Xerox®Phaser® 6020/6022
WorkCentre® 6025/6027 MFP
Service Manual Updated 3/7/2016 DAW

**Sample
Status Code Structure:
077-108**

⚠️WARNING: The following servicing instructions are for use by qualified service personnel only.

Contents

1 General Information

Contents

Contents

Contents

3 Image Quality

Contents

4　Service Parts Disassembly

Contents

Contents

General Information

1

In this chapter...

- About this Service Manual
- Manual Organization
- Symbols Marked on the Product
- Power Safety Precautions
- Electrostatic Discharge (ESD) Precautions
- Service Safety Summary.
- Environmental Health and Safety Incident Reporting
- Regulatory
- Introduction
- Printer Configurations
- Parts of the Printer
- Control Panel
- Operations Modes
- Consumables
- Media Path Flow Chart
- Major Printer Components
- Control
- Specifications
- Translated Warnings

About this Service Manual

The Phaser 6020/6022 and WorkCentre 6025/6027 MFP Service Manual   3/2016 is the primary document used for repairing, maintaining, and troubleshooting the printer. Use this manual as your primary resource for understanding the operational characteristics of the printer and all available options. This manual describes specifications, theory, and the diagnosis and repair of problems occurring in the printer and attached options. Also included are detailed replacement procedures, parts lists, and wiring diagrams.

Manual Terms

Various terms are used throughout this manual to either provide additional information on a specific topic or to warn of possible danger present during a procedure or action. Be aware of all symbols and terms when they are used, and always read Note, Caution, and Warning statements.

⚠ **WARNING:** A warning indicates an operating or maintenance procedure, practice or condition that, if not strictly observed, results in injury or loss of life.

❗ **CAUTION:** A caution indicates an operating or maintenance procedure, practice or condition that, if not strictly observed, results in damage to, or destruction of, equipment.

Replacement Note: A replacement note provides important information related to parts replacement. When needed, replacement notes appear at the end of the disassembly procedure.

Note: A note indicates an operating or maintenance procedure, practice or condition that is necessary to efficiently accomplish a task. A note can provide additional information related to a specific subject or add a comment on the results achieved through a previous action.

Manual Organization

The Phaser 6020/6022 and WorkCentre 6025/6027 MFP Service Manual   3/2016 contains the following sections:

Introductory, Safety, and Regulatory Information: This section contains important safety information and regulatory requirements.

Chapter 1 - General Information: This section contains an overview of the printer's operation, configuration, specifications, and consumables.

Chapter 2 - Error Codes and Troubleshooting: This section provides detailed troubleshooting procedures for error messages and codes generated by resident diagnostics. Troubleshooting covers the operation of Power On Self Test (POST) and Service Diagnostics. In addition, this section includes troubleshooting methods for situations where error indicator is not available.

Chapter 3 - Image Quality Troubleshooting: This section focuses on techniques to correct image quality problems associated with the printer output.

Chapter 4 - Service Parts Disassembly: This section contains removal procedures for spare parts listed in the Parts List. A replacement procedure is included when necessary.

Chapter 5 - Parts List: This section contains exploded views of the print engine and optional Field Replaceable Units (FRUs), as well as part numbers for replacement parts.

Chapter 6 - Maintenance: This section provides periodic cleaning procedures for the printer. This section also provides procedures for the adjustment of print engine components

Chapter 7 - Wiring: This section contains the plug/jack locations and wiring diagrams for the printer.

Appendix - Reference: This section provides a list of acronyms and their definitions, and a menu maps for the Phaser 6022 and WorkCentre 6025 MFP.

Symbols Marked on the Product

Hot surface on or in the printer. Use caution to avoid personal injury.

Use caution (or draws attention to a particular component). Refer to the manual(s) for information.

Allow 40 minutes for the Fuser to cool down.

Do not touch the item.

Do not expose the item to sunlight.

Do not expose the item to light.

Product Terms

Caution: A personal injury hazard exists that may not be apparent. For example, a panel may cover the hazardous area.

Danger: A personal injury hazard exists in the area where you see the sign.

Power Safety Precautions

Power Source

For 115VAC printers, do not apply more than 127 volts RMS between the supply conductors or between either supply conductor and ground. For 230VAC printers, do not apply more than 254 volts RMS between the supply conductors or between either supply conductor and ground. Use only the specified power cord and connector. This manual assumes that the reader is a qualified service technician.

Plug the three-wire power cord (with grounding prong) into a grounded AC outlet only. If necessary, contact a licensed electrician to install a properly grounded outlet. If the product loses its ground connection, contact with conductive parts may cause an electrical shock. A protective ground connection by way of the grounding conductor in the power cord is essential for safe operation.

Disconnecting Power

⚠️ **WARNING:** Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

Disconnect the Power Cord in the following cases:
* if the power cord or plug is frayed or otherwise damaged.
* if any liquid or foreign material is spilled into the product.
* if the printer is exposed to any excess moisture.
* if the printer is dropped or damaged.
* if you suspect that the product needs servicing or repair.
* if you intend to clean the product.High Temperature Warning

Electrostatic Discharge (ESD) Precautions

Some semiconductor components, and the respective sub-assemblies that contain them, are vulnerable to damage by Electrostatic Discharge (ESD). These components include Integrated Circuits (ICs), Large-Scale Integrated circuits (LSIs), field-effect transistors, and other semiconductor chip components. The following techniques will reduce the occurrence of component damage caused by static electricity. Observe these additional safety precautions:

⚠️ **WARNING:** Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

❗ **CAUTION:** Immediately before handling any semiconductor component assemblies, drain the electrostatic charge from your body. This can be accomplished by touching an earth ground source or by wearing a wrist strap device connected to an earth ground source. Wearing a wrist strap will also prevent accumulation of additional bodily static charges. Be sure to Remove the wrist strap before applying power to the unit under test to avoid potential shock.

❗ **CAUTION:** After removing a static sensitive assembly from its anti-static bag, place it on a grounded conductive surface. If the anti-static bag is conductive, you may ground the bag and use it as a conductive surface.

❗ **CAUTION:** Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage some devices.

❗ **CAUTION:** Do not Remove a replacement component or electrical sub-assembly from its protective package until you are ready to install it.

❗ **CAUTION:** Immediately before removing the protective material from the leads of a replacement device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

❗ **CAUTION:** Minimize body motions when handling unpacked replacement devices. Motion such as your clothes brushing together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an electro-statically sensitive device.

❗ **CAUTION:** Handle ICs and Erasable Programmable Read-Only Memories (EPROMs) carefully to avoid bending pins.

❗ **CAUTION:** Pay attention to the direction of parts when mounting or inserting them on Circuit Boards.

Service Safety Summary

General Guidelines

For qualified service personnel only: Refer also to the preceding Power Safety Precautions on page 1-5.

Avoid servicing alone: Do not perform internal service or adjustment of this product unless another person capable of rendering first aid or resuscitation is present.

Use care when servicing with power: Dangerous voltages may exist at several points in this product. To avoid personal injury, do not touch exposed connections and components while power is On. Disconnect power before removing the power supply shield or replacing components.

Do not wear jewelry: Remove jewelry prior to servicing. Rings, necklaces and other metallic objects could come into contact with dangerous voltages and currents.

Warning Labels

Read and obey all posted warning labels. Throughout the printer, warning labels are displayed on potentially dangerous components. As you service the printer, check to make certain that all warning labels remain in place.

Safety Interlock

Make sure all covers are in place and the Interlock Switch is functioning correctly after you have completed a printer service call. If you bypass an Interlock Switch during a service call, use extreme caution when working on or around the printer.

Servicing Electrical Components

Before starting any service procedure, switch the printer power Off and unplug the power cord from the wall outlet. If you must service the printer with power applied, be aware of the potential for electrical shock.

⚠ **WARNING:** Do not touch any electrical components unless instructed to do so in a service procedure.

Servicing Mechanical Components

When servicing mechanical components within the printer, manually rotate the Drive Assemblies, Rollers, and Gears.

⚠️ **WARNING:** Do not try to manually rotate or manually stop the drive assemblies while a motor is running.
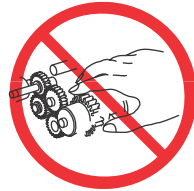
Servicing Fuser Components

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Warning/Caution Labels

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

Caution label for high-temperature units

This picture shows the location and content of the caution label on the Fuser for both the SFP and MFP.
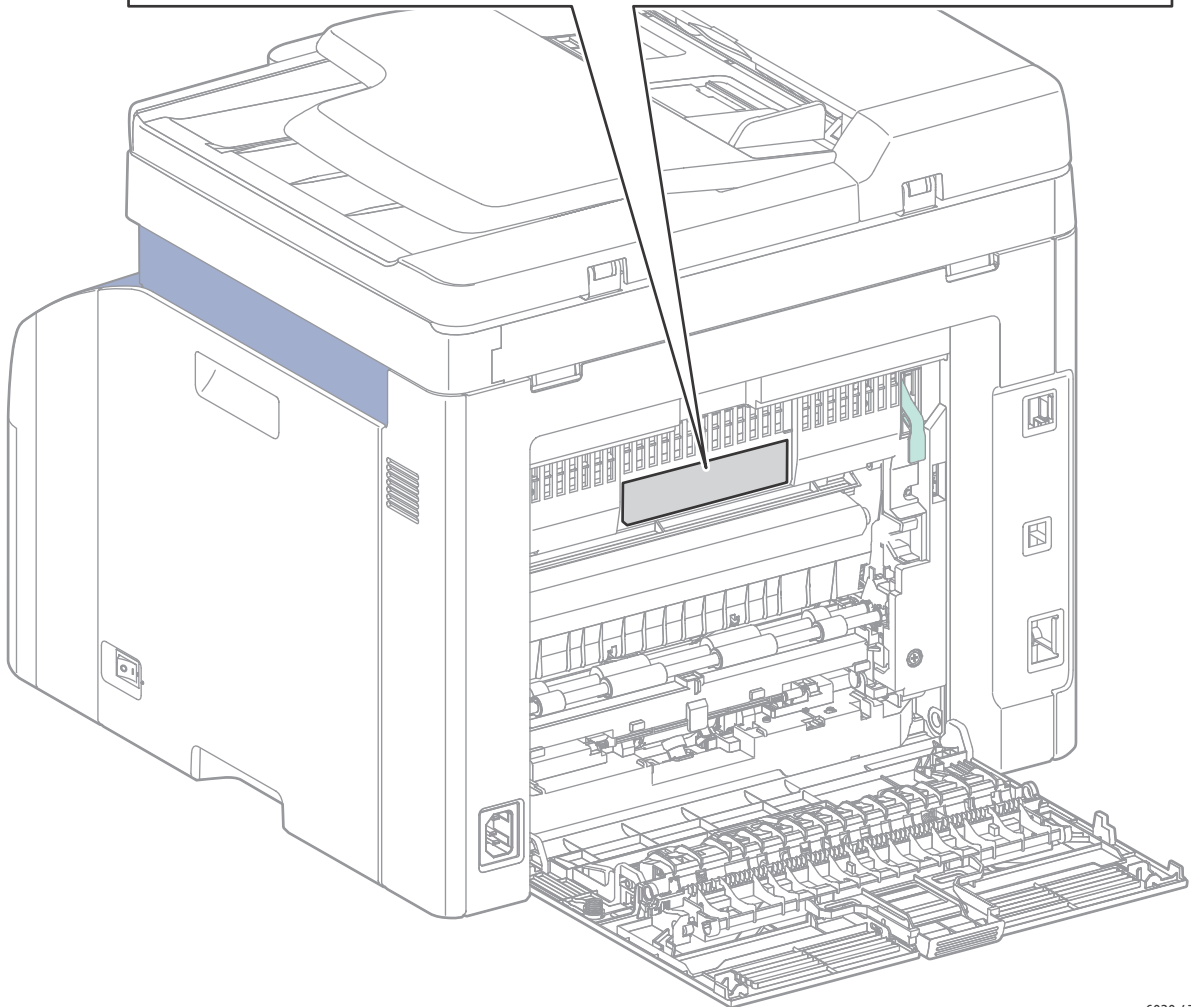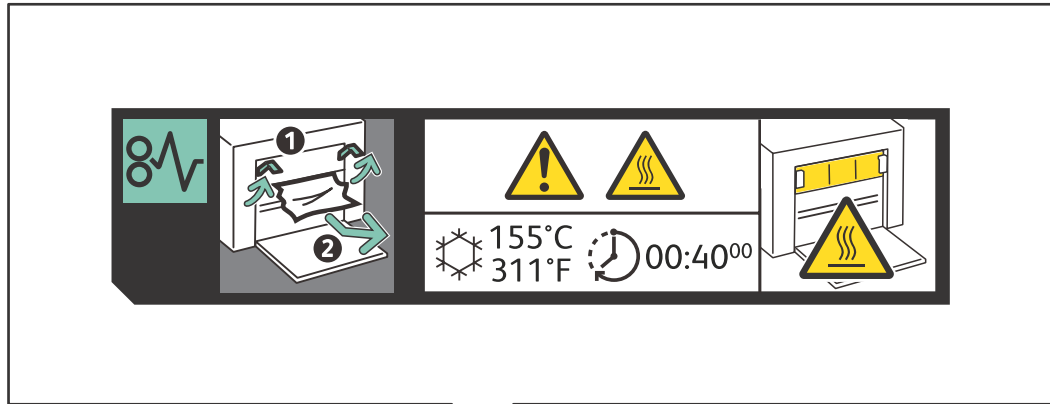
s6020-472

Toner Cartridge Caution Label
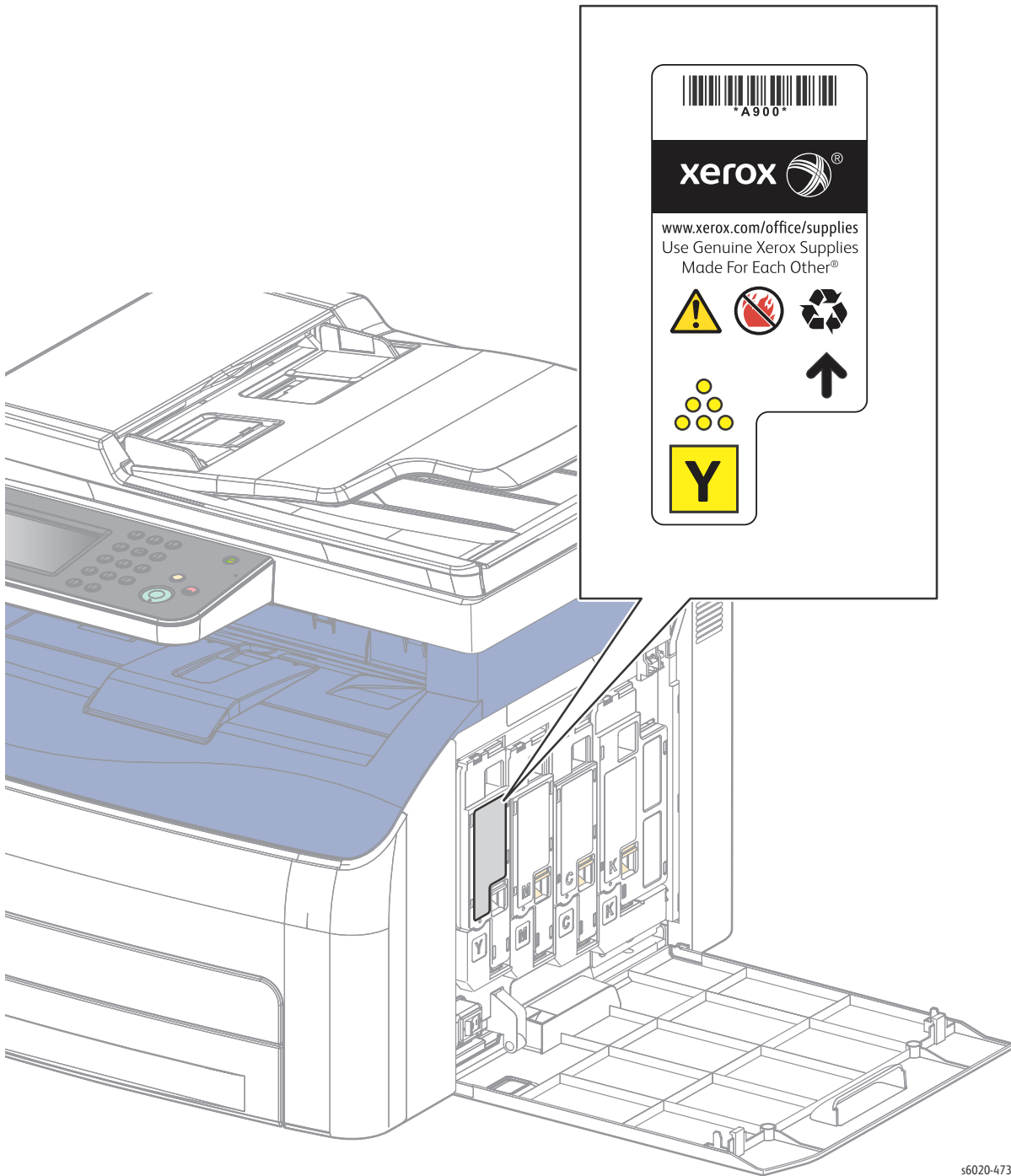
s6020-473

Rear Door Caution Label
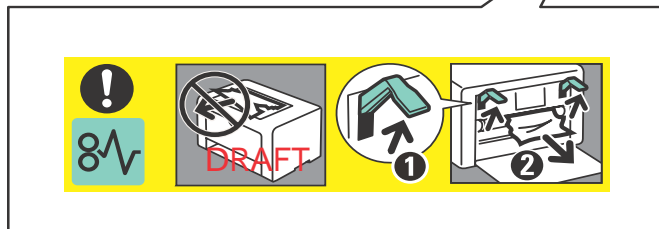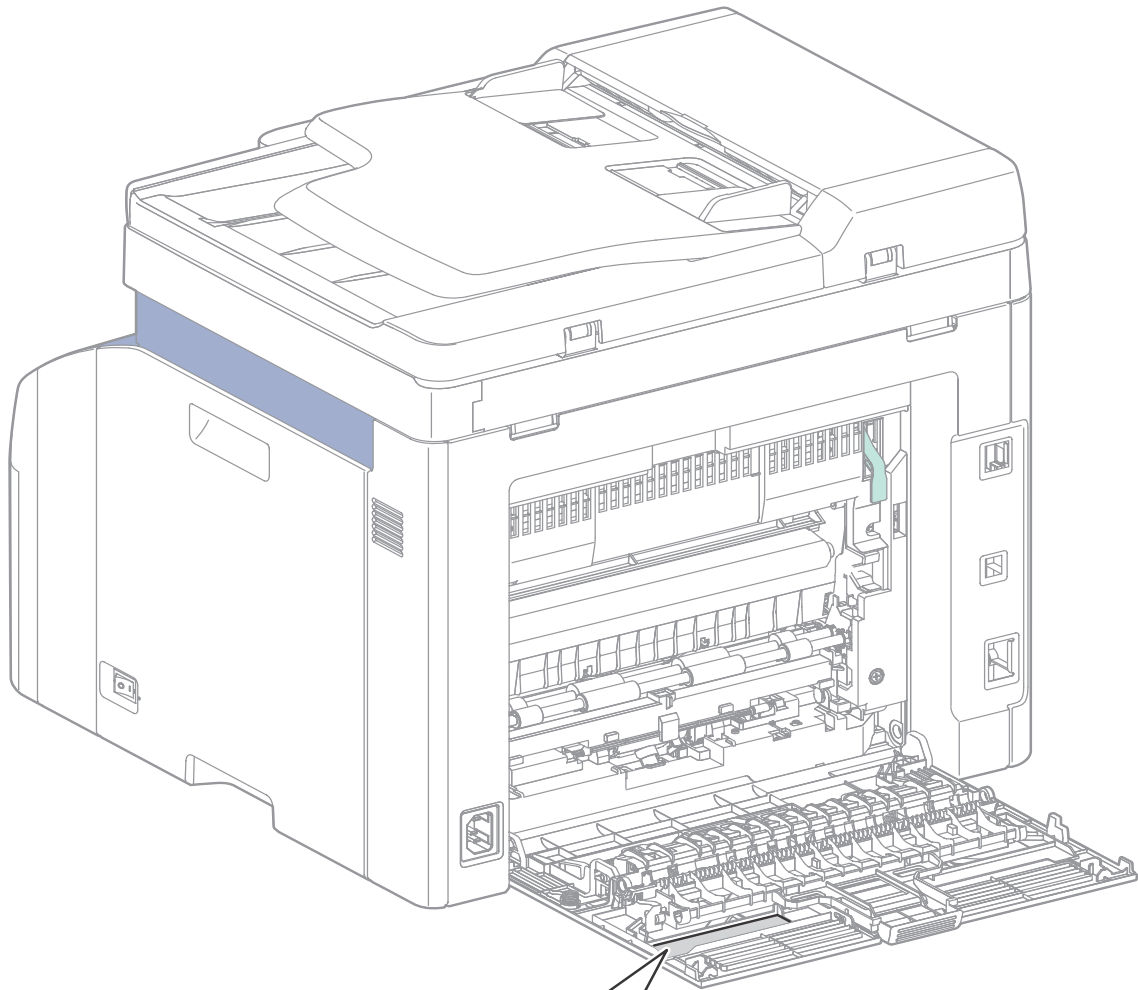
s6020-474

Paper Cassette Caution Label (Phaser 6022 and WorkCentre 6027 MFP)
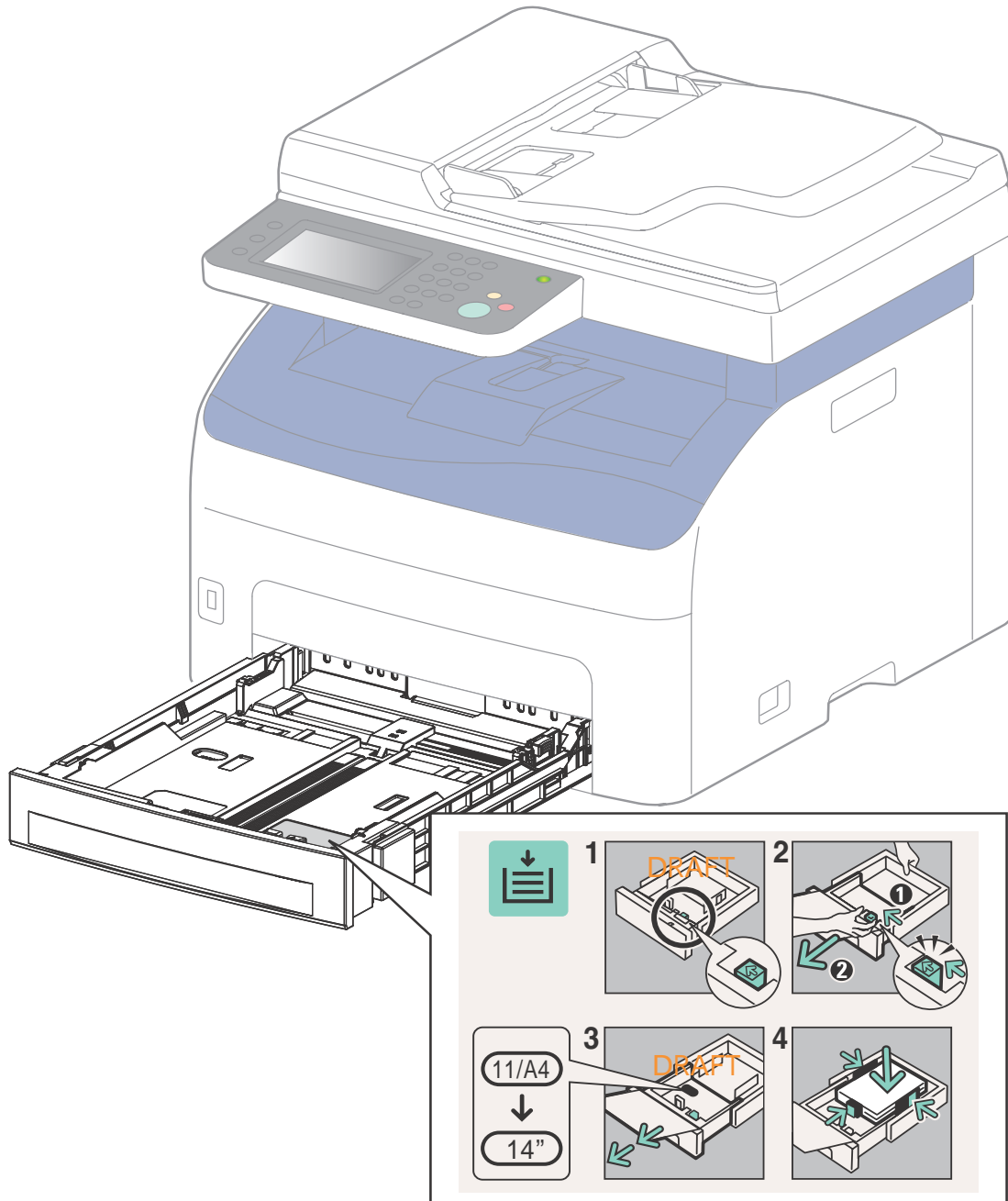
s6020-475

Paper Tray Caution Label (Phaser 6020 and WorkCentre 6025 MFP)
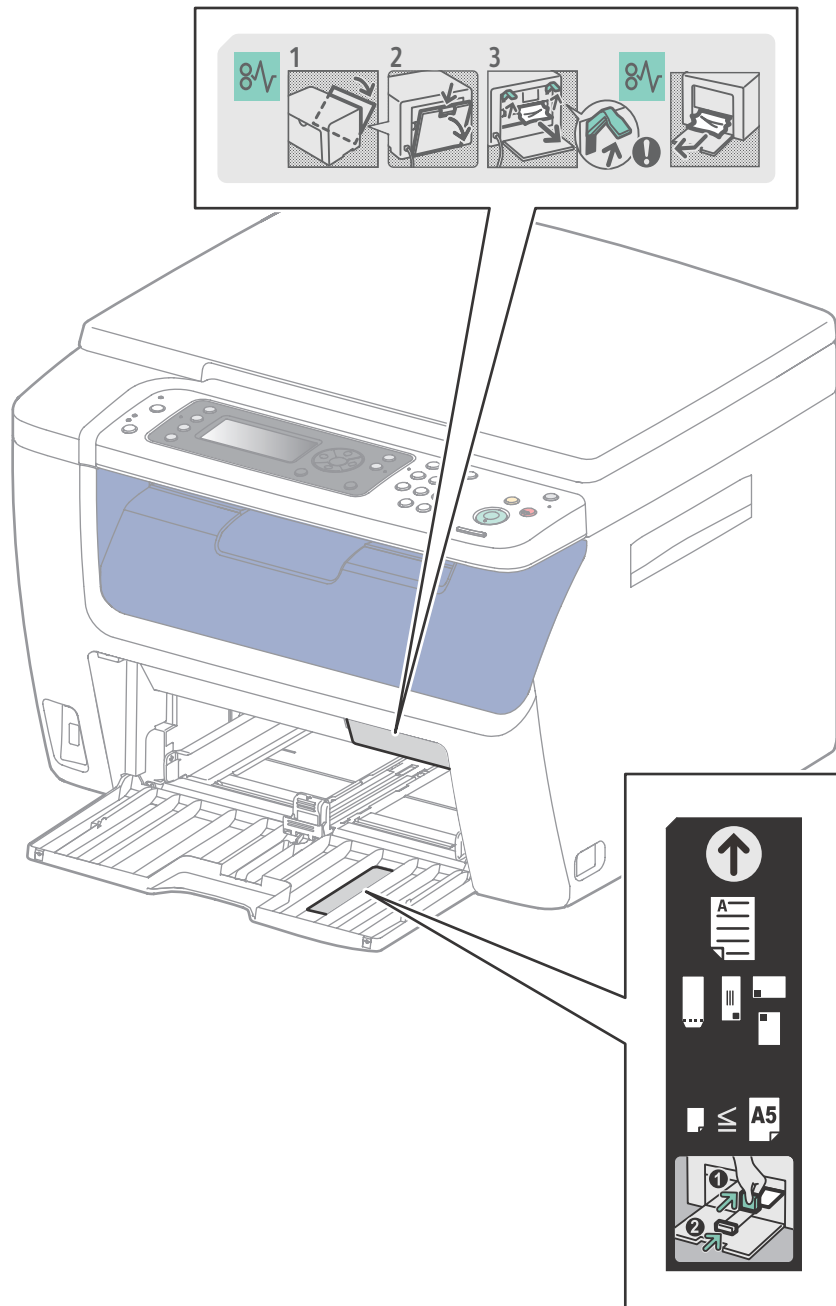
s6020-554

Toner Cleaning Caution

⚠️ **WARNING:** Use an approved toner vacuum cleaner. Using a household vacuum cleaner may cause an explosion or ignition resulting in burns or injury.

Do Not Vacuum Toner
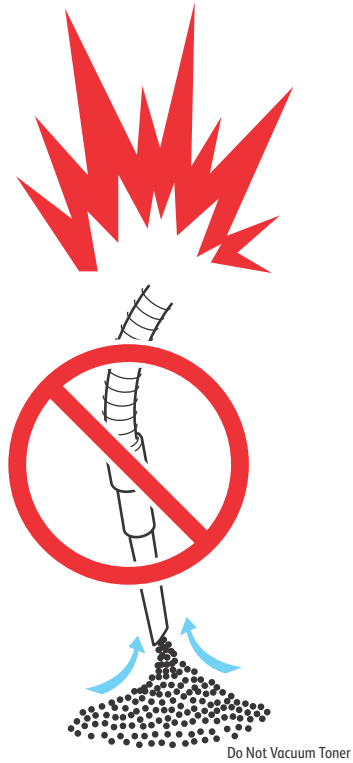
Battery

A Lithium battery is used on the Image Processor Board.

⚠️ **WARNING:** Danger of explosion if the battery is installed incorrectly. A new battery must be the same or equivalent type.

Note: Dispose of the old battery according to the manufacturer's instructions.

IP Board
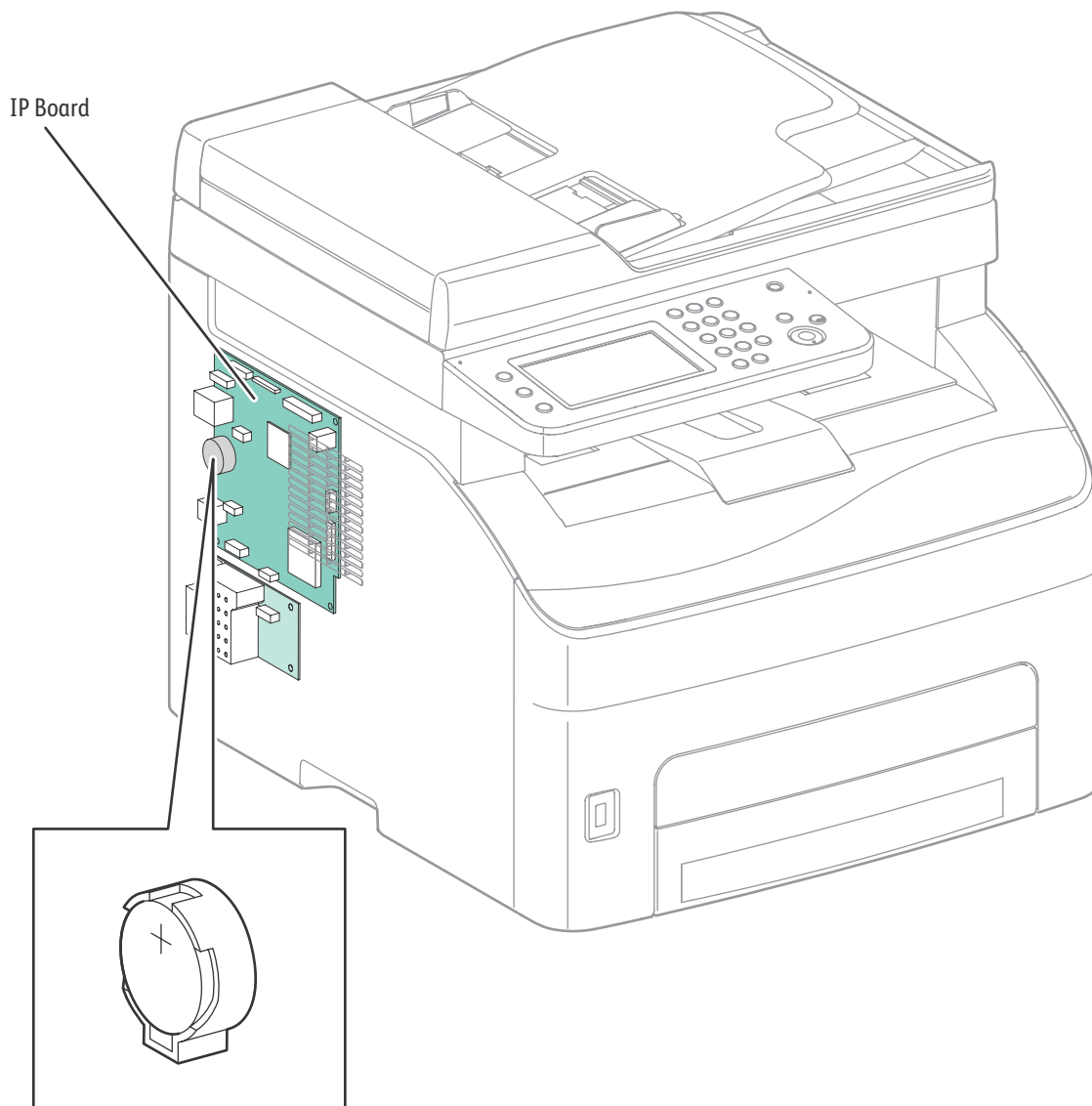
s6020-477

Note: The WorkCentre 6027 MFP uses a real-time clock dependent on the battery. Verify the time and date settings when changing the battery.

Environmental Health and Safety Incident Reporting

This section defines requirements for notification of health and safety incidents involving Xerox products (equipment and materials) at customer locations worldwide. These requirements apply to Xerox Corporation and its subsidiaries worldwide.

Objective

To enable prompt resolution of health and safety incidents involving Xerox products and to ensure Xerox regulatory compliance.

Definitions

Incident:

An event or condition occurring in a customer account that has resulted in injury, illness or property damage. Examples of incidents include machine fires, smoke generation, physical injury to an operator or service representative. Alleged events and product conditions are included in this definition.

Requirements

Initial Report:

1. Xerox organizations have established a process for individuals to report product incidents to Xerox Environment Health & Safety within 24 hours of becoming aware of the event.

2. The information to be provided at the time of reporting is outlined in the Health and Safety Incident Report form.

   The Health and Safety Incident Report form used to report incidents involving Xerox products is available on Xerox Global Service Net at https://www.xrxgsn.com/secure/main.pl?CatId=1789. If you are unable to download the form, request a form when reporting the incident by phone, electronic mail or Fax. You can also see the form at "E, H, & S Incident Report Form" on (page A-2).

3. The initial notification may be made by any of the methods that follow:

   – For all incidents in **North America**, **Europe**, **Developing Markets East**
     (Middle East, Africa, India, China and Hong Kong) & **Developing Markets West**
     (Brazil, Mexico, Latin American North and Latin American South):

     • Phone* EH&S at: 1-800-ASK-Xerox

     • Electronic mail EH&S at: usa.product.incident@xerox.com

     • Fax EH&S at: 1-585-422-8217 [intelnet 8*222 8217].

   Note: Initial notification made by phone must be followed within 24 hours by a completed Health and Safety Incident Report form sent to the indicated electronic mail address or fax number. If sending a fax, please also send the original form by internal mail.

Responsibilities for resolution:

1. Business Groups / Product Design Teams responsible for the product involved in the incident shall:

    a. Manage field bulletins, customer correspondence, product recalls, safety retrofits.

    b. Fund all field retrofits.

2. Field Service Operations shall:

    a. Preserve the Xerox product involved and the scene of the incident inclusive of any associated equipment located in the vicinity of the incident.

    b. Return any affected equipment/part(s) to the location designated by Xerox EH&S and/or the Business Division.

    c. Implement all safety retrofits.

3. Xerox EH&S shall:

    a. Manage and report all incident investigation activities.

    b. Review and approve proposed product corrective actions and retrofits, if necessary.

    c. Manage all communications and correspondence with government agencies.

    d. Define actions to correct confirmed incidents.

Regulatory

Xerox has tested this product to electromagnetic emission and immunity standards. These standards are designed to mitigate interference caused or received by this product in a typical office environment.

United States (FCC Regulations)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with these instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment Off and On, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiver (device being interfered with).
- Increase the separation between the printer and the receiver.
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Any changes or modifications not expressly approved by Xerox could void the user's authority to operate the equipment. To ensure compliance with Part 15 of the FCC rules, use shielded interface cables.

Canada (Regulations)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

European Union

The CE mark applied to this product symbolizes Xerox's declaration of conformity with the following applicable Directives of the European Union as of the dates indicated:

December 12, 2006: Low Voltage Directive 2006/95/EC

December 15, 2004: Electromagnetic Compatibility Directive 2004/108/EC

March 9, 1999: Radio Equipment & Telecommunications Terminal Equipment Directive 1999/5/EC

This product, if used properly in accordance with the user's instructions, is neither dangerous for the consumer nor for the environment.

To ensure compliance with European Union regulations, use shielded interface cables.

A signed copy of the Declaration of Conformity for this product can be obtained from Xerox.

Introduction

The Phaser 6020/6022 and WorkCentre 6025/6027 are color laser devices built around a common print engine. The Phaser 6020 and Phaser 6022 printers are single function machines, while the WorkCentre 6025 and WorkCentre 6027 are multifunction printers that add copy, scan, and fax functions.

Technical Support Information

The Phaser 6020/6022 and WorkCentre 6025/6027 MFP Printer Service Manual is the primary document used for repairing, maintaining, and troubleshooting the printers.

To ensure complete understanding of this product, completion of Xerox Phaser 6020/6022 and WorkCentre 6025/6027 MFP Printer Service Training is strongly recommended.

For updates to the Service Manual, Service Bulletins, knowledge base, etc., go to:

- Xerox Global Service Net: HTTPs://www.xrxgsn.com/secure/main.pl

- Service Partners: http://www.office.xerox.com/partners

- Xerox Service Acronyms:https://open.xerox.com/Services/acronym

For further technical support, contact your assigned Xerox Technical Support for this product.

Printer Configurations

The following tables list the configurations of the Phaser 6020 and 6022 printers and the WorkCentre 6025 and 6027 MFPs.

Features	Phaser 6020	Phaser 6022
Processor Speed	525 MHz	525 MHz
Memory	128 MB	256 MB
Print Speed (A4)	10 Color / 12 BW	18 Color / 18 BW
Resolution	1200 x 2400 dpi 1bit (IOT)	1200 x 2400 dpi 1bit (IOT)
USB 2.0 Interface	Standard	Standard
USB Host	None	None
Ethernet Interface 10/100 Base-TX	None	Standard
Wireless Interface	Standard	Standard
Manual Feed Slot	None	None
Paper Tray Dust Cover	Standard	None
Paper Tray (150 Sheets)	Standard	None
Paper Cassette (150 sheets)	None	Standard

Features	WorkCentre 6025 Color MFP	WorkCentre 6027 MFP
Processor Speed	525 MHz	525 MHz
Memory	256 MB	512 MB
Print Speed (A4)	10 Color / 12 BW ppm	18 Color / 18 BW ppm
Copy Speed (A4)	2.5 Color / 10 BW cpm	8 Color / 18 BW cpm
Print Resolution	1200 x 2400 dpi 1bit (IOT)	1200 x 2400 dpi 1bit (IOT)
Scan/Copy Resolution - platen Scan/Copy Resolution - ADF IIT resolution (Platen)	600 x 600 dpi max Not Applicable 1200 x 1200 dpi max	600 x 600 dpi max 600 x 300 dpi max 1200 x 1200 dpi max
USB 2.0 Interface	Standard	Standard
USB Host	Standard (front)	Standard (front)
Ethernet Interface 10/100 Base-TX	None	Standard
Wireless Interface	Standard	Standard
Fax	None	Standard
Automatic Document Feeder	None	Standard (15 sheets)
Bypass Sheet Feeder (10 sheets)	Standard	None
Paper Tray (150 Sheets)	Standard	None
Paper Cassette (150 sheets)	None	Standard

Parts of the Printer

Front and Side View

Phaser 6020

s6020-171
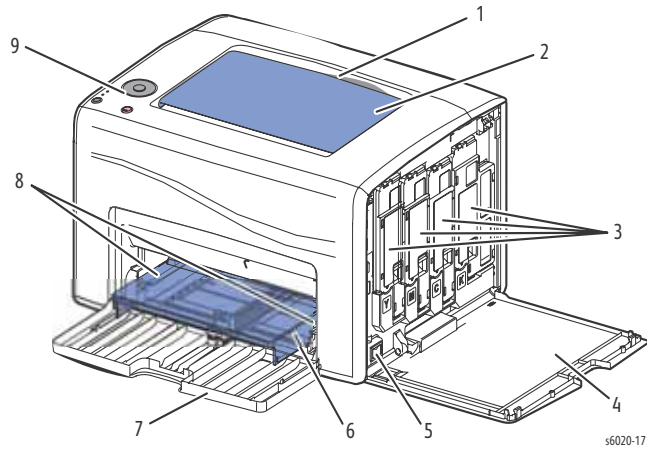
1.	Output Tray	6.	Dust Cover
2.	Output Tray Extension	7.	Paper Tray
3.	Toner Cartridges	8.	Paper Guides
4.	Toner Door	9.	Control Panel
5.	Power Switch		

Phaser 6022
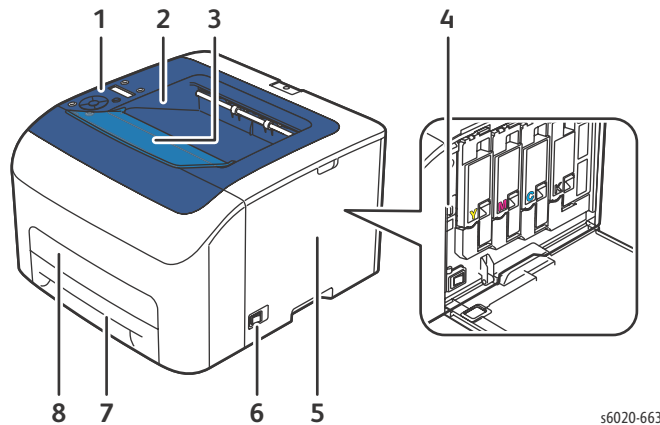
s6020-663

1.	Output Tray	5.	Power Switch
2.	Output Tray Extension	6.	Paper Tray
3.	Toner Cartridges	7.	Jam Access Cover
4.	Toner Door	8.	Control Panel

WorkCentre 6025 MFP
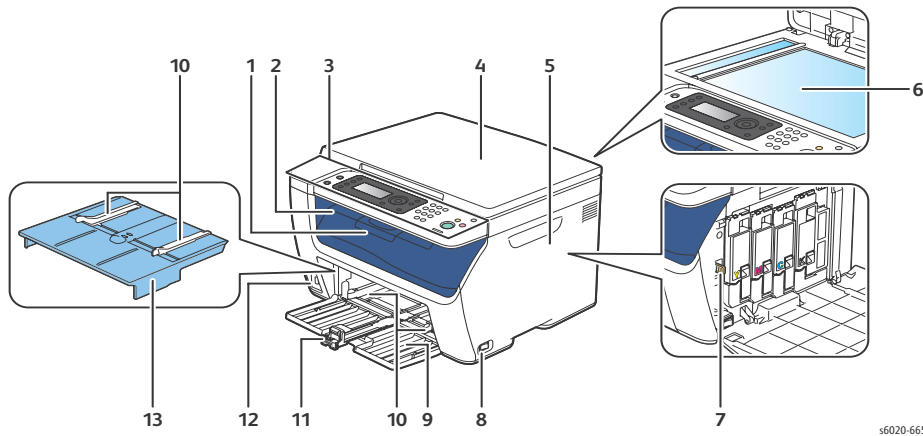
s6020-665

1.	Output Tray Extension	8.	Power Switch
2.	Output Tray	9.	Paper Tray
3.	Control Panel	10.	Feeder Guides
4.	Platen Cover	11.	Paper Tray Extension
5.	Toner Door	12.	USB Input Port
6.	Document Glass	13.	Bypass Tray
7.	LED Cleaning Rod		

WorkCentre 6027 Color MFP
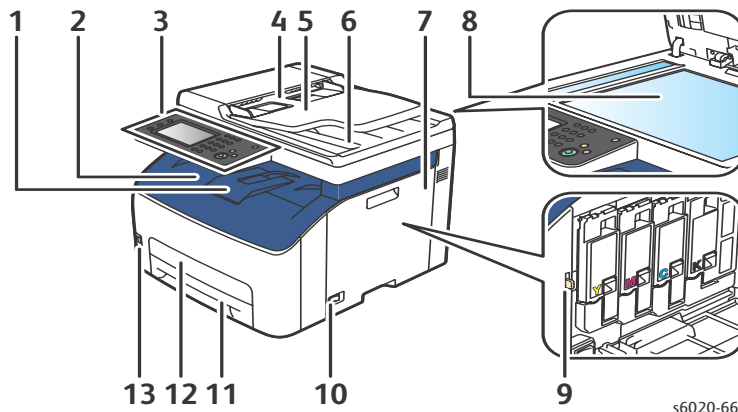
s6020-667

1.	Output Tray Extension	8.	Document Glass
2.	Output Tray	9.	LED Cleaning Rod
3.	Control Panel	10.	Power Switch
4.	ADF Paper Guides	11.	Paper Tray
5.	ADF Input Tray	12.	Jam Access Cover
6.	ADF Output Tray	13.	USB Input Port
7.	Toner Door		

Rear and Side View

Phaser 6020
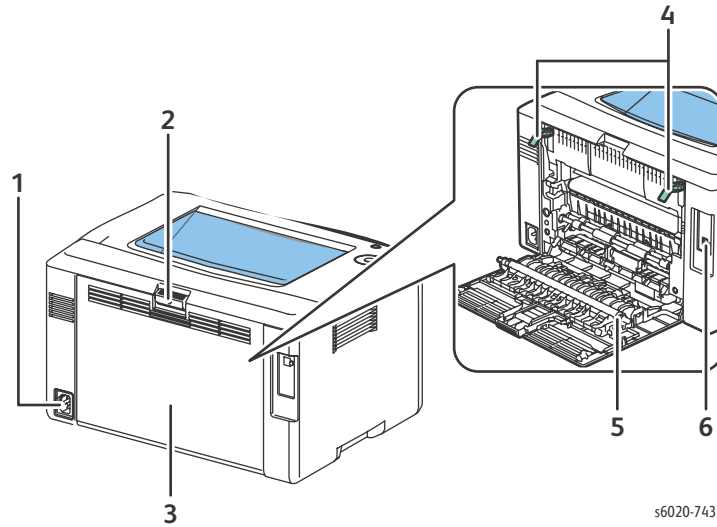
s6020-743

1.	Power Receptacle	4.	Fuser Release Levers
2.	Rear Door Release Button	5.	Bias Transfer Roller
3.	Rear Door	6.	USB Port

Phaser 6022
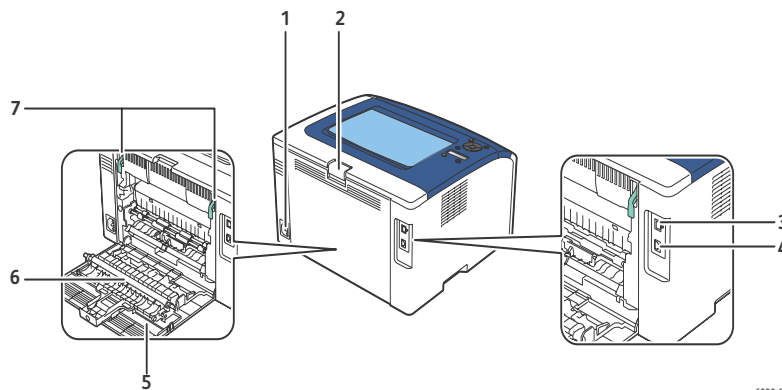
s6020-664

1.	Power Receptacle	5.	Rear Door
2.	Rear Door Release Button	6.	Bias Transfer Roller
3.	USB Port	7.	Fuser Release Levers
4.	Ethernet Port		

WorkCentre 6025 MFP
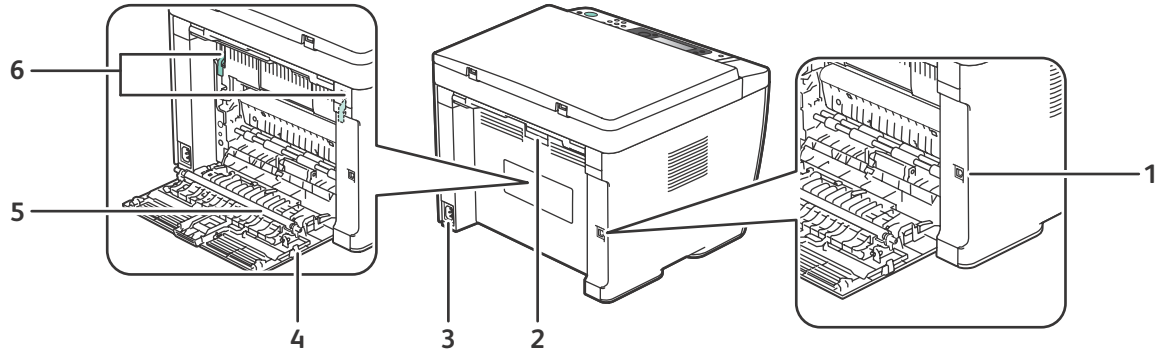
s6020-666

1.	USB Port	4.	Rear Door
2.	Rear Door Latch	5.	Bias Transfer Roller
3.	Power Receptacle	6.	Fuser Lock Levers

WorkCentre 6027 MFP
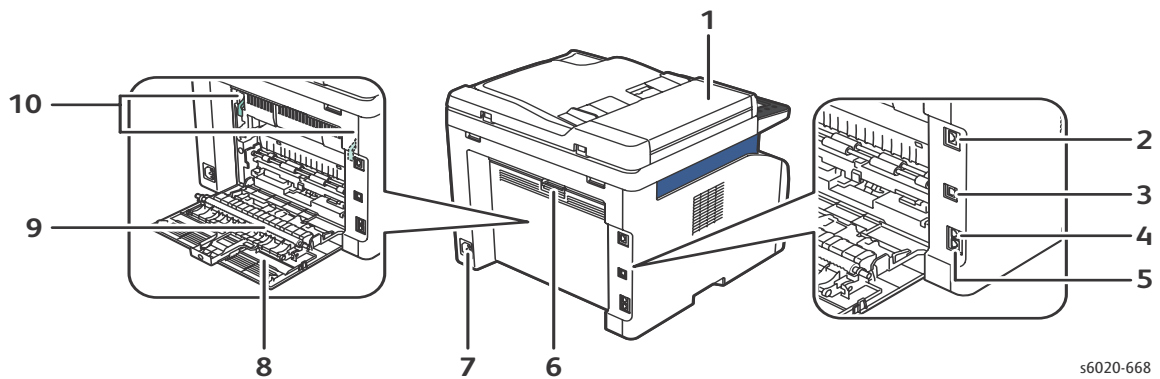
s6020-668

1.	ADF	6.	Rear Door Latch
2.	Ethernet Port	7.	Power Receptacle
3.	USB Port	8.	Rear Door
4.	Fax Line-In	9.	Bias Transfer Roller
5.	Telephone Line-Out	10.	Fuser Lock Levers

Control Panel

Phaser 6020 Control Panel

s6020-670
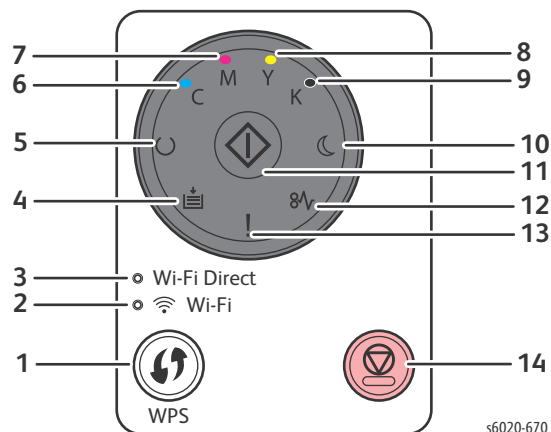
Item	Feature	Description
1.	WPS Button	Establishes a connection to a wireless router.
2.	WiFi Light	Indicates a wireless connection is established.
3.	WiFi Direct® Light	Flashing indicates a connection to a WiFi Direct® device.
4.	Load Paper Light	Flashing: jam in the paper tray, out of paper, or paper size mismatch.
5.	Ready/Data Light	Green when the printer is ready to receive data, blinks when the printer is busy receiving data. Ready/Data and Power Saver lights both flashing indicates printer is canceling a print job
6.	Cyan Toner Light	On indicates toner low. flashing indicates toner empty or non-Xerox® toner cartridge installed.
7.	Magenta Toner Light	On indicates toner low. flashing indicates toner empty or non-Xerox® toner cartridge installed.
8.	Yellow Toner Light	On indicates toner low. flashing indicates toner empty or non-Xerox® toner cartridge installed.
9.	Black Toner Light	On indicates toner low. flashing indicates toner empty or non-Xerox® toner cartridge installed.
10.	Power Saver Light	On indicates Low Power or Sleep mode. Ready/Data and Power Saver lights both flashing indicates printer is canceling a print job.
11.	OK	Press OK to resume.
12.	Jam Light	Indicates a paper jam.
13.	Error Light	Error condition or warning.
14.	Cancel Button	Cancel Print Job

Note: For more information on the Phaser 6020 Control Panel, see "Phaser 6020 Control Panel Indicators" on (page A-5).

Phaser 6022 Control Panel
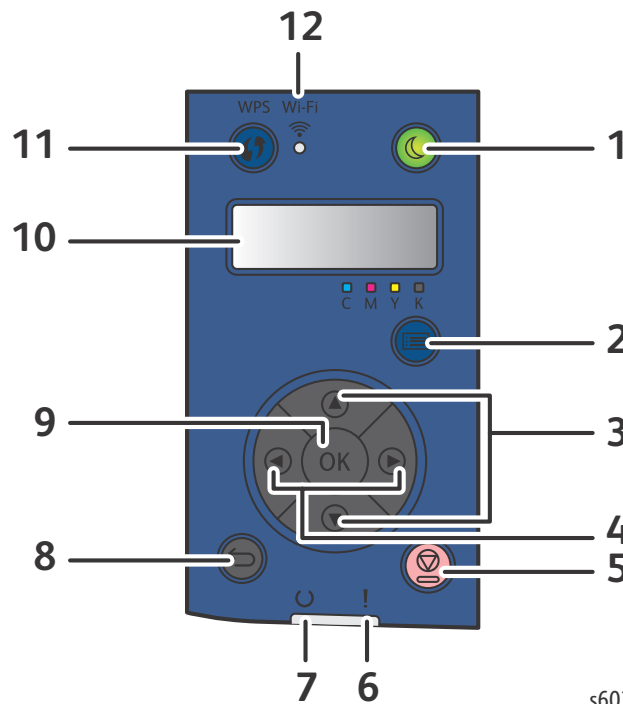
s6020-671

Item	Feature	Description
1.	Power Saver Button	Enter or exit Power Saver mode.
2.	Menu Button	Displays Information Pages, Billing Meters, Admin, Tray Settings, and Panel Language menus.
3.	Up/Down Arrow Buttons	Navigates to the next/previous menu, item, or option.
4.	Left/Right Arrow Buttons	Navigates forward/backward through submenus and fields.
5.	Cancel Button	Cancel print job.
6.	Error Light	Flashes RED when an error occurs.
7.	Ready/Data Light	Green indicates ON. Flashing indicates printer receiving data.
8.	Back/Return Button	Navigates up one level in a menu.
9.	OK	Displays the selected menu or selects the current menu option.
10.	Control Panel Display	Provides information about settings, statuses, and error messages. An asterisk (*) next to a menu option indicates the current default setting.
11.	WPS Button	Establishes a wireless connection.
12.	WiFi Light	Indicates a wireless connection established.

WorkCentre 6025 Color MFP Control Panel

s6020-672
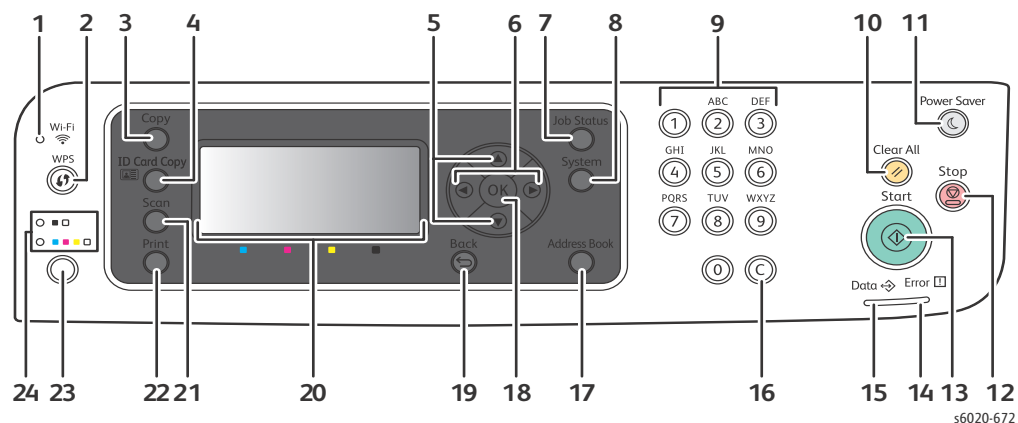
Item	Display/Panel Symbol	Name	Description
1.		WiFi Light	Indicates a wireless connection established.
2.		WPS Button	Establishes a wireless connection.
3.		Copy Button	Provides access to the Copy menu.
4.		ID Card Copy Button	Provides access to the ID Card Copy menu.
5.		Up/Down Arrow Buttons	Navigates to the next/previous menu, item, or option.
6.		Left/Right Arrow Buttons	Navigates forward/backward through submenus and fields.
7.		Job Status Button	Displays a list of active or completed jobs.
8.		System Button	Switches the display to the System menus.
9.		Alphanumeric Keypad	Enter alpha or numeric characters
10.		Clear All Button	Clears all current settings for printing, copying, or scanning and restores to default settings.

Item	Display/Panel Symbol	Name	Description
11.		Power Saver Button	• ON indicates Power Saver mode. • Press to exit Power Saver mode.
12.		Stop Button	Cancels the current job.
13.		Start Button	Starts a copy or scan job.
14.	!	Error Light	Indicates an error condition or warning.
15.		Ready/Data Light	• Green indicates ON. • Flashing indicates printer receiving data.
16.		C (clear) Button	Deletes numeric values or the last digit entered using the alphanumeric keys.
17.		Address Book	Opens address book. Automatically activates when accessing the Scan to E-Mail menu.
18.	OK	OK Button	This button displays the selected menu or selects the current menu option.
19.		Back/Return Button	Use this button to navigate to the previous menu item.
20.		Display Screen	This screen displays status messages, menus, and toner levels.
21.		Scan Button	This button provides access to the Scan menu.
22.		Print Button	This button provides access to the Print menu.
23.		Color Mode Button	Press the **Color Mode** button to toggle the selection between color and black and white.
24.		Color Mode Lights	These lights indicate which color mode is selected.

WorkCentre 6027 Color MFP Control Panel

s6020-673
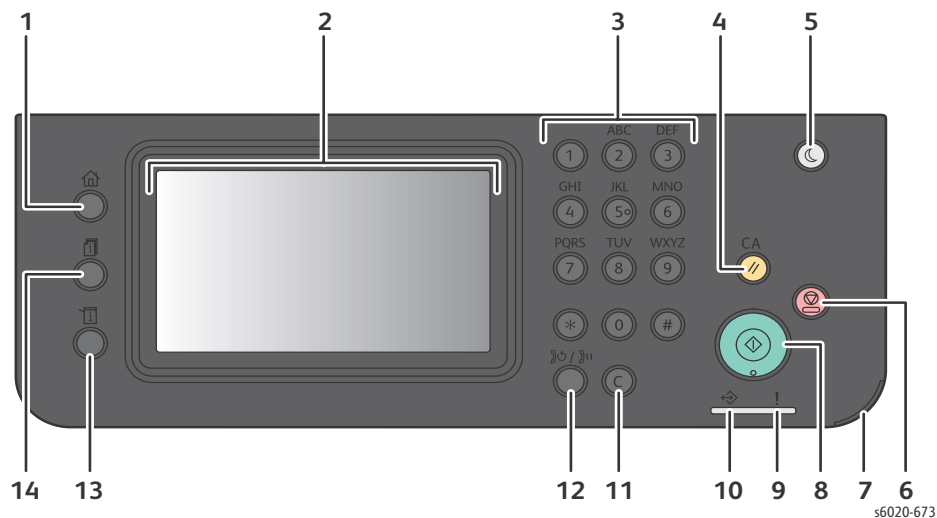
Item	Feature (number)	Description
1.	Services Home Button	Provides access to the Services home menu.
2.	Touch Screen Display	Displays information, and provides access to printer functions.
3.	Alphanumeric Keypad	Enters alphanumeric information.
4.	Clear All Button	Resets all settings for the current selection.
5.	Power Saver	Enters and exits Power Saver mode.
6.	Stop Button	Cancels the current job.
7.	Mobile LED	Flashing indicates a WiFi Direct® connection or other mobile print task.
8.	Start Button	Starts the selected copy, scan, fax, or Print From job.
9.	Error Light	• ON indicates an error condition or warning. • Flashing RED indicates "requires technical support."
10.	Ready/Data Light	• Green indicates ON. • Flashing indicates printer receiving data.
11.	Clear Button	Deletes numeric values or the last digit entered using the alphanumeric keys.
12.	Redial/Pause	Indicates the status of the printer – power and ready-to-print. When illuminated, indicates a printer error.
13.	Machine Status Button	Switches the display to the System menus.
14.	Job Status Button	Displays the Active jobs, Secure Print jobs, and Secure Fax jobs.

Operations Modes

The printer can be operated in the following four modes:

Mode	Condition	Definition
Running Mode		The printer is in an operating status such as running or recording.
	Fusing	Kept at the operating temperature.
	Exposure system	Operating
	Recording system	Operating
	Cooling fan	The fan operates at high speed.
Ready Mode		The printer is in standby status, ready to run.
	Fusing	Kept at standby temperature.
	Exposure system	The system is at Pause.
	Recording system	The system is at Pause.
	Cooling fan	The fan operates at low speed.
Low Power Mode		The printer enters Power Saver Mode 1 when it has not received print data for the specified time.
	Fusing	The system is at Pause.
	Exposure system	The system is at Pause.
	Recording system	The system is at Pause.
	Cooling fan	The system is at Pause.
Sleep Mode		The printer enters Power Saver Mode 2 to reduce power consumption.
	Fusing	The system is at Pause.
	Exposure system	The system is at Pause.
	Recording system	The system is at Pause.
	Cooling fan	The system is at Pause.

Consumables

The Toner Cartridges are the only consumables. The Toner Cartridge CRUM (Customer Replaceable Unit Meter) records toner usage data. When a Toner Cartridge reaches the end of estimated cartridge life its status is indicated by the Error LED on the Control Panel (page 1-26).

Toner Cartridge	Capacity	Approximate Print Life*
Black	Starter Capacity	500 pages
	Standard Capacity	2000 pages
Yellow, Magenta, and Cyan	Starter Capacity	500 pages
	Standard Capacity	1000 pages

* Declared cartridge yield in accordance with ISO/IEC 19798 and ISO/IEC 24712
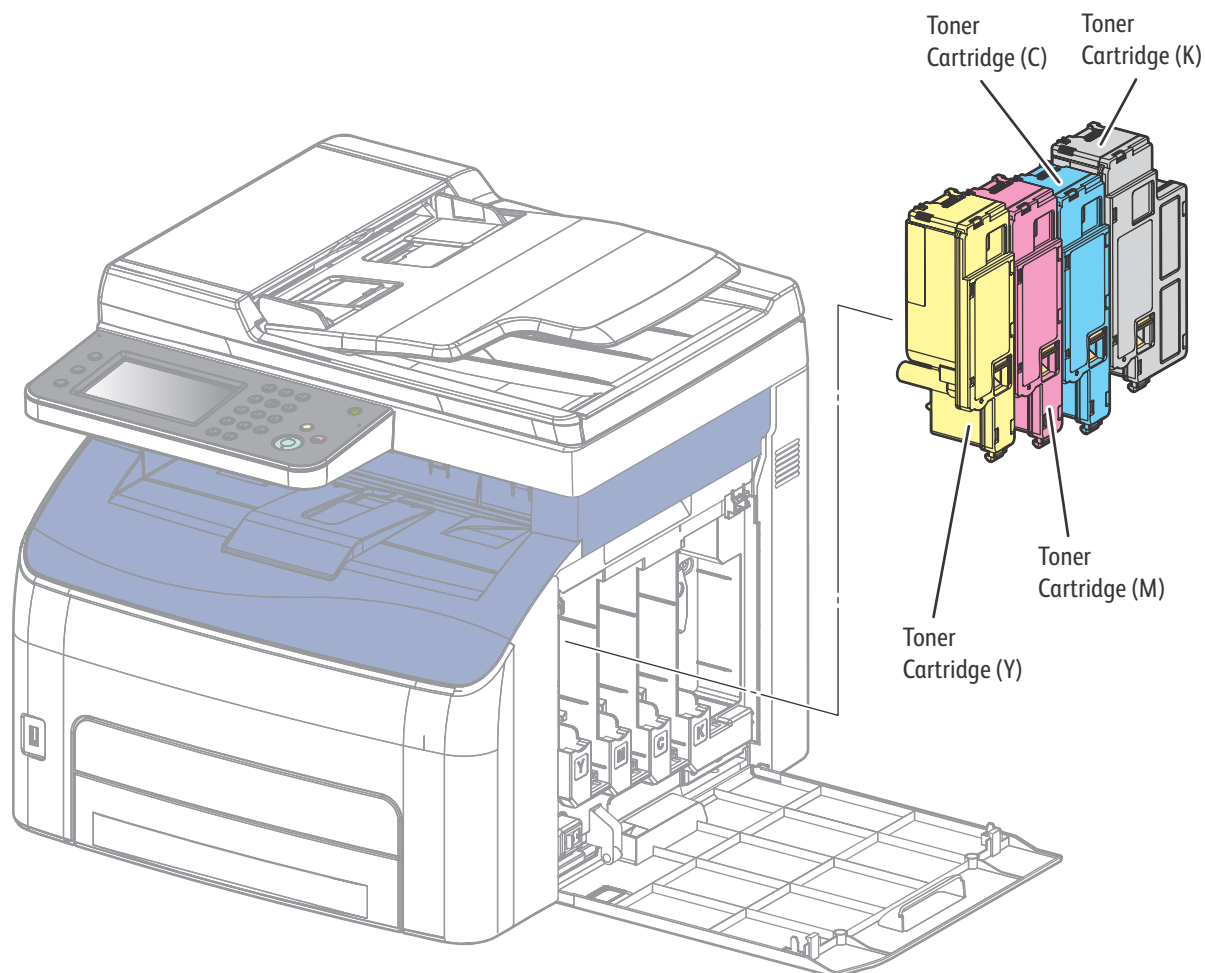
s6020-488

Replacement Timing of Consumable Parts

Replacement Timing of Consumables

When a consumable part is about to reach its replacement period, one of the following messages appears on the Control Panel:

Model	LED Indicator/Message	Meaning	Detection Device
Phaser 6020/6022	The Ready/Data LED (Orange) illuminates and the corresponding Toner LED (Orange) illuminates and slowly blinks.	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 print approximately an additional 100 pages in K, and 75 in Y, M, and C.	The Toner CRUM detects the replacement period from the remaining toner amount.
WorkCentre 6025/6027 MFP	CMYK Low Replace Soon		
Phaser 6020/6022	The Error LED (Orange) illuminates and the corresponding Toner LED (Orange) illuminates.	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.	
WorkCentre 6025/6027 MFP	Replace Cart. 093-93X Replace Y/M/C/K	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.	

Media Handling

Media Path Flow Chart

```
  ┌──────────┐   ┌─ Multiple Sheet Feed      ┌──────────┐   ┌─ Multiple Sheet Feed
  │  Bypass  │◄─ ┤   Prevention              │   Main   │◄─ ┤   Prevention
  └────┬─────┘   │ ┌──────────────────┐      └────┬─────┘   │ ┌──────────────────┐
       │         └─┤ Motor Drive /    │           │         └─┤ Motor Drive /    │
       │◄──────────┤ Solenoid /       │           │◄──────────┤ Solenoid /       │
       │           │ Feed Roller      │           │           │ Feed Roller      │
       ▼           └──────────────────┘           ▼           └──────────────────┘
  ┌──────────────────────────────────────────────────────┐      ┌─ Leading Edge
  │              Registration Assembly                   │◄──── ┤   Registration
  └───────┬──────────────────────────────────────────────┘      
          │         ┌──────────────────┐
          │◄────────┤ Motor Drive /    │
          │         │ Clutch /         │
          │         │ Registration     │
          │         │ Roller           │
          ▼         └──────────────────┘
  ┌──────────────────────────────────────┐
  │           IBT Belt Assembly          │
  └───────┬──────────────────────────────┘
          │         ┌──────────────────┐
          │◄────────┤ Motor Drive /    │
          │         │ Belt /           │
          │         │ 2nd BTR          │
          ▼         └──────────────────┘
  ┌──────────────────────────────────────┐
  │            Fuser Assembly            │
  └───────┬──────────────────────────────┘
          │         ┌──────────────────┐
          │◄────────┤ Motor Drive /    │
          │         │ Heat Roller /    │
          │         │ Pressure Belt    │
          ▼         └──────────────────┘
  ┌──────────────────────────────────────┐
  │     Exit Roller in the Fuser Assembly│
  └───────┬──────────────────────────────┘
          │
          ▼
  ┌──────────────────────────────────────┐
  │              Top Cover               │
  └──────────────────────────────────────┘
```

s6020-079

Media Path

This section describes the paper feed path of the entire device and the paper feed process in the each feed section.

Paper Path Layout

The following diagram shows the typical media path of all four printers.

- - - ▶ : Paper Transfer
▼ : Paper Sensors

Exit Sensor [Fuser Assy]

Heat Roll [Fuser Assy]

Exit Roll [Fuser Assy]

Pressure Belt [Fuser Assy]

Transfer Belt [Belt Assy IBT]

Transfer Roller

Y M C K

Rubber Registration Roller [Regi Assy]

Registration Pinch Roller [Regi Assy]

Feed Roller

Registration Sensor [Regi Assy]

No Paper Sensor

Separator Roller
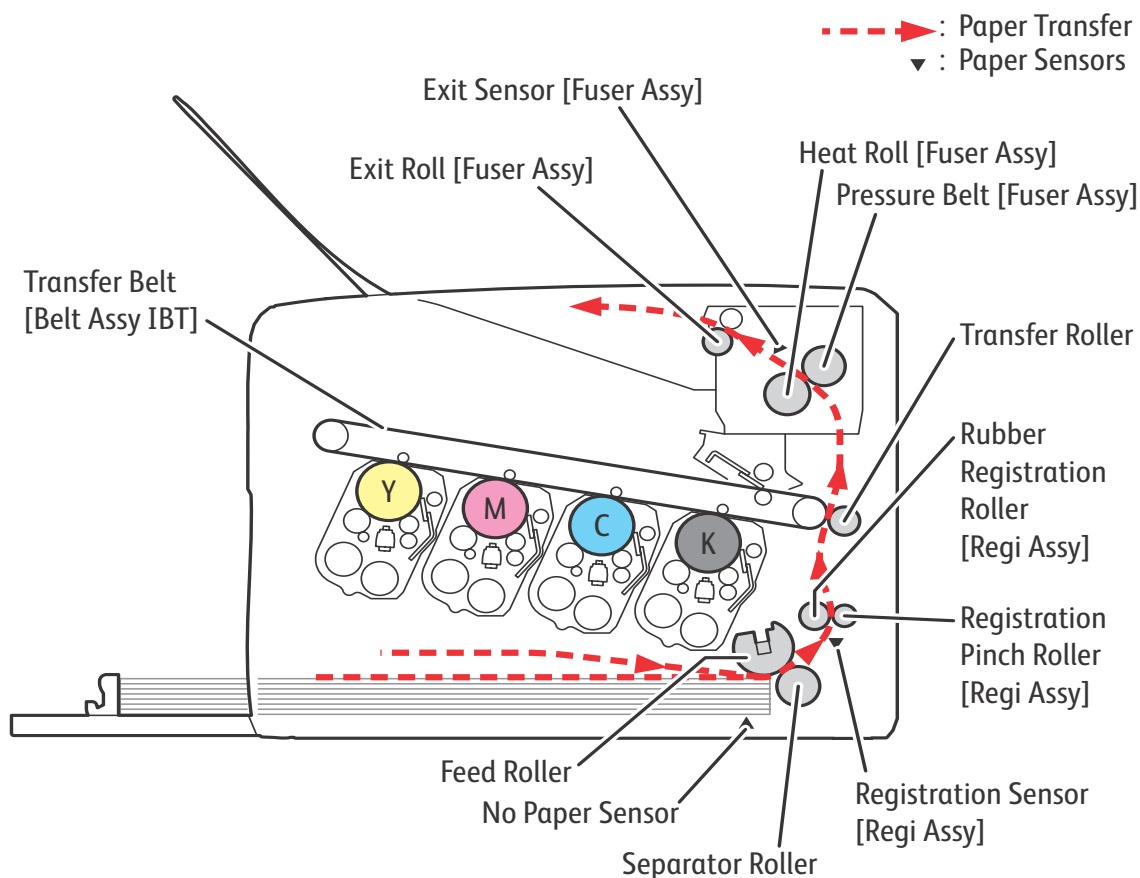
s6020-080

Note: The Phaser 6022 and WorkCentre 6027 utilize the No Paper Sensor having a Paper Cassette rather than a Paper Tray as with the Phaser 6020 and WorkCentre 6025.

Paper Path of the ADF (WorkCentre 6027 MFP only)

When sheet feeding from the Document Feeder Tray of the ADF begins, the Nudger Roller and the Feed Roller rotate driven by the torque from the ADF Motor. The sheet is nipped between the Feed Roller and the ADF Separator Pad while being fed into the ADF.

Inside the ADF, the sheet is fed by the Takeaway Roller driven by the torque of the ADF Motor to the Scanner Home (CVT: Constant Velocity Transport) Position in the Carriage Assembly and scanned. Once scanning is complete, the sheet is ejected to the Document Output Tray of the ADF by the Exit Roller rotating from the torque of the ADF Motor.

s6020-377
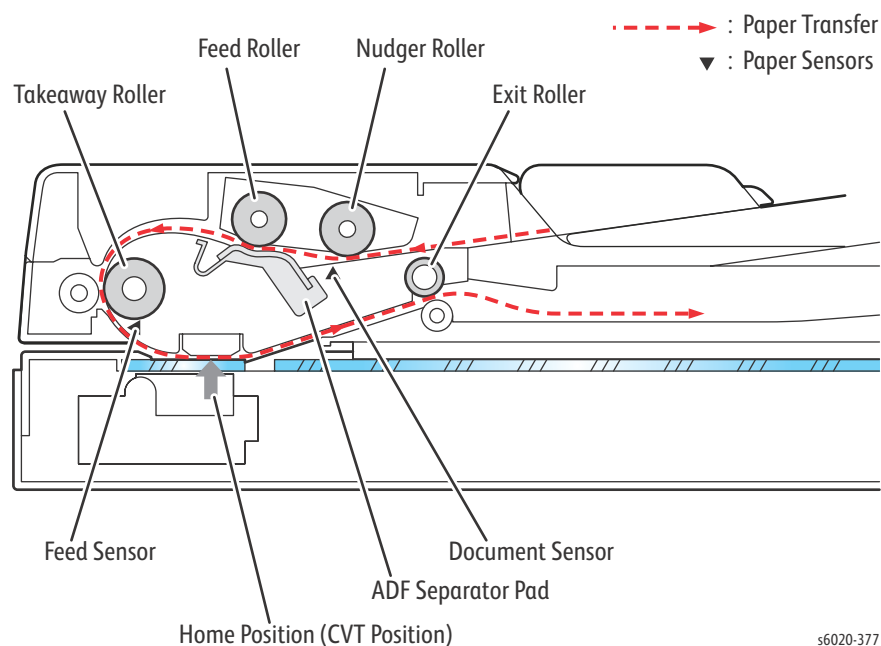
Feeding from the Paper Cassette (Phaser 6022 and WorkCentre 6027 MFP)

When sheet feeding from the cassette starts, the Feed Roller rotates, driven by the Drive Motor and controlled by the Feed Solenoid to feed the sheet to the position where it is nipped between the Feed Roller and the Separator.

As the Feed Roller rotates, the CAM MSI L and CAM MSI R also rotate to lift the Plate Bottom via the PLATE ARM L and PLATE ARM R to the position for sheet feeding.

s6020-508
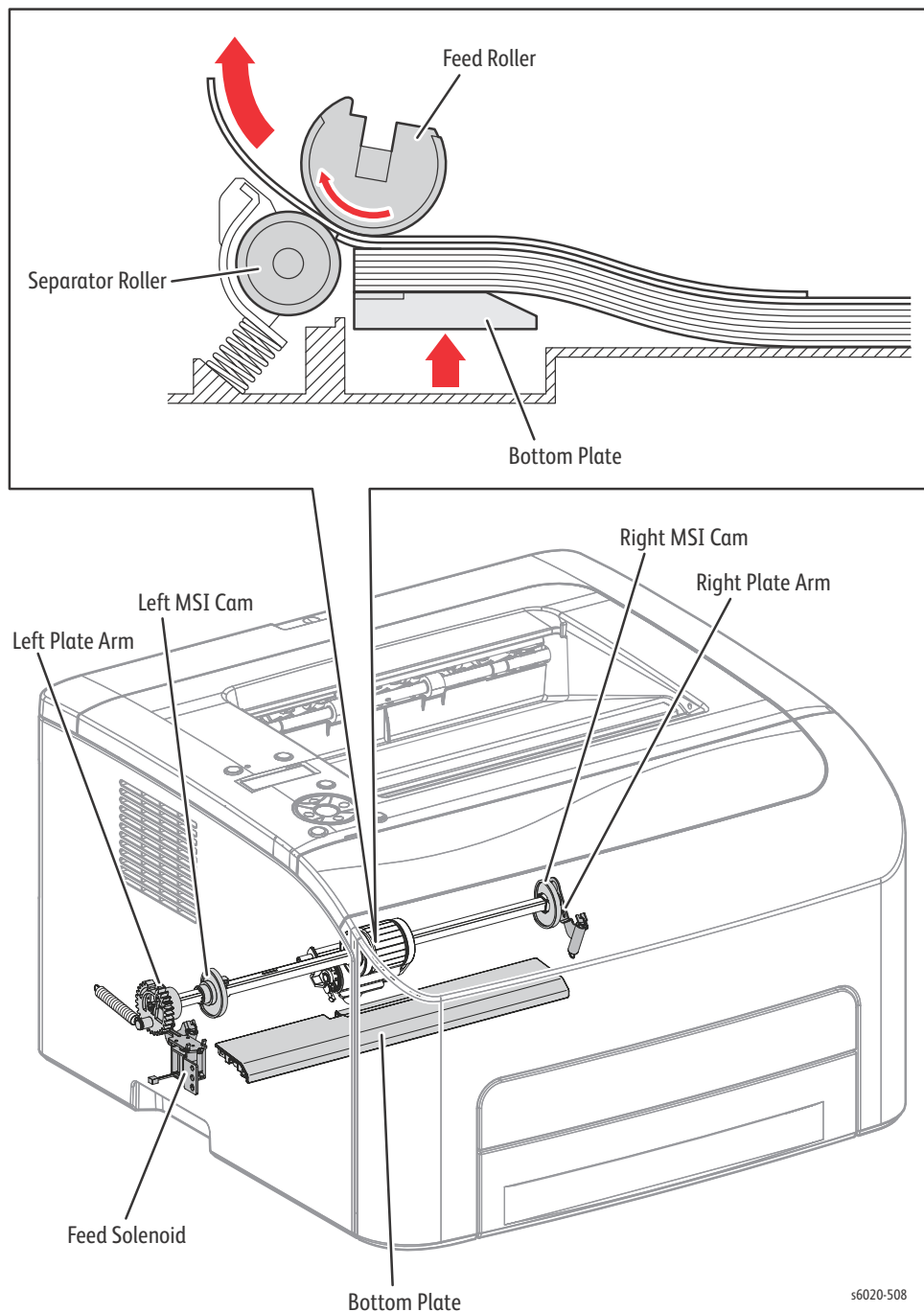
Feeding from the Paper Tray (Phaser 6020 and WorkCentre 6025 MFP)

When sheet feeding from the Paper Tray starts, the Feed Roller rotates, driven by the Main Drive Assembly and controlled by the Feed Solenoid, to feed the sheet to the position where it is nipped between the Feed Roller and the Separator Pad.

As the Feed Roller rotates, the Left Feed Roller Cam and Right Feed Roller Cam also rotate to lift the bottom plate via the Left Follower Arm and Right Follower Arm to the position for sheet feeding.
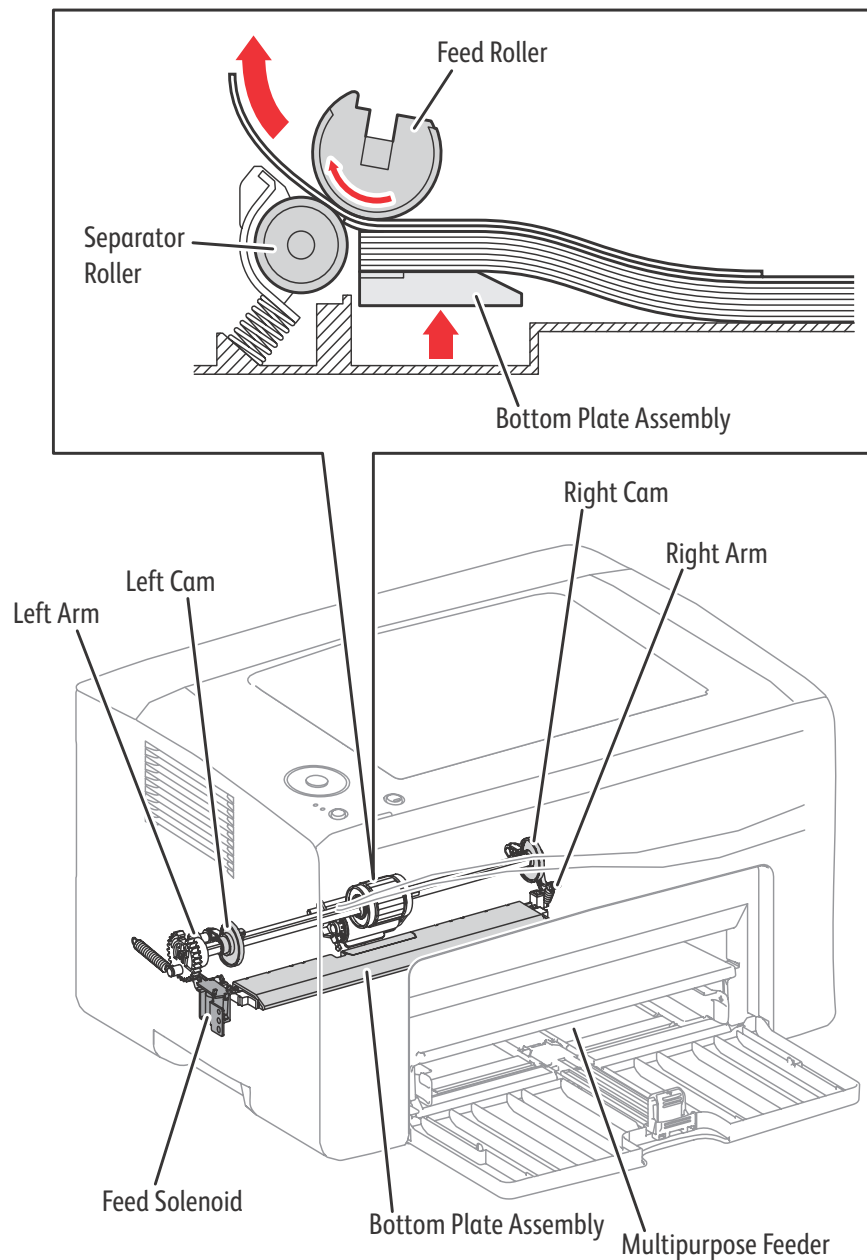
s6020-081

Multiple Sheet Feed Prevention

The sheets in the tray are occasionally stuck together along the edges. The stuck sheets cause a multiple sheet feed or a jam. The sheets are fed by the Feed Roller to a position between the Feed Roller and the Separator Pad. Normally, when only one sheet is fed, both the Feed Roller and Separator Pad rotate to allow the sheet to pass. However, when two sheets are fed concurrently, only the Feed Roller rotates and the Separator Pad is locked thereby allowing the upper sheet to separate from the lower sheet that is stopped by the friction with the Separator Pad at rest.

The Separator Pad is pushed toward the Feed Roller by spring pressure, and is controlled by the torque limiter (Friction Clutch) with which it is coupled.
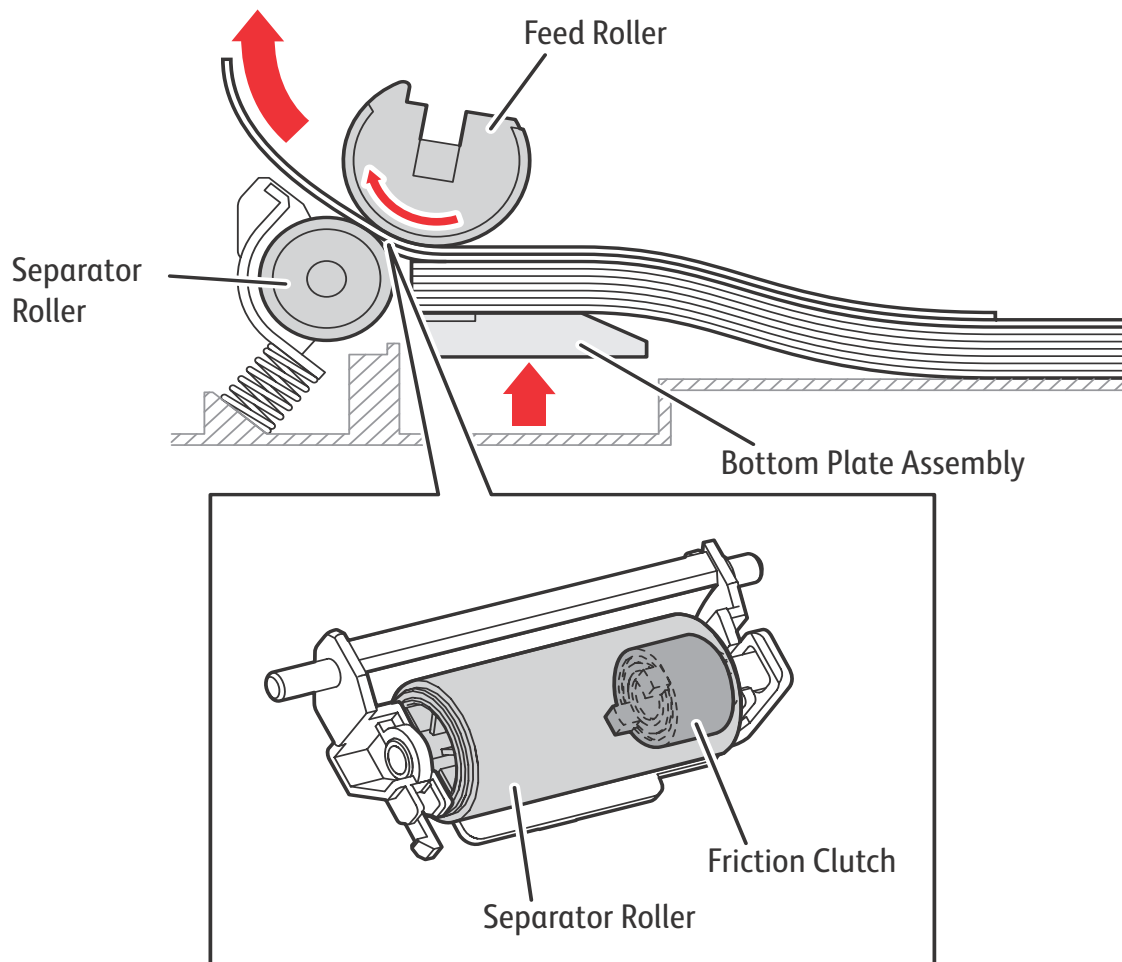
s6020-082

Feeding from the Bypass Tray (Phaser 6020 and WorkCentre 6025 MFP)

When feeding from the Bypass Tray starts, the Feed Roller rotates, driven by the Main Drive Assembly and controlled by the Feed Solenoid, to feed the sheet to the position where it is nipped between the Feed Roller and the Separator Pad.

The paper path from the Paper Tray and the paper path from the Bypass Tray are the same. The sheets loaded in the Bypass Tray are positioned nearer to the Feed Roller, and are given the higher priority in feeding if both the Paper Tray and the Bypass Tray are loaded.
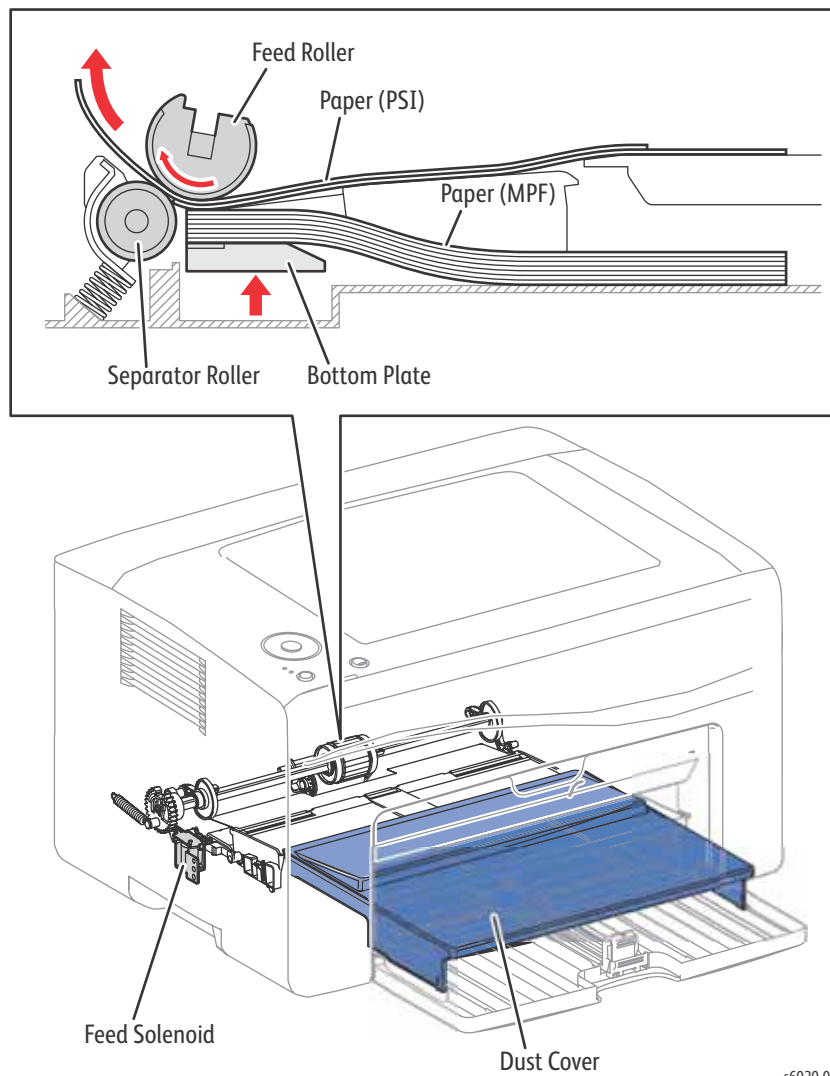
s6020-083

Feeding in Registration Section

The sheet fed out of the Tray is forwarded to the registration section, driven by the Main Drive Assembly and controlled by the Registration Clutch.

When the sheet reaches the registration section, its lead-edge position is adjusted see "Leading-edge Registration" on (page 1-42), and then the sheet is forwarded to the toner transfer section (Bias Transfer Roller).

s6020-084
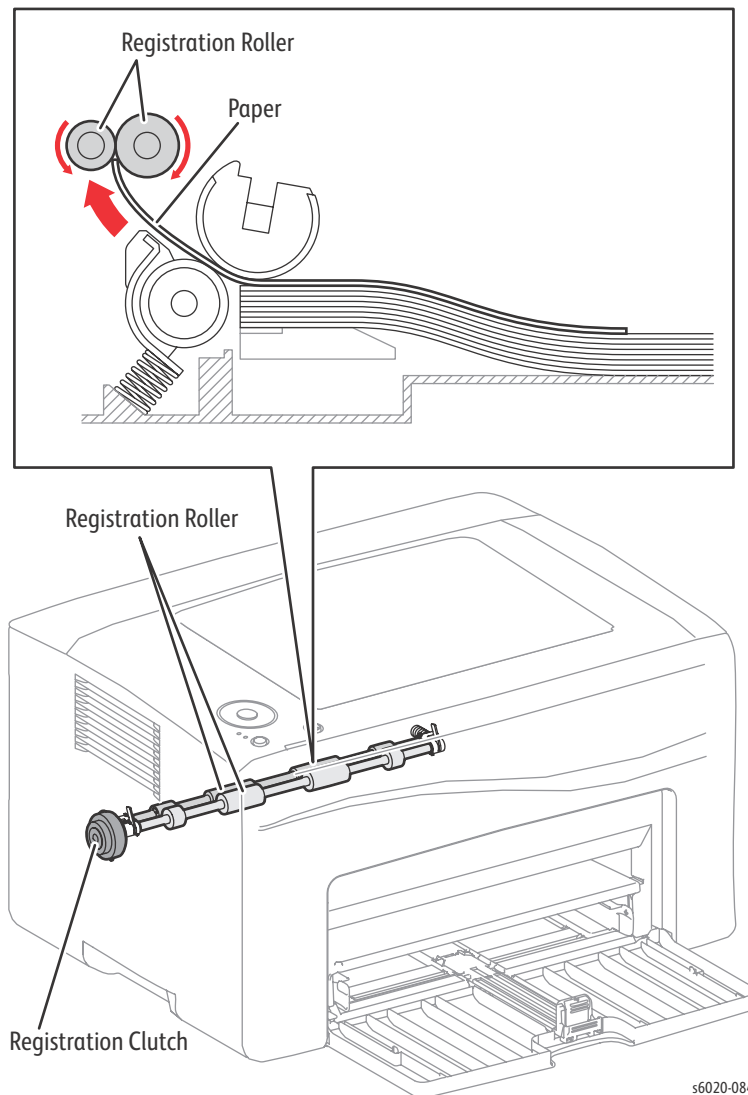
Leading-edge Registration

When a sheet is fed from the Tray to the toner transfer section, the registration of the sheet may not be correctly maintained due to misalignment of lead edges in the tray.

To avoid this problem, the lead edge position needs to be aligned at the Registration Rollers before the sheet is fed in front of the transfer belt, or in front of the BTRs.

By thrusting the edge of the sheet fed out of the Paper Tray or Bypass Tray against the Registration Roller that is locked, the lead edge position of the sheet is corrected.

Before the Registration Rollers are energized, the paper is advanced from the tray to the rollers. This process aligns the leading edge as shown in the following illustration.

By pushing the edge of the sheet against the Registration Roller that is not turning, the lead edge of the sheet is registered.
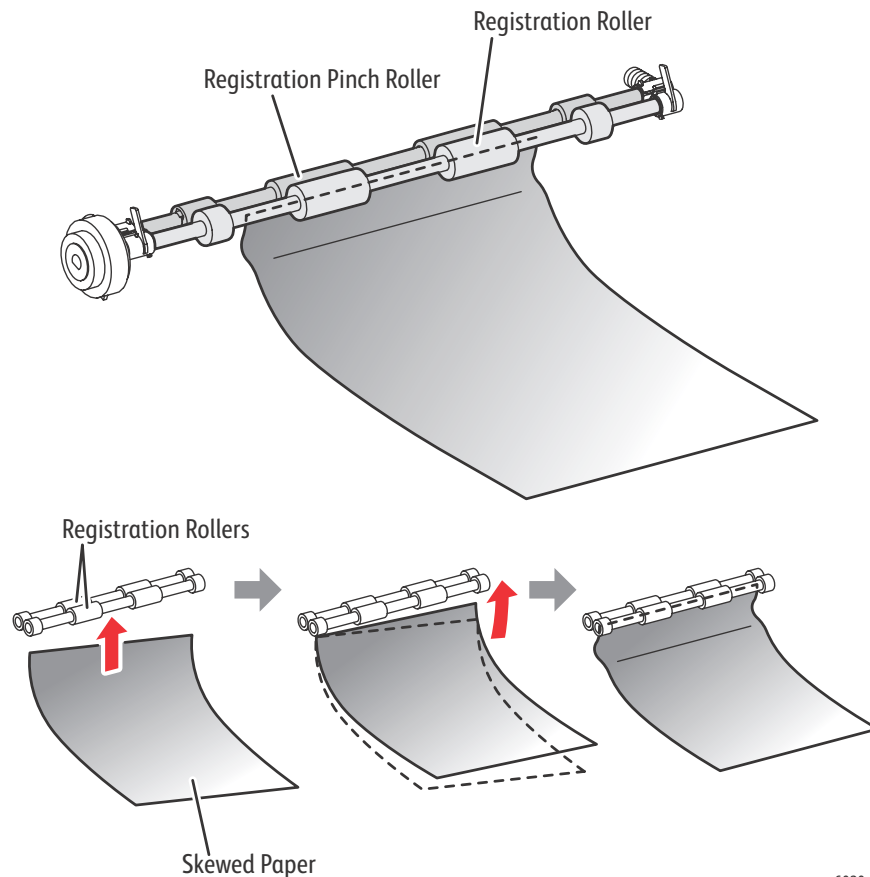
s6020-085

Transfer/Fusing/Exit

When the sheet passes the registration section it then passes through the toner transfer position. There it is nipped between the transfer belt and the Bias Transfer Roller that are driven by the Main Drive Assembly. The toner image on the transfer belt is transferred onto the sheet. As the sheet is forwarded to the exit section, the toner image is fused onto the sheet surface by the heat roller that is driven by the Main Drive Assembly.

At the exit section, the sheet is ejected by the Fuser's exit roller. The exit roller is driven by the Main Drive Assembly.

s6020-086
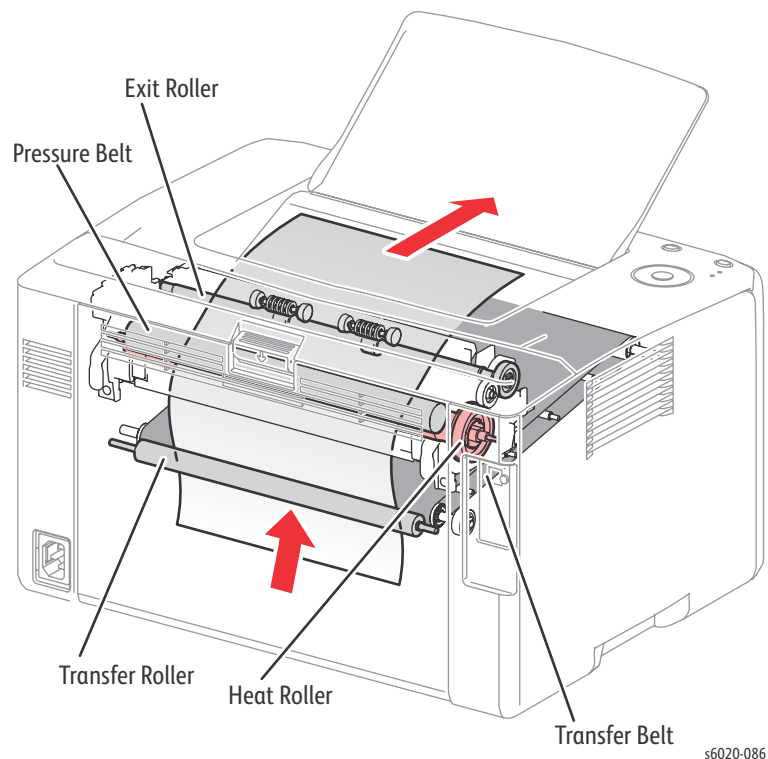
Major Printer Components

Major functional components of the printer are described below with illustrations.

These components are classified into the following functional blocks.

- Sensors
- Paper Tray
- Registration Assembly
- Process Control Sensors
- LED Print Head
- Toner Cartridge
- Xerographic Assembly
- Transfer/Fusing/Exit
- Drive Assemblies
- Electrical
- Scanner
- Automatic Document Feeder (ADF) (WorkCentre 6027 MFP only)

Sensors

The printer contains sensors of various types that perform a variety of functions. One group of sensors track media along the media path to detects jams. Other sensors detect the presence of the Toner Cartridges, stop printer activity if a door is open (interlock), detect the presence of media in the trays, and monitor fusing temperature.

Exit Sensor

CRUM K

CRUM C

CRUM M

CRUM Y

Interlock Switch

Registration Sensor

No Paper Sensor

K Mode Sensor
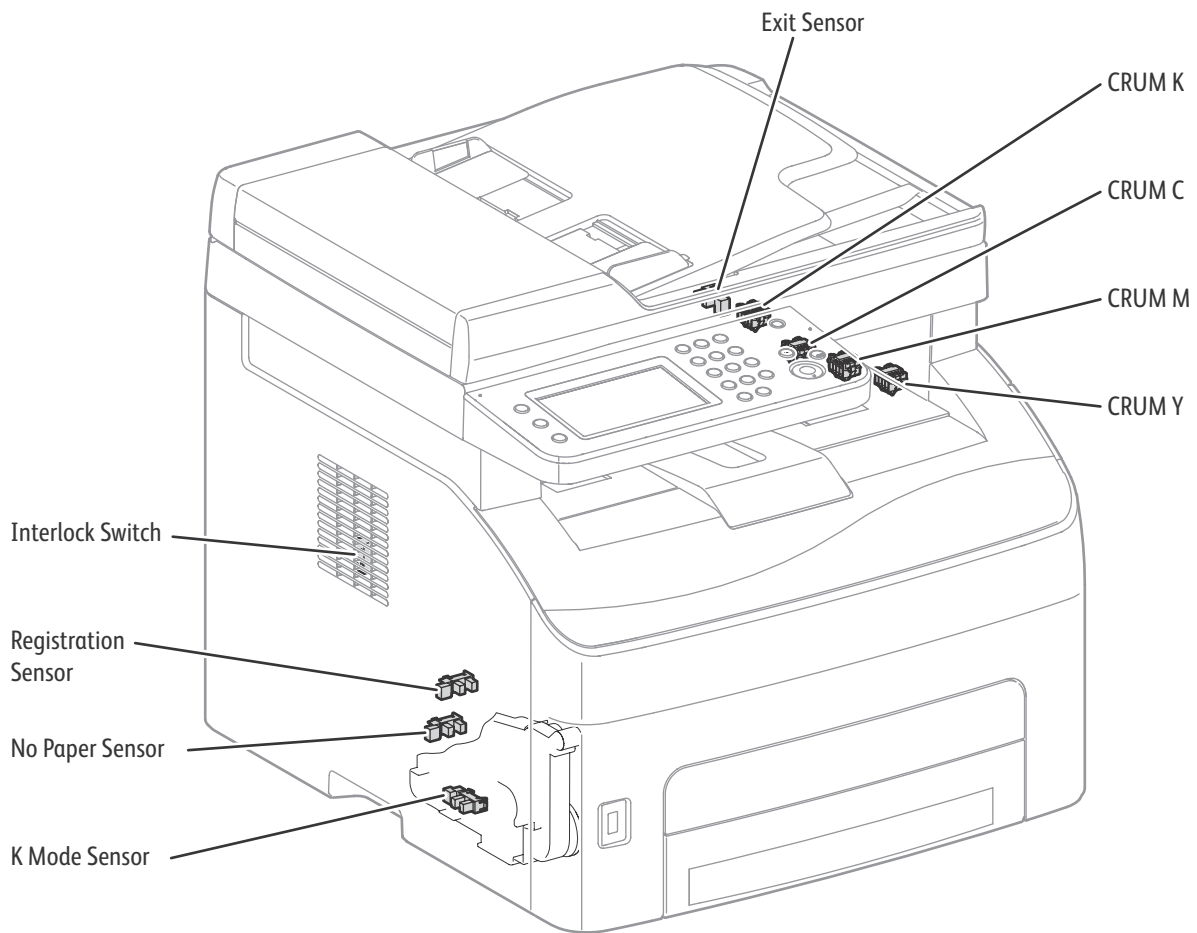
s6020-595

Paper Tray

Major Functions

- Side Guides

  The side guides align the print media stack in the width direction by moving perpendicularly to the paper feeding direction.

- Tray Extension

  The Tray Extension aligns the print media stack in the length direction and determines the paper size by moving in the paper feeding direction.

- Separator Pad

  The Separator Pad and the Feed Roller nip the print medium to prevent multiple sheet feed.

- Bottom Plate

  When sheets are fed, the bottom plate rises to the position where sheets can be fed see "Feeding from the Paper Tray (Phaser 6020 and WorkCentre 6025 MFP)" on (page 1-38).

- Bypass Tray

  The Bypass Tray provides feeding of non-standard paper sizes like envelopes in the Phaser 6020 and WorkCentre 6025 MFP printers.

Phaser 6020 and WorkCentre 6025 MFP

s6020-087
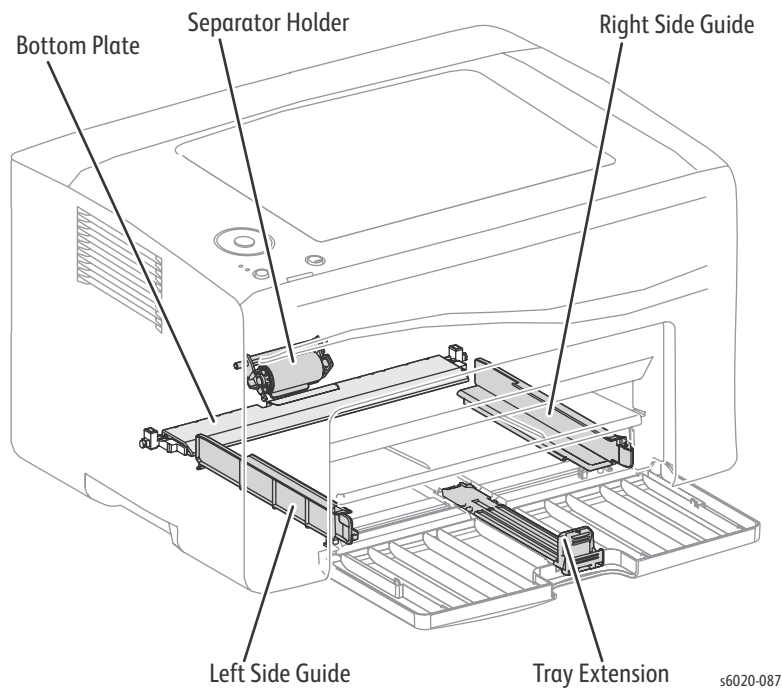
Paper Cassette

Major Functions

- Side Guides

  The side guides align the print media stack in the width direction by moving perpendicularly to the paper feeding direction.

- Tray Extension

  The Tray Extension aligns the print media stack in the length direction and determines the paper size by moving in the paper feeding direction.

- Separator Holder Assembly

  The Separator Holder Assembly contains the Separator Pad, Cover, and Spring to assist paper feed without multi-sheet feed problems.

- Bottom Plate

  When sheets are fed, the bottom plate rises to the position where sheets can be fed see "Feeding from the Paper Tray (Phaser 6020 and WorkCentre 6025 MFP)" on (page 1-38).

- Paper Cassette

  The Paper Cassette provides feeding of standard and non-standard paper sizes like envelopes and extends for use of legal size paper in the Phaser 6022 and WorkCentre 6027 MFP printers.

- Legal Tray Dust Cover

  Provides protection of the paper and feed area from dust and foreign objects when the Paper Cassette is extended and an opening between the Paper Tray front and printer Front Cover exists.

- Jam Access Door

  The Jam Access Door provides ease of access to the back of the printer inside to assist removal of paper when a jam in the inner feed area occurs. The Jam Access Door also provides protection of the internal feed area and paper from foreign objects and dust.

Phaser 6022 and WorkCentre 6027 MFP

Bottom Plate   Separator Holder Assembly

Jam Access Door   Legal Tray Dust Cover   Paper Cassette   s6020-533
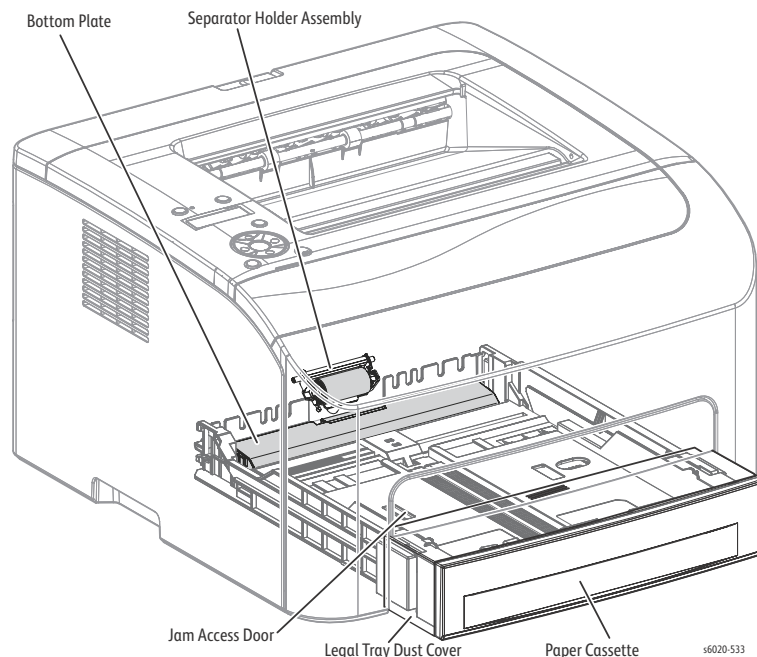
Paper Feeder

Major Functions

- Feed Solenoid

  Transmits the torque from the Main Drive Assembly to the Feed Roller see "Drive" on (page 1-87).

- Feed Roller

  When the Feed Solenoid operates, the Feed Roller starts rotating to feed the print medium see "Left and Right Feeder Roller Cam/Feed Roller" on (page 4-83)).

Feed Roller

Feed Solenoid
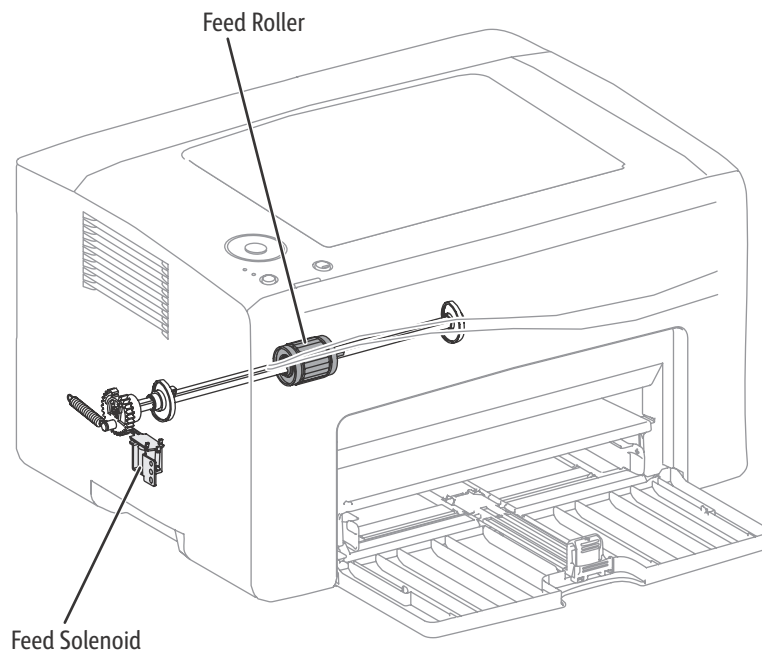
s6020-674

No Paper Sensor (Phaser 6022 and WorkCentre 6027 Only)

Detects the presence/absence of sheets in the Paper Tray or Bypass Tray based on the change of the actuator position. (No sheets: Sensor beam is received.)

No Paper Actuator
(No Paper Position)

No Paper Sensor

Bottom Plate

No Paper Actuator

Paper

No Paper Sensor

Bottom Plate

No Paper Actuator
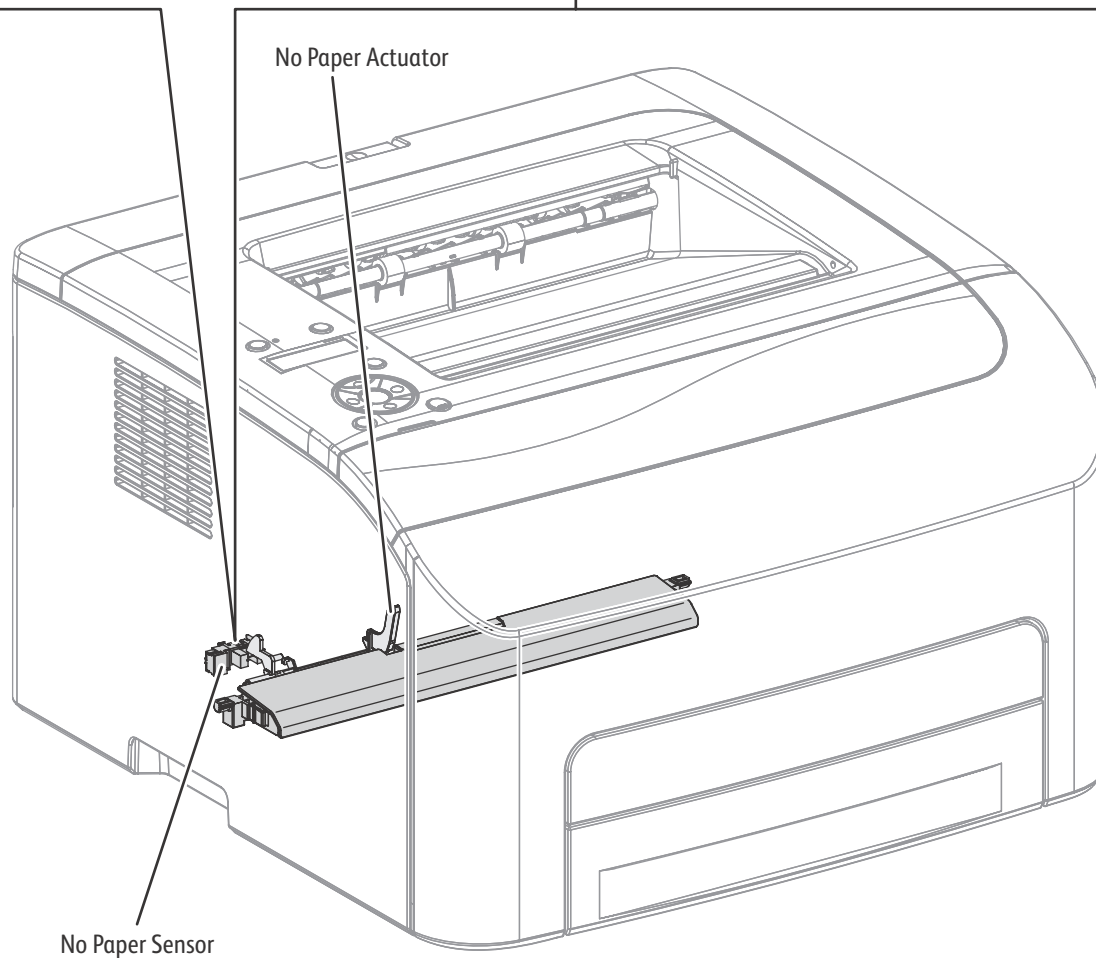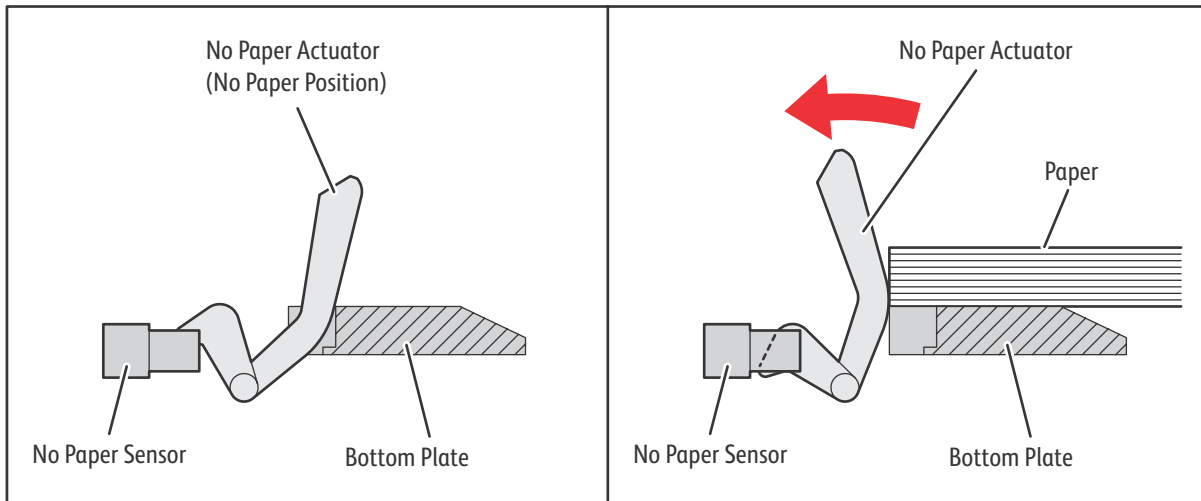
No Paper Sensor

s6020-675

Registration Assembly

Major Functions

- Registration Sensor
  - The Registration Sensor detects that the lead edge of the print medium has reached the registration section. (No paper: sensor beam is blocked)

Registration Actuator (No Paper Position)

Registration Sensor

Registration Actuator

Paper

Registration Sensor

Registration Sensor

Registration Actuator
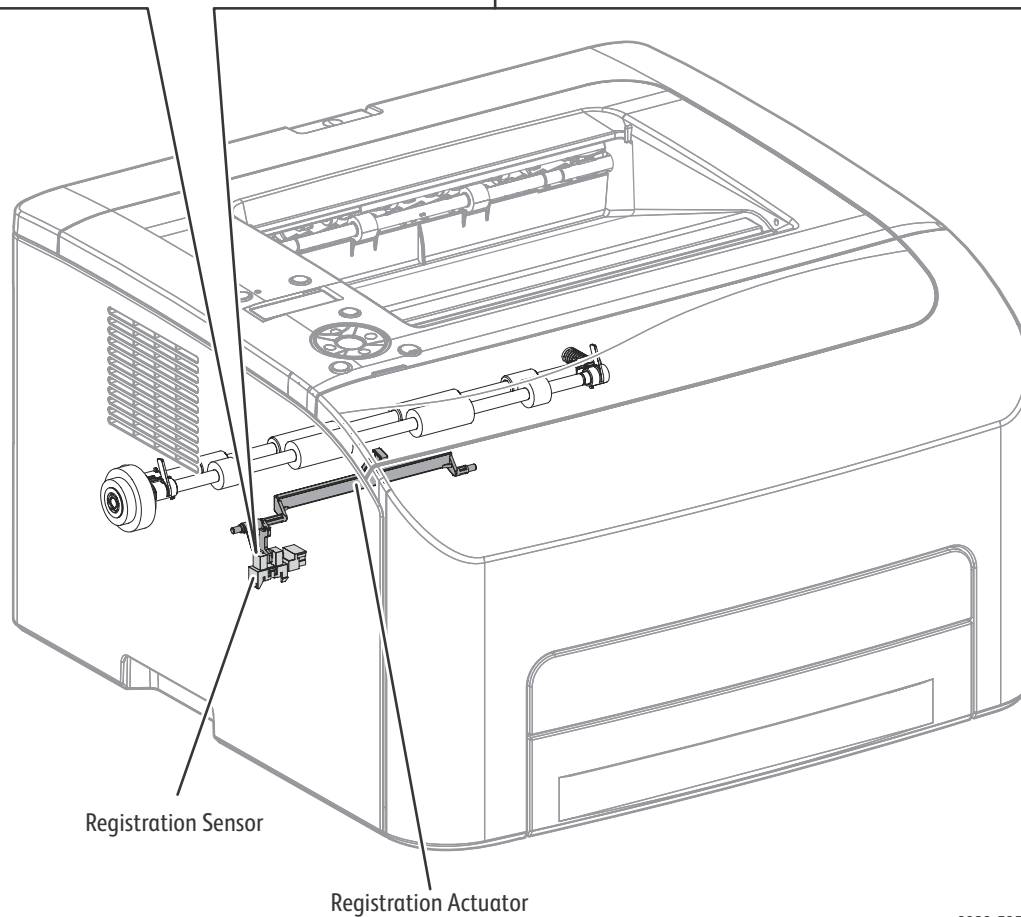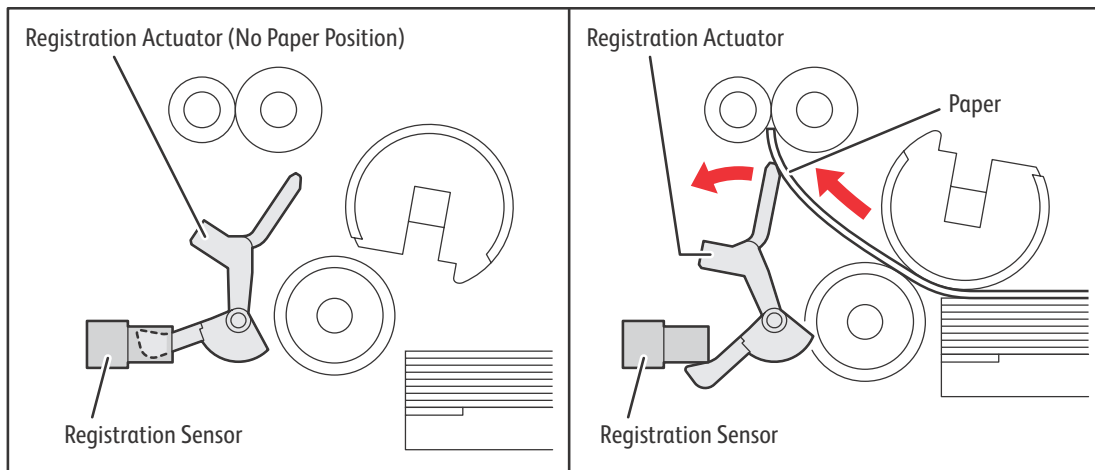
s6020-535

- Registration Clutch
    - The Registration Clutch transmits the driving torque from the Main Drive Assembly to the Registration Roller to feed the sheet from Paper Tray or Bypass Tray to the Fuser, see "Drive" on (page 1-87).
    - To place the toner image at an appropriate position on the sheet, the timing of leading edge feeding from the Registration Assembly is adjusted by the Registration Clutch operation.

Registration Pinch Roller Assembly

Registration Roller

Registration Clutch

Registration Sensor
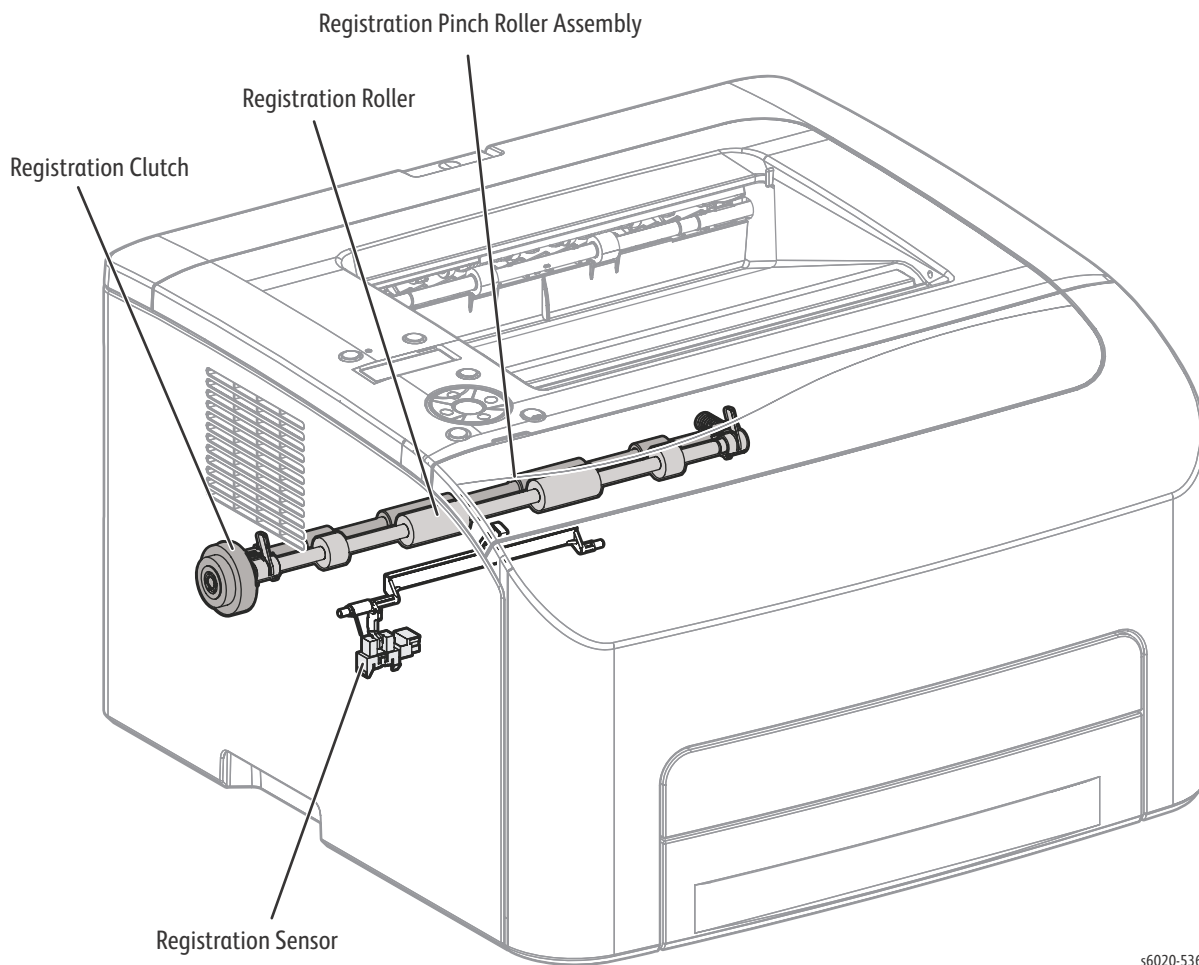
s6020-536

Process Control Sensors

Major Functions

- ADC Sensor
  - Measures the density of the toner patches on the belt at the Window position before the secondary transfer, and converts it to a voltage value. This voltage value is used for toner density control.
- MOB (Mark On Belt sensor) Sensor - 6022 and 6027.
  - Detects incorrect registration among the YMCK colors based on the marks created on the rear side of the Belt.

Transfer Belt

ADC Sensor

MOB Sensor
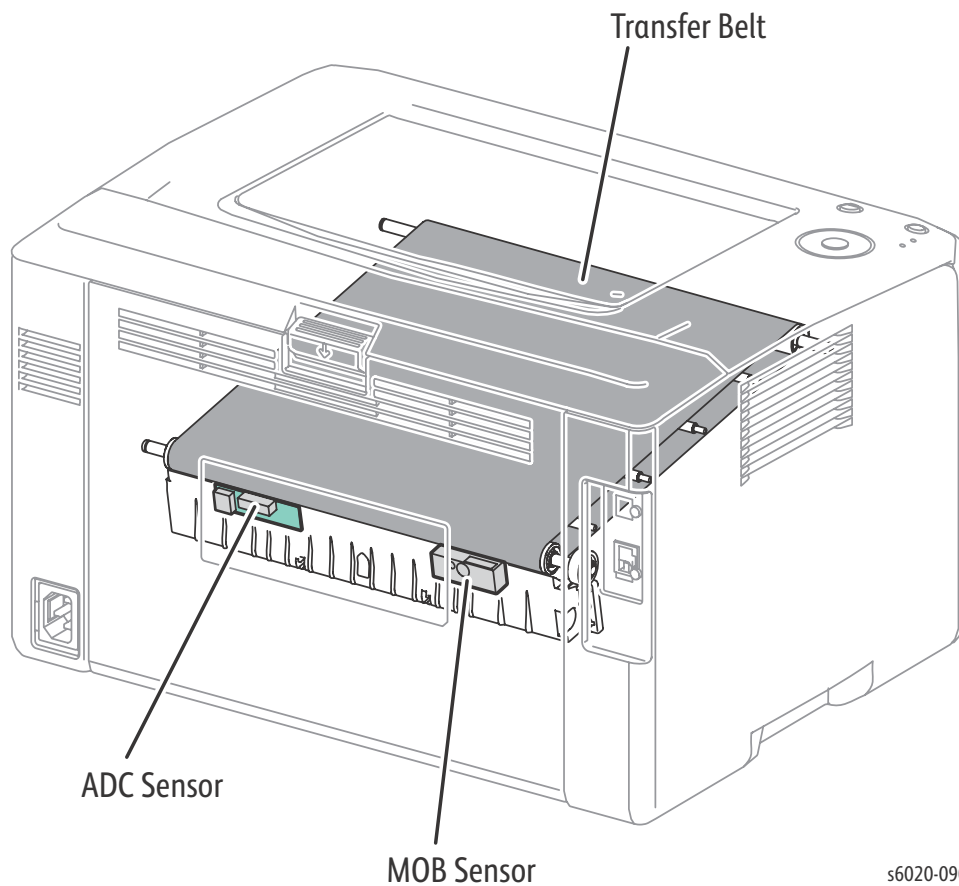
s6020-090

LED Print Head

Major Functions

- LED Print Head (LPH)
  - An exposure device for creating an electrostatic latent image on the drum surface. One unit is provided for each of Yellow, Magenta, Cyan, and Black.
- LED Board
  - A circuit board that distributes signals from the LED Driver Board to the LPH.

LPH Assembly (K)

LPH Assembly (C)

LPH Assembly (M)

LPH Assembly (Y)

Bottom View Illustration

ASIC Board

LPH Assembly
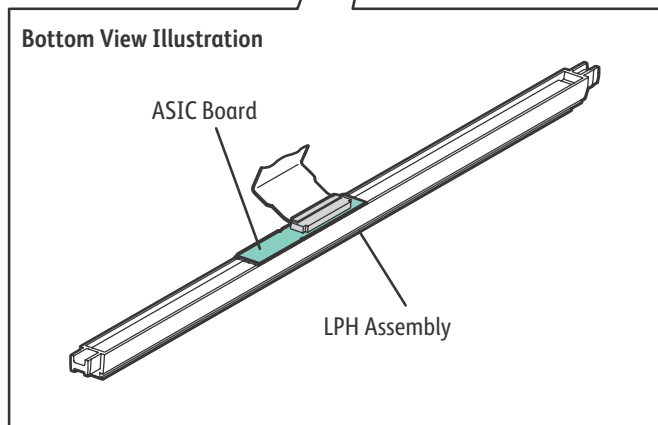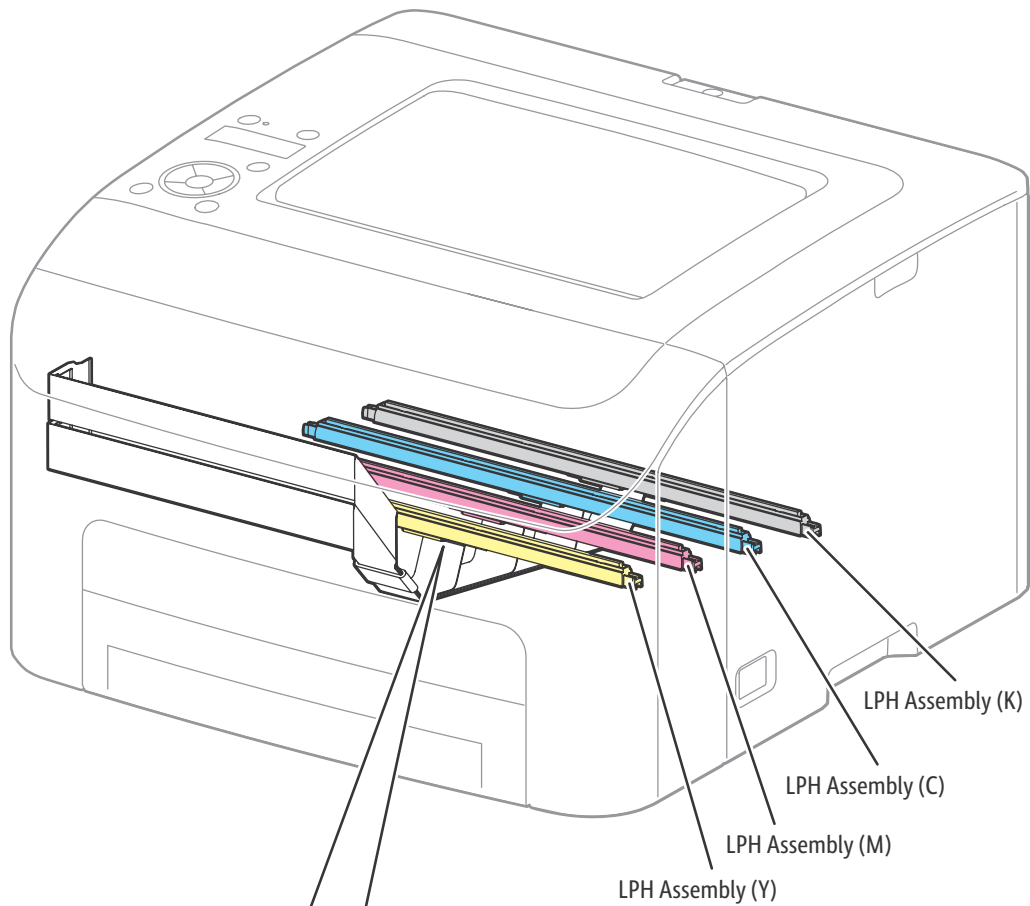
s6020-538

Toner Cartridge

Major Functions

- Toner Cartridge
  - Contains toner and a small amount of carrier. Also stores waste toner.
- CRUM Connector
  - The CRUM stores, reads, and writes printer-specific information regarding the CRU (Customer-Replaceable Unit).
- Toner Motor
  - Supplies toner from the Toner Cartridge to the Xerographics Assembly by driving the Toner Cartridge auger. The toner Dispenser assembly contains a motor for driving the augers for Yellow and Magenta, and a motor for driving the augers for Cyan and Black.
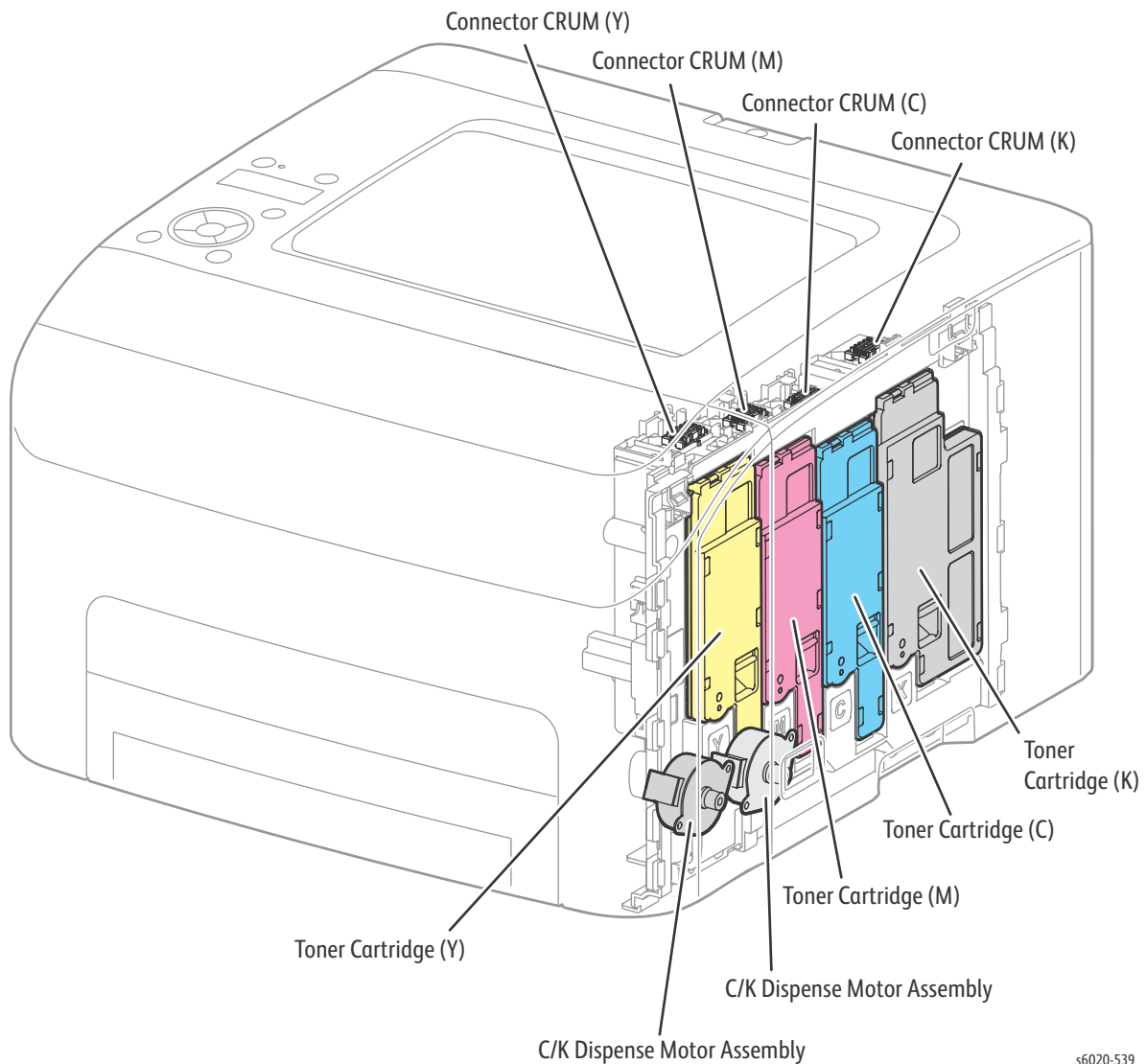
s6020-539

Xerographic Assembly

The xerographic assembly contains the developers and transfer belt.

Developer

s6020-540
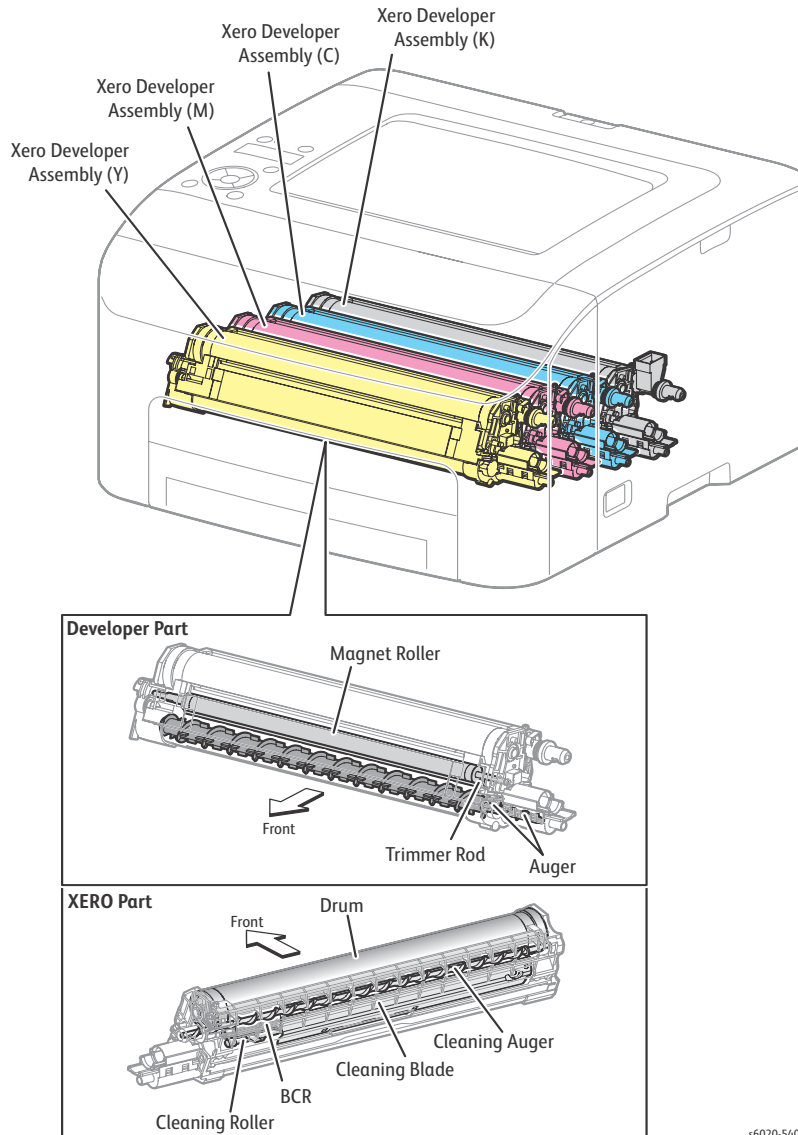
Major Functions

- Drum
    - The drums are exposed to LED light to create latent images for each of Yellow, Magenta, Cyan, and Black.
- Bias Charge Roller (BCR)
    - Charges the drum electrically.
    - Cleaning Roller
      Removes the toner remaining on the BCR.

Removes the toner remaining on the drum after the toner image is transferred to the print medium.

- Magnet Roller

  The magnet roller contacts the drum to form the toner image on the drum surface.

- Auger

  The auger agitates the toner particles.

- Trimmer

  The trimmer uniformly levels the toner/carrier particles deposited on the surface of the Magnet Roller.

Transfer Belt

s6020-104
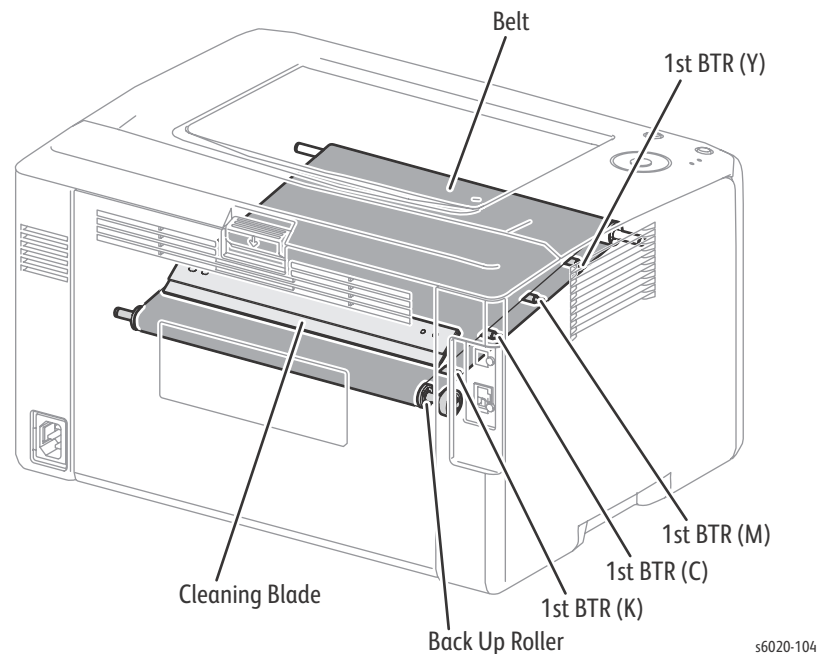
Major Functions

- 1st BTR Roller (Y/M/C/K)

  – Attracts the toner image on the drum to the transfer belt by positively charging the transfer belt from the backside.

- Transfer Belt

  – Receives the four color-separated toner images from each drum in registration with one another.

- Back Up Roller

  – Helps the toner particles migrate onto the transfer belt by retaining the belt at a position where it nearly contacts the print media during the second transfer process. See "Process Control Sensors" on (page 1-52).

- Cleaning Blade

  – Scrapes off the excess toner remaining on the transfer belt.

Fuser & Exit

The Fuser fixes the toner image onto the sheet by heat and pressure and guides the sheet into and out of the fixing position.
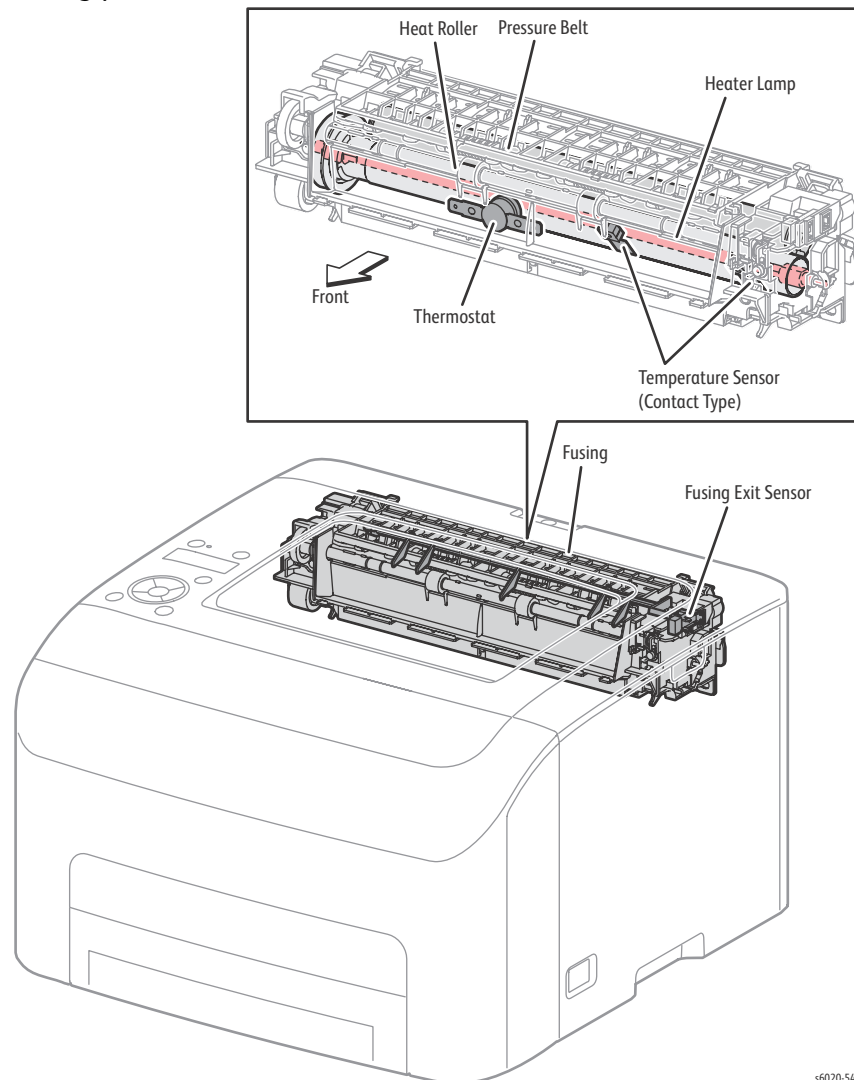
s6020-542

Major Functions

- Heat Roller
  - A metal roller that transfers heat to the sheet to fuse the toner particles onto the sheet surface.
- Pressure Belt
  - A combination of a belt and a pressurizing system for pressing the sheet against the heat roller.
- Heater Lamp
  - A heating-coil-enclosed lamp located inside the heat roller to heat its entire length.
- Temperature Sensor (contact type)

- A thermistor (temperature-responsive resistance) positioned in contact with the heat roller to detect its surface temperature and regulate heat lamp operation.
- Thermostat
  - A component connected in series with the power supply for the heat lamp. Prevents the overheating of the heat roller by releasing the contacts when the contact section has reached a certain temperature due to a overheating failure of overheating.
- Fuser Exit Sensor
  - Detects whether the fused print has passed through the Fuser based on the change of the actuator position. (Sheet passed: Sensor beam received.)

Drive Assemblies

Main Drive   MU Drive Assembly

Switching Solenoid

Drive Gear Assembly   Switching Sensor

Developer Drive Assembly   s6020-106
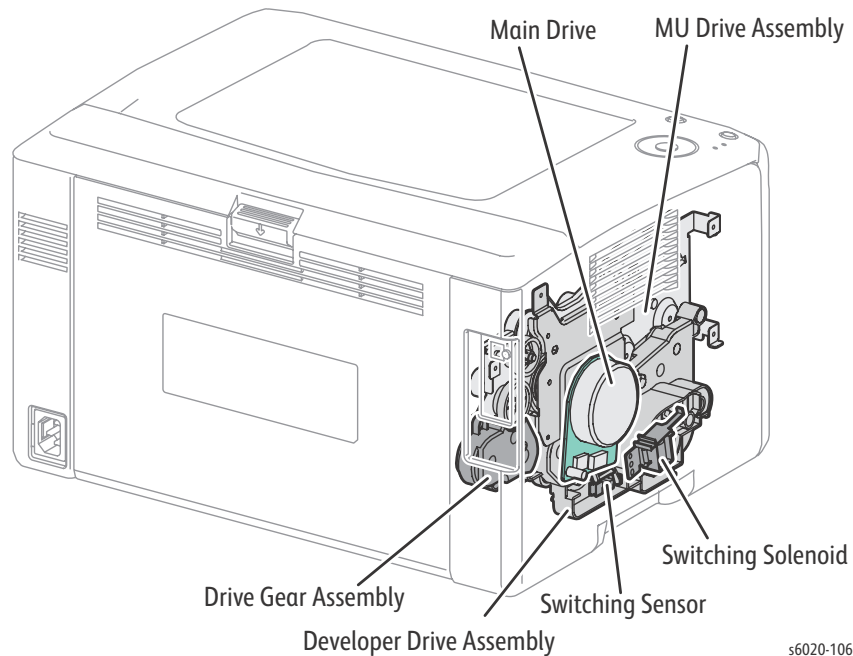
Major Functions

- Main Drive Assembly
  - A motor for driving components such as MU Drive Assembly, Feed Drive Assembly, and the Fuser.
- Developer Drive Assembly
  - An assembly to relay torque from the Main Drive Assembly to the MU Drive Assembly.

  Contains the Switching Solenoid and the Switching Sensor.
  - Switching Sensor
    Detects whether the printer is running in the full color mode or the B/W mode based on the position of the actuator. (Full Color mode: Sensor beam is received)
  - Switching Solenoid
    Switches between the full color mode and the B/W mode by disconnecting the imaging units for Yellow, Magenta, and Cyan from the torque from the Main Drive Assembly in the B/W mode see "Full Color Mode and B/W Mode" on (page 1-60).
- Feed Drive Assembly
  - An assembly that rotates the Paper Feed and Registration Roller by the torque from the Main Drive Assembly.
- MU Drive Assembly
  - An assembly that rotates the transfer belt, drums (YMCK), and the augers and magnet rollers in the Developer Drive Assembly by the torque from the Main Drive Assembly.

Full Color Mode and B/W Mode

The Full Color mode uses the four colors of Y, M, C, and K while the B/W mode uses K only.

To deactivate the components for Y, M, and C during the B/W mode operation, the torque transmission route is changed between the Full Color and B/W modes.

- Operation in Full Color mode
  - In the full color mode, the magnet rollers for YMCK rotate to form a full-color visible toner image by the torque from the Main Drive Assembly.

s6020-107
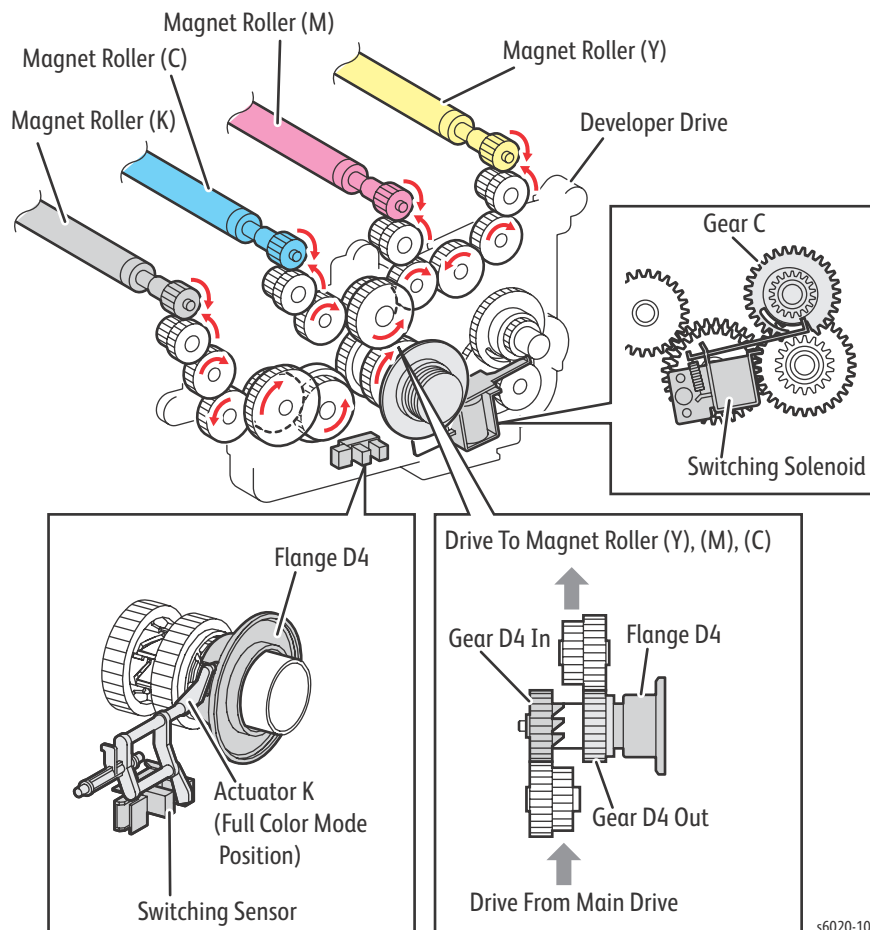
Operation in B/W mode

In the B/W mode, the Switching Solenoid in the Developer Drive Assembly disconnects the magnet rollers for YMC from the torque from the Drive Assembly, allowing only the magnet roller for K to rotate to form a visible toner image in Black.

[Black And White Mode]

Magnet Roller (K)

Flange D4

Gear Cam

Gear C

Gear C

Switching Solenoid

Flange D4

Actuator K
(Black And White
Mode Position)

Switching Sensor

Cutting Off Drive

Gear D4 In

Flange D4

Gear D4 Out

Drive From Main Motor
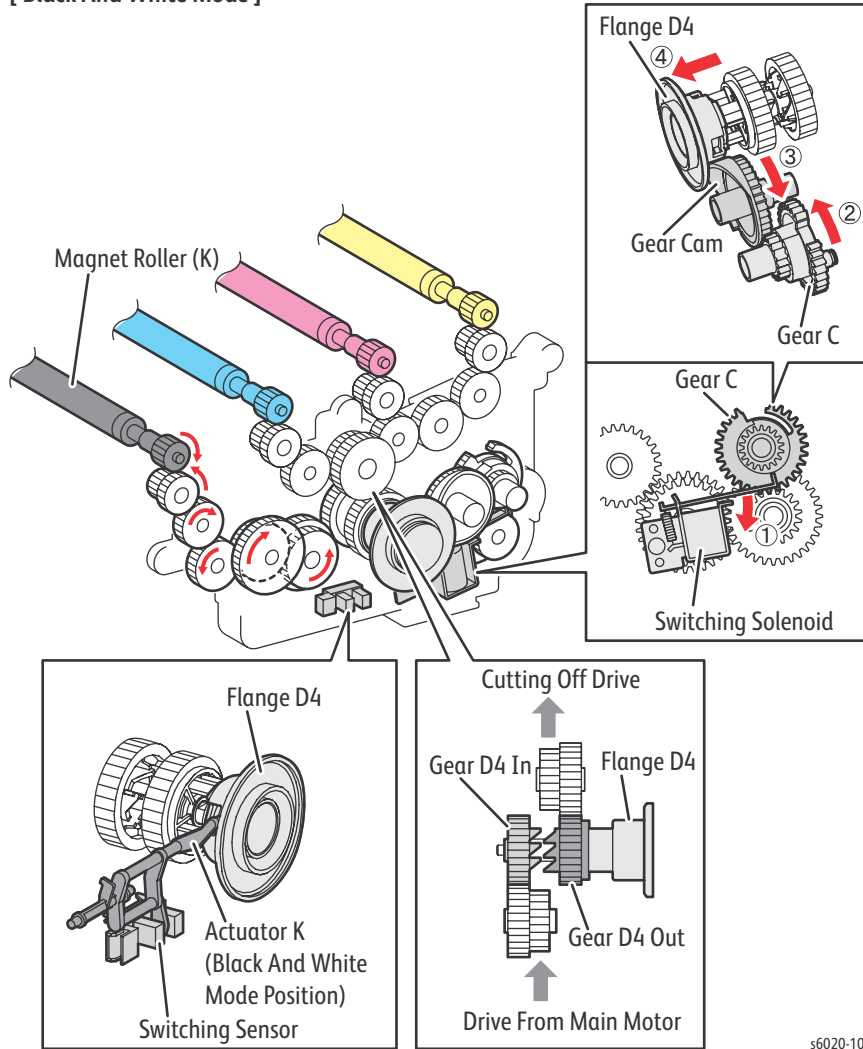
s6020-108

Electrical

Fan

Front View Illustration

Main Fan
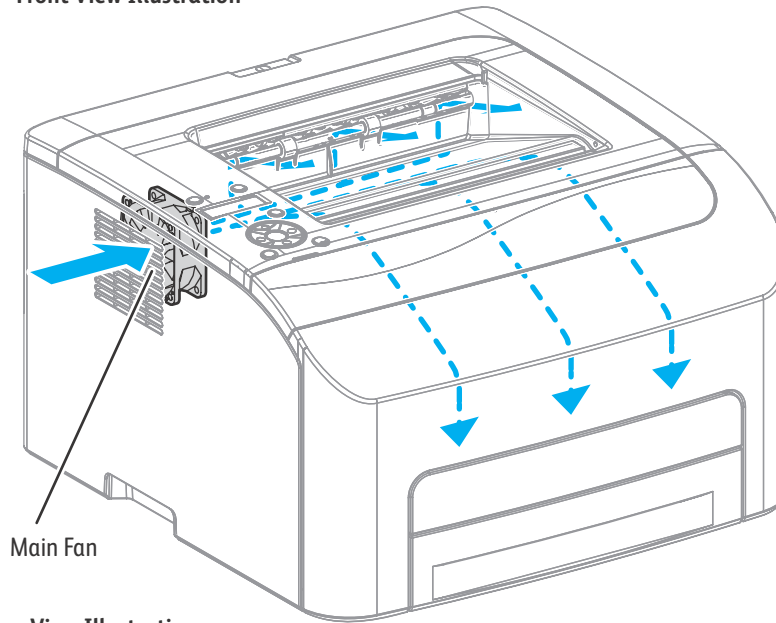
Rear View Illustration

Main Fan
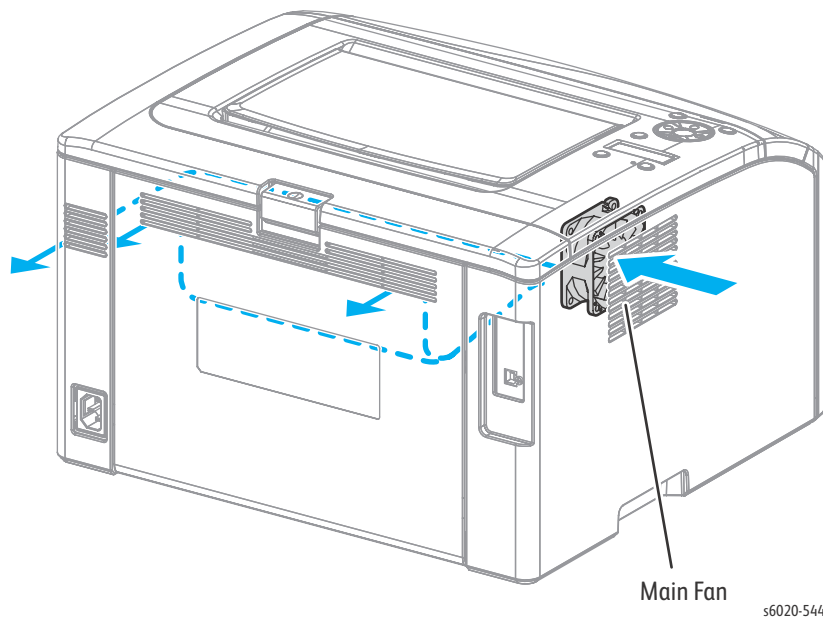
s6020-544

Major Functions

- Fan
  - Exhausts heat out of the printer.
- Switches
  - Power Switch
    Turns on/off the AC power to the printer.
  - Rear Interlock Switch:
    Detects Rear Door position. Interrupts DC power to the printer (+24VDC) when the Rear Door is opened.
- LVPS
  - Supplies the AC power from the power supply to the heater section of the Fuser and generates stable low DC voltage to be used by the logic circuits and other components.
- HVPS
  - Supplies high voltage to the BCRs and the magnet rollers for each color.
- MCU Board
  - Controls the print operation based on the communication with the print controller and on the information from the sensors or switches. The temperature/humidity sensor is on this board as well.
- IP Board
  - The Image Processor Board is the print controller. The IP Board converts print data received at the USB or Ethernet port to image data suitable for the LED Driver Board.
- LED Driver Board
  - The LED Driver Board generates image signals for the LPHs.
- Control Panel
  - Allows the user to view the printer status or execute operations via the LCD, LED, and buttons.

General Information

Electrical Parts Locations

Rear View Illustration

LED Board

Front

Main Power Switch

Interlock Switch

HVPS

Main Fan

IP Board

LVPS

LED Driver Board

MCU

s6020-603
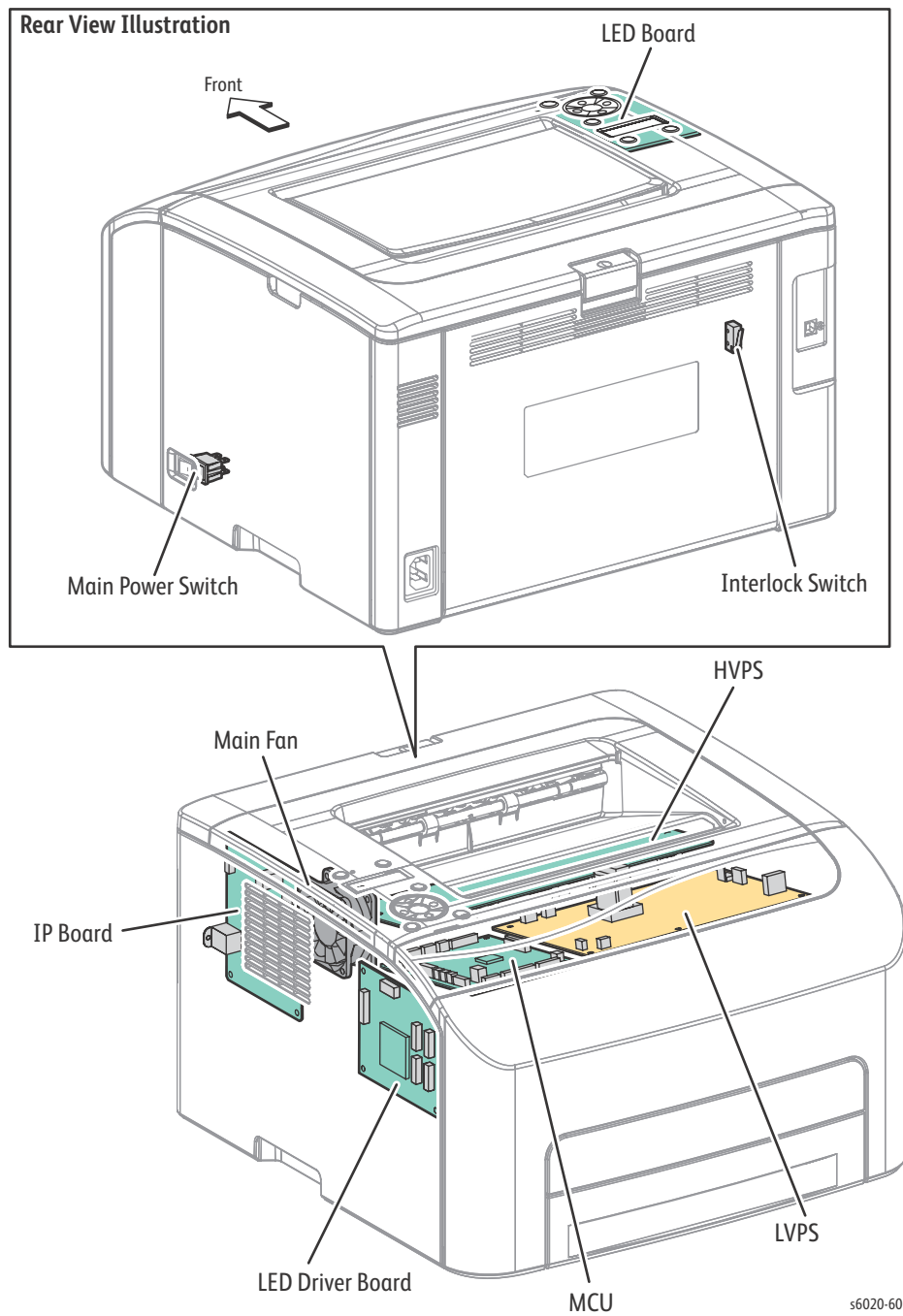
Data Flow

The print data (electric signal) from the printer controller flows as shown in the following illustration before it is turned into a print.

```
┌─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─┐
│            Host (Electric Signal)                      │
└─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─┘
                          │
                          ▼
┌────────────────────────────────────────────────────────┐
│   Electronic Sub-System Control Board (Electrical Signal)│
└────────────────────────────────────────────────────────┘
                          │
                          ▼
┌────────────────────────────────────────────────────────┐
│        Machine Control Unit (Electric Signal)           │
└────────────────────────────────────────────────────────┘
                          │
                          ▼
┌────────────────────────────────────────────────────────┐
│                     LPH (LEDs)                          │
└────────────────────────────────────────────────────────┘
                          │
                          ▼
┌────────────────────────────────────────────────────────┐
│      Electrostatic Latent on Drum (Invisible Image)     │
└────────────────────────────────────────────────────────┘
                          │
                          ▼
┌────────────────────────────────────────────────────────┐
│                 Toner Image on Drum                     │
└────────────────────────────────────────────────────────┘
                          │
                          ▼
┌────────────────────────────────────────────────────────┐
│                 Toner Image on Belt                     │
└────────────────────────────────────────────────────────┘
                          │
                          ▼
┌────────────────────────────────────────────────────────┐
│                 Toner Image on Paper                    │
└────────────────────────────────────────────────────────┘
                          │
                          ▼
┌────────────────────────────────────────────────────────┐
│                 Print Image on Paper                    │
└────────────────────────────────────────────────────────┘
```
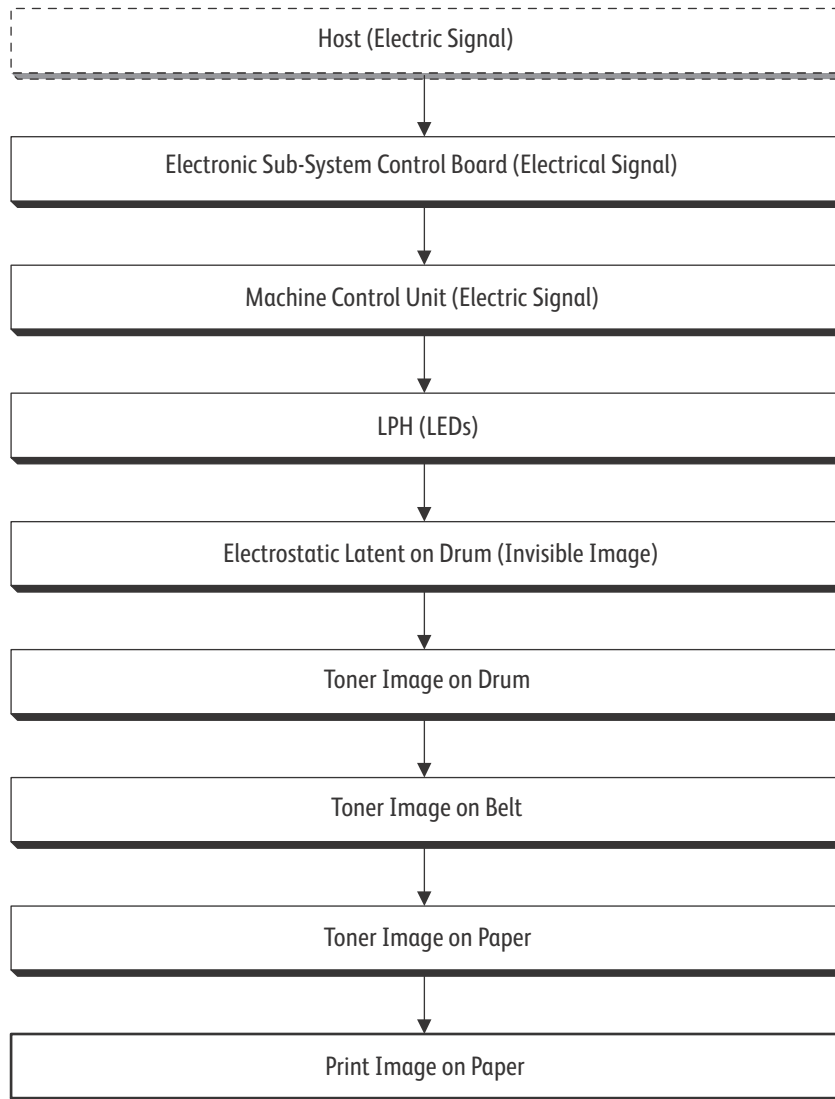
s6020-111

Scanner

The Scanner Assembly consists of the Image Input Terminal (IIT), and in the WorkCentre 6025 and 6027 MFP models, an Automatic Document Feeder (ADF).

Document scanning is performed by the carriage assembly in the IIT. The carriage assembly consists of a CMOS image sensor for converting image to data, a LED array for illuminating the original, and a rod scope for converting the original image to a full-size image.

ADF

Carriage
Assembly

IIT

Document

LED Array

Rod Scope

CMOS
Image Sensor
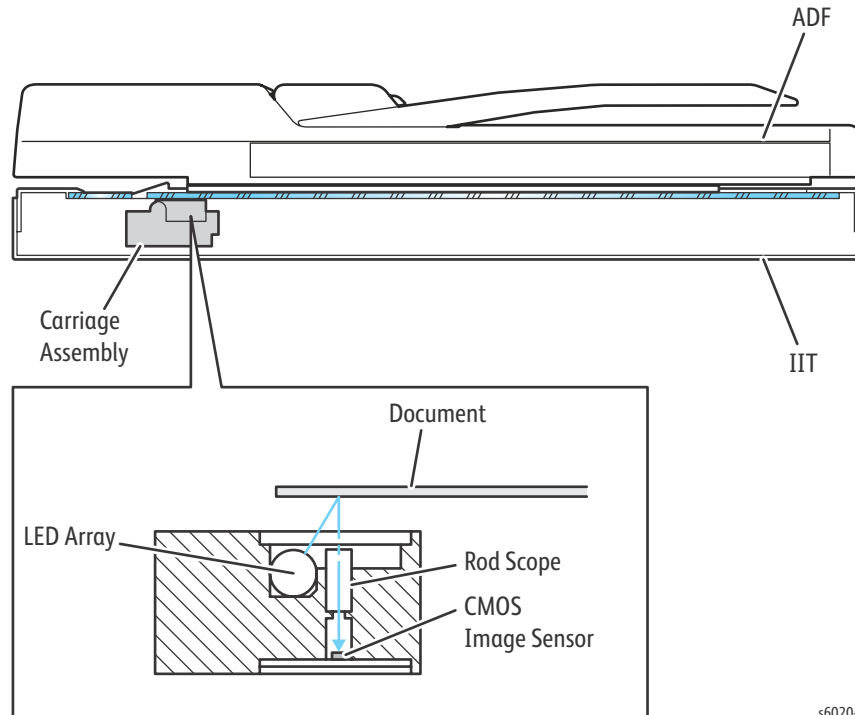
s6020-260

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.
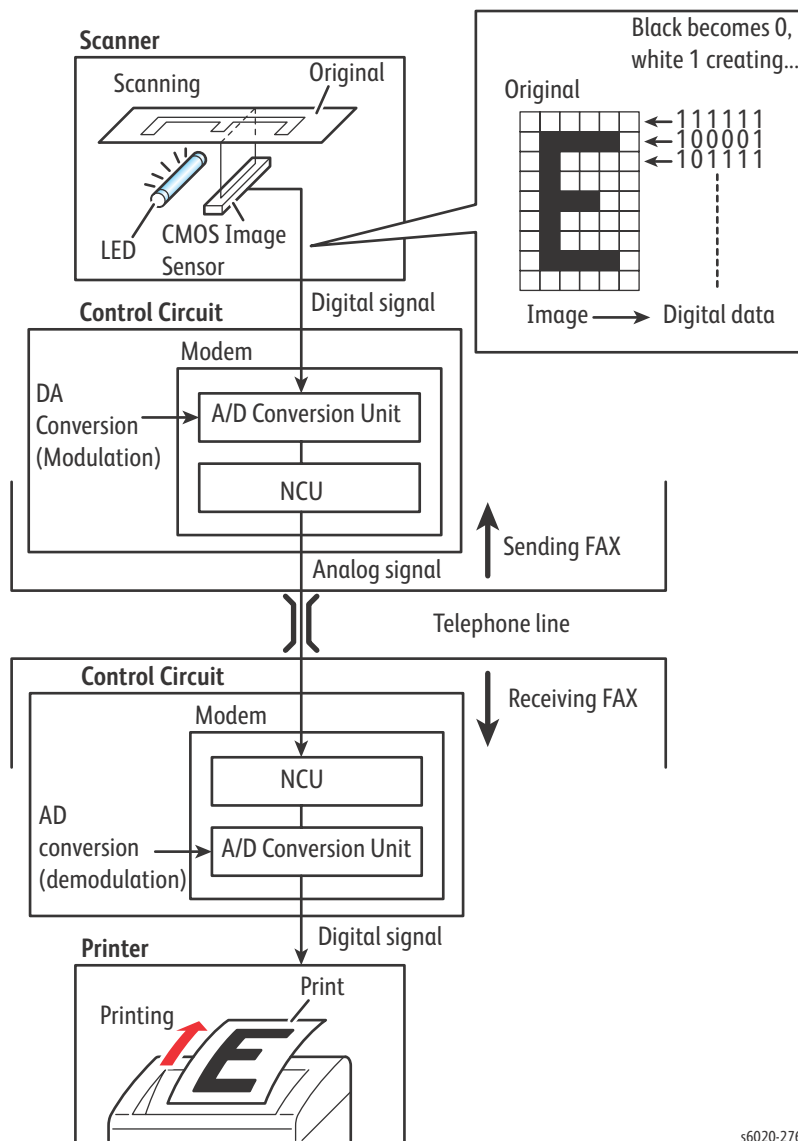
s6020-276

Scanner to Engine Data Flow Transfer

```
              ┌─────────────────────────────────────┐
              │              Document               │
              └─────────────────────────────────────┘
                                 ╎
                                 ▼
              ┌─────────────────────────────────────┐
              │   CCD Image Sensor (Scanner Assembly)│
              └─────────────────────────────────────┘
    Scanner
    ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─│─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─
    Engine                        ▼
              ┌─────────────────────────────────────┐
              │         Controller (IP Board)       │
              └─────────────────────────────────────┘
                                 │
                                 ▼
              ┌─────────────────────────────────────┐
              │              LPH (LED)              │
              └─────────────────────────────────────┘
                                 ╎
                                 ▼
              ┌─────────────────────────────────────┐
              │             Drum (CRU)              │
              └─────────────────────────────────────┘
```
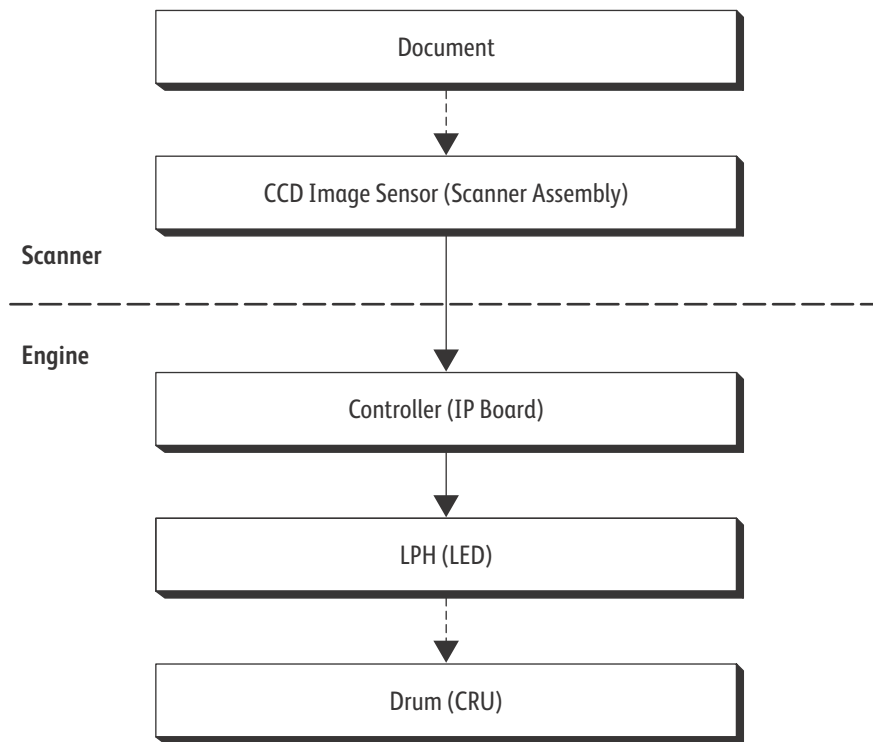
s6020-277

Major Functional Components of the Image Input Terminal (IIT)

SSB Board

Control Panel

Carriage Assembly

Scanner Home
Position Sensor

Carriage Motor

IP Board

Fax Board

Front USB Board

s6020-512
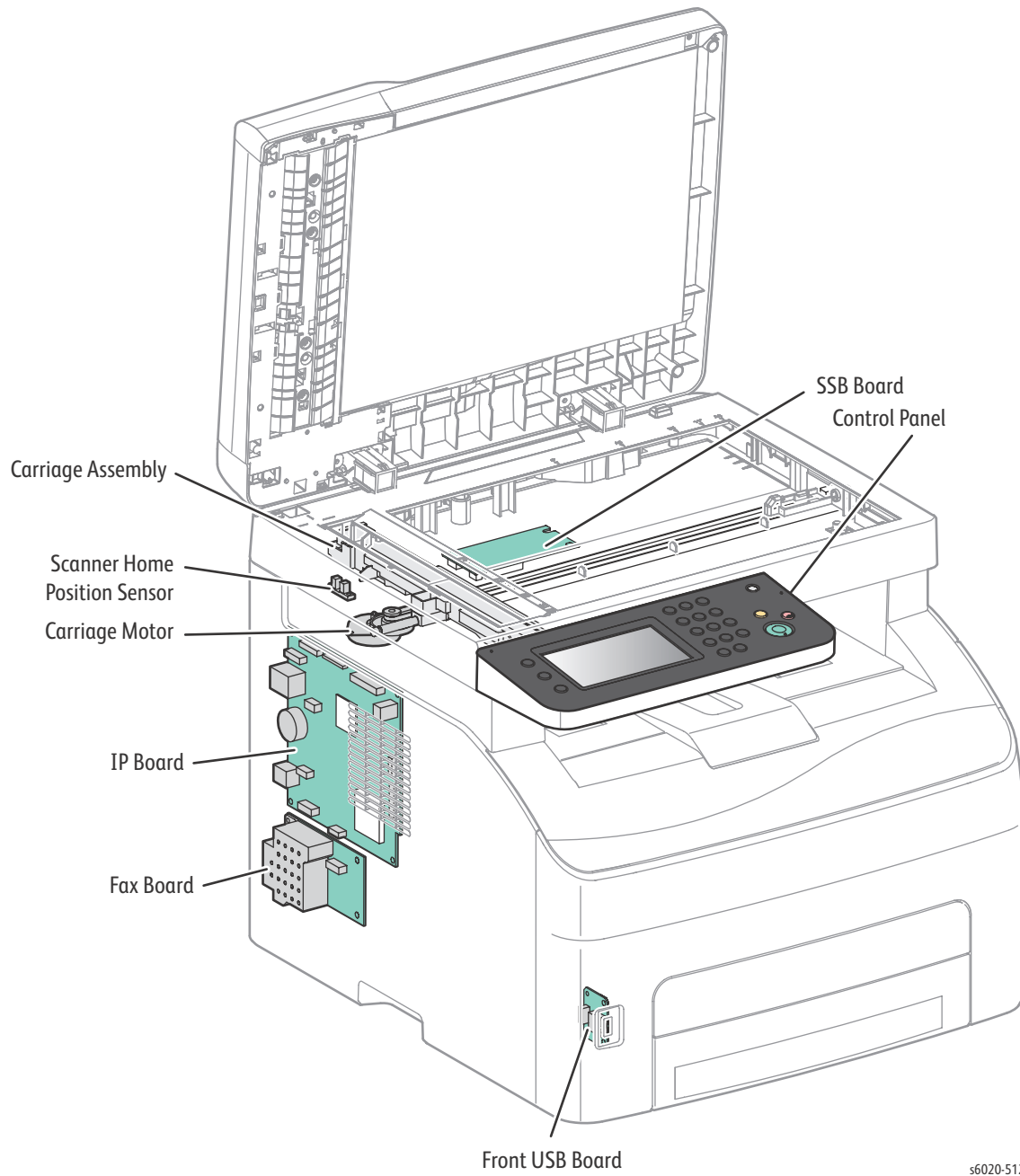
WorkCentre 6027 MFP IP Board

The IP Board is the print controller of the printer. The IP Board connected to the MCU Board controls the entire system (diagnostic, interface, image processing, etc.).
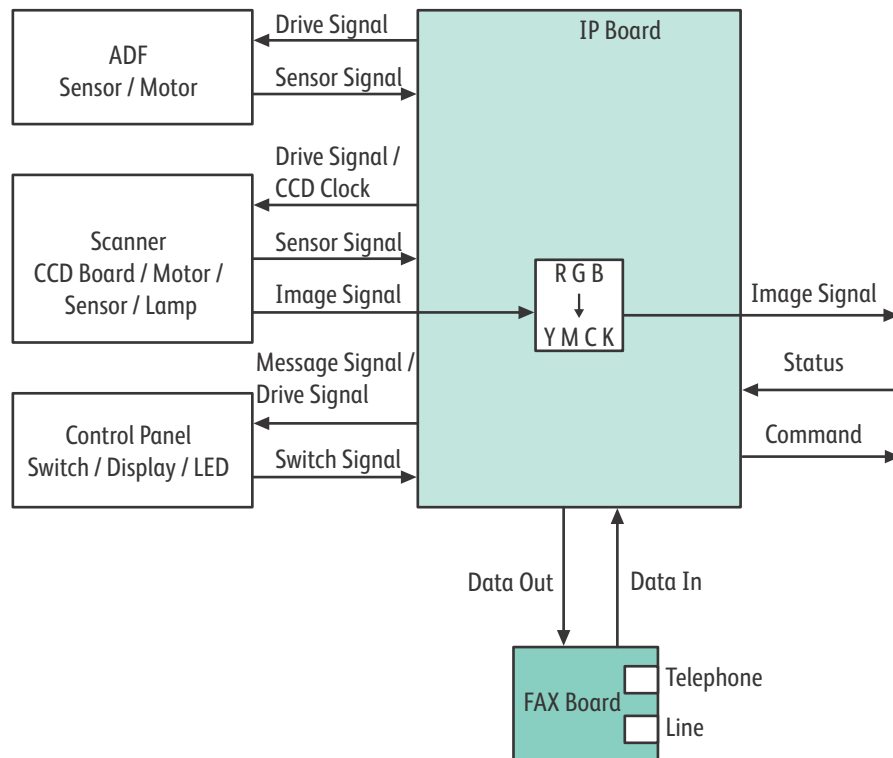
- Fax Board
  - The Fax Board controls the Fax interface.
- Scanner Board
  - The Scanner board controls the IIT interface.
- Control Panel
  - Allows the user to view the printer status or execute operations with the LCD, LED, and buttons.
- USB Front Board
  - The USB Front Board is used to connect USB memory devices for scanning to USB memory and printing from USB memory. This connector complies with USB2.0 (Hi-Speed).

Scanning Control

A CMOS image sensor is used to read image data from the document. To ensure stabilized image reading, the CMOS 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.

Reference data is obtained by reading image data from a White reference plate via the CMOS image sensor.

AOC (Auto Offset Control)

AOC is performed by turning off the exposure lamp after AGC. This state is read by the CMOS image sensor as the Black reference value. The order of AGC and AOC adjustment depends on the model.

AGC (Auto Gain Control): White Level Variation Adjustment

During AGC, the carriage assembly 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 CMOS image sensor as the White reference value.

Shading Compensation

Shading compensation compensates for pixel-by-pixel sensitivity variations and the non uniformity 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 CMOS image sensor.

Scanning at the Document Glass

While the carriage assembly in the IIT moves, the LED array illuminates the document, allowing the reflected image to be read by the CMOS image sensor through the rod scope. The speed at which the carriage assembly moves is dependent on what the copy magnification is set at.

s6020-261
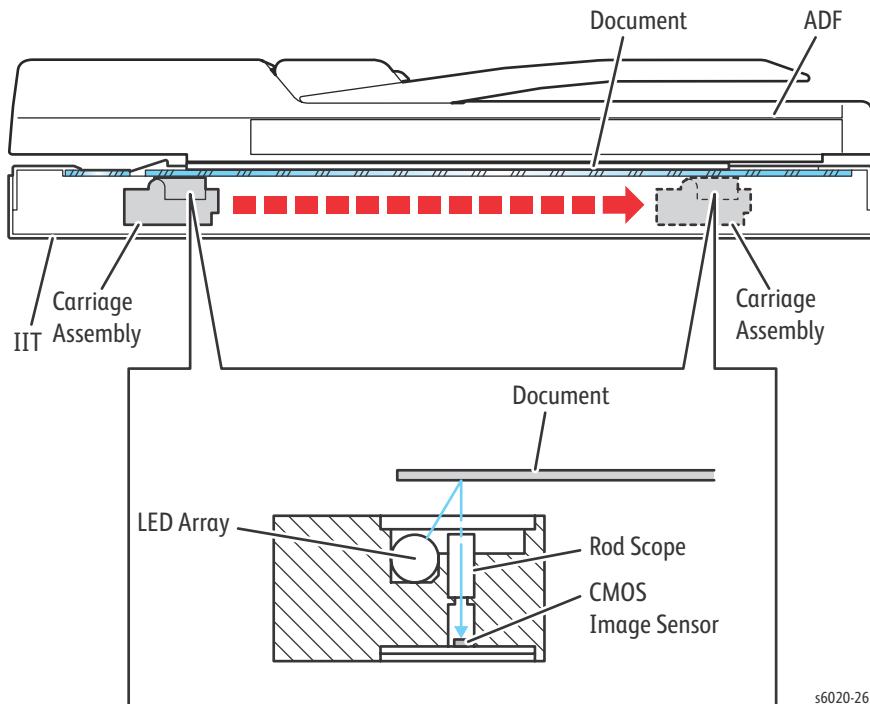
Automatic Document Feeder (ADF) (WorkCentre 6027 MFP only)

Scanning From the Auto Document Feeder

When the ADF is used, scanning is performed by moving the original with the CMOS image sensor fixed at one position. This is called Constant Velocity Transport (CVT). Scanning is controlled by changing the feed speed of the ADF motor according to the copy magnification. When the media passes the scanner home position, the images on the media are exposed by scanning with the LED array of the scan head. The reflected image is read by the CMOS image sensor through the rod scope.
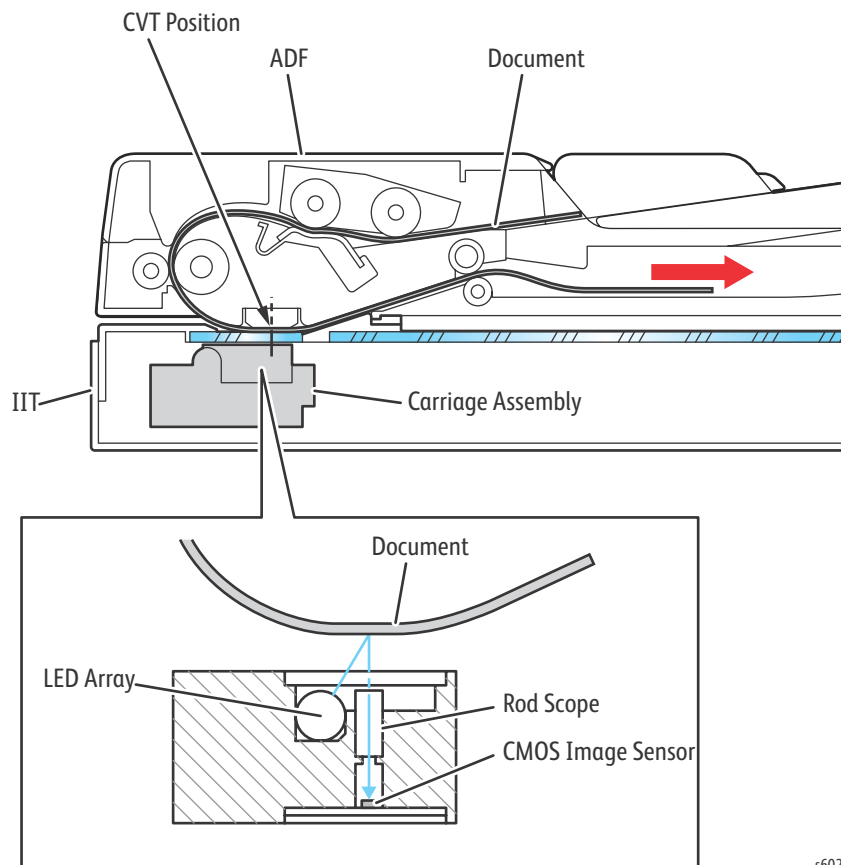
s6020-262

ADF Components

Sensors.
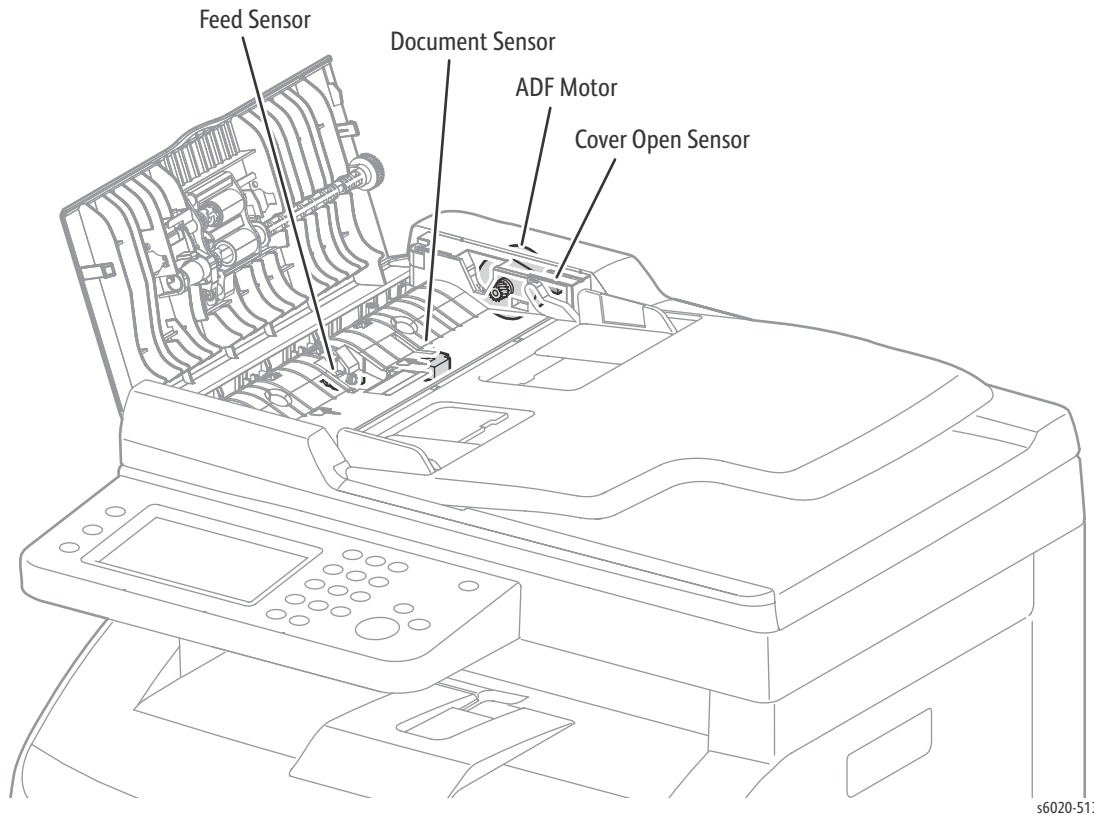
s6020-513

- Document Sensor
  - A sensor that detects the presence or absence of a document on the ADF Document Tray.
- Cover Open Sensor
  - A sensor that detects whether or not the ADF Top Cover is open.
- Feed Sensor
  - The Feed Sensor is installed immediately downstream from the Feed Roller to detect completion of document feed.
- ADF Motor
  - The ADF motor rotates the nudger roller, feed roller, takeaway roller, registration roller, and exit roller.
- Document Stopper
  - When the document is loaded in the ADF, the sheet cannot go any further because the document stopper is locked by the document stopper follower that is hooked onto the ADF Top Cover.
  - When the ADF starts feeding, the upstream end of the pickup assembly rotates downward (refer to the following illustration). The stopper on the pickup assembly lowers the document stopper follower, allowing the document stopper follower to be released from the ADF Top Cover. This also allows the lead edge of the sheet traveling in the feeding direction to go forward by displacing the document stopper upward. When the sheet completes feeding, the

pickup assembly returns to its original position, hooking the document stopper follower onto the ADF Top Cover to lock the document stopper again.
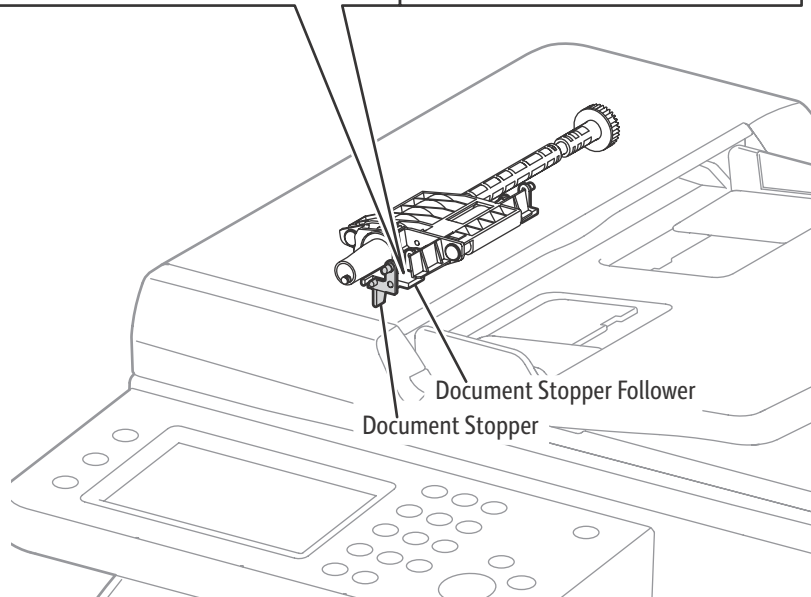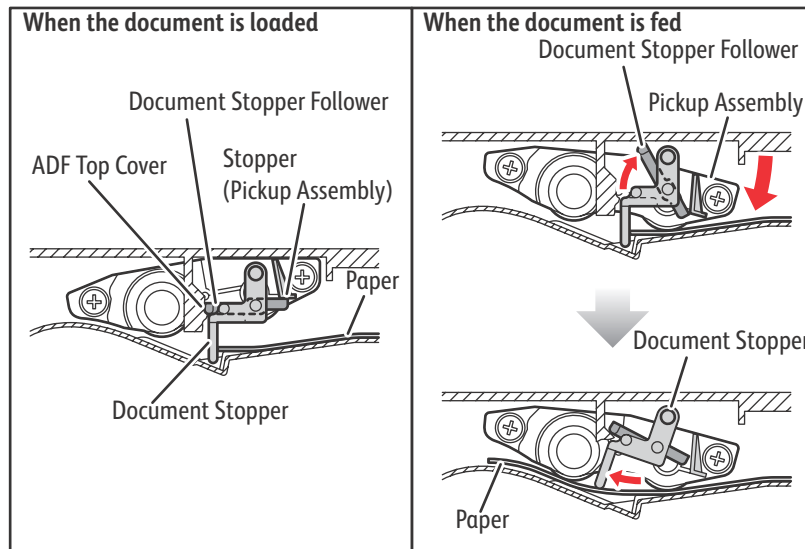
s6020-514

The pinch roller assembly is normally pressed against the direction of the takeaway roller by spring pressure.

Documents are fed between the pinch rollers and the takeaway roller to the CVT window by rotation of the takeaway roller.

If a jam occurs between the pinch roller assembly and the takeaway roller, it is hard to retrieve documents due to the high spring pressure of the pinch roller assembly. In order to retrieve jammed documents, open the ADF Cover to release the spring pressure. This results in enough clearance between the pinch rollers and the takeaway roller to release the paper.

Close ADF Top Cover Assembly

ADF Top Cover Assembly

Link

Pinch Roller

Takeaway Roller

Spring

Open ADF Top Cover Assembly

ADF Top Cover Assembly

Link

Pinch Roller

Takeaway Roller

①

②

Spring

Pinch Roller Assembly

s6020-515
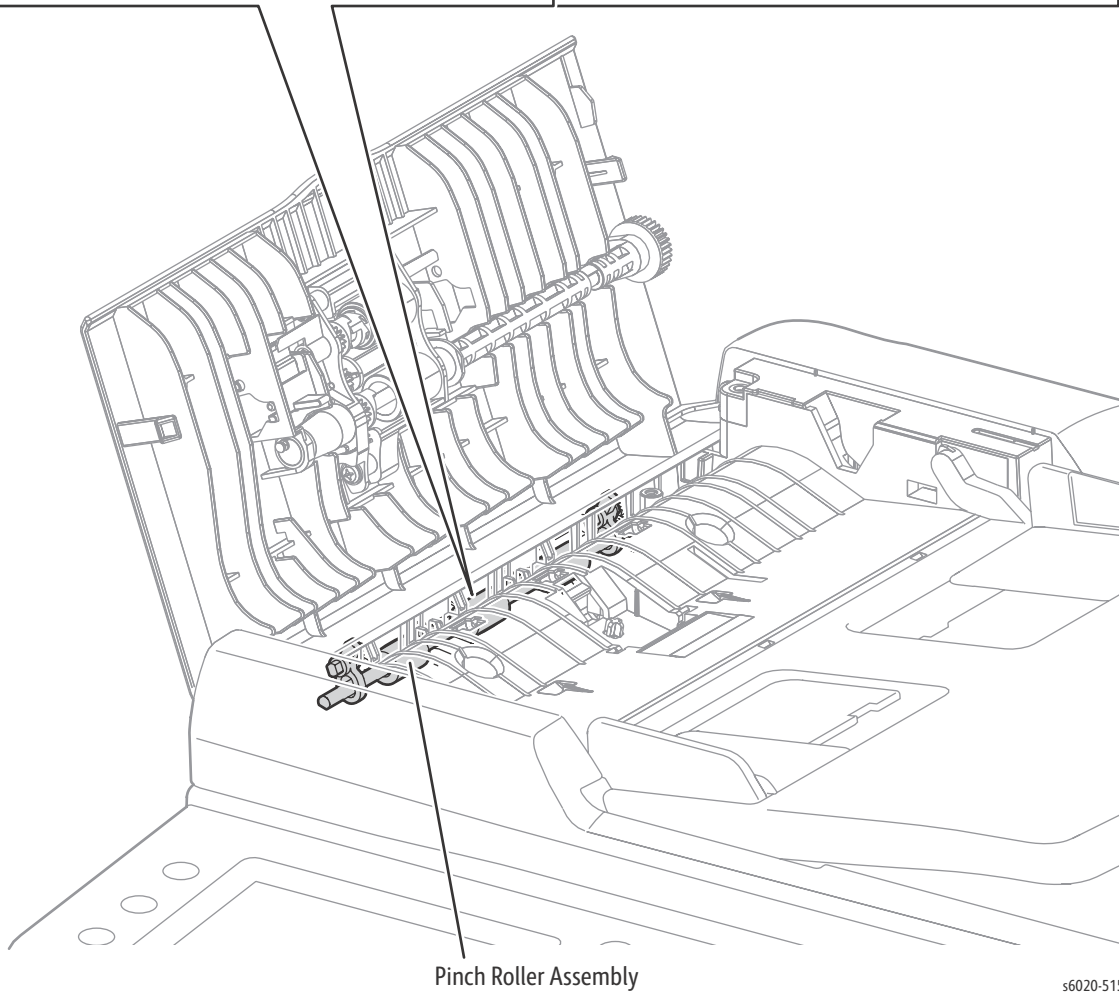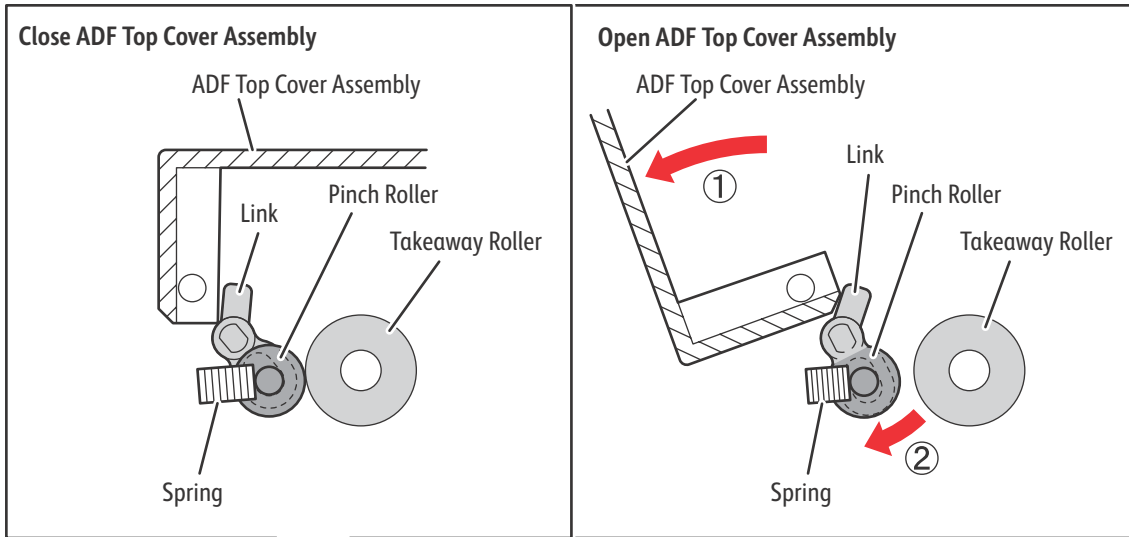
ADF Paper Path

Media in the document tray is conveyed through the feed roller and takeaway roller. The sheet is nipped between the feed roller and the ADF Separator Pad while feeding into the ADF.

Inside the ADF, the sheet is fed by the takeaway roller, rotating by torque from the ADF motor. When the sheet reaches the Scanner Home Position in the carriage assembly, it is scanned.

When the scan completes, the sheet is ejected to the output tray of the ADF by the exit roller. The exit roller is driven by torque from the ADF Motor.
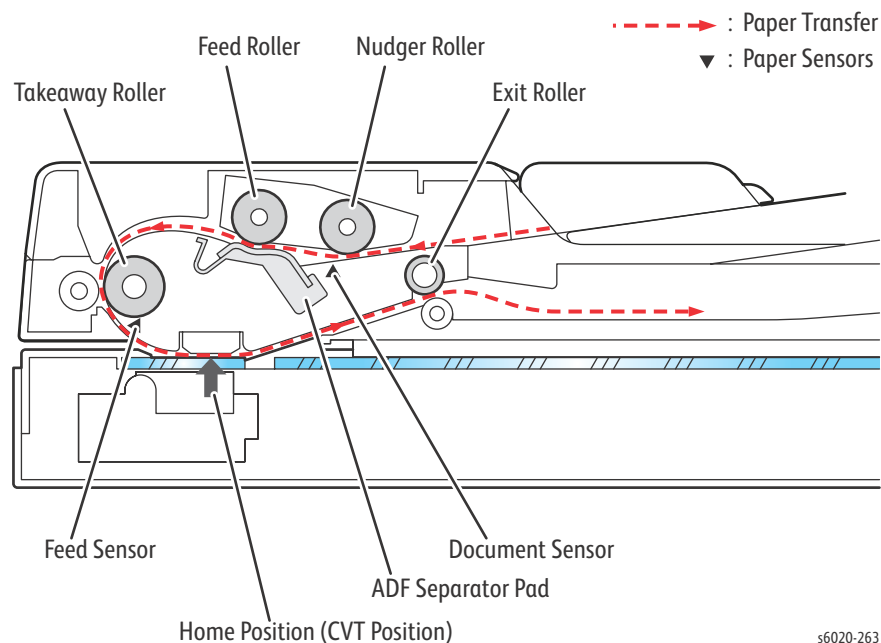
s6020-263

ADF Drive

The torque of the ADF Motor is transferred to each Document Feeding Roller as shown in the following diagrams.

[Name of moving parts]

```
                        ADF Motor
                            │
                            ▼
                  Feed Gear Deceleration
                   │            │
                   │            ▼
                   │        Idler Gear
                   │            │
                   │            ▼
                   │        Idler Gear
                   │            │
                   │            ▼
                   │     Pickup Gear Deceleration
                   │        │            │
                   │        ▼            │
                   │  Exit Gear          │
                   │  Deceleration       │
                   ▼        ▼            ▼
            Takeaway    Exit Roller   Shaft Gear
            Roller Gear    Gear
```

[Takeaway Roller]   [Exit Roller]   [Feed Roller]

Pickup Roller Gear

Pickup Idle Gear

Pickup Idle Gear

Pickup Idle Gear

Pickup Roller Gear

[Nudger Roller]

ADF Top Cover Assembly

s6020-282

ADF Drivetrain

■■■■□ : Indicates the engagement of gears.

[Name of moving parts]

Gear Shaft

[Feed Roller]

Pickup Roller Gear

Pickup Idle Gear

[Nudger Roller]

Pickup Roller Gear
Feed Gear
Deceleration

ADF Motor

Takeaway Roller Gear

Pickup Gear
Deceleration

[Takeaway Roller]

Idler Gear

Exit Gear
Deceleration

Idler Gear

Exit Roller Gear

[Exit Roller]

Front

s6020-284

Fax (WorkCentre 6027 MFP only)

Fax Overview

The three basic units of a Fax are the Scanner (for reading the image), the Control Circuit, and the Printer.
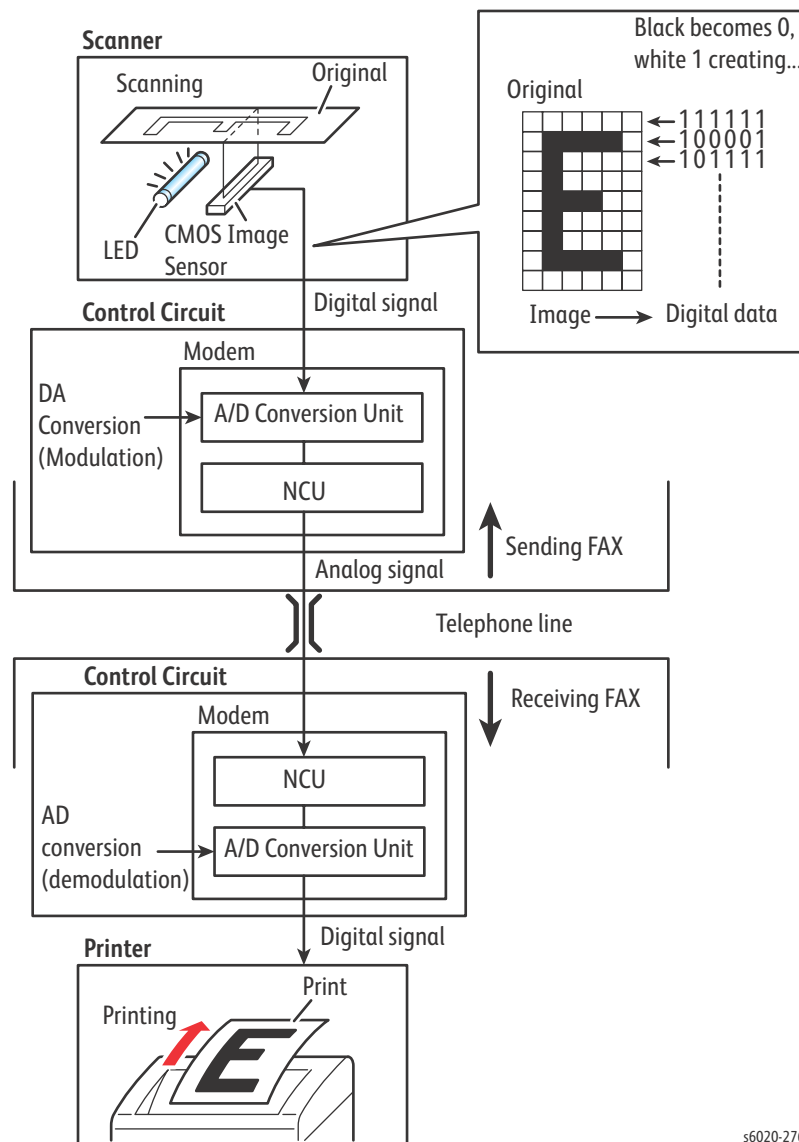
s6020-276

Scanner

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.

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 carriage assembly 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 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.

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.

Printer

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 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 100 dpi	(Analog)	Analog transmission. No band compression.
Group 2 (G2) 1976	Approx. 3 min.	100 x 100 dpi	(Analog)	Analog transmission. Band compression technology adopted.
Group 3 (G3) 1980	Approx. 1 min.	200 x 200 dpi	14.4 kbps (Super G3: 33.6 kbps)	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 400 dpi	64 kbps (using ISDN)	Digital transmission. Supported by various digital transmission services. Halftone supported.

Control

Process Control

The parameters related to image formation must be corrected to stabilize printing. The control of the entire printing process including the parameter correction control is called process control.

The process control is performed by the following two methods after every 30 cumulative prints upon termination of a print run or during a continuous run:

- Potential Control
- Toner Density Control

  To supplement these two controls, the following controls are provided:
- High Area Coverage Mode
- Admix Mode

Potential Control

To stabilize the print image density, the drum charging voltage, the developing DC voltage, and the LED light amount of the LPH are adjusted according to the ever-changing developing capability of each color developer. The adjusted drum charging voltage, the developing DC voltage, and the LED light amount of the LPH are fed back to keep the print image density constant.

The outline of control is as follows:

- The temperature and humidity sensor detects the temperature and humidity.
- The patches of respective colors (Yellow, Magenta, Cyan, and Black) for the potential control are generated and transferred onto the Belt.
- The ADC Sensor (density sensor) detects the density of the patches on the Belt.
- The drum charging voltage, the developing DC voltage, and the LED light amount of the LPH are adjusted for each color according to the detected patch density.

Toner Density Control

The toner density must be kept constant to stabilize the print image quality. The control system for this purpose is called toner density control.

- ICDC (Image Count Dispenser Control)

  The quantity of the toner to be consumed in the developing process is calculated in terms of toner-dispensing time based on the quantity of the video signals that have been input to the LPH. The amount of the toner to be fed to the developer section is controlled by turning on the Toner Motor for the toner-dispensing time thus calculated.

- ADC (Auto Density Control)

The patches of respective colors (Yellow, Magenta, Cyan, and Black) for the toner density control are generated under the specified potential condition, and then transferred onto the transfer belt. The ADC Sensor measures the densities of these patches and compares them with the reference value. If the toner density is lower than the reference value, the toner Dispenser quantity is increased at the next printing. If the toner density is higher than the reference value, the toner Dispenser quantity is reduced at the next printing. The toner Dispenser quantity is calculated in terms of the toner-dispensing time on a color-by-color basis.

High Area Coverage Mode

A continuous printing of a high area coverage data that exceeds the extra toner Dispenser capability causes the toner density in the developer to be lowered.

The High Area Coverage Mode postpones the next page feed and Dispensers the toner during this time if the toner Dispenser time has reached the specified value during a continuous printing.

Admix Mode

This mode executes extra toner dispensation to prevent the toner density from being lowered whenever the value of the toner density control patch measured by the ADC Sensor falls far below the reference value. If the toner density level cannot be recovered even after this operation, it is determined that the toner has run out.

ADC Sensor Adjustment

The ADC Sensor is a reflection type sensor that irradiates the light from its LED onto the target and detects the reflected light at its photoreceptor and outputs electric signals responsive to the amount of detected light. To ensure an accurate patch density measurement, the surfaces of the ADC Sensor is cleaned to Remove soil due to toner, etc., and the light quantity adjustment is made so that the reflected light quantity satisfies the predetermined value when the patch for potential control and toner density control are created.

Color Registration Control

The printer uses a tandem system where the drums and developers are arranged respectively for each of Yellow, Magenta, Cyan, and Black colors. Since the four color-separated images are overlaid one another onto the print medium, a color shift may occur. The color registration control calculates how much the registration is shifted, and adjusts the LPH write timing.

The lateral registration control adjusts all of the four colors in lateral directions.

The color registration control is executed during a process control based on the change in the internal temperature and the print count.

The control is outlined below:

- With no toner on the transfer belt, the output value of the ADC Sensor is measured to determine the threshold value.
- The patch for color registration control is generated on the transfer belt. This patch is composed of four cycles of a color pattern, each containing 10 mm-wide color bars starting with a Black trigger line followed by K, C, K, M, K, and Y (in this order).

Color Registration Control
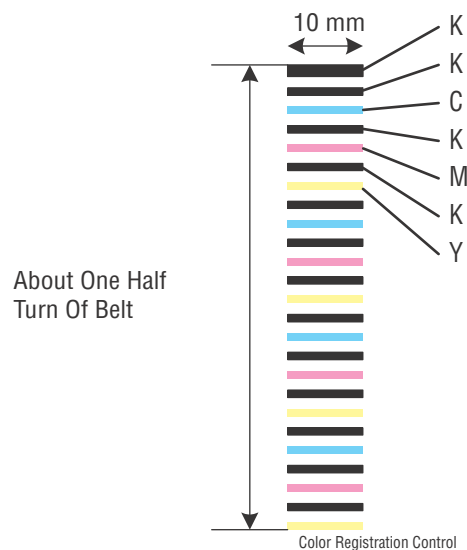
- The density of the patch is measured by the ADC Sensor.
- The shift correction amount is calculated from the threshold value determined in step 1 and the patch density measured in step 3.
- The LPH write timing is changed according to the shift correction amount.

Fuser Control

Fuser Temperature Control

To control the Fuser temperature, the target temperature is set, and then the heat lamp is turned on/off so that the surface temperature of the heat roller satisfies the target value.

The surface temperature of the heat roller is detected by a thermistor. When the temperature detected is higher than the target value, the heat lamp is turned Off. When the temperature is below the target value, the heat lamp is turned On.

However, the sensor may detect a temperature lower than the actual value when an error occurs during the temperature detection. To prevent the heat lamp from overheating, the heat lamp is turned off unless warm-up is completed within the specified time.

The target temperature varies depending on the printer status such as warm-up, printing, or process control, and is calibrated according to the interior temperature detected by the environmental sensor, the temperature difference between the middle and the ends of the heat roller, the printing mode, and the input power supply voltage.

Cooling down

As the printing continues, the temperature of the heat roller becomes nonuniform between the area that contacts the sheet and the area that does not. In such a case, the paper feeding is suspended for a certain duration to compensate for the temperature non uniformity of the heat roller. This is called "Cooling Down".

When the temperature of the heat roller end is high, cooling down is performed to lower the temperature to the target value.

Sensor Warm-up

The thermistor loses its measuring accuracy when the temperature of the sensor itself is -5°C or below. Therefore, the sensor is warmed up to 0°C when its temperature is -5°C or below. This is called "Sensor Warm-up".

Drive

Paper Feed Drive Flow

The torque of the Main Drive Assembly is transmitted through the route shown in the following illustration.

[Name of moving parts]

Motor Drive Assembly
- Main Motor
- Gear PF1
- Gear PF2

Gear PH3   Gear F3

Gear F4

Gear PH5   Gear Idler HR

Gear PH6   Gear PH4   Gear HR

PH Drive Assembly

[Heat Roller]

Gear Idler Exit

Gear Feed   MPT Feed Solenoid   Registration Clutch   Gear Exit

[Feed Roller]   [Regi Roller]   [Exit Roller]
MPF & PSI   Registration Assembly   Fuser

s6020-125

Paper Feed Drive Components

[Name Of Moving Parts]

▬▬▬ : Indicates The Engagement Of Gears

Exit Gear

Exit Idler Gear

Fuser

[Exit Roller]

[Heat Roller]

Heat Roller Idler Gear

Motor Drive

Gear F4

Heat Roller Gear

Gear F3

Gear PF2

Gear PH3

Gear PH5

Gear PF1

Gear PH4

PH Drive

Main Motor

Gear PH6

Registration Clutch

[Registration Roller]

Feed Gear

Front

MPT Feed Solenoid

[Feed Roller]

s6020-126

Full Color Mode Development Drive Flow

[Name Of Moving Parts]

```
┌─────────────────────────────────────────────────────────┐
│                      Motor Drive                         │
│  ┌───────────────────────────────────────────────────┐  │
│  │                   Main Motor                      │  │
│  └───────────────────────────────────────────────────┘  │
│  ┌───────────────────────────────────────────────────┐  │
│  │                    Gear D1                        │  │
│  └───────────────────────────────────────────────────┘  │
└─────────────────────────────────────────────────────────┘
```

```
┌─────────────────────────────────────────────────────────┐
│  ┌───────────────────────────────────────────────────┐  │
│  │                    Gear D2                        │  │
│  └───────────────────────────────────────────────────┘  │
│  ┌──────────────┐        ┌──────────────┐               │
│  │  Gear  D3C   │        │  Gear DK1    │               │
│  └──────────────┘        └──────────────┘               │
│  ┌──────────────┐        ┌──────────────┐               │
│  │  Gear D4 In  │───────▶│  Gear DK2    │               │
│  └──────────────┘        └──────────────┘               │
│  ┌──────────────┐                                       │
│  │  Gear D4 Out │                                       │
│  └──────────────┘                                       │
│  ┌──────────────┐                                       │
│  │  Gear  D5    │                                       │
│  └──────────────┘                                       │
│  ┌──────────────┐                        ┌───────────┐  │
│  │ Idler Gear D2│                        │Idler Gear │  │
│  └──────────────┘                        │    D1     │  │
│  ┌──────────────┐                        └───────────┘  │
│  │ Idler Gear D1│                                        │
│  └──────────────┘                                        │
│  ┌──────────────┐   ┌──────────────┐   ┌─────────────┐  │
│  │ Idler Gear D2│   │ Idler Gear D2│   │Idler Gear D2│  │
│  └──────────────┘   └──────────────┘   └─────────────┘  │
│                    Developer Drive                       │
└─────────────────────────────────────────────────────────┘
```

```
┌─────────────────────────────────────────────────────────┐
│  ┌───────────┐  ┌───────────┐  ┌───────────┐  ┌────────┐ │
│  │ Gear D6(Y)│  │ Gear D6(M)│  │ Gear D6(C)│  │Gear D6 │ │
│  └───────────┘  └───────────┘  └───────────┘  │  (K)   │ │
│                        MU Drive                └────────┘ │
└─────────────────────────────────────────────────────────┘
```

Xerographic Developer (Y)	Xerographic Developer (M)	Xerographic Developer (C)	Xerographic Developer (K)
Magnet Gear (Y)	Magnet Gear (M)	Magnet Gear (C)	Magnet Gear (K)
[Magnet Roller (Y)]	**[Magnet Roller (M)]**	**[Magnet Roller (C)]**	**[Magnet Roller (K)]**
Magnet Idler Gear (Y)	Magnet Idler Gear (M)	Magnet Idler Gear (C)	Magnet Idler Gear (K)
Auger Gear (Y)	Auger Gear (M)	Auger Gear (C)	Auger Gear (K)
[Supply Auger (Y)]	**[Supply Auger (M)]**	**[Supply Auger (C)]**	**[Supply Auger (K)]**
Admix Auger Gear (Y)	Admix Auger Gear (M)	Admix Auger Gear (C)	Admix Auger Gear (K)
[Admix Auger (Y)]	**[Admix Auger (M)]**	**[Admix Auger (C)]**	**[Admix Auger (K)]**

s6020-127

Full Color Mode Development Drive Components

[Name Of Moving Parts]

▮▬▮▬▮ : Indicates The Engagement Of Gears

[Auger Supply]

[Magnet Roll]

Xerographic Developer (Y)

Xerographic Developer (M)

Xerographic Developer (C)

Xerographic Developer (K)

Magnet Gear

Magnet Idler Gear

Auger Gear

[Auger Admix]

Admix Auger Gear

Magnet Gear (Y)

Magnet Gear (M)

Magnet Gear (C)

Magnet Gear (K)

Gear D6 (Y)

Front

Motor Drive
Main Motor

Gear D6 (M)

Gear D6 (C)

MU Drive

Gear D1

Gear D6 (K)

Gear Idler D2

Gear D5

Developer Drive

Gear Idler D2

Gear Idler D1

Gear Idler D2

Idler Gear D2

Gear D5

Gear D4 In

Gear DK1

Gear D4 In

Flange D4

Gear Idler D1

Gear D2

Gear D3C

Gear DK2

Gear D4 Out

Switching Solenoid

Gear D3C

s6020-128

B/W Mode Development Drive Flow

[Name Of Moving Parts]

Motor Drive

Main Motor

Gear D1

Gear D2

Gear D3C

Gear D4 In → Gear DK1

Gear DK2

Gear D4 Out ← Gear C ← Switching Solenoid

Cam Gear

Idler Gear D1

Flange D4

Idler Gear D2

Developer Drive

Gear D6 (K)

MU Drive

Magnet Gear (K)

[Magnet Roll (K)]

Magnet Idler Gear (K)

Auger Gear (K)

[Auger Supply (K)]

Admix Auger Gear (K)

[Auger Admix (K)]

Xerographic Developer (K)

s6020-129

B/W Development Drive Components

[Name Of Moving Parts]

▪━━▪▫ : Indicates The Engagement Of Gears.

[Auger Supply (K)]

[Magnet Roll (K)]

Magnet Gear (K)

Magnet Idler
Gear (K)

[Auger Admix (K)]

Gear Auger (K)
Gear Auger Admix (K)

Xerographic
Developer (K)

Magnet Gear (K)

Motor Drive

Main Motor

MU Drive

Front

Developer Drive

Gear D6 (K)

Gear D5

Gear
D4 In

Flange D4

Gear D1

Gear D4 Out

Idler Gear D2

Gear D3C

Idler Gear D1

Gear D2   Gear D3C

Gear D4 In   Gear C

Flange D4

Gear Dk1

Gear C

Gear DK2

Gear Cam

Switching Solenoid

s6020-130

Drum, Belt Drive, and Excess Toner Collecting Drive Flow

[Name Of Moving Parts]

Motor Drive
- Main Motor
- Gear X1

MU Drive
- Gear X2 — Gear X2
- Idler Gear X — Idler Gear X
- Gear X2 — Gear X2

[Drum (Y)]
Xerographic Cleaning Auger Gear (Y)
[Xerographic Cleaning Auger (Y)]
Xerographic Developer (Y)

[Drum (M)]
Xerographic Cleaning Auger Gear (M)
[Xerographic Cleaning Auger (M)]
Xerographic Developer (M)

[Drum (C)]
Xerographic Cleaning Auger Gear (C)
[Xerographic Cleaning Auger (C)]
Xerographic Developer (C)

[Drum (K)]
Xerographic Cleaning Auger Gear (K)
[Xerographic Cleaning Auger (K)]
Xerographic Developer (K)

Belt
- Gear T1
- Gear DRV — Auger Gear
- [Belt] — [Belt Cleaning Auger]

s6020-131

Drum, Belt Drive, and Excess Toner Collecting Drive Components

[Name Of Moving Parts]
▬▭ : Indicates The Engagement Of Gears

[Belt]

[Belt Cleaning Auger]
Auger Gear
Gear T1

DRV Gear

Motor Drive

Gear X1

Gear Idler X
Gear X2

Gear X2

Gear X2

MU Drive

Gear Idler X

Gear X2

Front

Xerographic
Developer (Y)

Xerographic
Developer (M)

Xerographic
Developer (C)

Xerographic
Developer (K)

[Drum]

Xerographic
Cleaning Auger Gear

[Xerographic Cleaning Auger]

s6020-132

Toner Dispenser

The torque of the Toner Dispenser drives the auger in the Toner Cartridge.

Toner Dispenser Y and K Drive Flow

[Name Of Moving Parts]

```
                                    Dispenser
 ┌─────────────────────────────────────────────────────────────────────┐
 │  Dispense Motor (Y), (M)              Dispense Motor (C), (K)         │
 │                                                                       │
 │  Idler Gear 34    Idler Gear 34           Idler Gear 34               │
 │                                                                       │
 │  Idler Gear 34                                 Idler Gear 34          │
 │                                                                       │
 │                                                Idler Gear 34          │
 │                                                                       │
 │                                                Idler Gear 34          │
 │                                                                       │
 │  Oneway Clutch (Y)  Oneway Clutch (M)  Oneway Clutch (C)  Oneway Clutch (K) │
 │                                                                       │
 │  Idler Gear 23 (Y)                             Idler Gear 23 (K)      │
 └─────────────────────────────────────────────────────────────────────┘

    Auger Gear (Y)                              Auger Gear (K)

    [ Dispense                                  [ Dispense
      Auger (Y) ]                                 Auger (K) ]
    Auger Gear (Y)                              Auger Gear (K)

    [ Cartridge Auger (Y) ]                     [ Cartridge Auger (K) ]
    Toner Cartridge (Y)                         Toner Cartridge (K)
```

s6020-133

Toner Dispenser Y and K Drive Components

[Name Of Moving Parts]

■━━━□ : Indicates The Engagement Of Gears

Toner Cartridge (K)

Toner Cartridge (C)

Toner Cartridge (M)

Toner Cartridge (Y)

[Auger Dispense Tn (K)]

[Auger Ctrg (K)]

Auger Gear (K)

[Cartridge Auger (Y)]

Auger Gear (Y)

Auger Gear (K)

Idler Gear 23 (K)

[Dispense Auger TN (Y)]

Oneway Clutch (C)

Oneway Clutch (K)

Oneway Clutch (M)

Idler Gear 23 (Y)

Auger Gear (Y)

Oneway Clutch (Y)

Front

Idler Gear 34

Idler Gear 34

Dispense Motor (C), (K)

Dispense Motor (Y), (M)

Idler Gear 34

s6020-134

Toner Dispenser M and C Drive Flow

[Name Of Moving Parts]

Dispenser

| Dispense Motor (Y), (M) | | Dispense Motor (C), (K) |

Idler Gear 34 → Idler Gear 34 → Idler Gear 34

Idler Gear 34 → Idler Gear 34

Idler Gear 34

Idler Gear 34

Oneway Clutch (Y) Oneway Clutch (M) Oneway Clutch (C) Oneway Clutch (K)

Idler Gear 23 (M) Idler Gear 23 (C)

Auger Gear (M) Auger Gear (C)

[Dispense Auger (M)] [Dispense Auger (C)]

Auger Gear (M) Auger Gear (C)

[Cartridge Auger (M)] [Cartridge Auger (C)]
Toner Cartridge (M) Toner Cartridge (C)

s6020-135

Toner Dispenser M and C Drive Components

[Name Of Moving Parts]

▮▬▬▭ : Indicates The Engagement Of Gears

Toner Cartridge (K)

Toner Cartridge (C)

Toner Cartridge (M)

Toner Cartridge (Y)

[Dispense Auger (C)]

Auger Gear (M)

[Cartridge Auger (M)]

[Cartridge Auger (C)]

Auger Gear (C)

[Dispense Auger (M)]

Auger Gear (C)

Auger Gear (M)

Oneway Clutch (C)

Idler Gear 23 (C)

Idler Gear 23 (M)

Oneway Clutch (K)

Oneway Clutch (Y)

Oneway Clutch (M)

Idler Gear 34

Idler Gear 34

Front

Idler Gear 34

Dispense Motor (C), (K)

Dispense Motor (Y), (M)

Idler Gear 34

s6020-136

Specifications

Printer Specifications

Characteristic	Specifications
Printing Technology	LED xerography
Printer Life	5 years from the start of use, or 30 kPV using LTR/A4, or total number of platen scan + ADF scan reaches 40k.
Warm-Up Time	6020 28s or less to Ready Mode 6022 28s or less to Ready Mode 6025 32s or less to Ready Mode 6027 35s or less to Ready Mode
Power Saver Mode 1 (low power)	The default setting is 5 minutes. Use the Printer Settings Utility to change the default setting from 5 to 60 minutes.
Power Saver Mode 2 (sleep)	The default setting is 6 minutes. Use the Printer Settings Utility to change the default setting from 1 to 60 minutes.
Resolution	1200 x 2400 dpi 1bit (IOT) 600 x 600 dpi 2bit (Firmware) 600 x 600 dpt 8bit (Printer Driver)
Paper Tray (150 Sheets) Paper Cassette (150 Sheets)	Standard (Phaser 6020 and WorkCentre 6025 MFP) Standard (Phaser 6022 and WorkCentre 6027 MFP)
Bypass Tray (10 Sheets) Paper Tray Dust Cover (0 Sheets)	Standard (WorkCentre 6025) Standard (Phaser 6020)
External Interfaces	
USB 2.0 (WorkCentre 6025/6027 MFP)	Connector Type: One Type B Protocol: USB 1.1; Hi-speed USB 2.0 compatible
Ethernet (Phaser 6022 and WorkCentre 6027 MFP Only)	Connector Type: One RJ-45 connector 10 BASE-T/100 BASE-TX compatible
Wireless	Compliant Standard: IEEE802.11b/g/n Security Protocol: WEP (64/128bits), WPA-PSK (TKIP, AES), WPA-2PSK (AES) Certifications: WiFi, WiFi Direct, WPA, WPA2.0 WiFi Protected Setup (WPS): Push Button Configuration (PBC), Personal Identification Number (PIN)
FAX Connection Terminal (WorkCentre 6027 MFP Only)	Connection to public line (FAX line): RJ11 modular jack (2-wire) Terminal for external telephone: RJ11 modular jack (2-wire) Terminal to connect handset: Not provided.
Supported Operating Systems	
Mac	Mac OS X 10.5.8, 10.6.x, 10.7.x, 10.8.x, 10.9.x
Windows	Windows 8/8.1(32/64 bit), Windows 7 (32/64 bit), Vista (32/64 bit), Windows XP, 2003 Server (32/64 bit), 2008/2008R2 Server (32/64 bit), 2012/2012R2 Server (32/64 bit)
Linux (32 and 64 bit versions)	-Red Hat Enterprise Linux Desktop (32/64 bit) -SUSE Linux Enterprise Desktop 11 (32/64 bit) -Ubuntu 12.04 (32/64 bit)

Characteristic	Specifications
Memory Specifications	**Memory**
6020/6022	Main Memory: 128/256MB
6025/6027	Main Memory: 256/512 MB
Print Speed	**Black/ White** **ppm (A4)**
Phaser 6020	CLR: Print Speed 10 ppm (A4) B/W: Print Speed 12 ppm (A4)
Phaser 6022	CLR: Print Speed 18 ppm (A4) B/W: Print Speed 18 ppm (A4)
WorkCentre 6025 MFP	CLR: Print Speed 10 ppm (A4) B/W: Print Speed 12 ppm (A4)
WorkCentre 6027 MFP	CLR: Print Speed 18 ppm (A4) B/W: Print Speed 18 ppm (A4)

Copy Specifications

Characteristic	Specifications
Auto Exposure	On/Off
Collate	Supported
Color Balance	5 Levels (RGB)
Continuous Copy Speed of Multiple-sheet Document • WorkCentre 6025 MFP • ADF Mode (cpm) (WorkCentre 6027 MFP only)	CLR: Copy Speed 5 cpm (A4) B/W: Copy Speed 12 cpm (A4) CLR: Copy Speed 8 cpm (A4) B/W: Copy Speed 18 cpm (A4)
Grey Balance	Not Supported
Lighten/Darken	5 Levels
Margin Adjustment	Top/Bottom, Left/Right, and Middle.
Multiple Up (N to 1)	Continuous 2, 4, 8, or 32 pages can be printed on one sheet of paper.
Number of Copies	1-99
Original Type	Text, Photo, Text/Photo
Poster	Not Supported
Sharpness	5 Levels
Auto Fit	Not Supported
Cloning	Not Supported
Watermarks	Documents can be printed with pre-registered watermarks.
Copy Mode	
Color (default)	The following modes are available Text/Photo (default) Photo Text

Characteristic	Specifications	
Black and White	The following modes are available Text/Photo (default) Photo Text	
Image Quality		
Resolution WorkCentre 6025 and 6027 MFP IIT WorkCentre 6027 Color MFP IIT Spec.	Platen 600 x 600 dpi max 1200x1200 dpi max 600 x 600 dpi max 1200x1200 dpi max	ADF Not applicable 600 x 300
Auto Exposure	Data can be copied suppressing document background. On/Off can be selected.	
Color Balance	5 levels (RGB)	
Color Saturation	3 levels	
Density Adjustment	5 levels	
Sharpness	5 levels	
Magnification		
Fixed	200 %, 141 %, 122 %, 100 %, 81 %, 70 %, 50 %	
Variable	25 % to 400 % (Settable in 1 % increments)	

Scanning Specifications

Characteristic	Specifications
Scan Mode WorkCentre 6025 and 6027 MFP ADF - WorkCentre 6027 MFP only	• Platen Mode: Scan document using the document glass. • Constant Velocity Transport (CVT) Mode: Scan document via the ADF.
Local (USB) Scanning	
Scan Interface	TWAIN, WIA 2.0
Resolution	
Platen Glass	600 x 600 dpi
ADF	600 x 300 dpi
Network Scanning	
Scan Interface	TWAIN, WIA 2.0
Color Mode	Color, Black & White
Original Type	Text, photo, mixed
Lighten/Darken	5 levels
Sharpness	3 levels
Auto Exposure	Off, Normal, Higher(1), Higher(2)
File Format	TIFF, JPEG, PDF

Characteristic	Specifications

Resolution	• TWAIN: 75 x 75 to 4800 x 4800 dpi
	• WIA: 75/100/150/200/300/400/600 dpi
	• MAC ICA
	  Platen - 75/100/150/200/300/600/1200/2400/4800 dpi
	  ADF - 75/100/150/200/300/600 dpi
	• Resolutions other than the following are achieved by driver's resolution conversion.
	  200 x 200 dpi
	  300 x 300 dpi
	  600 x 300 dpi
	  1200 x 1200 dpi

File Format	JPG, TIFF, PDF
Scan to Desktop via SMB/SMB2	Supported
Scan to FTP	Supported
Scan to E-mail	Supported
E-mail Address Book	Up to 100 E-mail Addresses, and up to 10 E-mail Groups. Addresses are stored in device memory. Each E-mail Group may have up to 10 addresses associated with it.
Maximum Scanning Area	
Document Glass (Letter)	215.9 mm x 297 mm (8.5 in. x 11.7 in.)
ADF (WorkCentre 6027 MFP only)	215.9 mm x 355.6mm (8.5 in. x 14 in.)
Scanning Halftone Level	
Output from the CCD has the following halftone levels.	B/W: 1 bit for Line art and 8 bit for Grayscale. Color: 24 bit.
Platen	
Document Setting Reference Position	Left rear corner as viewed from printer front.
Document Glass Size	220 mm x 300 mm (8.66 in. x 11.8 in.) (Flat glass area)
ADF	
Resolution (Line Density in Fast Scan Direction)	600 x 300 dpi
Document Thickness	60 g/m^2 to 105 g/m^2
Capacity	15 sheets (plain paper)

Fax Specifications (WorkCentre 6027 Color MFP)

Characteristic	Specifications
Communication Mode	Priority 1: ITU-T Super G3 Priority 2: ITU-T G3 ECM Priority 3: ITU-T G3
DirectFAX	Supported

Characteristic	Specifications
Facsimile Communication Network (FAX NET)	Not supported
Fax Send/Receive Buffer	2 MB
Supported Network	PSTN, PBX Note: The printer can not be connected to an ISDN network.
Supported Protocols	• V. 34 (Max.33.6 kbps) • V. 17 (14.4/12/9.6/7.2 kbps) • V. 29 (9.6/7.2 kbps) • V. 27ter (4.8/2.4 kbps)
Transfer	If the machine cannot print received FAX data because of printer trouble, or when the user specifies transfer of received data, received data is automatically sent to a pre-registered machine. Settings: OFF, Forward only, or Print & Forward.
Walk-up Fax	
Incoming Call Control	Telephone Mode, Auto Receive, Fax, Tel/Fax, Ans/Fax, DRPD
Color Fax	Not supported
Resolution	Standard, Fine, Super Fine, and Ultra Fine
Compression Method	B/W: 1bit, JBIG, MMR, MR, MH encoding Color: Not supported
DM Protection	Rejects junk Fax
Polling Receive	Auto, Manual
Auto Reduction Rec	On, Off, and Auto
Delayed Start	Up to 23 hours and 59 minutes
Broadcast Sending	Sequential only
Fax Cover Page	Supported
On Hook	Supported
Remote Receive	Supported
Fax Address Book	Supported
LAN Fax	
Driver	GDI Drivers
Resolution	Normal (200 x 100), Fine (200 x 200), Superfine (200 x 400), Super-High Image Quality (400 x 400)
Color	Not supported
Delayed Start	Up to 24 hours
Broadcast Sending	Up to 30 destinations
Zoom	Same as printer driver.
Auto RE (auto fit)	Same as printer driver.
Rotation	Same as printer driver.
N-up	Same as printer driver.
Watermark	Same as printer driver.
Phone Book	Up to 500 Speed Dial Numbers and up to 500 Group Dial. Local phone book stored on PC.
Secure Receive	Supported

Environmental Specifications

Characteristic	Specifications	
Temperature and Humidity		
Operating	15˚ to 28˚ C (59˚ to 82.4˚ F) at 20 % to 70 % RH	
Storage (Packaged)	-20˚ to 40˚ C (-4˚ to 104˚ F) at 5 % to 90 % RH	
Altitude		
Operating (The altitude must be adjusted at the Control Panel when used above 1000m to ensure print quality.)	0 to 3,100 meters (10,170 feet)	
Storage (Packaged)	0 to 15,000 meters (49,212 feet)	
Acoustic Noise Level		
Printer	Printing	Standby
Phaser 6020	64.4db	39.9db
Phaser 6022	67.2db	38.1db
WorkCentre 6025 MFP	63.9db	39.0db
WorkCentre 6027 MFP	67.5db	40.6db
Power Save Mode (all models)	Background level	

Electrical Specifications

Characteristic	Specifications
Inrush Current All Models	Maximum of 100 A within 10 msec (half cycle) or less
Power Supply Voltage/Frequency	
Phase	Single-phase with ground
Line Voltages*	110V M/C: 100 to 127V±10 % (90 to 140V) 220V M/C: 220 to 240V±10 % (198 to 264V)
Max Current	110V M/C: 7A or less 220V M/C: 5A or less
Frequency Range	60Hz±3Hz; 50Hz±3Hz
Power Consumption	
Continuous Printing • Phaser 6020 • Phaser 6022 • WorkCentre 6025 MFP • WorkCentre 6027 MFP	220 W or less 340 W or less 220 W or less 330 W or less
Ready Mode • Phaser 6020 • Phaser 6022 • WorkCentre 6025 MFP • WorkCentre 6027 MFP	42 W or less 42 W or less 42 W or less 42 W or less
Power Saver Mode 1 • Phaser 6020 • Phaser 6022 • WorkCentre 6025 MFP • WorkCentre 6027 MFP	10 W or less 10 W or less 25 W or less 27 W or less
Power Saver Mode 2 • Phaser 6020 • Phaser 6022 • WorkCentre 6025 MFP • WorkCentre 6027 MFP	2 W or less 3 W or less 2W or less 3 W or less

* See the Rating label on the machine for the correct voltage, frequency (hertz), and current for your machine.

Image Specifications

Note: Edge-to-edge printing is not available.

Area Definition	Specifications
Usable Area (maximum paper size)[1]	215.9mm x 355.6mm (8.5 inches x 14 inches)
Unprintable Area	4.0mm from edge of all four sides
Printable Area[2]	207.9 x 347.6mm

1. Maximum width 220mm for Envelope (DL LEF).
2. Maximum printable width of paper which paper width is more than 215.9mm is 210.9mm, therefore, maximum printable area is 210.9 x 351.6mm.

Media and Tray Specifications

Media recommended for use with this printer is known as standard paper. The feed performance, reliability, and print quality satisfy the specifications.

Supported media types.

Size	Paper Tray	Bypass Tray
A4 (210 x 297 mm (8.27 x 11.69 in.))	Y	Y
B5 (182 x 257 mm (7.17 x 10.12 in.))	Y	Y
A5 (148 x 210 mm (5.83 x 8.27 in.))	Y	Y
C5 (162 x 229 mm (6.38 x 9.02 in.))	Y	Y
Monarch (98 x 191 mm (3.875 x 7.5 in.))	Y	Y
Monarch LEF (191 x 98mm (7.5 x 3.875 in.))	Y	Y
Envelope #10 (105 x 241 mm (4.125 x 9.5 in.))	Y	Y
DL (110 x 220 mm (4.33 x 8.66 in.))	Y	Y
DL LEF (220 x 110 mm (8.66 x 4.33 in.))	Y	Y
Letter (216 x 279 mm (8.5 x 11 in.))	Y	Y
Legal (216 x 356mm (8.5 x 14 in.))	Y	Y
Folio (216 x 330 mm (8.5 x 13 in.))	Y	Y
Executive (184 x 267 mm (7.25 x 10.5 in.))	Y	Y
Custom	Y	Y
Width: 76.2 to 215.9 mm (3 to 8.5 in.) Length: 127 to 355.6mm (5 to 14 in.) Maximum width of 220 mm for envelope (DL LEF) Minimum length of 98.4 mm for envelope (Monarch LEF)		

Media	Weight (g/m^2)	Paper Tray
Plain	60 to 90	Y
Plain Thick	91 to 105	Y
Recycled	60 to 105	Y
Label	-	Y
Covers Normal (lightweight card stock)	106 to 163	Y
Coated Normal (lightweight glossary card stock)	106 to 163	Y
Envelope	-	Y
Output Tray	100 sheets plain paper, 5 sheets for Label, Envelope, thick paper, or other paper	

ADF Specifications

Description	Specification
Capacity	15 sheets plain paper, or paper stack height of 2.2 mm or less
Paper Size	A5 SEF - Legal
	Min: Fast scan direction 148.0 mm (5.83") x Slow scan direction 210.0 mm (8.27")
	Max: Fast scan direction 215.9 mm (8.5") x Slow scan direction 355.6mm (14")
Basis Weight	60 g/m^2 to 105 g/m^2
Feeding Order	Top to bottom feed
Document Size Detection	Not Supported

Warm Up Time

The Phaser 6020 and 6022 reach the Ready state within 28 seconds after power on, transition from Low Power to Ready, and transition from Sleep to Ready.

The WorkCentre 6025 and 6027 reach the Ready state within 32 seconds after power on, transition from Low Power to Ready, and transition from Sleep to Ready.

First Print Output Time (FPOT)

First Print Output Time (FPOT) is defined as the time from when the engine receives a Start signal, until a single A4 sized page is printed and delivered to the output tray.

FPOT		
Printer	**Color Mode**	**Ready Mode**
Phaser 6020 and WorkCentre 6025	Color	17.3 seconds or less
	B&W	15 seconds or less
Phaser 6022 and WorkCentre 6027	Color	15 seconds or less
	B&W	12.5 seconds or less

First Copy Output Time (WorkCentre 6025 and 6027 MFP)

First Copy Output Time (FCOT) is the time required for the printer to deliver the first sheet of paper after the user presses **Start**. The following conditions are applied:

- Printer is in the Ready state
- Document setting: Platen mode
- Magnification Ratio: 100 %
- Paper source: Feed from the standard paper tray
- Paper type: Standard paper
- Paper size: A4
- Mode: Standard mode (Factory default)

FCOT		
Printer	Color Mode	Ready Mode
WorkCentre 6025 MFP	Color	40 seconds or less
	B&W	24 seconds or less
WorkCentre 6027 MFP	Color	30 seconds or less
	B&W	20 seconds or less

Physical Dimensions and Clearances

Phaser 6020 Dimensions and Weight
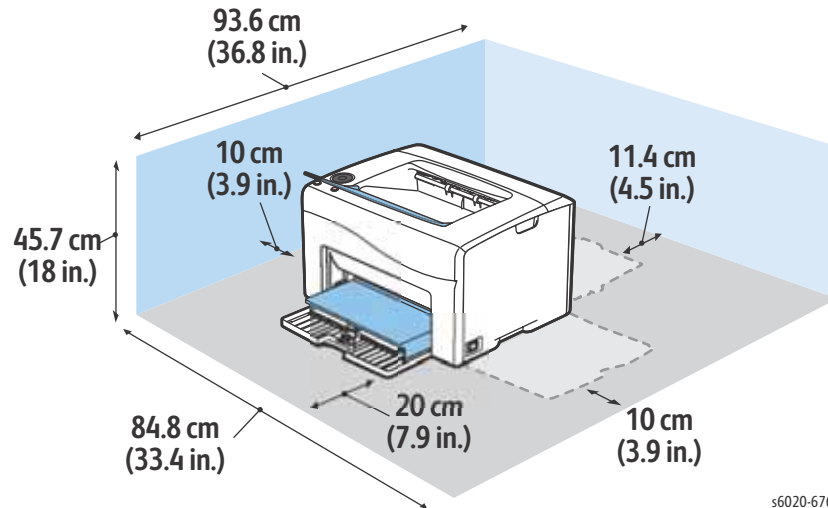
s6020-676

Note: All weights and measurements at ± 5 %.

Print Engine	Specification
Height (Output Tray open)	234 mm (9.2 in.)
Width (Toner Door Open)	394 mm (15.5 in.)
Depth (Paper Tray open)	304 mm (12 in.)
Weight	Net.: 10.5 kg (23.2 lb.)

Phaser 6022 Dimensions and Weight
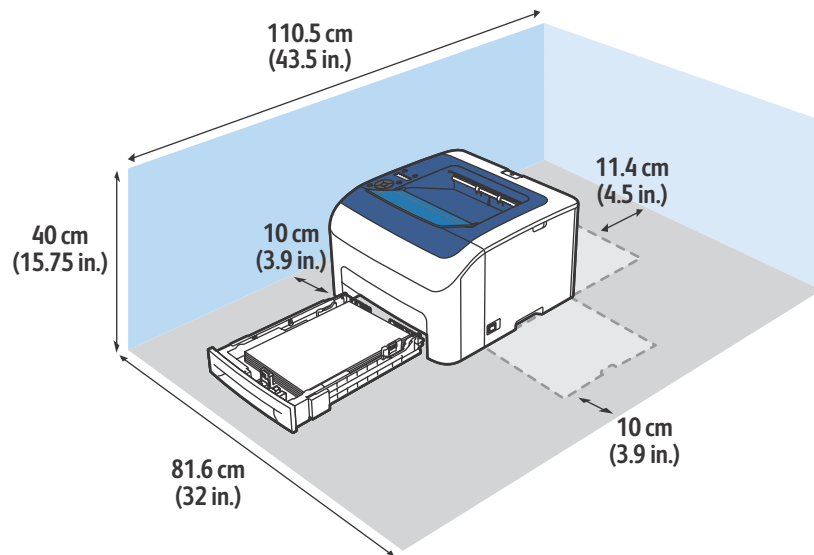
s6020-677

Note: All weights and measurements at ± 5 %.

Print Engine	Specification
Height (Output Tray open)	246 mm (9.7 in.)
Width (Toner Door Open)	397 mm (15.6 in.)
Depth (Paper Tray open)	398 mm (15.7 in.)
Weight	Net.: 12.3kg (27.1 lb.)

WorkCentre 6025 MFP Dimensions and Weight
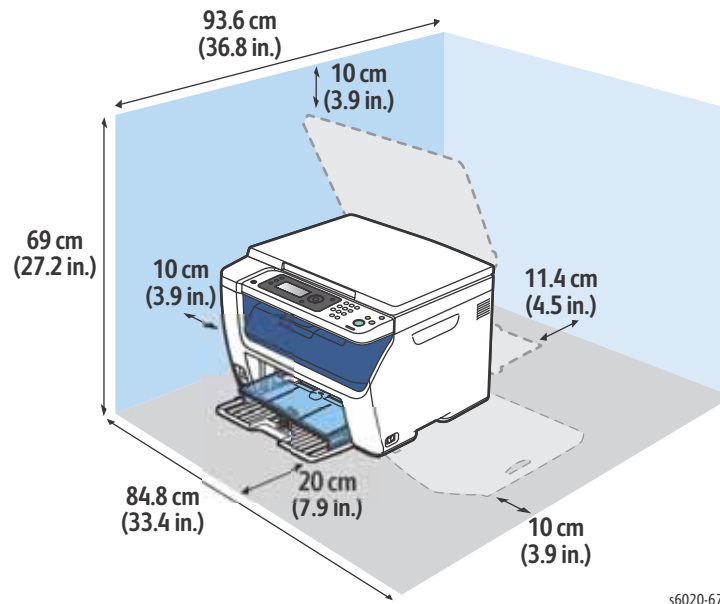
93.6 cm (36.8 in.)
10 cm (3.9 in.)
69 cm (27.2 in.)
10 cm (3.9 in.)
11.4 cm (4.5 in.)
84.8 cm (33.4 in.)
20 cm (7.9 in.)
10 cm (3.9 in.)

s6020-678

Note: All weights and measurements at ± 5 %.

Print Engine	Specification
Height (Output Tray open)	318 mm (12.5 in.)
Width (Toner Door Open)	410 mm (16.2 in.)
Depth (Paper Tray open)	398 mm (15.7 in.)
Weight	Net: 14.95kg (32.96 lbs.)

WorkCentre 6027 MFP Printer Dimensions and Weight

110.5 cm
(43.5 in.)

11.4 cm
(4.5 in.)

10 cm
(3.9 in.)

11.4 cm
(4.5 in.)

76.2 cm
(30 in.)

86.4 cm
(34 in.)

10 cm
(3.9 in.)

s6020-679
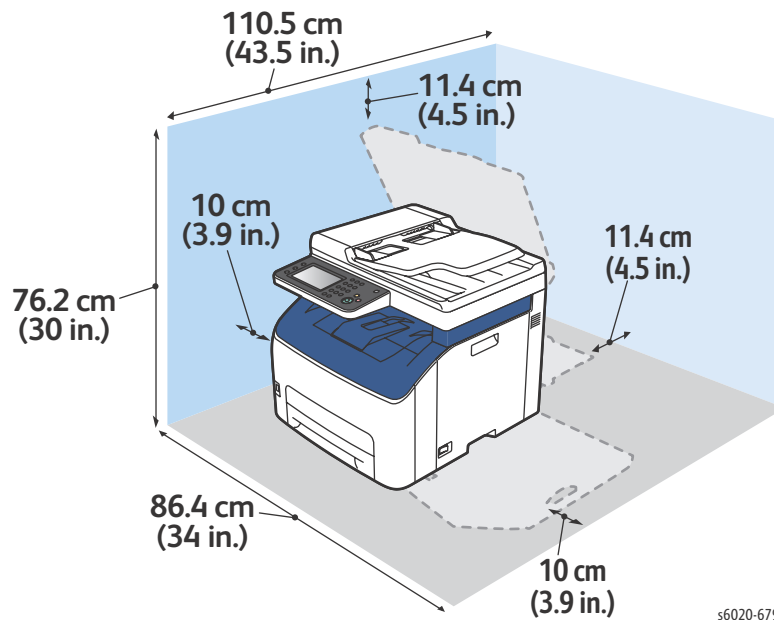
Note: All weights and measurements at ± 5 %.

Print Engine	Specification
Height	387.5 mm (15.3 in.)
Width	410 mm (16.2 in.)
Depth (Paper Tray closed).	438.5 mm (17.3 in.)
Weight (Toner Cartridges installed)	16.6kg (37.26 lbs.) ± 5 %

Mounting Surface Specifications

The printer must be used on a level surface or print quality may be compromised when the printer is on a surface with more than 1 degree tilt or sag. An non-level surface will cause toner to settle in the cartridge unevenly and be delivered to the fuser incorrectly causing image quality issues.

Failure to adhere to the specified mounting specification of less than 7mm tilt in any direction during usage of the printer will void all warranties of print-quality and/or performance.

7 mm

7 mm

s6020-185
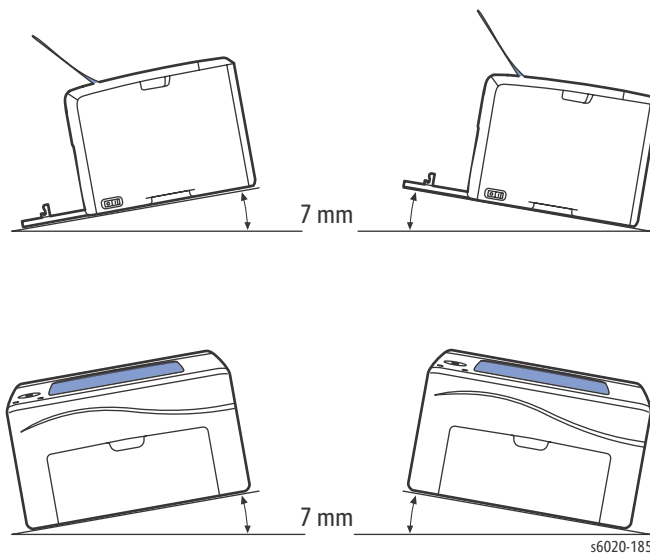
Translated Warnings

⚠️ **WARNING:** Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

DANGER : Assurez-vous que la machine est hors tension lorsque vous effectuez des tâches ne nécessitant pas d'alimentation électrique. Débranchez le câble d'alimentation pour prévenir tout risque d'électrocution. Les chocs électriques peuvent présenter un danger de mort ou entraîner des blessures graves. De plus, certaines pièces, lorsqu'elles sont en mouvement, peuvent être source de blessures graves.

AVVERTENZA: Accertarsi di isolare la macchina dall'alimentazione elettrica quando si eseguono attività che non richiedono elettricità. Scollegare il cavo di alimentazione. L'elettricità può causare morte o lesioni personali. Le parti in movimento possono causare lesioni personali.

VORSICHT: Sicherstellen, dass die Stromversorgung des Geräts bei Arbeiten, die keinen Strom erfordern, ausgeschaltet ist. Den Netzstecker ziehen. Andernfalls besteht Stromschlaggefahr und Verletzungsgefahr durch bewegliche Teile.

AVISO: Asegúrese de mantener la máquina aislada de la energía eléctrica mientras realiza tareas que no necesitan electricidad. Desconecte el cable de alimentación. La energía eléctrica puede producir lesiones o incluso la muerte. Las piezas sueltas pueden producir lesiones.

⚠️ **WARNING:** Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Electricity can cause death or injury. Moving parts can cause injury.

DANGER : Assurez-vous que la machine est hors tension lorsque vous effectuez des tâches ne nécessitant pas d'alimentation électrique. Les chocs électriques peuvent présenter un danger de mort ou entraîner des blessures graves. De plus, certaines pièces, lorsqu'elles sont en mouvement, peuvent être source de blessures graves.

AVVERTENZA: Accertarsi di isolare la macchina dall'alimentazione elettrica quando si eseguono attività che non richiedono elettricità. L'elettricità può causare morte o lesioni personali. Le parti in movimento possono causare lesioni personali.

VORSICHT: Sicherstellen, dass die Stromversorgung des Geräts bei Arbeiten, die keinen Strom erfordern, ausgeschaltet ist. Andernfalls besteht Stromschlaggefahr und Verletzungsgefahr durch bewegliche Teile.

AVISO: Asegúrese de mantener la máquina aislada de la energía eléctrica mientras realiza tareas que no necesitan electricidad. La energía eléctrica puede producir lesiones o incluso la muerte. Las piezas sueltas pueden producir lesiones.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

DANGER : Ne pas toucher au four pendant qu'il est encore chaud.
AVVERTENZA: Non toccare il fonditore quando è caldo.
VORSICHT: Fixierbereich erst berühren, wenn dieser abgekühlt ist.
AVISO: No toque el fusor mientras está caliente.

⚠️ **WARNING:** The following servicing instructions are for use by qualified service personnel only.

DANGER: Les instructions de maintenance suivantes sont réservées au personnel qualifié.
AVVERTENZA: Le seguenti istruzioni di manutenzione sono destinate esclusivamente per l'utilizzo da parte del personale di assistenza qualificato.
VORSICHT: Die folgenden Wartungsanweisungen richten sich ausschließlich an qualifiziertes Personal.
AVISO: Las siguientes instrucciones de servicio son para uso exclusivo del personal de servicio cualificado.

⚠️ **WARNING:** Do not touch electrical components unless instructed to do so in a service procedure.

DANGER: Ne pas toucher les composants électriques à moins d'y être invité au cours de la procédure de maintenance.
AVVERTENZA: Non toccare i componenti elettrici a meno che non sia espressamente indicato in una procedura di manutenzione.
VORSICHT: Berühren Sie keine elektrischen Komponenten, sofern dies nicht im Rahmen einer Wartungsmaßnahme erforderlich ist.
AVISO: No toque los componentes eléctricos a menos que así se indique en un procedimiento de servicio.

⚠️ **WARNING:** Do not attempt to manually rotate or stop the drive assemblies while a motor is running.

DANGER: Ne pas tenter de faire tourner ou d'arrêter manuellement les équipements moteur pendant qu'un moteur est en train de tourner.
AVVERTENZA: Non tentare di ruotare manualmente o arrestare i complessivi di trasmissione mentre è in funzione un motore.
VORSICHT: Versuchen Sie nicht, die Antriebsbaugruppen manuell zu drehen oder anzuhalten, während ein Motor läuft.
AVISO: No intente girar o parar manualmente los componentes de accionamiento con el motor funcionando.

⚠️ **WARNING:** Use an approved toner vacuum cleaner. Using a household vacuum cleaner may cause an explosion or ignition, resulting in burns or injury

DANGER: Utiliser un aspirateur de toner homologué. L'utilisation d'un aspirateur de ménage peut provoquer une explosion ou un incendie, provoquant brûlures ou blessures.
AVVERTENZA: Utilizzare solo un aspiratore di toner approvato. L'utilizzo di un aspirapolvere domestico potrebbe provocare un'esplosione o produrre scintille, causando ustioni o lesioni personali.
VORSICHT: Verwenden Sie einen zugelassenen Tonerstaubsauger. Das Verwenden eines handelsüblichen Haushaltsstaubsaugers kann Explosionen und Feuer verursachen und zu Bränden und Verletzungen führen.
AVISO: Utilice una aspiradora aprobada para tóner. Utilizar una aspiradora doméstica puede causar una explosión o ignición que provoque quemaduras o lesiones.

⚠️ **WARNING:** Danger of explosion if the battery is installed incorrectly. A new battery must be the same or equivalent type.

DANGER: Il existe un risque d'explosion si la batterie n'est pas correctement installée. La nouvelle batterie doit être du même type ou d'un type équivalent.

AVVERTENZA: L'installazione errata della batteria può causare esplosioni. La nuova batteria deve essere dello stesso tipo o di tipo equivalente.

VORSICHT: Es besteht Explosionsgefahr, wenn die Batterie nicht korrekt installiert wird. Neue Batterien müssen den gleichen oder einen äquivalenten Typ aufweisen.

AVISO: Existe el riesgo de explosión si la batería se instala de forma incorrecta. La nueva batería debe ser del mismo tipo o equivalente.

⚠️ **WARNING:** Avoid electrical shock hazard. Correctly route all wires into the harness guides when installing the Fuser.

DANGER: Éviter tout danger d'électrocution en veillant à faire passer correctement tous les câbles dans les guides du faisceau de câbles lors de l'installation du module four.

AVVERTENZA: Per evitare il rischio di scosse elettriche, inserire correttamente tutti i cavi nelle guide del cablaggio quando si installa il fusore.

VORSICHT: Vermeiden Sie das Risiko elektrischer Schläge. Führen Sie beim Installieren der Fixiereinheit alle Kabel korrekt durch die Kabelbaumführung.

AVISO: Evite el riesgo de descarga eléctrica. Enrute todos los cables correctamente en las guías al instalar el fusor.

Error Troubleshooting

2

In this chapter...

Introduction

The Error Troubleshooting chapter describes error messages and numeric codes displayed on the Control Panel and listed on the Error History page. These error indications serve as the entry point into the troubleshooting process.

Troubleshooting of problems not directly indicated by or associated with an error message or code is covered in Chapter 4, General Troubleshooting. Print quality problems are covered in Chapter 5, Print Quality Troubleshooting.

Also covered in this chapter are Service Diagnostics, and troubleshooting procedures not associated with an error code or Control Panel error message. For troubleshooting problems associated with an error message, refer to "Error Messages and Troubleshooting Procedures" on (Page 2-4). Print-quality problems are covered in "Print-Quality Troubleshooting" on (Page 3-10).

The printer tracks and reports errors in a number of ways. The two types of error reporting discussed in this section include:

- Error messages and codes displayed on the Control Panel
- Engine (fatal) and Jam Error logs displayed on the Control Panel or listed on the Error History Report

Troubleshooting Overview

To increase the efficiency of troubleshooting, ensure that preliminary checks are made to confirm the trouble status before proceeding.
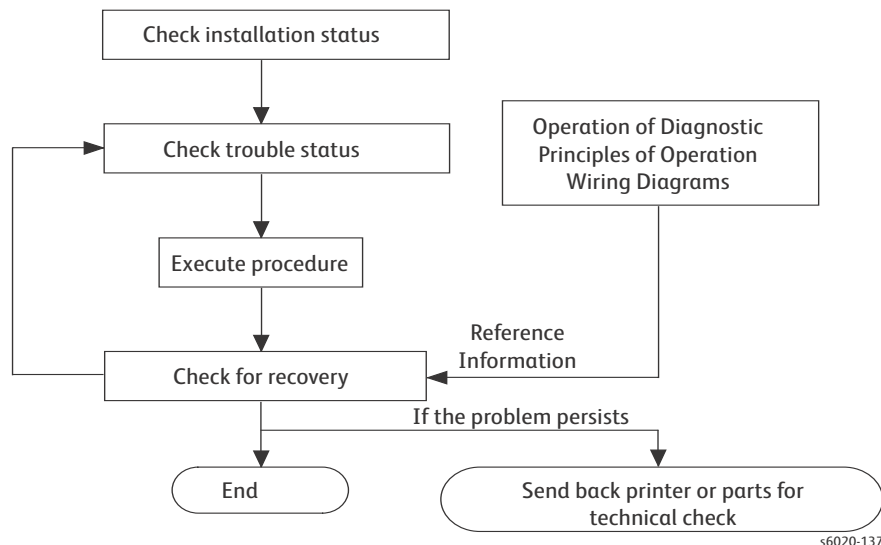
Servicing Instructions

The service checklist below is an overview of the path a service technician should take when servicing the printer.

Step 1: Identify the Problem
1. Verify the reported problem does exist.
2. Check for any error codes and write them down.
3. Print normal customer prints and service test prints.
4. Make note of any print-quality problems in the test prints.
5. Make note of any mechanical or electrical abnormalities present.
6. Make note of any unusual noise or smell coming from the printer.
7. View the System Error and Paper Jam Error on the Error History Report.
8. Verify the AC input power supply is within proper specifications by measuring the voltage at the electric outlet while the printer is running.

Step 2: Inspect and Clean the Printer
1. Turn the printer power Off.
2. Disconnect the AC power cord from the wall outlet.
3. Verify the power cord is free from damage or short circuit and is connected properly.
4. Remove the Toner Cartridges.
5. Inspect the printer interior and remove any foreign matter such as paper clips, staples, pieces of paper, dust, or loose toner.
6. Do not use solvents or chemical cleaners to clean the printer interior.
7. Do not use any type of oil or lubricant on printer parts.
8. Use only an approved toner vacuum.
9. Clean all rubber rollers with a lint-free cloth, dampened slightly with cold water and mild detergent.
10. Inspect the interior of the printer for damaged wires, loose connections, toner leakage, and damaged or obviously worn parts.
11. If the Toner Cartridges appear obviously damaged, replace with new ones.

Step 3: Find the Cause of the Problem
1. Use the Error Messages and Codes and troubleshooting procedures to find the cause of the problem.
2. Use Service Diagnostics to check the printer and optional components.
3. Use the Wiring Diagrams and Plug/Jack Locator to locate test points.
4. Take voltage readings as instructed in the appropriate troubleshooting procedure.

Step 4: Correct the Problem
1. Use the Parts List to locate a part number.
2. Use the FRU Disassembly procedures to replace the part.

Step 5: Final Checkout
1. Test the printer to be sure you have corrected the initial problem and there are no additional problems present.

Error Messages and Troubleshooting Procedures

The error messages and codes generated by the printer's operating system are the lead-in to the troubleshooting procedures that follow in subsequent pages. This section correlates the output of the printer's diagnostic aids and provides the troubleshooting procedures to locate and correct the

Initial Actions

Some problems are easy to resolve. Use these steps in an attempt to quickly isolate the problem.

1. Turn Off the printer, wait 10 seconds, then turn On the printer. This often solves problems related to power transients, ESD, and software errors.
2. If a message appears on the Control Panel, see "Error Messages and Troubleshooting Procedures" on (Page 2-4) for specific procedures related to error messages.
3. Check the power cord.
4. Is the power cord plugged into the printer and a properly grounded electrical outlet?
5. Is the power cord damaged?
6. Check the electrical outlet.
7. Is the outlet turned off by a switch or breaker?
8. Does other electrical equipment plugged into the outlet operate?

Display Problems

1. If the Control Panel displays only diamonds or is blank:
   - Turn Off the printer, wait 10 seconds, then turn On the printer.
   - When tests complete, **Ready to Print** should appear on the display.

   Note: If the problem persists see, "Control Panel Troubleshooting" on (Page 2-162).

2. If menu settings changed from the operator panel have no effect:

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

   - Change the menu settings from the printer driver, the printer utilities, or the software pro-gram instead of the operator panel.
   - 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

If menu settings entered from the Control Panel have no effect, change or disable print settings from the print driver, the print utilities, or the application.

> Note: Settings made in the application, print driver, or print utilities override settings made from the Control Panel.

1. If a job did not print correctly or incorrect characters were printed, check the following:
   - Check that printer is in "Ready" state before sending a print job.
     - Phaser 6020 "Ready" LED is illuminated.
     - Phaser 6022 and WorkCentre 6025/6027 MFP Control Panel displays "Ready".
   - Check the loaded print media.
   - Check the print driver.
   - Check the printer connections to WiFi, Ethernet, or USB.
   - Verify that the correct print media size is selected.
   - If using a print spooler, verify that the spooler has not stalled.
   - Check the printer's interface configuration. Determine the host interface you are using.
   - Print the Configuration Page to verify that the current settings are correct.
2. Output fonts will not print correctly using the PCL driver in its default mode.
   - To correct this problem, use the PostScript driver.
3. If print media mis-feeds or multiple feeds occur, check and try the actions below.
   - Make sure the print media you are using meets the specifications for your printer. Refer to Print Media Guidelines of this section.
   - Flex print media before loading it in any of the sources.
   - Make sure the print media is loaded correctly.
   - Make sure the width and length guides on the print media sources are adjusted correctly.
   - If the print media are overfilled in sources, reduce the amount of media.
   - Load the recommended print side correctly for the type of print media you are using.
   - Turn the print media over or around and try printing again to see if feeding improves.
   - Check the print media type loaded in the source, and refill only one type of print media, if print media types are mixed.
   - Refill a new ream of print media, if some reams are mixed.
   - Remove the top and bottom sheets of a ream before loading the print media.
   - Do not reload print media until the print media source is empty.
4. If envelope mis-feeds or multiple feeds occur:
   - Remove the stack of envelops from the Bypass Tray or Paper Cassette and feed a single envelope.
   - If page breaks in unexpected places:
   - Check the "Job Timeout" in the Basic Settings menu and increase the value.
   - If a job prints from the wrong source or on the wrong print media:
   - Check the "Paper Size" and "Paper Type" in the Tray Settings menu on the printer operator panel and in the printer driver.
5. If print media does not stack neatly in the output tray:
   - Turn the print media stack over in the cassette.

Print Media Guidelines

Print media is 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 cassette.

Paper Type

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. Before buying large quantities of any print media, it is recommended that you try a sample first. When loading paper, identify the recommended print side on the paper package, and load the paper accordingly.

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

Cassette automatically feed paper whose weights range from 60 g/ m2 to 163 g/m2 (16 lb bond to 44 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 feeder, 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 cassette.

Smoothness

The degree of paper smoothness directly affects print quality. If the paper is too rough, the toner does not fuse 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 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 to 135 g/m2 (16 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 possess characteristics that can result in 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 provide 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.

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.

1. Preprinted paper with chemicals that may contaminate the printer
2. Preprinted paper that can be affected by the temperature in the fusing
3. Preprinted paper that require 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.
4. Coated paper (erasable bond), synthetic paper, thermal paper
5. Rough-edged, rough or heavily textured surface paper, or curled paper
6. Recycled paper containing more than 25 % post-consumer waste that do not meet DIN 19 309
7. Multiple-part forms or documents
8. 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:

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

Copy Problems

If a document loaded in the ADF cannot be copied.

1. Ensure the ADF cover is firmly closed.
2. Ensure that the release lever is properly positioned.

Scanning Problems

Problem	Check/Explanation
Scanner does not work.	1. Ensure that you place the document to be scanned face down from the document feeder glass, or face up in the ADF. 2. There may not be enough available memory to hold the document you want to scan. Try the Prescan function to see if that works. Try lowering the scan resolution rate. 3. Check that the USB cable is connected properly. 4. Ensure that the USB cable is not defective. Switch the cable with a known good cable. If necessary, replace the cable. 5. Check that the scanner is configured correctly. Check the application you want to use to make certain that the scanner job is being sent to the correct port.
Printer scans very slowly.	1. Graphics are scanned more slowly than text when using the Scan to E-mail or Scan to Network feature. 2. Communication speed becomes slow in scan mode because of the large amount of memory required to analyze and reproduce the scanned image. 3. Scanning images at a high resolution takes more time than scanning at a low resolution.

Problem	Check/Explanation
Document mis-feeds or multiple mis-feeds occur in the Automatic Document Feeder (ADF).	1. Check whether the ADF roller assembly is installed properly. 2. Ensure the document's paper type meets the specifications for the printer. 3. Check whether the document is properly loaded in the ADF. 4. Ensure that the document guides are adjusted properly. 5. Ensure that the number of document sheets do not exceed the maximum capacity of the ADF. 6. Ensure that the document is not curled. 7. Fan the document well before loading it in the ADF.
Vertical stripes appear on the output when scanned using the ADF.	Clean the document glass.
Smear appears at the same location on the output when scanned using the document glass.	Clean the document glass.
Images are skewed.	Ensure that the document is loaded straight in the ADF or on the document glass.
Diagonal lines appear jagged when scanned using the ADF.	If the document uses thick media, try scanning it from the document glass.
One of the following messages appears on your computer screen: • Device can't be set to the H/W mode you want. • Port is being used by another program. • Port is Disabled. • Scanner is busy receiving or printing data. When the current job is completed, try again. • Invalid handle. • Scanning has failed.	1. There may be a copying or printing job in progress. When the current job is complete, try the job again. 2. The selected port is currently being used. Restart your computer and try again. 3. The printer's cable may be improperly connected or the power may be off. 4. The scanner driver is not installed or an operating environment is not set up properly. 5. Ensure that the port is properly connected and the power is turned on. Then restart your computer. 6. Check if the USB cable is properly connected.
Printer does not properly transfer scan data to a specified destination via the Scan to E-mail or Scan to Network feature	1. Check the following settings under **Address Book > Server Address**: 　　• Server Address 　　• Server Path 　　• Share Name 　　• Login Name 　　• Login Password 　　• Scan to E-mail 2. Check the following setting under **Address Book > E-Mail Address**: 　　• Address

Fax Problems

Problem	Check/Explanation
Some of the words on an incoming fax are stretched.	The fax machine sending the fax had a temporary document jam. Have the fax resent.
Lines appear on sent documents.	Check the platen glass for marks and clean it.
The printer dials a number, but the connection with another fax machine fails.	The other fax machine may be turned off, out of paper, or cannot answer incoming calls. Speak with the other machine operator and ask her/him to sort out the problem.
Documents are not stored in memory.	There may not be enough memory to store the document. If the display shows a Memory Full message, delete any documents no longer needed from the memory and then restore the document, or wait for the job in progress (e.g., a fax transmission or reception) to complete.
No dial tone sounds.	1. Check that the phone line is connected properly. 2. Check that the phone socket in the wall is working by plugging in another phone.
Numbers stored in the memory do not dial correctly.	Ensure that the numbers are stored in the memory correctly. (Print a Phone Book list.)
Document does not feed into the printer.	1. Ensure that the document is not wrinkled and you are putting it in correctly. Check that the document is of the right size, not too thick or thin. 2. Ensure that the ADF cover is firmly closed.
Faxes are not received automatically.	1. The FAX mode should be selected. 2. Ensure that there is paper in the paper tray. 3. Check to see if the display shows Memory Full.
Printer does not send faxes	1. Ensure that the document is loaded in the ADF or on the document feeder glass. 2. Sending should show up on the display. 3. Check the other fax machine you are sending to, to see if it can receive your fax.
Incoming fax has blank spaces or is received in poor quality.	1. A noisy phone line can cause line errors. 2. Check your printer by making a copy. 3. The toner cartridge may be empty. Replace the toner cartridge. 4. The fax machine sending you the fax may be faulty.
Blank areas appear at the bottom of each page or on other pages, with a small strip of text at the top.	You may have chosen the wrong paper settings in the user option setting.
Printer will not send or receive faxes.	Ensure that the country code is set correctly by pressing the **System** button and then select **Admin Menu > Fax Settings > Country**.
Error often occurs during a fax transmission or reception.	Reduce the modem speed by pressing the **System** button and then select A**dmin Menu > Fax Settings > Modem Speed**.

Media-Based Problems

1. Check that the correct type of media is being used; for the correct media types and weights, refer to. The customer should be using a quality laser printer paper. The printer may have trouble picking glossy or overly smooth paper.
2. Inspect the paper for bent, torn, or folded corners.
3. Check the media path for obstructions or debris.
4. Ensure that the correct media type is set at the Control Panel.
5. Ensure that the media guides are set correctly.
6. Ensure that the media is a supported type for the tray.
7. Load a fresh ream of paper in the tray.

Multiple-Sheet Pick

1. Check the media. Is the media in good condition and listed as supported media? Quality office laser printer paper works best.
2. Remove the paper, fan and reload the media. Ensure the guides are securely against the paper and the tray has not been over filled.
3. Fan and new ream of paper and load into the paper tray.
4. Check the tray's Separator Roller for damage.
5. Clean the Feed Rollers with a clean, moistened with water only, lint-free wipe.
6. Replace the Feed Rollers.

Mis-Pick

1. Check that the correct type of media is being used and the media guides are set correctly.
2. Remove, fan, and reload the media. Check that the tray is not over filled.
3. Try loading media from a fresh ream, fan, and then insert the media into the tray or flip existing media over.
4. Clean the Feed and Separator Rollers with a clean, moistened with water only, lint-free wipe.

Skewed Image

1. The image area is not parallel, skewed, with the sides of the page but the printer neither jams nor displays an error code.
2. Remove the tray and ensure the paper guides are set correctly.
3. Check that the correct type of media for the tray is being used.
4. Ensure that the tray has not been over filled. (Skewed images are a common defect when the tray is overfilled.)
5. Verify the Feed Rollers are installed correctly.
6. Clean the Feed and Separator Rollers with a clean, dry, lint-free wipe.

Damaged Prints

The printed page exits the printer either wrinkled, creased, or torn. The printer neither jams nor displays an error code.

1. Stop the sheet at various points in the media path to determine where the media is damaged.
2. Try using the next heaviest type of paper.
3. Feed paper through the printer from each of the available trays. Is the paper damaged when fed out of one tray but not when fed out of the others? If so, inspect the tray for damage, ensure that the media guides are set correctly and verify that the proper media is being used.
4. If media shows damage from all trays, check the registration rollers.
5. Inspect the tray and media path for debris or broken components.

Wrinkled Envelopes

Envelope wrinkling of varying severity can sometimes occur. In general, envelope wrinkling is considered a technology limitation due to the fusing process which relies on heat and pressure to bond toner to the media. The #10 Commercial envelopes are particularly susceptible to wrinkling.

1. Check the media path for obstructions or debris.
2. Check that the media guides are set correctly.
3. Test envelopes from various manufacturers to find the best result.

Fuser Jams

1. Ensure that the paper is in good condition and is listed as supported media. Try loading new media from a fresh ream.
2. Check that the printer is operating within its environmental specifications by printing the Information page.
3. Ensure that the loaded media matches the Control Panel settings.
4. Are the margins on the page greater than 4.1 mm?
5. Check the Fuser area for debris.

Exit Jams

1. Check that the correct type of media is being used; refer to "Physical Dimensions and Clearances" on (Page 1-109).
2. Ensure the printer is within its operating environmental specifications.
3. If media is showing excessive curl when exiting, try turning the media over, loading new media from a fresh ream, or a different type of media.
4. Ensure that the loaded media matches the Control Panel settings.
5. Is the jam caused by a heavy, stiff paper being used for two-sided printing? In such cases, a lighter grade of paper should be used.
6. If debris is visible, clean the printer with a clean, dry, lint-free wipe.
7. Turn the printer off and then back on. The exit roller in the Fuser should turn for a few seconds.

Printing the Error History Report

The Error History Report provides a list of error messages and codes relating to jam and system (fatal) errors.

The Error History page contains two types of history information.
- System Fail History:
  Item Number, Total Print Count, Chain-Link code, and Error Information.
- Paper Jam History:
  Item No., Total Print Count, Chain-Link code, and Paper Jam Type information.

Printing the Error History Report at the Phaser 6020 Control Panel

- At the Control Panel, press and hold the **[OK] button**.
  The Printer Settings, Device Settings, and Error History Report are printed.

Printing the Error History Report at the Phaser 6022 Control Panel

- At the Control Panel press the **Menu button**.
- At **Information Pages** press **[OK]**.
- Press the **Up** or **Down** arrow button to find Error History. Press **[OK]**.

The Error History Report is printed.

Printing the Error History Report at the WorkCentre 6025 MFP Control Panel

- At the Control Panel, press the **System button**.
- Use the **Down Arrow** button to scroll to **Information Pages**, and press **[OK]**.
  The Error History Report is printed.

Printing the Error History Report at the WorkCentre 6027 MFP Control Panel

- At the Control Panel, press the **System button**.
- Use the **Down Arrow** button to scroll to **Information Pages**, and press **[OK]**.
  The Error History Report is printed.

Printing the Error History Report with the Printer Settings Utility (Phaser 6020)

- From the Windows Start Menu, select **Programs** > **Xerox Office Printing** >**Phaser 6020** > **Printer Settings Utility**.
- On the **Printer Settings Report** tab, select **Information Pages**.
- Press the **Error History** button.
  The Error History Report is printed.

Error Messages Abbreviations

Due to limited display space, some error messages include abbreviations. The most common abbreviations used throughout this chapter are listed here.

Term	Definition
ADC	Automatic Density Control
ASIC	Application-Specific Integrated Circuit
BLK	Black
COMM	Communication
CRT	Cartridge
CRUM	Customer Replaceable Unit Memory
ER/ERR	Error
ENV	Environment
FUNC	Function
MAC address	Media Access Control Address
MCU	Machine Control Unit
NVM	Non-Volatile Memory. Used instead of NVRAM.
NVRAM	Non-Volatile Random Access Memory
PDL	Page Description Language
RAM	Random Access Memory
REG	Registration
ROM	Read Only Memory
TRAN	Transfer Belt

Phaser 6020 Status Codes

Phaser 6020 Status Code Indicators

Phaser 6020 Control Panel Indicators

1. Toner LED
2. Energy Saver LED
3. Jam LED
5. Start Button and LED
6. Error LED
7. Load Paper LED
8. Ready/Data LED

s6020-680

Note: Print the Error History Report ((page 2-13)).

Use the following table to interpret error indicators on the Control Panel of the Phaser 6020.

Note:

- A "+" in this table indicates that the LED will remain in whatever state it was in prior to the error occurring.
- A "-" indicates that the LED is off after the error occurs.

● / ●: ON ,"●" / "●": Fast Blink , '●': Slow Blink

Status Code	LED										Status Contents	Go To page
	Y Toner	M Toner	C Toner	K Toner	Energy Saver	Jam	Start	Error	Load Paper	Ready/Data		
010-397	-	-	-	-	-	-	-	"●"	-	-	<Fusing Failure> The operation error of Fusing (Temperature anomaly error etc.) is detected.	2-24
016-500	-	●	●	-	-	-	-	●	●	-	<Erase Flash Error> Flash memory erase error occurred.	2-28
016-501	-	●	●	●	-	-	-	●	●	-	<Download Write Error> Flash memory write error occurred.	2-28
016-502	-	●	●	●	-	-	-	●	●	-	<Download Verify Error> Flash memory verify error occurred.	2-28
007-371					See Status Code 042-372							2-71

Status Code	LED Y Toner	M Toner	C Toner	K Toner	Energy Saver	Jam	Start	Error	Load Paper	Ready/Data	Status Contents	Go To page
016-718	-	-	-	-	-	-	-	🟠	-	-	<Memory Overflow> Unable to process the PCL print data because of insufficient memory.	2-30
016-720	-	-	-	-	-	-	-	🟠	-	-	<PDL Error> The print data cannot be processed by PDL.	2-32
016-744	-	-	🟠	-	-	-	-	🟠	🟠	-	<Download Check Sum Error> The checksum is invalid.	2-33
016-745	-	-	🟠	-	-	-	-	🟠	🟠	-	<Download header Error> The header information is invalid.	2-33
024-340	-	-	-	-	-	-	-	”🟠”	-	-	<Firmware Error> MCU firmware error occurs.	2-49
024-360	🟠	🟠	🟠	🟠	-	-	-	🟠	🟠	-	<MCU Download Error> Download failure of MCU firmware.	2-50
024-371	-	-	-	-	-	-	-	”🟠”	-	-	<MCU-ESS Communication Fail> Communication fail between MCU and ESS.	2-51
024-958	-	-	-	-	-	-	”🟢”	🟠	”🟠”	-	<Paper Size Mismatch> The size of paper in the cassette does not match the specified print size. AAAAA: Paper Size BBBBB: Paper Type	2-53
024-963	-	-	-	-	-	-	”🟢”	🟠	”🟠”	-	<No Suitable Paper> Cassette has run out of paper, or the size (or type) of paper in the cassette does not match the specified print size (or type). AAAAA: Paper Size BBBBB: Paper Type	2-54
041-340	-	-	-	-	-	-	-	”🟠”	-	-	<NVRAM Error> The operation error of NVM (read/write check error etc.) is detected.	2-68
042-358	-	-	-	-	-	-	-	”🟠”	-	-	<Fan Motor Failure> MCU detects an error upon receiving error signal from the Fan Motor.	2-70
042-372	-	-	-	-	-	-	-	”🟠”	-	-	<DEVE Mode Change Failure> DEVE Mode Change failure is detected.	2-71
061-370	-	-	-	-	-	-	-	”🟠”	-	-	<LPH Failure> LPH failure is detected.	2-72
075-921	-	-	-	-	-	-	”🟢”	-	-	🟠	<Paper Remain at Regi> Paper remain was detected at the Regi section (or cassette section) of the Printer.	2-78

Status Code	LED										Status Contents	Go To page
	Y Toner	M Toner	C Toner	K Toner	Energy Saver	Jam	Start	Error	Load Paper	Ready/Data		
077-100	-	-	-	-	+	"●"	-	●	-	+	\<Paper Remain at Regi\> Paper remain was detected at the Regi section (or cassette section) of the Printer.	2-79
077-104	-	-	-	-	+	"●"	-	●	-	+	\<Reg OFF Jam\> The paper does not pass through the Regi Sensor within the specified time.	2-81
077-106	-	-	-	-	+	"●"	-	●	-	+	\<Exit On JAM\> The paper does not reach the Exit Sensor within the specified time.	2-83
077-108	-	-	-	-	+	"●"	-	●	-	+	\<Exit Off early JAM\> The paper passed through the Exit Sensor earlier than the specified time.	2-85
077-109	-	-	-	-	+	"●"	-	●	-	+	\<Exit Off JAM\> The paper does not pass through the Exit Sensor within the specified time.	2-85
077-304	-	-	-	-	+	-	-	●	-	+	\<Rear Cover Open\> The Rear Cover is open.	2-86
077-900	-	-	-	-	+	"●"	-	●	-	+	\<Paper Remain at Exit\> Paper remain was detected at the Exit section of the Printer.	2-87
077-901	-	-	-	-	+	"●"	-	●	-	+	\<Paper Remain at Regi\> Paper remain was detected at the Regi section of the Printer.	2-88
091-402	+	+	+	+	+	+	+	●	+	+	\<Xero Near Life\> The Printer (XERO DEVE LPH BELT ASSY) is approaching the replacement time.	2-90
092-310	-	-	-	-	-	-	-	"●"	-	-	\<CTD Sensor Contamination\> The CTD (ADC) Sensor has reached the Cleaning time.	2-92
092-651	-	-	-	-	-	-	-	"●"	-	-	\<CTD (ADC) sensor error\> CTD (ADC) sensor error is detected.	2-93
092-661	-	-	-	-	-	-	-	"●"	-	-	\<Environment Sensor Error\> The Environment (Temperature/Humidity) sensor detected the temperature anomaly.	2-94
092-910	+	+	+	+	+	+	+	●	+	+	\<CTD Sensor Contamination Warning\> The CTD (ADC) Sensor is approaching the Cleaning time.	2-92

Status Code	LED										Status Contents	Go To page
	Y Toner	M Toner	C Toner	K Toner	Energy Saver	Jam	Start	Error	Load Paper	Ready/Data		
093-423	●	+	+	+	+	+	+	+	+	+	\<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	2-95
093-424	+	●	+	+	+	+	+	+	+	+	\<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	2-95
093-425	+	+	●	+	+	+	+	+	+	+	\<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	2-95
093-426	+	+	+	●	+	+	+	+	+	+	\<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	2-95
093-919	"●"	-	-	-	-	-	-	●	-	-	\<Y Toner Low Density\> Detects low density of yellow.	2-96
093-920	-	"●"	-	-	-	-	-	●	-	-	\<M Toner Low Density\> Detects low density of magenta.	2-96
093-921	-	-	"●"	-	-	-	-	●	-	-	\<C Toner Low Density\> Detects low density of cyan.	2-96

Status Code	LED										Status Contents	Go To page
	Y Toner	M Toner	C Toner	K Toner	Energy Saver	Jam	Start	Error	Load Paper	Ready/Data		
093-922	-	-	-	"●"	-	-	-	●	-	-	<K Toner Low Density> Detects low density of black.	2-96
093-926	-	-	-	"●"	-	-	-	-	-	-	<K CRUM ID Error> An unsupported Toner Cartridge (K) is detected or not installed in the printer or is not seated correctly.	2-99
093-930	"●"	+	+	+	+	+	+	●	+	+	<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)Yellow → 2)Magenta → 3)Cyan → 4)Black	2-97
093-931	+	"●"	+	+	+	+	+	●	+	+	<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)Yellow → 2)Magenta → 3)Cyan → 4)Black	2-97
093-932	+	+	"●"	+	+	+	+	●	+	+	<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)Yellow → 2)Magenta → 3)Cyan → 4)Black	2-97
093-933	-	-	-	"●"	-	-	-	●	-	-	<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)Yellow → 2)Magenta → 3)Cyan → 4)Black	2-97
093-960	"●"	-	-	-	-	-	-	-	-	-	<Y CRUM ID Error> An unsupported Toner Cartridge (Y) is detected.	2-99

Status Code	LED										Status Contents	Go To page
	Y Toner	M Toner	C Toner	K Toner	Energy Saver	Jam	Start	Error	Load Paper	Ready/Data		
093-961	-	"●"	-	-	-	-	-	-	-	-	<M CRUM ID Error> An unsupported Toner Cartridge (M) is detected.	2-99
093-962	-	"●"	-	-	-	-	-	-	-	-	<C CRUM ID Error> An unsupported Toner Cartridge (C) is detected.	2-99
093-970	●	-	-	-	-	-	-	●	-	-	<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)Yellow → 2)Magenta → 3)Cyan → 4)Black	2-99
093-971	-	●	-	-	-	-	-	●	-	-	<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)Yellow → 2)Magenta → 3)Cyan → 4)Black	2-99
093-972	-	-	●	-	-	-	-	●	-	-	<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)Yellow → 2)Magenta → 3)Cyan → 4)Black	2-99
093-973	-	-	-	●	-	-	-	●	-	-	<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)Yellow ® 2)Magenta ® 3)Cyan ® 4)Black	2-99
116-343	-	-	-	-	-	-	-	"●"	-	-	<ASIC Error>	2-102
124-333	-	-	-	-	-	-	-	"●"	-	-	<ASIC Failure> ASIC failure is detected.	2-108
191-310	-	-	-	-	-	-	-	"●"	-	-	<XERO Life Over> The Printer (XERO DEVE LPH BELT ASSY) has reached the replacement time.	2-110
193-700	●	●	●	●	+	+	+	+	+	+	<Custom Toner Mode> The printer is in custom toner mode.	2-111

Status Code Troubleshooting

Note: A complete list of Status Codes can be found in the Appendix (page A-9).

005-121 ADF Jam

Applicable Error

005-121: Paper Jam 005-121 Open ADF Cover and Clear Jam <ADF Jam>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • ADF Assembly, PL8.1.1 • ADF Cover, PL8.1.3 • ADF Separator Pad, PL8.1.4	• "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "WorkCentre 6027 MFP IIT" on (Page 7-59) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Is the ADF closed against the document glass completely?	Go to step 2.	Close the ADF completely and go to step 2.
2.	Does the error persist?	Go to step 3.	Complete.
3.	Reseat P/J1, P/J6, and P/J16 on the IP Board. Does the error persist?	Go to step 4.	Complete.
4.	Does the ADF feed the document?	Go to step 5.	Go to step 7.
5.	Open the ADF Cover and check the document path. Is there foreign substance on the document path?	Remove the foreign substance. Go to step 6.	Go to step 7.
6.	Does the error persist?	Go to step 7.	Complete.
7.	Clean the ADF feed rollers. Do the feed rollers rotate smoothly?	Go to step 8.	Replace the ADF (page 4-77).
8.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	Replace the ADF Cover (page 4-77) and ADF Separator Pad (page 4-77).	Complete.

005-301 ADF Cover Open

Applicable Error

005-301: Cover Open 005-301 Remove paper then Close ADF Cover <ADF Cover Open>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • ADF Assembly, PL8.1.1	• "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58). • "WorkCentre 6027 MFP IIT" on (Page 7-59) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Is the ADF Cover completely closed?	Go to step 3.	Close the ADF cover and go to step 2.
2.	Does the error persist?	Go to step 3.	Complete.
3.	Is the ADF Cover damaged?	Replace the ADF Cover (page 4-77) Go to step 4.	Go to step 5.
4.	Does the error persist?	Go to step 5.	Complete.
5.	Reseat P/J1, P/J6, and P/J16 on the IP Board. Does the error persist?	Go to step 6.	Complete.
6.	Replace the ADF (page 4-77). Does the error persist?	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150).	Complete.

009-95x CRUM Error

The Toner Cartridge CRUM communication error is detected.

Applicable Error

009-950, -951, -952, -953: CRUM Error <CRUM Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Applicable Parts	Wiring and Plug/Jack Map References
• HARNESS ASSY DCKR PL4.1.2 • MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Developer - 6020 (Page 7-31), 6022 (Page 7-39), 6025 (Page 7-47), 6027 (Page 7-56) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Step	Actions and Questions	Yes	No
1.	Are the Toner Cartridges installed in the printer Xerox Toner Cartridges?	Go to step 2.	The customer will need to replace all non-Xerox cartridges with Genuine Xerox cartridges.
2.	Inspect the contacts on the CRUM connectors. Are any bent or broken?	Repair of replace the connector.	Go to Step 3.
3.	Disconnect P/J13 on the MCU Board and unlace the harness. Inspect the harness for damage. Is the harness damaged?	Repair the harness, then go to step 4.	Go to step 4.
4.	Disconnect P/J13 on the PWBA MCU. Is the voltage across ground to P/J13-3 on the MCU Board approximately +3.3 VDC?	Repair the Harness Assembly DCKR.	Go to step 5.
5.	Replace the Toner Cartridge (C, M, Y, or K). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

010-397 Fuser Failure

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

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Applicable Error

- 010-397 <Fuser Failure>

Initial Actions

- Reseat the Fuser.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Fuser, PL5.1.1 • MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Fuser - 6020 (Page 7-32), 6022 (Page 7-40), 6025 (Page 7-48), 6027 (Page 7-57) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the Fuser and cycle system power. Does the error persist? ⚠️ **WARNING:** Do not touch the fuser while it is hot.	Go to step 2.	Complete.
2.	Check these connections 1. MCU Board P/J26 and P/J18. 2. LVPS P/J201. Are the connectors secure?	Go to step 3.	Secure the connectors.
3.	Check the Fuser harness. 1. Remove the Fuser. 2. Disconnect P/J26 and P/J18 from the MCU Board and P/J201 from the LVPS. Is the harness damaged?	Repair the harness.	Go to step 4.
4.	Replace the Fuser (page 4-129). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-315 IP Board to IIT Communication Error

An error occurred between the IIT and the Controller.

Applicable Error

- 016-315: An error occurred between the IIT and the Controller <ESS Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2 • LED Driver Board, PL7.1.5	• "Map 3 - WorkCentre 6025 MFP" on (Page 7-17) • "Map 3 - WorkCentre 6027 MFP" on (Page 7-22) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the LED Driver Board (page 4-144). Does the error persist?	Go to step 3.	Complete.
3.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-317 ESS ROM Main Check Fail

016-317: The standard Page Memory is corrupted.

Applicable Error

- 016-317: The standard Page Memory is corrupted. <ESS Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2 • LED Driver Board, PL7.1.5	• "Map 2 - Phaser 6020" on (Page 7-6); "Map 3 - Phaser 6020" on (Page 7-7) • "Map 2 - Phaser 6022" on (Page 7-11); "Map 3 - Phaser 6022" on (Page 7-12) • "Map 2 - WorkCentre 6025 MFP" on (Page 7-16); "Map 3 - WorkCentre 6025 MFP" on (Page 7-17) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21); "Map 3 - WorkCentre 6027 MFP" on (Page 7-22) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-54) • Xerographics - 6020 (Page 7-29), 6022 (Page 7-37), 6025 (Page 7-45), 6027 (Page 7-54) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the LED Driver Board (page 4-144). Does the error persist?	Go to step 3.	Complete.
3.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-372 DRAM Memory Allocation Fail

Fax memory allocation error is detected.

Applicable Error

- 016-372: <DRAM Memory Allocation Fail>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-50x Firmware Errors

The firmware download to the printer failed.

Applicable Errors

- 016-500: Erase Flash Err Restart Printer <Erase Flash Error>
- 016-501: Can not update application code in FLASH <Download Write Error>
- 016-502: Can not update parameters correctly in FLASH <Download Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2 • LED Driver Board, PL7.1.5	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • IP Board - 6020 (Page 7-29), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • Xerographics - 6020 (Page 7-29), 6022 (Page 7-37), 6025 (Page 7-45), 6027 (Page 7-54) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the LED Driver Board (page 4-144). Does the error persist?	Go to step 3.	Complete.
3.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-503 E-mail Error

An e-mail error has occurred.

Applicable Errors

- 016-503: SMTP Error 016-503 Scan Job Failure Press OK
- 016-504: POP Error 016-504 Scan Job Failure Press OK
- 016-506: SMTP Login Error 016-506 Scan Job Failure Press OK
- 016-507: SMTP Error 016-507 Scan Job Failure Press OK

Initial Actions

- Check server settings and DNS Settings
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6025 MFP" on (Page 7-16) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-718 Memory Overflow

Unable to process the PCL print data because of insufficient memory.

Applicable Error

- 016-718: <Memory Overflow> Printer Job Failure Press OK <No band buffer to stored image data due to too large file size>

Initial Actions

- Cycle printer power.
- Reduce the resolution, or cancel 2 sided printing or N up feature, and then print again.
- Verify the controller FW version, upgrade if less than current version.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9/PL7.1.16 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reduce the resolution of the print job. does the error persist?	Go to step 2	Complete.
2.	Verify the controller firmware version. Update to latest version if not at latest version now. Does the error persist?	Go to step 3	Complete.
3.	Reseat all connections on the IP Board. Does the error persist?	Go to step 4.	Complete.
4.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	Go to step 5.	Complete.
5.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.	

016-719 Decode Error

Decode error is detected.

Applicable Error

- 016-719: Decode Error 016-719 Printer Job Failure Press OK <Decode Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-720 PDL Error

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

Applicable Error

- 016-720: <PDL Error> The print data cannot be processed by the PDL.

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9/PL7.1.16 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the memory. Print the Configuration Page to determine the amount of memory installed. Is the print job too large?	Divide the print job to fit installed memory.	Go to step 2.
2.	Reseat all connections on the IP Board. Does the error persist?	Go to step 3.	Complete.
3.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	Go to step 4.	Complete.
4.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.	

016-737, -74x Download Errors

The system firmware file is incorrect, corrupt, or communications to the printer failed.

Applicable Errors

- 016-737: Format Error Press OK Button <Download Format Error> The file format is invalid.
- 016-741: Protection Error <Download Protect Error> The Protect is invalid. Download was attempted under the condition where it is prohibited.
- 016-742: Invalid ID Press OK Button <Download ID Error> An error occurred because an invalid firmware is installed.
- 016-743: Range Check Error <Download Range Error> The address of the write destination is invalid.
- 016-744: Format Error 016-744 System Invalid Data Press OK <Download Format Error> Invalid file format to be downloaded.
- 016-745: Format Error 016-745 System Invalid Data Press OK <Download Protect Error> Download destination device protection on.

Initial Actions

- Cycle printer power.
- Check the download destination for protection on.
    - Admin Menu -> Secure Settings -> Software Download -> **Enable**. MUST be 'Enabled'; if 'Disabled', select 'Enabled', return to main menu and reboot the printer.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9/7.1.16 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Go to step 3.	Complete.
3.	Does the error persist?	Contact your designated field support for assistance.	Complete.

016-749 PJL Request Error

The print data cannot be processed by PJL.

Applicable Error

- 016-749: PJL Request 016-749 System Invalid Data Press OK <Parser found PJL format error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9/7.1.16 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-753 PDL Emulation Error

PDL emulation error has occurred

Applicable Error

- 016-753 PDL Emulation Error <Wrong Password>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Control Panel	

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	If necessary, check whether the correct machine password has been instructed to the other machine. Does the error persist?		Complete.

016-755 PDF Print Prohibited

Attempted to process a print-protected PDF file

Applicable Error

- 016-755: PDF Print Prohibited <PDF Print Prohibited>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Control Panel	

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Cancel the print protection using Adobe Reader and try printing again. Does the error persist?	Go To Step 2.	Complete.
2.	Check whether the version of the Controller ROM is the latest one, and upgrade the version if it is not the latest.		Complete.

016-76x E-mail Error

An e-mail error has occurred.

Applicable Errors

- 016-764: Mail Connect Fail 016-764 Scan Job Failure Press OK <Connect Error> Can not connect to mail server for sending mail.
- 016-766: SMTP TX Fail Error 016-766 Scan Job Failure Press OK <SMTP> Can not transfer completely.
- 016-767: Invalid Address Error 016-767 Scan Job Failure Press OK <E-mail Address Error> Recipient address is invalid.

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6025 MFP" on (Page 7-16) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6025 MFP Image Processor Board" on (Page 7-49) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "MCU Board" on (Page 4-160) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-79x USB Memory Removal Error

USB memory is removed while memory reading job is being executed.

Applicable Errors

- 016-791: USB Memory Was Removed 016-791 System Job Failure Press OK <USB Memory Removal Error>
- 016-795: File Format Error 016-795 Printer Job Failure Press OK <File Format Error> An unsupported file format was selected at USB Memory Print.
- 016-797: File Read Error 016-797 Printer Job Failure Press OK <File Read Error> The contents of the USB Memory can not be read correctly.

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9/PL7.1.16 • MCU Board, PL7.2.2	• "Map 2 - Phaser 6022" on (Page 7-11) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "Phaser 6022 Image Processor Board" on (Page 7-41) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "MCU Board" on (Page 4-160) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connections on the IP Board and MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	Go to step 3.	Complete.
3.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.	

016-799 Invalid Job

Invalid print job settings.

Applicable Error

- 016-799: Invalid Job

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9/PL7.1.16 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "MCU Board" on (Page 4-160) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connections on the IP Board and MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board Phaser 6020/6022 and WorkCentre 6025 MFP (Page 4-149), WorkCentre 6027 MFP (Page 4-150). Does the error persist?	Go to step 3.	Complete.
3.	Replace the MCU Board (page 4-160).	Complete.	

016-920, -921 Wireless Error

The connection with Register exceeded the time limit for communication.

Applicable Error

- 016-920: Wireless Error 016-920 System Setup Fail Press OK <AP Detecting Fail While WPS Setup>
- 016-921: Wireless Error 016-921 System Setup Fail Press OK <AP Detecting Fail While WPS Setup>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9B • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connections on the IP Board and MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	Go to step 3.	Complete.
3.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.	

016-930, -931 USB Host Error

An unsupported USB memory device was attached to the USB port.

Applicable Errors

- 016-930: USB Host Error 016-930 System Unsupported Device Remove from USB Port <Detect Installation Of Un-supported Device>
- 016-931: USB Host Error 016-931 System Unsupported Device Remove from USB Port <Detect Installation Of Hub Device>

Initial Actions

Unplug the unsupported device.

016-981 Collate Full

The print job exceeds memory capacity.

Applicable Errors

- 016-981: Collate Full 016-981 Printer Job too Large Press OK <SIA CODEC Manager Detects Out Of Memory During Collate Copy>

Initial Actions

- Break the print job into 2 or more jobs.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-982 Memory Overflow

Memory was determined to be full due to collate, stored or interrupted jobs.

Note: This Status Code is not related to any hardware fault.

Applicable Errors

- 016-982: Memory Overflow <Memory Overflow>

Initial Actions

- Cycle printer power.
- Reduce the number of pages printed.
- Print at lower resolution or higher compression.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

016-985 Scan Mail Size Limit

Scanned mail size exceeds printer limitation.

Applicable Errors

- 016-985: Scan Mail Size Limit 016-985 Scan Job Failure Press OK <Mail Size Error>

Initial Actions

- Cycle printer power.
- Reduce the number of pages printed.
- Print at lower resolution or higher compression.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6025 MFP" on (Page 7-16) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

017-970 Memory Full

The printer memory is full.

Applicable Errors

- 017-970: Memory Full 017-970 Scan Job Failure Press OK <Out Of Memory>

Initial Actions

- Cycle printer power.
- Reduce the number of pages printed.
- Print at lower resolution or higher compression.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

017-980, -981 Report File Error

Report job fails to open/close report file or Fax Report job fails to report file.

Applicable Errors

- 017-980: Report error 017-980 System Job Failure Press OK <Fail To Decode Image Data Stored In Flash - Check Compressed Fax TX Image Data.>
- 017-981: Report error 017-981 System Job Failure Press OK <Fail To Process Image Data When Executing Image Processing - Check Image Scaling Or Image Rotating>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

017-988 PC Scan Time Out

Applicable Errors

- 017-988: PC Scan Time Out 017-988 Scan Job Failure Press OK <PC Scan Time Out>

Initial Actions

- Cycle printer power.
- Reduce the number of pages printed.
- Print at lower resolution or higher compression.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6025 MFP" on (Page 7-16) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6025 MFP Image Processor Board" on (Page 7-49) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-162). 3. LoadNVM from ESS	Complete.

018-338 Wireless Error

The Wireless error is detected when checking the Wireless circuitry during initialization diagnostics.

Applicable Errors

- 018-338: System Restart Printer Contact Support If Message Returns <Configuration of WIFI is failed>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9B • Wireless Harness, PL1.1.31 • Wireless Board Bracket, PL1.1.30	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the connections between the IP Board and the Wireless Board. Are P/J6601 and P/J6501 properly connected?	Go to step 2.	Reconnect the connections, then go to step 2.
2.	Does the error persist?	Go to step 3.	Complete.
3.	Disconnect P/J6601 on the IP Board, and P/J6501 on the Wireless Board. Is each cable of the Wireless Harness continuous?	Go to step 4.	Replace the Wireless Harness.
4.	Replace the WiFi Board. Does the error persist when the power is turned on?	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150).	Complete.

024-340 CPU Detect Internal Error

MCU firmware error detected.

Applicable Error

- 024-340: Code:xxxxxxxx Restart Printer <CPU Detect Internal Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• MCU Board, PL7.2.2	• "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160) 3. LoadNVM from ESS Does the error persist?	Perform the Electrical Noise check (page 2-163). Go To Step 2.	Complete.
2.	Does the error persist?	Contact your designated field support for assistance.	

024-360 Download Error

MCU firmware download error detected.

Applicable Error

- 024-360: System Restart Printer Contact Support If Message Returns <MCU Firmware AP Code Is Failed>

Initial Actions

- Cycle printer power.
- Verify "Software Download is Enabled;
  - Admin Menu -> Secure Settings -> Software Download -> **Enable**. MUST be 'Enabled'; if 'Disabled', select 'Enabled', return to main menu and reboot the printer.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• MCU Board, PL7.2.2	• "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Send MCU FW data from Downloading tool. Does the error persist?	Go to step 2.	Complete.
2.	Reseat all connections on the IP Board and MCU Board. Does the error persist?	Go to step 3.	Complete.
3.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Does the error persist?	Perform the Electrical Noise check (page 2-163). Go to step 4.	Complete.
4.	Contact your designated field support for assistance.		

024-371 MCU - Image Processor Board Communication Error

Communication has failed between the MCU and IP Boards.

Applicable Error

- 024-371: System Restart Printer Contact Support If Message Returns <MCU-ESS Communication Fail>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board PL7.1.9/7.1.16 • MCU Board PL7.2.2 • Image Processor Harness PL7.2.12	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the cables in the connectors on the IP and MCU Boards then cycle system power. Does the error persist?	Go to step 2.	Complete.
2.	Check the Image Processor Harness continuity. Disconnect the IP Board P/J402 and the MCU Board P/J22. Is the harness damaged?	Replace the harness (page 4-157).	Go to step 3.
3.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

024-946 Cassette Detached

The Paper Cassette is not detected.

Applicable Error

- 024-946: Cassette Detached <Cassette Detached>

Initial Actions

- Insert the Paper Cassette.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Paper Cassette	

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Insert or Reseat the Paper Cassette. Does the error persist?	Go to step 2.	Complete.
2.	Pull out the tray, and check the shape of the actuator located at the rear of the tray. Is the actuator dislocated or deformed	Go To Step 4.	Go To Step 3.
3.	Test the sensor in diagnostics. Does the state change when the actuator is moved?	Replace the MCU Board	Replace the sensor.
4.	Replace / reinstall the Actuator. Does the error persist?	Go to step 3	Complete

024-958 Paper Size Mismatch

Paper Size Mismatch

The size of paper in the MFP (or PSI) does not match the specified print size.
AAAAAA: Paper Size

BBBBBB: Paper Type

Applicable Error

- 024-958: Paper Size Mismatch 024-958 Printer Load Paper then Press OK AAAAA (or BBBBB) <Paper Size Match>

    Note: Line-4 is switched periodically by two messages (AAAAA/BBBBB). Frequency is 3 sec.

Initial Actions

- Check that the correct paper is in the paper tray. Change the paper if necessary.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Registration Sensor, PL2.3.5 • Registration roller bushing(s) and spring(s)	• Map 3 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-58) • Feed - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the Regi Sensor in diagnostics. Does the display change when the actuator is moved?	Go to step 2.	Replace the Regi Sensor.
1.	Check the registration rollers. Are all the rollers in contact with even pressure on each side? Are the registration pressure roller bushings and springs correctly installed?	Go to step 3.	Correct the registration roller installation issue.
1.	Is the transfer roller mounted correctly and not binding?	Replace the MCU Board 1. SaveNVM to ESS 2. Replace the MCU Board (page 4-156). 3. LoadNVM from ESS	Correct the transfer roller mounting issue.

024-963 No Suitable Paper

The MFP (or PSI) has run out of paper or the size (or type) of paper does not match the specified print size (or type).

XXXXXX: Paper Size YYYYYY: Paper Type

Applicable Error

- 024-963: No Paper 024-963 Printer Load Paper then Press OK <No Paper>

Initial Actions

- Check that the correct paper is in the paper tray. Change, or load, the paper if necessary.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Registration Sensor, PL2.3.5 • Harness Assembly RKN SNS, PL2.2.25 • MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Feed - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the Regi Sensor in CE Diag. Does the display change when the actuator is moved?	Go to step 2.	Replace the Regi Sensor.
2.	Check the Registration Rollers. Are all the rollers in contact with even pressure on each side. Are the registration pressure roller bushings ad springs correctly installed?	Go to step 3.	Correct any Registration Roller installation issues.
3.	Is the Transfer Roller mounted correctly and not binding?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). LoadNVM from ESS.	Correct any Transfer Roller mounting issues.

026-722, -723 USB Memory Write Protect Error / File Path Limit Error

The USB Memory is write protected or the file path name is too long.

Applicable Errors

- 026-722: Write Protect 026-722 Scan Job Failure Press [OK] <Write Protect>
- 026-723: File Path Limit 026-723 Scan Job Failure Press [OK] <File Path Limit>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - Phaser 6022" on (Page 7-11) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "Phaser 6022 Image Processor Board" on (Page 7-41) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	026-722 - Initialize (format) the USB memory device on a computer with one of the following file formats and attempt to perform the operation again. • Supported file formats: FAT12, FAT16 (FAT), FAT32 Note: - NTFS and software encrypted UDSB devices are not supported. Does the error persist?	Contact your designated support center representative.	Compete
2.	027-723 - Verify the USB device is fully inserted into the USB port and the USB device is not removed while the printer is accessing the USB device. Does the error persist?	Go to step 3.	Complete

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
3.	Verify the USB device and the file on the USB device are accessible by the computer. Can the device and file(s) be accessed by the computer?	Turn the printer off, unplug the printer from the wall for at least 30s, plug back in and turn on. Attempt the print/scan job again.	Format the device in one of the following supported formats - FAT12, FAT16 (FAT), FAT32. Retry accessing the USB device on the computer then attempt the scan or print job again.
4.	Does the error persist?	Go to step 5.	Complete.
5.	Reload firmware from www.xerox.com. Does the error persist?	Go to step 2.	Complete.
6.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	Go to step 4.	Complete.
7.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.	

026-750, -751, -752 Scan Communication Fail

Communication failed during a scan job.

Applicable Errors

- 026-750: Scan Communication Fail 026-750 Scan Job Failure Press OK <I/O Manager Detects Unknown Command Or Protocol From Network Link>
- 026-751: Scan Communication Fail 026-751 Scan Job Failure Press OK <Network Link Is Disconnected While Sending Data Or Status>
- 026-752: Scan Communication Fail 026-752 Scan Job Failure Press OK <I/O Manager Cannot Send USB Data>

Initial Actions

- Verify the USB Cable connected to the printer and the PC is securely connected.
- Verify USB cable connectivity with another USB cable or connect the printer to a different, known good computer.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6025 MFP" on (Page 7-16) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6025 MFP Image Processor Board" on (Page 7-49) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Verify there are no TCP/IP communications issues; • No duplicate IP addresses. • Printer is not set to DHCP and a static assigned IP address is in the printer network settings. Save new settings and restart the printer and computer if TCP/IP setting have been changed. Does the error persist?	Go to step 2.	Complete
2.	Verify firmware and upgrade revision if needed. Does the error persist?	Go to step 3.	Complete.

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
3.	Verify all cables are securely connected at the IP Board, external USB board, and attempt the job again. Does the error persist?	Go to step 4.	Complete.
4.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	Go to step 4.	Complete.
5.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.	

027-446 IPv6 Duplicate

Duplicate IPv6 address detected upon startup.

Applicable Error

- 027-446: IPv6 Duplicate <IPv6 Address Duplicate>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the SMB settings in the Address Book or CWIS. Does the error persist?	Go to step 2.	Complete.
2.	"MCU Board" on (Page 4-160). Does the error persist when the power is turned off and on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

027-452 IPv4 Duplicate

Duplicate IPv4 address detected upon startup.

Applicable Error

- 027-452: IPv4 Duplicate <IPv4 Address Duplicate>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Step	Actions and Questions	Yes	No
1.	At the printer's Control Panel, press the **Menu** key. Using the **Up Arrow**, **Down Arrow**, and **OK** keys, navigate to **Admin Menu > Network Settings >TCP/IP > IPv4 > Get Address**. Is **Get Address** set to **Panel**?	The printer is trying to use an address that is being used by another device on the network. Change the printer's address.	Another device is trying to use the printer's address. Find the other device and resolve the problem by changing the other device's address.

031-52x, -53x, 55x SMB Error

A SMB error is detected.

Applicable Errors

- 031-521: SMB Error 031-521 Scan Login Error Press OK <SMB Login Error>
- 031-526: SMB Error 031-536 Scan Name Resolve Error Press OK <DNS Name Resolve Error>
- 031-529: SMB Error 031-529 Scan Login Failed Press OK <Share Folder ID ERROR or Illegal PASSWORD>
- 031-530: SMB Error 031-530 Scan SMB Path Error Press OK <SMB Path Error>
- 031-533: SMB Error 031-533 Scan File Make Error Press OK <SMB File Make Error>
- 031-534: SMB Error 031-534 Scan Folder Make Error Press OK <SMB Folder Make Error>
- 031-535: SMB Error 031-535 Scan Delete File Error Press OK <SMB Delete File Error>
- 031-536: SMB Error 031-536 Scan Delete Folder Error Press OK <SMB Delete Folder Error>
- 031-537: SMB Error 031-537 Scan Disk Full Error Press OK <SMB Server Storage Full>
- 031-555: SMB Error 031-355 Scan Connect Error Press <Detects SMB Link Is Broken>
- 031-556: SMB Error 031-556 Scan Write Error Press OK <SMB Write Error>
- 031-557: SMB Error 031-557 Scan File Duplication Press OK <SMB File Duplication Error>
- 031-558: SMB Error 031-558 Scan Connect Error Press OK <SMB Connect Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
IP Board, PL7.1.9 MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6025 MFP" on (Page 7-16) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6025 MFP Image Processor Board" on (Page 7-49) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the connectors on the IP and MCU Boards then cycle system power. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150)). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

031-57x, -58x, -59x FTP Errors

FTP error is detected.

Applicable Errors

- 031-571: FTP Error 031-571 Scan Connect Error Press OK <Detects FTP Server Link Is Broken>
- 031-574: FTP Error 031-574 Scan Name Resolve Error Press OK <Domain Name Resolving Failure>
- 031-575: FTP Error 031-575 Scan Server Address Error Press OK <Scan Server Address Error>
- 031-576: FTP Error 031-576 Scan Server Not Found Press OK <Can Not Open FTP Server For Accessing>
- 031-578: FTP Error 031-578 Scan Login Failed Press OK <FTP ID ERROR or FTP PASSWORD Illegal>
- 031-579: FTP Error 031-579 Scan FTP Path Error Press OK <FTP Path Error>
- 031-582: FTP Error 031-582 Scan File Create Error Press OK <Can Not Create File Name>
- 031-584: FTP Error 031-584 Scan Connect Error Press OK <Can Not Create Directory>
- 031-585: FTP Error 031-585 Scan DEL Command Error Press OK <Can Not Delete File>
- 031-587: FTP Error 031-587 Scan RMD Command Error Press OK <Can Not Delete Directory>
- 031-588: FTP Error 031-588 Scan Write Error Press OK <Data Can Not Be Written Onto FTP>
- 031-589: FTP Error 031-589 Scan Disk Full Error Press OK <FTP Storage Full>
- 031-594: FTP Error 031-594 Scan TYPE Command Error Press OK <FTP Command Type Incorrect>
- 031-598: FTP Error 031-598 Scan APPE Command Error Press OK <FTP APPEND Command Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6025 MFP" on (Page 7-16) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6025 MFP Image Processor Board" on (Page 7-49) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the connectors on the IP and MCU Boards then cycle system power. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

033-503, -513 FAX Memory Error

Applicable Errors

- 033-503: Memory Full 033-503 Fax Job Failure Press OK <Memory Full At Reception>
- 033-513: Memory Full 033-513 Fax Job Failure Press OK <FLASH Is Full For Fax Data Store>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Package Assy Fax Lt, Pl7.1.15 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the connectors on the IP and MCU Boards then cycle system power. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

033-517, -518, -519 Fax Administration Errors

Applicable Errors

- 033-517: Password Error 033-517 Fax Job Failure Press OK <The Password Of The PC Fax Job Is Different From Password Of The Fax Service Lock When The Fax Service Lock Setting Is "Password Locked">

- 033-518: Region is not Set 033-518 Fax Job Failure Press OK <Fax Country is not set correctly>

- 033-519: Function is Disabled 033-519 Fax Job Failure Press OK <Machine Receives A PC Fax Job When The Fax Service Lock Setting Is "Locked".>

Initial Actions

- Cycle printer power.

- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the connectors on the IP and MCU Boards then cycle system power. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

033-787, -788 Memory Full Fax Job Failure

The Calling Table is full.

Applicable Error

- 033-787: Memory Full 033-787 Fax Job Failure Press OK <Calling Table Full>
- 033-788: Memory Full 033-788 Fax Job Failure Press OK <Register Page/Band To Flash Memory Failed For Receiving Data From PC Host>

    Note: The scanned images will be transmitted out and the report will show only successful transmission with the stored pages. The message will be cleared after Job Fault time out.

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the connectors on the IP and MCU Boards then cycle system power. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

034-7xx FAX Communication Errors

Applicable Errors

- 034-700: Busy 034-700 Fax Job Failure Press OK <Fax Busy>
- 034-701: No Dial Tone 034-701 Fax Job Failure Press OK <No Dial Tone>
- 034-702: No Answer 034-702 Fax Check Line Connection Press OK <No loop current for FAX modem>
- 034-703: Communication Fail 034-703 Fax Job Failure Press OK <Interrupted TX at receive end>
- 034-704: Communication Fail 034-704 Fax Job Failure Press OK <No answer at receive end>
- 034-705: Communication Fail 034-705 Fax Job Failure Press OK <TX redial failure>
- 034-706: Communication Fail 034-706 Fax Job Failure Press OK <TX ID timeout>
- 034-707: Communication Fail 034-707 Fax Job Failure Press OK <FTP RMD command error is detected>
- 034-708: Communication Fail 034-708 Fax Job Failure Press OK <Received data not written to FTP>
- 034-709: Communication Fail Fax Job Failure Press OK (Remote polling disabled)
- 034-710: Communication Fail Fax Job Failure Press OK (Remote polling or RX unavailable)
- 034-711: Communication Fail Fax Job Failure Press OK (FTP APPEND command error is detected)
- 034-712 through -727: Communication Fail Fax Job Failure Press OK
- 034-750 to 034-768: Communication Error (RX communication error is detected)

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9	• "Map 2 - WorkCentre 6027 MFP" on (Page 7-21)
• MCU Board, PL7.2.2	• "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the connectors on the IP and MCU Boards then cycle system power. Does the error persist?	Go to step 2.	Complete.
2.	Replace the Fax Board (page 4-156). Does the error persist	Go to step 3	Complete.

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
3.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

041-340 NVRAM Error

The operation error of NVM (read/write check error etc.) is detected.

Applicable Error

- 041-340: Code:xxxxxxxx Restart Printer <NVRAM Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• MCU Board, PL7.2.2	• "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Perform the Electrical Noise test (page 2-163). Does the error persist?	Go to step 2.	Complete.
2.	Download and install firmware form www.xerox.com.	Go to step 3.	Complete.
3.	1. Save NVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Does the error persist?	Contact your designated field support for assistance.	Complete.

042-325 Motor Error

MCU detects an error from the Main Drive Motor.

Applicable Error

- 042-325: Motor Error Restart Printer

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Main Drive Assembly, PL6.1.2 • Main Motor Harness, PL6.1.7 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • Drive - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the Main Drive Motor in CE Diags. Does the Motor run?	1. SaveNVM to ESS. 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS.	Go to step 2.
2.	Check the connections between the MCU Board P/J16 and the Main Drive Assembly P/J160. Are the connections secure?	Go to step 3.	Reconnect the connectors, then go to step 4.
3.	Does the error persist?	Go to step 4.	Complete.
4.	Is the Main Drive Assembly installed correctly?	Go to step 5.	Reseat the Main Drive Assembly, then go to step 6.
5.	Does the error persist when the power is turned off and on?	Go to step 6.	Complete.
6.	Check the Main Drive harness continuity. Disconnect P/J16 from the MCU Board and P/J160 from the Main Drive Assembly to check continuity. Is the harness damaged?	Repair the harness.	Go to step 7.
7.	Check the power to the Main Drive Assembly. Disconnect connector P/J16 on the MCU Board. Are the voltages across ground at P/J16-2 and P/J16-4 approximately +24 VDC when the Interlock Switch is closed?	Replace the Main Drive Assembly (page 4-134).	1. SaveNVM to ESS. 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS.

042-358 Fan Motor Failure

MCU detects an error from the Fan Motor.

Applicable Error

- 042-358: Printer Restart Printer Contact Support If Message Returns <Fan Motor Failure>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• LVPS, PL 7.2.1 • Fan, PL 7.1.2 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • LVPS - 6020 (Page 7-27), 6022 (Page 7-35), 6025 (Page 7-43), 6027 (Page 7-52) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Test the Fan in CE Diag (see "Fan" on page 2-148). For the 6020: Test the Fan with the "Fan" on page 2-148. Does the Fan function normally?	Go to step 2.	Go to step 3.
2.	Does the error persist?	Replace the Fan.	Complete.
3.	Check the connections between the FAN and LVPS. Is P/J205 on the LVPS securely connected?	Go to step 4.	Complete.
4.	Disconnect P/J205 on the LVPS. Is the voltage across ground at P/J205-1 approximately +24 VDC when the Interlock Switch is pushed?	1. SaveNVM to ESS. 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS.	Replace the LVPS.

042-372 DEVE Mode Change Failure

DEVE Mode Change failure is detected.

Applicable Error

- 042-372: DEVE Mode Error Restart Printer <DEVE Mode Change Failure>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Feed Solenoid, PL6.1.10 • Switching Sensor • Harness Assembly RKN SNS PL2.2.25/26 • Developer Drive Assembly, PL6.1.6 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • Map 3 - 6020 (Page 7-12), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Feed - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Does the error persist when the power is turned on?	Go to step 2.	If there is more than only the current error in the fault history, go to step 2.
2.	Test the K Mode Solenoid: Enter diagnostic mode and select **Engine Diag > Motor Test > K Mode Solenoid** You can also use the CE Diag Tool to perform this test ("K Mode Solenoid" on page 2-151). Does the Feed Solenoid function normally?	Go to step 4.	Go to step 3.
3.	Check the P/J10 connector on the MCU Board. Is P/J10 connected correctly?	Replace the K Mode Solenoid (page 4-117).	Reseat the connector.
4.	Does Gear C rotate and engage the drive train when the K mode solenoid releases it?	Go to step 5.	Replace the developer drive assembly PL6.1.6.
5.	Test the color mode sensor in diagnostics. Does the sensor function correctly?	Go to step 7.	Replace the sensor PL2.3.5 Then go to step 6.
6.	Does the sensor function correctly in diagnostics after replacement?	Complete.	Go to step 7
7.	Check the connections between the MCU Board P/J12 and the Feed Sensor P/J122. Are the connections secure?	Replace the MCU Board (page 4-128).	Reseat the connector.

061-370 LPH Failure

Applicable Error

- 061-370: Printer Code:xxxxxxxx Restart Printer <LPH Failure>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • LED Driver Board, PL7.1.5 • HEAD ASSY-M-K, PL3.3.4	• "Map 2 - WorkCentre 6027 MFP" on (Page 7-21); "Map 3 - WorkCentre 6027 MFP" on (Page 7-22) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • Xerographics - 6020 (Page 7-29), 6022 (Page 7-37), 6025 (Page 7-45), 6027 (Page 7-54) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the connectors at the LED Driver Board P/J2, 3, 4, and 5 and Xerographics Assembly P/J6, 7, 8, and 9. Are the connectors securely connected?	Go to step 2.	Reconnect the connectors.
2.	Does the error persist when the power is turned on?	Go to step 3.	Complete.
3.	Print the test pattern ASIC. Put the printer in diagnostic mode and select **Test Print > Test Pattern ASIC**. You can also print the test pattern from the CE Diag Tool. See "Test Print" on (Page 2-134). Is the image printed correctly?	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150).	Replace the LED Driver Board (page 4-144).

062-321 Carriage Motor Error

Applicable Error

- 062-321: System Restart Printer <Carriage Motor Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Reference Table

Step	Actions and Questions	Yes	No
1.	Perform Scanner Test 1 in diagnostics. Does the scanner motor run?	Go to step 2.	Replace the Scanner Assembly.
2.	Reseat the connectors between the scanner and IP Board. Does the error reoccur?	Go to step 3	Complete.
3.	Temporarily connect a replacement scanner. Does the error reoccur?	Replace the IP Board.	Install the replacement scanner.

062-322 Scanner Drive Calibration Failure

Scanner drive calibration failed.

Applicable Error

- 062-322: <No message, only appears in error log>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2 • Scanner, PL8.1.1	• "Map 2 - WorkCentre 6025 MFP" on (Page 7-16) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6025 MFP Image Processor Board" on (Page 7-49) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "WorkCentre 6025 MFP Scanner" on (Page 7-50) • "WorkCentre 6027 MFP IIT" on (Page 7-59) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the connectors on the IP and MCU Boards then cycle system power. Does the error persist?	Go to step 2.	Complete.
2.	Does the error persist?	Replace the Scanner (page 4-70) for WorkCenter 6025 MFP or (page 4-70) for WorkCenter 6027 MFP.	Complete.
3.	Replace the IP Board Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Go to step 3.	Complete.

062-790 Copy Limit

Unable to continue due to copy limitation.

Applicable Error

- 062-790: Confirm 062-790 Deleted by Limit Press OK <Copy Limit>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• "Map 2 - WorkCentre 6025 MFP" on (Page 7-16) • "Map 2 - WorkCentre 6027 MFP" on (Page 7-21) • "WorkCentre 6025 MFP Image Processor Board" on (Page 7-49) • "WorkCentre 6027 MFP Image Processor Board" on (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the connectors on the IP and MCU Boards then cycle system power. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

075-100 Jam Errors

The Registration Sensor is not turned ON within the specified time.

Applicable Error

- 075-100: Paper Jam 075-100 Printer Jam at Feed <Misfeed Jam)>

Initial Actions

- Check the media path for obstructions or debris.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Feed Roller, PL22.4 • Feed Solenoid, PL6.1.10 • Registration Sensor, PL2.3.5 • Main Drive Assembly, PL6.1.2 • Registration Clutch, PL2.3.7 • Harness Assembly RKN SNS, PL2.2.25 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Feed - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • Drive - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Are the Feed Roller and Separator Pad installed correctly?	Go to step 2.	Install parts that are not correctly installed.
2.	Does the Feed Roller rotate smoothly and the tray lift so that the paper contacts the feed roller?	Go to step 3.	Go to step 7.
3.	Does the paper feed to the nip point of the registration roller?	Go to step 4.	Replace the feed and or separator rollers.
4.	Enter diagnostic mode and run the Regi Sensor test (see page 2-136). You can also use CE Diag Tool to perform this test (see page 2-110). Lift the Main Paper Tray Chute (PL3.3.3), this pushes on the actuator, does the number on the display change each time the Main Paper Tray Chute is lifted?	Go to step 5.	Go to step 6.

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
5.	Disconnect the MCU Board P/J21 and the Registration Sensor P/J120. Check the Harness Assembly RKN SNS for continuity. Is the harness damaged?	Go to step 6.	Repair or replace the harness.
6.	Disconnect the MCU Board P/J21. Is the voltage across ground and P/J12-1 +3.3VDC?	Replace the Registration Sensor (page 4-89).	1. SaveNVM to ESS. 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS.
7.	Enter diagnostic mode and run Main Motor on Full (see page 2-123). You can also use the CE Diag Tool to run this test see "CE Diags Tool" on page 2-110. Does the Main Drive Assembly function correctly.	Go to step 8	Go to step 10
8.	Enter diagnostic mode and run the Feed SOLENOID test. You can also use the CE Diag Tool to run this test see "CE Diags Tool" on page 2-110. Does the Feed Solenoid function correctly?	Go to step 9.	Replace the Feed Solenoid (page 4-128).
9.	Enter diagnostic mode and select Engine Diag > Motor Test > Regi Clutch. You can also use the CE Diag Tool to run this test see "CE Diags Tool" on page 2-110. Does the Registration Clutch function correctly?	1. SaveNVM to ESS. 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS.	Replace the Registration Clutch (page 4-90).
10.	Check the connector of P/J19 on the MCU Board. Is the connection secure?	Go to step 11.	Reconnect the connector, then go to step 15.
11.	Does the error persist?	Go to step 12.	Complete.
12.	Disconnect P/J16 from the MCU Board and P/J160 from the Main Drive Assembly. Check the continuity of the cable. Is the cable damaged?	Repair the cable.	Go to step 13.
13.	Disconnect the MCU Board P/J16 and check that the voltages across ground at P/J16-2 and P/J16-4 are +24 VDC. Are the voltages correct?	Replace the Main Drive Assembly (page 4-134).	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS

075-921 Insert Output To Tray

The sheet on which to print an odd-numbered page has not been loaded in the Paper Cassette /Bypass Tray when manual duplex printing is performed.

Applicable Error

- 075-921: Printer Insert Output to Tray Press OK to Continue Printing <Insert Output To Tray>

Initial Actions

- Remove the paper from the Output Tray, put it back in to the paper tray, and press **OK**.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the connectors on the IP and MCU Boards then cycle system power. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150)). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

077-100 Paper Remain at Regi

Paper remain was detected at the Registration section (or Paper Tray/Bypass Tray section) of the printer.

Applicable Error

- 077-100: Paper Jam 077-100 Printer Jam at Exit <Paper Remain at Regi (MFP/PSI)>

Initial Actions

- Check the media path for obstructions or debris.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Registration Sensor, PL2.3.5 • Harness Assembly RKN SNS, PL2.2.25/26 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • Map 3 - 6020 (Page 7-7), 6022 (Page 7-11), 6025 (Page 7-17), 6027 (Page 7-22) • Feed - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • Drive - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Is the trailing edge of the paper past the registration sensor actuator?	Go to step 3.	Go to step 5.
2.	Enter diagnostic mode and run the Regi Sensor test (see page 2-136). You can also use CE Diag Tool to perform this test (see page 2-110). Lift the Main Paper Tray Chute (PL3.3.3), this pushes on the actuator does the number on the display change each time the Main Paper Tray Chute is lifted?	Go to step 3.	Replace the Registration Sensor (Phaser 6020 and WorkCentre 6025 MFP (page 4-97), Phaser 6022 and WorkCentre 6027 MFP (page 4-100).
3.	Disconnect the MCU Board P/J21 and the Registration Sensor P/J120. Check the Harness Assembly RKN SNS for continuity. Is the harness damaged?	Repair the harness.	Go to step 4.
4.	Disconnect the MCU Board P/J12. Is the voltage across ground and P/J12-1 +3.3VDC?	Reconnect the connectors, then go to step 2.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS
5.	Is the ROLL REGI PL 2.3.1 installed correctly and in full contact with ROLL ASSY PINCH REGI PL 2.3.2.	Go to step 6.	Repair the mechanical issue with ROLL REGI.

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
6.	Enter diagnostic mode and select Engine Diag > Motor Test > Regi Clutch. You can also use the CE Diag Tool to run this test (see "CE Diags Tool" on page 2-110). Does the Registration Clutch function correctly?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Replace the Registration Clutch (page 4-90).

077-104 Regi Jam

The paper does not pass through the Registration Sensor within the specified time.

Applicable Error

- 077-104: Paper Jam 077-104 Printer Jam at Exit <Regi Jam>

Initial Actions

- Check the media path for obstructions or debris.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Registration Sensor, PL2.3.5 • Registration Clutch, PL2.3.7 • Harness Assembly RKN SNS, PL2.2.25/26 • Main Drive Assembly, PL6.1.2 • Harness Assembly Dispenser MOT, PL6.1.7 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Feed - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • Drive - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the installation and operation of the Registration Roller and the Registration Pinch Roller Assembly. Are the Registration Roller and the Registration Pinch Roller Assembly installed properly?	Go to step 2.	Replace the relevant part, then go to step 2.
2.	Check connectors P/J12 and P/J120 between the MCU Board and the Registration Sensor. Are the connectors secure?	Go to step 3.	Reseat the harness in the connectors, then go to step 3.
3.	Does the error still occur when printing?	Go to step 4.	Complete.
4.	Enter diagnostic mode and run the **Regi Sensor** test (see "Registration Sensor" on (Page 2-142)). You can also use the CE Diag Tool to run this test see (page 2-112). Lift the Paper Tray Chute (PL3.3.3), does the number on the display increase by 1 each time the Paper Tray Chute is lifted?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Go to step 5.

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
5.	Disconnect the MCU Board P/J21 and the Registration Sensor P/J120. Check the Harness Assembly RKN SNS for continuity. Is the harness damaged?	Go to step 6.	Repair the harness.
6.	Check that the voltage across ground on the MCU Board P/J12-1 is +3.3 VDC. Is the voltage correct?	Replace the Registration Sensor (Phaser 6020 and WorkCentre 6025 MFP (page 4-97), Phaser 6022 and WorkCentre 6027 MFP (page 4-105).	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS
7.	Check connectors P/J16 and P/J160 between the MCU Board and the Main Drive Assembly. Are the connectors secure?	Go to step 9.	Reconnect the connectors, then go to step 8.
8.	Does the error persist when printing?	Go to step 9.	Complete.
9.	Enter diagnostic mode and run the **Main Motor** test see (page 2-119). You can also use the CE Diag Tool to run this test. see "Main Motor" on (Page 2-147). Does the Main Drive Assembly function normally?	Go to step 14.	Go to step 10.
10.	Check the Main Drive Assembly for proper installation. Is the Main Drive Assembly installed correctly?	Go to step 12.	Reseat the Main Drive Assembly, then go to step 11.
11.	Does the error still occur when printing?	Go to step 12.	Complete.
12.	Disconnect P/J16 from the MCU Board and P/J160 from the Main Drive Assembly. Check the continuity of the cable. Is the cable damaged?	Repair the cable.	Go to step 13.
13.	Check the MCU Board P/J25 for proper connection. Is P/J25 securely connected?	Go to step 15.	Reconnect the connector, then go to step 14.
14.	Does the error persist?	Go to step 15.	Complete.
15.	Disconnect P/J16 on the MCU Board. Are the voltages across ground at P/J16-2 and P/J16-4 approximately +24 VDC when the Interlock Switch is pushed?	Replace the Main Drive Assembly (page 4-134), then go to step 16.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Go to step 16.
16.	Does the error persist when printing?	Go to step 17.	Complete.
17.	Enter diagnostic mode and run the **Regi Clutch** test. You can also use the CE Diag Tool to run this test see "Registration Clutch" on (Page 2-149). Does the Registration Clutch function correctly?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Replace the Registration Clutch (page 4-98).

077-106 Jam at Exit

The paper does not reach the Registration Sensor within the specified time.

Applicable Error

- 077-106: Paper Jam 077-106 Printer Jam at Exit <Regi Jam>

Initial Actions

- Check the media path for obstructions or debris.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Registration Sensor, PL2.3.5 • Registration Clutch, PL2.3.7 • Harness Assembly RKN SNS, PL2.2.25/26 • Main Drive Assembly, PL6.1.2 • Harness Assembly Main MOT, PL6.1.7 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Feed - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • Drive - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the installation and operation of the Registration Roller and the Registration Pinch Roller Assembly. Are the Registration Roller and the Registration Pinch Roller Assembly installed properly?	Go to step 2.	Reinstall/replace the relevant part, then go to step 2.
2.	Check connectors P/J12 and P/J120 between the MCU Board and the Registration Sensor. Are the connectors secure?	Go to step 4.	Reconnect the connectors, then go to step 3.
3.	Does the error still occur when printing?	Go to step 4.	Complete.
4.	Enter diagnostic mode and run the **Regi Sensor** test (see (page 2-142). You can also use the CE Diag Tool to run this test (see (page 2-112). Lift the Paper Tray Chute (PL3.3.3), does the number on the display increase by 1 each time the Paper Tray Chute is lifted?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Go to step 5.
5.	Disconnect the MCU Board P/J12 and the Registration Sensor P/J120. Check the Harness Assembly RKN SNS for continuity. Is the harness damaged?	Go to step 6.	Repair the harness.

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
6.	Check that the voltage across ground on the MCU Board P/J12-1 is +3.3 VDC. Is the voltage correct?	Replace the Registration Sensor (Phaser 6020 and WorkCentre 6025 MFP (page 4-97), Phaser 6022 and WorkCentre 6027 MFP (page 4-105). Go to step 7.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160) 3. LoadNVM from ESS Go to step 7.
7.	Does the error persist when printing?	Go to step 8.	Complete.
8.	Check connectors P/J16 and P/J160 between the MCU Board and the Main Drive Assembly. Are the connectors secure?	Go to step 9.	Reconnect the connectors, then go to step 9.
9.	Does the error persist when printing?	Go to step 10.	Complete.
10.	Enter diagnostic mode and run the **Main Motor** test (see (page 2-147)). You can also use the CE Diag Tool to run this test (see "Main Motor" on (Page 2-147). Does the Main Drive Assembly function normally?	Go to step 15.	Go to step 11.
11.	Check the Main Drive Assembly for proper installation. Is the Main Drive Assembly installed correctly?	Go to step 12.	Reseat the Main Drive Assembly, then go to step 12.
12.	Does the error still occur when printing?	Go to step 13.	Complete.
13.	Disconnect P/J16 from the MCU Board and P/J160 from the Main Drive Assembly. Check the continuity of the cable. Is the cable damaged?	Repair the cable.	Go to step 14.
14.	Check the MCU Board P/J25 for proper connection. Is P/J25 securely connected?	Go to step 15.	Reconnect the connector, then go to step 15.
15.	Does the error persist when printing?	Go to step 16.	Complete.
16.	Check the power to the Main Drive Assembly. Disconnect P/J16 on the MCU Board. Are the voltages across ground at P/J16-2 and P/J16-4 approximately +24 VDC when the Interlock Switch is engaged?	Replace the Main Drive Assembly (page 4-134), and then go to step 17.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Go to step 17.
17.	Does the error persist when printing?	Go to step 18.	Complete.
18.	Enter diagnostic mode and run the **Regi Clutch** test (page 2-149). You can also use the CE Diag Tool to run this test (see "Registration Clutch" on (Page 2-149). Does the Registration Clutch function correctly?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Replace the Registration Clutch (page 4-98).

077-108, -109 Exit Jams

The paper passed through the Exit Sensor earlier than the specified time or the paper does not pass through the Exit Sensor within the specified time.

⚠ **WARNING:** Do not touch the fuser while it is hot.

Applicable Errors

- 077-108: Paper Jam 077-108 Printer Jam at Exit, <Exit Jam> Early pass
- 077-109: Paper Jam 077-109 Printer Jam at Exit, <Exit Jam> No pass

Initial Actions

- Check the media path for obstructions or debris.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
Fuser, PL5.1.1 MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-11), 6025 (Page 7-17), 6027 (Page 7-21) • Fuser - 6020 (Page 7-32), 6022 (Page 7-40), 6025 (Page 7-48), 6027 (Page 7-57) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Remove the fuser exit guide see (page 4-131). Are any torn off pieces of paper present?	Remove the paper.	Go to step 2.
2.	Check P/J18 on the MCU Board. Is P/J18 connected securely?	Go to step 3.	Reconnect P/J18, then go to step 3.
3.	Does the error persist?	Replace the Fuser (page 4-106). Go to step 4.	Complete.
4.	Does the error persist?	Replace the MCU Board.	Complete.

077-304 Rear Cover Open

The rear cover is open.

Applicable Error

- 077-304: Close Rear Cover 077-304 Printer Rear Cover is Open <Rear Cover Open>

Initial Actions

- Open and close the Rear Door.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Rear Door, PL1.1.6 • Rear I/L Switch Assembly, PL1.1.12 • LVPS, PL7.2.1 • MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • LVPS - 6020 (Page 7-27), 6022 (Page 7-35), 6025 (Page 7-43), 6027 (Page 7-52) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Visually inspect the Rear Door for damage. Is the Rear Door damaged?	Replace the Rear Door (page 4-8) for Phaser 6020, or (page 4-22) for Phaser 6022, or (page 4-39) for WorkCenter 6025 MFP, or (page 4-51) for WorkCenter 6027 MFP.	Go step 2.
2.	Enter diagnostic mode and run the **Cover Open Sensor** test (see (page 2-143). Does the number on the display increase by 1 each time the door is opened?.	Go to step 4.	Go to step 3.
3.	Replace the Rear I/L Switch Assembly (page 4-12) for Phaser 6020, or (page 4-25) for 6022, or (page 4-41) for WorkCenter 6025 MFP, or (page 4-54) for WorkCenter 6027 MFP. Does the error persist?	Go to step 4.	Complete.
4.	Replace the LVPS (page 4-158). Does the error still occur when printing?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

077-900 Exit Jam

Paper is remaining at the Exit section of the Printer.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Applicable Error

- 077-900: Paper Jam Remain at Exit 077-900 Printer Open Rear Cover Remove Paper, <Paper Remain At Exit>

Initial Actions

- Check the media path for obstructions or debris.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Fuser, PL5.1.1 • MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Fuser - 6020 (Page 7-32), 6022 (Page 7-40), 6025 (Page 7-48), 6027 (Page 7-57) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Remove the fuser exit guide see (page 4-131). Are any torn off pieces of paper present?	Remove the paper.	Go to step 2.
2.	Check P/J18 on the MCU Board. Is P/J18 connected securely?	Go to step 3.	Reconnect P/J18, then go to step 3.
3.	Does the error persist?	Replace the Fuser (page 4-106). Go to step 4.	Complete.
4.	Does the error persist?	Replace the MCU Board.	Complete.

077-901 Registration Jam

Paper is detected at the registration section of the Printer.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Applicable Error

- 077-901: Paper Jam Remain at Regi 077-901 Printer Open Rear Cover Remove Paper, <Paper Remain At Regi>

Initial Actions

- Check the media path for obstructions or debris.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Registration Sensor, PL2.3.5 • Harness Assembly RKN SNS, PL2.2.25 • MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Feed - 6020 (Page 7-28), 6022 (Page 7-36), 6025 (Page 7-44), 6027 (Page 7-53) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the installation and operation of the Registration Roller and the Registration Pinch Roller Assembly. Are the Registration Roller and the Registration Pinch Roller Assembly installed properly?	Go to step 2.	Replace the relevant part, then go to step 2.
2.	Check connectors P/J12 and P/J120 between the MCU Board and the Registration Sensor. Are the connectors secure?	Go to step 3.	Reseat the harness in the connectors, then go to step 3.
3.	Does the error still occur when printing?	Go to step 4.	Complete.
4.	Enter diagnostic mode and run the **Regi Sensor** test (see "Registration Sensor" on page 2-142). You can also use the CE Diag Tool to run this test (see (page 2-112). Lift the Paper Tray Chute (PL3.3.3), does the number on the display increase by 1 each time the Paper Tray Chute is lifted?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Go to step 5.

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
5.	Disconnect the MCU Board P/J21 and the Registration Sensor P/J120. Check the Harness Assembly RKN SNS for continuity. Is the harness damaged?	Go to step 6.	Repair the harness.
6.	Check that the voltage across ground on the MCU Board P/J12-1 is +3.3 VDC. Is the voltage correct?	Replace the Registration Sensor (Phaser 6020 and WorkCentre 6025 MFP (page 4-97), Phaser 6022 and WorkCentre 6027 MFP (page 4-100).	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS
7.	Check connectors P/J16 and P/J160 between the MCU Board and the Main Drive Assembly. Are the connectors secure?	Go to step 9.	Reconnect the connectors, then go to step 8.
8.	Does the error persist when printing?	Go to step 9.	Complete.
9.	Enter diagnostic mode and run the **Main Motor** test (see (page 2-119). You can also use the CE Diag Tool to run this test. (see "Motor Test" on page 2-131). Does the Main Drive Assembly function normally?	Go to step 14.	Go to step 10.
10.	Check the Main Drive Assembly for proper installation. Is the Main Drive Assembly installed correctly?	Go to step 12.	Reseat the Main Drive Assembly, then go to step 11.
11.	Does the error still occur when printing?	Go to step 12.	Complete.
12.	Disconnect P/J16 from the MCU Board and P/J160 from the Main Drive Assembly. Check the continuity of the cable. Is the cable damaged?	Repair the cable.	Go to step 13.
13.	Check the MCU Board P/J25 for proper connection. Is P/J25 securely connected?	Go to step 15.	Reconnect the connector, then go to step 14.
14.	Does the error persist?	Go to step 15.	Complete.
15.	Disconnect P/J16 on the MCU Board. Are the voltages across ground at P/J16-2 and P/J16-4 approximately +24 VDC when the Interlock Switch is pushed?	Replace the Main Drive Assembly (page 4-134), then go to step 16.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Go to step 16.
16.	Does the error persist when printing?	Go to step 17.	Complete.
17.	Enter diagnostic mode and run the **Regi Clutch** test. You can also use the CE Diag Tool to run this test (see "Registration Clutch" on page 2-149). Does the Registration Clutch function correctly?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Replace the Registration Clutch (page 4-98).

091-402 XERO Near Life

The Printer (Xerographic) is approaching the replacement time.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Applicable Error

- 091-402: If Message "XERO Near Life" returns AND the printer has not reached end of life at 30,000 prints, proceed with troubleshooting below.

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Xerographics - 6020 (Page 7-29), 6022 (Page 7-37), 6025 (Page 7-45), 6027 (Page 7-54) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Turn the printer off and then on. Does the error persist?	Go to step 2.	Complete.
2.	Is the print count close to or greater than 30k prints?	No service should be performed on machines >30,000 prints	Go to step 3.
3.	Does print quality meet or exceed guaranteed print quality specifications?	Complete.	Replace any component(s) related to the print quality issues.

091-441 XERO Life Warning

The Printer Xerographic Assembly (Imaging Units, Developers and Transfer Belt Assembly) have reached end-of-life, refer to the manual.

Note: The error cannot be cleared once the printer has reached EOL. Printing will not be inhibited; however, print quality is no longer guaranteed.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Applicable Error

- 091-441: Printer is approaching end-of-life. No service should be performed on machines >30,000 prints.

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Xerographics - 6020 (Page 7-29), 6022 (Page 7-37), 6025 (Page 7-45), 6027 (Page 7-54) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Turn the printer off and then on. Does the error persist?	Go to step 2.	Complete.
2.	Is the print count greater than 30k prints?	No service should be performed on machines >30,000 prints	Go to step 3.
3.	Does print quality meet or exceed guaranteed print quality specifications?	Complete.	Replace any component(s) related to the print quality issues.

092-310, -910 Check Unit (ADC) Sensor

The CTD (ADC) Sensor has reached the Cleaning time or the CTD (ADC) Sensor needs to be cleaned.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Applicable Errors

- 092-310: Check CTD Unit <CDT Sensor Contamination>
- 092-910: Check CTD Unit <CDT Sensor Contamination>

Initial Actions

- Cycle printer power.
- Clean the ADC Sensor (page 6-7).
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
MCU Board, PL7.2.2	• "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Disconnect P/J14 on the MCU Board. Is the voltage across ground at P/J14-1 and P/J14-9 on the MCU Board +5 VDC?	Go to step 2.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Go to step 2.
2.	Does the error persist?	Contact your designated field support for assistance.	Complete.

092-651 CDT (ADC) Sensor Error

CTD (ADC) sensor error is detected.

Applicable Error

- 092-651: Code:xxxxxxxx Restart Printer <CDT (ADC) Sensor Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• MCU Board, PL7.2.2	• "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Clean the ADC sensor (page 6-7). Does the error persist when the power is turned on?	Go to step 2.	Complete.
2.	Disconnect the harness at MCU Board P/J14 and at Xerographics Assembly P/J140, and check the harness for continuity. Is the harness continuous?	Go to step 3.	Repair the harness.
3.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Does the error persist?	Contact your designated field support for assistance.	Complete.

092-661 ENV Sensor Error

The Environment (Temperature/Humidity) sensor detected the temperature anomaly.

Applicable Error

092-661: Code:xxxxxxxx Restart Printer <Environmental Sensor Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
MCU Board, PL7.2.2	• "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Does the error persist?	Contact your designated field support for assistance.	Complete.

093-42x Toner Cartridge (X) Near Life

The Toner Cartridge (X) is approaching the replacement time. When all the toner cartridges are simultaneously approaching the replacement time, a warning is indicated in the following order:

1)Black 2)Cyan 3)Magenta 4)Yellow

Applicable Errors

- 093-423: Ready to Print 093-423 Printer Y Cartridge is Close to Life
- 093-424: Ready to Print 093-424 Printer M Cartridge is Close to Life
- 093-425: Ready to Print 093-425 Printer C Cartridge is Close to Life
- 093-426: Ready to Print 093-426 Printer X Cartridge is Close to Life

Initial Actions

- Replace the indicated Toner Cartridge.
- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Harn assy dckr, PL4.1.2 • MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Developer - 6020 (Page 7-31), 6022 (Page 7-39), 6025 (Page 7-47), 6027 (Page 7-56) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the Toner Cartridge. Does the error persist?	Go to step 2.	Complete.
2.	Check P/J13 on the MCU Board. Is the connector secure?	Go to step 4.	Reconnect P/J13, then go to step 3.
3.	Does the error persist?	Go to step 4.	Complete.
4.	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Does the error persist?	Contact your designated field support for assistance.	Complete.

093-919. -920, -921, -922 (X) Toner Low Density

Applicable Errors

- 093-919: Low Density 093-919 Printer Check Y Cartridge Now
- 093-920: Low Density 093-920 Printer Check M Cartridge Now
- 093-921: Low Density 093-921 Printer Check C Cartridge Now
- 093-922: Low Density 093-922 Printer Check X Cartridge Now

Initial Actions

- Cycle printer power.
- If non-Xerox Toner Cartridges are installed, replace with Xerox Toner Cartridges and run 50 prints to purge the Developer of old toner.
- Replace the indicated Toner Cartridge.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• MCU Board, PL7.2.2	• "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Clean the ADC sensor (page 6-7). Does the error persist?	Go to step 2.	Complete.
2.	Check that MCU Board P/J14 is securely connected? Is the connection secure?	Go to step 3.	Reconnect P/J14, then go to step 3.
3.	Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Contact your designated field support for assistance.

093-930, -931, -932, -933 Replace Toner Cartridge

The indicated toner cartridge needs to be replaced.

Applicable Errors

* 093-930 to 093-933: Replace (X) Cartridge

Initial Actions

* Cycle printer power.
* If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• Harn assy dckr, PL4.1.2 • MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Developer - 6020 (Page 7-31), 6022 (Page 7-39), 6025 (Page 7-39), 6027 (Page 7-56) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the appropriate Toner Cartridge. Does the error persist?	Go to step 2.	Complete.
2.	Does the error persist when the power is turned off and on?	Go to step 3.	Complete.
3.	Check P/J13 on the MCU Board. Is the connection secure?	Go to step 5.	Reconnect P/J13, then go to step 4.
4.	Does the error persist?	Go to step 5.	Complete.
5.	Disconnect P/J13 on the MCU Board, and inspect the harness. Is the harness damaged?	Repair the harness, then go to step 6.	Go to step 7.
6.	Does the error persist?	Go to step 7.	Complete.
7.	Replace the Toner Cartridge (C, M, Y, or K). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Go to step 4.	Contact your designated field support for assistance.

093-95x Toner Comm Fail

Applicable Errors

- 093-950 Y Cartridge Error
- 093-951 M Cartridge Error
- 093-952 C Cartridge Error
- 093-925 K Cartridge Error

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• HARN ASSY DCKR, PL4.1.2 • MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Developer - 6020 (Page 7-31), 6022 (Page 7-39), 6025 (Page 7-47), 6027 (Page 7-56) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat the Toner Cartridge. Does the error persist?	Go to step 2.	Complete.
2.	Check the connection at MCU Board P/J13. Is the connection secure?	Go to step 3.	Reconnect P/J13, then go to step 3.
3.	Does the error persist?	Go to step 4.	Complete.
4.	Disconnect P/J13 on the MCU Board and unlace the harness. Inspect the harness for damage. Is the harness damaged?	Repair the harness, then go to step 5.	Go to step 6.
5.	Does the error persist?	Go to step 6.	Complete.
6.	Replace the Toner Cartridge (C, M, Y, or K). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Go to step 7.	Complete.
7.	Does the error persist?	Contact your designated field support for assistance.	Complete.

093-926, -96x, -97x CRUM ID Error, Toner Cartridge (X) Detached

An unsupported cartridge is detected or the indicated Toner Cartridge is not installed in the printer. If no toner cartridge has been installed in the printer, a warning is indicated in the following order:

1)Yellow 2)Magenta 3)Cyan 4)Black

Applicable Errors

- 093-926: CRUM ID 093-926 Reseat K Cartridge
- 093-960: CRUM ID 093-960 Reseat Y Cartridge
- 093-961: CRUM ID 093-961 Reseat M Cartridge
- 093-962: CRUM ID 093-962 Reseat C Cartridge
- 093-970: Insert Print Cart. 093-970 Printer Insert Y Cartridge
- 093-971: Insert Print Cart. 093-971 Printer Insert M Cartridge
- 093-972: Insert Print Cart. 093-972 Printer Insert C Cartridge
- 093-973: Insert Print Cart. 093-973 Printer Insert X Cartridge
- 093-974 Insert Toner Cartridge

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• HARN ASSY DCKR, PL4.1.2 • MCU Board, PL7.2.2	• Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • Developer - 6020 (Page 7-31), 6022 (Page 7-39), 6025 (Page 7-47), 6027 (Page 7-56) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Reference Table

Step	Actions and Questions	Yes	No
1.	Are the Toner Cartridges installed in the printer Xerox Toner Cartridges?	Go to step 2.	Complete.
2.	Disconnect P/J13 on the MCU Board and unlace the harness. Inspect the harness for damage. Is the harness damaged?	Repair the harness, then go to step 3.	Go to step 3.
3.	Disconnect P/J13 on the PWBA MCU. Is the voltage across ground to P/J13-3 on the MCU Board approximately +3.3 VDC?	Repair the Harness Assembly DCKR.	Go to step 5.
4.	Replace the Toner Cartridge (C, M, Y, or K). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

116-210, -395 System USB Port Error

Applicable Errors

- 116-210: System Restart Printer Contact Support If Message Returns <System USB Port Error>
- 116-395: System Restart Printer Contact Support If Message Returns <System USB Port Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Reference Table

Step	Actions and Questions	Yes	No
1.	Reseat the connectors on the IP and MCU Boards then turn the printer back on. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

116-323 Checksum Error (Fax)

Checksum Error for Fax parameter is detected.

Applicable Error

- 116-323: System Restart Printer Contact Support If Message Returns

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the PACKAGE ASSY FAX LT PL7.1.15 Does the error persist when the power is turned on?	Replace the IP Board: Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150).	Complete.

116-324, -326, -343 Firmware Errors

The firmware download to the printer failed.

Applicable Errors

- 116-324: Controller Error Restart Printer <Controller Error>
- 116-326: NVM checksum error (Scan section) <Checksum Error (scan)>
- 116-343: ASIC Error Restart Printer <ASIC Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2 • LED Driver Board, PL7.1.5	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • Xerographics - 6020 (Page 7-29), 6022 (Page 7-37), 6025 (Page 7-45), 6027 (Page 7-54) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the LED Driver Board (page 4-144). Does the error persist?	Go to step 3.	Complete.
3.	Replace the IP Board Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

116-325 Checksum Error (Other)

Checksum error for (Other) parameter is detected.

Applicable Error

- 116-325: NVM checksum error (Other section) <Checksum Error (other)>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022, (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Reference Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist when the power is turned on?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

116-314, -355 ESS Network Errors

Applicable Errors

- 116-314: <ESS Network MAC Address Error>
- 116-355: <ESS On Board Network Fatal Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Reference Table

Step	Actions and Questions	Yes	No
1.	Reseat all connectors on the IP Board and the MCU Board. Does the error persist?	Go to step 2.	Complete.
2.	Replace the IP Board: Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS Go to step 3.	Complete.
3.	Does the error persist?	Contact your designated field support for assistance.	Complete.

116-703 PostScript LANG Interpretation Error (PS/PDF)

There is a problem in the PostScript data and an error occurred in PostScript grammar interpretation or language interpretation.

Note: This Status Code is not related to any hardware fault.

Applicable Errors

- 116-703: PostScript LANG Interpretation Error <PS/PDF Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting pROCEDURE Table

Step	Actions and Questions	Yes	No
1.	Correct the job data. Does the error persist?	No.	Complete.

116-720 PCL Memory Low, Page Simplified

There is a problem in the PostScript data and an error occurred in PostScript grammar interpretation or language interpretation.

> Note: This Status Code is not related to any hardware fault.

Applicable Errors

- 116-720: A PCL Memory Error Has Occurred <PCL Memory Low>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Change the print job data size; smaller image file, document, or other job file size and try the print job again. Does the error persist?	Change file size or type.	Complete.

062-360, 117-3xx System Restart

<ESS-Related Error> Image Processor related error occurred.

Applicable Errors

062-360:	System Restart	117-344:	System Restart
117-331:	System Restart	117-346:	System Restart
117-332:	System Restart	117-348:	System Restart
117-333:	System Restart	117-349:	System Restart
117-334:	System Restart	117-350:	System Restart
117-340:	System Restart	117-351:	System Restart
117-342:	System Restart	117-366:	System Restart
117-343:	System Restart		

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the connectors on the IP Board. Are the connections secure?	Go to step 3.	Securely reconnect the connectors, then go to step 2.
2.	Does the error persist?	Go to step 3.	Complete.
3.	Replace the IP Board; Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?		Complete.

124-333 ASIC Failure

Applicable Error

- 124-333: Restart Printer

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• LED Driver Board, PL7.1.5 • LED/MCU Cable, PL7.1.6 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • Map 3 - 6020 (Page 7-7), 6022 (Page 7-12), 6025 (Page 7-17), 6027 (Page 7-22) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • Xerographics - 6020 (Page 7-29), 6022 (Page 7-37), 6025 (Page 7-45), 6027 (Page 7-54) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check connectors P/J23 and P/J1 on the MCU Board and LED Driver Board. Are the connections secure?	Go to step 3.	Reconnect the connectors P/J23 and P/J1, and then go to step 2.
2.	Does the error persist?	Go to step 3.	Complete.
3.	Disconnect the MCU Board P/J23 and the LED Driver Board P/J1, and check the LED/MCU Cable continuity. Is the cable damaged?	Replace the LED/MCU Cable.	Go to step 4.
4.	Replace the LED Driver Board (page 4-144). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

134-211 Fax Card Modem Error

Applicable Error

- 134-211: System Restart Printer Contact Support If Message Returns <Fax Card Modem Error>

Initial Actions

- Cycle printer power.
- If the problem persists, use the following procedure.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21)
• Fax Board, PL7.1.22	• IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58)
• Fax Harness. PL7.1.22	• "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3)
• MCU Board, PL7.2.2	• "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Disconnect the Fax Harness at P/J2 on the IP Board and the corresponding P/J on the Fax Board. Check the Fax Harness for continuity. Is the cable OK?	Go to step 2.	Replace the Fax Harness.
2.	Replace the PACKAGE ASSY FAX LT PL7.1.15 Does the error persist?	Replace the IP Board.	Complete.

191-310 XERO Life Over, 191-311 XERO Life Over (Counter)

The Printer (XERO DEVE LPH BELT ASSY) has reached the replacement time.

Applicable Error

- 191-310: System Restart Printer Contact Support If Message Returns <XERO Life Over>
- 191-311: XERO Life Over (Counter) <XERO Life Over>

Initial Actions

- Cycle printer power.
- If the problem persists, follow the procedure below.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• MCU Board, PL7.2.2	• "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Turn the printer off and then on. Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.
2.	Contact your designated field support for assistance.		Complete.

193-700 Custom Toner Mode

The printer is in custom toner mode.

Applicable Error

- 193-700: Ready to Print 193-700 Printer Non-Xerox Toner Installed <Custom Toner Mode>

Initial Actions

- Cycle printer power.
- If the problem persists, follow the procedure below.

Troubleshooting Reference Table

Applicable Parts	Wiring and Plug/Jack Map References
• IP Board, PL7.1.9 • MCU Board, PL7.2.2	• Map 2 - 6020 (Page 7-6), 6022 (Page 7-11), 6025 (Page 7-16), 6027 (Page 7-21) • IP Board - 6020 (Page 7-33), 6022 (Page 7-41), 6025 (Page 7-49), 6027 (Page 7-58) • "Plug and Jack Locater Coordinates and Diagrams" on (Page 7-3) • "Wiring Diagrams" on (Page 7-23)

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Loosen the screws on the IP Board, then tighten the screws to reseat the board. Check that all the connectors on the IP Board are secure. Does the problem persist?	Go to step 2.	Complete.
2.	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150). Does the error persist?	1. SaveNVM to ESS 2. Replace the MCU Board (page 4-160). 3. LoadNVM from ESS	Complete.

Service Diagnostics (CE Diags)

Using CE Diags with the Phaser 6020

The Phaser 6020 printer has diagnostic testing built into the Windows printer software installed off the packaging CD\DVD or downloaded from the Xerox website to test electromechanical components, display printer status, and provide some NVRAM access. Use these tests to diagnose problems and isolate which component needs replacement.

If confronted with an error that requires more than a cursory investigation to clear, or when directed by a troubleshooting procedure, use the diagnostic tests to exercise selected sub-assemblies or parts in the vicinity of the reported error.

Two versions of the CE Diags Tool are available. One for the Phaser 6020, and another for the Phaser 6022 and WorkCentre 6025/6027 MFP. Both versions have the following system requirements.

Description	Characteristic
Operating System	• Windows 7 • Windows Server 2008 • Windows Vista • Windows XP • Windows 2003
Connection Mode	USB

Entering and Exiting CE Diags for the Phaser 6020

1. Click on the Start Button in Windows.
2. Click on All Programs.
3. Click on Xerox Office Printing.
4. Click on Phaser 6020.
5. Click on Launcher.
6. Click on Printer Setting Utility inside the Launcher dialog box.
7. Inside the Printer Setting Utility select the Phaser 6020 on the USB:xxx port.
8. The Printer Settings Utility shows 3 tabs:
   - Printer Settings Report
   - Printer Maintenance
   - Diagnosis
9. On the keyboard, press the keys **CTRL+C+E** to open the CE Diags tab

   Note: To execute the CE Diag menu requires entry of the **CTRL+C+E**.

10. When testing has completed, close the CE Diags by clicking the red X at the top right of the Printer Settings Utility dialog box.

11. Click [OK] to close the program.
12. Click on the printer settings utility icon in the Windows Task Bar and click Close in the dialog box at the bottom right.

CE Diag Dialog Box
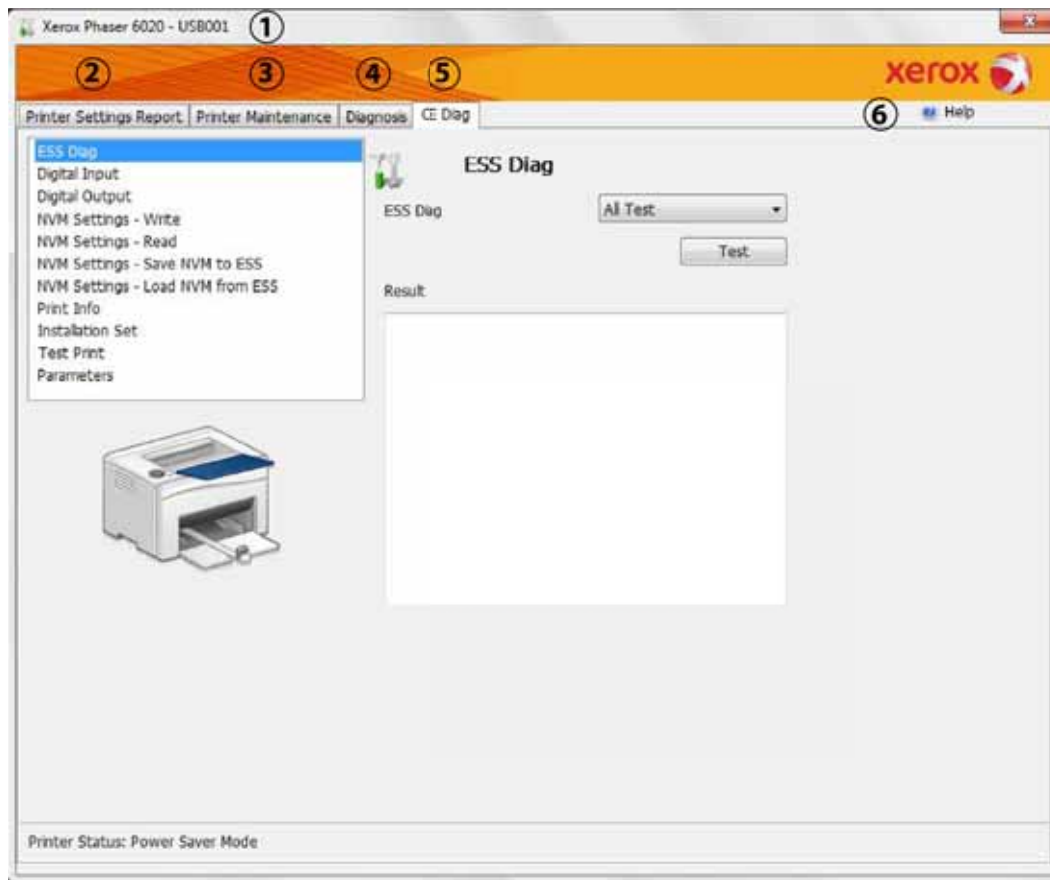
1. Title Bar: shows printer model and port.
2. Printer Settings Report Tab: displays current printer settings.
3. Printer Maintenance Tab: change setting withing the current printer system.
4. Diagnosis Tab: provides test prints available in "Chapter 3 - Image Quality".
5. CE Diag Tab: Provides diagnostics tests for verifying and troubleshooting error conditions.
6. Help Menu: provides help within the current tab.

Phaser 6020 CE Diag. Mode Menu Map

Xerox® Phaser® 6020
Color Printer

XEROX ®

Menus

CTRL-C-E

CE Diag Tab

ESS Diag

Flash ROM Test
DRAM Test
MAC+PHY Test
IOT Test
Light Flash R/W Test
USB Test1
USB Test2
OP Panel Test
Fax Card Test
Lamp Test
Scanner Test 1
Scanner Test 2
All Test

IOT Diag

Digital Input
Digital Output
NVM Settings ▶

Print Info

Config Page ▶
Print Settings ▶

Installation Set

Serial No.
Pixel Counter
Print Counter ▶
Clear All NVM
Clear Job History

Test Print

TestPatASIC[IOT]
TestPatLPHY[IOT]
TestPatLPHM[IOT]
TestPatLPHC[IOT]
TestPatLPHK[IOT]

Parameter

Regi ▶
Life ▶
Print

NVM Edit
SaveNVM to ESS
Load/NVM from ESS

Ethernet
TCP/IP ▶
Protocol ▶
Host Access List
Reset Defaults

Port Status

Col Print Count
B/W Print Count
Tot Print Count

X Margin Yellow
X Margin Magenta
X Margin Cyan
X Margin Black
Y Margin Yellow
Y Margin Magenta
Y Margin Cyan
Y Margin Black
Skew Margin Yellow
Skew Margin Magenta
Skew Margin Cyan
Skey Margin Black
Bow Margin Yellow
Bow Margin Magenta
Bow Margin Cyan
Bow Margin Black
Lead Offset
Side Offset

IP Mode
IPv4

LPR
Port 9100
WSD
SNMP
Email Alerts
Internet Services
Bonjour (mDNS)

M/C Total PV
M/C FC PV
DEVE Roundtime K
DEVE RoundtimeYMC
TotalXEROroundtime
XERO Roundtime
M/C DispTime Y
M/C DispTime M
M/C DispTime C
M/C DispTime K
M/C Pixel Y
M/C Pixel M
M/C Pixel C
M/C Pixel K
M/C ColorEmptyB/W
M/C Custom Start
M/C Custom End
Waste Toner Y
Waste Toner M
Waste Toner C
Waste Toner K
Toner PV Y
Toner PV M
Toner PV C
Toner PV K
Toner DispTime Y
Toner DispTime M
Toner DispTime C
Toner DispTime K
Toner TDCC Y
Toner TDCC M
Toner TDCC C
Toner TDCC K
Toner Pixel Y
Toner Pixel M
Toner Pixel C
Toner Pixel K

s6020-222

Phaser 6020 CE Diag

Test Item	Function
All Test	Refer to "All Test" on (Page 2-127) for a description of the test.
Code ROM Test	Refer to "CodeROM Test" on (Page 2-127) for a description of the test.
EEP ROM Test	Refer to "EEP ROM Test" on (Page 2-127) for a description of the test.
DRAM Test	Refer to "DRAM Test" on (Page 2-127) for a description of the test.
MAC+PHY Test	Refer to "MAC+PHY Test" on (Page 2-127) for a description of the test.
ASIC Test	Refer to "ASIC Test" on (Page 2-128) for a description of the test.
IOT Test	Refer to "IOT Test" on (Page 2-127) for a description of the test.
Auto-Off Test	When an instruction to start the test is received from the control panel, the Auto-Off control signal is activated to power off the device automatically.
PANEL Test	Tests the LEDs and I/O of the control panel. s6020-680 1. Press the \<Start> button to check whether the following LEDs illuminate for one second. • 1: K Toner LED • 1: C Toner LED • 1: M Toner LED • 1: Y Toner LED • 3: Jam LED • 6: Error LED • 7: Load Paper LED 2. Press the \<Cancel> button to check whether the following LEDs illuminate for one second. • 2: Energy Saver LED • 5: Start LED • 8: Ready/Data LED To end the control panel test, press the \<Start> button and the \<Cancel> button simultaneously.
Engine Test	Refer to "Engine Test" on (Page 2-131) for a description of the test.
Sensor Test	Refer to "Sensor Test" on (Page 2-131) for a description of the test.
Motor Test	Refer to "Motor Test" on (Page 2-131) for a description of the test.

Test Item	Function
NVM Settings	Refer to "NVM Settings" on (Page 2-132) for a description of the test.
Print Info	Refer to "Print Info" on (Page 2-133) for a description of the test.
Installation	Refer to "Installation" on (Page 2-133) for a description of the test.
Test Print	Refer to "Test Print" on (Page 2-134) for a description of the test.
Parameter	Refer to "Parameter" on (Page 2-134) for a description of the test.
REGI	Refer to "Regi" on (Page 2-134) for a description of the test.
Life Counter	Refer to "Life Counter" on (Page 2-135) for a description of the test.

Phaser 6020 Sensor Locations
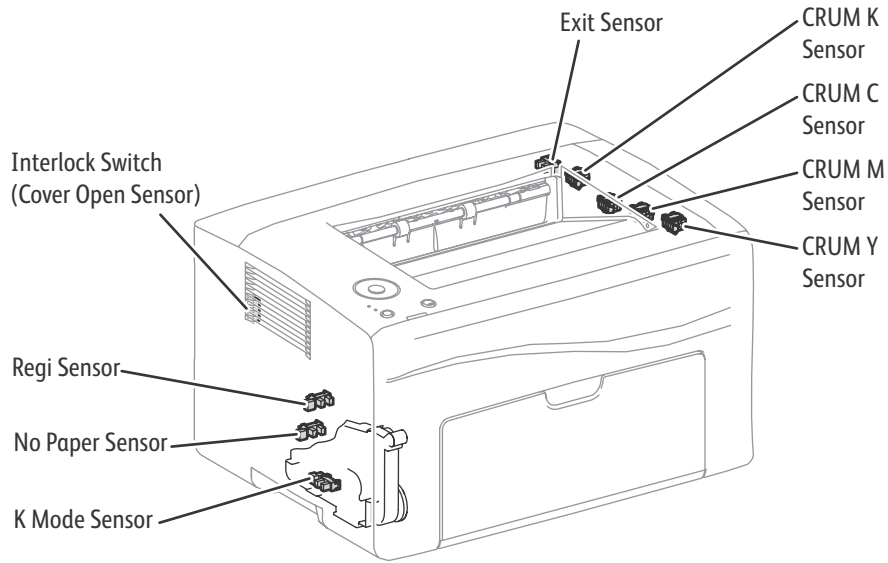
s6020-002

Phaser 6020 Motor Locations

Yellow/Magenta
Toner Motor

Fan

Main
Motor

Cyan/Black
Toner Motor

K Mode Solenoid

Registration Clutch

Feed Solenoid

s6020-003
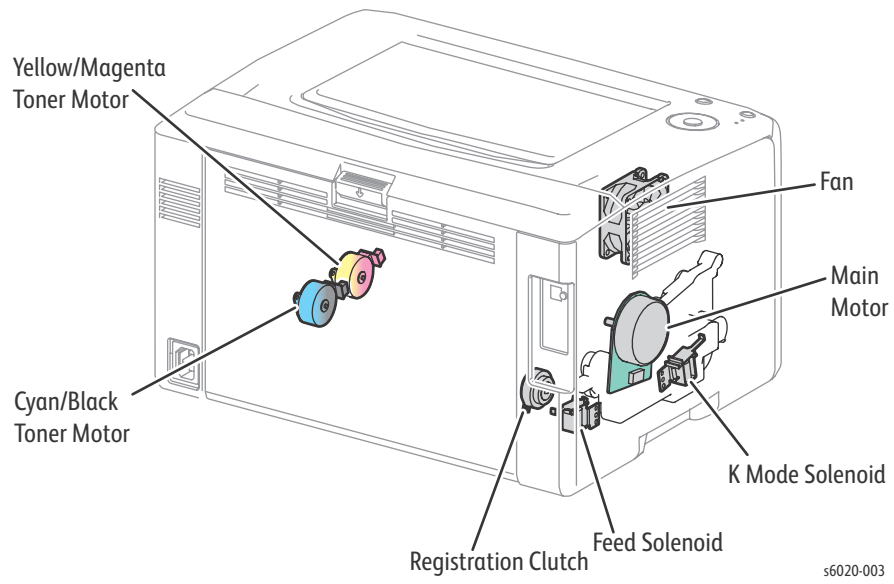
Phaser 6022 and WorkCentre 6025/6027 MFP CE Diag Testing

The Phaser 6022 and WorkCentre 6025/6027 MFP printers have built-in diagnostics to test electromechanical components, display printer status, and provides some NVRAM access. Use these tests to diagnose problems and isolate which component needs replacement.

If confronted with an error that requires more than a cursory investigation to clear, or when directed by a troubleshooting procedure, use the diagnostic tests to exercise selected sub-assemblies or parts in the vicinity of the reported error. Diagnostic tests are controlled from the Control Panel and are described in detail in "WorkCentre 6025 MFP Scanner Diagnostic Test Procedures" on (Page 2-154), or "WorkCentre 6025 MFP Scanner Diagnostic Test Procedures" on (Page 2-154).

Using the CE Diag Tool

Most diagnostic tests are straight forward and require no additional explanation, but there are some that require specific conditions be met to achieve meaningful results. These instructions cover each of the test groups, listing special instructions, conditions, or other information necessary to successfully interpret the results of the diagnostic tests. Use the arrow buttons to scroll through the menus and highlight the desired test. The **OK** button runs the test. Press **Stop** to stop the test. To switch between test groups, exit the current diagnostics mode and return to the Service Mode menu.

Phaser 6022 Control Panel Operation

The diagnosis provides two modes that have their respective uses (purposes), target operators, and functions.

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.

MFG Setting Mode:

> Note: The MFG Setting mode cannot be used.

Phaser 6022 Control Panel
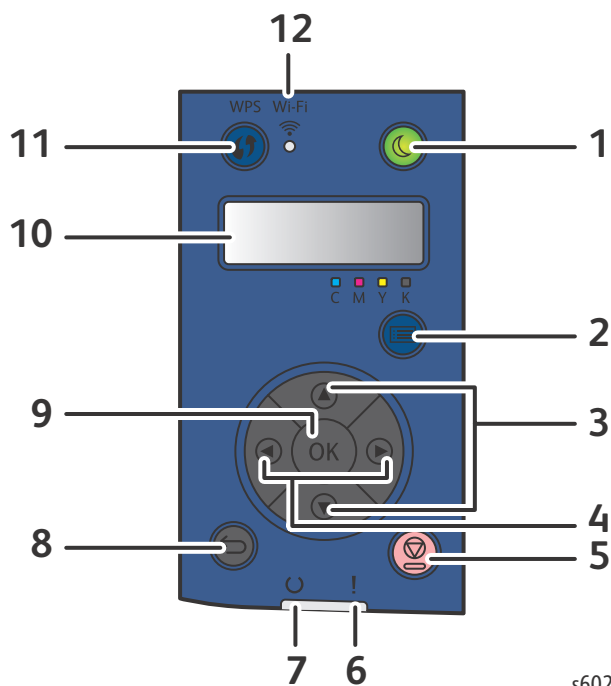
s6020-671

Function	Description
LCD Display	Displays the menu, setting values, and test results.
▲ ▼	Selects the Diag item or parameter value.
◀ ▶	Moves the cursor to the left or right.
OK	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/Stop	Cancels or Stops the Diag menu (Returns to the menu one level higher).
Back	Press the [Back] button to cancel the selection or stop the processing.

Entering CE Diag Mode

1. Turn off the power.
2. Turn on the power while holding down "▲" and "▼" keys.
3. Release the fingers from these keys when "CE Mode" is displayed.

Phaser 6022 CE Diag Menu Map

ESS Diag

Flash ROM Test
DRAM Test
MAC+PHY Test
IOT Test
Light Flash R/W Test
USB Test 1
USB Test 2
OP Panel Test
Fax Card Test
Lamp Test
Scanner Test 1
Scanner Test 2
All Test

IOT Diag

Digital Input
Digital Output
NVM Settings ▶

Print Info

Config Page
Print Settings

Installation Set

Serial No.
Pixel Counter
Print Counter ▶
Clear All NVM
Clear JobHistory

Test Print

TestPatASIC[IOT]
TestPatLPHY[IOT]
TestPatLPHM[IOT]
TestPatLPHC[IOT]
TestPatLPHK[IOT]

Parameter

Regi ▶
Life ▶
Print

Accept the menu selection
Scroll up
Go up one level
Scroll down

NVM Edit
SaveNVM to ESS
LoadNVM from ESS

NVM Edit
SaveNVM to ESS
LoadNVM from ESS

X Margin Yellow
X Margin Magenta
X Margin Cyan
X Margin Black
Y Margin Yellow
Y Margin Magenta
Y Margin Cyan
Y Margin Black
Skew Margin Yellow
Skew Margin Magenta
Skew Margin Cyan
Skew Margin Black
Bow Margin Yellow
Bow Margin Magenta
Bow Margin Cyan
Bow Margin Black
Lead Offset
Side Offset

M/C Total PV
M/C FC PV
DEVE Roundtime K
DEVERoundtimeYMC
TotalXEROroundtime
XEROroundtime
M/C DispTime Y
M/C DispTime M
M/C DispTime C
M/C DispTime K
M/C Pixel Y
M/C Pixel M
M/C Pixel C
M/C Pixel K
M/C ColorEmptyBW
M/C Custom Start
M/C Custom End
Waste Toner Y
Waste Toner M
Waste Toner C
Waste Toner K
Toner PV Y
Toner PV M
Toner PV C
Toner PV K
Toner DispTime Y
Toner DispTime M
Toner DispTime C
Toner DispTime K
Toner TDCC Y
Toner TDCC M
Toner TDCC C
Toner TDCC K
Toner Pixel Y
Toner Pixel M
Toner Pixel C
Toner Pixel K

s6020-223

WorkCentre 6025 MFP Control Panel

s6020-672

Function	Description
LCD Display	Displays the menu, setting values, and test results.
▲ ▼	Selects the Diag item or parameter value.
◀ ▶	Moves the cursor to the left or right.
OK	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/Stop	Cancels or Stops the Diag menu (Returns to the menu one level higher).
Back	Press the [Back] button to cancel the selection or stop the processing.

For parameters: pressing **OK** after selecting an item from the menu displays the current value of the item.

Executing CE Diag Mode

1. Turn off the power.
2. Turn on the power while holding down "▲" and "▼" keys.
3. Release the fingers from these keys when the "CE Mode", "Printer" and "Scanner" are displayed. (Entered the CE Diag. mode.)
4. Press "▼" to select "Scanner", and press "[OK]" key.
5. Press "▲" or "▼" key to select the test item.
6. Press "[OK]" key twice to execute the test.

   Note: To return to one step higher menu, press "STOP" key.

Error Troubleshooting

WorkCentre 6025 MFP Service Diagnostics Menu Map

Accept the menu selection ▲ (Scroll up)

Printer

ESS Diag

Flash ROM Test
DRAM Test
MAC+PHY Test
IOT Test
Light Flash R/W Test
USB Test 1
USB Test 2
OP Panel Test
Lamp Test
Scanner Test 1
Scanner Test 2
All Test

▶ (Go down one level)
▼ (Scroll down)
◀ (Go up one level)

IOT Diag

Digital Input
Digital Output
NVM Settings ▶

NVM Edit
SaveNVM to ESS
LoadNVM from ESS

Print Info

Config Page
Print Settings

NVM Edit
SaveNVM to ESS
LoadNVM from ESS

Installation Set

Serial No.
Pixel Counter
Print Counter ▶
Clear All NVM
Clear JobHistory

X Margin Yellow
X Margin Magenta
X Margin Cyan
X Margin Black
Y Margin Yellow
Y Margin Magenta
Y Margin Cyan
Y Margin Black
Skew Margin Yellow
Skew Margin Magenta
Skew Margin Cyan
Skew Margin Black
Bow Margin Yellow
Bow Margin Magenta
Bow Margin Cyan
Bow Margin Black
Lead Offset
Side Offset

M/C Total PV
M/C FC PV
DEVE Roundtime K
DEVERoundtimeYMC
TotalXEROroundtime
XEROroundtime
M/C DispTime Y
M/C DispTime M
M/C DispTime C
M/C DispTime K
M/C Pixel Y
M/C Pixel M
M/C Pixel C
M/C Pixel K
M/C ColorEmptyBW
M/C Custom Start
M/C Custom End
Waste Toner Y
Waste Toner M
Waste Toner C
Waste Toner K
Toner PV Y
Toner PV M
Toner PV C
Toner PV K
Toner DispTime Y
Toner DispTime M
Toner DispTime C
Toner DispTime K
Toner TDCC Y
Toner TDCC M
Toner TDCC C
Toner TDCC K
Toner Pixel Y
Toner Pixel M
Toner Pixel C
Toner Pixel K

Test Print

TestPatASIC[IOT]
TestPatLPHY[IOT]
TestPatLPHM[IOT]
TestPatLPHC[IOT]
TestPatLPHK[IOT]

Parameter

Regi ▶
Life ▶
Print

s6020-681

WorkCentre 6025 MFP Service Diagnostics Menu Map (cont.)

Accept the menu selection

▲ (Scroll up)

▶ (Go down one level)

▼ (Scroll down)

◀ (Go up one level)

Fax/Scanner

Information

Scan Counter

Scanner Maintenance

White Balance

Registration Param. ▶ — FB Lead offset adjustment
FB Side offset adjustment

Auto Registration

IIT I/O Check ▶ — FB Home Sensor

Scan Counter Clear

Backup Data

All Clear

User & System Clear

System Data Init

Complete
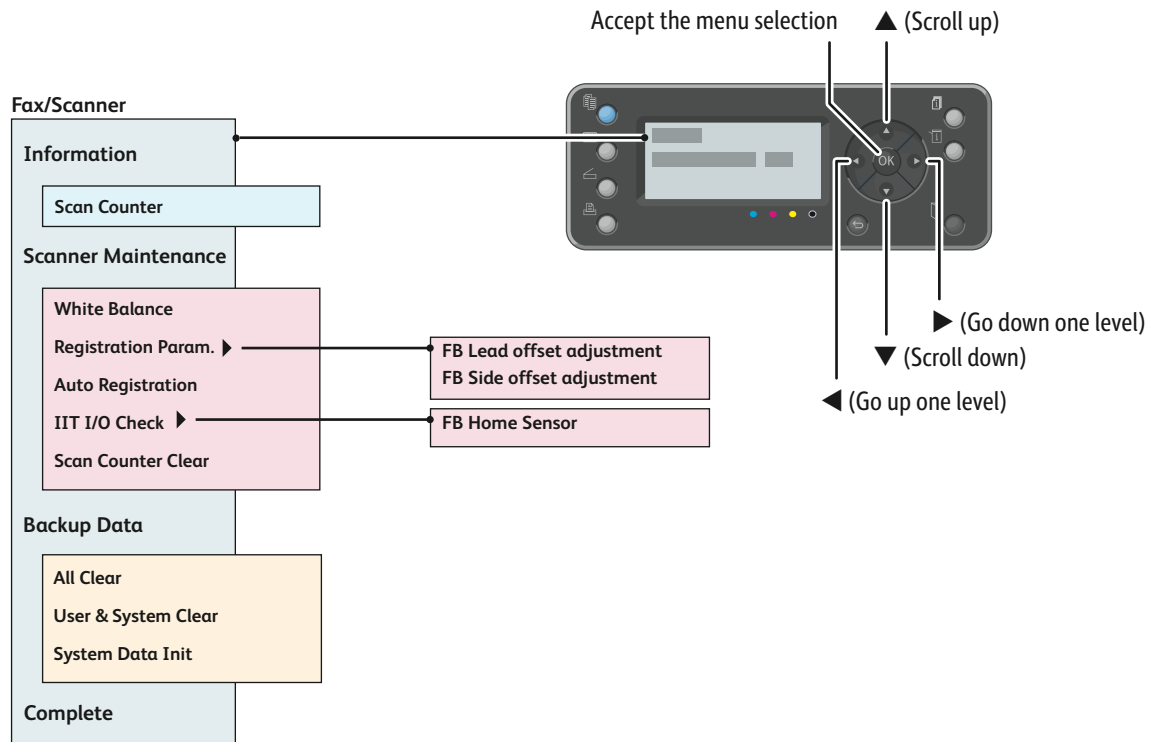
s6020-682

WorkCentre 6027 MFP Control Panel

s6020-596
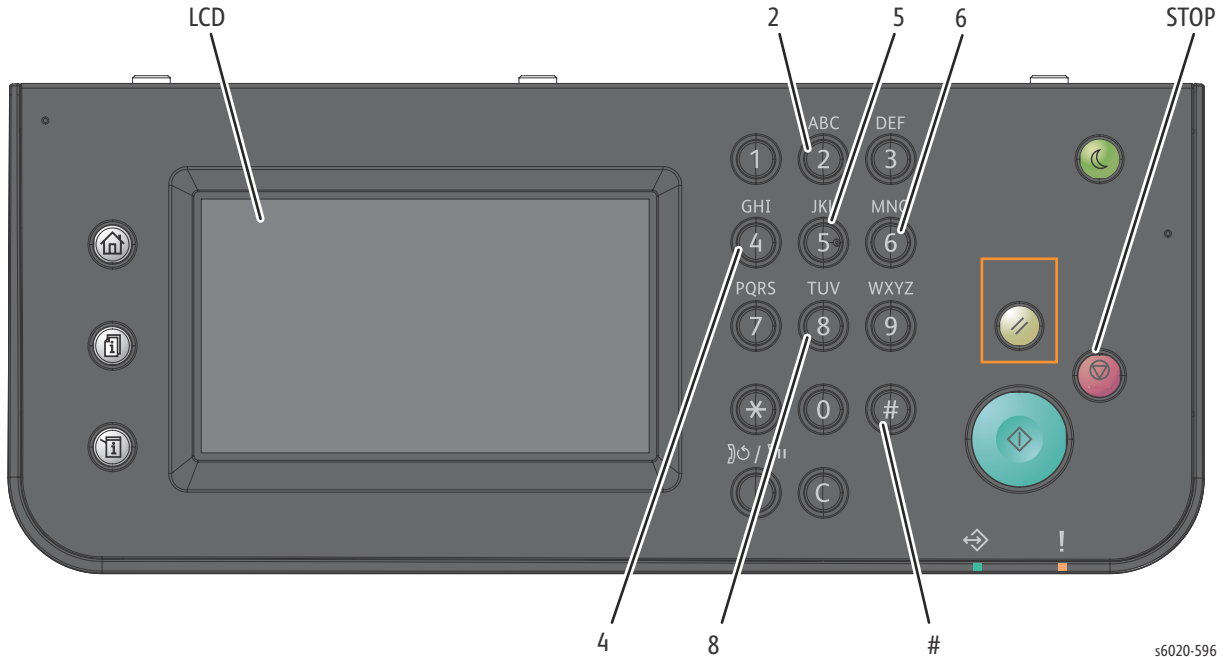
LCD and Buttons	Description
LCD	Displaying a diagnosis item and its result
Keys 2, 8	Selecting a diagnosis item/Selecting data at parameter setting
Keys 4, 6	Key moves the cursor to the left/right
Key 5	Determining a diagnosis item/Executing a diagnosis/Determining a parameter at parameter setting
#	Reseting a diagnosis item (Returning to the menu one level higher) Terminating each digital input/output

Entering CE Diag Mode

1. Turn off the power.
2. Turn on the power while pressing down "2" and "8" keys.
3. Release the keys when the "CE Mode" is displayed.
4. "CE Mode", "Printer" and "FAX/Scanner" are displayed.
5. Select "FAX/Scanner" and press [OK].

WorkCentre 6027 MFP Service Diagnostics Menu Map

Printer

ESS Diag

Flash ROM Test
DRAM Test
MAC+PHY Test
IOT Test
Light Flash R/W Test
USB Test 1
USB Test 2
OP Panel Test
Fax Card Test
Lamp Test
Scanner Test 1
Scanner Test 2
All Test

IOT Diag

Digital Input
Digital Output
NVM Settings ▶

Print Info

Config Page
Print Settings

Installation Set

Serial No.
Pixel Counter
Print Counter ▶
Clear All NVM
Clear JobHistory

Test Print

TestPatASIC[IOT]
TestPatLPHY[IOT]
TestPatLPHM[IOT]
TestPatLPHC[IOT]
TestPatLPHK[IOT]

Parameter

Regi ▶
Life ▶
Print

NVM Edit
SaveNVM to ESS
LoadNVM from ESS

NVM Edit
SaveNVM to ESS
LoadNVM from ESS

X Margin Yellow
X Margin Magenta
X Margin Cyan
X Margin Black
Y Margin Yellow
Y Margin Magenta
Y Margin Cyan
Y Margin Black
Skew Margin Yellow
Skew Margin Magenta
Skew Margin Cyan
Skew Margin Black
Bow Margin Yellow
Bow Margin Magenta
Bow Margin Cyan
Bow Margin Black
Lead Offset
Side Offset

M/C Total PV
M/C FC PV
DEVE Roundtime K
DEVERoundtimeYMC
TotalXEROroundtime
XEROroundtime
M/C DispTime Y
M/C DispTime M
M/C DispTime C
M/C DispTime K
M/C Pixel Y
M/C Pixel M
M/C Pixel C
M/C Pixel K
M/C ColorEmptyBW
M/C Custom Start
M/C Custom End
Waste Toner Y
Waste Toner M
Waste Toner C
Waste Toner K
Toner PV Y
Toner PV M
Toner PV C
Toner PV K
Toner DispTime Y
Toner DispTime M
Toner DispTime C
Toner DispTime K
Toner TDCC Y
Toner TDCC M
Toner TDCC C
Toner TDCC K
Toner Pixel Y
Toner Pixel M
Toner Pixel C
Toner Pixel K

s6020-683

WorkCentre 6027 MFP Service Diagnostics Menu Map (cont.)

Fax/Scanner

Information

Scan Counter

Scanner Maintenance

White Balance

Registration Param. ▶ ——— ADF Lead offset adjustment
ADF Side offset adjustment
FB Lead offset adjustment
FB Side offset adjustment

Auto Registration

IIT I/O Check ▶ ——— FB Home Sensor
ADF Scan Sensor
ADF Document Sensor
ADF Cover Sensor

Scan Counter Clear

Parameter

Backup Data

All Clear

User & System Clear

System Data Init

Complete
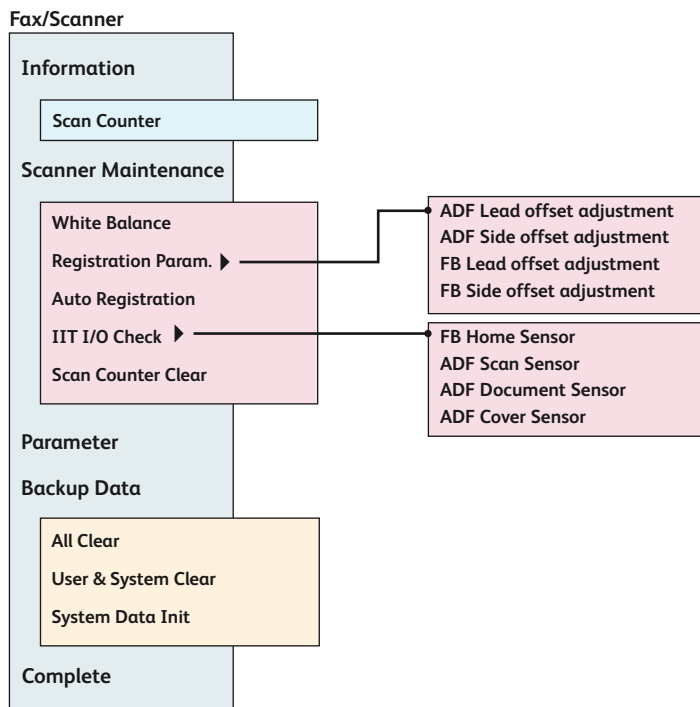
s6020-684

Diagnostic Test Descriptions
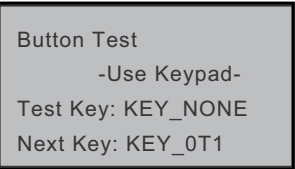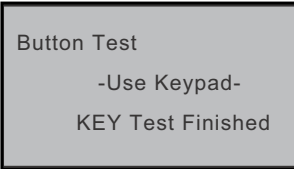
The table below lists the diagnostic tests available, the expected results, and a brief description of each test. If a test fails and displays an error code, use the troubleshooting procedure in Chapter 3 specific to the error. If the test indicates component failure, replace the failed component using the procedures in Chapter 8. If test results are inconclusive, isolate the problem using the general procedures in this chapter.

⚠ **CAUTION:** Do not turn the printer OFF during ESS Diag testing.

Test	Display	Error Message	Test Description
All Test	• Start • Processing • Check OK or • *<Failed Test>* Error		This test checks all ESS diagnostic items except OP panel, USB Host test, Lamp test, Scanner Test and Auto-Off Test.
CodeROM Test	• Start • Processing • Check OK or NG	CodeROM ERROR	Calculates the ROM checksum and compares it with the stored value. Run this test when a 016-317 error occurs.
EEP ROM Test	• Start • Processing • Check OK or NG		Performs write/read/verify on the Diag. area of the EEPROM.
DRAM Test	• Start • Processing • Check OK or NG	DRAM ERROR Addr:0xCCCCCCCC 0xAA -> 0xBB	This test performs read/write/verify of the DRAM.
MAC+PHY Test	• Start • Processing • Check OK or NG	MAC+PHY ERROR	Run this test when 116-314, 116-350, 116-351, 116-352, and 116-355 errors occur.
IOT Test	• Start • Processing • Check OK or NG	IOT ERROR	This test checks communication with the IOT. Then it reads the status register of the IOT to check whether commands can be exchanged with the IOT
Light Flash R/W Test	• Start • Processing • Check OK or NG	FLASH ERROR Addr:0xCCCCCCCC 0xAA -> 0xBB	Tests read/write/verify of the value ONCE in the test flash area. The test pattern would be 0x55, and 0xaa. 0xCCCCCCCC is the first error address, 0xAA is the correct value, and 0xBB means the error value on 0xCCCCCCCC.

Test	Display	Error Message	Test Description
USB Host 2 Test	• Start • Processing • Check OK or NG	USB HOST 2 CHECK ERROR	This test will check whether WiFi dongle enumeration has been passed
ASIC Test	• Start • Check OK or NG • OK (Check the PWBA ESS AIO 4IN1.) • NG (Check the PWB ASSY TOP TOKI 2 or LPH.)		ASIC Register check. Run this test when 116-343 error occurs.
PANEL Test Phaser 6022	Tests the LCD, LEDs, buttons, and I/O of the control panel. Pressing the button in the following table displays the corresponding contents on the LED and LCD.		

Button	LED	LCD
▲	■	Displays "UP" on the LCD.
▼	■	Displays "DOWN" on the LCD.
◄	■	Displays "LEFT" on the LCD.
►	■	Displays "RIGHT" on the LCD.
✓	■	Displays "SET" on the LCD.
MENU	■	Displays "MENU" on the LCD.
Cancel	☐	Displays "CANCEL" on the LCD.
▲ ▼ pressed at the same time	Complete	Displays "Start" on the LCD.

Test	Display	Error Message	Test Description
PANEL Test WorkCenter 6025 MFP	Tests the LEDs, buttons, and I/O of the control panel. Pressing the button in the following table displays the corresponding contents on the LED and LCD.		

LCD Test: LCD will display a test sequence:

H-Bar

s6020-443

V-Bar

s6020-444

Checker

s6020-445

Black

s6020-446

White

s6020-447

LED Test: LED display in the following order:
Copy LED > Scan LED > Menu LED > B&W LED > Color LED > Ready LED > Error LED > Data LED > All LED ON

Key Test: Shows Button Test information (Figure 1).
You can follow the auto-order Key test or press any key and LCD will display the button information.
LCD displays "KEY Test Finished" when complete (Figure 2).

Figure 1:

Button Test
      -Use Keypad-
 Test Key: KEY_NONE
 Next Key: KEY_0T1

Figure 2:

Button Test
      -Use Keypad-
   KEY Test Finished

Test	Display	Error Message	Test Description
PANEL Test WorkCentre 6027 MFP	Tests the LEDs, buttons, and I/O of the control panel. Pressing the button in the following table displays the corresponding contents on the LED and LCD.		

LCD Test: LCD will display a test sequence:

Red

Green

Blue

Black

White

LED Test: LED display in the following order:
Copy LED > Fax LED > Scan LED > Menu LED > B&W LED > Color LED > Ready LED > Error LED >
Data LED > All LED ON flashing 3 times

Key Test: Shows Button Test information (Figure 1).
You can follow the auto-order Key test or press any key and LCD will display the button information.
LCD displays "KEY Test Finished" when complete (Figure 2).

Figure 1:

```
    Button Test
      -Use Keypad-
  Test Key: KEY_NONE
  Next Key: KEY_0T1
```

Figure 2:

```
    Button Test
      -Use Keypad-
   KEY Test Finished
```

Test	Display	Error Message	Test Description
Engine Diag	**Tests for print engine components.**		
Engine Test	• Start • Check OK or Engine Error		Print engine communication test. Run this test when the 024-371 error occurs.
Sensor Test	At the start, L - 0 is displayed. L changes to H and back to L while the counter increments when a sensor is turned On from Off. Component tests:		These tests check whether the sensors operate normally. The Sensor Test is performed for all the components. Press the **OK** button to run the selected test. Press **Cancel** to exit the test. The display returns to the Service Mode menu. Note: During the Sensor Test, no other diagnostic functions can be performed. The printer only accepts DI components and exit commands.

	Test		**Component**
DI-0	Fan Alarm		Fan
DI-2	No Paper Sensor		No Paper Sensor
DI-3	K Mode Sensor		Color Mode Sensor
DI-4	Exit Sensor		Exit Sensor
DI-5	Regi Sensor		Registration Sensor
DI-7	Interlock Switch		Interlock Switch
DI-8	CRUM Y Sensor		Yellow CRUM Sensor
DI-9	CRUM M Sensor		Magenta CRUM Sensor
DI-a	CRUM C Sensor		Cyan CRUM Sensor
DI-b	CRUM K Sensor		Black CRUM Sensor
Motor Test	Component tests:		These tests check operation of the electromechanical components. Press the **OK** button to run the selected test. Press **Cancel** to exit the test. The display returns to the Service Mode menu. During the Motor Tests, no other diagnostic functions can be performed. The printer only accepts component and exit commands.

Test	Display	Error Message	Test Description
DO-0 DO-1 DO-2	Main Motor (FULL) Main Motor (HALF) Main Motor (SLOW)		Main Drive Assembly **CAUTION:** When checking the Main Motor, stop the test within 10 seconds. Executing this test for 10 seconds or longer may cause damage to the printer.
DO-4 DO-5	Fan Motor (High) Fan Motor (LOW)		Fan Motor **CAUTION:** When checking the Fan Motor, stop the test within 10 seconds. Executing this test for 10 seconds or longer may cause damage to the printer.
DO-7	Regi Clutch		Drive Clutch
DO-9	Feed SOLENOID		Feed Solenoid
DO-b	K Mode SOLENOID		Developer Drive Assembly
DO-10 DO-12 DO-14 DO-16	Yellow Toner Motor Magenta Toner Motor Cyan Toner Motor Black Toner Motor		Toner Motors **CAUTION:** When checking the toner motors, stop the test within 3 seconds. Executing this test for 3 seconds or longer may cause damage to the printer.
DO-20	DBAC ON		Note: The use of DBAC ON, DBDC ON, TR1+ ON, TR2+ ON, TR2- ON, CR ON, MOB LED ON, ADC LED ON, 24V ON, HV CLK ON is prohibited to avoid shock hazards since they are high-voltage outputs.
DO-22	DBDC ON		
DO-26	TR1+ ON		
DO-28	TR2+ ON		
DO-2A	TR2- ON		
DO-2C	CR ON		
DO-2E	MOB LED ON		
DO-30	ADC LED ON		
DO-32	24V ON		
DO-34	HV CLK ON		
Edit NVM	• Ad0000=00000000* • Please wait		Displays current NVM values. Use this function to edit NVM information. **CAUTION:** Change NVM values only when directed to do so by a troubleshooting procedure.

Test	Display	Error Message	Test Description
Save NVM	Save NVM • Save NVM MCU -> ESS OK? • Saved • Please wait		Saves the MCU Board NVM to the IP Board temporarily when the MCU needs to be replaced.
Info Page	• Ready • Processing		Prints version information. The Configuration Page contains: • Engine ROM Revision No. • MCU NVM Revision No.
Print Settings	• Ready • Processing		Prints the configured settings. • Serial No. • Tone Correction On/Off • Counter Type • Full Color Print Count • Color 1 Print Count • Color 2 Print Count • B/W Print Count • Total Print Count • Full Color Backup Count • Color 1 Backup Count • Color 2 Backup Count • B/W Backup Count • Total Backup Count • Full Color Error Count • Color 1 Error Count • Color 2 Error Count • B/W Error Count
Serial No.	• YXLxxxxxx • YXMxxxxxx • YXNxxxxxx • YXRxxxxxx		Displays the 6 digit Serial Number. This value is editable.

Test	Display	Error Message	Test Description
Pixel Counter	• Y: nn.n • C: nn.n • M: nn.n • K: nn.n		Pixel count values of colors Y/M/C/K. (Read only.)
Print Counter	• Full Color Print • Color 1 Print • Color 2 Print • B/W Print • Total Print • Full Color Backup • Color 1 Backup • Color 2 Backup • B/W Backup • Total Backup • Full Color Error • Color 1 Error • Color 2 Error • B/W Error	•	Displays the respective counter values in the master NVM and backup NVM. (Read only.)
Clear All NVM	• OK? • Processing • Initialized	•	Clears all NVM.
Clear Job History	• OK? • Processing • Initialized		Deletes job history data from NVM.

Note: The available test prints are found in the Test Print menu. For a description of these test pages, see "Test Prints" on (Page 3-33).

X Margin Y, M, C, K	• -137 to 137		Adjusts registration in the feed direction.
Y Margin Y, M, C, K	• -3780 to 3780		Adjusts registration in the scan direction.
Skew Y, M, C, K	• -630 to 630		Adjusts the skew so that the image is parallel with both sides of the paper.
Bow Margin Y, M, C. K	• -100 to 100		Adjust print timing to keep print out put horizontal across the page as it feeds.

Test	Display	Error Message	Test Description
Lead Offset	• -94 to 94		Adjusts offset of the leading edge of the page
Side Offset	• -68 to 68		Adjust offset of the side of the page.
See the following illustration for additional explanation.			

Shifts the print area in this direction by reducing the value. ←

→ Shifts the print area in this direction by increasing the value.

X Margin Y, M, C, K

Y Margin Y, M, C, K

Default Value

↑

Shifts the print area in this direction by reducing the value.

Shifts the print area in this direction by increasing the value.

↓

Image Side

Default Value

s6020-229
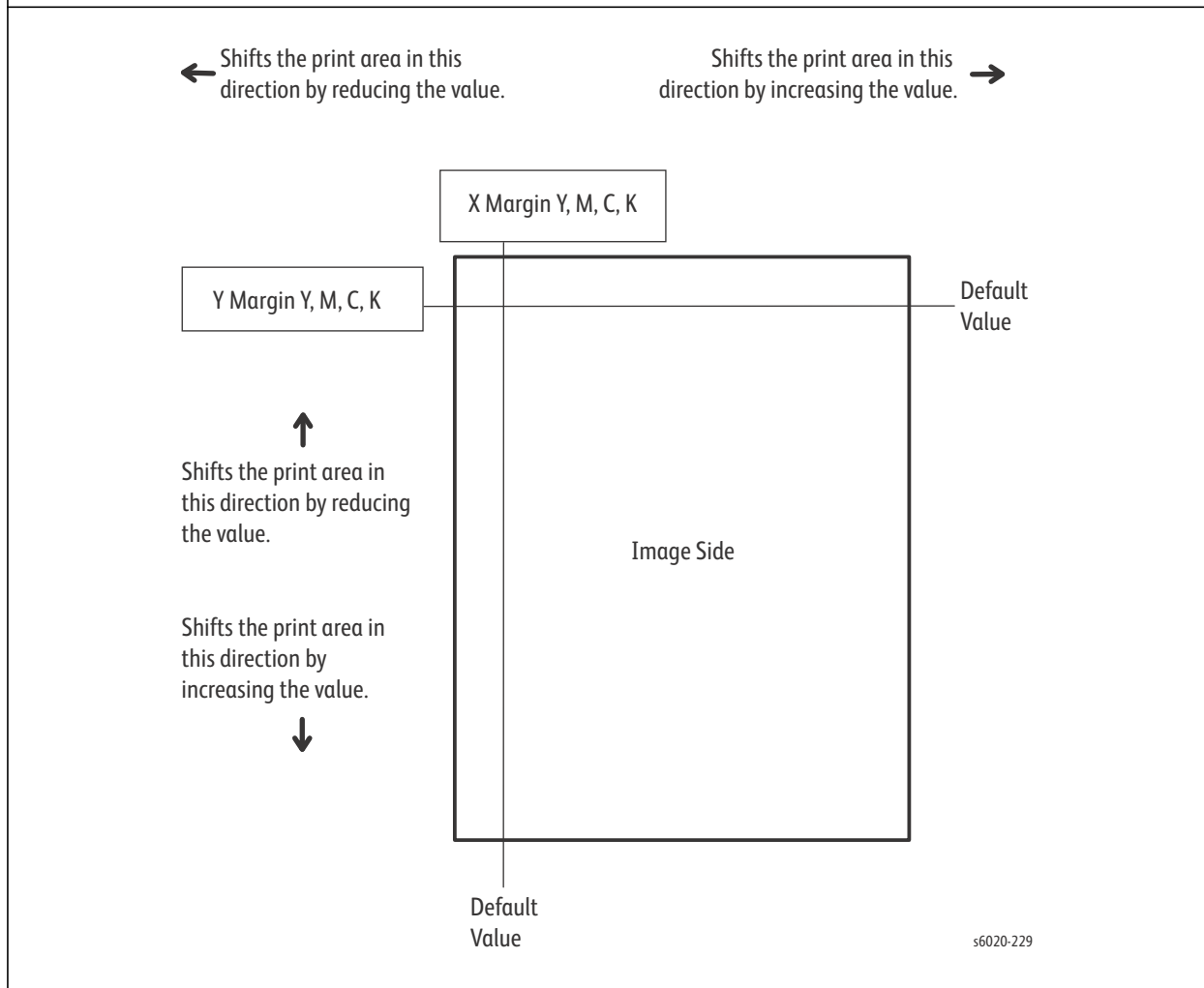
M/C Total PU	30000		
M/C FC PV	-		
DEVE Roundtime K	-		
DEVE Roundtime YMC	-		
XERO Roundtime	-		
M/C DispTime Y	-		

Test	Display	Error Message	Test Description
M/C DispTime M	-		
M/C DispTime C	-		
M/C DispTime K	-		
M/C Pixel Y	-		
M/C Pixel M	-		
M/C Pixel C	-		
LM/C Pixel K	-		
M/C ColorEmptyBW	-		
M/C Custom Start	-		
M/C Custom End	-		
Waste Toner Y	-		
Waste Toner M	-		
Waste Toner C	-		
Waste Toner K	-		
Toner PV Y	Std.: 700/High:14000		
Toner PV M	Std.: 700/High:14000		
Toner PV C	Std.: 700/High:14000		
Toner PV K	Std.: 700/High:14000		
Toner DispTime Y	-		
Toner DispTime M	-		
Toner DispTime C	-		
Toner DispTime K	-		
Toner TDCC Y	-		
Toner TDCC M	-		
Toner TDCC C	-		
Toner TDCC K	-		
Toner Pixel Y	-		
Toner Pixel M	-		
Toner Pixel C	-		
Toner Pixel K	-		

Digital Input Test Procedures

This function checks whether the Digital Input components operate normally or not. The Digital Input test is performed for all the Digital Input components. Select the component to test from the drop down list box, and then click the **OK** button. LOW or HIGH is displayed on the Result screen. The component operation is checked in such a way that the component status is changed from LOW to HIGH and vice versa by operating the actuator or opening/closing the door. To stop the operation, click the **Stop** button.

CE Diag "Printer" Sensor Tests

Procedures for testing each IOT sensor using Service Diagnostics.

> Note: See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.

Sensor Location

- No Paper Sensor
- K Mode Sensor
- Exit Sensor
- Registration Sensor
- Interlock Switch (Cover Open Sensor)
- Y, M, C, K CRUM

Phaser 6022
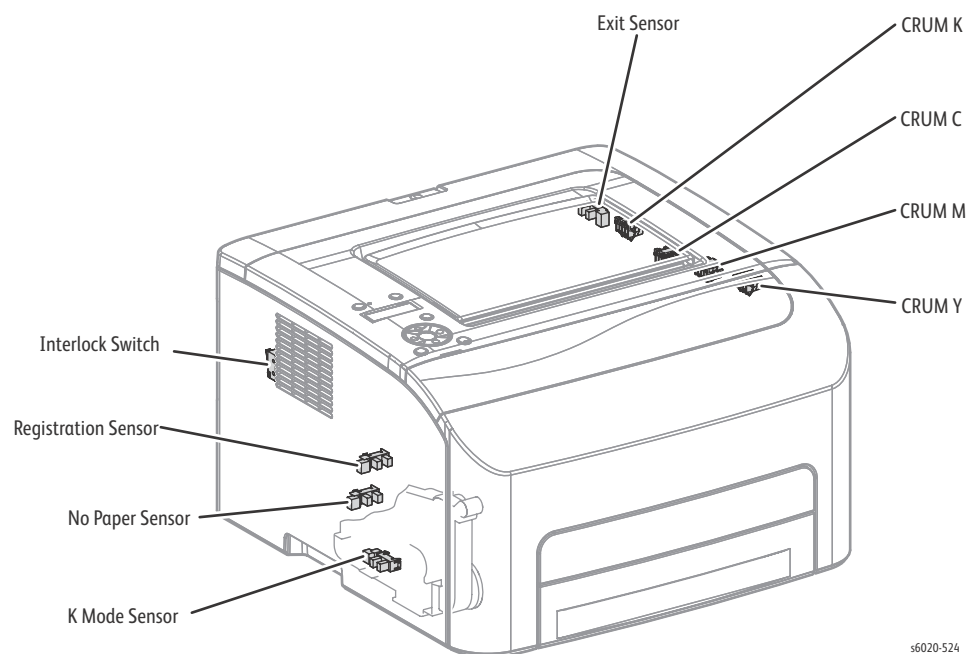
s6020-524

WorkCentre 6025 MFP

Exit Sensor

CRUM K

CRUM C

CRUM M

CRUM Y

Interlock Switch

Registration Sensor

K Mode Sensor

s6020-557

WorkCentre 6027 MFP

Exit Sensor

CRUM K

CRUM C

CRUM M

CRUM Y

Interlock Switch

Registration Sensor

No Paper Sensor

K Mode Sensor

s6020-595
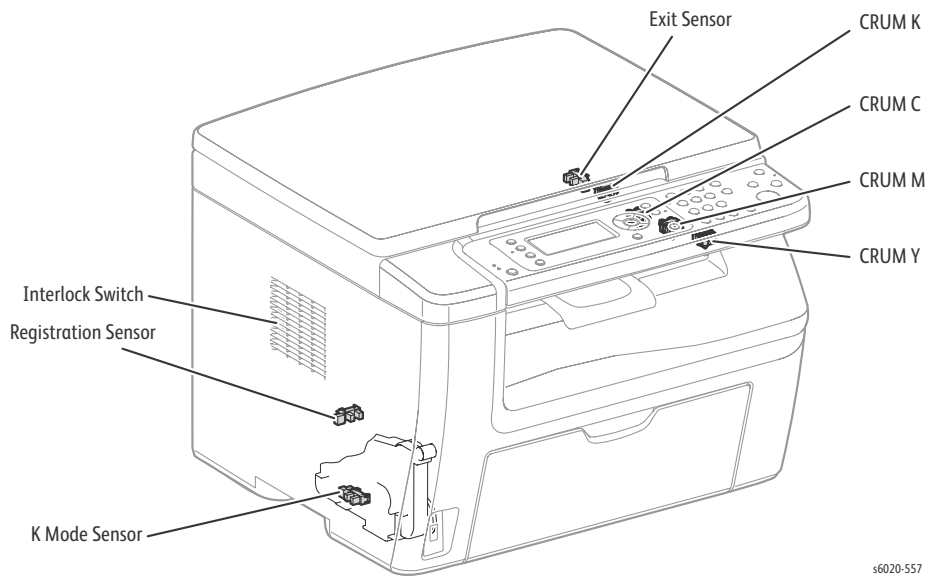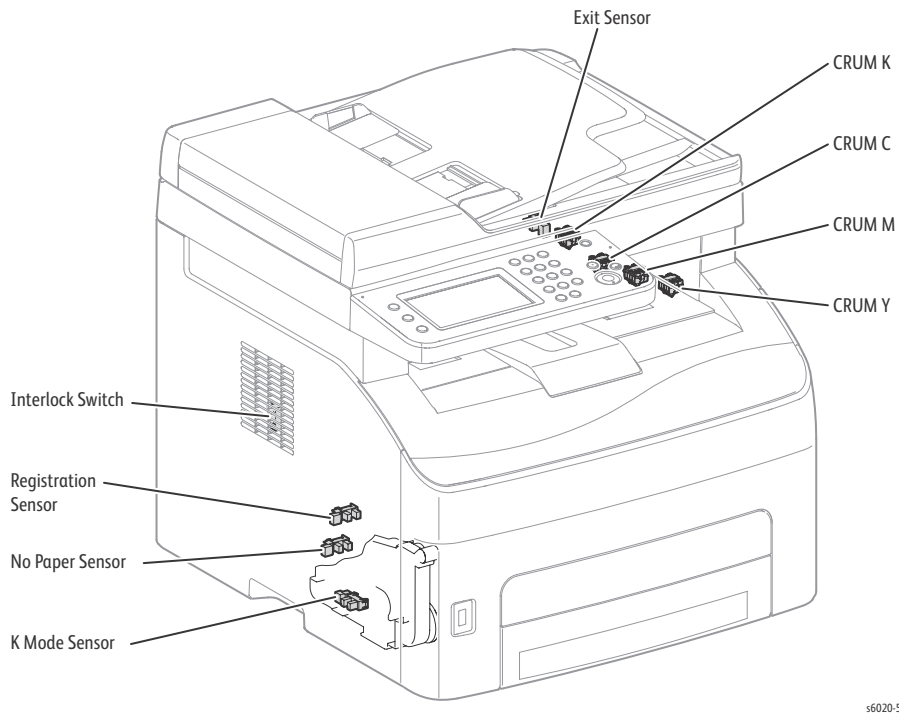
No Paper Sensor

1. Enter Service Diagnostics ((page 2-119)).
   - See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.
2. Run the No Paper test: **Engine Diag** > **Sensor Test** > **No Paper Sensor**.
3. Insert a sheet into the tray to check whether the sensor functions properly.
4. Confirm the number shown on the display increases each time the sheet is inserted.
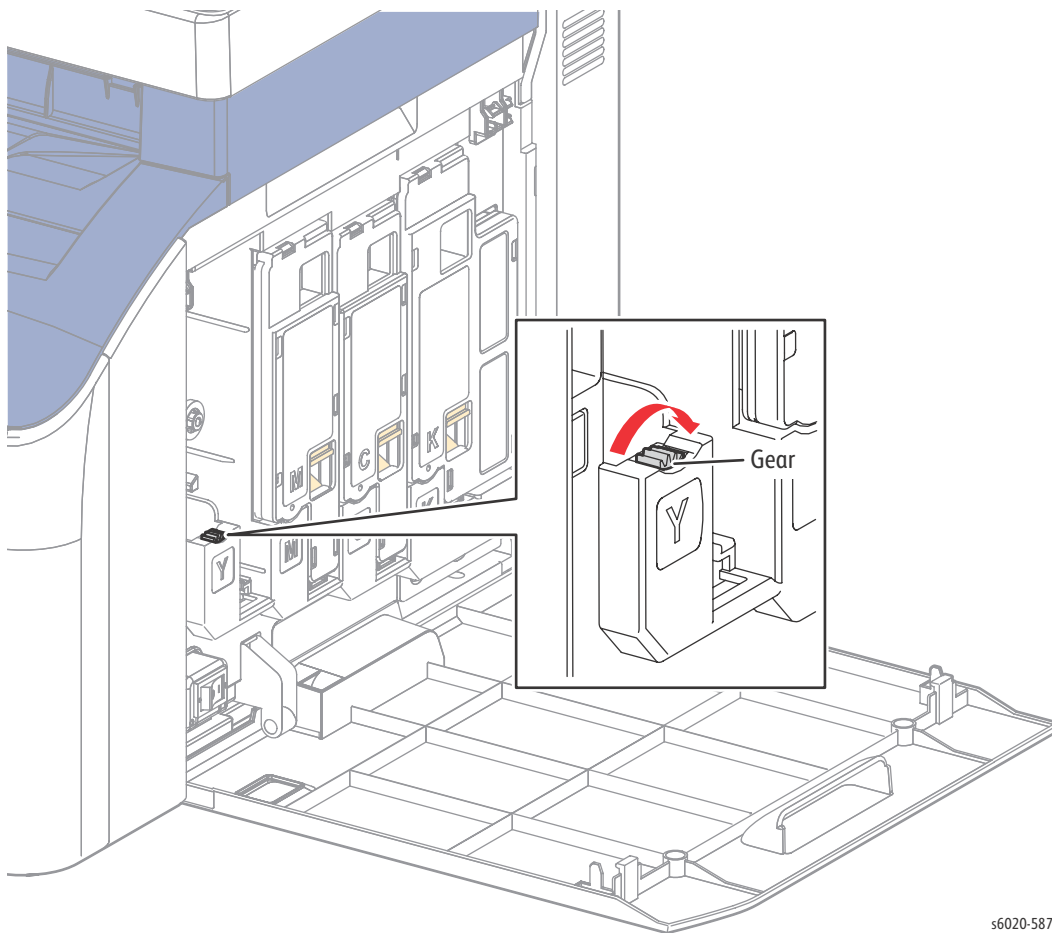5. Press the **Cancel** button to stop the test.

Paper

s6020-594
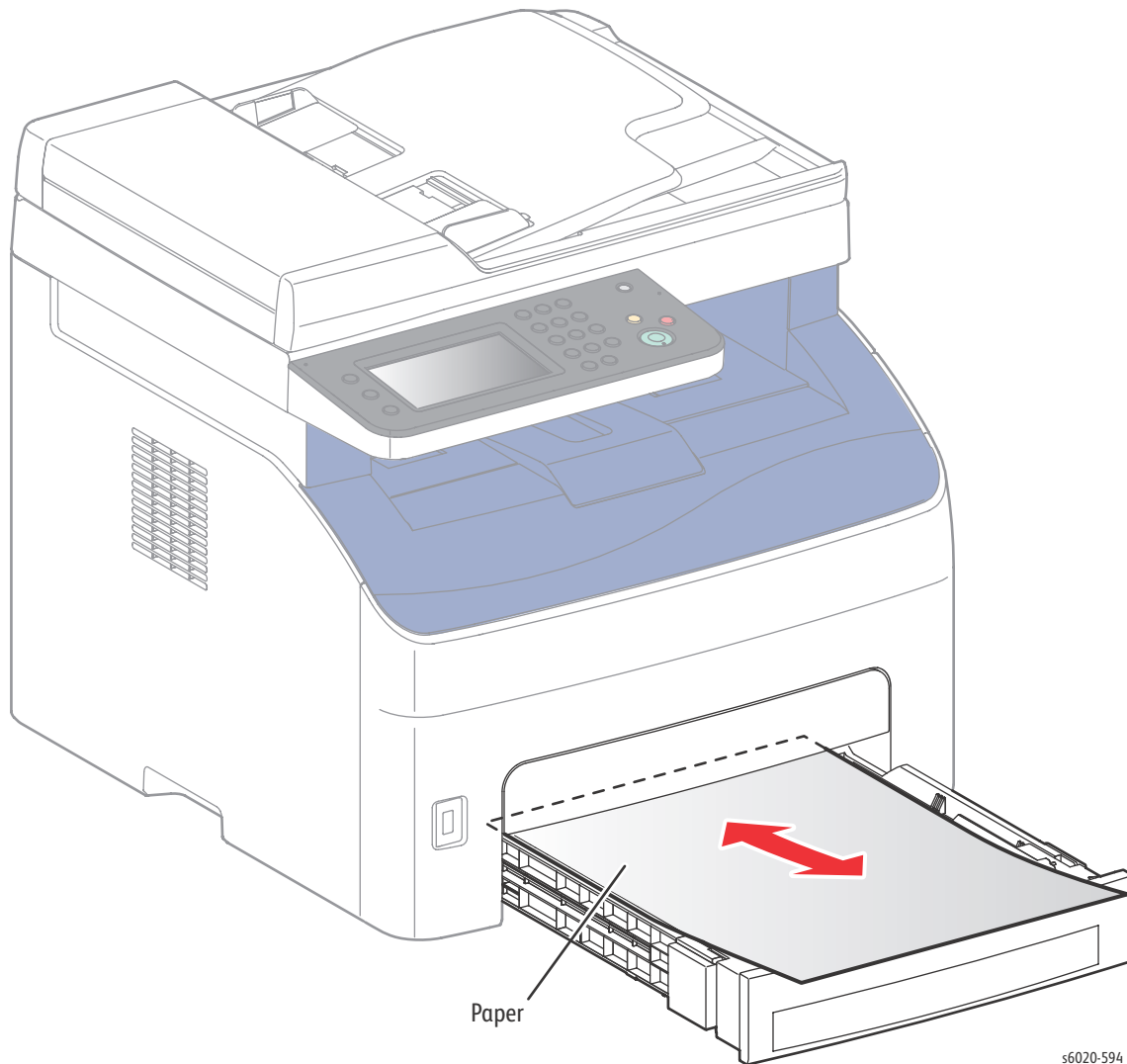
K Mode Sensor

1. Remove the Left Side Cover and Paper Tray Harness Guide.
2. Enter Service Diagnostics ((page 2-119)).
   - See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.
3. Run the K Mode test: **Engine Diag** > **Sensor Test** > **K Mode Sensor**.
4. Operate the actuator to check sensor function.
5. Confirm the number shown on the display increases every time the actuator is operated.
6. Press the **Cancel** button to stop the test.
7. Replace the Paper Tray Harness Guide and Left Side Cover.

K Mode Switching Sensor
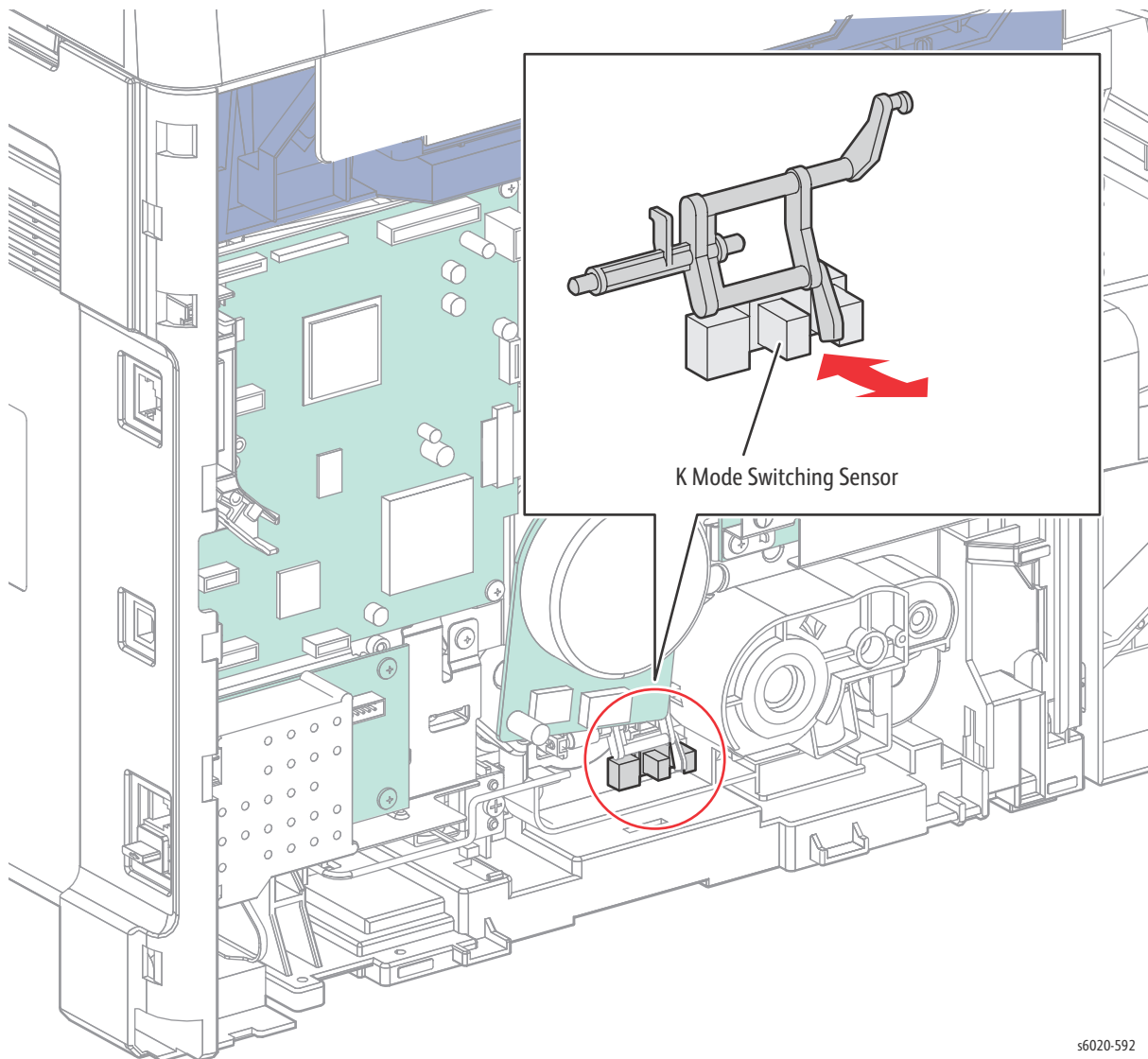
s6020-592

Exit Sensor

1. Enter Service Diagnostics ((page 2-119)).
   - See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.
2. Run the Exit Sensor test: **Engine Diag** > **Sensor Test** > **Exit Sensor**.
3. Operate the actuator to check sensor function.
4. Confirm the number shown on the display increases every time the actuator is operated.
5. Press the **Cancel** button to stop the test.
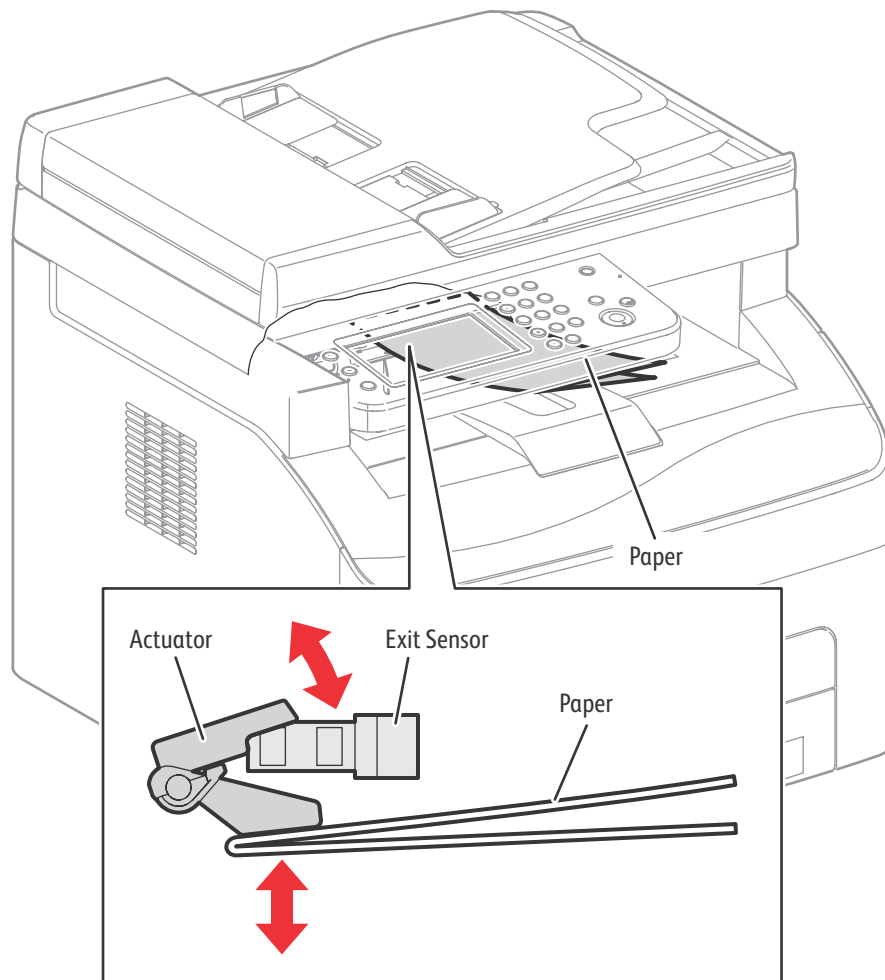
s6020-591

Registration Sensor

1. Enter Service Diagnostics ((page 2-119)).
   - See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.
2. Open the Rear Door.
3. Run the Registration Sensor test: **Engine Diag** > **Sensor Test** > **Regi Sensor**.
4. Operate the actuator to check sensor function.
5. Confirm the number shown on the display increases every time the actuator is operated.
6. Press the **Cancel** button to stop the test.
7. Close the Rear Door.

Actuator

Registration Sensor
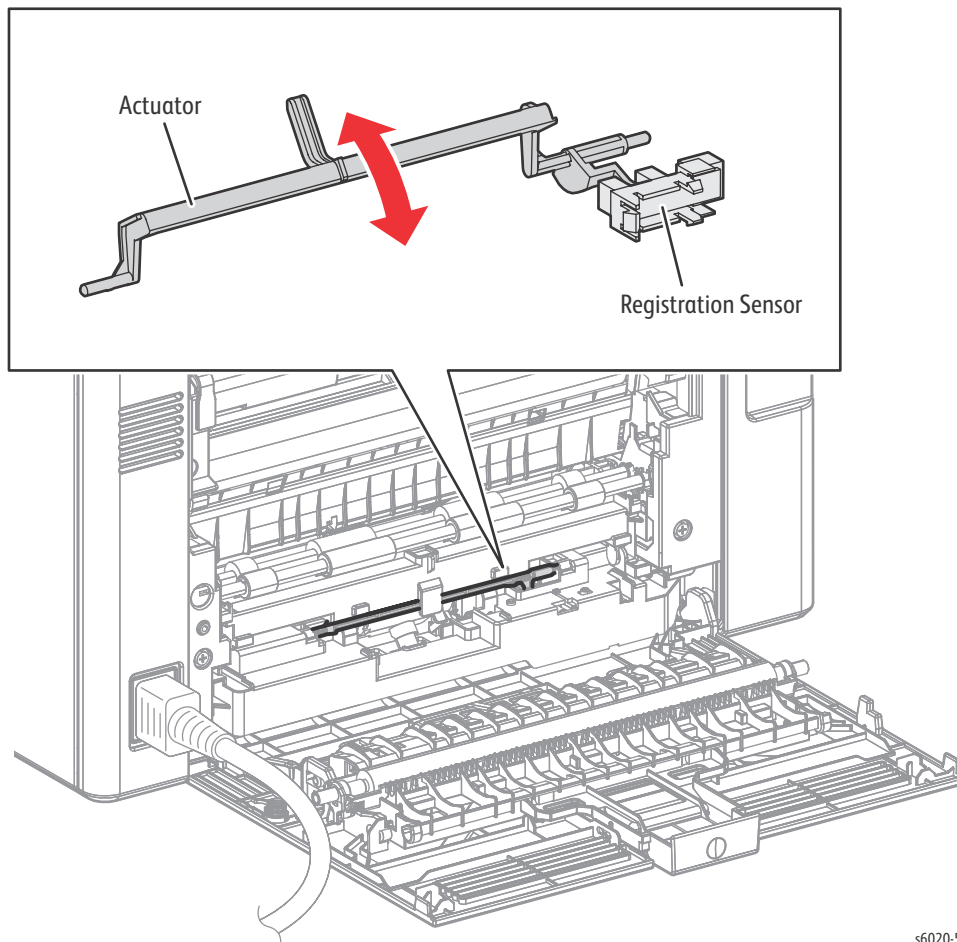
s6020-500

Rear Cover Interlock

1. Enter Service Diagnostics ((page 2-119)).
   - See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.
2. Run the Interlock Switch test: **Engine Diag** > **Sensor Test** > **Cover Open Sensor**.
3. Open and close the Rear Door to actuate the switch.
4. Confirm the number shown on the display increases every time the actuator is operated.
5. Press the **Cancel** button to stop the test.
6. Close the Rear Door.
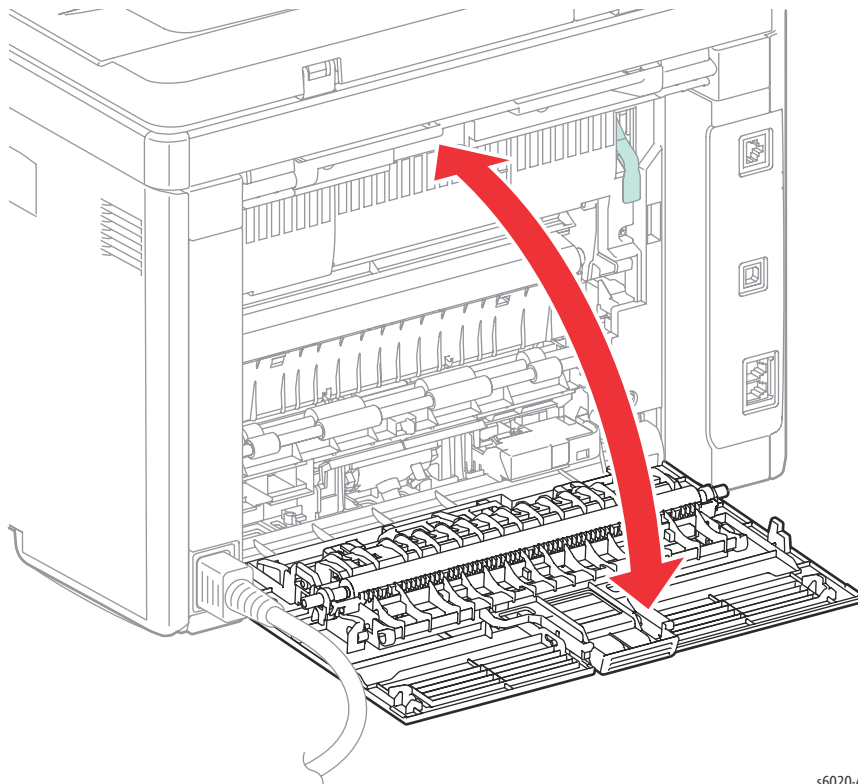
s6020-431

Y, M, C, K CRUM

1. Enter Service Diagnostics ((page 2-112)).
    - See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.
2. Open the Toner Door.
3. Use the **Up** and **Down Arrow** buttons to select **Printer > IOT Diag > DI-**X, where X is the code for the CRUM to test.
    - CRUM Y: DI-8
    - CRUM M: DI-9
    - CRUM C: DI-a
    - CRUM K: DI-b
4. Check whether the sensor functions properly by removing and replacing the toner cartridge under test.
5. Confirm the number shown on the display increases each time the toner cartridge is Removed.
6. Press the **Stop** button to stop the test.
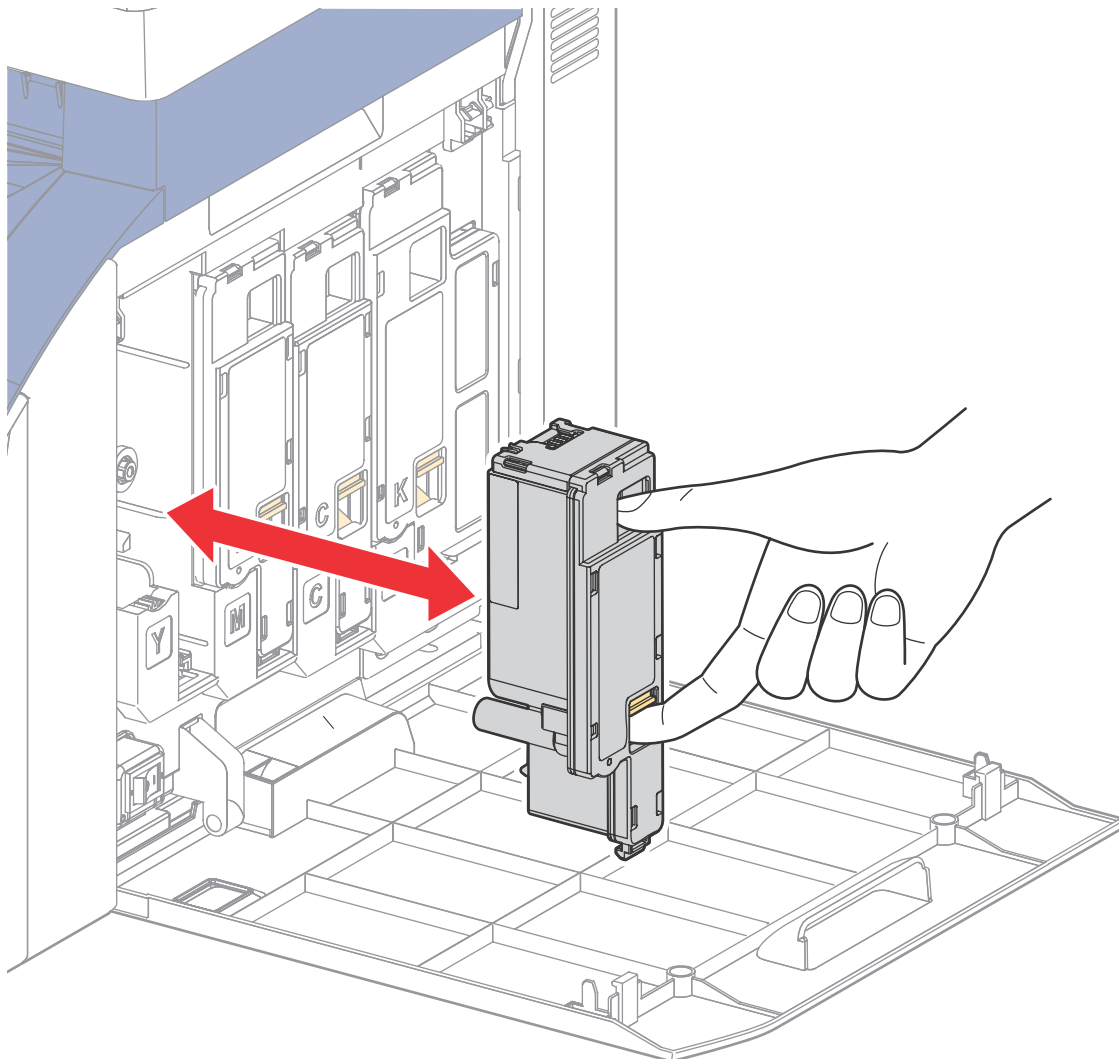
s6020-590

CE Diag "Printer" Motor Test Procedures

These tests check whether the Digital Output (DO) components (Motor, Clutch and Solenoid) operate. When the interlock is opened during a Motor Test the component stops.

When a paper jam or PQ problem occurs, or an error message or code is displayed, these tests help to pinpoint the faulty part. Before executing the test, examine the details of the jam, PQ problem, or error, and isolate the faulty parts. The following tests are available:

- Main Motor (Full, Half, Slow)
- Fan Motor (High, Low)
- Registration Clutch
- Feed Solenoid
- K Mode Solenoid

Phaser 6022

s6020-525

WorkCentre 6025 MFP

Fan Motor

Yellow/Magenta
Toner Motor

Cyan/Black
Toner Motor

Main Motor

K Mode Solenoid

Feed Solenoid

Registration Clutch
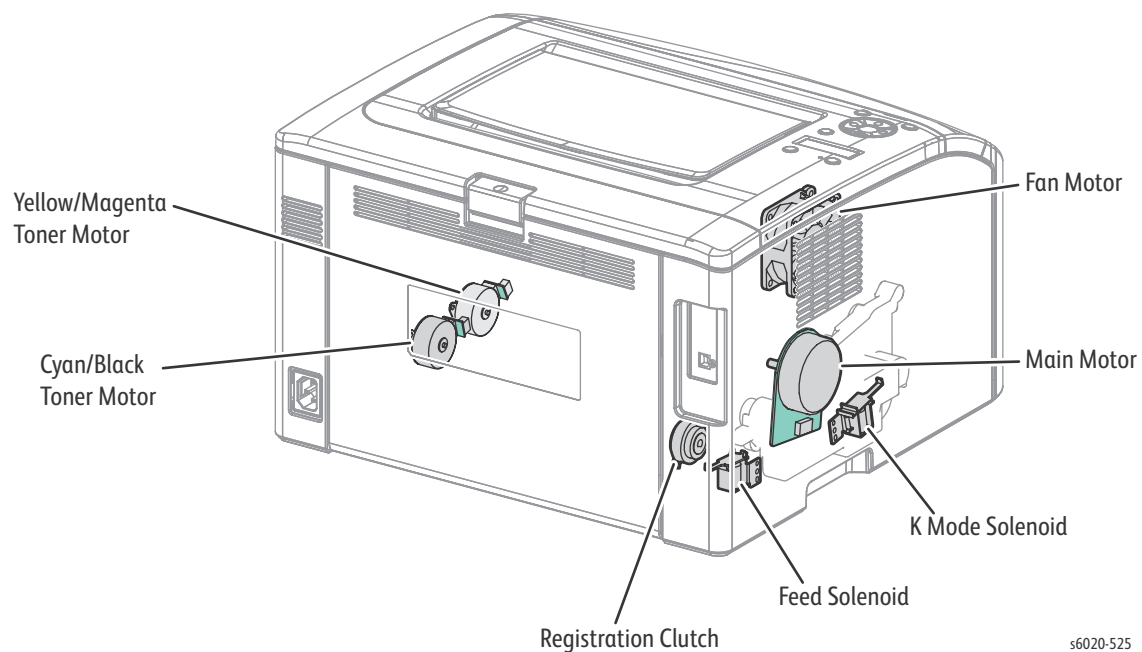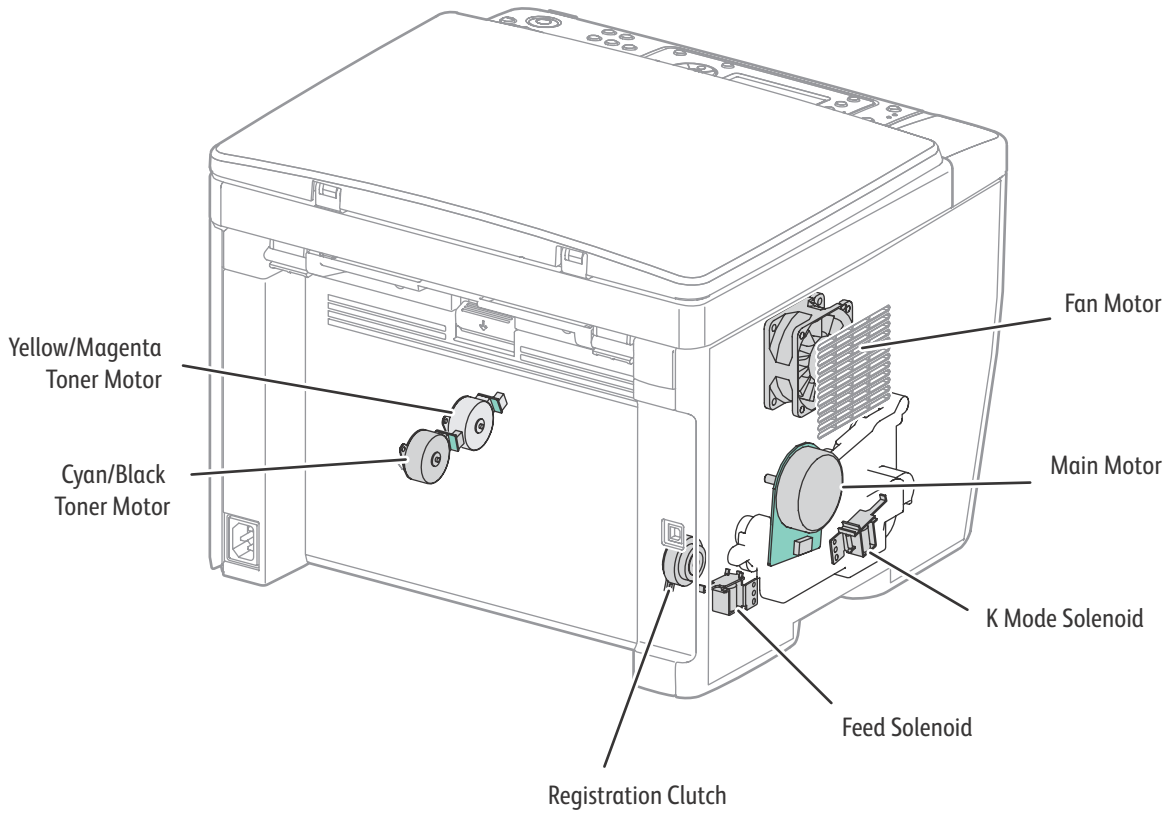
s6020-563

WorkCentre 6027 MFP

Yellow/Magenta
Toner Motor

Cyan/Black
Toner Motor

Fan

Main Motor

K Mode Solenoid

Feed Solenoid

Registration Clutch
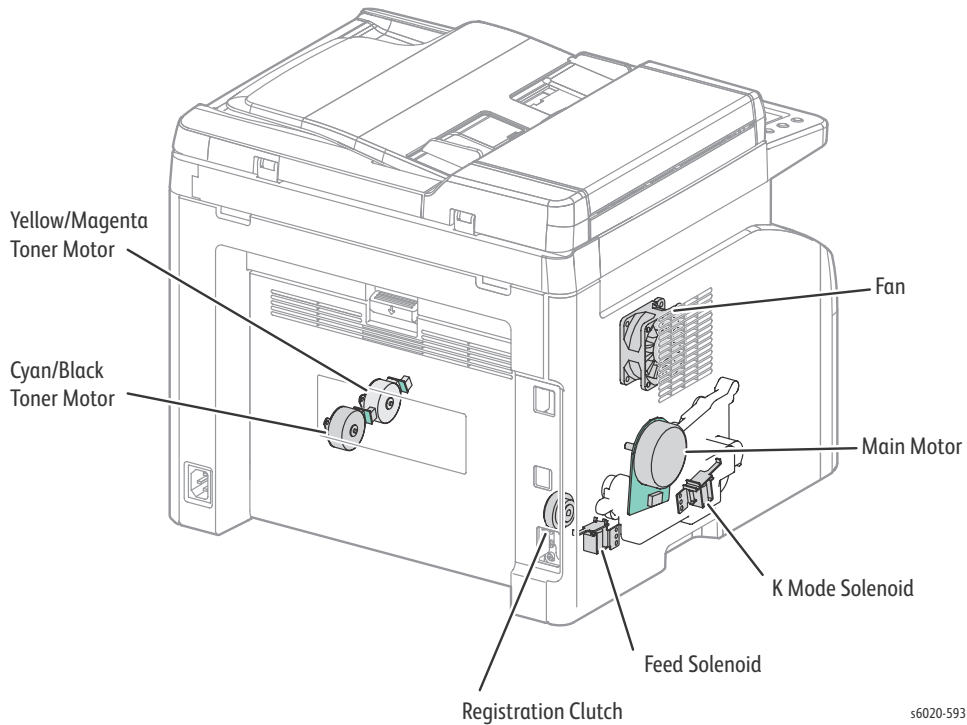
s6020-593

Main Motor

1. Enter Service Diagnostics ((page 2-119)).
    - See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.
2. Run the Main Motor (Full) test: **Engine Diag** > **Motor Test** > **Main Motor Full**.

⚠️ **CAUTION:** When checking the motor, stop the test within 10 seconds. Executing a motor check for 10 seconds or longer may cause damage to the printer.

To stop the motor check, press the **Cancel** button (or click the **Stop** button if performing the test from the CE Diag Tool).

3. Check that the Exit Roller rotates.
4. Press the **Cancel** button to stop the test.

Exit Roll

s6020-485
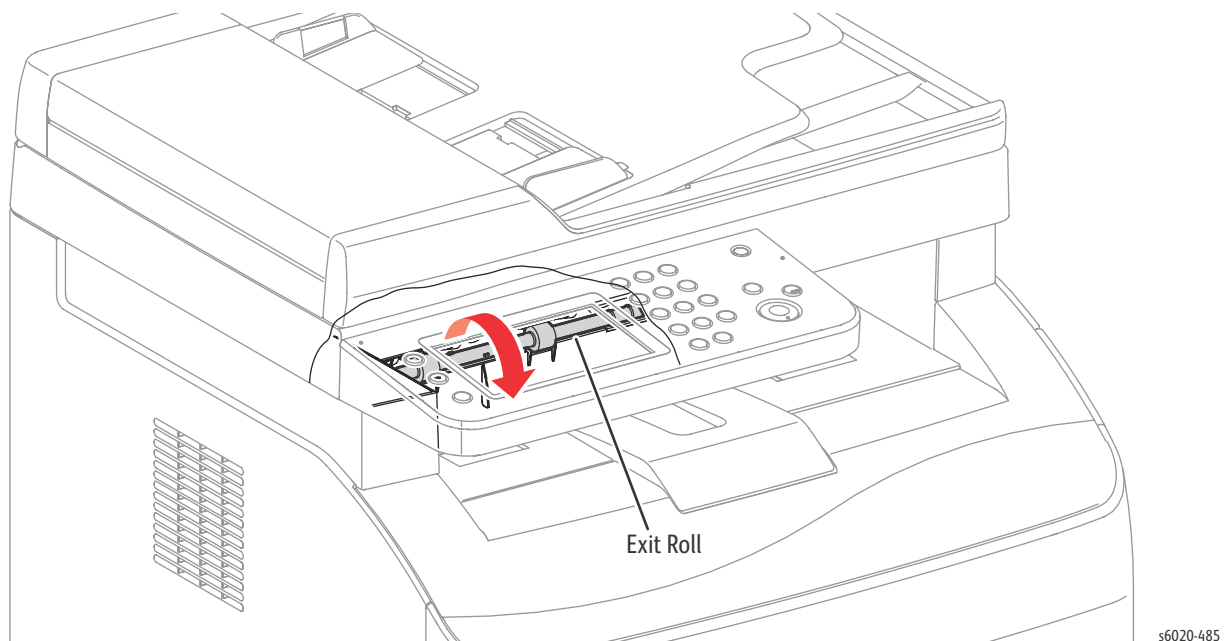
Fan

1. Enter Service Diagnostics ((page 2-119)).
   - See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.
2. Run the Fan (High) test: **Engine Diag > Motor Test > Fan High.**

⚠️ **CAUTION:** When checking the Fan, stop the test within 10 seconds. Executing the Fan test for 10 seconds or longer may cause damage to the Fan.

3. Check Fan rotation.
4. Press the **Cancel** button to stop the test.
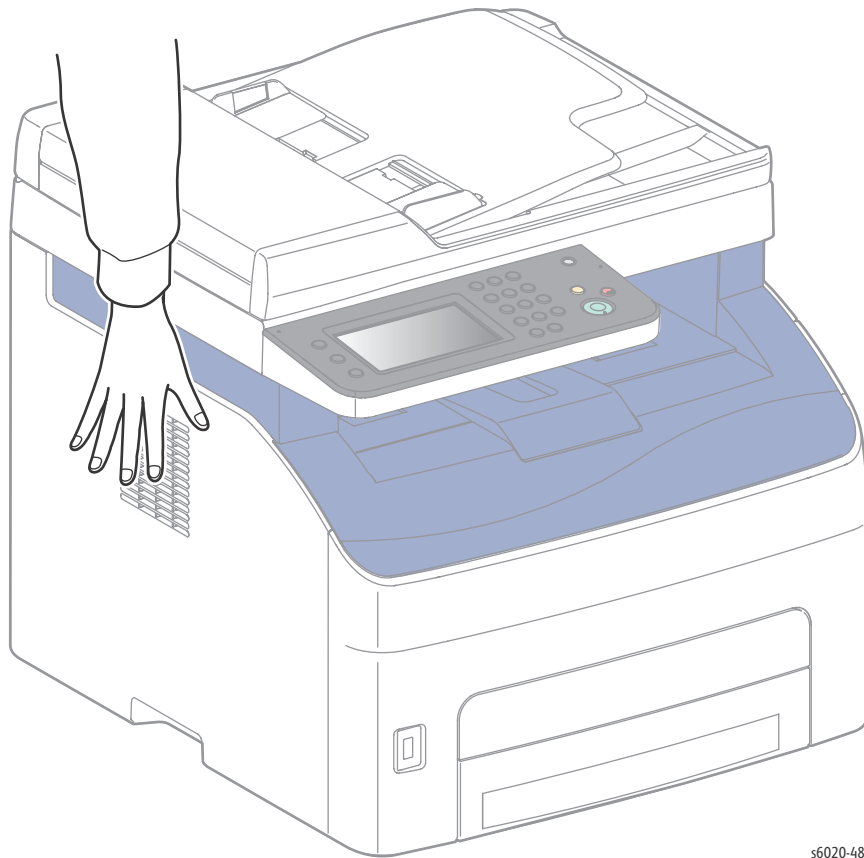
s6020-486

Registration Clutch

The Registration Roller rotates when the Main Motor (FULL) and the Regi Clutch tests are executed simultaneously.

1. Enter Service Diagnostics ((page 2-119)).
2. Open the Rear Door.
3. Close the Rear Door Interlock Switch.
4. Run the Main Motor Full and Registration Clutch tests: scroll to **Engine Diag > Motor Test > Main Motor Full** and press **OK**, then scroll down to **Regi Clutch** and press **OK**.
5. Check that the Registration Roller rotates.
6. Press the **Cancel** button to stop the Regi Clutch test.
7. Use the **Down Arrow** to scroll to the motor test and press **Cancel** to stop the motor test.
8. Open the Rear Door Interlock Switch.
9. Close the Rear Door.

Registration Rollers
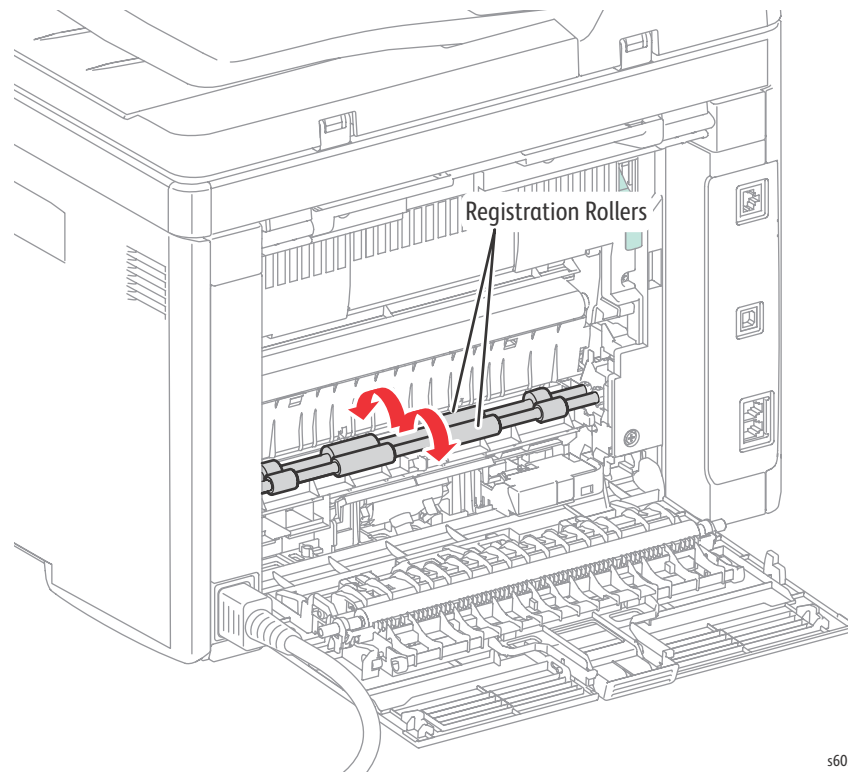
s6020-434

Feed Solenoid

The Feed Roller rotates when the Main Motor (FULL) and the Feed Solenoid tests are executed simultaneously.

1. Enter Service Diagnostics ((page 2-119)).
   - See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.
2. Remove the Paper Cassette.
3. Run the Main Motor Full and Feed Solenoid tests: go to **Engine Diag** > **Motor Test** > **Main Motor Full** and press **OK**, then scroll down to **Feed Solenoid** and press **OK**.
4. Check that the Feed Roller rotates.
5. Press the **Cancel** button to stop the Feed Solenoid test.
6. Use the **Down Arrow** to scroll to the motor test, and press **Cancel** to stop the motor test.
7. Replace the Paper Cassette.

Feed Roller
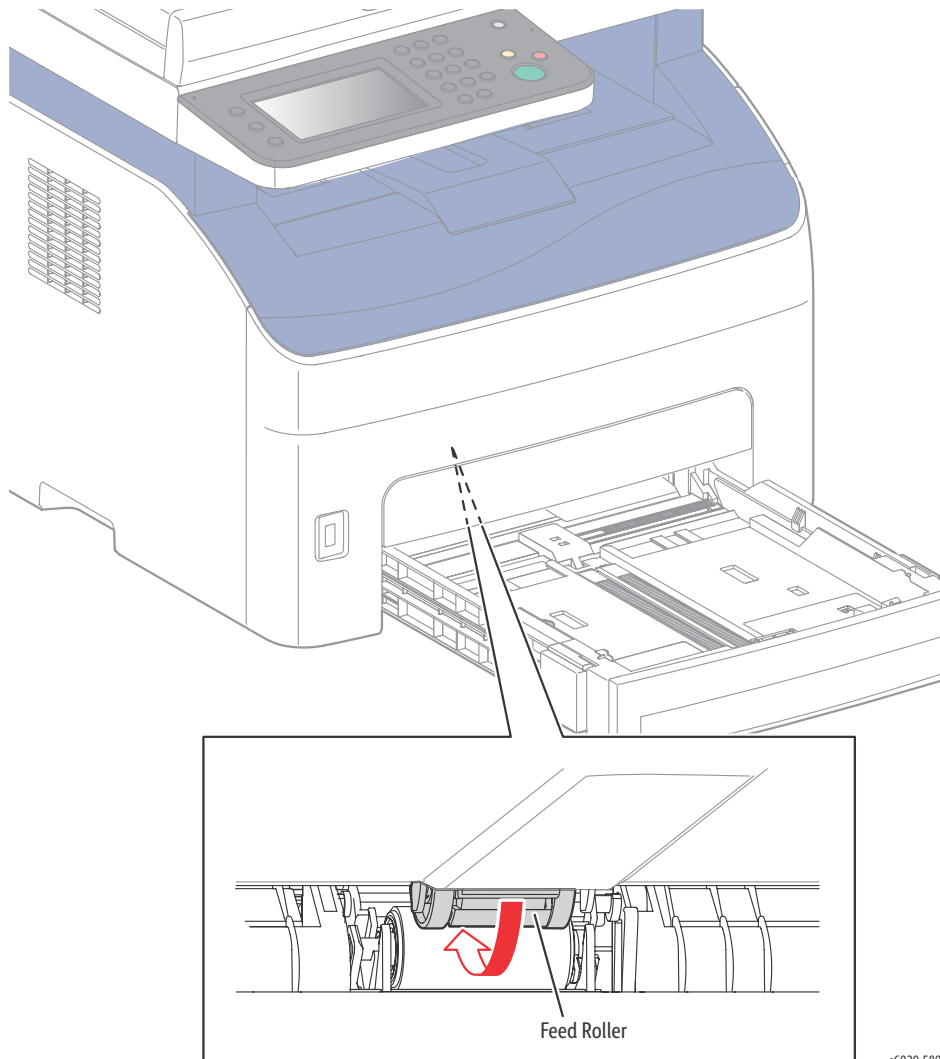
s6020-589

K Mode Solenoid

1. Remove the Left Side Cover and Paper Tray Harness Guide.
2. Enter Service Diagnostics ((page 2-119)).
    *   See "Using CE Diags with the Phaser 6020" on (Page 2-112) for testing the Phaser 6020.
3. Run the Color Mode Solenoid test: **Engine Diag** > **Motor Test** > **K Mode Solenoid**.
4. Check Color Mode Solenoid movement.
5. Press the **Cancel** button to stop the solenoid test.
6. Replace the Harness Guide and Left Side Cover.

K Mode Solenoid

s6020-588
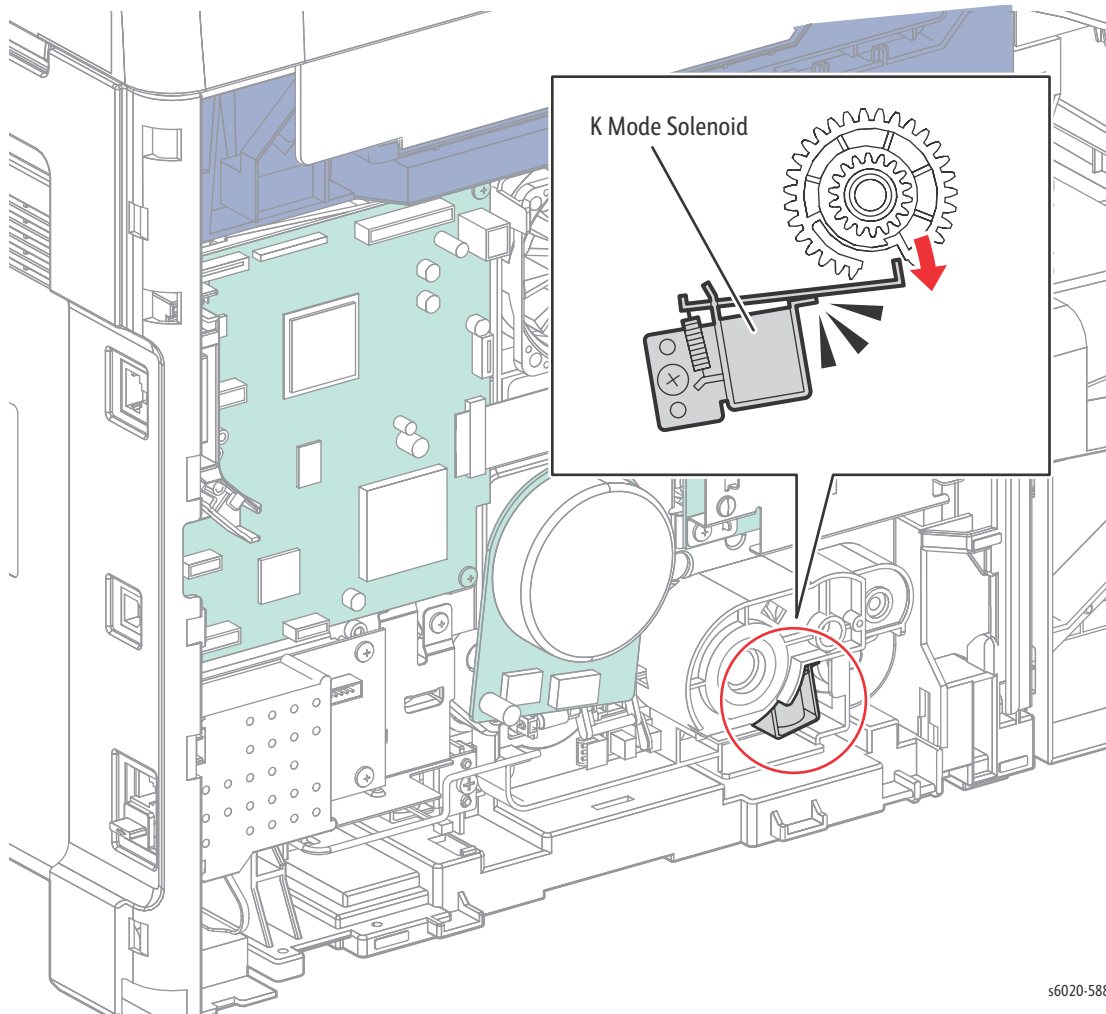
Y/M/C/K Toner Motor

1. Remove the Left Side Cover and Paper Tray Harness Guide.
2. Enter Service Diagnostics ((page 2-112)).
3. Run the Color Mode Solenoid test: **Printer > IOT Diag > Digital Output > DO-X**, where X is one of the following:

    - Yellow Toner Motor: DO-10
    - Magenta Toner Motor: DO-12
    - Cyan Toner Motor: DO-14
    - Black Toner Motor: DO-16

4. Remove the toner cartridge under test.
5. Check that the toner motor gear rotates.
6. Press the **Stop** button to stop the test.
7. Replace the toner cartridge and close the Toner Door.

Gear

s6020-587

WorkCentre 6025 MFP Specific CE Diags

SSB Board

Console Assembly

Carriage Assembly

Scanner Home
Position Sensor

Carriage Motor

IP Board

Front USB Assembly
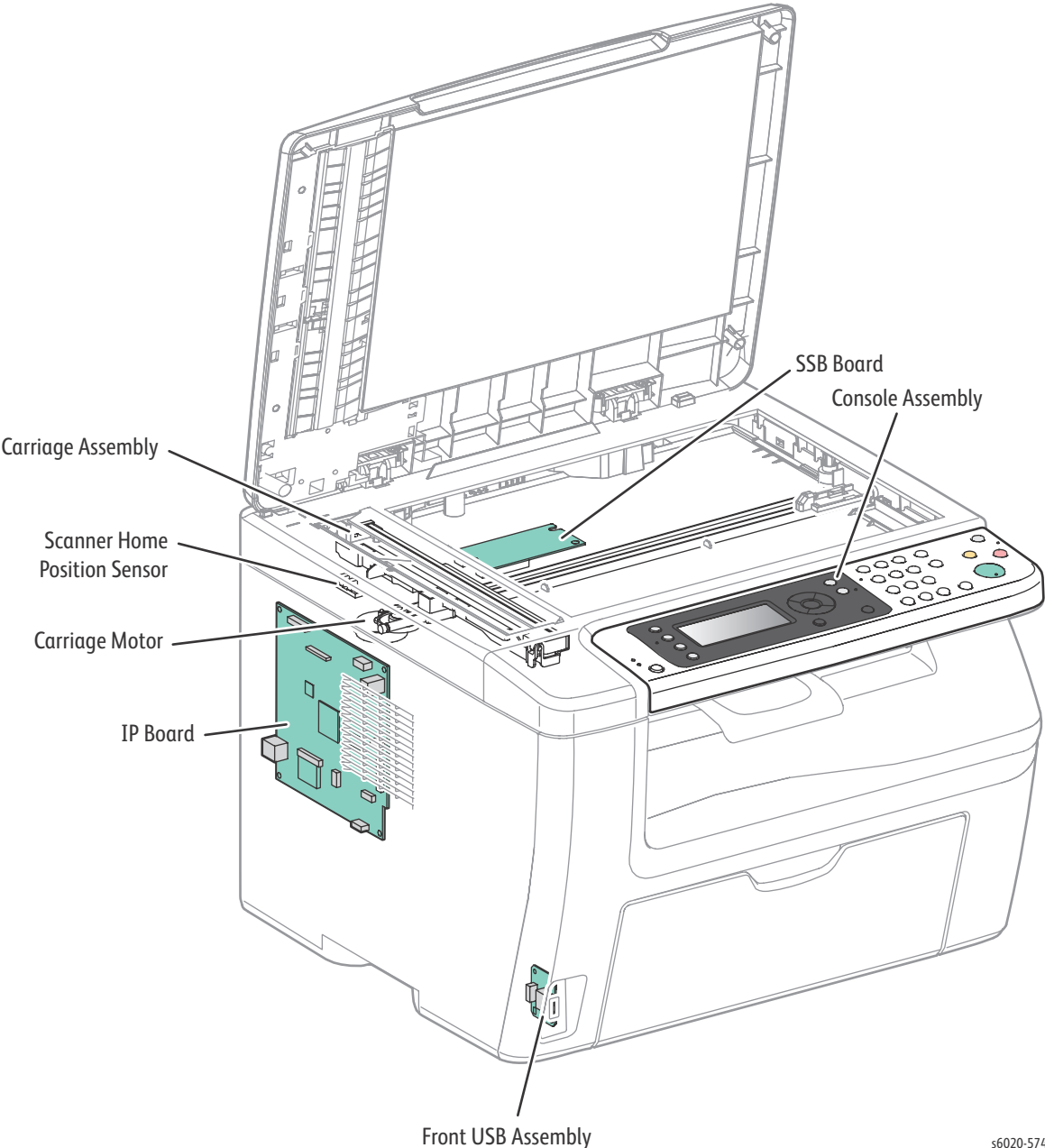
s6020-574

WorkCentre 6025 MFP Scanner Diagnostic Test Procedures

Test	Control Panel (WorkCentre 6025 MFP)	Description
Scan Counter	FB: 0x00000000 ADF: 0x00000000	Displays the scan counter value. • FB: Platen scans
White Balance	White Balance	Reports the result of white balance which is performed while the printer powers up.
Registration Param.		This function adjusts the registration parameters of the scanner.
Regi FB Lead	-2.0 mm to 2.0 mm, in 0.1 mm step	Adjusts Registration of the flatbed leading edge.
Regi FB Side	-1.0 mm to 1.0 mm, in 0.1 mm steps	Adjusts Registration of the flatbed side edge.
Auto Registration		Reports the result of auto registration which is performed while the printer powers up.
IIT I/O Check	• FB Home Sensor	Check the on/off of the flatbed home position sensor.
Scan Counter Clear		This function clears the flat bed counters.
	All Clear	Clears all of the backup data.
	User & System Clear	Clears stored: document data, address information, communication management data, and history. Initializes the system data.
	System Data Init	Initializes the system data.
	Complete	Exits the diagnostics and returns to normal operation taking the changes of the data into effect.

Extended ESS Diags for the WorkCentre 6027 MFP

Scanner Test 1

Checks the scanner motor system for carriage movement then moves the scanner carriage between the home position and the maximum image area. "Carriage Motor On" will display on the OP Panel during carriage movement. The test is complete at the home position and the OP Panel reads "Carriage Motor Off".

Message During Test	Message After Test
Carriage Motor-On	Carriage Motor -Off

WorkCentre 6027 MFP Specific CE Diags

Carriage Assembly

Scanner Home
Position Sensor

Carriage Motor

IP Board

Fax Board

SSB Board
Control Panel

Front USB Board
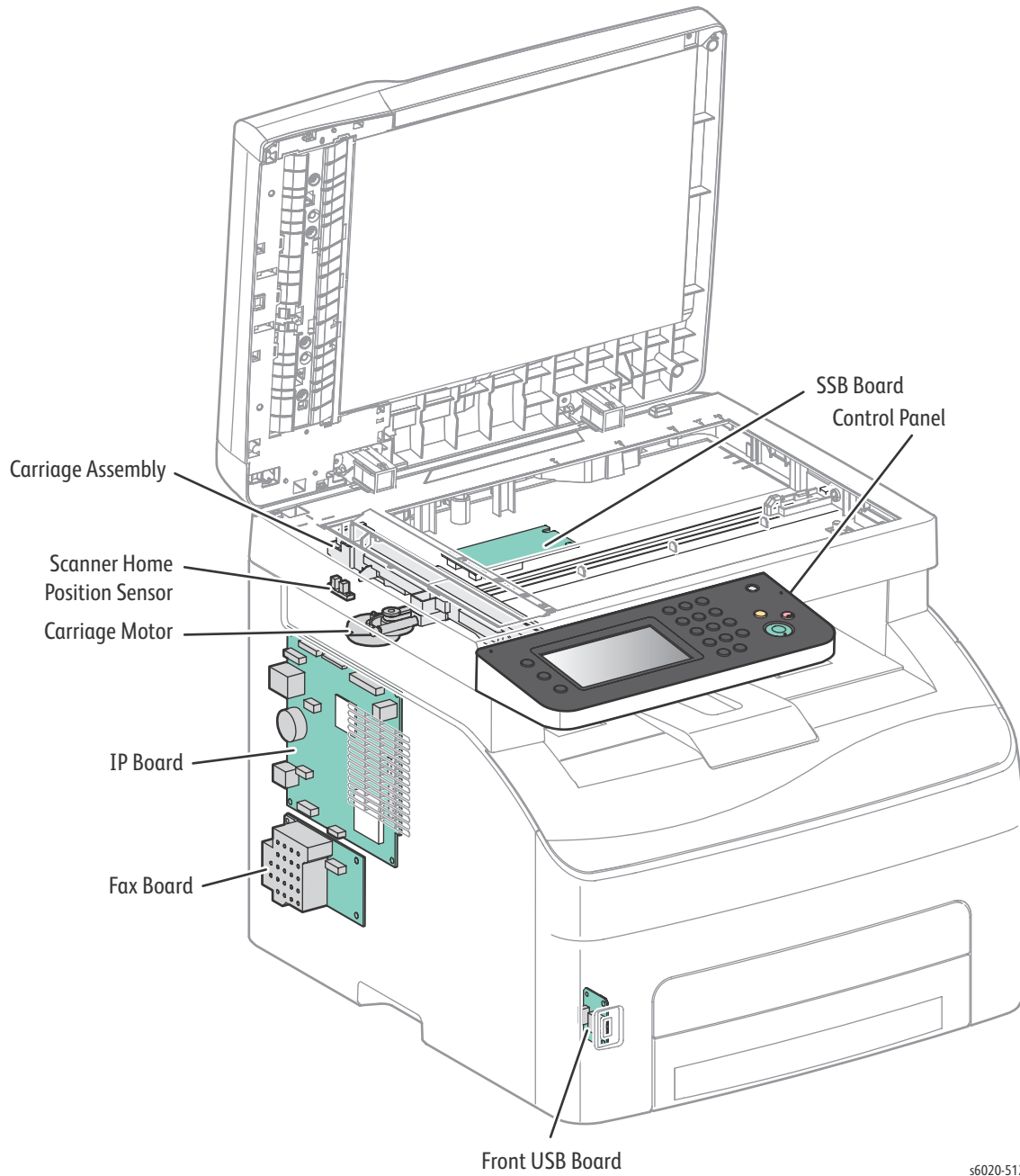
s6020-512

WorkCentre 6027 MFP FAX/Scanner Diagnostic Test Procedures

⚠️ **CAUTION:** Do not turn the printer Off during ESS Diag testing.

Test	Control Panel (WorkCentre 6027 MFP)	Description
Scan Counter	FB: 0x00000000 ADF: 0x00000000	Displays the scan counter value. • FB: Platen scans • ADF: ADF scans
White Balance	White Balance	Reports the result of white balance which is performed while the printer powers up.
Registration Param.		This function adjusts the registration parameters of the scanner.
Regi ADF Lead	-2.0 mm to 2.0 mm, in 0.1 mm steps	Adjusts Registration of the ADF leading edge.
Regi ADF Side	-1.0 mm to 1.0 mm, in 0.1 mm steps	Adjusts Registration of the ADF side edge.
Regi FB Lead	-2.0 mm to 2.0 mm, in 0.1 mm step	Adjusts Registration of the flatbed leading edge.
Regi FB Side	-1.0 mm to 1.0 mm, in 0.1 mm steps	Adjusts Registration of the flatbed side edge.
Auto Registration		Reports the result of auto registration which is performed while the printer powers up.
IIT I/O Check	• FB Home Sensor • ADF Scan Sensor • ADF Document Sensor • ADF Cover Sensor	Tests the scanner sensors.
Scan Counter Clear		This function clears the flat bed and ADF counters.

Test	Control Panel (WorkCentre 6027 MFP)	Description
	Menu	
Pulse Dialing	Enable Pulse Dialing	No Change Available
	Pulse dial make/break ratio	0: 30 % / 70 % 1: 32 % / 68 % 2: 33 % / 67 % 3: 36 % / 64 % 4: 38 % / 62 % 5: 39 % / 61 % 6: 40 % / 60 % 7: 42 % / 58 %
	Enable 20 PPS DP	No Change Available
DTMF Tone	DTMF high tone level (-dB)	0: -3 dB, 1: -4 dB, 2: -5 dB, 3: -6 dB, 4: -7 dB, 5: -8 dB, 6: -9 dB, 7: -10 dB
	DTMF high/low level difference (dB)	0: 0 dB, 1: -1 dB, 2: -2 dB, 3: -3 dB, 4:- 4 dB, 5: -5 dB
	DTMF Dialing Speed (ms)	0: 70 ms, 1: 80 ms, 2: 85 ms, 3: 90 ms, 4: 95 ms, 5: 100 ms, 6: 105 ms, 7: 110 ms
Ring Detection	Freq Range @ On Period -- Upper Bound	27~85 Hz
	Freq Range @ On Period -- Lower Bound	13~20 Hz
	Minimum On time	0: 100 ms, 1: 110 ms, 2: 120 ms, 3: 130 ms, 4: 140 ms, 5: 150 ms, 6: 160 ms, 7: 170 ms, 8: 180 ms, 9: 190 ms, 10: 200 ms, 11: 210 ms, 12: 220 ms, 13: 230 ms, 14: 240 ms, 15: 250 ms
	Off time	0: 500 ms, 1: 600 ms, 2: 700 ms, 3: 800 ms, 4: 900 ms, 5: 1000 ms, 6: 1100 ms, 7: 1200 ms, 8: 1300 ms, 9: 1400 ms, 10: 1500 ms, 11: 1600 ms, 12: 1700 ms, 13: 1800 ms, 14: 1900 ms, 15: 2000 ms
	Ring Threshold	5V - 36V

Test	Control Panel (WorkCentre 6027 MFP)	Description
Busy Tone Detection	Enable Busy Tone Detection	0: Disable, 1: Enable
	On duration (Max duration)	0~80 (10 ms)
	On duration (Min duration)	0~30 (10 ms)
	Off duration (Max duration)	0~80 (10 ms)
	Off duration (Min duration)	0~30 (10 ms)
	No. of cycle for busy condition	0: 3, 1: 4, 2: 5, 3: 6
	Power Threshold	0: 35 dB, 1: 36 dB, 2: 37 dB, 3: 38 dB, 4: 39 dB, 5: 40 dB, 6: 41 dB, 7: 42 dB, 8: 43 dB, 9: 44 dB, 10: 45 dB, 11: 46 dB, 12: 47 dB, 13: 48 dB, 14: 49 dB, 15: 50 dB
	TEL/FAX Power Threshold	0: -22 dB, 1: -24 dB, 2: -26 dB, 3: -28 dB, 4: -30 dB, 5: -32 dB, 6: -34 dB, 7: -36dB
Dial Tone Detection	Enable Dial Tone Detection	0: Disable, 1: Enable
	Validation Time	6~30 (100 ms)
	Power Threshold	0: 35 dB, 1: 36 dB, 2: 37 dB, 3: 38 dB, 4: 39 dB, 5: 40 dB, 6: 41 dB, 7: 42 dB, 8: 43 dB, 9: 44 dB, 10: 45 dB, 11: 46 dB, 12: 47 dB, 13: 48 dB, 14: 49 dB, 15: 50 dB
Call Progress Tone Freq. Filter	Call Progress Tone Freq. Filter	0: 340 Hz ~ 560 Hz 1: 310 Hz ~ 485 Hz 2: 363 Hz ~ 502 Hz 3: 276 Hz ~ 504 Hz 4: 415 Hz ~ 460 Hz 5: 310 Hz ~ 640 Hz 6: 370 Hz ~ 525 Hz
RX Power	Rx Call Detection Level	0: -36 dB, 1: -37 dB, 2: -38 dB, 3: -39 dB, 4: -40 dB, 5: -41 dB, 6: -42 dB, 7: -43 dB, 8: -44 dB, 9: -45 dB, 10: -46 dB, 11: -47 dB, 12: -48 dB
TX Power	Tx Cable Equalizer	0: 0 dB, 1: 2 dB, 2: 4 dB, 3: 6 dB, 4: 8 dB, 5: 10 dB, 6: 11 dB, 7: 12 dB
	Tx Signal Level	0: -3 dB, 1: -4 dB, 2: -5 dB, 3: -6 dB, 4: -7 dB, 5: -8 dB, 6: -9 dB, 7: -10 dB, 8: -11 dB, 9: -12 dB, 10: -13 dB, 11: -14 dB, 12: -15 dB, 13: -16 dB, 14: -17 dB, 15: -18 dB
	TCF Training Time	-35s - 35s
External Hook Threshold	High voltage	High (20~40 V)
	Medium voltage	Medium (10~19 V)
	Low voltage	Low (5~9 V)

Test	Control Panel (WorkCentre 6027 MFP)	Description
FAX Capability Setting	Best Coding Capability	0: MH, 1: MR, 2: MMR, 3: JBIG
	All Clear	Clears all of the backup data.
	User & System Clear	Clears the stored document data, the address information, the communication management data, and the history. Initializes the system data.
	System Data Init	Initializes the system data.
	Complete	Exits the diagnostics and returns to normal operation, taking the changes of the data into effect.

Extended ESS Diags for the WorkCentre 6027 MFP

ESS Diag testing of the WorkCenter 6027 MFP adds 3 tests not found in the Phaser 6020/6022 and WorkCentre 6025 MFP; Fax Card Test, Scanner Test 1, and Scanner Test 2.

1. Turn off the printer power.
2. Turn on the power while holding down the "2" and "8" keys.
3. Release the fingers from these keys when the "CE Mode" is displayed.
4. The "CE Mode", "Printer" and "FAX/Scanner" are displayed.
5. Press "8" key. (Select the "Fax/Scanner" Diag. mode.)
6. Press "5" key. (Entered the "Fax/Scanner" Diag. mode.)
7. Press "2" and "8" key to select the test item.
8. Press "5" key twice to execute the test.

Fax Card Test

Checks communication with the FAX card and then reads registers of the FAX card to check whether commands can be exchanged between the FAX card and IP Board.

Normal message	Error message
CHECK OK	FAX CARD ERROR

Scanner Test 1

Checks the scanner motor system for carriage movement then moves the scanner carriage between the home position and the maximum image area. "Carriage Motor On" will display on the OP Panel during carriage movement. The test is complete at the home position and the OP Panel reads "Carriage Motor Off".

Message During Test	Message After Test
Carriage Motor-On	Carriage Motor -Off

Scanner Test 2

Checks the motor system for ADF document handling. Place paper in the ADF before and press [OK} to start. ""ADF Motor ON" is displayed on the OP Panel while the test is running. The test completes when original comes out on the exit tray and the OP Panel displays, "ADF Motor OFF".

Message During Test	Message After Test
ADF Motor-On	ADF Motor -Off

The table below shows the scanner motor speed when running Scanner Test 1 and Scanner Test 2 respectively.

Test	Motor Speed (unit: PPS)	Motor Speed (unit: mm/sec)	Micro-step
Test 1 (FB)	9064	95.93	1/4 (2400dpi gear ratio)
Test 2 (ADF)	2268	96.01	1/4 (600dpi gear ratio)

Fax

Initial Actions

- Cycle printer power.
- If the problem persists, follow the procedure below.
- Resend the FAX.

Step	Actions and Questions	Yes	No
1.	Place a document on the platen, and make a copy. Did the copy print correctly?	Go to step 2.	Go to step 4.
2.	If the copy printed correctly, the fault is likely in the telephone line or with the receiving printer. If the fault is in the telephone line, first retry sending the FAX. If there is no improvement, check that the copy function at the receiving printer functions correctly. Did the copy at the receiving printer function correctly?	Go to step 3.	Complete. The fault lies with the destination printer.
3.	Contact the telephone company. Note: 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.		
4.	Clean the platen glass. Did cleaning the glass correct the problem?	Complete.	Go to step 5.
5.	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. Does the problem persist?	Repair the ADF ().	Repair the scanner. Need a topic to link to for the Yes and No columns

Control Panel Troubleshooting

Printer Does not Come to a "Ready" State

1. Turn the printer off and back on.
2. Reseat connectors on the Image Processor Board.
3. Refer to "DC Power Troubleshooting" on (Page 2-165).
4. Replace the Control Panel (Phaser 6022 - page 4-63, WorkCentre 6025 MFP - page 4-63, WorkCentre 6027 MFP page 4-67).
5. Repair the Control Panel wiring harnesses.

Ready LED is On, Display is Blank

1. Remove and reseat connections to the Image Processor Board.
2. Replace the Control Panel (Phaser 6022 - page 4-63, WorkCentre 6025 MFP - page 4-63, WorkCentre 6027 MFP page 4-67).
3. Repair the Control Panel wiring harness.
4. Replace the Image Processor Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150)).

Control Panel has Failed

The Control Panel either fails to illuminate or the buttons fail to operate after the power switch is turned On.

Initial Actions

- Cycle printer power.
- If the problem persists, follow the procedure below.

Step	Actions and Questions	Yes	No
1.	Check connections between the Image Processor Board and the Control Panel. Are P/J407 and P/J220 secure?	Go to step 2.	Secure the connections.
2.	Check the continuity of the Control Panel Harness (PL1.1.5). Is the Control Panel Harness continuity good?	Go to step 3.	Repair the harness, and if the error persists, go to step 3.
3.	Replace the Control Panel (Phaser 6022 - page 4-63, WorkCentre 6025 MFP - page 4-63, WorkCentre 6027 MFP page 4-67). Does the error persist?	Replace the IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150).	Complete.

Abnormal Noises

Electrical Noise

Initial Actions

- Cycle printer power.
- If the problem persists, follow the procedure below.

Step	Actions and Questions	Yes	No
1.	Are there any other electrical appliances within 3 meters of the printer, such as generators, radio and appliances with motors? Ether turn off the other electrical appliances, or relocate the printer at least 6 meters from other appliances. Does the electrical noise error still occur?	Go to step 2.	Complete.
2.	Is AC power supply outlet wired and grounded appropriately?	Go to step 3.	Request the client to fix the AC power supply outlet.
3.	Reseat the Toner Cartridges. Does the electrical noise error still occur?	Go to step 4.	Complete.
4.	Check the Xerographics Assembly plate earth dl (PL3.2.2). Are there any stains or foreign substances on the contacts?	Wipe the stains or foreign substance with dry cloth.	Reseat the connectors on the HVPS.

Power Supply Troubleshooting

AC Power Troubleshooting

Initial Actions

- Cycle printer power.
- If the problem persists, follow the procedure below.

Step	Actions and Questions	Yes	No
1.	When the printer is turned on, can you hear the motor?	Go to "DC Power Troubleshooting" on (Page 2-165).	Go to step 2.
2.	Connect the power cord to a different outlet. Does the printer now work?	Complete.	Go to step 3.
3.	Check that the power cord is plugged in to both the printer and the outlet. Does the printer now work?	Complete.	Go to step 4.
4.	Disconnect the power cord and wait for 1 minute. Reseat all of the connectors on the LVPS, and then turn the printer on. Does the printer now work?	Complete.	Go to step 5.
5.	Disconnect the power cord and wait for 1 minute. Reseat the AC Inlet Harness (PL7.2.9), and then turn the printer on. Does the printer now work?	Complete.	Replace the LVPS (page 4-158).

DC Power Troubleshooting

Initial Actions

- Cycle printer power.
- If the problem persists, follow the procedure below.

Step	Actions and Questions	Yes	No
1.	When the printer is turned on, can you hear the motor?	Go to step 2.	Go to step 5.
2.	Is the Control Panel working?	Go to step 4.	Go to step 3.
3.	Reseat both ends of the Control Panel cable. Does the error persist?	Go to step 4.	Complete.
4.	Reseat the connectors on the Image Processor Board. Does the error persist?	Complete.	Replace the Image Processor Board (Phaser 6020/6022 and WorkCentre 6025 MFP (page 4-149), WorkCentre 6027 MFP (page 4-150)). Replace the Control Panel (page 4-63 for Phaser 6022, page 4-63 for WorkCentre 6025 MFP, page 4-67 for WorkCentre 6027 MFP).
5.	Reseat the connectors on the MCU Board. Does the error persist?	Replace the LVPS (page 4-158).	Complete.

Image Quality

3

In this chapter...

- Image Quality Overview
- Checklist Before Troubleshooting Print-Quality
- Print-Quality Troubleshooting
- Test Prints
- Image Specifications

Image Quality Overview

Image-quality defects can be attributed to printer components, consumables, media, internal software, external software applications, and environmental conditions. To successfully troubleshoot print-quality problems, eliminate as many variables as possible. The first step is to generate prints using information pages embedded in the printer on laser paper from the approved media list. Refer to "Acronyms and Abbreviations" on page A-23 for supported and specialty media that have been tested and approved for use in the Phaser 6020/6022 & WorkCentre 6025/6027 MFPs. Use paper from a fresh ream that is acclimated to room temperature and humidity.

If the print-quality defect remains after printing on approved media from an unopened ream of paper, then investigate applications and environmental conditions.

Determine the temperature and humidity under which the printer is operating. Compare this to the "Electrical Specifications" on page 1-105. Extreme temperature and humidity can adversely affect print quality.

When analyzing a print-quality defect, first determine if the defect occurs in all colors or only one color and if it is repeating or a random occurrence. Continuous defects in the process direction, such as voids and lines, are the most difficult to diagnose. Inspect the visible surfaces of all rollers for obvious defects. If no defects are found, replace the Fuser, and then the Xerographics Assembly.

Defects Associated with Specific Printer Components

Some print-quality problems are associated with specific assemblies. Refer to the specific print-quality troubleshooting procedure for detail information.

Fuser

- Vertical Blank Lines
- Unfused Image
- Random Spots
- Streaks

Bias Transfer Roller

- Light or Undertone Print
- Vertical Blank Lines
- Random Spots
- Streaks
- Skew

Repeating Defects

Developer Assembles	Component	Part Number	Roll Diameter (mm)	Interval (mm)
Bias Transfer Roller	Bias Transfer Roller	PL1.1.9	14	44.0
Fuser	H/R	PL5.1.1	21.37	67.1
Xerographics Assembly	drum	PL3.3.1	30	94.3
	BCR	PL3.3.1	9	28.3
	BCR-CLN ROLL	PL3.3.1	8	25.1
	MAG ROLL	PL3.3.1	12.5	39.3
	1st BTR	PL3.3.1	10	31.4
	Back Up ROLL	PL3.3.1	15.85	49.8
	ID ROLL	PL3.3.1	16	50.2

Checklist Before Troubleshooting Print-Quality

Check Printer Condition

Toner

Low toner can cause print-quality problems, such as fading, streaking, White lines, or dropouts. Print a small document from different software applications to replicate the problem and check the amount of toner available. If the toner is low, replace the affected cartridges.

Toner that is not genuine Xerox toner can also cause print-quality problems. If the toner is not Xerox toner, replace the Toner Cartridge and recheck the print-quality issue.

Cleaning

Paper, toner, and dust particles can accumulate inside the printer and cause print-quality problems such as smearing or specks. Clean the inside of the printer to reduce these problems. Start by printing 10 blank sheets of paper, and then refer to "Cleaning" on page 6-3.

Symptom Checklist

Based on the observed defect, check the following items prior to performing troubleshooting. These actions may help resolve the problem without troubleshooting the printer.
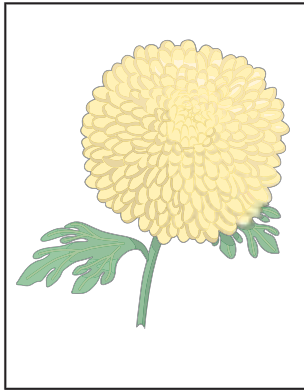
Light or Undertone Print

Light Print

•Reset the print driver Image Settings (Brightness and Contrast) to the default settings.

•In the printer Printing Preferences menu **Advanced** tab, check that **Draft Mode** is not selected.

•If you are printing on an uneven print surface, change the Paper Type setting in the printer driver to increase the paper type one higher.

•Check that the correct media is being used.

•Non-Xerox toner used?

Replacement Note: When replacing a non-Xerox toner cartridge with a Xerox Toner cartridge, multiple prints may be necessary to clear out the old toner for improved print quality.

Blank Print

Entire page is White or one color is missing from image.

•Ensure the packaging material is Removed from the Toner Cartridge.

•Check the Toner Cartridge to make sure that it is installed correctly.

•Verify the Bias Transfer Roller is correctly installed (page 4-9).

Smudges or Smears

Toner Smears

•If you are printing on an uneven print surface, change the Paper Type setting in the printer driver to increase the paper type one higher.

•Verify that the paper is within the printer specifications.

•Adjust the Fuser temperature.
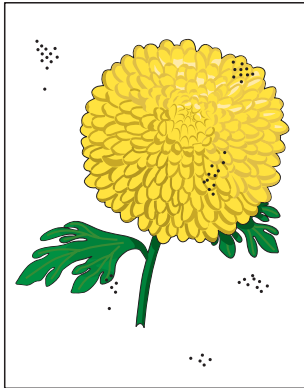
Spots On Page and Printing Blurred

- Check the Toner Cartridge(s) to ensure correct installation.
- Clean the inside of the printer.
- If the spots repeat at a regular interval, replace the component associated with the interval.
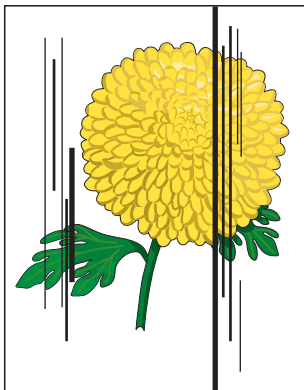
Random Spots

Streaks On Page

- Visually inspect the transfer belt.
- Replace the Developer of Imaging Unit of the corresponding color.

Vertical Stripes
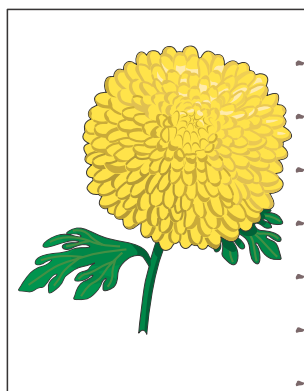
Pitched Color Dots

- Replace the component corresponding to the spacing.
- See the Repeating Defect table on (page 3-3).

Repeating Defect, Developer Roller

Vertical Blank Lines

Clean the LEDs.

Vertical Blank Lines

Ghosting

•Verify that the correct print media is being used.

•The print media surface may be uneven. Set the media type to one higher in the printer diver.

•Adjust the transfer bias (see page 6-14).

•Adjust the Fuser temperature (see page 6-10).

Residual Image/Ghosting

Background Contamination

•There is toner contamination on all or most of the page.

•If NXT is being used, replace the color(s) and run enough prints to purge the toner.
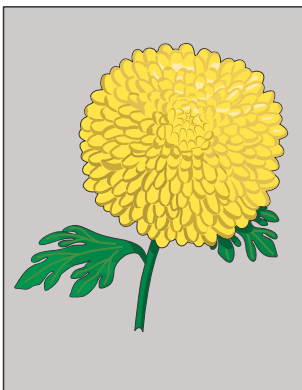
Background Contamination
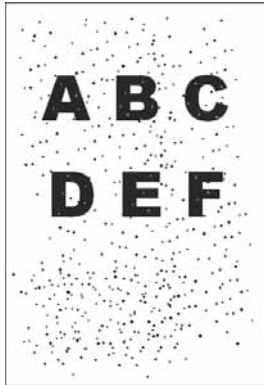
Bead-Carry-Out

- Small spots are scattered over the page.
- If the printer is installed in a high altitude location, set the altitude for the location.

s6020-201
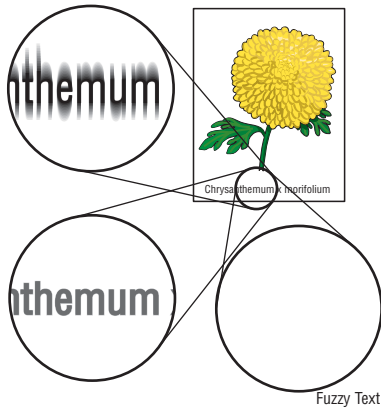
Jagged Characters

- Set Screen to Fineness in the printer driver (found on the **Advanced** tab, under **Other Settings**).
- Enable Bitmap Smoothing in the printer driver.
- If using a downloaded font, ensure that the font is recommended for the printer, operating system, and the application being used.

Chrysanthemum x morifolium

Fuzzy Text
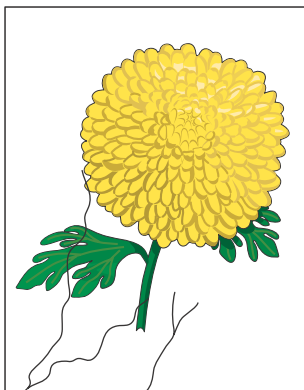
Wrinkling

- Verify correct print media is being used and the media is not damp.

Wrinkling

Incorrect Margins

Make sure the margins are set correctly in the software application.
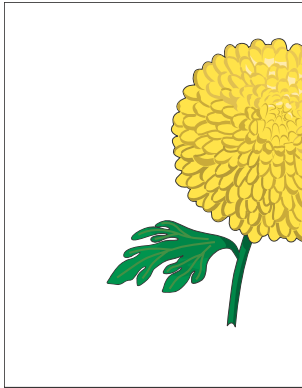
Image Not Centered

Color Out of Alignment

This problem can occur after installing a new Black Toner Cartridge if the Imaging Unit has not been cleaned.

•Execute Auto Color Registration Adjustment (page 6-15).

•Clean the ADC Sensor (page 6-7).

•Manually correct color registration (page 6-15).
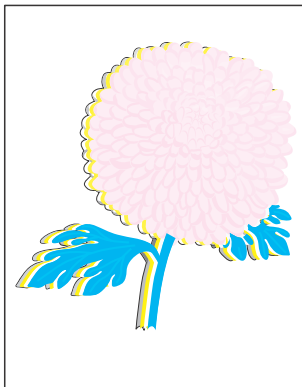
Color Registration

Skewed Images

•Verify that the paper guides are set correctly.

•Verify that the correct print media is being used.

B

A

Image Area
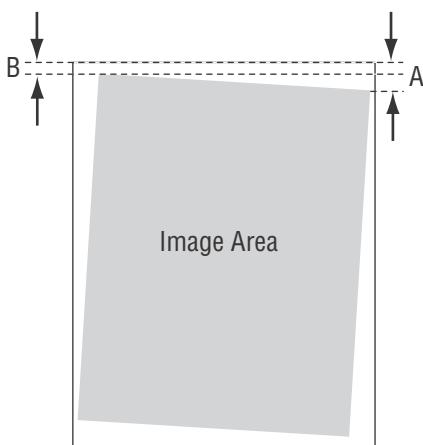
Skew 3
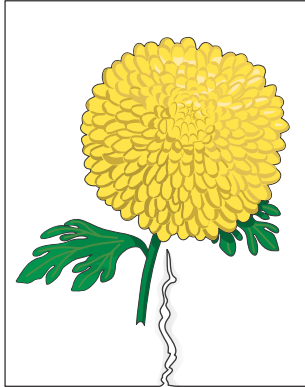
Damaged Print Media

Damaged Media

- Verify that the correct print media is being used.
- Check for foreign materials around the Paper Tray and Registration sections.
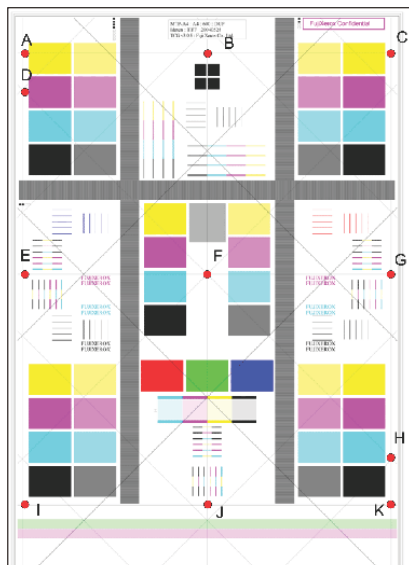
Color Spec Chart

If you are using downloaded fonts, verify that the fonts are supported by the printer, the host computer, and the software application.

Print-Quality Troubleshooting

The troubleshooting flow is as follows:

```
                          ┌──────────────┐
                          │    Start     │
                          └──────┬───────┘
                          ┌──────┴───────┐
                          │ Test Printing │
                          └──────┬───────┘
                                 │
                        ╱ Is there a ╲         No
                       ⟨ corresponding ⟩───────────────────────┐
                        ╲ procedure? ╱                         │
                              │ Yes                            │
                    ┌─────────┴──────────┐        ┌────────────┴────────────┐
                    │ Carry out the      │        │ Slide the Toner         │
                    │ corresponding      │        │ Cartridges (YMCK)       │
                    │ troubleshooting.   │        │ in and out several times.│
                    └─────────┬──────────┘        └────────────┬────────────┘
              No              │                    No           │
         ┌──────────── Is the trouble fixed?   ┌────────── Is the trouble fixed?
         │                    │ Yes            │                │ Yes
         │          ┌─────────┴──────┐         │       ┌────────┴──────┐
         │          │      End       │         │       │      End      │
         │          └────────────────┘         │       └───────────────┘
         │                                      │
         │                          ┌───────────┴────────────┐
         │                          │    Replace the Fuser    │
         │                          └───────────┬────────────┘
         │              No                      │
         │      ┌────────────────── Is the trouble fixed?
    ┌────┴──────┴──────────┐                    │ Yes
    │ Replace the "Possible │          ┌─────────┴──────┐
    │ causative parts" listed│         │      End       │
    │ in the relevant        │         └────────────────┘
    │ procedure one by one.  │
    └───────────────────────┘
```
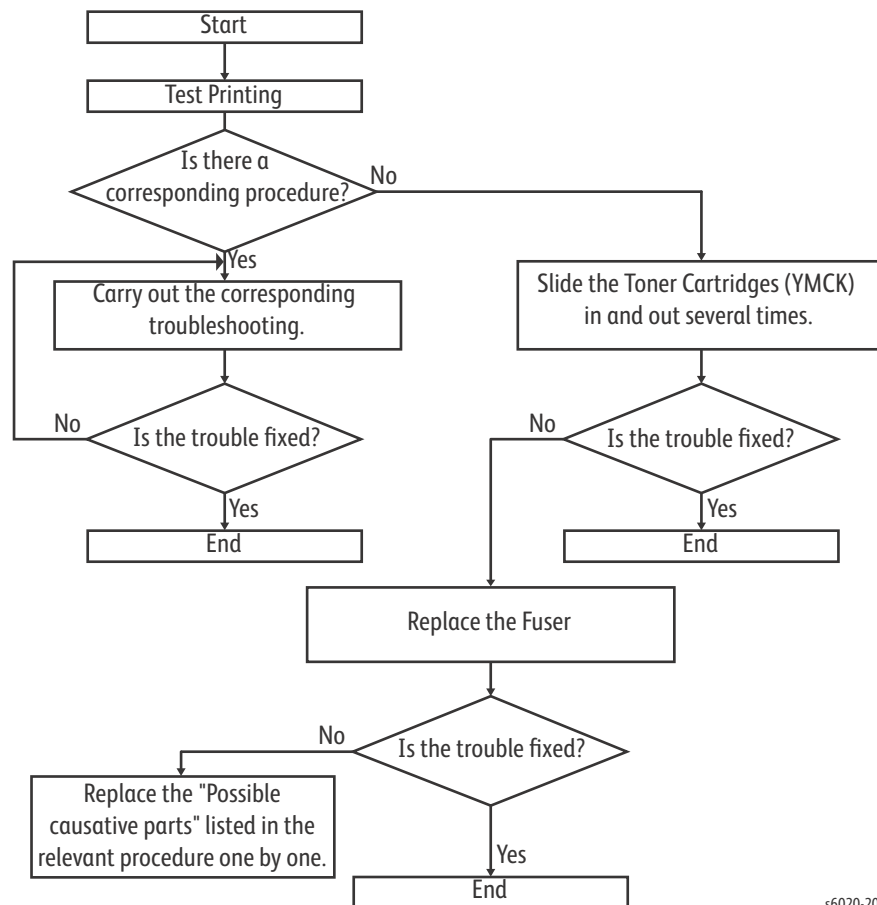
s6020-200

Print-Quality Defect Troubleshooting Procedures

The following table lists the print-quality defect corrective procedure, their definition, and the page where each procedure is provided.

Defect	Description	Go to
Light or Undertone Print	The image density is too light in all colors.	3-12
Blank Print	The entire image area is blank.	3-13
Toner Smears	The entire image area is Black.	3-13
Toner Smears	Toner smears appear on the page.	3-14
Random Spots	Spots of toner are randomly scattered on the page.	3-15

Defect	Description	Go to
Streaks	Streaks appear on the page.	3-16
Pitched Color Dots	Evenly spaced dots appear vertically in a line.	3-17
Vertical Blank Lines	There are faded or completely non-printed lines along the page.	3-18
Residual Image or Ghosting	There are faint, ghostly images appearing on the page.	3-19
Background Contamination	There is toner contamination on all or most of the page.	3-20
Jagged Characters	Characters have jagged or uneven edges.	3-21
Auger Mark	Diagonal density no uniformity appears in halftone areas.	3-22
Damaged Media	The paper is wrinkled, folded, or worn-out.	3-23
Image Not Centered	The image is not centered on the page.	3-25
Color Registration	Color registration is out of alignment.	3-27
Skew	The image is not parallel with both sides of the paper.	3-28
Unfused Image	The toner is not completely fused.	3-30

Light or Undertone Print

The overall image density is too light in all colors.

Initial Actions

- Check that the media settings match the media in use.
- Check that the media is dry and in good condition.

Applicable Parts	Example Print
• Toner Motor, PL4.1.9 • Bias Transfer Roller, PL1.1.9	 Light or Undertone Print

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check Toner Motor function. ⚠️ **CAUTION:** When checking the motor, stop the test within 5 seconds. Executing a motor check for more than 5 seconds may cause damage to the printer 1. Put the printer in diagnostic mode and select **Engine Diag > Motor Test > Yellow/Magenta/Cyan/Black Toner Motor ("Y/M/C/K Toner Motor" on page 2-152).** 2. On the **CE Diag** tab, select **Digital Output**. 3. In the drop down list select **Toner Motor Y/M/C/K On**, then click the **Start** button. 4. Does the Toner Motor function?	Go to step 2.	Replace the Toner Motor (page 4-125).
1.	2. Replace the Bias Transfer Roller (page 4-83). 3. Does the error persist?	Contact your designated field support for assistance.	Complete.

Blank Print

The entire image area is blank.

Initial Actions

- Ensure there is no debris in the transfer path. Debris can be caused by poor electrical contact between the Transfer Belt and the HPVS.

Applicable Parts	Example Print
- Bias Transfer Roller, PL1.1.9	Blank Print

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check media condition. Is the media dry and recommended?	Go to step 3.	Replace the media, then go to step 2.
2.	Does the image print correctly?	Complete.	Go to step 3.
3.	Reseat and lock the Toner Cartridges. Does the image print correctly?	Complete.	Go to step 4.
4.	Replace the Bias Transfer Roller. Does the error persist?	Contact your designated field support for assistance.	Complete.

Toner Smears

There are faded or completely non-printed lines along the page in the direction of the paper travel from the leading edge to the trailing edge.

⚠ **WARNING:** Do not touch the fuser while it is hot.

Initial Actions

- Check the media path.
- Ensure there is no debris on the transfer path.

Applicable Parts	Example Print
• Fuser, PL5.1.1 • Bias Transfer Roller, PL1.1.9	 Smudges or Smears

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Reseat P/J18 and P/J26 on the MCU Board, and P/J201 on the LVPS. Does the image print correctly?	Complete.	Go to step 2.
2.	Replace the Fuser (page 4-129). Does the image print correctly?	Complete.	Replace the Bias Transfer Roller.
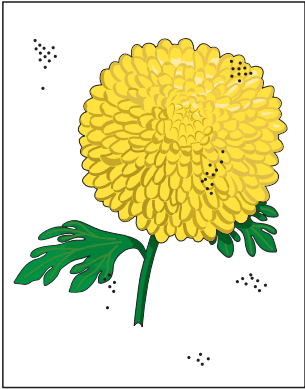
Random Spots

There are spots of toner randomly scattered across the page.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Initial Actions

- Check the paper transfer path.
- Ensure there is no debris on the transfer path.

Applicable Parts	Example Print
• Bias Transfer Roller, PL1.1.9 • Fuser, PL5.1.1	 Random Spots

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Clean the LED windows and the inside of the printer. See "Cleaning the LED Windows" on page 6-3. Does the image print correctly?	Complete.	Go to step 2.
2.	Check the paper being used. Is it approved paper?	Go to step 4.	Load supported media, then go to step 3.
3.	Does the image print correctly?	Complete.	Go to step 4.
4.	Reseat and lock the Toner Cartridges. Does the image print correctly?	Complete.	Go to step 5.
5.	Replace the Bias Transfer Roller (page 4-83). Does the image print correctly?	Complete.	Go to step 6.
6.	Replace the Fuser (page 4-129).	Complete.	
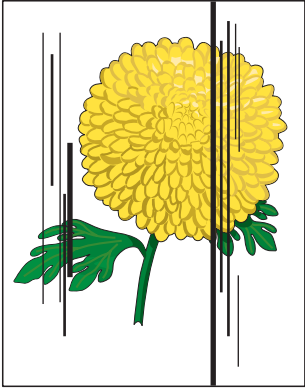
Streaks

Dark streaks in one or all colors appear on the output.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Initial Actions

- Examine a print and determine if the streaks are in one color or all colors.
- Check the paper transfer path.
- Ensure there is no debris on the transfer path.

Applicable Parts	Example Print
• Developer Assembly, PL3.2.6,7,8,9. • IBT Belt, PL3.1.99. • Bias Transfer Roller, PL1.1.9 • Fuser, PL5.1.1	 Vertical Stripes
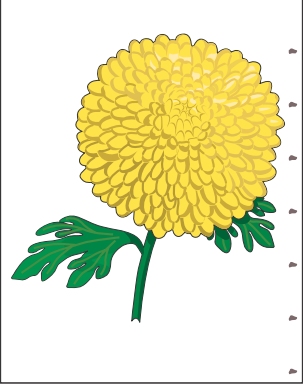
Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Is the streak in one color only?	Replace the corresponding developer or imaging unit.	Go to step 2.
2.	Make a print and stop the print mid-print by opening the back door. Is the streak visible on the IBT belt?	Examine the belt cleaner for damage or contamination and repair or replace.	Go to step 3.
3.	Is the streak visible on the Bias Transfer Roller?	Replace the bias transfer roller.	Replace the fuser.

Pitched Color Dots

There are recurring color dots on the page.

- Initial Actions
- Check the paper transfer path.
- Ensure there is no debris on the transfer path.

Applicable Parts	Example Print
• Bias Transfer Roller, PL1.1.9 • Fuser, PL5.1.1	 Repeating Defect, Developer Roller

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Measure the pitch. Does the pitch match any of the pitches shown in the Repeating Defects Table? See page 3-3.	Replace the corresponding parts.	Contact your designated field support for assistance.

Vertical Blank Lines

There are faded or completely non-printed lines along the page in the direction of the paper travel from the leading edge to the trailing edge.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Initial Actions

- Clean the LED windows. See "Cleaning the LED Windows" on page 6-3.
- Ensure there is no debris on the media path.

Applicable Parts	Example Print
• Bias Transfer Roller, PL1.1.9 • Fuser, PL5.1.1	 Vertical Blank Lines

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check media condition. Is the media dry and approved for use?	Go to step 3.	Replace with dry, approved media, then go to step 2.
2.	Does the image print correctly?	Complete.	Go to step 3.
3.	Replace the Bias Transfer Roller (page 4-83). Does the image print correctly?	Complete.	Go to step 4.
4.	Replace the Fuser (page 4-129).	Complete.	

Residual Image or Ghosting

There are faint, ghostly images appearing on the page. The images may be either from a previous page or from the page currently being printed.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Initial Actions

- Check the paper transfer path.
- Ensure there is no debris on the transfer path.
- Set the media type to one heavier.

Applicable Parts	Example Print
• Bias Transfer Roller, PL1.1.9 • Fuser, PL5.1.1	 Residual Image/Ghosting

Troubleshooting Procedure Table
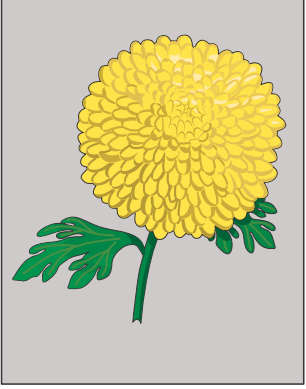
Step	Actions and Questions	Yes	No
1.	Replace the Bias Transfer Roller (page 4-83). Does the image print correctly?	Complete.	Go to step 2.
2.	Set the media type one step heavier.	Complete	Go to step 3.
3.	Replace the Fuser (page 4-129).	Complete.	

Background Contamination

Small spots are scattered randomly across the page.

Initial Actions

- Check the paper transfer path.
- Ensure there is no debris on the transfer path.

Applicable Parts	Example Print
• Bias Transfer Roller, PL1.1.9	\nBackground Contamination

Troubleshooting Procedure Table
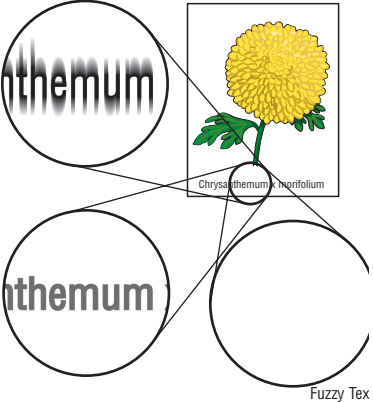
Step	Actions and Questions	Yes	No
1.	Replace the Bias Transfer Roller.\nDoes the image print correctly?	Complete.	Contact your designated field support for assistance.

Jagged Characters

Characters have fuzzy edges.

Initial Actions

- Check the paper transfer path.
- Ensure there is no debris on the transfer path.

Applicable Parts	Example Print
• Image Processor Board, PL7.1.9	

Troubleshooting Procedure Table
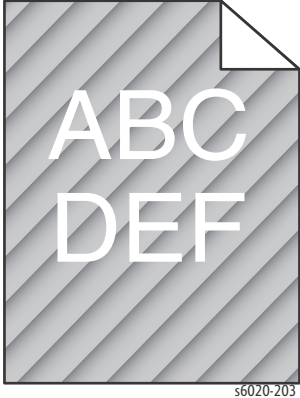
Step	Actions and Questions	Yes	No
1.	Replace the Image Transfer Board.	Complete.	

Auger Mark

Diagonal marks of non-uniform density in half tone areas appear on the image.

Initial Actions

- Ensure there is no debris on the transfer path.

Applicable Parts	Example Print
• Bias Transfer Roller, PL6.1.7 • Developer Assembly, PL3.2.6, 7, 8, 9	 s6020-203

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Replace the Developer of the corresponding color. Does the image print correctly?	Complete.	Contact your designated field support for assistance.
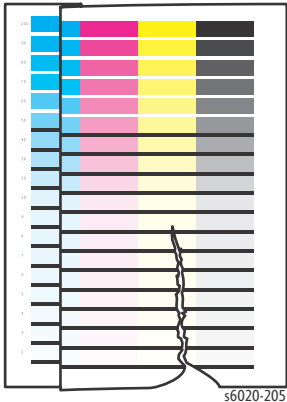
Damaged Media

Paper comes out from the printer wrinkled, folded, or worn-out.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Initial Actions

- Check the paper transfer path.
- Ensure there is no debris on the transfer path.
- If feeding through the manual feed slot, try feeding from Tray 1.

Applicable Parts	Example Print
• Feed Roller, PL2.2.4 Left and Right Feed Roller Cam, PL2.2.2 and PL2.2.7 • Registration Roller, PL2.3.1 • Registration Pinch Roller, PL2.3.2 • Fuser, PL5.1.1 • Separator Pad, PL2.2.11 • MCU Board, PL7.2.2	 s6020-205

The Paper Tray is recommended for paper feeding because paper fed from the Bypass Tray is prone to skew depending on how the sheet is fed.

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the paper condition. Is the paper dry and approved for use?	Go to step 3.	Replace with dry, approved paper, then go to step 2.
2.	Check the paper path for contamination or foreign objects. Is there contamination or foreign objects in the paper path?	Clean the paper path, and then go to step 3.	Go to step 4.
3.	Does the image print correctly?	Complete.	Go to step 4.

Troubleshooting Procedure Table (Continued)
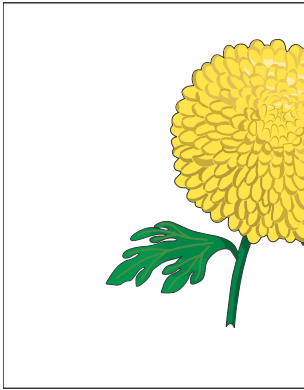
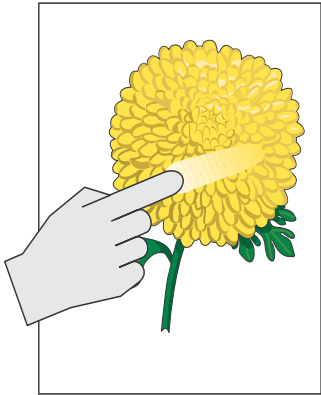| Step	Actions and Questions	Yes	No
4.	Check the Registration Roller and the Registration Pinch Roller for rotation. Using the Control Panel: Put the printer in diagnostic mode and select **Engine Diag > Motor Test > Regi Clutch**, and then run the **Motor > Main Motor** (see "Main Motor" on page 2-147). Using CE Diagnostics: Run the Registration Clutch check. See "Registration Clutch" on page 2-149. Do the Registration Roller and the Registration Pinch Roller rotate correctly?	Complete.	Go to step 5.
5.	Replace the Registration Clutch (page 4-98), and then perform the test in step 4. Do the Registration Roller and the Registration Pinch Roller rotate correctly?	Go to step 8.	Go to step 6.
6.	Replace the Feed Drive Assembly (page 4-138), and then perform the test in step 4. Do the Registration Roller and the Registration Pinch Roller rotate correctly?	Go to step 8.	Go to step 7.
7.	Replace the Main Drive Assembly (page 4-134). Does the image print correctly?	Complete.	Go to step 8.
8.	Replace the Fuser (page 4-129). Does the image print correctly?	Complete.	Go to step 9.
9.	Replace the Separator Pad (page 4-87). Does the image print correctly?	Complete.	Go to step 10.
10.	Replace the Feed Roller and the Left and Right Feed Roller Cams (page 4-83). Does the image print correctly?	Complete.	Go to step 11.
11.	Replace the MCU Board (page 4-160). Does the image print correctly?	Complete.	Contact your designated field support for assistance.

Image Not Centered

The image is not centered on the page.

Initial Actions

- Verify that the paper guides are set correctly.
- If feeding from the Bypass Tray, try feeding from Paper Tray.

Applicable Parts	Example Print
- Feed Drive Assembly, PL6.1.5 - Registration Roller, PL2.3.1 - Registration Pinch Roller, PL2.3.2 - Separator Pad, PL2.2.11 - MCU Board, PL7.2.2	 Image Not Centered

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the Registration Roller and the Registration Pinch Roller for rotation. Using the Control Panel: Put the printer in diagnostic mode and select **Engine Diag > Motor Test > Regi Clutch, and then enter the Motor > Main Motor** (see "Registration Clutch" on page 2-149). Using CE Diagnostics: Run the Registration Clutch check. See "Registration Clutch" on page 2-149. Do the Registration Roller and the Registration Pinch Roller rotate?	Complete.	Go to step 6.

Troubleshooting Procedure Table (Continued)
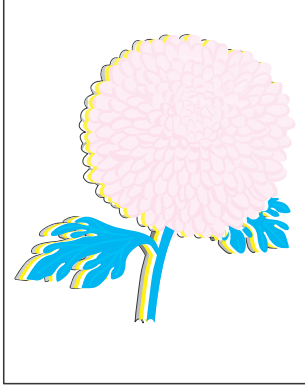
Step	Actions and Questions	Yes	No
2.	Replace the Registration Clutch (page 4-98), and then perform the test in step 1. Do the Registration Roller and the Registration Pinch Roller rotate correctly?	Go to step 5.	Go to step 3.
3.	Replace the Feed Drive Assembly (page 4-138), and then perform the test in step 1. Do the Registration Roller and the Registration Pinch Roller rotate correctly?	Go to step 5.	Go to step 4.
4.	Replace the Main Drive Assembly (page 4-134). Does the image print correctly?	Complete.	Go to step 6.
5.	Does the image print correctly?	Complete.	Go to step 6.
6.	Inspect the Registration Roller and the Registration Pinch Roller for wear or damage. Is either part worn or damaged?	Replace the Registration Roller (page 4-94) or the Registration Pinch Roller (page 4-94), then go to step 7.	Go to step 8.
7.	Does the image print correctly?	Complete.	Go to step 8.
8.	Replace the Separator Pad (page 4-87). Does the image print correctly?	Complete.	Go to step 9.
9.	Replace the MCU Board (page 4-160). Does the image print correctly?	Complete.	Contact your designated field support for assistance.

Color Registration

Color registration is out of alignment.

Initial Actions

- If feeding through the Bypass Tray, try feeding from Paper Tray.

Applicable Parts	Example Print
	Color Registration

Troubleshooting Procedure Table
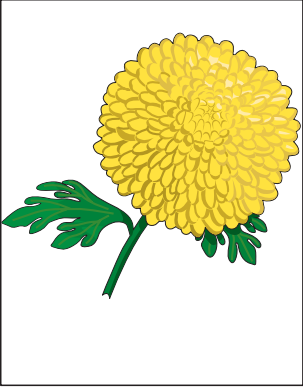
Step	Actions and Questions	Yes	No
1.	Clean the ADC and MOB Sensors. See "Cleaning the Color Toner Density Sensors" on page 6-7. Does the image print correctly?	Complete.	Go to step 2.
2.	Adjust the color registration. See "Maintenance and Adjustment Procedures" on page 6-10. Does the image print correctly?	Complete.	Contact your designated field support for assistance.

Skew

The image is not parallel with both sides of the paper.

Initial Actions

- Verify that the paper guides are set correctly.
- Check the media path.
- Ensure there is no debris on the transfer path.
- If feeding through the manual feed slot, try feeding from Tray 1.

Applicable Parts	Example Print
- Feed Roller, PL2.2.4 Left and Right Feed Roller Cam, PL2.2.2 and PL2.2.7 - Registration Roller, PL2.3.1 - Registration Pinch Roller, PL2.3.2 - Separator Roller, PL2.1.5 - MCU Board, PL7.2.2	 Skew 2

Note: The Paper Tray is recommended for paper feeding because paper fed from the Bypass Tray is prone to skew depending on how the sheet is fed.

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check Registration Roller and Registration Pinch Roller rotation. Put the printer in diagnostic mode and select **Engine Diag > Motor Test > Regi Clutch**, and then enter **Motor > Main Motor** (see "Main Motor" on page 2-147). Using the CE Diagnostics: Run the Registration Clutch check. See "Registration Clutch" on page 2-149. Do the rollers rotate?	Go to step 6.	Go to step 2.
2.	Replace the Registration Clutch (page 4-98), and then perform the test in step 1. Do the Registration Roller and the Registration Pinch Roller rotate correctly?	Go to step 5.	Go to step 3.

Troubleshooting Procedure Table (Continued)

Step	Actions and Questions	Yes	No
3.	Replace the Feed Drive Assembly (page 4-138), and then perform the test in step 1. Do the Registration Roller and the Registration Pinch Roller rotate correctly?	Go to step 5.	Go to step 4.
4.	Replace the Main Drive Assembly (page 4-134). Does the image print correctly?	Complete.	Go to step 5.
5.	Inspect the Registration Roller and the Registration Pinch Roller for wear or damage. Is either part worn or damaged?	Replace the Registration Roller (page 4-94) or the Registration Pinch Roller (page 4-94), then go to step 6.	Go to step 7.
6.	Does the image print correctly?	Complete.	Go to step 7.
7.	Replace the Feed Roller and the Left and Right Feed Roller Cams (page 4-83). Does the image print correctly?	Complete.	Go to step 8.
8.	Replace the Separator Pad (page 4-87). Does the image print correctly?	Complete.	Go to step 9.
9.	Replace the MCU Board (page 4-160). Does the image print correctly?	Complete.	Contact your designated field support for assistance.

Unfused Image

The image is not completely fused to the paper. The image easily rubs off.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

Initial Actions

- Check the media path.
- Check the Fuser connection (P/J171).
- Verify the Fuser Lock Levers at the back of the printer are engaged (lowered).

Applicable Parts	Example Print
• Fuser, PL5.1.1 • MCU Board, PL7.2.2	 Unfused Image

Troubleshooting Procedure Table
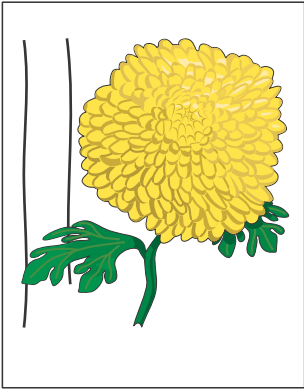
Step	Actions and Questions	Yes	No
1.	Check the media being used and its condition. Is the media dry and recommended?	Go to step 3.	Replace with dry, approved media, then go to step 2.
2.	Does the image print correctly?	Complete.	Go to step 3.
3.	Check the Toner type. Is non-Xerox Toner in use?	Replace with Xerox toner, then go to step 4.	Go to step 5.
4.	Does the image print correctly?	Complete.	Go to step 5.
5.	Replace the Fuser (page 4-129). Does the error persist?	Complete.	Complete.
6.	Replace the MCU Board (page 4-160). Does the error persist?	Contact your designated field support for assistance.	Complete.

Hunting

The printed image has wavy column line in the direction of the paper travel.

Initial Actions

- Check the ADF media path for dirt or debris.
- Check the ADF media transport components.

Applicable Parts	Example Print
• ADF Assembly, PL8.1.2 • IIT Assembly, PL8.1.8	 Hunting

Troubleshooting Procedure Table
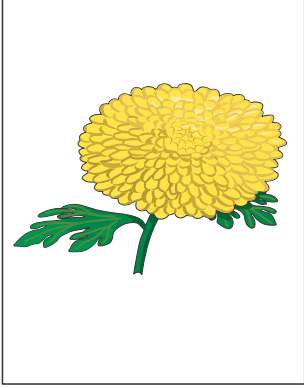
Step	Actions and Questions	Yes	No
1.	Check the media being used and its condition. Is the media dry and recommended?	Go to step 3.	Replace with dry, approved media, then go to step 2.
2.	Does the image print correctly?	Complete.	Go to step 3.
3.	Replace the ADF Assembly (page 4-77). Does the error persist?	Replace the IIT Assembly (page 4-70).	Complete.

Incorrect Magnification

Incorrect magnification when copying with the ADF feeding.

Initial Actions

- Check the paper transfer path.
- Ensure there is no debris on the transfer path.

Applicable Parts	Example Print
• ADF Assembly, PL8.1.2 • IIT Assembly, PL8.1.8	 Magnification Incorrect

Troubleshooting Procedure Table

Step	Actions and Questions	Yes	No
1.	Check the media being used and its condition. Is the media dry and recommended?	Go to step 3.	Replace with dry, approved media, then go to step 2.
2.	Does the image print correctly?	Complete.	Go to step 3.
3.	Replace the ADF Assembly (page 4-77). Does the error persist?	Replace the IIT Assembly (page 4-70).	Complete.

Test Prints

A variety of test prints are available for troubleshooting print quality defects and to confirm proper printer operation. Test Prints can isolate printing problems to the MCU or Image Processor Board by using on board image data to isolate the two boards. Test prints are also useful for stimulating asynchronous (dynamic) events related to the print process, or as a test for media path and media related problems. Some other key features of test prints:

- Is the only diagnostic utility to exercise the entire print cycle.
- They are isolated from the operating system, and are run from firmware.
- Isolates the Image Processor Board from the MCU Board.
- Captures static or dynamic events.
- Helps to isolate events that cause print artifacts or prevents printing.

Test prints are selected from the list of available test prints in the **Test Print** menu of diagnostics.

Printing Test Prints From CE Diagnostics

- Start the CE Diagnostic software, and select the **CE Diags** tab.
- Select **Test Print**.
- Select the desired test print button.

Printing Test Prints From Service Diagnostics

- Power off the printer.
- Power on the printer while pressing the
-
- e **Down Arrow** and **Up Arrow** buttons.
- Release the fingers from the buttons when "CE Mode" and "Password" is displayed.
- Press the **Down Arrow** button twice and press **OK** button.
- The printer is now in Service Diagnostic mode.
- Press the **Down Arrow** button until "Test Print" is displayed.
- Press **OK**.
- Use the **Down Arrow** and **Up Arrow** buttons to select the desired test print.

Paper Size

Sets the paper size in which the test print is printed.

WorkCentre 6025 MFP Test Prints

To print a test print:

1. Start the Xerox Chart Print Tool.
2. Check that the Paper Size is set correctly in the tool.
3. Click the check box of the chart that you want to print.
4. Click the **Next** button.
5. Select either **Network** or **USB** for printing.
6. Select the appropriate printer and click **Next**.
7. Click **Finish** when complete.

Pitch Configuration Chart
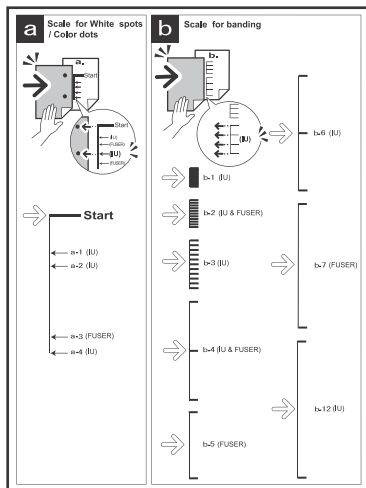
Pitch Chart Test Print

Print this chart to check for any regular lines or toner spots when encountering PQ problems.

From the difference in the interval of regular lines or spots, you can determine the parts that have caused the trouble.

Ghost Configuration Chart
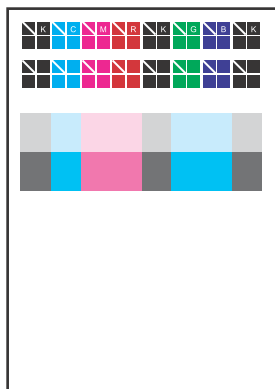
s6020-466

This print allows you to check for image ghosting. When a ghost occurs, the patches broken into two triangles and the K/B/G/R/M/C characters appear on the light-colored patches K/C/M in the lower half of the chart, and the patches with triangles only appears on the dark-colored patches K/C/M below the light-colored patches.

- Fail: Characters repeat in the light area.
- Pass: Characters are not visible in the light area.

4 Colors Configuration Chart

s6020-464
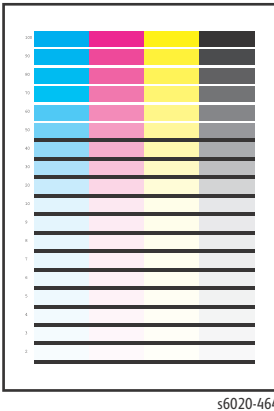
This test print provides 2 - 100 % density for Cyan, Magenta, Yellow, or Black on the whole page. This test is used to identify problems with the printer function or the Image Processor Board. Compare the print with this example to determine the problem.

•Fail: Check the printer function.

•Pass: Check the Image Processor Board.

MQ Chart Test Print

s6020-199
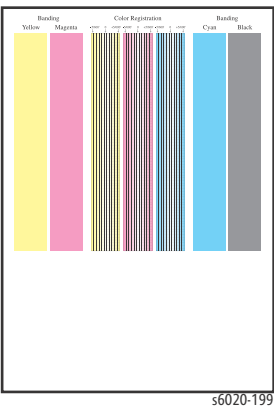
Prints charts to check for binding in A4 or Letter.

When the PQ problem occurred, this test helps to identify the problem as printer related or otherwise.

TestPatASIC[IOT] Test Print

s6020-187
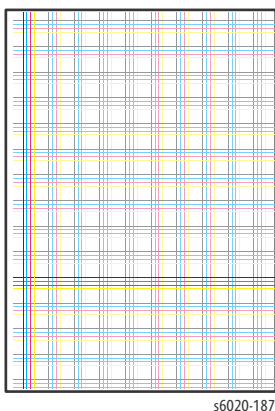
Prints the LED Driver Board built-in test pattern.

If the pattern does not print correctly, check the LED Driver board. If the pattern prints OK, check the Image Processor Board.

TestPatLPHY[IOT] Test Print

s6020-188
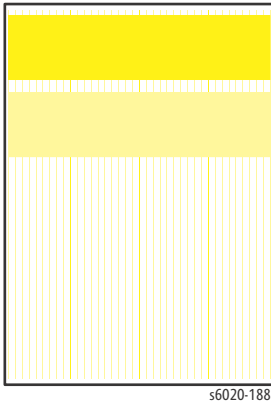
Prints the LPH Y built-in test pattern.

If the test pattern does not print correctly, check the print process. If the test pattern prints correctly, check the LED Driver Board and the Image Processor Board.

TestPatLPHM[IOT] Test Print

s6020-189
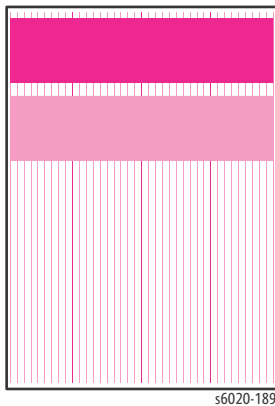
Prints the LPH M built-in test pattern.

If the test pattern does not print correctly, check the print process. If the test pattern prints correctly, check the LED Driver Board and the Image Processor Board.

TestPatLPHC[IOT] Test Print

s6020-190
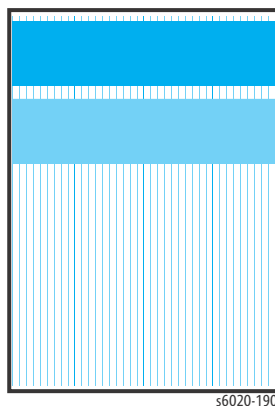
Prints the LPH C built-in test pattern.

If the test pattern does not print correctly, check the print process. If the test pattern prints correctly, check the LED Driver Board and the Image Processor Board.

TestPatLPHK[IOT] Test Print

s6020-191
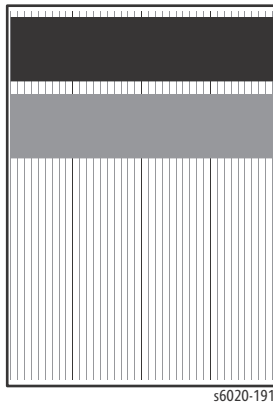
Prints the LPH K built-in test pattern.

If the test pattern does not print correctly, check the print process. If the test pattern prints correctly, check the LED Driver Board and the Image Processor Board.

Grid 2 Test Print

s6020-192
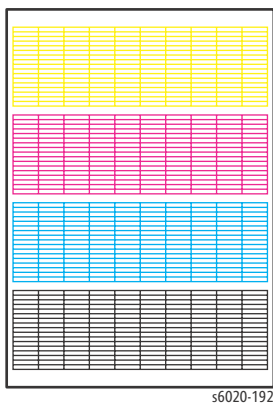
Prints the ESS built-in grid pattern.

Compare the print with the sample chart. If the test print does not match the test print shown here, check the print process and the LED Driver Board. If the test print is OK, check that the printer is connected correctly.

Toner Pallet Check Test Print

s6020-193
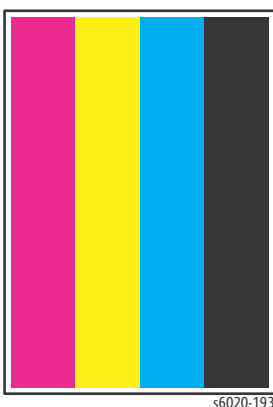
This test print provides 100 % density for Cyan, Magenta, Yellow, and Black on the whole page. This test is used to identify problems with the toner when printing pictures or photos. Compare the print with this example to determine the problem.

- •**Fail:** Check the Toner Cartridge and delivery for the problem color.
- •**Pass:** Check the print data.

Additional Test Charts

Additional test charts can be found on the **Diagnosis** tab of the CE Diags tool.

Alignment Chart
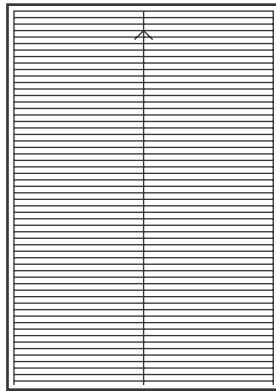
s6020-463

This chart allows you to check for media skew. When the sheet is fed normally, the vertical and horizontal lines are aligned parallel to the edges of the sheet. When there is a problem, alignment is skewed.

- Fail: Perform the Skew troubleshooting procedure (page 3-28).
- Pass: Lines are parallel to the edges of the sheet.

Drum Refresh Configuration Chart
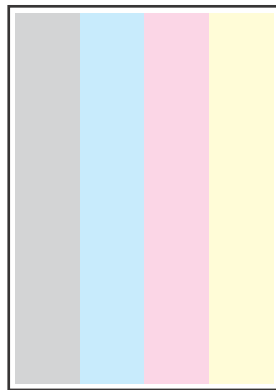
s6020-465

This test print provides 20 % density for combination of yellow, magenta, cyan, and Black on the whole page. This test is used to identify problems with balance of three color toners or another toner. Compare the print with this example to determine the problem.

- Checks Cyan, Magenta, or Yellow Toner Cartridge, HVPS, Imaging Units, biasing contacts.
- Used to troubleshoot repeating defects, missing colors, streaks, voids or banding.

Image Specifications

Specification Chart

The points lettered A through K on the example illustration are measurement points used to determine whether the image is within specifications.

Color Chart
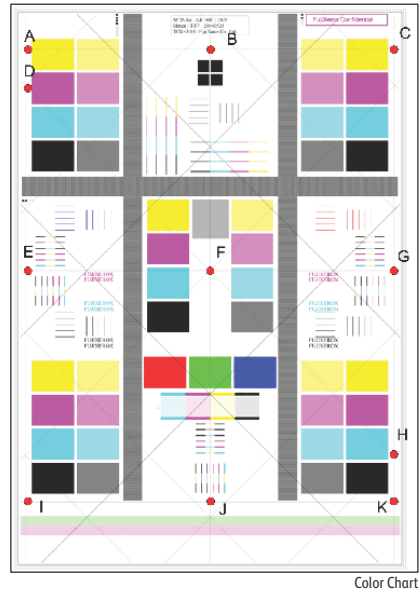
Skew

Paper Tray (A4)	180 mm ± 1.4 mm
Paper Tray (LTR)	200 mm ± 1.5 mm
Bypass Tray (A4)	180 mm ± 2.0 mm
Bypass Tray (LTR)	200 mm ± 2.2 mm

Skew = a - b
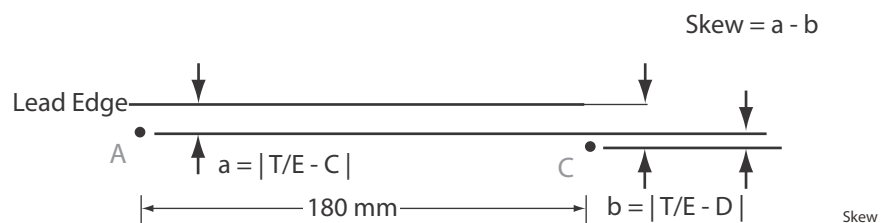
Skew

To measure skew: Measure the margin of the paper at the leading edge of each corner, and then take the difference between them.

s6020-242
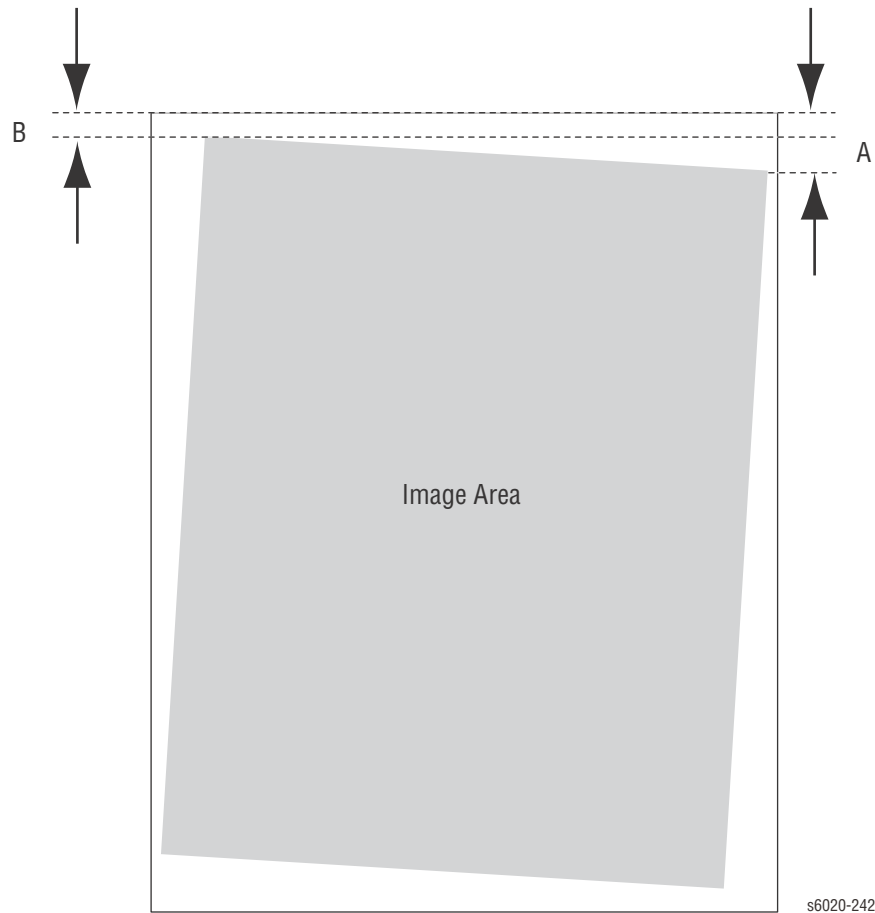
Note: The most common reason for skew to be out of specification is because the paper guides are set incorrectly.

Parallelism

- Horizontal: 180 mm ± 1.3 mm
- Vertical: 280 mm ± 1.3 mm
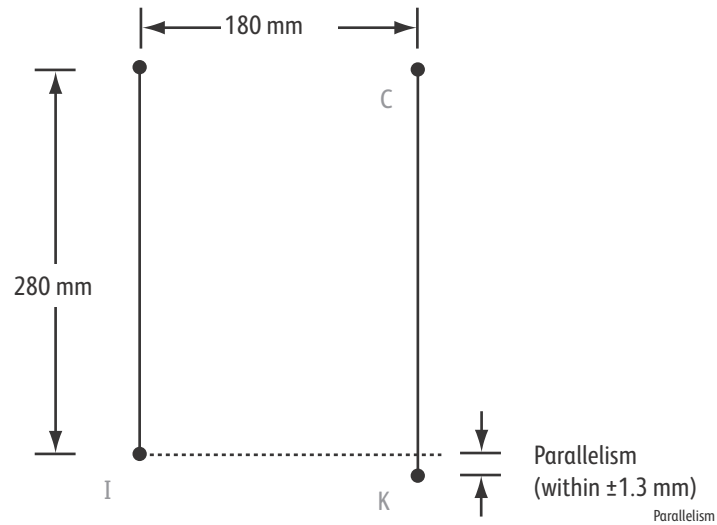
Parallelism

Note: The most common reason for parallelism to be out of specification is because the paper guides are set incorrectly.

Perpendicularity

140 mm ± 1.0 mm

Perpendicularity
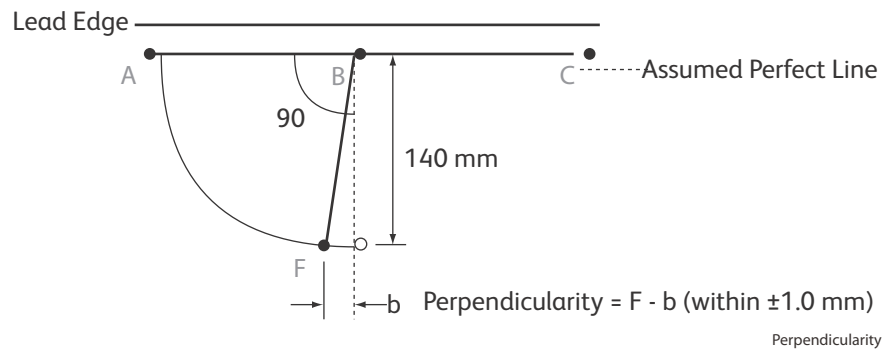
Linearity

Horizontal
- A4   180 mm ± 0.5 mm
- LTR   200 mm ± 0.5 mm

Vertical
- A4   280 mm ± 0.6mm
- LTR   260 mm ± 0.6mm

Slant
- A4   254.5 mm ± 1.1 mm
- LTR   282.8mm ± 1.2 mm

180 mm (A4)
200 mm (LTR)

----------- Assumed Perfect Line
———— Printed Real Line

Linearity of Horizontal Line (within ±0.5 mm)

280 mm (A4)
260 mm (LTR)

Linearity of Vertical Line (mm) (within ±0.6 mm)

Linearity of Slant (within ±1.2 mm)

254.5 mm (A4)
282.8 mm (LTR)
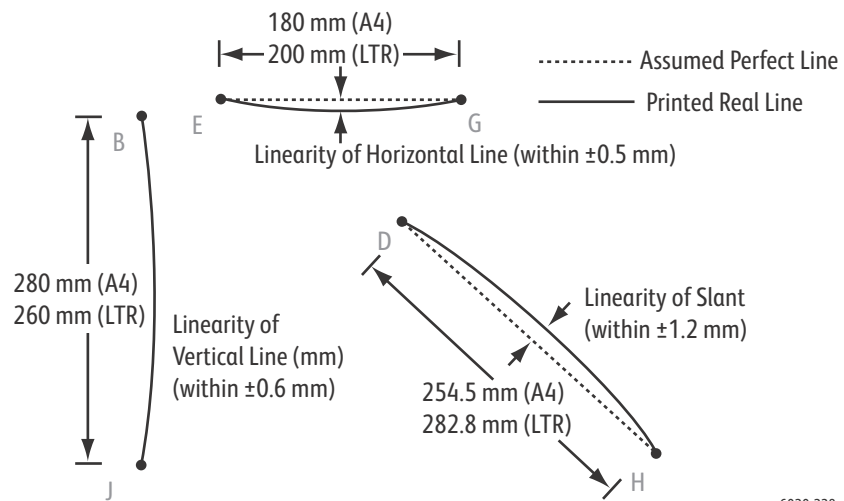
s6020-228

Magnification Error

Horizontal
  A4   180 mm ± 0.5 mm
  LTR   200 mm ± 0.5 mm

Vertical
  A4   280 mm ± 0.5 mm
  LTR   260 mm ± 0.5 mm

Magnification = Measured Length / Nominal

B

Nominal = 280 mm
LTR Nominal = 260 mm

J

A4 Nominal = 180 mm
LTR Nominal = 200 mm

E   G
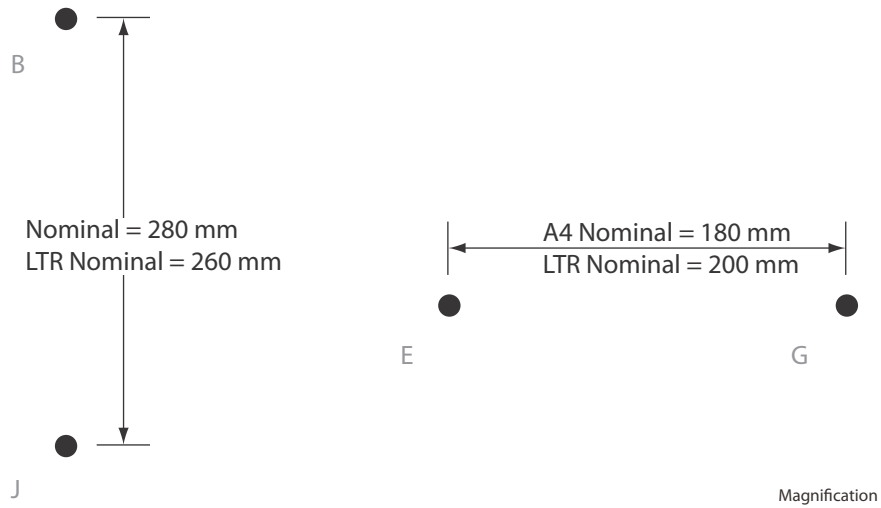
Magnification

Registration

- Leading Edge: £ ± 2.0 mm
- Side Edge: £ ± 2.5 mm

Registration = Measured Length - Nominal

Lead Edge

Nominal = 10.0 mm
(within ±2 mm)

B

Left Edge

Nominal = 8.5 mm
(within ±2.5 mm)

F
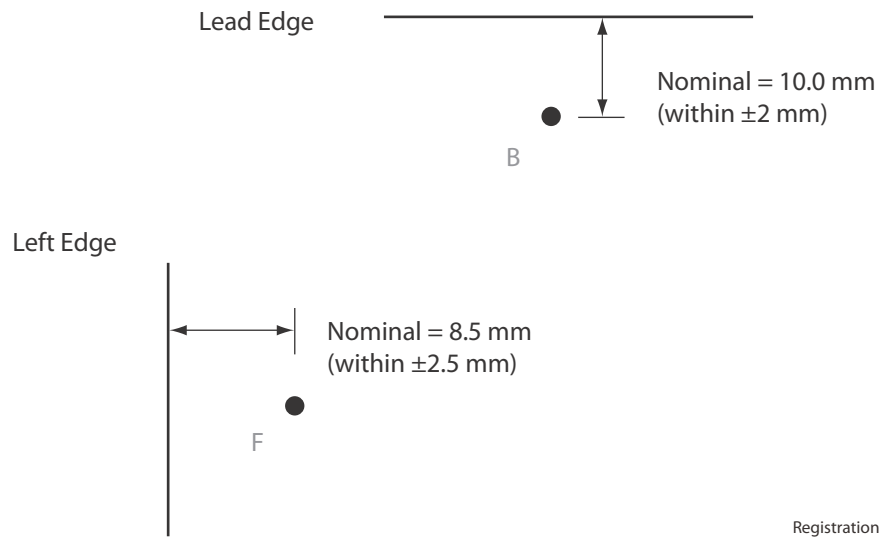
Registration

Note: The most common reason for registration to be out of specification is because the paper guides are set incorrectly.

Print Area

- Usable Area[1] (maximum paper size): 215.9 mm x 355.6 mm
- Guaranteed Printable Area[2]: 207.9 mm x 347.6 mm
- Un-printable Area: 4.0 mm from edge of the paper all sides.

Guaranteed and Maximum Area
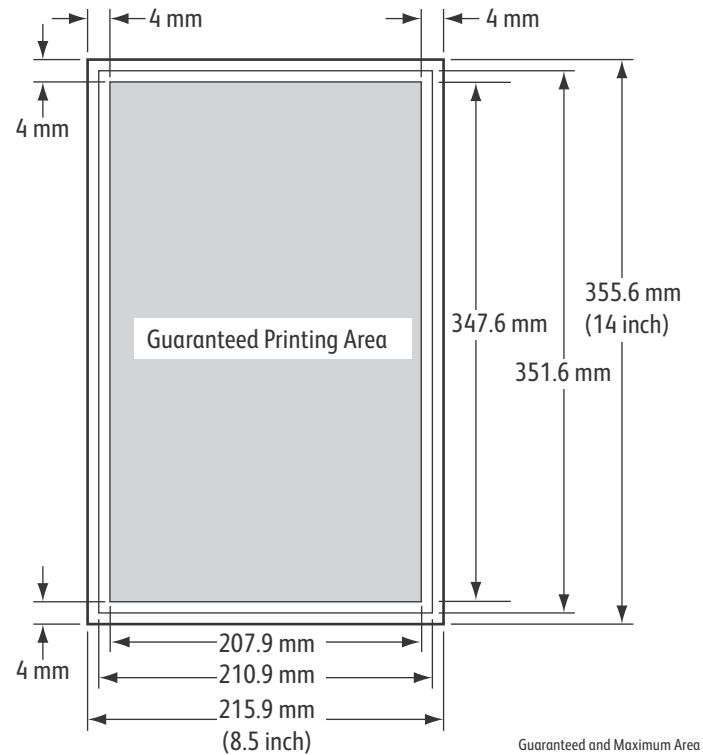
[1]Maximum width for envelopes is 220 mm

[2]Maximum printable width of paper for paper sizes greater than 215.9 mm is 210.9 mm

Service Parts Disassembly

4

In this chapter...

Overview

This section contains the removal procedures for field-replaceable parts listed in the Parts List. In most cases, the replacement procedure is simply the reverse of the removal procedure. In some instances, additional steps are necessary and are provided for replacement of the parts. For specific assemblies and parts, refer to Chapter 5 - Parts List.

Standard Orientation of the Printer

When needed, the orientation of the printer is called out in the procedure as an aid for locating the printer parts. The following figure identifies the Front, Rear, Left, and Right sides of the printer.

s6020-001
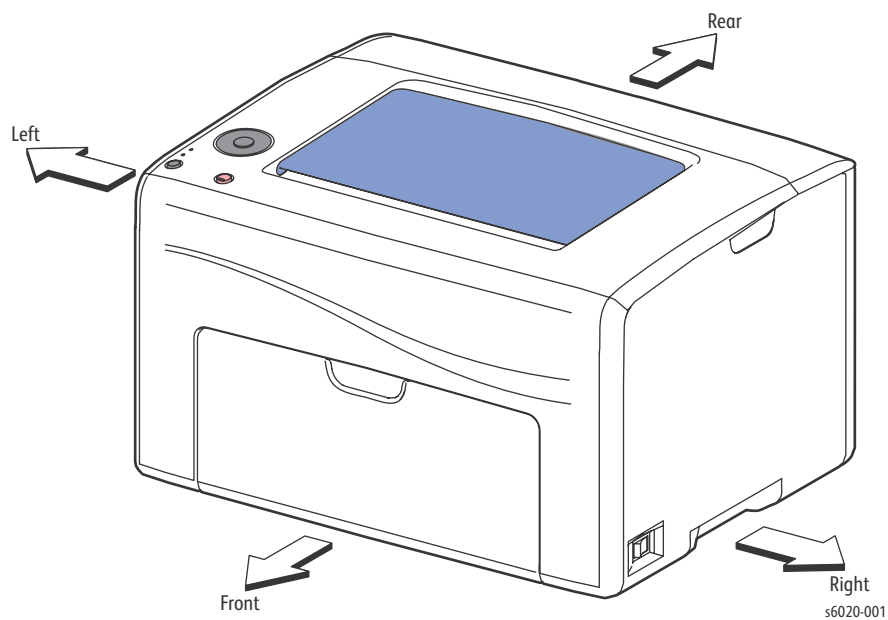
Preparation

Before you begin any procedure:

⚠️ **WARNING:** Ensure that the electricity to the machine is switched off while performing tasks that do not need electricity. Disconnect the power cord. Electricity can cause death or injury. Moving parts can cause injury.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

⚠️ **CAUTION:** Many parts are secured by plastic tabs. Do not over flex or force these parts. Do not over torque screws threaded into plastic.

Note: Names of parts that appear in the removal procedures may not match the names that appear in the Parts List. For example, a part called Paper Tray in a removal procedure may appear on the Parts List as Cassette Tray Assembly. While using a removal procedure, ignore any prerequisite procedures for parts already removed.

1. Wear an Electrostatic Discharge wrist strap.
2. Turn Off power and disconnect the power cord from the wall outlet.
3. Disconnect all cables from the printer.
4. Remove Toner Cartridges (page 4-5).
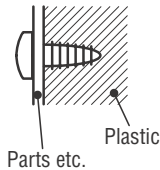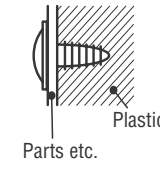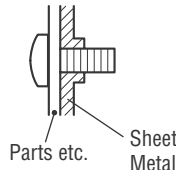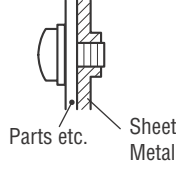
Notations in the Disassembly Text

- The notation "(item X)" points to a numbered call out in the illustration corresponding to the disassembly procedure being performed.
- The notation "PL*X.X.X*" indicates the component is listed in the Parts List.
- Arrows in an illustration show direction of movement when removing or replacing a component.
- The notation "(Tap, Plastic, 10 mm)" or "(Metal, 6mm)" refer to the type of screw being Removed.

Replacement Note: Provides information specific to the replacement of parts or assemblies.

Fastener Types

The following table lists the types of Posi-Drive screws used to assemble the printer. The procedures provide dimensions for screws being Removed.

Type	Application	Shape	Characteristics
Self-tapping, Plastic			1. Silver colored. 2. Screw thread is coarse compared to metal screw. 3. Screw tip is thin.
Self-tapping, Plastic, with Flange			1. Silver-colored 2. It has a flange. 3. Screw thread is coarse comparing to the sheet metal type. 4. Screw tip is thin.
Sheet Metal, Silver			1. Silver colored. 2. Diameter is uniform.
Sheet Metal, Silver with Lock Washer			1. Silver colored. 2. Includes a toothed washer. 3. Diameter is uniform. 4. Used for grounding terminals.

⚠ **CAUTION:** Use care when installing self-tapping screws in plastic. To properly start the screw in plastic, turn the screw counter-clockwise in the hole until you feel the screw engage the threads, then tighten as usual. Improperly aligning or over tightening the screw can result in damage to previously tapped threads.

Always use the correct type and size screw. Using the wrong screw can damage tapped holes. Do not use excessive force to remove or install either a screw or a printer part.

Consumables

Consumables consist of the 4 Toner Cartridges.

Toner Cartridges

PL4.1.13-16

1. Open the Toner Door.
2. Lift the Toner Cartridge handle upward to release the lock.
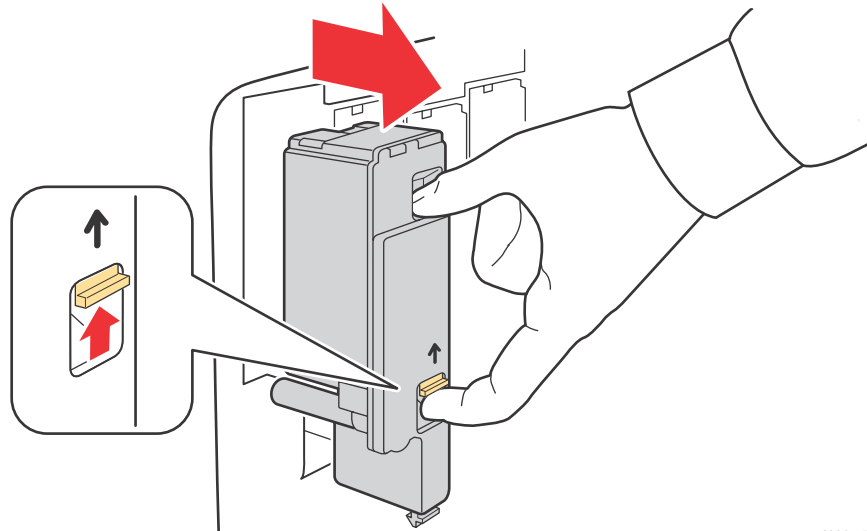
s6020-153

Note: Toner cartridge part numbers can be found in the Appendix on Page A-22

3. Pull the Toner Cartridge out of the printer.
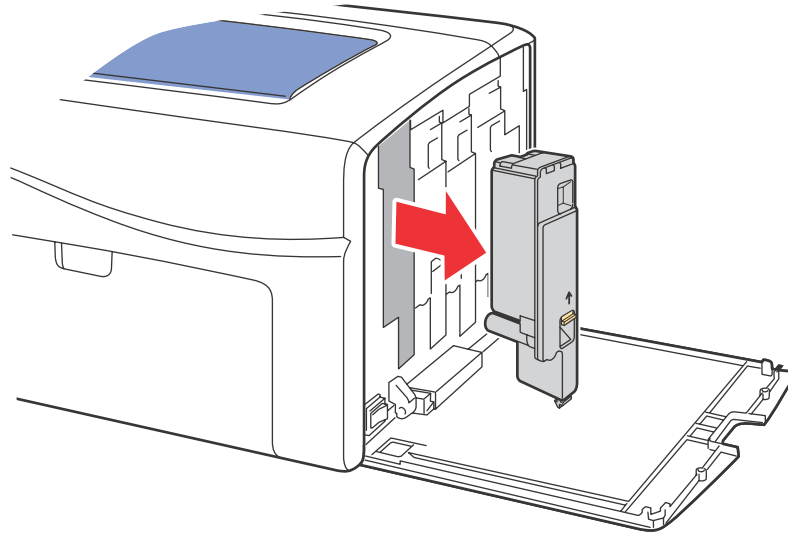
s6020-161

Phaser 6020 Cover Removal

Phaser 6020 Top Cover Assembly

PL1.1.1 (with 4, 23~26)

1. Remove the Paper Tray Cover (page 4-15)
2. Remove the Front Cover (page 4-16).
3. Remove 2 screws (Silver, M3, 6mm).
4. Release 6 front tabs of the Top Cover and lift the Top Cover starting from the right and disconnect P/J220 on the Control Panel to remove the Top Cover.
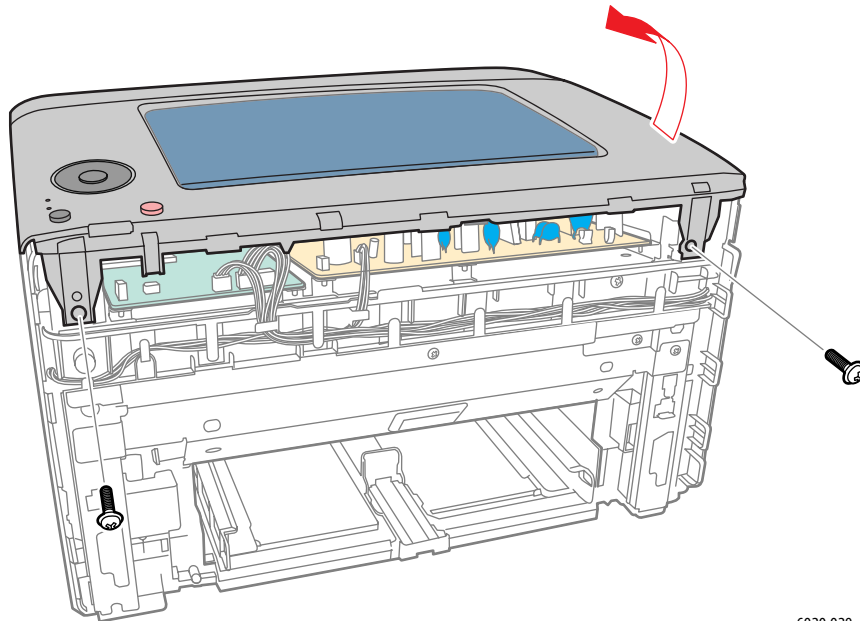
s6020-029

Phaser 6020 Rear Door Assembly

PL1.1.6 (with 7, 8, 9)

1. Open the Rear Door.
2. Release the left side boss of the Rear Door from the Toner Cover.
3. Slide the Rear Door left to release the right side boss and remove the Rear Door.
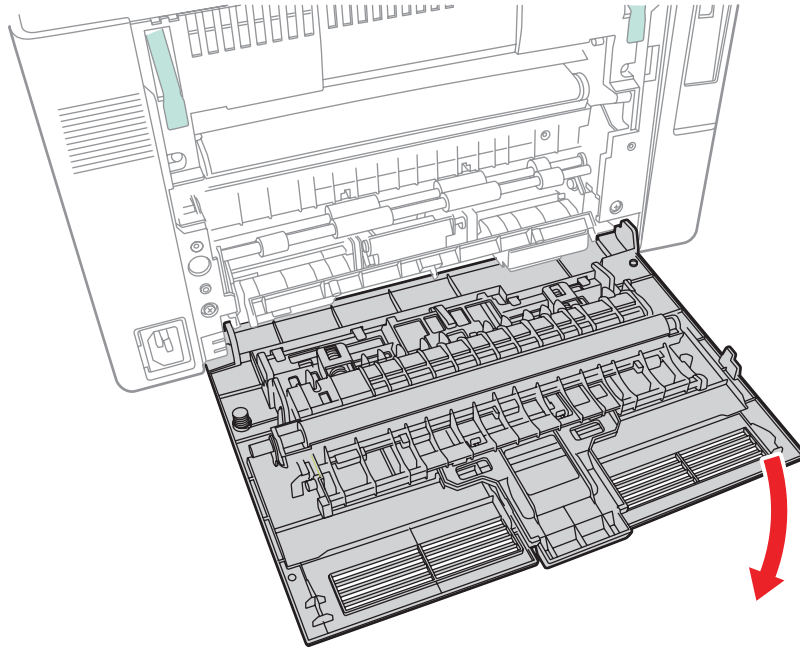
s6020-030

Phaser 6020 Bias Transfer Roller (BTR) Assembly

PL1.1.7 ~9

1. Open the Rear Door.
2. Lift the latch of the Left Transfer Roller Bearing (white) and rotate and pull off the Transfer Roller.
3. Lift the latch of the Right Transfer Roller Bearing (black) and rotate and pull off the Transfer Roller.
4. remove the Transfer Roller from the Rear Door Assembly.
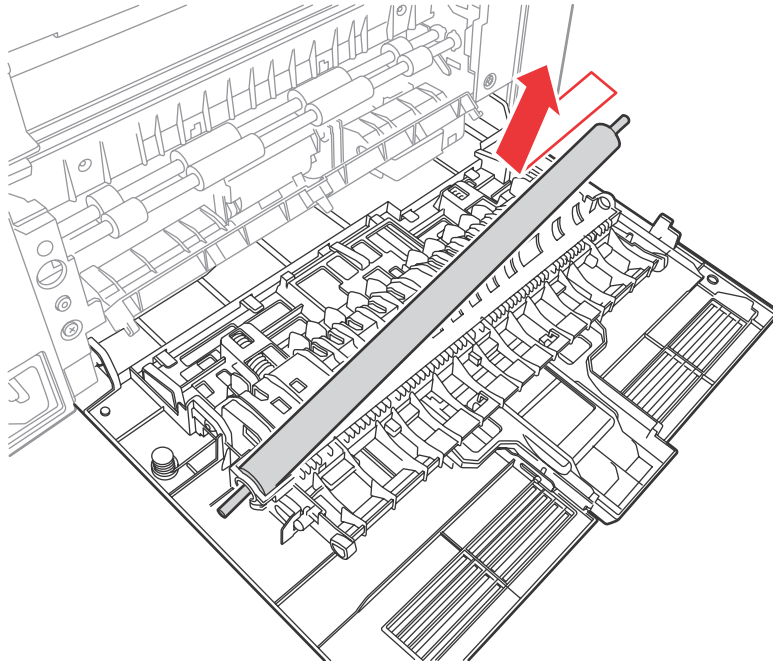
s6020-032

Replacement Note: The Right Transfer Roller Bearing is installed over the spring.

Phaser 6020 Rear Cover

PL1.1.10

1. Remove the Paper Tray Cover (page 4-15)
2. Remove the Front Cover (page 4-16).
3. Open the Rear Door.
4. Remove the Left Side Cover (page 4-18).
5. Lift the 2 levers on the Fuser lock.
6. Remove 4 (Silver,Tap, 8mm) screws attaching the Rear Cover to the chassis and swing the Rear Cover out to expose the I/L Switch Holder.
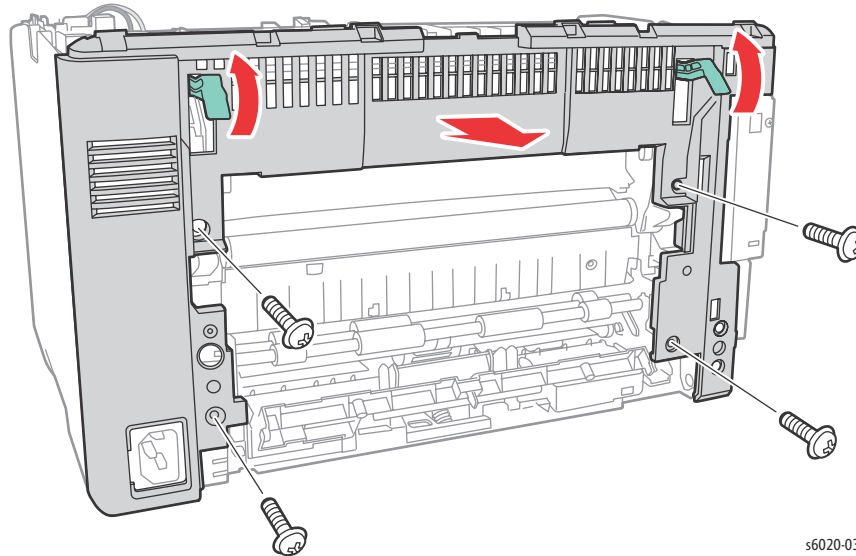
s6020-031

7. Remove 2 screws (Silver,Tap, 8mm) securing the I/L Switch Assembly to the Rear Cover and remove the Rear Cover.

s6020-308
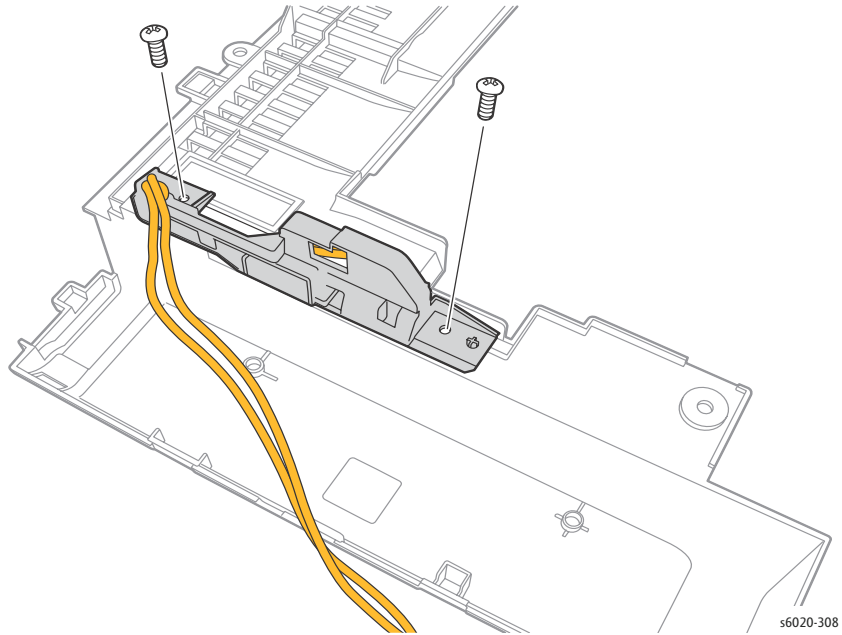
Phaser 6020 Rear I/L Switch Assembly

PL1.1.12 (with 13)

1. Remove the Paper Tray Cover (page 4-15).
2. Remove bottom left screw (Silver, Tap, 8mm) securing the Front Cover to the chassis.
3. Unhook the Front Cover on the left side bottom of the printer.
4. Unhook the Front Cover from the Left Side Cover.
5. Remove the Left Side Cover (page 4-18).
6. Open the Rear Door.
7. Remove the Rear Cover (page 4-10).
8. Remove 2 screws (Silver,Tap, 8mm) securing the I/L Switch Assembly to the Rear Cover.
9. Release the I/L Switch Assembly harness from the harness guide and disconnect from P/J 204 on the LVPS board.
10. Remove the I/L Switch Assembly.
11. Remove the Rear Interlock Switch from the I/L Switch Assembly.

s6020-308
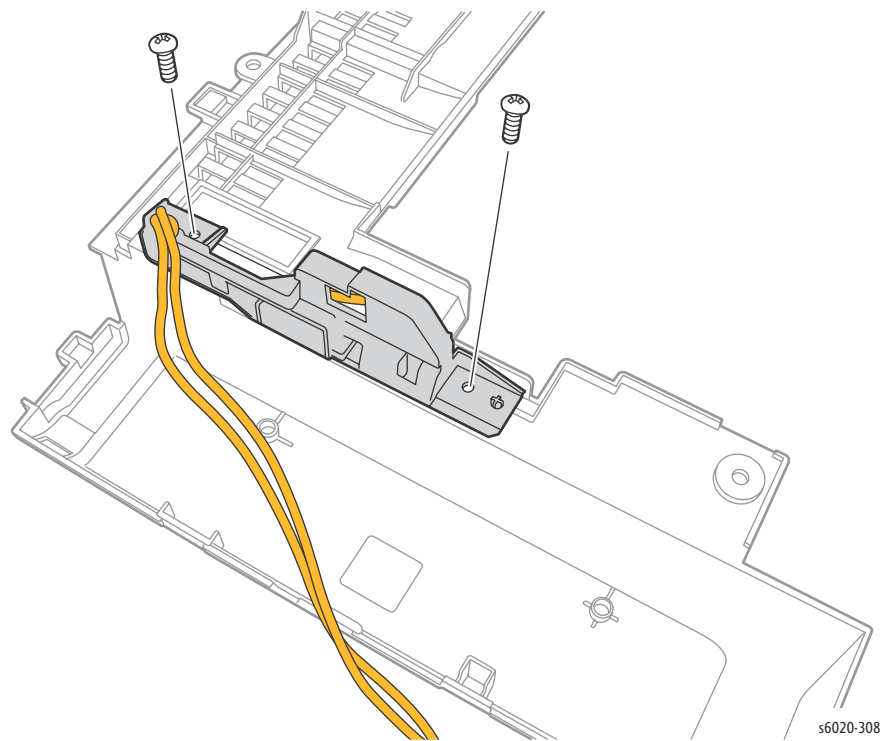
Phaser 6020 Toner Door

PL1.1.15

1. Remove the Paper Tray Cover (page 4-15).
2. Remove the Front Cover (page 4-16).
3. Open the Rear Door.
4. Slide the Toner Door to the rear to remove.
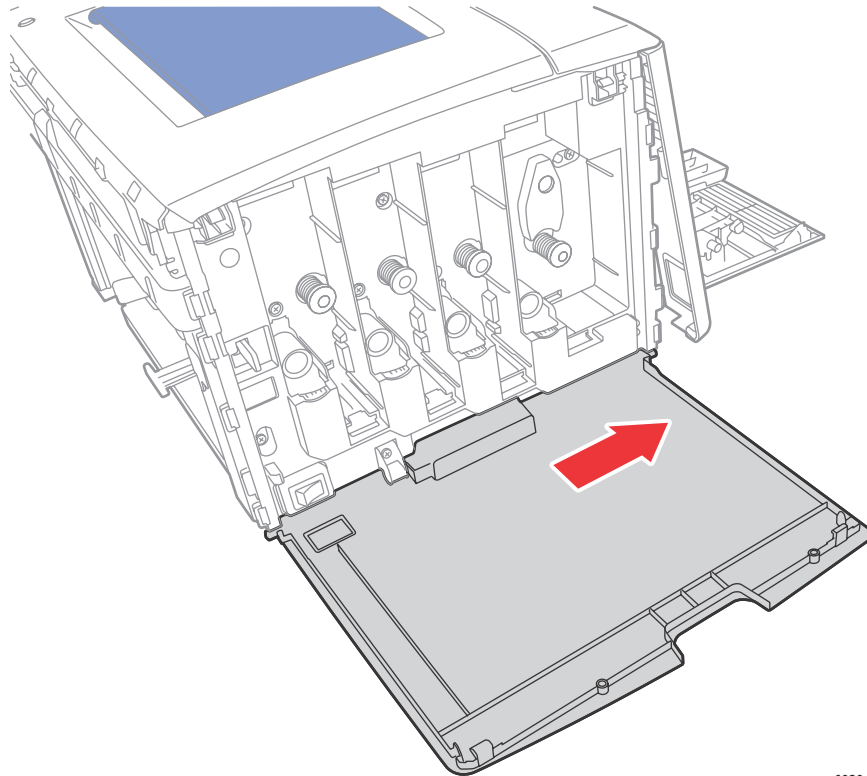
s6020-212

## Phaser 6020 Toner Door Cover Hinge

PL1.1.16

1. Remove the Paper Tray Cover (page 4-15).
2. Remove the Front Cover (page 4-16).
3. Remove the Toner Door (page 4-13).
4. Remove 1 screw (Silver, Tap, 8mm) securing the Toner Door Cover Hinge and remove.
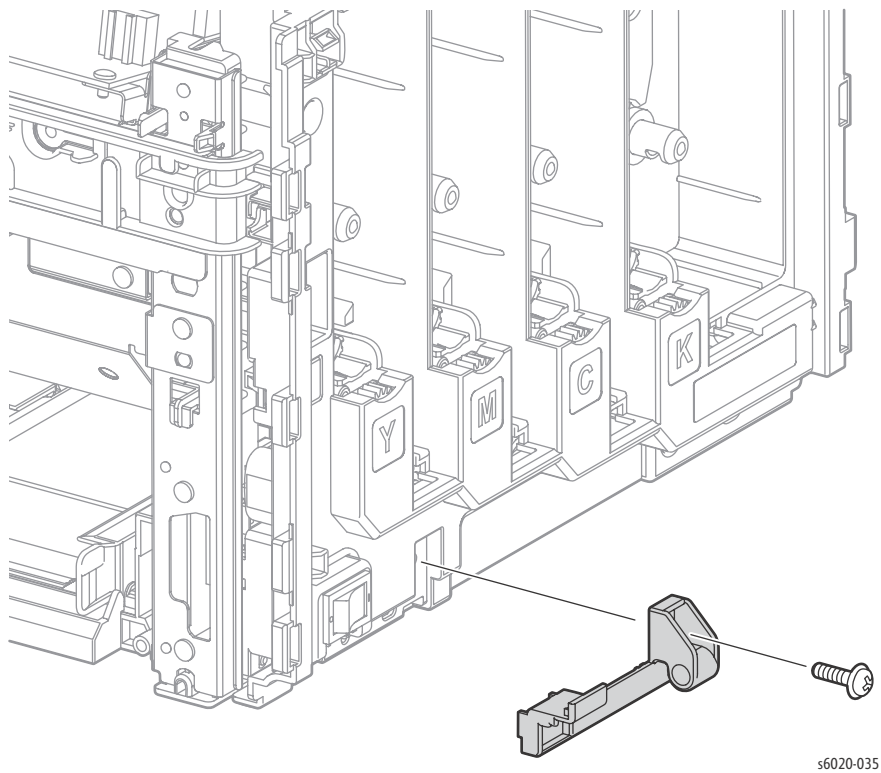
s6020-035

Phaser 6020 Paper Tray Cover

PL1.1.17

1. Open the Paper Tray Cover.
2. Release the boss on the Paper Tray Cover from the Front Cover and remove.
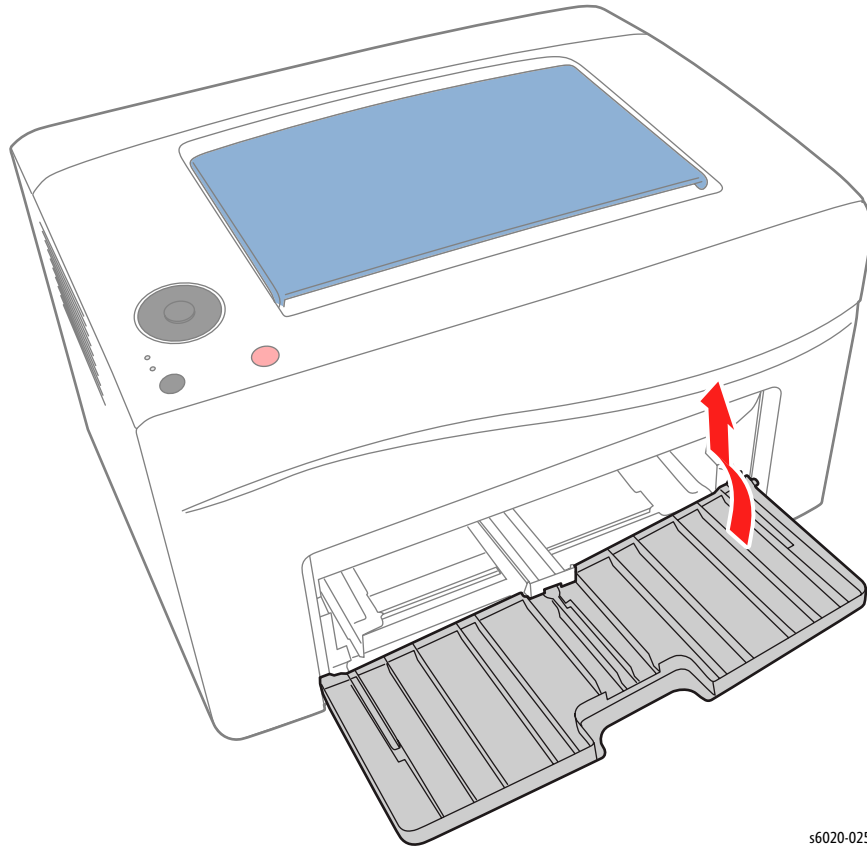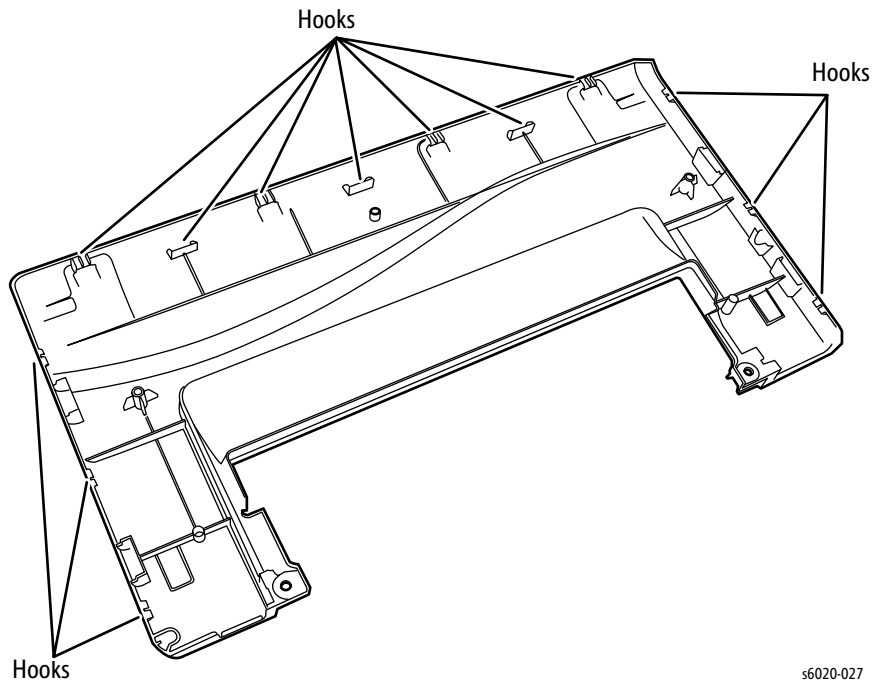
s6020-025

Phaser 6020 Front Cover

PL1.1.18

1. Remove the Paper Tray Cover (page 4-15).
2. Open the Toner Door.
3. Remove 2 screws (Silver,Tap, 8mm) that secure the Front Cover.
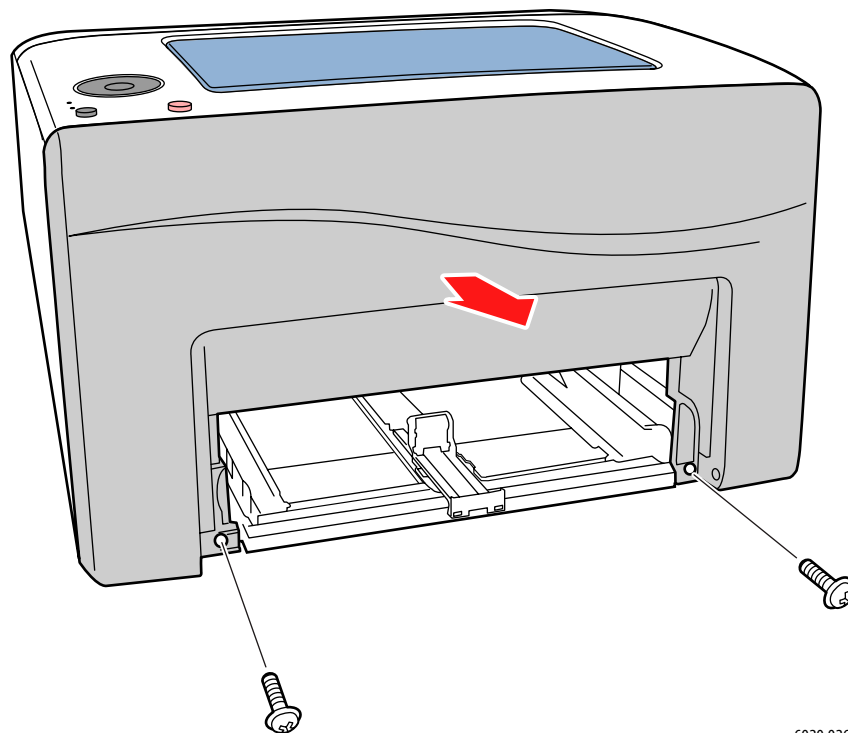
s6020-026

1. Starting at the bottom, gently pull the Front Cover away from the printer releasing 3 hooks from the Left Cover and 3 hooks from the Toner Cover.

2. Release 7 hooks from the Top Cover to remove the Front Cover.

Hooks

Hooks

Hooks

s6020-027

Partial Front Cover Removal

1. Remove the Paper Tray.
2. Remove bottom left screw (Silver, Tap, 8mm) securing the Front Cover to the chassis.
3. Unhook the Front Cover on the left side from the bottom of the printer.
4. Unhook the Front Cover from the Left Side Cover.

Phaser 6020 Left Side Cover

PL1.1.21

1. Remove the Paper Tray.
2. Remove bottom left screw (Silver, Tap, 8mm) securing the Front Cover to the chassis.
3. Unhook the Front Cover on the left side from the bottom of the printer.
4. Unhook the Front Cover from the Left Side Cover.
5. Open the Rear Door.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

6. Pull down on the 2 bottom tabs to release the cover from the hooks.
7. Lift at the back bottom corner of the Left Side Cover just below the USB/Network jack to release 1 hook.
8. Pull out and down on the front side and remove.
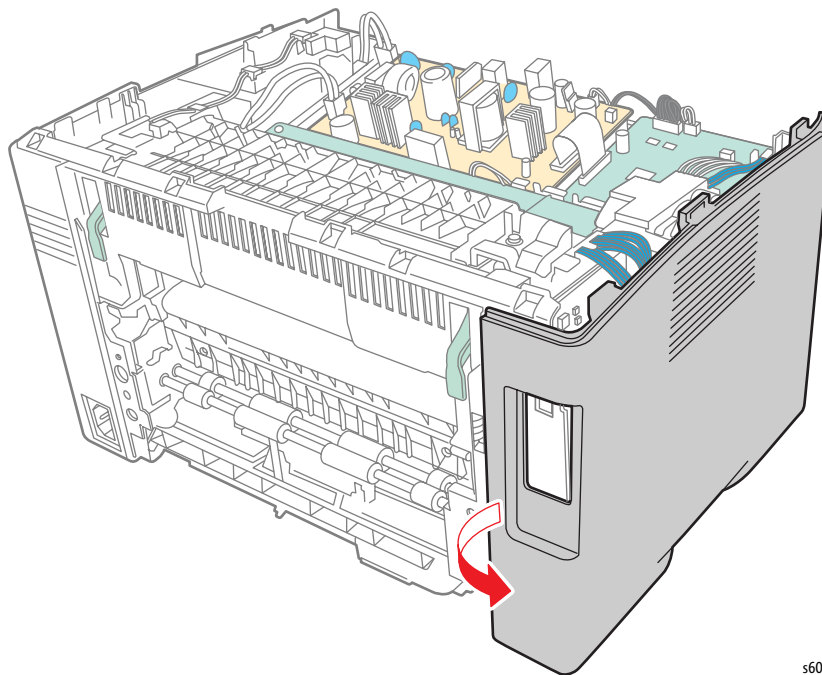
s6020-028

Note: Flex the Back Cover out at the arrow in the illustration to release an extension protruding the rear chassis.

Phaser 6020 Rear Top Cover

PL1.1.23

1. Open the Rear Door.
2. Press in on the Rear Cover and lift the center of the Rear Top Cover to release 2 hooks.
3. Lift up on each end to release 2 hooks.
4. Lift again at the center to release 2 hooks.
5. Lift up and back to release 4 hooks and remove.
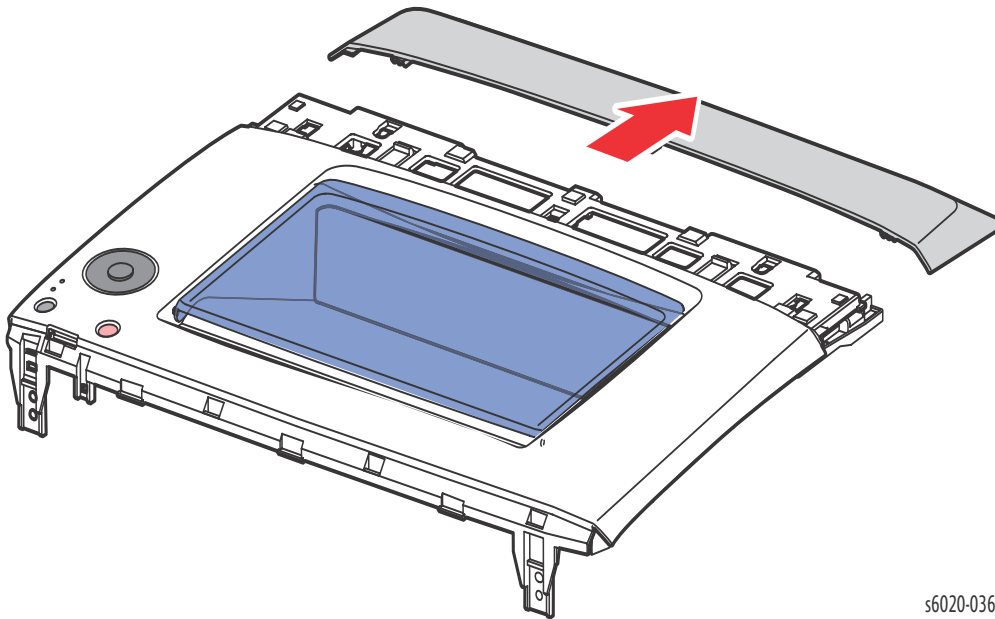
s6020-036

Replacement Note: When replacing the Top Cover only, remove the Rear Top Cover from the Top Cover and install on the new Top Cover.

Phaser 6020 Inner Top Cover

PL1.1.24

1. Remove the Paper Tray Cover (page 4-15).
2. Remove the Front Cover (page 4-16).
3. Open the Toner Door.
4. Remove the Rear Top Cover (page 4-19).
5. Remove the Top Cover (page 4-7).
6. Release 3 hooks from the Top Cover and remove.

s6020-037
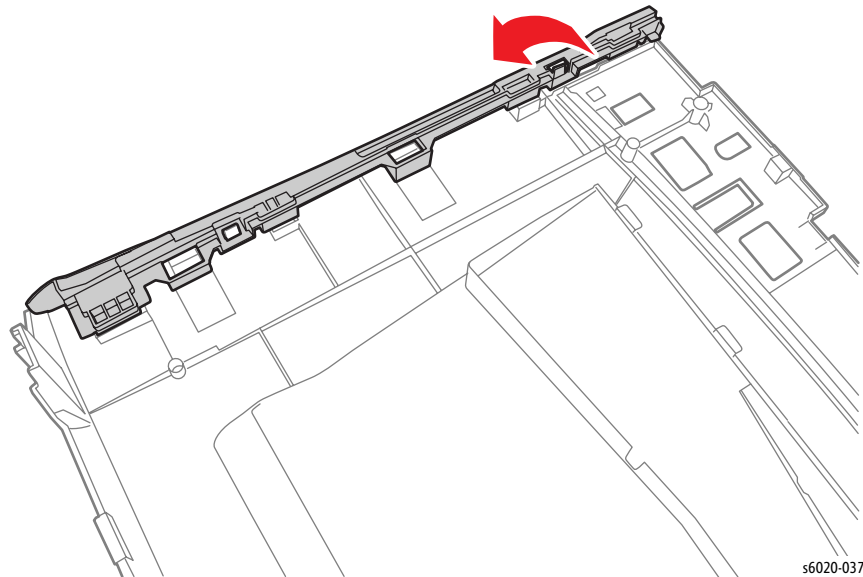
Phaser 6022 Cover Removal

Phaser 6022 Top Cover Assembly

PL1.1.1 (with 3, 14, 15, 98)

1. Open the Toner Door (page 4-27)
2. Remove the Top Front Cover (page 4-30).
3. Open the Rear Door.
4. Remove the Rear Door (page 4-22)
5. Remove the Rear Cover (page 4-23)
6. Remove 2 screws (Silver, M3, 6mm) securing the Top Cover to the rear of the chassis.
7. Disconnect the ribbon cable from socket S/J8 on the IP Board.
8. Release the right front tab of the Top Cover at the Front Cover and lift the Top Cover starting from the right.
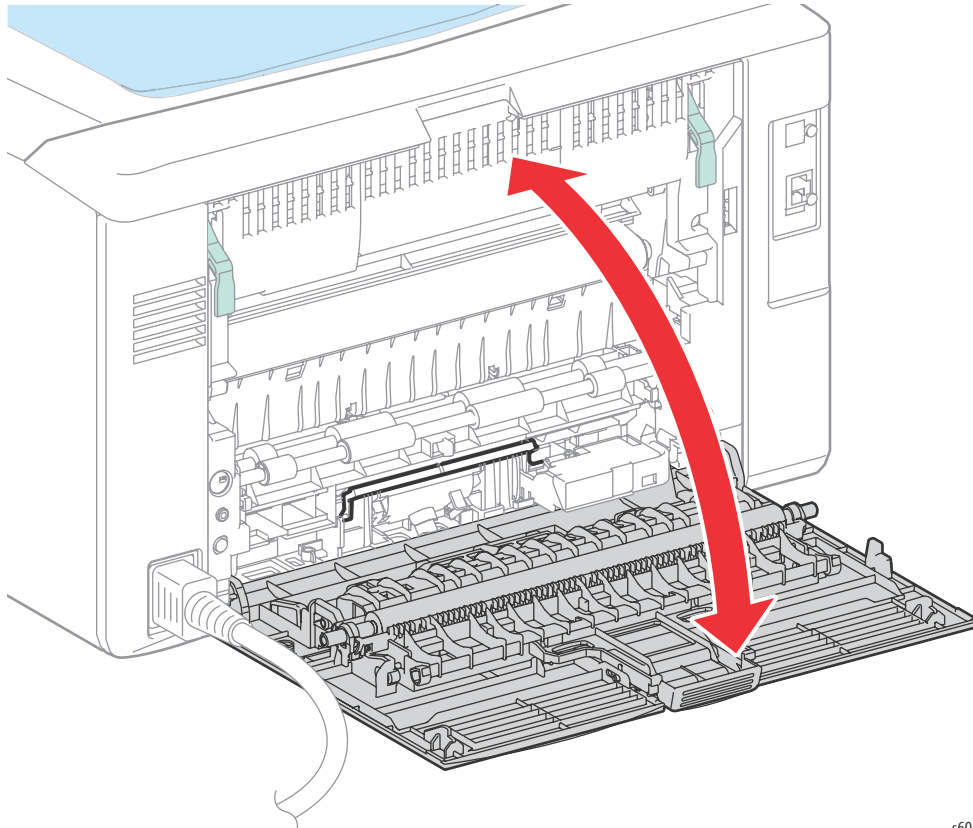9. Release 6 tabs connecting the Front Cover and remove the Top Cover.
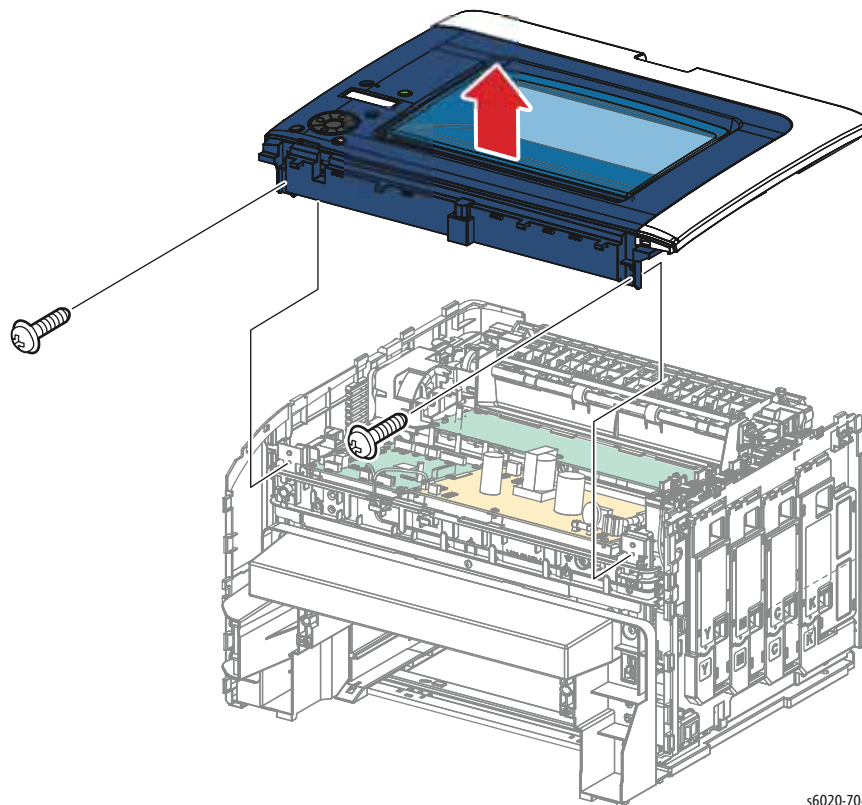
s6020-704

Phaser 6022 Rear Door

PL1.1.4

1. Open the Rear Door.
2. Release the right side boss of the Rear Door from the Rear Cover.
3. Slide the Rear Door left to release the left side boss from the Left Side Cover and remove the Rear Door.

s6020-501

Note: See "Phaser 6020 Bias Transfer Roller (BTR) Assembly" on page 9 for removing the Roller Assembly PL1.1.5, 6, 7.

Phaser 6022 Rear Cover

PL1.1.8

1. Remove the Rear Door.
2. Open the Toner Door.
3. Remove 4 (Silver,Tap, 8mm) screws attaching the Rear Cover to the chassis.
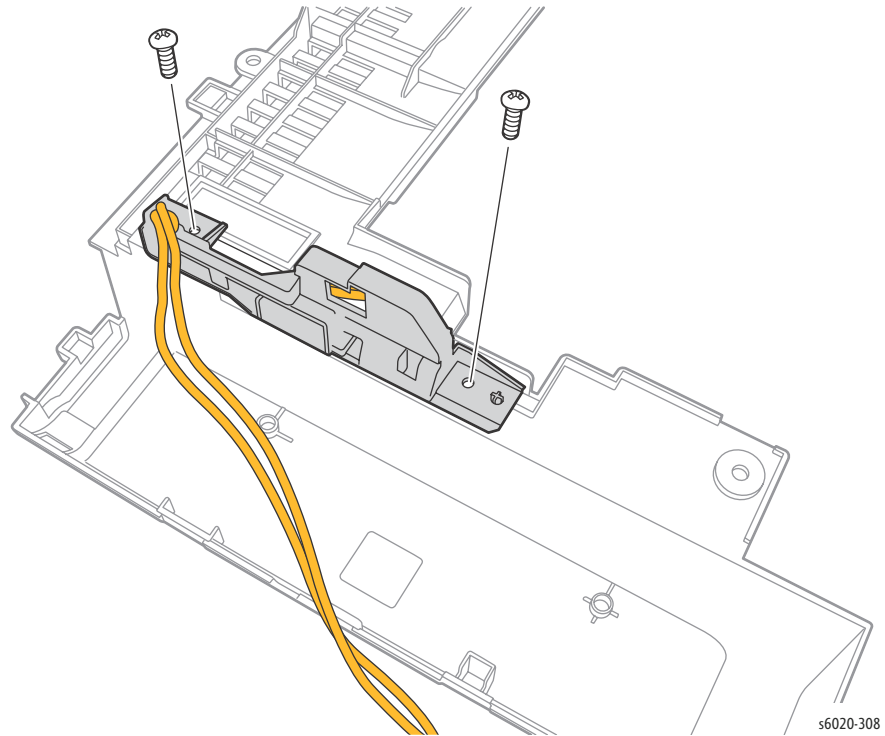4. Lift the 2 levers on the Fuser lock.
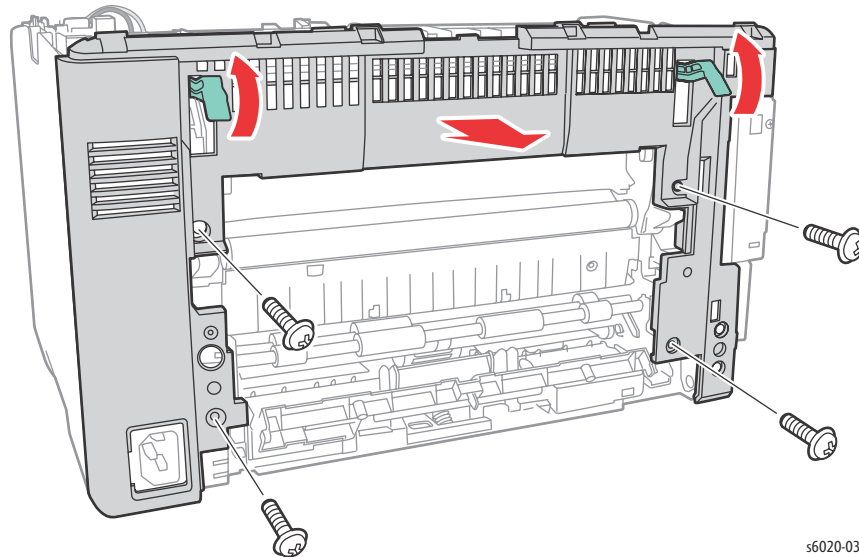
s6020-031

5. Release 3 hooks attached at the rear of the Dispenser Frame.
6. Release 3 hooks attached at the Left Cover.
7. Swing the door open to expose the I/L Rear Switch housing.

   Notes: Release some of the harness from the harness guide to allow enough slack to get to the screws of the I/L Switch Housing.
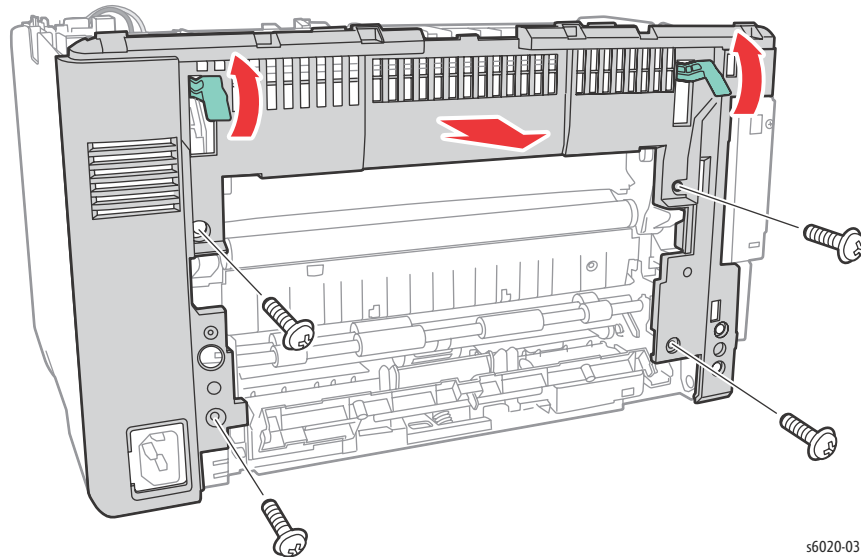
8. Remove 2 screws (Silver, Plastic, 6mm) securing the I/L Switch Housing to the Rear Door and remove the Rear Door.

s6020-308

Phaser 6022 Rear I/L Switch Assembly

PL1.1.9, 1.1.10

1. Open the Rear Door.
2. Open the Toner Door.
3. Remove 4 (Silver,Tap, 8mm) screws attaching the Rear Cover to the chassis.
4. Lift the 2 levers on the Fuser lock.

s6020-031

5. Release 3 hooks attached at the rear of the Dispenser Frame.
6. Release 3 hooks attached at the Left Cover.
7. Swing the Rear Cover open to expose the I/L Rear Switch housing.

    Notes: Release part of the harness from the harness guide to allow enough slack to get to the screws of the I/L Switch Housing.

8.   Remove 2 screws (Silver, Plastic, 6mm) securing the I/L Switch Housing to the Rear Cover and remove the Rear Cover.

s6020-308
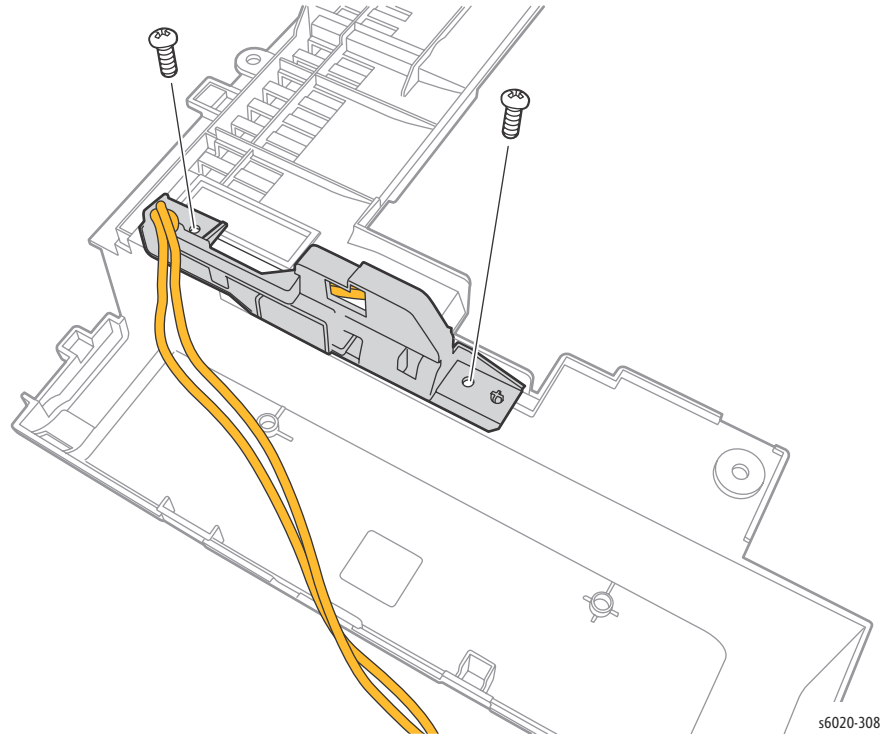
9.   Release the I/L Switch Harness from the harness guide and disconnect from P/J204 on the LVPS to remove completely.

P/J204

s6020-033
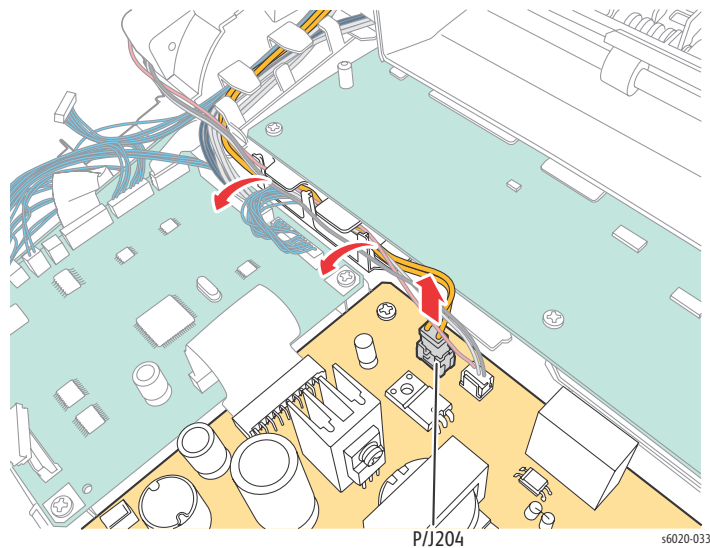
Phaser 6022 Toner Door

PL1.1.11

1. Release 2 hooks from the right side of the Rear Cover.
2. Slide the Toner Door to the rear of the printer and remove.

s6020-604

Note: See "Phaser 6020 Toner Door Cover Hinge" on page 14 for removing the Toner Door Hinge PL1.1.12.
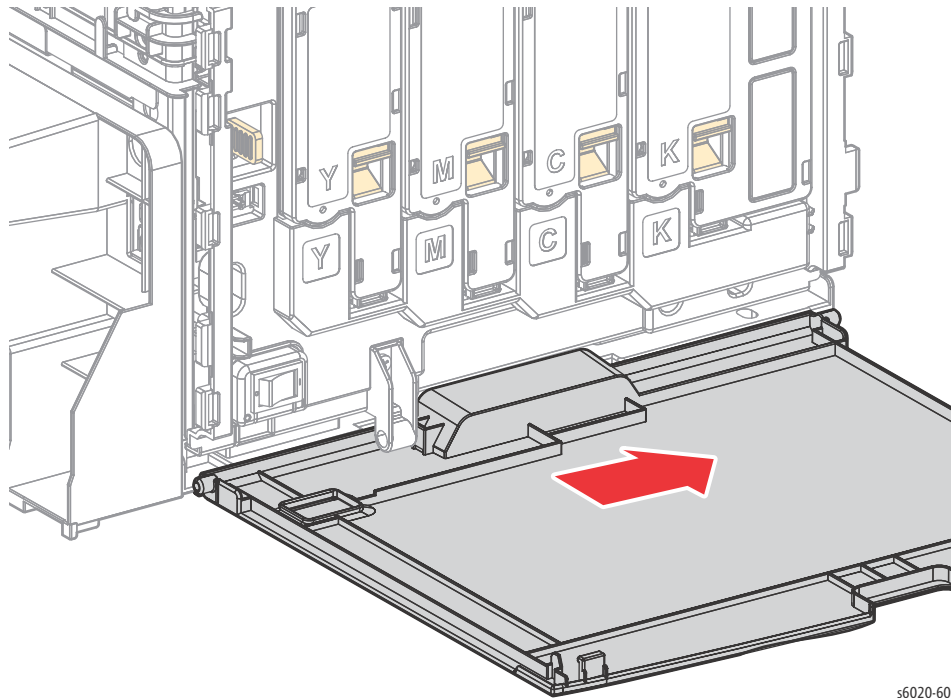
Phaser 6022 Left Side Cover

PL1.1.13

1. Remove the Paper Tray and Jam Cover (page 4-32).
2. Remover the Toner Door (page 4-27)
3. Remove the Top Front Cover (page 4-30).
4. Remove the Front Cover (page 4-34).
5. The Right Side Cover is easily detached from the Toner Window Cover boss as an assembly attached to the Front Cover.Open the Rear Door.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

6. Release 2 hooks on the bottom to remove cover.
7. Lift at the back bottom corner of the Left Side Cover just below the USB/Network jack to release 1 hook.
8. Pull out and down on the front side and remove.

s6020-697

Note: Flex the Back Cover out at the arrow in the illustration below to release an extension protruding the rear chassis.

Phaser 6022 Rear Top Cover

PL 1.1.14

Note: The Rear Top Cover is attached to the Top Cover using a sliding latch system, be careful to pull up only where directed.

1. Lift up at the rear left corner of the Rear Top Cover to release 2 hooks from the Top Cover.
2. Pull the left side of the Rear Top Cover to the rear of the printer to release 2 sliding latches.
3. Pull the Rear Top Cover to the right to release 2 sliding latches from the rear of the Top Cover and remove.
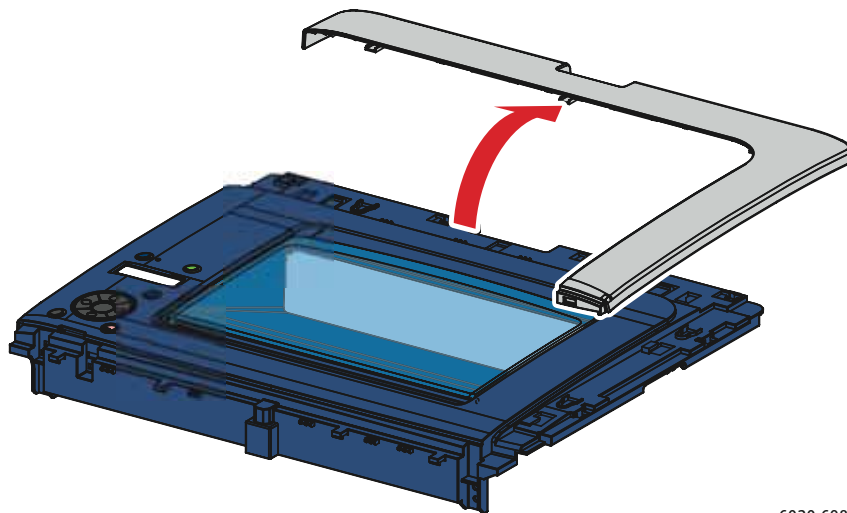
s6020-698

Phaser 6022 Top Front Cover

PL1.1.16

1. Lift the left side of the Top Front Cover up and right to release 5 hooks underneath to remove.
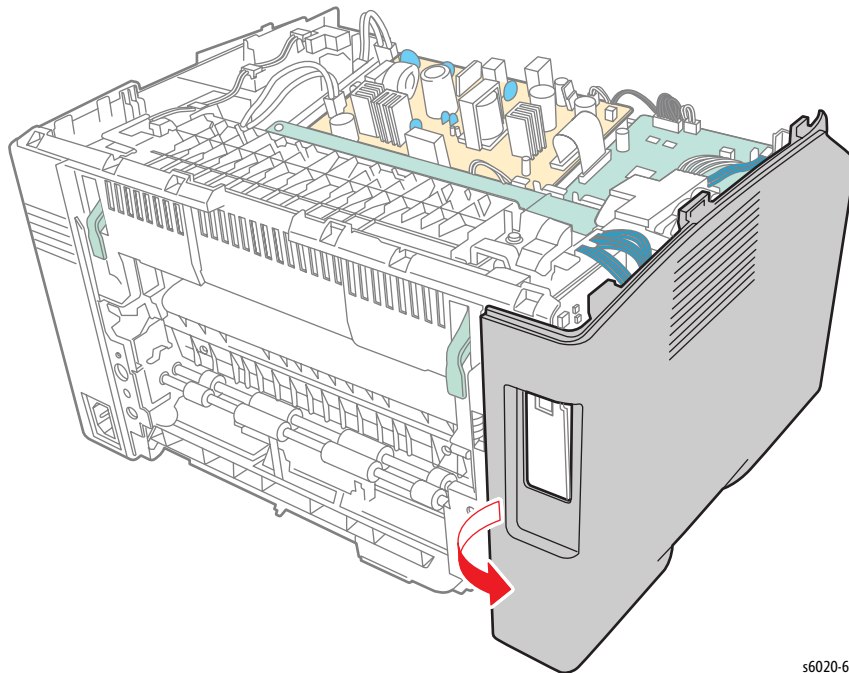

s6020-699
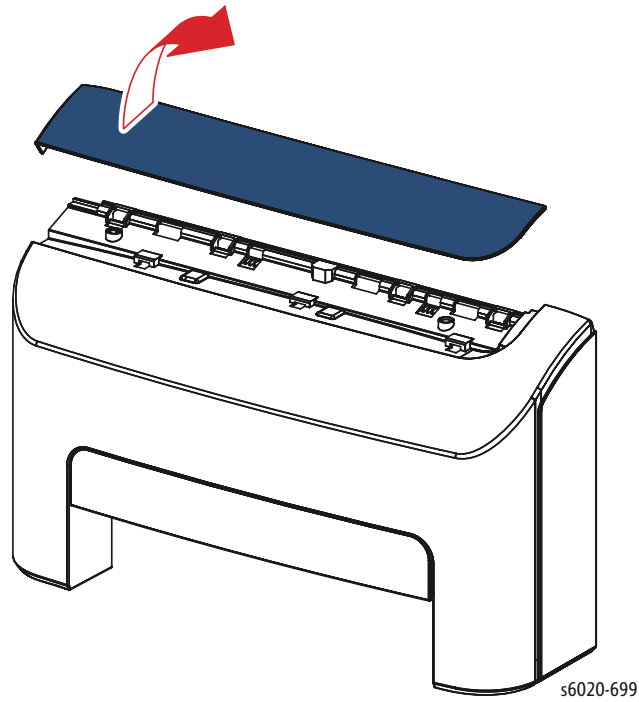
Phaser 6022 Front Side Cover

PL 1.1.18

1. Remove the Paper Tray and Jam Cover (page 4-32).
2. Remover the Toner Door (page 4-27)
3. Remove the Top Front Cover (page 4-30).
1. Remove the Front Cover (page 4-34).

   Note: The Front Side Cover is easily detached from the Toner Window Cover boss as an assembly attached to the Front Cover.

2. Release 3 hooks connecting the Front Side Cover to the Front Cover.
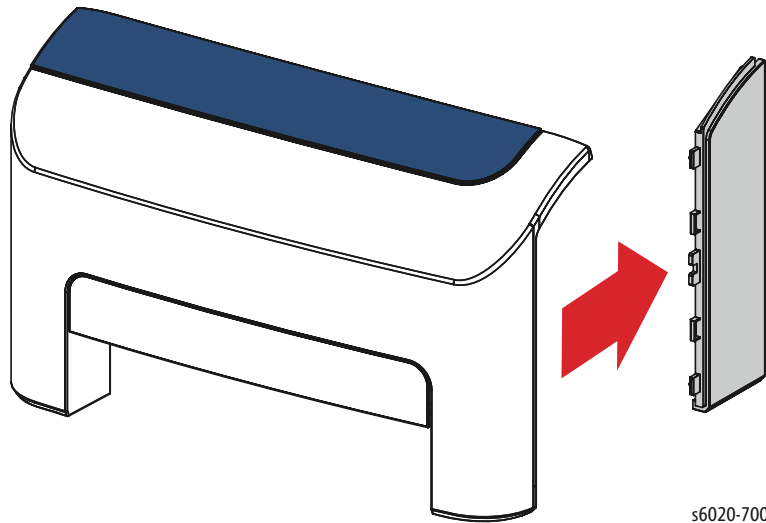
s6020-700

Phaser 6022 Jam Cover, Jam Cover Bracket

PL 1.1.19, 1.1.20

1. Pull the Paper Tray out from the front of the printer.
2. Lift the Jam Cover and press out on each side of the Jam Cover hinge to remove.

s6020-701
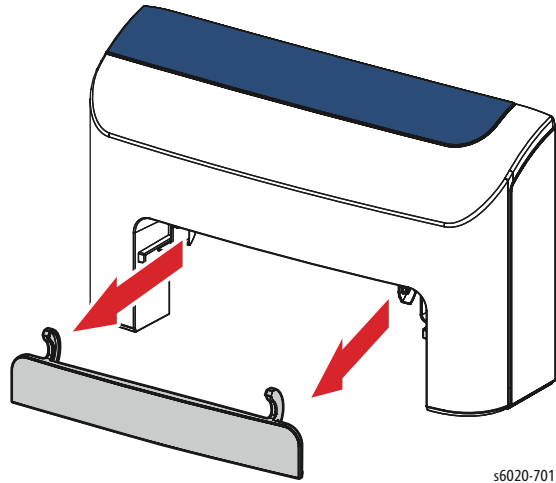
Jam Cover Bracket Removal

> Note: The Jam Cover Bracket holding the Jam Cover snaps into the back of the Front Cover above the opening.

3. Remove the Top Front Cover (page 4-30).
4. Turn the Front Cover over.
5. Remove 2 screws (Silver, Plastic, 6mm) securing the Jam Cover Bracket to the Front Cover.

Hook Attachment Points

s6020-702
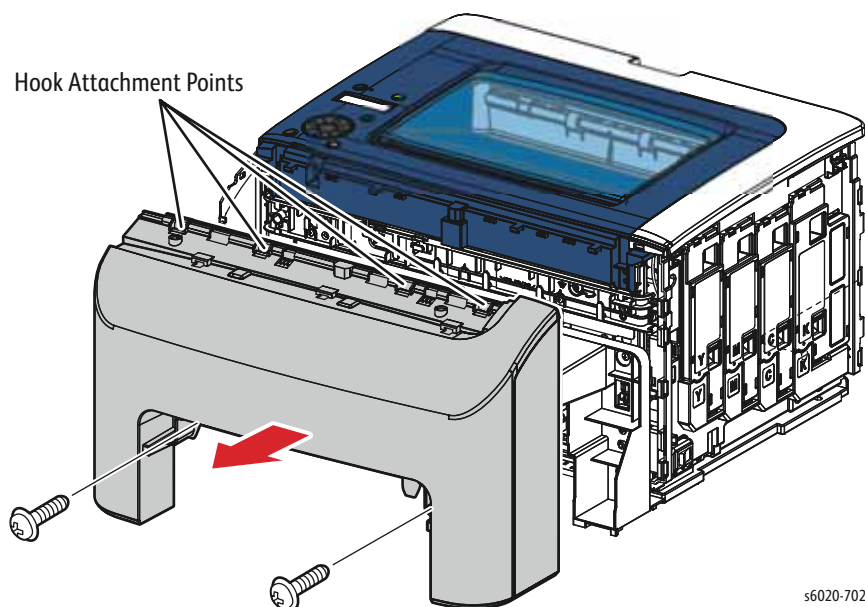
6. Release 2 hooks and lift the Jam Cover Bracket from the Front Cover to remove.

Hook

Hook
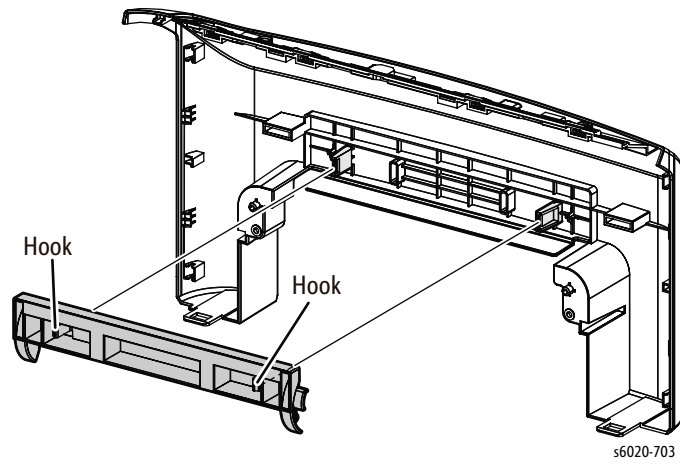
s6020-703

Phaser 6022 Front Cover

PL1.1.21

1. Remove the Paper Tray and Jam Cover (page 4-32).
2. Remover the Toner Door (page 4-27)
3. Remove the Top Front Cover (page 4-30).

s6020-699

4. Remove 2 screws (Silver,Tap, 8mm) securing the Front Cover to the chassis.
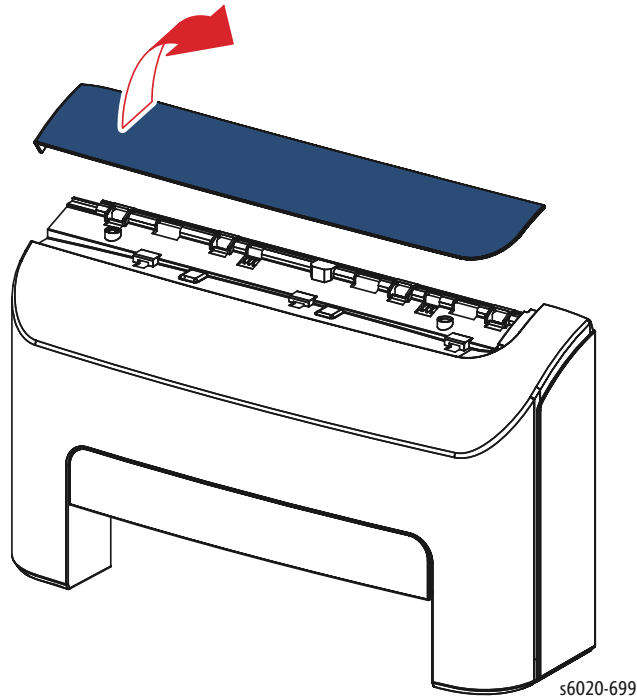
Hook Attachment Points
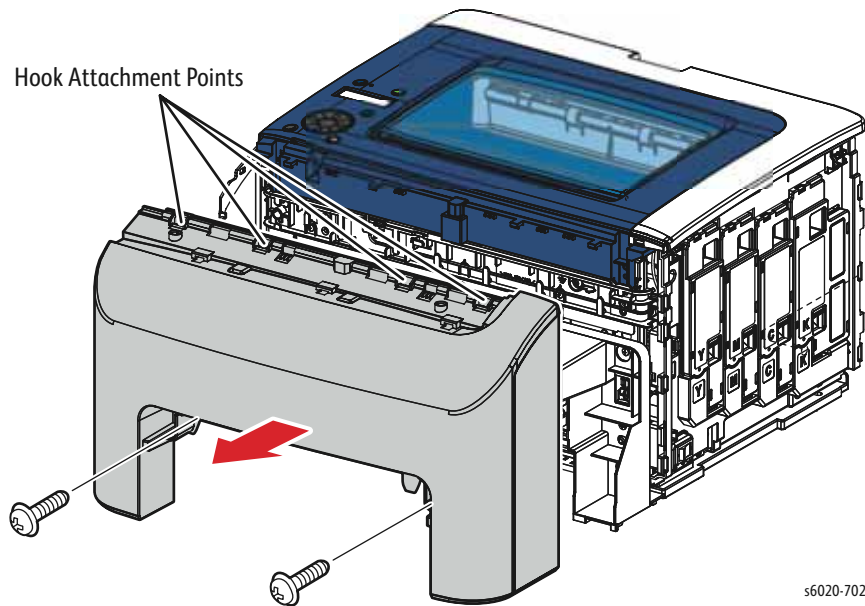
s6020-702

Note: The Right Side Cover is easily detached from the Toner Window Cover boss as an assembly attached to the Front Cover.

5. Starting at the bottom left, gently pull the Front Cover away from the printer releasing 3 hooks from the Left Cover.

    Note: Pressing in on the Left Cover at the connection to the Front Cover will ease release of 3 hooks attaching the Front Cover.

6. Release 4 hooks from the Top Cover and remove the Front Cover.

Hook

Hook
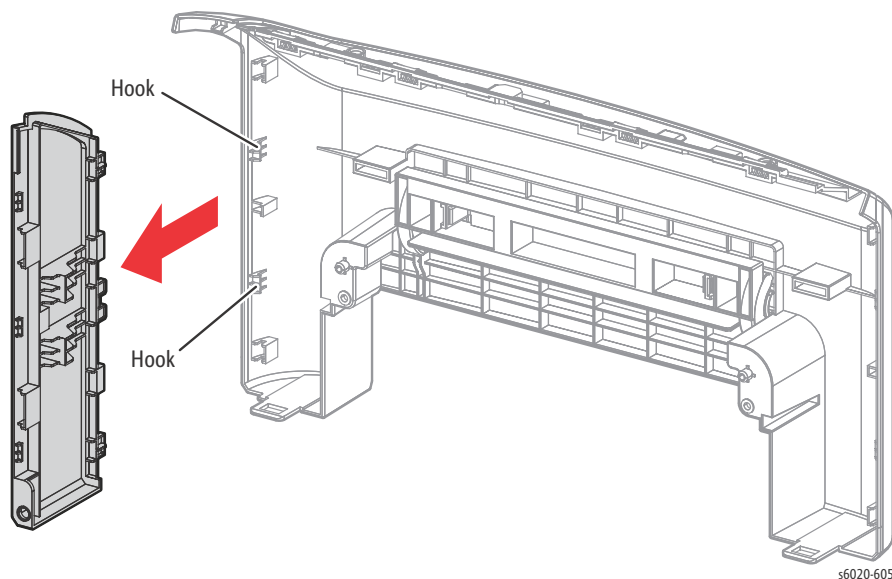
s6020-605

WorkCentre 6025 MFP Cover Removal

WorkCentre 6025 MFP Top Cover Assembly

PL 1.1.1 (with 2, 4, 27)

1. Remove the Paper Tray Cover (page 4-43).
2. Lift the Scanner.
3. Remove the Output Tray Extension.
4. Open the Toner Door.
5. Remove the Front Cover (page 4-48).
6. Remove 2 screws (Silver,Tap, 8mm) securing scanner arms to Top Cover.
7. Slide both scanner arms toward front of printer and lift up.
8. Remove scanner arms.
9. Open the Scanner until the hinges disconnect from the Top Cover.
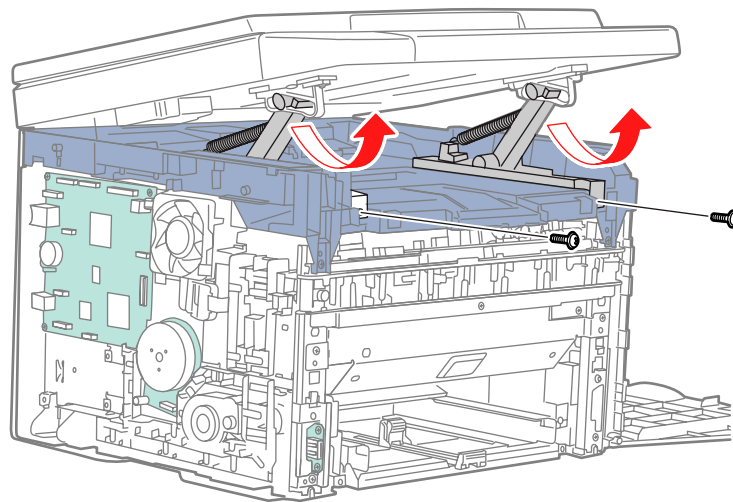
s6020-283

10. Pull the cables through the hole in the Top Cover while removing the Scanner.

s6020-340
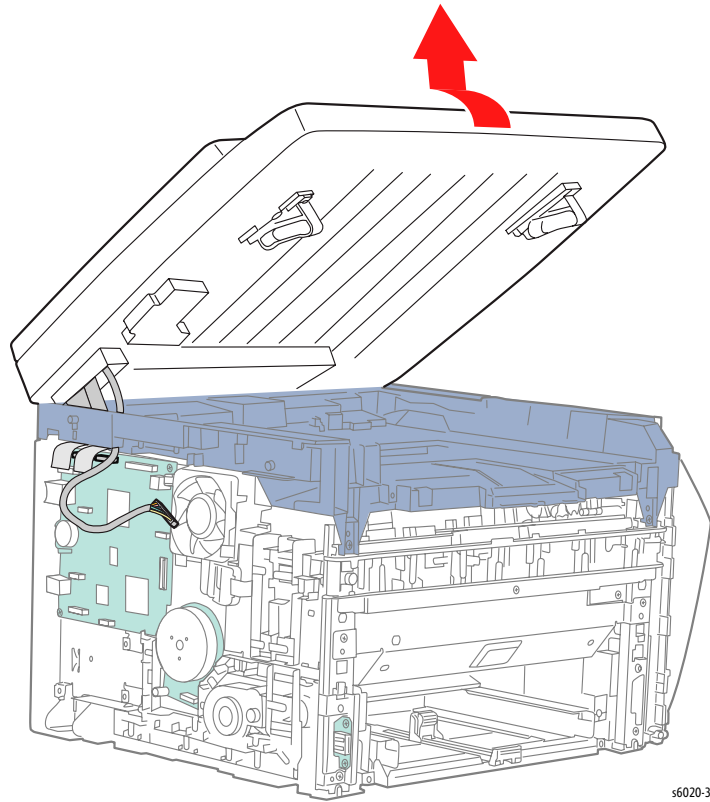
11. Open the Rear Door.
12. Remove 2 screws (Silver, Tap, 8mm) securing the Rear Cover to the Top Cover.

s6020-343
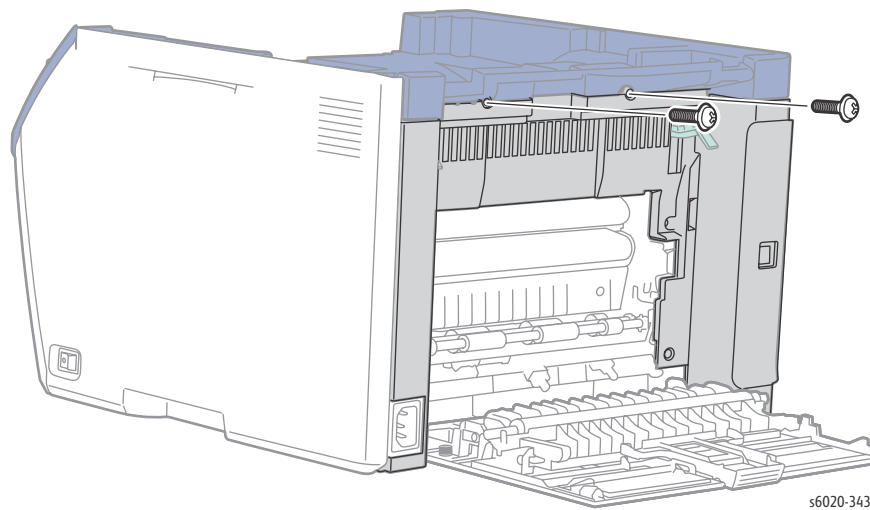
13. Remove 2 screws (Silver, Tap, 6mm) securing the Top Cover at the front of the printer.

14. Remove 2 screws (Silver, Tap, 6mm) securing the Top Cover in the rear of the printer from the top.

15. Release 3 tabs and lift the Top Cover off the printer.L
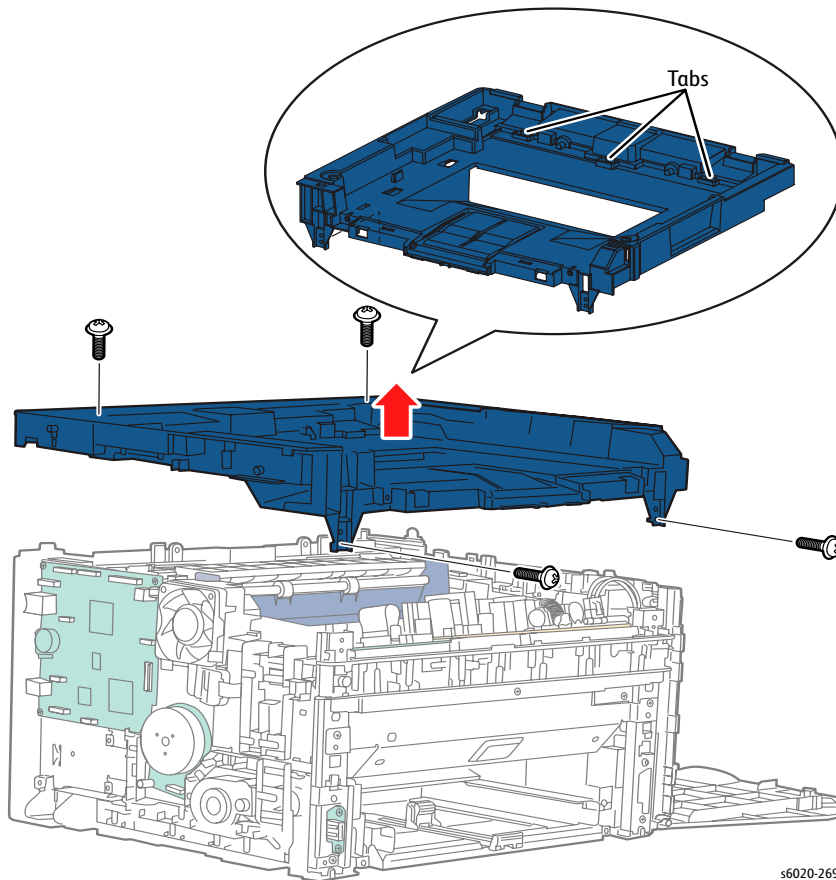
s6020-269

WorkCentre 6025 MFP Rear Door Assembly

PL1.1.6

1. Open the Rear Door.
2. Release the right side boss of the Rear Door from the Rear Cover.
3. Slide the Rear Door left to release the left side boss from the Left Side Cover and remove the Rear Door.
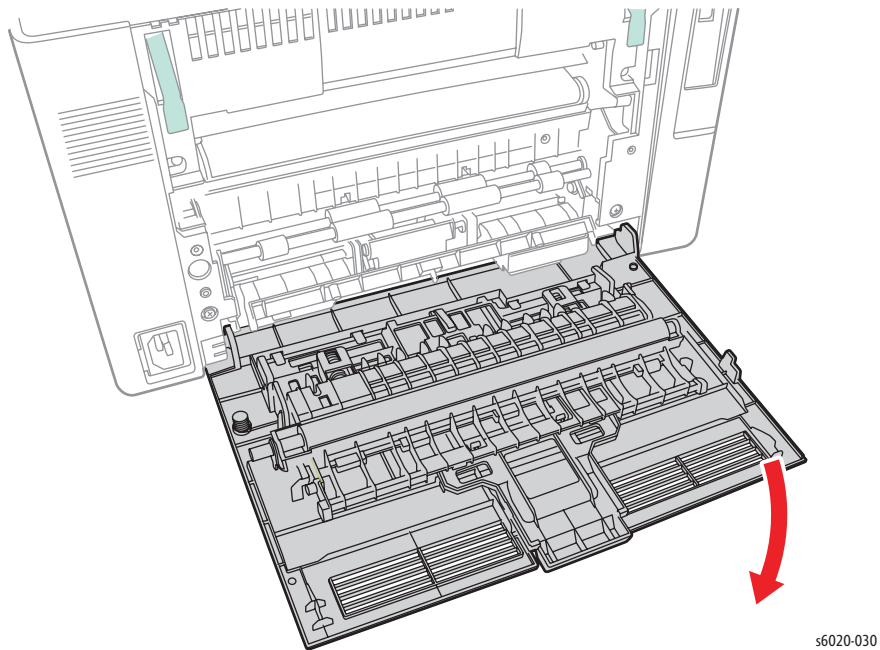
s6020-030

Note: See "Phaser 6020 Bias Transfer Roller (BTR) Assembly" on page 9 for removing the Roller Assembly PL1.1.7, 8, 9.

WorkCentre 6025 MFP Rear Cover

PL 1.1.10

1. Remove the Top Cover (page 4-36).
2. Remove the Rear Door (page 4-39)
3. Lift the 2 levers on the Fuser lock.

s6020-313
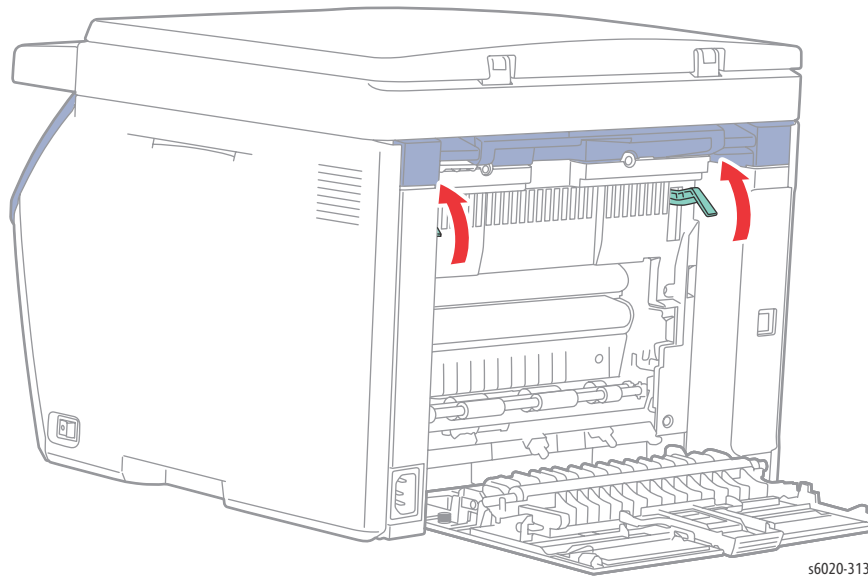
4. Remove 6 screws (Silver, Tap, 8mm) securing the Rear Cover to the chassis and remove the Rear Cover.

s6020-733

WorkCentre 6025 MFP I/L Switch Assembly (with 13)

PL 1.1.12 (with 13)

1. Remove the Rear Cover (page 4-40).
2. Remove 2 screws (Silver, Tap, 8mm) securing the I/L Switch Assembly to the Rear Cover and remove the I/L Switch Assembly.
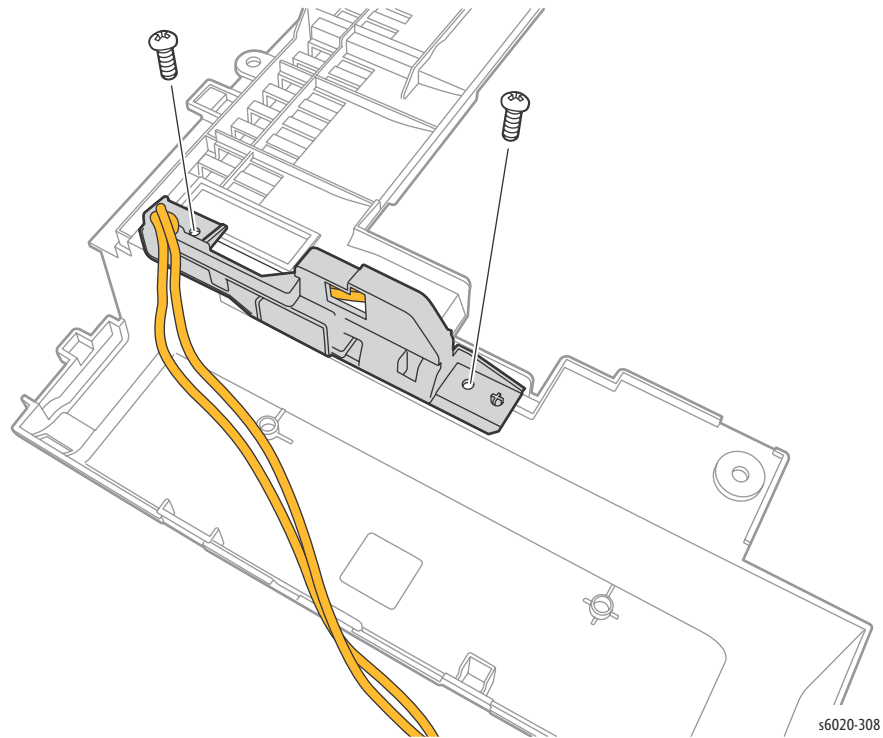
s6020-308

WorkCentre 6025 MFP Toner Door

PL 1.1.15

1. Open the Toner Door.
2. Release the boss on the right side of the Toner Door.
3. Slide the right boss from the Rear Cover, off the toner Door Hinge, and remove the Toner Door.
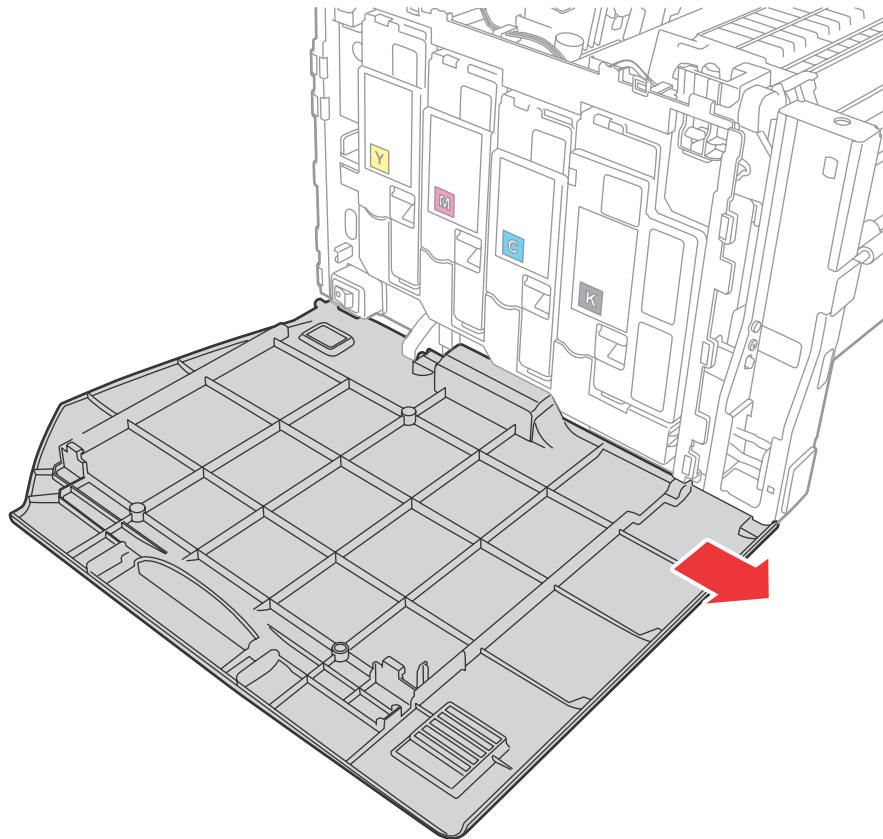
s6020-309

Note: See "Phaser 6020 Toner Door Cover Hinge" on page 14 for removing the Toner Door Hinge PL1.1.16.

WorkCentre 6025 MFP Paper Tray

PL 1.1.17

1. Open the Paper Tray Cover.
2. Release the boss of the Paper Tray Cover from the hole in the Front Cover and remove.

s6020-333
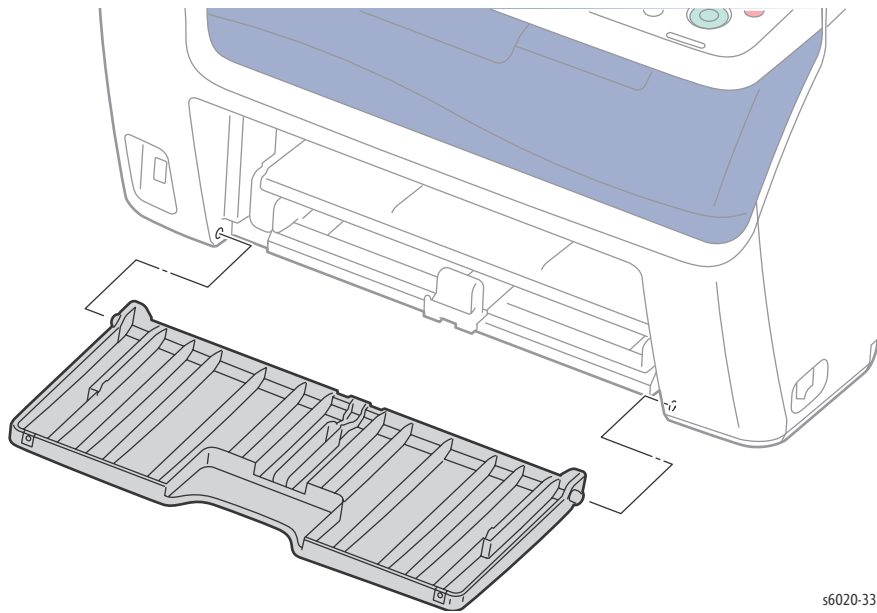
WorkCentre 6025 MFP Left Side Cover

PL 1.1.21

1. Remove the Paper Tray (page 4-15).
2. Lift the Scanner.
3. Remove 1 screw (Silver, Tap, 6mm) from the left side of the Front Cover.
4. Release 3 hooks connecting the left side of the Front Cover to the Left Side Cover.
5. Release 2 hooks on bottom of the printer.
6. Release 2 hooks on the back of the Left Cover connecting to the Rear Cover.
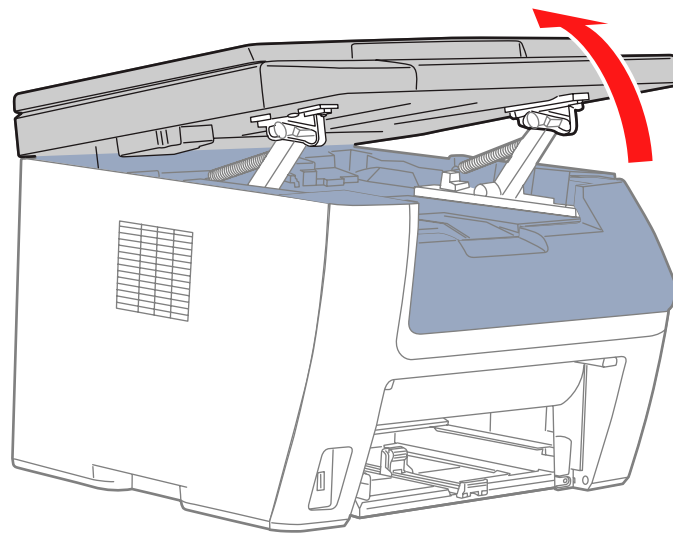
s6020-306

7. Release 2 top hooks while pulling the Left Cover down and away from the printer and remove the cover.
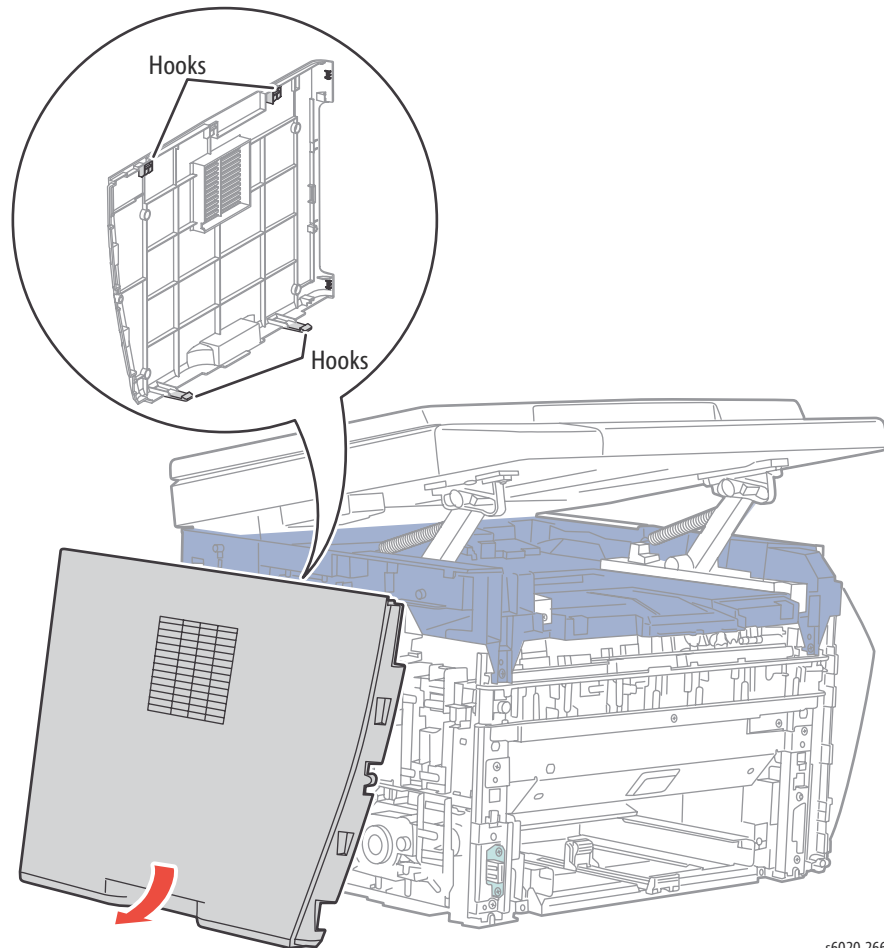
s6020-266

Replacement Note: Start by inserting 3 tabs of the Left Cover into the slots of the Top Cover to install.

WorkCentre 6025 MFP Output Tray Extension

PL 1.1.27

1. Lift the Scanner.
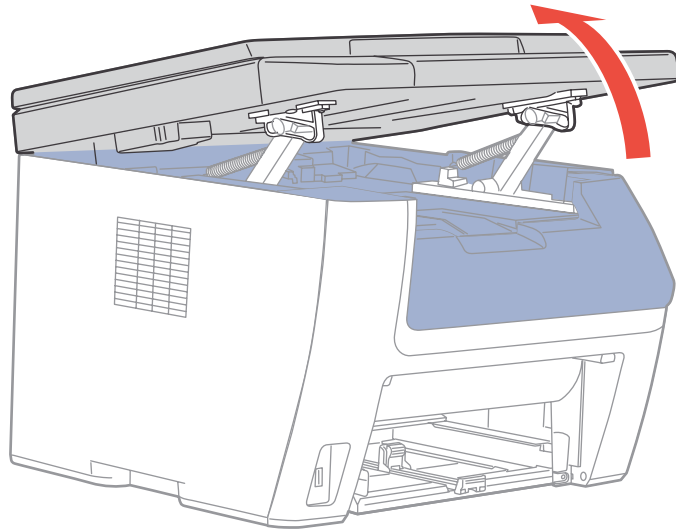
s6020-420

2. Slide the Output Tray extension to the front of the printer until it stops.

3. Release the boss on each side from the Top Cover and remove.
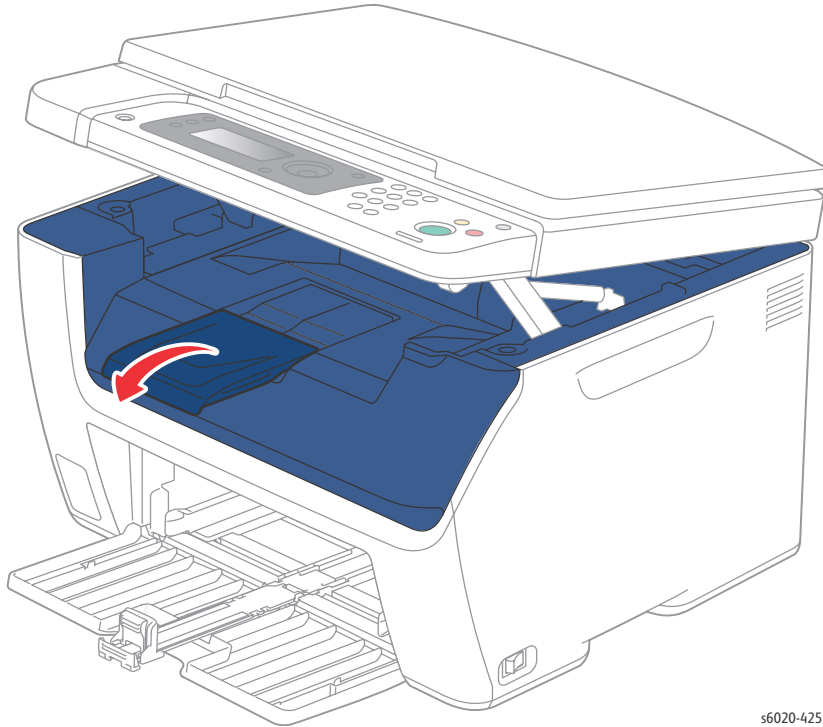
s6020-425

WorkCentre 6025 MFP Front Cover

PL 1.1.38 (with 18, 35, 36, 37)

1. Remove the Paper Tray (page 4-43).
1. Lift the Scanner.
2. Open the Toner Door.
3. Push down in the front-center of the Top Cover at the Upper Front Cover to release 2 hooks.
4. Pull up on each side of the Upper Front Cover to release 4 hooks and remove the Upper Front Cover.
5. Remover 2 screws (Silver, Plastic, 6mm) securing the Lower Front Cover to the chassis.
6. Release 3 hooks from the Left Side Cover and 3 hooks from the Dispenser Frame releasing the Inner Front Cover and remove.
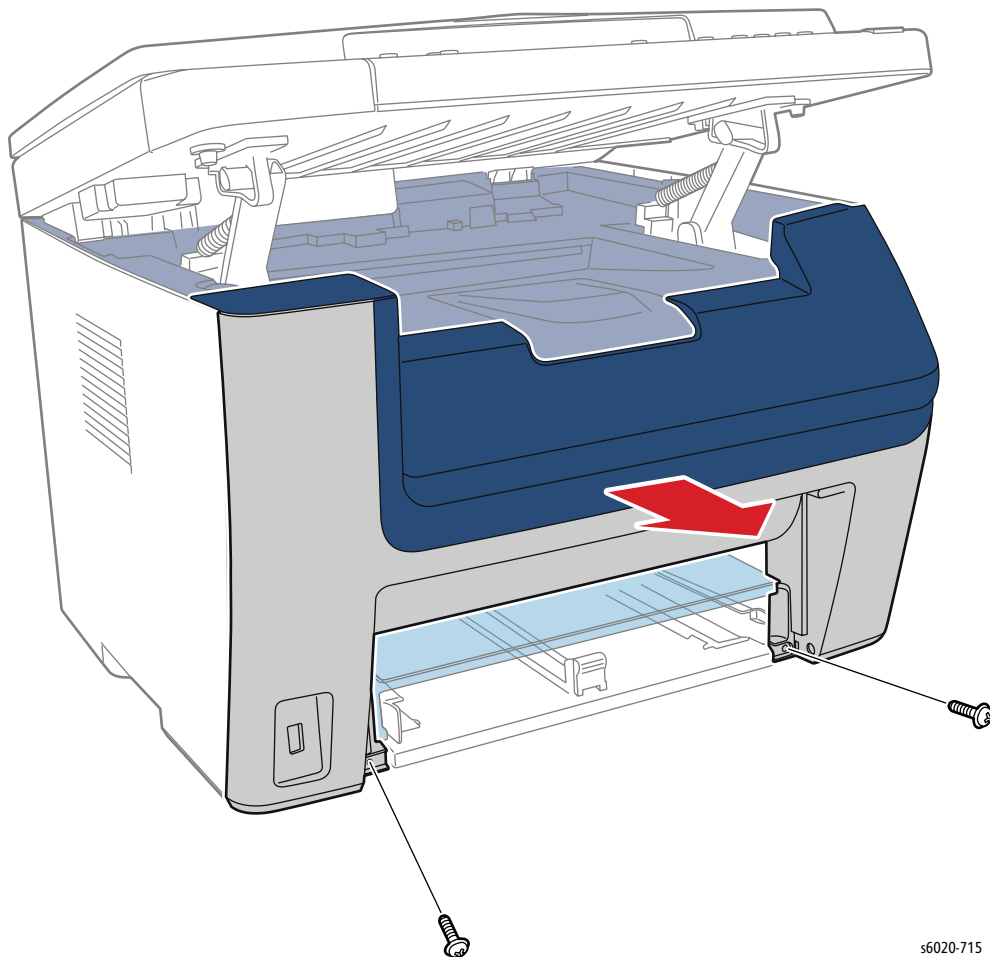
s6020-715

WorkCentre 6027 MFP Cover Removal

WorkCentre 6027 MFP Top Cover

PL 1.1.3

1. Remove the Paper Tray.
2. Remove the Jam Cover
3. Remove the Front Cover (page 4-61).
4. Remove the Left Side Cover (page 4-56).
5. Remove the ADF Assembly (page 4-77).
6. Open the Toner Door
7. Remove the Upper Right Side Cover (page 4-58).
8. Remove the Rear Cover (page 4-52).
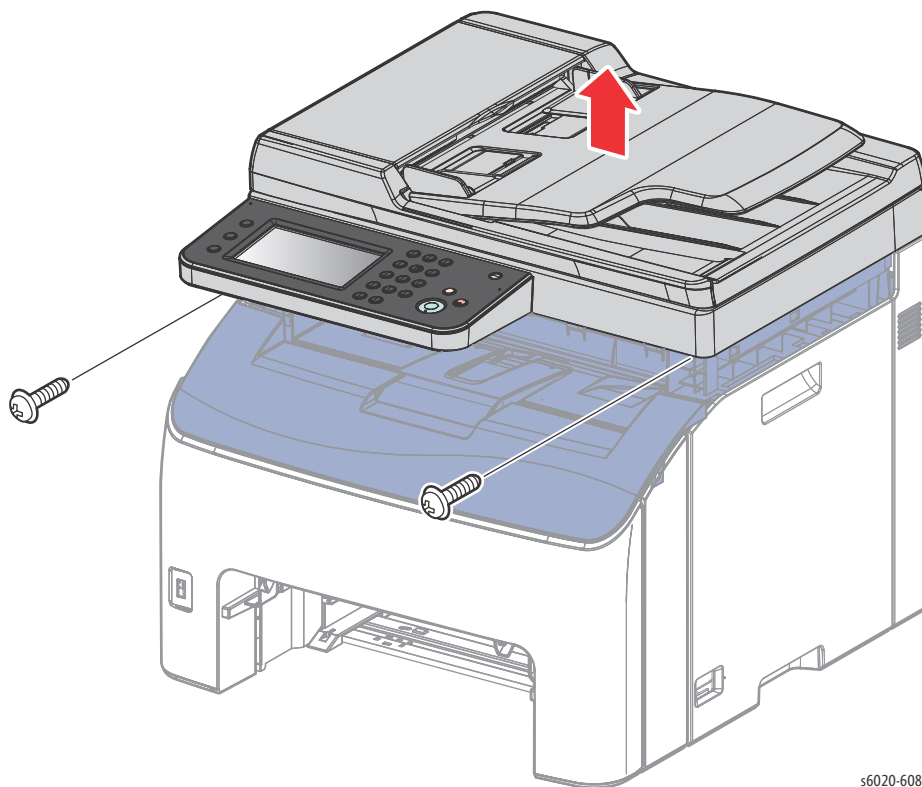
s6020-608

9.   Remove 4 screws (Silver, M3, 6mm) securing the Top Cover to the chassis.

10. Release 3 tabs holding the Top Cover to the chassis and remove the Top Cover.
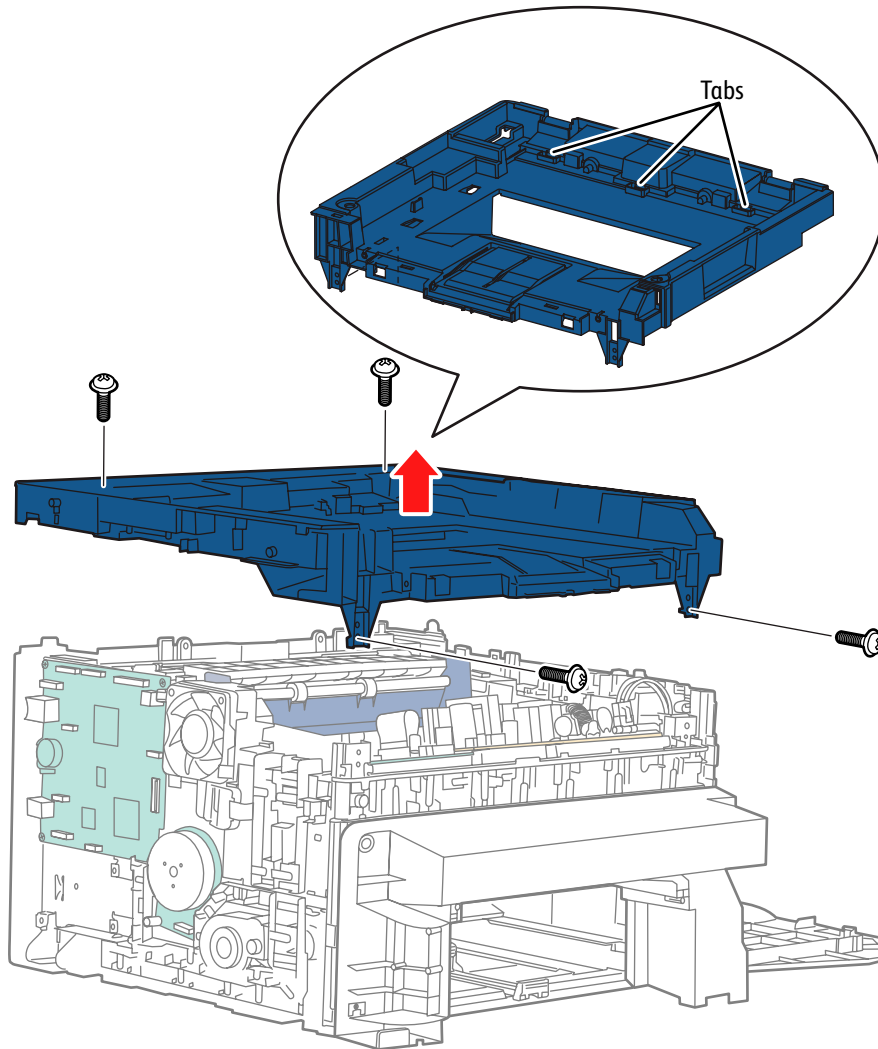
s6020-719

WorkCentre 6027 MFP Rear Door Assembly

PL 1.1.4

1. Open the Rear Door.
2. Release the right side boss of the Rear Door (located adjacent to the power receptacle) from the chassis.
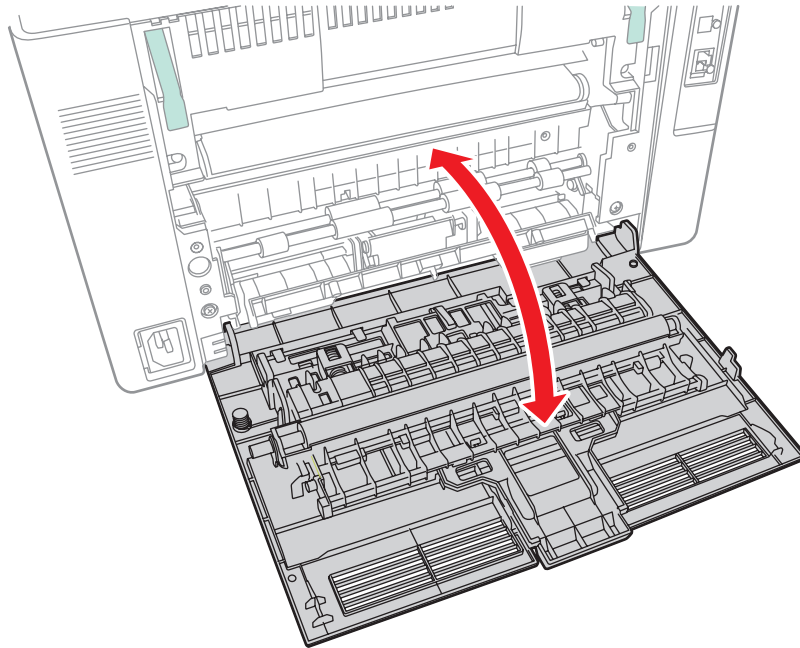

s6020-724

Note: See "Phaser 6020 Bias Transfer Roller (BTR) Assembly" on page 9 for removing the BTR Roller Assembly PL1.1.5, 6, 7.
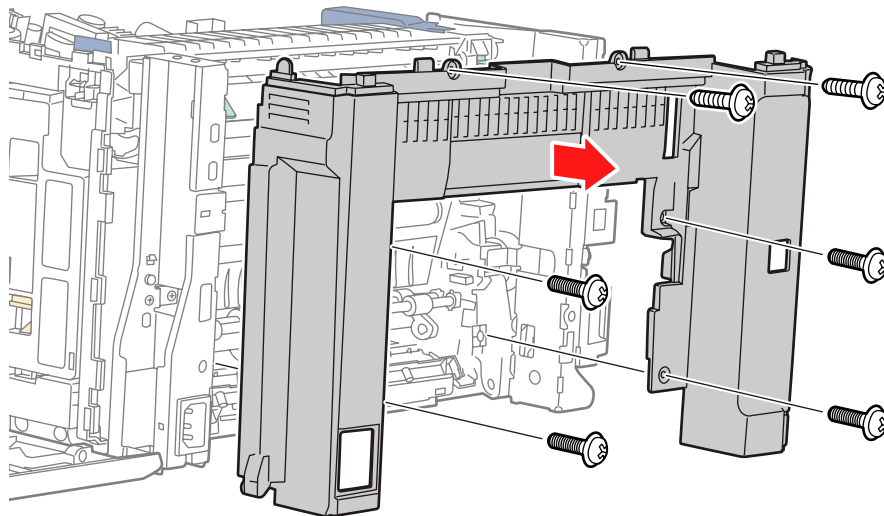
WorkCentre 6027 MFP Rear Cover Assembly (with 23)

PL 1.1.8, PL 1.1.23

1. Remove Rear Door (page 4-51).
2. Lift the 2 levers locking the Fuser.
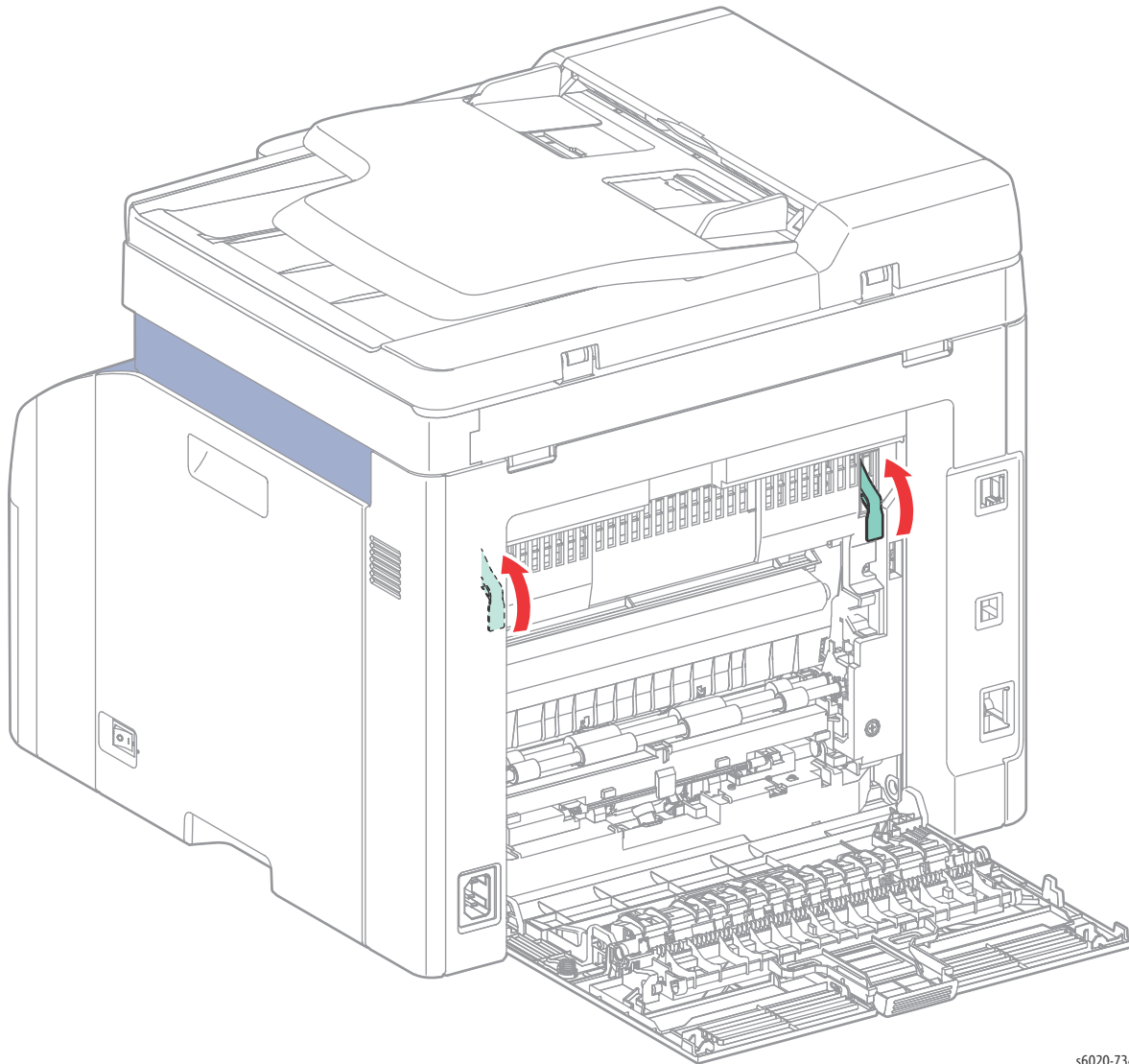
s6020-734

3. Remove 6 screws (Silver, Tap, 8mm) securing the AIO Inner Rear Cover to chassis.
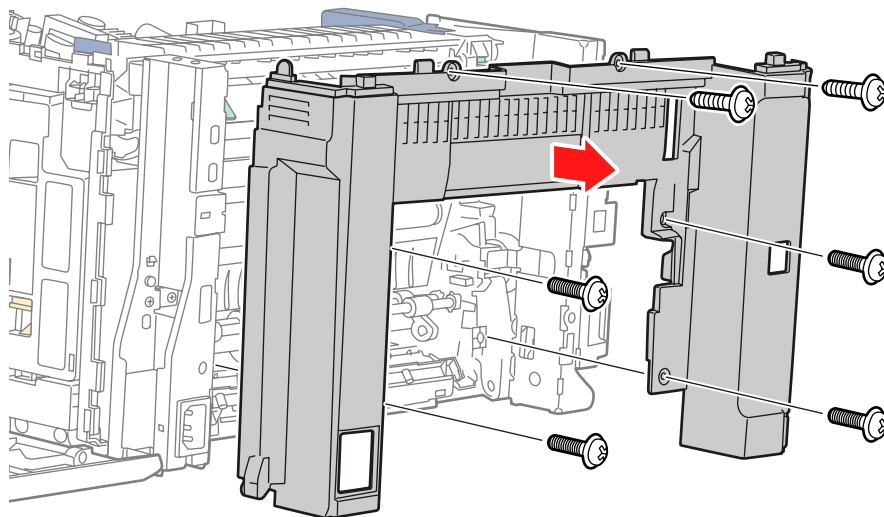
s6020-733

4. Open the AIO Inner Rear Cover exposing the I/L Switch Assembly.
5. Release the I/L Switch Assembly harness from the harness guide to allow the AIO Inner Rear Cover opening to allow removal of 2 screws (Silver, Tap, 6mm) securing the I/L Switch Assembly to the AIO Inner Rear Cover. and remove.
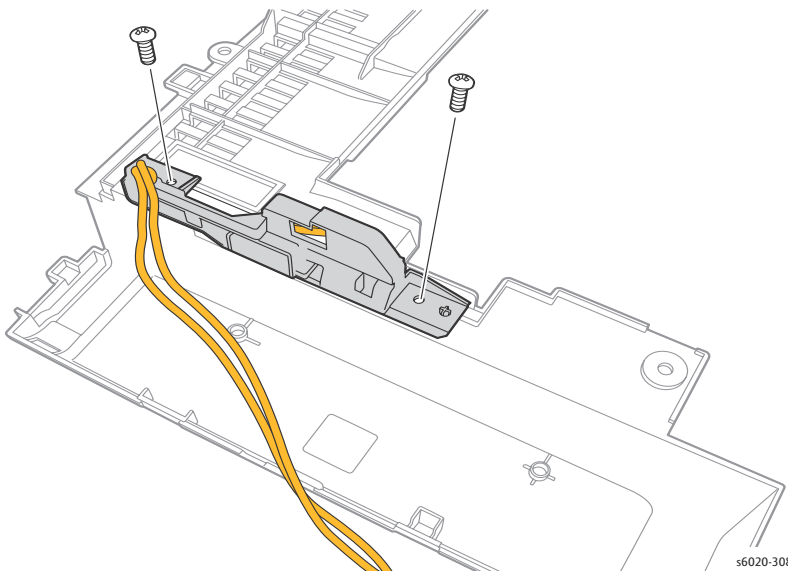
s6020-308

6. Remove the AIO Inner Rear Cover. with the Rear Side Cover (23) attached.

WorkCentre 6027 MFP I/L Switch Assembly (with 10)

PL 1.1.9 (with 10)

1. Remove the Rear Cover (page 4-52).
2. Swing open the Rear Cover exposing the I/L Switch Assembly.
3. Release the I/L Switch Assembly harness from the harness guide and disconnect from P/J 204 on the LVPS board
4. Remove 2 screws (Silver, Tap, 8mm) securing the I/L Switch Assembly to the Rear Cover.
5. Remove the I/L Switch Assembly.
6. Remove the Rear Interlock Switch from the Rear I/L Holder.

s6020-308
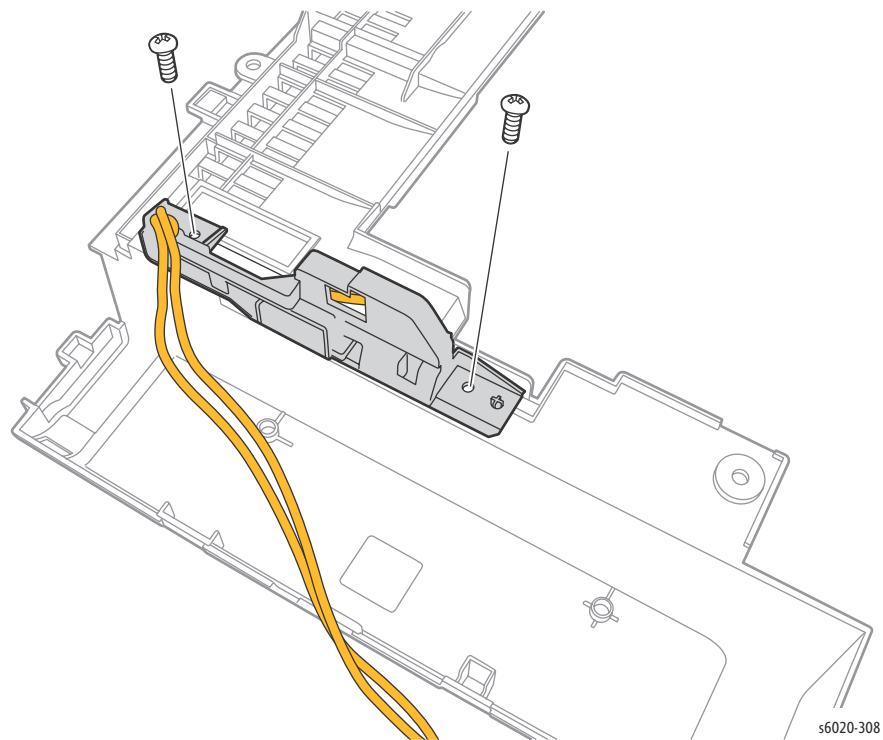
WorkCentre 6027 MFP Toner Door

PL 1.1.11

1. Remove 1 screw (Silver, Tap, 8mm) from the left side of the Lower Front Cover (page 4-61) to release the boss of the Toner Door Cover.

2. Release the boss out of the Rear Side Cover and slide the Toner Door Cover out of the Toner Door Cover Hinge and remove.
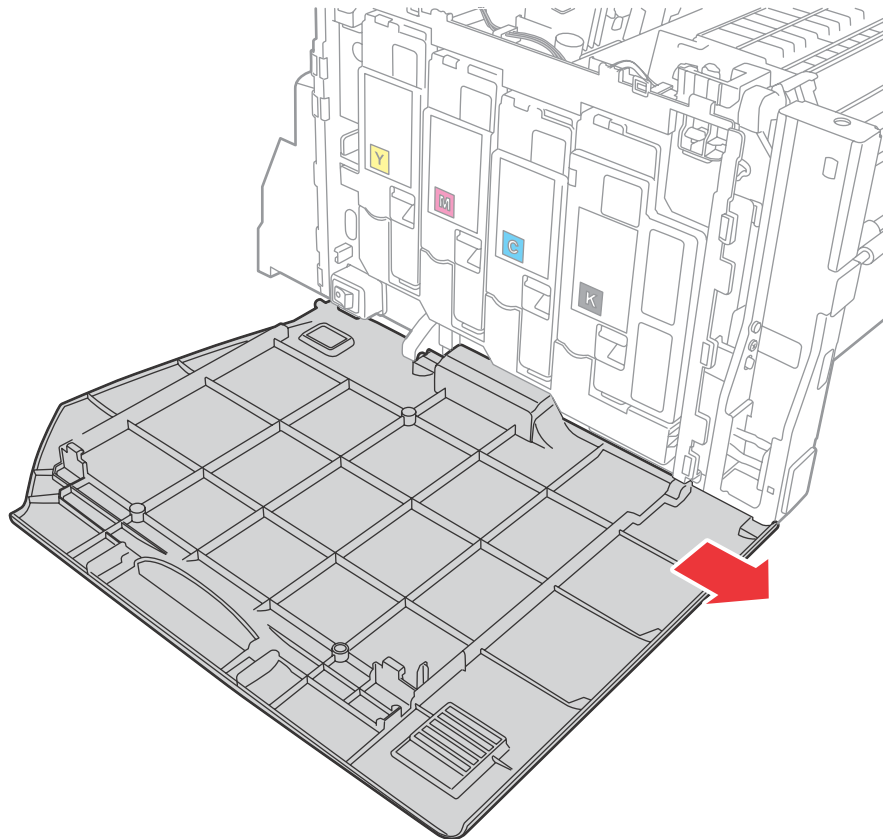

s6020-720

Note: See "Phaser 6020 Toner Door Cover Hinge" on page 14 for removing the Toner Door Hinge PL1.1.12.

WorkCentre 6027 MFP Left Side Cover Assembly

PL 1.1.21

1. Remove Paper Tray.
2. Remove 1 screw (Silver Plastic, 6mm) securing the left Front Cover (page 4-32).
3. Remove the Left Top Cover (page 4-57).
4. Press in at the center-front of the Left Cover at the Front Cover to release 3 hooks.
5. Release the latch under the printer at the Front Cover bottom left and pull the Front Cover out from the printer.
6. Release 2 hooks at the top-rear of the Left Cover from the Rear Cover and remove.
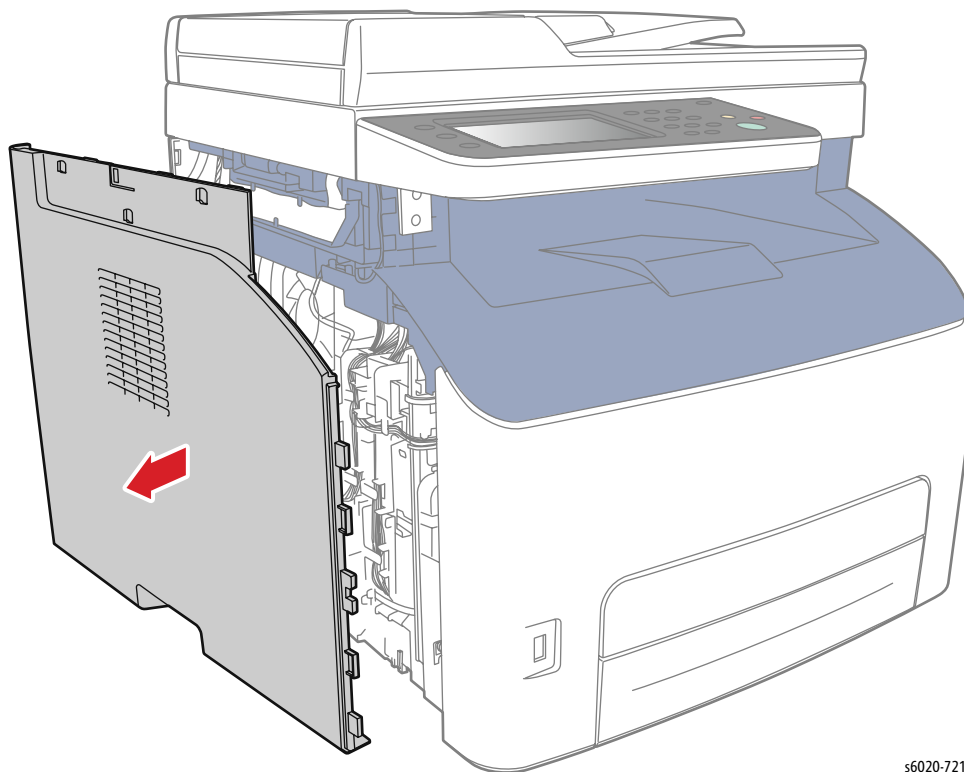
s6020-721

WorkCentre 6027 MFP Upper Left Side Cover

PL 1.1.19

1. Lift the AIO Upper Left Side Cover at the center from the top releasing 1 hook from the tab while pushing the AIO Upper Left Side Cover right toward the front of the printer to release the remaining 3 hooks and remove.

s6020-584
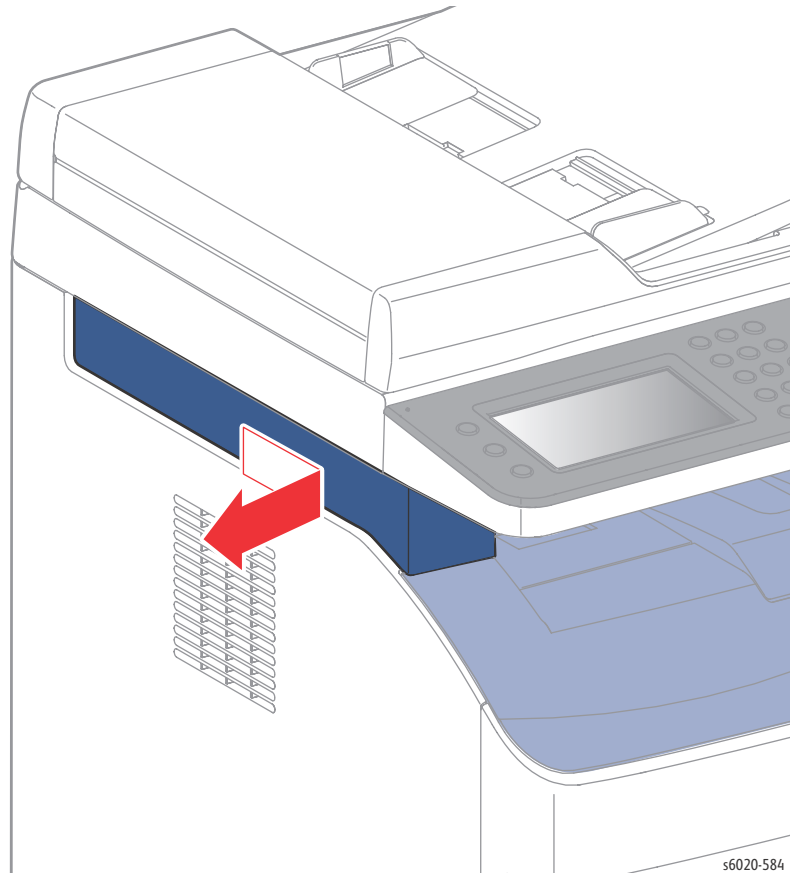
Note: The AIO Upper Left Side Cover can be removed and installed as an assembly while attached to the Left Side Cover

WorkCentre 6027 MFP Upper Right Side Cover

PL1.1.20

1. Lift the AIO Upper Right Side Cover at the center from the bottom pulling the right side to the middle releasing 2 hooks on the right side.
1. Push the AIO Upper Right Side Cover left toward the front of the printer to release the remaining 1 hook and remove.
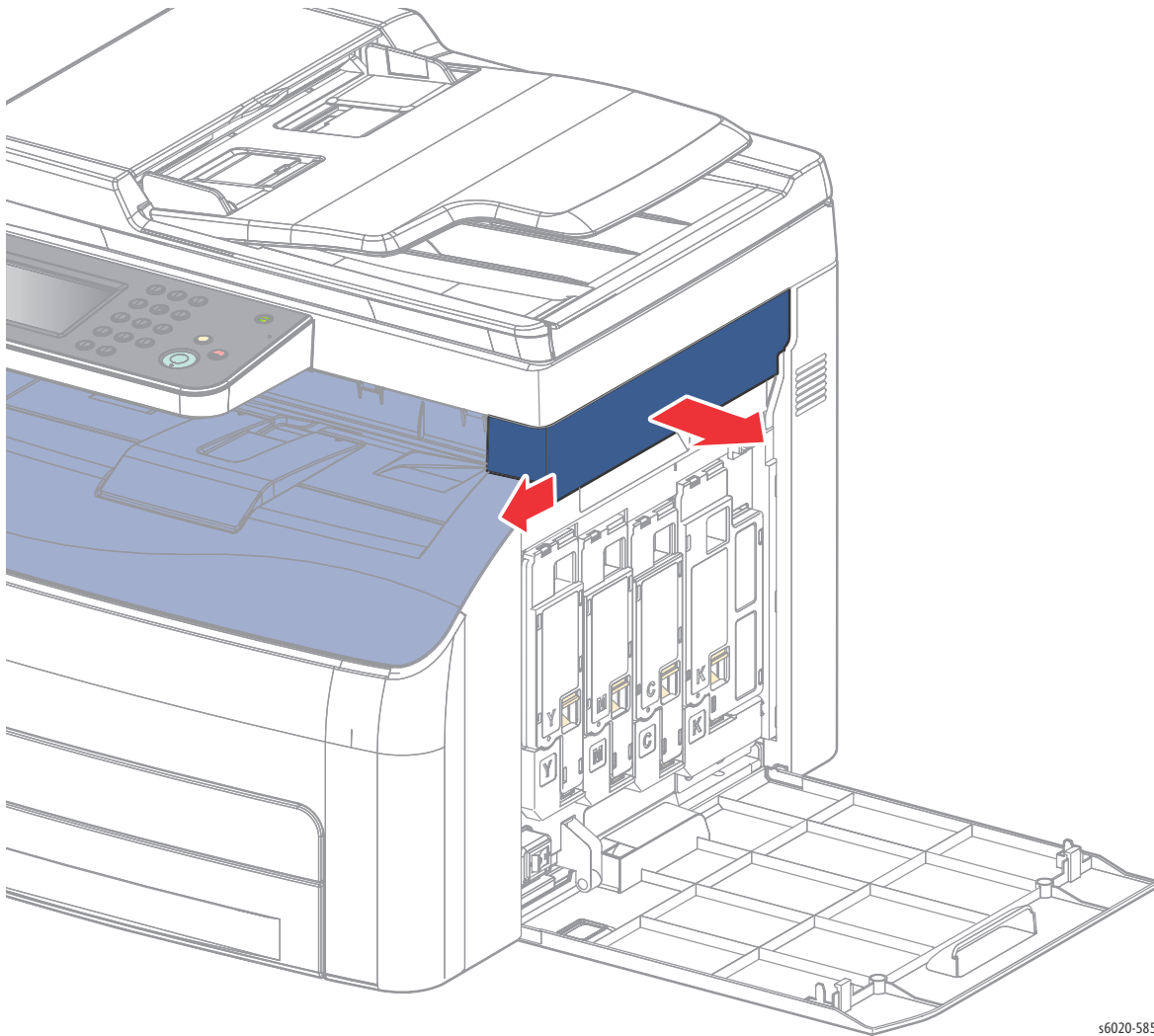
s6020-585

WorkCentre 6027 MFP Rear Side Cover

PL 1.1.23

1. Starting at the top, front side, of the Rear Side Cover, push to the rear of the printer and twist out to release the 1 of 3 hooks.
2. Continue down releasing the remaining 2 hooks.
3. Push to the hear to and pull out to release the 2 guides of the Dispenser Frame.
4. Starting at the top of the Rear Side Cover, release 4 hooks in the Inner Rear Cover by opening the Rear Side Cover edge out to the rear of the printer and remove.
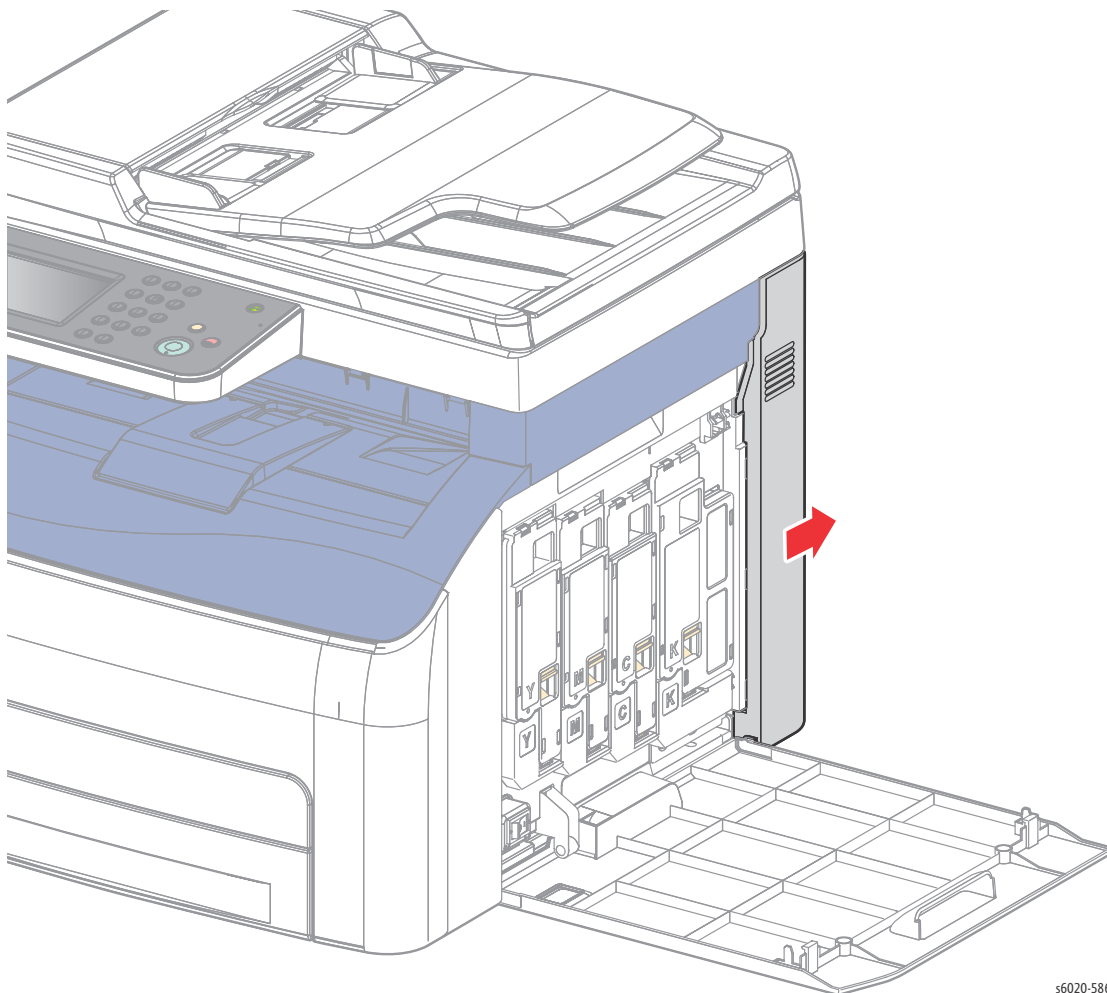
s6020-586

WorkCentre 6027 MFP Right Side Cover

PL 1.1.17

1. Remove the Lower Front Cover.
2. Release the Right Side Cover from the boss on the bottom of the Toner Window Cover and remove.
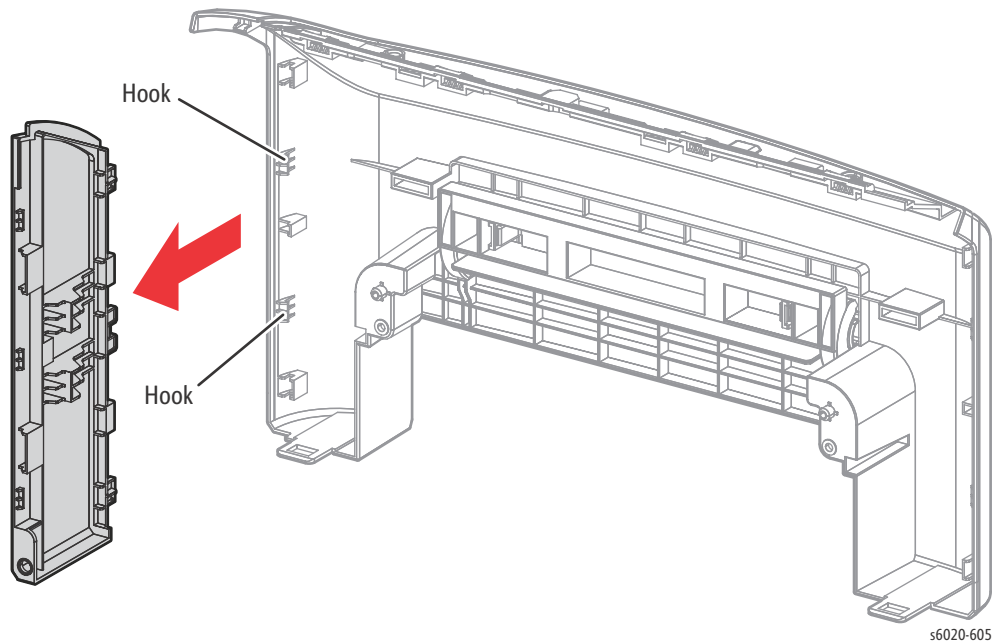
Hook

Hook

s6020-605

Note: The Right Side Cover is easily detached from the Toner Window Cover boss as an assembly attached to the Lower Front Cover.

3. Remove the AIO Right Side Cover from the Lower Front cover by releasing 3 hooks connecting the covers.

WorkCentre 6027 MFP Lower Front Cover

PL 1.1.13

Note: Includes PL 1.1.18, PL 1.1.35, and PL1.1.36

1. Remove the Paper Tray.
2. Remove the Jam Access Door.
3. Remove 2 screws (Silver, Tap, 8mm) securing the AIO Lower Front Cover to the chassis.
4. Release 2 hooks on the bottom of the Lower Front Cover.
5. Push in at the center front of the Left Side Cover to release 2 hooks.
6. Pull the left side of the Front Lower Cover away from the printer to release 2 hooks on the Left Side Cover.
7. Lift the left front edge of the Front Upper Cover and release 6 hooks connecting the Front Lower Cover moving right.
8. Pull the left side of the Front Lower Cover away from the printer releasing the Left Side Cover from the boss on the Toner Window Cover and remove.
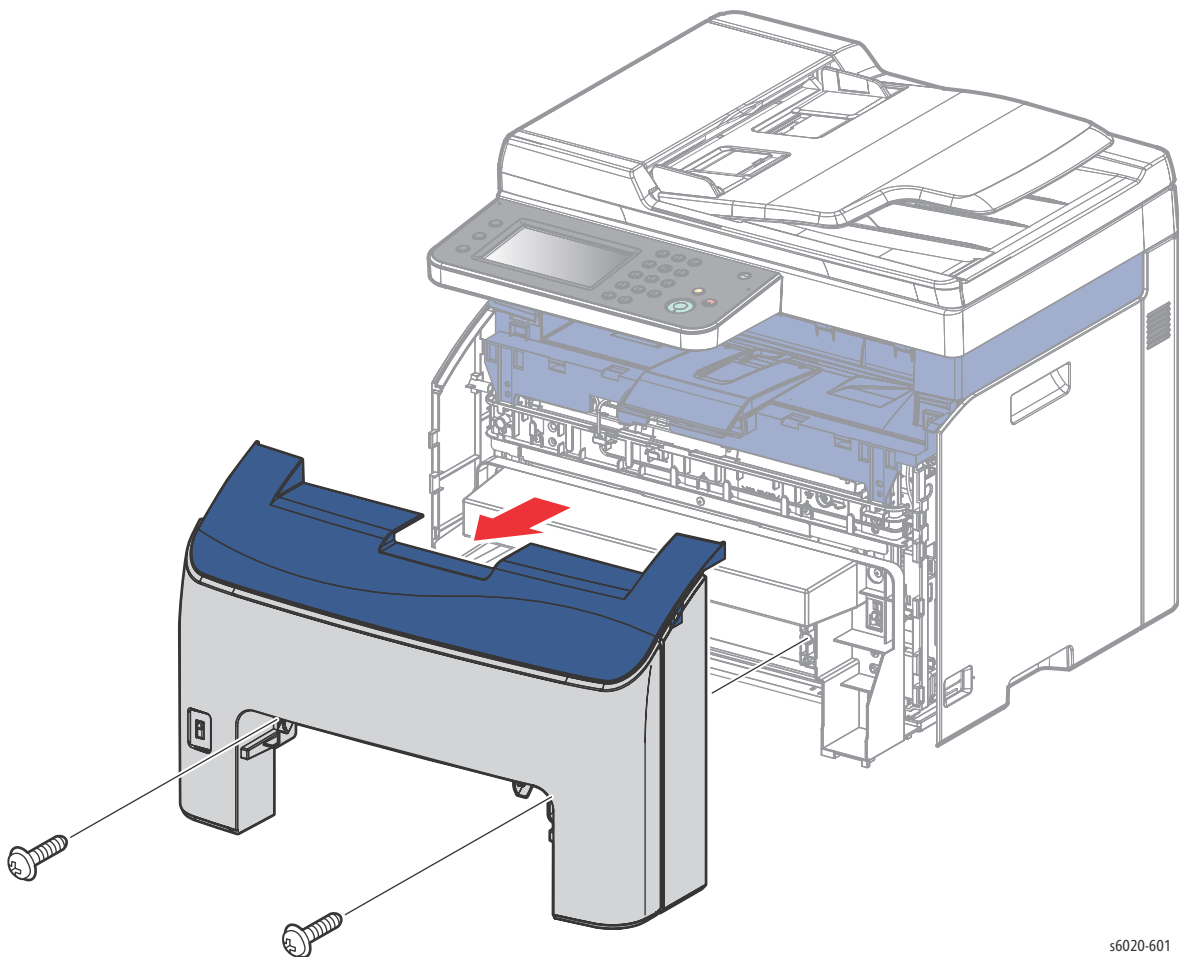
s6020-601

WorkCentre 6027 MFP Upper Front Cover

PL 1.1.16

Note: Includes PL 1.1.18, PL 1.1.35, and PL1.1.36

1. Remove the Paper Tray.
2. Remove the Jam Access Door.
3. Remove 2 screws (Silver, Tap, 8mm) securing the AIO Lower Front Cover to the chassis.
4. Release 2 hooks on the bottom of the AIO Lower Front Cover.
5. Push in at the center front of the Left Side Cover to release 2 hooks.
6. Pull the left side of the Front Lower Cover away from the printer to release 2 hooks on the Left Side Cover.
7. Lift the left front edge of the Front Upper Cover and release 6 hooks connecting the Front Lower Cover moving right.
8. Pull the left side of the Front Lower Cover away from the printer releasing the Left Side Cover from the boss on the Toner Window Cover and remove.
9. Grasp the Front Upper Cover in the front center from below and lift at the 2 center hooks pressing down on the 2 outside edges to bow the Front Upper Cover releasing 2 center hooks and 2 hooks just out from the center.
10. Lift the AIO Front Upper Cover and pull out from the printer to release 4 remaining hooks and remove.
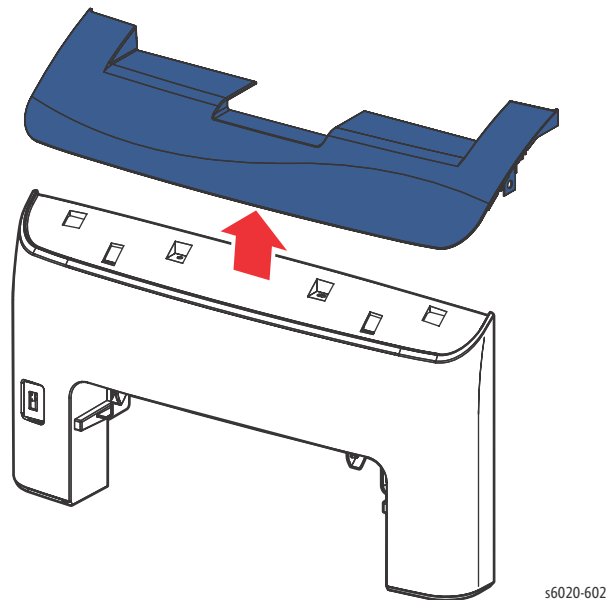
s6020-602

Control Panel Removal

Phaser 6022 Control Panel

PL1.1.3

1. Remove the Top Cover (page 4-21).
2. Release the ribbon cable from the cable guides.
3. Remove Control Panel Cover.

s6020-052
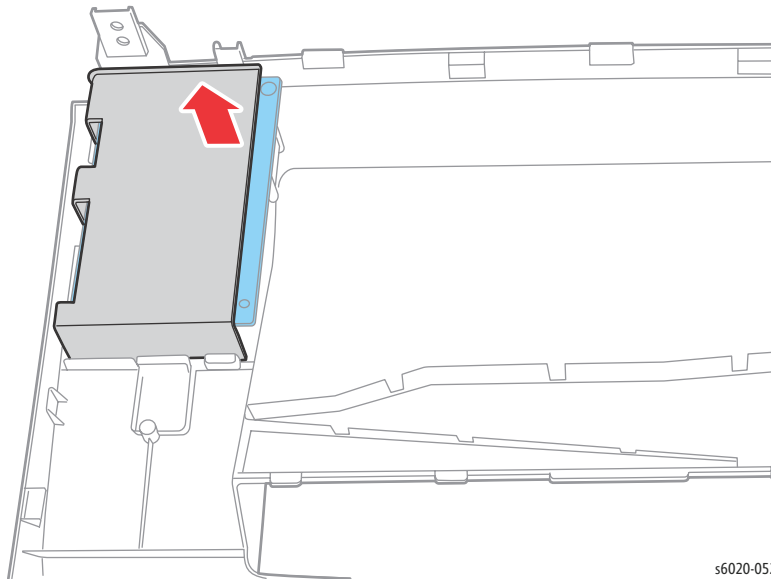
4. Remove 3 screws (Silver,Tap, 8mm), and remove Control Panel.

s6020-053
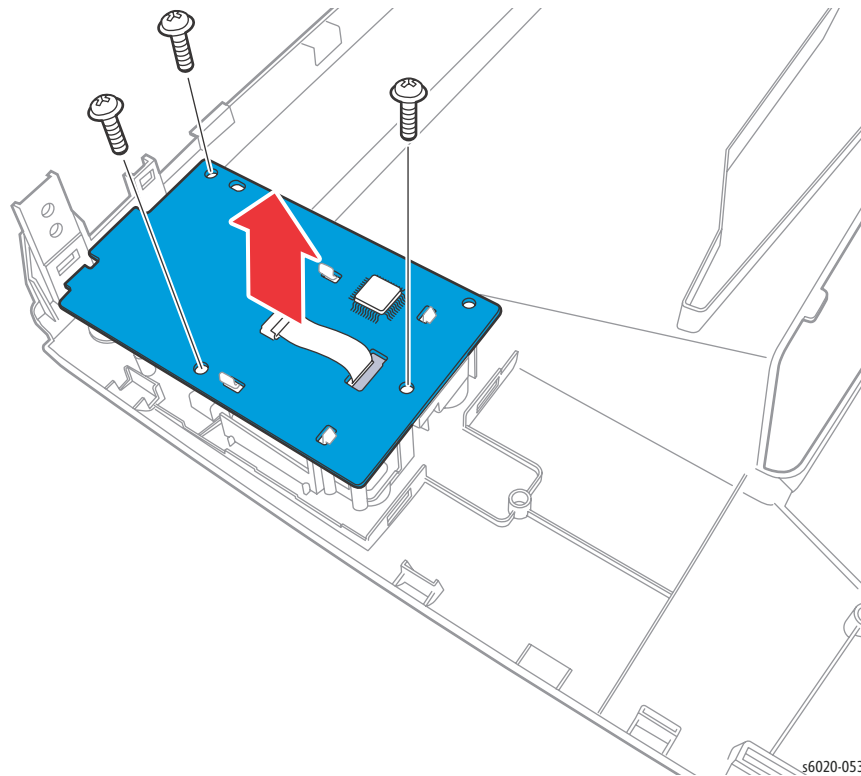
Replacement Note: There are 2 slots at the front of the printer, install the Control Panel in the lower slot and the board shield in the upper slot. See the following illustration.

Tab

s6020-179
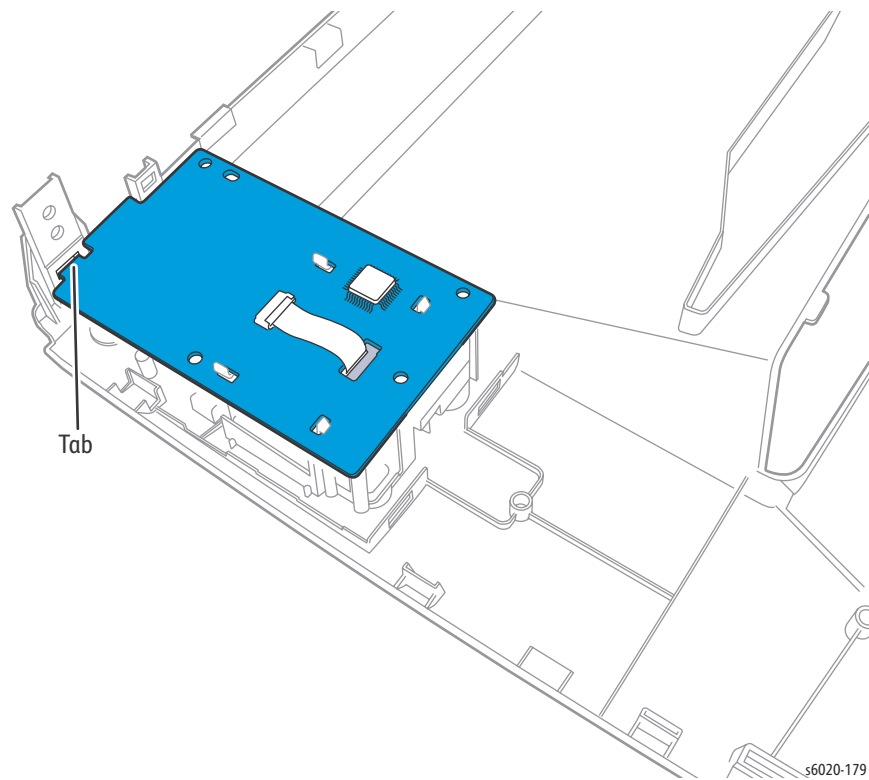
WorkCentre 6025 MFP Console Assembly Removal

PL 9.1.10

1. Lift the Scanner Assembly.
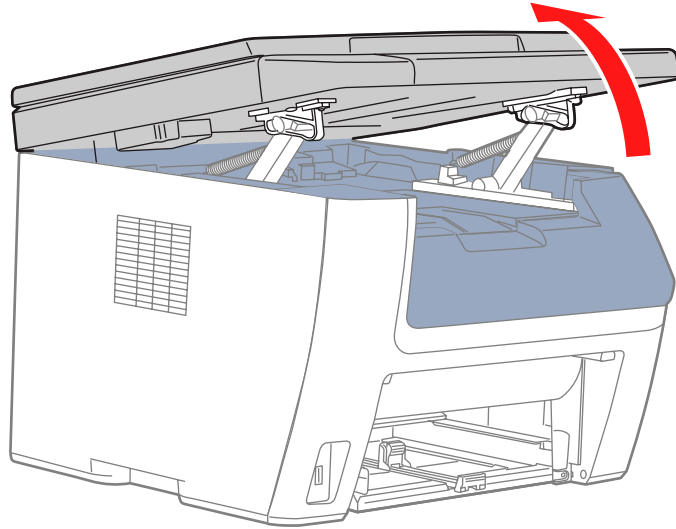
s6020-306

2. Remove 2 screws (silver, with flange, tap, 8 mm).
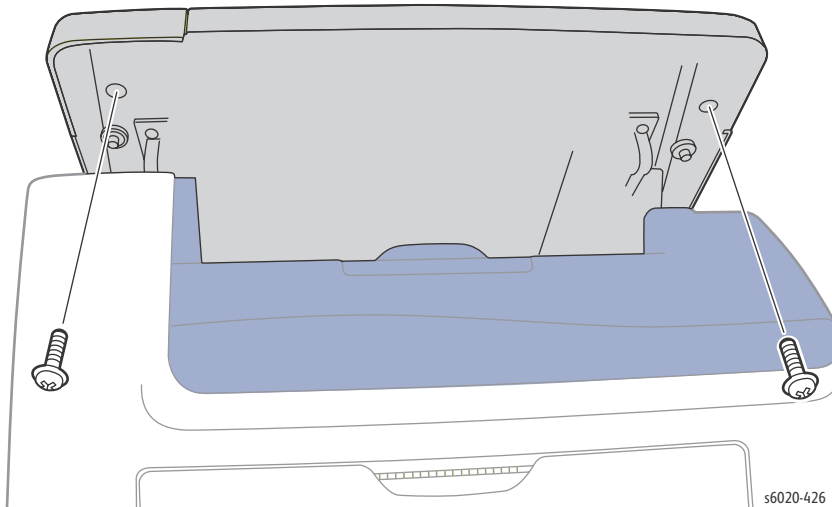
s6020-426

3. Close the Scanner Assembly.
4. Disconnect the ribbon cable (P/J1) and speaker wire.

5. Release 3 hooks in front and remove the Control Panel.

P/J1
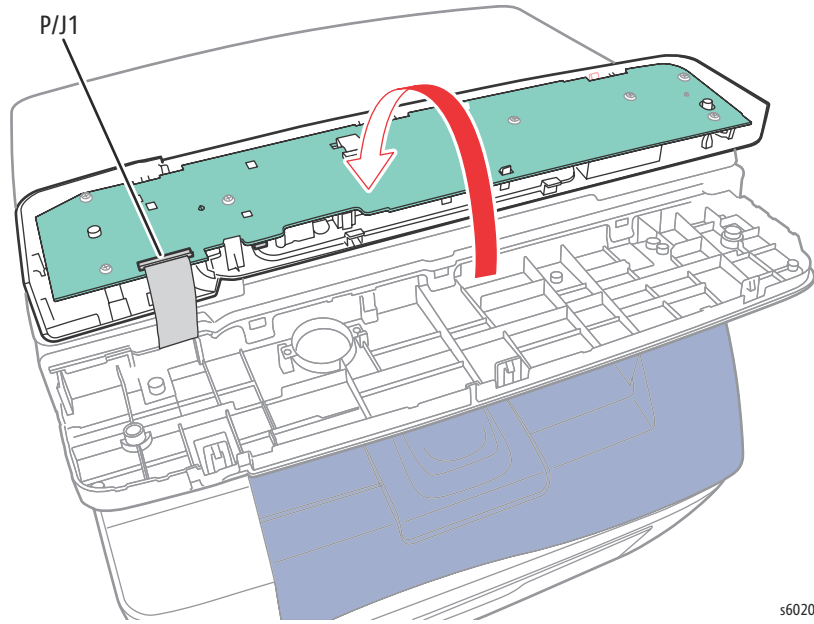
s6020-427

WorkCentre 6027 MFP Console Assembly Removal

PL 8.1.10

1. Remove the Upper Left Side Cover (page 4-57) and Upper Right Side Cover (page 4-58) to expose the 2 screws securing the Console Assembly to the Top Cover.

2. Remove 2 screws (Silver, Plastic, 6mm) securing the Console Assembly to the Top Cover in the front and release 1 hook at each screw location and lift the Console Assembly to expose 2 screws securing the Control Panel to the Console Assembly.
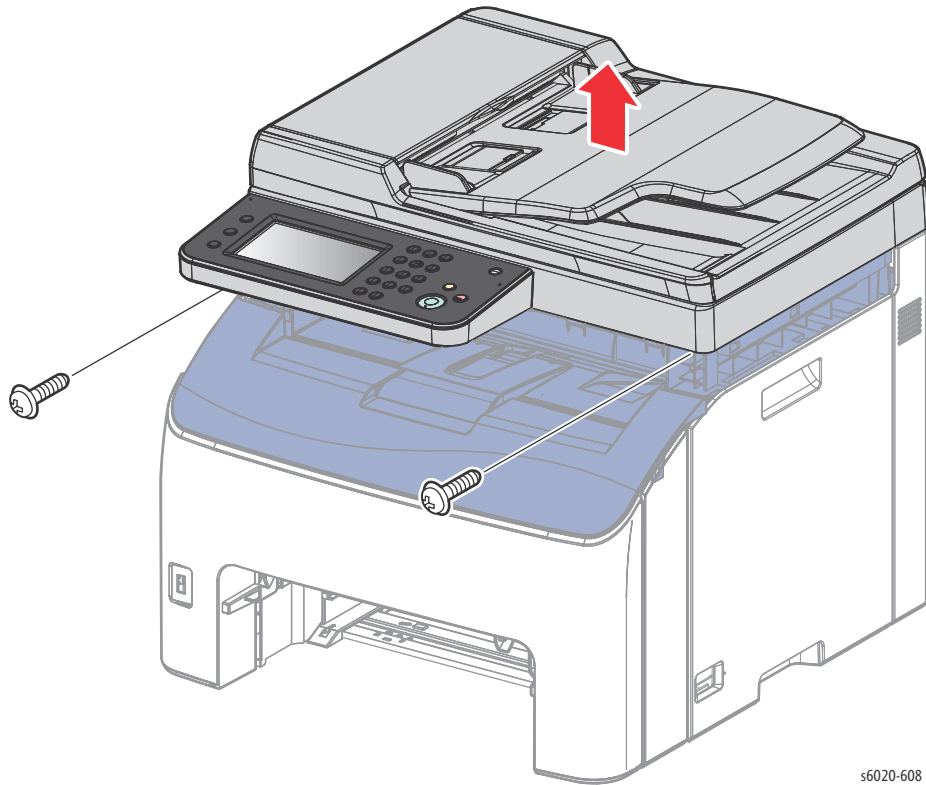
s6020-608

3. Release the Control Panel ground wire from the harness guide to provide slack.
4. Lift the front of the Console Assembly and remove 2 screws (Silver w/Flange, Tap, 8 mm) securing the Control Panel to the Console Assembly.
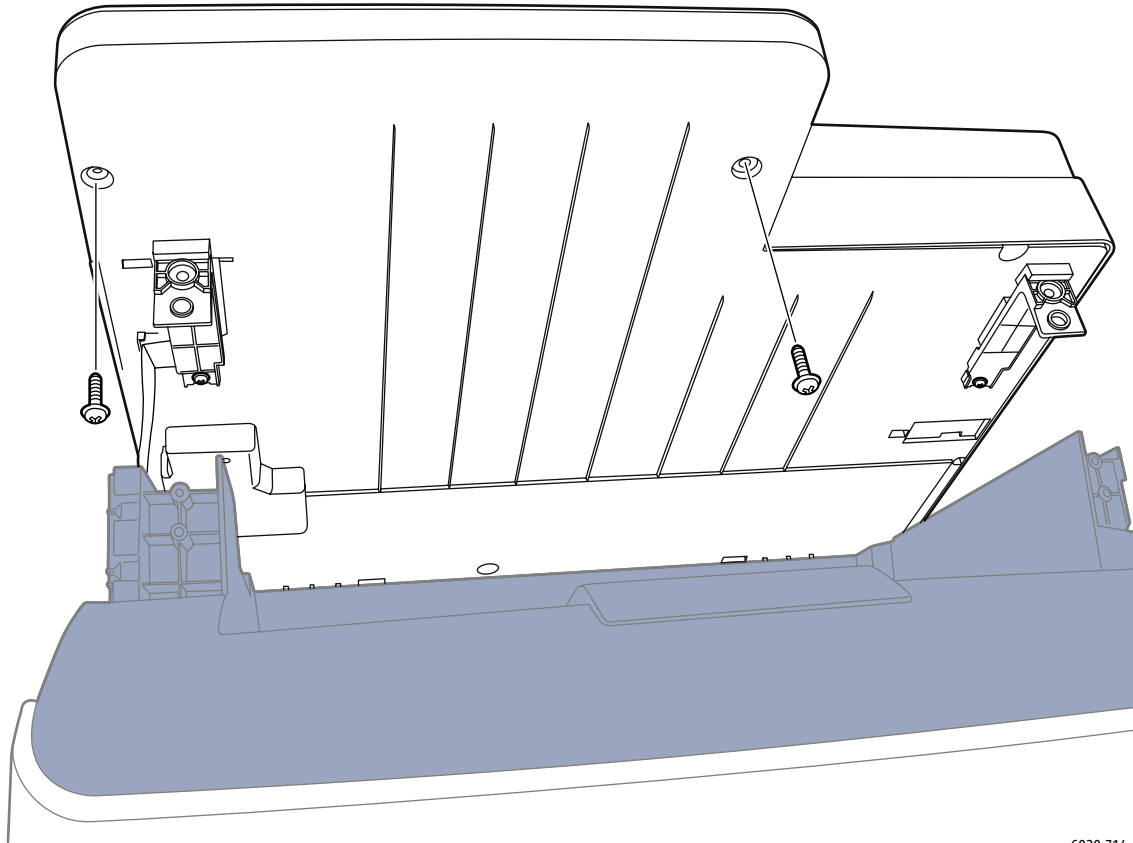
s6020-714

5. Set the Scanner back on the Top Cover.

6. Release 3 hooks in the front separating the Control Panel from the Console Assembly.

Hooks

s6020-722
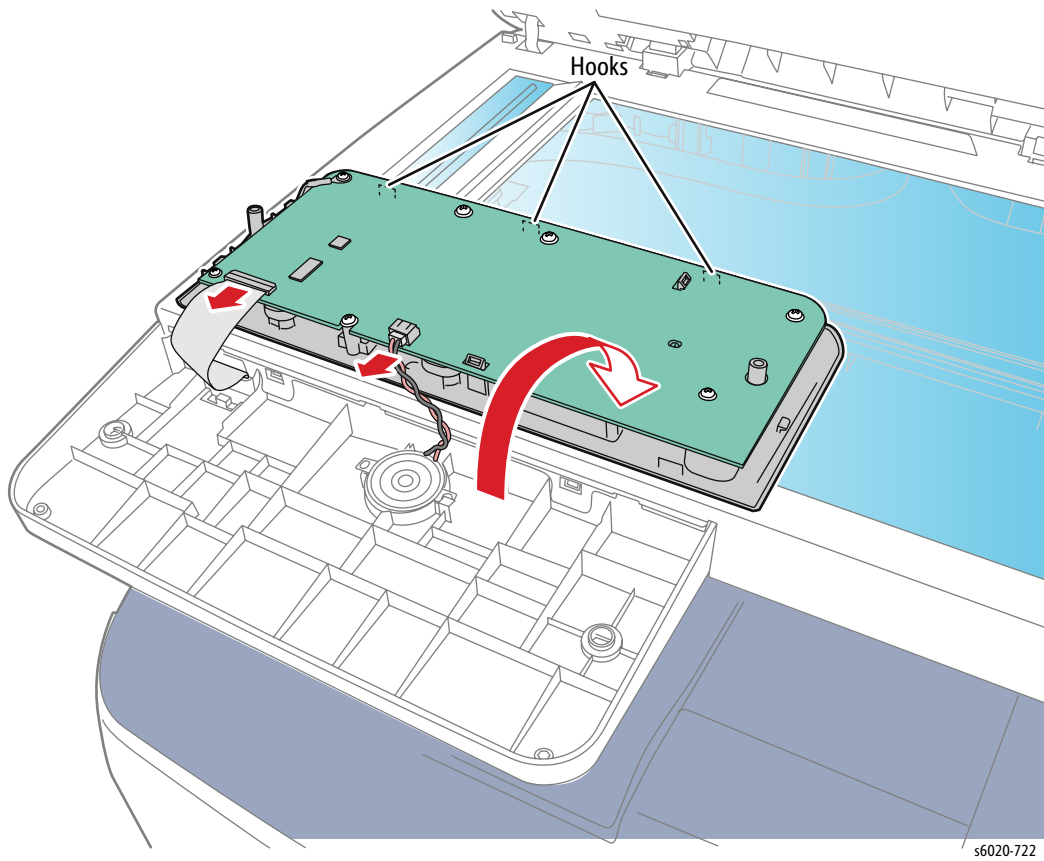
7. Disconnect the LCD ribbon cable and speaker to remove.

IIT Procedures (Scanner and ADF)

WorkCentre 6025 MFP Scanner Assembly

PL 8.1.1/PL 9.1.1

1. Remove the Paper Tray (page 4-15).
2. Open the Toner Door.
3. Remove the Front Cover (page 4-48).
4. Remove the Left Side Cover (page 4-44).
5. Disconnect P/J1, P/J6, and P/J16 on the IP Board.
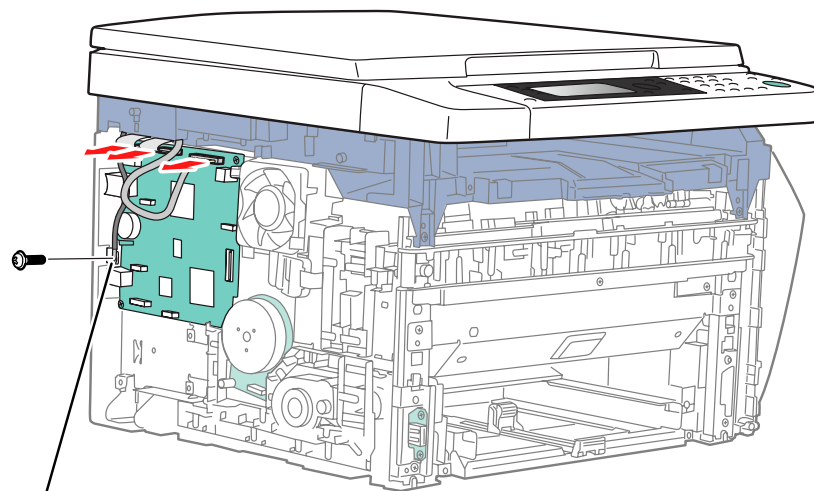
Grounding Wire and screw: ADF Only

s6020-293

6. Remove 2 screws (Silver, Tap, 8mm) securing scanner arms to Top Cover.
7. Slide both scanner arms toward front of printer and lift up.
8. Remove scanner arms.
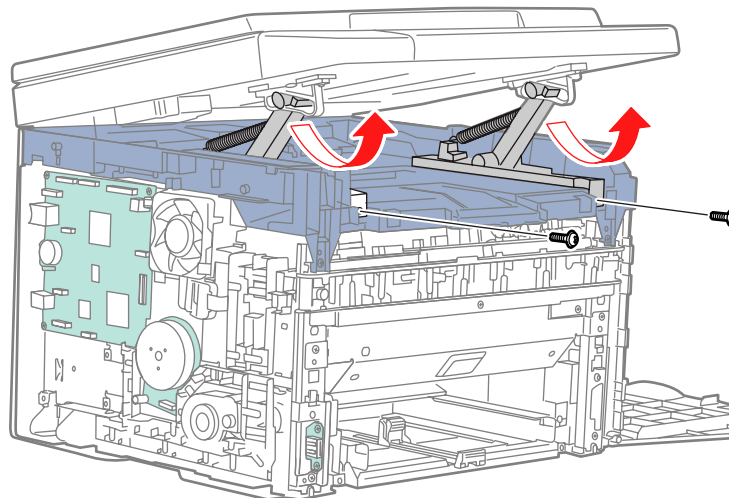
s6020-283

9.   Open the Scanner until the hinges disconnect from the Top Cover.

10. Pull the cables through the hole in the Top Cover while removing the Scanner.
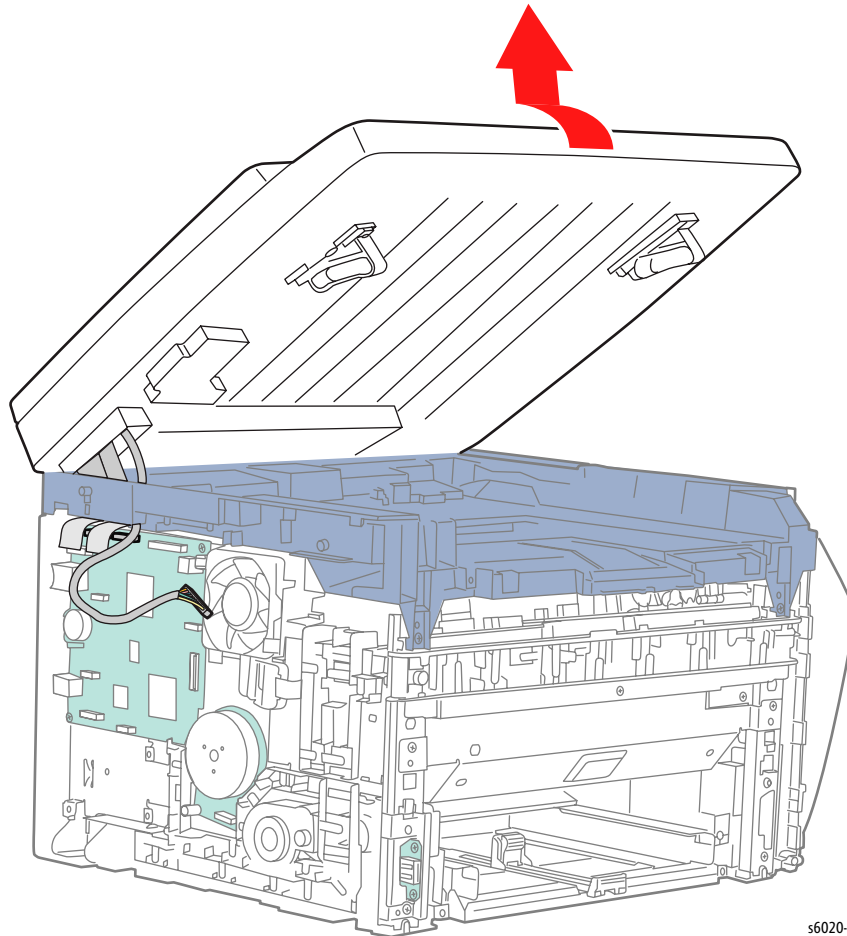
s6020-340

Replacement Note: When the Scanner Assembly is replaced recalibrate the new Scanner. See "Scanner Adjustment" on page (page 6-26), remove Scanner (page 4-70).

Scanner Harness

1. Turn the Scanner over and set it down on a clean, flat surface.
2. Remove 1 screw (Silver, Flanged, Tap, 6mm) securing the SSB Cover to the Scanner Pad.
3. Move the cover to the right and remove SSB Cover.
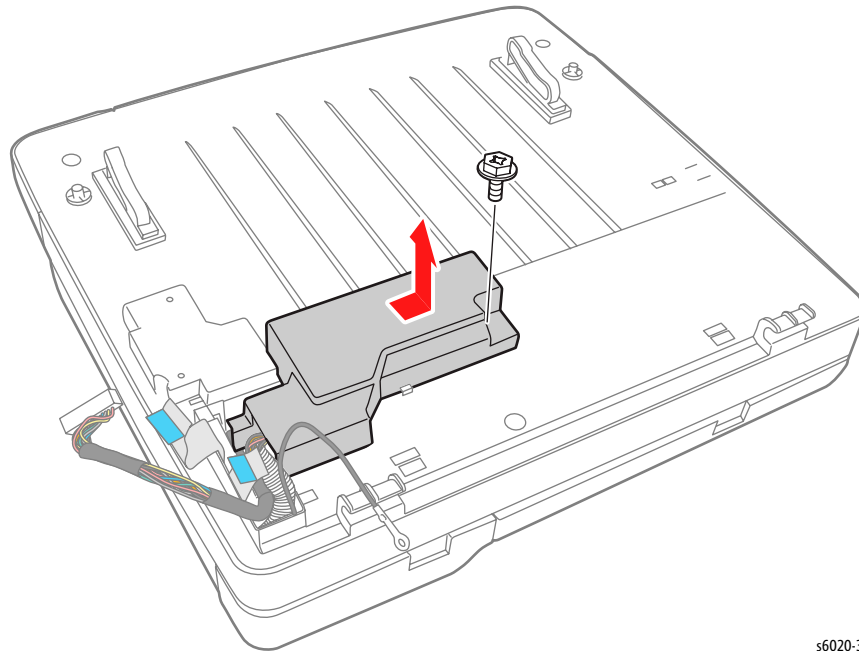
s6020-337

4. Disconnect P/J3, P/J4, and P/J10 on the IIT Board and release the harness form the harness guide.

SJ10

SJ4

SJ3
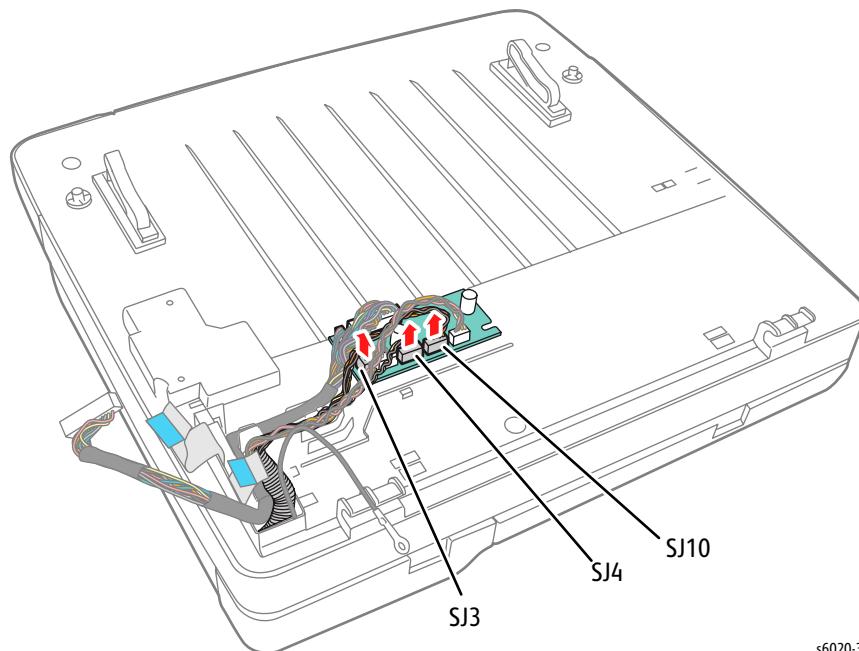
s6020-338

WorkCentre 6027 MFP Scanner Assembly

PL 8.1.1/PL 9.1.1

1. Remove the Left Side Cover (page 4-56).
2. Remove the Front Cover (page 4-61).
3. Remove the ADF Assembly (page 4-77).
4. Disconnect the Scanner Harness from the IP Board.
5. Remove 2 screws (Silver, Plastic, 6mm) securing the Scanner to the Top Cover.
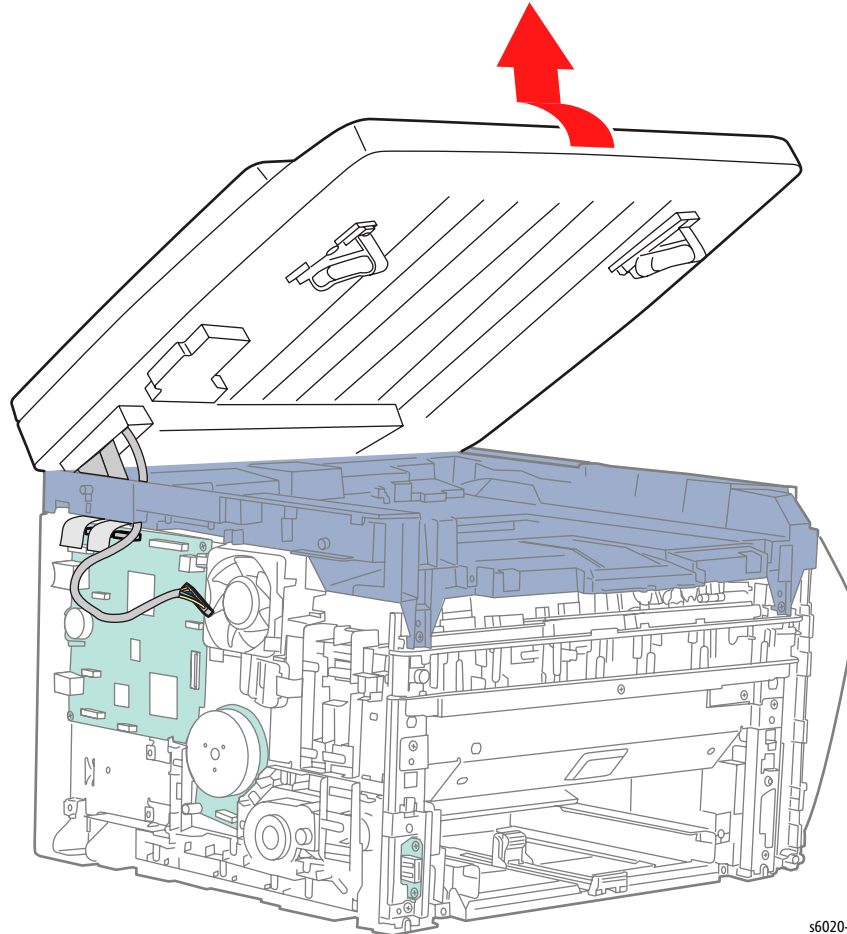
s6020-340

6.   Lift the Scanner off the Top Cover feeding the harness through the Top Cover and remove.
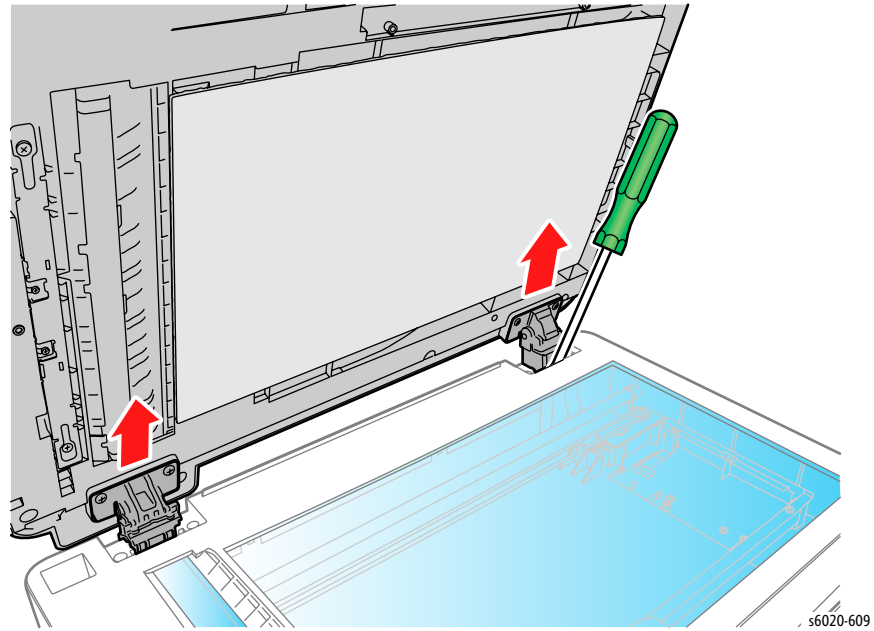
s6020-609

Replacement Note: When the Scanner Assembly is replaced, recalibrate the new Scanner. See "Scanner Adjustment" on page (page 6-26).

WorkCentre 6027 MFP ADF Separator Pad Removal/Installation

PL 8.1.4, 8.1.5

1. Lift the ADF Top Cover.
2. Pull the tab of the ADF Separator Pad out from the hook and lift the ADF Separator Pad from the ADF Assembly.
3. Pull the ADF Separator Spring off the connecting pin.
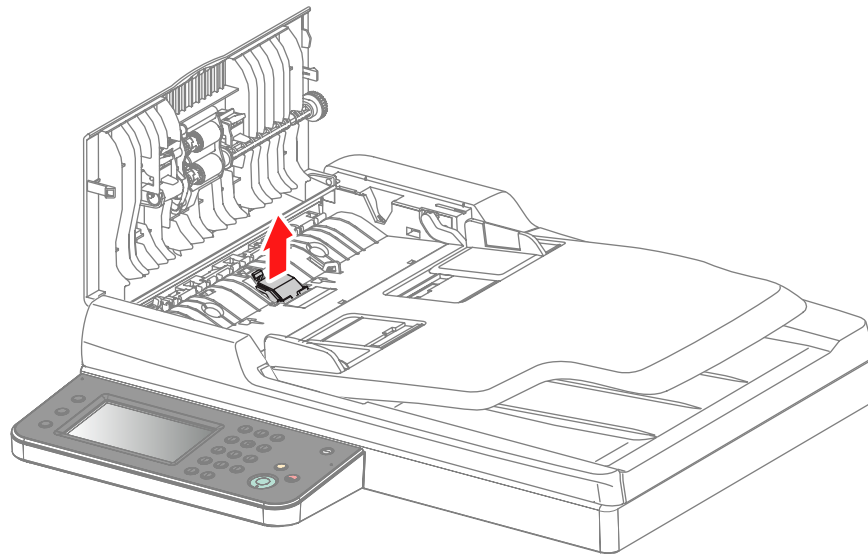
s6020-336

WorkCentre 6027 MFP ADF Input Tray Assembly Removal

PL 8.1.6

1. Lift the ADF Top Cover.
2. Release the left boss of the ADF Input Tray.
3. Slide the right boss out of the ADF and remove the ADF Input Tray.
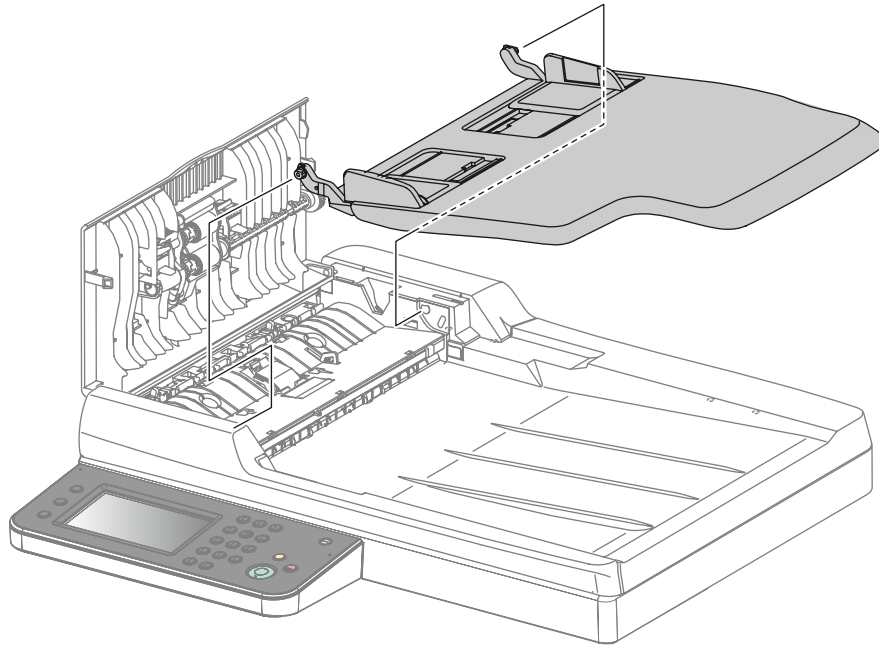
s6020-335

WorkCentre 6027 MFP ADF Assembly

PL 8.1.2, 8.1.3, 8.1.4, 8.1.5, 8.1.6, 8.1.7

1. Remove the Left Side Cover (page 4-56).
2. Disconnect P/J1, P/J6, and P/J16 on the IP Board.
3. Remove 1 screw (Silver, Metal, 6mm) to remove the ADF ground wire.
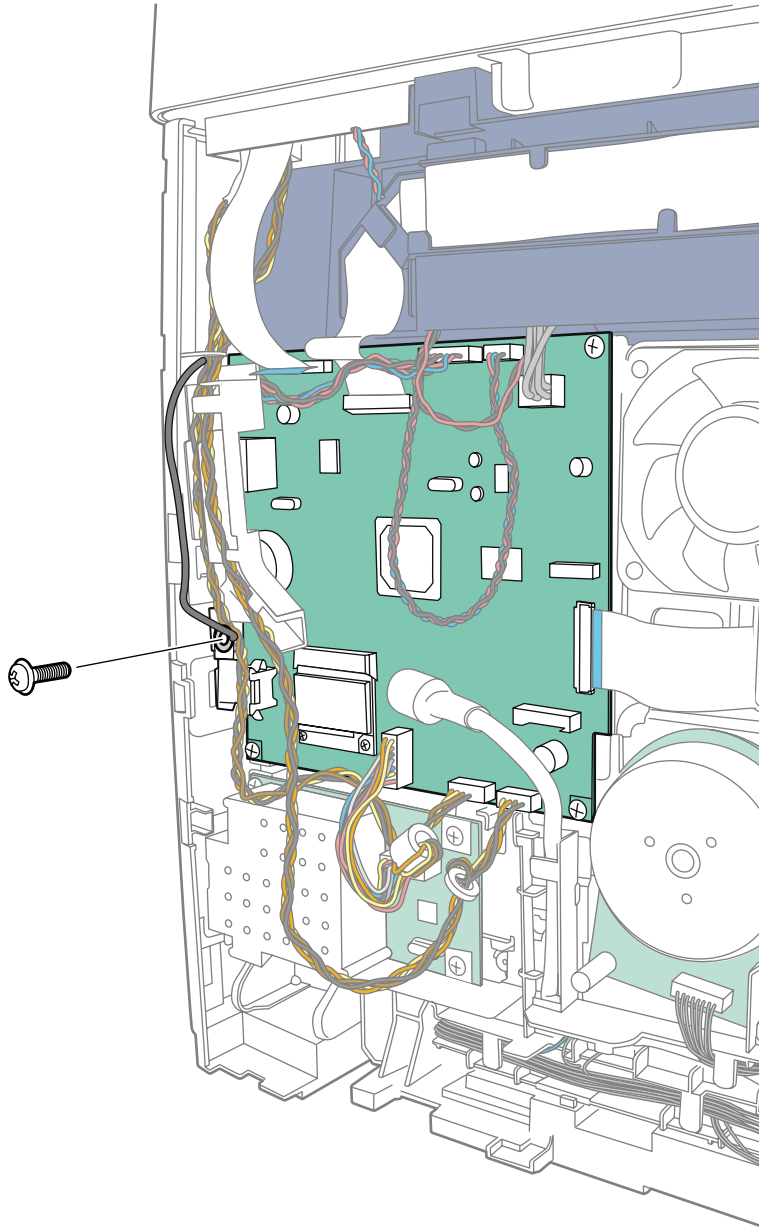
4. Open the Toner Door.
5. Lift the ADF Assembly until the hinges stop and release 2 tabs on the ADF hinges.
6. Pull the harness through hole in the IIT Assembly while removing the ADF.
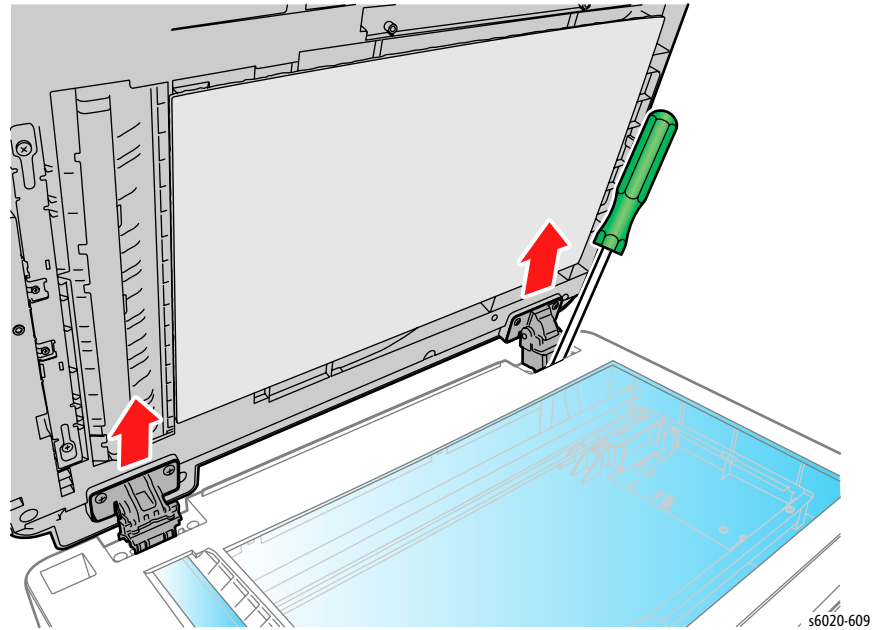
s6020-609

Paper Feeder

Paper Tray Extension (Phaser 6020 and WorkCentre 6025 MFP)

PL2.1.7

1. Remove the Paper Tray Cover (Phaser 6020 page 4-15, WorkCentre 6025 page 4-43).
2. Remove the Bypass Tray Cover/Dust Cover (page 4-80).
3. Slide the Paper Tray Extension to the front until it stops.
4. Release 2 hooks on the Paper Tray Extension and remove.
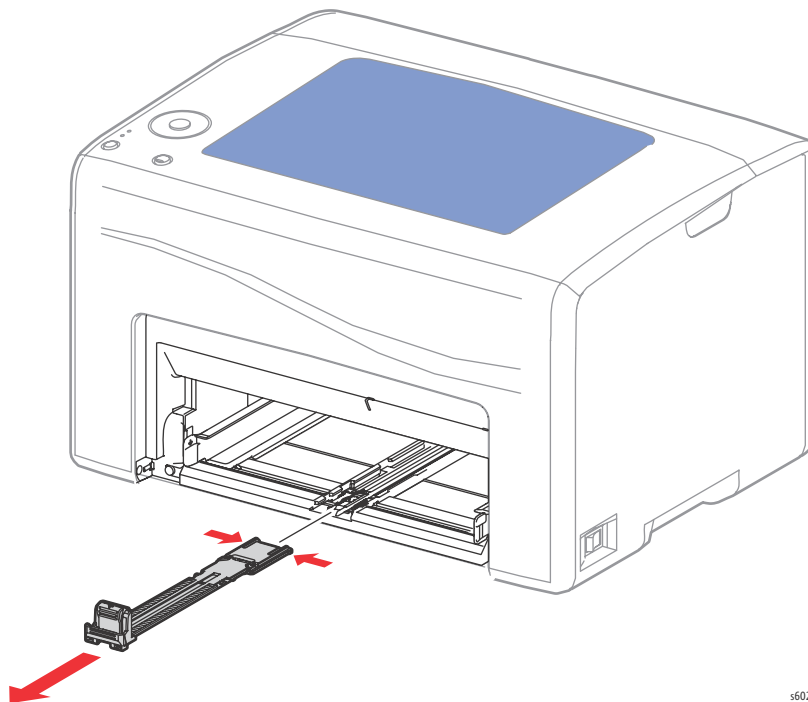
s6020-005

Bypass Tray Cover/Dust Cover (Phaser 6020 and WorkCentre 6025 MFP)

PL2.1.10 (6022), PL2.1.11(6020)

1. Open the Paper Tray Cover.
2. Remove the Bypass Tray Cover/Dust Cover from the printer.
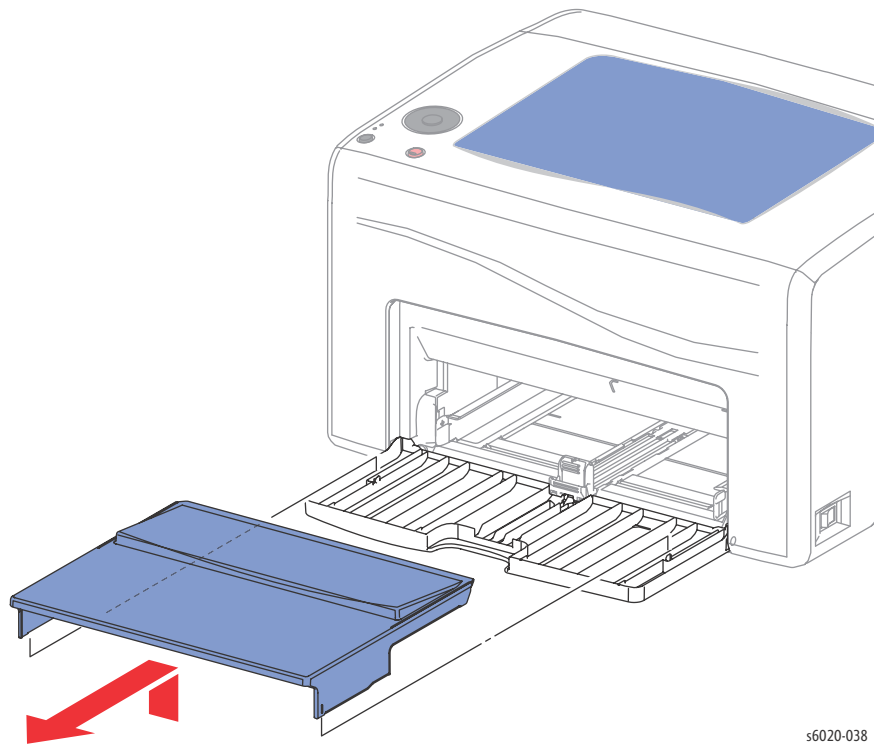
s6020-038

> Note: The Phaser 6020 comes with the Dust Cover the WorkCentre 6025 with the Bypass Tray Cover.

Bias Transfer Roller (BTR) Assembly

PL1.1.7, 1.1.8, 1.1.9

1. Open the Rear Door.
2. Lift the latch of the Left BTR Bearing (White), rotate the Left BTR Bearing clockwise, and remove the Left BTR Bearing from the Bias Transfer Roller.
3. Lift the latch of the Right BTR Bearing (Black), rotate the Right BTR Bearing counter clockwise, remove the Right BTR Bearing from the Bias Transfer Roller, and remove the Bias Transfer Roller.

Inset
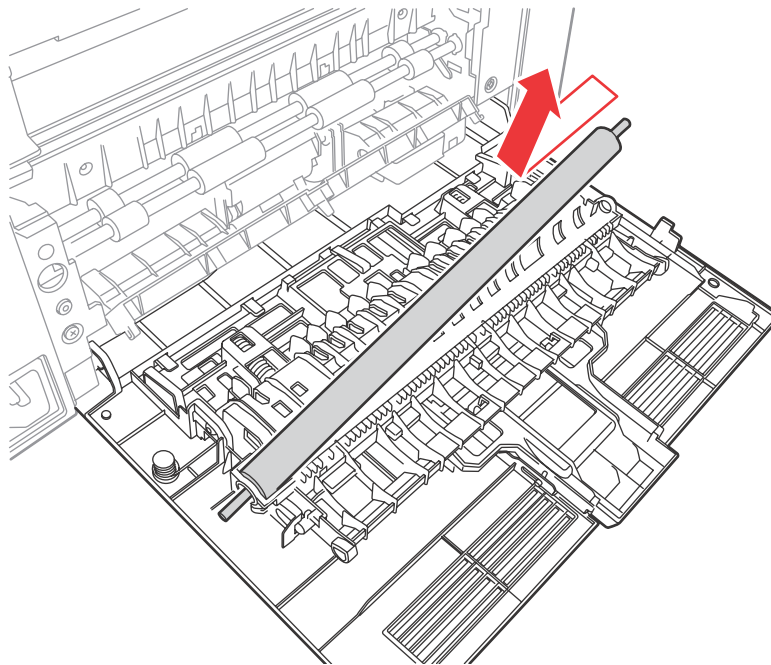
s6020-032

Replacement Note: The Right BTR Bearing is installed over the spring.

Paper Guide (Phaser 6020 and WorkCentre 6025 MFP)

PL2.1.12

1. Open the Paper Tray Cover.
2. Remove the Bypass Tray Cover (page 4-80).
3. Lift the printer from the front and set it on the Rear Door.
4. On the bottom of the printer release 4 hooks.
5. Release the tab on the left side to separate the tray bypass base assembly.

Hooks
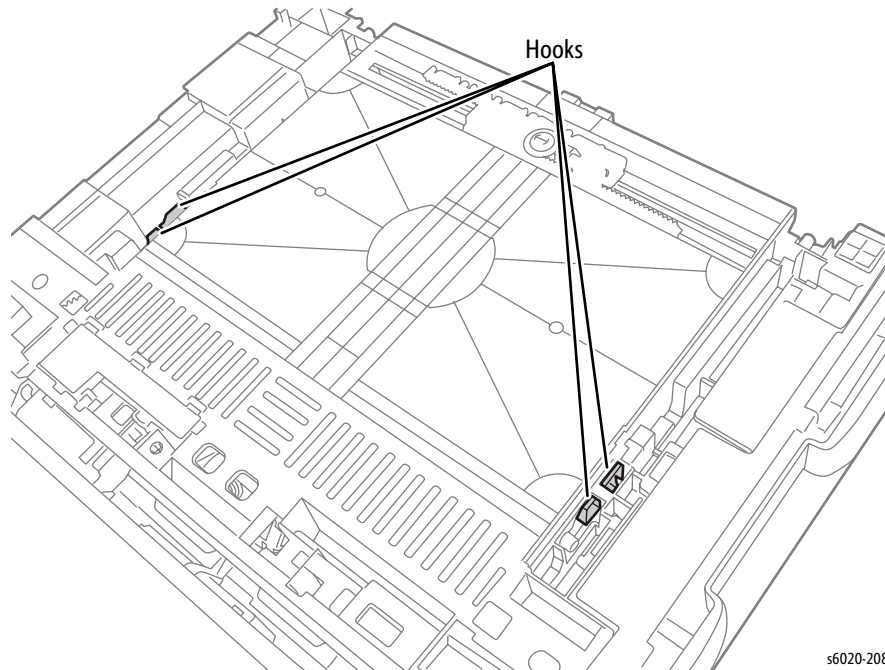
s6020-208

6. Push the boss on the right side and lift the bypass base assembly out of the printer.
7. Remove the Paper Guide from the bypass base assembly.
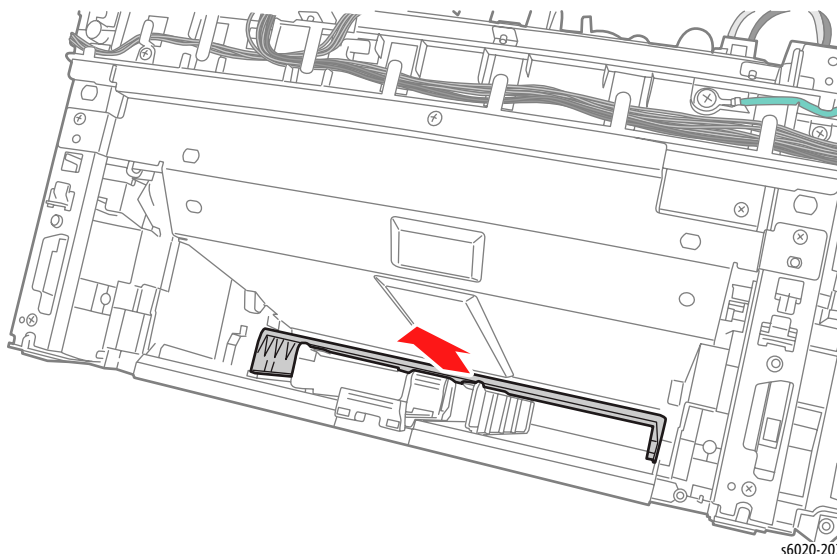
s6020-207

Left and Right Feeder Roller Cam/Feed Roller

PL 2.2.2, PL 2.2.4, PL2.2.7

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43).
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
7. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42 or 6027 page 4-55).
8. Remove Cleaner Assembly (page 4-144).
9. Disconnect P/J206 on the LVPS, and P/J13 and P/J20 on the MCU Board.
10. Remove the harness from the harness guide.

P/J206
P/J20
P/J13
s6020-069

11. Disconnect P/J201 on the LVPS and release the harness from the harness guide.

P/J201
s6020-117

12. Remove 5 screws (Silver, Tap, 8mm) securing the Toner Dispenser Frame.

s6020-039

13. Release the latch under the power switch and remove the Toner Dispenser Frame.
14. Remove IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP page 4-149, WorkCentre 6027 MFP page 4-150).
15. Remove Feed Drive Assembly (page 4-138).
16. Remove Registration Clutch (page 4-98).
17. Remove Registration Pinch Roller (page 4-91).
18. Remove Registration Roller (page 4-94).
19. Remove Paper Tray Chute (page 4-96).
20. Remove Registration Actuator (Phaser 6020 and WorkCentre 6025 page 4-97, Phaser 6022 and WorkCentre 6027 MFP page 4-100).
21. Remove Separator Assembly (page 4-87).

22. Release 1 hook on Left Feed Roller Cam (PL 2.2.7) and 1hook on Right Feed Roller Cam (PL2.2.2).
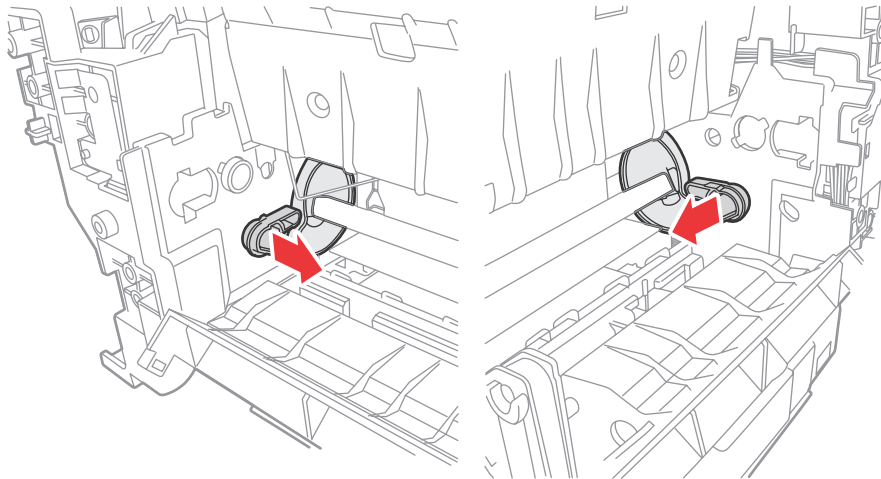
s6020-040

23. Depress the Feed Solenoid arm while rotating the Feed Roller Shaft counterclockwise 90 degrees.
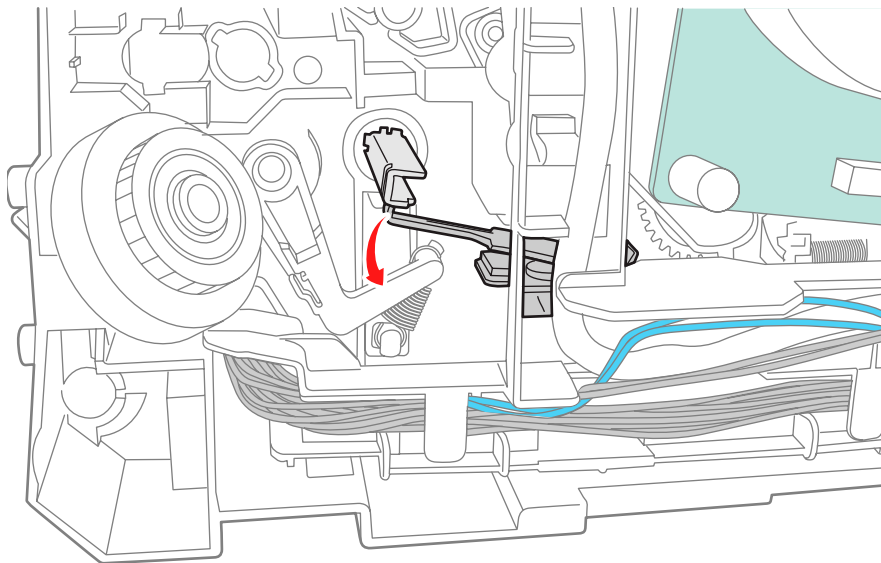
s6020-243

24. Release the hook on the Feed Roller, move the Feed Roller to the right, and remove.

Rear
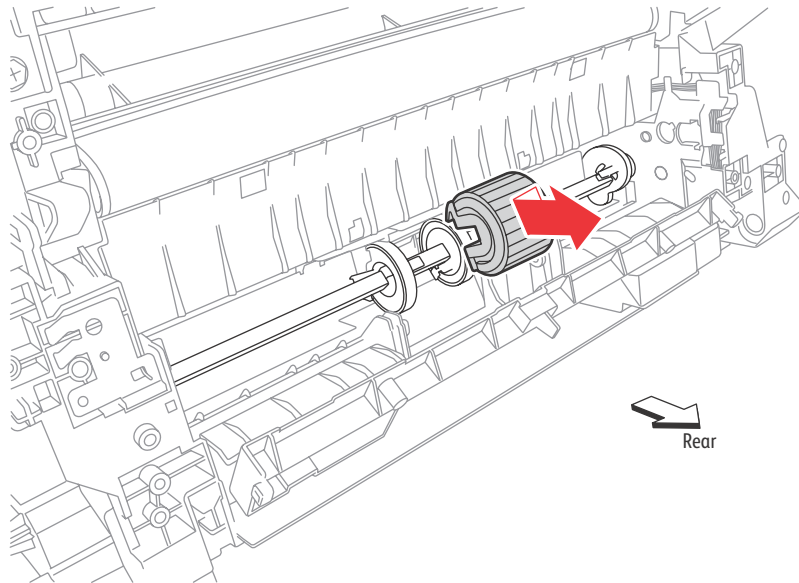
s6020-215

25. Feed Shaft removal:
    a. Release the Left Feed Roller Cam latch, move the Feed Shaft to the left side of the printer.
    b. Release the Right Feed Roller Cam latch, remove the Right Feed Roller Cam from the Feed Shaft.
    c. Remove the Feed Shaft from the printer, remove the Left Feed Roller Cam from the Feed Shaft.

Latch
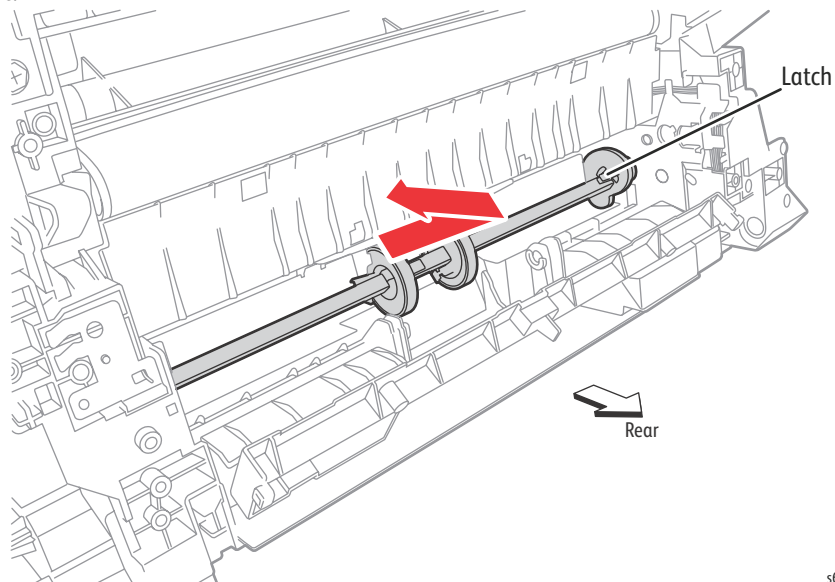
Rear

s6020-214

Separator Pad, Separator Spring, and Separator Roller

PL2.2.11,12 (with 29, 30, and 31)

1. Open the Rear Door.
2. Remove the Paper Tray Chute (page 4-96).
3. Remove the Registration Actuator (Phaser 6020 and WorkCentre 6025 page 4-97, Phaser 6022 and WorkCentre 6027 MFP page 4-100).
4. Release the Separator Spring.
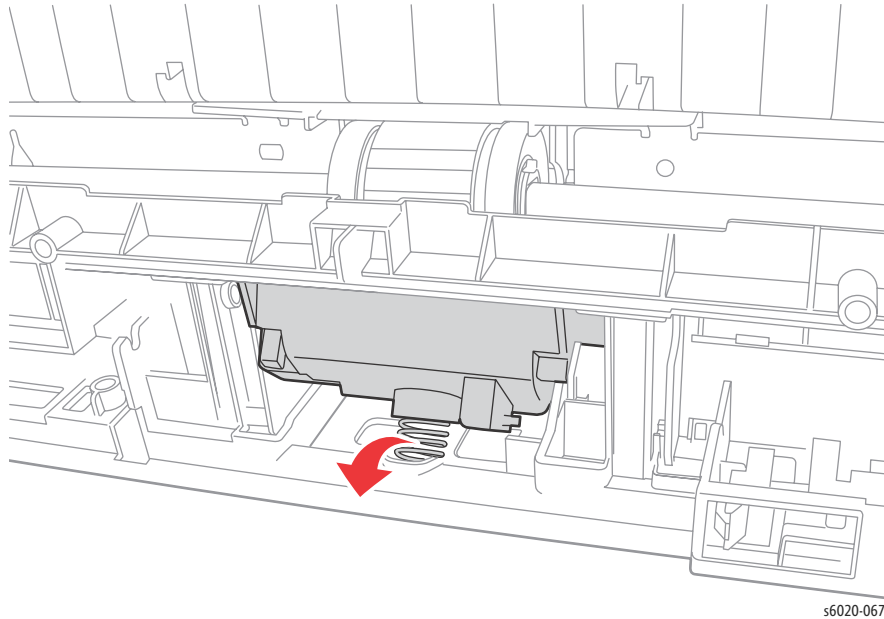
s6020-067

5. Rotate the Separator Holder past the Lower Chute opening.
6. Slide the Separator Holder left and lift the right pin of the Separator Holder from the Lower Chute and remove.
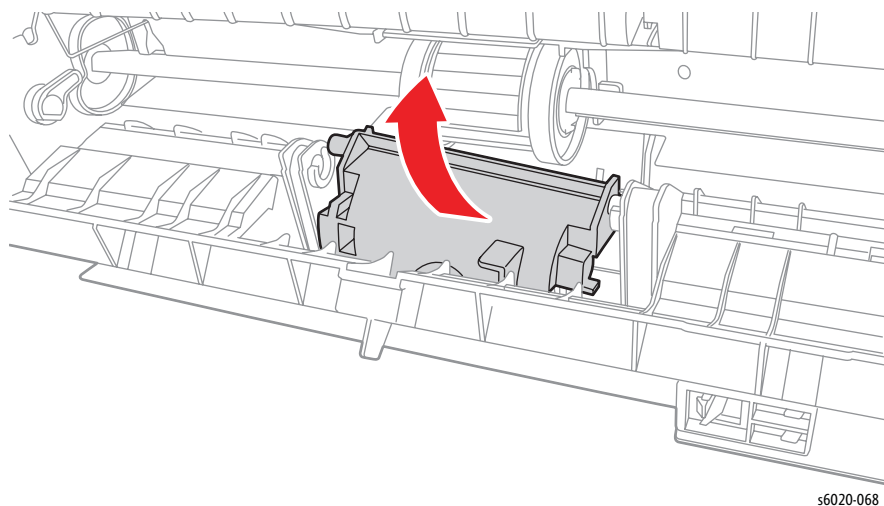
s6020-068

Left/Right Follower, Arm, and Spring

PL2.2.13~14, PL2.2.17~18, PL2.2.24

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
7. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42 or 6027 page 4-55).
8. Remove Cleaner Assembly (page 4-144).
9. Disconnect P/J206 on the LVPS, and P/J13 and P/J20 on the MCU Board.
10. Remove the harness from the harness guide.

P/J206
P/J20
P/J13
s6020-069

11. Disconnect P/J201 on the LVPS and release the harness from the harness guide.

P/J201
s6020-117

12. Remove 5 screws (Silver, Tap, 8mm) to remove the Toner Dispenser Frame from the printer.

s6020-039

13. Remove IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP page 4-149, WorkCentre 6027 MFP page 4-150).
14. Remove Feed Drive Assembly (page 4-138).
15. Remove Registration Clutch (page 4-98).
16. Remove Registration Roller (page 4-94).
17. Remove Paper Tray Chute (page 4-96).

18. While releasing the hook of the Follower, push the Follower towards the inside of the printer.

    Note: This step applies to both the left and right parts.
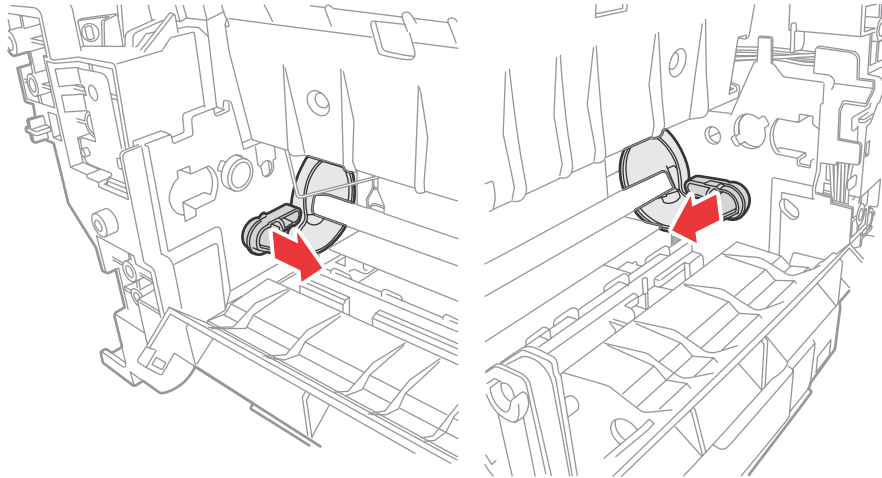
s6020-040

19. Remove NF Springs.
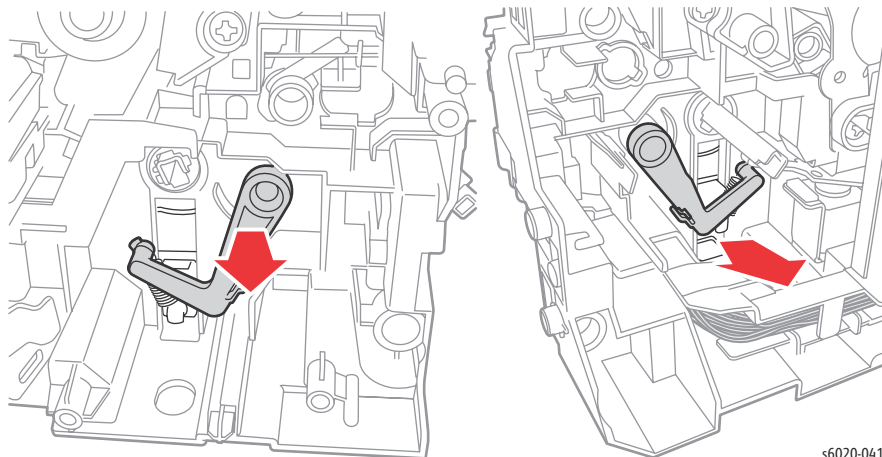
s6020-041

Registration Pinch Roller

PL2.3.2

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
6. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42 or 6027 page 4-55).
7. Remove Cleaner Assembly (page 4-144).
8. Disconnect P/J206 on the LVPS, and P/J13 and P/J20 on the MCU Board.
9. Remove the harness from the harness guide.

P/J206

P/J20

P/J13   s6020-069

10. Remove 5 screws (Silver, Tap, 8mm), rotate the Toner Dispenser Frame toward the front of the printer.

s6020-039

11. Remove Image Processor Board (Phaser 6020/6022 and WorkCentre 6025 MFP page 4-149, WorkCentre 6027 MFP page 4-150).
12. Remove Feed Drive Assembly (page 4-138).
13. Remove Registration Clutch (page 4-98).

   Note: Steps 14 and 15 apply to the bearings on both the left and right side.

14. Remove the Registration Spring
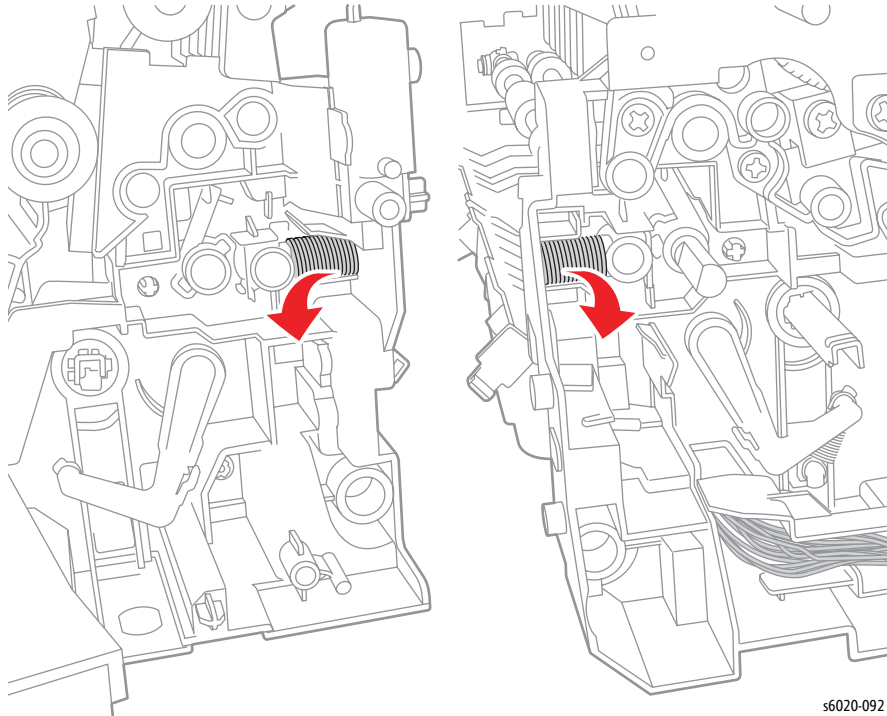
s6020-092

15. Release the latch to remove the Registration Bearing.
16. Remove the Registration Pinch Roller Assembly.

Latch
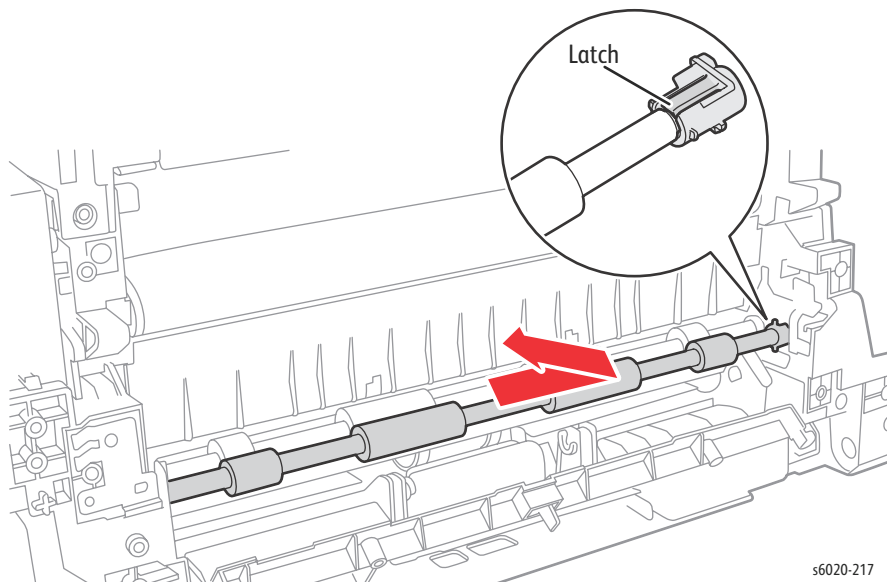
s6020-217

Registration Roller

PL2.3.1

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
6. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42 or 6027 page 4-55).
7. Remove Cleaner Assembly (page 4-128).
8. Remove 5 screws (Silver, Tap, 8mm) and rotate the Toner Dispenser Frame from the printer.

s6020-039
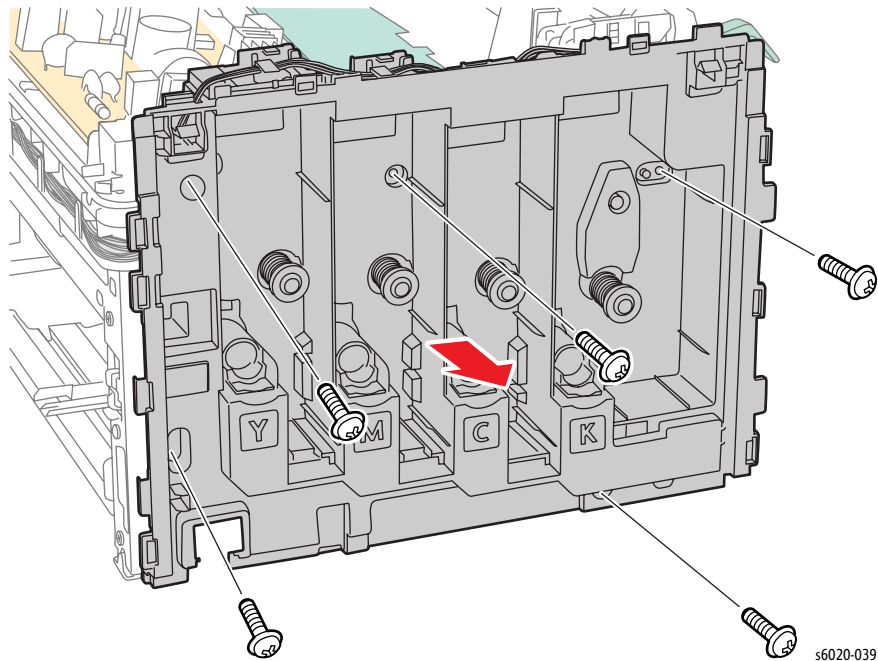
9. Remove Image Processor Board (Phaser 6020/6022 and WorkCentre 6025 MFP page 4-149, WorkCentre 6027 MFP page 4-150).
10. Remove Feed Drive Assembly (page 4-138).
11. Remove Registration Clutch (page 4-98).
12. Remove Registration Pinch Roller (page 4-91).

13. Release the hook by rotating the Registration Bearing counterclockwise and pull the Registration Roller to the right.

s6020-093

14. Release the tab and remove Registration Bearing from the Registration Roller.

Tab

s6020-094
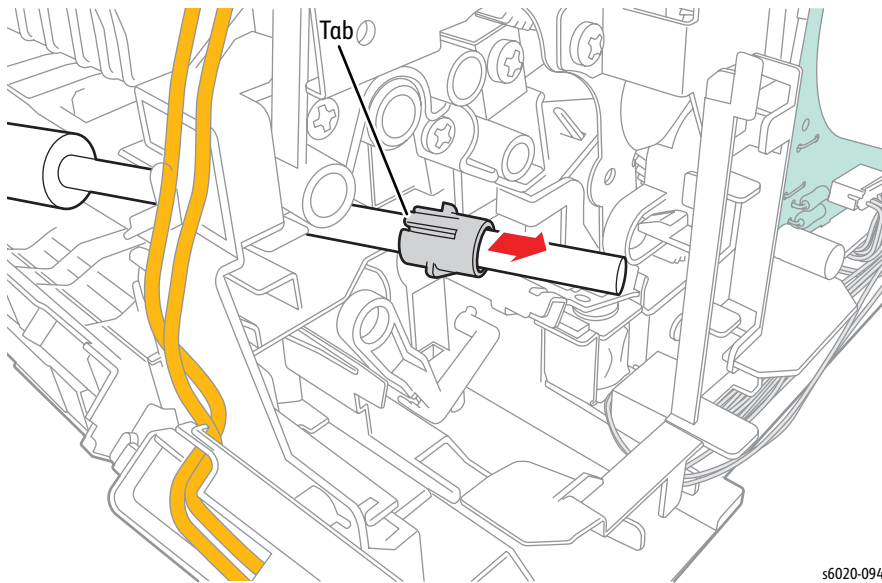
15. Remove Registration Roller.

Paper Tray Chute (Phaser 6020 and WorkCentre 6025)

PL2.3.3

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
6. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42 or 6027 page 4-55).
7. Remove Cleaner Assembly (page 4-144).
8. Remove Registration Pinch Roller (page 4-91).
9. Remove Registration Roller (page 4-94).
10. Release 2 bosses on the Paper Tray Chute and remove it from the printer.
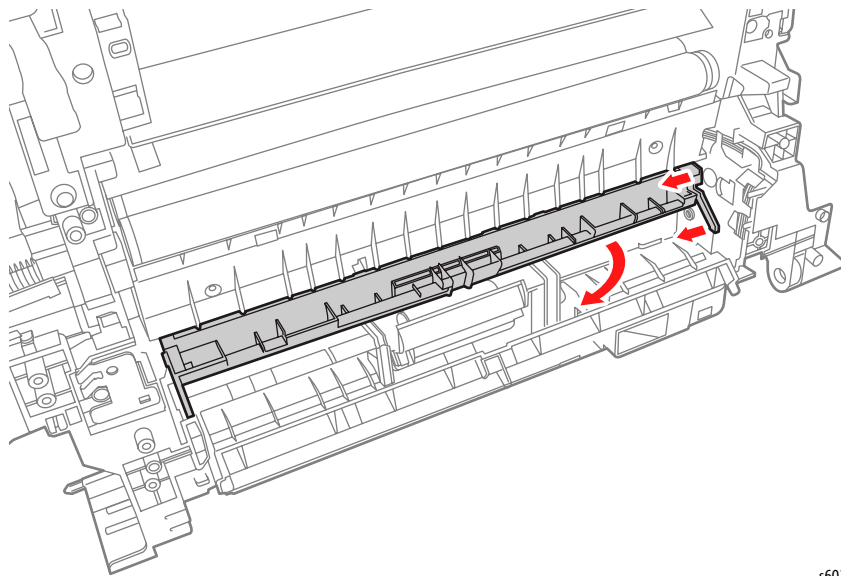
s6020-046

Registration Sensor (Phaser 6020 and WorkCentre 6025)

PL2.3.5

1. Open the Rear Door.
2. Release 2 hooks and remove the Sensor Cover.
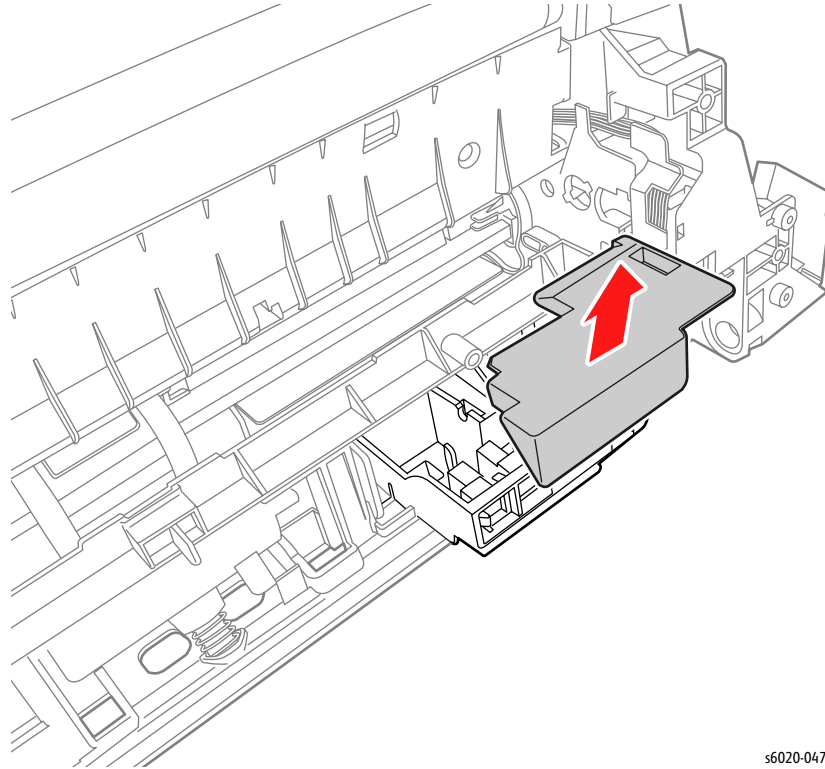
s6020-047

3. Lift the Chute Low and release 3 hooks on the Registration Sensor.

P/J120
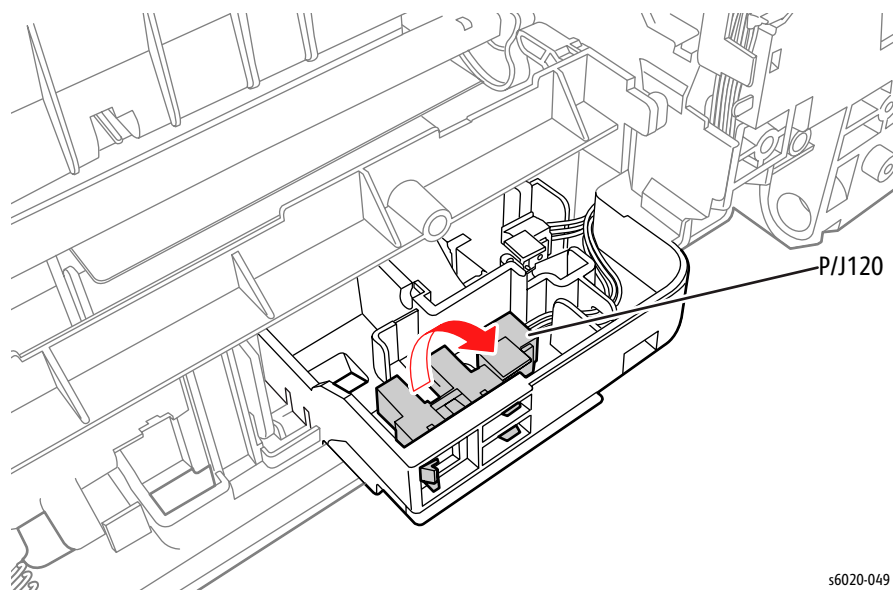
s6020-049

Registration Clutch

PL2.3.7

⚠️ **WARNING:** Do not touch the fuser while it is hot.

1. Remove the Paper Tray.
2. Open the Rear Door.
3. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove 2 screws (Silver, Tap, 6mm) securing the Fan Assembly and lay the Fan Assembly to the side.
6. Remove the Image Processor Board (Phaser 6020/6022 and WorkCentre 6025 MFP page 4-149, WorkCentre 6027 MFP page 4-150).
7. Remove the Feed Drive Assembly (page 4-138).
8. Remove the spring, release the hook, and remove the gear.
9. Disconnect P/J25 on the MCU Board and remove the harness from the harness guide.
10. Remove the Registration Clutch.
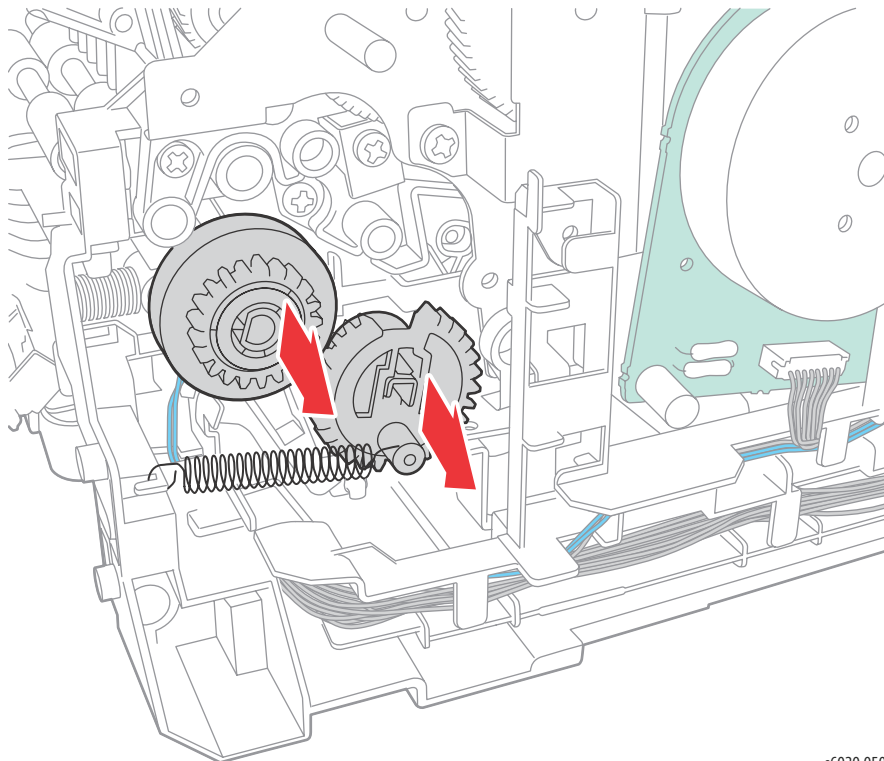
s6020-050

Registration Actuator and Spring (Phaser 6020 and WorkCentre 6025)

PL2.3.11

1. Open the Rear Door.
2. Release 2 hooks and remove the Sensor Cover.
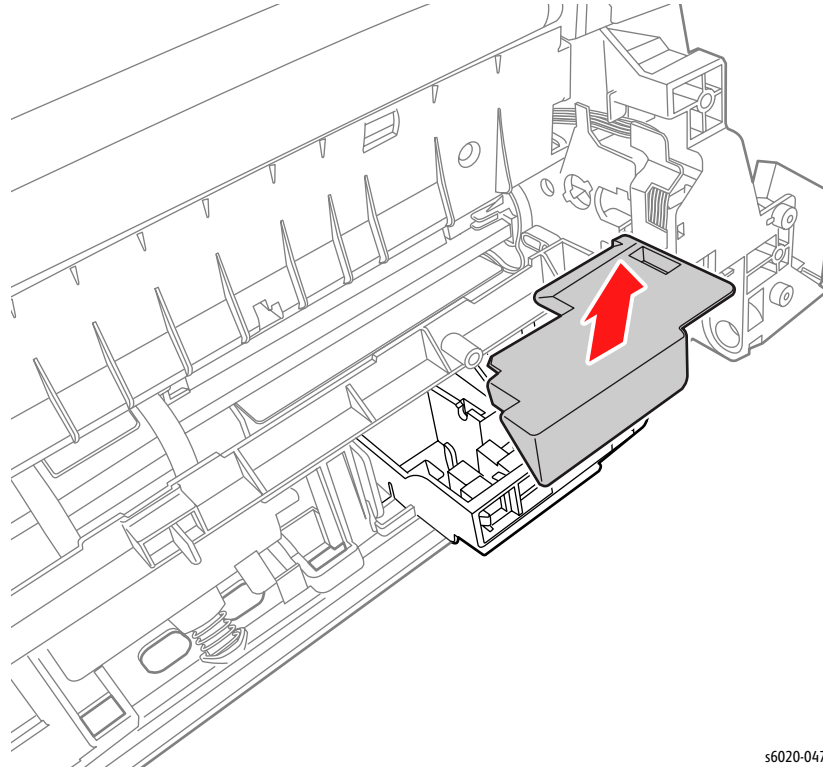
s6020-047

3. Release the left shaft of the Registration Actuator from the hole in the printer.
4. Remove the Registration Actuator and spring.
5. Remove the Registration Spring from the Registration Actuator.
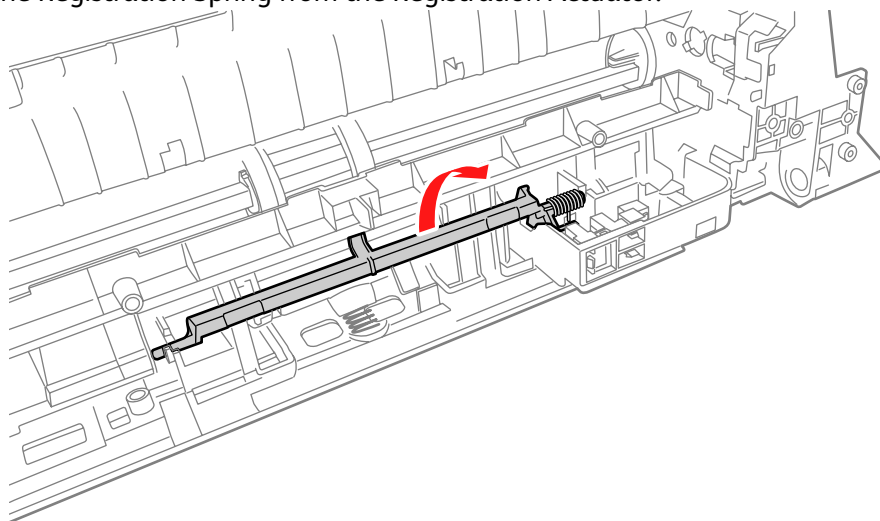
s6020-051

Phaser 6022 and WorkCentre 6027 MFP Registration Actuator and No Paper Actuator

PL2.2.16 (with 30, 31, 32) and PL2.3.9, 10

1. Remove the Rear Door.
2. Remove 2 screws (Silver, Plastic, 6mm) securing the separator chute to the printer and pull the separator chute out of the printer.
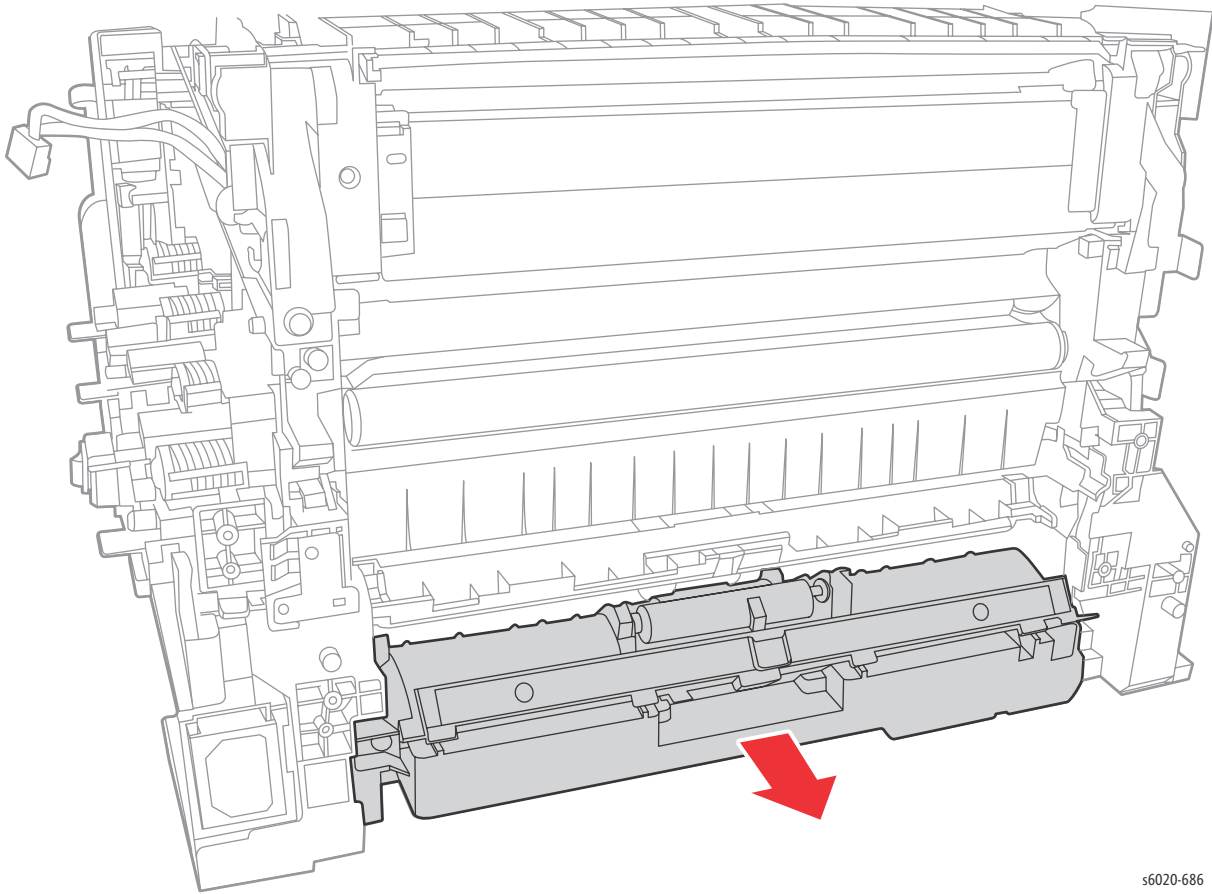
s6020-686

3. Release the boss on each side of the lower chute from the separator chute and remove.
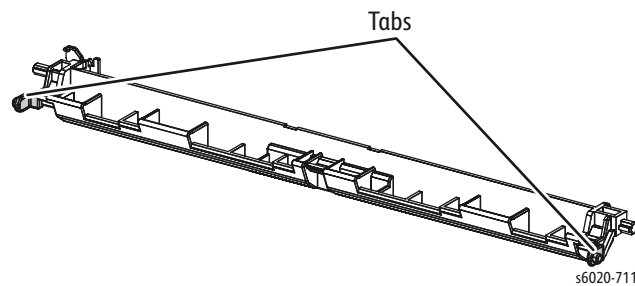
Tabs

s6020-711

4. Release 2 tabs securing the no paper cover to the separator chute and remove the separator cover.

s6020-687
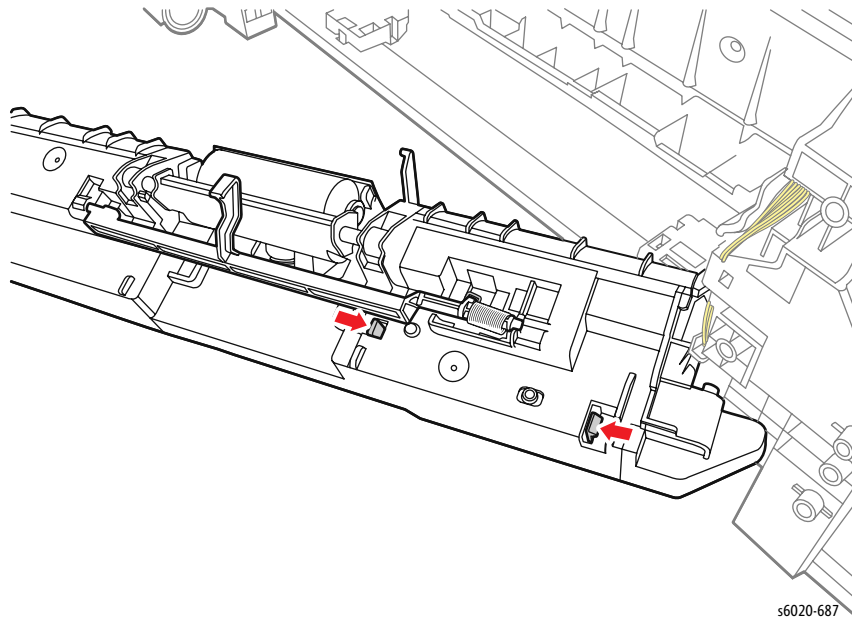
5. Release the shaft on each side of the No Paper Actuator from the shaft holes in the separator chute.

s6020-688
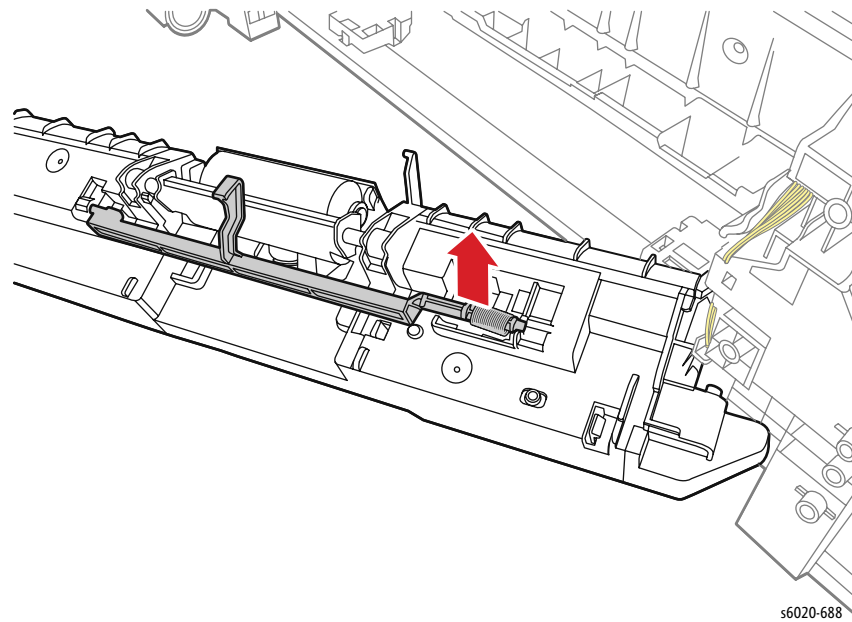
6. Remove the No Paper Actuator (16), the No Paper Sub Actuator (32), the Main No Paper Actuator Spring (30), and the No Paper Sub Actuator Spring (31).
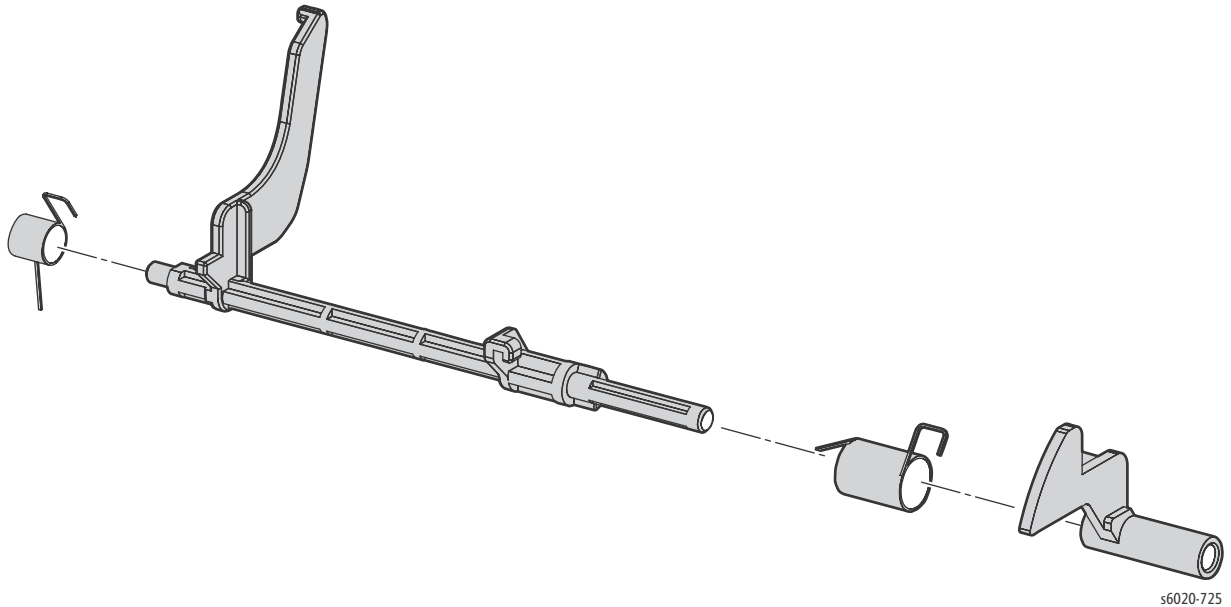
s6020-725

Replacement Notes:

- Verify the Main No Paper Actuator Spring (30), and the No Paper Sub Actuator Spring (31) are correctly attached as shown in the figure below.
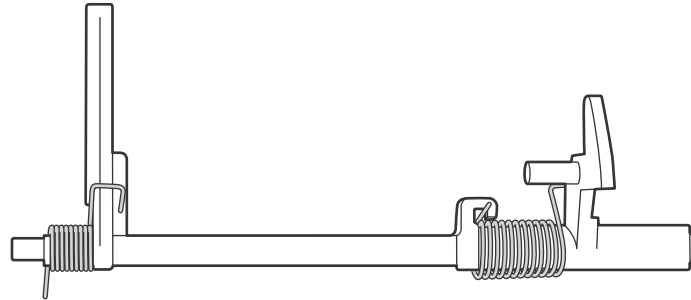
s6020-736

- Verify the No Paper Actuator is attached as shown in the figure below.
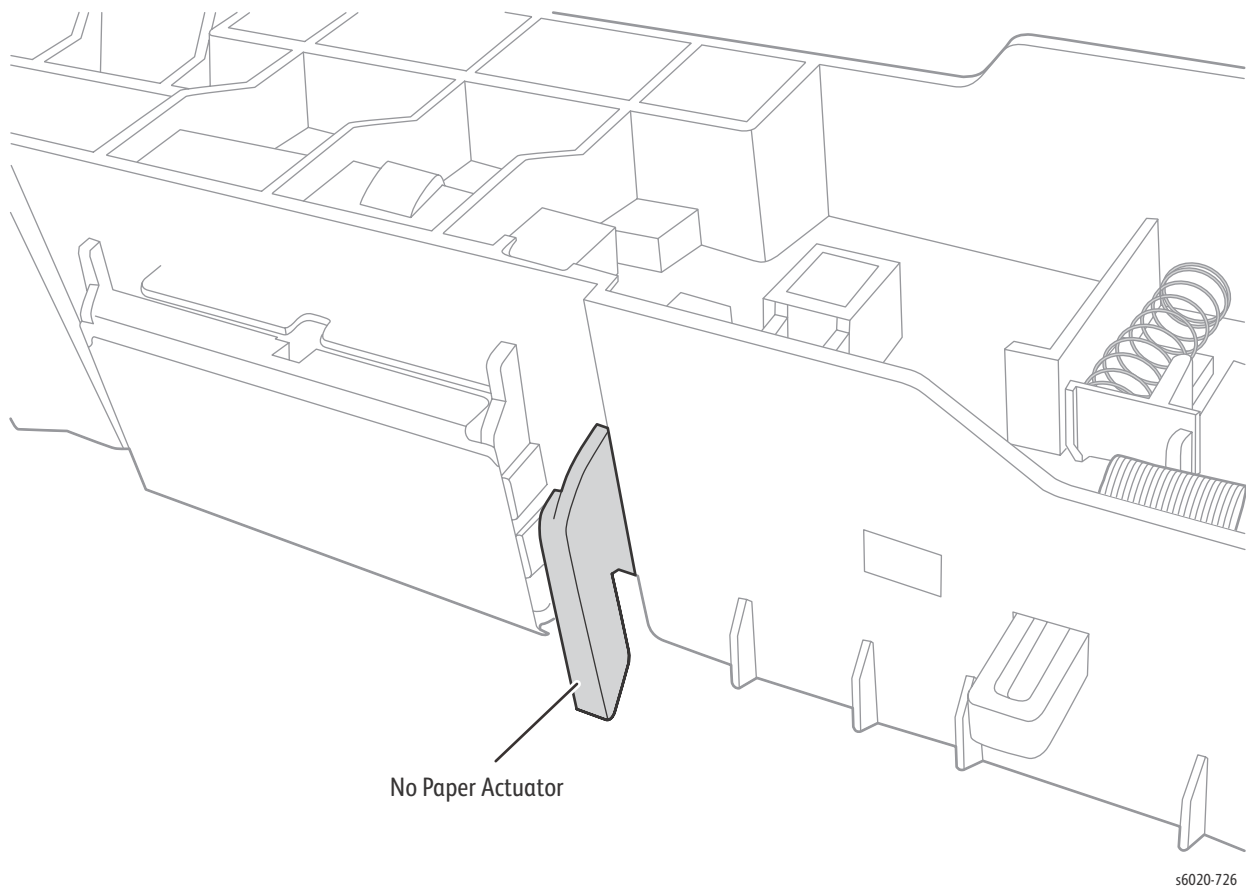
No Paper Actuator

s6020-726

- Verify the No Paper Sub Actuator is correctly attached **<u>inside</u>** the separator chute.
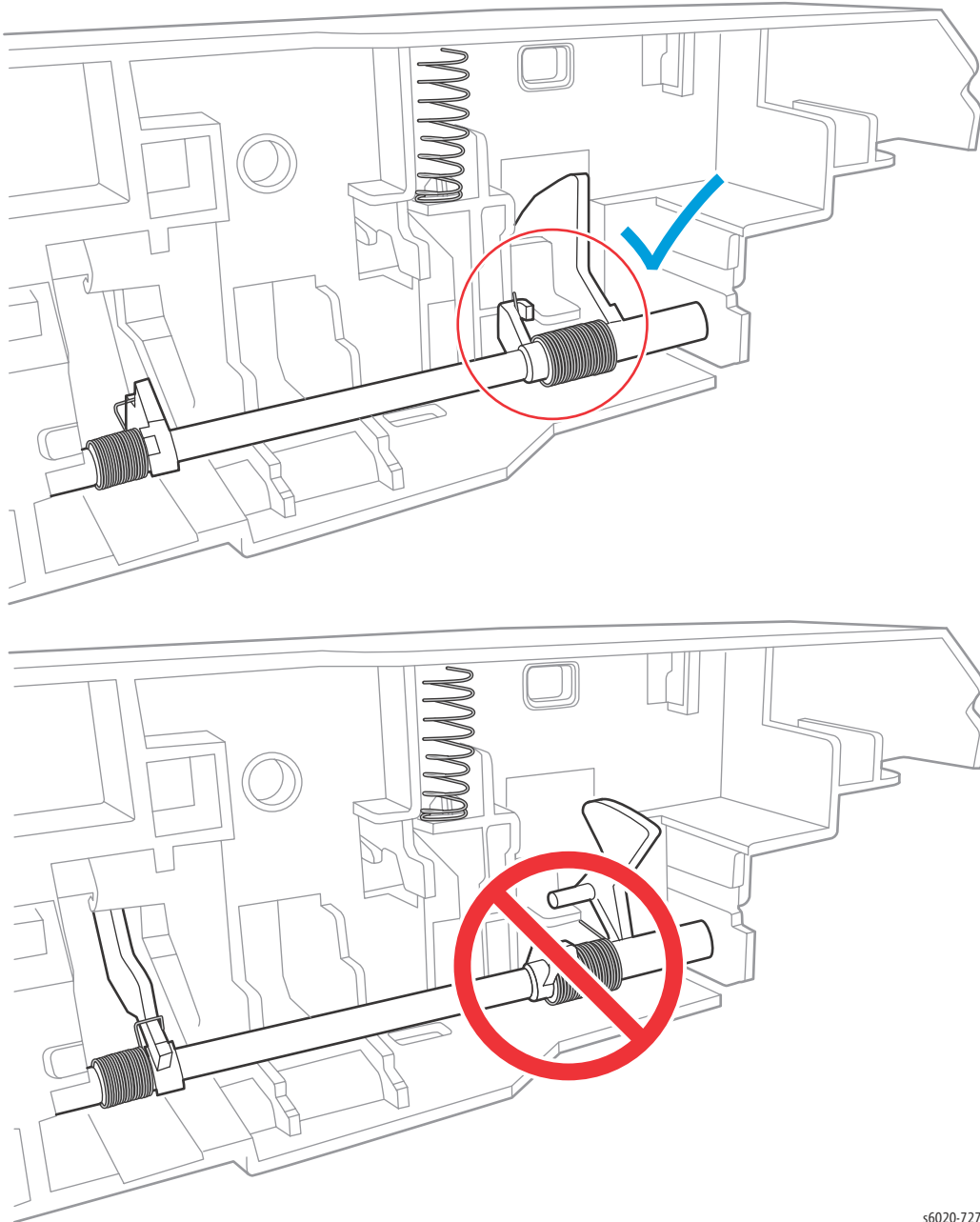
s6020-727

Registration Sensor and No Paper Sensor (Phaser 6022 and WorkCentre 6027 MFP)

PL 2.3.4 and PL2.2.18, (with 2.2.20 - Sensor Harness)

1. Remove the Rear Door.
2. Remove 2 screws (Silver, Plastic, 6mm) securing the separator chute to the printer and remove.
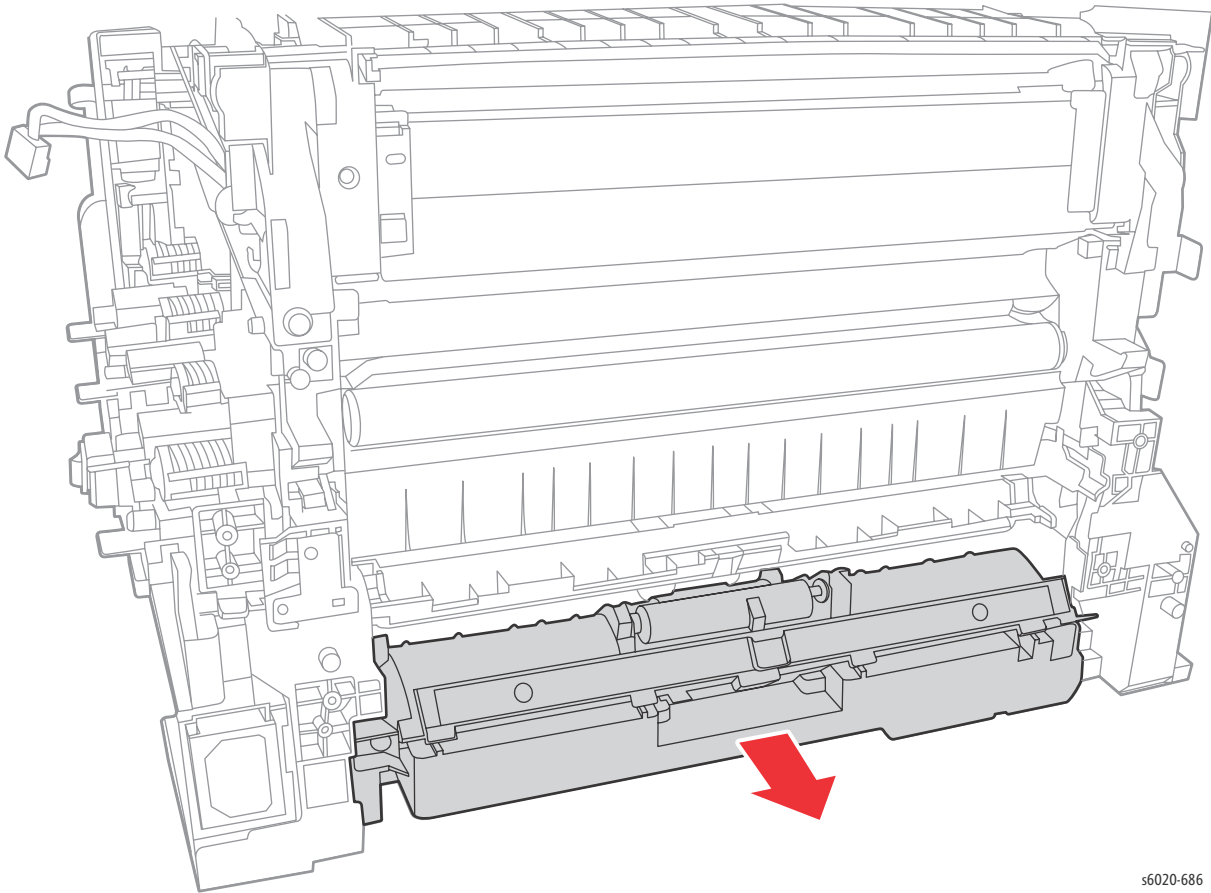
s6020-686

3. Release the boss on each side of the lower chute from the separator chute and remove.

Tabs

s6020-711

4. Release 2 tabs securing the no paper cover to the separator chute and remove.

s6020-687
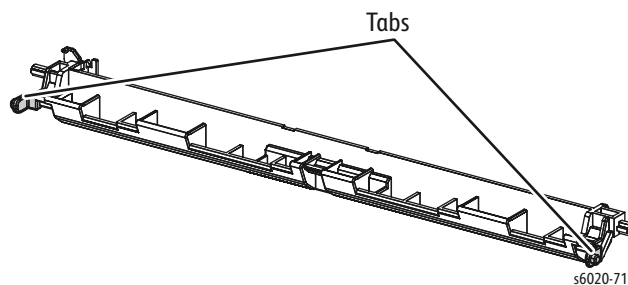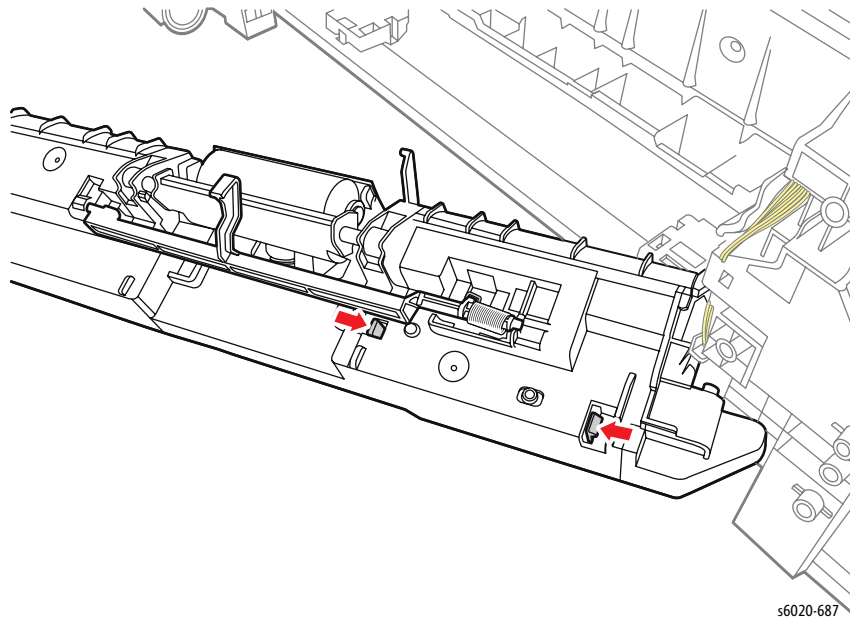
5. Remove the no paper cover from the separator chute revealing the No Paper and Registration Sensors (PL2.3.4).

s6020-689
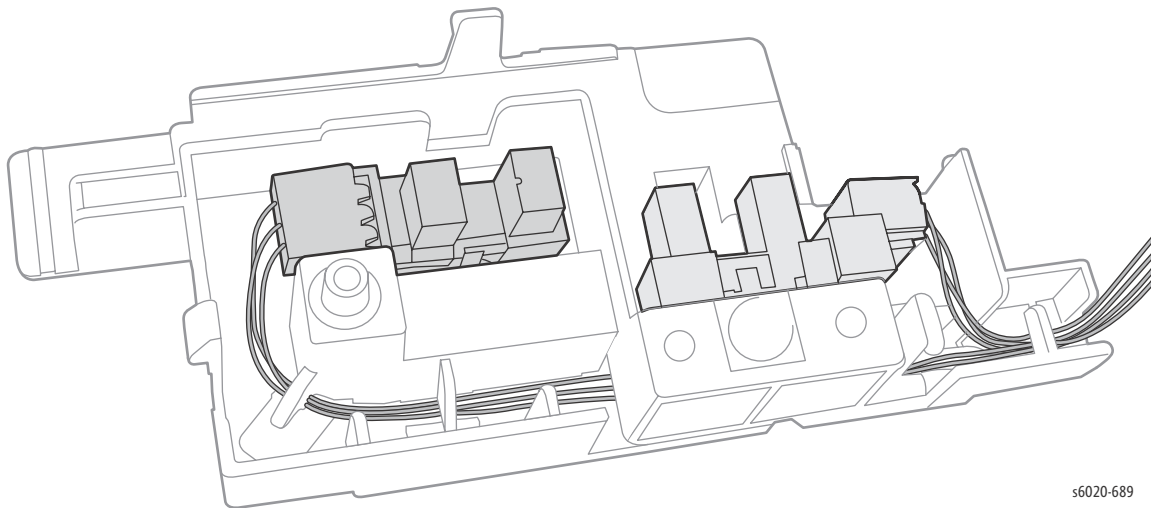
1. Disconnect J/P120 from the Regi Sensor and J/P121 from the No Paper Sensor and release the harness form the harness guide.
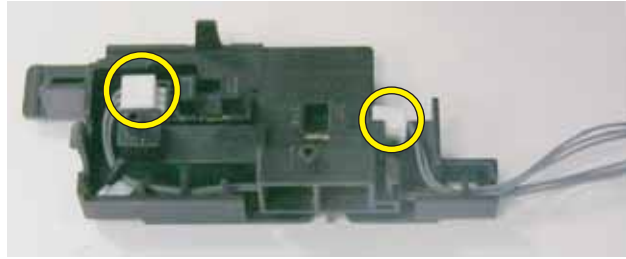
2. Release 3 hooks to remove the Regi Sensor.

Hook

Hooks

s6020-728
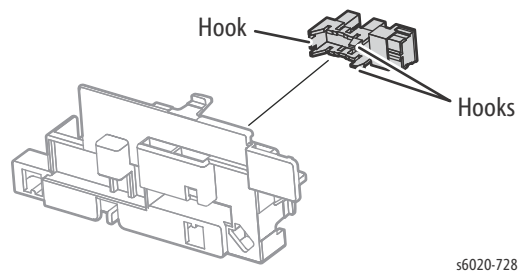
3. Release 3 hooks to remove the No Paper Sensor.

Hook

Hooks

s6020-731
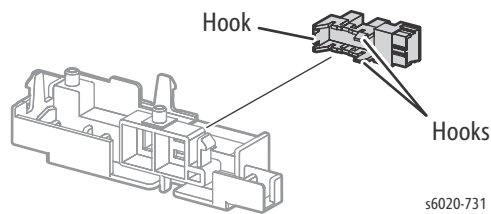
Xerographics

Xerographics Removal (1.25 hours removal)

⚠️ **WARNING:** Do not touch the fuser while it is hot.
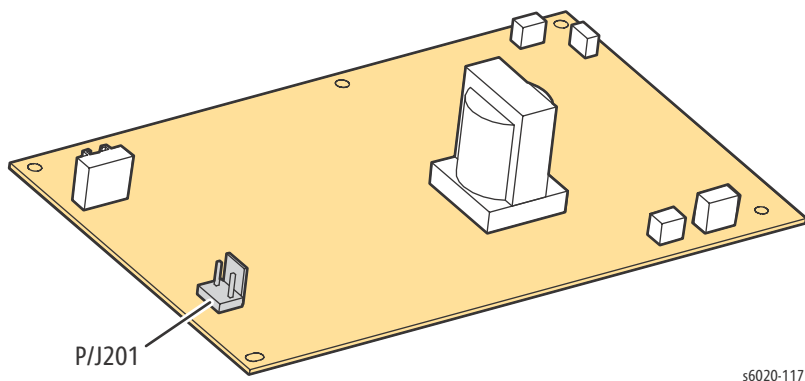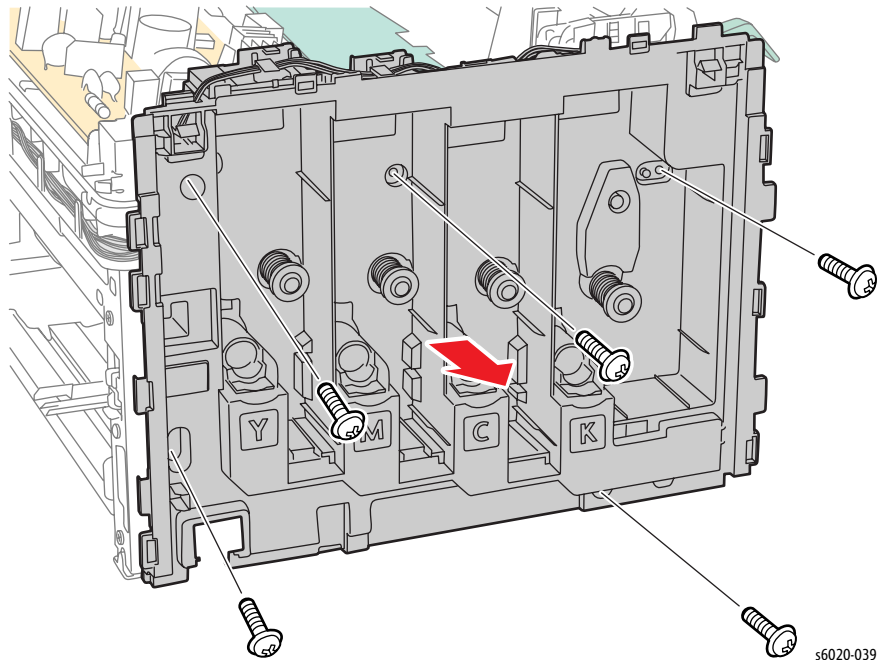
PL3.1.1

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
4. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
5. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
6. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42 or 6027 page 4-55).
7. Remove Cleaner Assembly (page 4-144).
8. Remove LVPS (page 4-158).
9. Remove IP Board (Phaser 6020/6022 and WorkCentre 6025 MFP page 4-149, WorkCentre 6027 MFP page 4-150).
10. Remove Fuser (page 4-129). (15 minutes)
11. Disconnect P/J206 on the LVPS, and P/J13 and P/J20 on the MCU Board.
12. Release the harness from the harness guide.

P/J206

P/J20

P/J13

s6020-069
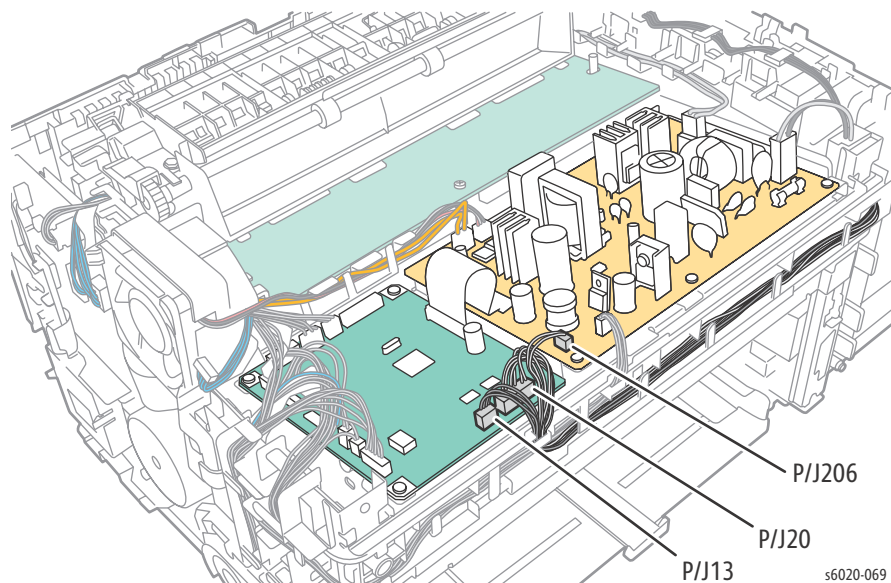
13. Remove 5 (Silver, Tap, 8mm) screws to remove Toner Dispenser Frame from the printer.
14. Remove MCU Board (page 4-160).
15. Remove HVPS (page 4-162).
16. Remove LED Driver Board (page 4-144).
17. Remove Feed Drive Assembly (page 4-138).
18. Remove Main Drive Assembly (page 4-134).
19. Remove Developer Drive Assembly (page 4-140).

s6020-039
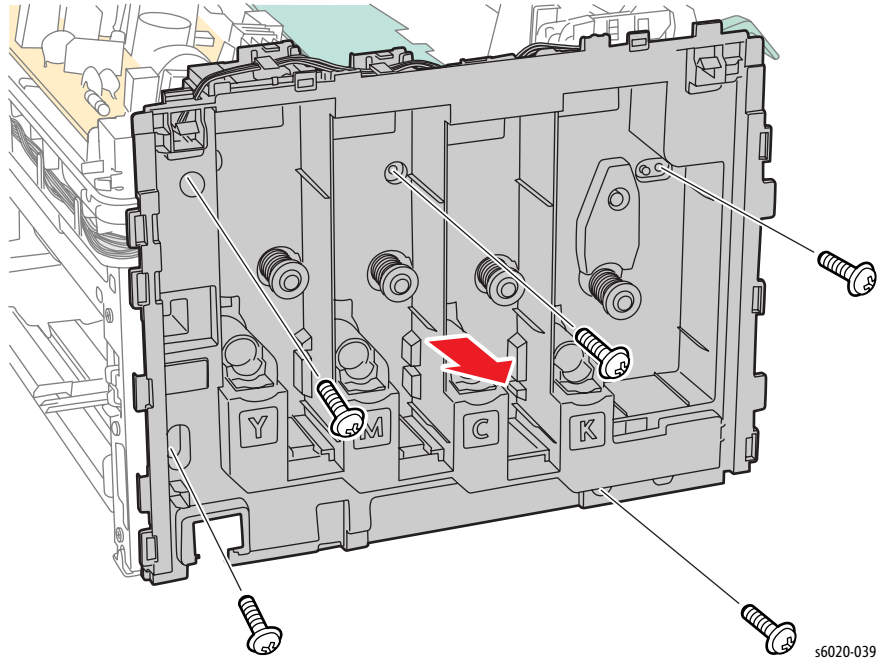
20. Remove 1 screw (Silver, Washer, 6mm) to disconnect the grounding terminal from the front of the printer.

s6020-095
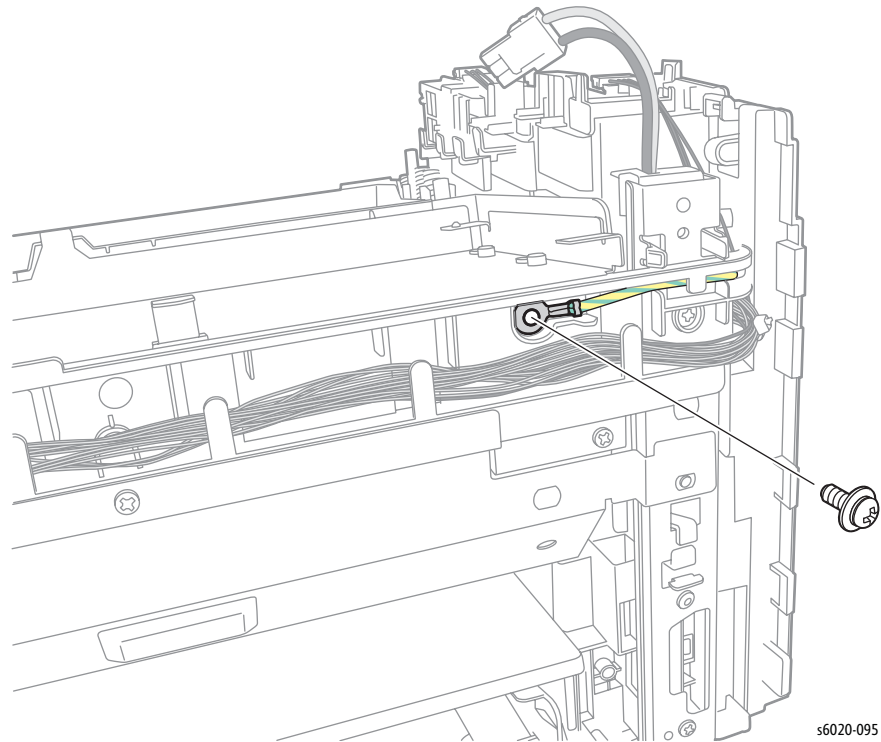
21. Remove 2 screws (Silver, M3, 6mm) to remove the front harness guide.
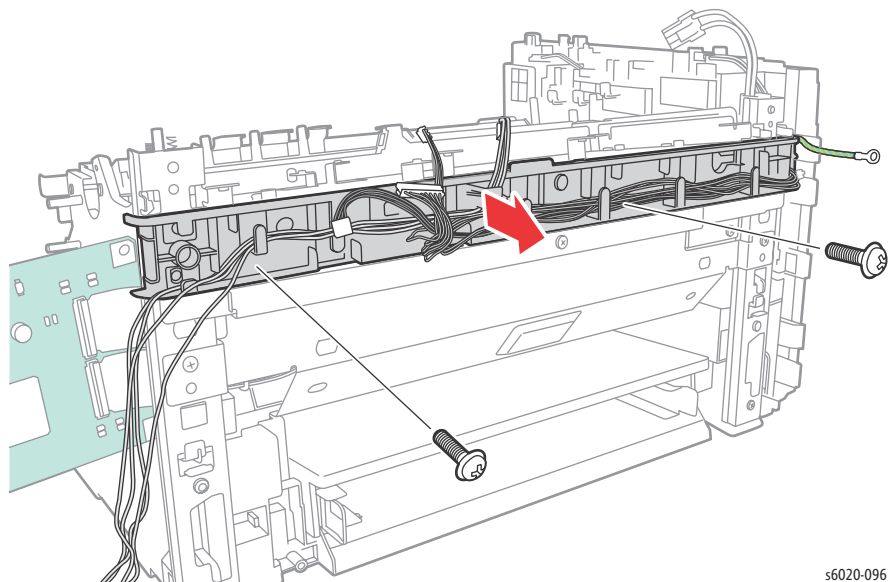
s6020-096

22. Remove 5 screws (Silver, Tap, 8mm), 2 screws (Silver, M2, 6mm), and 2 screws (Silver, M3, 6mm), and lay the MU Drive Assembly on the work surface.

    Note: The MU Drive Assembly has a ground strap welded to it. Take care to not damage the strap.
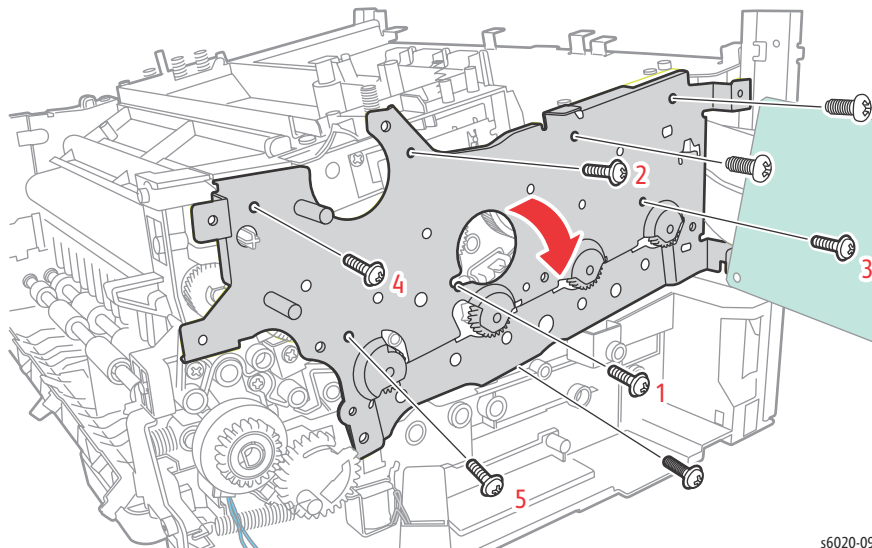
s6020-097

    Note: When replacing the MU Drive Assembly, loosely install the 5 numbered screws (Silver, Tap, 8mm) first, then tighten screw 1 through 5 in that order.

23. Remove 4 screws (Silver, Tap, 8mm) securing the Xerographics Assembly to the printer.
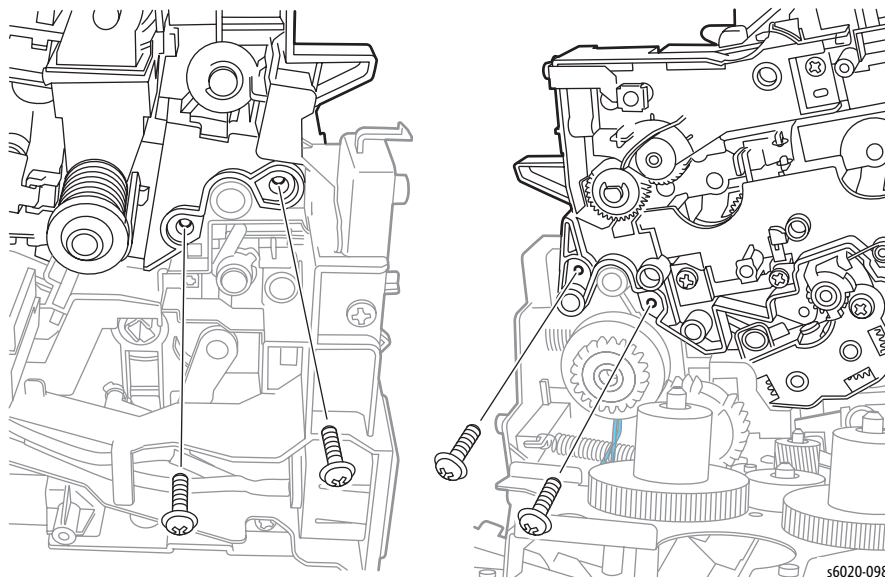
s6020-098

24. Remove the Xerographics Harness. from the harness guide.
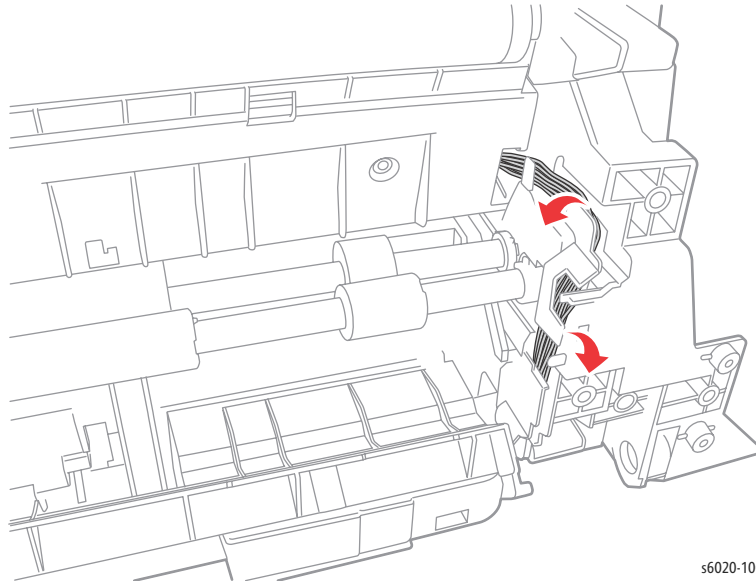
s6020-100

25. Remove 4 screws (Silver, Metal, 6mm) from the earth ground plates on the Toner Dispenser side of the Xerographics Assembly.

26. Remove the Xerographics Assembly.

    Note: After removing the Xerographics Assembly place it in a flat stable location.

Front
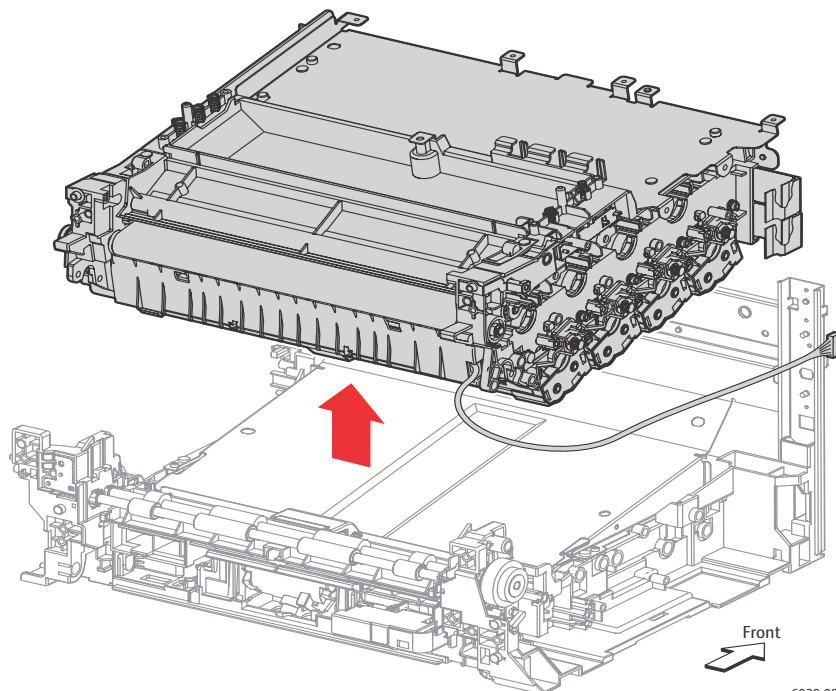
s6020-099

27. Inspect the Feed Roller and replace if worn (page 4-83).

28. Clean the Separator Roller.

    Note: If damaged, replace the Separator Holder Assembly (page 4-87).

Xerographics Disassembly

Developer Removal

⚠️ **WARNING:** Do not touch the fuser while it is hot.

1. Remove the Xerographics Assembly (page 4-108).
2. Turn the Xerographics assembly upside down on the table.
3. Remove 1 Developer Spring on the right side.
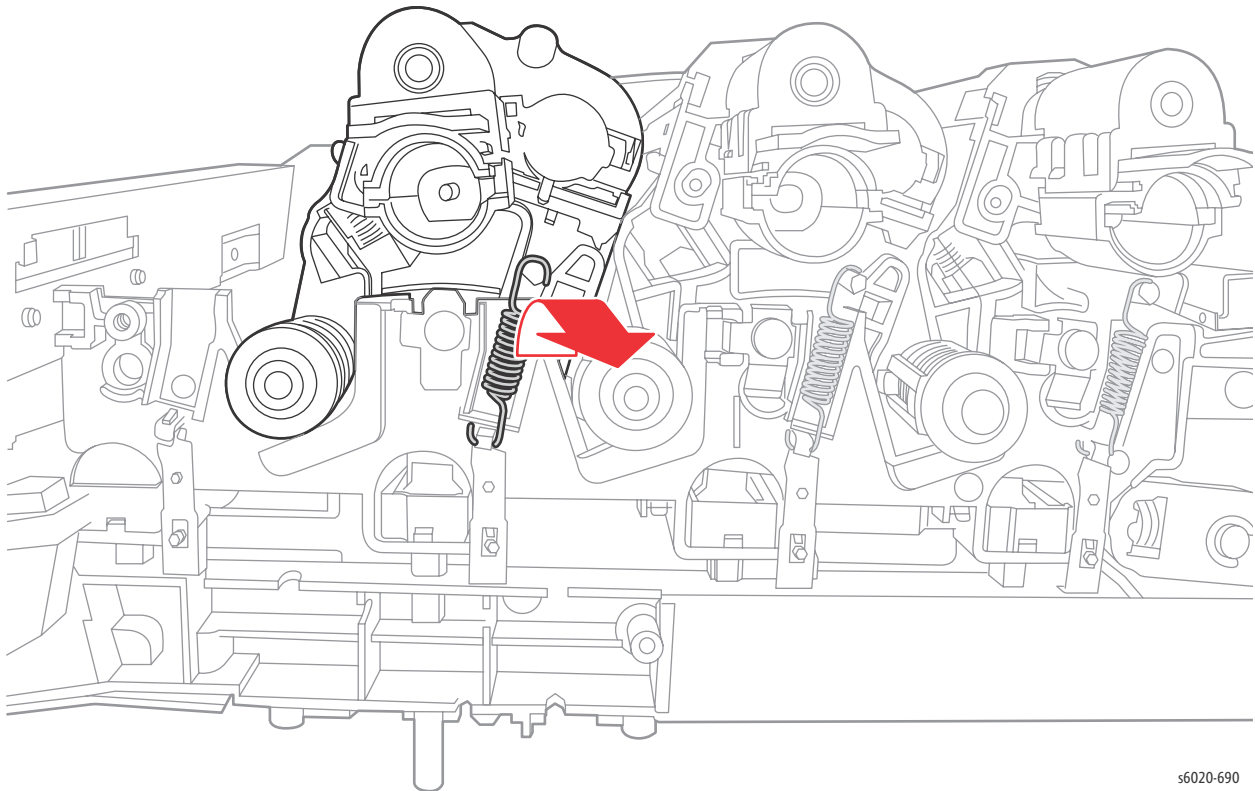
s6020-690

4. Remove 1 Developer Spring on the left side
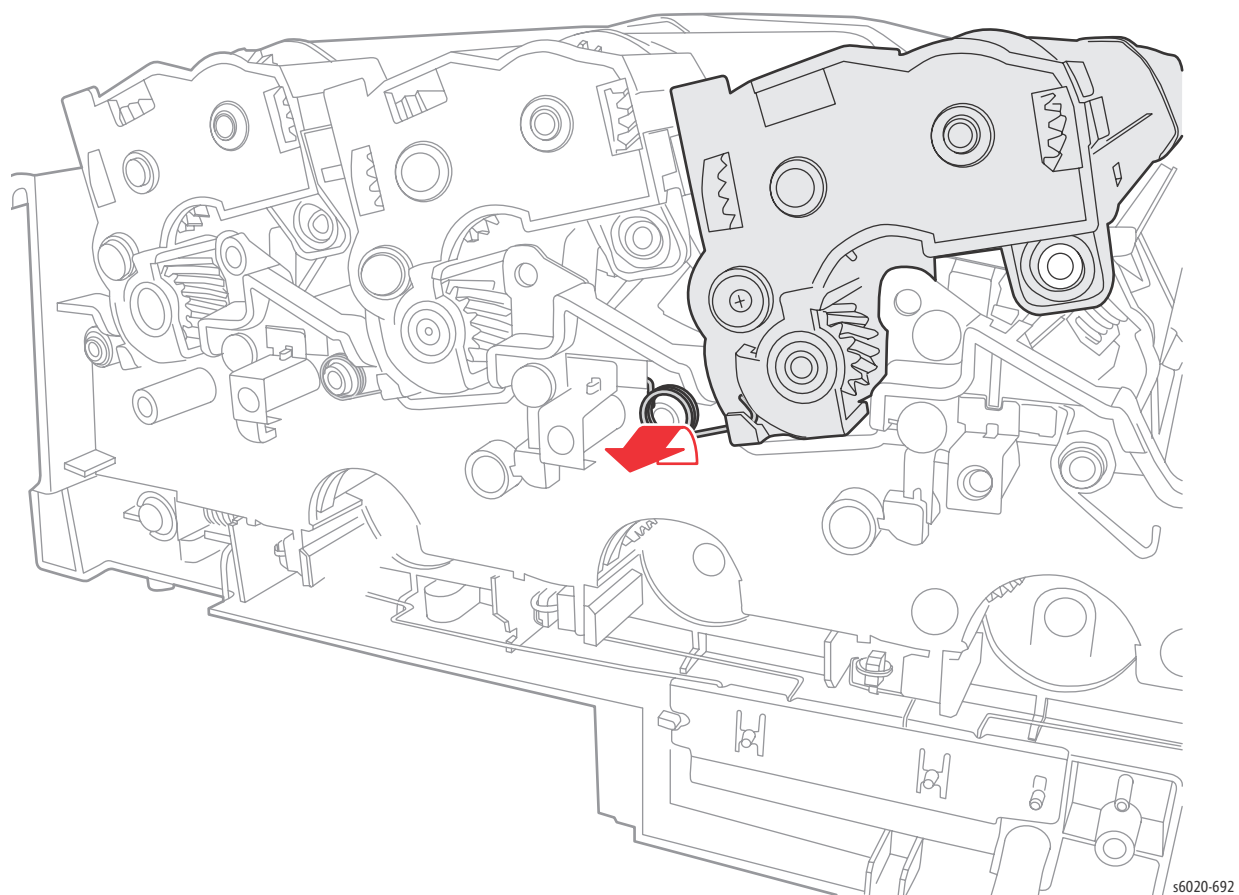
s6020-692

5. Remove 1 screw (Silver, Metal, 8mm).
6. Release the latch on the Developer Assembly off the boss on the left.

Boss

s6020-691
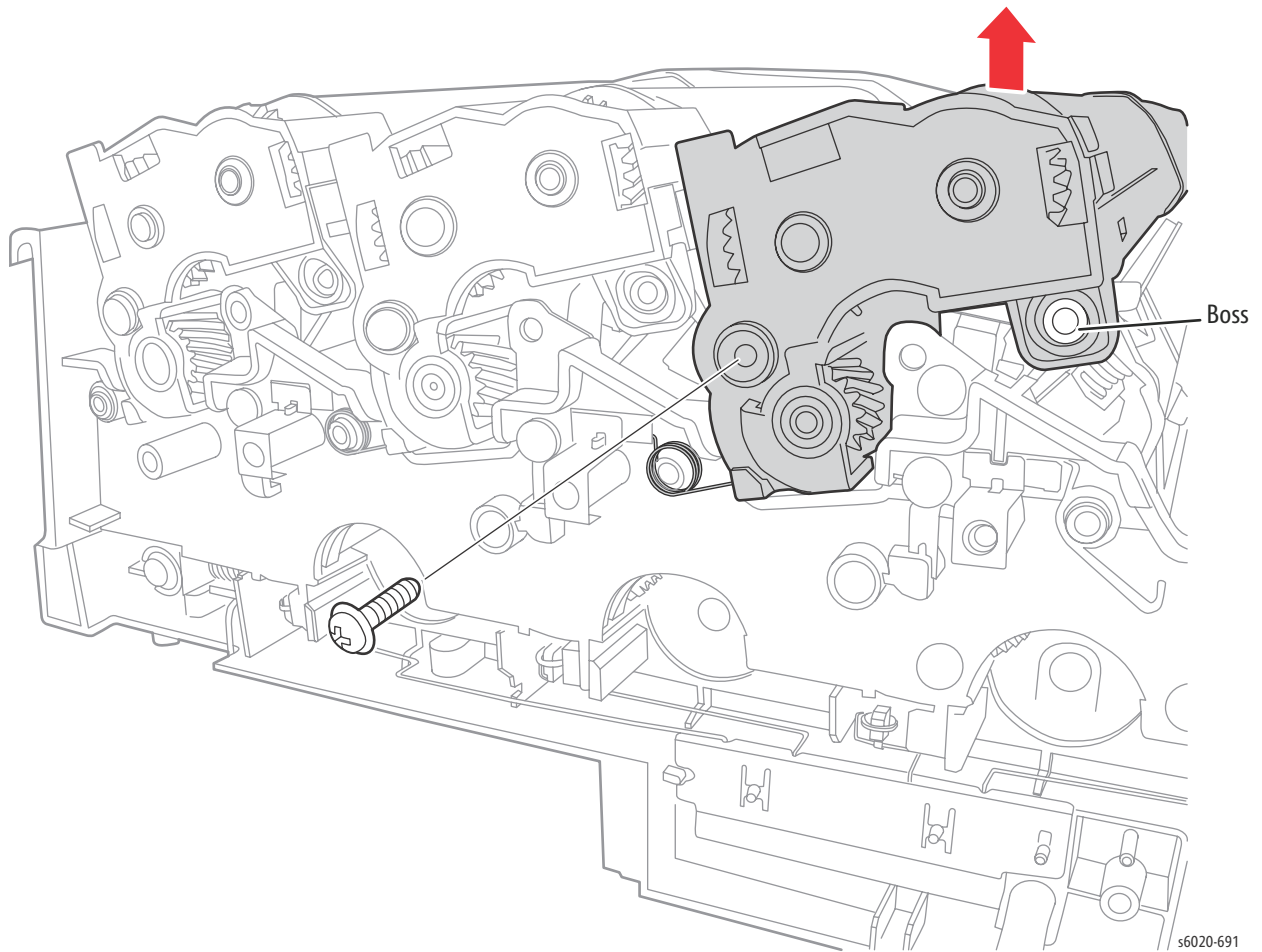
7. Release the latch on the Developer Assembly off the boss on the left.
8. Remove the ribbon cable from the guide on the back of the Xerographics Assembly.
9. Lift the Developer Assembly Housing off the Xerographics Assembly Housing.
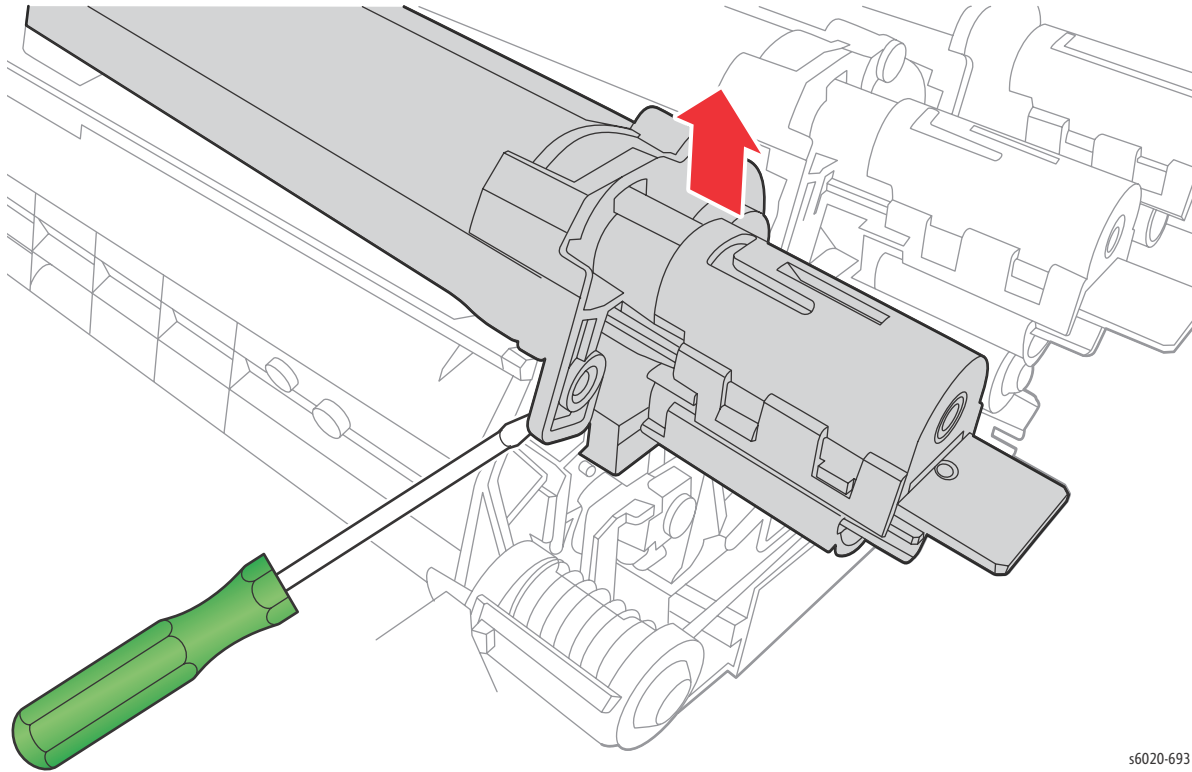
s6020-693

Remove the High Zero Assembly Housing (LED Assembly)

1. Remove 2 screws (Silver, Plastic, 8mm) from the left and right sides.
2. Remove 1 clip held by each screw just removed.
3. Lift the clip off the back of the LED Assembly and slide the clip off the pin.

⚠ **CAUTION:** Do not to break the plastic pin holding the clip.
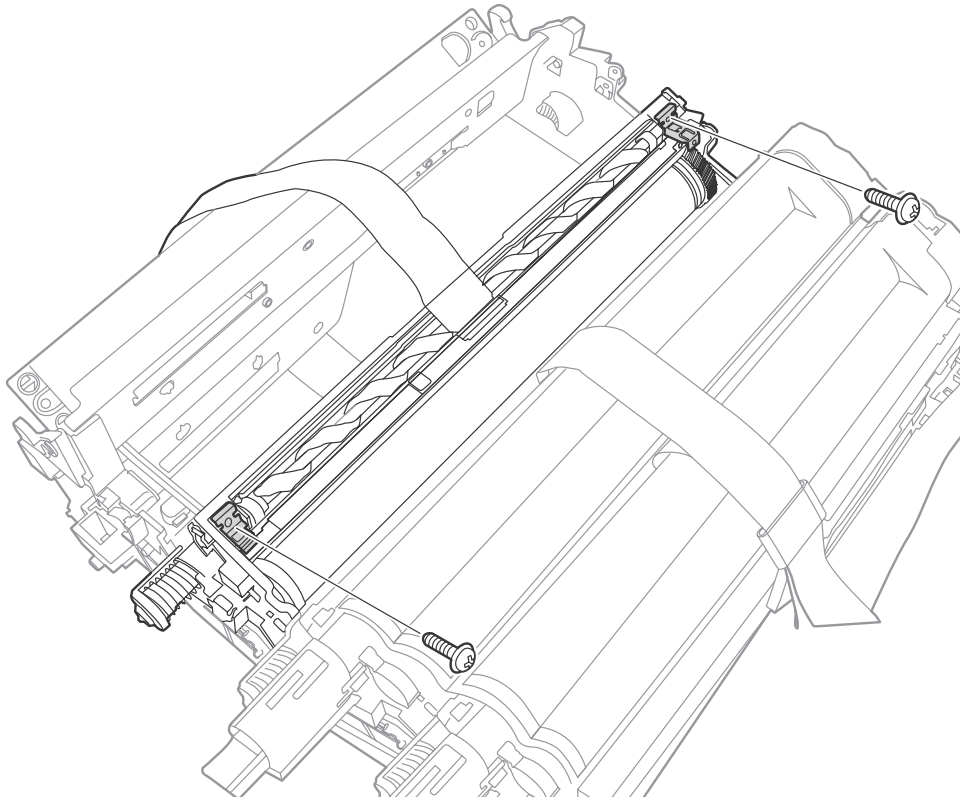
Left and Right clips holding the housing in-place.
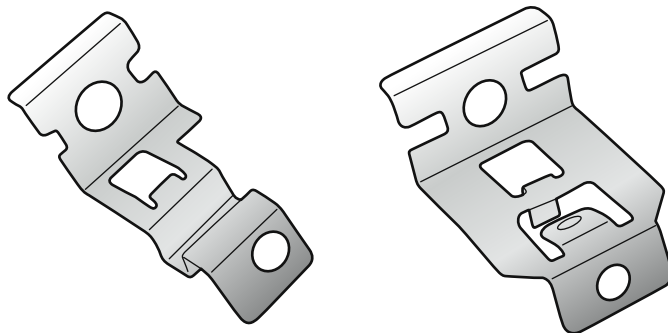
s6020-735

⚠ **CAUTION:**

- Do not to break the plastic pin holding the clip.
- The clips are side dependent, right and left sides.

4. Lift the clip on the left side of the LED Assembly.
5. Lift the LED bar from the Imaging Unit
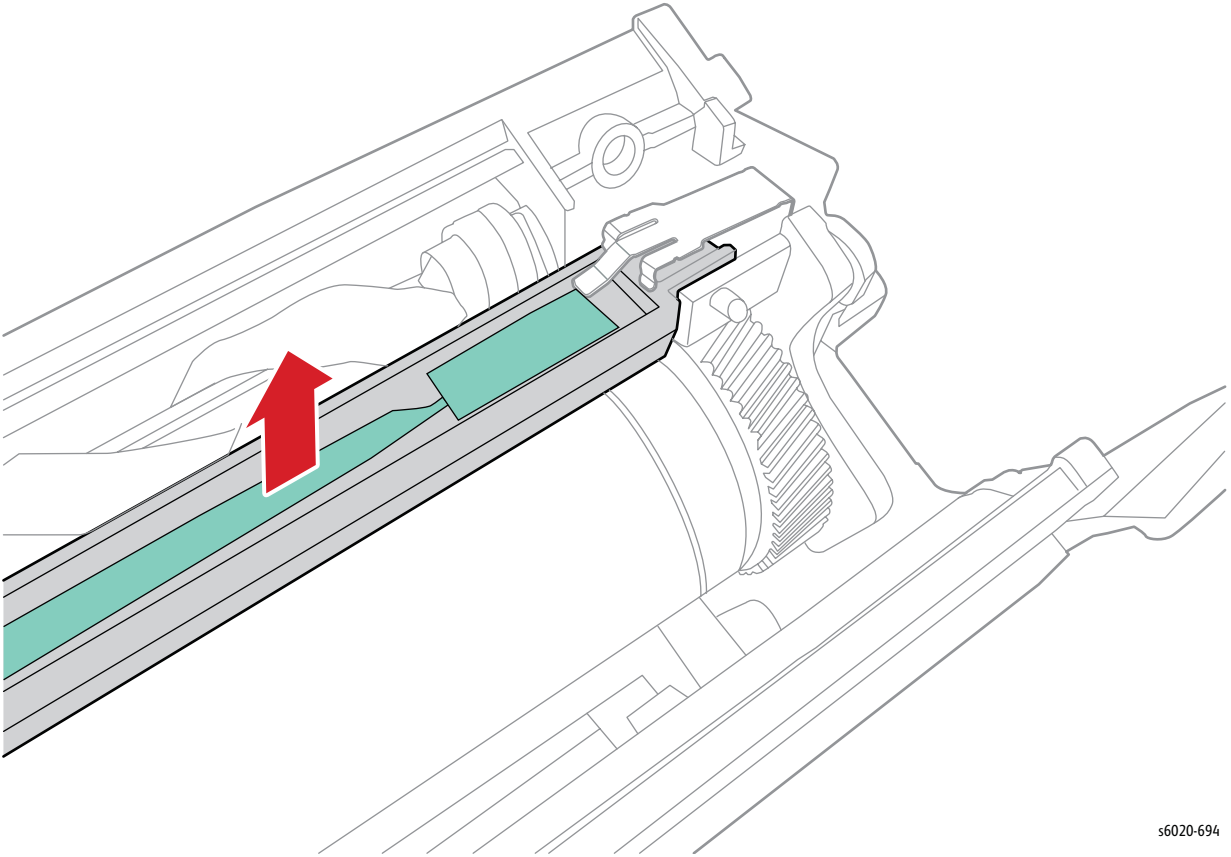
s6020-694

Remove the Imaging Unit (PL3.3.1)

1. Remove 1 screw (Silver, Plastic, 8mm) and the retaining clip retaining clip.
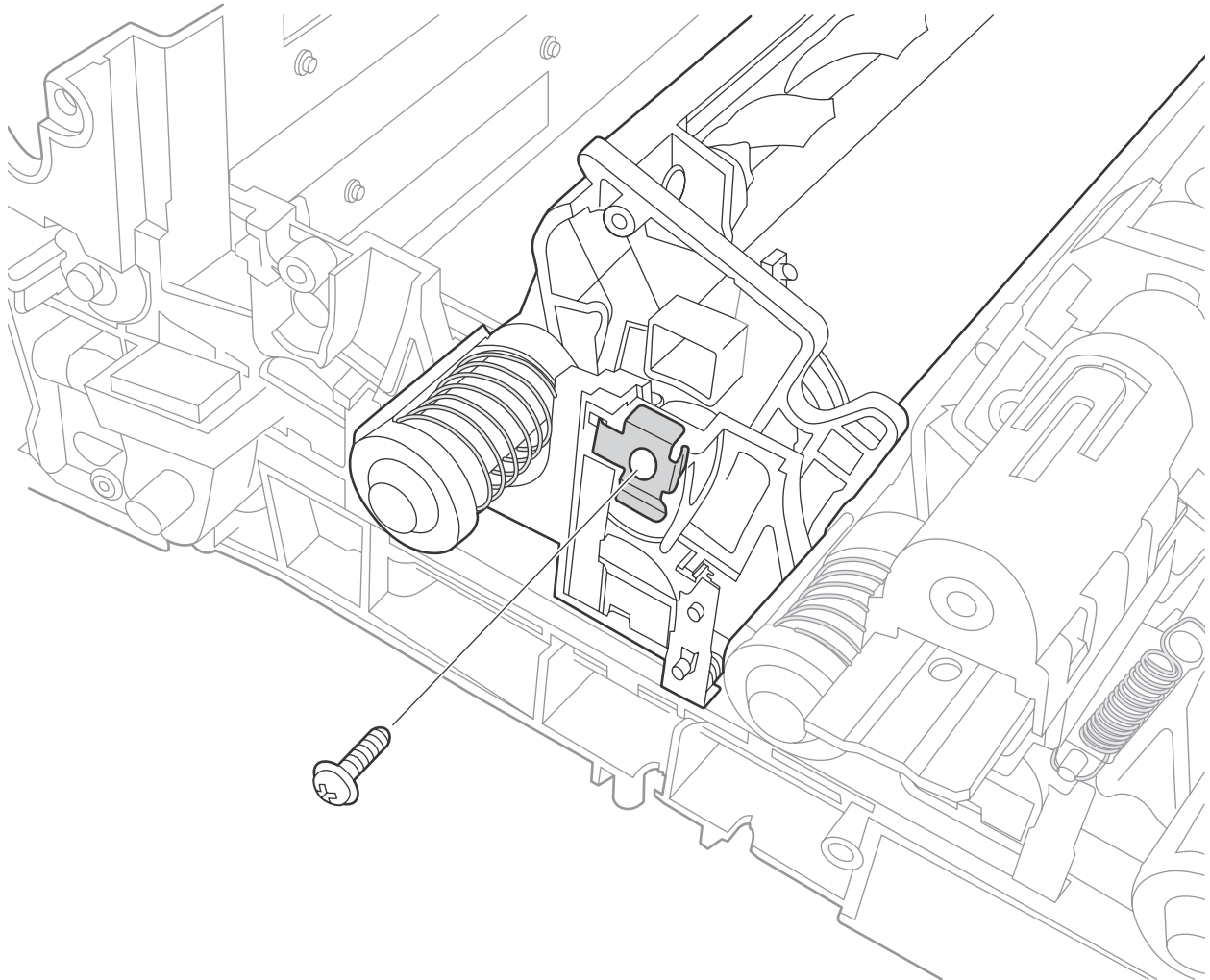
s6020-708

2. Grab the shaft and remove completely.
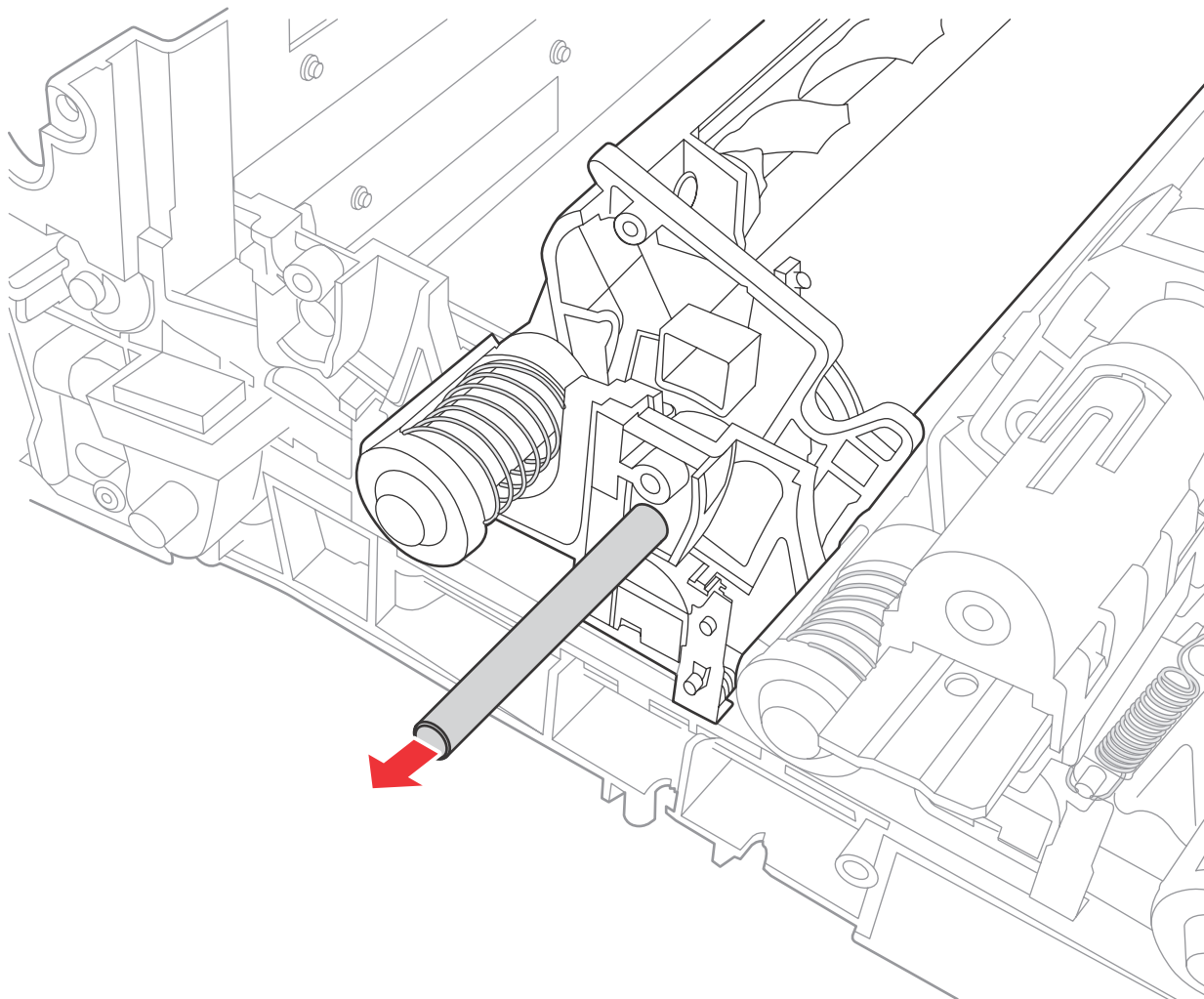
s6020-709

3. Remove 1 screw (Silver, Plastic, 8mm) from the left side.
4. Lift the Imaging unit from the Xerographics Assembly.
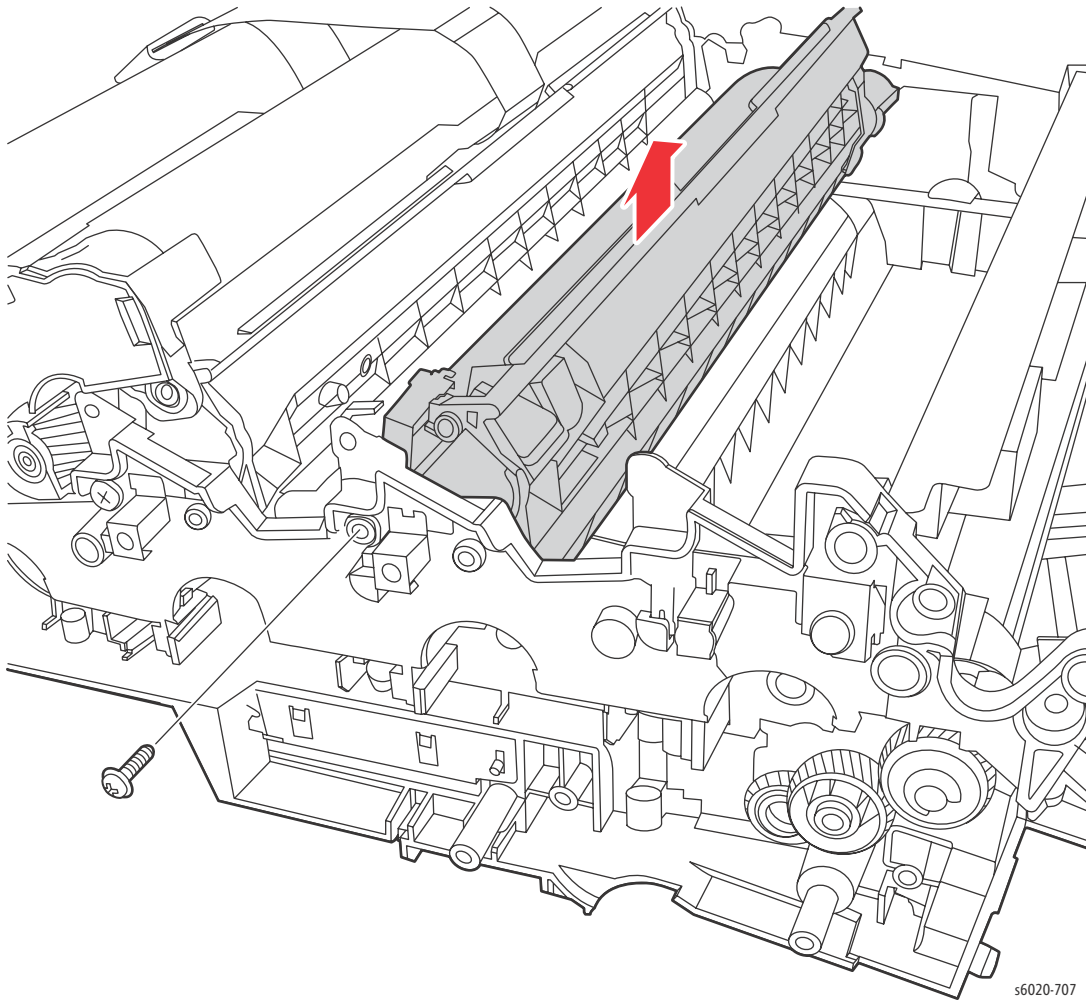
s6020-707

5.   Remove the retaining clip from the Imaging Unit.
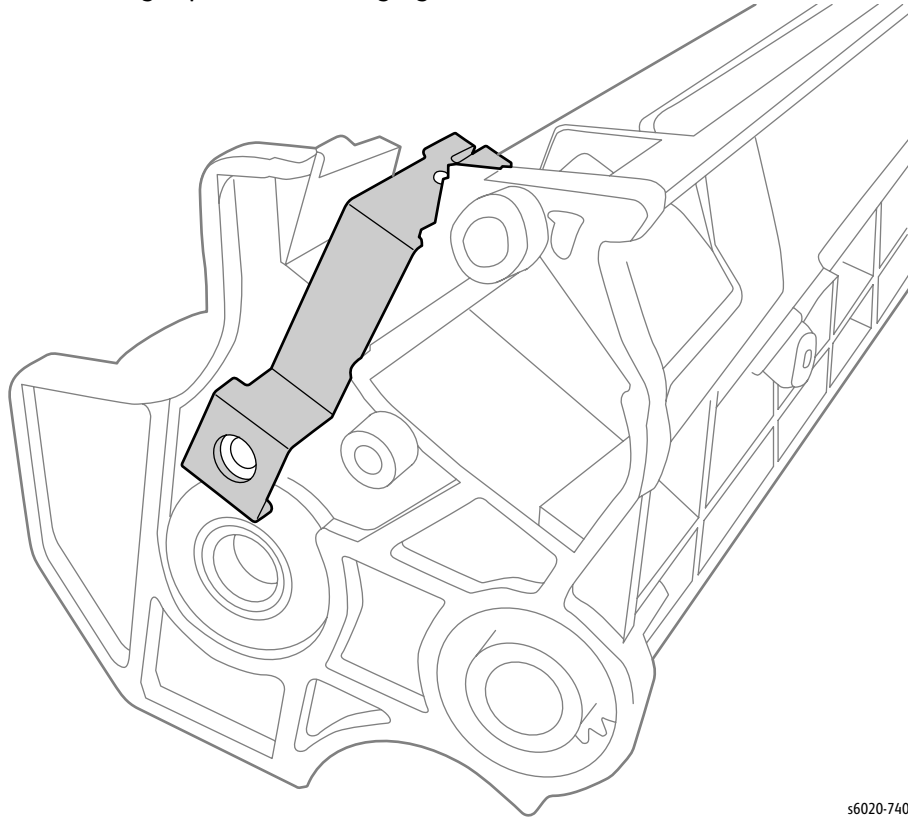
s6020-740

Replacement Note: The clip on the left side is located in between the Imaging Unit and the Xerographics Assembly. Install the clip with the Imaging Unit aligning the clip with the screw hole of the Xerographics Assembly.

Toner Dispenser

Idler 34 Gear, Oneway Clutch Assembly, and Idler 23 Gear

PL4.1.6~7, PL 4.1.11

⚠️ **WARNING:** Do not touch the fuser while it is hot.

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43).
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21;
6. 6025 page 4-36; 6027 page 4-49).
7. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
8. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42 or 6027 page 4-55).
9. Remove Toner Motors (page 4-125).
10. Release the Toner Motor harness from the harness guide.
11. Remove 1 screw (Silver, Tap, 8mm).

s6020-113
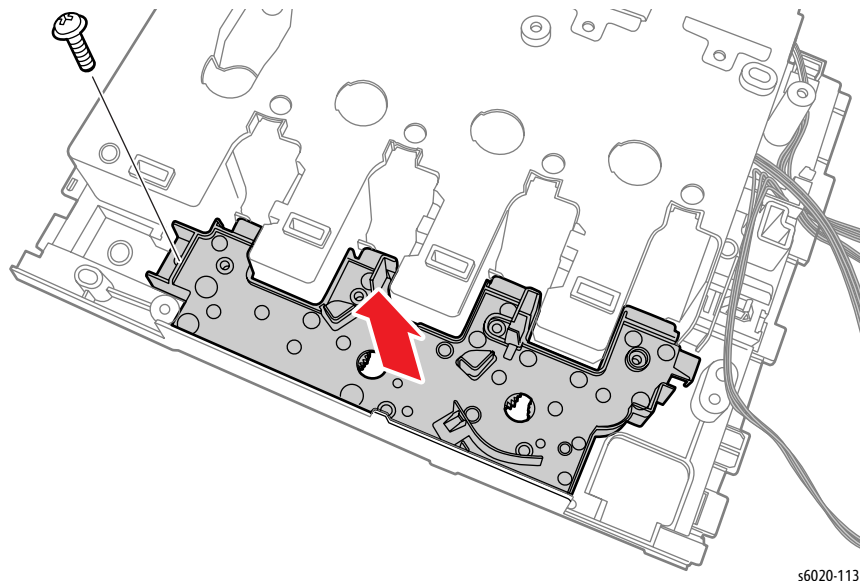
12. Release the 2 hooks on the Frame Drive Assembly and remove Frame Drive Assembly from the Toner Dispenser Frame.

⚠️ **CAUTION:** When performing this step do not drop the gears on the Frame Drive Assembly.

Hooks

s6020-232
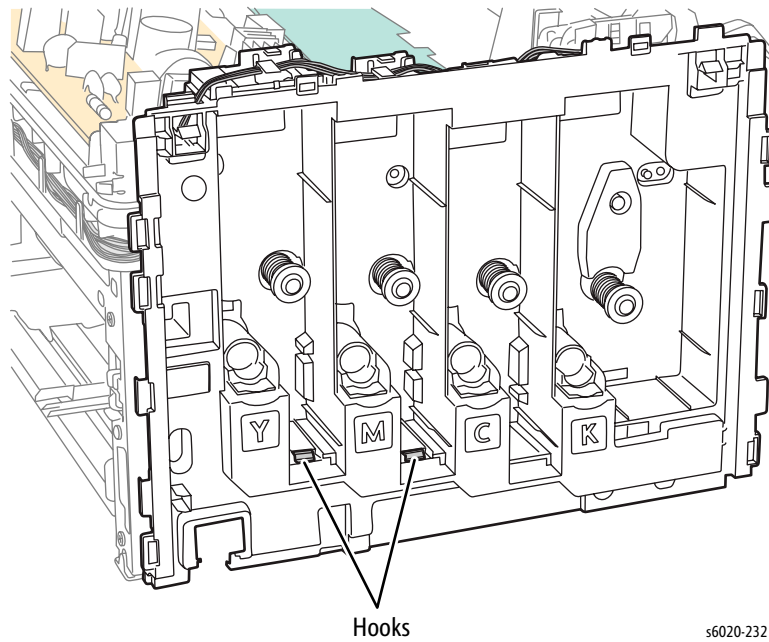
13. Remove Idler 34 Gears, the Oneway Clutch Assemblies, and the Idler 23 Gears.

Idler 23 Gears

Oneway Clutches

Idler 34 Gears   Idler 34 Gears

s6020-114
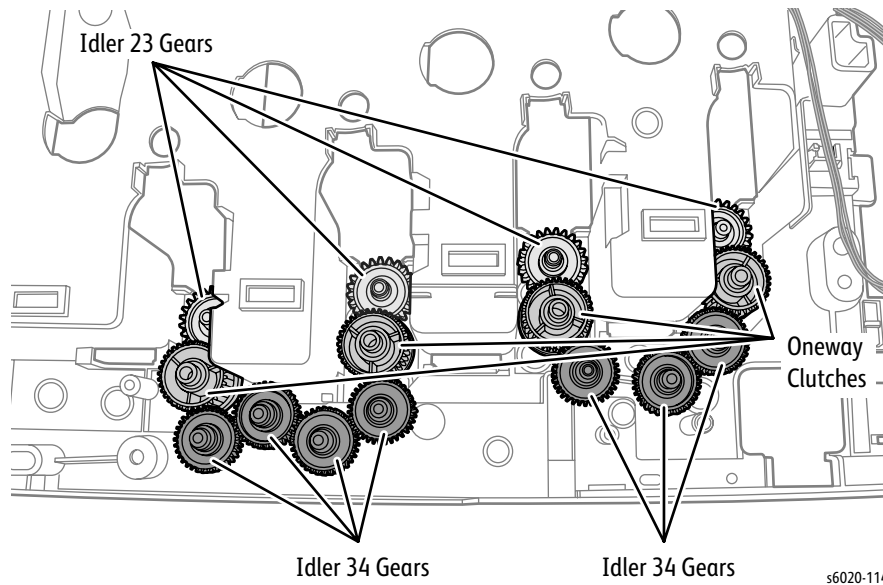
Toner Motor

PL4.1.9

⚠️ **WARNING:** Do not touch the fuser while it is hot.
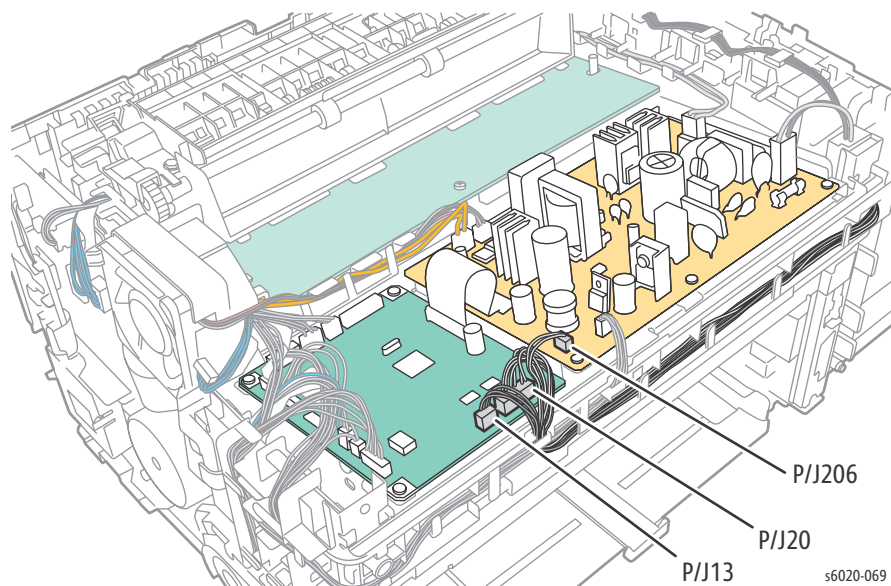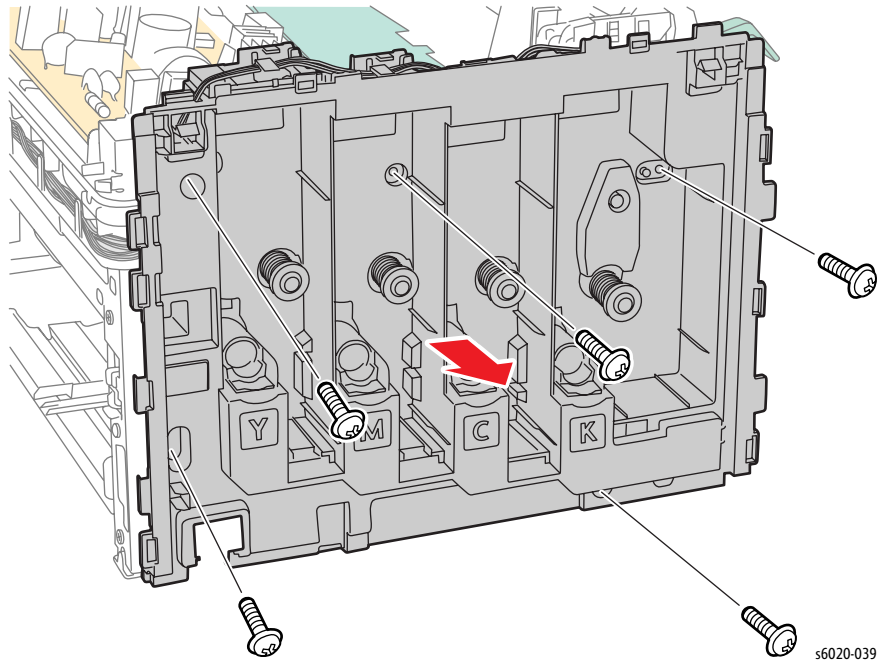
1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
7. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42 or 6027 page 4-55).
8. Remove Cleaner Assembly (page 4-144).
9. Disconnect P/J206 on the LVPS, and P/J13 and P/J20 on the MCU Board.
10. Release the harness from the harness guide.
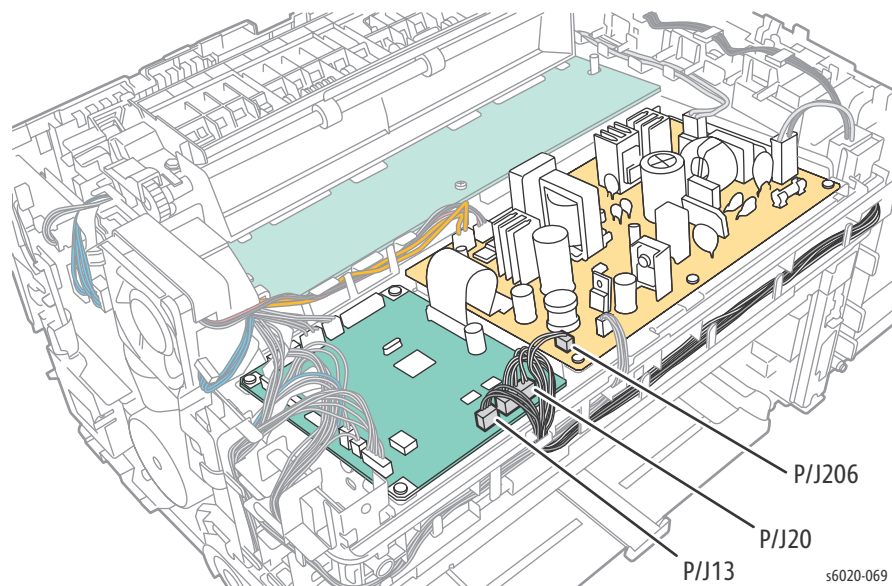
P/J206
P/J20
P/J13
s6020-069

11. Disconnect P/J201 on the LVPS and release the harness from the harness guide.

P/J201

s6020-117
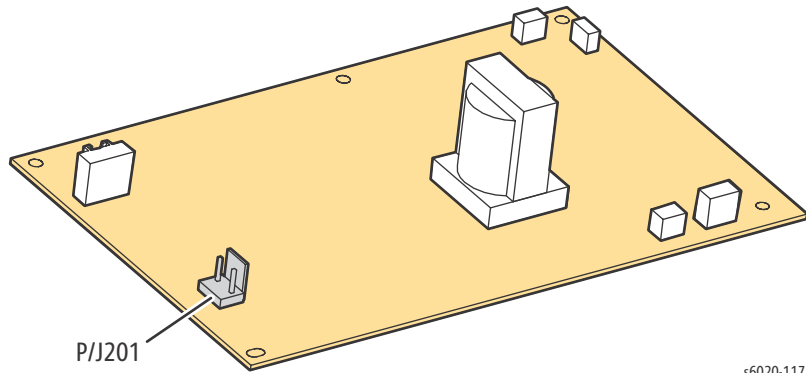
12. Remove 5 screws (Silver, Tap, 8mm), and remove the Toner Dispenser Frame from the printer.

s6020-039
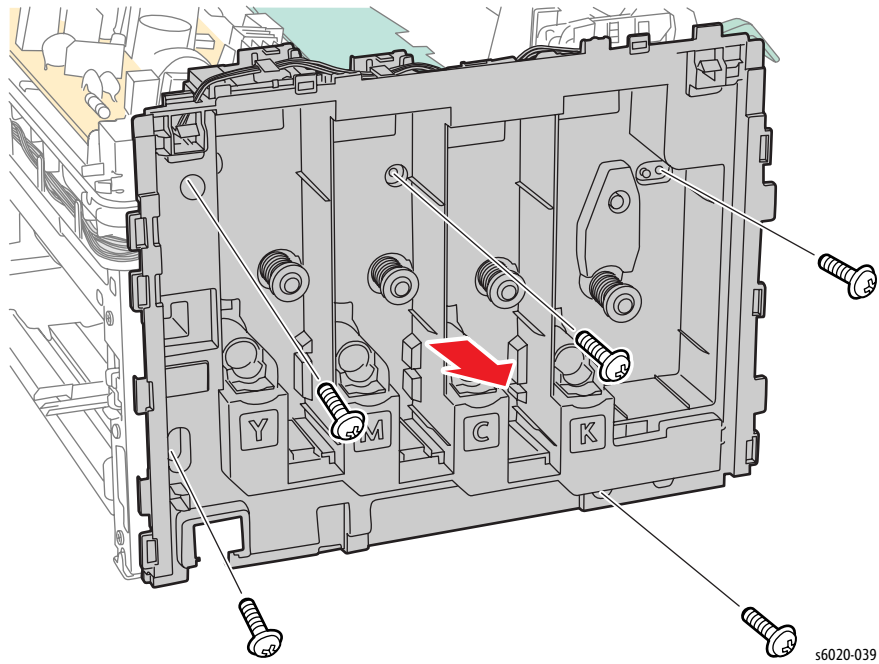
13. Disengage P/J200 and P/J201 from the Toner Motors.

14. Remove 2 screws (Silver, Tap, 8mm) to remove the Toner Motors from the Toner Dispenser Frame.

P/J200

P/J201

s6020-101
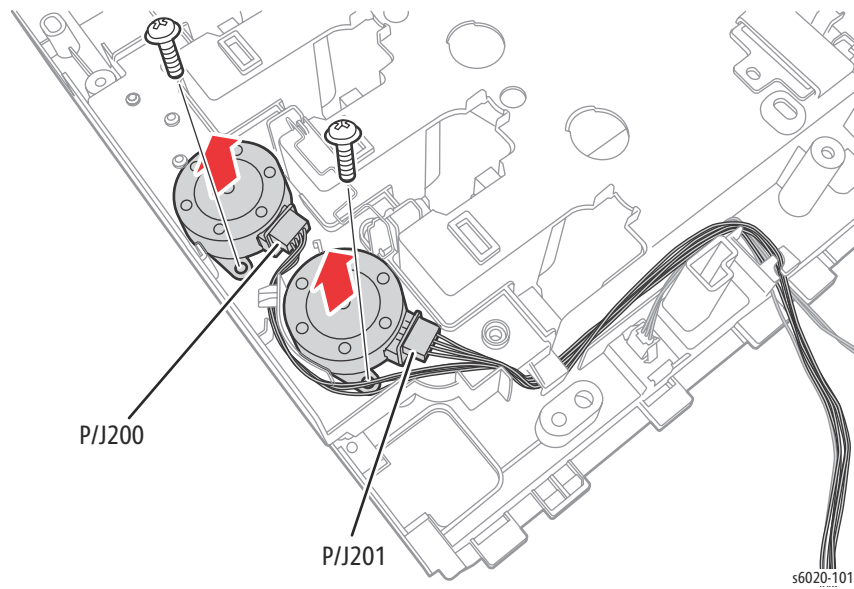
LED Cleaner Assembly

PL4.1.17

1. Open the Toner Door.
2. Pull the Cleaner Assembly out of the printer.
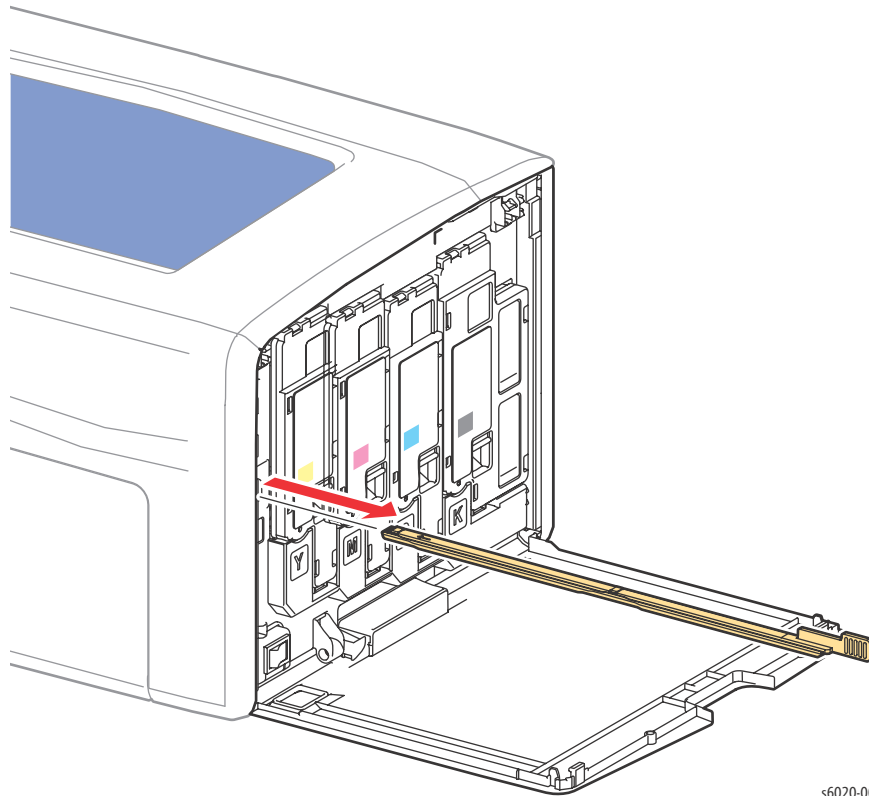
s6020-006

Fuser

PL5.1.1

⚠️ **WARNING:** Do not touch the fuser while it is hot.

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-18; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
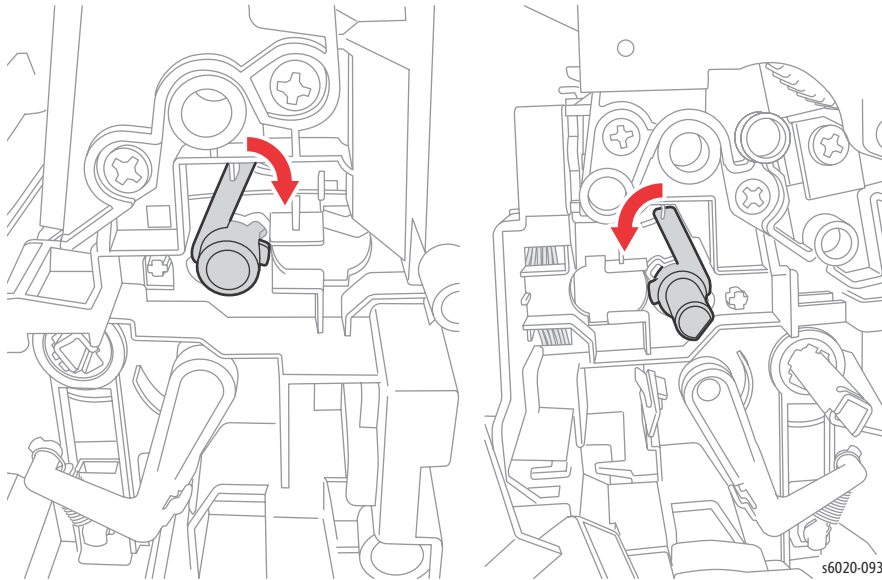3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
7. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42 or 6027 page 4-55).
8. Remove Scanner (6025 page 4-70; 6027 page 4-73).
9. Disconnect P/J18 and P/J26 from the MCU Board, and release the harness from the harness guide.
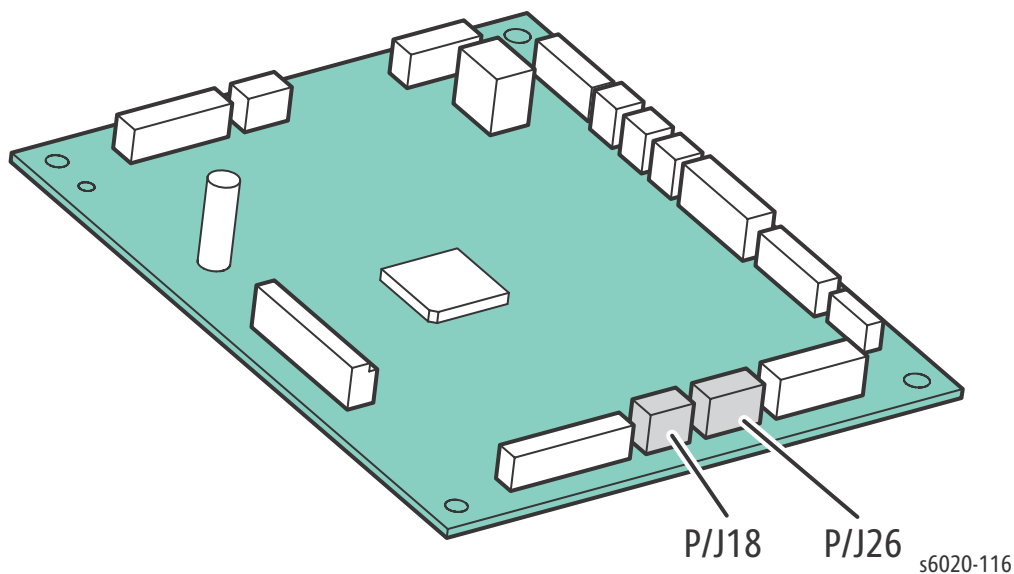
P/J18   P/J26   s6020-116

9. Disconnect P/J201 on the LVPS, and release the harness from the harness guide.

P/J201

s6020-117
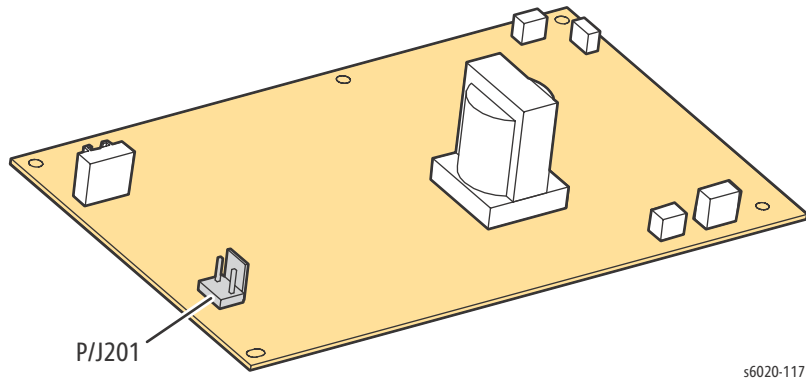
10. Remove 2 screws (Silver, Hex Head, Tap, 8mm) securing the Fuser to the chassis.
11. Remove the Fuser.
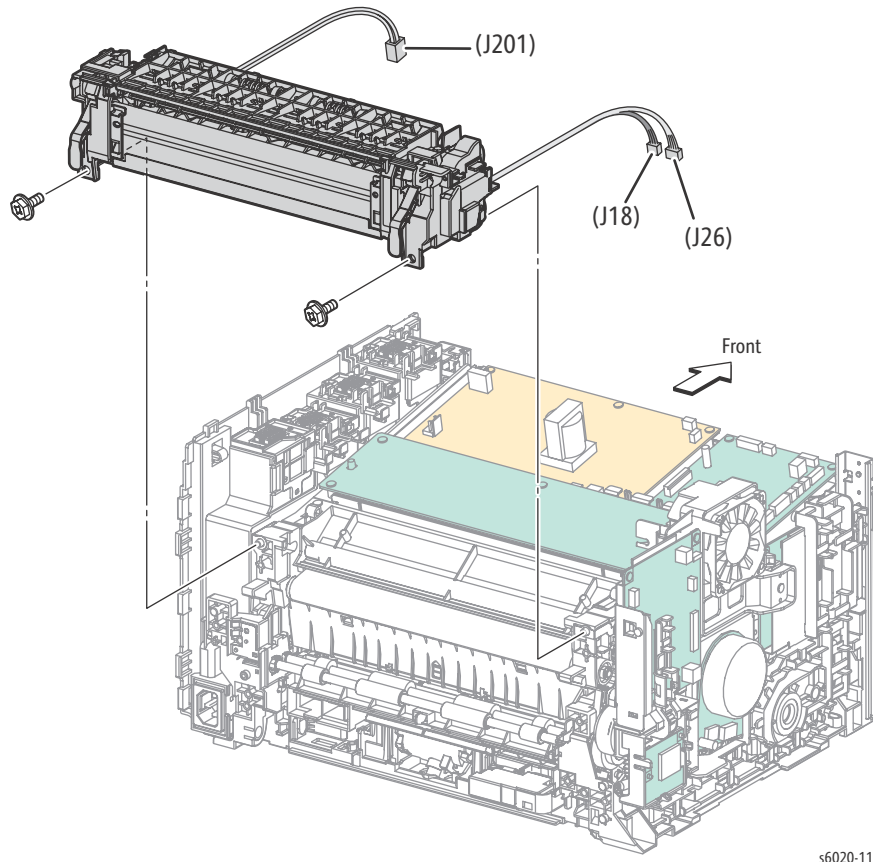
(J201)

(J18)   (J26)

Front

s6020-118

⚠️ **WARNING:** Avoid electrical shock hazard. Correctly route all wires into the harness guides when reinstalling the Fuser.

Fuser Exit Guide

Removal of the fuser exit guide may be necessary to enable paper jam errors due to pieces of paper left in the fuser area after removal causing paper jam errors.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

1. Remove the Paper Tray Cover or Paper Cassette (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-18; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Disconnect the Fuser paper presence sensor cable from the sensor board.
7. Remove 2 screws (Silver, Plastic, 8mm) securing the fuser exit guide to the Fuser.
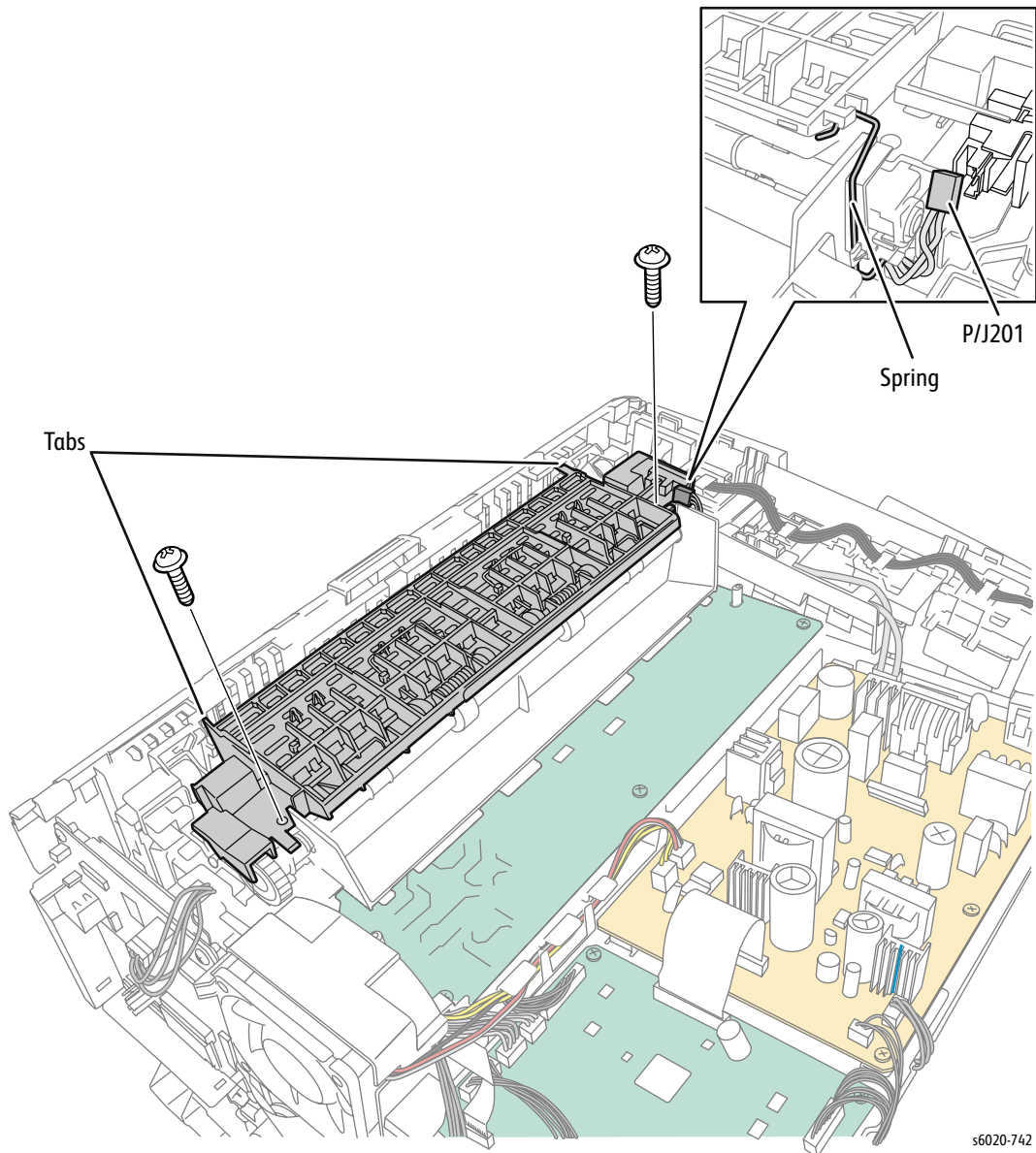
s6020-742

8. Lift the fuser exit guide at the front-left and pull the fuser exit guide to the front of the printer to release the fuser exit guide from the Fuser frame.

9. Lift up and pull the right side from the Fuser frame and lay the fuser exit guide on the MCU Board.

⚠️ **CAUTION:** Do not remove the spring from the fuser exit guide. The spring should remain in-place while relocating the fuser exit guide to remove any paper trapped in the fusing roller.
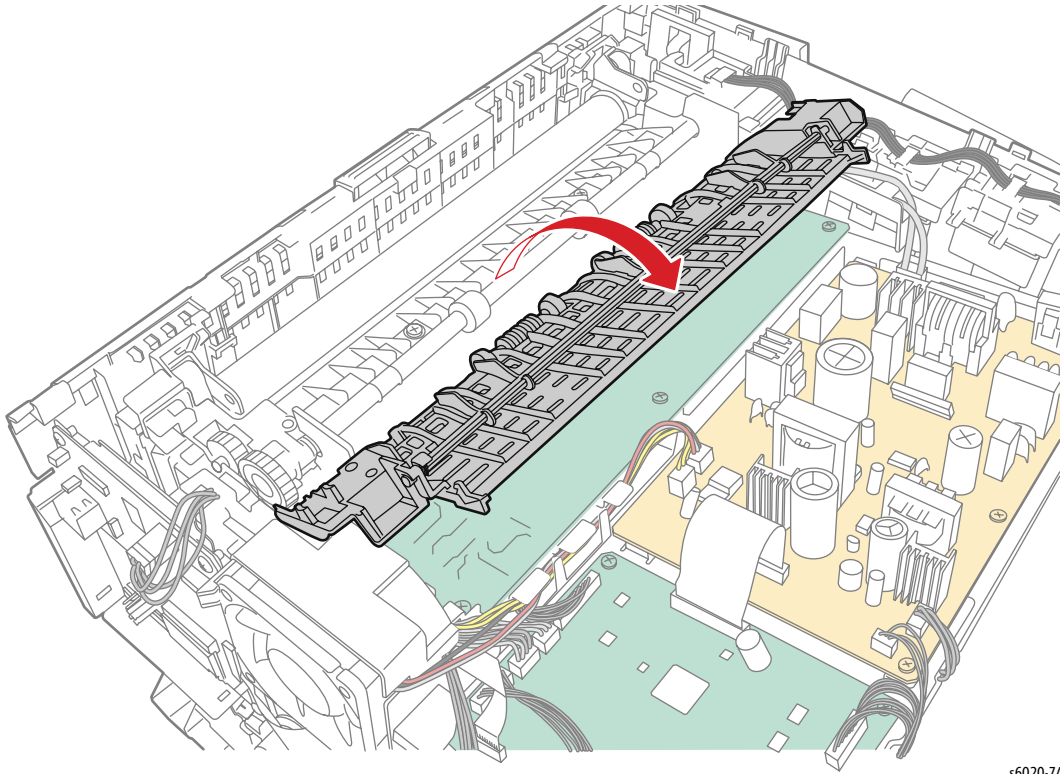
s6020-741

Drive

Main Drive Assembly *(See video for Developer Drive Assembly)*

PL6.1.2

⚠️ **WARNING:** Do not touch the fuser while it is hot.

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove Image Processor Board (Phaser 6020/6022 and WorkCentre 6025 MFP page 4-149, WorkCentre 6027 MFP page 4-150).
6. Remove 1 screw (Silver, M3, 6mm) from the Fan Duct and remove the Fan Duct with Fan (page 4-143).
7. Remove 3 screws (Silver, M3, 6mm) and remove the image processing board plate from the printer.

s6020-273
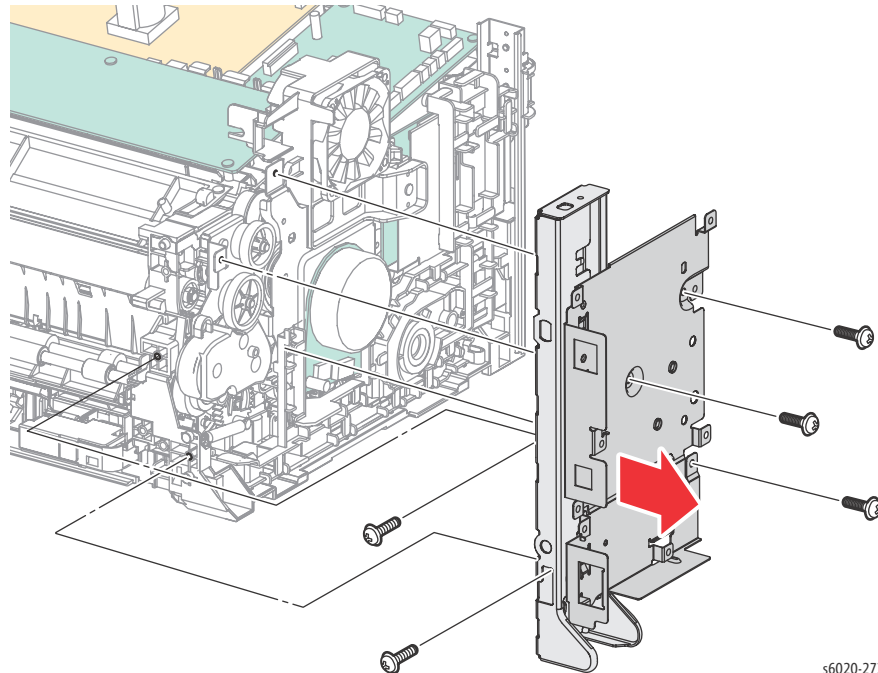
Note: To gain access to the lower screw on the face of the ip board plate, unhook the paper tray harness guide from the plate.

8. Release 1 hook and move the Upper Paper Tray harness guide away from the printer.
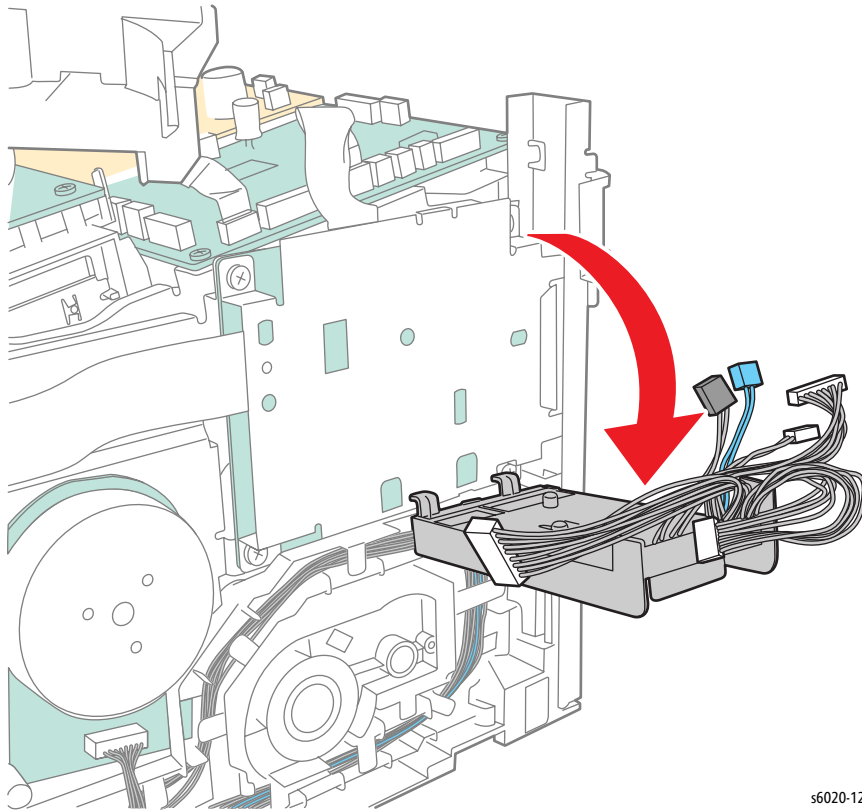
s6020-120

9. Release the 3 hooks and move the Lower Paper Tray harness guide away from the printer.
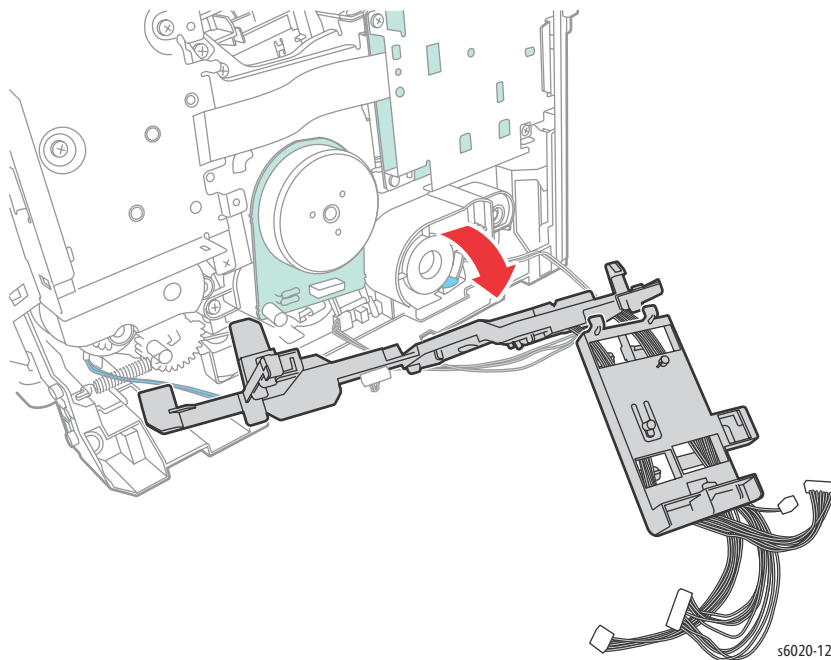
s6020-121

10. Remove 4 screws (Silver, M3, 6mm) to remove the LED Cover Plate from the printer.

s6020-122
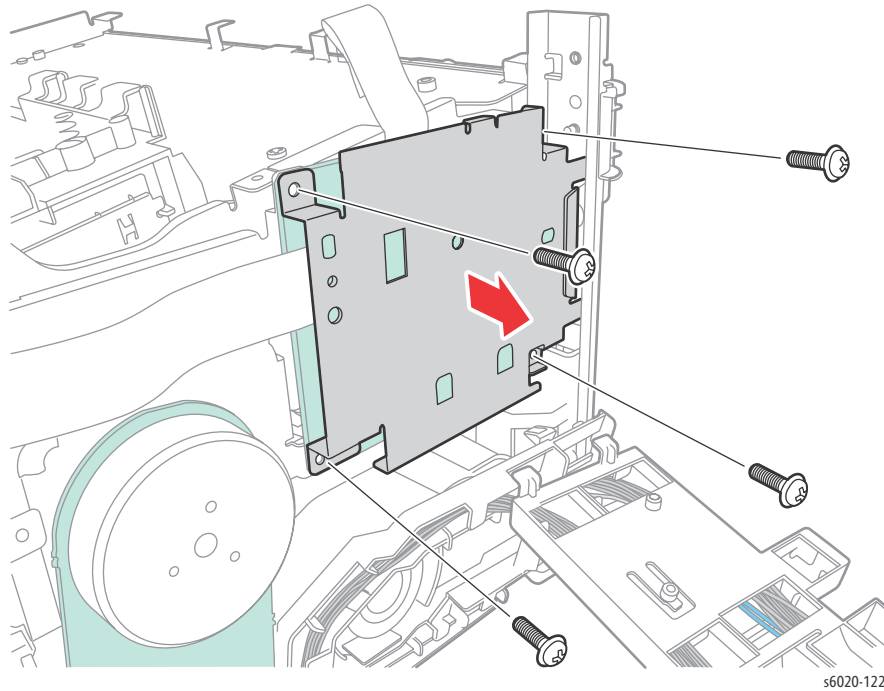
11. Leave the ribbon cables on the LED Driver Board connected and pivot the LED Driver Board clear of the area.

P/J1

s6020-182
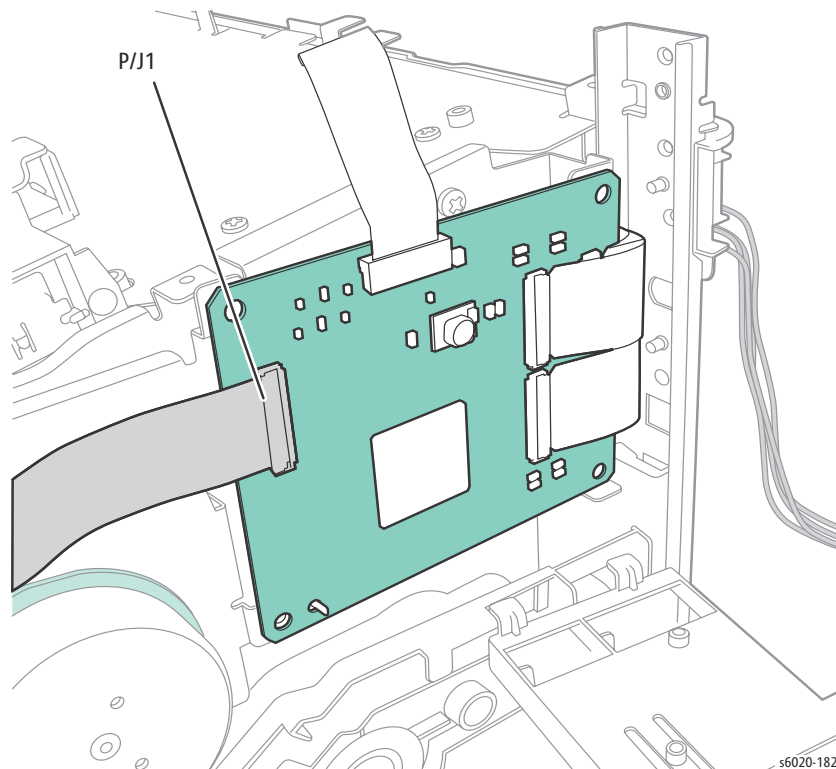
12. Remove Feed Drive Assembly (page 4-138).

13. Disconnect P/J160 on the Main Drive Assembly.

14. Remove 2 screws (Silver, M4, 6mm) and 1 screw (Silver, Tap, 8mm) to remove Main Drive Assembly.

⚠️ **CAUTION:** When performing this step, take care to not drop the gears on the Main Drive Assembly.
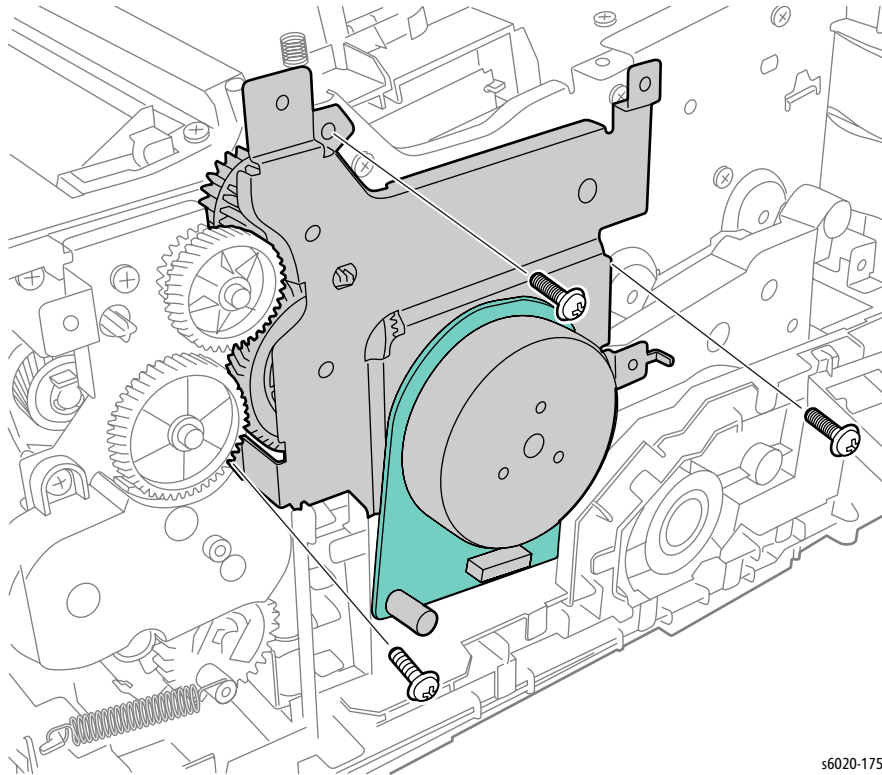
s6020-175

Feed Drive Assembly   *(See video for Developer Drive Assembly)*

PL6.1.5

⚠️ **WARNING:** Do not touch the fuser while it is hot.

1. Remove the Paper Tray.
2. Remove bottom left screw (Silver, Tap, 8mm) securing the Front Cover to the chassis.
3. Unhook the Front Cover on the left side from the bottom of the printer.
4. Unhook the Front Cover from the Left Side Cover.
5. Open the Rear Door.
6. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
7. Remove Image Processor Board (Phaser 6020/6022 and WorkCentre 6025 MFP page 4-149, WorkCentre 6027 MFP page 4-150). and mounting plate (page 4-154).
8. Remove 1 screw (Silver, M3, 6mm) to move the Fan Assembly up and out of the way.

Latch
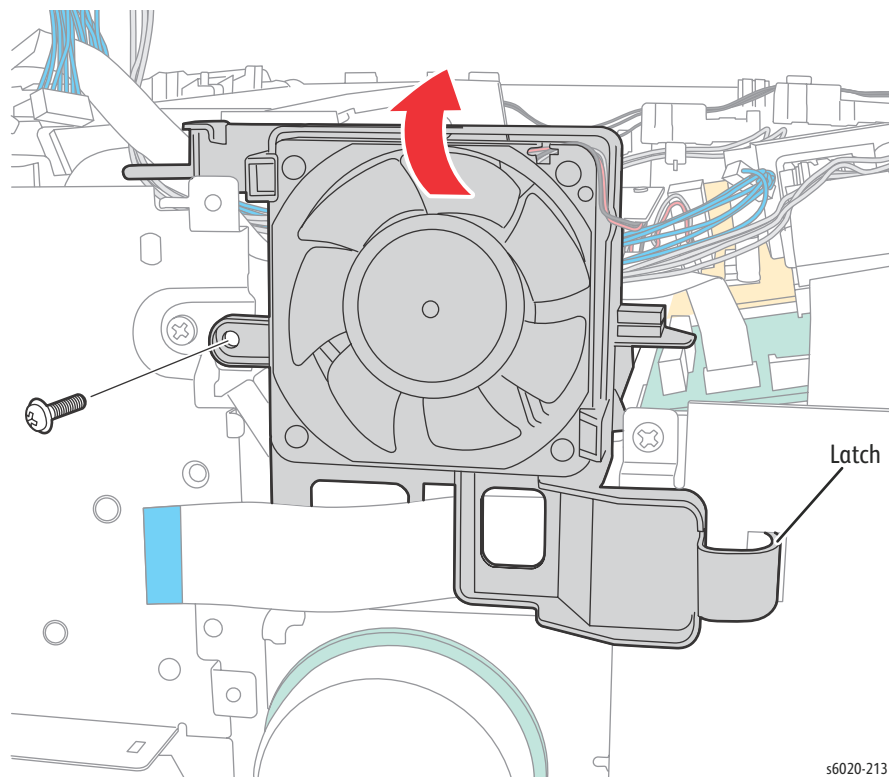
s6020-213

9. Remove F3 and PH3 gears.
10. Remove 2 screws (Silver, M3, 6mm) to remove the Feed Drive Assembly from the printer.
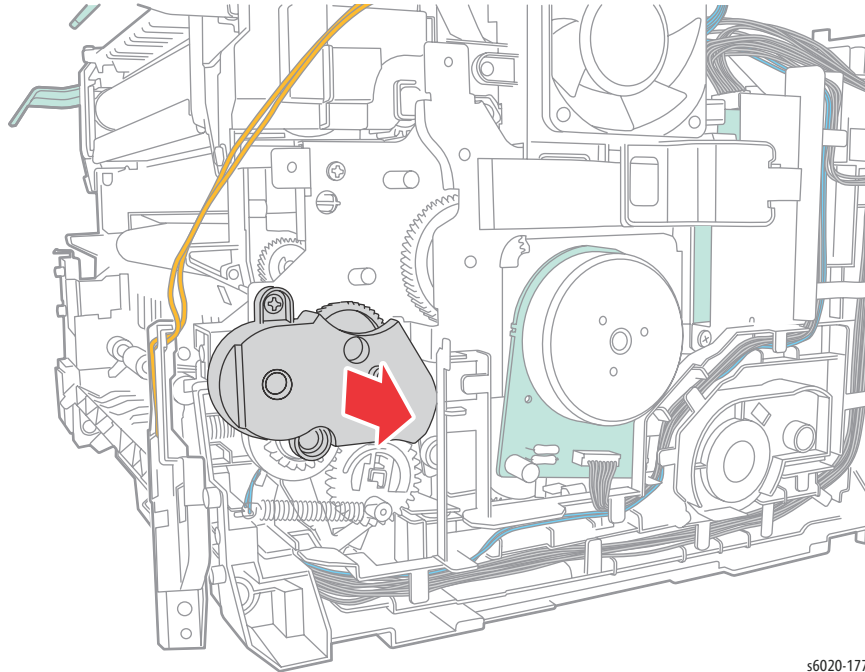
s6020-177

Developer Drive Assembly

PL6.1.6

1. Remove the Paper Tray.
2. Remove bottom left screw (Silver, Tap, 8mm) securing the Front Cover to the chassis.
3. Unhook the Front Cover on the left side from the bottom of the printer.
4. Unhook the Front Cover from the Left Side Cover.
5. Open the Rear Door.
6. Remove the Left Side Cover (6020 page 4-18, 6022 page 4-28, 6025 page 4-44, 6027 page 4-56).
7. Remove the Image Processor Board (Phaser 6020/6022 and WorkCentre 6025 MFP page 4-149, WorkCentre 6027 MFP page 4-150)
8. Remove the IP mounting plate (page 4-154).
9. Remove the Feed Drive Assembly (page 4-138).
10. Remove 4 screws (Silver, Metal, 6mm) on the cover plate of the LED Driver Board (page 4-144).
11. Disconnect P/J1 from the MCU Board.
12. Leave the remaining ribbon cables connected and lay the LED Board to the side.
13. Disconnect the Mode Change Solenoid (J10) from the Main Drive Assembly.
14. Remove the Main Drive Assembly (page 4-134).
15. Remove 3 (Silver, M4, 6mm) screws and 2 (Silver, Tap, 8mm) screws to remove the Developer Drive Assembly from the printer.

CAUTION: Lean the top of the assembly away from the printer to prevent gear disassembly.

s6020-178
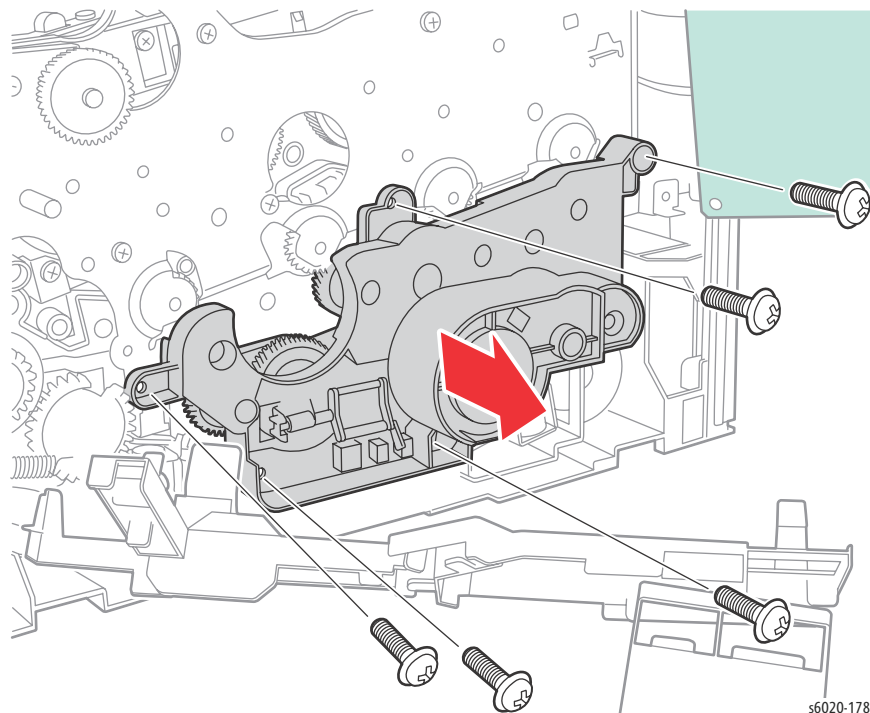
Feed Solenoid

PL6.1.10

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
7. Remove the Image Processor Board (Phaser 6020/6022 and WorkCentre 6025 MFP page 4-149, WorkCentre 6027 MFP page 4-150)
8. Remove the IP mounting plate (page 4-154).
9. Disconnect the connectors on the MCU Board (page 4-160).
10. Disconnect P/J160 on the Main Drive Assembly.
11. Release all wires from the drive harness guide.
12. Release 1 hook and remove the Drive harness guide from the printer.
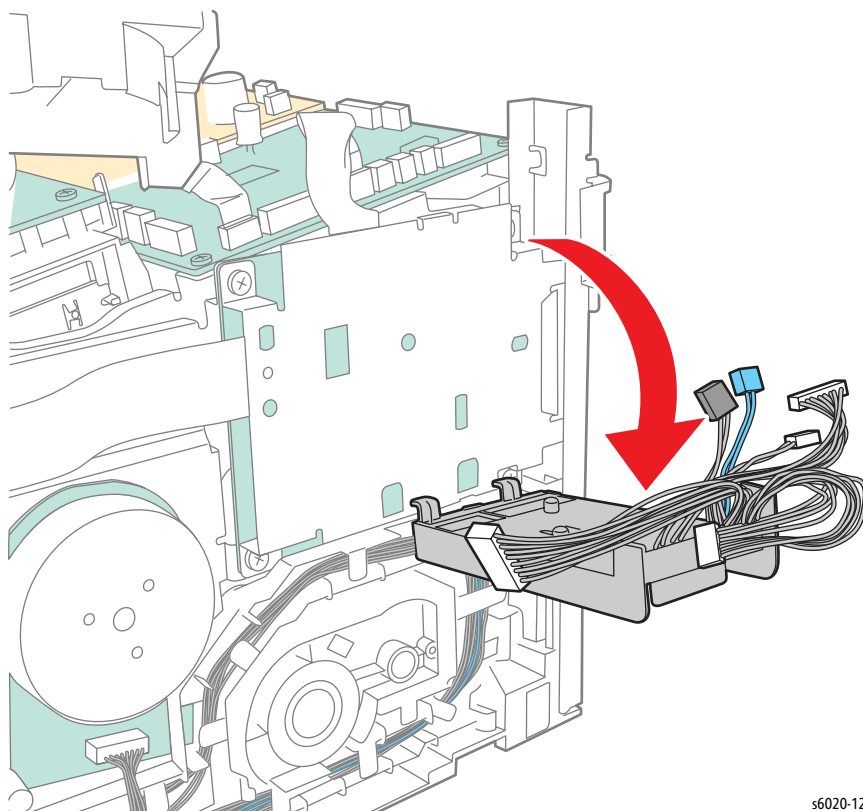
s6020-120

13. Release 3 hooks and move the paper tray harness guide away from the printer.

s6020-121
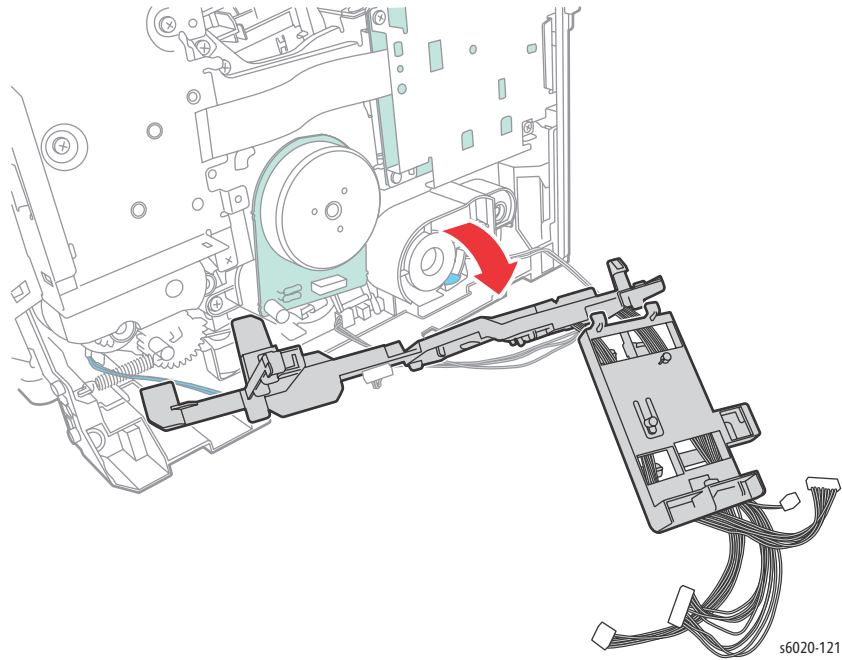
14. Remove 1 screw (Silver, Tap, 8mm) to remove the Feed Solenoid from the printer.

s6020-233
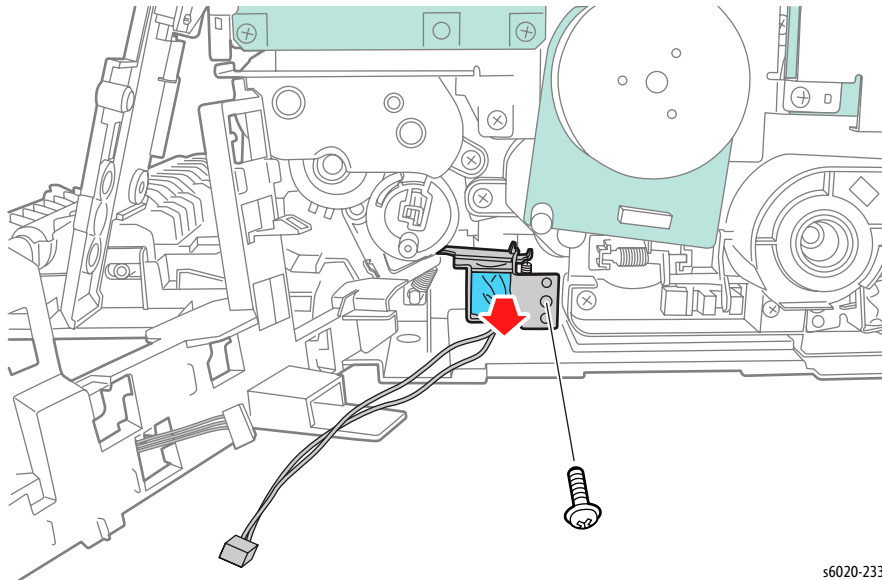
Electrical

Fan

PL7.1.2

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Disconnect P/J205 on the LVPS, and release the harness from the harness guide.
7. Release 2 hooks and remove the Fan from the Fan Duct.

Hooks

s6020-180
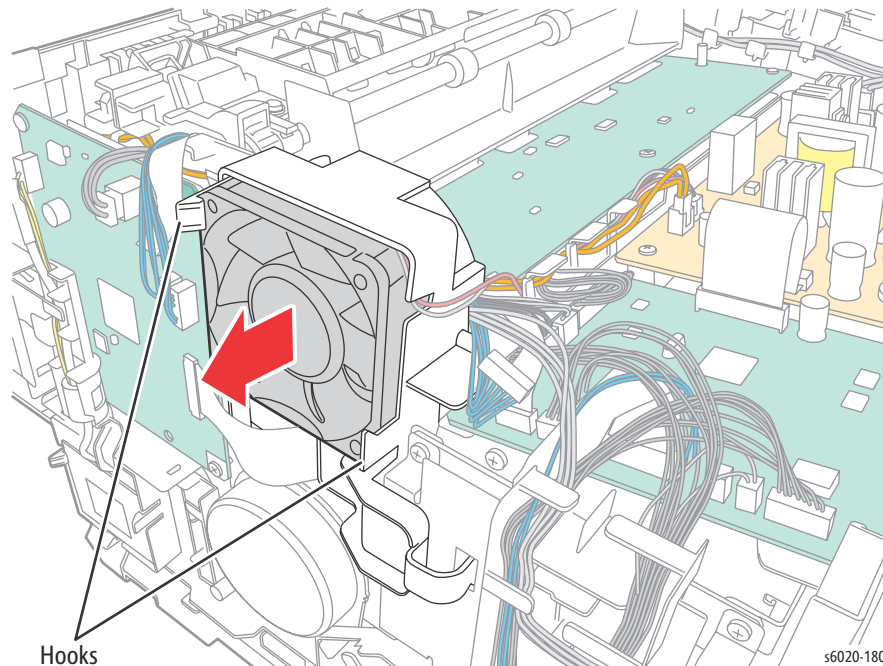
LED Driver Board and Harness

PL7.1.5, PL7.1.7A~B

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43).
2. Open the Rear Door.
3. Remove bottom left screw (Silver, Tap, 8mm) securing the Front Cover to the chassis.
4. Unhook the Front Cover on the left side from the bottom of the printer.
5. Unhook the Front Cover from the Left Side Cover.
6. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
7. Release the Fan and the Fan Duct from the chassis and lay to the side (page 4-143).
8. Release the harness from the Drive harness guide.
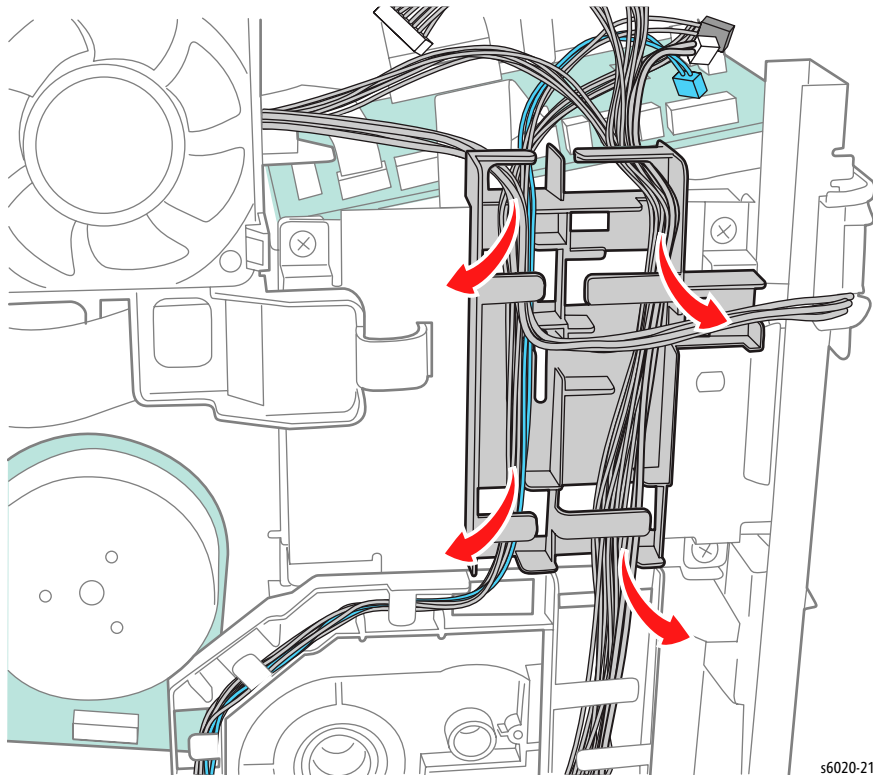
s6020-219

9. Release 1 hook and remove the Drive harness guide from the printer.
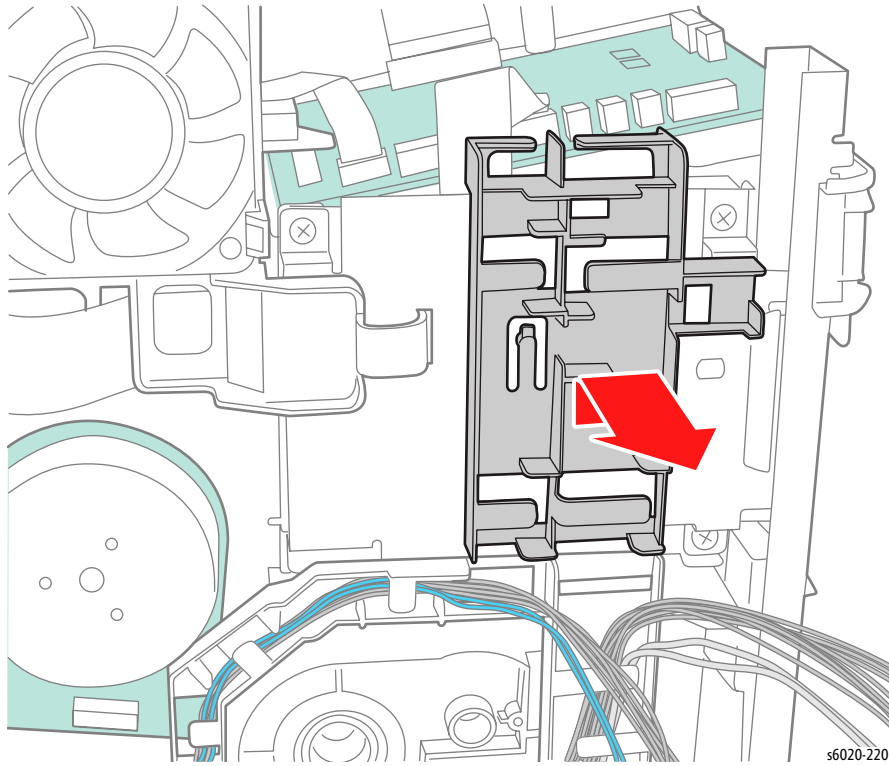
s6020-220

10. Release the harness from the Paper Tray harness guide.
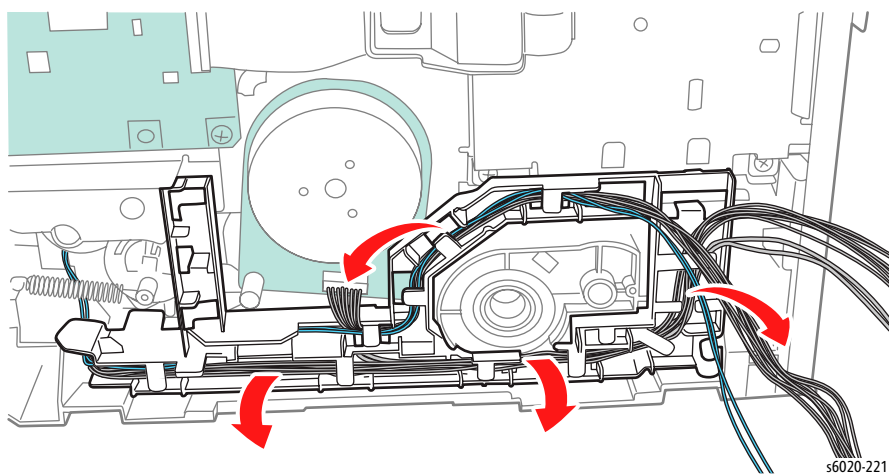
s6020-221

11. Release 3 hooks and remove the Paper Tray harness guide from the printer.
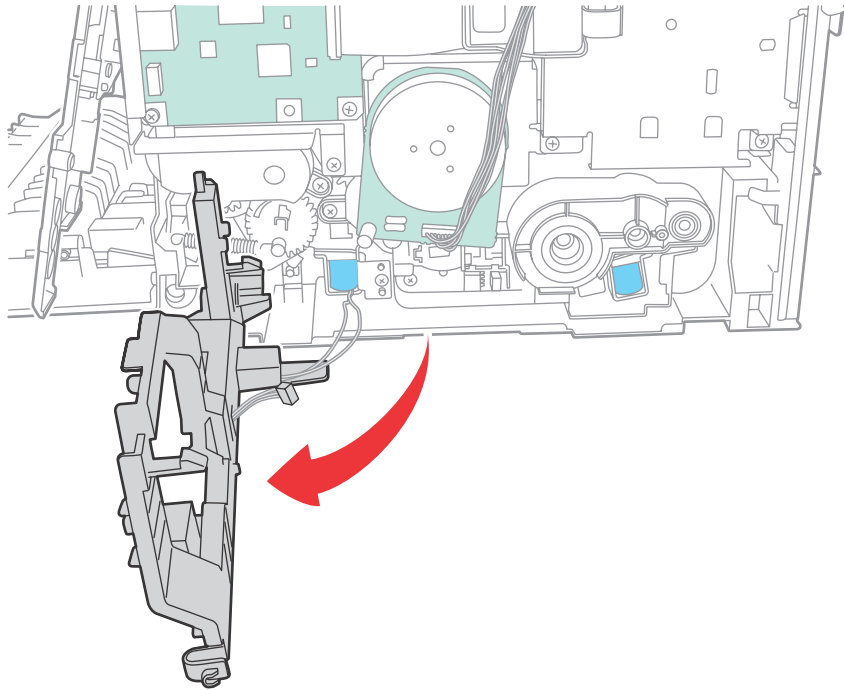
s6020-218

12. Remove 4 screws (Silver, M3, 6mm) to remove the LED Cover Plate from the printer.

s6020-122
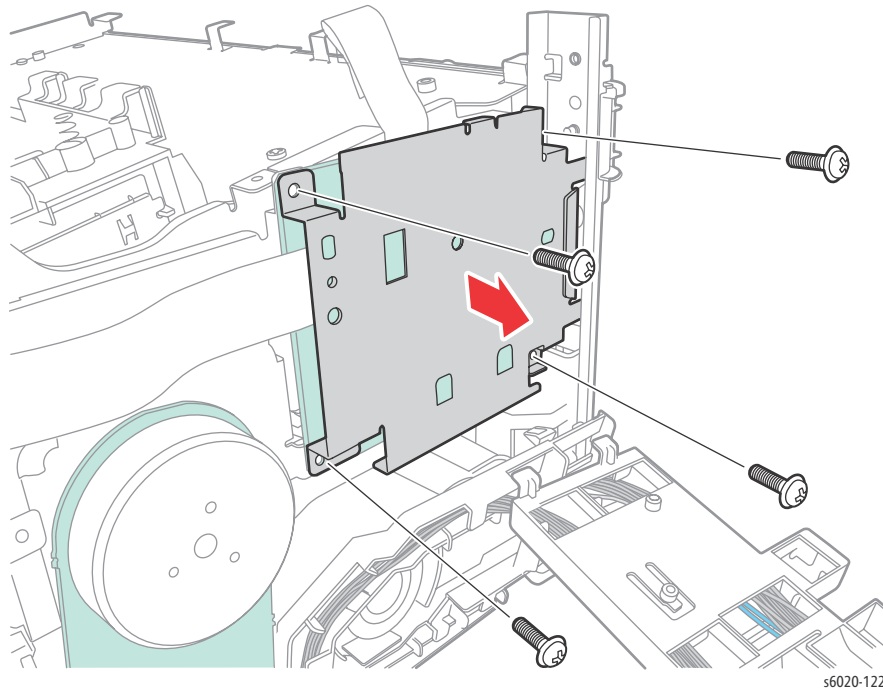
⚠ **CAUTION:** The ribbon cable uses a ZIF connector. Use care lifting the latch of the connector to release the cable to prevent damage. A broken latch will result in replacement of the LED Driver Board.

13. Lift the latch of the ZIPF connector to release the ribbon cables on the LED Driver Board and remove the LED Driver Board.

P/J1
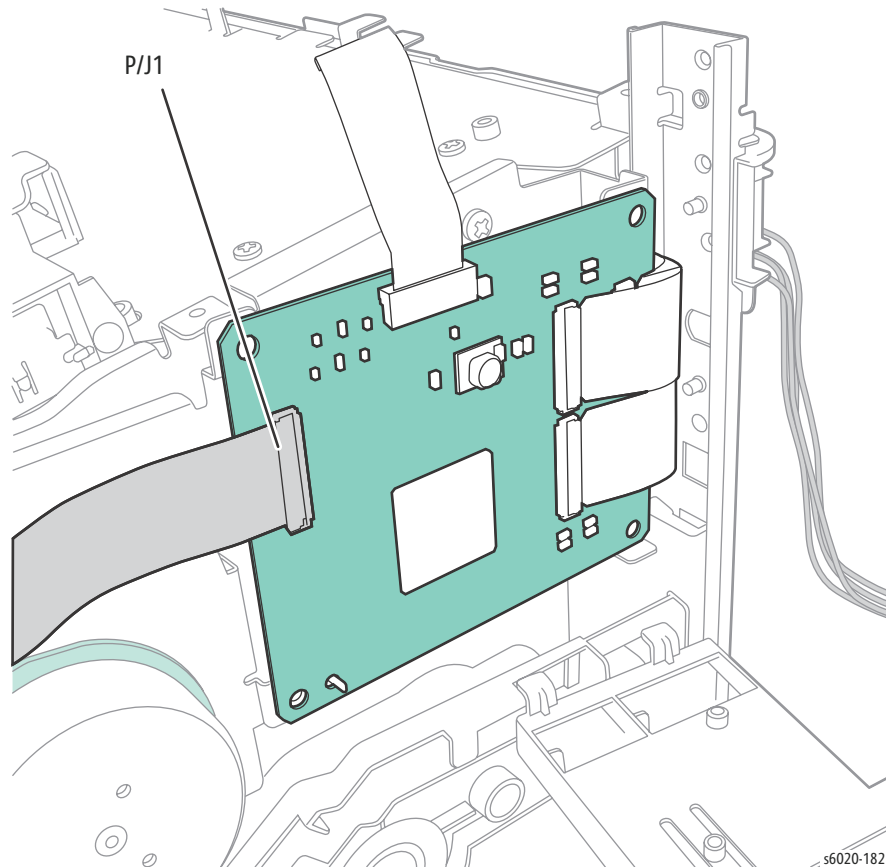
s6020-182

IP (Image Processor) Board

PL7.1.9, 16

Phaser 6020/6022 and WorkCentre 6025

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43).
2. Open the Rear Door.
3. Remove bottom left screw (Silver, Tap, 8mm) securing the Front Cover to the chassis.
4. Unhook the Front Cover on the left side from the bottom of the printer.
5. Unhook the Front Cover from the Left Side Cover.
6. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
7. Open the connector latch on P/J112 on the Image Processor Board to disconnect the LED Driver Board.
8. Disconnect the remaining cables on the Image Processor Board.

P/J10

s6020-234
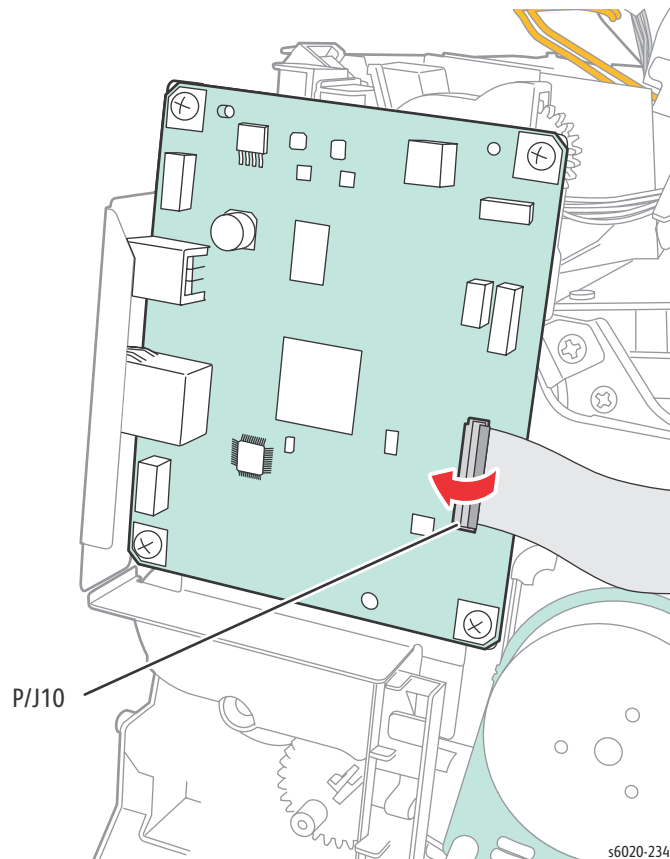
9. Remove 4 (Silver, M3, 6mm) screws and 1 (Silver, M2, 6mm) screw and remove the Image Processor Board from the printer.

P/J112

s6020-055
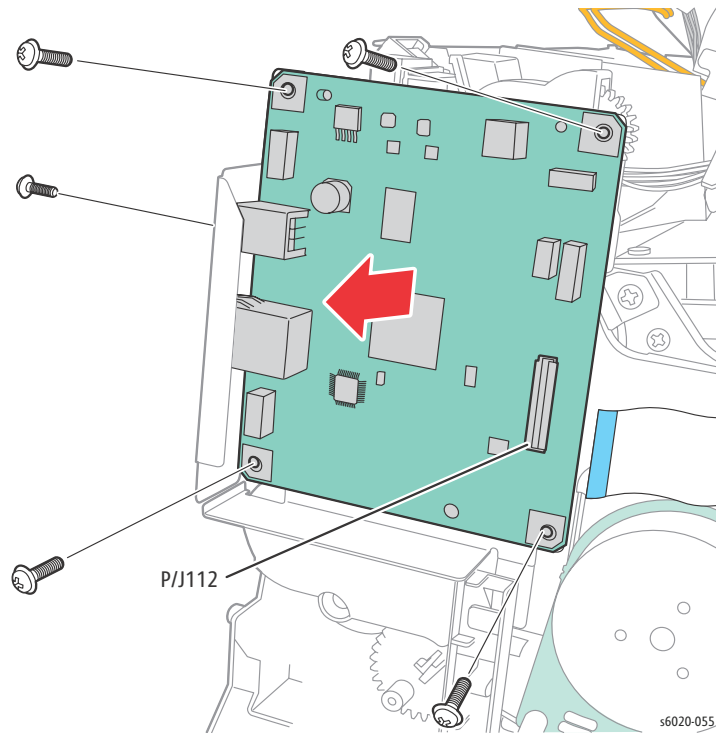
WorkCentre 6027

1. Remove the Paper Tray Cover (6025) or Paper Tray (6022/6027).
2. Open the Toner Door.
3. Remove 1 screw (Silver, Plastic, 6mm) securing the left side of the Front Cover.
4. Press in at the center-front of the Left Side Cover to release 2 hooks from the Front Cover and disconnect the covers.
5. Release 3 hooks of the Left Side Cover from the Top Cover.
6. Release 2 hooks from the Rear Cover and remove the Left Side Cover.

7. Open the connector latch of SJ17 on the Image Processor Board to disconnect the LED Driver Board.

SJ17
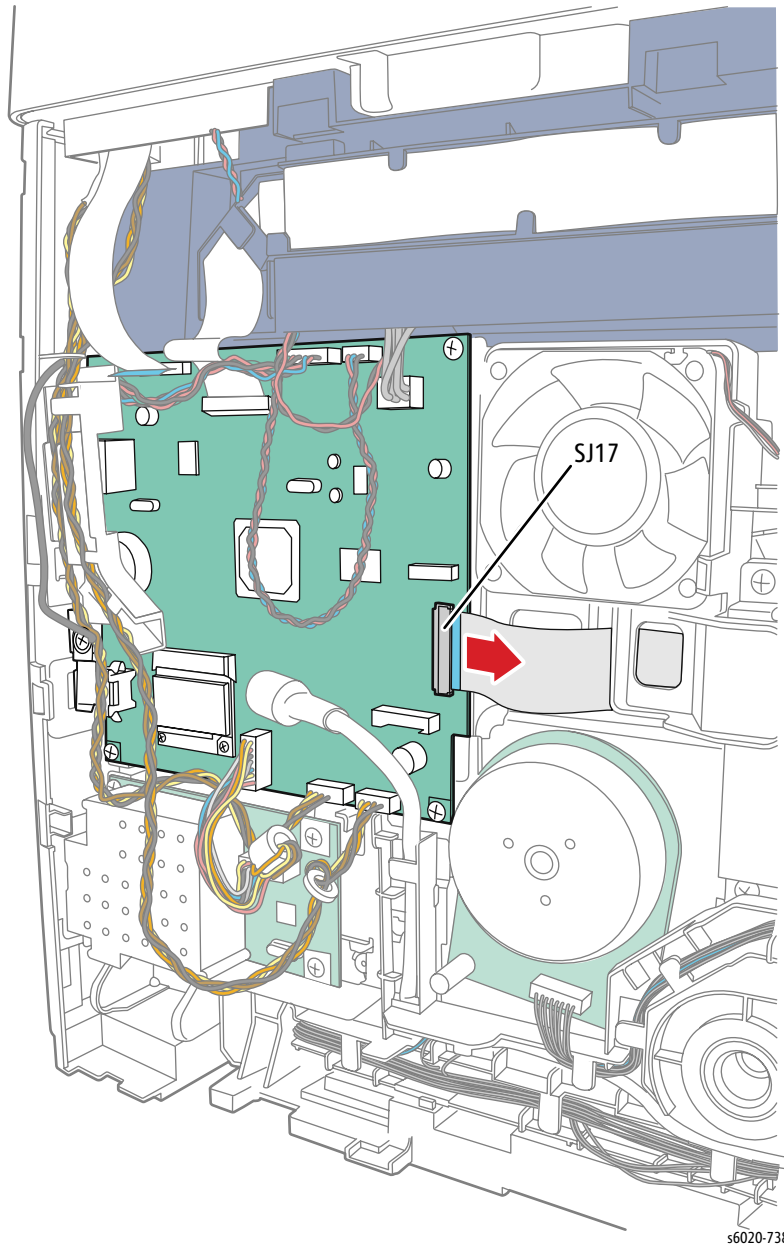
s6020-738

8. Open the connector latch of P/J16 on the Image Processor Board to disconnect the Scanner.

P/J16
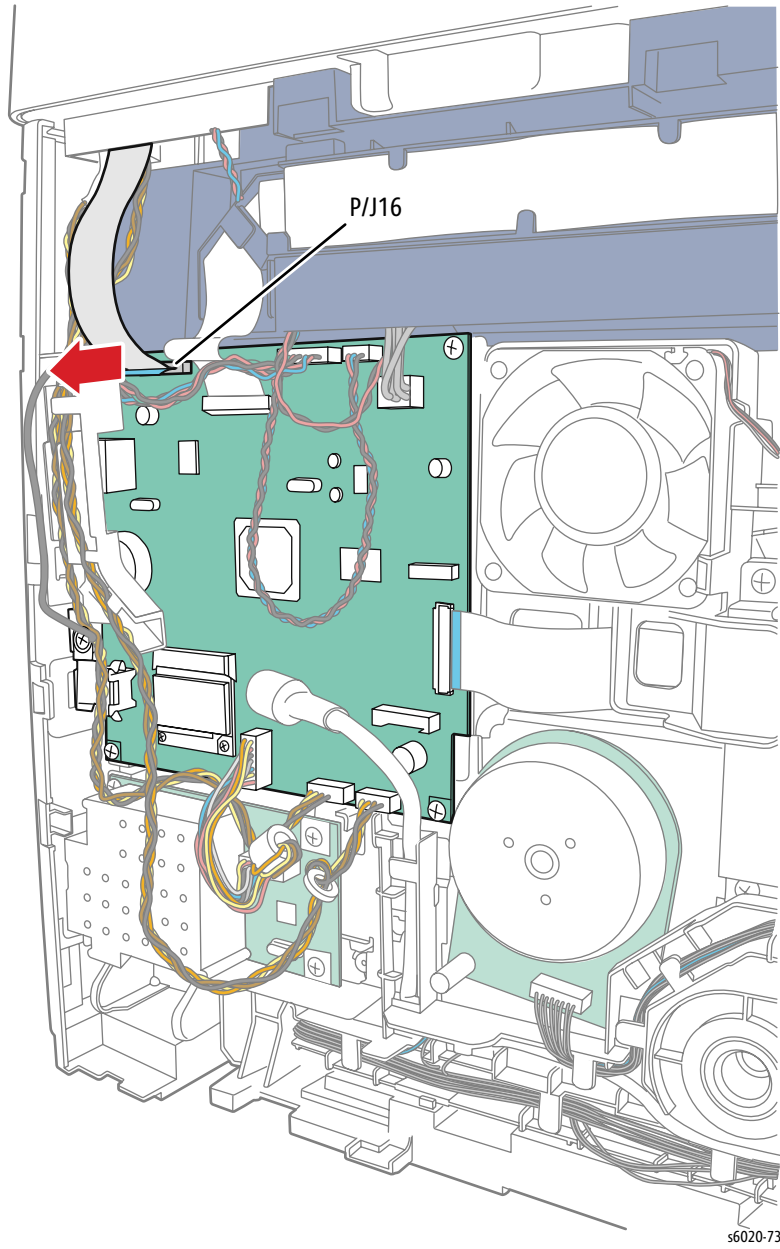
s6020-739

9. Disconnect all remaining cables.

10. Remove 1 screw (Silver, Metal, 6mm) at the ADF ground wire.
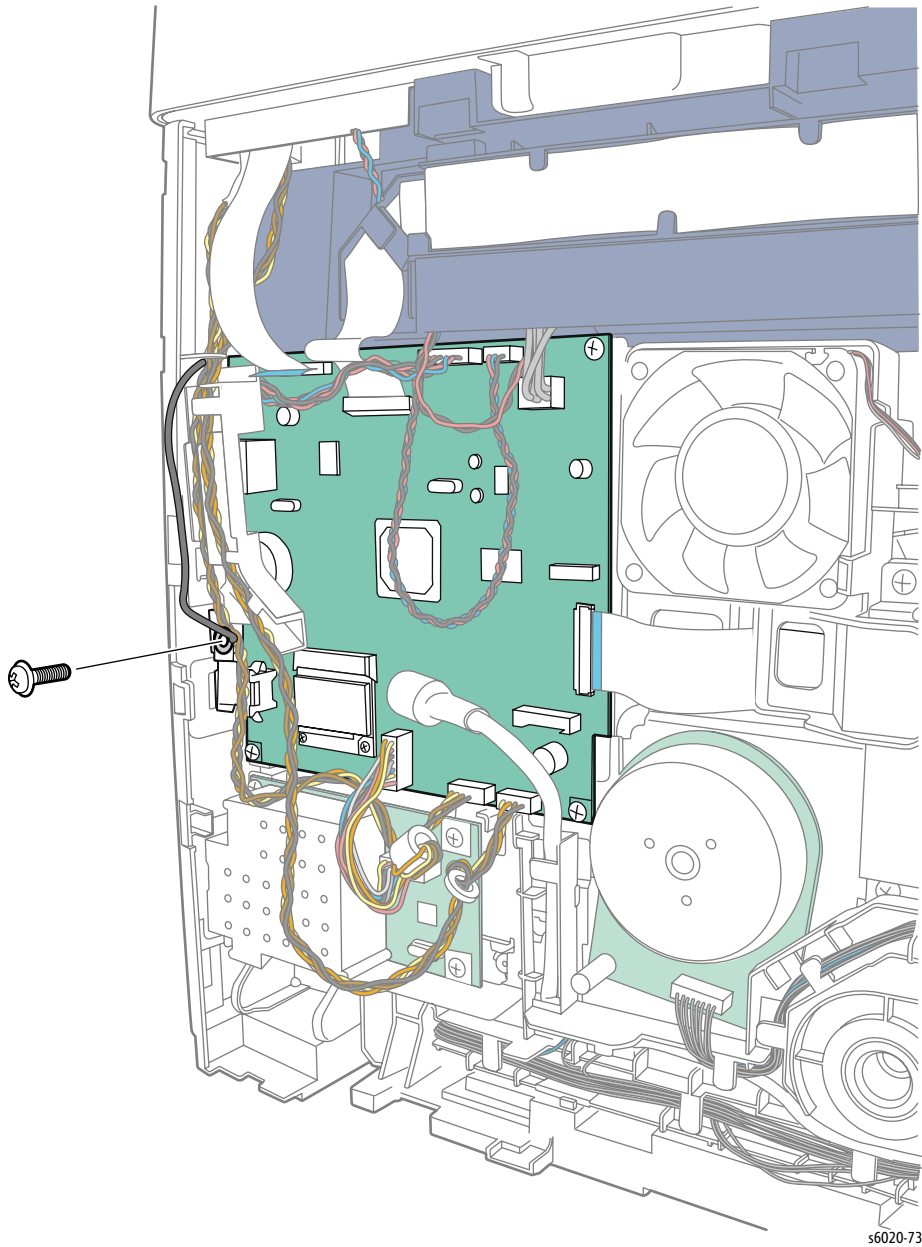
s6020-737

11. Remove 4 screws (Silver, Tap, 6mm) and remove the Image Processing Board.
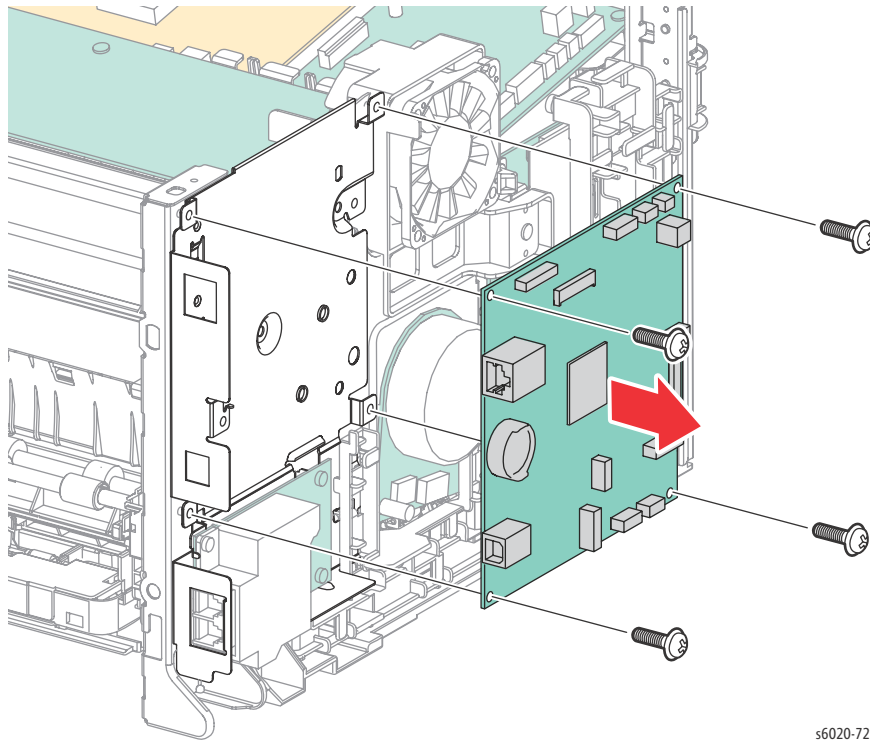
s6020-729

IP Board Plate Removal

1. Remove 1 screw (Silver, M3, 6mm) from the Fan Duct and remove the Fan Duct with Fan (page 4-143).

2. Remove 3 screws (Silver, M3, 6mm) and remove the image processing board plate from the printer.
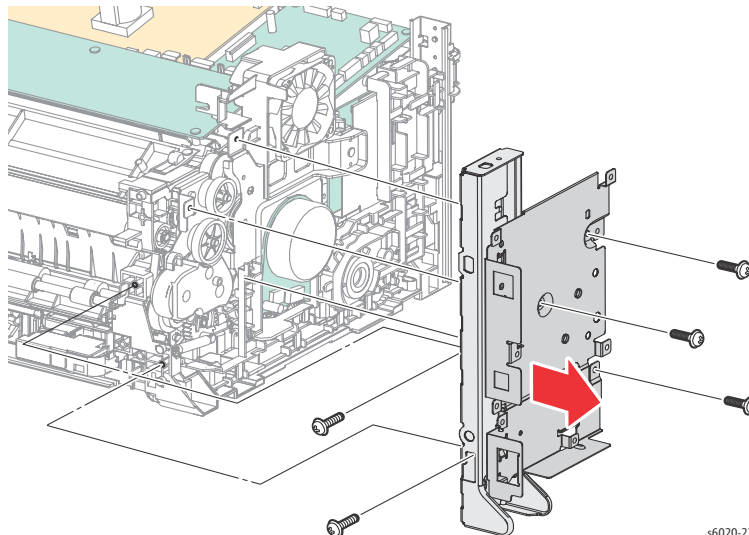
s6020-273

Note: To gain access to the lower screw on the face of the image processing board plate, unhook the paper tray harness guide from the plate.

Front USB Board (WorkCentre 6025 and 6027 MFP)

PL7.1.18

1. Remove the Paper Tray Cover (6025) or Paper Tray (6022/6027).
2. Open the Toner Door.
3. Remove 1 screw (Silver, Plastic, 6mm) securing the left side of the Front Cover.
4. Press in at the center-front of the Left Side Cover to release 2 hooks from the Front Cover and disconnect the covers.
5. Release 3 hooks of the Left Side Cover from the Top Cover.
6. Release 2 hooks from the Rear Cover and remove the Left Side Cover.
7. Disconnect P/J2 from the Front USB Board.

P/J2

s6020-274
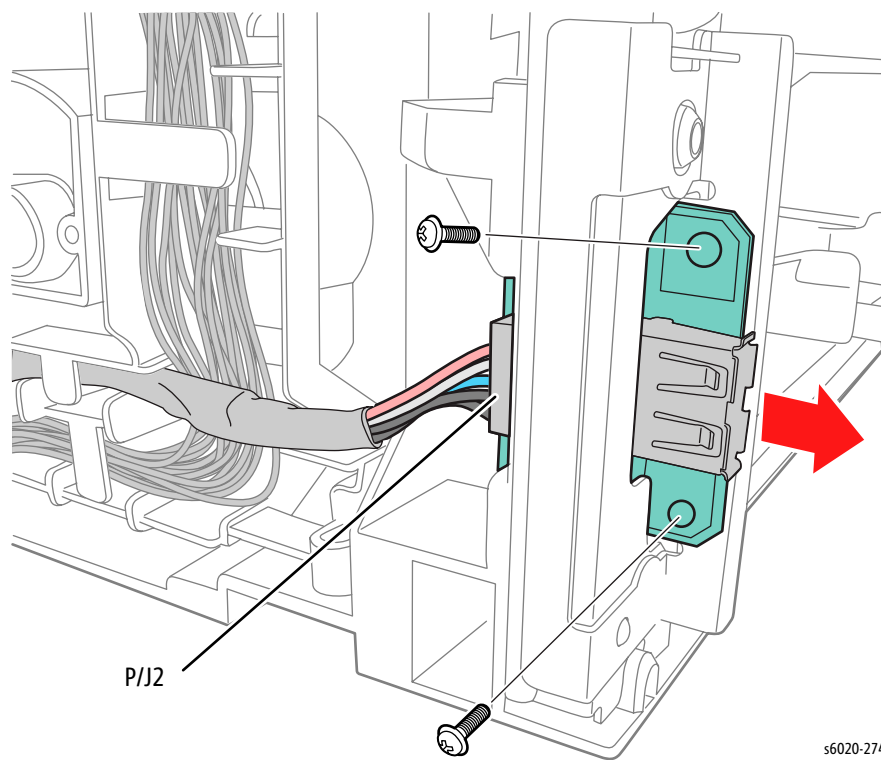
8. Remove 2 screws (silver, tap, 8 mm) and remove the Front USB Board from the printer.

Fax Board (WorkCentre 6027 MFP)

PL7.1.22

1. Remove the Paper Tray.
2. Remove the Jam Access Cover (page 4-32)
3. Remove 1 screw (Silver, Plastic, 6mm) securing the left side of the Front Cover.
4. Press in at the center-front of the Left Side Cover to release 2 hooks from the Front Cover and disconnect the covers.
5. Release 3 hooks of the Left Side Cover from the Top Cover.
6. Release 2 hooks from the Rear Cover and remove the Left Side Cover.
7. Disconnect SJ8 on the IP Board, remove 4 screws (silver, M3, 6 mm), and remove the Fax Board.

SP2

s6020-730
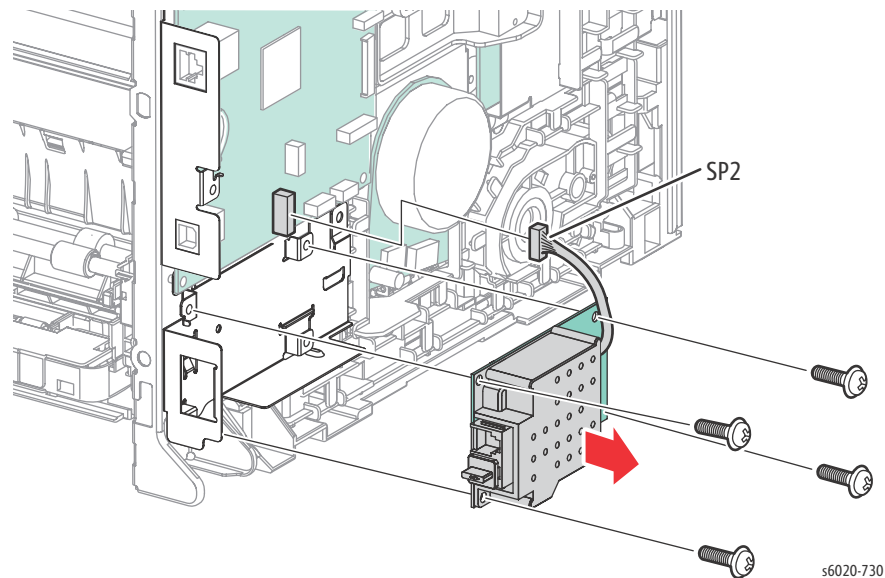
Image Processor Harness

PL7.2.12

1. Follow the Image Processing Board removal steps (page 4-149) leaving the Image Processing Board attached and

2. Disconnect SJ18 from the MCU Board.

P/J22

s6020-237
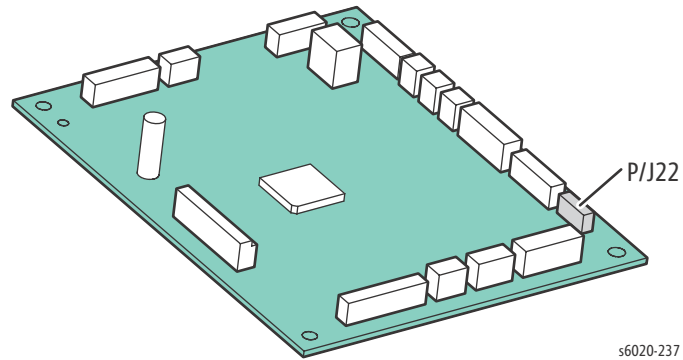
3. Disconnect J2 and remove the Image Processor Harness.

P/J8

s6020-238
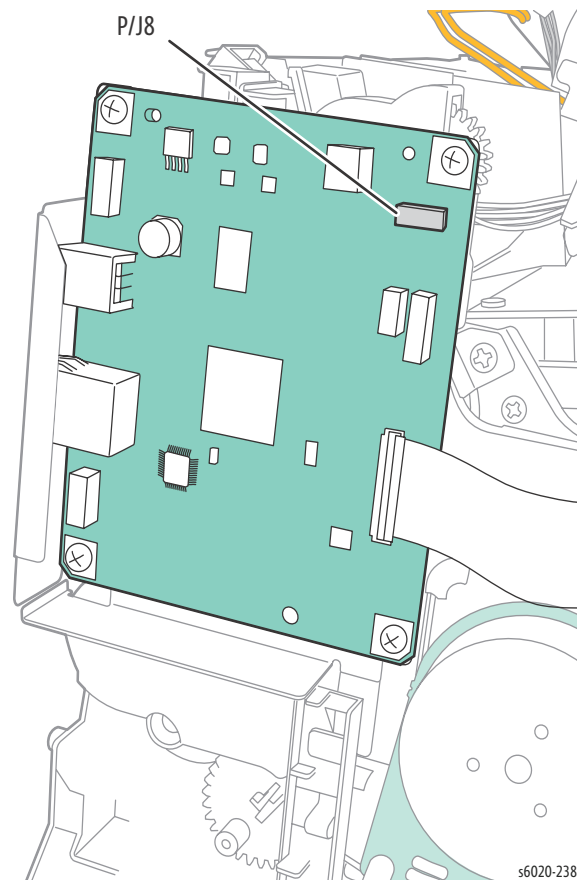
LVPS

PL7.2.1A~B

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
7. Disconnect the ribbon cable from P/J17 on the MCU Board.
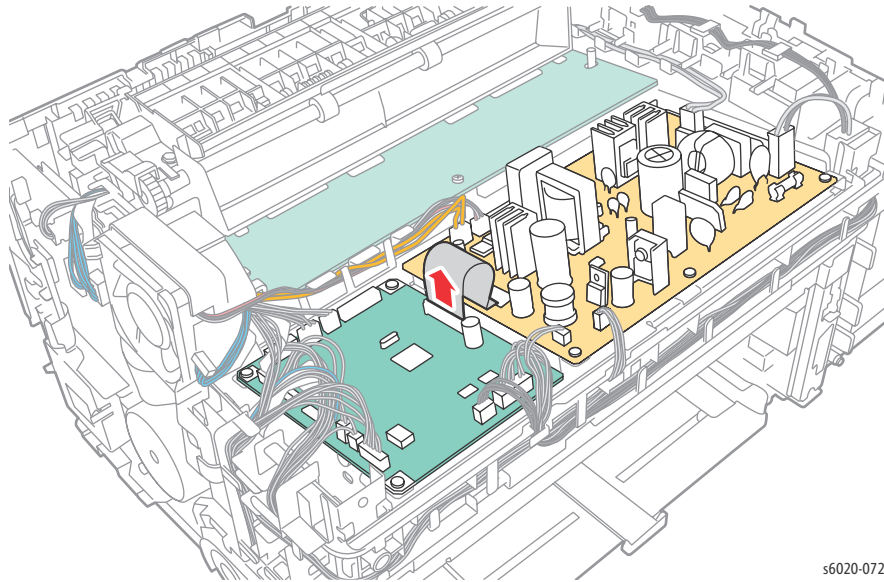
s6020-072

8. Disconnect the connectors on the LVPS remove 4 screws (Silver, M3, 6mm).

9. Remove LVPS from the printer.

s6020-071
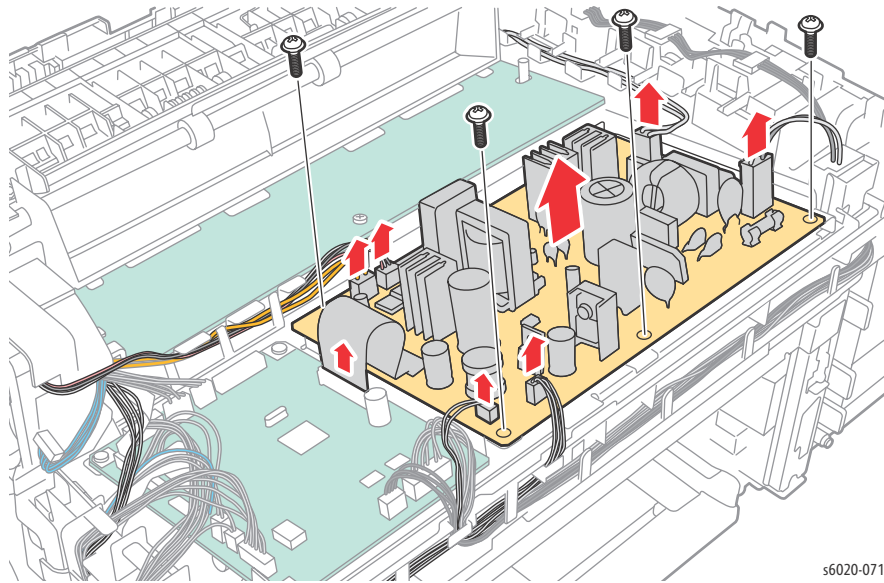
⚠ **CAUTION:** When reinstalling the LVPS, verify all wires remain properly routed through the harness guides and all connectors are fully seated.

MCU Board

PL7.2.2

⚠️ **CAUTION:** Save the internal data of MCU Board to the LED Driver Board. See."NVM Settings" on page 2-132.

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
3. Open the Rear Door.
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).

Latch
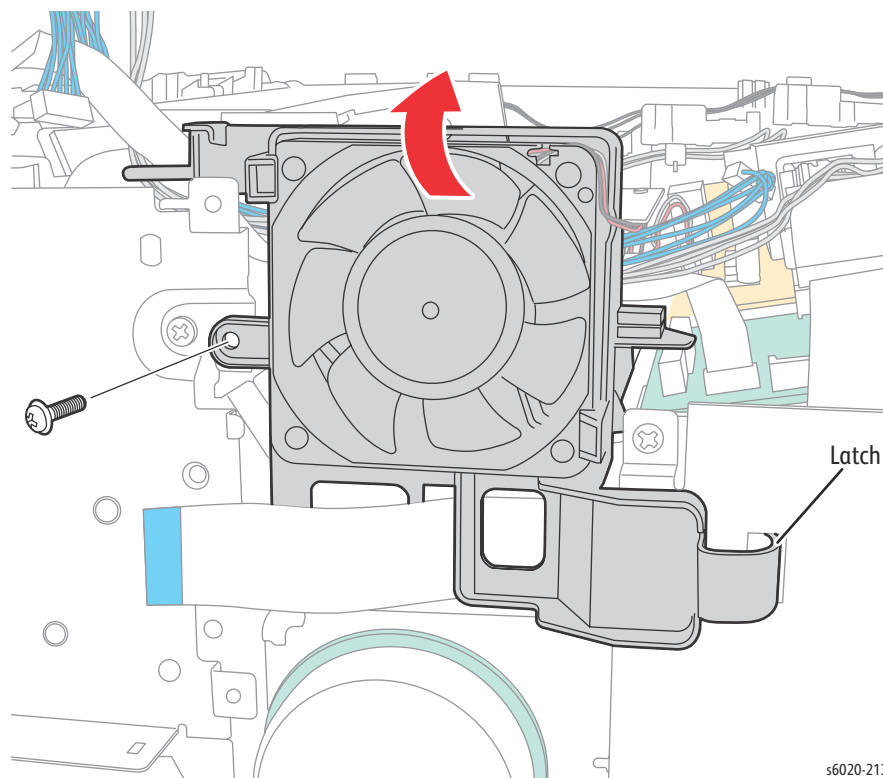
s6020-213

7. Disconnect all connectors on the MCU Board.
8. Remove 4 screws (Silver, Plastic, 6mm) to remove the MCU Board from the printer.
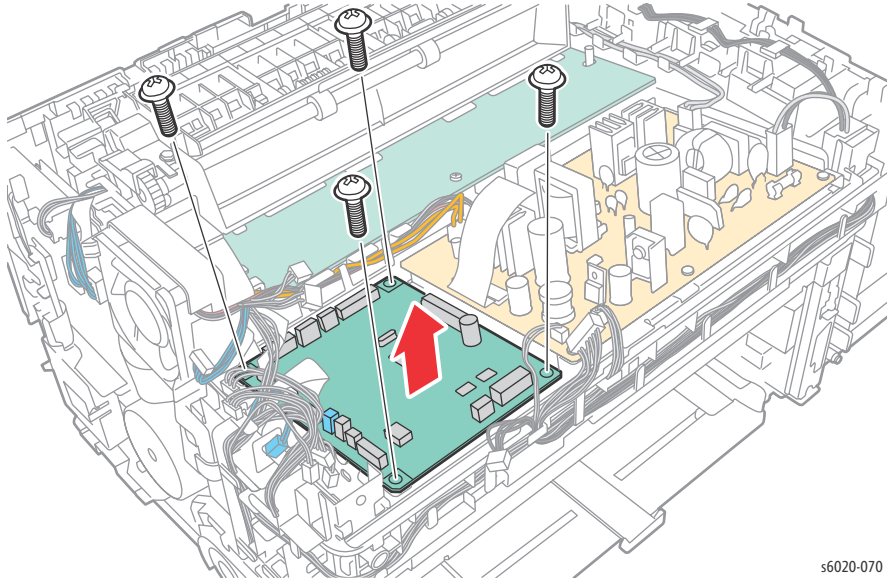
s6020-070

HVPS

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Open the Rear Door.
3. Remove the Front Cover (6020 page 4-18; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
7. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42; 6027 page 4-55).
8. Remove 2 screws securing the Fuser (Silver, Hex Head, Tap, 8mm) pull the Fuser slightly away from the printer.
9. Disconnect P/J201, J18, and J26 from the MCU Board.

(J201)

(J18) (J26)

Front
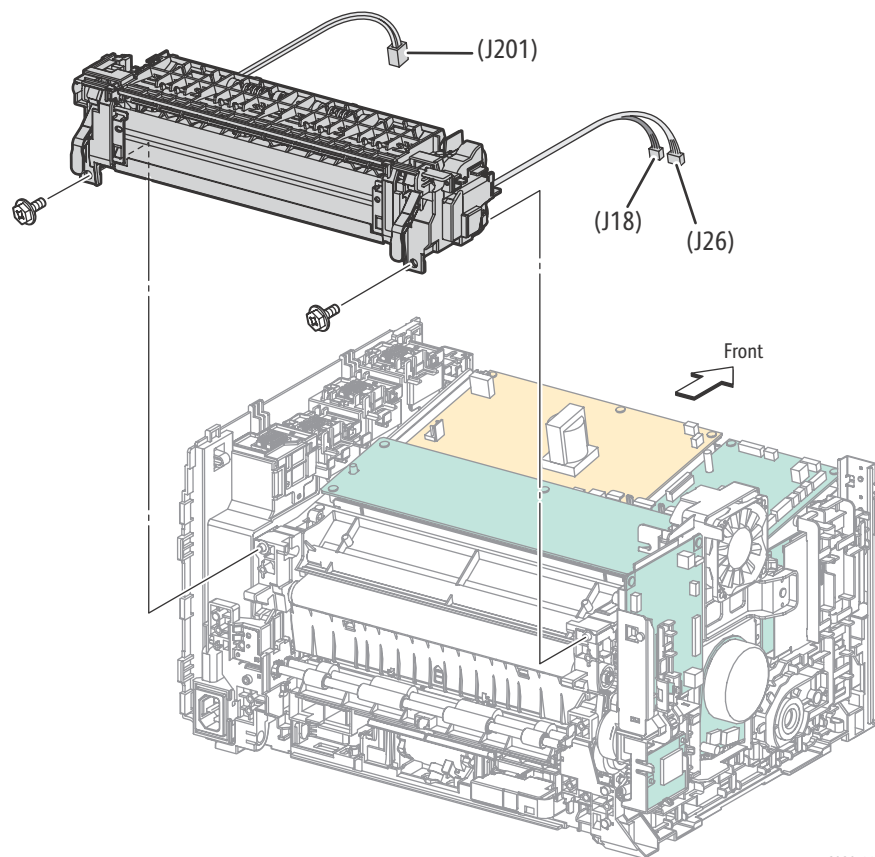
s6020-118

10. Unlace the HVPS wiring from the harness guide.
11. Remove 5 screws (Silver, Tap, 8mm) securing the HVPS to the chassis.
12. Disconnect P/J210 from HVPS.
13. Lift the fan-side of the board first and remove HVPS from the printer.
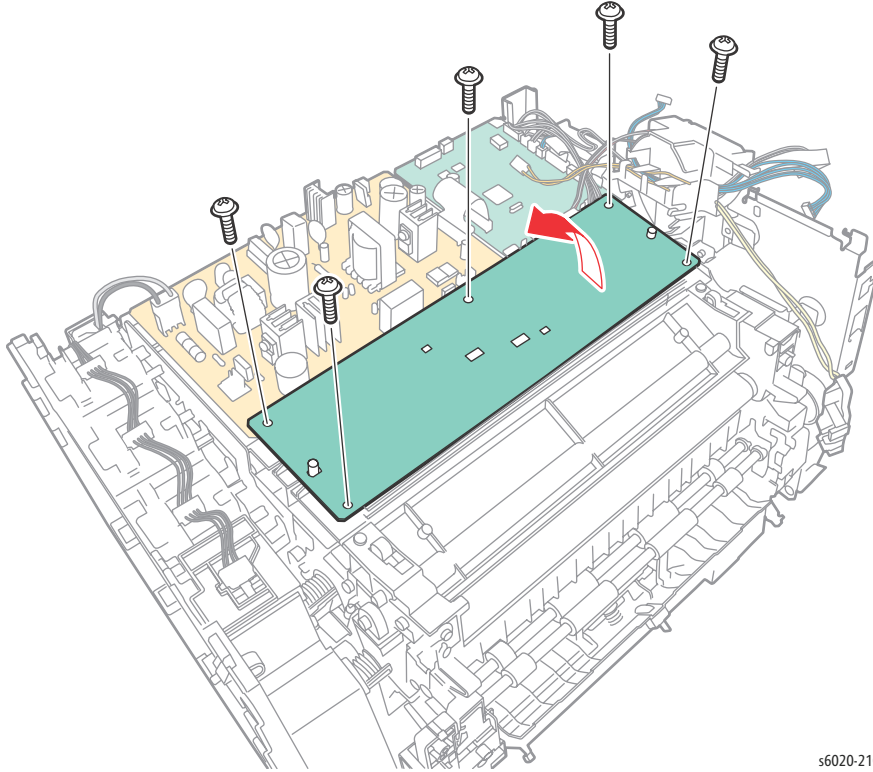
s6020-210

AC Inlet Harness

PL7.2.9

1. Remove the Paper Tray Cover (6020 page 4-15; 6025 page 4-43)
2. Open the Rear Door.
3. Remove the Front Cover (6020 page 4-16; 6022 page 4-34; 6025 page 4-48; 6027 page 4-61).
4. Remove the Left Side Cover (6020 page 4-18; 6022 page 4-28; 6025 page 4-44; 6027 page 4-56).
5. Remove the Top Cover (6020 page 4-7; 6022 page 4-21; 6025 page 4-36; 6027 page 4-49).
6. Remove the Rear Cover (6020 page 4-10; 6022 page 4-23; 6025 page 4-40; 6027 page 4-52).
7. Remove the Toner Door (6020 page 4-13; 6022 page 4-27; 6025 page 4-42; 6027 page 4-55).
8. Disconnect P/J206 on the LVPS, and P/J13 and P/J20 on the MCU Board.
9. Release the harness from the harness guide.

P/J206
P/J20
P/J13
s6020-069
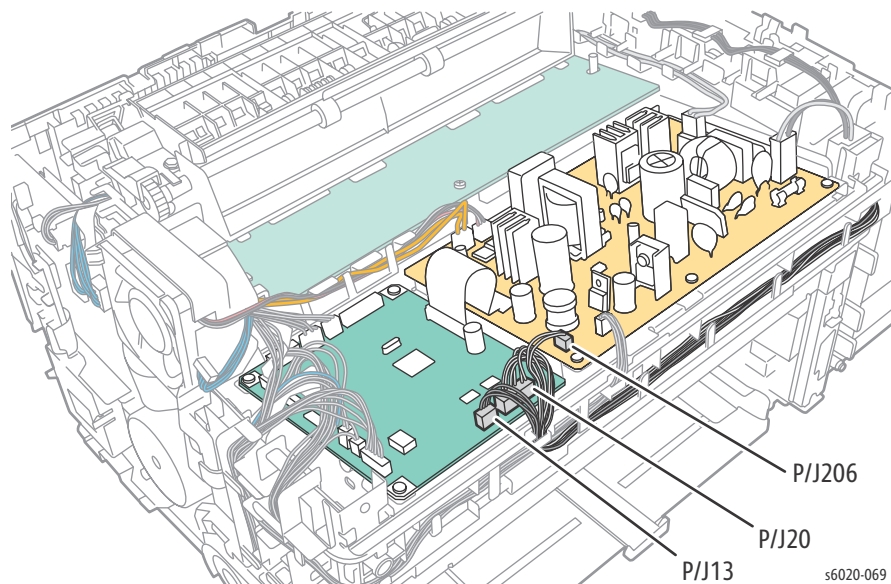
10. Disconnect P/J201 on the LVPS and release the harness from the harness guide.

P/J201
s6020-117
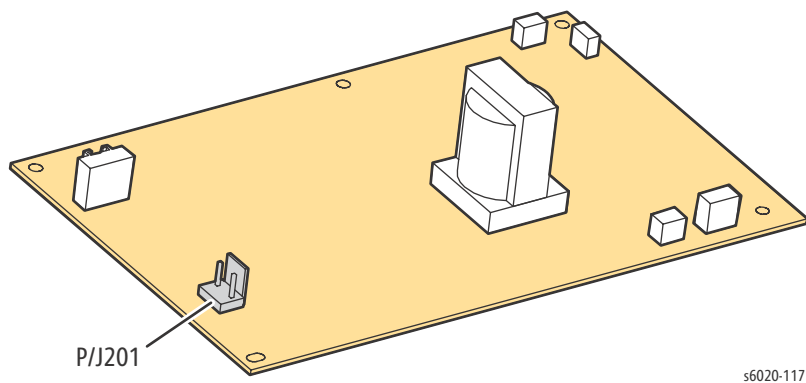
11. Remove 5 screws (Silver, Tap, 8mm) remove the Toner Dispenser Frame from the printer.

s6020-039
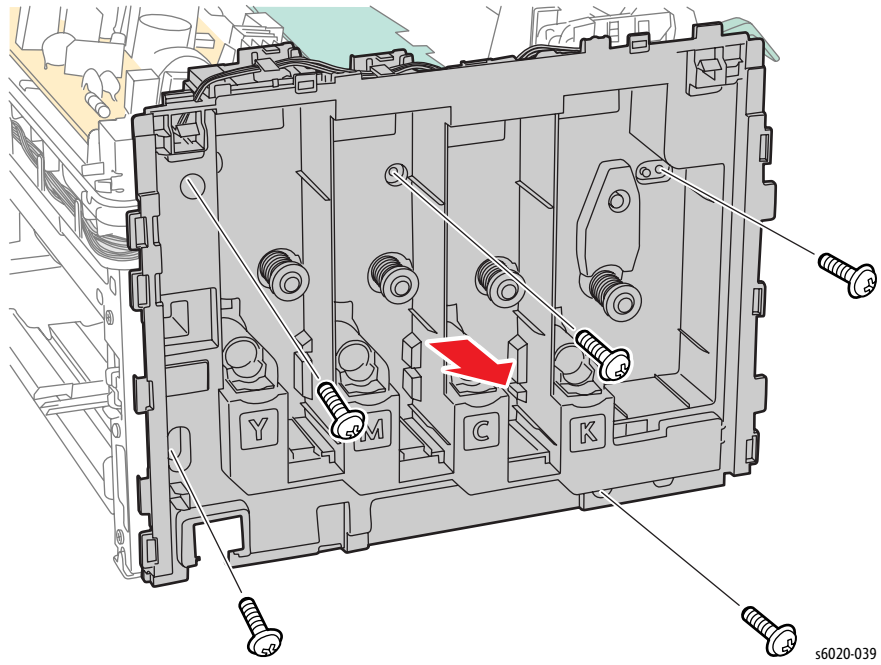
12. Disconnect P/J200 on the LVPS.
13. Remove 1 screw (Silver, Metal, 6mm) to disconnect the ground wire.

14. Remove 3 screws (Silver, Tap, 8mm) to remove the harness guide.
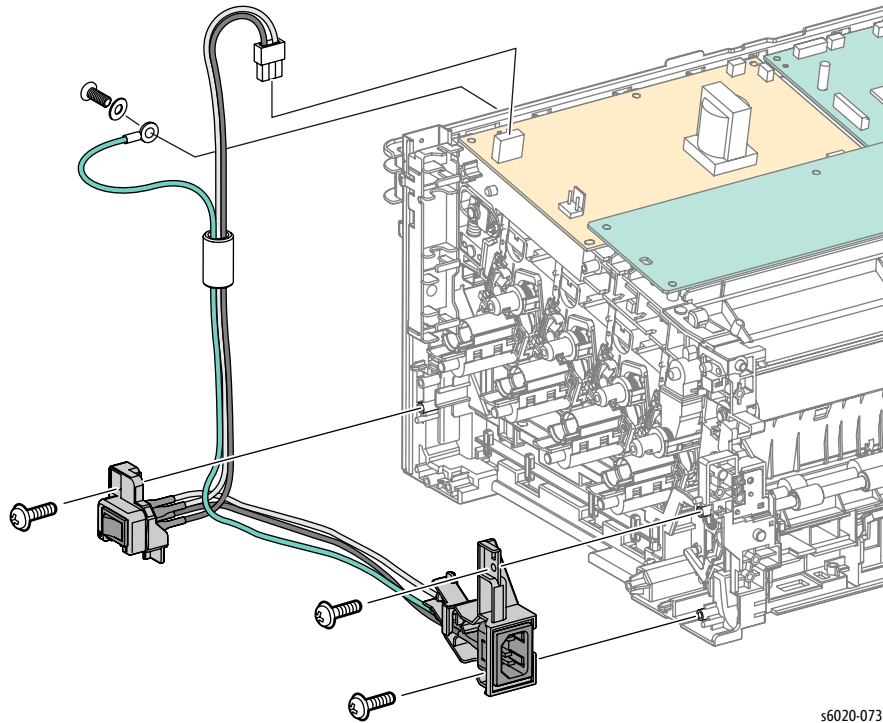
s6020-073

15. Press the tab and release the AC Inlet Connector from the harness guide

Single Tab
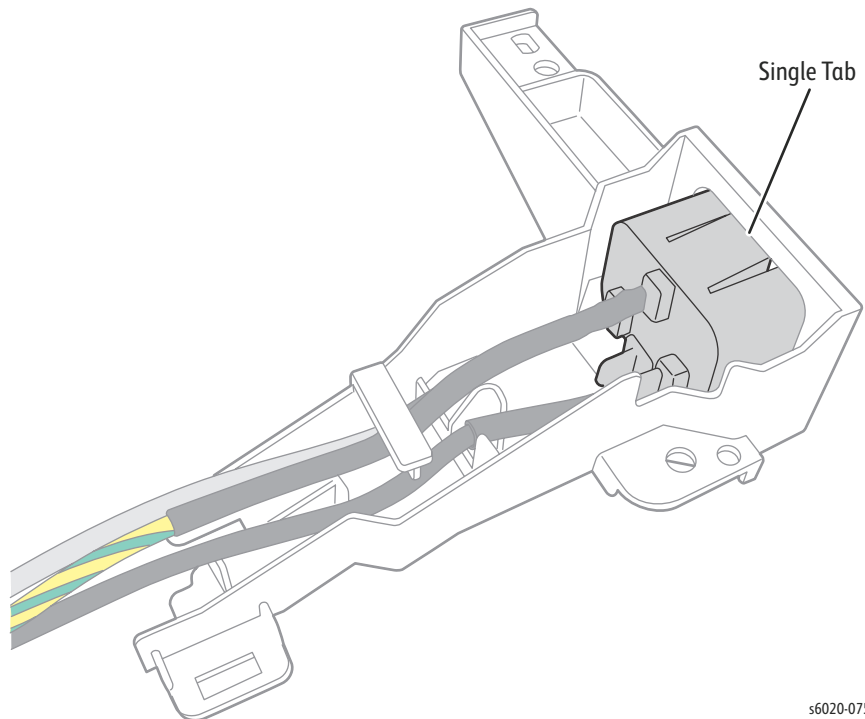
s6020-075

16. Release 2 hooks and remove AC Inlet Harness from the Switch Holder.

Hooks
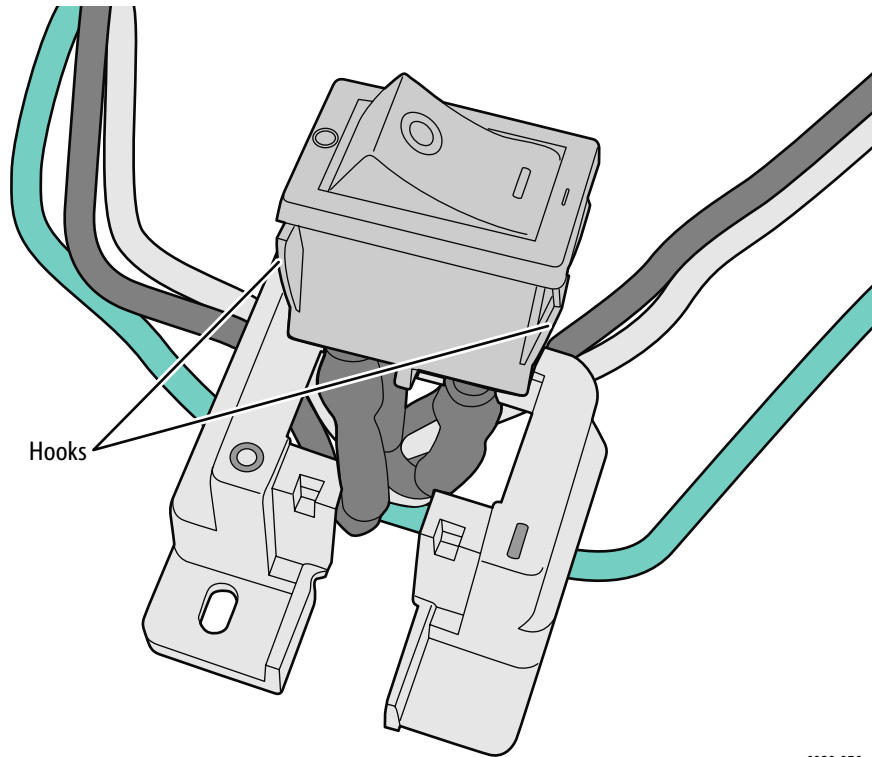
s6020-076

17. Pull the AC Inlet Connector and harness out of the harness guide.
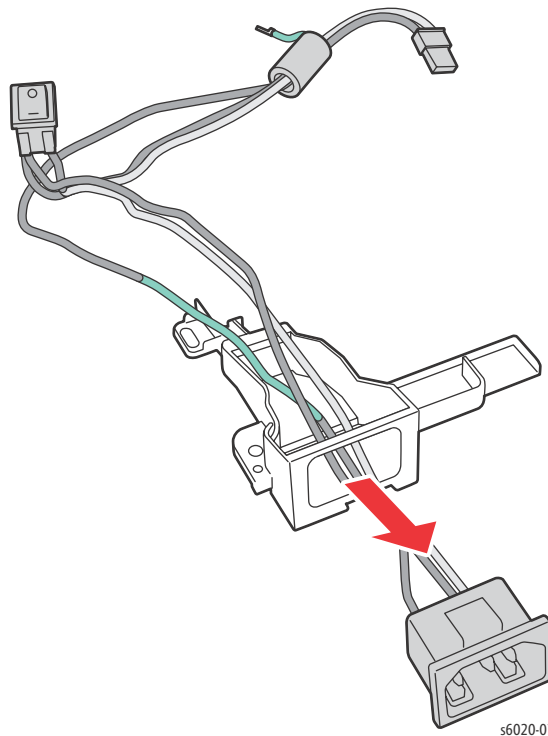
s6020-074

18. Install the AC Inlet Harness into the Switch Holder correctly as shown in the following illustration.

Hooks
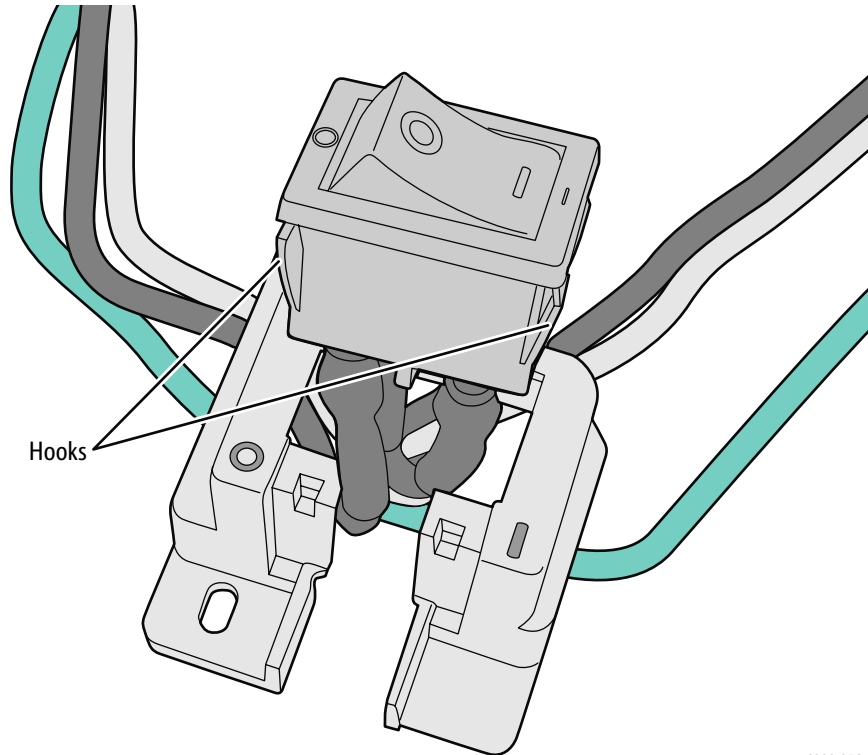
s6020-076

Parts List

5

In this chapter...

- Serial Number Location and Format
- Using the Parts List
- Print Engine Parts
- Service Kits and Cables

Serial Number Location and Format

Changes to Xerox products are made to accommodate improved components as they become available. It is important when ordering parts to include the following information:

- Component's part number
- Product type or model number
- Serial Number of the printer

The serial number is found on a label located on the left side frame near the Fuser. The Front Cover must be opened to view the Serial Number.

MANUFACTURED: March, 2011
Xerox S/N: YXN000524

s6020-211
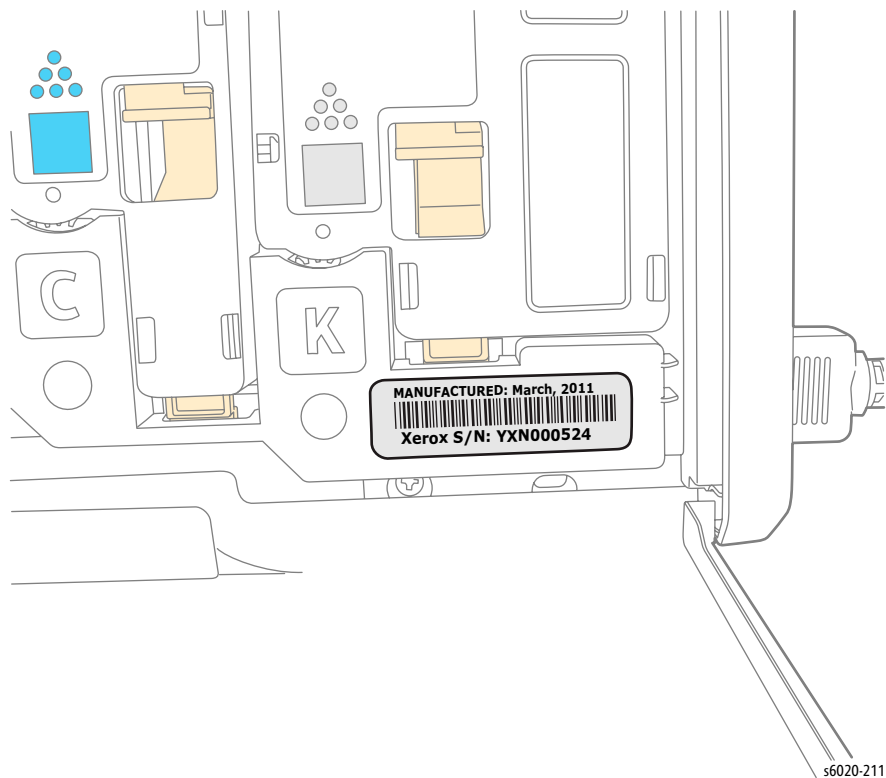
The nine-digit serial number uses the format **PPPRSSSSS**.

- **PPP** = Three digit alphanumeric product code (example)

Product Code	Product
P3A	6020, 110V Engine
P4A	6020, 220V Engine
P5A	6022, 110V Engine
P6A	6022, 220V Engine
P0B	6025, 110V Engine
P9A	6025, 220V Engine

Product Code	Product
P7A	6027, 110V Engine
P8A	6027, 220V Engine

- **R** = Single digit numeric revision digit, 0-9. To be rolled when the ending serial number is reached or when a major product change occurs.
- **SSSSS** = Five digit numeric serial number based on the following table. The serial numbers are reset only when the ending number is reached or when the revision number is rolled.

Product	Starting Serial Number	Ending Serial Number
6020, 110V Engine	057701	059700
6020, 220V Engine	337096501x	337146500x
6022, 110V Engine	59701	79700
6022, 220V Engine	337146501x	337186500x
6025, 110V Engine	186501	236500
6025, 220V Engine	337236501x	337286500x
6027, 110V Engine	286501	336500
6027, 220V Engine	337415501x	337515500x

Example

P3A1057701 Xerox Serial Number

P3A: Product Code for the Phaser 6020, 110V printer

1= Revision Level

057701 = Serial Number for 6020

Using the Parts List

Only parts showing part numbers are available for ordering by support. Parts not showing part numbers are available on the parent assembly.

- **Item:** The callout number from the exploded part diagram.
- **Name/Description:** The name of the part to be ordered and the number of parts supplied per order.
- **Part Number:** The material part number used to order that specific part.
- Parts identified throughout this manual are referenced **PL#.#.#**; For example, PL3.1.10 means the part is item 10 of Parts List 3.1.
- A Black triangle preceding a number followed by a parenthetical statement in an illustrated parts list means the item is a parent assembly, made up of the individual parts called out in parentheses.
- The notation "**with X~Y**" following a part name indicates an assembly that is made up of components X through Y. For example, "1 (with 2~4)" means part 1 consists of part 2, part 3, and part 4.
- An asterisk (*) following a part name indicates the page contains a note about this part.
- The notation "**J1<>J2 and P2**" is attached to a wire harness. It indicates that connector Jack 1 is attached to one end of the wire harness and connector J2 is attached to the other end that is plugged into P2.
- Fastener location and type are indicated using designators listed in the following table. Refer to "Fastener Types" on page 4-4" for a complete list of fasteners used, and "Hardware Kit" on page 5-98 for fasteners available in the Hardware Kit.

Designator	Fastener Type
E	E-ring
KL	K-clip
ST	Screw, self-tapping
SM	Screw, sheet metal

Print Engine Parts

Phaser 6020

PL1.1 Covers

1 (with 4,23-26)
2
6
7
8
4
23
9
SM2
24
26
ST1
ST1
10
25
SM2
ST1
21
ST1
13
ST1
(J204)
ST1
ST1
12(with 13)
ST1
18
ST1
16
15
ST1
17
ST1
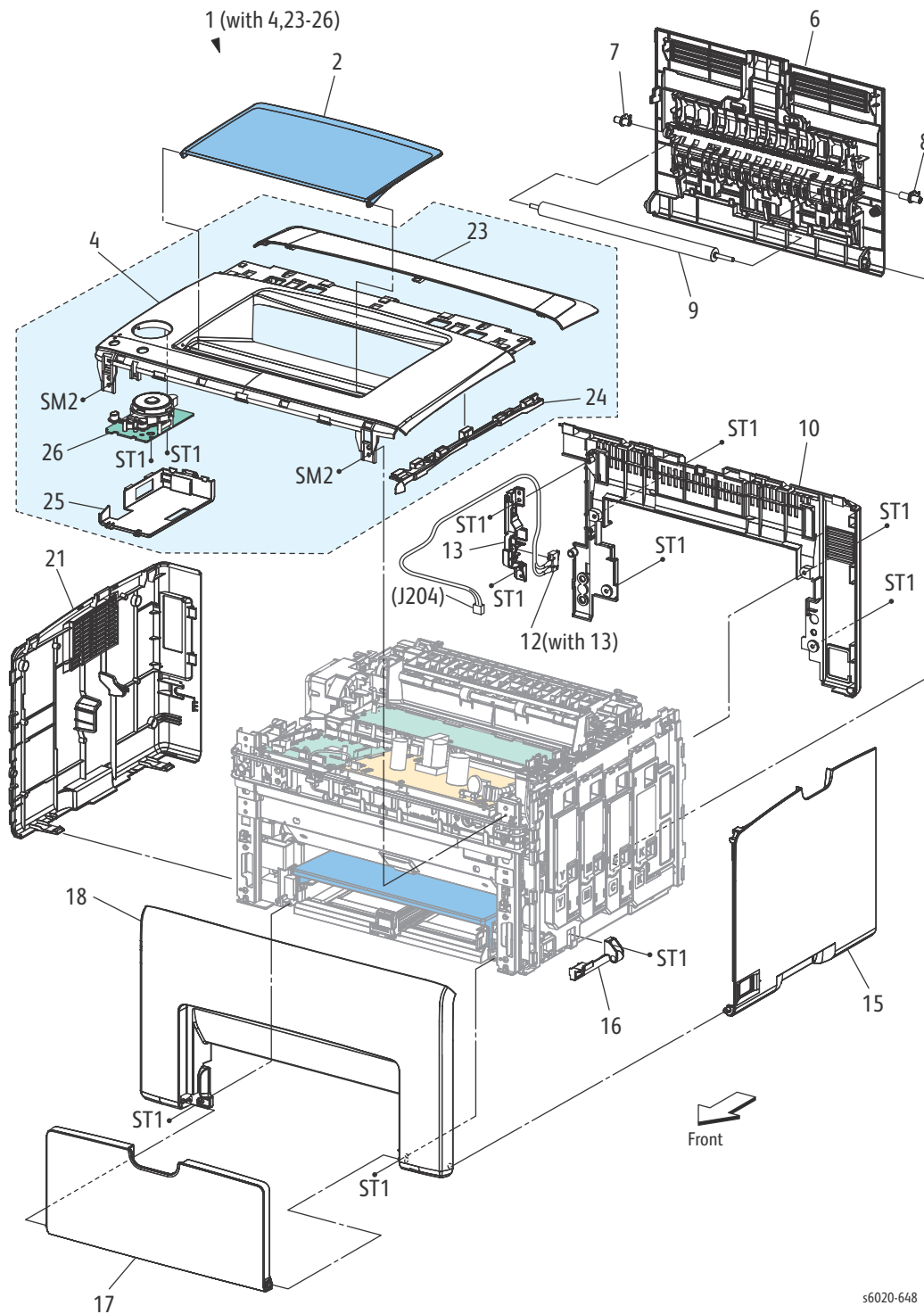
Front

s6020-648

PL Item	Part Name	Part Number
1.	COVER ASSY TOP (WITH 2-4,23) (TOP COVER)	848K 93531
2.	TRAY EXTENSION CBV	050E 26771
3.	PANEL ASSY LED LT	REF only
4.	COVER ASSY TOP FRONT WPS LQ	REF only
5.	-	--
6.	COVER ASSY REAR	640K 93720
7.	BEARING BTR L	013E 38091
8.	BEARING BTR R	013E 38101
9.	ROLL ASSY BTR	022K 78520
10.	KIT COVER REAR INNER LQ	604K 92560
11.	--	--
12.	SWITCH I/L ASSY (with 13)	676K 12440
13.	HOLDER IL REAR	--
14.	--	--
15.	COVER WINDOW TNR	848E 67341
16.	HINGE CVR SFP	803E 06441
17.	KIT COVER MSI LQ	604K 92570
18.	KIT COVER FRONT LQ	604K 92580
19.	--	--
20.	--	--
21.	COVER SIDE L LQ	848E 67322
22.	--	--
23.	COVER TOP REAR	--
24.	COVER INNER TOP	--
25.	COVER OPP	822E 10600
26.	PWB ASSY LED	101K 68030

PL 2.1 Feeder (1/3)
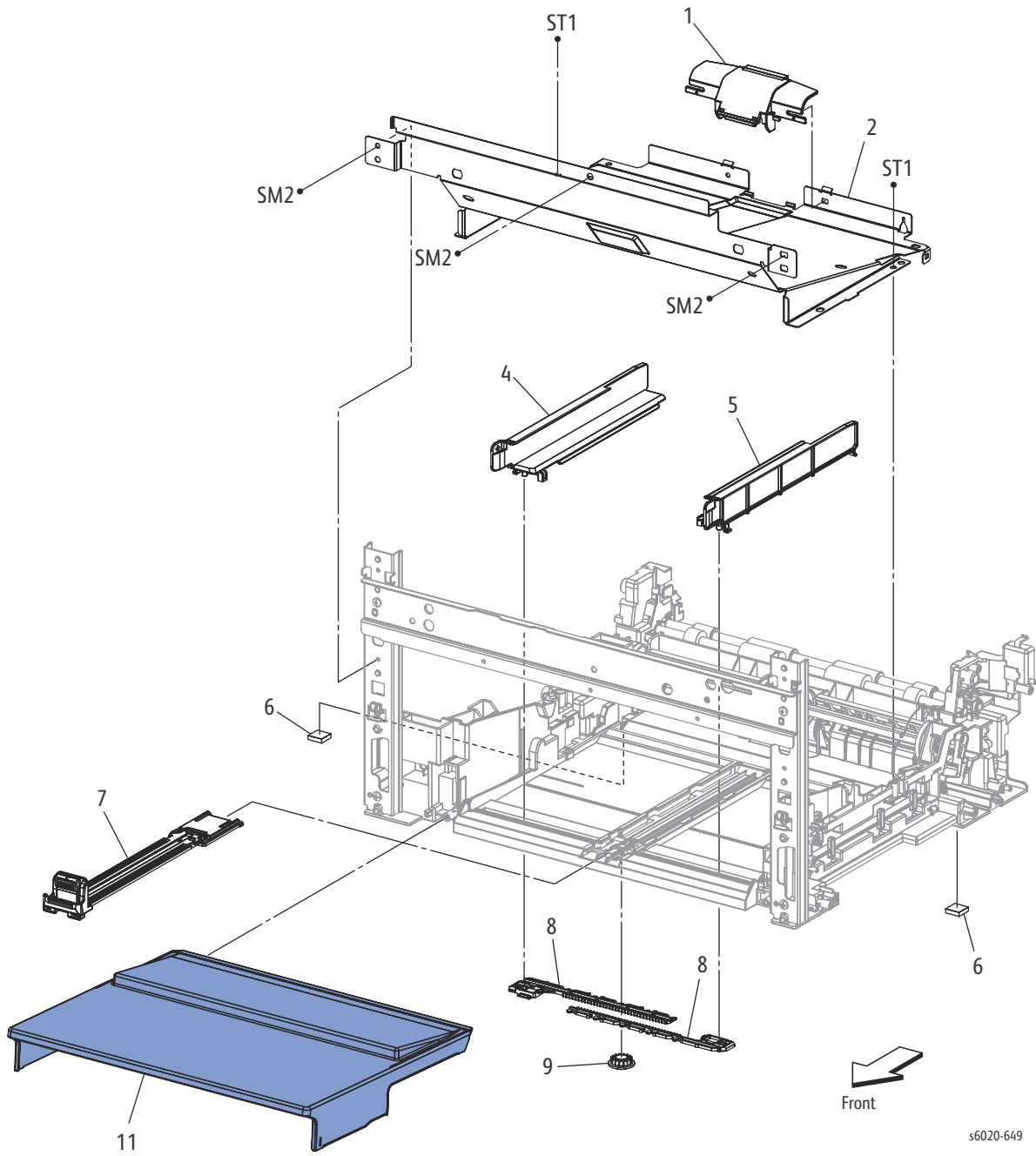
s6020-649

Front

PL Item	Part name	Part Number
1.	COVER FEED	--
2.	PLATE LOWER	--
3.	--	--
4.	GUIDE SIDE MSI L	--
5.	GUIDE SIDE MSI R	--
6.	FOOT ASSY	--
7.	TRAY ASSY MSI EXTENSION	050K 66341
8.	RACK GUIDE SIDE V	--
9.	GEAR PINION	--
10.	--	--
11.	COVER DUST MSI V	848E 67650

PL 2.2 Feeder (2/3)

s6020-650
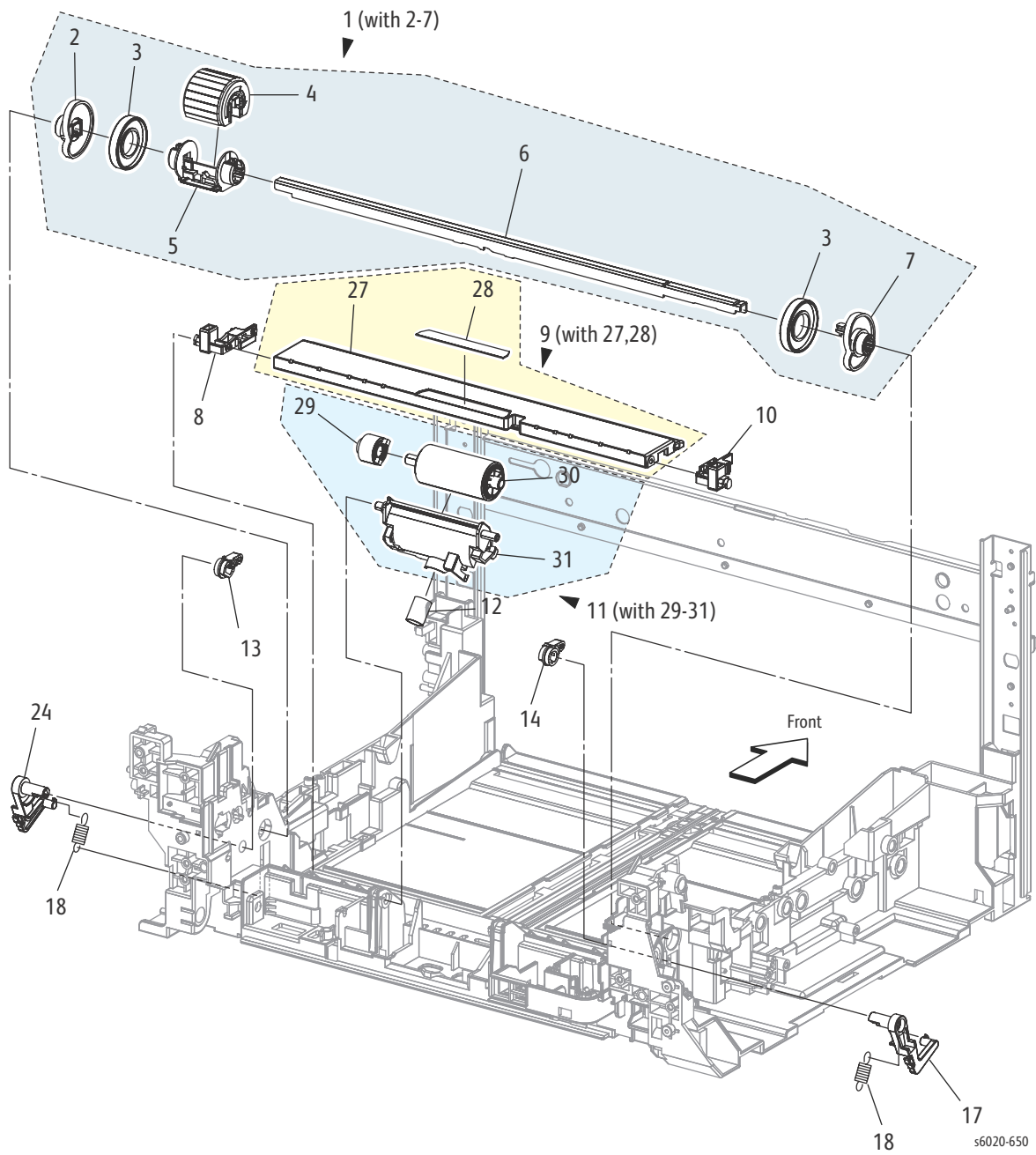
Item	Part Name	Part Number
1.	ROLL ASSY FEED MSI (with 2-7)	059K 75531
2.	CAM MSI R	008E 97492
3.	ROLL CORE MSI	--
4.	ROLL ASSY FEED	059K 75520
5.	HOLDER FEED	--
6.	SHAFT FEED	--
7.	CAM MSI L	008E 97481
8.	HOLDER BTM R	--
9.	PLATE ASSY BOTTOM (with 27,28)	--
10.	HOLDER BTM L	--
11.	HOLDER ASSY SEPARATOR (with 29-31)	019K 11790
12.	SPRING SEPARATOR	809E 91661
13.	FOLLOWER R	008E 97513
14.	FOLLOWER L	008E 97503
15.	--	--
16.	--	--
17.	ARM MSI L	031E 98380
18.	SPRING NF	809E 91681
19.	--	--
20.	--	--
21.	--	--
22.	--	--
23.	--	--
24.	ARM MSI R	013E 98390
25.	--	--
26.	--	--
27.	PLATE BOTTOM	--
28.	PAD MSI	--
29.	CLUTCH ASSY FRICTION	--
30.	ROLL ASSY SEPARATOR	--
31.	HOLDER SEPARATOR	--

PL 2.3 Feeder (3/3)

s6020-651
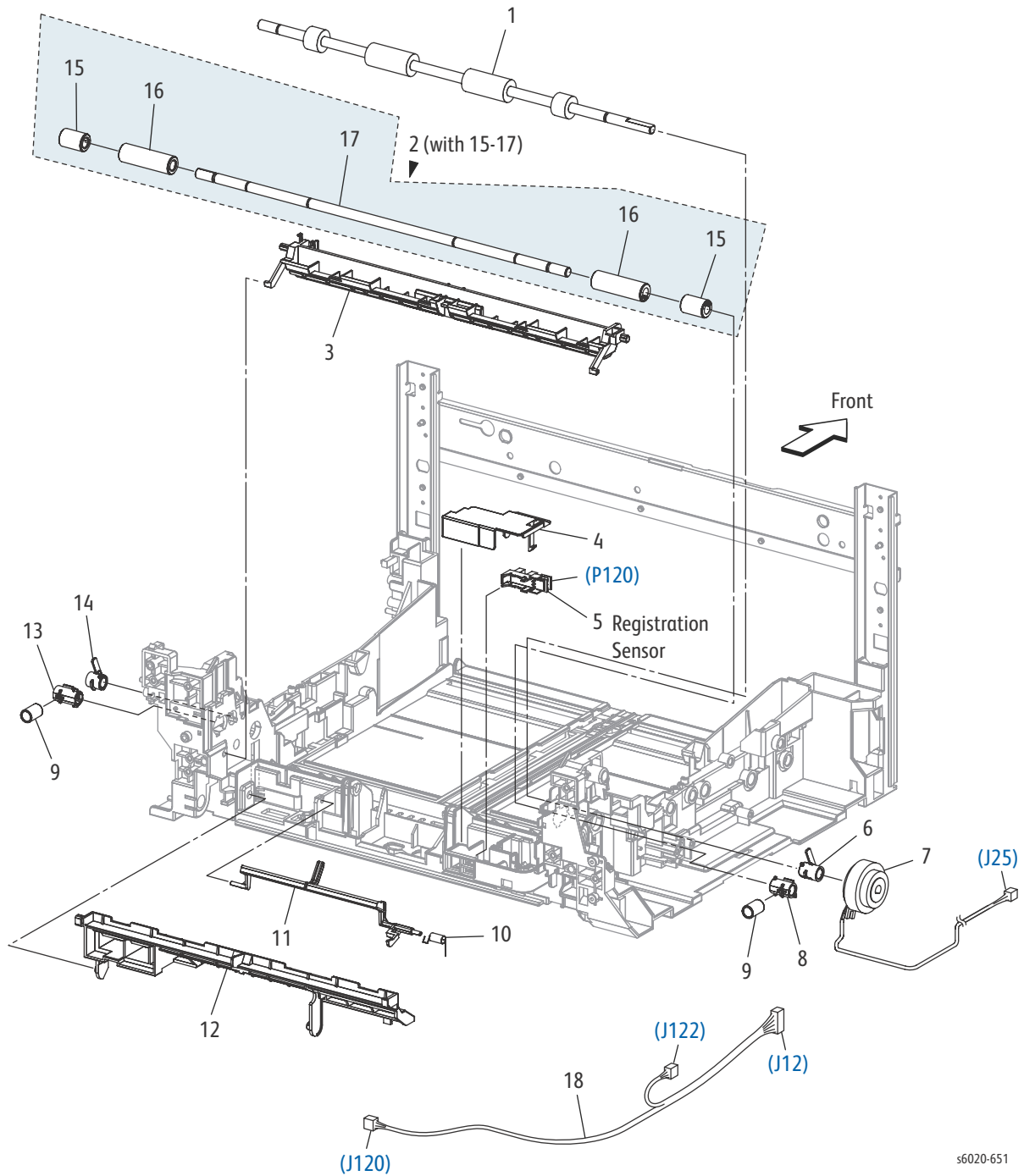
PL Item	Part Name	Part Number
1.	ROLL REGI	059E 06931
2.	ROLL ASSY PINCH REGI (with 15-17)	059K 67751
3.	CHUTE MSI	054E 55090
4.	COVER SENSOR	--
5.	SENSOR PHOTO (REGI SENSOR)	930W 00123
6.	BEARING REGI	--
7.	CLUTCH REGI	121K 46582
8.	BEARING REGI METAL	--
9.	SPRING REGI	809E 91700
10.	SPRING ACT REGI	809E 91650
11.	ACTUATOR REGI	120E 32561
12.	CHUTE LOW	--
13.	BEARING REGI METAL EARTH	--
14.	BEARING REGI EARTH	--
15.	ROLL PINCH REGI 10	--
16.	ROLL PINCH REGI 30	--
17.	SHAFT PINCH REGI	--
18.	HARNESS ASSY RK SNS (J12-J120,J122)	

PL 3.1 Xerographics (1/3)

1 (PL3.2,PL3.3)

(J2) (LPH M)

(J3) (LPH Y)

(J5) (LPH C)

(J4) (LPH K)

ST1

ST1

ST1

ST1

(J14)

Front
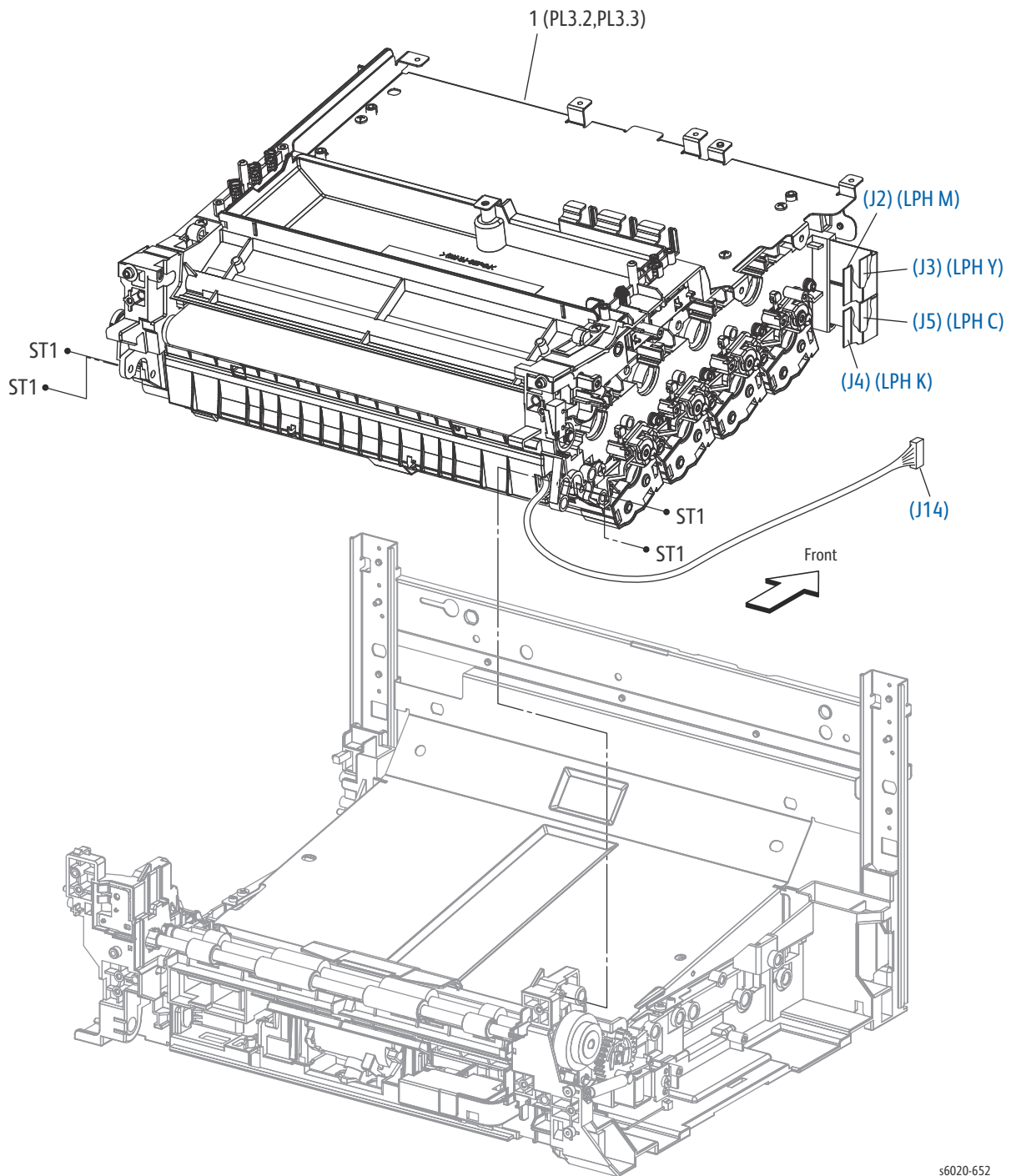
s6020-652

PL Item	Part name	Part Number
1.	XERO DEVE LPH BELT ASSY (PL3.2,PL3.3)	REF Only
99.	BELT TRANSFER	064K 93751

PL 3.2 Xerographics (2/3)

Front

4

5
ST1

5
ST1

5
ST1

5
ST1

(J14)

ST4
2
ST4
2
ST4
2
ST4
2

1
1
1
1

[Ref PL3.3]

6

7

8

9

10
10
10
10
10

s6020-653
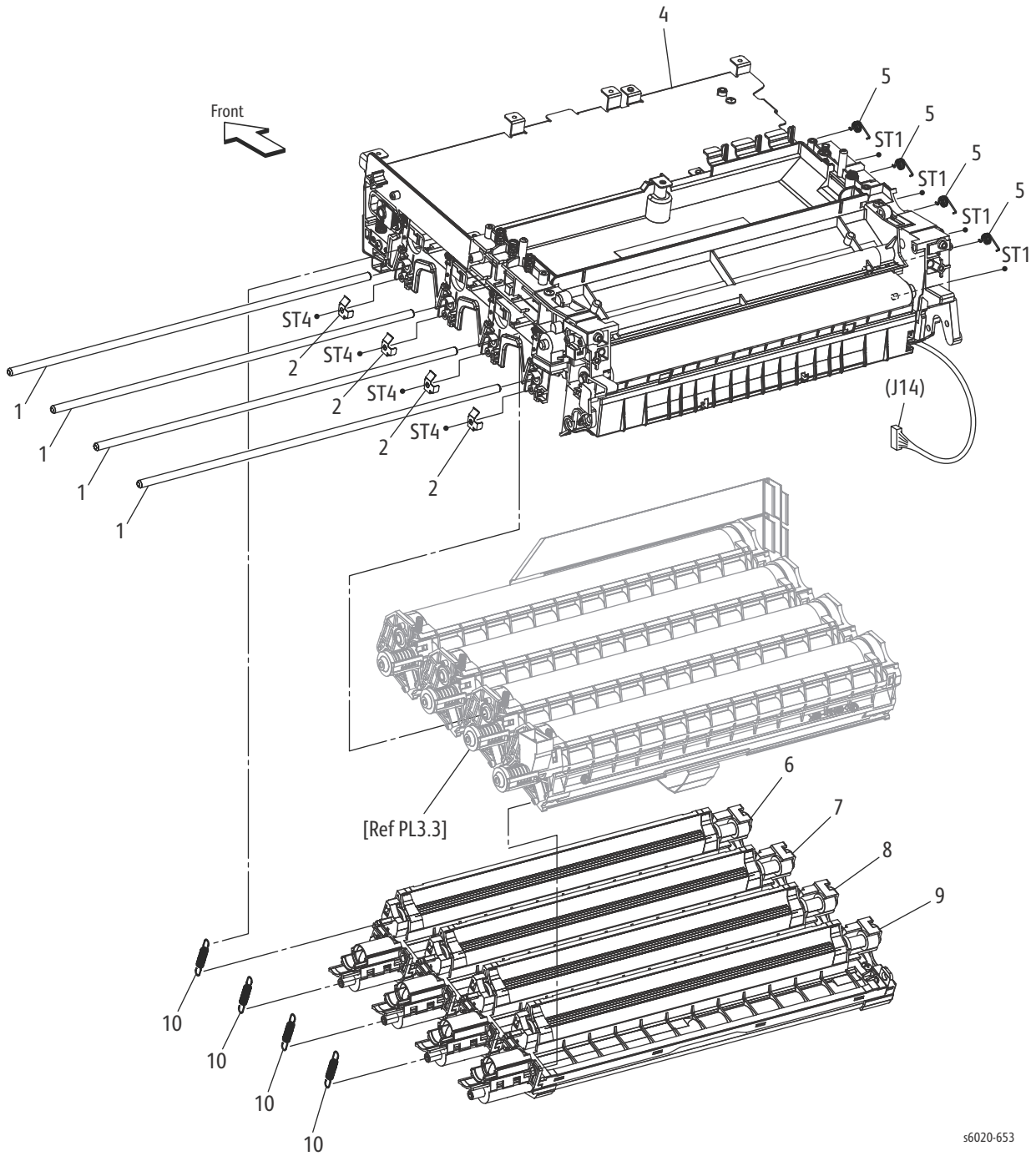
PL Item	Part Name	Part Number
1.	SHAFT DRUM	--
2.	PLATE EARTH DL	--
3.	--	--
4.	HOUSING ASSY TRANSFER A	--
5.	SPRING DEVE D	809E 91951
6.	HOUSING ASSY DEVE Y	848K 92910
7.	HOUSING ASSY DEVE M	848K 92920
8.	HOUSING ASSY DEVE C	848K 92930
9.	HOUSING ASSY DEVE K	848K 92940
10.	SPRING DEVE AD	809E 91880

PL 3.3 Xerographics (3/3)
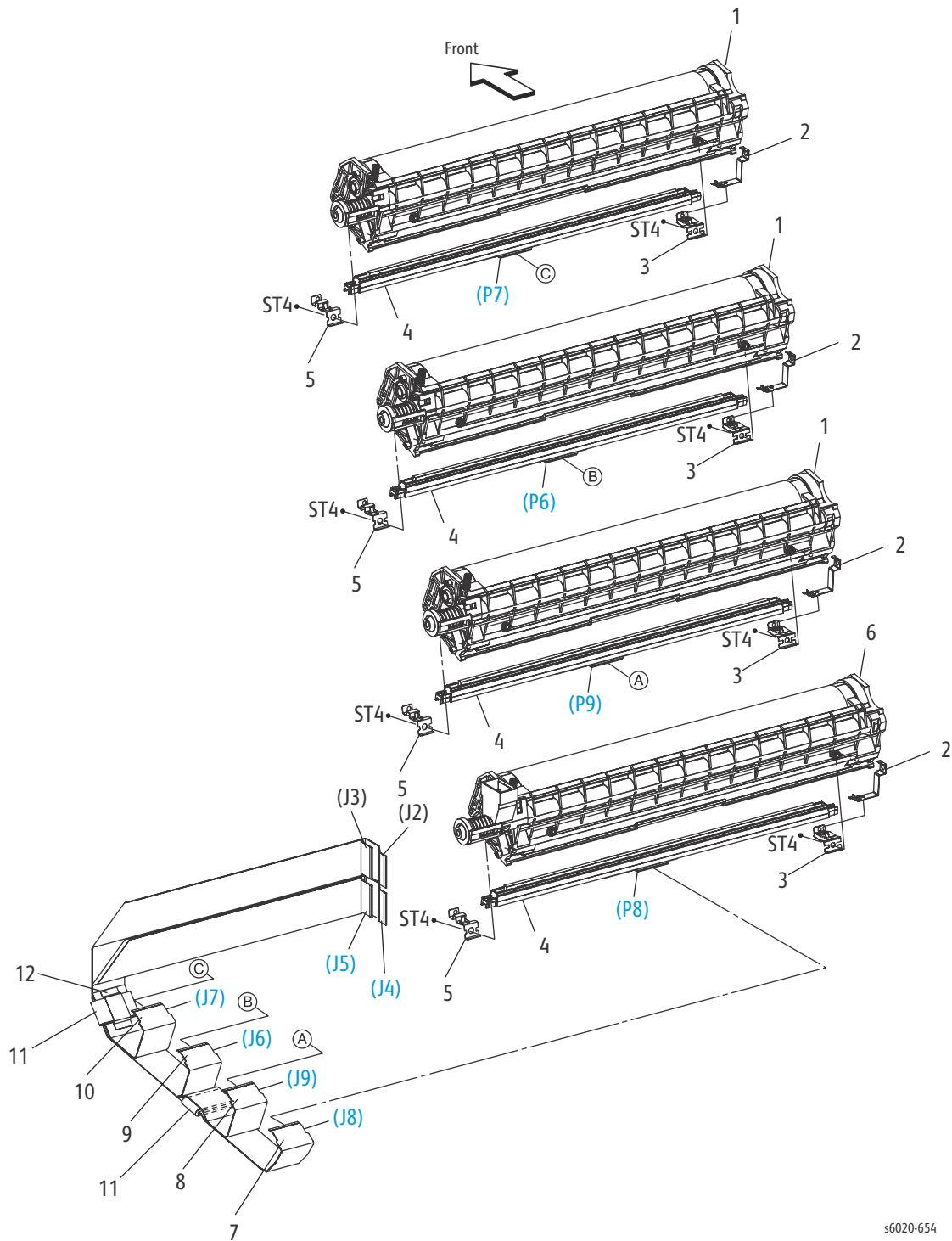
s6020-654

PL Item	Part Name	Part Number
1.	HOUSING ASSY XERO HIGH P H V	848K 93180
2.	SPRING-FG PART2	--
3.	SPRING LPH V	--
4.	HEAD ASSY V	130K 79120
5.	SPRING LPH AD	--
6.	HOUSING ASSY XERO HIGH K	848K 93200
7.	CABLE FFC KPN	--
8.	CABLE FFC CPB	--
9.	CABLE FFC MPB	--
10.	CABLE FFC YPB	--
11.	CORE FERRITE	--
12.	TAPE	--

PL 4.1 Dispenser

20

1 (with 2-11,18,19)

2

3

(J13)

4

4

4

4

5

ST1

ST1

ST1

ST1

6

6

6

6

7

7

7

7

7

ST1

8

(P200)

(P201)

(A)

ST1

(B)

ST1

ST1

9

9

9

9

10

11

11

11

11

11

11

11

11

11

10

(J206)

(J20)

18

Front

(J208)

19

(J201)

(J200)

(A)

(B)

12

13

14

15

16

17

Y

M

C

K

ST1

s6020-655

PL Item	Parts name	Part Number
1.	DISPENSER ASSY (with 2-11, 18, 19)	--
2.	HARNESS ASSY DCKR (J13-TONER CRUM Y,M,C,K)	--
3.	KEY-HW K	029E 53810
4.	KEY HW YMC	029E 53800
5.	FRAME DISP	--
6.	GEAR IDLER 23	807E 32140
7.	CLUTCH ASSY ONEWAY	005K 10071
8.	CONDUCTOR GND MOT	--
9.	MOTOR ASSY DISP	127K 61370
10.	FRAME MOTOR	--
11.	GEAR IDLER 34	807E 32130
12.	COVER CONNECTOR	822E 13060
13.	TONER CARTRIDGE Y START	--
14.	TONER CARTRIDGE M START	--
15.	TONER CARTRIDGE C START	--
16.	TONER CARTRIDGE K START	--
17.	CLEANER ASSY	042K 94281
18.	HARNESS ASSY FSR TEST (J206-J208)	--
19.	HARNESS ASSY DISPENSE MOT (J20-J200,J201)	--
20.	GUIDE HARNESS Fuser	--

PL 5.1 Fusing

s6020-656

PL Item	Part Name	Part Number
1.	Fuser 110V LQ	126K 34961
1.	Fuser 220V LQ	126K 34971

PL 6.1 Drive
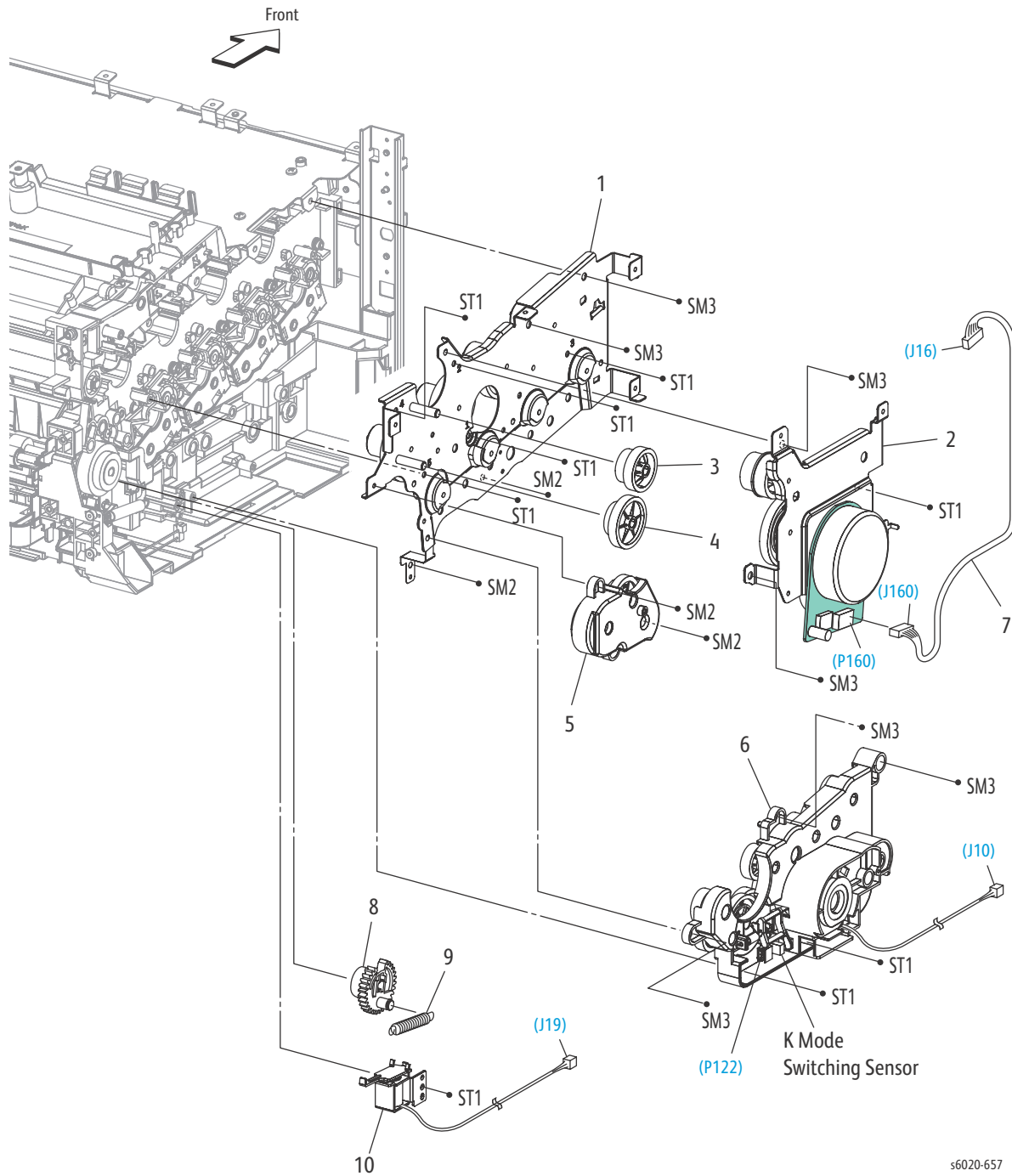
Front

1

ST1

SM3

SM3

ST1

ST1

(J16)

SM3

2

3

ST1

SM2

ST1

ST1

4

SM2

SM2

(J160)

SM2

7

SM2

(P160)

SM3

5

SM3

6

SM3

(J10)

ST1

8

ST1

9

SM3

ST1

(J19)

K Mode
Switching Sensor

ST1

(P122)

10

s6020-657

PL Item	Part Name	Part Number
1.	DRIVE ASSY MU V	--
2.	DRIVE ASSY MOT V	007K 17073
3.	GEAR F3 V	807E 32381
4.	GEAR PH3 V	807E 32391
5.	DRIVE ASSY PH V	007K 17092
6.	DRIVE ASSY DEVE V	007K 17088
7.	HARNESS ASSY MAIN MOT (J16-J160)	--
8.	GEAR FEED V	--
9.	SPRING FEED V	--
10.	SOLENOID FEED MSI V	121E 22671

PL 7.1 Electrical (1/2)

1

2

(J205)

6

Ⓐ

SM2

(J23)

Front

(J1)

5

4

3

(P1)

(P2)

SM2

7

(P1)

(P3)

SM2

(P1)

(P5)

SM2

(P112)

(J1)

(P4)

SM2

9

Ⓐ

SM2

SM2

SM2

SM2

8

SM2

11

SM7

SM2

SM2

(P9)

(P8)

(P11)

(J10)

s6020-658

PL Item	Part Name	Part Number
1.	DUCT FAN	--
2.	FAN MAIN	127E 86170
3.	GUIDE HARNESS DRIVE	--
4.	PLATE BITZ	--
5.	PWB ASSY TOP TOKI2	960K 76820
6.	FFC ASSY LIGHT BIZ (J1-J23)	962K 79920
7.	HARNESS ASSY TOKI (P1-P112)	962K 81970
8.	PLATE ESS LT WF	--
9.	PWBA ESS SFP Phaser 6020 and WorkCentre 6025 MFP 110V	604K 92520
10.	--	--
11.	GUIDE HARNESS MSI	--

PL 7.2 Electrical (2/2)

(J202)
SM2
SM2
14 SM2
2
SM2
12
11
(J22)
(P202)
(P206)
SM2
1
SM2
SM2
SM2
(J401)
(P200)
(J17)
(J402)
(P201)
SM2
13
ST1
(P204)
(J21)
ST1
ST1
(P205)
(J210)
ST1
(P210)
3
ST1
ST1

*: Not in used.
(P16)
(P10)
(P15)*
(P19)
(P20)
(P13)
(P25)
(P23)
(P14)
(P22)
(P17)
(P12)
(P21)
(P18)
(P26)
[Ref PL7.2.2]

SM2

Front

SM2
5
SM2

(J200)

SM5
6

7
ST1
ST1
8
ST1
9
10
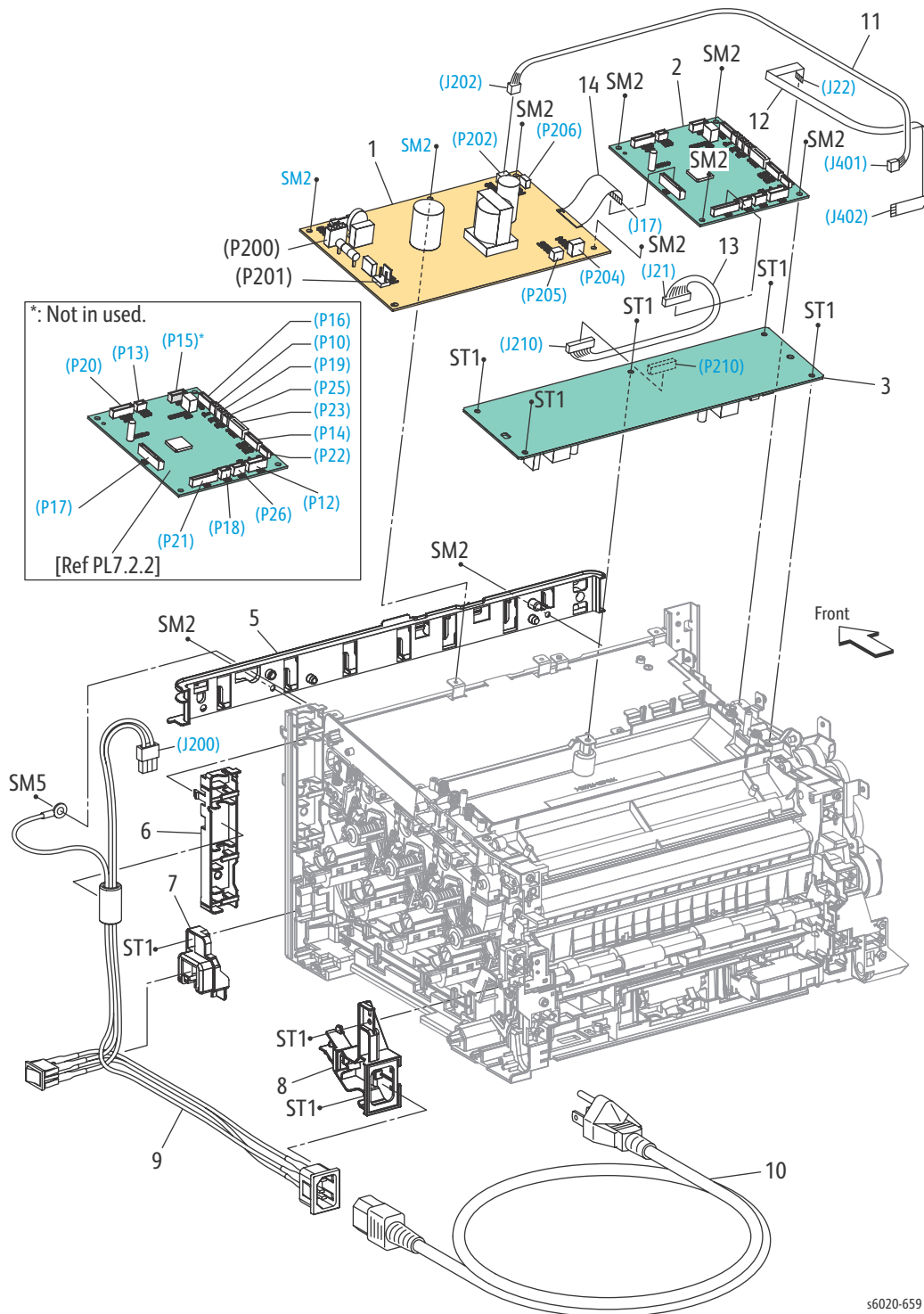
s6020-659

PL Item	Part Name	Part Number
1a.	PWBA LVPS 100V	105K 31173
1b.	PWBA LVPS 200V	105K 31183
2	PWBA MCU MC02KC	960K 77511
3.	PWBA HVPS	105K 23996
4.	--	--
5.	GUIDE HARNESS FRONT	--
6.	GUIDE HARNESS AC	--
7.	HOLDER SW SFP	--
8.	GUIDE HARNESS INLET	--
9.	HARNESS ASSY INLET SFP (AC INLET-MAIN SW,J200)	--
10.	POWER CORD 110V	--
10.	POWER CORD 220V	
11.	HARNESS ASSY LVES (J202-J401)	--
12.	FFC ASSY ESS (J22-J402)	--
13.	HARNESS ASSY HVPS (J21-J210)	962K 79910
14.	FFC ASSY MCLV	--

Phaser 6022

PL1.1 Covers

2

3 (with 14)

14

4

5

6

7

1 (with 3,14,15,98)

SM2

98

ST1

ST1

ST1

ST1

SM2

8 (with Label)

ST1

10

ST1

ST1

ST1

(J204)

ST1

ST1

9 (with 10)

15

13

16

21

ST1

12

ST1

ST1

11

ST1

18

20

Front

17 (with 18-21)

19
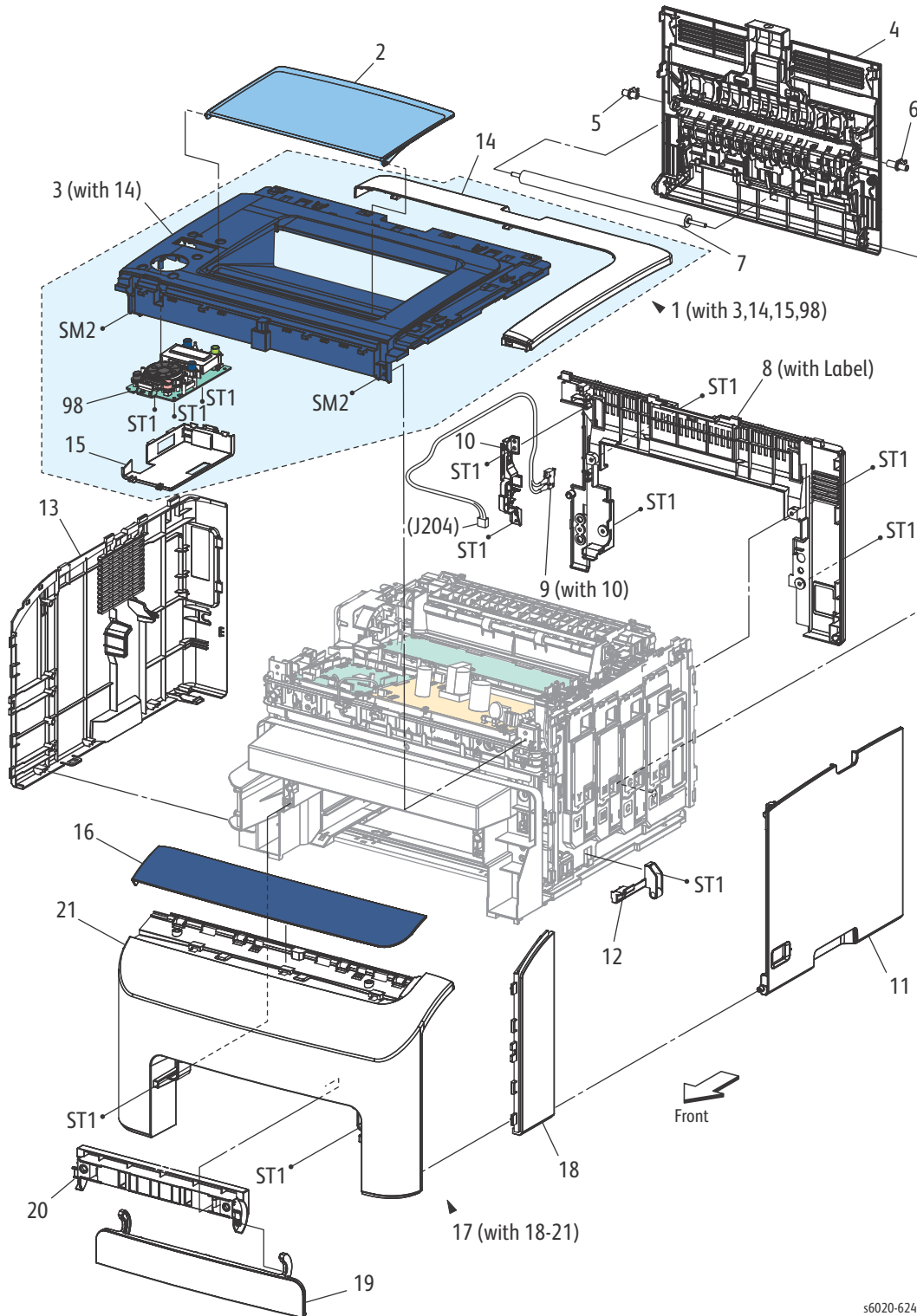
s6020-624

Item	Parts Name	Part Number
1.	COVER ASSY TOP (WITH 3, 14, 15, 98)	848K 89792
2.	TRAY EXTENSION CBV	050E 26771
3.	COVER ASSY SUB TOP (with 14)	REF Only
4.	COVER ASSY REAR	604K 93730
5.	BEARING BTR L	013E 38091
6.	BEARING BTR R	013E 38101
7.	ROLL ASSY BTR	022K 78520
8.	KIT COVER REAR INNER LQ (WITH LABEL)	604K 92630
9.	SWITCH I/L ASSY (with 10)	676K 12440
10.	HOLDER IL REAR	--
11.	COVER WINDOW TNR	822E 10711
12.	HINGE CVR SFP	803E 21931
13.	COVER SIDE L	822E 10672
14.	COVER TOP REAR	--
15.	COVER OPP	--
16.	COVER FRONT TOP SFP	822E10631
17.	COVER ASSY FRONT (WITH 18-21)	848K 89812
18.	COVER FRONT SIDE SFP	822E 10770
19.	COVER JAM CL PE	822E 10650
20.	BRACKET COVER JAM	869E 09731
21.	COVER FRONT SFP	--
98.	PWB ASSY LED	101K 68040

PL 2.1 Feeder (1/3)
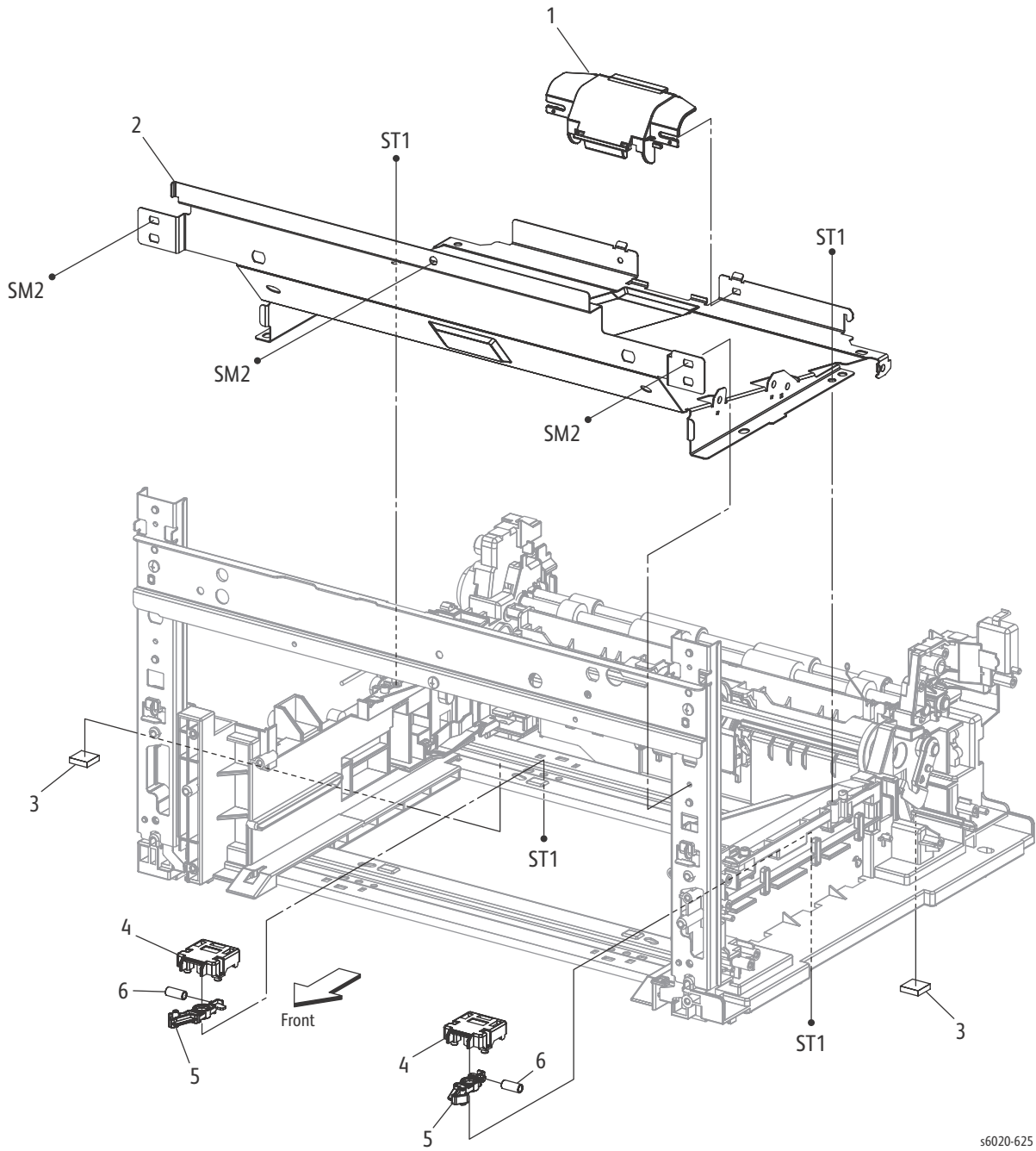
s6020-625

PL Item	Part Name	Part Number
1.	COVER FEED	--
2.	PLATE LOWER	--
3.	FOOT ASSY	--
4.	HOLDER LATCH CST	019E 89730
5.	LATCH CST	--
6.	SPRING LATCH CST	--

PL 2.2 Feeder (2/3)

Registration
Sensor
(PL2.3.4)

No Paper Sensor

(J120) (J121) (J122) (J12)
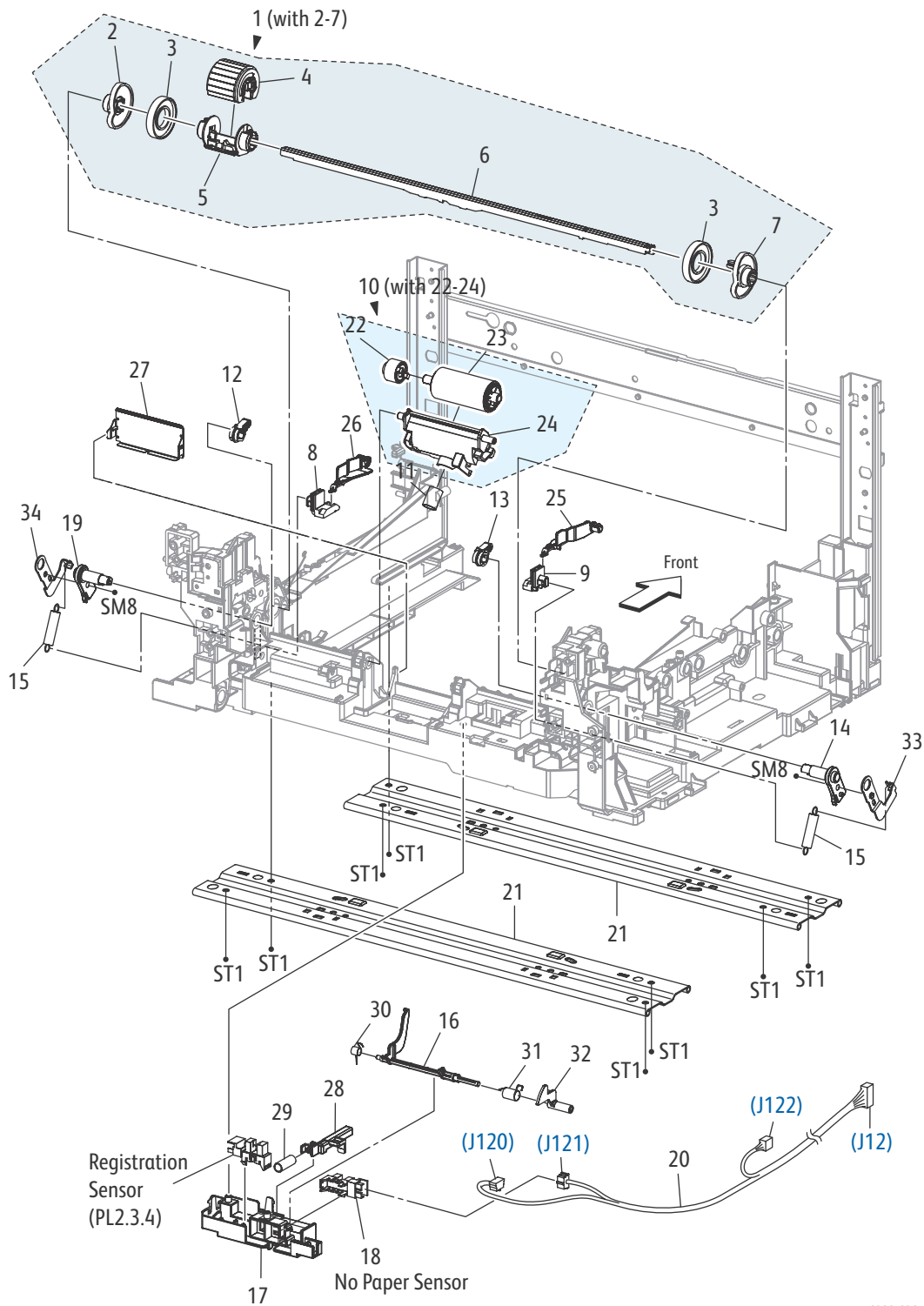
s6020-626

Item	Part Name	Part Number
1.	FEED ASSY MSI (with 2-7)	059K 88840
2	CAM MSI R	--
3	ROLL CORE MSI	--
4	ROLL ASSY FEED	059K 78701
5	HOLDER FEED	--
6	SHAFT FEED	--
7	CAM MSI L	--
8	HOLDER BTM R	--
9	HOLDER BTM L	--
10	HOLDER ASSY SEPARATOR (with 22-24)	019K 16020
11	SPRING SEPARATOR	809E 91661
12	FOLLOWER R	008E 97513
13	FOLLOWER L	008E 97503
14	HOLDER ARM L	019E 89680
15	SPRING NF	809E 91681
16	ACTUATOR NO PAPER	120E 35361
17	COVER NO PAPER	019E 89721
18	SENSOR PHOTO (NO PAPER SENSOR)	930W 00123
19	ARM MSI R	019E 89690
20	HARNESS ASSY RKN SNS (J12-J120,J121,J122)	--
21	PLATE BOTTOM TIE	--
22	CLUTCH ASSY FRICTION	--
23	ROLL ASSY SEPARATOR	--
24	HOLDER SEPARATOR	--
25	ARM BOTTOM IN L	--
26	ARM BOTTOM IN R	--
27	PLATE ASSY SEPARATOR	--
28	SLIDE STOPPER	--
29	SPRING STOPPER	--
30	SPRING ACT NO PAPER MAIN	--
31	SPRING ACT NO PAPER SUB	--
32	ACTUATOR NO PAPER SUB	--
33	PLATE ARM L	--
34	PLATE ARM R	--
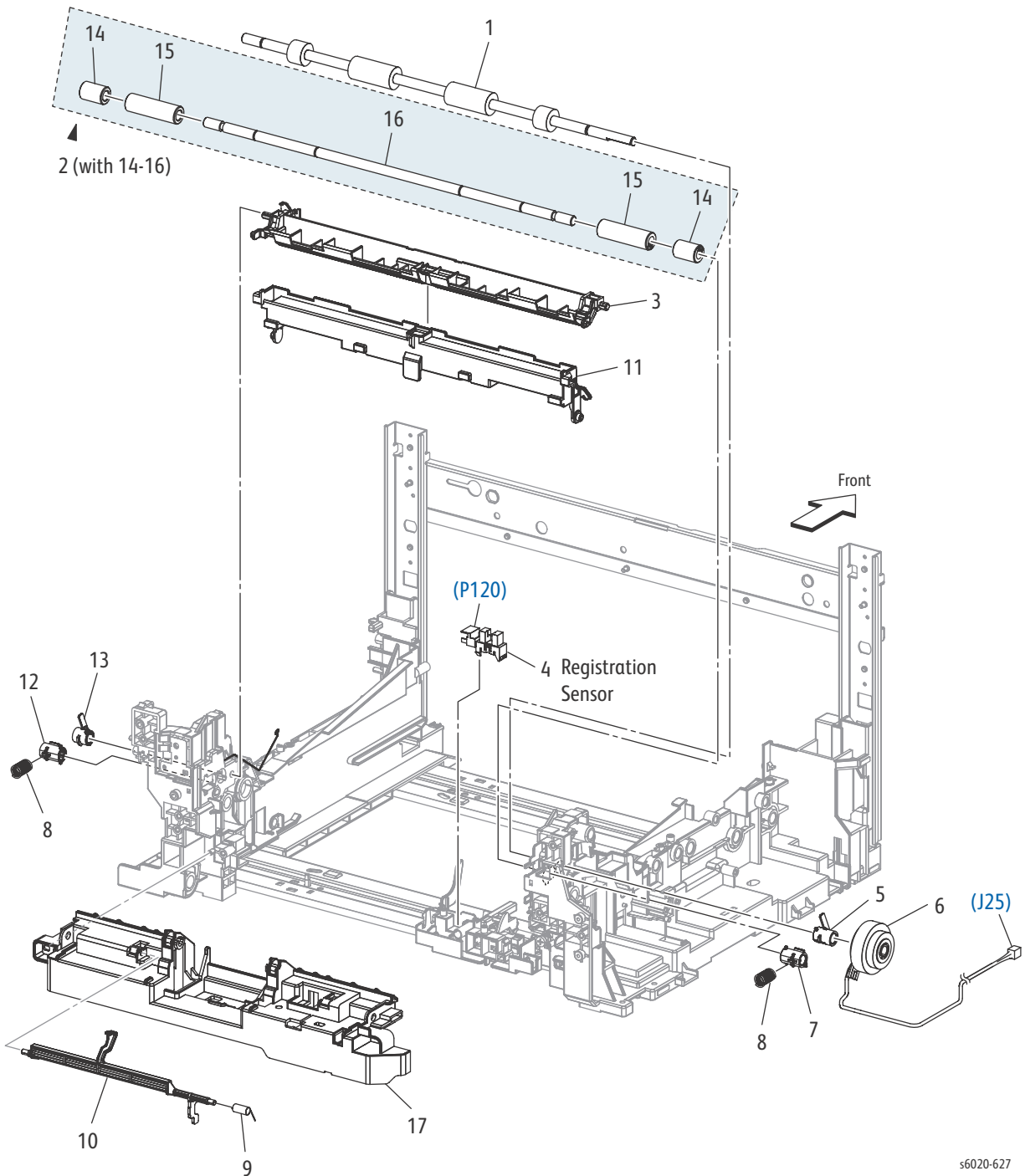
PL 2.3 Feeder (3/3)

14
15
1
2 (with 14-16)
16
15
14
3
11
Front
(P120)
13
4 Registration Sensor
12
8
5
6
(J25)
8
7
8
10
17
9

s6020-627

PL Item	Part Name	Part Number
1.	ROLL REGI	059E 06931
2.	ROLL ASSY PINCH REGI (WITH 14-16)	059K 67751
3.	CHUTE UPPER	054E 55420
4.	SENSOR PHOTO (REGI SENSOR)	930W 00123
5.	BEARING REGI	--
6.	CLUTCH REGI	121K 46582
7.	BEARING REGI METAL	--
8.	SPRING REGI	809E 91700
9.	SPRING ACT REGI	809E 91650
10.	ACTUATOR REGI	120E 35351
11.	CHUTE LOW	--
12.	BEARING REGI METAL EARTH	--
13.	BEARING REGI EARTH	--
14.	ROLL PINCH REGI 10	--
15.	ROLL PINCH REGI 30	--
16.	SHAFT PINCH REGI	--
17.	CHUTE SEPARATOR	--

PL 3.1 Xerographics (1/3)

1 (PL3.2,PL3.3)

(J2) (LPH M)

(J3) (LPH Y)

(J5) (LPH C)

(J4) (LPH K)

ST1

ST1

ST1

ST1

(J14)

Front
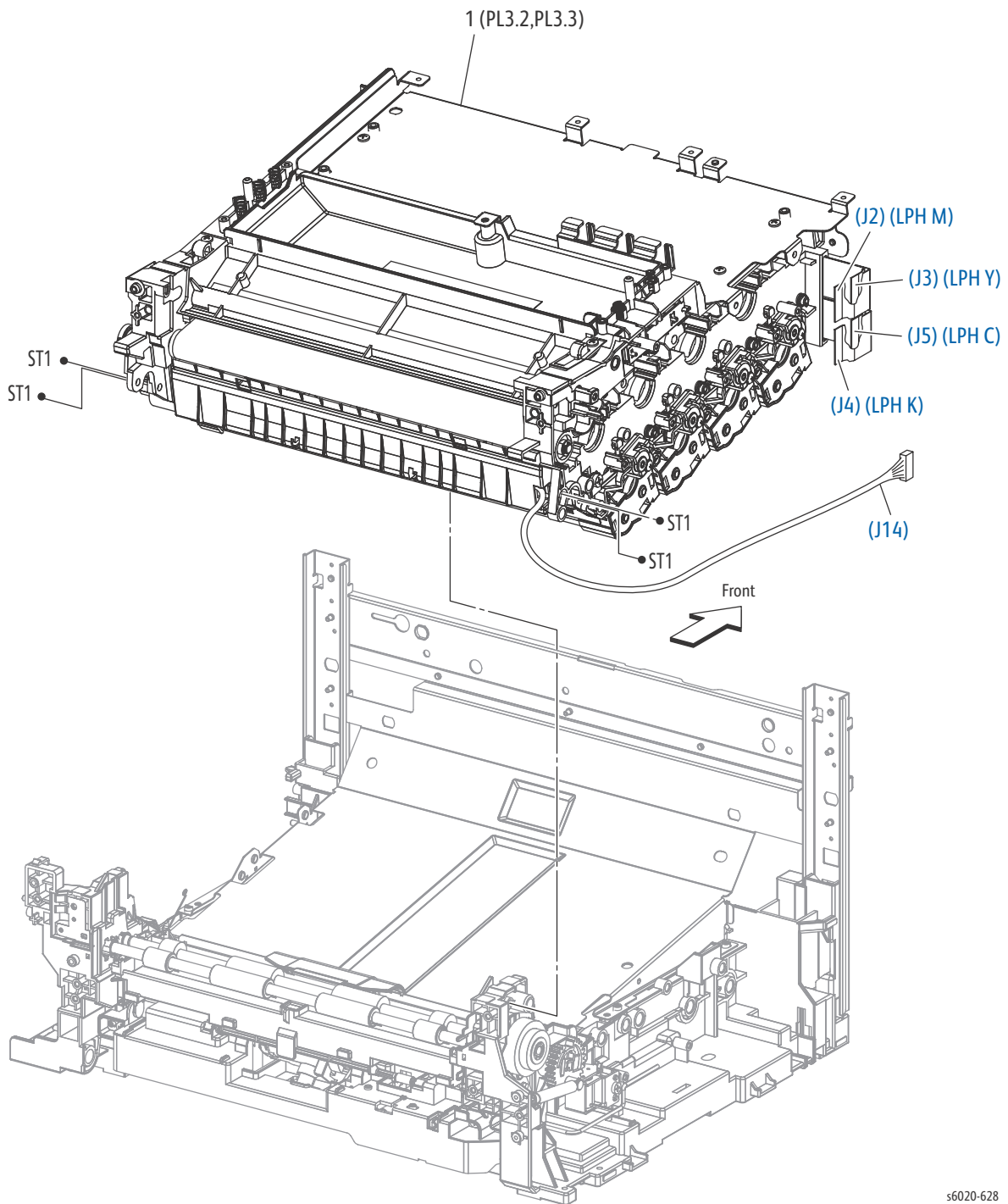
s6020-628

PL Item	Part name	Part Number
1.	XERO DEVE LPH BELT ASSY (PL3.2,PL3.3)	REF Only
99.	BELT TRANSFER	064K 93751

PL 3.2 Xerographics (2/3)

Front

3

4

5
ST1

5
ST1

5
ST1

5
ST1

ST4
2

ST4
2

ST4
2

ST4
2

1

1

1

1

(J14)

[Ref PL3.3]

6

7

8

9

10

10

10

10

10
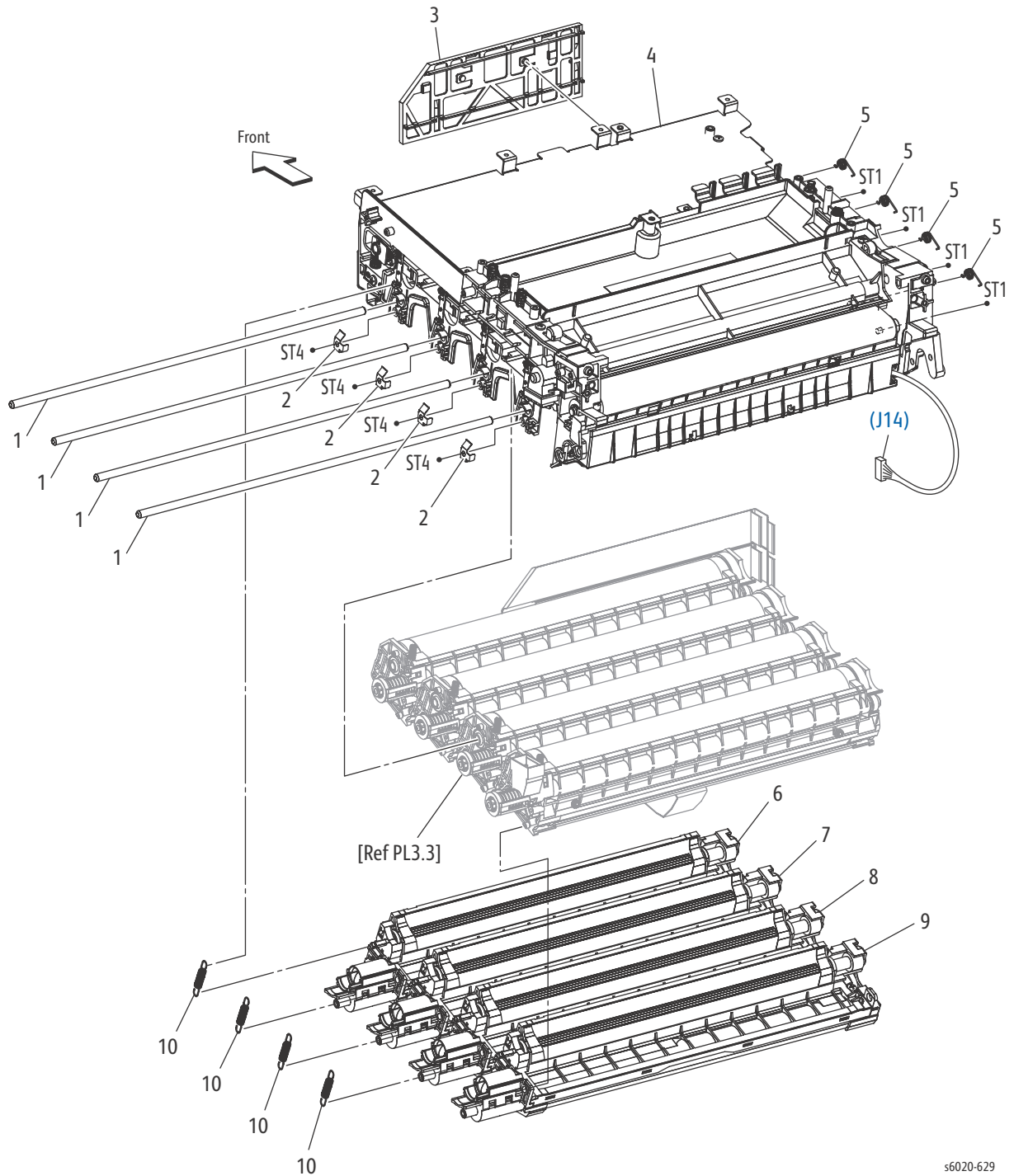
s6020-629

PL Item	Part Name	Part Number
1.	SHAFT DRUM	--
2.	PLATE EARTH DL	--
3.	GUIDE FFC LPH	--
4.	HOUSING ASSY TRANSFER B	--
5.	SPRING DEVE D	809E 91951
6.	HOUSING ASSY DEVE Phaser 6022 and WorkCentre 6027 MFP Y	848K 93080
7.	HOUSING ASSY DEVE Phaser 6022 and WorkCentre 6027 MFP M	848K 93090
8.	HOUSING ASSY DEVE Phaser 6022 and WorkCentre 6027 MFP C	848K 93100
9.	HOUSING ASSY DEVE Phaser 6022 and WorkCentre 6027 MFP K	848K 93110
10.	SPRING DEVE AD	809E 91880

PL 3.3 Xerographics (3/3)

Front

1

2

13

ST4

ST4

ST4

3

(P7)

4

5

1

2

13

ST4

ST4

ST4

3

(P6)

4

5

1

2

13

ST4

ST4

ST4

3

(P9)

4

5

6

2

ST4

3

(J3)

(J2)

ST4

(P8)

4

13

ST4

5

(J5)

(J4)

12

C

11

(J7)

B

10

(J6)

A

9

(J9)

11

8

(J8)

7

s6020-630

PL Item	Part Name	Part Number
1.	HOUSING ASSY XERO HIGH P H V	848K 93440
2.	SPRING-FG PART2	--
3.	SPRING LPH V	--
4.	HEAD ASSY V	130K 79120
5.	SPRING LPH AD PART2	899E 09850
6.	HOUSING ASSY XERO HIGH K	848K 93460
7.	CABLE FFC K KRN	--
8.	CABLE FFC C KRN	--
9.	CABLE FFC M KRN	--
10.	CABLE FFC Y KRN	--
11.	CORE FERRITE	--
12.	TAPE	--
13.	PLATE EARTH LPH	--

PL 4.1 Dispenser

20

1 (with 2-11,18,19)

2

(J13)

3

4

4

4

4

5

ST1

ST1

ST1

6 6 6 6

6

7

7 7 7

7

ST1

ST1

8

(P200)

ST1

(P201)

(A)

ST1

(B)

ST1

9

9

9

10

11 11

11

11 11

11 11

11 11

11

12

ST1

ST1

13

14

15

16

17

(J206)

18

(J20)

Front

(J208)

19

(J201)

(J200)

(A)

(B)

s6020-655

PL Item	Parts name	Part Number
1.	DISPENSER ASSY (with 2-11, 18, 19)	--
2.	HARNESS ASSY DCKR (J13-TONER CRUM Y,M,C,K)	--
3.	KEY HW K	029E 53810
4.	KEY HW YMC	029E 53800
5.	FRAME DISP	--
6.	GEAR IDLER 23	807E 32140
7.	CLUTCH ASSY ONEWAY	005K 10071
8.	CONDUCTOR GND MOT	--
9.	MOTOR ASSY DISP	127K 61370
10.	FRAME MOTOR	--
11.	GEAR IDLER 34	807E 32130
12.	COVER CONNECTOR	822E 13060
13.	TONER CARTRIDGE Y START	--
14.	TONER CARTRIDGE M START	--
15.	TONER CARTRIDGE C START	--
16.	TONER CARTRIDGE K START	--
17.	CLEANER ASSY	042K 94281
18.	HARNESS ASSY FSR TEST (J206-J208)	--
19.	HARNESS ASSY DISPENSE MOT (J20-J200, J201)	--
20.	GUIDE HARNESS Fuser	--

PL 5.1 Fusing

s6020-656

PL Item	Part Name	Part Number
1	Fuser Phaser 6022 and WorkCentre 6027 MFP 110V	126K 34981
1	Fuser Phaser 6022 and WorkCentre 6027 MFP 220V	126K 34991

PL 6.1 Drive

Front

(P10) (P16)

1

ST1

SM3

SM3

(J16)

SM3

ST1

2

ST1

SM3

ST1

3

ST1

4

ST1

SM2

SM2

SM2

SM2

(J160)

8

SM2

7

9

SM3

(P160)

5

SM3

6

SM3

(J10)

ST1

10

ST1

ST1

(J19)

SM3

ST1

K Mode
Switching Sensor

s6020-631

PL Item	Part Name	Part Number
1.	DRIVE ASSY MU	--
2.	DRIVE ASSY MOT Phaser 6022 and WorkCentre 6027 MFP	007K 20960
3.	GEAR F3	807E 32381
4.	GEAR PH3	807E 47660
5.	DRIVE ASSY PH	007K 20970
6.	DRIVE ASSY DEVE	007K 17088
7.	HARNESS ASSY MAIN MOT (J16-J160)	--
8.	GEAR FEED	--
9.	SPRING FEED	--
10.	SOLENOID FEED PTH	121E 22671

PL 7.1 Electrical (1/2)

(P205)

(P23)

Front

1

2

(J205)

6

SM2

(J23)

(J1)

5

(P2)

4

(P1)

(P3)

SM2

3

7

(P1)

(P5)

(P112)

SM2

SM2

(P4)

SM2

(J1)

SM2

8

SM2

9

(P9)

(P8)

SM2

(P11)

SM2

SM2

SM7

(J10)

SM2

SM2

SM2

SM2

s6020-632

10

PL Item	Part Name	Part Number
1.	DUCT FAN	--
2.	FAN MAIN	127E 86170
3.	GUIDE HARNESS DRIVE	--
4.	PLATE BITZ	--
5.	PWB ASSY TOP TOKI 2	960K 76820
6.	FFC ASSY LIGHT BIZ (J1-J23)	962K 79920
7.	HARNESS ASSY TOKI (P1-P112)	962K 81970
8.	PLATE ESS IOT	--
9.	PWBA ESS SFP Phaser 6022 and WorkCentre 6027 MFP	960K 92540
10.	GUIDE HARNESS MSI	--
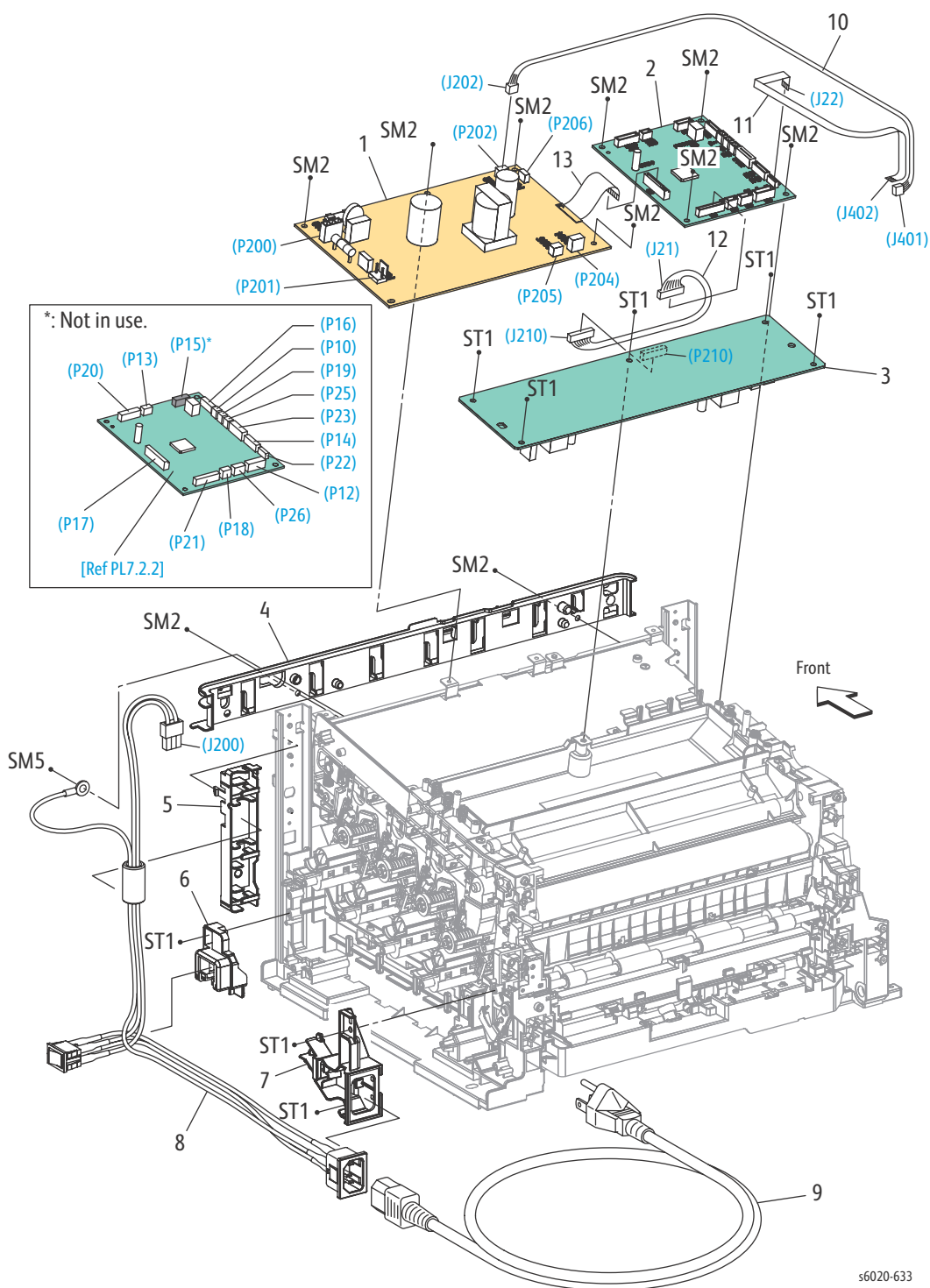
PL 7.2 Electrical (2/2)

*: Not in use.

[Ref PL7.2.2]

Front

s6020-633

PL Item	Part Name	Part Number
1.	PWBA LVPS 100V	105K 31173
1.	PWBA LVPS 200V	105K 31183
2.	PWBA MCU MC02KC	960K 77511
3.	PWBA HVPS	105K 23996
4.	GUIDE HARNESS FRONT	--
5.	GUIDE HARNESS AC	--
6.	HOLDER SW SFP	--
7.	GUIDE HARNESS INLET	--
8.	HARNESS ASSY INLET SFP (AC INLET-MAIN SW,J200)	--
9.	POWER CORD 110V	--
9.	POWER CORD 220V	
10.	HARNESS ASSY LVES (J202-J401)	--
11.	FFC ASSY ESS (J22-J402)	--
12.	HARNESS ASSY HVPS (J21-J210)	962K 79910
13.	FFC ASSY MCLV	--

PL 9.1 Cassette Assembly
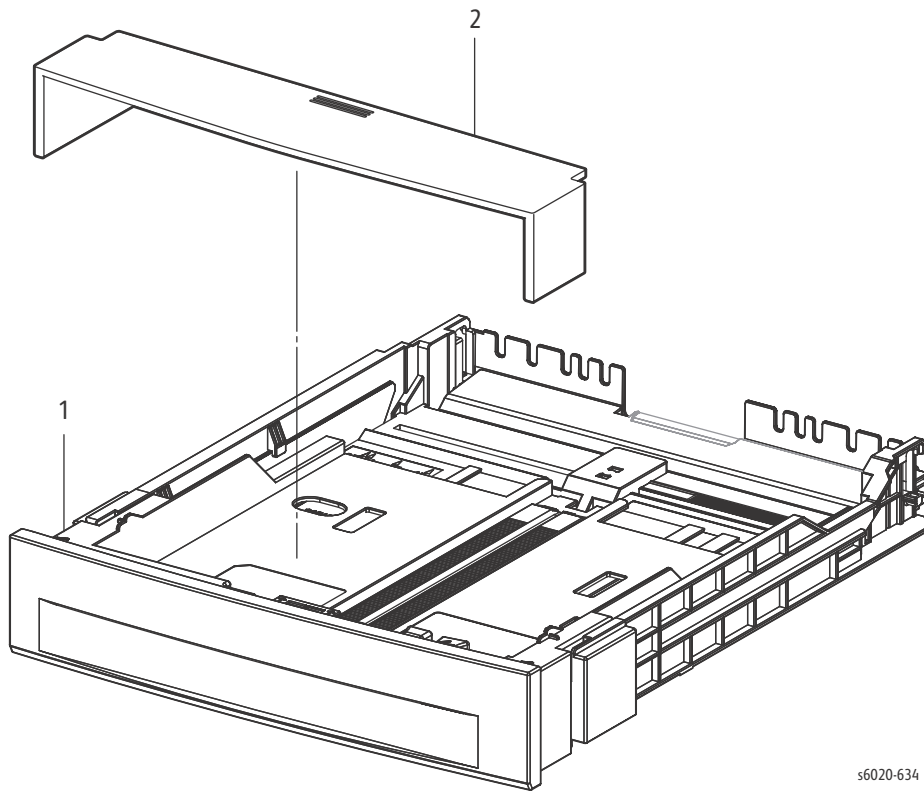
s6020-634

PL Item	Part Name	Part Number
1.	KIT CASSETTE ASSY	640K 92642
2.	COVER CST	822E 05630

WorkCentre 6025 MFP

PL1.1 Covers

33 (with 23-25)

23

24

25

ST1

34 (with 23,24,26)

23

24

26

SM2

ST1

7

6

8

4

SM2

9

1 (with 2,4,27)

SM2

27

2

SM2

98 (with 2,27)

21

ST1

ST1

ST1

10

ST1

ST1

ST1

13

ST1

ST1

(J204)

12(with 13)

35

37

37

36

18

ST1

ST1

38 (with 18,35-37)

16

ST1

15

Front

17
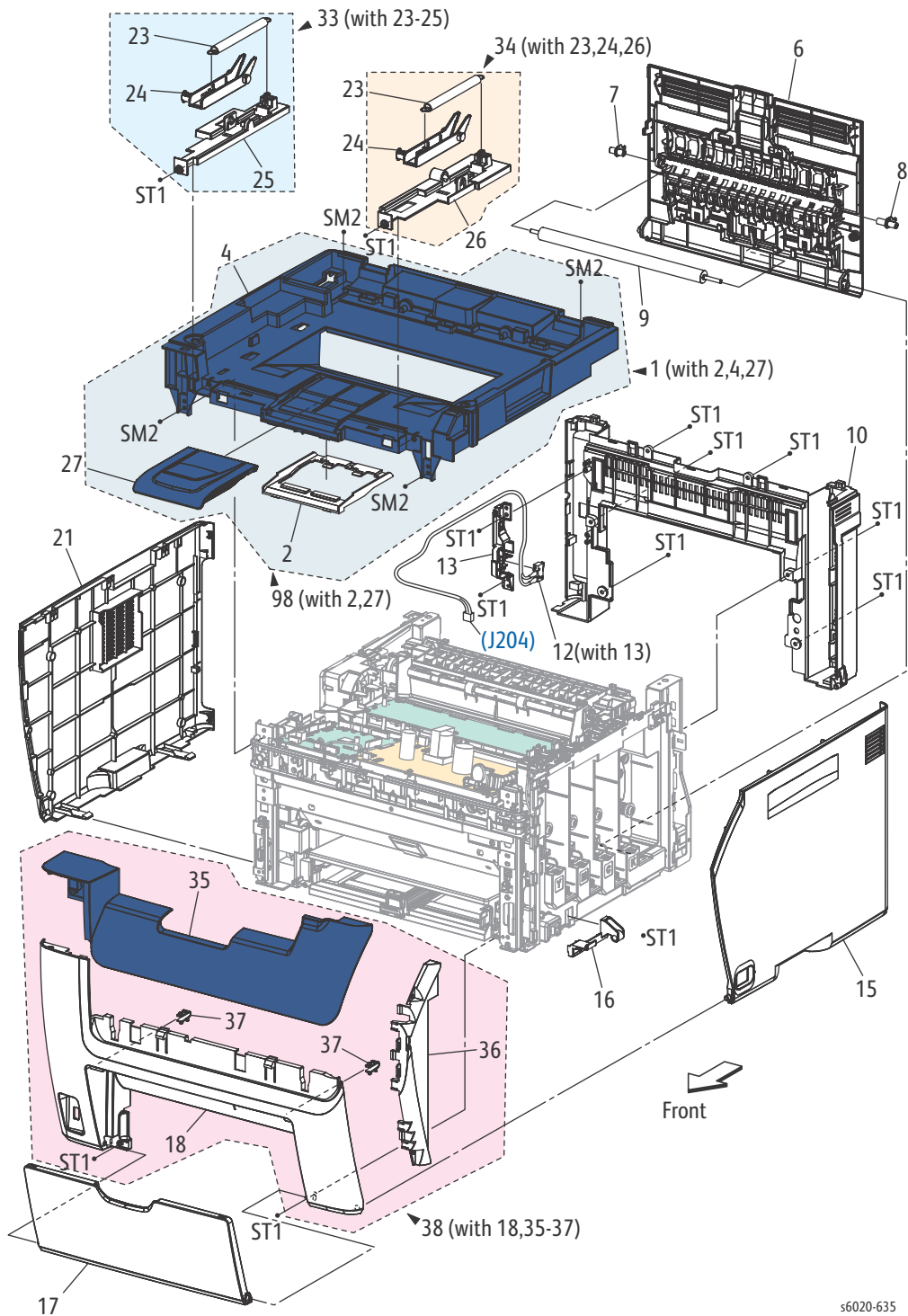
s6020-635

Item	Part Name	Part Number
1.	COVER ASSY TOP AIO (WITH 2, 4, 27)	--
2.	COVER EXTENSION AIO V	--
3.	--	--
4.	COVER TOP AIO	848K90550
5.	--	--
6.	COVER ASSY REAR AIO LQ	604K 93720
7.	BEARING BTR L	013E 38091
8.	BEARING BTR R	013E 38101
9.	ROLL ASSY BTR	022K 78520
10.	KIT COVER REAR INNER AIO 3inLQ	604K 92590
11.	--	--
12.	SWITCH I/L ASSY (with 13)	676K 12440
13.	HOLDER IL REAR	--
14.	--	--
15.	COVER WINDOW TNR AIO LQ	848E 67463
16.	HINGE CVR AIO	--
17.	KIT COVER MSI AIO LQ	604K 92600
18.	COVER FRONT LOWER AIO VB	--
19.	--	--
20.	--	--
21.	COVER SIDE L AIO	848E 67452
22.	--	--
23.	SPRING IIT	--
24.	ARM IIT V	--
25.	HOLDER ARM L V	--
26.	HOLDER ARM R V	--
27.	TRAY EXTENSION AIO	--
28.	--	--
29.	--	--
30.	--	--
31.	--	--
32.	--	--
33.	HOLDER ASSY ARM L (with 23-25)	019K 11690
34.	HOLDER ASSY ARM R (with 23,24,26)	019K 11700
35.	COVER FRONT UPPER AIO	--
36.	COVER FRONT INNER AIO	--
37.	LATCH MSI	--
38.	KIT COVER FRONT UPPER AIO (WITH 18, 35-37)	604K 92610

PL 2.1 Feeder (1/3)

s6020-636
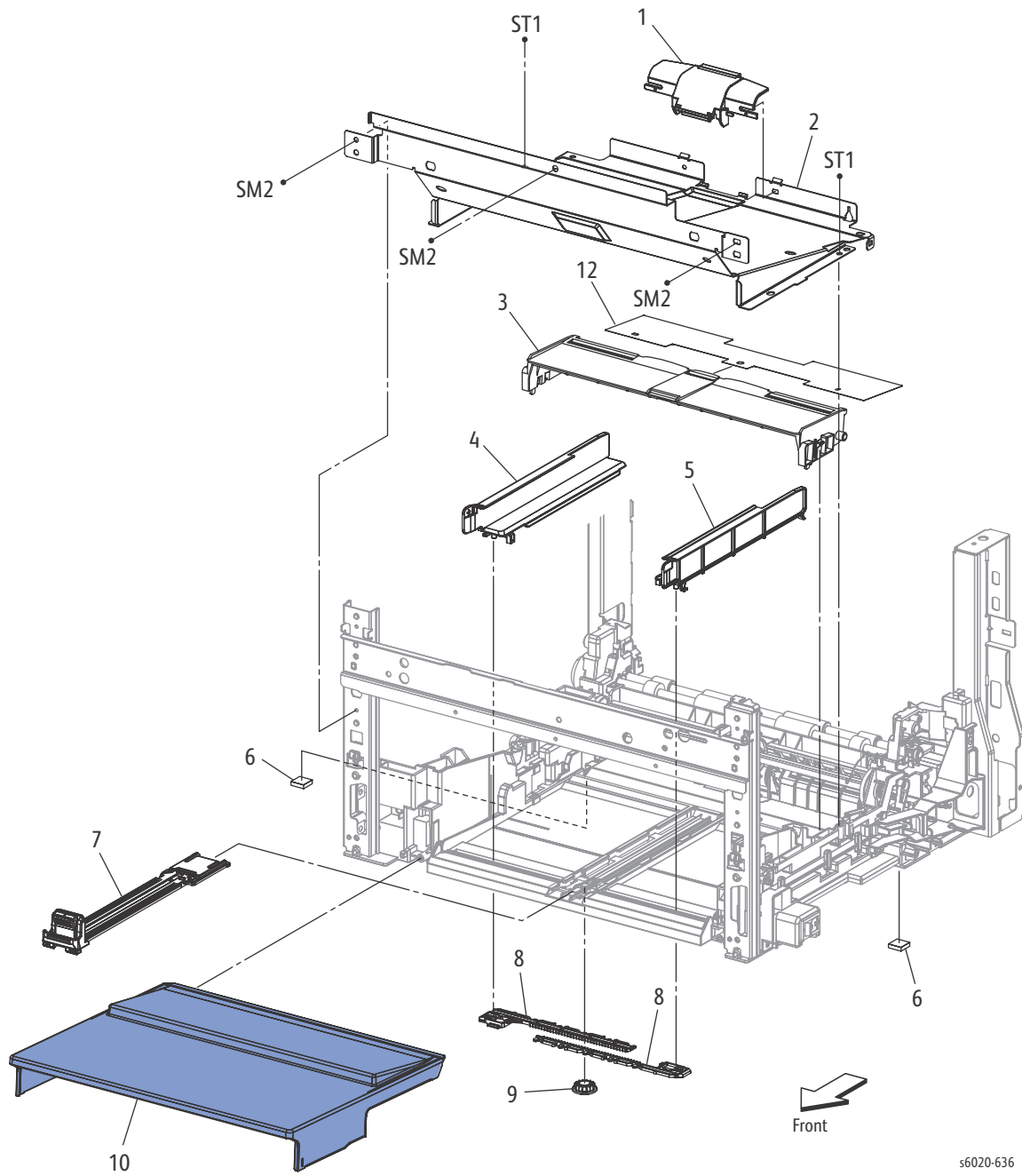
PL Item	Part name	Part Number
1.	COVER FEED	--
2.	PLATE LOWER	--
3.	TRAY PSI BASE	--
4.	GUIDE SIDE MSI L	--
5.	GUIDE SIDE MSI R	--
6.	FOOT ASSY	--
7.	TRAY ASSY MSI EXTENSION X V	050K 66341
8.	RACK GUIDE SIDE V	--
9.	GEAR PINION	--
10.	TRAY ASSY PSI COVER	050K 66350
11.	--	--
12.	GUIDE PAPER PSI	038E 39310

PL 2.2 Feeder (2/3)

s6020-637
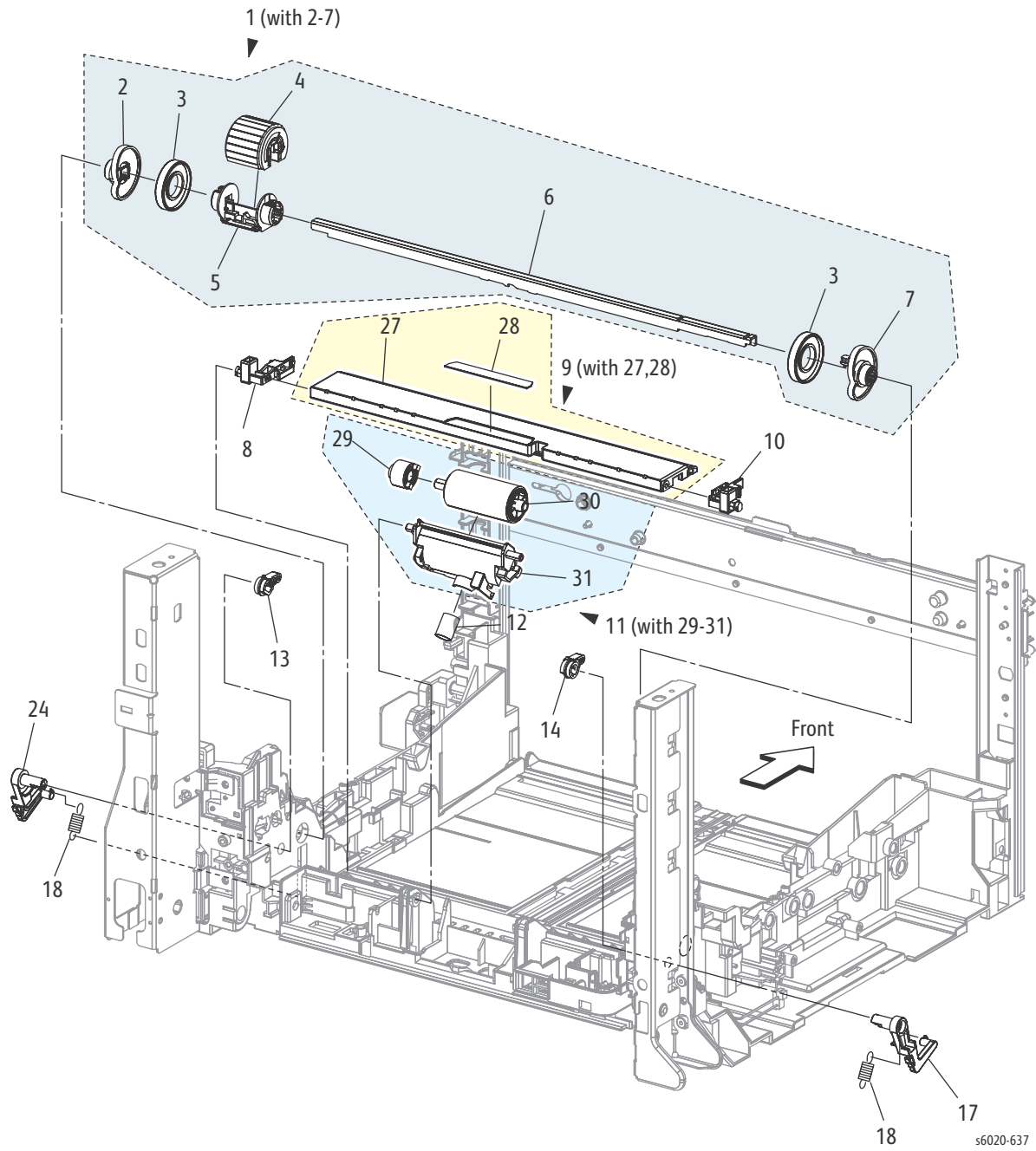
Item	Part Name	Part Number
1.	ROLL ASSY FEED MSI (with 2-7)	059K 75531
2.	CAM MSI R	--
3.	ROLL CORE MSI	--
4.	ROLL ASSY FEED	059K 75520
5.	HOLDER FEED	--
6.	SHAFT FEED	--
7.	CAM MSI L	--
8.	HOLDER BTM R	--
9.	PLATE ASSY BOTTOM (with 27,28)	--
10.	HOLDER BTM L	--
11.	HOLDER ASSY SEPARATOR (with 29-31)	019K 11790
12.	SPRING SEPARATOR	809E 91661
13.	FOLLOWER R	008E 97513
14.	FOLLOWER L	008E 97503
15.	--	--
16.	--	--
17.	ARM MSI L	031E 12020
18.	SPRING NF	809E 91681
19.	--	--
20.	--	--
21.	--	--
22.	--	--
23.	--	--
24.	ARM MSI R	031E 98390
25.	--	--
26.	--	--
27.	PLATE BOTTOM	--
28.	PAD MSI	--
29.	CLUTCH ASSY FRICTION	--
30.	ROLL ASSY SEPARATOR	--
31.	HOLDER SEPARATOR	--

PL 2.3 Feeder (3/3)

s6020-638
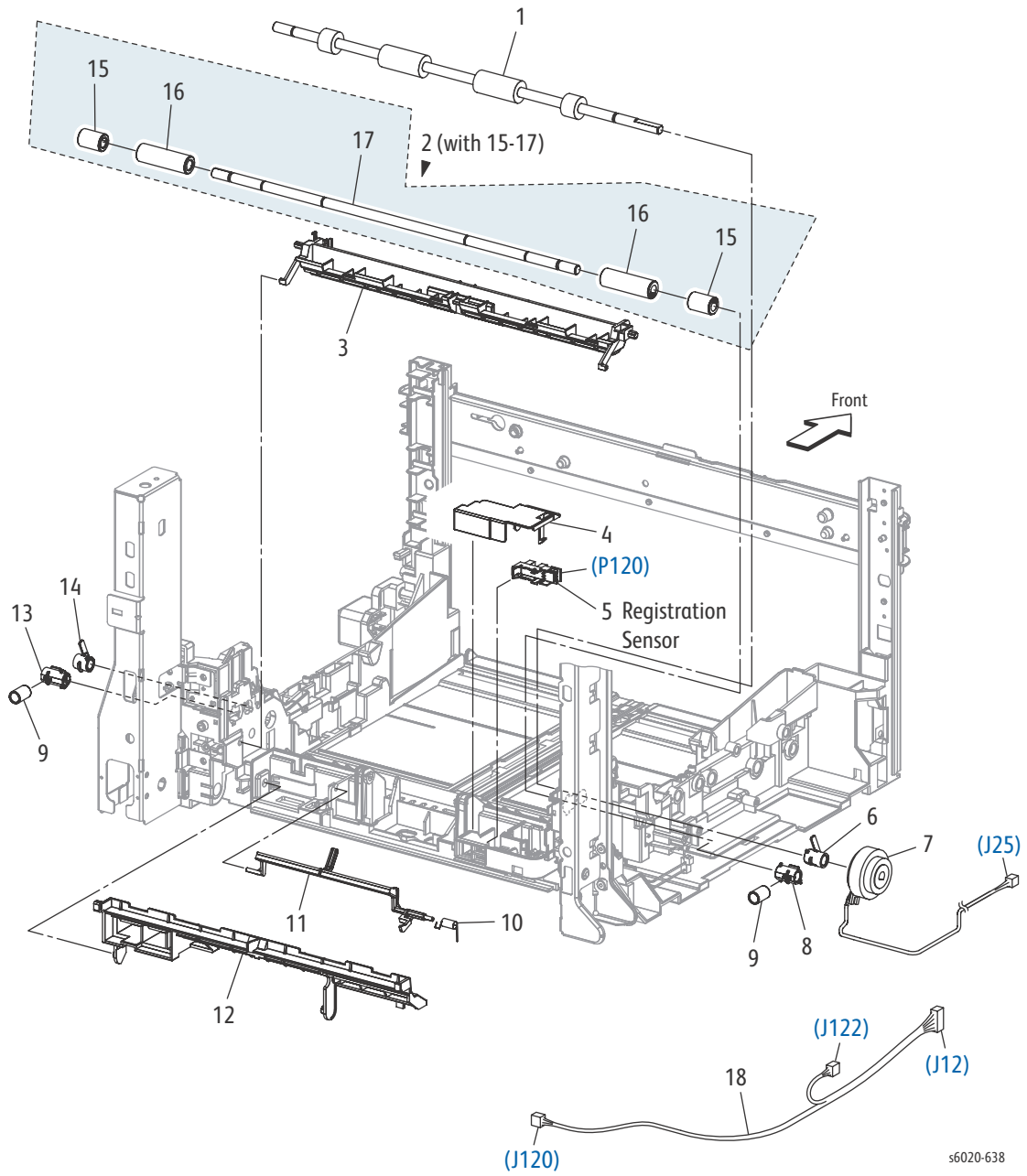
PL Item	Part Name	Part Number
1.	ROLL REGI	059E 06931
2.	ROLL ASSY PINCH REGI (with 15-17)	059K 67751
3.	CHUTE MSI	054E 42892
4.	COVER SENSOR	--
5.	SENSOR PHOTO (REGI SENSOR)	930W 00123
6.	BEARING REGI	--
7.	CLUTCH REGI	121K 46582
8.	BEARING REGI METAL	--
9.	SPRING REGI	--
10.	SPRING ACT REGI	809E 91650
11.	ACTUATOR REGI	120E 32561
12.	CHUTE LOW	--
13.	BEARING REGI METAL EARTH	--
14.	BEARING REGI EARTH	--
15.	ROLL PINCH REGI 10	--
16.	ROLL PINCH REGI 30	--
17.	SHAFT PINCH REGI	--
18.	HARNESS ASSY RK SNS (J12-J120, J122)	--

PL 3.1 Xerographics (1/3)

1 (PL3.2,PL3.3)

(J2) (LPH M)

(J3) (LPH Y)

(J5) (LPH C)

(J4) (LPH K)

ST1

ST1

ST1

ST1

(J14)

Front
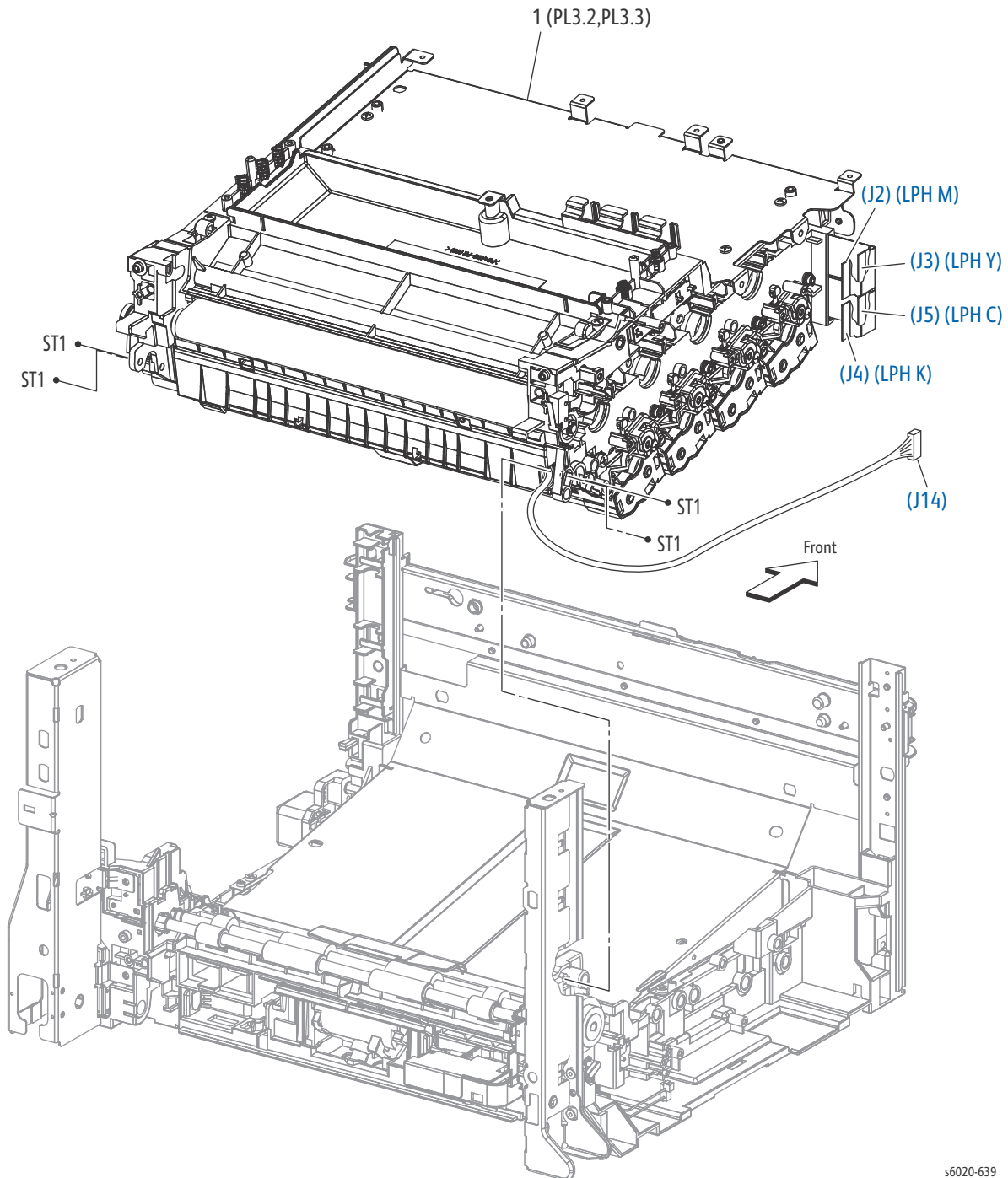
s6020-639

PL Item	Part name	Part Number
1.	XERO DEVE LPH BELT ASSY (PL3.2,PL3.3)	REF Only
99.	BELT TRANSFER	064K 93751

PL 3.2 Xerographics (2/3)

Front

4

5
ST1

5
ST1

5
ST1

5
ST1

ST4
2

ST4
2

ST4
2

ST4
2

1

1

1

1

(J14)

[Ref PL3.3]

6

7

8

9

10

10

10

10

s6020-640

PL Item	Part Name	Part Number
1.	SHAFT DRUM	--
2.	PLATE EARTH DL	--
3.	--	--
4.	HOUSING ASSY TRANSFER B	--
5.	SPRING DEVE D	809E 91951
6.	HOUSING ASSY DEVE Y	848K 92910
7.	HOUSING ASSY DEVE M	848K 92920
8.	HOUSING ASSY DEVE C	848K 92930
9.	HOUSING ASSY DEVE K	848K 92940
10.	SPRING DEVE AD	809E 91880

PL 3.3 Xerographics (3/3)

Front

1

2

ST4

3

(P7) C

ST4

4

5

1

2

ST4

3

(P6) B

ST4

4

5

1

2

ST4

3

(P9) A

ST4

4

5

6

2

ST4

3

(P8)

4

(J3)

(J2)

(J5)

(J4)

ST4

5

12

C

11

(J7) B

10

(J6) A

9

(J9)

11

8

(J8)

7

s6020-641

PL Item	Part Name	Part Number
1.	HOUSING ASSY XERO HIGH P HIGH	848K 93180
2.	SPRING FG PART2	809E 93301
3.	SPRING LPH V	809E 93280
4.	HEAD ASSY V	130K 79120
5.	SPRING LPH AD PART2	899E 08490
6.	HOUSING ASSY XERO HIGH K	848K 93200
7.	CABLE FFC K KRN	--
8.	CABLE FFC C KRN	--
9.	CABLE FFC M KRN	--
10.	CABLE FFC Y KRN	--
11.	CORE FERRITE	--
12.	TAPE	--

PL 4.1 Dispenser

1 (with 2-11,18,19)

2

3

4

4

4

4

(J13)

5

ST1

ST1

ST1

ST1

ST1

12

ST1

16

13

14

15

17

6 6 6 6

6

7

7 7 7

7

8

ST1

(P200)

(P201)

A

ST1

B

ST1

9

9

9

10

11 11

11 11

11 11 11

11

(J206)

(J20)

18

Front

(J208)

(J200)

19

(J201)

A

B

s6020-642

PL Item	Parts name	Part Number
1.	DISPENSER ASSY (with 2-11, 18, 19)	--
2.	HARNESS ASSY DCKR (J13-TONER CRUM Y,M,C,K)	--
3.	KEY HW K	029E 53810
4.	KEY HW YMC	029E 53800
5.	FRAME DISP	--
6.	GEAR IDLER 23	807E 32140
7.	CLUTCH ASSY ONEWAY	005K 10071
8.	CONDUCTOR GND MOT	--
9.	MOTOR ASSY DISP	127K 61370
10.	FRAME MOTOR	--
11.	GEAR IDLER 34	807E 32130
12.	COVER CONNECTOR	822E 13060
13.	TONER CARTRIDGE Y START	--
14.	TONER CARTRIDGE M START	--
15.	TONER CARTRIDGE C START	--
16.	TONER CARTRIDGE K START	--
17.	CLEANER ASSY	042K 94281
18.	HARNESS ASSY FSR TEST (J206-J208)	--
19.	HARNESS ASSY DISPENSE MOT (J20-J200,J201)	--

PL 5.1 Fusing

(J201)

(J18) (J26)

ST10

1

ST10

Front
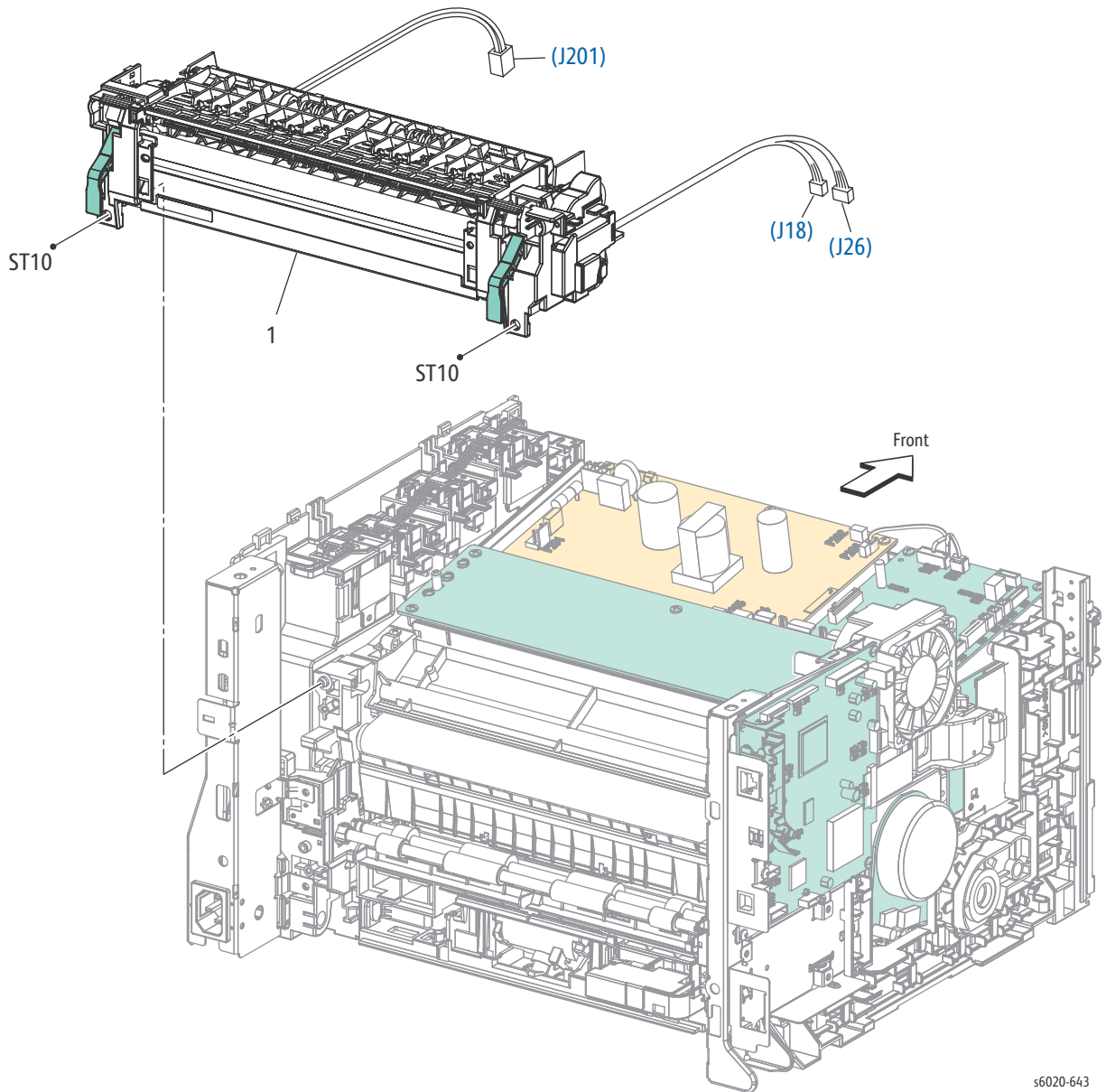
s6020-643

PL Item	Part Name	Part Number
1	Fuser 110V LQ	126K34981
1	Fuser 220V LQ	126K34991

PL 6.1 Drive

Front

1

ST1

SM3

SM3

ST1

(J16)

SM3

ST1

2

ST1

3

ST1

SM2

ST1

4

ST1

SM2

SM2

(J160)

SM2

(P160)

5

SM3

SM3

6

SM3

(J10)

ST1

ST1

SM3

8

K Mode
Switching Sensor

9

(P122)

(J19)

ST1

10
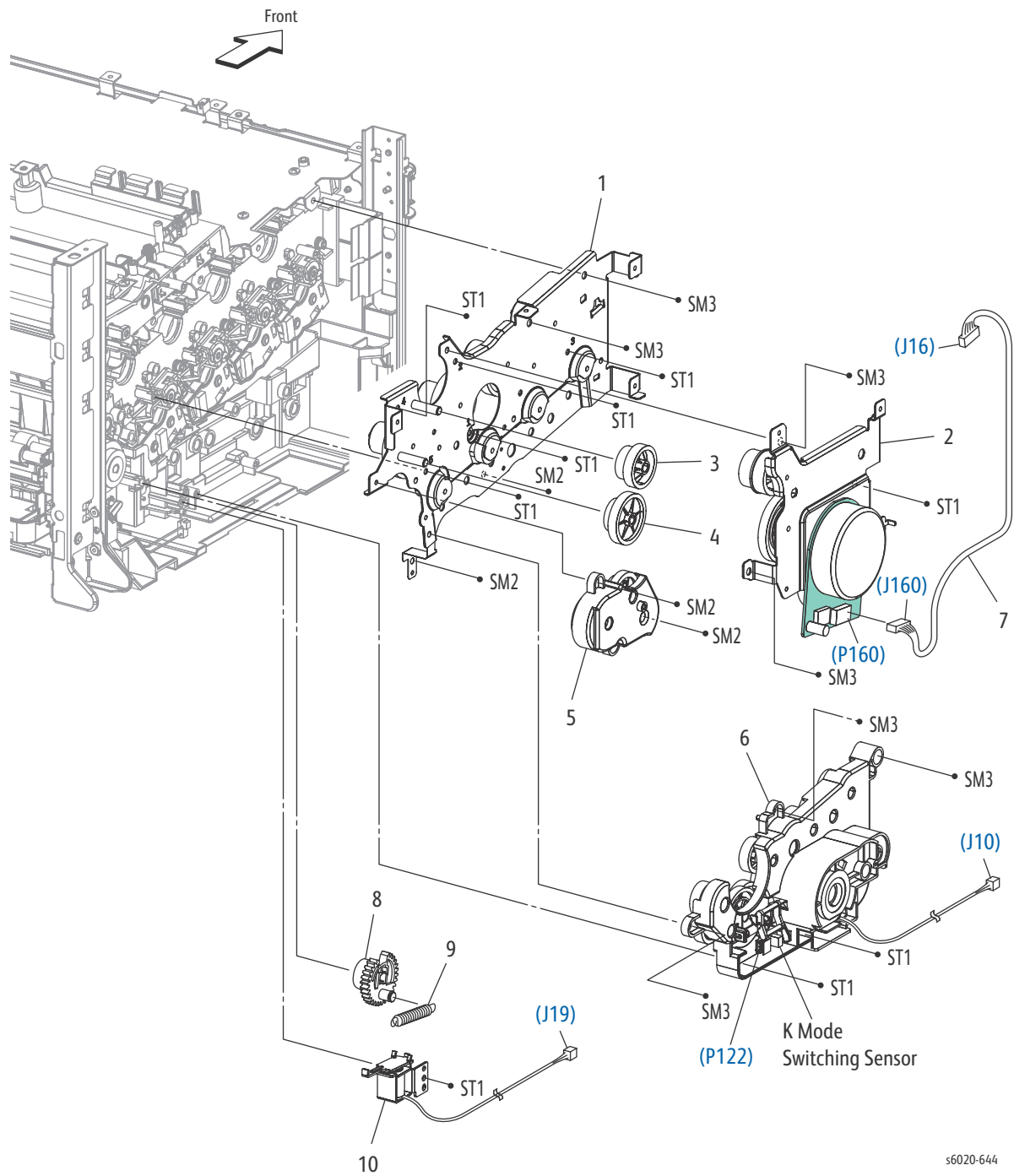
s6020-644

PL Item	Part Name	Part Number
1.	DRIVE ASSY MU V	--
2.	DRIVE ASSY MOT V	007K 17073
3.	GEAR F3 V	807E 32381
4.	GEAR PH3 V	807E 32391
5.	DRIVE ASSY PH V	007K 17092
6.	DRIVE ASSY DEVE V	007K 17088
7.	HARNESS ASSY MAIN MOT (J16-J160)	--
8.	GEAR FEED	--
9.	SPRING FEED	--
10.	SOLENOID FEED MSI	121E 22671

PL 7.1 Electrical (1/2)
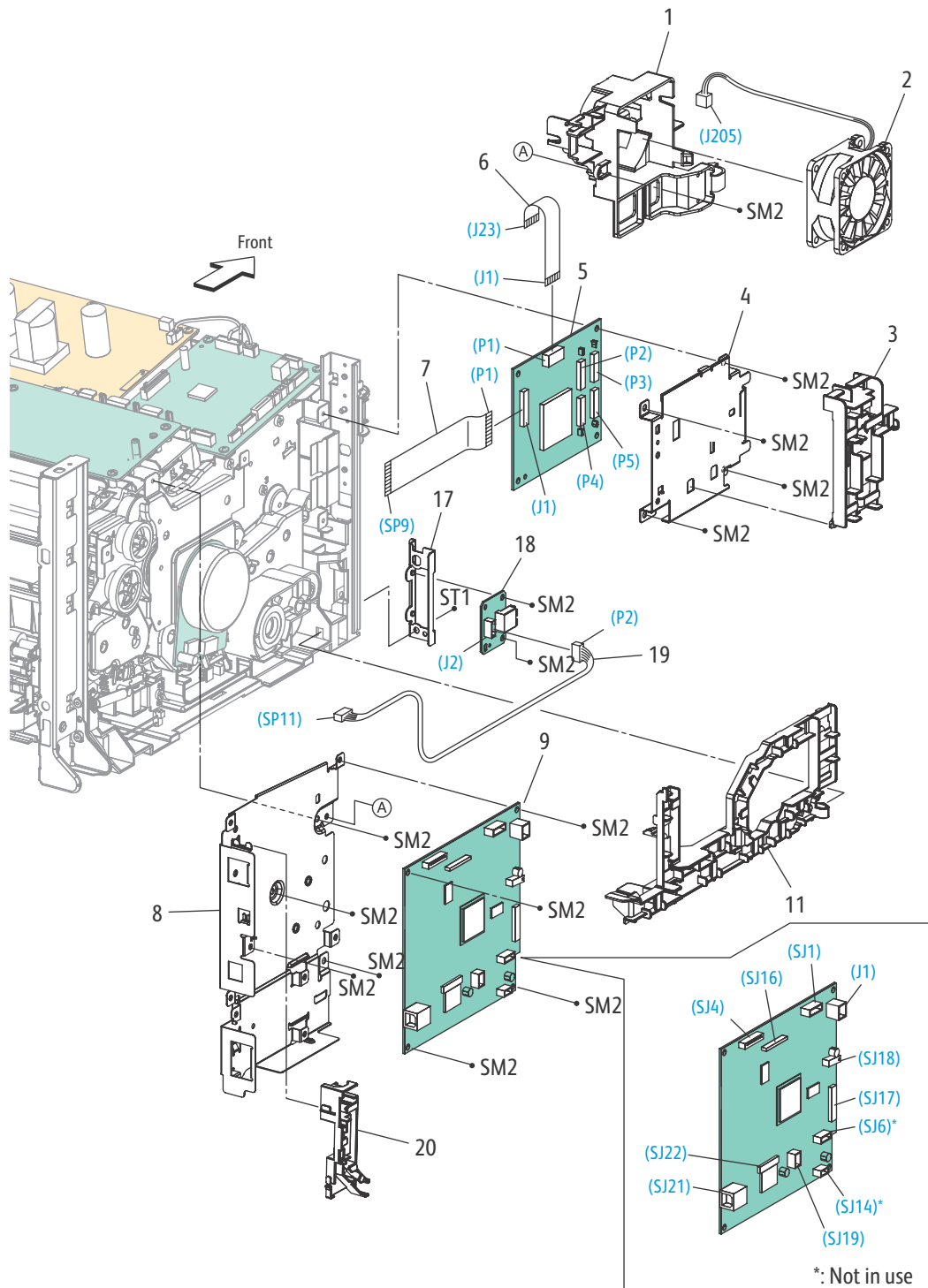
s6020-645

PL Item	Part Name	Part Number
1.	DUCT FAN	--
2.	FAN MAIN	127E 86170
3.	GUIDE HARNESS DRIVE	--
4.	PLATE BITZ	--
5.	PWB ASSY TOP TOKI 2	960K 76820
6.	FFC ASSY LIGHT BIZ (J1-J23)	962K 79920
7.	HARNESS ASSY TOKI (P1-P112)	962K 81970
8.	PLATE ESS AIO	--
9.	PWBA ESS AIO 3IN1	604K 92530
10.	--	--
11.	GUIDE HARNESS MSI	--
12.	--	--
13.	--	--
14.	--	--
15.	--	--
16.	--	--
17.	FRONT BRACKET USB	--
18.	PWB ASSY USB FRONT	960K 47000
19.	HARNESS ASSY USB FRONT (P2-SP11)	--
20.	GUIDE HARNESS ESS	--

PL 7.2 Electrical (2/2)

*: Not in used.

[Ref PL7.2.2]
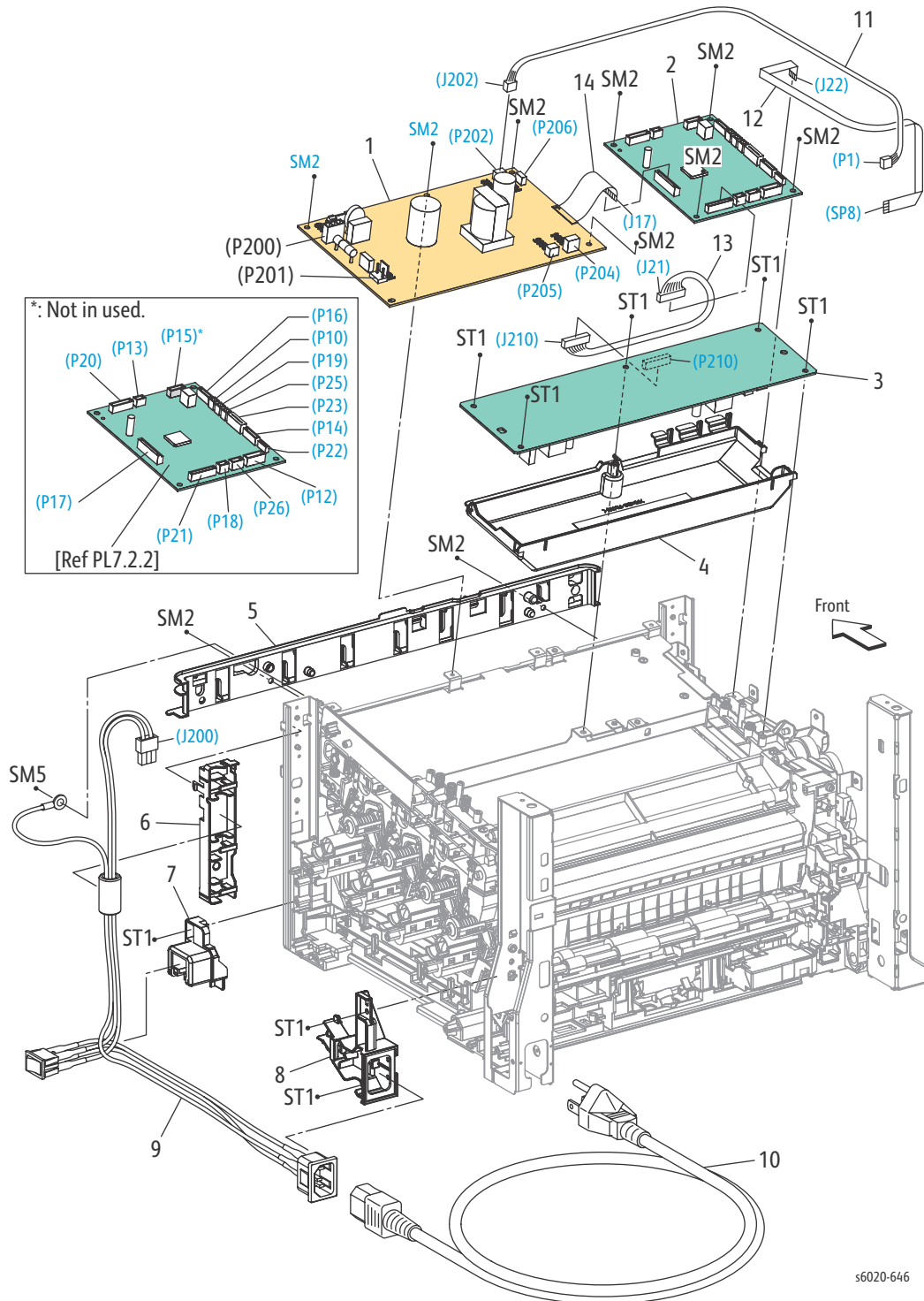
Front

s6020-646

PL Item	Part Name	Part Number
1.	PWBA LVPS 100V	105K 31173
1.	PWBA LVPS 200V	105K 31183
2.	PWBA MCU MC02KC	960K 77511
3.	PWBA HVPS	105K 23996
4.	HOUSING HVPS	--
5.	GUIDE HARNESS FRONT	--
6.	GUIDE HARNESS AC	--
7.	HOLDER SW AIO	--
8.	GUIDE HARNESS INLET	--
9.	HARNESS ASSY INLET AIO (AC INLET-MAIN SW, J200)	--
10.	POWER CORD 110V	--
10.	POWER CORD 220V	
11.	HARNESS ASSY LVES AIO (J202-P1)	962K 81490
12.	FFC ASSY ESS AIO (J22-SP8)	--
13.	HARNESS ASSY HVPS (J21-J210)	962K 81910
14.	FFC ASSY MCLV	--

PL 9.1 Scanner Assembly

1 (with 2,8,10,11,12)

2 (with 7)

7

8 (with 9)

9

7

10

12

11

12

[Ref PL1.1.33]

[Ref PL1.1.34]

ST1

ST1

Front
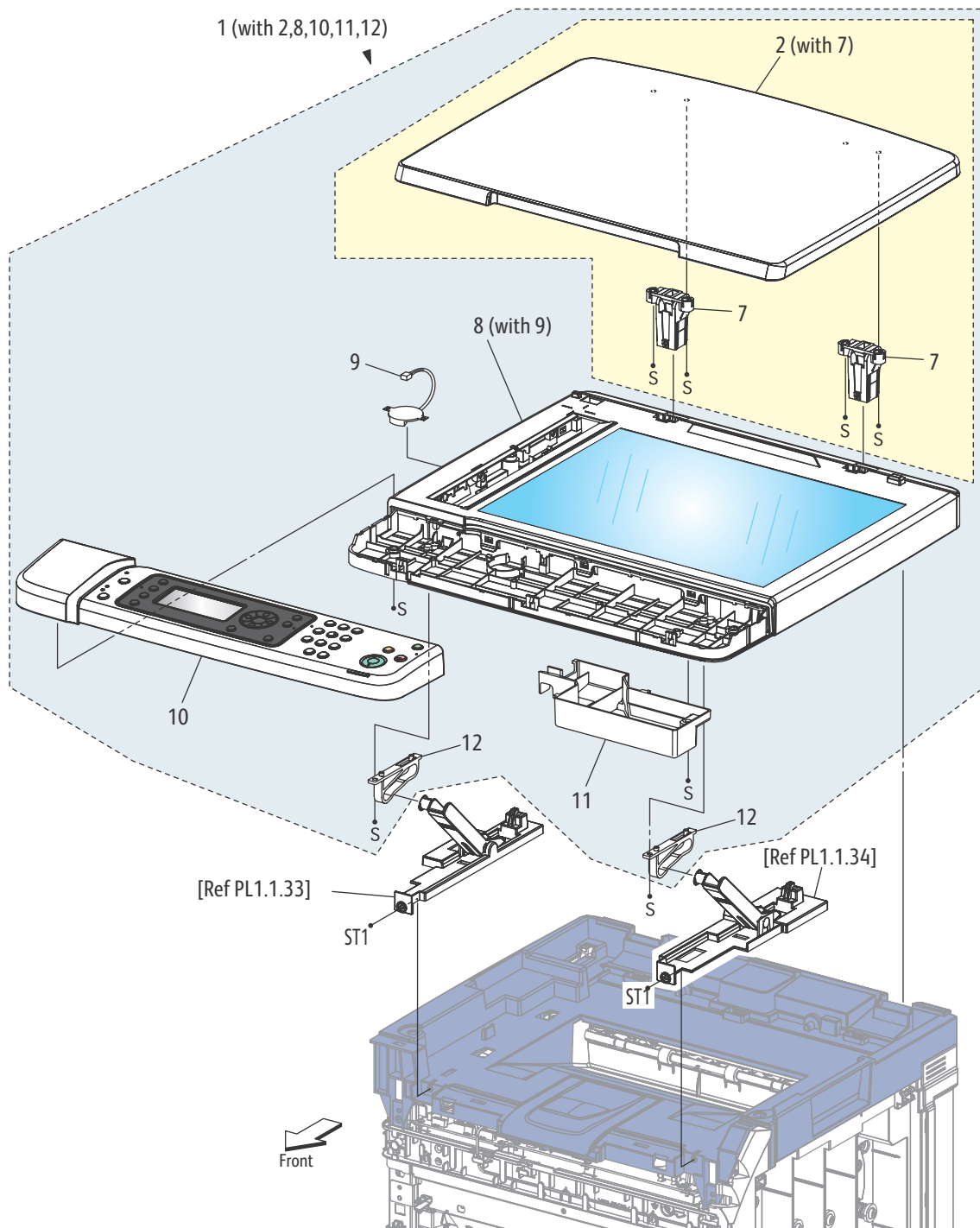
s6020-647

Item	Part Name	Part Number
1.	SCANNER ASSY 3IN1 (WITH 2,7,8,10,11,12)	604K 92720
2.	PLATEN COVER (WITH 7)	
3.	--	--
4.	--	--
5.	--	--
6.	--	--
7.	HINGE ASSY FB AIO 3IN	604K 92740
8.	IIT ASSY 3INVB (WITH9)	--
9.	SPEAKER	--
10.	CONSOLE ASSY AIO 3IN	--
11.	COVER SSB	--
12.	PANEL IIT FB	--

WorkCentre 6027 MFP

PL1.1 Covers

15

1 (with 2,3,15)

98 (with 2,15)

4

5

6

3

SM2

SM2

7

8 (with 23)

SM2

SM2

ST1

19

2

SM2

10

ST1

ST1

24

24

(J204)

ST1

ST1

ST1

14 (with 19)

9 (with 10)

ST1

20

23

16

ST1

13

12

11

22

17

Front

21

18 (with 13,16,17,21,22)

ST1

ST1
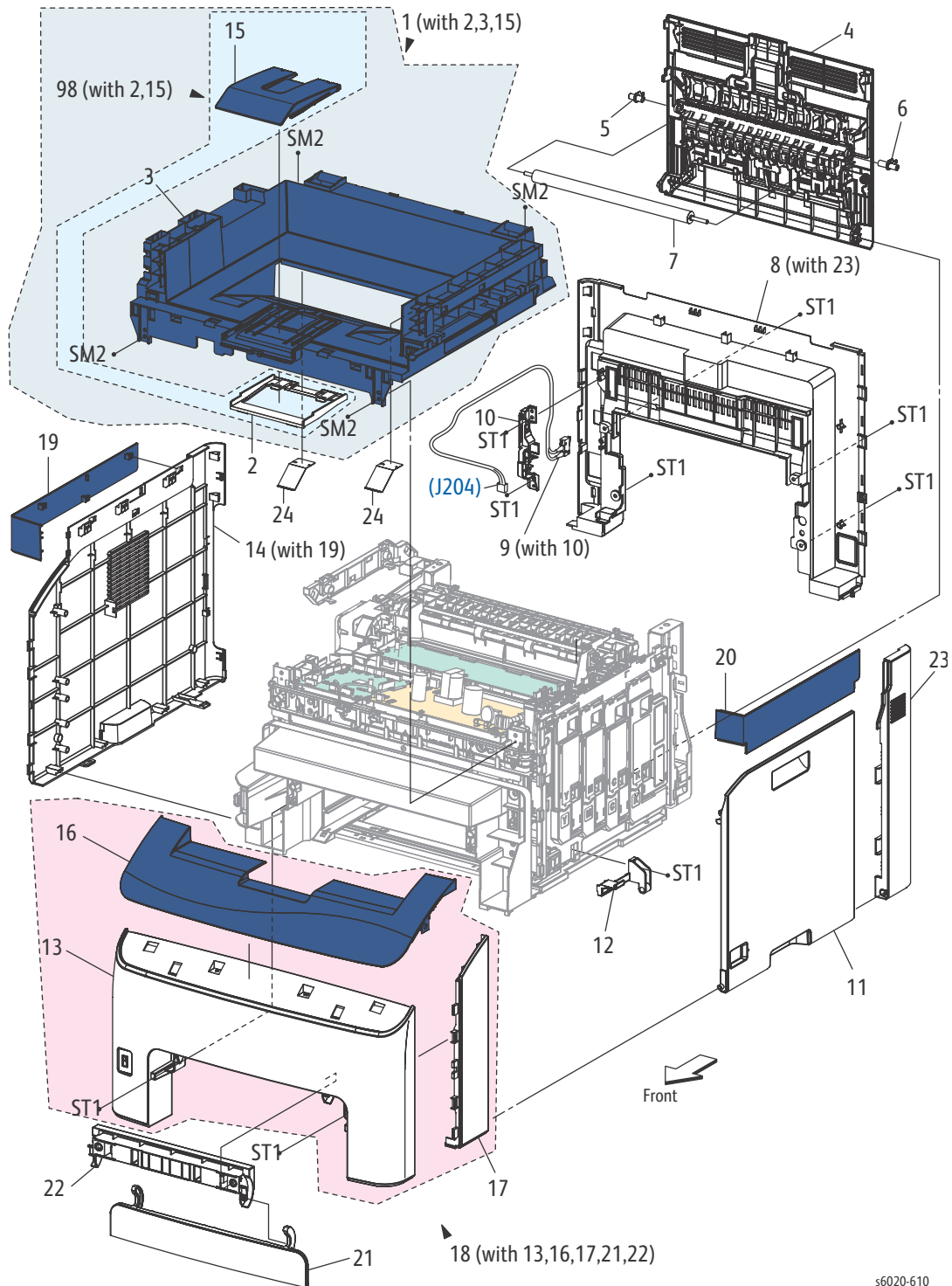
s6020-610

Item	Part Name	Part Number
1.	COVER TOP AIO (WITH 2, 3, 15)	--
2.	COVER EXTENSION AIO	--
3.	COVER TOP AIO	822E 12945
4.	COVER ASSY REAR AIO	604K 93750
5.	BEARING BRT L	013E 38091
6.	BEARING BTR R	013E 38101
7.	ROLL ASSY BTR	022K 78520
8.	COVER ASSY INNER REAR (with 43) AIO-4inLQ 6027	604K 92650
9.	SWITCH I/L ASSY (WITH 10)	676K 12440
10.	HOLDER IL REAR	--
11.	COVER WINDOW TNR AIO LQ	822E 11203
12.	HINGE CVR AIO	803E 21980
13.	COVER FRONT LOWER AIO VB	--
14.	COVER ASSY SIDE L AIO (with 19)	848K 90573
15.	TRAY EXIT AIO	--
16.	COVER FRONT UPPER AIO	--
17.	COVER SIDE R AIO	--
18.	KIT COVER FRONT AIO (WITH 13,16,17,21,22)	604K 93781
19.	COVER SIDE L UPPER AIO	822E 12961
20.	COVER SIDE R UPPER AIO	822E 12971
21.	COVER JAM CL PE	--
22.	BRACKET COVER JAM	--
23.	COVER SIDE REAR	822E11221
24.	FILM ASSY EXIT	--
98.	KIT COVER EXTENSION ASSY AIO (WITH 2,15)	604K 92660

PL 2.1 Feeder (1/3)
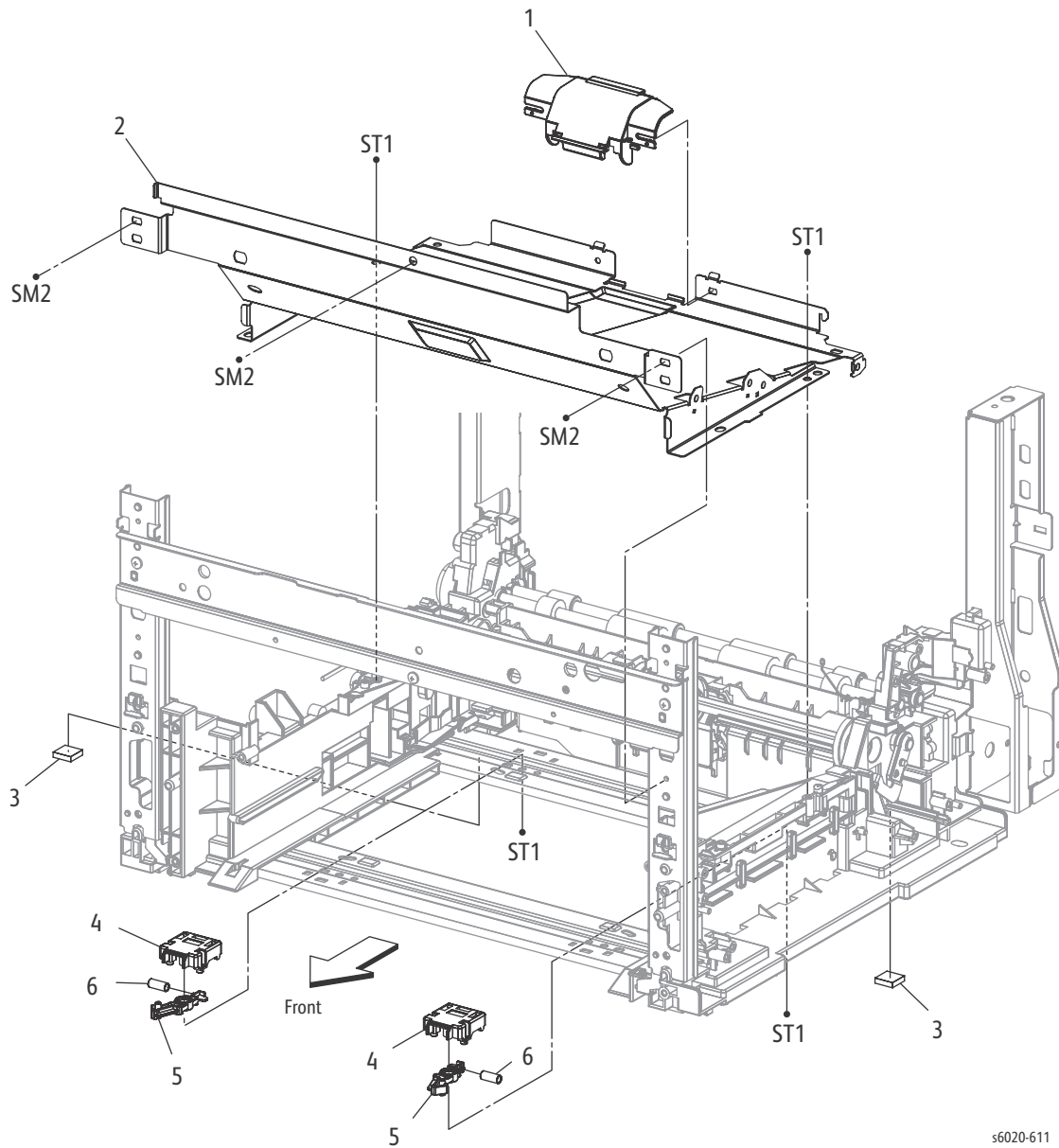
s6020-611

PL Item	Part name	Part Number
1.	COVER FEED	--
2.	PLATE LOWER	--
3.	FOOT ASSY	--
4.	HOLDER LATCH CST	019E 89730
5.	LATCH CST	--
6.	SPRING LATCH CST	--

PL 2.2 Feeder (2/3)

1 (with 2-7)

2
3
4
5
6
3
7

10 (with 22-24)

22
23
24
26
27
12
8
11
13
25
9

Front

34
19
SM8
15

14
SM8
33
15

ST1
ST1
21
21
ST1
ST1
ST1
ST1
ST1
ST1

30
16
31
32
28
29
20
(J122)
(J120)
(J121)
(J12)

Registration
Sensor
(PL2.3.4)

17
18
No Paper
Sensor
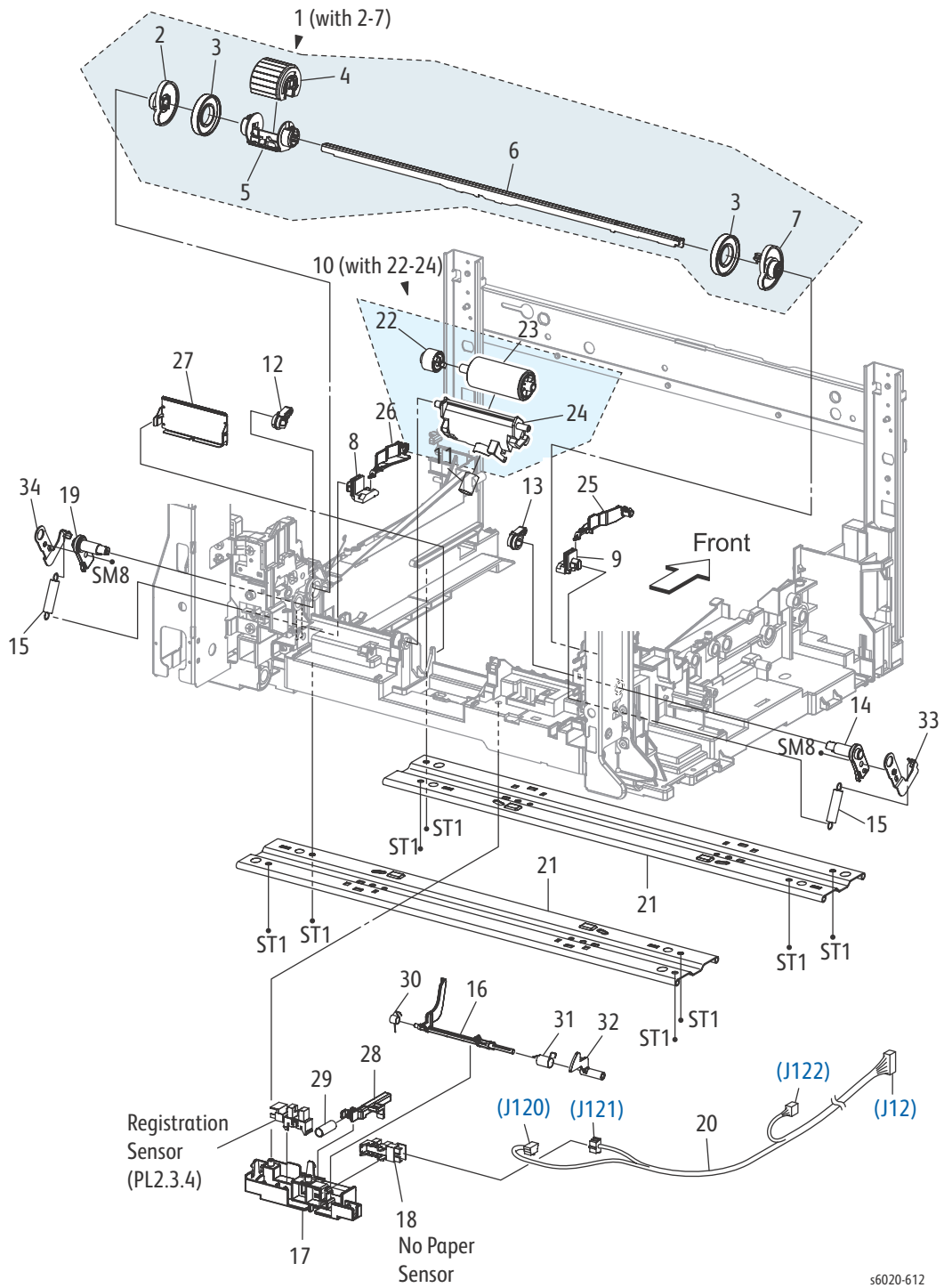
s6020-612

Item	Part Name	Part Number
1.	ROLL ASSY FEED MSI (WITH 2-7)	059K 88840
2.	CAM MSI R	008E 97492
3.	ROLL CORE MSI	--
4.	ROLL ASSY FEED	059K 78701
5.	HOLDER FEED	--
6.	SHAFT FEED	--
7.	CAM MSI L	008E 97481
8.	HOLDER BTM R	--
9.	HOLDER BTM L	
10.	HOLDER ASSY SEPARATOR (WITH 22-24)	019K 16020
11.	SPRING SEPARATOR	809E 91661
12.	FOLLOWER R	008E 97513
13.	FOLLOWER L	008E 97503
14.	ARM MSI L	031E 89680
15.	SPRING NF	809E 91681
16.	ACTUATOR NO PAPER	120E 35360
17.	COVER NO PAPER	019E 89720
18.	SENSOR PHOTO (NO PAPER SENSOR)	930W 00123
19.	ARM MSI R	019E 89690
20.	HARNESS ASSY RKN SNS (J12,-J20,J121,J122)	--
21.	PLATE BOTTOM TIE	--
22.	CLUTCH ASSY FRICTION	--
23.	ROLL ASSY SEPARATOR	--
24.	HOLDER SEPARATOR	--
25.	ARM BOTTOM IN L	
26.	ARM BOTTOM IN R	--
27.	PLATE ASSY SEPERATOR	--
28.	SLIDE STOPPER	--
29.	SPRING STOPPER	--
30.	SPRING ACTUATOR NO PAPER MAIN	--
31.	SPRING ACTUATOR NO PAPER SUB	--
32.	ACTUATOR NO PAPER SUB	--
33.	PLATE ARM L	--
34.	PLATE ARM R	--
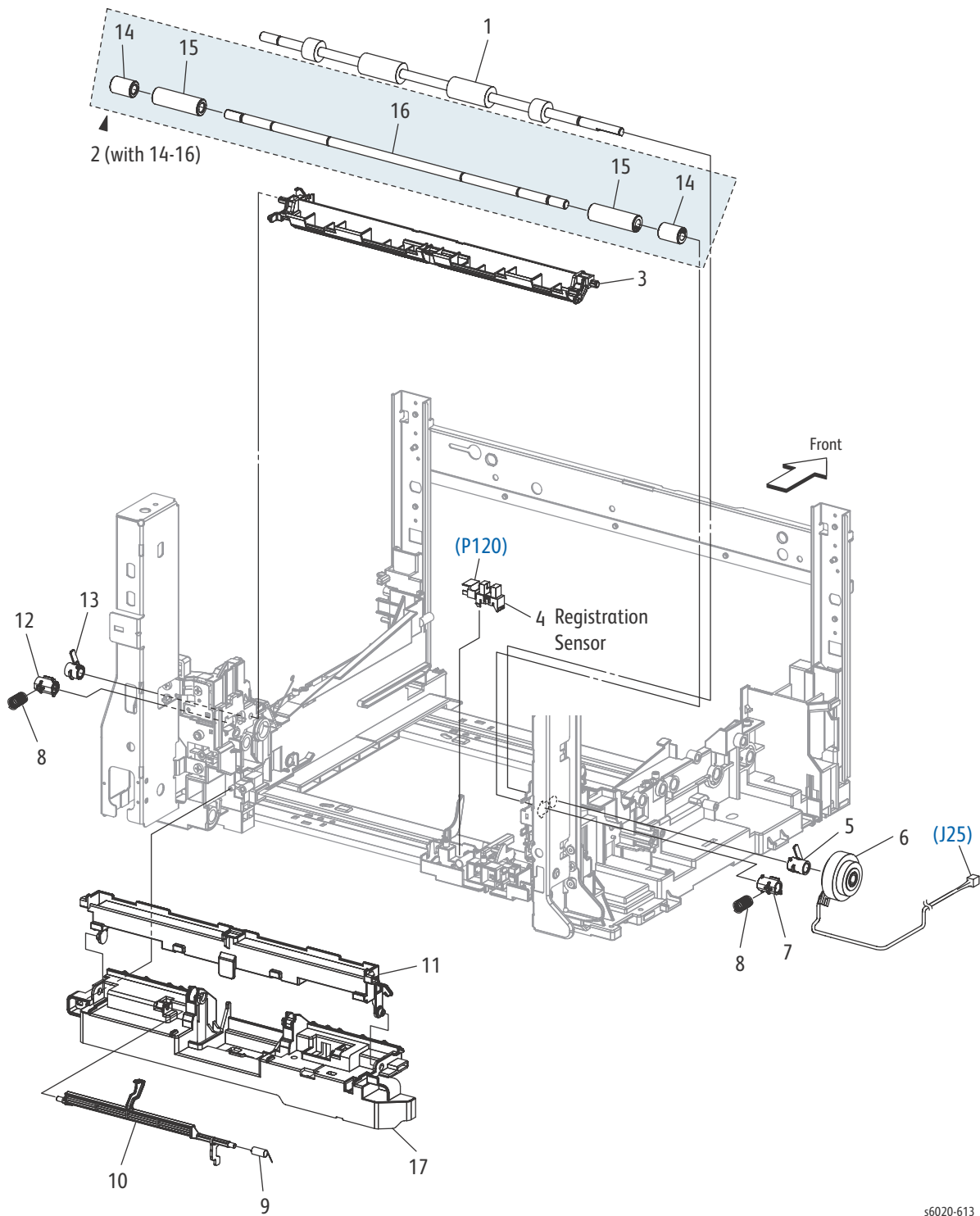
PL 2.3 Feeder (3/3)

s6020-613

PL Item	Part Name	Part Number
1.	ROLL REGI	059E 06931
2.	ROLL ASSY PINCH REGI (WITH 14-16)	059K 67751
3.	CHUTE UPPER	054E 55420
4.	SENSOR PHOTO (REGI SENSOR)	930W 00123
5.	BEARING REGI	013E 44760
6.	CLUTCH REGI	121K 46582
7.	BEARING REGI METAL	--
8.	SPRING REGI	809E 91700
9.	SPRING ACT REGI	809E 91650
10.	ACTUATOR REGI	120E 35351
11.	CHUTE LOW	054E 55441
12.	BEARING REGI METAL EARTH	--
13.	BEARING REGI EARTH	--
14.	ROLL PINCH REGI 10	--
15.	ROLL PINCH REGI 30	--
16.	SHAFT PINCH REGI	--
17.	CHUTE SEPARATOR	--

PL 3.1 Xerographics (1/3)

1 (PL3.2,PL3.3)

(J2) (LPH M)

(J3) (LPH Y)

(J5) (LPH C)

(J4) (LPH K)

ST1

ST1

ST1

(J14)

Front

SM3

SM3

SM3

SM3
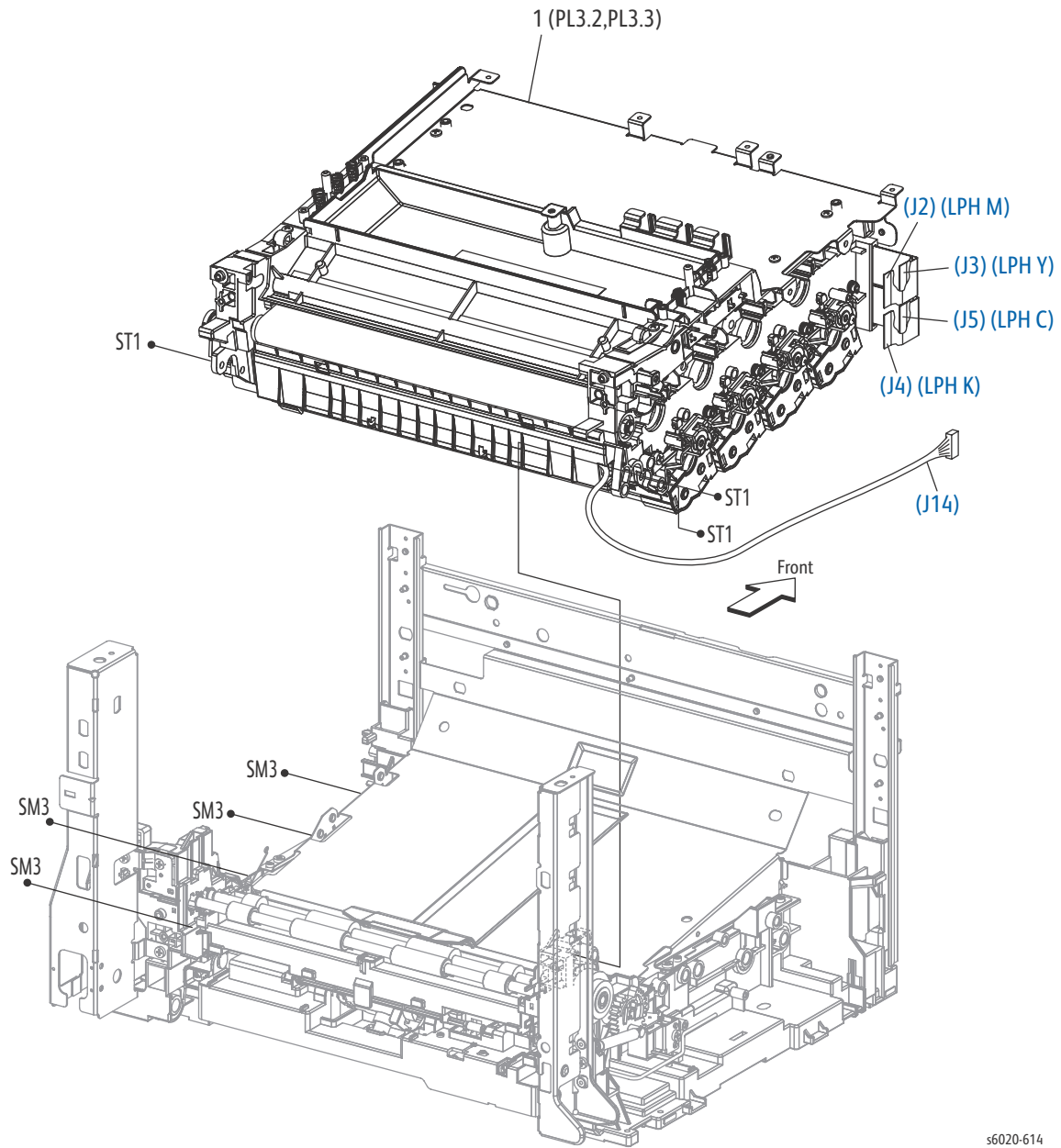
s6020-614

PL Item	Part name	Part Number
1.	XERO DEVE LPH BELT ASSY (PL3.2,PL3.3)	--
99.	BELT TRANSFER	064K 93751

PL 3.2 Xerographics (2/3)
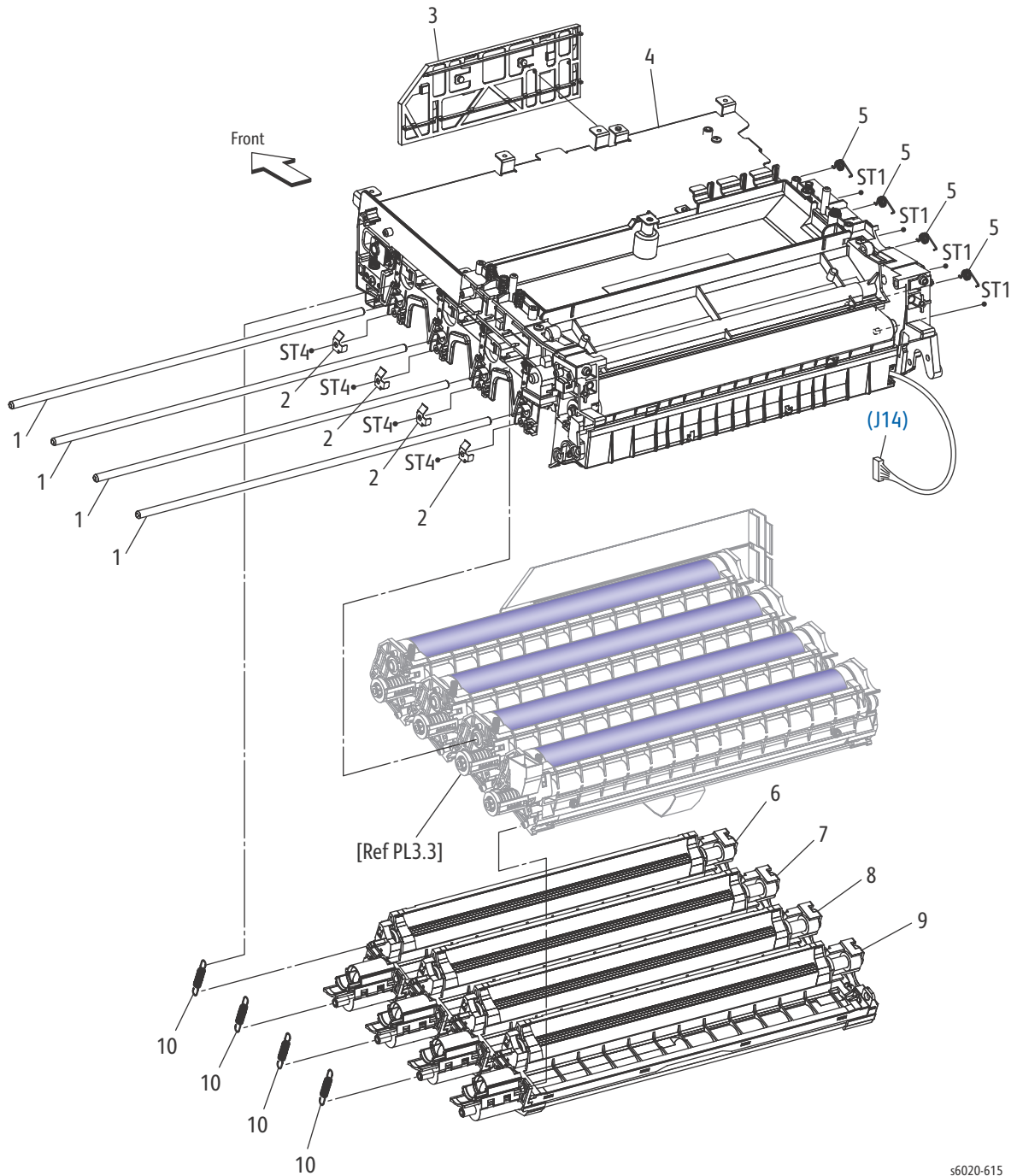
s6020-615

PL Item	Part Name	Part Number
1.	SHAFT DRUM	--
2.	PLATE EARTH DL	--
3.	GUIDE FFC LPH	--
4.	HOUSING ASSY TRANSFER B	--
5.	SPRING DEVE D	809E 91951
6.	HOUSING ASSY DEVE Phaser 6022 and WorkCentre 6027 MFP Y	848K 93080
7.	HOUSING ASSY DEVE Phaser 6022 and WorkCentre 6027 MFP M	848K 93090
8.	HOUSING ASSY DEVE Phaser 6022 and WorkCentre 6027 MFP C	848K 93100
9.	HOUSING ASSY DEVE Phaser 6022 and WorkCentre 6027 MFP K	848K 93110
10.	SPRING DEVE AD	809E 91880

PL 3.3 Xerographics (3/3)

Front

13

ST4

ST4

5

4

(P7) C

1

2

ST4

3

1

13

ST4

ST4

5

4

(P6) B

1

2

ST4

3

1

13

ST4

ST4

5

4

(P9) A

1

2

ST4

3

6

(J3)

(J2)

ST4

13

(J5) (J4)

12

C

(J7)

11

B

10

(J6)

9

A

11

(J9)

8

(J8)

7

2

ST4

3

ST4

5

4

(P8)

s6020-616

PL Item	Part Name	Part Number
1.	HOUSING ASSY XERO HIGH P H V	848K 93440
2.	SPRING FG PART2	809E 93301
3.	SPRING LPH V	809E 93280
4.	HEAD ASSY V	130K 79120
5.	SPRING LPH AD	899E 09850
6.	HOUSING ASSY XERO HIGH K Phaser 6022 and WorkCentre 6027 MFP	848K 93460
7.	CABLE FFC K KRN	--
8.	CABLE FFC C KRN	--
9.	CABLE FFC M KRN	--
10.	CABLE FFC Y KRN	--
11.	CORE FERRITE	--
12.	TAPE	--
13.	PLATE EARTH LPH	--

PL 4.1 Dispenser

(J206)

(J20)

18

20

19

(J208)

(J200)

2

1 (with 2-11)

(J13)

(J201)

A

B

3

4

4

4

4

5

ST1

ST1

ST1

ST1

ST1

12

8

ST1

(P200)

(P201)

A

B

ST1

ST1

9

9

9

10

6

6

6

6

6

7

7

7

7

7

11

11

11

11

11

11

11

13

14

15

16

17

Front
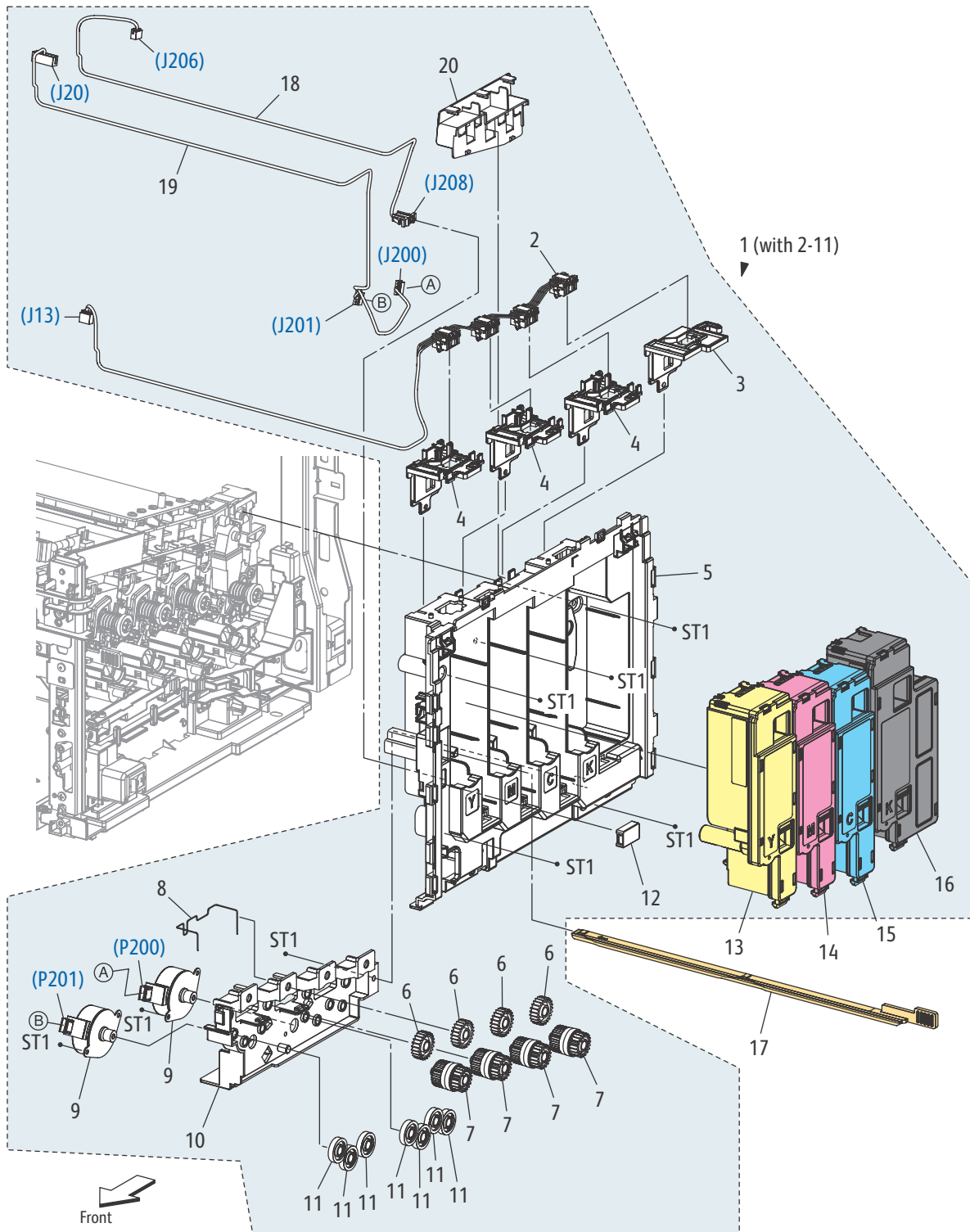
s6020-617

PL Item	Parts name	Part Number
1.	DISPENSER ASSY (with 2-11, 18, 19)	--
2.	HARNESS ASSY DCKR (J13-TONER CRUM Y,M,C,K)	--
3.	KEY HW K	029E 53810
4.	KEY HW YMC	029E 53800
5.	FRAME DISP	--
6.	GEAR IDLER 23	807E 32140
7.	CLUTCH ASSY ONEWAY	005K 10071
8.	CONDUCTOR GND MOT	--
9.	MOTOR ASSY DISP	127K 61370
10.	FRAME MOTOR	--
11.	GEAR IDLER 34	807E 32130
12.	COVER CONNECTOR	822E 13060
13.	TONER CARTRIDGE Y START	--
14.	TONER CARTRIDGE M START	--
15.	TONER CARTRIDGE C START	--
16.	TONER CARTRIDGE K START	--
17.	CLEANER ASSY	042K 94281
18.	HARNESS ASSY FSR TEST (J206-J208)	--
19.	HARNESS ASSY DISPENSE MOT (J20-J200,J201)	--
20.	GUIDE HARNESS FUSER	--

PL 5.1 Fusing

s6020-618

PL Item	Part Name	Part Number
1	Fuser Phaser 6022 and WorkCentre 6027 MFP 110V	126K34981
1	Fuser Phaser 6022 and WorkCentre 6027 MFP 220V	126K34991

PL 6.1 Drive

Front

(P10) (P16)

1

ST1

SM3

SM3

ST1

(J16)

SM3

ST1

2

ST1

ST1

3

ST1

4

SM2

(J160)

SM2

SM3

SM2

(P160)

SM2

7

5

SM3

6

SM3

8

(J10)

9

ST1

ST1

SM3

K Mode Switching Sensor

ST1

10

(J19)

s6020-219

PL Item	Part Name	Part Number
1.	DRIVE ASSY MU	--
2.	DRIVE ASSY MOT Phaser 6022 and WorkCentre 6027 MFP	007K 20960
3.	GEAR F3	807E 32381
4.	GEAR PH3	807E 47660
5.	DRIVE ASSY PH	007K 20970
6.	DRIVE ASSY DEVE	007K 17088
7.	HARNESS ASSY MAIN MOT (J16-J160)	--
8.	GEAR FEED	--
9.	SPRING FEED	--
10.	SOLENOID FEED PTH	121E 22671

PL 7.1 Electrical (1/2)

s6020-620

PL Item	Part Name	Part Number
1.	DUCT FAN	
2.	FAN MAIN	127E86170
3.	GUIDE HARNESS DRIVE	
4.	PLATE BITZ	
5.	PWB ASSY TOP TOKI 2	
6.	FFC ASSY LIGHT BIZ (J1-J23)	962K79920
7.	HARNESS ASSY TOKI (P1-SP9)	962K81970
8.	PLATE ESS AIO	
9.	PWBA ESS AIO 4IN1	604K92540
10.	GUIDE HARNESS MSI	
11.	PWB ASSY USB FRONT	960K47000
12.	HARNESS ASSY USB FRONT (7501-J7601)	
13.	HARNESS ASSY SWIFT FAX	
14.	PWBA SWIFT FAX	
15.	PACKAGE ASSY FAX LT (WITH 13,14)	101K68570
16.	GUIDE HARNESS ESS	
17.	GUIDE HARNESS FFC UI	

PL 7.2 Electrical (2/2)

SM2
11
(J202)
SM2
(J22)
SM2
SM2
2
12
SM2
1
(P202)
(P206)
SM2
SM2
(SP8)
SM2
14
SM2
(P1)
(P200)
13
ST1
(P201)
(J21)
(P205)
(P204)
ST1
ST1
3
(J210)
ST1
(P210)
ST1

*: Not in used.

(P16)
(P10)
(P15)*
(P19)
(P20)
(P13)
(P25)
(P23)
(P14)
(P22)
(P17)
(P12)
(P21)
(P18)
(P26)

[Ref PL7.2.2]

4
SM2

Front

SM2
5

SM2
(J200)

SM5
6

ST1
7

ST1
8
ST1

9
10

s6020-621

PL Item	Part Name	Part Number
1.	PWBA LVPS 100V	105K 31173
1.	PWBA LVPS 200V	105K 31183
2.	PWBA MCU MC02KC	960K 77511
3.	PWBA HVPS	105K 23996
4.	HOUSING HVPS	--
5.	GUIDE HARNESS FRONT	--
6.	GUIDE HARNESS AC	--
7.	HOLDER SW AIO	--
8.	GUIDE HARNESS INLET	--
9.	HARNESS ASSY INLET AIO (AC INLET-MAIN SW,J200)	--
10.	POWER CORD 110V	--
10.	POWER CORD 220V	--
11.	HARNESS ASSY LVES AIO (J202-P1)	962K 81490
12.	FFC ASSY ESS AIO (J22-SP8)	962K 81910
13.	HARNESS ASSY HVPS (J21-J210)	--
14.	FFC ASSY MCLV	--

PL 8.1 Scanner/ADF Assembly

s6020-622
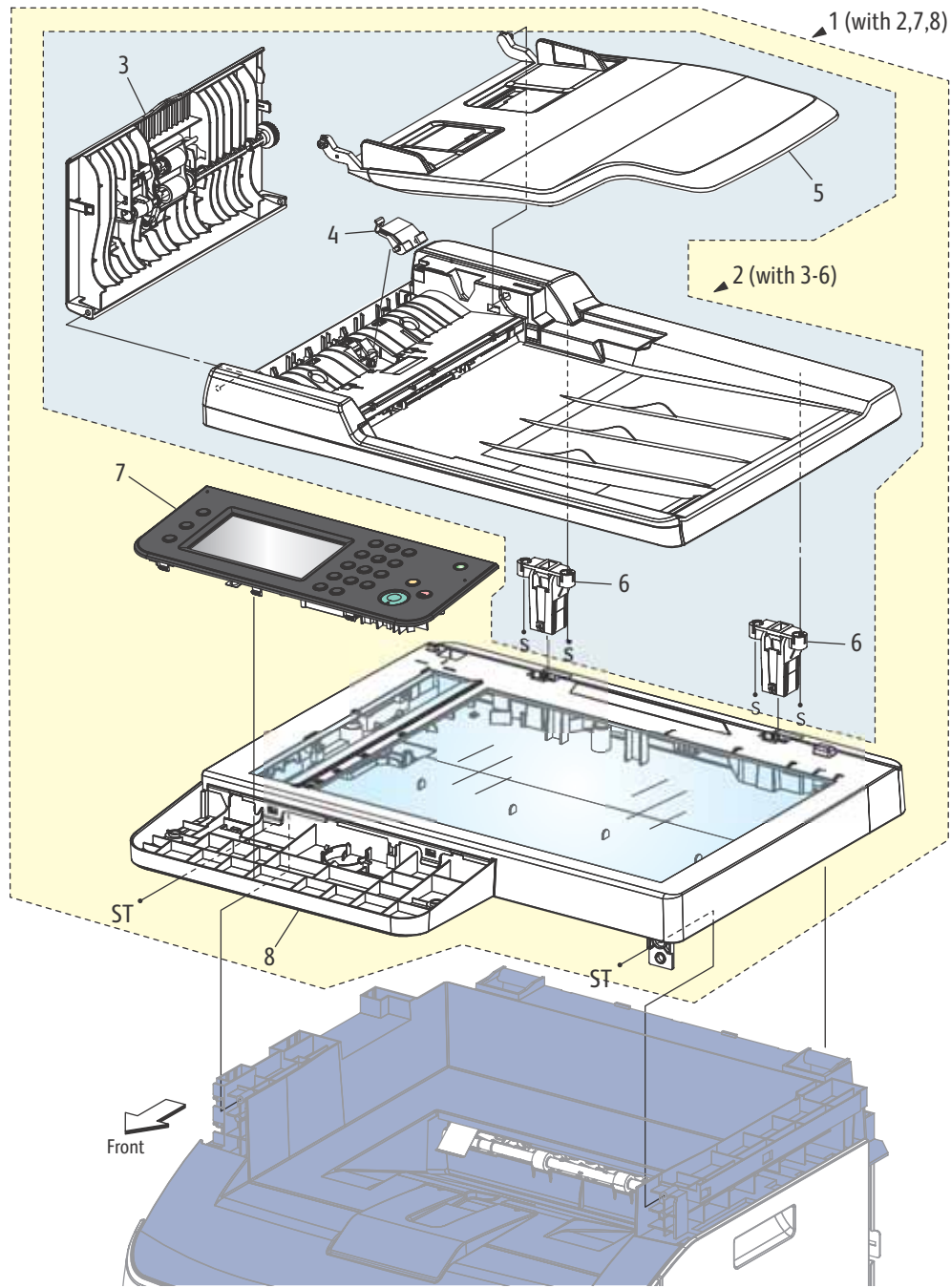
Item	Part Name	Part Number
1.	SCANNER ASSY 4IN1 (with 2,7,8)	604K 92730
2.	ADF ASSY (with 3-6)	--
3.	COVER ASSY TOP ADF	604K 92930
4.	SEPARATOR PAD ADF	604K 65560
5.	TRAY ASSY INPUT ADF	604K 65530
6.	HINGE ASSY ADF AIO 4IN	604K 92750
7.	IIT ASSY 4IN VB	--
8.	CONSOLE ASSY AIO 4IN	604K 92500

PL 9.1 Cassette Assembly
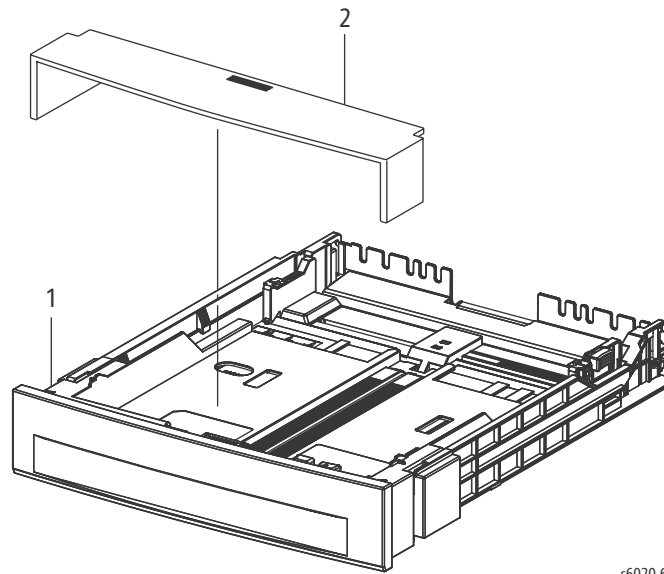
s6020-623

Item	Part Name	Part Number
1.	KIT CASSETTE ASSY	604K 92642
2.	COVER CST	822E 05630

Service Kits and Cables

Service Kits provide spare parts normally associated with larger assemblies.

Cables

Item	Part Name	Part Number
PL10.1	USB CABLE	--
PL90.1	USB CABLE	--
1.	KIT PACKAGING-ASSY TEL CABLE 3M	--

Hardware Kit

Item	Part Name	Part Number
99.01.01	KIT HARDWARE KRN	604K 60070

Hardware Kit Contents

Fastener Type	Size	Parts List Designator	Quantity
Screw for plastic, Silver, self-tapping	M3 x 6mm	ST4	2
	M3 x 8mm	ST1	4
Screw for plastic, Silver, self-tapping, with flange	M3 x10 mm	ST10	2
Sheet metal screw, Silver	M3 x 6mm	SM2	4
	M4 x 6mm	SM3	2
	M3 x 6mm	SM7	1
Screw for sheet metal, Silver, with external tooth washer	M4 x 6mm	SM5	1

Maintenance and Adjustment

6

In this chapter...

- Service Maintenance Procedures
- Cleaning
- Moving the Printer
- Maintenance and Adjustment Procedures
- Cleaning
- Maintenance Using the Phaser 6020 Xerox Printer Setting Utility Software
- Maintenance at the Phaser 6022 and WorkCentre 6025 MFP Control Panel
- Maintenance at the WorkCentre 6027 MFP Control Panel

Service Maintenance Procedures

Perform the following procedures whenever you check, service, or repair a printer. Cleaning the printer, as outlined in the following steps, assures proper operation of the printer and reduces the probability of having to service the printer in the future.

- Clean the Feed Rollers, exit rollers, and guides; replace if necessary.
- Remove and clean the paper tray.
- Print a Configuration and Error History pages, diagnose, and repair any problems as indicated.
- Check cleanliness of the interior and exterior, including the fan; if necessary clean (dust or vacuum) these areas.
- Review proper printer operation using a customer file, if possible. Check with the customer regarding any special applications they may be running.

The frequency of use, the type of media printed on, and operating environment are factors in determining how critical cleaning the machine is and how often it is necessary.

Review with the customer all work that was performed and discuss proper printer care.

Recommended Tools

- Toner vacuum cleaner
- Clean water
- Clean, dry, lint-free cloth
- Black light-protective bag

Cleaning

Cleaning the LED Windows

If prints have voids or light streaks through one or more colors, use the following instructions to clean the LED windows.

> Do not use warm water or cleaning solvents to Remove toner from your skin or clothing. Warm water sets the toner and makes it difficult to Remove. If toner gets on your skin or clothing, brush it off, blow it off, or wash it off with cold water and mild soap.

> Do not expose the inside of the printer to strong light. Minimize exposure to light in general to 5 minutes or less if possible.

1. Make sure that the printer is turned off and power cord is unplugged.
2. Spread some paper at the right side of the printer to catch loose toner.
3. Open the toner access cover.
4. Pinch the Toner Cartridge release lever upward, as shown in the illustration.
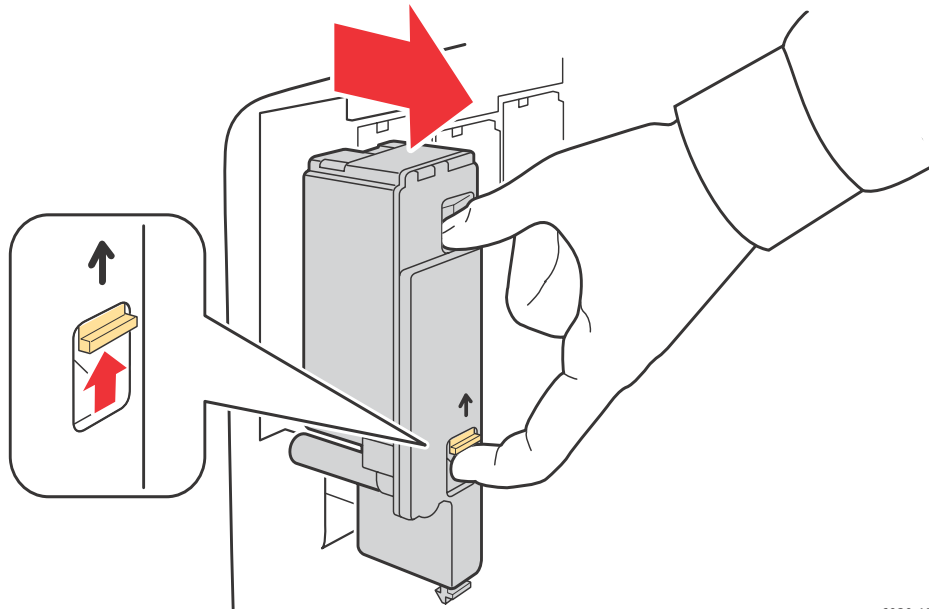
s6020-153

1. Pull out the Toner Cartridge and set it on the paper with the label side down to prevent spillage.
2. Remove the other 3 cartridges.

3. Pull out the cleaning rod and remove it from the printer.
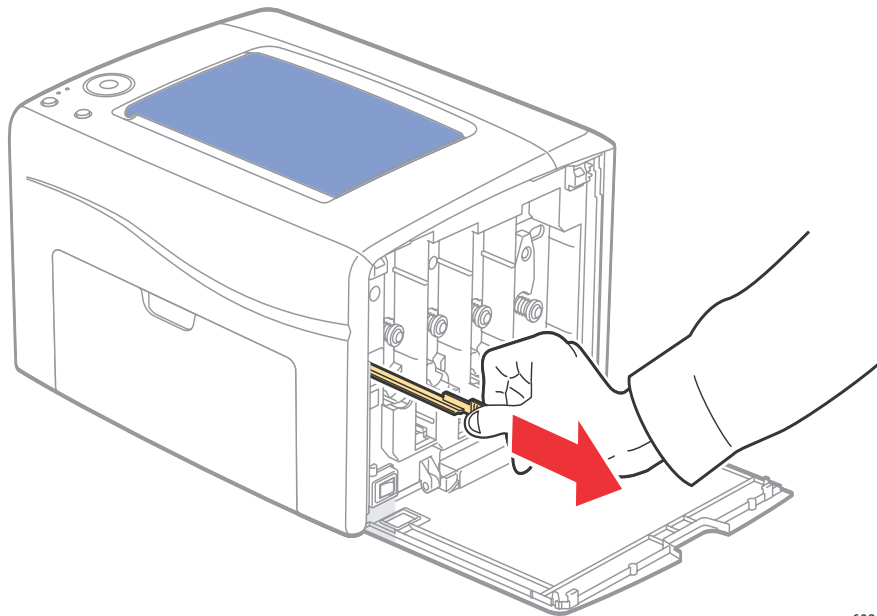
s6020-154

1. Insert the cleaning rod into the hole beside the arrow in the first toner slot.
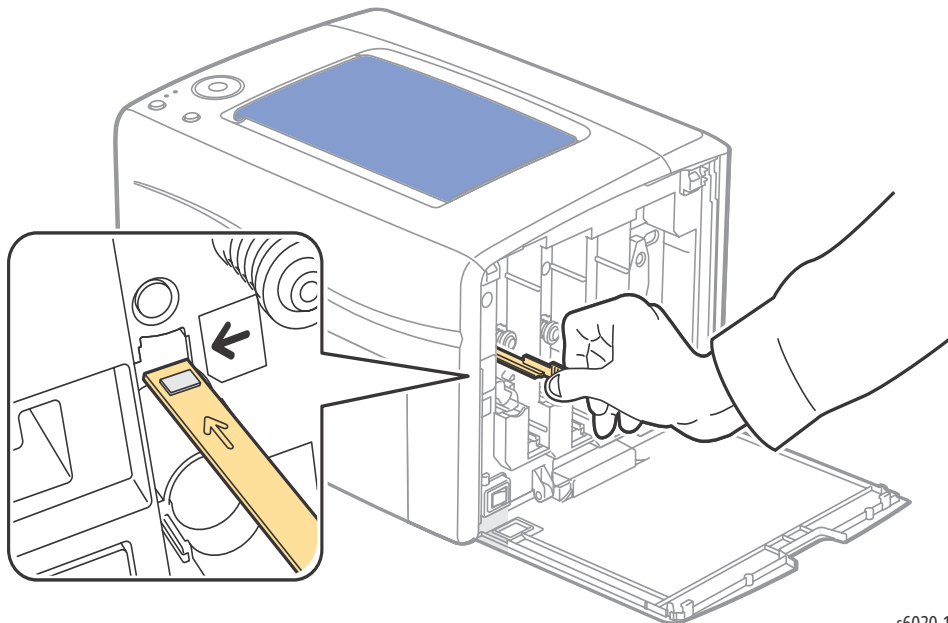
s6020-15

1. Push the cleaning rod into the printer until it stops, then pull it out of the printer.
   - Repeat the same procedure for each LED window.
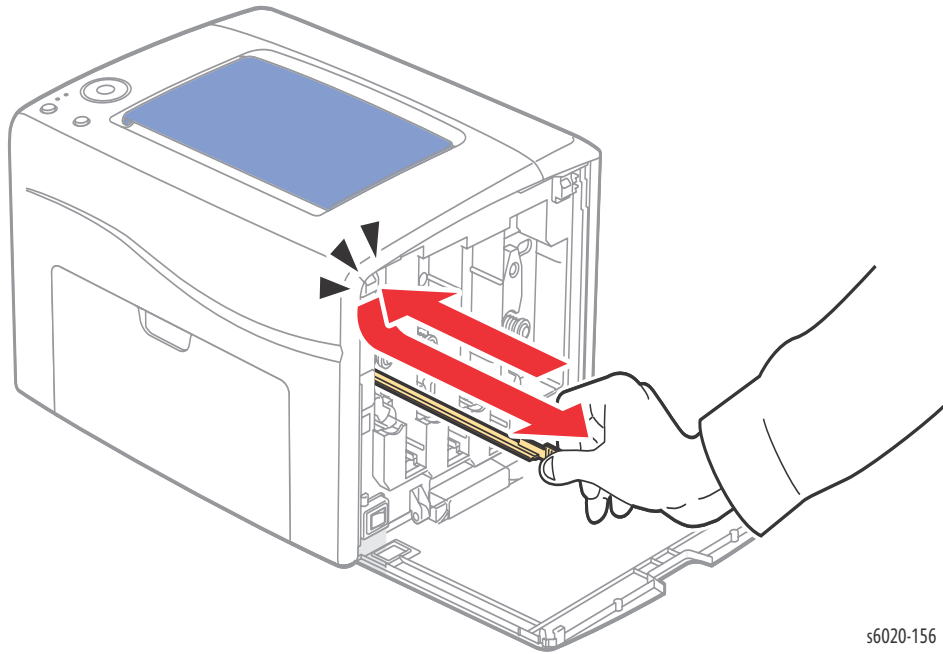
s6020-156

2. Return the cleaning rod to the original location.
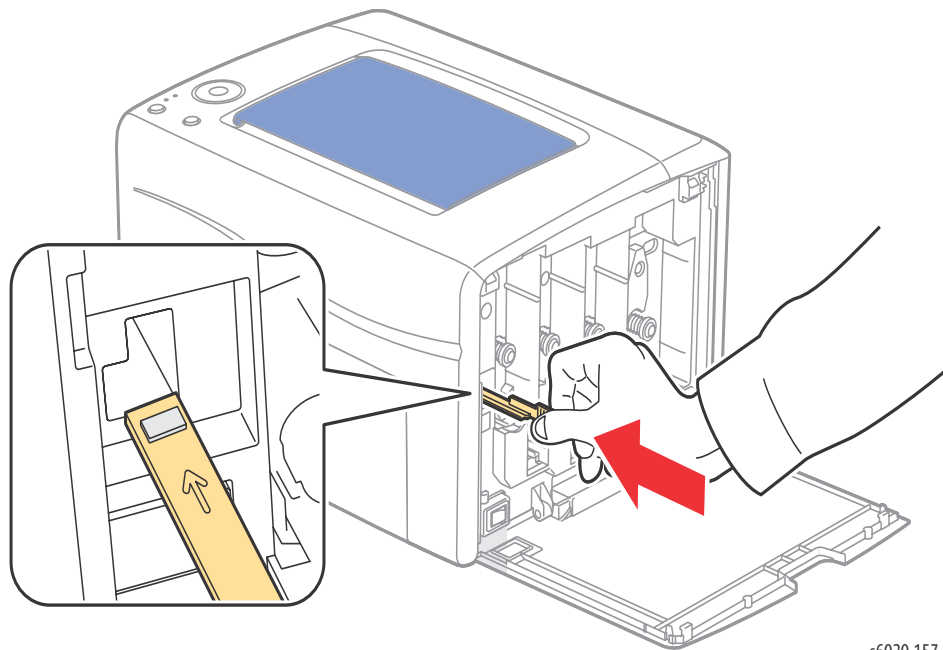
s6020-157

Maintenance and Adjustment

1. Align the Toner Cartridge to the associated slot by aligning the geared post with the hole. Insert the cartridge firmly by pressing in on the center of the label until it clicks in place.
2. Insert each of the other 3 Toner Cartridges.
3. Close the toner access cover.

s6020-158
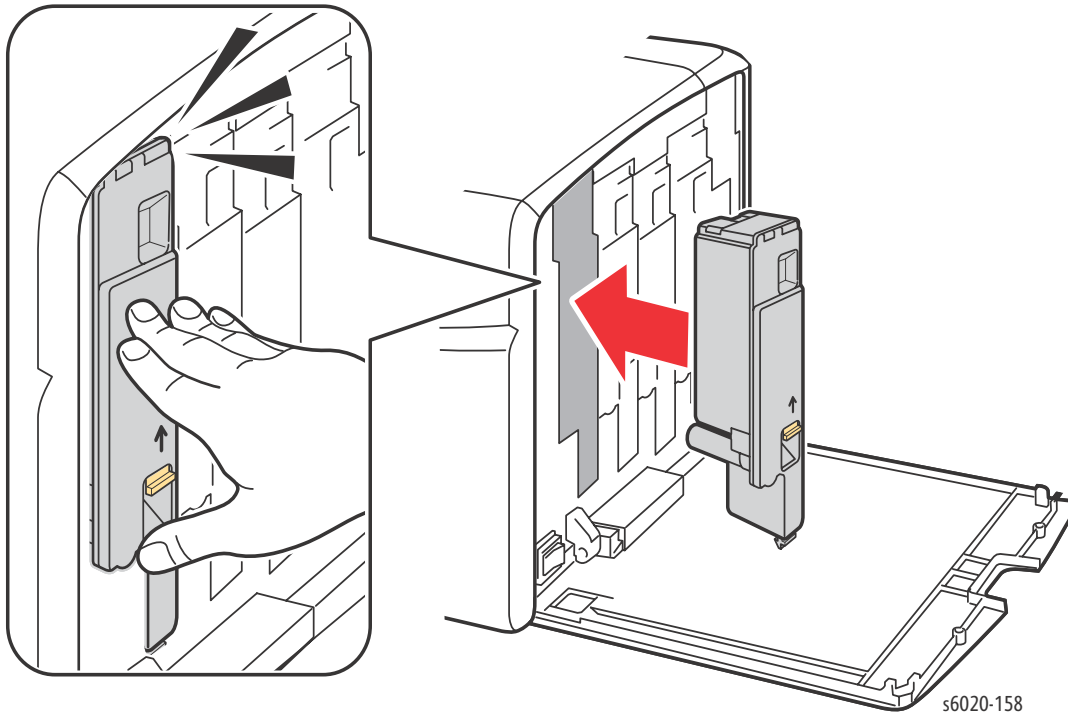
Cleaning the Color Toner Density Sensors

The Color Toner Density Sensors (ADC Sensors) measure the optical density of toner deposited on the marking unit during the calibration cycles of the printing process. One sensor is located at each side of the marking unit to insure that the density of the toner is consistent across the belt. To insure optimum print quality, the printer checks the operation of the ADC Sensors at the beginning of each calibration cycle. When the printer indicates a ADC Sensor error on the Control Panel or in the Printer Setting Utility, clean the ADC Sensors.

> Note: Do not use warm water or cleaning solvents to remove toner from your skin or clothing. Warm water sets the toner and makes it difficult to remove. If toner gets on your skin or clothing, brush it off, blow it off, or wash it off with cold water and mild soap.

⚠️ **WARNING:** Do not touch the fuser while it is hot.

To clean the ADC Sensors:

1. Turn off the printer and unplug it from the power source.
2. Open the Rear Door.
3. Clean the ADC Sensors by wiping inside the access holes with a clean, dry cotton swab.
4. Close the Rear Door.

s6020-159
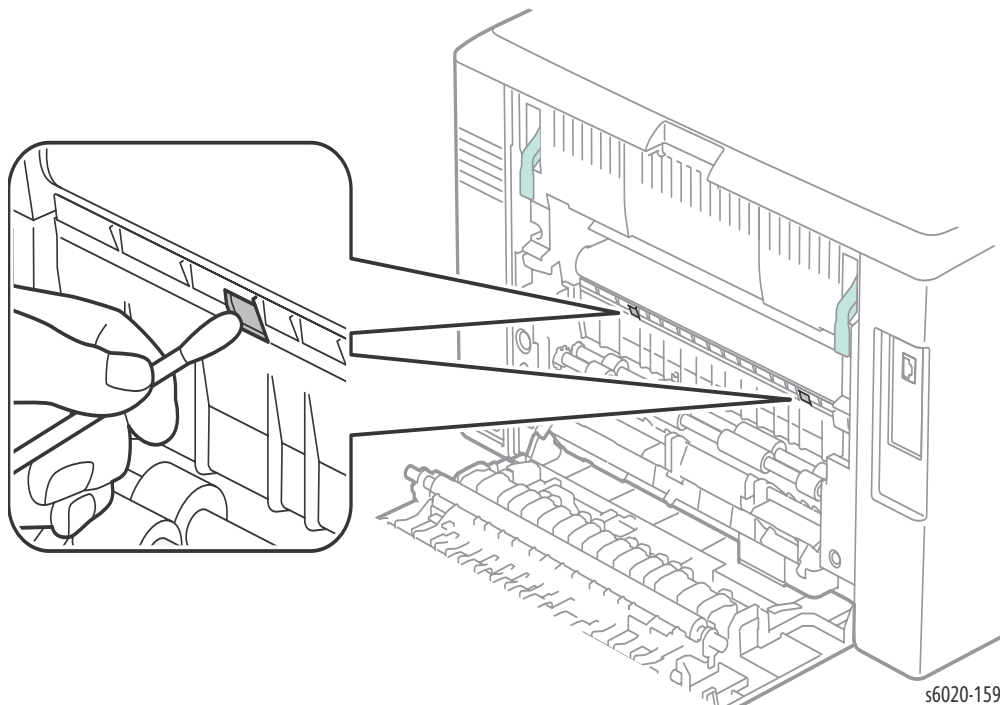
Moving the Printer

The printer, with consumables installed weighs 11.3 kg (24.9 lb.).

When moving the printer over long distances, Remove the Toner Cartridges to prevent toner from spilling.

Before moving the printer, do the following:
1. Turn the printer Off and disconnect all cables.
2. Allow the printer to cool about 40 minutes.
3. Remove media from the output tray and return the Tray Extension to its non-extended position.
4. Remove the Bypass Tray, then push in the center paper guide until it stops.
5. Push in the side paper guides until they stop.
6. Place the Bypass Tray inside the printer, on the Main Tray.
7. Fold up the Main Tray Extension to cover the paper feed.
8. Lift and carry the printer as shown in the illustration.

s6020-160

9. Do not tilt the printer more than 10 degrees to the front or back, or left or right. Tilting the printer more than 10 degrees may cause toner spillage.

s6020-185
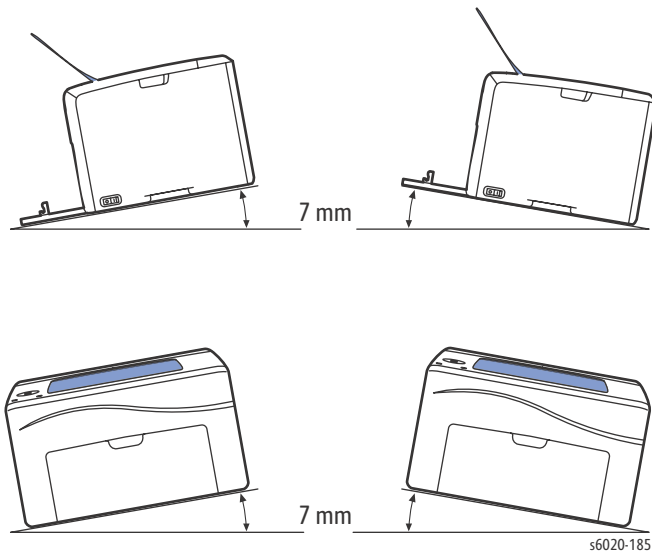
Failure to properly repackage the printer for shipment can result in damage not covered by the warranty, Service Agreement, or Total Satisfaction Guarantee.

After moving the printer:
1. Reinstall any parts you Removed.
2. Reconnect the printer to the cables and power cord.
3. Plug in and turn On the printer.
4. Adjust the color registration before using the printer.

Maintenance and Adjustment Procedures

Printer maintenance can be performed using a number of tools within the Xerox Printer Setting Utility, part of the Windows Software for the Phaser 6020 and from the control panel for the Phaser 6022 and WorkCentre 6025/6027 MFP printers:

The following table lists the adjustments and parameters available within each adjustment:

List	Adjustment	Parameter
Paper Type	Plain	lightweight heavyweight
	Label	lightweight heavyweight
BTR	Plain	(-3 - +3)
	Bond	(-3 - +3)
	Light Card	(-3 - +3)
	LW Gloss Card	(-3 - +3)
	Labels	(-3 - +3)
	Recycled	(-3 - +3)
	Envelope	(-3 - +3)
Fusing	Plain	(-3 - +3)
	Bond	(-3 - +3)
	Light Card	(-3 - +3)
	LW Gloss Card	(-3 - +3)
	Labels	(-3 - +3)
	Recycled	(-3 - +3)
	Envelope	(-3 - +3)
Auto Regi	On/Off	
Auto Color Regi	Auto Adjust	Y/N
	Color Regi Chart	Y/N
	Enter Number	Y=0 M=0 C=0 (-5-+5)
		LY=0 LM=0 LC=0 (-5-+5)
		RY=0 RM=0 RC=0 (-5-+5)

List	Adjustment	Parameter
Clean Developer	Y/N	
Toner Refresh	Yellow	Y/N
	Magenta	Y/N
	Cyan	Y/N
	Black	Y/N
BTR Refresh	Y/N	
Init NVM	System Section	Y/N
	User Scan Section	Y/N
Adjust Altitude	0m	meters above sea level
	1000m	
	2000m	
	3000m	

Maintenance Using the Phaser 6020 Xerox Printer Setting Utility Software

Color Registration

The printer automatically adjusts the color registration when automatic adjustment is turned on. You can also adjust color registration manually any time the printer is idle. You must adjust the color registration any time the printer is moved. If you are having printing problems, adjust the color registration.

To perform a color registration adjustment:
1. Launch the Printer Setting Utility, then select the **Printer Maintenance** tab.
2. Select **Color Registration Adjustment**.
3. For On, clear the check box, click **Start**.

Adjusting the Paper Type

Use Adjust Paper Type to compensate for paper thickness within a paper type. If the printed image is too light, use a heavier setting for the paper you are using. If the printed image is mottled or blotchy-looking, decrease the setting for the paper you are using.

To adjust the paper type:
1. Launch the Printer Setting Utility, then select the **Printer Maintenance** tab.
2. Click **Adjust Paper Type**.
3. Plain Paper or Labels, change the paper type.
4. Click **Apply New Settings**.

Adjusting the Bias Transfer Roller

Use Adjust BTR to specify the bias transfer roller (BTR) voltage for printing on the selected paper type. If the printed image is too light, increase the offset for the paper you are using. If the printed image is mottled or blotchy-looking, decrease the offset for the paper you are using.

To adjust the bias transfer roller:
1. Launch the Printer Setting Utility and select the **Printer Maintenance** tab.
2. Click **Adjust BTR**.
3. Change the offset value for the paper that you are using.
4. Click **Apply New Settings**.

Adjusting the Fuser

Use Adjust Fuser for optimum print quality across a wide range of paper types. If the toner on a print is smearing or can be rubbed off the paper, increase the offset for the paper you are using. If the toner is blistered or mottled, decrease the offset for the paper you are using.

To adjust the Fuser:
1. Launch the Printer Setting Utility, then select the **Printer Maintenance** tab.
2. Click **Adjusting Fusing Unit**.
3. Select the offset value for the desired paper type.
4. Click **Apply New Settings**.

Refreshing the Bias Transfer Roller

Use the BTR Refresh procedure to reduce paper curling and improve paper discharge.

To refresh the bias transfer roller:
1. Launch the Printer Setting Utility, then select the **Printer Maintenance** tab.
2. Click **BRT Refresh Mode**.
3. For On, select the check box.
4. Click **Apply New Settings**.

Adjusting the Altitude

Use Adjust Altitude to adjust the altitude to match that of the location where the printer is installed. If the altitude setting is incorrect, it can cause print-quality problems.

To adjust the altitude:
1. Launch the Printer Setting Utility and select the **Printer Maintenance** tab.
2. Click **Adjust Altitude**.
3. Select the altitude range to match that of the location where the printer is installed.
4. Click **Apply New Settings**.

Checking Page Counts

You can check the total number of printed pages on the Configuration Page. The Print Volume section lists the total number of pages printed on each paper size.

To print the Configuration Page:
1. Launch the Printer Setting Utility.
2. Click the **Printer Settings Report** tab.
3. Click **Information Pages**.
4. Click **Configuration Page**.

Maintenance at the Phaser 6022 and WorkCentre 6025 MFP Control Panel

Adjust Paper Type

1. On the control panel, press the **Menu** button.
2. Press the **Up Arrow** or **Down Arrow** button to select **Admin Menu**, then press the **OK** button.
3. Press the **Up Arrow** or **Down Arrow** button to select **Maintenance Menu**, then press the **OK** button.
4. Press the **Up Arrow** or **Down Arrow** button to select **Adjust Paper Type**, then press **OK**.
5. **Plain**:
   - Lightweight
   - Heavyweight
6. **Labels**:
   - Lightweight.
   - Heavyweight.
7. Press the **Return** button to return to Ready.

   Note: See the table above for Adjustments and Parameters.

Adjusting the Bias Transfer Roller

1. On the control panel, press the **Menu** button.
2. Press the **Up Arrow** or **Down Arrow** button to select **Admin Menu**, then press the **OK** button.
3. Press the **Up Arrow** or **Down Arrow** button to select **Maintenance Menu**, then press the **OK** button.
4. Press the **Up Arrow** or **Down Arrow** button to select **Adjust BTR**, then press **OK**.
5. Press the **Up Arrow** or **Down Arrow** button to select paper type, then press **OK**.
6. Select the bias offset to adjust the BTR for the selected paper type from -3 to +3 increments of 1.
   - Select a more positive value to increase the bias voltage.
   - Select a more negative value to decrease the bias voltage.
7. Repeat the steps until the output image or test is satisfactory.
8. Press the **Return** button to return to Ready.

Adjusting the Fuser

To adjust the Fuser:

1. On the control panel, press the **Menu** button.
2. Press the **Up Arrow** or **Down Arrow** button to select **Admin Menu**, then press the **OK** button.
3. Press the **Up Arrow** or **Down Arrow** button to select **Maintenance Menu**, then press the **OK** button.
4. Press the **Up Arrow** or **Down Arrow** button to select **Adjust Fuser**, then press **OK**.

5. Press the **Up Arrow** or **Down Arrow** button to select paper type, then press **OK**.
6. Select the Fusing temperature offset to adjust the Fusing temperature for the selected paper type from -3 to +3 increments of 1.
   - Select a more positive value to increase the bias voltage.
   - Select a more negative value to decrease the bias voltage.
7. Repeat the steps until the output image or test is satisfactory.
8. Press the **Return** button to return to Ready.

Color Registration

Enabling/Disabling Automatic Color Registration

Use the following procedure to enable or disable the automatic color registration adjustment feature.
1. On the printer control panel, press the **Menu** button.
2. Press the **Down Arrow** button to go to **Admin Menu** and then press the **OK** button.
3. Press the **Down Arrow** button to scroll to **Maintenance Mode** and press **OK**.
4. Press the **Down Arrow** button to scroll to **Auto Regi Adjust** and press **OK**.
5. Press the **Down** or **Up Arrow** buttons to select On or Off.
6. Do one of the following:
   - To enable the feature, at On press **OK**.
   - To disable the feature, at Off press **OK**.
7. Press the **Return** button to return to the main menu.

Performing an Automatic Color Registration Adjustment

Use the following procedure to perform the automatic color registration adjustment.

Note: An automatic color registration adjustment is performed every time a new Toner Cartridge is installed.

1. On the printer control panel, press the **Menu** button.
2. Press the **Down Arrow** button to go to **Admin Menu** and then press the **OK** button.
3. Press the **Down Arrow** button to scroll to **Maintenance Mode** and press **OK**.
4. Press the **Down Arrow** button to scroll to **Adjust Color Regi** and press **OK**.
5. At Auto Adjust, press **OK**.
6. At the prompt, Are you sure?, press **OK** to begin the calibration.

When the adjustment is complete, Ready appears on the printer control panel.

Manual Color Registration

You can fine-tune color registration by performing a manual adjustment. Manual color registration adjustment is a three-step process:

1. Print the Color Registration Chart.
2. Using the chart and your test page, determine the color registration values to adjust.
3. Enter the determined color registration values and press [OK].

Printing the Color Registration Correction Chart

The following procedure can also be performed using the Printer Setting Utility. For details, see.

1. On the printer control panel, press the **Menu** button.
2. Press the **Down Arrow** button to go to **Admin Menu** and then press the **OK** button.
3. Press the **Down Arrow** button to scroll to **Maintenance Mode** and press **OK**.
4. Press the **Down Arrow** button to scroll to **Adjust Color Regi** and press **OK**.
5. Press the **Down Arrow** button to scroll to **Color Regi Chart** and press **OK**.
    - The Color Registration Chart prints.
6. Does the chart need adjustment?
    - Yes, proceed to the next section.
    - No, complete.

Determining the Color Registration Values

The Color Registration Chart shows horizontal and vertical values for each color. The color registration marks are grouped on the chart as follows:

Vertical registration values are at the top of the page:
- Y = Paper feed direction Yellow
- M = Paper feed direction Magenta
- C = Paper feed direction Cyan

Left side registration values are on the left side of the page:
- LY = Left Yellow
- LM = Left Magenta
- LC = Left Cyan

Right side registration values are on the right side of the page:
- RY = Right Yellow
- RM = Right Magenta
- RC = Right Cyan

To determine the vertical values:

1. In the upper section of the Color Registration Chart, vertical color lines are printed in gaps between corresponding vertical Black lines. The line sets are in color groups: Y, M, or C. Each set of lines has a corresponding number printed above it. In each color group, identify the set of lines in which the color line is perfectly aligned between the corresponding Black lines. Refer to the enlarged illustration on the chart that shows how to determine the closest number.

2. For each color, do one of the following:

    •   If zero (0) is the value on the color set that is most closely aligned, you do not need to adjust that color.

    •   If zero (0) is not the value on the color set that is most closely aligned, circle the number that is closest.

To determine the horizontal values:

1. In the left and right sections of the Color Registration Chart, horizontal color lines are printed in the gaps between corresponding Black lines. Each group of lines is arranged in a group under the corresponding letters LY, LM, LC, RY, RM, and RC. Each set of lines has a corresponding number printed to the right of it. In each color group, identify the set of lines in which color line is most closely aligned between the corresponding Black lines. Refer to the enlarged illustration on the chart that shows how to determine the closest number.

2. Proceed to determining the vertical values described in the following procedure:

    •   If zero (0) is the value on the color set that is most closely aligned, you do not need to adjust that color.

    •   If zero (0) is not the value on the color set that is most closely aligned, circle the number that is closest.

3. If it is necessary to make any horizontal or vertical adjustments, proceed to.

Entering Color Registration Value at the Control Panel

The following procedures can also be performed using the Printer Setting Utility. For details, see.

Using the printer control panel, enter the values that you found in the Color Registration Correction Chart to make adjustments.

1. On the control panel, press the **Menu** button.
2. Press the **Up Arrow** or **Down Arrow** button to select **Admin Menu**, then press the **OK** button.
3. Press the **Up Arrow** or **Down Arrow** button to select **Maintenance**, then press **OK**.
4. Press the **Up Arrow** or **Down Arrow** button to select **Adjust Color Regi**, then press **OK**.
5. Press the **Up Arrow** or **Down Arrow** button to select **Enter Number**, then press **OK**.
6. Adjust the Vertical registration values:

    a. Press the **Up Arrow** or **Down Arrow** button to select the Y value from the Color Registration Correction Chart. Press the Forward button to move to the next value.

    b. Press the **Up Arrow** or **Down Arrow** button to select the M value from the Color Registration Correction Chart. Press the **Forward** button to move to the next value.

    c. Press the **Up Arrow** or **Down Arrow** button to select the C value from the Color Registration Correction Chart.

    d. Press **OK** to accept the changes and continue to the next adjustment.

7. Adjust the Left Horizontal registration values:

    a. Press the **Up Arrow** or **Down Arrow** button to select the LY value from the Color Registration Correction Chart. Press the **Forward** button to move to the next value.

    b. Press the **Up Arrow** or **Down Arrow** button to select the LM value from the Color Registration Correction Chart. Press the **Forward** button to move to the next value.

c.   Press the **Up Arrow** or **Down Arrow** button to select the LC value from the Color Registration Correction Chart. Press **OK** to move to the next screen.

d.   Press **OK** to accept the changes and continue to the next adjustment.

8.   Adjust the Right Horizontal registration values:

a.   Press the **Up Arrow** or **Down Arrow** button to select the RY value from the Color Registration Correction Chart. Press the **Forward** button to move to the next value.

b.   Press the **Up Arrow** or **Down Arrow** button to select the RM value from the Color Registration Correction Chart. Press the **Forward** button to move to the next value.

c.   Press the **Up Arrow** or **Down Arrow** button to select the RC value from the Color Registration Correction Chart. Press **OK** to move to the next screen.

9.   When the registration value adjustments are complete, press OK. The printer returns to Ready.

10.   Print the chart again to verify the values:

11.   Repeat the steps until the color registration is satisfactory.

12.   Press the **Return** button to return to Ready.

Cleaning the Developer

To Clean the Developer:

1.   On the control panel, press the **Menu** button.

2.   Press the **Up Arrow** or **Down Arrow** button to select **Admin Menu**, then press the **OK** button.

3.   Press the **Up Arrow** or **Down Arrow** button to select **Maintenance Menu**, then press the **OK** button.

4.   Press the **Up Arrow** or **Down Arrow** button to select **Clean Developer**, then press **OK**.

5.   Select **YES** from the drop down list.

6.   Press the **Return** button to return to Ready.

Refreshing the Toner Cartridge

To Refresh a Toner Cartridge:

1.   On the control panel, press the **Menu** button.

2.   Press the **Up Arrow** or **Down Arrow** button to select **Admin Menu**, then press the **OK** button.

3.   Press the **Up Arrow** or **Down Arrow** button to select **Maintenance Menu**, then press the **OK** button.

4.   Press the **Up Arrow** or **Down Arrow** button to select **Refresh Toner**, then press **OK**.

5.   Select the **Y or N** to Refresh the Toner for the selected Cartridge color.

- Yellow - Y/N
- Magenta - Y/N
- Cyan - Y/N
- Black - Y/N

6.   Press the **Return** button to return to Ready.

Refreshing the BTR

To Refresh the BTR:
1. On the control panel, press the **Menu** button.
2. Press the **Up Arrow** or **Down Arrow** button to select **Admin Menu**, then press the **OK** button.
3. Press the **Up Arrow** or **Down Arrow** button to select **Maintenance Menu**, then press the **OK** button.
4. Press the **Up Arrow** or **Down Arrow** button to select **BTR Refresh** then press **OK**.
5. Select **ON** from the drop down list.
6. Press the **Return** button to return to Ready.

Initialize NVM

To Initialize the NVM:
1. On the control panel, press the **Menu** button.
2. Press the **Up Arrow** or **Down Arrow** button to select **Admin Menu**, then press the **OK** button.
3. Press the **Up Arrow** or **Down Arrow** button to select **Maintenance Menu**, then press the **OK** button.
4. Press the **Up Arrow** or **Down Arrow** button to select **Init NVM** then press **OK**.
5. Select desired section:
   - System Section - Y/N
   - User Scan Section - Y/N
6. Press the **Return** button to return to Ready.

Adjusting Altitude

Print quality varies with barometric pressure. Since the barometric pressure decreases as the altitude increases, the altitude can affect the print quality of the printer. To optimize print quality for your location, select the altitude setting on your printer to match the altitude of your location.

To adjust altitude:
1. On the control panel, press the **Menu** button.
2. Press the **Up Arrow** or **Down Arrow** button to select **Admin Menu**, then press the **OK** button.
3. Press the **Up Arrow** or **Down Arrow** button to select **Maintenance Menu**, then press the **OK** button.
4. Press the **Up Arrow** or **Down Arrow** button to select **Adjust Altitude** then press **OK**.
5. Select the value closest to the altitude of your location.

   Note: "0" is the default value. 1000m = 1000m above sea level.

6. Press the **Return** button to return to Ready.

Maintenance at the WorkCentre 6027 MFP Control Panel

Adjusting for the Paper Type

Use Adjust Paper Type to compensate for paper thickness within a paper type. If the printed image is too light, use a heavier setting for the paper you are using. If the printed image is mottled or blotchy-looking, decrease the setting for the paper you are using.

To adjust the paper type:
1. At the printer control panel, press the **Machine Status** button.
2. Touch **Tools**, then touch **Admin Settings**.
3. Using the keypad, type the passcode as needed.
4. Touch
   - **Maintenance**.
5. Touch
   - **Adjust Paper Type**.
6. Touch
   - **Plain** or **Labels**.
7. To select the weight range of the paper, touch
   - **Lightweight** or **Heavyweight**.
8. To return to the Services Home menu, press the
   - **Services Home** button.

Adjusting the Bias Transfer Roller

Use Adjust BTR to specify the bias transfer roller (BTR) voltage for printing on the selected paper type. If the printed image is too light, increase the offset for the paper you are using. If the printed image is mottled or blotchy-looking, decrease the offset for the paper you are using.

To adjust the bias transfer roller:
1. At the printer control panel, press the **Machine Status** button.
2. Touch **Tools**, then touch **Admin Settings**.
3. Using the keypad, type the passcode as needed.
4. Touch
   - **Maintenance**.
5. Touch
   - **Adjust BTR**.
6. Select the paper type for the adjustment.
7. To increase or decrease the amount of offset. touch

- Plus (**+**) or Minus (**-**), then touch **OK**.
8. Repeat this procedure for each paper type you need to adjust.

Adjusting the Fuser

Use Adjust Fuser for optimum print quality across a wide range of paper types. If the toner on a print is smearing or can be rubbed off the paper, increase the offset for the paper you are using. If the toner is blistered or mottled, decrease the offset for the paper you are using.

To adjust the Fuser
1. At the printer control panel, press the **Machine Status** button.
2. Touch **Tools**, then touch **Admin Settings**.
3. Using the keypad, type the passcode as needed.
4. Touch
   - **Maintenance**.
5. Touch
   - **Adjust Fuser**.
6. Select the paper type for the adjustment.
7. To increase or decrease the amount of offset. touch
   - Plus (**+**) or Minus (**-**), then touch **OK**.
8. Repeat this procedure for each paper type you need to adjust.

Color Registration

The printer automatically adjusts the color registration when automatic adjustment is turned on. You can also adjust color registration manually any time the printer is idle. You must adjust the color registration any time the printer is moved. If you are having printing problems, adjust the color registration.

Setting Automatic Color Registration
1. At the printer control panel, press the **Machine Status** button.
2. Touch **Tools**, then touch **Admin Settings**.
3. Using the keypad, type the passcode as needed.
4. Touch
   - **Maintenance**.
5. Touch
   - **Auto Reg Adjust**.
6. Touch
   - **On**, then touch **OK**.
7. To navigate back to Maintenance, touch the
   - **Back** button.

Performing an Automatic Color Registration Adjustment

Automatic color registration adjustment occurs every time a new toner cartridge is installed. You can run this adjustment at other times as needed.

To perform an automatic color registration adjustment:
1. At the printer control panel, press the **Machine Status** button.
2. Touch **Tools**, then touch **Admin Settings**.
3. Using the keypad, type the passcode as needed.
4. Touch
   - **Maintenance**.
5. Touch
   - **Color Reg Adjust**.
6. Touch
   - **Auto Correct**.
7. Touch
   - **Start**.
8. To begin the calibration, press
9. **Start** again.

Performing a Manual Color Registration Adjustment

Color Registration adjusts the printer to make corrections to blurry or hazy prints, or prints with color halos.

To perform a color registration adjustment:
1. At the printer control panel, press the **Machine Status** button.
2. Touch **Tools**, then touch **Admin Settings**.
3. Using the keypad, type the passcode as needed.
4. Touch
   - **Maintenance**.
5. Touch
   - **Color Registration**.
6. Touch
   - **Print Registration Chart**.
7. Touch
   - **Print**.
8. Starting with the left side calibration lines, circle the line in each group where the color bar aligns with the adjacent black bars.
   - Repeat the process for the right side calibration lines, RY, RM, and RC.
9. Align a straight edge through the middle of the white zone in each of the PY, PM, and PC charts. There is a number at the end of each chart that represents the middle of the white zone. Find the number for the middle of the white zone and circle it.

- Touch **Enter Registration Value**.
10. To enter values for each LY, LM, and LC fields, touch
    - Plus (**+**) or Minus (**-**) to match the numbers that you circled earlier.
11. Touch
    - **Next**.
12. To enter values for each RY, RM, and RC fields, touch
    - Plus (**+**) or Minus (**-**) to match the numbers that you circled earlier.
13. Touch
    - **Next**.
14. To enter values for each PY, PM, and PC fields, touch
    - Plus (**+**) or Minus (**-**) to match the numbers that you circled earlier.
15. Touch
    - **OK**.
16. Print another Registration Chart, then repeat the process until you complete the color registration corrections.

Refreshing the Bias Transfer Roller

Use the BTR Refresh procedure to reduce paper curling and improve paper discharge.

To refresh the bias transfer roller:
1. At the printer control panel, press the **Machine Status** button.
2. Touch **Tools**, then touch **Admin Settings**.
3. Using the keypad, type the passcode as needed.
4. Touch
    - **Maintenance**.
5. Select
    - **BTR Refresh**, then press **Start**.

Adjusting the Altitude

Use Adjust Altitude to adjust the altitude to match that of the location where the printer is installed. If the altitude setting is incorrect, it can cause print-quality problems.

To adjust the altitude:
1. At the printer control panel, press the **Machine Status** button.
2. Touch **Tools**, then touch **Admin Settings**.
3. Using the keypad, type the passcode as needed.
4. Touch
    - **Maintenance**.
5. Touch
    - **Adjust Altitude**.

6. To select an altitude from the list, touch it.

7. Touch

   • **OK**.

8. To return to the Services Home menu, press the

   • **Services Home** button.

Adjusting the Touchscreen

You can use the Adjust Touchscreen feature to calibrate the touch positions on the touchscreen.

To adjust the touchscreen:

1. At the printer control panel, press the **Machine Status** button.

2. Touch **Tools**, then touch **Admin Settings**.

3. Using the keypad, type the passcode as needed.

4. Touch

   • **Maintenance**.

5. Touch

   • **Adjust Touchscreen**.

6. Read the instructions, then touch

   • **OK**.

7. Touch each cross as it appears.

   • Touch **OK**.

8. To return to the Services Home menu, press the

9. **Services Home** button.

Initializing Non-Volatile Memory

This feature initializes the settings stored in the non-volatile memory (NVM) except for the network settings. The NVM stores printer settings even after the power is turned off. After executing this function and restarting the printer, all menu settings are reset to their default values.

To initialize non-volatile memory:

1. At the printer control panel, press the **Machine Status** button.

2. Touch **Tools** > **Admin Settings**.

3. Using the keypad, type the passcode as needed.

4. Touch

   • **Maintenance**

   • scroll to the next screen

   • touch **Initialize NVM**.

5. To select to reset the non-volatile memory, touch one of the following:

- **User Fax Section**
- **User Scan Section**
- **System Section**.

6. Touch
   - **Initialize**
   - **Yes, Initialize**.

7. To cancel, touch the
   - **No**
   - **or the Cancel** button.

8. To return to the Service Tools menu, press the
   - **Back** arrow.

9. To return to the Services Home menu, press the **Services Home** button.

Clearing Job History

The printer retains information on previous printing jobs, including the date, time, job type, document name, output color, paper size, number of pages, and results. The status of a maximum of 20 jobs prints on the Job History Report. You can use Clear Job History to clear all jobs from the list.

To clear job history:
1. At the printer control panel, press the **Machine Status** button.
2. Touch **Tools**, then touch **Admin Settings**.
3. Using the keypad, type the passcode as needed.
4. Touch
   - **Maintenance**.
5. Touch
   - **Clear Job History**.
6. To clear the job history, touch
   - **Start**.
7. To close without clearing the job history, touch **Cancel**.

Scanner Adjustment

When the Scanner is replaced, the Scanner calibration data must be written to the IP Board for proper Scanner operation. The WorkCentre 6025 and 6027 MFPs have a Gap Serial Number sticker located at the center rear of the scanner. This number is the calibration data that is required.
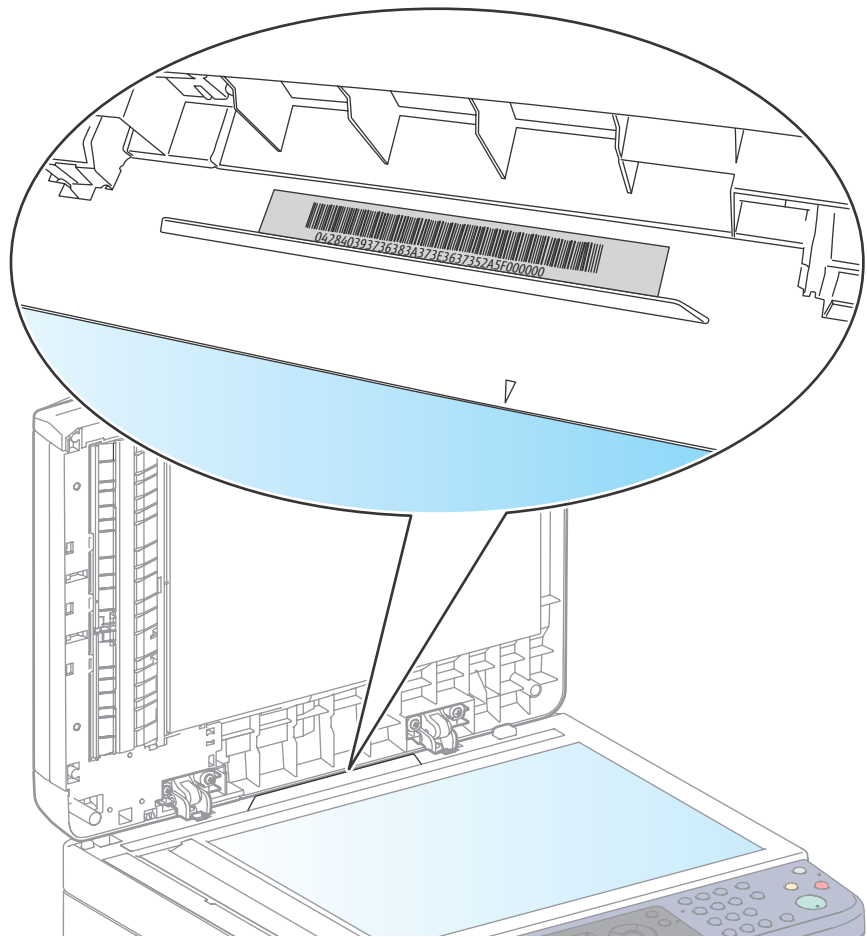
s6020-457

- Connect the printer to the computer via USB.
- Start the Grande Gap Writer software (attached).
- Choose the Scanner from the Scanner List.
- Enter the Gap Serial Number in the **Gap SN** box and press Enter.
- The information is written to the IP Board.

Wiring

7

In this chapter...

- Printer Plug/Jack Designations
- Plug and Jack Locater Coordinates and Diagrams
- Wiring Diagrams

Printer Plug/Jack Designations

This chapter contains the plug/jack designators, locator diagrams, and wiring diagrams. The Plug/Jack Locator diagrams show the P/J locations within the printer. Use these illustrations to locate connections called out in the troubleshooting procedures presented in Sections 3, 4, and 5.

1. Locate the P/J connector designator in the first column of the table.
2. Use the coordinates to locate the connection indicated on the map by its P/J designation number.
3. The Remarks column provides a brief description of each connection.+
4. Using this information, go to the map listed in the Map column.

Plug and Jack Locater Coordinates and Diagrams

Phaser 6020 P/J Coordinates

P/J	Coordinates	Remarks	Map
1	I-122	Connects PWB ASSY TOP TOKI 2 and FFC ASSY LIGHT BIZ	2
1	I-123	Connects PWB ASSY TOP TOKI 2 and HARNESS ASSY TOKI	2
2	J-122	Connects PWB ASSY TOP TOKI 2 and FFC LPH (M) (Marking Unit)	2
3	J-122	Connects PWB ASSY TOP TOKI 2 and FFC LPH (Y) (Marking Unit)	2
4	J-123	Connects PWB ASSY TOP TOKI 2 and FFC LPH (K) (Marking Unit)	2
5	J-123	Connects PWB ASSY TOP TOKI 2 and FFC LPH (C) (Marking Unit)	2
8	H-123	Connects PWBA ESS SFP Phaser 6020 and WorkCentre 6025 MFP and HARNESS ASSY LVES	2
9	H-123	Connects PWBA ESS SFP Phaser 6020 and WorkCentre 6025 MFP and HARNESS ASSY TOKI	2
10	H-123	Connects PWBA ESS SFP Phaser 6020 and WorkCentre 6025 MFP and HARNESS ASSY CONSOLE	2
11	H-123	Connects PWBA ESS SFP Phaser 6020 and WorkCentre 6025 MFP and FFC ASSY ESS	2
12	J-134	Connects PWBA MCU MC02KC and HARNESS ASSY RK SNS	3
13	H-133	Connects PWBA MCU MC02KC and HARNESS ASSY DCKR	3
14	J-134	Connects PWBA MCU MC02KC and HARNESS ASSY CTD (Marking Unit)	3
15	I-133	Not Connect	3
16	I-133	Connects PWBA MCU MC02KC and HARNESS ASSY MAIN MOT	3
17	H-134	Connects PWBA MCU MC02KC and PWBA LVPS	3
18	I-134	Connects PWBA MCU MC02KC and Fuser	3
19	I-134	Connects PWBA MCU MC02KC and SOLENOID FEED MSI	3
20	H-134	Connects PWBA MCU MC02KC and HARNESS ASSY DISPENSE MOT	3
21	I-134	Connects PWBA MCU MC02KC and HARNESS ASSY HVPS	3
22	J-134	Connects PWBA MCU MC02KC and FFC ASSY ESS	3
23	I-134	Connects PWBA MCU MC02KC and FFC ASSY LIGHT BIZ	3
25	I-134	Connects PWBA MCU MC02KC and CLUTCH REGI	3
26	I-134	Connects PWBA MCU MC02KC and Fuser	3
120	E-125	Connects REGI Sensor and HARNESS ASSY RK SNS	2

P/J	Coordinates	Remarks	Map
122	H-125	Connects DRIVE ASSY DEVE V (K Mode Switching Sensor) and HARNESS ASSY RK SNS	2
130	I-107	Connects Toner CRUM (K) and HARNESS ASSY DCKR	1
131	I-107	Connects Toner CRUM (C) and HARNESS ASSY DCKR	1
132	H-107	Connects Toner CRUM (M) and HARNESS ASSY DCKR	1
133	H-107	Connects Toner CRUM (Y) and HARNESS ASSY DCKR	1
140	C-123	Connects CTD (ADC) Sensor and HARNESS ASSY CTD1 TRO (Marking Unit)	2
141	E-124	Connects TRO (MOB) Sensor and HARNESS ASSY CTD1 TRO (Marking Unit)	2
160	H-124	Connects DRIVE ASSY MOT V and HARNESS ASSY MAIN MOT	2
200	H-110	Connects MOTOR ASSY DISP (CK) and HARNESS ASSY DISPENSE MOT	1
200	B-139	Connects PWBA LVPS and HARNESS ASSY INLET SFP	3
201	G-110	Connects MOTOR ASSY DISP (YM) and HARNESS ASSY DISPENSE MOT	1
201	C-139	Connects PWBA LVPS and Fuser	1
202	E-138	Connects PWBA LVPS and HARNESS ASSY LVES	3
203	F-138	Connects PWBA LVPS and PWBA MCU MC02KC	3
204	F-139	Connects PWBA LVPS and SWITCH I/L ASSY	3
205	F-139	Connects PWBA LVPS and FAN MAIN	3
206	E-138	Connects PWBA LVPS and HARNESS ASSY FSR TEST	3
208	G-109	Not Connect (Used in production process only)	1
210	F-139	Connects PWBA HVPS and HARNESS ASSY HVPS	3
220	B-106	Connects PWB ASSY LED and HARNESS ASSY CONSOLE	1
404	G-124	Not Connect	2
406	G-124	Not Connect	2
408	H-123	Not Connect	2

Map 1 - Phaser 6020

220

133 132 131 130

208 201 200
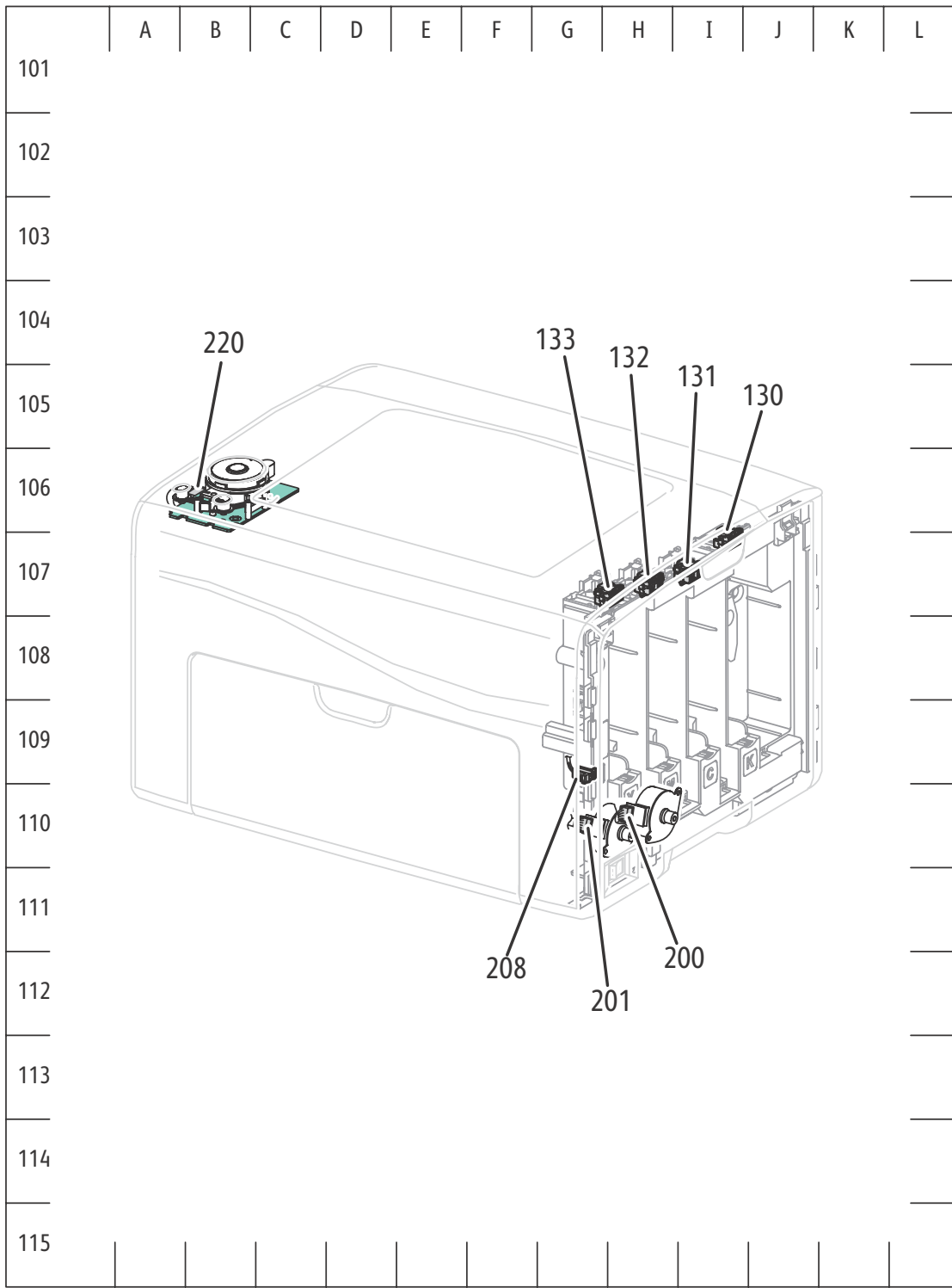
s6020-007

Map 2 - Phaser 6020

	A	B	C	D	E	F	G	H	I	J	K	L
116												
117												
118												
119												
120												
121												
122												
123												
124												
125												
126												
127												
128												
129												
130												

∗ : Not Connected
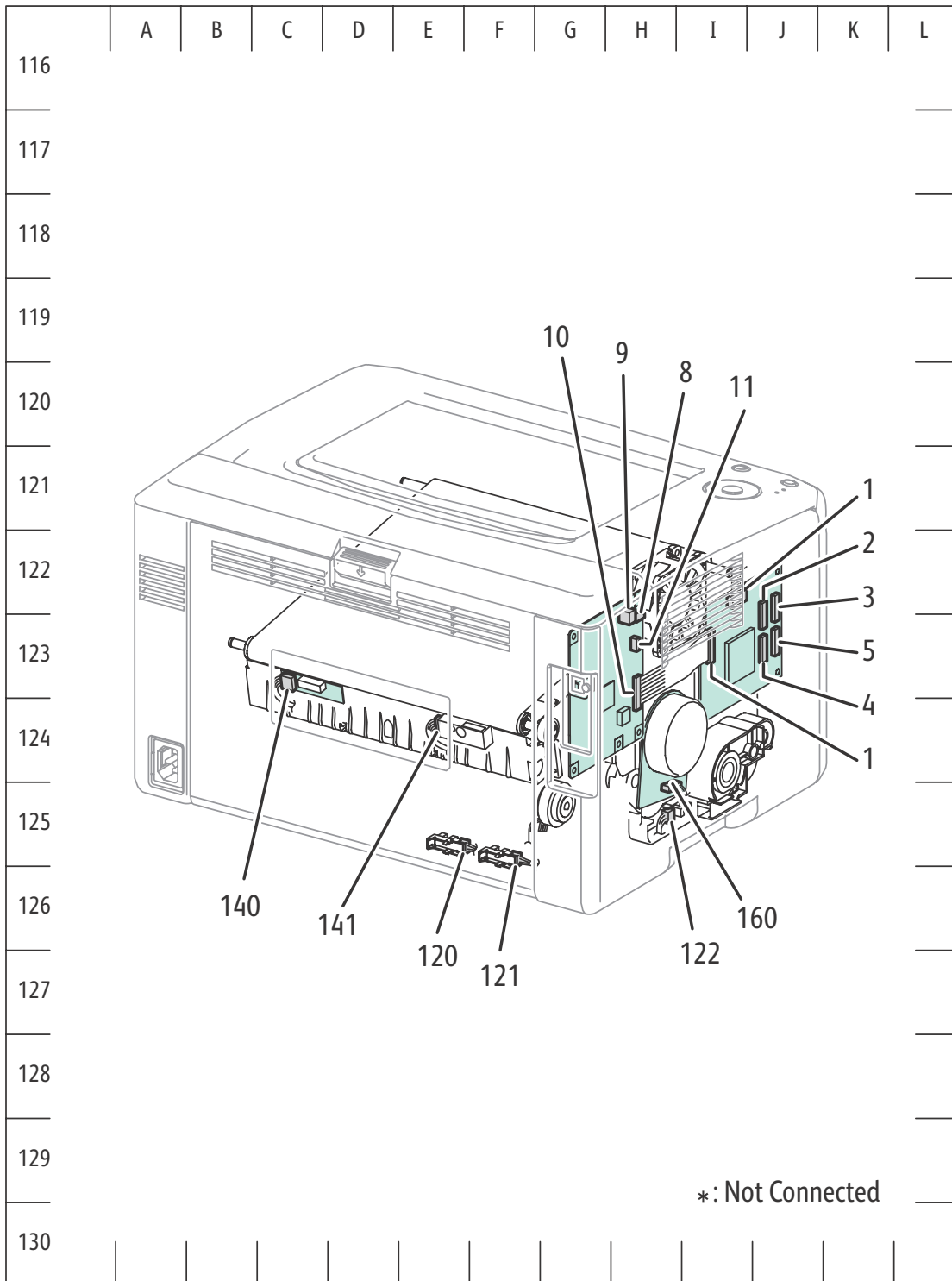
s6020-123

Map 3 - Phaser 6020

*: Not Connected
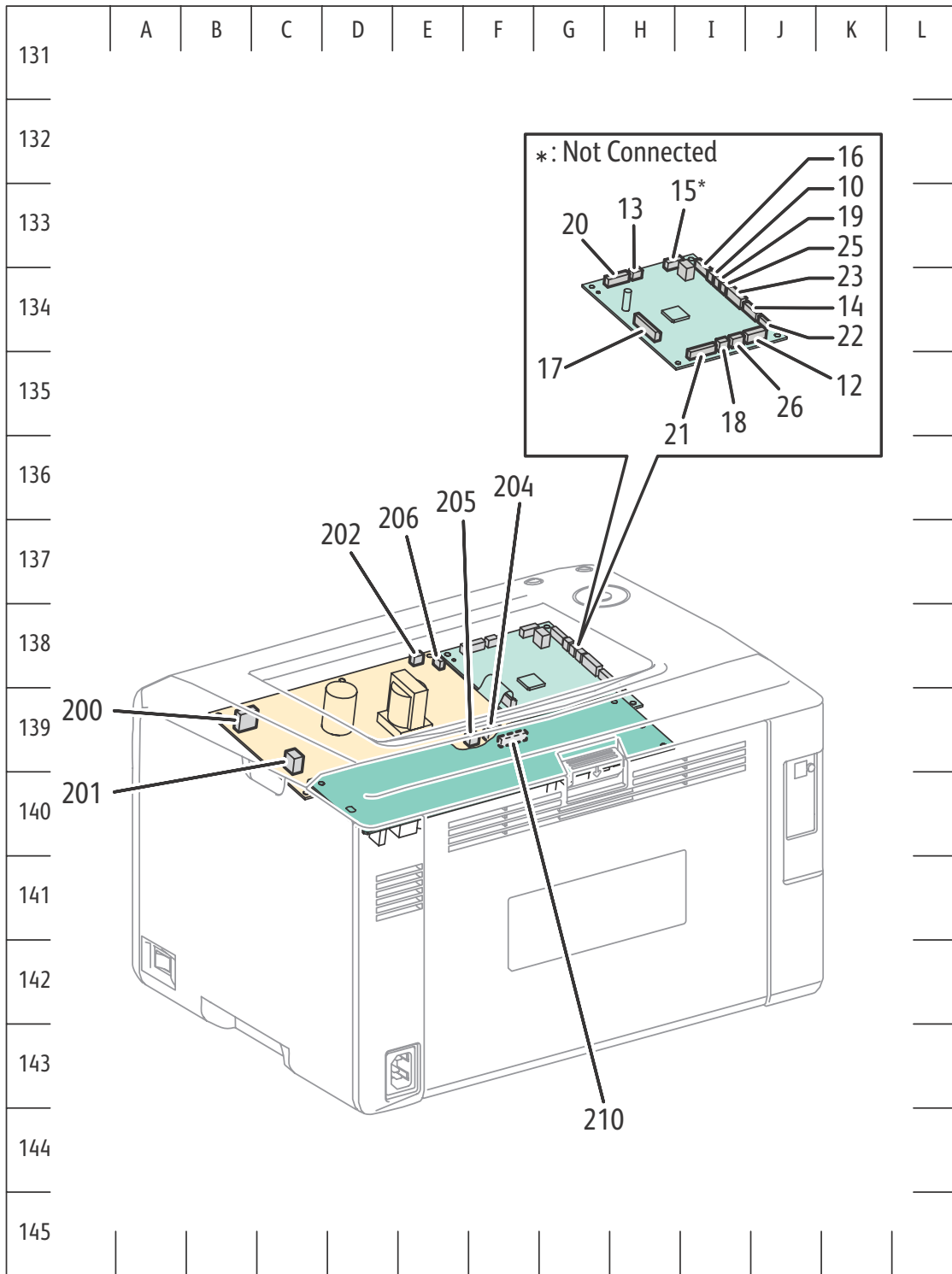
s6020-124

Phaser 6022 P/J Coordinates

P/J	Coordinates	Remarks	Map
1	I-122	Connects PWB ASSY TOP TOKI 2 and FFC ASSY LIGHT BIZ	2
1	I-123	Connects PWB ASSY TOP TOKI 2 and HARNESS ASSY TOKI	2
2	J-122	Connects PWB ASSY TOP TOKI 2 and FFC LPH (M) (Marking Unit)	2
3	J-122	Connects PWB ASSY TOP TOKI 2 and FFC LPH (Y) (Marking Unit)	2
4	J-123	Connects PWB ASSY TOP TOKI 2 and FFC LPH (K) (Marking Unit)	2
5	J-123	Connects PWB ASSY TOP TOKI 2 and FFC LPH (C) (Marking Unit)	2
8	H-123	Connects PWBA ESS SFP Phaser 6020 and WorkCentre 6025 MFP and HARNESS ASSY LVES	2
9	H-123	Connects PWBA ESS SFP Phaser 6020 and WorkCentre 6025 MFP and HARNESS ASSY TOKI	2
10	H-123	Connects PWBA ESS SFP Phaser 6020 and WorkCentre 6025 MFP and HARNESS ASSY CONSOLE	2
11	H-123	Connects PWBA ESS SFP Phaser 6020 and WorkCentre 6025 MFP and FFC ASSY ESS	2
12	J-134	Connects PWBA MCU MC02KC and HARNESS ASSY RKN SNS	3
13	H-133	Connects PWBA MCU MC02KC and HARNESS ASSY DCKR	3
14	J-134	Connects PWBA MCU MC02KC and HARNESS ASSY CTD1 TRO (Marking Unit)	3
15	I-133	Not Connect	3
16	I-133	Connects PWBA MCU MC02KC and HARNESS ASSY MAIN MOT	3
17	H-134	Connects PWBA MCU MC02KC and PWBA LVPS	3
18	I-134	Connects PWBA MCU MC02KC and Fuser Phaser 6022 and WorkCentre 6027 MFP	3
19	I-134	Connects PWBA MCU MC02KC and SOLENOID FEED PTH	3
20	H-134	Connects PWBA MCU MC02KC and HARNESS ASSY DISPENSE MOT	3
21	I-134	Connects PWBA MCU MC02KC and HARNESS ASSY HVPS	3
22	J-134	Connects PWBA MCU MC02KC and FFC ASSY ESS	3
23	I-134	Connects PWBA MCU MC02KC and FFC ASSY LIGHT BIZ	3
25	I-134	Connects PWBA MCU MC02KC and CLUTCH REGI	3
26	I-134	Connects PWBA MCU MC02KC and Fuser Phaser 6022 and WorkCentre 6027 MFP	3
120	E-125	Connects REGI Sensor and HARNESS ASSY RKN SNS	2

P/J	Coordinates	Remarks	Map
121	F-125	Connects No Paper Sensor and HARNESS ASSY RKN SNS	2
122	H-125	Connects DRIVE ASSY DEVE (K Mode Switching Sensor) and HARNESS ASSY RKN SNS	2
130	I-107	Connects Toner CRUM (K) and HARNESS ASSY DCKR	1
131	I-107	Connects Toner CRUM (C) and HARNESS ASSY DCKR	1
132	H-107	Connects Toner CRUM (M) and HARNESS ASSY DCKR	1
133	H-107	Connects Toner CRUM (Y) and HARNESS ASSY DCKR	1
140	C-123	Connects CTD (ADC) Sensor and HARNESS ASSY CTD (Marking Unit)	2
160	H-124	Connects DRIVE ASSY MOT and HARNESS ASSY MAIN MOT	2
200	H-110	Connects MOTOR ASSY DISP (CK) and HARNESS ASSY DISPENSE MOT	1
200	B-139	Connects PWBA LVPS and HRNESS ASSY INLET SFP Phaser 6022 and WorkCentre 6027 MFP	3
201	G-110	Connects MOTOR ASSY DISP (YM) and HARNESS ASSY DISPENSE MOT	1
201	C-139	Connects PWBA LVPS and Fuser Phaser 6022 and WorkCentre 6027 MFP	3
202	E-138	Connects PWBA LVPS and HARNESS ASSY LVES	3
203	F-139	Connects PWBA LVPS and PWBA MCU MC02KC	3
204	F-139	Connects PWBA LVPS and SWITCH I/L ASSY	3
205	F-139	Connects PWBA LVPS and FAN MAIN	3
206	E-138	Connects PWBA LVPS and HARNESS ASSY FSR TEST	3
208	G-109	Not Connect (Used in production process only)	1
210	F-139	Connects PWBA HVPS and HARNESS ASSY HVPS	3
220	B-106	Connects PWB ASSY LED and HARNESS ASSY CONSOLE	1

Map 1 - Phaser 6022
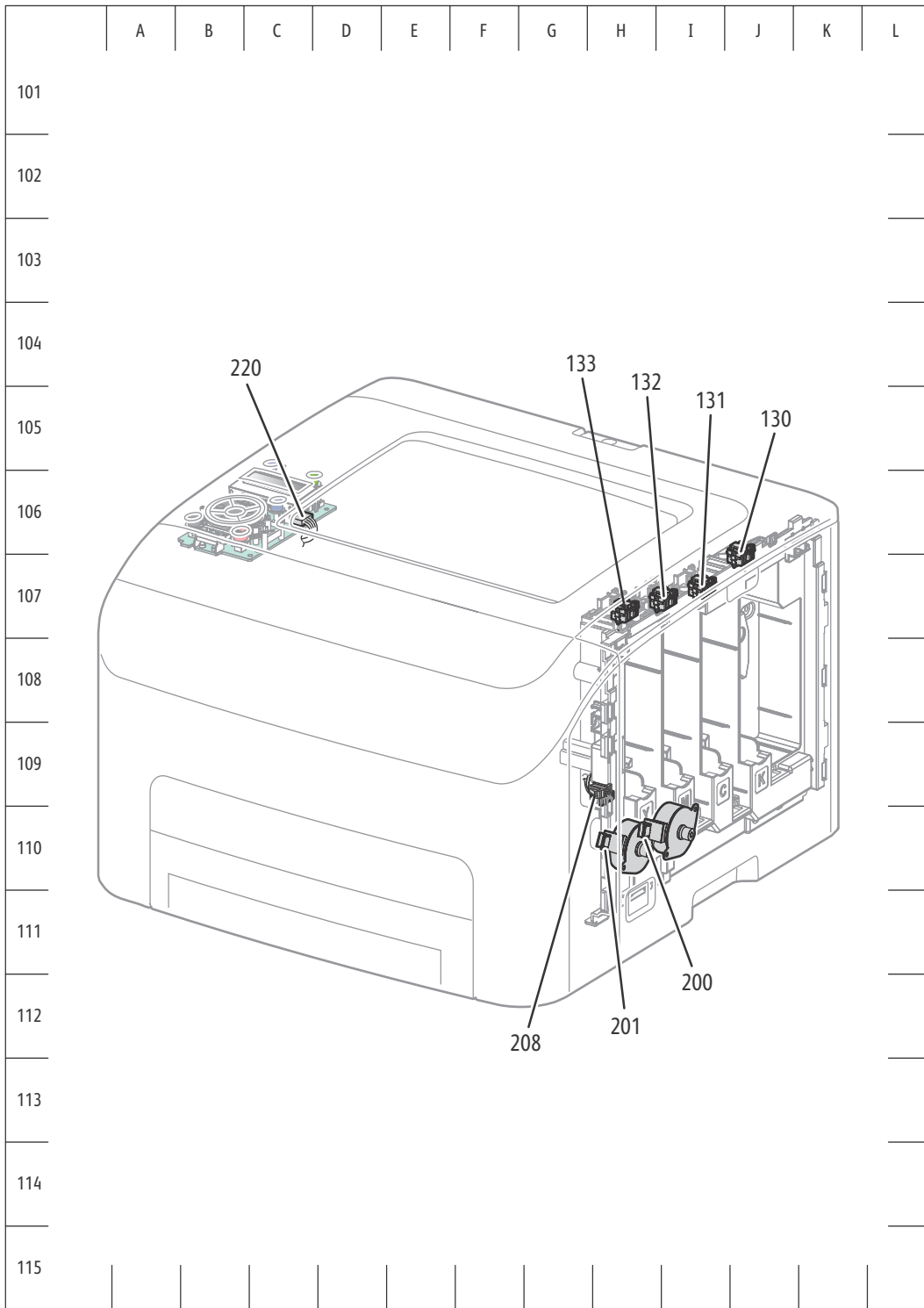
s6020-526

Map 2 - Phaser 6022

s6020-527

∗ : Not Connected

Wiring

Map 3 - Phaser 6022

* : Not Connect
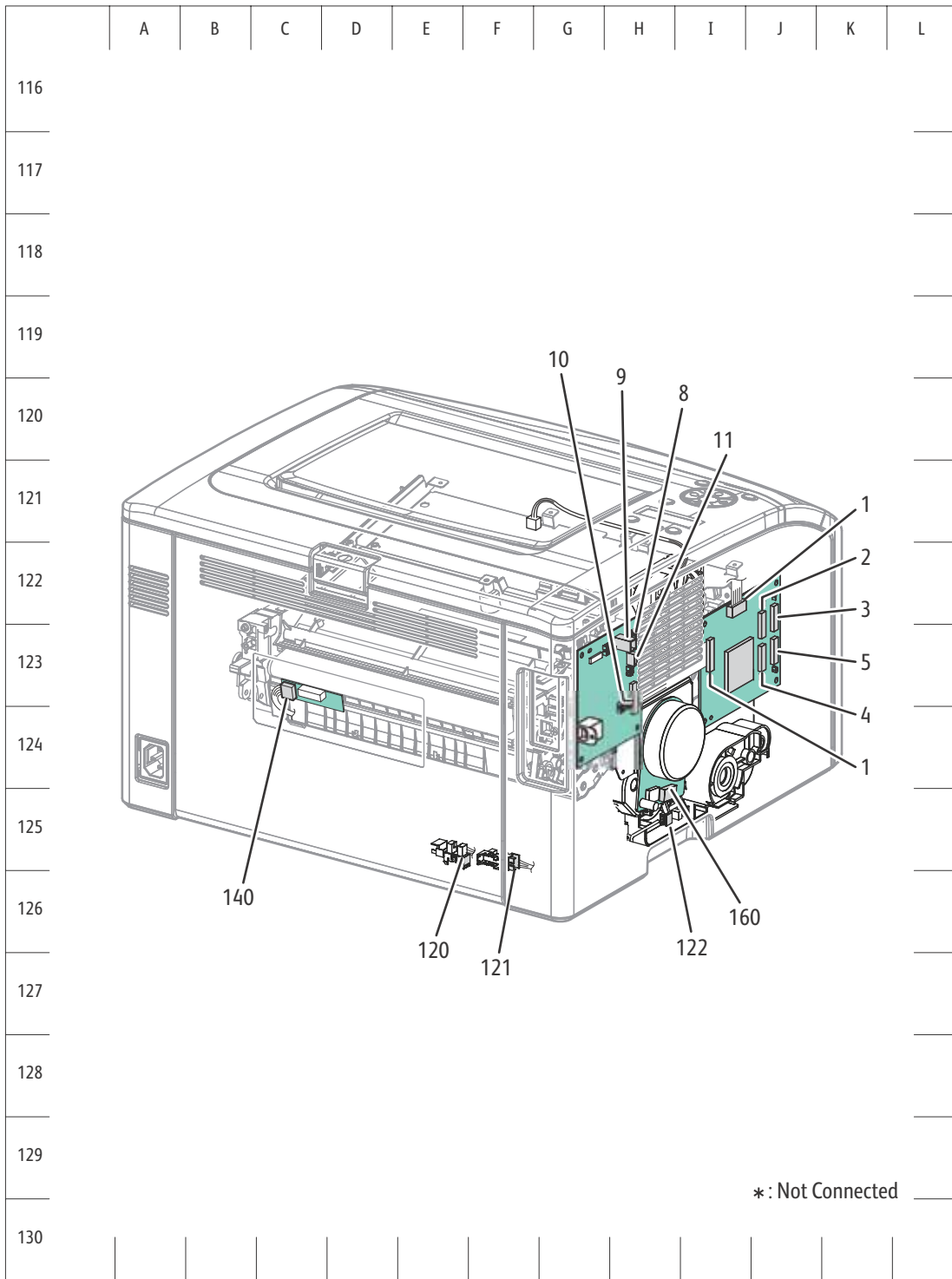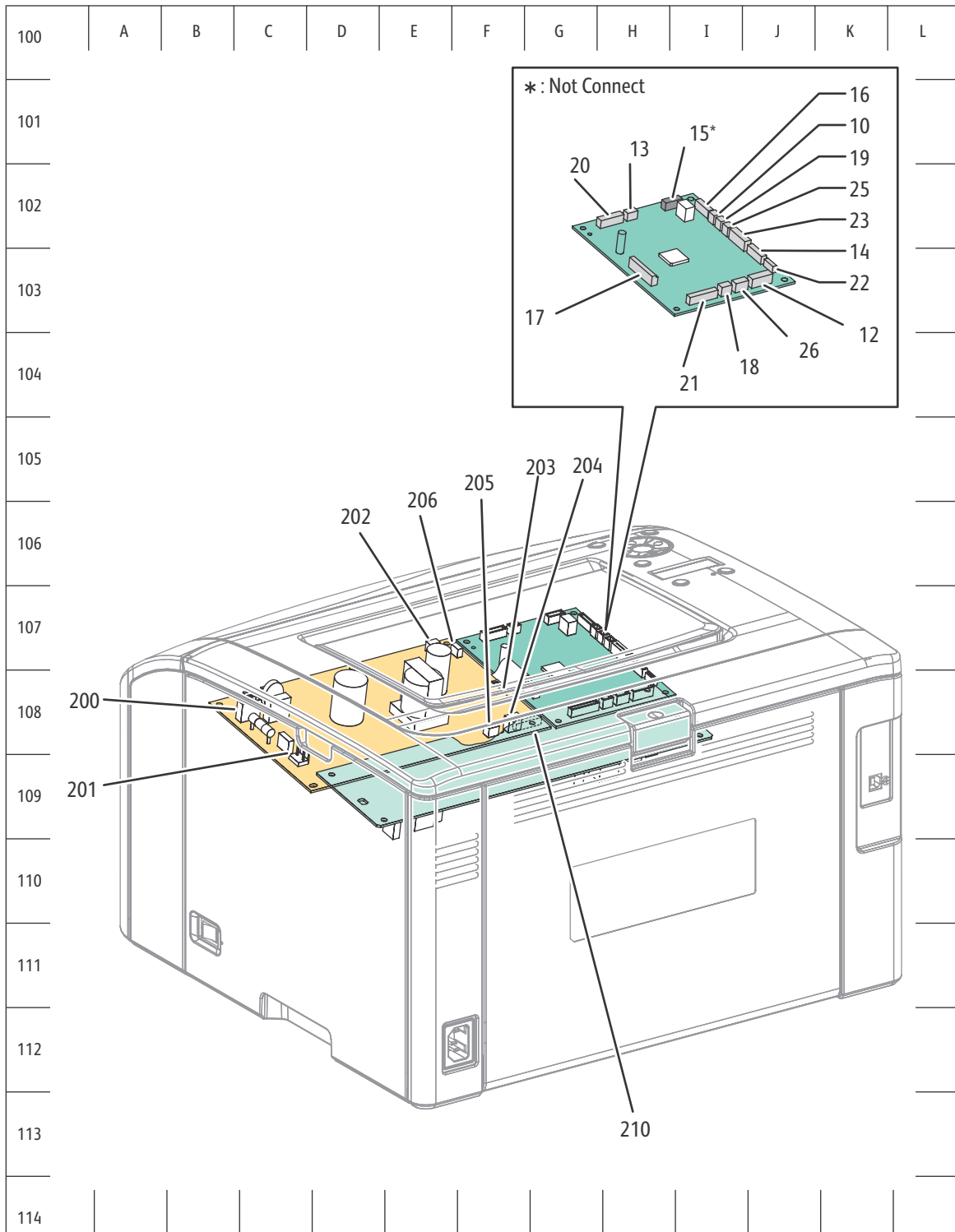
s6020-696

WorkCentre 6025 MFP P/J Coordinates

P/J	Coordinates	Remarks	Map
1	I-125	Connects PWB ASSY TOP TOKI 2 and FFC ASSY LIGHT BIZ	2
1	I-125	Connects PWB ASSY TOP TOKI 2 and HARNESS ASSY TOKI	2
1	J-117	Connects PWBA ESS AIO 3in1 and HARNESS ASSY LVES AIO	2
2	J-125	Connects PWB ASSY TOP TOKI 2 and FFC LPH (M) (Marking Unit)	2
2	I-119	Not Connect	2
2	K-126	Connects HARNESS ASSY USB FRONT and PWBA ESS AIO 3IN1	2
3	J-125	Connects PWB ASSY TOP TOKI 2 and FFC LPH (Y) (Marking Unit)	2
4	J-125	Connects PWB ASSY TOP TOKI 2 and FFC LPH (K) (Marking Unit)	2
5	J-125	Connects PWB ASSY TOP TOKI 2 and FFC LPH (C) (Marking Unit)	2
10	I-133	Connects PWBA MCU MC02KC and DRIVE ASSY DEVE V (K Mode Switching Solenoid)	3
12	J-134	Connects PWBA MCU MC02KC and HARNESS ASSY RKN SNS	3
13	H-133	Connects PWBA MCU MC02KC and HARNESS ASSY DCKR	3
14	J-133	Connects PWBA MCU MC02KC and HARNESS ASSY CTD1 TRO (Marking Unit)	3
15	I-133	Not Connect	3
16	I-133	Connects PWBA MCU MC02KC and HARNESS ASSY MAIN MOT	3
17	H-134	Connects PWBA MCU MC02KC and PWBA LVPS	3
18	I-134	Connects PWBA MCU MC02KC and Fuser	3
19	I-133	Connects PWBA MCU MC02KC and SOLENOID FEED MSI	3
20	H-133	Connects PWBA MCU MC02KC and HARNESS ASSY DISPENSE MOT	3
21	I-134	Connects PWBA MCU MC02KC and HARNESS ASSY HVPS	3
22	J-134	Connects PWBA MCU MC02KC and FFC ASSY ESS AIO	3
23	I-133	Connects PWBA MCU MC02KC and FFC ASSY LIGHT BIZ	3
25	I-133	Connects PWBA MCU MC02KC and CLUTCH REGI	3
26	I-134	Connects PWBA MCU MC02KC and Fuser	3
120	E-128	Connects REGI Sensor and HARNESS ASSY RKN SNS	2
122	H-127	Connects DRIVE ASSY DEVE V (K Mode Switching Sensor) and HARNESS ASSY RKN SNS	2
130	I-107	Connects Toner CRUM (K) and HARNESS ASSY DCKR	1
131	I-108	Connects Toner CRUM (C) and HARNESS ASSY DCKR	1

P/J	Coordinates	Remarks	Map
132	H-108	Connects Toner CRUM (M) and HARNESS ASSY DCKR	1
133	G-108	Connects Toner CRUM (Y) and HARNESS ASSY DCKR	1
140	C-126	Connects CTD (ADC) Sensor and HARNESS ASSY CTD1 TRO (Marking Unit)	2
141	E-126	Connects TRO (MOB) Sensor and HARNESS ASSY CTD1 TRO (Marking Unit)	2
160	H-127	Connects DRIVE ASSY MOT V and HARNESS ASSY MAIN MOT	2
200	H-111	Connects MOTOR ASSY DISP (CK) and HARNESS ASSY DISPENSE MOT	1
200	B-139	Connects PWBA LVPS and HARNESS ASSY INLET AIO	3
201	G-111	Connects MOTOR ASSY DISP (YM) and HARNESS ASSY DISPENSE MOT	1
201	C-140	Connects PWBA LVPS and Fuser	3
202	E-139	Connects PWBA LVPS and HARNESS ASSY LVES AIO	3
203	F-139	Connects PWBA LVPS and PWBA MCU MC02KC	3
204	F-140	Connects PWBA LVPS and SWITCH I/L ASSY	3
205	F-140	Connects PWBA LVPS and FAN MAIN	3
206	E-139	Connects PWBA LVPS and HARNESS ASSY FSR TEST	3
208	G-110	Not Connect (Used in production process only)	1
210	F-140	Connects PWBA HVPS and HARNESS ASSY HVPS	3
S1	I-117	Connects PWBA ESS AIO 3IN1 and SCANNER ASSY 3IN1	2
S2	I-119	Not Connect	2
S6	I-117	Connects PWBA ESS AIO 3IN1 and SCANNER ASSY 3IN1 (CONSOLE ASSY AIO 3IN1)	2
S8	J-118	Connects PWBA ESS AIO 3IN1 and FFC ASSY ESS AIO	2
S9	J-118	Connects PWBA ESS AIO 3IN1 and HARNESS ASSY TOKI	2
S11	I-119	Connects PWBA ESS AIO 3IN1 and HARNESS ASSY USB FRONT	2
S12	I-118	Not Connected	2
S16	H-118	Connects PWBA ESS AIO 3IN1 and SCANNER ASSY 3IN1	2

Map 1 - WorkCentre 6025 MFP
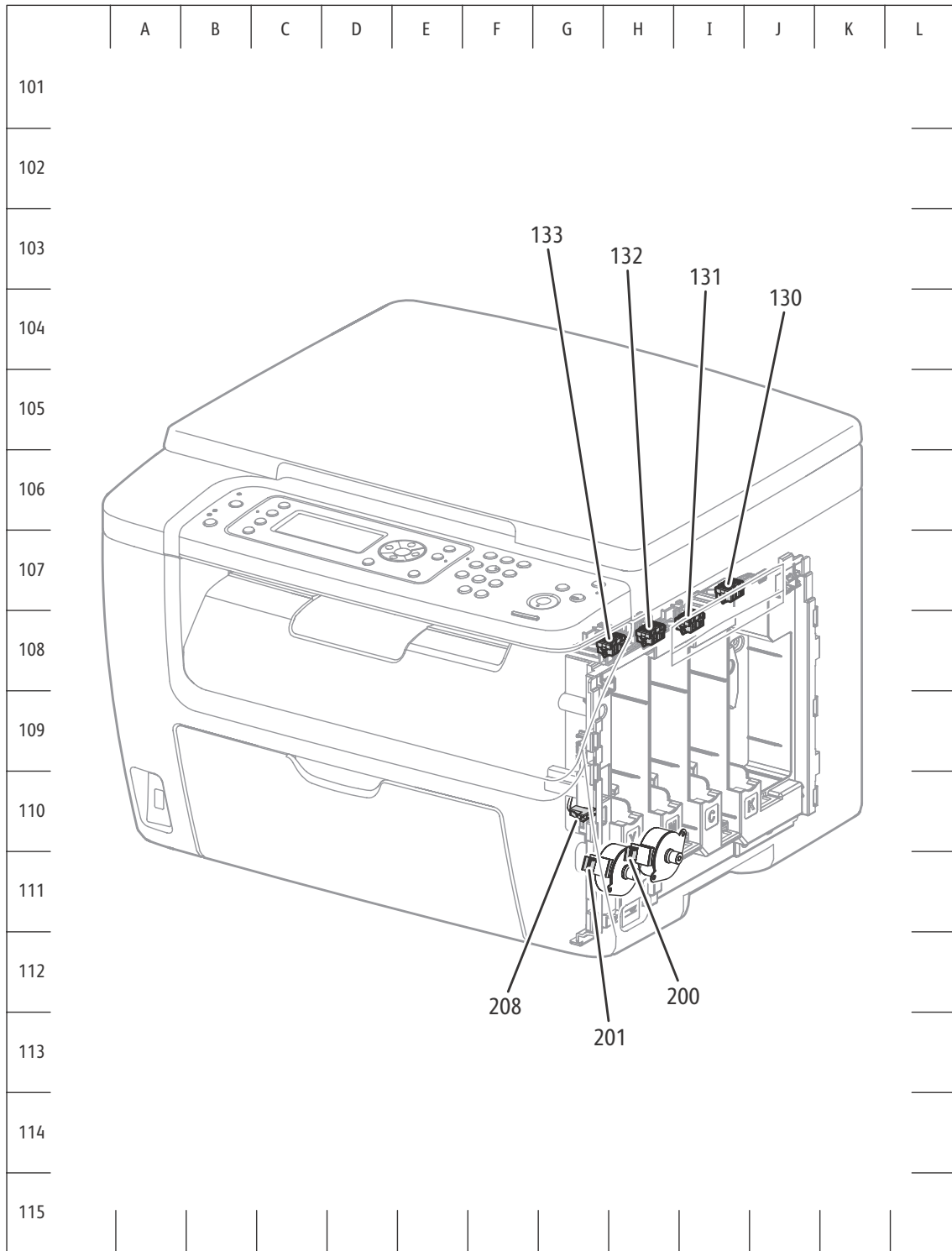
s6020-569

Map 2 - WorkCentre 6025 MFP

*: Not Connected

S1
S6
S16
1
S8
S9
S11
S12*
S2*
2*

1
2
3
5
4
2
1
140
141
120
122
160
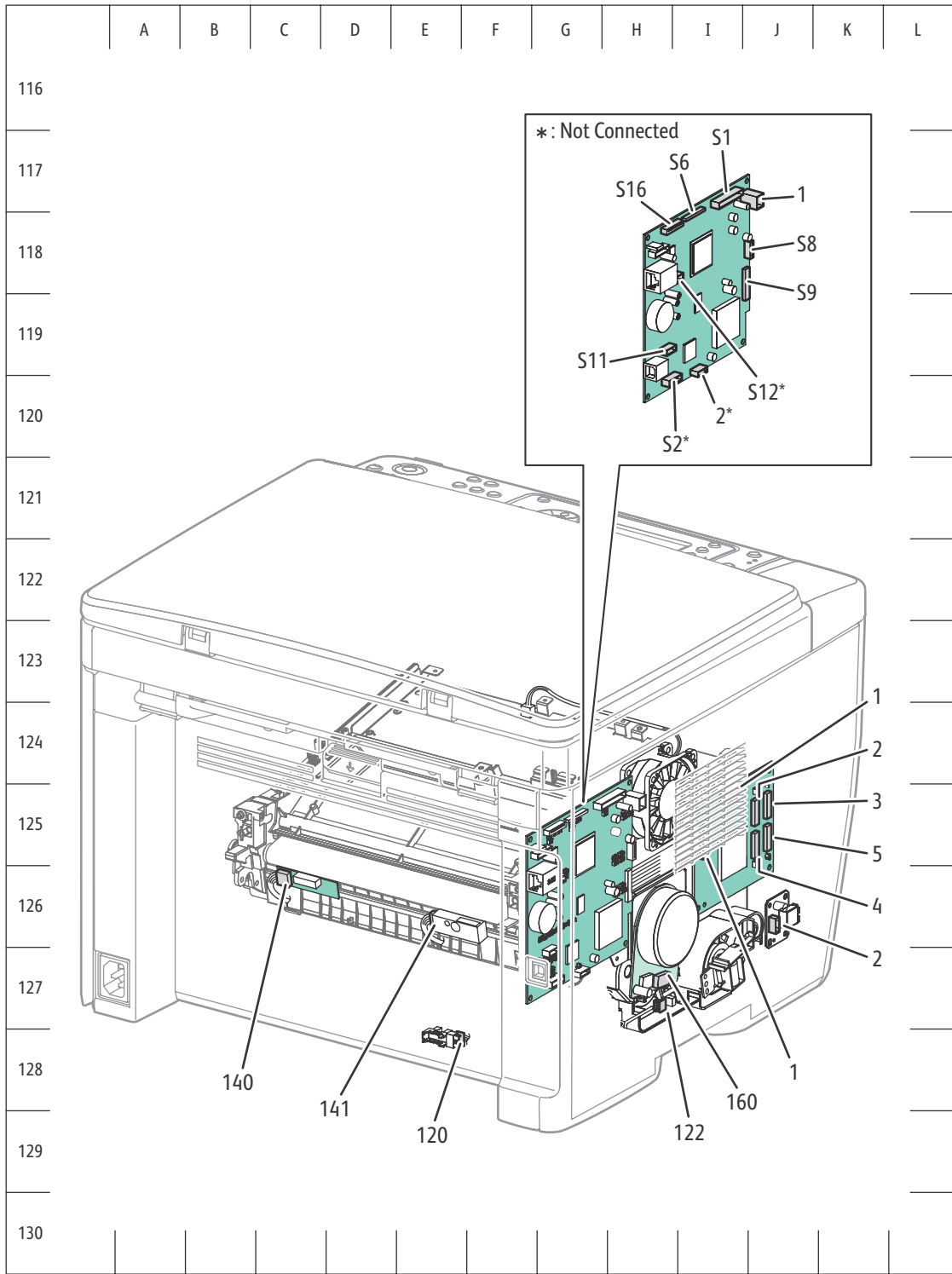
s6020-570

Map 3 - WorkCentre 6025 MFP

*: Not Connected

s6020-571
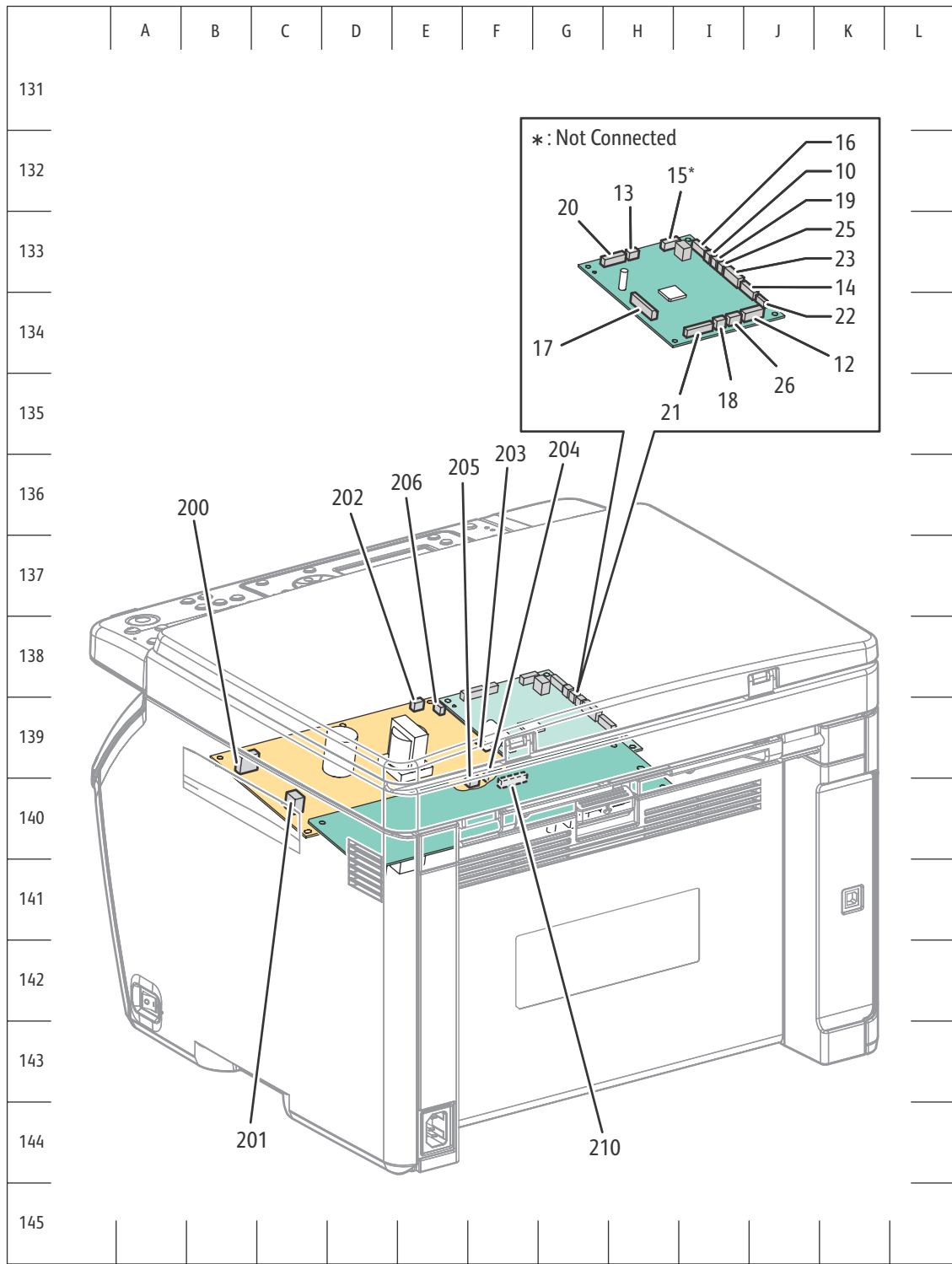
WorkCentre 6027 MFP P/J Coordinates

P/J	Coordinates	Remarks	Map
1	I-125	Connects PWB ASSY TOP TOKI 2 and FFC ASSY LIGHT BIZ	2
1	I-125	Connects PWB ASSY TOP TOKI 2 and HARNESS ASSY TOKI	2
1	J-117	Connects PWBA ESS AIO 4IN and HARNESS ASSY LVES AIO	2
2	J-125	Connects PWB ASSY TOP TOKI 2 and FFC LPH (M) (Marking Unit)	2
2	I-119	Not Connect	2
2	J-126	Connects HARNESS ASSY USB FRONT and PWBA ESS AIO 4IN	2
3	J-125	Connects PWB ASSY TOP TOKI 2 and FFC LPH (Y) (Marking Unit)	2
4	J-125	Connects PWB ASSY TOP TOKI 2 and FFC LPH (K) (Marking Unit)	2
5	J-125	Connects PWB ASSY TOP TOKI 2 and FFC LPH (C) (Marking Unit)	2
10	I-133	Connects PWBA MCU MC02KC and DRIVE ASSY DEVE (K Mode Switching Solenoid)	3
12	J-134	Connects PWBA MCU MC02KC and HARNESS ASSY RKN SNS	3
13	H-133	Connects PWBA MCU MC02KC and HARNESS ASSY DCKR	3
14	J-133	Connects PWBA MCU MC02KC and HARNESS ASSY CTD1 TRO (Marking Unit)	3
15	I-133	Not Connect	3
16	I-133	Connects PWBA MCU MC02KC and HARNESS ASSY MAIN MOT	3
17	H-134	Connects PWBA MCU MC02KC and PWBA LVPS	3
18	I-134	Connects PWBA MCU MC02KC and Fuser Phaser 6022 and WorkCentre 6027 MFP	3
19	I-133	Connects PWBA MCU MC02KC and SOLENOID FEED PTH	3
20	H-133	Connects PWBA MCU MC02KC and HARNESS ASSY DISPENSE MOT	3
21	I-134	Connects PWBA MCU MC02KC and HARNESS ASSY HVPS	3
22	J-134	Connects PWBA MCU MC02KC and FFC ASSY ESS AIO	3
23	I-133	Connects PWBA MCU MC02KC and FFC ASSY LIGHT BIZ	3
25	I-133	Connects PWBA MCU MC02KC and CLUTCH REGI	3
26	I-134	Connects PWBA MCU MC02KC and Fuser Phaser 6022 and WorkCentre 6027 MFP	3
101	J-118	Connects PWBA ESS AIO 4IN and FFC ASSY ESS AIO	2
120	E-128	Connects REGI Sensor and HARNESS ASSY RKN SNS	2
121	F-128	Connects No Paper Sensor and HARNESS ASSY RKN SNS	2

P/J	Coordinates	Remarks	Map
122	H-127	Connects DRIVE ASSY DEVE (K Mode Switching Sensor) and HARNESS ASSY RKN SNS	2
130	I-107	Connects Toner CRUM (K) and HARNESS ASSY DCKR	1
131	I-108	Connects Toner CRUM (C) and HARNESS ASSY DCKR	1
132	H-108	Connects Toner CRUM (M) and HARNESS ASSY DCKR	1
133	G-108	Connects Toner CRUM (Y) and HARNESS ASSY DCKR	1
140	C-126	Connects CTD (ADC) Sensor and HARNESS ASSY CTD (Marking Unit)	2
160	H-127	Connects DRIVE ASSY MOT Phaser 6022 and WorkCentre 6027 MFP and HARNESS ASSY MAIN MOT	2
200	H-111	Connects MOTOR ASSY DISP (CK) and HARNESS ASSY DISPENSE MOT	1
200	B-139	Connects PWBA LVPS and HRNESS ASSY INLET AIO	3
201	G-111	Connects MOTOR ASSY DISP (YM) and HARNESS ASSY DISPENSE MOT	1
201	C-140	Connects PWBA LVPS and Fuser Phaser 6022 and WorkCentre 6027 MFP	3
202	E-139	Connects PWBA LVPS and HARNESS ASSY LVES AIO	3
203	F-139	Connects PWBA LVPS and PWBA MCU MC02KC	3
204	F-140	Connects PWBA LVPS and SWITCH I/L ASSY	3
205	F-140	Connects PWBA LVPS and FAN MAIN	3
206	E-139	Connects PWBA LVPS and HARNESS ASSY FSR TEST	3
208	G-110	Not Connect (Used in production process only)	1
210	F-140	Connects PWBA HVPS and HARNESS ASSY HVPS	3
S1	I-117	Connects PWBA ESS AIO 4IN and SCANNER ASSY 4IN1	2
S2	I-119	Connects PWBA ESS AIO 4IN and HARNESS ASSY SWIFT FAX	2
S6	I-117	Connects PWBA ESS AIO 4IN and SCANNER ASSY 4IN1 (CONSOLE ASSY AIO 4IN)	2
S8	J-118	Connects PWBA ESS AIO 4IN and FFC ASSY ESS AIO	2
S9	J-118	Connects PWBA ESS AIO 4IN and HARNESS ASSY TOKI	2
S11	I-119	Connects PWBA ESS AIO 4IN and HARNESS ASSY USB FRONT	2
S12	I-118	Not Connect	2
S14	H-118	Not Connect	2
S16	H-118	Connects PWBA ESS AIO 4IN and SCANNER ASSY 4IN1	2

Map 1 - WorkCentre 6027 MFP
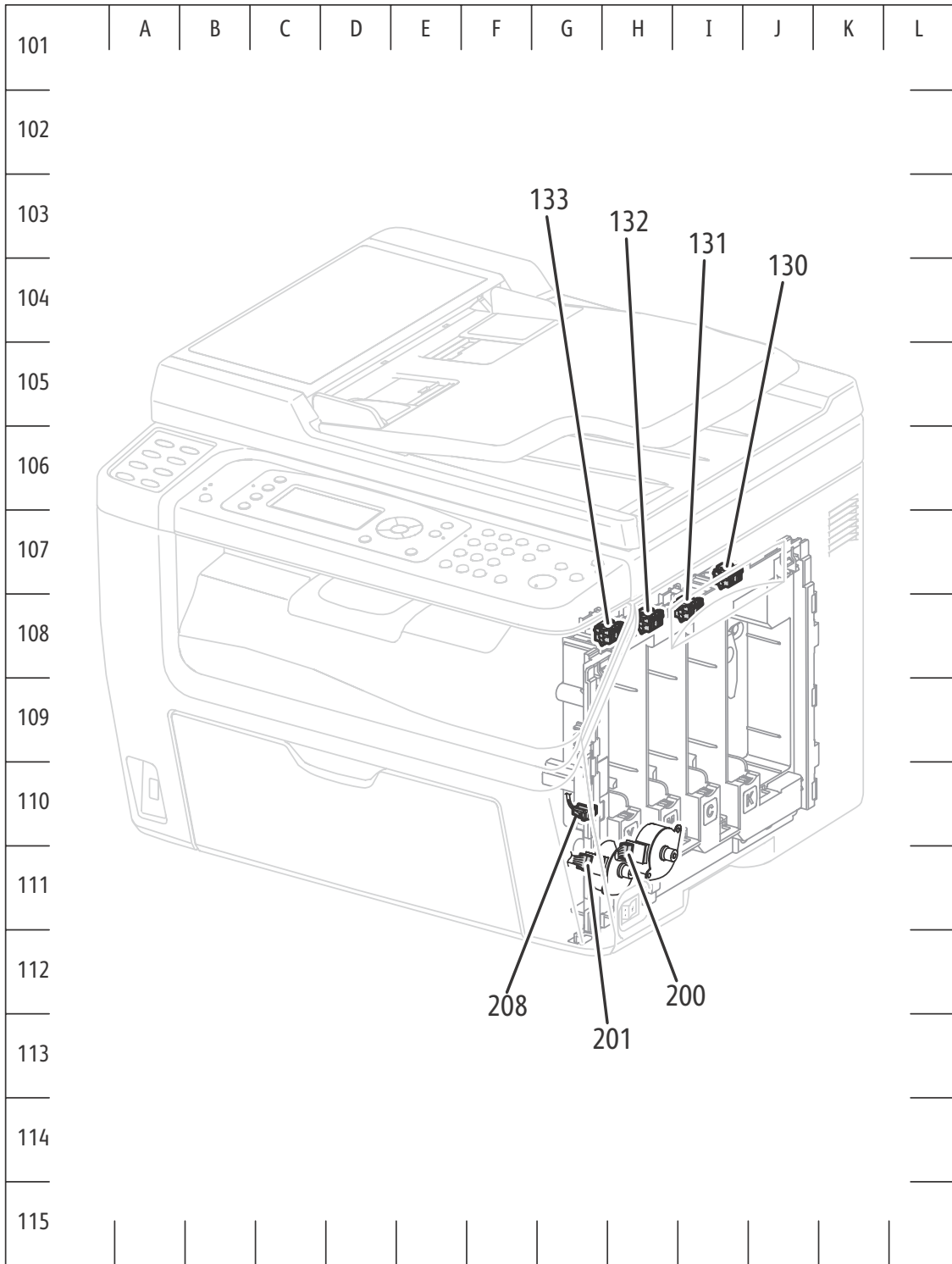
s6020-257

Map 2 - WorkCentre 6027 MFP

*: Not Used

S1
S6
S16
1
S14*
S8
S9
S11
S12
S2
2*

116
117
118
119
120
121
122
123
124
125
126
127
128
129
130

A B C D E F G H I J K L

1
2
3
5
4
2
1
140
141
120
121
101
122
160
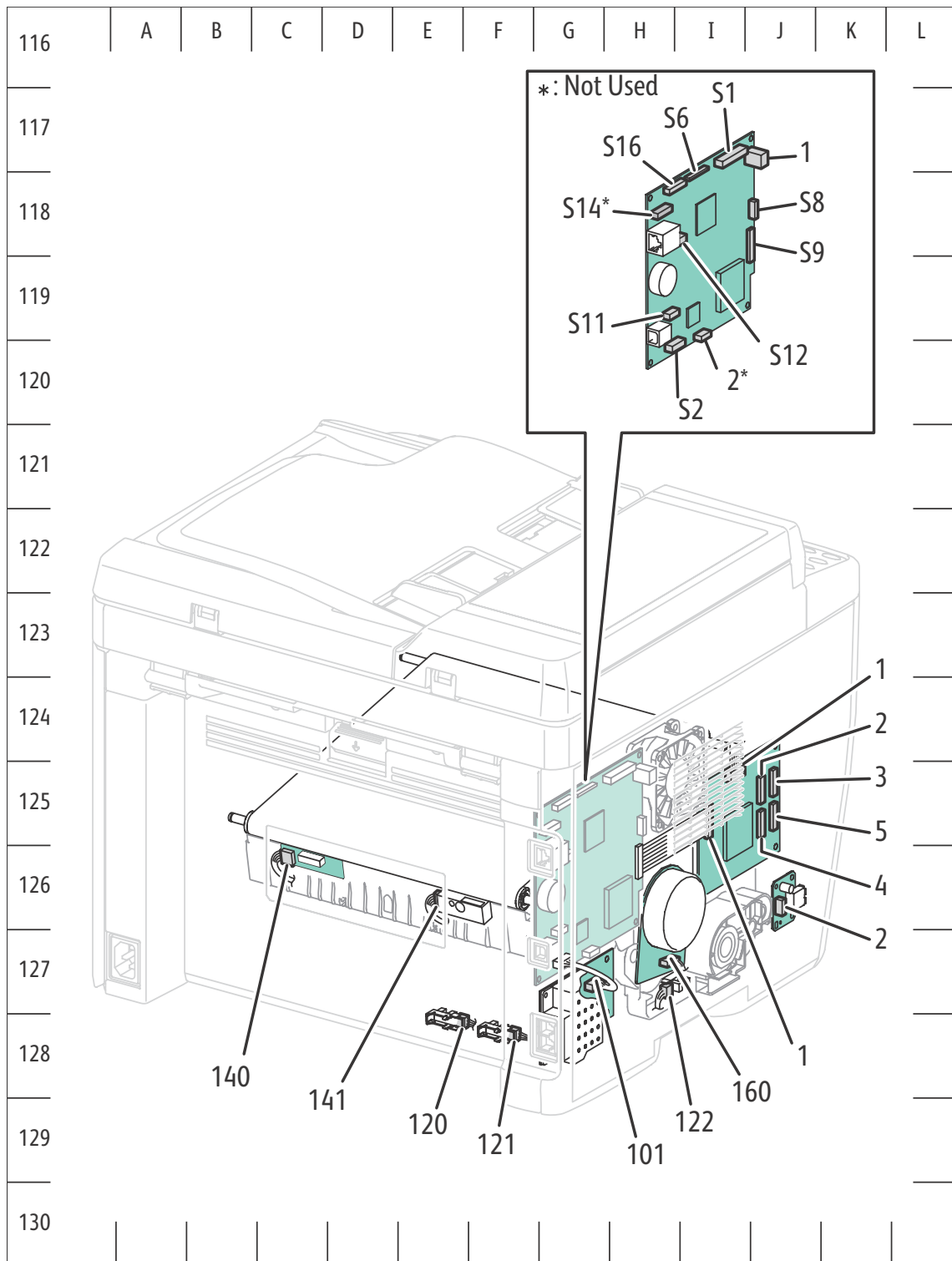
s6020-258

Map 3 - WorkCentre 6027 MFP

∗: Not Used
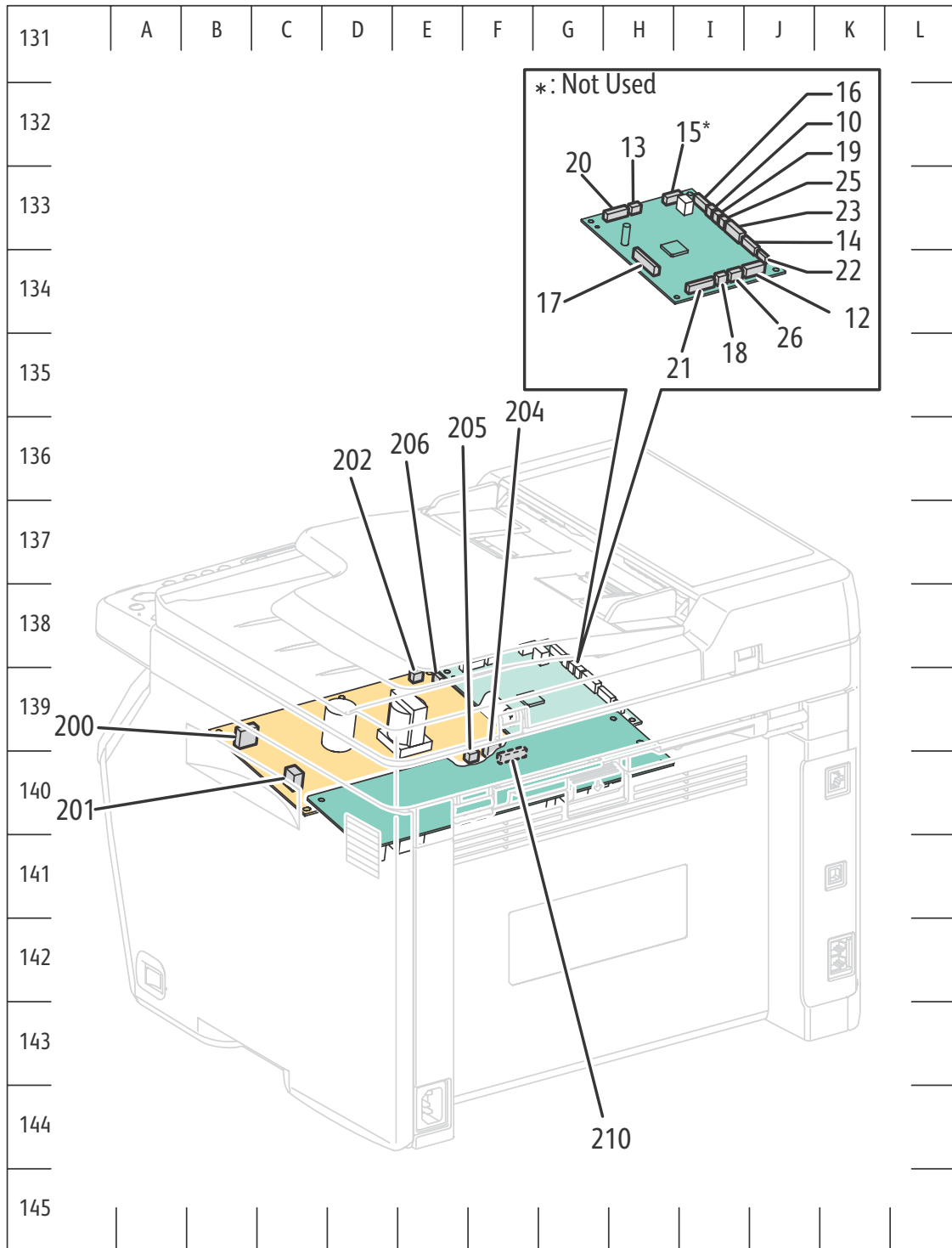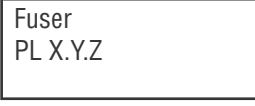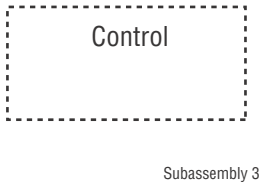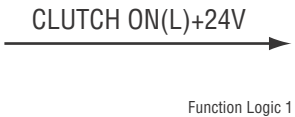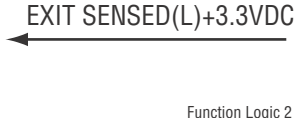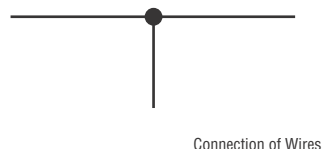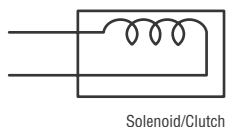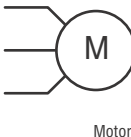
s6020-259
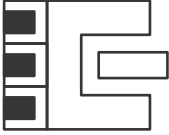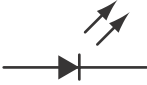
Wiring Diagrams

Notations Used in the Wiring Diagrams

The following table lists the symbols used in the wiring diagrams.

Symbol	Description
Plug	Denotes a Plug.
Jack	Denotes a Jack.
P/Jxx YY Plug and Jack	Denotes Pin yy and Jack yy of the connector Pxx and Jxx.
JPxxx Jumper	Denotes a Jumper Point (JPxxx/xxx). Each end of the Jumper connection has a numeric designation.
Fuser PL X.Y.Z Subassembly 1	Denotes the parts. PL X.Y.Z implies the item "Z" of plate (PL) "X.Y" in Parts List.
Heater Subassembly 2	Denotes functional parts attached with functional parts name.

Symbol	Description
Control Subassembly 3	Denotes the control and its outline in the Board.
DEVE_A → Connection Wire	Denotes a connection between parts with harness or wires, attached with signal name/contents.
CLUTCH ON(L)+24V → Function Logic 1	Denotes 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.
← EXIT SENSED(L)+3.3VDC Function Logic 2	Denotes 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.
Connection of Wires	Denotes a connection between wires.
Solenoid/Clutch	Denotes a Clutch or Solenoid.
M Motor	Denotes a Motor.

Symbol	Description
Optic Sensor	Denotes a Photo Sensor.
LED	Denotes an LED.
Safety Interlock Switch	Denotes a Safety Interlock Switch.
On Off Switch	Denotes an On-Off Switch (single-pole, single-throw switch).
Temperature Switch	Denotes an On-Off Switch (Temperature - normally close).
	Denotes an NPN Photo-transistor.
I/L +24 VDC	Denotes DC voltage when the Interlock Switch in MCU Board turns On.
+5 VDC +3.3 VDC	Denotes DC voltage.
SG	Denotes signal ground.
AG	Denotes analog ground.
RTN	Denotes return.

Phaser 6020 Wiring Diagrams

Phaser 6020 System Wiring

s6020-163

Phaser 6020 LVPS

LVPS
PL7.2.1

MCU Board
PL7.2.2

Interlock Switch
PL1.1.12

P/J204

1

3

I/L +24VDC

P/J17

	+5V-LPH	20
	+5V-LPH	19
	+5V-LPH	18
	SG	17
	SG	16
	SG	15
	Sleep	14
	Fan High	13
	Fan Enable	12
	Fan Alarm	11
	Geat1	10
	Fuser Relay	9
	IL Open	8
	+24v On	7
	+24V Ret	6
	+24V Ret	5
	+24V Ret	4
	+24V MCU	3
	+24V MCU	2
	+24V MCU	1

Main Fan PL7.1.2

P/J205

1   FAN +24VDC
2   FAN ALARM
3   SG

HARN ASSY INLET
PL7.2.9

P/J200

1
2
3

4

2

3

1

LINE
NUT

FG

s6020-164

Phaser 6020 Feeder

s6020-165

Phaser 6020 Drive

s6020-166

Phaser 6020 Xerographics

FFC LPH YMCK

LED Driver Board PL7.1.5

P/J xx*1

Pin	Signal	Pin
1	SG	40
2	VCC 5V	39
3	RESET	38
4	SCL (SCK)	37
5	SDA (DI)	36
6	SG (DO)	35
7	Pull up 3.3V (CS)	34
8	VCC 5V	33
9	SG	32
10	VDATA 3 P	31
11	VDATA 3 N	30
12	VDATA 2 P	29
13	VDATA 2 N	28
14	VDATA 1 P	27
15	VDATA 1 N	26
16	VDATA 0 P	25
17	VDATA 0 N	24
18	VCC 5V	23
19	SG	22
20	VCLK P	21
21	VCLK N	20
22	SG	19
23	VCC 5V	18
24	HSYNC	17
25	MODE	16
26	READY	15
27	VCC 5V	14
28	SG	13
29	1.5V RETURN	12
30	1.5V RETURN	11
31	1.5V RETURN	10
32	1.5V RETURN	9
33	1.5V RETURN	8
34	1.5V RETURN	7
35	VCC 1.5V	6
36	VCC 1.5V	5
37	VCC 1.5V	4
38	VCC 1.5V	3
39	VCC 1.5V	2
40	VCC 1.5V	1

LPH Developer Belt PL3.1.1

P/J xx*2

(LPH Y/M/C/K)

FFC Assembly Light Biz
PL7.1.6

P/J 1 — P/J23

Pin	Signal	Pin
1	+3.3V	11
2	+5V	10
3	+5V	9
4	SG	8
5	SG	7
6	MOB 1	6
7	MOB 2	5
8	SDAT	4
9	SCLK	3
10	RESET	2
11	INT	1

MCU Board PL7.2.2

P/J14

P/J140

Belt

CTD (ADC)

s6020-167

Phaser 6020 HVPS

MCU Board
PL7.2.2

HVPS Harness
PL7.2.13

HVPS
PL7.2.3

P/J21

13	DEV DA	1
12	DEV AC	2
11	TR1+ DA	3
10	TR2- DA	4
9	TR2+ DA	5
8	TR1 I MON	6
7	TR2 I MON	7
6	CR DA	8
5	HV CLK	9
4	+3.3V	10
3	SG	11
2	SG	12
1	+24V	13

P/J210

LPH Developer Belt
PL3.1.1

BCR

BTR

K

Developer

BTR : Bias Transfer Roller

BCR : Bias Charge Roller

C

M

Y
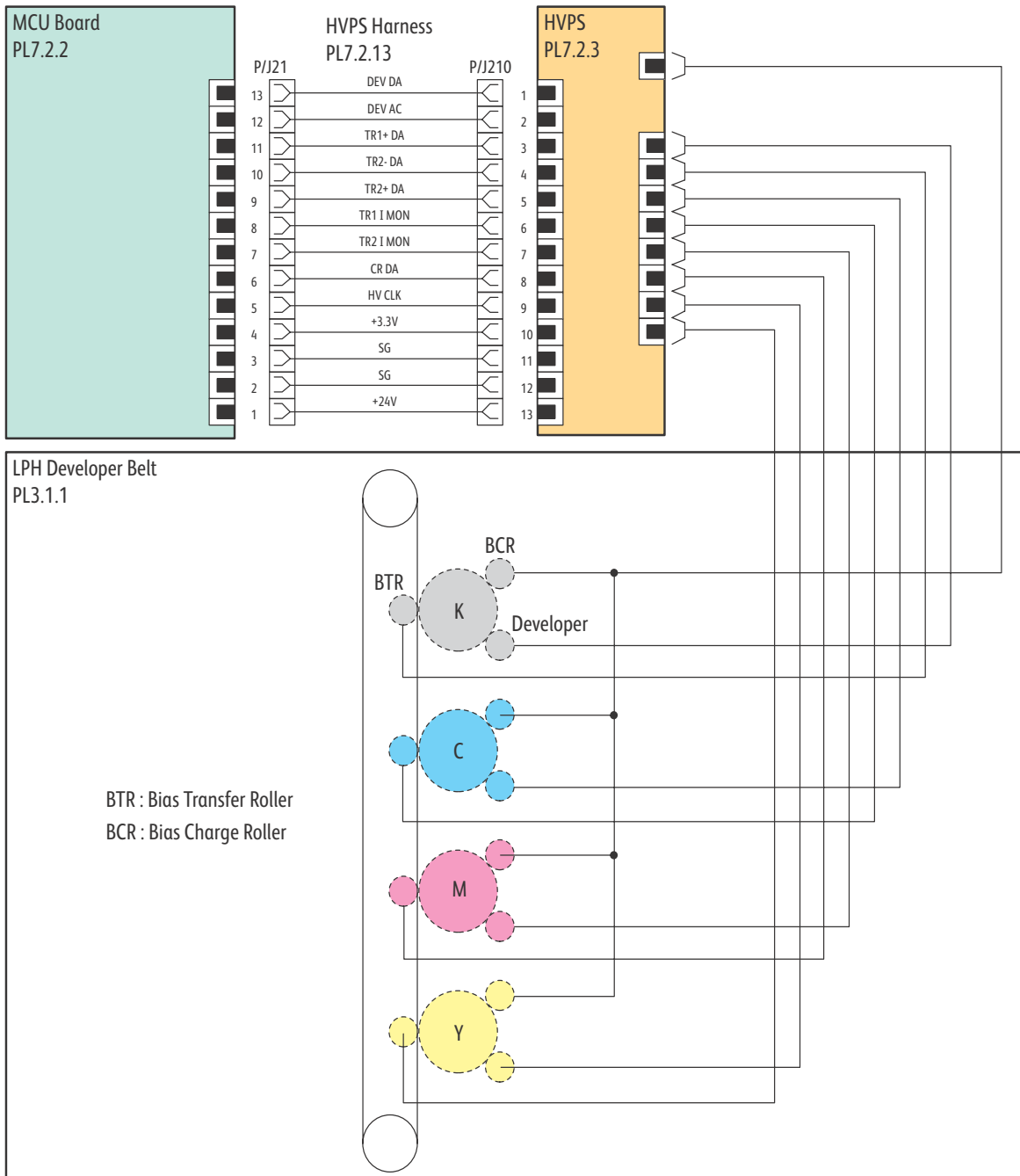
s6020-168

Phaser 6020 Developer

s6020-170

Phaser 6020 Fuser

MCU Board
PL7.2.2

Toner Dispense Motor Harness Assembly
PL4.1.19

P/J20

P/J201

8 YM DISPENSE MOT /A
7 YM DISPENSE MOT A
6 YM DISPENSE MOT B
5 YM DISPENSE MOT /B

1 4
2 3
3 2
4 1

Dispense Motor (YM)
PL4.1.9

M

P/J200

4 CK DISPENSE MOT /A
3 CK DISPENSE MOT A
2 CK DISPENSE MOT B
1 CK DISPENSE MOT /B

1 4
2 3
3 2
4 1

Dispense Motor (CK)
PL4.1.9

M

CRUM Harness Assembly
PL4.1.2

P/J13

4 SDAT
3 +3.3V
2 SCLK
1 SG

Toner
CRUM Y

Toner
CRUM M

Toner
CRUM C

Toner
CRUM K

4 3 2 1 P/J133
4 3 2 1 P/J132
4 3 2 1 P/J131
4 3 2 1 P/J130

CRUM Y Key
PL4.1.4

CRUM M Key
PL4.1.4

CRUM C Key
PL4.1.4

CRUM K Key
PL4.1.3

s6020-169

Phaser 6020 Image Processor Board

IP Board PL7.1.9

IP FFC Assembly PL7.2.12

P/J11			P/J22
1	STS		1
2	CMD		2
3	CRDY		3
4	SRDY		4
5	NC		5
6	SG		6
7	SG		7
8	SLEEP		8

MCU Board PL7.2.2

LVPS Harness Assembly PL7.2.11

+5VDC

P/J9			P/J202
1	+5V ESS		1
2	+5V ESS		2
3	SG		3
4	SG		4

LVPS PL7.2.1 +5VDC

Control Panel Harness Assembly PL1.1.5

+5VDC

P/J8			P/J220
1	+5V		1
2	OPPCLK		2
3	OPPDAT		3
4	SG		4

Control Panel PL1.1.3

LED Harness Assembly PL7.1.7

P/J10			P/J1
40	SG		1
39	CONTCLK+ Y		2
38	CONTCLK- Y		3
37	SG		4
36	SG		5
35	VDO+ Y		6
34	VDO- Y		7
33	SG		8
32	VD1 Y		9
31	SG		10
30	PREQ Y		11
29	(VALID Y)		12
28	SG		13
27	VDO+ M		14
26	VDO- M		15
25	SG		16
24	VD1 M		17
23	SG		18
22	PREQ M		19
21	(VALID M)		20
20	SG		21
19	VDO+ C		22
18	VDO- C		23
17	SG		24
16	VD1 C		25
15	SG		26
14	PREQ C		27
13	(VALID C)		28
12	SG		29
11	VDO+ K		30
10	VDO- K		31
9	SG		32
8	VD1 K		33
7	SG		34
6	PREQ K		35
5	LREQ K		36
4	(VALID K)		37
3	SG		38
2	NC		39
1	NC		40

LED Driver Board PL7.1.5

s6020-183

Phaser 6022 Wiring Diagrams

Phaser 6022 System Wiring

s6022-163

Phaser 6022 LVPS

LVPS
PL7.2.1

MCU Board
PL7.2.2

P/J204

1

Interlock Switch
PL1.1.12

3

I/L +24VDC

P/J17

+5V-LPH	20	
+5V-LPH	19	
+5V-LPH	18	
SG	17	
SG	16	
SG	15	
Sleep	14	
Fan High	13	
Fan Enable	12	
Fan Alarm	11	
Geat1	10	
Fuser Relay	9	
IL Open	8	
+24v On	7	
+24V Ret	6	
+24V Ret	5	
+24V Ret	4	
+24V MCU	3	
+24V MCU	2	
+24V MCU	1	

Main Fan PL7.1.2

P/J205

1 FAN +24VDC

2 FAN ALARM

3 SG

HARN ASSY INLET
PL7.2.9

P/J200

1

2   4   3

3   2   1

LINE

NUT

FG

s6020-164

Phaser 6022 Feeder

MCU PL7.2.2	P/J19		

I/L +24VDC

FEED 1

MSI Feed Solenoid
PL6.1.10

+5VDC

Registration Sensor Harness PL2.2.20

P/J12   P/J120

PULL UP +5VDC

SG

REGI SENSED (L) +3.3VDC

Registration Sensor
PL2.3.4

+5VDC

PULL UP +5VDC

SG

NO PAPER SENSED (H) +3.3VDC

P/J121

No Paper Sensor
PL2.2.18

Interlock +24VDC

P/J25

I/L +24VDC

REGI CL ON (L) +24VDC

Registration Clutch
PL2.3.6

s6022-164

Phaser 6022 Drive

MCU Board
PL7.2.2

Interlock +24VDC

P/J10

I/L +24VDC

K MODE SOL ON (L) +24VDC

Developer Drive
PL6.1.6

K Mode Switching Solenoid

+5VDC

Registration Sensor Harness Assembly
PL2.2.20

P/J12   P/J122

PULL UP +5VDC

SG

K MODE SENSED (L) +3.3VDC

K Mode Switching Sensor

Interlock +24VDC

Main Motor Harness Assembly
PL6.1.7

P/J16   P/J160

SG

I/L +24VDC

SG

I/L +24VDC

START / STOP

SG

REF CLOCK

GAIN CHANGE

Main Drive Assembly
PL6.1.2

M

s6022-165

Phaser 6022 Xerographics

s6022-166

Wiring

Phaser 6022 HVPS

MCU Board PL7.2.2

HVPS Harness PL7.2.13

HVPS PL7.2.3

P/J21

13	DEV DA
12	DEV AC
11	TR1+ DA
10	TR2- DA
9	TR2+ DA
8	TR1 I MON
7	TR2 I MON
6	CR DA
5	HV CLK
4	+3.3V
3	SG
2	SG
1	+24V

P/J210: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

LPH Developer Belt PL3.1.1

BCR

BTR

K

Developer

C

BTR : Bias Transfer Roller

BCR : Bias Charge Roller

M

Y

s6020-168

Phaser 6022 Developer

MCU Board PL7.2.2

Toner Dispense Motor Harness Assembly PL4.1.19

P/J20

8	YM DISPENSE MOT /A
7	YM DISPENSE MOT A
6	YM DISPENSE MOT B
5	YM DISPENSE MOT /B

P/J201

1	4
2	3
3	2
4	1

Dispense Motor (YM) PL4.1.9

M

4	CK DISPENSE MOT /A
3	CK DISPENSE MOT A
2	CK DISPENSE MOT B
1	CK DISPENSE MOT /B

P/J200

1	4
2	3
3	2
4	1

Dispense Motor (CK) PL4.1.9

M

CRUM Harness Assembly PL4.1.2

P/J13

4	SDAT
3	+3.3V
2	SCLK
1	SG

Toner CRUM Y

Toner CRUM M

Toner CRUM C

Toner CRUM K

4 3 2 1 P/J133
4 3 2 1 P/J132
4 3 2 1 P/J131
4 3 2 1 P/J130

CRUM Y Key PL4.1.4

CRUM M Key PL4.1.4

CRUM C Key PL4.1.4

CRUM K Key PL4.1.3

s6020-169

Phaser 6022 Fuser

s6020-170

Phaser 6022 Image Processor Board

IP Board PL7.1.9

IP FFC Assembly PL7.2.12 — P/J11 / P/J22

MCU Board PL7.2.2

Pin	Signal	Pin
1	STS	1
2	CMD	2
3	CRDY	3
4	SRDY	4
5	NC	5
6	SG	6
7	SG	7
8	SLEEP	8

LVPS Harness Assembly PL7.2.11 — P/J9 / P/J202

LVPS PL7.2.1 +5VDC

+5VDC

Pin	Signal	Pin
1	+5V ESS	1
2	+5V ESS	2
3	SG	3
4	SG	4

Control Panel Harness Assembly PL1.1.5 — P/J8 / P/J220

Control Panel PL1.1.3 +5VDC

Pin	Signal	Pin
1	+5V	1
2	OPPCLK	2
3	OPPDAT	3
4	SG	4

LED Harness Assembly PL7.1.7 — P/J10 / P/J1

LED Driver Board PL7.1.5

P/J10	Signal	P/J1
40	SG	1
39	CONTCLK+ Y	2
38	CONTCLK- Y	3
37	SG	4
36	SG	5
35	VDO+ Y	6
34	VDO- Y	7
33	SG	8
32	VD1 Y	9
31	SG	10
30	PREQ Y	11
29	(VALID Y)	12
28	SG	13
27	VDO+ M	14
26	VDO- M	15
25	SG	16
24	VD1 M	17
23	SG	18
22	PREQ M	19
21	(VALID M)	20
20	SG	21
19	VDO+ C	22
18	VDO- C	23
17	SG	24
16	VD1 C	25
15	SG	26
14	PREQ C	27
13	(VALID C)	28
12	SG	29
11	VDO+ K	30
10	VDO- K	31
9	SG	32
8	VD1 K	33
7	SG	34
6	PREQ K	35
5	LREQ K	36
4	(VALID K)	37
3	SG	38
2	NC	39
1	NC	40

s6020-183

WorkCentre 6025 MFP Wiring Diagrams

WorkCentre 6025 MFP System Wiring

s6025-294

WorkCentre 6025 MFP LVPS

LVPS
PL7.2.1

Interlock Switch
PL1.1.12

P/J204

1

3

I/L +24VDC

MCU Board
PL7.2.2

P/J17

+5V-LPH	20	
+5V-LPH	19	
+5V-LPH	18	
SG	17	
SG	16	
SG	15	
Sleep	14	
Fan High	13	
Fan Enable	12	
Fan Alarm	11	
Geat1	10	
Fuser Relay	9	
IL Open	8	
+24v On	7	
+24V Ret	6	
+24V Ret	5	
+24V Ret	4	
+24V MCU	3	
+24V MCU	2	
+24V MCU	1	

Main Fan PL7.1.2

P/J205

1 FAN +24VDC
2 FAN ALARM
3 SG

Inlet Harness Assembly
PL7.2.9

P/J200

1
2   4   3
3   2   1

LINE
NUT

FG

s6020-409

WorkCentre 6025 MFP Feeder

MCU
PL7.2.2

P/J19
1 — I/L +24VDC — MSI Feed Solenoid PL6.1.10
2 — FEED 1

+5VDC

Registration Sensor Harness PL2.3.18

P/J12
1 — PULL UP +5VDC — P/J120 3
2 — SG — 2
3 — REGI SENSED (L) +3.3VDC — 1

Registration Sensor
PL2.3.5

Interlock +24VDC

P/J25
1 — I/L +24VDC — Registration Clutch PL2.3.7
2 — REGI CL ON (L) +24VDC

s6020-165

WorkCentre 6025 MFP Drive

MCU Board
PL7.2.2

Interlock +24VDC

P/J10
1 — I/L +24VDC — Developer Drive PL6.1.6
2 — K MODE SOL ON (L) +24VDC — K Mode Switching Solenoid

+5VDC

Registration Sensor Harness Assembly PL2.3.18

P/J12
7 — PULL UP +5VDC — P/J122 3
8 — SG — 2
9 — K MODE SENSED (L) +3.3VDC — 1

K Mode Switching Sensor

Interlock +24VDC

Main Motor Harness Assembly PL6.1.7

P/J16   P/J160
1 — SG — 9
2 — I/L +24VDC — 8
3 — SG — 7
4 — I/L +24VDC — 6
5 — START / STOP — 5
6 — SG — 4
7 — REF CLOCK — 3
8 — GAIN CHANGE — 2

Main Drive Assembly
PL6.1.2

M

s6020-166

WorkCentre 6025 MFP Xerographics

LED Driver Board PL7.1.5	FFC LPH YMCK	LPH Developer Belt PL3.1.1 (LPH Y/M/C/)

P/J xx*1 / P/J xx*2

	Signal	
1	SG	40
2	VCC 5V	39
3	RESET	38
4	SCL (SCK)	37
5	SDA (DI)	36
6	SG (DO)	35
7	Pull up 3.3V (CS)	34
8	VCC 5V	33
9	SG	32
10	VDATA 3 P	31
11	VDATA 3 N	30
12	VDATA 2 P	29
13	VDATA 2 N	28
14	VDATA 1 P	27
15	VDATA 1 N	26
16	VDATA 0 P	25
17	VDATA 0 N	24
18	VCC 5V	23
19	SG	22
20	VCLK P	21
21	VCLK N	20
22	SG	19
23	VCC 5V	18
24	HSYNC	17
25	MODE	16
26	READY	15
27	VCC 5V	14
28	SG	13
29	1.5V RETURN	12
30	1.5V RETURN	11
31	1.5V RETURN	10
32	1.5V RETURN	9
33	1.5V RETURN	8
34	1.5V RETURN	7
35	VCC 1.5V	6
36	VCC 1.5V	5
37	VCC 1.5V	4
38	VCC 1.5V	3
39	VCC 1.5V	2
40	VCC 1.5V	1

FFC Assembly Light Biz PL7.1.6

MCU Board PL7.2.2

Belt

P/J 1

1	+3.3V	11
2	+5V	10
3	+5V	9
4	SG	8
5	SG	7
6	MOB 1	6
7	MOB 2	5
8	SDAT	4
9	SCLK	3
10	RESET	2
11	INT	1

P/J23

P/J14 / P/J140 — CTD (ADC)

5	SG	1
4	Vmon	2
3	LED-K	3
2	VOUT	4
1	+5V	5

P/J141 — TR0 (MOB)

6	LED	4
7	VOUT	3
8	SG	2
9	+5V	1

s6025-167

WorkCentre 6025 MFP HVPS

MCU Board
PL7.2.2

HVPS Harness
PL7.2.13

HVPS
PL7.2.3

P/J21

P/J210

13	DEV DA	1
12	DEV AC	2
11	TR1+ DA	3
10	TR2- DA	4
9	TR2+ DA	5
8	TR1 I MON	6
7	TR2 I MON	7
6	CR DA	8
5	HV CLK	9
4	+3.3V	10
3	SG	11
2	SG	12
1	+24V	13

LPH Developer Belt
PL3.1.1

BCR

BTR

K

Developer

C

BTR : Bias Transfer Roller

BCR : Bias Charge Roller

M

Y

s6020-416

WorkCentre 6025 MFP Developer

s6020-169

WorkCentre 6025 MFP Fuser

s6020-170

WorkCentre 6025 MFP Image Processor Board

IP Board
PL7.1.9

Control Panel
PL9.1.10

P/J220
SP/J16

IP FFC Assembly
PL7.2.12

SP/J18
P/J22

1	STS	8
2	CMD	7
3	CRDY	6
4	SRDY	5
5	NC	4
6	SG	3
7	SG	2
8	SLEEP	1

MCU Board
PL7.2.2

+5VDC

LVPS Harness Assembly
PL7.2.11

P/J1
P/J202

1	+5V ESS	1
2	+5V ESS	2
3	SG	3
4	SG	4
5	+24V ESS	5
6	+24V ESS SG	6

LVPS
PL7.2.1
+5VDC

Front USB
Board
PL7.1.18

USB Front Harness Assembly
PL7.1.19

P/J2
SP/J19

1	VBUS	1
2	DATA-	2
3	DATA+	3
4	SG	4
5	FG	5

LED Harness Assembly
PL7.1.7

SP/J17
P/J1

LED Driver Board
PL7.1.5

40	SG	1
39	CONTCLK+ Y	2
38	CONTCLK- Y	3
37	SG	4
36	SG	5
35	VDO+ Y	6
34	VDO- Y	7
33	SG	8
32	VD1 Y	9
31	SG	10
30	PREQ Y	11
29	(VALID Y)	12
28	SG	13
27	VDO+ M	14
26	VDO- M	15
25	SG	16
24	VD1 M	17
23	SG	18
22	PREQ M	19
21	(VALID M)	20
20	SG	21
19	VDO+ C	22
18	VDO- C	23
17	SG	24
16	VD1 C	25
15	SG	26
14	PREQ C	27
13	(VALID C)	28
12	SG	29
11	VDO+ K	30
10	VDO- K	31
9	SG	32
8	VD1 K	33
7	SG	34
6	PREQ K	35
5	LREQ K	36
4	(VALID K)	37
3	SG	38
2	NC	39
1	NC	40

s6025-183

WorkCentre 6025 MFP Scanner

s6025-414

WorkCentre 6027 MFP Wiring Diagrams

WorkCentre 6027 MFP System Wiring

s6027-294

WorkCentre 6027 MFP LVPS

LVPS PL7.2.1	MCU Board PL7.2.2

Interlock Switch
PL1.1.12

P/J204

1

3   I/L +24VDC

P/J17

+5V-LPH	20
+5V-LPH	19
+5V-LPH	18
SG	17
SG	16
SG	15
Sleep	14
Fan High	13
Fan Enable	12
Fan Alarm	11
Geat1	10
Fuser Relay	9
IL Open	8
+24v On	7
+24V Ret	6
+24V Ret	5
+24V Ret	4
+24V MCU	3
+24V MCU	2
+24V MCU	1

Main Fan PL7.1.2

P/J205

1   FAN +24VDC
2   FAN ALARM
3   SG

Inlet Harness Assembly
PL7.2.9

P/J200

1
2   4   3   LINE
3   2   1   NUT

FG

s6020-409

WorkCentre 6027 MFP Feeder

MCU PL7.2.2

P/J19
1 — I/L +24VDC — MSI Feed Solenoid PL6.1.10
2 — FEED 1

+5VDC

Registration Sensor Harness PL2.2.20

P/J12
1 — PULL UP +5VDC — P/J120 3 — Registration Sensor PL2.3.4
2 — SG — 2
3 — REGI SENSED (L) +3.3VDC — 1

+5VDC

4 — PULL UP +5VDC — P/J121 3 — No Paper Sensor PL2.2.18
5 — SG — 2
6 — NO PAPER SENSED (H) +3.3VDC — 1

Interlock +24VDC

P/J25
1 — I/L +24VDC — Registration Clutch PL2.3.6
2 — REGI CL ON (L) +24VDC

s6022-164

WorkCentre 6027 MFP Drive

MCU Board PL7.2.2

Interlock +24VDC

Developer Drive PL6.1.6

P/J10
1 — I/L +24VDC — K Mode Switching Solenoid
2 — K MODE SOL ON (L) +24VDC

+5VDC

Registration Sensor Harness Assembly PL2.3.20

P/J12
7 — PULL UP +5VDC — P/J122 3 — K Mode Switching Sensor
8 — SG — 2
9 — K MODE SENSED (L) +3.3VDC — 1

Interlock +24VDC

Main Motor Harness Assembly PL6.1.7

P/J16
1 — SG — P/J160 9 — Main Drive Assembly PL6.1.2
2 — I/L +24VDC — 8
3 — SG — 7
4 — I/L +24VDC — 6
5 — START / STOP — 5
6 — SG — 4
7 — REF CLOCK — 3
8 — GAIN CHANGE — 2

M

s6027-166

WorkCentre 6027 MFP Xerographics

LED Driver Board PL7.1.5

FFC LPH YMCK

LPH Developer Belt PL3.1.1

(LPH Y/M/C/)

P/J xx*1

P/J xx*2

Pin	Signal	Pin
1	SG	40
2	VCC 5V	39
3	RESET	38
4	SCL (SCK)	37
5	SDA (DI)	36
6	SG (DO)	35
7	Pull up 3.3V (CS)	34
8	VCC 5V	33
9	SG	32
10	VDATA 3 P	31
11	VDATA 3 N	30
12	VDATA 2 P	29
13	VDATA 2 N	28
14	VDATA 1 P	27
15	VDATA 1 N	26
16	VDATA 0 P	25
17	VDATA 0 N	24
18	VCC 5V	23
19	SG	22
20	VCLK P	21
21	VCLK N	20
22	SG	19
23	VCC 5V	18
24	HSYNC	17
25	MODE	16
26	READY	15
27	VCC 5V	14
28	SG	13
29	1.5V RETURN	12
30	1.5V RETURN	11
31	1.5V RETURN	10
32	1.5V RETURN	9
33	1.5V RETURN	8
34	1.5V RETURN	7
35	VCC 1.5V	6
36	VCC 1.5V	5
37	VCC 1.5V	4
38	VCC 1.5V	3
39	VCC 1.5V	2
40	VCC 1.5V	1

FFC Assembly Light Biz PL7.1.6

MCU Board PL7.2.2

Belt

P/J 1

P/J23

P/J14

P/J140

Pin	Signal	Pin
1	+3.3V	11
2	+5V	10
3	+5V	9
4	SG	8
5	SG	7
6	MOB 1	6
7	MOB 2	5
8	SDAT	4
9	SCLK	3
10	RESET	2
11	INT	1

Pin	Signal	Pin
5	SG	1
4	Vmon	2
3	LED-K	3
2	VOUT	4
1	+5V	5

CTD (ADC)

P/J141

Pin	Signal	Pin
6	LED	4
7	VOUT	3
8	SG	2
9	+5V	1

TR0 (MOB)

s6025-167

WorkCentre 6027 MFP HVPS

MCU Board PL7.2.2	HVPS Harness PL7.2.13	HVPS PL7.2.3

P/J21		P/J210
13	DEV DA	1
12	DEV AC	2
11	TR1+ DA	3
10	TR2- DA	4
9	TR2+ DA	5
8	TR1 I MON	6
7	TR2 I MON	7
6	CR DA	8
5	HV CLK	9
4	+3.3V	10
3	SG	11
2	SG	12
1	+24V	13

LPH Developer Belt
PL3.1.1

BCR

BTR

K

Developer

C

BTR : Bias Transfer Roller
BCR : Bias Charge Roller

M

Y

s6020-416

WorkCentre 6027 MFP Developer

MCU Board
PL7.2.2

Toner Dispense Motor Harness Assembly
PL4.1.19

P/J20

8	YM DISPENSE MOT /A
7	YM DISPENSE MOT A
6	YM DISPENSE MOT B
5	YM DISPENSE MOT /B

P/J201

Dispense Motor (YM)
PL4.1.9

4	CK DISPENSE MOT /A
3	CK DISPENSE MOT A
2	CK DISPENSE MOT B
1	CK DISPENSE MOT /B

P/J200

Dispense Motor (CK)
PL4.1.9

CRUM Harness Assembly
PL4.1.2

P/J13

4	SDAT
3	+3.3V
2	SCLK
1	SG

Toner
CRUM Y

Toner
CRUM M

Toner
CRUM C

Toner
CRUM K

4 3 2 1 P/J133
4 3 2 1 P/J132
4 3 2 1 P/J131
4 3 2 1 P/J130

CRUM Y Key
PL4.1.4

CRUM M Key
PL4.1.4

CRUM C Key
PL4.1.4

CRUM K Key
PL4.1.3

s6020-169

WorkCentre 6027 MFP Fuser

MCU Board
PL7.2.2

P/J26

4 — SG
3 — STS 2

+5VDC

2 — SG
1 — STS 1

P/J18

3 — FUSER EXIT SENSED (L) +3.3VDC
2 — SG
1 — PULL UP +5VDC

Fuser
PL5.1.1

STS 2

STS 1

Exit
Sensor

LVPS
PL7.2.1

P/J201

1 — N HEAT1
3* — LINE

* Note:
100V: P/J201-3
200V: P/J201-4

Heater

Thermostat

s6020-170

WorkCentre 6027 MFP Image Processor Board

s6027-183

WorkCentre 6027 MFP IIT

IP Board PL7.1.9

SP/J10
1
2
3
4

SP/J15
1
2
3

SP/J11
1
2
3

P/J4
Pin	Signal
1	SG
2	SG
3	INV_PW
4	INV_PW
5	SG
6	+12VDC
7	+3VDC
8	Home SEN
9	+5VDC
10	SG
11	/RESET
12	SH_R
13	AFE_SDIO
14	AFE_SCLK
15	/AFE_SEN
16	RXIN0-
17	RXIN0+
18	SG
19	RXIN1-
20	RXIN1+
21	DGND
22	RXIN2-
23	RXIN2+
24	SG
25	RXINCLK-
26	RXINCLK+
27	DGND
28	LVDSCLK+
29	LVDSCLK-
30	SG

P/J14
Pin	Signal
1	SCAN MOT/B
2	SCAN MOTB
3	SCAN MOT/A
4	SCAN MOTA

Scanner Assembly PL8.1.1

ADF Assembly

ADF Motor

Paper Sensor

Scanner Home Position Sensor

ACCD Board — CON2
1–30

CON1
1
2

Lamp Inverter
1 2

Lamp

Scanner Motor

s6027-414

Wiring

Reference

A

In this chapter...

- E, H, & S Incident Report Form
- Phaser 6020 Control Panel Indicators
- Phaser 6022 Control Panel Menu Map
- WorkCentre 6025 MFP Control Panel Menu Map
- Status Codes
- Xerox Supplies and Accessories
- Acronyms and Abbreviations

E, H, & S Incident Report Form

The form on the following pages is the form that is current *at the time* of this manual's publication. For the most current version of the form, download from Xerox Global Service Net at https://www.xrxgsn.com/secure/main.pl?CatId=1789.

CONFIDENTIAL (when filled in)

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EHS 700 - Health & Safety Incident Report Form
for Incidents Involving a Xerox Product

For incidents in Canada: PIPEDA consent given	☐ YES ☐ NO	EH&S Office Use ONLY EH&S Incident Reference Number:
PIPEDA is the Canadian "Personal Information Protection and Electronic Documents Act."		
For incidents in the EU: Safe Harbour Complaint	☐ YES ☐ NO	

*Date Of Incident (mm / dd / yyyy):

Product Description

*Model No. or Product Name:

Product Serial Number:	Serial Number(s) of Accessory (ies):
Installation Date:	Total Copy Meter:

Date of last service maintenance:

List damaged and affected part(s) of the machine by description and part number:

*Description	**Part Number**

*Location of product and affected part(s):

Customer Identification

*Customer Name:	***Name of Customer Contact Person**:

*Address:	E-mail:	***Telephone**:
		Fax:

Customer Service Engineer Identification

*Name (required for Xerox serviced equipment):	Employee:	E-mail:
Location:	***Phone** (required for Xerox serviced equipment):	

Individual Providing Notification

*Name:	***Title**:	***Telephone Number**:
*Organization:		E-Mail:

Mailing Address:	***Date Report Submitted**:

* Required information is preceeded by asterisk, **title shown in red**, with a tan wash background

Form EH&S-700 Rev 4.0 (18 March 2014)　　　　　Universal Format　　　　　page 1

EHS 700 - Health & Safety Incident Report Form for
Incidents Involving a Xerox Product

CONFIDENTIAL
(when filled in)

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Details of Incident

*Description Of Incident: (Check all that apply)

☐ Smoke

Describe quantity and duration of smoke:

☐ Fire with open flames seen
☐ Electric shock to operator or service representative
☐ Physical injury/illness to operator or service representative
Describe:

☐ Other, describe:

MANDATORY DESCRIPTION (above): Provide a detailed description of all valid factors that may have contributed to the incident. Hardware involved in the incident should be preserved and retained for further investigation should investigation be deemed necessary by EH&S.

LIST INCIDENT DESCRIPTIONS AND SUPPORT DIAGRAMS/DATA INCLUDED OR ATTACHED:

*Any damage to customer property? No ☐   Yes ☐ Describe:

*Did external emergency response provider(s) such as a fire department, ambulance, etc. respond?
No ☐   Yes   ☐ Identify: (i.e., source, names of individuals)

Apparent cause of incident (identify part that is suspected to be responsible for the incident)

*Preliminary actions taken to mitigate incident:

Instructions: E-mail or fax both pages of this completed form to EH&S:

e-mail: usa.product.incident@xerox.com or fax 585-422-8217 [Intelnet 8*222-8217]

 * Required information is preceeded by asterisk, **title shown in red** with a tan wash background

Phaser 6020 Control Panel Indicators
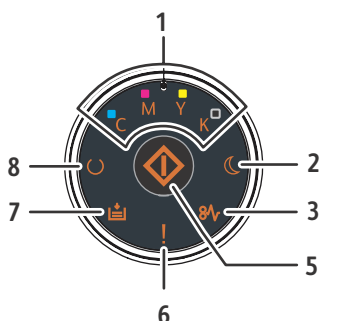
1. Toner LED
2. Energy Saver LED
3. Jam LED
5. Start Button/LED
6. Error LED
7. Load Paper LED
8. Ready/Data LED

s6020-680

● / ●: ON ,"●" / "●": Fast Blink , '●': Slow Blink

Item	Feature	Description
1.	(C) Cyan Toner	• Indicates that the Cyan toner is low. • Flashing indicates the toner is empty or toner warning. • Flashing means non-Xerox toner is installed.
	(M) Magenta Toner	• Indicates that the Magenta toner is low. • Flashing indicates the toner is empty or toner warning. • Flashing means non-Xerox toner is installed.
	(Y) Yellow Toner	• Indicates that the Yellow toner is low. • Flashing indicates the toner is empty or toner warning. • Flashing means non-Xerox toner is installed.
	(K) Black Toner	• Indicates that the Black toner is low. • Flashing indicates the toner is empty or toner warning. • Flashing means non-Xerox toner is installed.
2.	Energy Saver	• Indicates the printer is in the Low Power or Power Saver Mode 2. • Flashing at the same time the Ready light is flashing indicates the printer is canceling the print job.
3.	Jam	• Flashing indicates a paper jam in the printer.
5.	[OK]	• Prompts the user to press the **[OK]** button to resume printing after an interruption. • Press **[OK]** to print side 2 of a manual 2-sided print job after paper is reloaded. • Press and hold **[OK]** to print Printer Settings report, Panel Settings report, and Error History report.

Item	Feature	Description
6.	Error	• Indicates an error that needs your attention. • When flashing, the printer has a critical error that can only be corrected by restarting the printer or by calling for service. • When illuminated and a CMYK Toner is illuminated, the toner should be reset. • When illuminated and a CMYK Toner is flashing, the toner should be replaced.
7.	Load Paper	• Indicates non-paper notifications such as download, startup diagnostics, or other non-paper notifications. • Flashing indicates a Paper Size Mismatch in the printer, paper is jammed in the paper tray, or the printer is out of paper.
8.	Ready/Data	• Green indicates the printer is ready. • Green with **[OK]** flashing indicates that the printer is waiting for the user to press **[OK]** after inserting paper for side 2 printing (manual duplex). • Flashing green indicates the printer is busy or is waiting for you to take an expected action. • Flashing green + flashing Power Saver light indicates the printer is canceling the print job.

Phaser 6022 Control Panel Menu Map

Xerox® Phaser® 6022
Color Printer

Menus

WPS Wi-Fi

Power Saver On/Off

Enter the system menu

Arrow buttons scroll up, down, forward, and back through the menus

OK button accepts the menu selection

Cancel

Back/Return button goes up one level in the menu

Information Pages

Configuration
Panel Settings
Job History
Error History
Demo Page
PCL Fonts List
PS Fonts List

Billing Meters

Total Impression
Color Impression
Black Impression

Admin Menu

Network ▶
System Setup ▶
Maintenance ▶
Secure Setup ▶
USB Setup ▶
PCL Setup ▶
PS Setup ▶
PDF Setup ▶

| Wi-Fi Status |
| Wi-Fi Setup |
| WPS Setup |
| Wi-Fi Direct Setup |
| Reset Wi-Fi |
| TCP/IP |
| Protocol |
| Host Access List |
| Initialize NVM |
| PS Data Format |
| Wi-Fi |

| Power Saver Timer |
| Auto Reset |
| Fault Timeout |
| Job Timeout |
| mm / inch |
| Low Toner Alert Msg |
| Paper Size Mismatch |

| F/W Version |
| Adjust Paper Type |
| Adjust BTR |
| Adjust Fusing Unit |
| Auto Regi Adjust |
| Adjust Color Regi |
| Clean Developer |
| Toner Refresh |
| BTR Refresh |
| Initialize NVM |
| Adjust Altitude |
| Machine Life |

| Panel Lock |
| Software Download |
| Show Network Info |

| Port Status |
| PS Data Format |

| Paper Size |
| Orientation |
| Font |
| Symbol Set |
| Font Size |
| Font Pitch |
| Form Line |
| Quantity |
| Draft Mode |
| Line Termination |
| Output Color |

| PS Error Report |
| PS Job Timeout |
| Output Color |
| Image Depth |

| Quantity |
| Print Mode |
| PDF Password |
| Paper Size |
| Layout |
| Output Color |

Panel Language

English	Suomi
Français	Polski
Italiano	Türkçe
Deutsch	Ελληνικά
Español	Русский
Nederlands	Čeština
Dansk	Magyar
Norsk	Português
Svenska	

www.xerox.com/office/6022docs

s6020-712

WorkCentre 6025 MFP Control Panel Menu Map

Xerox® WorkCentre® 6025
Color Multifunction Printer

xerox

Menus

WorkCentre 6025

Display job status

Enter the system menu

Access the address book

Arrow buttons scroll up, down, forward,
and back through the menus

OK button accepts the menu selection

Back/Return button goes up one level in the menu

Information Pages

Configuration
Panel Settings
Job History
Error History
Demo Page
Address Book

Billing Meters

Total Impression
Color Impression
Black Impression

Admin Menu

Network ▷
System Setup ▷
Maintenance ▷
Secure Settings ▷
Scan to Email ▷
USB Setup ▷

Panel Lock
Service Lock
Software Download
Show Network Info

Edit from Field

Port Status

F/W Version
Adjust Paper Type
Adjust BTR
Adjust Fusing Unit
Auto Regi Adjust
Adjust Color Regi
Clean Developer
Tone Refresh
BTR Refresh
Initialize NVM
Adjust Altitude
Machine Life

Wireless Status
Wireless Setup
WPS Setup
Wi-Fi Direct Setup
Reset Wireless
TCP/IP
Protocol
Host Access List
Initialize NVM
Wi-Fi

Power Saver Timer
Auto Reset
Fault Time Out
Job Time Out
Clock Settings
Alert Tone
mm / inch
Low Toner Alert
Size / Type Error
Power On Wizard

Defaults Settings

Copy Defaults
Scan Defaults
Print from USB Defaults

Tray Settings

MPF

Panel Language

English	Polski
Français	Türkçe
Italiano	Русский
Deutsch	Česko
Español	Magyar
Nederlands	Português
Dansk	Suomi
Norsk	Ελληνικά
Svenska	

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Status Codes

The Error Message Summary table lists possible errors, along with the corresponding code, and page reference for the corrective procedure.

- The Error Code column lists the code associated with the error.
- The Error Message LCD column shows the message as it appears on the LCD when the error occurs during normal operation.
- The Error Description column describes the error.
- The Go to column links to the troubleshooting procedure related to the error.

Use this table to identify the proper procedure to correct the reported error.

Error Code	Error Message LCD	Error Description	Go to
005-121	Job Canceled Open ADF Cover and Remove All Paper	<ADF Paper Jam> Paper Jam. Open The ADF Top Cover And Remove The Paper Jam	2-21
005-121	005-121 Paper Jam Open ADF Cover and Clear Jam	<ADF Paper Jam> Paper jam. Open the ADF Top Cover and remove the paper jam	2-21
005-301	005-301 Cover Open Remove paper then Close ADF Cover	<ADF Cover Open> ADF Top Cover is open.	2-22
009-950	009-950 Printer Cartridge Error Reseat Yellow Cartridge	<Y Toner Comm Fail> Toner CRUM(Y) Communication Error Detected.	2-23
009-951	009-951 Printer Cartridge Error Reseat Magenta Cartridge	<M Toner Comm Fail> Toner CRUM(M) Communication Error Detected.	2-23
009-952	009-952 Printer Cartridge Error Reseat Cyan Cartridge	<C Toner Comm Fail> Toner CRUM(C) Communication Error Detected.	2-23
009-953	009-953 Printer Cartridge Error Reseat Black Cartridge	<K Toner Comm Fail> Toner CRUM(K) Communication Error Detected.	2-23

Error Code	Error Message LCD	Error Description	Go to
010-397	010-397 Code:XXXXXXXX Restart Printer Contact Support If Message Returns	<Fuser Failure> Please Reboot Printer. Contact Customer Support If This Failure Is Repeated	2-24
016-372	016-372 System Restart Printer Contact Support If Message Returns	<DRAM Memory Allocation Fail> Fax Memory Allocation Error Is Detected.	2-27
016-500	Erase Flash Err Restart Printer	Erase Flash Error	2-28
016-501	016-501 System Write Flash Error Contact Support If Message Returns	<Download Write Error> Flash Memory Write Error Occurred.	2-28
016-502	016-502 System Write Flash Error Contact Support If Message Returns	<Download Error> When Downloading Error Is Detected.	2-28
016-503 016-504 016-506 016-507	016-50x Scan SMTP Error Job Failure Press [OK]	An E-mail Error Has Occurred.	2-29
016-718	016-718 Printer Memory Full Job Too Large Press [OK]	<Memory Overflow> The Current Printing Job Process Cannot Be Continued Because The Memory Capacity Is Exceeded.	2-30
016-719	016-719 Printer Decode Error Job Failure Press [OK]	<Decode error> Decode Error Is Detected.	2-31
016-720	016-720 Printer PDL Request Data Violation Press [OK]	<PDL Error> The Print Data Cannot Be Processed By Pdl.	2-32
016-744	Format Error 016-744 System Invalid Data Press [OK]	<Download Format Error> Invalid Code To Be Downloaded.	2-33
016-745	016-745 System Format Error Invalid Data Press [OK]	<Download Format Error>	2-33

Error Code	Error Message LCD	Error Description	Go to
016-749	016-749 Printer PJL Request Data Violation Press [OK]	<PJL Request Error> The Print Data Cannot Be Processed By PJL.	2-34
016-753	016-753 Error Wrong Password Press [OK] Button	<Wrong Password> PDL Emulation Error Occurred	2-35
016-755	016-755 Error PDF Print Disabled Press [OK] Button	<PDF Print Disabled> PDL Emulation Error Occurred.	2-36
016-764	016-764 Scan Connect Fail Job Failure Press [OK]	<Connect Error> Can Not Connect To Mail Server For Sending Mail.	2-37
016-766	016-766 Scan SMTP Error Job Failure Press [OK]	<SMTP> Can Not Transfer Completely.	2-37
016-767	016-767 Scan Address Error Job Failure Press [OK]	<E-mail Address Error> Recipient Address Is Invalid.	2-37
016-791	016-791 System USB Memory was Removed. Job Failure Press [OK]	<USB Memory Removal Error> USB Memory Is Removed While Memory Reading Job Is Being Executed.	2-38
016-795	016-795 Printer File Format Error Job Failure Press [OK]	<File Format Error> An Unsupported File Was Selected At USB Memory Print.	2-38
016-797	016-797 Printer File Read Error Job Failure Press [OK]	<File Read Error> The Contents Of The USB Memory Cannot Be Read Correctly.	2-38
016-920	016-920 System Wireless Error Setup Fail Press [OK]	<Wireless Setting Error Time-out Error> A Time-out With The Register Occurred.	2-40
016-921	016-921 System Wireless Error Setup Fail Press [OK] Button	<Wireless Setting Error Timeout Error> A Connection Time-out With The Register Occurred.	
016-930 016-931	016-930/931 System USB Host Error Unsupported Device Remove From USB Port	<USB Host Error> Detect Installation Of Un-supported Device.	2-41

Error Code	Error Message LCD	Error Description	Go to
016-981	016-981 Printer Collate Full Job Too Large Press [OK]	<Collate Full> Exceeds The Memory Capacity.	2-42
016-982	016-982 Error Memory Overflow Press [OK] Button	<Memory Overflow> The Print Job Is Too Large For The Memory Available.	2-43
016-985	016-985 Scan Mail Size Limits Job Failure Press [OK]	<Mail Size Error> Mail Size Limits Error	2-44
017-970	017-970 Scan Memory Full Job Failure Press [OK]	<Out of Memory> Out of Memory.	2-45
017-980	017-980 System Report Error Job Failure Press [OK]	<Report File Open/Close Error> Report Job Fails To Open/close Report File.	2-46
017-981	017-981 System Report Error Job Failure Press [OK]	<Report File Error> Fax Report Job Fails To Report File.	2-46
017-988	017-988 Scan PCScan Time Out Job Failure Press [OK]	<PC Scan Time Out> Time out at Scan-To-Application start.	2-47
018-338	018-338 System Restart Printer Contact Support If Message Returns	<Wireless Error> The error is detected when checking the Wireless circuitry.	2-48
024-340	024-340 Code:xxxxxxxx Restart Printer	<Firmware Error> MCU firmware error detected.	2-49
024-360	024-360 System Restart Printer Contact Support If Message Returns	<MCU Firmware Down Load Error> MCU firmware download error detected.	2-50

Error Code	Error Message LCD	Error Description	Go to
024-371	024-371 System Restart Printer Contact Support If Message Return	<MCU-ESS Communication Fail> Communication fail between MCU and ESS.	2-51
024-946	024-946 Printer Cassette Detached	<Cassette Detached> Load Paper and Insert Paper Cassette.	2-52
024-958	024-958 Printer Paper Size Mismatch Load Paper then Press [OK] AAAAA (or BBBBB)	<Paper Size Mismatch> The Size Of Paper Does Not Match The Specified Print Size. 　XXXXXX: Paper Size 　YYYYYY: Paper Type	2-53
024-963	024-963 Printer No Suitable Paper Load Paper then Press [OK]	<No Suitable Paper> Printer Has Run Out Of Paper, Or The Size (Or Type) Of Paper Does Not Match The Specified Print Job Size (Or Type). 　Xxxxxx: Paper Size 　Yyyyyy: Paper Type	2-54
026-723	026-723 Scan File Path Limit Job Failure Press [OK]	<File Path Limit> Cannot Access The Target File In The USB Memory Because The Path Is Too Long.	2-55
026-750 027-751 027-752	026-75X Scan Communication Fail Job Failure Press [OK]	Scan Communication Failure	2-57
027-446	027-446 Duplicate IPv6	<IPv6 duplicate> Duplicate IPv6 Addresses Detected Upon Startup.	2-59
027-452	027-452 Duplicate IPv4	<IPv4 duplicate> Duplicate IPv4 Addresses Detected Upon Startup.	2-60
031-521	031-521 Scan SMB Error Login Error Press [OK]	<SMB Login Error> SMB Login Error Is Detected.	2-61
031-526	031-536 Scan SMB Error Name Resolve Error Press [OK]	<SMB Name Resolve Error> SMB Domain Name Resolve Error Is Detected.	2-61

Error Code	Error Message LCD	Error Description	Go to
031-529	031-529 Scan SMB Error Login Failed Press [OK]	<SMB Login Failed> Invalid Password Is Detected.	2-61
031-530	031-530 Scan SMB Error SMB Path Error Press [OK]	<SMB Path Error> SMB Working Path Error Is Detected.	2-61
031-533	031-533 Scan File Make Error Press [OK]	<SMB File Make Error> Can Not Create File Name Well.	2-61
031-534	031-534 Scan SMB Error Folder Make Error Press [OK]	<SMB Folder Make Error> Can't Make Directory In SMB Repository.	2-61
031-535	031-535 Scan SMB Error Delete File Error Press [OK]	<SMB Delete File Error> SMB Delete File Error Is Detected.	2-61
031-536	031-536 Scan SMB Error Delete Folder Error Press [OK]	<SMB Delete Folder Error> SMB Delete File Error Is Detected.	2-61
031-537	031-537 Scan SMB Error Disk Full Error Press [OK]	<SMB Disk Full Error> SMB Server Storage Full.	2-61
031-555	031-555 Scan SMB Error Login Failed Press [OK]	<SMB Connect Error> Detects SMB Link Is Broken.	2-61
031-556	031-556 Scan SMB Error Write Error Press [OK]	<SMB Write Error> Data Can Not Be Written Onto SMB.	2-61
031-557	031-557 Scan SMB Error File Duplication Press [OK]	<SMB File Duplication Error> File Duplication Error Is Detected.	2-61

Error Code	Error Message LCD	Error Description	Go to
031-558	031-558 Scan SMB Error Connect Error Press [OK]	<SMB Connect Error> BIOS Error Is Detected.	2-61
031-571	031-571 Scan FTP Error Login Failed Press [OK]	<FTP Connect Error> FTP Link Error Is Detected.	2-62
031-574	031-574 Scan FTP Error Name Resolve Error Press [OK]	<FTP Name Resolve Error> FTP Domain Name Resolve Error Is Detected.	2-62
031-575	031-575 Scan FTP Error Server Address Error Press [OK]	<FTP Server Address Error> FTP Host Name Resolve Error Is Detected.	2-62
031-576	031-576 Scan FTP Error Server Not Found Press [OK]	<FTP Server Not Found> Can Not Open FTP Server For Accessing.	2-62
031-578	031-578 Scan FTP Error Login Failed Press [OK]	<FTP Connect Error> FTP Link Error Is Detected.	2-62
031-579	031-579 Scan FTP Error FTP Path Error Press [OK]	<FTP Path Error> FTP Path Error Is Detected.	2-62
031-582	031-582 Scan FTP Error File Make Error Press [OK]	<FTP File Make Error> Can Not Create File Name Well.	2-62
031-584	031-584 Scan FTP Error Connect Error Press [OK]	<FTP Connect Error> Can't Make Directory.	2-62
031-585	031-585 Scan FTP Error DEL Command Error Press [OK]	<FTP Delete Command Error> FTP Delete Command Error Is Detected.	2-62

Error Code	Error Message LCD	Error Description	Go to
031-587	031-587 Scan FTP Error RMD Command Error Press [OK]	<FTP RMD Command Error> FTP RMD Command Error Is Detected.	2-62
031-588	031-588 Scan FTP Error Write Error Press [OK]	<FTP Write Error> Data Can Not Be Written Onto FTP.	2-62
031-589	031-589 Scan FTP Error Disk Full Error Press [OK]	<FTP Disk Full Error> FTP Storage Full.	2-62
031-594	031-594 Scan FTP Error TYPE Command Error Press [OK]	<FTP Type Command Error> FTP Type Command Error Is Detected.	2-62
031-598	031-598 Scan FTP Error APPE Command Error Press [OK]	<FTP APPEND Command Error> FTP APPEND Command Error Is Detected.	2-62
033-503	033-503 Fax Job Failure Memory Full Press [OK]	<Memory Full> Memory Full At Reception.	2-63
033-513	033-513 Fax Job Failure Memory Full Press [OK]	<Communication Error> Communication Interrupted Due To Memory Full.	2-63
033-517	033-517 Fax Job Failure Password Error Press [OK]	<D-Fax Password Error> The Password For D-fax Does Not Match The Password For Fax/Scanner Lock.	2-64
033-518	033-518 Fax Job Failure Country is not Set Press [OK]	<Fax Country is not set correctly.> The Country Setting Value Is Not Set Correctly.	2-64
033-519	033-519 Fax Job Failure Function is Disabled. Press [OK]	<FAX Function is not set correctly> The FAX Function Setting Is Not Set Correctly.	2-64
033-787	033-787 Fax Job Failure Memory Full Press [OK]	<Calling Table Full> The Calling Table Is Full.	2-65
033-788	033-788 Fax Job Failure Memory Full Press [OK]	<Memory Full> Exceeds The Memory Capacity.	2-65

Error Code	Error Message LCD	Error Description	Go to
034-700	034-700 Fax Job Failure Busy Press [OK]	<FAX Busy> FAX Called Number Is Busy.	2-66
034-701	034-701 Fax Job Failure No Dial Tone Press [OK]	<No Dial Tone> No Dial Tone On The Phone Line.	2-66
034-702 to 034-727	034-7xx Fax Job Failure Communication Fail Press [OK]	Communication Errors	2-66
034-750 to 034-768	034-7xx Fax Job Failure Communication Fail Press [OK]	RX Communication Errors	2-66
041-340	041-340 Code:xxxxxxxx Restart Printer	<NVRAM Error> The Operation Error Of NVM (read/write Check Error Etc.) Is Detected.	2-68
042-358	042-358 Printer Restart Printer Contact Support If Message Returns	<Fan Motor Failure> MCU Detects An Error Upon Receiving Error Signal From The Fan Motor.	2-70
042-372	DEVE Mode Error Restart Printer	<DEVE Mode Change Failure> DEVE Mode Change Failure Is Detected.	2-71
061-370	061-370 Printer Code:xxxxxxxx Restart Printer	<LPH Failure> LPH Failure Is Detected.	2-72
062-321	062-321 System Restart Printer	<Carriage Motor Error> Carriage Motor Error Is Detected.	2-73
062-360	062-360 System Restart Printer	<Image Processing Error> Image Processor Error Is Detected.	2-107
062-790	062-790 Confirm Deleted by Limit Press [OK]	<Copy Limit> Unable To Continue Due To Copy Limitation.	2-75
075-100	075-100 Printer Paper Jam Jam at Feed	<Misfeed Jam> The Registration Sensor Is Not Turned On Within The Specified Time.	2-76
075-921	075-921 Printer Insert Output To Tray Press [OK] To Continue Printing	< Insert Output To Tray> The Sheet On Which To Print An Odd-numbered Page Has Not Been Loaded In The Paper Tray (Or Bypass Tray) When Manual Duplex Printing Is Performed.	2-78

Error Code	Error Message LCD	Error Description	Go to
077-100	077-100 Printer Paper Jam Jam At Exit	<Paper Remain At Regi (MFP/psi)> Paper Remain Was Detected At The Registration Section (Or Paper Tray/bypass Tray Section) Of The Printer.	2-79
077-104	077-104 Printer Paper Jam Jam At Exit	<Regi Jam> The Paper Does Not Pass Through The Registration Sensor Within The Specified Time.	2-81
077-106	077-106 Printer Paper Jam Jam At Exit	<Regi Jam> The Paper Does Not Reach The Registration Sensor Within The Specified Time.	2-83
077-108	077-108 Printer Paper Jam Jam At Exit	<Exit Jam> The Paper Passed Through The Exit Sensor Earlier Than The Specified Time.	2-12
077-109	077-109 Printer Paper Jam Jam At Exit	<Exit Jam> The Paper Does Not Pass Through The Exit Sensor Within The Specified Time.	2-12
077-304	077-304 Printer Close Inner Rear Cover Inner Rear Cover Is Open	<Rear Cover Open> The Inner Rear Cover Is Open.	2-86
077-900	077-900 Printer Paper Jam Remain At Exit Open Inner Rear Cover Remove Paper	<Paper Remain At Exit> Paper Remain Was Detected At The Exit Section Of The Printer.	2-12
077-901	077-901 Printer Paper Jam Remain At Reg Open Inner Rear Cover Remove Paper	<Paper Remain At Regi> Paper Remain Was Detected At The Registration Section Of The Printer.	2-88
091-402	091-402 Printer Contact Support If Message Returns	<Xero Near Life> The Printer (Xerographic) Is Approaching The Replacement Time.	2-90
091-441	091-441 Ready Printer Close To End Of Life	<Ready To Print> Printer Approaching End Of Life Refer To The Manual.	
092-310	092-310 Check CTD Unit	<CTD Sensor Contamination> The CTD (ADC) Sensor Has Reached The Cleaning Time.	2-92

Error Code	Error Message LCD	Error Description	Go to
092-651	092-651 Code:xxxxxxxx Restart Printer	<CTD (ADC) Sensor Error> CTD (ADC) Sensor Error Is Detected.	2-93
092-661	092-661 Code:xxxxxxxx Restart Printer	<Environment Sensor Error> The Environment (Temperature/humidity) Sensor Detected The Temperature Anomaly.	2-94
092-910	092-910 Check CTD Unit	<CTD Sensor Contamination> The CTD (ADC) Sensor Needs To Be Cleaned.	2-92
093-423 to 093-426	093-42X Printer Ready To Print X Cartridge Is Close To Life	<Toner Cartridge (X) Near Life> The Toner Cartridge (X) Is Approaching The Replacement Time. When All The Toner Cartridges Are Simultaneously Approaching The Replacement Time, A Warning Is Indicated In The Following Order: 1)black 2)cyan 3)magenta 4)yellow	2-95
093-919 to 093-922	093-9YY Low Density Printer Check X Cartridge Now	<X Toner Low Density> Low Density Of Indicated Toner Is Detected.	2-96
093-926	093-926 CRUM ID Reseat Black Cartridge	<K CRUM ID Error> An Unsupported Toner Cartridge (K) Is Detected.	2-97
093-930 to 093-933	093-93X Replace Cart. Printer Replace X Cartridge	<Toner Cartridge (X) Life Over> The Indicated Toner Cartridge Needs To Be Replaced. When All The Toner Cartridges Have Simultaneously Reached The Replacement Time, A Warning Is Indicated In The Following Order: 1)yellow 2)magenta 3)cyan 4)black	2-97
093-960 to 092-062	093-92x CRUM ID Reseat X Cartridge	<(Y, M, Or C) CRUM ID Error> An Unsupported Toner Cartridge Is Detected.	2-99
093-970 to 093-973	093-97x Printer Insert Print Cart. Insert X Cartridge	<Toner Cartridge (X) Detached> The Indicated Toner Cartridge Is Not Installed In The Printer. If No Toner Cartridge Has Been Installed In The Printer A Warning Is Indicated In The Following Order: 1)yellow 2)magenta 3)cyan 4)black	2-99

Error Code	Error Message LCD	Error Description	Go to
093-974	Insert Print Cart 093-974 Printer Insert Toner Cartridge	Insert Print Cartridge	2-99
116-210	116-210 System Restart Printer Contact Support If Message Returns	<System USB Port Error> System USB Port Error Is Detected.	2-100
116-314	116-314 System Restart Printer Contact Support If Message Returns	<ESS Network Mac Address Checksum Error> Checksum Error Occurred In The Network Mac Address.	2-104
116-323	116-323 System Restart Printer Contact Support If Message Returns	<Checksum Error (FAX)> Checksum Error For Fax Parameter Is Detected.	2-101
116-325	116-325 System Restart Printer Contact Support If Message Return	<Checksum Error (Other)> Checksum Error For Other Parameter Is Detected.	2-103
116-326	116-326 System Restart Printer Contact Support If Message Returns	<Checksum Error (SCAN)> Checksum Error For Scanner Parameter Is Detected.	2-102
116-355	116-355 System Restart Printer Contact Support If Message Returns	<ESS Network Fatal Error> An Error Occurred During The On-board Network Check.	2-104
116-395	116-395 System Restart Printer Contact Support If Message Returns	<System USB Port Error> System USB Port Error Is Detected.	2-100
116-703	116-703 PS/PDF Error Press [OK] Button	<PS/PDF Error> PostScript LANG Interpretation Error PS/PDF Error Occurred.	2-105
116-720	PDL Memory Over 116-720 Error Press [OK] Button	<Memory Overflow> PDL Emulation Error Occurred.	

Error Code	Error Message LCD	Error Description	Go to
117-331 117-332 117-333 117-334 117-346 117-348 117-350 117-366	117-xxx System Restart Printer Contact Support If Message Return	<ESS-related Error> Image Processor Related Error Occurred.	2-107
124-333	124-333 Printer Restart Printer	<ASIC Failure> ASIC Failure Is Detected.	2-108
134-211	134-211 System Restart Printer Contact Support If Message Returns	<Fax Card Modem Error> Modem Error Occurred.	2-109
191-310	191-310 Restart Printer Contact Support If message returns	<XERO Life Over> The Printer (Xerographics Unit) Has Reached The Replacement Time.	2-110
191-311	191-311 Printer End Of Life. Replace The Printer.	<Printer End Of Life> Replace The Printer	2-110
193-700	Ready To Print 193-700 Printer Non-Xerox Toner Installed	<Custom Toner Mode> The Printer Is In Custom Toner Mode.	2-111

Reference

Xerox Supplies and Accessories

The printer is shipped with starter Toner Cartridges that have a 500 print capacity and no CRUM.

Toner Cartridge Types

Region/Type	Description	Capacity	Part Number
US/EU	Cyan Standard Capacity	1,000	106R02756
	Magenta Standard Capacity	1,000	106R02757
	Yellow Standard Capacity	1,000	106R02758
	Black Standard Capacity	2,000	106R02759
DMO	Cyan Standard Capacity	1,000	106R02760
	Magenta Standard Capacity	1,000	106R02761
	Yellow Standard Capacity	1,000	106R02762
	Black Standard Capacity	2,000	106R02763

Power Cords

Description	Part Number
Power Cord, 110 V	675K 17830
Power Cord, 220 V	675K 05330

Acronyms and Abbreviations

Acronym	Description
A3	297 millimeters (11.69 inches) x 420 millimeters (16.54 inches).
A4	210 millimeters (8.27 inches) x 297 millimeters (11.69 inches).
A5	148 millimeters (5.82 inches) x 210 millimeters (2.10 inches).
AC	Alternating Current
AMPV	Average Monthly Print Volume
APC	Auto Power Control
ASSY	Assembly
ATM	Adobe Type Manager
CCD	Charge Coupled Device (Photoelectric Converter)
CCW	Counter-Clock Wise
CMYK	Toner colors for the printer: Y=Yellow, C=Cyan, M=Magenta, K=Black
CRU	Customer Replaceable Unit
CRUM	Customer Replaceable Unit Meter/Memory
CST	Cassette
dB	Decibel
DC	Direct Current
DDNS	Dynamic Domain Name System
DEV	Developer
DHCP	Dynamic Host Configuration Protocol
DPI	Dots Per Inch
DRV	Drive
DUP	Duplex
EEPROM	Electrically Erasable Programmable Read-Only Memory
ESD	Electrostatic Discharge
ESS	Image process controller
FCC	Federal Communications Commission
FDR	Feeder
FPOT	First Print Output Time

Acronym	Description
FRU	Field Replaceable Unit
GB	Giga Byte
GND	Ground
HARN	Harness
HUM	Humidity
HV	High Voltage
HVPS	High-Voltage Power Supply
Hz	Hertz (cycles per second)
IEC	International Electrotechnical Commission
I/F	Interface
IIT	Image Input Terminal - ADF, Scanner
IOT	Image Output Terminal - the printer
IP	Image Processor
KB	Kilo Byte
LAN	Local Area Network
LCD	Liquid Crystal Display
LD	Laser Diode
LED	Light Emitting Diode
LEF	Long-Edge Feed
LPD	Line Printer Daemon
LPR	Line Printer Remote
LTR	Letter Size Paper (8.5 x 11 inches)
LVPS	Low-Voltage Power Supply
MB	Mega Byte
MCU	Machine Control Unit (Engine Control Board)
MHz	Mega Hertz
MIB	Management Information Base
MM	Millimeters
MOT	Motor
MFP	Multi-Function Printer
NCS	Non-Contact Sensor

Acronym	Description
NVM	Non-Volatile Memory
NVRAM	Non-Volatile Random Access Memory
OPT	Optional
OS	Operating System
PCB	Printed Circuit Board
PDL	Page Description Language
P/J	Plug Jack (electrical connections)
PJL	Printer Job Language
PL	Parts List
POP3	Post Office Protocol version 3
PPD	PostScript Printer Description
PPM	Pages Per Minute
PWBA	Printed Wiring Board Assembly
RAM	Random Access Memory
RH	Relative Humidity
RMS	Root Mean Square Voltage
ROM	Read-Only Memory
ROS	Raster Output Scanner - Laser Unit
SEF	Short-Edge Feed
SFP	Single-Function Printer
SMB	Server Message Block
SNMP	Simple Network Management Protocol
SNR	Sensor
SOL	Solenoid
TDC	Toner Density Control
TNR	Toner
UI	User Interface
USB	Universal Serial Bus

Reference