

Repair Manual



M570



HP LaserJet Pro 500 color MFP M570 Printers

Repair Manual

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Edition 1, 11/2012

Part number: CZ271-91020

Conventions used in this guide

- TIP: Tips provide helpful hints or shortcuts.

- Notes provide important information to explain a concept or to complete a task.
- **CAUTION:** Cautions indicate procedures that you should follow to avoid losing data or damaging the product.
- **WARNING!** Warnings alert you to specific procedures that you should follow to avoid personal injury, catastrophic loss of data, or extensive damage to the product.

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1 Removal and replacement

NOTE: Your product might not appear exactly as the one shown in the photos in this chapter. Although some photos do not show the ADF/scanner unit, the procedures in this chapter are appropriate for your product.

- Introduction
- <u>Removal and replacement strategy</u>
- Service approach
- <u>Removal and replacement procedures</u>

Introduction

This chapter describes the removal and replacement of field-replaceable units (FRUs) only.

Replacing FRUs is generally the reverse of removal. Occasionally, notes and tips are included to provide directions for difficult or critical replacement procedures.

HP does not support repairing individual subassemblies or troubleshooting to the component level.

Note the length, diameter, color, type, and location of each screw. Be sure to return each screw to its original location during reassembly.

Incorrectly routed or loose wire harnesses can interfere with other internal components and can become damaged or broken. Frayed or pinched harness wires can be difficult to find. When replacing wire harnesses, always use the provided wire loops, lance points, or wire-harness guides and retainers.

Removal and replacement strategy

General cautions during removal and replacement

This chapter describes the removal and replacement of field-replaceable units (FRUs) only.

Replacing FRUs is generally the reverse of removal. Occasionally, notes and tips are included to provide directions for difficult or critical replacement procedures.

HP does not support repairing individual subassemblies or troubleshooting to the component level.

WARNING! Turn the product off, wait 5 seconds, and then remove the power cable before attempting to service the product. If this warning is not followed, severe injury can result, in addition to damage to the product. The power must be on for certain functional checks during troubleshooting. However, disconnect the power supply during parts removal.

Never operate or service the product with the protective cover removed from the laser scanner assembly. The reflected beam, although invisible, can damage your eyes.

The sheet-metal parts can have sharp edges. Be careful when handling sheet-metal parts.

CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten prefolds in the FFCs. You *must* fully seat all FFCs in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a Printed Circuit Assembly (PCA).

Incorrectly routed or loose wire harnesses can interfere with other internal components and can become damaged or broken. Frayed or pinched harness wires can be difficult to find. When replacing wire harnesses, always use the provided wire loops, lance points, or wire-harness guides and retainers.

NOTE: To install a self-tapping screw, first turn it counterclockwise to align it with the thread pattern, and then carefully turn it clockwise to tighten. Do not overtighten. If a self-tapping screw-hole becomes stripped, repair the screw-hole or replace the affected assembly.

Note the length, diameter, color, type, and location of each screw. Be sure to return each screw to its original location during reassembly.

TIP: For clarity, some photos in this chapter might show components removed that would not be removed to service the product. If necessary, remove the components listed at the beginning of a procedure before proceeding to service the product.

Electrostatic discharge

A CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Look for the ESD reminder

when removing product parts. Always perform service work at an ESD-protected workstation or mat, or use an ESD strap. If an ESD workstation, mat, or strap is not available, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

Protect the ESD-sensitive parts by placing them in ESD pouches when they are out of the product.

Required tools

- #1 Phillips screwdriver with a magnetic tip and a 152-mm (6-inch) shaft length
- #2 Phillips screwdriver with a magnetic tip and a 152-mm (6-inch) shaft length
- Small flat blade screwdriver
- Needle-nose pliers
- ESD mat or ESD strap (if one is available)
- Penlight (optional)
- **CAUTION:** Always use a Phillips screwdriver (callout 1). Do not use a Pozidriv® screwdriver (callout 2) or any motorized screwdriver. These can damage screws or screw threads.

Figure 1-1 Phillips and Pozidriv screwdriver comparison



Types of screws

NOTE: The illustrations in this section are for reference only. The screws in your product might look slightly different.

Illustration	Description	Size	Part number	Use
	Screw with washer	M3X6	XB2-7300-000CN	Used to secure metal components to metal components (for example, a ground wire to the frame)
	Screw, tapping	M3X6	XA9-1503-000CN	
	Screw	D-M3X6	XA9-1671-000CN	
	Screw	Р-МЗХ8	XB4-5300-807CN	
	Screw, tapping, truss head	M4X10	XB4-7401-005CN	Used to secure anything to plastic

6 mm	8 mm	10 mm	М З	M 4
◄►			0	Ο

Service approach

Product repair normally begins by using the product internal diagnostics and the following two-step process:

- 1. Isolate the problem to the major system (for example, the network or server, or the product).
- 2. Troubleshoot the problem by using the procedures in the solve problems chapter.

After you find a faulty part, the product can usually be repaired at the assembly level by replacing fieldreplaceable units (FRUs). Some mechanical assemblies might need to be repaired at the subassembly level.

Before performing service

- Remove all media from the product.
- Turn off the power using the power switch.
- Unplug the power cable and interface cable or cables.
- Place the product on an ESD workstation or mat, or use an ESD strap (if one is available). If an ESD workstation, mat, or strap is not available, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.
- Remove the toner cartridges. See <u>Toner cartridges on page 9</u>.
- Remove the tray or trays. See <u>Tray 2 and 3 on page 14</u>.

After performing service

- Plug in the power cable.
- Reinstall the toner cartridges.
- Reinstall the tray or trays.
- If the optional paper feeder was installed, place the product on the feeder.

NOTE: Your product might not appear exactly as the one shown in the photos in this chapter. Although some photos do not show the ADF/scanner unit, the procedures in this chapter are appropriate for this product.

Post-service test

Perform the following test to verify that the repair or replacement was successful.

NOTE: Your product might not appear exactly as the one shown in the photos in this chapter. Although some photos do not show the ADF/scanner unit, the procedures in this chapter are appropriate for this product.

Print-quality test

- 1. Verify that you have completed the necessary reassembly steps.
- 2. Make sure that the trays contain clean, unmarked paper.
- 3. Attach the power cord and interface cable or interface cables, and then turn on the product.
- 4. Verify that the expected startup sounds occur.
- 5. Print a configuration page, and then verify that the expected printing sounds occur.
- 6. Print a demo page, and then verify that the print quality is as expected.
- 7. Send a print job from the host computer, and then verify that the output meets expectations.
- 8. If necessary, restore any customer-specified settings.
- 9. Clean the outside of the product with a damp cloth.

Copy-quality test

- 1. Verify that you have completed the necessary reassembly steps.
- 2. Ensure that the input tray contains clean, unmarked paper.
- 3. Attach the power cord, and then turn on the product.
- 4. Verify that the expected start-up sounds occur.
- 5. Print a configuration page, and then verify that the expected printing sounds occur.
- 6. Place the configuration page in the Automatic Document Feeder (ADF).
- 7. Print a copy job, and then verify the results.
- 8. Place the configuration page on the scanner glass.
- 9. Print a copy job, and then verify the results.
- **10.** Clean the outside of the product with a damp cloth.

DC controller **PCA**



J100 : 24 v from low-voltage power supply (LVPS) and interlock	J114: HVPS lower	J126: memory tag connector
J101 : LVPS	J115: fuser sensors	J127 : pre-exposure LEDs (rear), SR17, SL1
J105: interconnect board (ICB)	J116: HVPS upper	J130 : registration density (RD) sensors (front and rear)
J106 : 500-sheet feeder, developing home position, laser motors	J117: fuser motor	J131: pickup motor
J107 : duplex sensor, tray 1 solenoid, paper present sensor	J118 : 5 v interlock	J133: not used
J108: environmental sensor	J119: LVPS fan	J134: not used
J109 : duplex clutch, overhead transparency (OHT) in, top-of-page sensor	J120 : drum motor 1 and drum motor 2	J137 : toner collection unit (TCU) full, TCU motor, toner level detection
J110: YM laser	J121 : drum motor 3, drum position 1,2,3	J138: 24 v to HVPS lower
J111: CK laser	J122 : OHT out	J139: fuser sensors
J112: pre-exposure LEDs (front)	J123 : pressure release, bin full, fuser delivery	J140 : lift motor, tray present, stack surface
J113 : 24 v to high-voltage power supply (HVPS) upper	J124 : 24 v to scanner	J143: 24 v present from LVPS
J145 :not used		

Parts removal order

Some procedures in this chapter include a list of assemblies that must be removed prior to beginning a specific removal process. Remove the listed assemblies in the order that they appear in the list.

Removal and replacement procedures

Customer self repair (CSR) components

NOTE: Your product might not appear exactly as the one shown in the photos in this chapter. Although some photos do not show the ADF/scanner unit, the procedures in this chapter are appropriate for this product.

Toner cartridges

CAUTION: If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. *Hot water sets toner into fabric*.

1. Open the front door. Make sure that the door is completely open.



Figure 1-3 Remove the toner cartridge (1 of 2)

- 2. Grasp the toner-cartridge handle and pull it out of the product to remove it.
 - **CAUTION:** Do not touch the green roller. Doing so can damage the cartridge. Do not expose the cartridge to strong light. Cover the cartridge with a sheet of paper to protect it from light.
 - ين Reinstallation tip Align the toner cartridge with its slot and insert the toner cartridge until it clicks into place.

Figure 1-4 Remove the toner cartridge (2 of 2)



Duplex-reverse guide

1. Grasp the duplex-reverse guide and pull it away from the product to release it.



Figure 1-5 Remove the duplex-reverse guide (1 of 2)

2. Remove the guide.

Figure 1-6 Remove the duplex-reverse guide (2 of 2)



Toner-collection unit

- **NOTE:** The toner-collection unit is designed for a single use. Do not try to empty the toner-collection unit and reuse it. Doing so could cause toner to spill inside the product and result in reduced print quality. For recycling information, see the product user guide.
 - 1. Open the front door. Make sure that the door is completely open.

Figure 1-7 Remove the toner-collection unit (1 of 4)



- 2. Grasp the blue label at the top of the toner-collection unit and remove it from the product.
 - Reinstallation tip Insert the bottom of the replacement unit into the product first and then push the top of the unit until it clicks into place. If the toner-collection unit is installed incorrectly, the front door will not close completely.



Figure 1-8 Remove the toner-collection unit (2 of 4)

3. To prevent toner spills, place the blue cap (callout 1) over the blue opening at the top of the unit (callout 2).



Figure 1-9 Remove the toner-collection unit (3 of 4)

Figure 1-10 Remove the toner-collection unit (4 of 4)



Tray 2 and 3

NOTE: Use this procedure to remove the Tray 2 or optional Tray 3.

1. Pull the tray straight out of the product until it stops.

Figure 1-11 Remove Tray 2 and 3 (1 of 2)



Carefully lift up on the tray to release it, and then remove the tray.
Figure 1-12 Remove Tray 2 and 3 (2 of 2)


Pickup roller and separation pad (Tray 1)

- **CAUTION:** Skin oils on the roller or pad can cause paper pickup problems. Wash your hands before handling the assembly.
 - 1. Open Tray 1, release two tabs (callout 1), and then rotate the roller cover away from the product to remove it.
 - $\frac{1}{2}$ TIP: Push down along the top edge of the cover to easily release the tabs.



Figure 1-13 Remove the pickup roller and separation pad (Tray 1) (1 of 3)

2. Release two tabs and rotate the roller body away from the product to remove it.

Figure 1-14 Remove the pickup roller and separation pad (Tray 1) (2 of 3)



- 3. Use a small flat blade screwdriver to release two tabs, and then remove the separation pad.
- بَلْ: TIP: You might need to slightly depress the spring-loaded separation pad pedestal to remove the separation pad.

Figure 1-15 Remove the pickup roller and separation pad (Tray 1) (3 of 3)



Pickup roller (Tray 2)

- **CAUTION:** Skin oils on the roller can cause paper pickup problems. Wash your hands before handling the assembly.
 - 1. Look up into the Tray 2 cavity (where the tray would be installed), and pull down to release the blue roller-locking lever.
 - Reinstallation tip When the roller is reinstalled, rotate the roller shaft several times to make sure that the shaft correctly engages the drive mechanism. You should hear a click when the shaft engages the drive mechanism.



Figure 1-16 Remove the pickup roller (Tray 2) (1 of 4)

2. Pull the roller toward the front of the product to release the rear of the roller shaft.



Figure 1-17 Remove the pickup roller (Tray 2) (2 of 4)

3. Rotate the roller shaft down and away from the product, and then slide the roller toward the rear of the product to release the front of the roller shaft.



Figure 1-18 Remove the pickup roller (Tray 2) (3 of 4)

- 4. Remove the pickup roller.
 - Reinstallation tip Make sure that the roller is orientated correctly when it is reinstalled (the large white collar should be positioned toward the front of the product.

Figure 1-19 Remove the pickup roller (Tray 2) (4 of 4)



Pickup and feed rollers (Tray 3)

- **CAUTION:** Skin oils on the roller can cause paper pickup problems. Wash your hands before handling the assembly.
 - 1. Locate the Tray 3 pickup and feed rollers.
 - TIP: The feeder is shown front side up in this procedure for clarity. You do not have to separate the product from the feeder to remove these rollers. Remove the tray, and then reach up into the cavity to remove the rollers.

Figure 1-20 Remove the pickup and feed rollers (Tray 3) (1 of 2)



2. Release three tabs (callout 1), and then remove the rollers.

Reinstallation tip When you reinstall the rollers, make sure that the rollers snap into place.



Figure 1-21 Remove the pickup and feed rollers (Tray 3) (2 of 2)

Separation roller (Tray 2)

- **CAUTION:** Skin oils on the roller can cause paper pickup problems. Wash your hands before handling the assembly.
- **NOTE:** Remove the Tray 2 if not already removed for service. See <u>Tray 2 and 3 on page 14</u>.

Remove two screws (callout 1), and then remove the separation roller assembly (callout 2).

Figure 1-22 Remove the separation roller (Tray 2)



CAUTION: To install a self-tapping screw, first turn it counterclockwise to align it with the thread pattern, and then carefully turn it clockwise to tighten. Do not overtighten. If a self-tapping screw-hole becomes stripped, repair the screw-hole or replace the affected assembly.

Secondary transfer roller

- **CAUTION:** Do not touch the spongy roller surface unless you are replacing the roller. Skin oils on the roller can cause image quality problems.
 - 1. Open the right-door assembly.
 - Figure 1-23 Remove the transfer roller (1 of 3)



2. Use the blue lever (callout 1) to lower the secondary transfer assembly.

Figure 1-24 Remove the transfer roller (2 of 3)



3. Grasp the roller shaft collars, and lift the transfer roller off of the product.



Figure 1-25 Remove the transfer roller (3 of 3)

Reinstall the transfer roller

When you reinstall the transfer roller, make sure that the pins on the shaft collars (callout 1) align with the holes in the mounting assembly.

Figure 1-26 Reinstall the transfer roller



Intermediate transfer belt (ITB)

- **CAUTION:** Do not touch the black-plastic belt. Skin oils and fingerprints on the belt can cause printquality problems. Always place the ITB on a flat surface in a safe and protected location.
 - **1.** Open the right-door assembly.
 - Figure 1-27 Remove the intermediate transfer belt (1 of 4)



2. Use the blue lever (callout 1) to lower the secondary transfer assembly.



Figure 1-28 Remove the intermediate transfer belt (2 of 4)

3. Grasp the small handles on the ITB and then pull the ITB out of the product until two large handles expand along the left and right sides of the ITB.



Figure 1-29 Remove the intermediate transfer belt (3 of 4)

- 4. Grasp the large handles on the ITB and then pull the ITB straight out of the product to remove it.
 - **CAUTION:** The ITB is a sensitive component. Be careful when handling the ITB so that it is not damaged. Always place the ITB in a safe and protected location.



Figure 1-30 Remove the intermediate transfer belt (4 of 4)

Reinstallation tip If you are installing a replacement ITB, make sure that you remove all of the packing tape (callout 1) and the protective cover sheet (callout 2).



Front-door assembly

1. Open the front door.



Figure 1-31 Remove the front-door assembly (1 of 2)

- 2. Remove two screws (callout 1), and then remove the front-door assembly.
 - **NOTE:** A small sheet-metal bracket on the left side of the door is not captive. Do not lose the bracket when you remove the screw.



Figure 1-32 Remove the front-door assembly (2 of 2)

3. If you are installing a replacement front-door assembly, install the HP nametag and the appropriate product model number tag on the assembly.

Document feeder pickup rollers

- **CAUTION:** Skin oils deposited on the roller might cause print-quality problems. Wash your hands before handling the assembly.
 - 1. Open the jam-access cover.
 - Figure 1-33 Remove the document feeder pickup rollers (1 of 5)



2. Release one tab (callout 1).

Figure 1-34 Remove the document feeder pickup rollers (2 of 5)



3. Rotate the shaft end of the roller assembly away from the document feeder (callout 1), and then slide the gear end of the roller out of the document feeder (callout 2) to remove the upper-roller assembly.



Figure 1-35 Remove the document feeder pickup rollers (3 of 5)

4. Release one tab (callout 1).

Figure 1-36 Remove the document feeder pickup rollers (4 of 5)



5. Rotate the shaft end of the roller assembly away from the document feeder (callout 1), and then slide the gear end of the roller out of the document feeder (callout 2) to remove the lower-roller assembly.



Figure 1-37 Remove the document feeder pickup rollers (5 of 5)

TIP: The roller assembly is keyed. When reinstalling the roller assembly, position the hex-shaped fitting on the shaft toward the rear of the product.

Document feeder separation pad

CAUTION: Skin oils deposited on the roller might cause print-quality problems. Wash your hands before handling the assembly.

1. Open the jam-access cover.

Figure 1-38 Remove the document feeder separation pad (1 of 2)



2. Locate the separation pad at the end of the document feeder input tray, press down on the pad, and then slide the pad toward the input tray to remove it from the assembly.



Figure 1-39 Remove the document feeder separation pad (2 of 2)

Control panel

Before proceeding, remove the following components:

- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Left-upper cover. See Left-upper cover on page 54.
- Right-upper rear cover. See <u>Right-upper rear cover on page 55</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.

TIP: Removing the ICB makes it easier to connect the control panel FFC when the control panel is reinstalled.

Remove the control panel

1. Disconnect one one FFC (callout 1).

Figure 1-40 Remove the control panel (1 of 6)



- 2. Feed the cable through the hole in the chassis (callout 1).
 - Reinstallation tip The FFC might be fastened to the chassis in several places with two-sided adhesive tape. Make sure that you refasten the FFC to the chassis when the control panel is reinstalled.



Figure 1-41 Remove the control panel (2 of 6)

3. Remove one screw (callout 1), and then remove the right-upper front cover (callout 2).



Figure 1-42 Remove the control panel (3 of 6)

4. Remove one screw.

Figure 1-43 Remove the control panel (4 of 6)



5. Carefully slide the control panel toward the right side of the product to release the left most hinge pin.

Figure 1-44 Remove the control panel (5 of 6)



6. Rotate the left side of the control panel up (callout 1) and away from the product to release the right most hinge pin, and then slide the control panel to the left (callout 2) to remove it.



Figure 1-45 Remove the control panel (6 of 6)

USB PCA

Before proceeding, remove the following components:

- Control panel. See <u>Control panel on page 32</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Right-upper rear cover. See <u>Right-upper rear cover on page 55</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Upper-right cover. See <u>Upper-right cover on page 66</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.

بَلْ TIP: Removing the ICB makes it easier to connect the control panel FFC when the control panel is reinstalled.

Remove the USB PCA

CAUTION: ESD sensitive component.

1. Disconnect one connector (callout 1).

Figure 1-46 Remove the USB PCA (1 of 3)



2. Remove one screw (callout 1).

Figure 1-47 Remove the USB PCA (2 of 3)



3. Remove the PCA.

Figure 1-48 Remove the USB PCA (3 of 3)



Control panel friction mount

Before proceeding, remove the following components:

- Control panel. See <u>Control panel on page 32</u>.
- USB PCA. See <u>USB PCA on page 36</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Right-upper rear cover. See <u>Right-upper rear cover on page 55</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Upper-right cover. See <u>Upper-right cover on page 66</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.

Remove the control panel friction mount

Use a small flat blade screw driver to carefully pry the friction mount straight up and off of the press fit pin (callout 1).

CAUTION: The pin is easily broken. Be very careful when removing the friction mount assembly.

Figure 1-49 Remove the control panel friction mount



Right door (optional paper feeder)

1. Open the right door.

Figure 1-50 Remove the right door; optional paper feeder (1 of 3)



2. Release one tab (callout 1), and then slide the stopper toward the right side of the product to remove it.



Figure 1-51 Remove the right door; optional paper feeder (2 of 3)

3. Support the door, and then release the door-retainer arm at the bottom of the door. Raise the door to release the lower hinge pin, and then remove the door.



Figure 1-52 Remove the right door; optional paper feeder (3 of 3)

External panels, covers, and doors

Identification and location

NOTE: Your product might not appear exactly as the one shown in the photos in this chapter. Although some photos do not show the ADF/scanner unit, the procedures in this chapter are appropriate for the product.

Figure 1-53 Product base, external panels, covers, doors; identification and location



Table 1-2	Product base,	external panels	, covers, doors;	identification	and location
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ltem	Description
1	Rear-top cover (see <u>Rear-top cover on page 71</u>)
2	Right-top cover (see <u>Right-top cover on page 64</u>)
3	Right-rear cover (see <u>Right-rear cover on page 48</u>)
4	Right-door assembly (see <u>Right-door assembly on page 44</u>)
5	Right-front cover (see <u>Right-front cover on page 58</u>)
6	Upper-right cover (see <u>Upper-right cover on page 66</u>)
7	Delivery cover (see Delivery cover on page 62)
8	Left-upper cover (see Left-upper cover on page 54)
9	Left cover (see <u>Left cover on page 50</u>)
10	Rear cover (see <u>Rear cover on page 56</u>)
11	Tray (see <u>Tray 2 and 3 on page 14</u>)
12	Front-door assembly (see Front-door assembly on page 27)
13	Front-upper cover (see Front-upper cover on page 42)
14	Front-top cover (see Front-top cover on page 69)

Front-upper cover

Remove the front-upper cover

1. Open the right door and the front door.

Figure 1-54 Remove the front-upper cover (1 of 4)



2. Remove one screw (callout 1).

Figure 1-55 Remove the front-upper cover (2 of 4)



3. Remove one screw (callout 1).

Figure 1-56 Remove the front-upper cover (3 of 4)



4. Lift the cover up to release it, and then remove the cover.

NOTE: The cover might be difficult to remove. It might require some flexing to release it.

Figure 1-57 Remove the front-upper cover (4 of 4)



Right-door assembly

1. Open the right-door assembly.

2. Close the secondary transfer assembly.



Figure 1-58 Remove the right-door assembly (1 of 8)

3. Remove three screws (callout 1).

Figure 1-60 Remove the right-door assembly (3 of 8)

4. Carefully release one link arm.

Figure 1-61 Remove the right-door assembly (4 of 8)



5. Remove one screw (callout 1), and then remove the cover (callout 2).



Figure 1-62 Remove the right-door assembly (5 of 8)

- 6. Disconnect two connectors (callout 1), and then release the wire harness from the guide (callout 2).
 - TIP: It is easier to disconnect the lower connector if you first remove the wire harnesses from the guide.

Figure 1-63 Remove the right-door assembly (6 of 8)



7. Remove two screws (callout 1).

Figure 1-64 Remove the right-door assembly (7 of 8)



8. Remove the right-door assembly.

Figure 1-65 Remove the right-door assembly (8 of 8)



Right-rear cover

1. Open the right-door assembly.

Figure 1-66 Remove the right-rear cover (1 of 3)



2. Remove two screws (callout 1) and release one tab (callout 2).

Figure 1-67 Remove the right-rear cover (2 of 3)



3. Rotate the bottom of the cover away from the product, and then remove the cover.

Figure 1-68 Remove the right-rear cover (3 of 3)



Left cover

1. Remove four screws (callout 1).

Figure 1-69 Remove the left cover (1 of 5)



2. Release the rear edge of the cover, and slightly separate the cover from the product.



Figure 1-70 Remove the left cover (2 of 5)
- 3. The figure below shows the cover removed so that you can see the mounting tab locations. **Before proceeding**, note the location of the mounting tabs.
- **CAUTION:** One tab (callout 2) is easily damaged when removing the cover. Be careful when removing the cover.



Figure 1-71 Remove the left cover (3 of 5)

- 4. Use your thumb to press in on the lower-front portion of the cover (callout 1 near the dashed circle in the figure below), and then slightly slide the cover away (callout 2) from the front door to release one tab.
 - **CAUTION:** You must flex the cover enough to release the front edge of the cover, but do not damage the tab at the bottom-front edge of the cover. See callout 2 in Figure 1-71 Remove the left cover (3 of 5) on page 51.



Figure 1-72 Remove the left cover (4 of 5)

5. Slide the cover toward the rear of the product and rotate it away from the product and then remove the cover.



Figure 1-73 Remove the left cover (5 of 5)

Rear-upper cover

1. Remove two screws (callout 1).

Figure 1-74 Remove the rear-upper cover (1 of 2)



2. Rotate the cover away from the product to remove it. See example below under Remove the rightupper cover.



Figure 1-75 Remove the rear-upper cover (2 of 2)

Left-upper cover

Before proceeding, remove the following components:

• Rear-upper cover. See <u>Rear-upper cover on page 53</u>.

Remove the left-upper cover

Release one tab and remove the cover.

Figure 1-76 Remove the left-upper cover



Right-upper rear cover

Before proceeding, remove the following components:

• Rear-upper cover. See <u>Rear-upper cover on page 53</u>.

Remove the right-upper cover

Rotate the cover away from the product (callout 1) to release it, and then slide it toward the rear of the product (callout 2) to remove it.



Figure 1-77 Remove the right-upper cover

Rear cover

Before proceeding, remove the following components:

- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.

Remove the rear cover

1. Remove eight screws (callout 1).

Figure 1-78 Remove the rear cover (1 of 2)



2. Slide the cover toward the fan side of the product, and then remove the rear cover.

Figure 1-79 Remove the rear cover (2 of 2)



Right-front cover

Before proceeding, remove the following components:

• Front-upper cover. See <u>Front-upper cover on page 42</u>.

Remove the right-front cover

NOTE: Be careful. When removing the cover, do not dislodge the power button. If the button is dislodged, see <u>Reinstall the power button on page 61</u> to reinstall it.

1. Remove one screw (callout 1).

Figure 1-80 Remove the right-front cover (1 of 5)



2. Remove two screws (callout 2).

Figure 1-81 Remove the right-front cover (2 of 5)



3. Before you proceed, take note of the tab locations at the bottom of the cover.

Figure 1-82 Remove the right-front cover (3 of 5)



- 4. Pull down on the cover to release three tabs (callout 3).
 - TIP: It might be easier if you position the product at the edge of the work surface so that there is a space for the cover to slide downward. Or, you might try inserting a small flat blade screwdriver behind the cover, and carefully pry the cover away from the product as you pull down on the cover to release the tabs.



Figure 1-83 Remove the right-front cover (4 of 5)

5. Rotate the bottom of the cover away from the product, and then pull down on the cover to remove it.



Figure 1-84 Remove the right-front cover (5 of 5)

Reinstall the power button

Snap the power button into the holders on the cover. Make sure that the spring is correctly installed.

Figure 1-85 Reinstall the power button



Delivery cover

Before proceeding, remove the following components:

- Front-upper cover. See <u>Front-upper cover on page 42</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Upper-right cover. See <u>Upper-right cover on page 66</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.

Remove the delivery cover

1. Remove three screws.

Figure 1-86 Remove the delivery cover (1 of 3)



2. Lift up (callout 1) and slide the delivery cover (callout 2).

Figure 1-87 Remove the delivery cover (2 of 3)



3. Remove the delivery cover.

Figure 1-88 Remove the delivery cover (3 of 3)



Right-top cover

Before proceeding, remove the following components:

- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See <u>Image scanner on page 77</u>.

Remove the right-top cover

1. Remove three screws.

Figure 1-89 Remove the right-top cover (1 of 2)



2. Disconnect one connector (callout 1), remove the wire harness from its retainer (callout 2), and remove the cover.



Figure 1-90 Remove the right-top cover (2 of 2)

Upper-right cover

Before proceeding, remove the following components:

- Control panel. See <u>Control panel on page 32</u>.
- USB PCA. See <u>USB PCA on page 36</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Right-upper rear cover. See <u>Right-upper rear cover on page 55</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.

Remove the upper-right cover

1. Remove one screw.

Figure 1-91 Remove the upper-right cover (1 of 5)



2. Release the USB cable from the retainers (callout 1).



Figure 1-92 Remove the upper-right cover (2 of 5)

3. Remove two screws.

Figure 1-93 Remove the upper-right cover (3 of 5)



4. Release one tab.

Figure 1-94 Remove the upper-right cover (4 of 5)

5. Carefully lift the upper-right cover straight up to remove it.

Figure 1-95 Remove the upper-right cover (5 of 5)



Front-top cover

Before proceeding, remove the following components:

- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Right-upper rear cover. See <u>Right-upper rear cover on page 55</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.
- Wireless PCA. See <u>Wireless PCA on page 87</u>.

Remove the front-top cover

1. Remove one screw (callout 1).

Figure 1-96 Remove the front-top cover (1 of 2)



2. Slide the cover toward the left side of the product to release it, and then remove the cover.

Figure 1-97 Remove the front-top cover (2 of 2)



Rear-top cover

Before proceeding, remove the following components:

- Control panel. See <u>Control panel on page 32</u>.
- USB PCA. See <u>USB PCA on page 36</u>.
- Control panel friction mount. See <u>Control panel friction mount on page 38</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Right-upper rear cover. See <u>Right-upper rear cover on page 55</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Delivery cover. See <u>Delivery cover on page 62</u>.
- Front-top cover. See <u>Front-top cover on page 69</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.
- Wireless PCA. See <u>Wireless PCA on page 87</u>.
- Upper-right cover. See <u>Upper-right cover on page 66</u>.
- Interconnect board (ICB). See Interconnect board (ICB) on page 88.

TIP: Removing the ICB makes it easier to connect the control panel FFC when the control panel is reinstalled.

Remove the rear-top cover

Remove three screws, and then remove the cover.

Figure 1-98 Remove the rear-top cover



Document feeder and scanner

Document feeder

Before proceeding, remove the following:

- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Right-upper rear cover. See <u>Right-upper rear cover on page 55</u>.

NOTE: After removing the document feeder assembly, place it on a clean, dry, and smooth surface.

1. Disconnect two connectors (callout 1) and one FFC (callout 2).



Figure 1-99 Remove the document feeder assembly (1 of 4)

- 2. Carefully feed the wire harnesses up through hole in the chassis (callout 1), and then feed the FFC through the hole in the chassis (callout 2) and through the ferrite (callout 3).
 - TIP: When you reinstall the document feeder, it might be easier to remove the ferrite from the product, pass the FFC though it, and then reinstall the ferrite in the product with two-sided adhesive tape.



Figure 1-100 Remove the document feeder assembly (2 of 4)

3. Open the document feeder, and then lift it straight up until it stops.



Figure 1-101 Remove the document feeder assembly (3 of 4)

- 4. Use a small flat blade screw driver to release two tabs (callout 1) on the hinges, and then pull the document feeder straight up and off (callout 2) of the product to remove it.
 - $\frac{1}{2}$ TIP: Push the screw drive down into the hinge wells to release the tabs.



Figure 1-102 Remove the document feeder assembly (4 of 4)

Reinstall the document feeder

Calibrate a replacement document feeder assembly

- 1. On the control-panel Home screen, touch the Setup \sim Button.
- 2. Touch the System setup menu.
- **3.** Touch the Print Quality menu.
- 4. Touch the Color Calibration item.
- 5. Touch the Calibrate now option.
- 6. Follow the instructions on the control-panel display.

Image scanner

Before proceeding, remove the following components:

- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Right-upper rear cover. See <u>Right-upper rear cover on page 55</u>.
- Document feeder. See <u>Document feeder on page 73</u>.

Remove the image scanner

1. Disconnect one FFC (callout 1), and then carefully feed it through the hole in the chassis (callout 2).



Figure 1-103 Remove the image scanner (1 of 5)

2. Remove two screws on the back side of the scanner.

Figure 1-104 Remove the image scanner (2 of 5)



3. Remove one screw on the right side of the scanner.

Figure 1-105 Remove the image scanner (3 of 5)



4. Remove one screw on the left side of the scanner.

Figure 1-106 Remove the image scanner (4 of 5)



5. Slide the scanner toward the back of the product (callout 1) and then lift it straight up and off of the product (callout 2) to remove it.



Figure 1-107 Remove the image scanner (5 of 5)

Reinstall the image scanner

Calibrate the scanner

- 1. On the control-panel Home screen, touch the Setup \sim Button.
- 2. Touch the System setup menu.
- **3.** Touch the Print Quality menu.
- 4. Touch the Color Calibration item.
- 5. Touch the Calibrate now option.
- 6. Follow the instructions on the control-panel display.

Internal assemblies

TIP: For clarity, some photos in this chapter show components removed that would not be removed to service the product. If necessary, remove the components listed at the beginning of a procedure before proceeding to service the product.

Fuser

CAUTION: The fuser might be hot. Be careful.

1. Open the right-door assembly.

Figure 1-108 Remove the fuser (1 of 2)



2. Grasp the handles and squeeze the blue release levers.

Pull the fuser straight out of the product to remove it.

Figure 1-109 Remove the fuser (2 of 2)



Formatter PCA

Before proceeding, remove the following components:

- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.

Remove the formatter PCA

CAUTION: ESD sensitive component.

- 1. Turn the product off and disconnect the power and interface cable.
- 2. Disconnect all of the connectors from the PCA (callout 1).

Figure 1-110 Remove the formatter (1 of 2)



3. Remove five screws (callout 1), and then remove the PCA.



Figure 1-111 Remove the formatter (2 of 2)

Fax PCA

Before proceeding, remove the following components:

- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.

Remove the fax PCA and cable

CAUTION: ESD sensitive component.

1. Disconnect one connector (callout 1).

Figure 1-112 Remove the fax PCA (1 of 2)



2. Remove four screws (callout 1), and then remove the PCA.

Figure 1-113 Remove the fax PCA (2 of 2)


Wireless PCA

Before proceeding, remove the following components:

- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Right-upper rear cover. See <u>Right-upper rear cover on page 55</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.

Remove the wireless PCA

Disconnect one connector (callout 1), remove one screw (callout 2), and then remove the PCA.

CAUTION: The wireless PCA wire-harness connector is keyed and must be correctly plugged into the PCA. Make sure that the connector is not reversed when connecting it to the PCA.

Figure 1-114 Remove the wireless PCA



Interconnect board (ICB)

Before proceeding, remove the following components:

- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.

Remove the ICB

NOTE: To locate DC controller connector locations, see <u>DC controller PCA on page 7</u>.

1. Disconnect two connectors (callout 1), one FFC (callout 2), and then remove one screw (callout 3).

Figure 1-115 Remove the ICB (1 of 4)



- 2. Slide the ICB up to release it, and then rotate it away from the formatter cage.
 - **CAUTION:** The ICB is still attached to the product by two FFCs and one wire harness on the backside of the PCA. Do not attempt to completely remove the ICB.



Figure 1-116 Remove the ICB (2 of 4)

3. Disconnect two FFCs (callout 1), and the disconnect one connector (callout 2).



Figure 1-117 Remove the ICB (3 of 4)

4. Remove the PCA.

Figure 1-118 Remove the ICB (4 of 4)



DC controller **PCA** and tray

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See Interconnect board (ICB) on page 88.

Remove the DC controller PCA and tray

CAUTION: ESD-sensitive part.

TIP: To access components behind the DC controller PCA, remove the PCA and the sheet-metal tray together. Disconnect all of the connectors on the PCA, and then remove five screws and the bracket. See Figure 1-119 Remove the DC controller PCA and tray (1 of 4) on page 91 and Figure 1-122 Remove the DC controller PCA and tray (4 of 4) on page 93.

NOTE: To locate DC controller connector locations, see <u>DC controller PCA on page 7</u>.

1. Remove one screw (callout 1), and then remove the sheet-metal bracket (callout 2).



Figure 1-119 Remove the DC controller PCA and tray (1 of 4)

2. Disconnect all the connectors.

Reinstallation tip The connector locations J133 and J134 are not used.



Figure 1-120 Remove the DC controller PCA and tray (2 of 4)

3. Remove four screws, and then remove the DC controller PCA.

NOTE: If removing the PCA with the sheet metal tray, skip this step and go to step 4.



Figure 1-121 Remove the DC controller PCA and tray (3 of 4)

4. If necessary, remove three screws (callout 1) and the sheet metal tray.

NOTE: Correctly install the cables in the cable guide (callout 2).



Figure 1-122 Remove the DC controller PCA and tray (4 of 4)

Low-voltage power supply (LVPS)

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.

Remove the LVPS

CAUTION: ESD-sensitive part.

NOTE: The formatter cage is attached to the LVPS. Both components are removed as an assembly, and then the formatter cage is removed from the LVPS.

1. Disconnect six connectors (callout 1; J100, J101, J143 on the DC controller PCA).

NOTE: To locate DC controller connector locations, see <u>DC controller PCA on page 7</u>.

Figure 1-123 Remove the LVPS (1 of 8)



2. Push in on the locking tab to release the retainer (callout 2), and then separate the retainer from the assembly.

NOTE: The retainer remains attached to the wire harness and is disengaged from the assembly.



Figure 1-124 Remove the LVPS (2 of 8)

3. Remove three screws (callout 3), and then remove the handle (callout 4).

Figure 1-125 Remove the LVPS (3 of 8)



- 4. Remove five screws.
- **NOTE:** The illustration below shows the ICB removed.
 - Figure 1-126 Remove the LVPS (4 of 8)
- 5. Remove two screws.

Figure 1-127 Remove the LVPS (5 of 8)



6. Rotate the formatter cage away from the top of the product.

Figure 1-128 Remove the LVPS (6 of 8)



7. Remove the assembly.

Figure 1-129 Remove the LVPS (7 of 8)



8. Remove four screws (callout 9), and then separate the formatter cage from the low-voltage power supply.



Figure 1-130 Remove the LVPS (8 of 8)

Delivery fan, cartridge fan, and environmental sensor

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Left cover. See <u>Left cover on page 50</u>.

Remove the delivery fan, cartridge fan, and environmental sensor

1. Remove five screws (callout 1), and then remove the sheet-metal plate (callout 2).

NOTE: Release the small sheet-metal plate (callout 3) to allow access to the larger sheet-metal plate behind it. Leave the smaller plate attached to the chassis.

Figure 1-131 Remove the delivery fan, cartridge fan, and environmental sensor (1 of 9)



- **2.** Disconnect five connectors (callout 3).
- **NOTE:** Disconnect the larger connector on the right side, from the bottom. Disconnect the two smaller connectors on the right side, from the top.

Figure 1-132 Remove the delivery fan, cartridge fan, and environmental sensor (2 of 9)



3. Release two tabs (callout 4), and then slide the delivery-fan and cartridge-fan assembly toward the power-supply side of the product to release it.



Figure 1-133 Remove the delivery fan, cartridge fan, and environmental sensor (3 of 9)

4. Pull the assembly slightly out of the product, disconnect two connectors (callout 5), and then remove the assembly.



Figure 1-134 Remove the delivery fan, cartridge fan, and environmental sensor (4 of 9)

5. Remove one screw (callout 6), and then remove the cover (callout 7).

Figure 1-135 Remove the delivery fan, cartridge fan, and environmental sensor (5 of 9)



6. Disconnect two connectors (callout 8), and then remove the fans (callout 9).

Figure 1-136 Remove the delivery fan, cartridge fan, and environmental sensor (6 of 9)



7. Remove the antistatic foam (callout 10).

Figure 1-137 Remove the delivery fan, cartridge fan, and environmental sensor (7 of 9)



8. Release one tab (callout 11).

Figure 1-138 Remove the delivery fan, cartridge fan, and environmental sensor (8 of 9)



9. Disconnect one connector (callout 12), and then remove the environmental sensor.



Figure 1-139 Remove the delivery fan, cartridge fan, and environmental sensor (9 of 9)



Toner-collection sensor

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Left cover. See <u>Left cover on page 50</u>.

Remove the toner-collection sensor

- 1. Remove five screws (callout 1), and then remove the sheet-metal plate (callout 2).
- **NOTE:** Release the small sheet-metal plate (callout 3) to allow access to the larger sheet-metal plate behind it. Leave the smaller plate attached to the chassis.



Figure 1-140 Remove the toner-collection sensor (1 of 4)

2. Disconnect one connector (callout 3).

Figure 1-141 Remove the toner-collection sensor (2 of 4)

- 3. Remove one screw (callout 4).
- يَنْ Reinstallation tip When you reinstall the sensor, make sure that the tab (callout 5) on the sensor body completely engages the slot in the product chassis.

Figure 1-142 Remove the toner-collection sensor (3 of 4)



4. Remove the toner-collection sensor.

Figure 1-143 Remove the toner-collection sensor (4 of 4)

Residual-toner-feed motor

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 24.
- Left cover. See <u>Left cover on page 50</u>.

Remove the residual-toner-feed motor

NOTE: Be careful. Do not dislodge the residual-toner collection door when you remove the assembly. If the door becomes dislodged, see <u>Reinstall the residual-toner collection door on page 111</u> to reinstall it.

1. Release one tab (callout 1) while you support the cover (callout 2).



Figure 1-144 Remove the residual-toner-feed motor (1 of 7)

2. Remove the cover.



Figure 1-145 Remove the residual-toner-feed motor (2 of 7)

3. Disconnect one connector (callout 3).

Figure 1-146 Remove the residual-toner-feed motor (3 of 7)



4. Support the assembly, and then remove two screws (callout 4).



Figure 1-147 Remove the residual-toner-feed motor (4 of 7)

5. Be careful. Do not dislodge the residual-toner collection door when you remove the assembly. If the door becomes dislodged, see <u>Reinstall the residual-toner collection door on page 111</u> to reinstall it.



Figure 1-148 Remove the residual-toner-feed motor (5 of 7)

6. Push the assembly into the product to release it.

Figure 1-149 Remove the residual-toner-feed motor (6 of 7)

7. Remove the motor.

Figure 1-150 Remove the residual-toner-feed motor (7 of 7)



Reinstall the residual-toner collection door

Snap the residual-toner collection door into the holders on the assembly. Make sure that the spring is correctly installed.

Figure 1-151 Reinstall the residual-toner collection door



Secondary transfer assembly

The secondary transfer assembly includes the transfer roller.

- **1.** Open the right-door assembly.
- 2. Use the blue lever (callout 1) to lower the secondary transfer assembly.

Figure 1-152 Remove the secondary transfer assembly (1 of 3)



- 3. Release one tab and carefully remove the stopper.
- **NOTE:** You might have to slightly lift up on the corner of the assembly to release the stopper pin from the hole in the chassis.



Figure 1-153 Remove the secondary transfer assembly (2 of 3)

4. Remove the secondary transfer assembly.



Figure 1-154 Remove the secondary transfer assembly (3 of 3)

Reinstall the secondary transfer assembly

Press and hold down the blue release lever when you reinstall the assembly.



Figure 1-155 Reinstall the secondary transfer assembly

Lower pickup guide

Remove the lower pickup guide

- **1.** Open the right-door assembly.
- 2. Locate the lower pickup guide directly below the registration assembly. The guide is locked into place by two green circular knobs (callout 1).

Figure 1-156 Remove the lower pickup guide (1 of 4)



3. Lift the green circular knobs simultaneously to release the assembly.

Figure 1-157 Remove the lower pickup guide (2 of 4)



4. Raise the guide, and then loosen, but do not remove, one screw (callout 1) on the paper entrance guide.

Figure 1-158 Remove the lower pickup guide (3 of 4)



5. While pushing down on the paper entrance guide (callout 1), use a flat blade screwdriver to press in on the hinge pin (callout 2) and release it from the product. Rotate the assembly counterclockwise away from the product to remove it.



Figure 1-159 Remove the lower pickup guide (4 of 4)

Reinstall the lower pickup guide

▲ Insert the front pin of the assembly into the hole at the front of the chassis. Slightly press down on the rear hinge pin and insert it into the hole at the rear of the chassis. Rotate the guide toward the product until the green knobs snap back into place. Tighten the screw on the paper entrance guide.

Registration density (RD) sensor assembly

Before proceeding, remove the following components:

- Intermediate transfer belt (ITB). See <u>Intermediate transfer belt (ITB) on page 24</u>.
- Secondary transfer assembly. See <u>Secondary transfer assembly on page 112</u>.

Remove the RD sensor assembly

1. Remove two screws (callout 1).

Figure 1-160 Remove the RD sensor assembly (1 of 6)



2. Slide the shutter toward the right side of the product. Keep the shutter in this position for the following step.



Figure 1-161 Remove the RD sensor assembly (2 of 6)

- 3. Carefully separate the assembly from the product. The assembly wire harnesses are still attached to the product.
 - A CAUTION: Do not damage the shutter as it passes through the chassis.



Figure 1-162 Remove the RD sensor assembly (3 of 6)

4. Disconnect two connectors (callout 2) on the back side of the assembly.

Figure 1-163 Remove the RD sensor assembly (4 of 6)



- 5. Push in on the locking tab to release the retainer (callout 3), and then separate the retainer from the assembly.
- **NOTE:** The retainer remains attached to the wire harness and disengages from the assembly.



Figure 1-164 Remove the RD sensor assembly (5 of 6)

6. Remove the assembly.



Figure 1-165 Remove the RD sensor assembly (6 of 6)

Power-supply fan and fan duct

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.

Remove the power-supply fan and fan duct

1. Disconnect one connector (callout 1; J119), and release the wire harnesses from the guide (callout 2).

NOTE: To locate DC controller connector locations, see <u>DC controller PCA on page 7</u>.

Figure 1-166 Remove the power-supply fan (1 of 4)



- 2. To remove the fan only: Release two tabs (callout 3), and then remove the fan from the fan duct.
 - Reinstallation tip When the fan is reinstalled, the air must flow into the product. Look at the arrows embossed on the fan frame that indicate air flow direction.



Figure 1-167 Remove the power-supply fan (2 of 4)

3. To remove the fan and the fan duct: Remove one screw (callout 4), and then release the wire harnesses from the guides on the fan duct.

Figure 1-168 Remove the power-supply fan (3 of 4)


4. To remove the fan and the fan duct: Release one tab (callout 5), and then remove the fan and the fan duct (callout 6).



Figure 1-169 Remove the power-supply fan (4 of 4)

Registration assembly

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 24.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Secondary transfer assembly. See <u>Secondary transfer assembly on page 112</u>.
- Registration density (RD) sensor assembly. See <u>Registration density (RD) sensor assembly</u> on page 117.

بَلْ: TIP: Removing the RD sensor assembly makes it much easier to reinstall the registration assembly.

• Power-supply fan and fan duct. See <u>Power-supply fan and fan duct on page 121</u>.

Remove the registration assembly

NOTE: If a replacement registration assembly is installed, you must use the control-panel menus to reset the registration-roller count.

1. Remove two screws (callout 1).



Figure 1-170 Remove the registration assembly (1 of 8)

2. Pull down on the cover to release one tab, and then rotate the cover away from the product to remove it.



Figure 1-171 Remove the registration assembly (2 of 8)

- 3. Release two green latches (callout 2), and then lower the feed guide.
- Reinstallation tip Make sure that the feed guide snaps into the closed position when you reinstall the registration assembly.



Figure 1-172 Remove the registration assembly (3 of 8)

4. Remove three screws (callout 3).

Figure 1-173 Remove the registration assembly (4 of 8)

- 5. Separate the assembly from the product, release one tab (callout 4), and then remove the cover (callout 5).
 - **CAUTION:** The assembly is still attached to the product by the wire harnesses.



Figure 1-174 Remove the registration assembly (5 of 8)

6. Disconnect one connector (callout 6), and then release the wire harness from the retainer.

Figure 1-175 Remove the registration assembly (6 of 8)



7. Disconnect three connectors (callout 7) on the back side of the assembly, and then release the wires from the retainers.



Figure 1-176 Remove the registration assembly (7 of 8)

- 8. Remove the assembly.
- Reinstallation tip When you reinstall the registration assembly, make sure that it is correctly positioned in the product. The tabs on the assembly must fit into the slots in the product chassis and the assembly should fit securely up against the product chassis.



Figure 1-177 Remove the registration assembly (8 of 8)

High-voltage power supply lower

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See Interconnect board (ICB) on page 88.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.

Remove the high-voltage power supply lower

CAUTION: ESD-sensitive part.

1. Disconnect two connectors (callout 1), and then remove three screws (callout 2).

Figure 1-178 Remove the high-voltage power supply lower (1 of 4)



2. Use a small flat blade screwdriver to carefully remove three locking clips (callout 3).

CAUTION: Do not damage the PCA with the screwdriver.



Figure 1-179 Remove the high-voltage power supply lower (2 of 4)

3. Disconnect one connector (callout 4; J114), and then release five clips (callout 5).

NOTE: To locate DC controller connector locations, see <u>DC controller PCA on page 7</u>.



Figure 1-180 Remove the high-voltage power supply lower (3 of 4)

4. Rotate the top of the power supply away from the chassis, and then disconnect one connector (callout 6). Remove the power supply



Figure 1-181 Remove the high-voltage power supply lower (4 of 4)

Reinstall the high-voltage power supply lower

When you reinstall the power supply, look through the holes in the PCA and make sure that the high-voltage contact springs are correctly seated against the PCA.



Figure 1-182 Reinstall the high-voltage power supply lower

Developing-disengagement motor

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.

Remove the developing-disengagement motor

1. Remove two screws (callout 1).

Figure 1-183 Remove the developing-disengagement motor (1 of 2)



2. Remove the motor.





Reinstallation tip Make sure the motor is installed correctly. The PCA on the motor should be on top when the installation is complete.

Pickup motor

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See <u>Formatter PCA on page 83</u>.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.

Remove the pickup motor

Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the motor.

Figure 1-185 Remove the pickup motor



Lifter-drive assembly

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.

Remove the lifter-drive assembly

1. Disconnect three connectors (callout 1), and then release the wire harness from the retainers.

Figure 1-186 Remove the lifter-drive assembly (1 of 2)



2. Remove five screws (callout 2), and then remove the assembly.



Figure 1-187 Remove the lifter-drive assembly (2 of 2)

Tray-pickup drive assembly

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See Interconnect board (ICB) on page 88.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.

Remove the tray-pickup drive assembly

NOTE: To remove the pickup motor only, see <u>Pickup motor on page 134</u>.

1. Remove one screw (callout 1), and then remove the sheet-metal bracket (callout 2).

Figure 1-188 Remove the tray-pickup drive assembly (1 of 10)



2. Disconnect six connectors (callout 3; J106, J107, J108, J137, J138, J140).

NOTE: To locate DC controller connector locations, see <u>DC controller PCA on page 7</u>.



Figure 1-189 Remove the tray-pickup drive assembly (2 of 10)

- 3. Disconnect one connector (callout 4; J119), remove one screw (callout 5), and then release the wire harness from the guides.
- **NOTE:** To locate DC controller connector locations, see <u>DC controller PCA on page 7</u>.



Figure 1-190 Remove the tray-pickup drive assembly (3 of 10)

4. Release one tab (callout 6), and then remove the fan and the fan duct (callout 7).

Figure 1-191 Remove the tray-pickup drive assembly (4 of 10)



- 5. Disconnect two FFCs (callout 8; J110, J111 on the DC controller PCA), release the FFCs from the guide (callout 9), and then release the wire harnesses from the guides.
 - **NOTE:** To locate DC controller connector locations, see <u>DC controller PCA on page 7</u>.



Figure 1-192 Remove the tray-pickup drive assembly (5 of 10)

6. Release one tab (callout 10), and then remove the guide.



Figure 1-193 Remove the tray-pickup drive assembly (6 of 10)

7. Release one tab (callout 11), and then remove the guide.

Figure 1-194 Remove the tray-pickup drive assembly (7 of 10)

8. Remove two screws (callout 12), and then remove the high-voltage bracket (callout 13).



Figure 1-195 Remove the tray-pickup drive assembly (8 of 10)

9. Remove three screws (callout 14).





- **10.** Carefully remove the assembly.
 - **CAUTION:** The gears, arm, and spring on the assembly are not captive. Use your finger to secure the arm and spring as you remove the assembly. If the gears, arm, or spring become dislodged, see <u>Reinstall the tray-pickup drive assembly on page 142</u>.



Figure 1-197 Remove the tray-pickup drive assembly (10 of 10)

Reinstall the tray-pickup drive assembly

1. Make sure that the spring-loaded gear (callout 1) is correctly installed.

Figure 1-198 Reinstall the tray-pickup drive assembly (1 of 3)



2. Make sure that the spring (callout 2) is correctly installed.

Figure 1-199 Reinstall the tray-pickup drive assembly (2 of 3)



3. Make sure that the gears, arm, and spring are correctly installed.

Figure 1-200 Reinstall the tray-pickup drive assembly (3 of 3)



Tray-pickup assembly

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See <u>Formatter PCA on page 83</u>.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- Registration density (RD) sensor assembly. See <u>Registration density (RD) sensor assembly</u> on page 117.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.
- Tray-pickup drive assembly. See <u>Tray-pickup drive assembly on page 137</u>.

Remove the tray-pickup assembly

1. Release one tab (callout 1), and then remove the gear (callout 2).

Figure 1-201 Remove the tray-pickup assembly (1 of 3)



2. Remove two screws (callout 3).

Figure 1-202 Remove the tray-pickup assembly (2 of 3)



3. Remove the assembly.

Figure 1-203 Remove the tray-pickup assembly (3 of 3)



Laser/scanner assembly (Y/M)

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See Interconnect board (ICB) on page 88.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.

Remove the laser/scanner assembly (Y/M)

1. Remove five screws (callout 1), and then remove the sheet-metal plate (callout 2).

Figure 1-204 Remove the laser/scanner assembly (Y/M) (1 of 12)

2. Disconnect one in-line connector (callout 3), and then release the wire harnesses from the guide (callout 4).



Figure 1-205 Remove the laser/scanner assembly (Y/M) (2 of 12)

3. Release one tab (callout 5), and then remove the guide (callout 6).



Figure 1-206 Remove the laser/scanner assembly (Y/M) (3 of 12)

4. Remove one screw (callout 7), and then remove the cover (callout 8).

Figure 1-207 Remove the laser/scanner assembly (Y/M) (4 of 12)

- 5. Disconnect one FFC (callout 9), and then release one spring (callout 10).
- **CAUTION:** The spring is not captive. Do not lose the spring when it is removed. Use a pair of needle-nose pliers to safely retain the spring when it is removed. Do not use a flat blade screwdriver to remove the spring; the spring could forcibly leave the product and strike you.
- Reinstallation tip When you reinstall the spring, make sure that the laser/scanner fits tightly up against the product chassis, and make sure that the FFC is fully seated in the connector. The locator tabs on the front and rear of the scanner must be firmly seated in the slots in the chassis.



Figure 1-208 Remove the laser/scanner assembly (Y/M) (5 of 12)

- 6. Disconnect six connectors (callout 11).
- **NOTE:** Disconnect the larger connector on the right side, from the bottom. Disconnect the two smaller connectors on the right side from the top.



Figure 1-209 Remove the laser/scanner assembly (Y/M) (6 of 12)

7. Release two tabs (callout 12), and then slide the fan assembly toward the power-supply side of the product to release it.



Figure 1-210 Remove the laser/scanner assembly (Y/M) (7 of 12)

8. Pull the fan assembly slightly out of the product, disconnect two connectors (callout 13), and then remove the assembly.



Figure 1-211 Remove the laser/scanner assembly (Y/M) (8 of 12)

- 9. Remove one screw (callout 14), and then release one spring (callout 15).
 - **CAUTION:** The spring is not captive. Do not lose the spring when it is removed. Use a pair of needle-nose pliers to safely retain the spring when it is removed. Do not use a flat blade screwdriver to remove the spring; the spring could forcibly leave the product and strike you.
 - Reinstallation tip When the laser/scanner is properly positioned in the chassis, the plastic parts which protrude at the front and rear of the product will be firmly seated against the locator tabs on the chassis. Verify that the assembly is correctly seated, and then install the spring.



Figure 1-212 Remove the laser/scanner assembly (Y/M) (9 of 12)

10. Remove the toner collection sensor.



Figure 1-213 Remove the laser/scanner assembly (Y/M) (10 of 12)

 Rotate the front of the laser/scanner assembly down (callout 1), and then slide it toward the right (callout 2). Lower the left corner, and then rotate the left corner out of the product (callout 3).



Figure 1-214 Remove the laser/scanner assembly (Y/M) (11 of 12)

12. Pull the laser/scanner assembly straight out of the product to remove it.



Figure 1-215 Remove the laser/scanner assembly (Y/M) (12 of 12)

Laser/scanner assembly (C/Bk)

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See Interconnect board (ICB) on page 88.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.
- Lifter drive assembly. See <u>Lifter-drive assembly on page 135</u>.
- Laser/scanner assembly (Y/M). See Laser/scanner assembly (Y/M) on page 146.

Remove the laser/scanner assembly (C/Bk)

- 1. Release one spring (callout 1), and then disconnect one connector (callout 2).
 - **CAUTION:** The spring is not captive. Do not lose the spring when it is removed. Use a pair of needle-nose pliers to safely retain the spring when it is removed. Do not use a flat blade screwdriver to remove the spring; the spring could forcibly leave the product and strike you.
- Reinstallation tip When you reinstall the spring, make sure that the laser/scanner fits tightly up against the product chassis, and make sure that the FFC is fully seated in the connector. The locator tabs on the front of the scanner must be firmly seated in the slots in the chassis.





2. Disconnect one connector (callout 3).



Figure 1-217 Remove the laser/scanner assembly (C/Bk) (2 of 7)

3. Remove two screws (callout 4) located below the front door.

Figure 1-218 Remove the laser/scanner assembly (C/Bk) (3 of 7)



4. Open the front door, and then remove one screw (callout 5) and the cover (callout 6).

Figure 1-219 Remove the laser/scanner assembly (C/Bk) (4 of 7)



- 5. Remove two screws (callout 7). Use your finger to release the locking tab (callout 8), and then remove the cover.
 - **CAUTION:** Be careful. The PGC actuators are easily dislodged when the cover is removed. See Figure 1-223 Reinstall the PGC actuators (1 of 5) on page 158. To reinstall the actuators, see Reinstall the protective glass cleaner (PGC) actuators on page 158.



Figure 1-220 Remove the laser/scanner assembly (C/Bk) (5 of 7)

- 6. Release one spring (callout 9).
 - **CAUTION:** The spring is not captive. Do not lose the spring when it is removed. Use a pair of needle-nose pliers to safely retain the spring when it is removed. Do not use a flat blade screwdriver to remove the spring; the spring could forcibly leave the product and strike you.
 - Reinstallation tip When you reinstall the spring, make sure that the laser/scanner fits tightly up against the product chassis.



Figure 1-221 Remove the laser/scanner assembly (C/Bk) (6 of 7)

- 7. Rotate the corner of the assembly away from the product until you can see the PCA, and then remove the assembly from the product.
 - Reinstallation tip When the laser/scanner is properly positioned in the chassis, the plastic parts which protrude at the front and rear of the product will be firmly seated against the locator tabs on the chassis. Verify that the assembly is correctly seated, and then install the spring.



Figure 1-222 Remove the laser/scanner assembly (C/Bk) (7 of 7)

Reinstall the protective glass cleaner (PGC) actuators

1. The following figure shows a dislodged PGC actuator.

- TIP: If the actuator and spring are only slightly dislodged, you might be able to easily push them back into place.



Figure 1-223 Reinstall the PGC actuators (1 of 5)
2. Remove the actuator and spring from the product. Install the spring on the actuator.

Figure 1-224 Reinstall the PGC actuators (2 of 5)



- 3. Before proceeding, take note of the following:
 - **Callout 1**: The pin on the actuator will be installed into the slot in the chassis.
 - **Callout 2**: The pin on the pivot arm will be installed into the slot on the actuator.
 - **Callout 3**: The end of the spring will be installed onto the tab on the chassis.

Figure 1-225 Reinstall the PGC actuators (3 of 5)



4. Place the end of the actuator into the PGC rod, and then use a small flat blade screw driver to fasten the end of the spring on the tab on the chassis.



Figure 1-226 Reinstall the PGC actuators (4 of 5)

5. Push down on the actuator to seat it into place. Verify that the actuator is correctly installed. The PGC actuator should freely move when you push in on the actuator.



Figure 1-227 Reinstall the PGC actuators (5 of 5)

High-voltage power supply upper

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See Interconnect board (ICB) on page 88.
- DC controller. See <u>DC controller PCA and tray on page 91</u>.
- Low-voltage power supply (LVPS). See <u>Low-voltage power supply (LVPS) on page 94</u>.

Remove the high-voltage power supply upper

CAUTION: ESD-sensitive part.

1. Remove one screw (callout 1).

Figure 1-228 Remove the high-voltage power supply upper (1 of 5)



- 2. Remove four screws (callout 2), and then rotate the sheet-metal plate away from the power supply.
- NOTE: You do not need to completely remove the sheet-metal plate to access the power supply.



Figure 1-229 Remove the high-voltage power supply upper (2 of 5)

- 3. Disconnect two connectors (J201, J202; callout 3) from the back side of the power supply.
- **NOTE:** For clarity, the figure in this step shows the ADF and scanner removed. Carefully reach under these components to access the two connectors.

Figure 1-230 Remove the high-voltage power supply upper (3 of 5)



4. Remove three screws (callout 4).

Figure 1-231 Remove the high-voltage power supply upper (4 of 5)

5. Release four tabs (callout 5), and then remove the power supply.

Figure 1-232 Remove the high-voltage power supply upper (5 of 5)



Reinstall the high-voltage power supply upper

When you reinstall the power supply, look through the holes in the PCA and make sure that the high-voltage contact springs are correctly seated against the PCA.

NOTE: One wire harness (callout 1) is disconnected at both ends. Do not lose the wire harness.

Position the FFC (callout 2) over the cable guide when you reinstall the power supply.

Figure 1-233 Reinstall the high-voltage power supply upper



Drum motor 1

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Interconnect board (ICB). See Interconnect board (ICB) on page 88.
- DC controller. See <u>DC controller PCA and tray on page 91</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- High-voltage power supply upper. See <u>High-voltage power supply upper on page 161</u>.

Remove the drum motor 1

Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the motor.
Figure 1-234 Remove the drum motor 1



Drum motor 2 or drum motor 3

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.
- DC controller. See <u>DC controller PCA and tray on page 91</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- High-voltage power supply upper. See <u>High-voltage power supply upper on page 161</u>.

Remove the drum motor 2 or drum motor 3

- ▲ Do one of the following:
 - Remove drum motor 2: Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the motor.
 - Remove drum motor 3: Disconnect one connector (callout 3), remove four screws (callout 4), and then remove the motor.

Figure 1-235 Remove the drum motor 2 or drum motor 3



Fuser motor

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See Interconnect board (ICB) on page 88.
- DC controller. See <u>DC controller PCA and tray on page 91</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- High-voltage power supply upper. See <u>High-voltage power supply upper on page 161</u>.

Remove the fuser motor

Disconnect one connector (callout 1), remove three screws (callout 2), and then remove the motor.

Figure 1-236 Remove the fuser motor



Main-drive assembly

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Intermediate transfer belt (ITB). See <u>Intermediate transfer belt (ITB) on page 24</u>.
- Front-upper cover. See <u>Front-upper cover on page 42</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Front-top cover. See <u>Front-top cover on page 69</u>.
- Rear-top cover. See <u>Rear-top cover on page 71</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See <u>Image scanner on page 77</u>.
- Fuser. See <u>Fuser on page 81</u>.
- Formatter PCA. See <u>Formatter PCA on page 83</u>.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.
- DC controller. See <u>DC controller PCA and tray on page 91</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- Secondary transfer assembly. See <u>Secondary transfer assembly on page 112</u>.
- Power-supply fan and fan duct. See <u>Power-supply fan and fan duct on page 121</u>.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.
- High-voltage power supply upper. See <u>High-voltage power supply upper on page 161</u>.

Remove the main-drive assembly

1. Remove two screws (callout 1), and then remove the cover (callout 2).



Figure 1-237 Remove the main-drive assembly (1 of 7)

2. Release the wire harnesses from the guide (callout 3), and then remove one screw (callout 4).



Figure 1-238 Remove the main-drive assembly (2 of 7)

3. Lift the high-voltage bracket up to release it, and then remove the bracket.

Figure 1-239 Remove the main-drive assembly (3 of 7)

4. Disconnect seven connectors (callout 5), and then release the wire harnesses from the guides.

Figure 1-240 Remove the main-drive assembly (4 of 7)



5. Remove two screws (callout 6), and then remove the sheet-metal plates (callout 7).

Figure 1-241 Remove the main-drive assembly (5 of 7)



6. Release the FFCs and lower wiring harness from the guide, release one tab (callout 8), and then remove the guide.



Figure 1-242 Remove the main-drive assembly (6 of 7)

- 7. Remove ten screws (callout 9), and then carefully remove the assembly.
 - **CAUTION:** Be careful when you remove the assembly. The cams on the backside of the assembly can be dislodged. If the cams become dislodged, install them on the shafts as shown in Figure 1-245 Reinstall the main-drive assembly (2 of 11) on page 173.

The black cam must be installed on the shaft furthest away from the developing-disengagement motor. The white cams are interchangeable.



Figure 1-243 Remove the main-drive assembly (7 of 7)

Reinstall the main-drive assembly

1. Remove the bracket (callout 1), two guides (callout 2), and the developing-disengagement motor (callout 3).

Install the bracket and guides on the replacement main-drive assembly.

NOTE: Do not install the developing-disengagement motor on the assembly (this motor must be removed from the assembly to align the main-drive cams).

Figure 1-244 Reinstall the main-drive assembly (1 of 11)



2. Locate the cams (callout 4) on the back side of the assembly.



Figure 1-245 Reinstall the main-drive assembly (2 of 11)

- 3. Slowly rotate the shaft near the black cam.
 - **WARNING!** Do not touch the plastic gears or cams. You must not wipe away any of the grease that is applied to these components. Always rotate the gears and cams by rotating the metal drive shaft.



Figure 1-246 Reinstall the main-drive assembly (3 of 11)

4. Continue to rotate the shaft until the holes in the black-cam gear align as shown below.

When correctly aligned, the *bottom-most* hole in the gear is aligned with a hole in the sheet-metal chassis.

NOTE: The holes in the other cam gears have a different alignment. Make sure that the holes in the black-cam gear are correctly aligned.



Figure 1-247 Reinstall the main-drive assembly (4 of 11)

- 5. Verify that the cams (callout 5) align correctly.
 - TIP: The second cam in from the right (the white cam to the left of the black cam), should have the *second* hole aligned with the hole in the sheet-metal chassis.

The third cam in from the right, should have the *third* hole aligned with the hole in the sheet-metal chassis.

The fourth cam in from the right (the cam nearest the developing-disengagement motor), should have the *fourth* hole aligned with the hole in the sheet-metal chassis.

If the second, third, or fourth cams do not correctly align, do the following. Hold the long drive shaft, and gently tilt the cam and gear away from the shaft to allow clearance to rotate the gear until the correct hole in the gear aligns with the hole in the chassis.



Figure 1-248 Reinstall the main-drive assembly (5 of 11)

6. When the cams align correctly, they fit easily into the holes in the chassis.

Figure 1-249 Reinstall the main-drive assembly (6 of 11)

7. When the assembly is placed on the chassis, the pin on the swing gear and on the bracket (callout 6), must align with the holes in the chassis (callout 7).

Figure 1-250 Reinstall the main-drive assembly (7 of 11)



8. Position the assembly on the chassis.



Figure 1-251 Reinstall the main-drive assembly (8 of 11)

9. Use your finger to push in on the assembly, and use a small flat blade screwdriver to align the pin on the swing gear with the hole in the chassis.



Figure 1-252 Reinstall the main-drive assembly (9 of 11)

10. When the assembly is correctly installed against the chassis, the pin above the swing gear protrudes through the hole in the chassis.



Figure 1-253 Reinstall the main-drive assembly (10 of 11)

11. Install the main-drive assembly mounting screws, and then reinstall the developing-disengagement motor (callout 8).



Figure 1-254 Reinstall the main-drive assembly (11 of 11)

Fuser-drive assembly

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 24.
- Front-upper cover. See <u>Front-upper cover on page 42</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Left-upper cover. See Left-upper cover on page 54.
- Rear cover. See <u>Rear cover on page 56</u>.
- Front-top cover. See Front-top cover on page 69.
- Rear-top cover. See <u>Rear-top cover on page 71</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.
- Fuser. See <u>Fuser on page 81</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.
- DC controller. See <u>DC controller PCA and tray on page 91</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- Secondary transfer assembly. See <u>Secondary transfer assembly on page 112</u>.
- Power-supply fan and fan duct. See <u>Power-supply fan and fan duct on page 121</u>.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.
- High-voltage power supply upper. See <u>High-voltage power supply upper on page 161</u>.
- Main-drive assembly. See <u>Main-drive assembly on page 168</u>.

Remove the fuser-drive assembly

1. Disconnect one connector (callout 1), and then release the wire harnesses from the guide (callout 2).





2. Remove two screws (callout 3), and then remove the guide (callout 4).



Figure 1-256 Remove the fuser-drive assembly (2 of 6)

3. Remove one screw (callout 5), and then remove the sheet-metal plate (callout 6).





4. Remove one screw (callout 7), and then remove the cover (callout 8).

Figure 1-258 Remove the fuser-drive assembly (4 of 6)



5. Remove five screws (callout 9).

Figure 1-259 Remove the fuser-drive assembly (5 of 6)

- 6. Carefully remove the assembly.
- **CAUTION:** A gear on the assembly is not captive. Do not lose the gear when you remove the assembly. If the gear becomes dislodged, see <u>Reinstall the fuser-drive assembly on page 183</u>.

Figure 1-260 Remove the fuser-drive assembly (6 of 6)



Reinstall the fuser-drive assembly

If the gear (callout 1) is dislodged when the assembly is removed, use the figure below to correctly install it on the assembly.

Figure 1-261 Reinstall the fuser-drive assembly



Delivery assembly

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Intermediate transfer belt (ITB). See <u>Intermediate transfer belt (ITB) on page 24</u>.
- Front-upper cover. See <u>Front-upper cover on page 42</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Front-top cover. See <u>Front-top cover on page 69</u>.
- Rear-top cover. See <u>Rear-top cover on page 71</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.
- Fuser. See <u>Fuser on page 81</u>.
- Formatter PCA. See <u>Formatter PCA on page 83</u>.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.
- DC controller. See <u>DC controller PCA and tray on page 91</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- Secondary transfer assembly. See <u>Secondary transfer assembly on page 112</u>.
- Power-supply fan and fan duct. See <u>Power-supply fan and fan duct on page 121</u>.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.
- High-voltage power supply upper. See <u>High-voltage power supply upper on page 161</u>.
- Main-drive assembly. See <u>Main-drive assembly on page 168</u>.
- Fuser-drive assembly. See <u>Fuser-drive assembly on page 179</u>.

Remove the delivery assembly

1. Remove two screws (callout 1), and then remove the guide (callout 2).



Figure 1-262 Remove the delivery assembly (1 of 5)

2. Remove two screws (callout 3).

Figure 1-263 Remove the delivery assembly (2 of 5)



3. Release one tab (callout 4), and then remove the gear (callout 5).

Figure 1-264 Remove the delivery assembly (3 of 5)



4. Release one tab (callout 6), and then rotate the locking clip until the tab on the clip aligns with the slot in the chassis.



Figure 1-265 Remove the delivery assembly (4 of 5)

- 5. Disconnect one connector (callout 7), remove two screws (callout 8), and then carefully lift the assembly (callout 9) off of the product to remove it.
 - **CAUTION:** A solenoid arm (on the right side) and a spring (on the left side) on the assembly are not captive. Do not lose the solenoid arm or the spring when you remove the assembly. If the solenoid arm or spring become dislodged, see <u>Reinstall the delivery assembly on page 188</u>.



Figure 1-266 Remove the delivery assembly (5 of 5)

Reinstall the delivery assembly

1. Make sure that the solenoid arm is correctly installed on the assembly.



Figure 1-267 Reinstall the delivery assembly (1 of 2)

2. Make sure that the spring is correctly installed on the assembly.

Figure 1-268 Reinstall the delivery assembly (2 of 2)

Duplex-drive assembly

Before proceeding, remove the following components:

- Toner-collection unit. See <u>Toner-collection unit on page 12</u>.
- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 24.
- Front-upper cover. See <u>Front-upper cover on page 42</u>.
- Right-rear cover. See <u>Right-rear cover on page 48</u>.
- Left cover. See <u>Left cover on page 50</u>.
- Rear-upper cover. See <u>Rear-upper cover on page 53</u>.
- Left-upper cover. See <u>Left-upper cover on page 54</u>.
- Rear cover. See <u>Rear cover on page 56</u>.
- Front-top cover. See <u>Front-top cover on page 69</u>.
- Rear-top cover. See <u>Rear-top cover on page 71</u>.
- Document feeder. See <u>Document feeder on page 73</u>.
- Image scanner. See Image scanner on page 77.
- Fuser. See <u>Fuser on page 81</u>.
- Formatter PCA. See Formatter PCA on page 83.
- Interconnect board (ICB). See <u>Interconnect board (ICB) on page 88</u>.
- DC controller. See <u>DC controller PCA and tray on page 91</u>.
- Low-voltage power supply (LVPS). See Low-voltage power supply (LVPS) on page 94.
- Secondary transfer assembly. See <u>Secondary transfer assembly on page 112</u>.
- Power-supply fan and fan duct. See <u>Power-supply fan and fan duct on page 121</u>.
- High-voltage power supply lower. See <u>High-voltage power supply lower on page 129</u>.
- High-voltage power supply upper. See <u>High-voltage power supply upper on page 161</u>.
- Main-drive assembly. See <u>Main-drive assembly on page 168</u>.
- Fuser-drive assembly. See <u>Fuser-drive assembly on page 179</u>.
- Delivery assembly. See <u>Delivery assembly on page 184</u>.

Remove the duplex-drive assembly

1. Disconnect two connectors (callout 1), and then remove three screws (callout 2).



Figure 1-269 Remove the duplex-drive assembly (1 of 2)

2. Remove the assembly.

Figure 1-270 Remove the duplex-drive assembly (2 of 2)



Optional paper feeder assembly (Tray 3)

NOTE: For information about removing the Tray 3 pickup roller, see <u>Pickup and feed rollers (Tray 3)</u> on page 19.

For information about removing the Tray 3, see <u>Tray 2 and 3 on page 14</u>.

For information about removing the right door (optional paper feeder), see <u>Right door (optional paper</u> <u>feeder) on page 39</u>.

Drawer connector

1. With a small screwdriver, lift one tab and then slide the drawer connector to release it.

Figure 1-271 Remove the drawer connector; optional paper feeder (1 of 2)



2. Remove one connector (callout 1).

Figure 1-272 Remove the drawer connector; optional paper feeder (2 of 2)



2 Parts and diagrams

- Order parts, accessories, and supplies
- Oderable parts
- Whole unit replacment (WUR)
- <u>Service parts</u>
- <u>Related documentation and software</u>
- Fasteners used in this product
- How to use the parts lists and diagrams
- <u>Assembly locations</u>
- <u>Covers</u>
- <u>Right-door assembly</u>
- Internal assemblies
- <u>Assessories</u>
- Alphabetical parts list
- <u>Numerical parts list</u>

Order parts, accessories, and supplies

You can obtain the following items directly from HP:

- **Replacement parts:** To order replacement parts in the U.S., go to <u>www.hp.com/go/hpparts/</u>. Outside the United States, order parts by contacting your local authorized HP service center.
- **Supplies and accessories:** To order supplies in the U.S., go to <u>www.hp.com/go/ljsupplies</u>. To order supplies worldwide, go to <u>www.hp.com/ghp/buyonline.html</u>. To order accessories, go to <u>www.hp.com/support/lj500colorMFPM570</u>.
Oderable parts

The following list of accessories was current at the time of printing. Ordering information and availability of the accessories might change during the life of the product.

Accessories

Table 2-1 Accessories

ltem	Description	Product number	Part number
1 x 500-sheet paper feeder		CE084A	CF084-67901
LaserJet printer cabinet		CE085A	CD644-67917
Power cords	Accy Power Cord - EU		8121-0731
	Accy Power Cord - UK		8121-0739
	Accy Power Cord - DEN		8121-0733
	Accy Power Cord - RSA		8121-0737
	Accy Power Cord - SWI		8121-0738
	Accy Power Cord - ISR		8121-1004
	Accy Power Cord - AEC		8121-0734
	Accy Power Cord - AUS		8121-0837
	Accy Power Cord - IND		8121-0564
	Accy Power Cord - CHN		8121-0943
	Accy Power Cord - TAI		8121-0964
	Accy Power Cord - ARG		8121-0729
	Accy Power Cord - CHI		8121-0735
	Accy Power Cord - BRAZIL		8121-1071
	Accy Power Cord - AMS		8121-0740

Table 2-1 Accessories (continued)

ltem	Description	Product number	Part number
Phone cords	RJ11 - 4 Wire Telecom Cable		8120-8922
	DEN Telecom Cable		8120-8911
	ISR Telecom Cable		8120-8913
	SWI Telecom Cable		8121-0844
	RJ11 - 2 Wire Telecom Cable		8121-0811
	KOR Telecom Cable		8120-8908
	AUS Telecom Cable		8120-8907
	NZ Telecom Cable		8120-8921
USB cable	1.83 m (6 ft)		8121-0868

Print cartridges and toner collection unit

Product name	Cartridge number	Part number (service)
HP Color LaserJet standard black print cartridge	CE400A	CE400-67901
HP Color LaserJet high capacity black print cartridge	CE400X	CE400-67902
HP Color LaserJet cyan print cartridge	CE401A	CE401-67901
HP Color LaserJet yellow print cartridge	CE402A	CE402-67901
HP Color LaserJet magenta print cartridge	CE403A	CE403-67901
Toner collection unit (TCU)	CE254A	RM1-4989-000CN
Fuser kit		CD644-67906 (110 V)
• Fuser assembly (110 V or 220 V)		CD644-67907 (220 V)
Installation instructions		

• Recycle guide

CAUTION: Make sure that you order the correct kit for the rated voltage of your product.

Customer self repair (CSR) and service kits

Product name	Part number
1 x 500-sheet paper feeder right door kit	CC468-67906
Right-door assembly	
Right-door stopper	
Right-door link	
Installation instructions	
Duplex reverse guide kit	CC468-67913
Duplex reverse guide	
Installation instructions	
Front-door assembly and name plate	CZ271-67901
• Front-door assembly	
• HP Jewel	
Name plate	
Installation instructions	
Laser scanner assembly kit	CD644-67905
Laser/scanner assembly	
Installation instructions	
Main drive assembly kit	CD644-67911
Main drive assembly	
Installation instructions	
Tray 1 roller kit	CD644-67903
Separation pad	
Pickup roller	
Installation instructions	
Tray 2 - x roller kit)	CD644-67904
• Separation roller assembly (Tray 2)	
• Kit, paper pickup roller assembly	
• Paper feed roller (1x500)	
• Paper pick up roller (1x500)	
Installation instructions	

Product name		Part number
Secondary transfer (T2) roller kit		CD644-67914
•	Secondary transfer roller assembly	
•	Installation instructions	
Inter	mediate transfer belt kit	CD644-67908
•	Intermediate transfer belt	
•	Secondary transfer roller assembly	
•	Installation instructions	
Ton	er collection unit (TCU) kit	CC468-67910
•	Toner collection unit	
•	Installation instructions	
500	-sheet feeder kit (Tray 3)	CF084-67901
•	500-sheet paper and HMT assembly	
IJр	rinter cabinet kit	CD644-67917
•	LJ printer cabinet	
Spring separation pad kit 5851-4879		5851-4879
•	Spring separation pad	
•	Installation instructions	

Whole unit replacment (WUR)

Table 2-2 LaserJet Pro 500 Color MFP M570dn (WUR)

LaserJet Pro 500 Color MFP M570dn		
M570dn 220V EMEA	CZ271-69001	
M570dn 110V NAR/TW	CZ271-69002	
M570dn 220V CL/AR/LAR	CZ271-69004	
M570dn 110V BR	CZ271-67062	

Table 2-3 LaserJet Pro 500 Color MFP M570dw (WUR)

LaserJet Pro 500 Color MFP M570dw			
M570dw 220V EMEA	CZ272-69001		
M570dw 110V NAR/TW (TW only)	CZ272-69002		
M570dw 220V AP/LAR (AP only)	CZ272-69003		
M570dw 220V CN/MY	CZ272-67061		

Service parts

The following service parts are not shown in the exploded view diagrams sections.

Table 2-4 Service parts

Item	Part number
Control panel	CZ271-60101
Control panel left mount	CZ271-40003
Control panel right mount	CZ271-40004
Control panel right rear	CZ271-40005
Control panel gear mount	CZ271-40015
Gear, control panel	CZ271-40006
Screw, friction gear mount	CZ271-20003
Washer, friction gear mount	CZ271-20004
Spring, friction gear mount	CZ271-20002
ICB Cable Guide	CZ271-40016
Cable, 24V	CZ271-50003
Cable, FAX	CF144-60126
Cable, FMTR power input	CZ271-50004
Cable, USB thumdrive	CZ271-50005
Cable, VIF FFC A	CZ271-50007
Cable, VIF FFC B	CZ271-50008
Cable, wireless	CZ271-50006
USB mount plate	CZ271-01002
FAX PCA (AA; CF206A)	CF206-60001
FAX PCA (Euro; CF207A)	CF207-60001
FAX PCA (Brz; CF208A)	CF208-60001
Formatter	CZ272-60001
Wireless PCA	1150-7951
USB PCA	CF368A
Inter connect board (ICB)	CZ272-60002
Scanner/ADF assembly	CZ271-60017
Auto document feeder assembly	CZ271-60016
Scanner assembly	CZ271-60015
Scan bezel assembly	CZ271-60014

ltem	Part number
ADF glass (with white background) assembly	CF286-60120
Scan base	CZ271-60013
Scanner chassis assembly	CF286-60112

Table 2-4 Service parts (continued)

Related documentation and software

are
a

ltem	Description	Part number
HP LaserJet Pro 500 color MFP M570 Printer User Guide	Product user guide	CZ271-90908
HP LaserJet Pro 500 color MFP M570 Printer Service Repair Manual	English service repair manual	CZ271-91020
HP LaserJet Pro 500 color MFP M570 Printer Service Troubleshooting Manual	English service troubleshooting manual	CZ271-91021

Fasteners used in this product

Table 2-6 Common fasteners

NOTE: The screw illustrations in the following table are for reference only. Screws might vary in size and appearance from those shown in this table.

Example	Description	Size	Part Number
(C) man	Screw, tapping, truss head	M4X10	XB4-7401-005CN
(C)	Screw, tapping, pan head	M4X10	XB4-7401-007CN
	Screw, D	М3Х8	XA9-1671-000CN
	Screw, D	МЗХ8	XA9-1834-000CN
	Screw (formatter assembly)	МЗХО.5	0515-4679

6 mm	8 mm	10 mm	М 3	M 4
			0	Ο

How to use the parts lists and diagrams

TIP: Some assemblies that are unique to the LaserJet Pro 500 Color MFP M570dn or the LaserJet Pro 500 Color MFP M570dw are not shown in the following exploded view sections. To find part numbers for these assemblies, see <u>Service parts on page 200</u>.

The figures in this chapter show the major subassemblies in the product and their component parts. A parts list table follows each exploded view assembly diagram. Each table lists the item number, the associated part number, and the description of each part. If a part is not listed in the table, then it is not a field replacement unit (FRU).

- **CAUTION:** Be sure to order the correct part. When looking for part numbers for electrical components, pay careful attention to the voltage that is listed in the description column. Doing so will ensure that the part number selected is for the correct all-in-one model.
- **NOTE:** In this manual, the abbreviation "PCA" stands for "printed circuit-board assembly." Components described as a PCA might consist of a single circuit board or a circuit board plus other parts, such as cables and sensors.

Assembly locations

Base product (no optional trays or accessories)



ltem	Description	ltem	Description
1	Face-down output bin	6	Power receptacle
2	Reverse tray	7	Test print switch
3	Right door	8	Tray 2
4	Tray 1	9	Front door
5	Power switch		

Base product (optional trays or accessories)



Table 2-7 Optional 500-sheet input tray

Item	Description
1	Connector
2	Tray 3
3	Positioning pins

Covers





Ref	Description	Part number	Qty
1	Cover, right front	RC2-5056-000CN	1
2	Cover, rear	RC2-5048-000CN	1
3	Cover, left	RC2-5052-000CN	1
4	Cover, rear right	RC2-5057-000CN	1
5	Cover, right lower	RC2-5059-000CN	1
6	Plate, blanking	RC2-5938-000CN	1
7	Tray, paper delivery	RL1-1941-030CN	1
9	Control panel cover assembly	RM1-9198-000CN	1
10	Cover, right	RC3-2095-000CN	1
11	Cover, upper right	RC3-2093-000CN	1
12	Cover, right rear	RC3-2096-000CN	1
13	Cover, left rear	RC3-2094-000CN	1
14	Cover, upper rear	RC3-2092-000CN	1
15	Cover, right door gear rear	RC2-4924-000CN	1
16	Cover, left lower	RC2-5069-000CN	1

Table 2-8 External covers, panels, and doors

Right-door assembly





Ref	Description	Part number	Qty
1	Right door assembly	RM1-8123-000CN	1
2	Duplex paper feed assembly	RM1-4959-000CN	1

Table 2-9 Right-door assembly

Internal assemblies

Internal assemblies (1 of 6)

Figure 2-5 Internal assemblies (1 of 6)



Ref	Description	Part number	Qty
3	Cover, front inner lower unit	RL1-1914-020CN	1
5	Cover, front inner upper	RC3-1070-000CN	1
6	Cover, front inner lower	RL1-1915-000CN	1
12	Waste toner detect assembly	RM1-5696-000CN	1
13	Waste toner duct assembly	RM1-8138-000CN	1
14	Toner collection unit (TCU)	RM1-4989-000CN	1
21	Waste toner box seal	RC2-4780-000CN	4

Table 2-10 Internal assemblies (1 of 6)

Internal assemblies (2 of 6)



Ref	Description	Part number	Qty
1	Fan cable assembly	RM1-5746-000CN	1
8	Tray 2	RM1-4962-060CN	1
27	Temperature sensor unit	RK2-3267-000CN	1
29	Toner sensor holder assembly	RM1-5700-000CN	4
30	Stand assembly	RM1-5588-000CN	4
31	Base assembly	RM1-8149-000CN	4
33	Connecting cable assembly	RM1-5749-000CN	1
34	Sensor cable assembly	RM1-5740-000CN	1
35	Sensor cable assembly	RM1-5741-000CN	1
36	Motor/sensor cable assembly	RM1-5752-000CN	1
37	Cartridge lock lever holder	RC2-5957-000CN	1
38	Fan (FM2, FM3)	RK2-2418-000CN	2
39	Cartridge lock lever holder	RC3-1075-000CN	2
40	Cartridge lock lever holder	RC2-5956-000CN	2

Table 2-11 Internal assemblies (2 of 6)

Internal assemblies (3 of 6)

Figure 2-7 Internal assemblies (3 of 6)



Ref	Description	Part number	Qty
6	Link, door stopper	RC2-4916-000CN	1
7	Guide, option enterance	RC2-4915-000CN	1
8	Sensor cable guide assembly (SR7)	RM1-8178-000CN	1
9	Cover, inner right lower	RC2-5019-000CN	1
10	Link, interlock (SW1)	RC2-5120-000CN	1
11	Mount, interlock switch	RC2-5123-000CN	1
12	Arm, interlock link switch	RC2-5121-000CN	1
14	Link, interlock	RC2-5119-000CN	1
15	Link, interlock	RC2-5118-000CN	1
20	Wire (mech) sensor project	RC2-4828-000CN	1
22	Fuser (110V)	RM1-8154-000CN	1
22	Fuser (220V)	RM1-8156-000CN	1
23	Secondary transfer assembly	RM1-4952-030CN	1
31	Button, power supply	RL1-1947-000CN	1
33	Paper delivery assembly	RM1-4970-060CN	1
36	Density detect assembly	RM1-8163-000CN	1
37	Pick up lower guide assembly	RM1-9192-000CN	1
39	Registration assembly	RM1-4969-000CN	1
40	Switch cable assembly	RM1-8065-000CN	1
41	Paper pick up assembly	RM1-4967-000CN	1
42	Front lock arm assembly	RM1-5532-000CN	1
43	Switch PCA assembly	RM1-8097-000CN	1

Table 2-12 Internal assemblies (3 of 6)

Internal assemblies (4 of 6)

Figure 2-8 Internal assemblies (4 of 6)



Ref	Description	Part number	Qty
44	Door switch assembly (SW2)	RM1-5732-000CN	1
45	Microswitch (SW3)	WC4-5171-000CN	1
47	Rear lock arm assembly	RM1-5533-000CN	1

Table 2-13 Internal assemblies (4 of 6)

Internal assemblies (5 of 6)



Ref	Description	Part number	Qty
1	Fusing connecting cable assembly	RM1-5714-000CN	1
2	Link, door stopper	RC2-4916-000CN	1
6	Fan (FM1)	RK2-2416-000CN	1
7	Rear handle	RC2-5042-000CN	1
9	Spring, grounding	RC2-5148-000CN	1
11	Switch arm	RC2-5943-000CN	1
15	Lower HVPS (D)	RM1-8087-000CN	1
16	Cable, laser FCC 1	RK2-3941-000CN	1
17	Cable, rear assembly	RM1-8084-000CN	1
18	Upper HVPS (T)	RM1-8088-000CN	1
19	Cable, laser FCC 2	RK2-3943-000CN	1
20	DC Controller	RM1-8119-000CN	1
27	Cable, MP sensor assembly	RM1-5737-000CN	1
29	Interconnect PCA (ICB)	RM1-8086-000CN	1
30	LVPS (110V)	RM1-8102-000CN	1
30	LVPS (220V)	RM1-8103-000CN	1

Table 2-14 Internal assemblies (5 of 6)

Internal assemblies (6 of 6)

Figure 2-10 Internal assemblies (6 of 6)



Ref	Description	Part number	Qty
1	Duplexing unit cable assembly	RM1-5730-000CN	1
7	Lifter drive assembly	RM1-4976-000CN	1
8	Main motor unit (M3, M4, M5)	RM1-8105-000CN	3
12	Connector, drawer	VS1-7258-007CN	1
13	Photo interrupter (SR5)	WG8-5935-000CN	1
14	Paper pick up drive assembly	RM1-8135-000CN	1
21	Pickup motor assembly (M13)	RM1-5773-000CN	1
22	Fusing drive assembly	RM1-8134-000CN	1
24	Duplex drive assembly	RM1-4973-000CN	1
25	Fusing motor assembly (M2)	RM1-4983-000CN	1
27	Stepping motor, DC (M10)	RK2-2415-000CN	1

Table 2-15 Internal assemblies (6 of 6)

Assessories

1 x 500-sheet paper feeder





Ref	Description	Part number	Qty
1	1 x 500-sheet feeder replacement kit	CF084-67901	1

Table 2-16 1 x 500-sheet paper feeder

Paper feeder covers

Figure 2-12 Paper feeder covers



Ref	Description	Part number	Qty
1	Cover, left	RC2-5428-000CN	1
2	Cover, rear	RC2-5429-000CN	1
3	Cover, right	RC2-5427-000CN	1
4	Cover, front upper	RC2-5425-000CN	1
5	Cover, front right	RC2-5426-000CN	1
7	Cover, left front	RC2-5430-000CN	1

Table 2-17 Paper feeder covers

Paper feeder main body

Figure 2-13 Paper feeder main body



Ref	Description	Part number	Qty
1	Lifter base assembly	RM1-5913-000CN	1
2	Paper feed assembly	RM1-6194-030CN	1
4	Paper pickup assembly	RM1-5919-000CN	1
13	Drawer connector	VS1-7257-007CN	1
14	Holder, drawer connector	RC2-5416-000CN	1

 Table 2-18
 Paper feeder main body

Paper feeder tray



Table 2-19 Tray

Ref	Description	Part number	Qty
1	Tray 3	RM1-6198-000CN	1

Paper feeder PCA


Table 2-20 Paper feeder PCA

Ref	Description	Part number	Qty
1	PCA, paper feeder driver (1 x 500)	RM1-5839-000CN	1

Alphabetical parts list

Table 2-21 Alphabetical parts list

Description	Part number	Table and page
1 x 500-sheet feeder replacement kit	CF084-67901	<u>1 x 500-sheet paper feeder</u> on page 223
Arm, interlock link switch	RC2-5121-000CN	Internal assemblies (3 of 6) on page 215
Base assembly	RM1-8149-000CN	Internal assemblies (2 of 6) on page 213
Button, power supply	RL1-1947-000CN	Internal assemblies (3 of 6) on page 215
Cable, laser FCC 1	RK2-3941-000CN	Internal assemblies (5 of 6) on page 219
Cable, laser FCC 2	RK2-3943-000CN	Internal assemblies (5 of 6) on page 219
Cable, MP sensor assembly	RM1-5737-000CN	Internal assemblies (5 of 6) on page 219
Cable, rear assembly	RM1-8084-000CN	Internal assemblies (5 of 6) on page 219
Cartridge lock lever holder	RC2-5957-000CN	Internal assemblies (2 of 6) on page 213
Cartridge lock lever holder	RC3-1075-000CN	Internal assemblies (2 of 6) on page 213
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Cover, front inner upper	RC3-1070-000CN	Internal assemblies (1 of 6) on page 211
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Cover, left	RC2-5428-000CN	Paper feeder covers on page 225
Cover, left front	RC2-5430-000CN	Paper feeder covers on page 225
Cover, left lower	RC2-5069-000CN	External covers, panels, and doors on page 207
Cover, left rear	RC3-2094-000CN	External covers, panels, and doors on page 207
Cover, rear	RC2-5048-000CN	External covers, panels, and doors on page 207
Cover, rear	RC2-5429-000CN	Paper feeder covers on page 225
Cover, rear right	RC2-5057-000CN	External covers, panels, and doors on page 207
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Cover, right	RC2-5427-000CN	Paper feeder covers on page 225
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Cover, right front	RC2-5056-000CN	External covers, panels, and doors on page 207
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Cover, right rear	RC3-2096-000CN	External covers, panels, and doors on page 207
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Duplex paper feed assembly	RM1-4959-000CN	<u>Right-door assembly</u> on page 209
Duplexing unit cable assembly	RM1-5730-000CN	Internal assemblies (6 of 6) on page 221
Fan (FM1)	RK2-2416-000CN	Internal assemblies (5 of 6) on page 219
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Fan cable assembly	RM1-5746-000CN	Internal assemblies (2 of 6) on page 213
Front lock arm assembly	RM1-5532-000CN	Internal assemblies (3 of 6) on page 215
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Fusing drive assembly	RM1-8134-000CN	Internal assemblies (6 of 6) on page 221
Fusing motor assembly (M2)	RM1-4983-000CN	Internal assemblies (6 of 6) on page 221
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Link, interlock	RC2-5118-000CN	Internal assemblies (3 of 6) on page 215
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Microswitch (SW3)	WC4-5171-000CN	Internal assemblies (3 of 6) on page 215
Motor/sensor cable assembly	RM1-5752-000CN	Internal assemblies (2 of 6) on page 213
Mount, interlock switch	RC2-5123-000CN	Internal assemblies (3 of 6) on page 215
Paper delivery assembly	RM1-4970-060CN	Internal assemblies (3 of 6) on page 215
Paper feed assembly	RM1-6194-030CN	Paper feeder main body on page 227
Paper pick up assembly	RM1-4967-000CN	Internal assemblies (3 of 6) on page 215
Paper pick up drive assembly	RM1-8135-000CN	Internal assemblies (6 of 6) on page 221
Paper pickup assembly	RM1-5919-000CN	Paper feeder main body on page 227
PCA, paper feeder driver (1 x 500)	RM1-5839-000CN	Paper feeder PCA on page 231
Photo interrupter (SR5)	WG8-5935-000CN	Internal assemblies (6 of 6) on page 221
Pick up lower guide assembly	RM1-9192-000CN	Internal assemblies (3 of 6) on page 215
Pickup motor assembly (M13)	RM1-5773-000CN	Internal assemblies (6 of 6) on page 221
Plate, blanking	RC2-5938-000CN	External covers, panels, and doors on page 207

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Rear lock arm assembly	RM1-5533-000CN	Internal assemblies (3 of 6) on page 215
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Right door assembly	RM1-8123-000CN	Right-door assembly on page 209
Secondary transfer assembly	RM1-4952-030CN	Internal assemblies (3 of 6) on page 215
Sensor cable assembly	RM1-5740-000CN	Internal assemblies (2 of 6) on page 213
Sensor cable assembly	RM1-5741-000CN	Internal assemblies (2 of 6) on page 213
Sensor cable guide assembly (SR7)	RM1-8178-000CN	Internal assemblies (3 of 6) on page 215
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Toner collection unit (TCU)	RM1-4989-000CN	Internal assemblies (1 of 6) on page 211
Toner sensor holder assembly	RM1-5700-000CN	Internal assemblies (2 of 6) on page 213
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Waste toner duct assembly	RM1-8138-000CN	Internal assemblies (1 of 6) on page 211
Wire (mech) sensor project	RC2-4828-000CN	Internal assemblies (3 of 6) on page 215

Numerical parts list

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RC2-4828-000CN	Wire (mech) sensor project	Internal assemblies (3 of 6) on page 215
RC2-4915-000CN	Guide, option enterance	Internal assemblies (3 of 6) on page 215
RC2-4916-000CN	Link, door stopper	Internal assemblies (3 of 6) on page 215
RC2-4916-000CN	Link, door stopper	Internal assemblies (5 of 6) on page 219
RC2-4924-000CN	Cover, right door gear rear	External covers, panels, and doors on page 207
RC2-5019-000CN	Cover, inner right lower	Internal assemblies (3 of 6) on page 215
RC2-5042-000CN	Rear handle	Internal assemblies (5 of 6) on page 219
RC2-5048-000CN	Cover, rear	External covers, panels, and doors on page 207
RC2-5052-000CN	Cover, left	External covers, panels, and doors on page 207
RC2-5056-000CN	Cover, right front	External covers, panels, and doors on page 207
RC2-5057-000CN	Cover, rear right	External covers, panels, and doors on page 207
RC2-5059-000CN	Cover, right lower	External covers, panels, and doors on page 207
RC2-5069-000CN	Cover, left lower	External covers, panels, and doors on page 207
RC2-5118-000CN	Link, interlock	Internal assemblies (3 of 6) on page 215
RC2-5119-000CN	Link, interlock	Internal assemblies (3 of 6) on page 215
RC2-5120-000CN	Link, interlock (SW1)	Internal assemblies (3 of 6) on page 215
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Part number	Description	Table and page
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RC2-5148-000CN	Spring, grounding	Internal assemblies (5 of 6) on page 219
RC2-5416-000CN	Holder, drawer connector	Paper feeder main body on page 227
RC2-5425-000CN	Cover, front upper	Paper feeder covers on page 225
RC2-5426-000CN	Cover, front right	Paper feeder covers on page 225
RC2-5427-000CN	Cover, right	Paper feeder covers on page 225
RC2-5428-000CN	Cover, left	Paper feeder covers on page 225
RC2-5429-000CN	Cover, rear	Paper feeder covers on page 225
RC2-5430-000CN	Cover, left front	Paper feeder covers on page 225
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RC2-5943-000CN	Switch arm	Internal assemblies (5 of 6) on page 219
RC2-5956-000CN	Cartridge lock lever holder	Internal assemblies (2 of 6) on page 213
RC2-5957-000CN	Cartridge lock lever holder	Internal assemblies (2 of 6) on page 213
RC3-1070-000CN	Cover, front inner upper	Internal assemblies (1 of 6) on page 211
RC3-1075-000CN	Cartridge lock lever holder	Internal assemblies (2 of 6) on page 213
RC3-2092-000CN	Cover, upper rear	External covers, panels, and doors on page 207
RC3-2093-000CN	Cover, upper right	External covers, panels, and doors on page 207
RC3-2094-000CN	Cover, left rear	External covers, panels, and doors on page 207
RC3-2095-000CN	Cover, right	External covers, panels, and doors on page 207
RC3-2096-000CN	Cover, right rear	External covers, panels, and doors on page 207

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Part number	Description	Table and page
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RK2-2416-000CN	Fan (FM1)	Internal assemblies (5 of 6) on page 219
RK2-2418-000CN	Fan (FM2, FM3)	Internal assemblies (2 of 6) on page 213
RK2-3267-000CN	Temperature sensor unit	Internal assemblies (2 of 6) on page 213
RK2-3941-000CN	Cable, laser FCC 1	Internal assemblies (5 of 6) on page 219
RK2-3943-000CN	Cable, laser FCC 2	Internal assemblies (5 of 6) on page 219
RL1-1914-020CN	Cover, front inner lower unit	Internal assemblies (1 of 6) on page 211
RL1-1915-000CN	Cover, front inner lower	Internal assemblies (1 of 6) on page 211
RL1-1941-030CN	Tray, paper delivery	External covers, panels, and doors on page 207
RL1-1947-000CN	Button, power supply	Internal assemblies (3 of 6) on page 215
RM1-4952-030CN	Secondary transfer assembly	Internal assemblies (3 of 6) on page 215
RM1-4959-000CN	Duplex paper feed assembly	<u>Right-door assembly</u> on page 209
RM1-4962-060CN	Tray 2	Internal assemblies (2 of 6) on page 213
RM1-4967-000CN	Paper pick up assembly	Internal assemblies (3 of 6) on page 215
RM1-4969-000CN	Registration assembly	Internal assemblies (3 of 6) on page 215
RM1-4970-060CN	Paper delivery assembly	Internal assemblies (3 of 6) on page 215
RM1-4973-000CN	Duplex drive assembly	Internal assemblies (6 of 6) on page 221
RM1-4976-000CN	Lifter drive assembly	Internal assemblies (6 of 6) on page 221
RM1-4983-000CN	Fusing motor assembly (M2)	Internal assemblies (6 of 6) on page 221
RM1-4989-000CN	Toner collection unit (TCU)	Internal assemblies (1 of 6) on page 211

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 Numerical parts list (continued)

Part number	Description	Table and page
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RM1-5533-000CN	Rear lock arm assembly	Internal assemblies (3 of 6) on page 215
RM1-5588-000CN	Stand assembly	Internal assemblies (2 of 6) on page 213
RM1-5696-000CN	Waste toner detect assembly	Internal assemblies (1 of 6) on page 211
RM1-5700-000CN	Toner sensor holder assembly	Internal assemblies (2 of 6) on page 213
RM1-5714-000CN	Fusing connecting cable assembly	Internal assemblies (5 of 6) on page 219
RM1-5730-000CN	Duplexing unit cable assembly	Internal assemblies (6 of 6) on page 221
RM1-5732-000CN	Door switch assembly (SW2)	Internal assemblies (3 of 6) on page 215
RM1-5737-000CN	Cable, MP sensor assembly	Internal assemblies (5 of 6) on page 219
RM1-5740-000CN	Sensor cable assembly	Internal assemblies (2 of 6) on page 213
RM1-5741-000CN	Sensor cable assembly	Internal assemblies (2 of 6) on page 213
RM1-5746-000CN	Fan cable assembly	Internal assemblies (2 of 6) on page 213
RM1-5749-000CN	Connecting cable assembly	Internal assemblies (2 of 6) on page 213
RM1-5752-000CN	Motor/sensor cable assembly	Internal assemblies (2 of 6) on page 213
RM1-5773-000CN	Pickup motor assembly (M13)	Internal assemblies (6 of 6) on page 221
RM1-5839-000CN	PCA, paper feeder driver (1 x 500)	Paper feeder PCA on page 231
RM1-5913-000CN	Lifter base assembly	Paper feeder main body on page 227
RM1-5919-000CN	Paper pickup assembly	Paper feeder main body on page 227
RM1-6194-030CN	Paper feed assembly	Paper feeder main body on page 227
RM1-6198-000CN	Tray 3	Tray on page 229

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RM1-8084-000CN	Cable, rear assembly	Internal assemblies (5 of 6) on page 219
RM1-8086-000CN	Interconnect PCA (ICB)	Internal assemblies (5 of 6) on page 219
RM1-8087-000CN	Lower HVPS (D)	Internal assemblies (5 of 6) on page 219
RM1-8088-000CN	Upper HVPS (T)	Internal assemblies (5 of 6) on page 219
RM1-8097-000CN	Switch PCA assembly	Internal assemblies (3 of 6) on page 215
RM1-8102-000CN	LVPS (110V)	Internal assemblies (5 of 6) on page 219
RM1-8103-000CN	LVPS (220V)	Internal assemblies (5 of 6) on page 219
RM1-8105-000CN	Main motor unit (M3, M4, M5)	Internal assemblies (6 of 6) on page 221
RM1-8119-000CN	DC Controller	Internal assemblies (5 of 6) on page 219
RM1-8123-000CN	Right door assembly	<u>Right-door assembly</u> on page 209
RM1-8134-000CN	Fusing drive assembly	Internal assemblies (6 of 6) on page 221
RM1-8135-000CN	Paper pick up drive assembly	Internal assemblies (6 of 6) on page 221
RM1-8138-000CN	Waste toner duct assembly	Internal assemblies (1 of 6) on page 211
RM1-8149-000CN	Base assembly	Internal assemblies (2 of 6) on page 213
RM1-8154-000CN	Fuser (110V)	Internal assemblies (3 of 6) on page 215
RM1-8156-000CN	Fuser (220V)	Internal assemblies (3 of 6) on page 215
RM1-8163-000CN	Density detect assembly	Internal assemblies (3 of 6) on page 215
RM1-8178-000CN	Sensor cable guide assembly (SR7)	Internal assemblies (3 of 6) on page 215
RM1-9192-000CN	Pick up lower guide assembly	Internal assemblies (3 of 6) on page 215

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Part number	Description	Table and page
RM1-9198-000CN	Control panel cover assembly	External covers, panels, and doors on page 207
VS1-7257-007CN	Drawer connector	<u>Paper feeder main body</u> on page 227
VS1-7258-007CN	Connector, drawer	Internal assemblies (6 of 6) on page 221
WC4-5171-000CN	Microswitch (SW3)	Internal assemblies (3 of 6) on page 215
WG8-5935-000CN	Photo interrupter (SR5)	Internal assemblies (6 of 6) on page 221

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