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Introduction

This chapter documents removal and replacement of field replaceable units (FRUs) only.

Removal and replacement strategy

Replace parts in the reverse order of their removal. Directions for difficult or critical replacement procedures are included.

⚠️ WARNING! The sheet-metal edges of the product can be sharp. Use caution when working on the product.

🔍 NOTE 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 locate. When replacing wire harnesses, always use the provided wire loops, lance points, or wire-harness guides.

Electrostatic discharge

⚠️ CAUTION The product contains parts that are sensitive to electrostatic discharge (ESD). Always service the product at an ESD-protected workstation, or use an ESD mat.

Watch for the ESD symbol to identify the parts that are sensitive to ESD. Protect these parts by using an ESD wrist strap and by placing ESD-sensitive parts into protective ESD pouches.

Required tools

The following tools are needed to service this product:

- #2 Phillips screwdriver with magnetic tip
- Small flat-blade screwdriver
- Small needle-nose pliers
- ESD mat
- Penlight

⚠️ CAUTION A pozidrive screwdriver can damage the screw heads on the product. Use a #2 Phillips screwdriver.

If you use a multispeed screwdriver, use a torque limiter.
Before performing service

Follow the pre-service procedures before you perform service.

Pre-service procedures

1. Remove all media from the product.
2. Place the product on an ESD mat. If an ESD mat or an ESD-protected workstation is not available, discharge body static and ground the product chassis before servicing the product.
3. Remove the print cartridge.
4. Unplug the power cord and the interface cable.
5. Lift the printer off optional tray 3 (if tray 3 is installed).

Parts removal order

Use the following diagram to determine which parts must be removed before removing other parts.

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[Diagram of parts removal order]

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ENWW  Before performing service  85
Covers

Left-side cover

1. Open the print-cartridge door.
2. At the back of the printer, use a flat-blade screwdriver to release two tabs (1).
3. Lift the cover away from the printer.

Right-side cover

1. Open the print-cartridge door.
2. Remove tray 2.
3. At the front of the printer, pop the front edge of the right-side cover over the two retaining tabs.

![Figure 6-2 Removing the right-side cover](image)

4. Lift the cover away from the printer.

**Back cover**

1. Remove tray 2.

2. Remove the left-side cover and the right-side cover.
3. Remove four screws (1).

Figure 6-3  Removing the back cover (1 of 2)

4. Tip the printer so that it rests on its front.

5. Release the tab (2) at the back of the printer on the right side.

6. Open the duplex access door (3).
7. Slide the cover toward the right side of the printer to clear the tab (1) on the duplexer tray (duplex models only).

![Figure 6-4 Removing the back cover (2 of 2)](image)

8. Lift the cover straight up and away from the printer.

**Duplexer tray (HP LaserJet P2015d, P2015dn, and P2015x printers only)**

1. Remove the left-side cover, the right-side cover, and the back cover.
2. Pull the duplexer tray release-tab (1) to release the duplexer tray magnets.

3. Pull out the duplexer tray.

**Top cover**

1. Remove the left-side cover, the right-side cover, the back cover, and the duplexer tray.
2. Remove two screws (1) at the back of the printer.

Figure 6-6 Removing the top cover (1 of 4)
3. Remove one screw (1) on the left side of the printer, and remove one screw (2) on the right side of the printer.

Figure 6-7  Removing the top cover (2 of 4)
4. Release the control-panel cable (1) on the left side of the printer.

Figure 6-8  Removing the top cover (3 of 4)
5. Lift the top cover off the printer.

Figure 6-9 Removing the top cover (4 of 4)
Control panel

1. Remove all covers.
2. On the bottom of the top cover, remove two screws (1).

Figure 6-10  Removing the control panel (1 of 2)
3. Remove the control-panel wires from the wire guides.
1. Remove the left-side cover.
2. Disconnect one cable (1) at the top of the formatter.
3. Disconnect one flat, flexible cable (2) at the top of the formatter.

⚠️ **CAUTION** Do not fold flat, flexible cables. Also, do not straighten pre-folds in flat, flexible cables.

4. Disconnect one flat, flexible cable (3) at the bottom of the formatter.
5. Disconnect one cable (4) at the bottom of the formatter.
6. Remove four screws (5).

7. Remove the formatter.

*Figure 6-12* Removing the formatter
1. Remove all covers.
2. Disconnect one flat, flexible cable (1) from the laser/scanner PCA.
3. Disconnect one cable (2) from the top of the laser/scanner.
4. Unthread all cables (3) from the laser/scanner cable guides.

**NOTE** Examine the cable routing as you unthread the cables.

5. Remove four screws (4).

![Figure 6-13 Removing the laser/scanner](image)

6. Lift the laser/scanner out of the printer.

**NOTE** Examine the shutter switch as you lift the laser/scanner out of the printer.
Memory-tag-reader assembly

1. Remove all covers.
2. Remove the fan from the printer chassis.
3. Remove one cable (1) from the top of the memory-tag-reader cover.
4. Disconnect one cable (2) from the formatter.

Figure 6-14 Removing the memory-tag-reader assembly (1 of 2)
5. Remove one screw (1).

6. Lift the back of the memory-tag-reader assembly slightly, and then slide the assembly toward the back of the printer to release it from the laser/scanner plate.

Figure 6-15  Removing the memory-tag-reader assembly (2 of 2)
1. Remove all covers.

2. Disconnect the duplex-drive cable (1) at the ECU, and then route the cable through the hole in the chassis.

3. Disconnect one cable (1) from the duplex-drive PCA.

Figure 6-16 Removing the duplex-drive PCA (1 of 2)
4. Remove one screw (2), and then lift the duplex-drive PCA off the printer.

Figure 6-17 Removing the duplex-drive PCA (2 of 2)
Fuser

Several parts must be removed before you can remove the fuser. The following parts are included in this section about removing the fuser:

- Fan
- Duplex-drive gears/face-down gears
- Duplex solenoid
- Fuser

Fan

1. Remove all covers.
2. Disconnect the fan cable (1) at the ECU.
3. Unthread the fan wires from the retaining clips.
4. Remove two screws (1).

Figure 6-18 Removing the fan (1 of 2)
5. Unhook the fan clip (2) and then lift the fan off the printer.

![Removing the fan (2 of 2)](image)

Figure 6-19 Removing the fan (2 of 2)

**Duplex-drive gears (HP LaserJet P2015d, P2015dn, and P2015x printers only)**

1. Remove all covers.

2. Remove the fan.
3. Remove three screws (1).
4. Lift the assembly away from the printer.

![Image of removing duplex-drive gears](image)

**Figure 6-21** Removing the duplex-drive gears (2 of 2)

*NOTE* The gears are not attached to the gear plate. Carefully remove the gear plate and the gears together to prevent them from falling out of the assembly.

**Duplex solenoid (HP LaserJet P2015d, P2015dn, and P2015x printers only)**

1. Remove all covers.
2. Remove the fan.
3. Remove the duplex-drive gears.
4. Disconnect one cable (1) at the duplex-drive PCA.
5. Remove one screw (2), and then lift the solenoid off the printer chassis.

![Figure 6-22 Removing the duplex solenoid](image)

**Fuser**

1. Remove all covers.
2. Remove the fan.
3. Remove the duplex-drive gears or face-down gears.
4. Remove the formatter.
5. On the right side of the printer, press the tabs on two gears (1) to release the gears, and then slide the gears off the shafts.
6. Disconnect one cable (2) on the right side of the printer.

Figure 6-23 Removing the fuser (1 of 10)
7. Disconnect four cables (1) from the ECU, and then disconnect two more cables (2) that were behind the first set.

8. Pull the tab on the cable holder (1) at the left side of the printer and slide it toward the center to release it from the frame, and then unroute the cables.

Figure 6-24 Removing the fuser (2 of 10)
9. Pull the tab on the cable holder (2) and slide it toward the center to release it from the frame, and then unroute the cables.

Figure 6-25 Removing the fuser (3 of 10)
10. Remove one screw (1) from the fuser cover, and then slide the fuser cover to the right and remove it.

Figure 6-26 Removing the fuser (4 of 10)
11. Disconnect three cables (1).

Figure 6-27 Removing the fuser (5 of 10)
12. Disconnect one cable (1), and then unroute the cable from the cable guide.

Figure 6-28 Removing the fuser (6 of 10)

NOTE Before you proceed to step 13, make sure that all cables disconnected in previous steps are free from any cable guides and cable holders.
13. Remove three screws (1) on the right side of the printer.
14. Remove three screws (1) from the left side of the printer.

Figure 6-30 Removing the fuser (8 of 10)
15. At the left side of the printer, pull the printer chassis from the top to spread the printer frame and release the fuser from the frame.
16. Pull the fuser out of the printer at an angle so that the delivery roller shaft clears the hole (1) in the chassis.

Figure 6-32  Removing the fuser (10 of 10)
Interlock assembly

1. Remove all covers.
2. Open the print-cartridge door.
3. Remove two screws (1) that secure the interlock assembly to the left side of the printer chassis.
4. Remove two cables (2).
5. Lift the interlock assembly away from the printer.

Figure 6-33  Removing the interlock assembly (1 of 2)
1. Remove all covers.
2. Remove the fan.
3. Remove the duplex-drive gears.
4. Remove the formatter.
5. Remove the fuser.
6. Remove the interlock assembly.
7. Remove cables from the cable clip under the feed plate (1), and then remove the feed plate by lifting it and pulling it straight back.

Figure 6-34 Removing the ECU (1 of 7)
8. Disconnect three cables (1).

Figure 6-35 Removing the ECU (2 of 7)
9. Remove one screw (4) from the right side of the printer.

Figure 6-36  Removing the ECU (3 of 7)
10. Remove two screws (1) from the left side of the printer, and then push the interlock cables and the formatter cable (2) through the hole in the chassis.
11. Spread the printer frame at the right side of the printer to release the internal tabs that secure the ECU to the chassis.

Figure 6-38 Removing the ECU (5 of 7)
12. Spread the printer frame at the left side of the printer to release the internal tabs, and then lower the ECU slightly and pull it straight back to remove it.

**NOTE** Make sure that cables do not become caught on the contact springs as you remove the ECU.

![Figure 6-39 Removing the ECU (6 of 7)](image)

**Reinstallation tip** When replacing the ECU, you might find it easier to find the correct placement of the ECU pan in the printer if you tip the printer so that it rests on its front.
13. Remove four screws (1) and then lift the ECU off the ECU plate.

Figure 6-40 Removing the ECU (7 of 7)
Main motor

1. Remove all covers.
2. Remove the fan.
3. Remove the duplex-drive gears.
4. Remove the formatter.
5. Remove the fuser.
6. Remove the interlock assembly.
7. Remove the ECU.
8. Remove three screws (1).
9. Hold the motor while releasing the tabs (1) on the cable guide, and then lift the motor and the cable guide out of the printer together.

Figure 6-42 Removing the main motor (2 of 2)
Pickup and feed assemblies

This section covers the major assemblies of the pickup and feed system: the transfer roller and the registration assembly.

Transfer roller

NOTE It is important to make sure that the transfer roller needs to be replaced before removing it. Excess handling can cause additional damage.

1. Open the print-cartridge door and remove the print cartridge.
2. Use needle-nose pliers to release the transfer roller tabs at the end of the roller, near the right side of the printer.

CAUTION Do not break the tabs, and do not touch the rollers.

3. Lift up the end of the roller near the right side of the printer, and then slide it toward the right side of the printer while pulling it out of the printer.

Figure 6-43 Removing the transfer roller
Registration assembly

1. Remove five screws (1).

![Figure 6-44](image) Removing the registration assembly

2. Lift the entire assembly out of the printer.
Main gear assembly/tray 2 pickup solenoid

1. Remove all covers.
2. Remove the fan from the printer chassis.
3. Disconnect one cable (1) at the ECU.

![Figure 6-45  Removing the main gear assembly (1 of 2)](image)

4. Remove the duplex-drive PCA from the printer chassis.
5. Release the tab on the gear (1) and slide the gear off the shaft.
6. Remove the cables from the cable guide (2).
7. Remove four screws (3).

8. Pull the main gear assembly straight away from the printer.

Figure 6-46 Removing the main gear assembly (2 of 2)
9. To remove the tray 2 pickup solenoid, disconnect one cable (1).

Figure 6-47  Removing the tray 2 pickup solenoid (1 of 2)
10. Remove one screw (1), and then lift the solenoid off the printer.

Figure 6-48 Removing the tray 2 pickup solenoid (2 of 2)
Print-cartridge door

1. Use a flat-blade screwdriver to gently pry the cartridge-door arm (1) off the print-cartridge door.

⚠️ **CAUTION** Be careful not to break the tabs.

![Image](image_url) Figure 6-49 Removing the print-cartridge door (1 of 2)
2. Remove two screws (2).

3. Lift the cartridge-door assembly straight away from the printer.

**Figure 6-50** Removing the print-cartridge door (2 of 2)