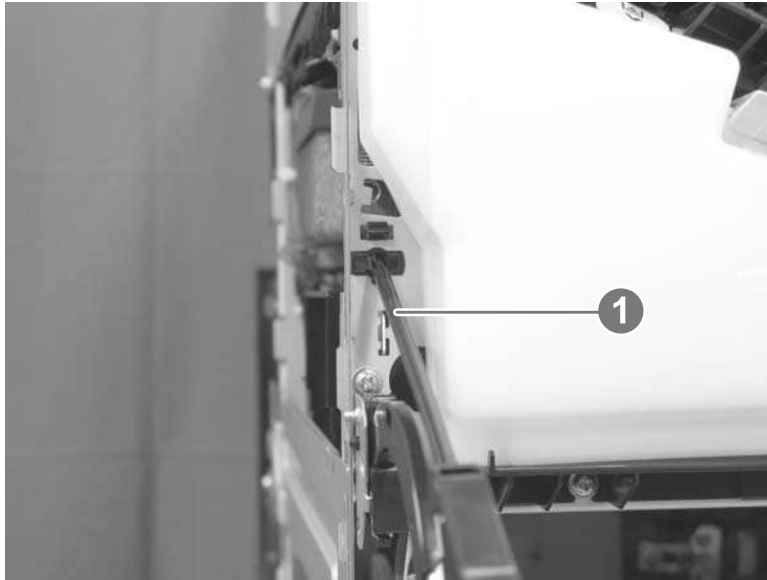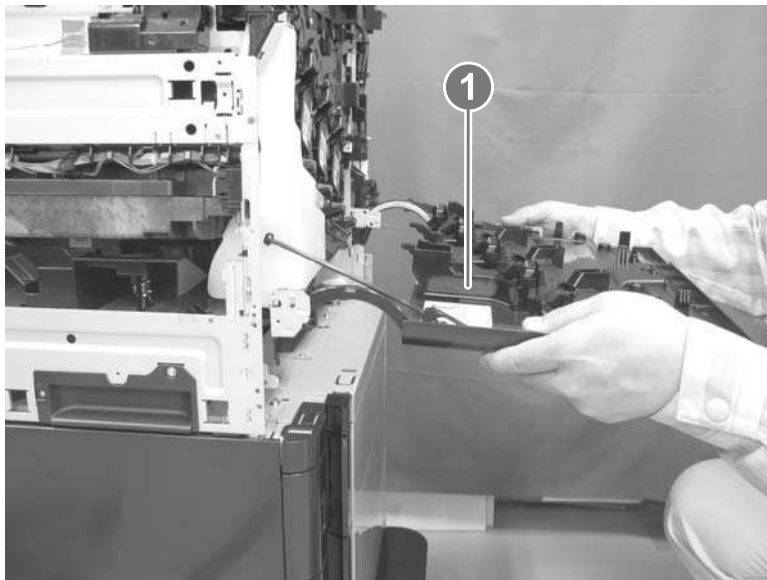6. Rotate the link-arm (callout 1) 90 degrees and release it.

Figure 1-198 Remove the front door assembly (6 of 7)

7. Remove the front door assembly (callout 1).
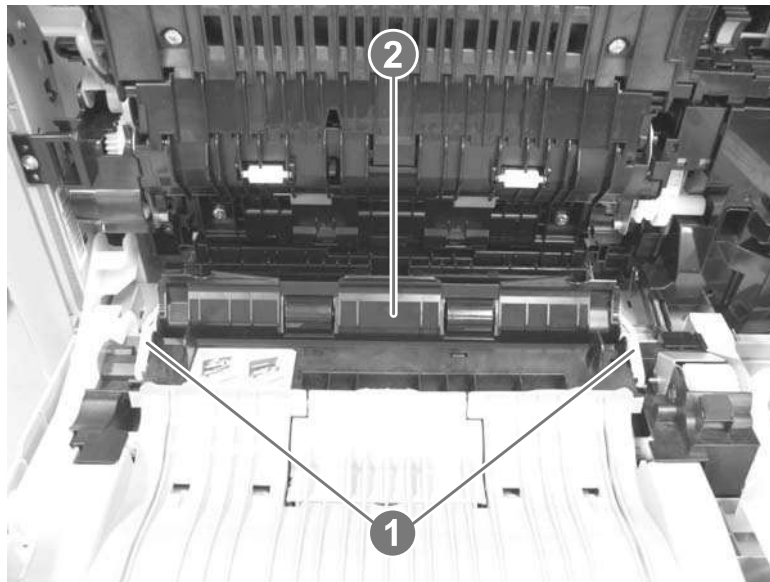
Figure 1-199 Remove the front door assembly (7 of 7)
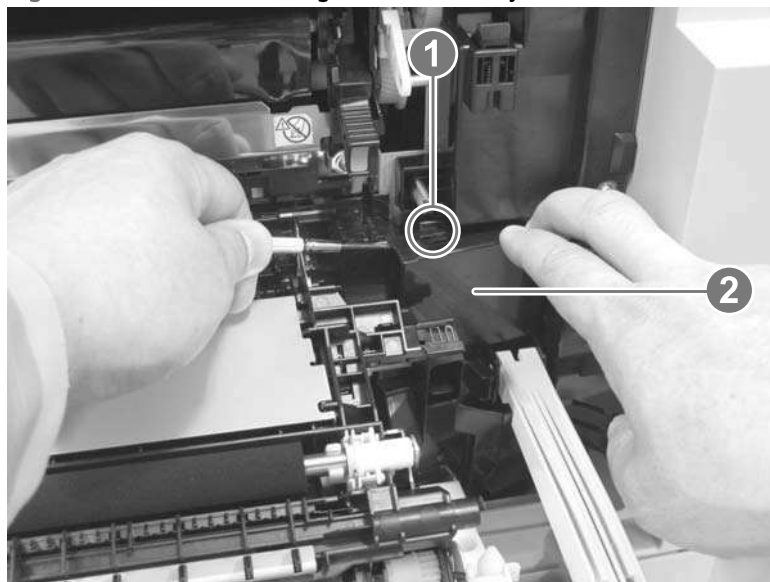
Right door assembly

1. Open the right-door assembly. Lift up the two link-arms and release them (callout 1). Close the feed guide (callout 2).

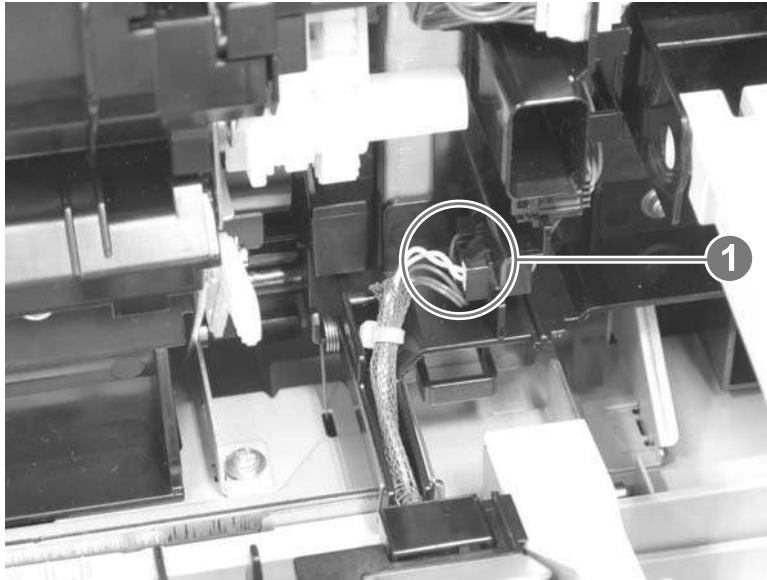   **Figure 1-200** Remove the right door assembly (1 of 8)

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

   Figure 1-201 Remove the right door assembly (2 of 8)
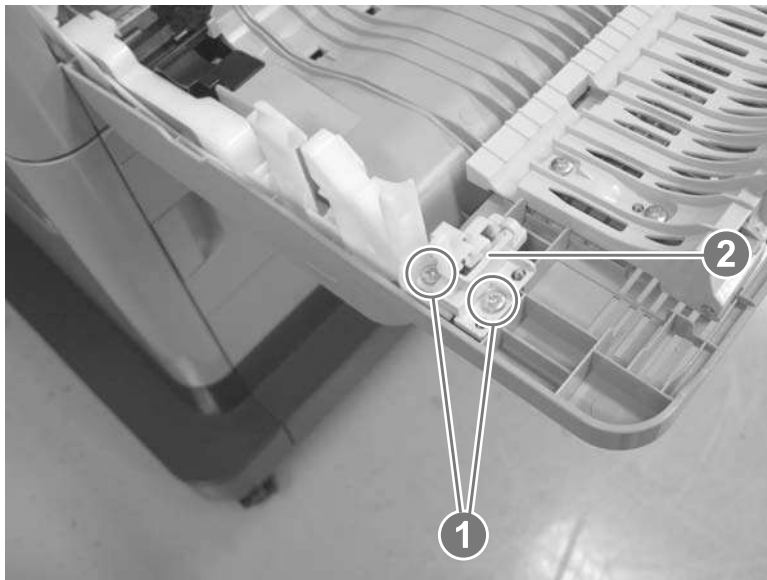
3. Disconnect two connectors (callout 1).

Figure 1-202 Remove the right door assembly (3 of 8)

4. Remove two screws (callout 1), and then remove the right door hook (callout 2).

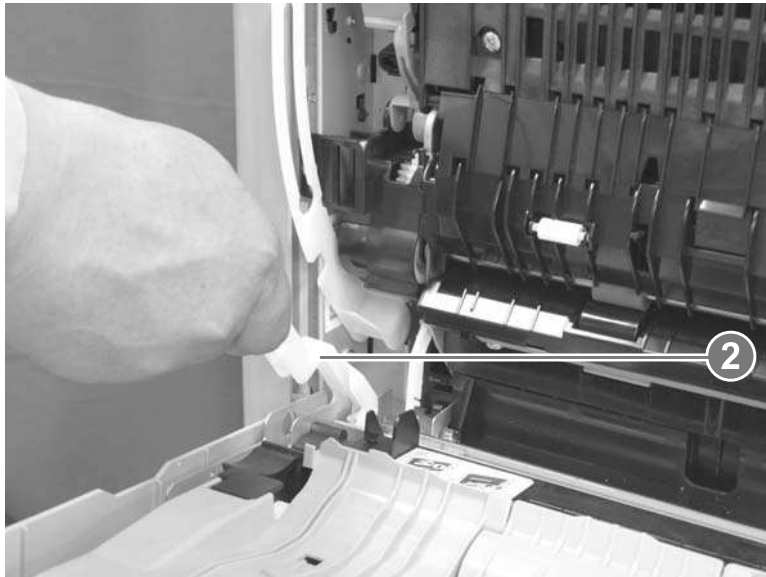Figure 1-203 Remove the right door assembly (4 of 8)

5. Remove one screw (callout 1), release the right door front arm (callout 2) from the right door link (callout 3). Lift up the right hinge cover.

Figure 1-204 Remove the right door assembly (5 of 8)

6. Lift up the hinge cover (callout 1) and remove it.

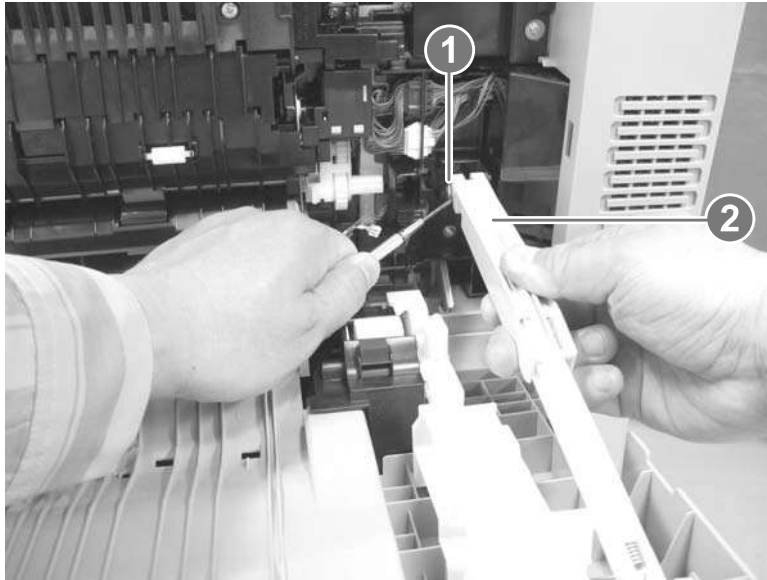**Figure 1-205** Remove the right door assembly (6 of 8)

7. Release the shaft (callout 1), and then release the damper assembly (callout 2).

CAUTION: A strong spring is inside the damper assembly. Hold on to the assembly firmly as it releases.
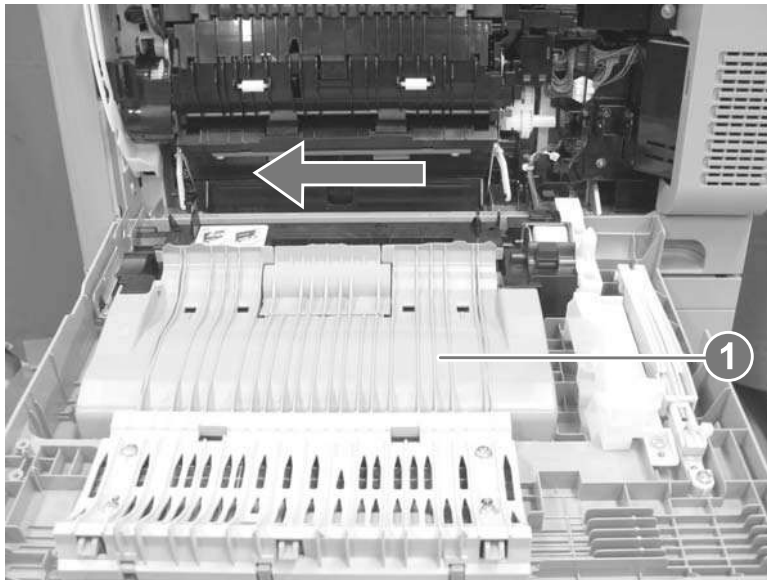
Figure 1-206 Remove the right door assembly (7 of 8)

8. Slide the right door assembly (callout 1) toward the front of the product to remove it
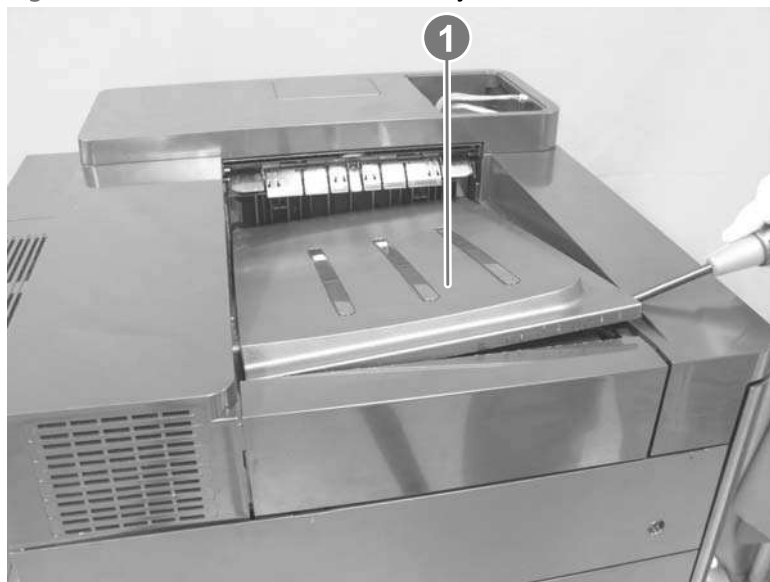
Figure 1-207 Remove the right door assembly (8 of 8)

Face-down tray (M651)

▲ On top of the product, insert a flat-blade screwdriver to lift the face-down tray (callout 1) and release two tabs. Remove the face-down tray.

Figure 1-208 Remove the face-down tray (1 of 2)

This photo shows the location of the tabs (callout 1).

Figure 1-209 Remove the face-down tray (2 of 2)
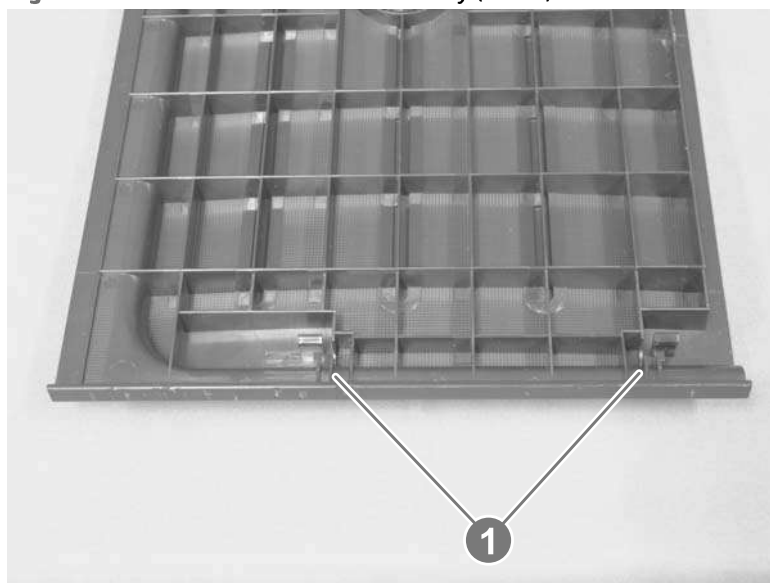
Reinstall the face-down tray

▲ When reinstalling the face-down tray, insert the post on the bottom of the tray into the spring (callout 1).

Figure 1-210 Reinstall the face-down tray

Face-down rear cover (M651)

Before proceeding, remove the following assemblies

- Upper left cover. See Upper left cover (M651) on page 117.

- Face-down tray. See Face-down tray (M651) on page 134.

Remove the face-down rear cover (M651)

1. Remove one screw (callout 1).

   Figure 1-211 Remove the face-down rear cover (M651; 1 of 5)
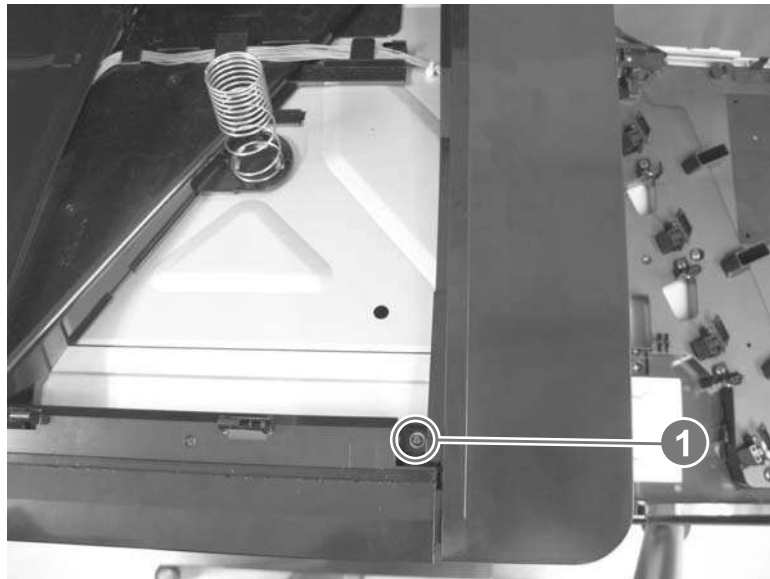
2. Remove one screw (callout 1), and then release one locator pin (callout 2).

   Figure 1-212 Remove the face-down rear cover (M651; 2 of 5)

3. Release two tabs (callout 1).

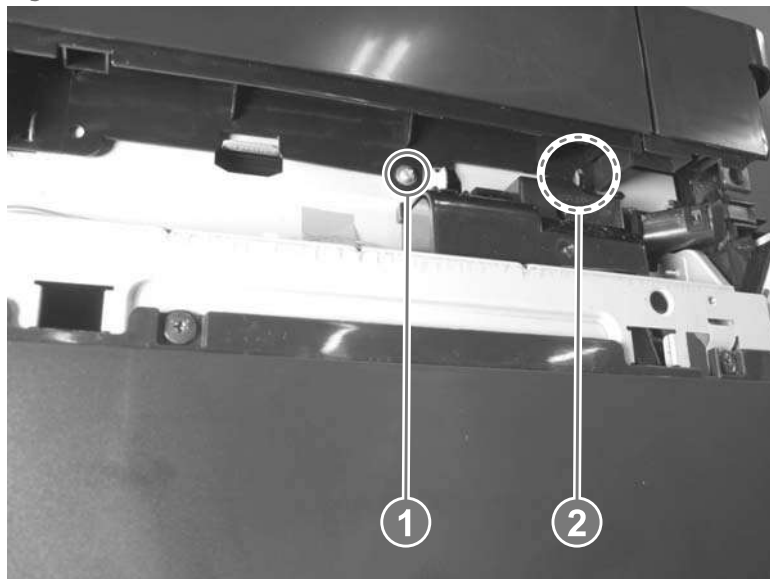Figure 1-213 Remove the face-down rear cover (M651; 3 of 5)

4. Lift up the left edge (callout 1) and release two locator pins (callout 2). Slide the face-down rear cover (callout 3) in the direction of the arrow to remove it.

Figure 1-214 Remove the face-down rear cover (M651; 4 of 5)

Figure 1-215 Remove the face-down rear cover (M651; 5 of 5)

Upper cover (M651)

Before proceeding, remove the following assemblies

- Control panel assembly. See Control panel assembly (M651) on page 28.

- Face-down tray. See Face-down tray (M651) on page 134.

- Face-down rear cover. See Face-down rear cover (M651) on page 136.

Remove the upper cover (M651)

1. Remove one screw (callout 1).

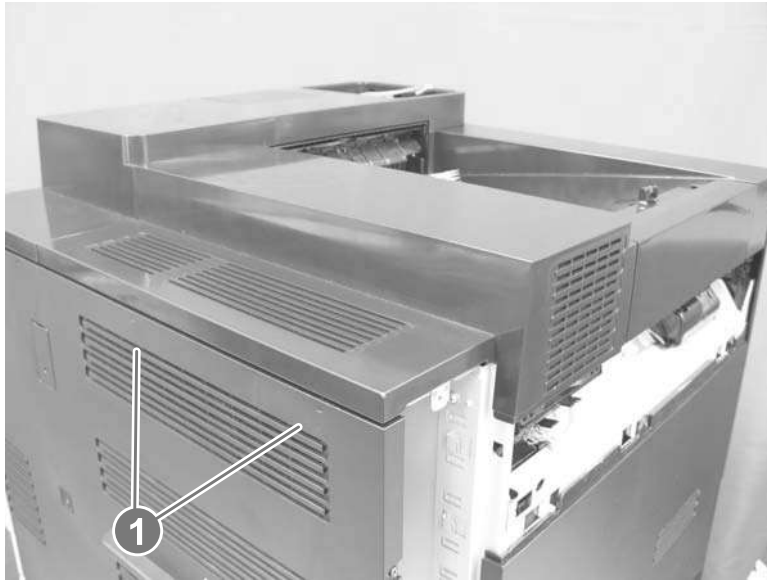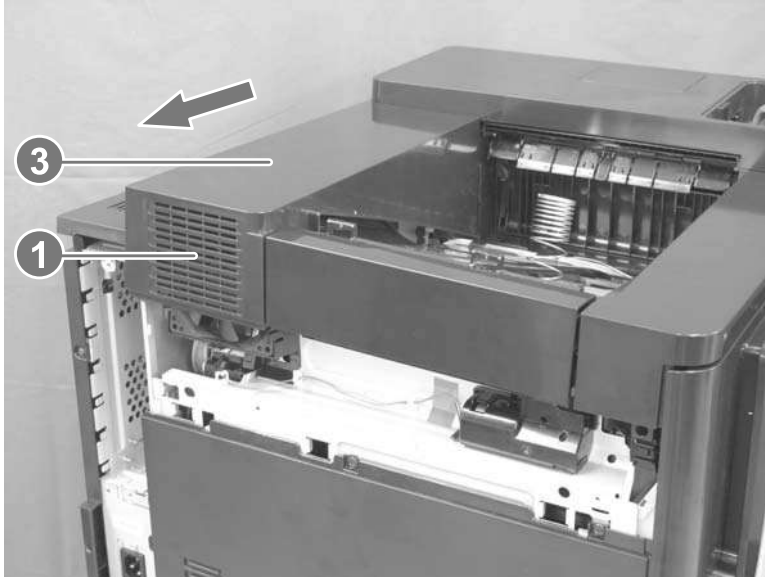   **Figure 1-216** Remove the upper cover (M651; 1 of 6)
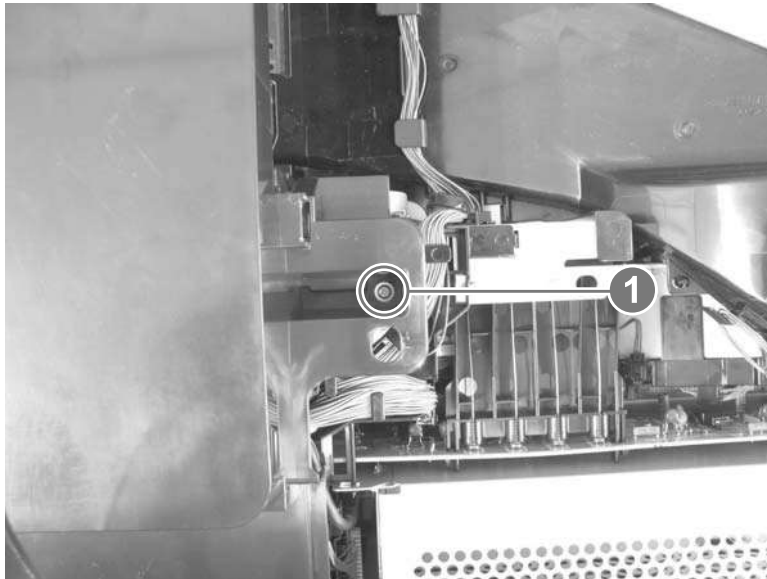
2. Remove one screw (callout 1).

   Figure 1-217 Remove the upper cover (M651; 2 of 6)

3. Open the right door assembly, and then release one tab (callout 1).

Figure 1-218 Remove the upper cover (M651; 3 of 6)

4. Release two tabs (callout 1), and then remove the upper cover assembly (callout 2).
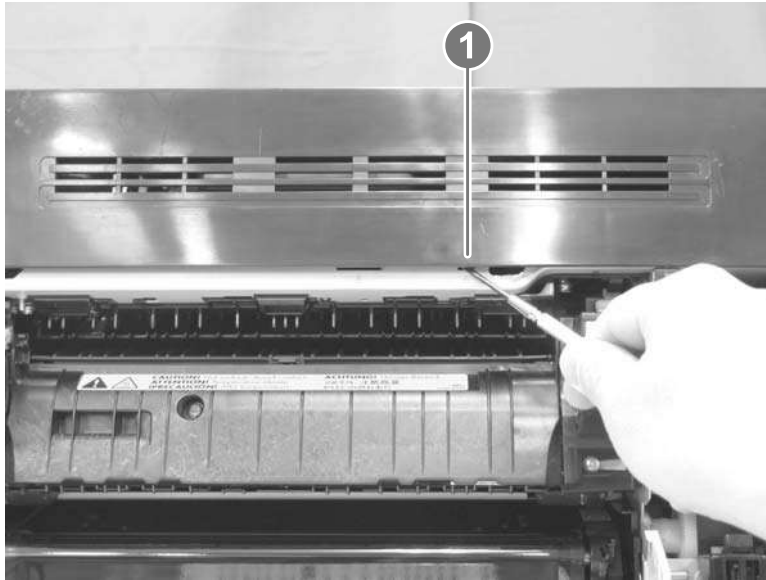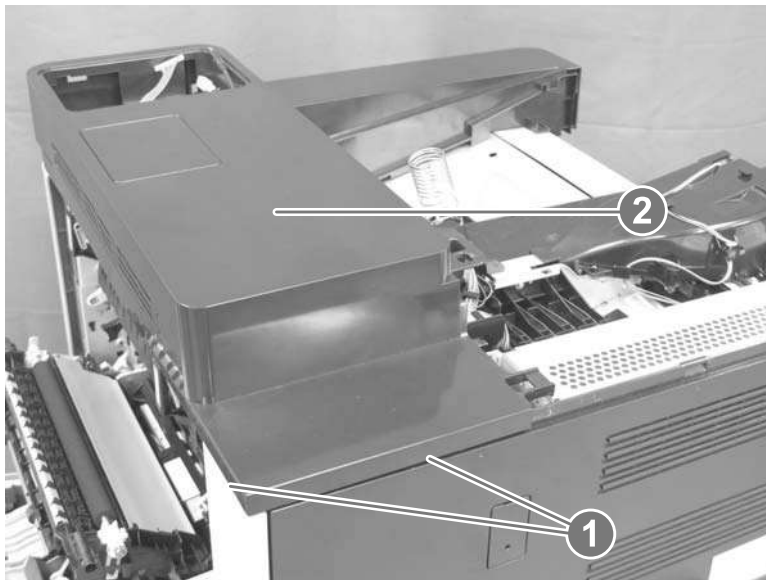
Figure 1-219 Remove the upper cover (M651; 4 of 6)

5. If replacing the upper cover, remove the hardware integration pocket cover (callout 1) from the upper cover (callout 2), and then install it on the replacement cover.

Figure 1-220 Remove the upper cover (M651; 5 of 6)
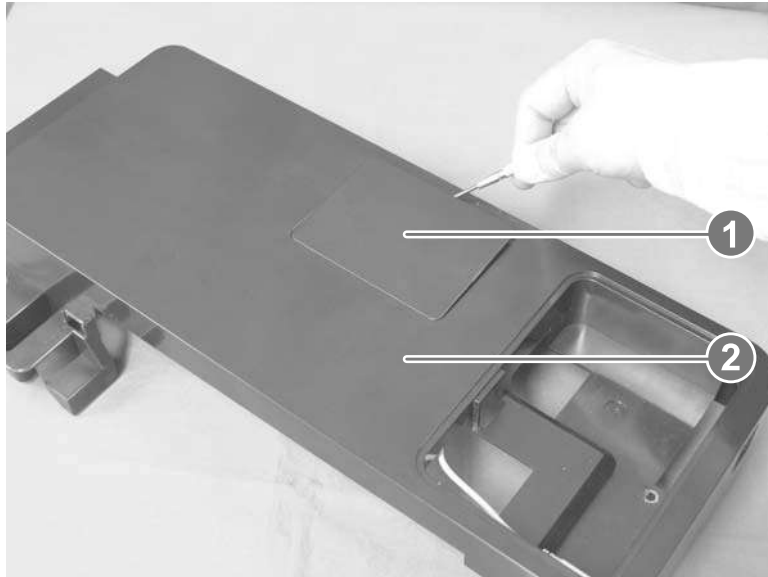
6. If replacing the upper cover, push the lever (callout 1) and pull out the cable tie. Remove the cable (callout 2) from the upper cover (callout 3), and then install it on the replacement cover.

Figure 1-221 Remove the upper cover (M651; 6 of 6)
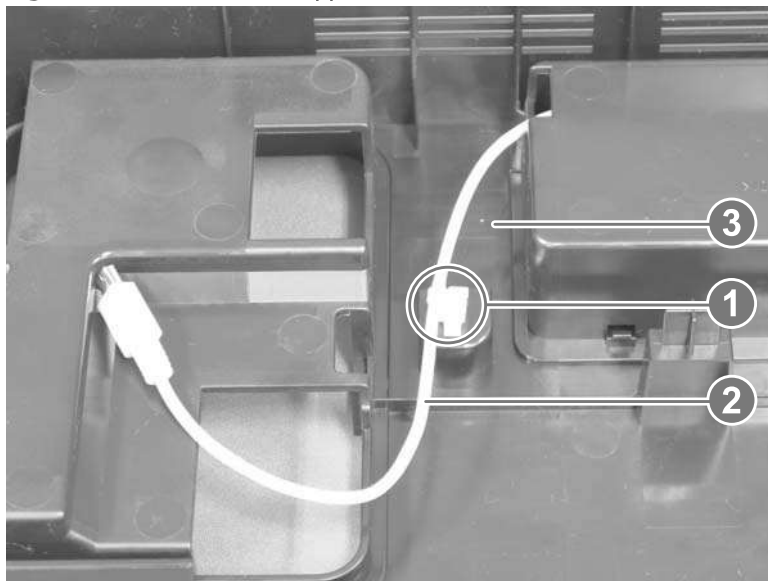
Reinstall the upper cover (M651)

When the cover is reinstalled, make sure that the white USB cable (callout 1), black USB cable, wire harness, and ground wire (callout 2), are routed through the correct openings in the cover.

NOTE: If the cables, wire harness, and ground wire are not correctly routed through the cover there might not be enough slack in them to reach the control panel when it is reinstalled.

Figure 1-222 Reinstall the upper cover (M651)
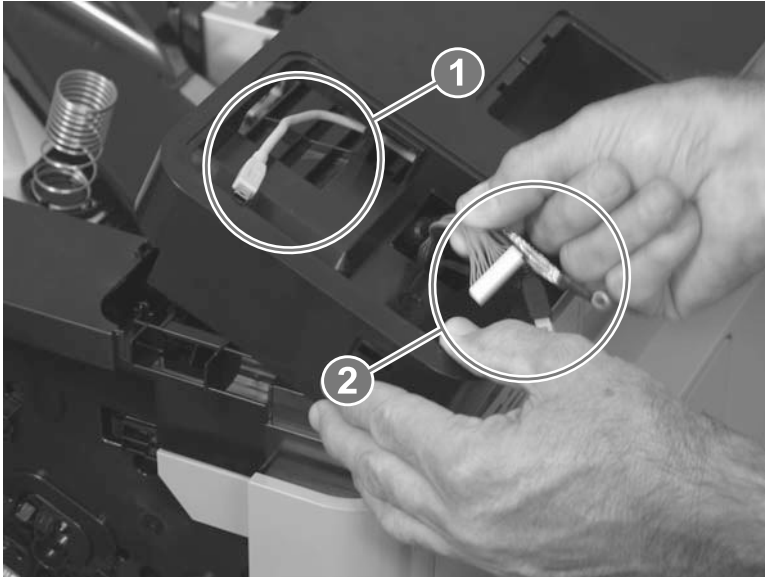
Front face-down cover and right-front upper cover (M651)

Before proceeding, remove the following assemblies

- Control panel assembly. See Control panel assembly (M651) on page 28.

- Right-front cover. See Right-front cover on page 124.

- Face-down tray. See Face-down tray (M651) on page 134.

- Face-down rear cover. See Face-down rear cover (M651) on page 136.

- Upper cover. See Upper cover (M651) on page 139.

Remove the front face-down cover and right-front upper cover

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

   Figure 1-223 Remove the front face-down cover and right-front upper cover (1 of 3)
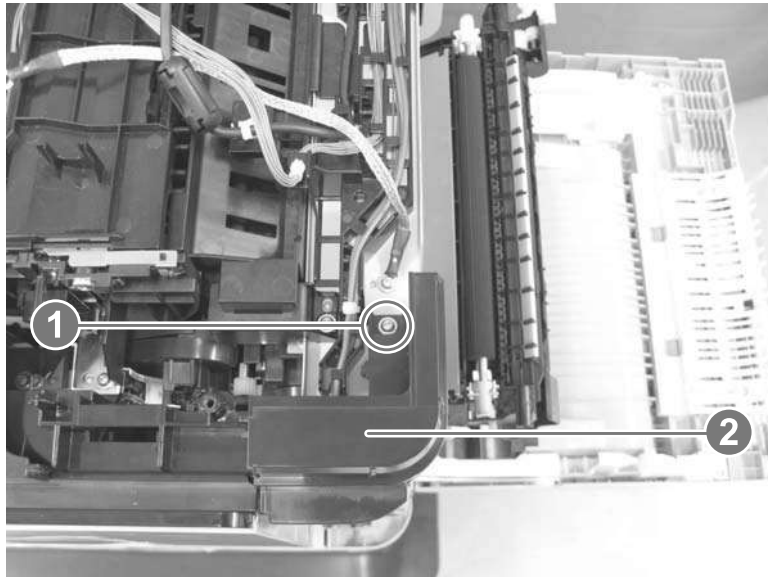
2. Remove one screw (callout 1).

   Figure 1-224 Remove the front face-down cover and right-front upper cover (2 of 3)
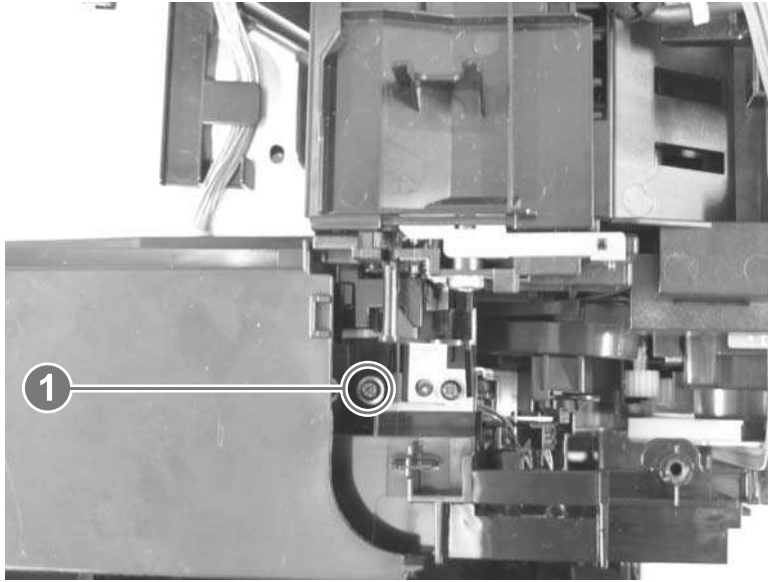
3. Remove one screw (callout 1), release two locator pins (callout 2), and then remove the front face-down cover assembly (callout 3).

   Figure 1-225 Remove the front face-down cover and right-front upper cover (3 of 3)
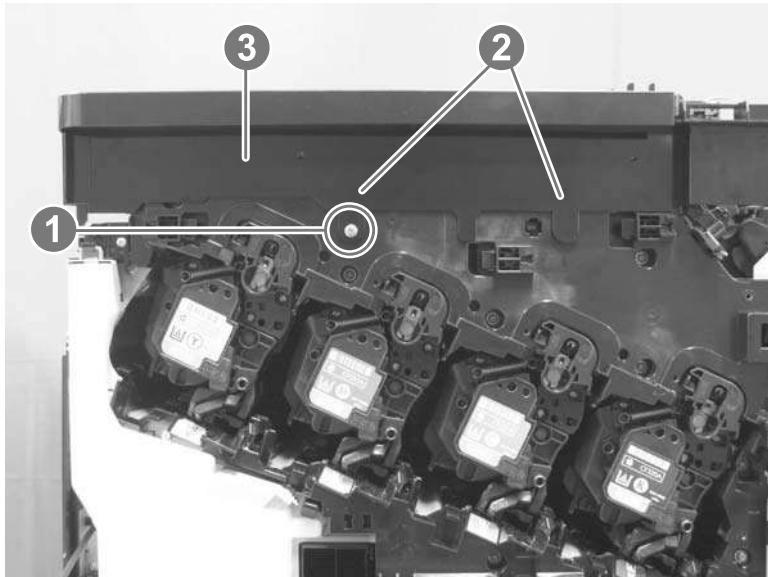
Intermediate cover assembly (M680)

Before proceeding, remove the following assemblies

- Document feeder assembly. See Document feeder (ADF) on page 80.

- Scanner assembly. See Image scanner assembly on page 103.

- Scissor hinge assembly (right only). See Scissor hinge assemblies on page 113.

- Right front cover. See Right-front cover on page 124.

Remove the intermediate cover assembly (M680)

▲ Release six tabs (callout 1), and then remove the intermediate cover assembly (callout 2).

Figure 1-226 Remove the intermediate cover assembly (M680)
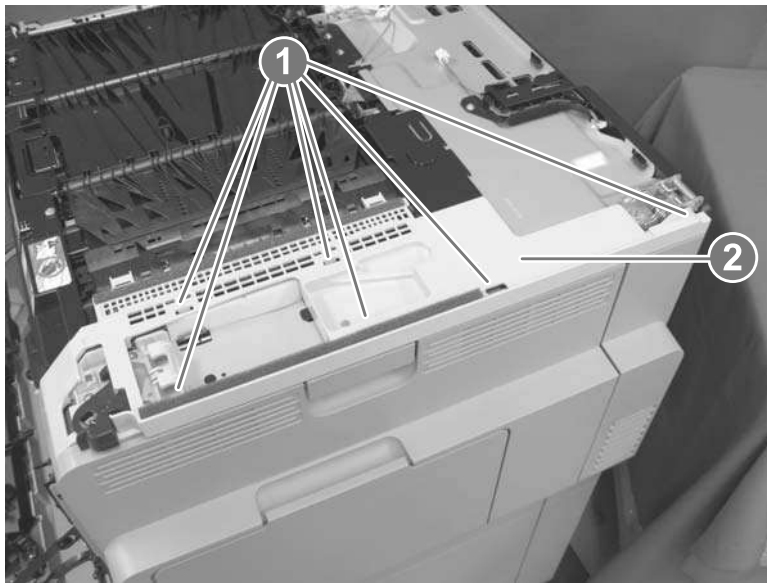
Right-rear cover

Before proceeding, remove the following assemblies

M651 models

● Control panel assembly. See Control panel assembly (M651) on page 28.

● Upper left cover. See Upper left cover (M651) on page 117.

● Face-down tray. See Face-down tray (M651) on page 134.

● Face-down rear cover. See Face-down rear cover (M651) on page 136.

● Upper cover. See Upper cover (M651) on page 139.

M680 models

● Document feeder assembly. See Document feeder (ADF) on page 80.

● Scanner assembly. See Image scanner assembly on page 103.

● Right front cover. See Right-front cover on page 124.

● Intermediate Intermediate cover assembly. See Intermediate cover assembly (M680) on page 145.

Remove the right-rear cover

▲ Release one tab (callout 1), and then slide the right-rear cover (callout 2) upward to remove it.

> **NOTE:** For the M680 product, carefully pry up on the corner of the grey-plastic bracket (callout 3) so the cover can slide upwards.

Figure 1-227 Remove the right-rear cover

Internal assemblies

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

IPTU (M680)

Before proceeding, remove the following assemblies

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.
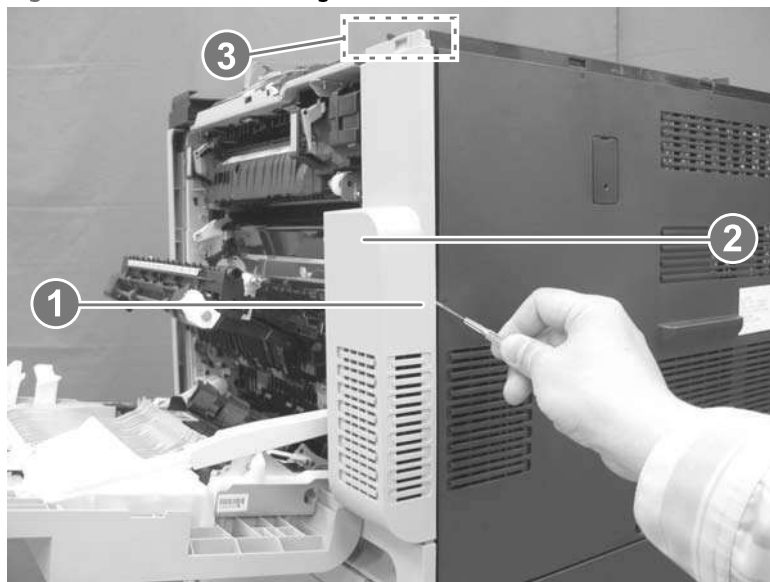
- Scanner rear cover. See Scanner rear cover on page 79.

- Document feeder. See Document feeder (ADF) on page 80.

- Scanner assembly. See Image scanner assembly on page 103.

NOTE: This assembly is also called the intermediate paper feed assembly.

Remove the IPTU
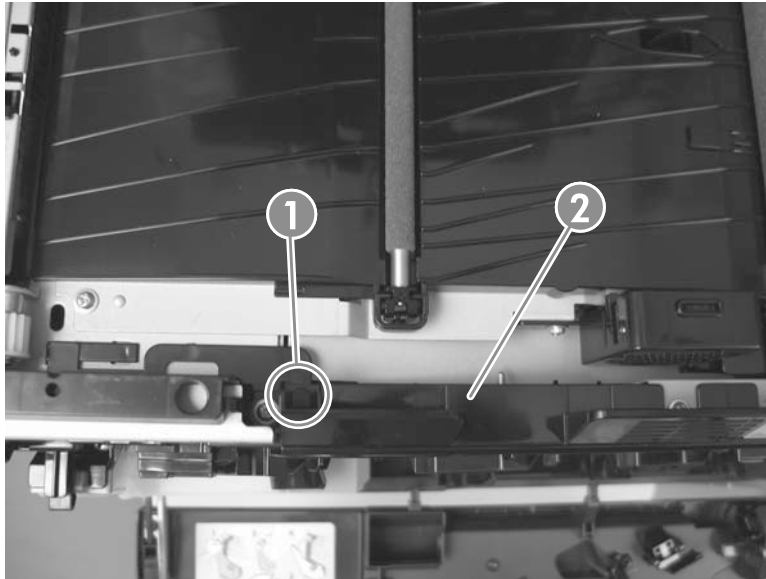
1. Open the front door and then remove three screws.

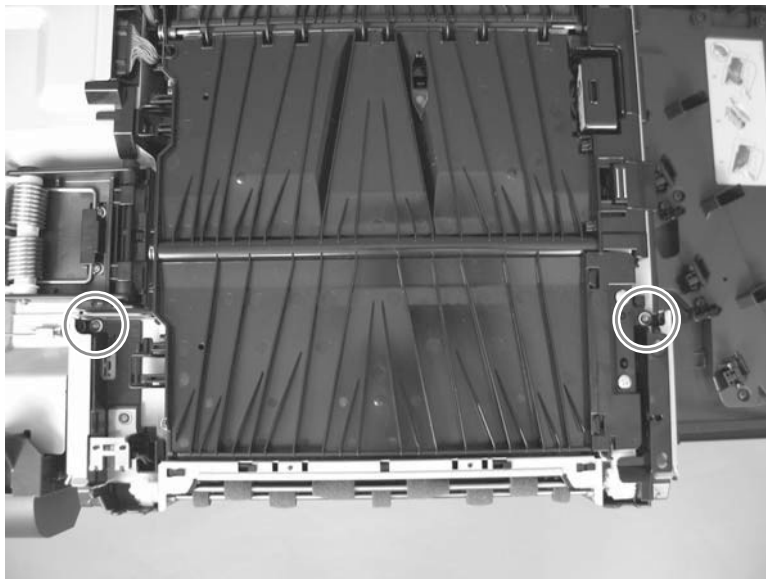**Figure 1-228** Remove the IPTU (1 of 5)

2. Lift the cover up on the right side to clear the pin, lift the paper path, rotate the cover on left side to release one tab (callout 1), and then remove the inner cover (callout 2).

Figure 1-229 Remove the IPTU (2 of 5)
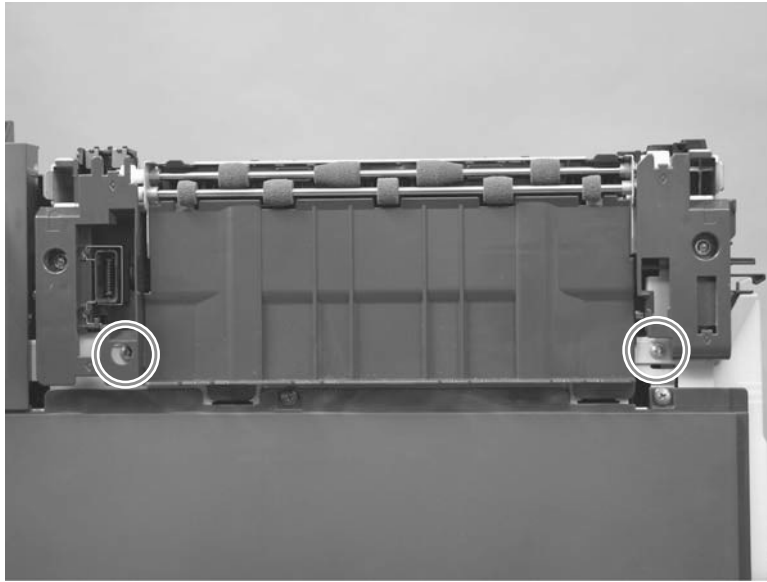

3. Remove two screws.

Figure 1-230 Remove the IPTU (3 of 5)

4. Remove two screws.

Figure 1-231 Remove the IPTU (4 of 5)

5. Disconnect one connector (callout 1) and then lift (callout 2) and slide the IPTU (callout 3) to remove.

Figure 1-232 Remove the IPTU (5 of 5)
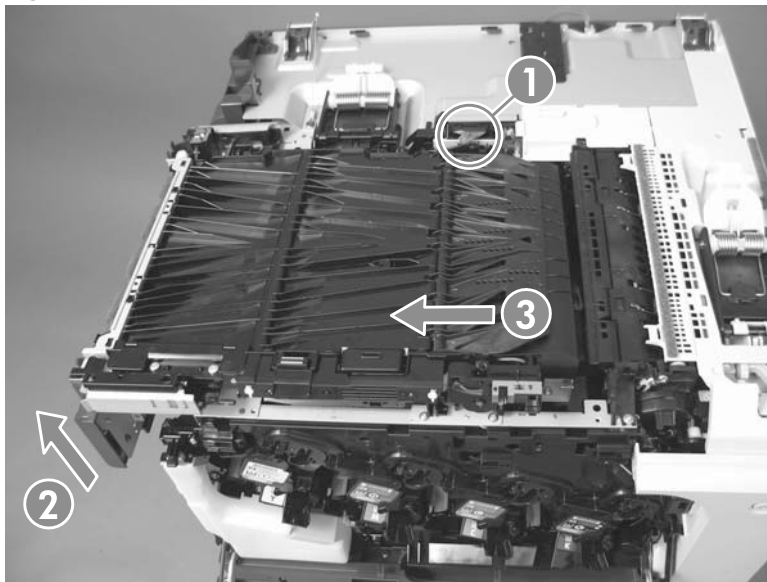
Cassette feed guide

TIP: A page jammed in the product might be removed by removing the cassette feed guide.

1. Open the right-door assembly.

   Figure 1-233 Remove the cassette feed guide (1 of 2)

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

   Figure 1-234 Remove the cassette feed guide (2 of 2)
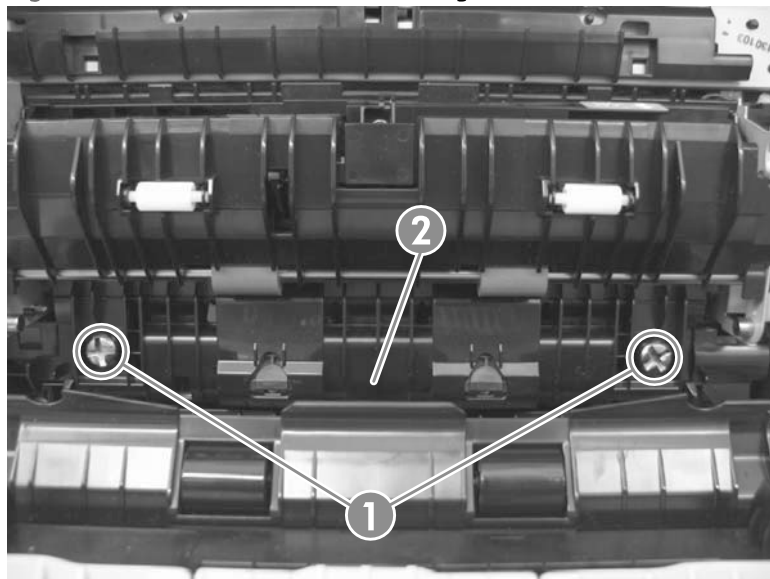
Reinstall the cassette feed guide

When reinstalling the cassette feed guide, make sure to correctly align each screw and pin with the corresponding hole and that the guide fits secure against the chassis.

Figure 1-235 Reinstall the cassette feed guide

Secondary transfer assembly

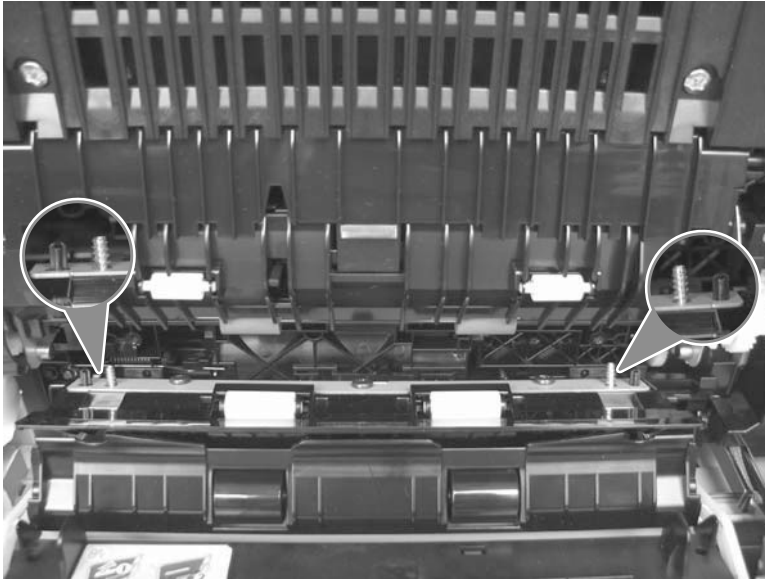The secondary transfer assembly includes the secondary transfer roller.

1. Open the right-door assembly.

    Figure 1-236 Remove the secondary transfer assembly (1 of 3)

2. Release one tab and carefully remove the stopper.

    > **NOTE:** The corner of the assembly migh need to be slightly lifted to release the stopper pin from the hole in the chassis.

    Figure 1-237 Remove the secondary transfer assembly (2 of 3)
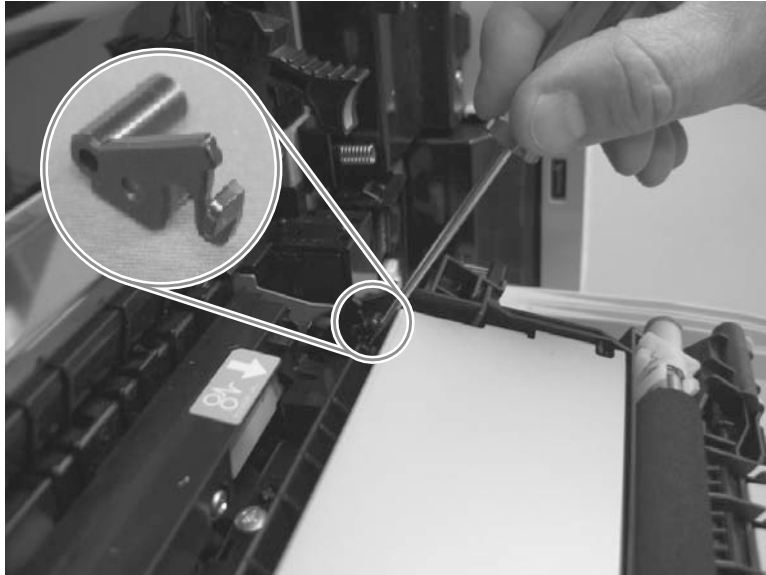
3. Remove the secondary transfer assembly.

> ⚠ **CAUTION:** Do not damage the blue release lever when removing the assembly.

Figure 1-238 Remove the secondary transfer assembly (3 of 3)

Reinstall the secondary transfer assembly
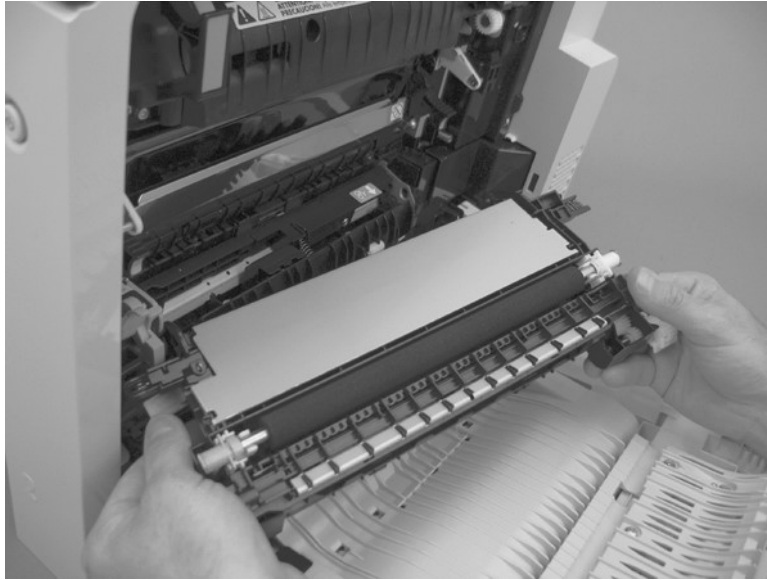
Press and hold the blue release lever when reinstalling the assembly.

Figure 1-239 Reinstall the secondary transfer assembly

Tray 1 separation pad

Before proceeding, remove the following assemblies

- Pickup roller. See Pickup roller (Tray 1) on page 46.

- Right door assembly. See Right door assembly on page 130.

Remove the Tray 1 separation pad

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

   Figure 1-240 Remove the Tray 1 separation pad (1 of 6)
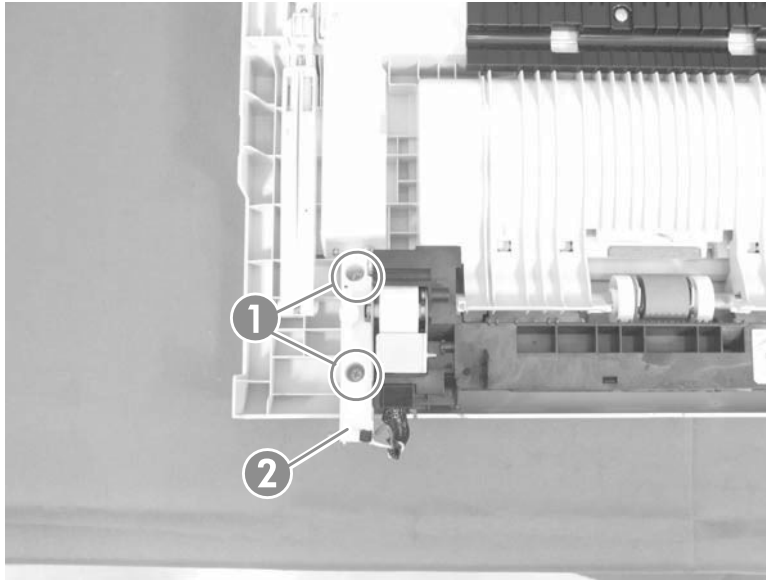
2. Remove two screws (callout 1) and separate Tray 1 (callout 2) from the door assembly.

   Figure 1-241 Remove the Tray 1 separation pad (2 of 6)
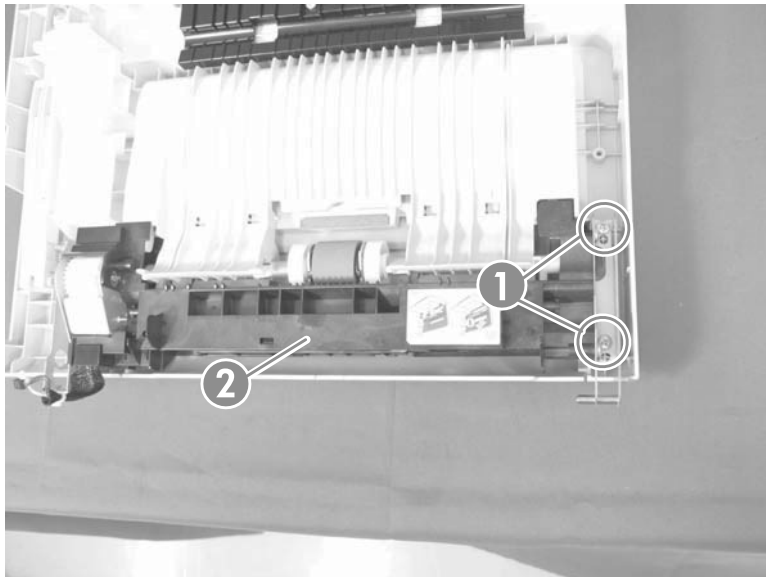
3. Release two tabs (callout 1) and slide the locking cap and sub roller toward the edge of the tray.

Figure 1-242 Remove the Tray 1 separation pad (3 of 6)
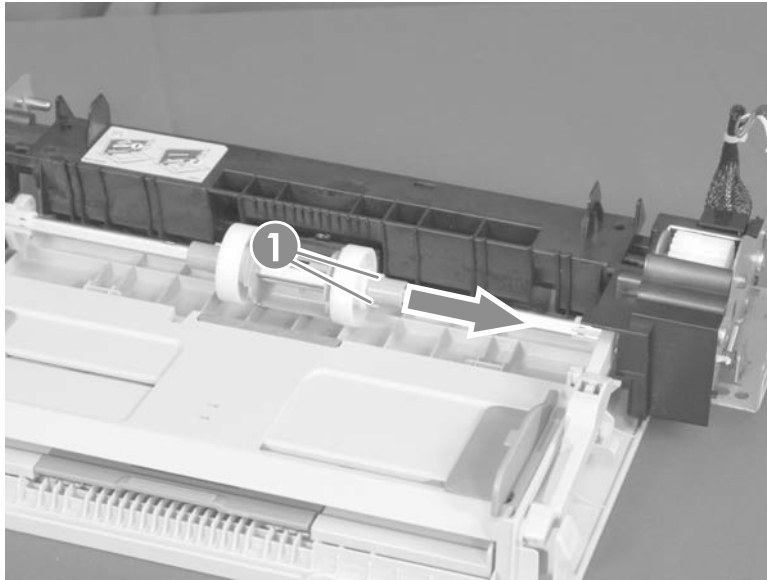
4. Release two tabs (callout 1) and slide the locking cap and sub roller toward the edge of the tray.

⚠ **CAUTION:** Do not damage the flag (callout 2).

Figure 1-243 Remove the Tray 1 separation pad (4 of 6)

5. Release one tab (callout 1) and slide the pickup-roller holder toward the edge of the tray.

⚠ **CAUTION:** Do not damage the flag (callout 2).

Figure 1-244 Remove the Tray 1 separation pad (5 of 6)

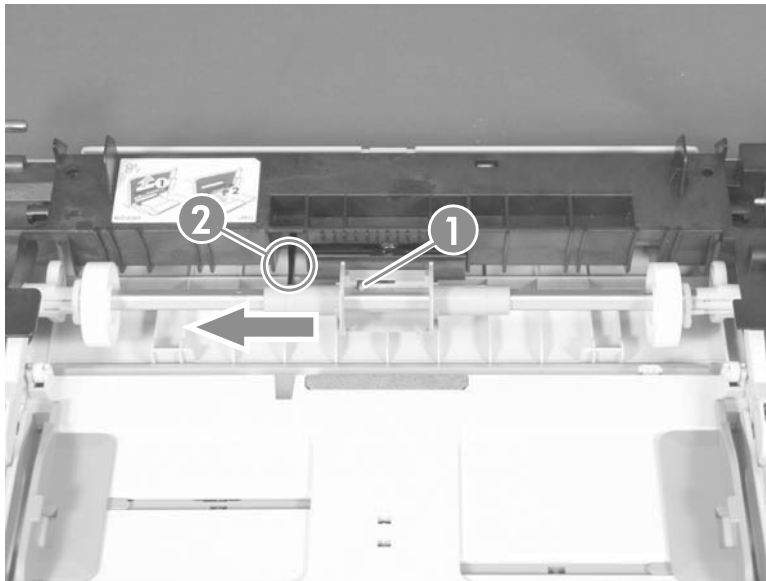**6.** Release one tab (callout 1) and remove the separation pad.

Figure 1-245 Remove the Tray 1 separation pad (6 of 6)
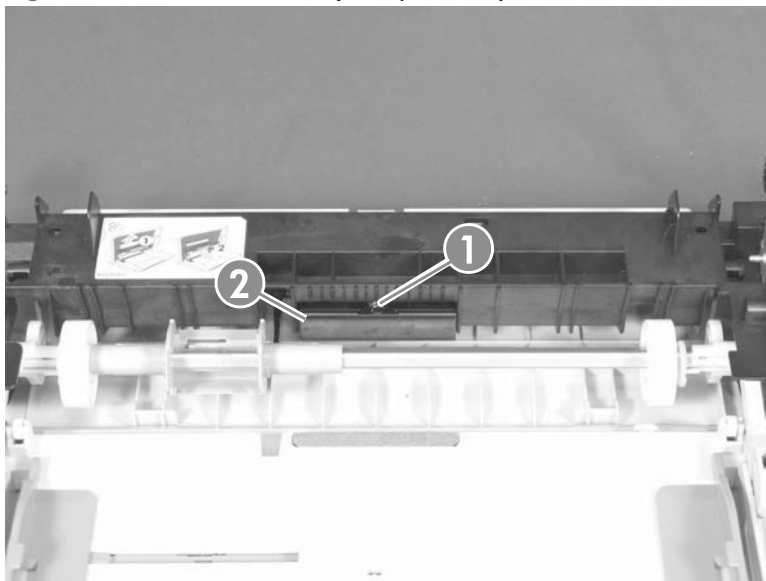
Registration density (RD) sensor assembly

Before proceeding, remove the following assemblies

- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 25.

- Secondary transfer assembly. See Secondary transfer assembly on page 152.

Remove the RD sensor assembly

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

   Figure 1-246 Remove the RD sensor assembly (1 of 7)
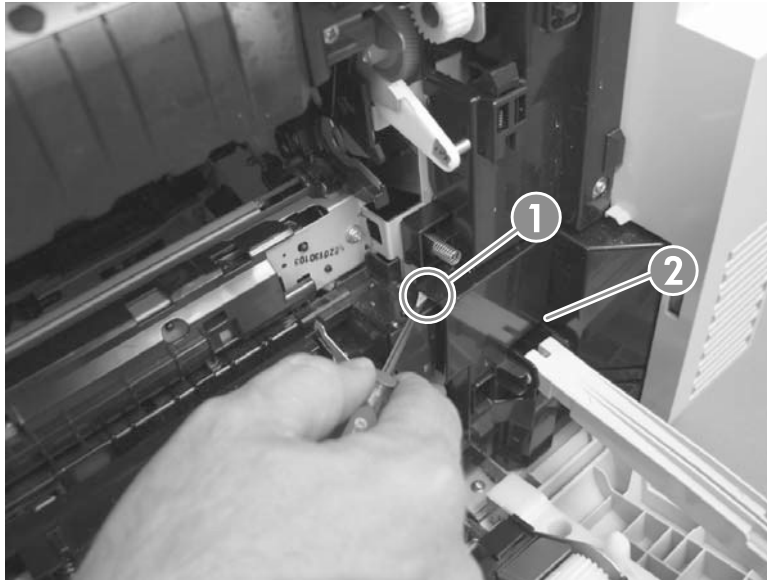
   NOTE: When reinstalling the cover, make sure that the tabs are seated correctly.

   Figure 1-247 Remove the RD sensor assembly (2 of 7)

2. Release one tab, and then remove the wire-harness cover.

TIP: Open the front door to make it easier to remove the cover.

Figure 1-248 Remove the RD sensor assembly (3 of 7)
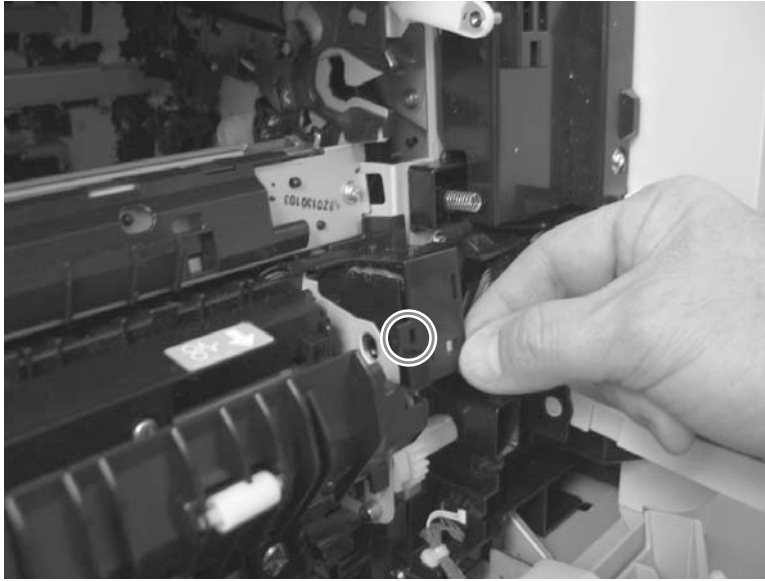
3. Disconnect three connectors.

Figure 1-249 Remove the RD sensor assembly (4 of 7)
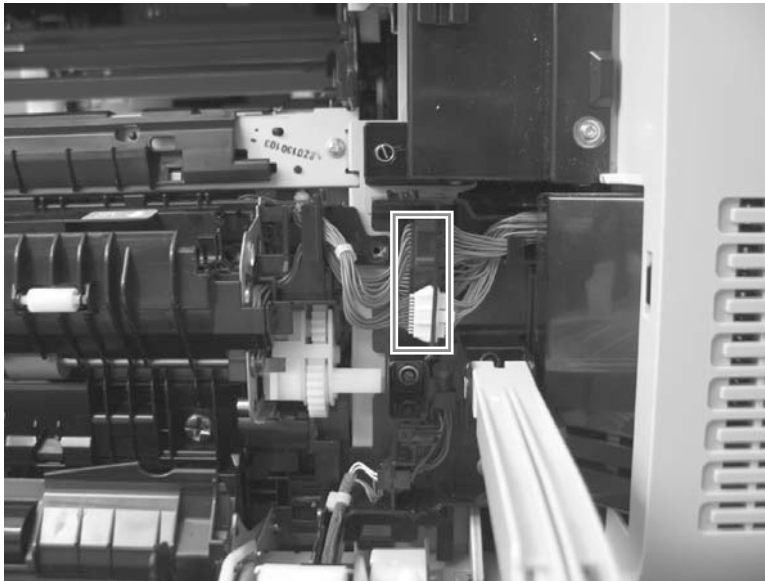
4. Remove two screws.

Figure 1-250 Remove the RD sensor assembly (5 of 7)
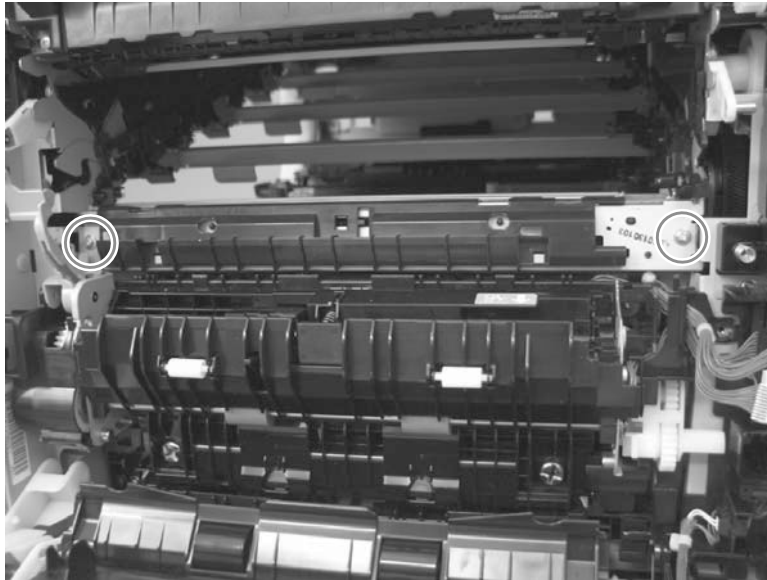
5. Slide the shutter toward the back side of the product. Keep the shutter in this position for the following step.

Figure 1-251 Remove the RD sensor assembly (6 of 7)

6. Carefully remove the assembly from the product.

⚠ **CAUTION:** Do not damage the shutter as it passes through the chassis.

Figure 1-252 Remove the RD sensor assembly (7 of 7)

Registration assembly

Before proceeding, remove the following assemblies

- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 25.

- Secondary transfer assembly. See Secondary transfer assembly on page 152.

Remove the registration assembly

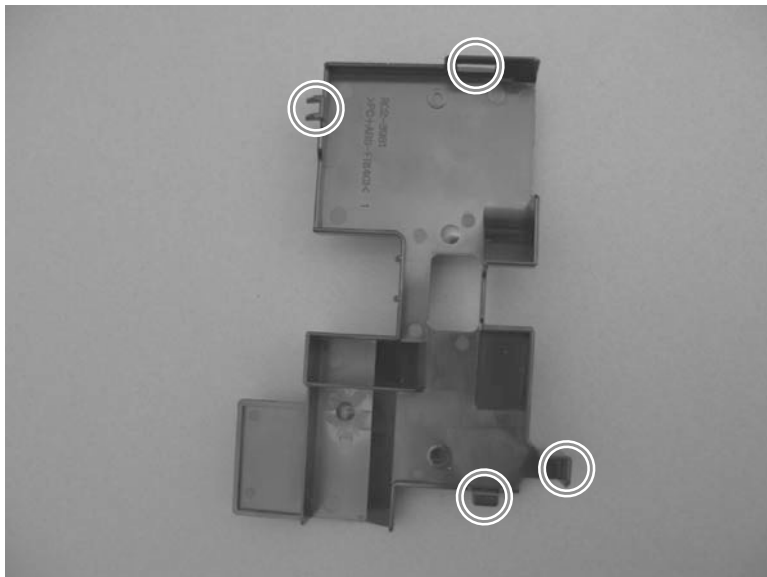1. Release one tab (callout 1), and then remove the cover (callout 2).

   Figure 1-253 Remove the registration assembly (1 of 8)
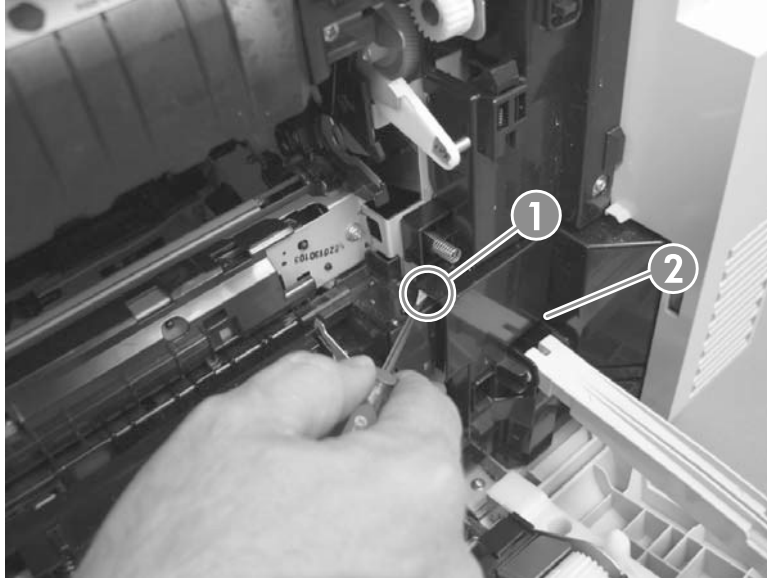
   📝 **NOTE:**   When reinstalling the cover, be sure that the tabs are seated correctly.

   **Figure 1-254** Remove the registration assembly (2 of 8)
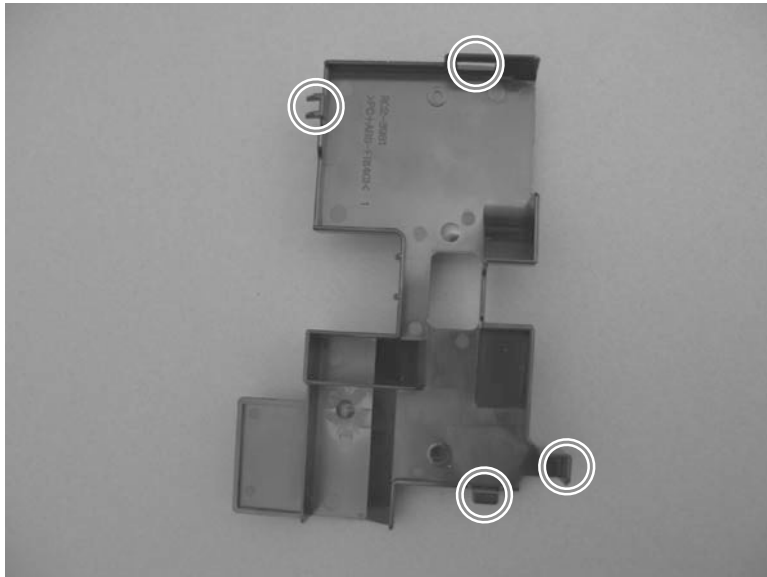
2. Release one tab, and then remove the wire-harness cover.

TIP: To make the cover easier to remove, open the front-door assembly to close the RD-sensor shutter.

Figure 1-255 Remove the registration assembly (3 of 8)

3. Disconnect three connectors.

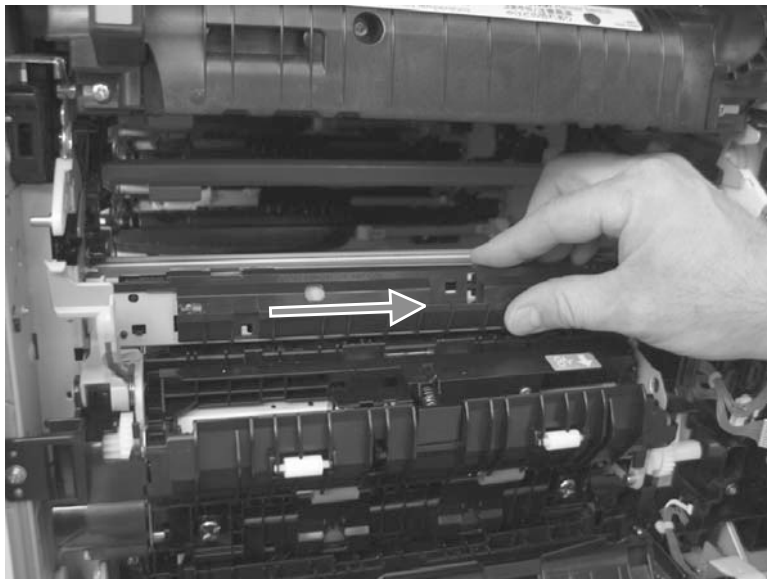**Figure 1-256** Remove the registration assembly (4 of 8)
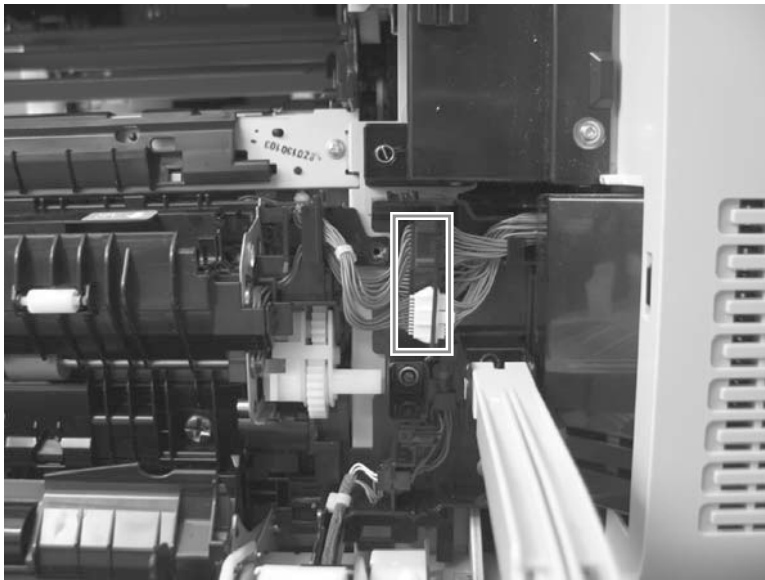
4. Remove two screws (callout 1), and then remove the cassette feed guide (callout 2).

Figure 1-257 Remove the registration assembly (5 of 8)
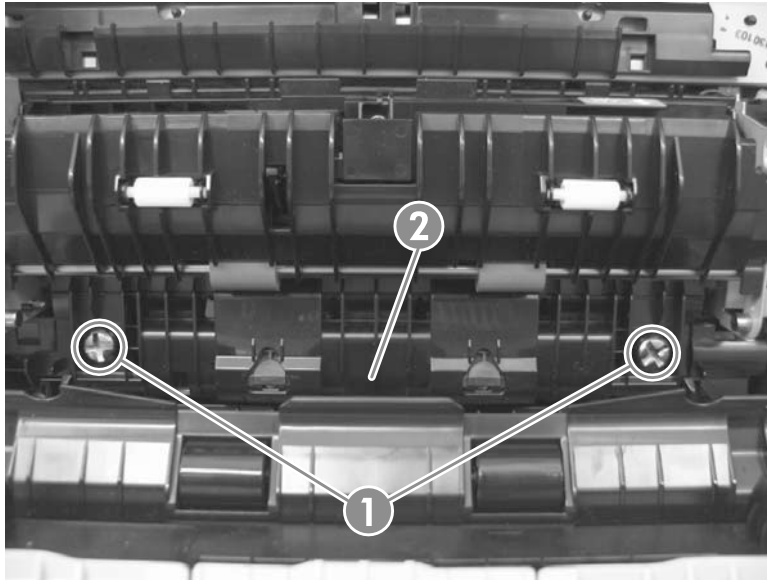
5. Remove four screws.

Figure 1-258 Remove the registration assembly (6 of 8)
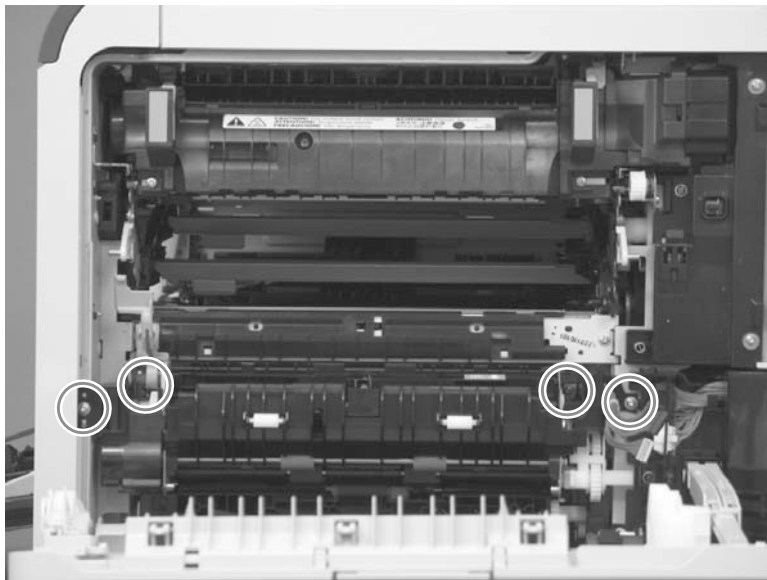
6. Release two pins and the front of the assembly.

Figure 1-259 Remove the registration assembly (7 of 8)
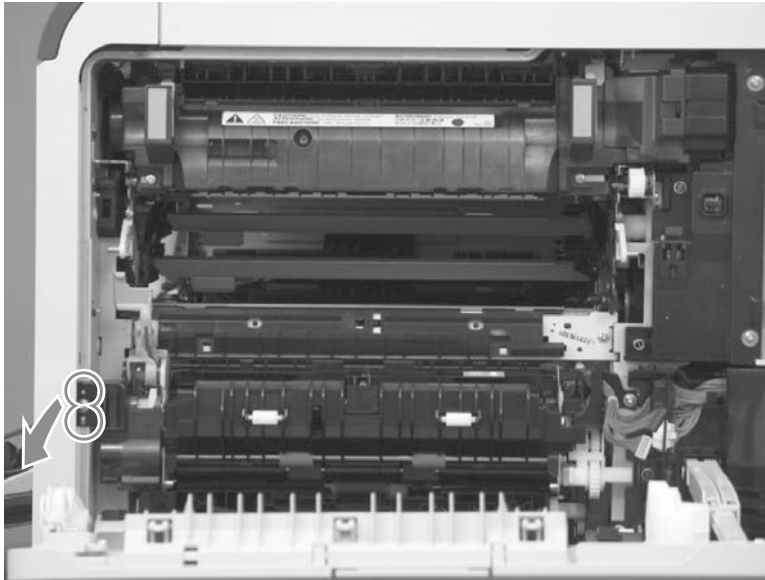
7. Remove the assembly from the product.

☼ **Reinstallation tip** When the registration assemblyis reinstalled, 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 fits securely up against the product chassis.

Figure 1-260 Remove the registration assembly (8 of 8)

Install a replacement registration assembly

After installing a replacement registration assembly, reset the counts for the registration roller and the media-sensor. Follow this procedure after reassembling the product:

1. From the Home screen on the product control panel, scroll to and touch the Device Maintenance button.

2. Touch the Service button.

3. The drop-down menu shows User Access Code. Open the menu and select Service Access Code.

4. Touch the Access Code field, and then enter the service code for this product:

    - **M651**: 04065114

    - **M680**: 04068014

5. Touch OK to open the Service menu.

6. Select New Registration Roller to reset the roller count.

7. Select Media Sensor Value to reset the media sensor.

Paper-delivery fan (M651)

Before proceeding, remove the following assemblies

- Upper left cover. See Upper left cover (M651) on page 117.

- Face-down tray. See Face-down tray (M651) on page 134.

- Face-down rear cover. See Face-down rear cover (M651) on page 136.

Remove the paper-delivery fan (M651)

1. Remove one screw (callout 1), disconnect one connector (callout 2), and then release one wire retainer (callout 3).

   TIP: When the fan is reinstalled, the air must flow into the product. Check the arrows embossed on the fan frame that indicate air flow direction.

   Figure 1-261 Remove the paper-delivery fan (M651; 1 of 2)
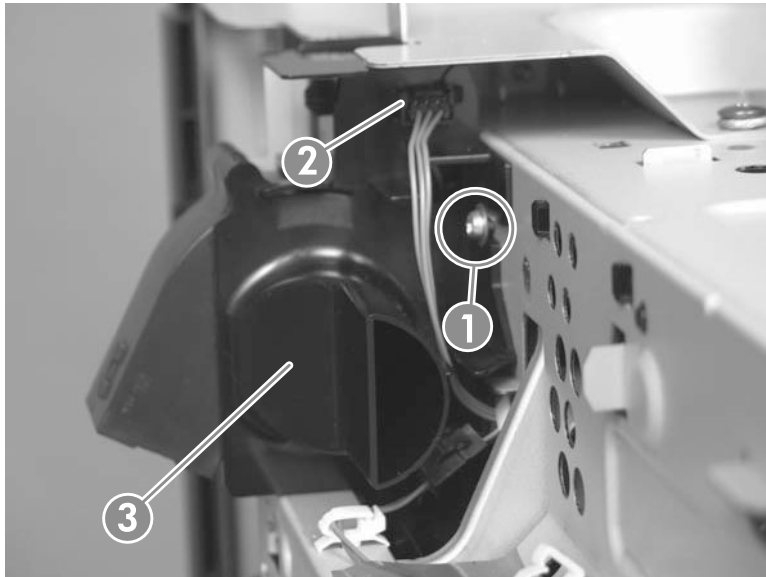
2. Release one tab (callout 1), and then remove the fan (callout 2).

Figure 1-262 Remove the paper-delivery fan (M651; 2 of 2)
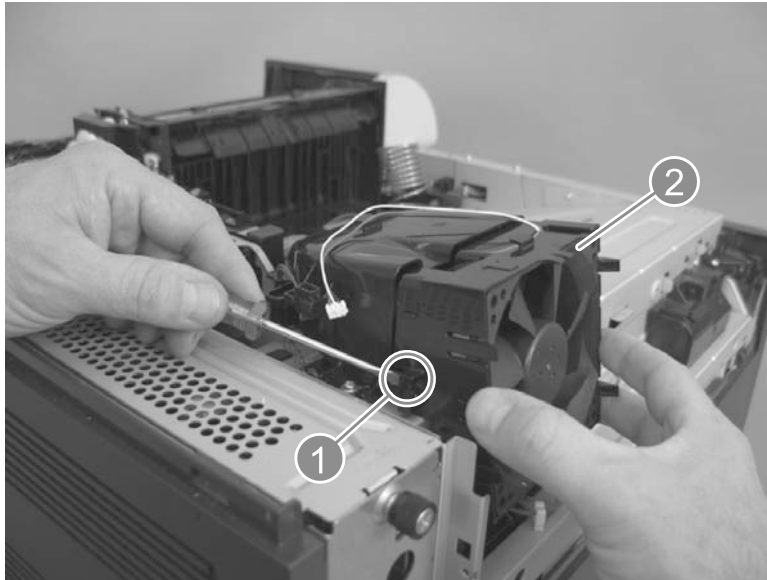
Paper-delivery fan (M680)

Before proceeding, remove the following assemblies

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.

- Scanner rear cover. See Scanner rear cover on page 79.

- Document feeder. See Document feeder (ADF) on page 80.

- Scanner assembly. See Image scanner assembly on page 103.

- Fan cover. See Fan cover (M680) on page 118.

- IPTU. See IPTU (M680) on page 147.

Remove the paper-delivery fan (M680)

▲ Remove one screw (callout 1), disconnect one connector (callout 2), and then remove the fan (callout 3).

Figure 1-263 Remove the paper-delivery fan (M680)
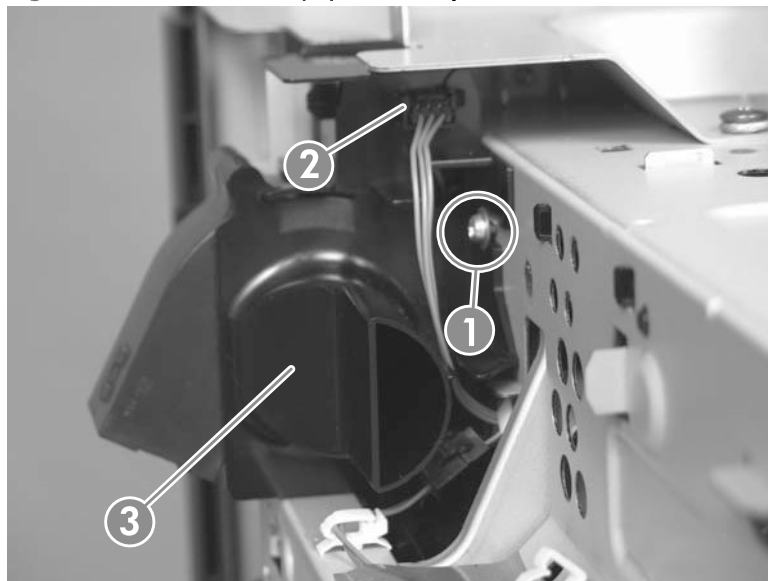
Residual-toner-feed motor

Before proceeding, remove the following assemblies

M651 models

- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 25.

- Upper-left cover. See Upper left cover (M651) on page 117.

M680 models

- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 25.

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.

- Scanner rear cover. See Scanner rear cover on page 79.

- Document feeder. See Document feeder (ADF) on page 80.

- Scanner assembly. See Image scanner assembly on page 103.

- Fan cover. See Fan cover (M680) on page 118.

- IPTU. See IPTU (M680) on page 147.

- Delivery fan. See Paper-delivery fan (M680) on page 168.

Remove the residual-toner-feed motor

Remove one screw (callout 1), disconnect one connector (callout 2), and them remove the residual-toner-feed motor (callout 3).

⚙ **Reinstallation tip**   When the motor (callout 3) is reinstalled, make sure that the keyed shaft on the product and motor assembly are correctly aligned and engaged.

Figure 1-264 Remove the residual-toner-feed motor (M651)

Figure 1-265 Remove the residual-toner-feed motor (M680)

Residual-toner transfer assembly

Before proceeding, remove the following assemblies

M651 models

- Toner-collection unit. See Toner-collection unit on page 6.

- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 25.

- Upper-left cover. See Upper left cover (M651) on page 117.

- Residual-toner-feed motor. See Residual-toner-feed motor on page 169.

M680 models

- Toner-collection unit. See Toner-collection unit on page 6.
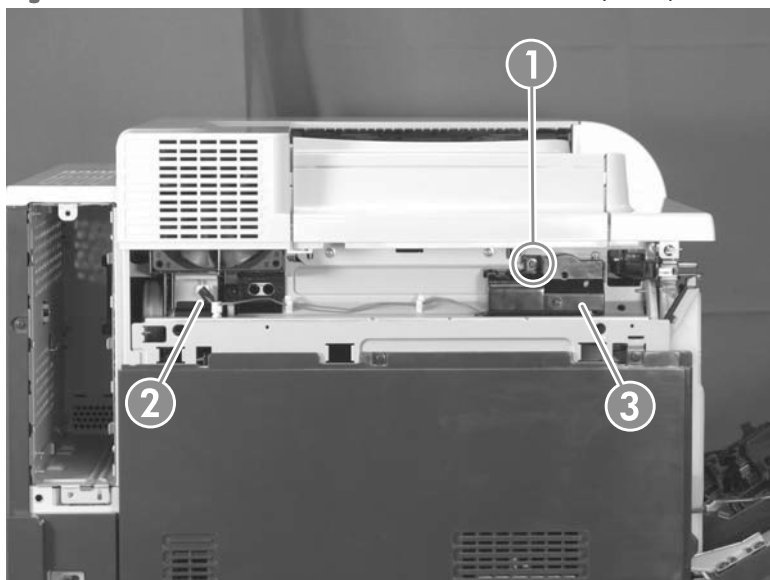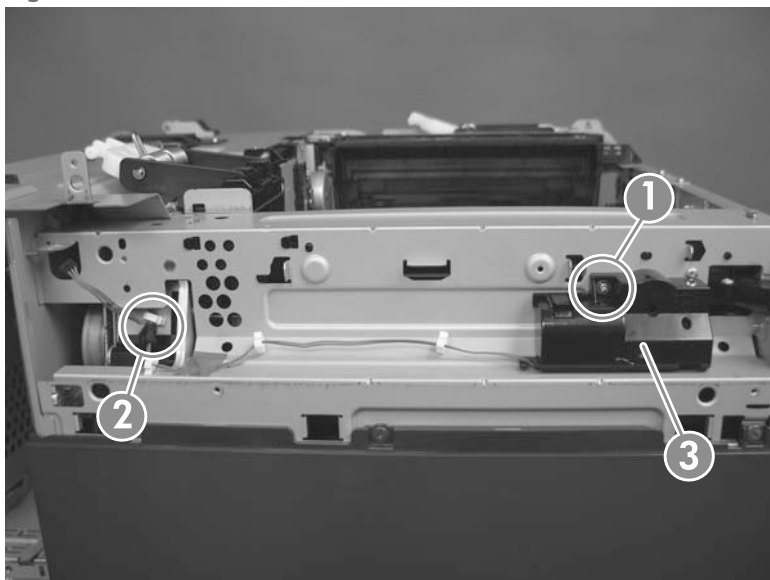
- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 25.

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.

- Scanner rear cover. See Scanner rear cover on page 79.

- Document feeder. See Document feeder (ADF) on page 80.

- Scanner assembly. See Image scanner assembly on page 103.

- Fan cover. See Fan cover (M680) on page 118.

- IPTU. See IPTU (M680) on page 147.

- Delivery fan. See Paper-delivery fan (M680) on page 168.

- Residual-toner-feed motor. See Residual-toner-feed motor on page 169.

Remove the residual-toner transfer assembly

1. Remove one screw.

   Figure 1-266 Remove the residual-toner transfer assembly (1 of 4)

2. Release one tab, and then remove the waste toner duct.

Figure 1-267 Remove the residual-toner transfer assembly (2 of 4)
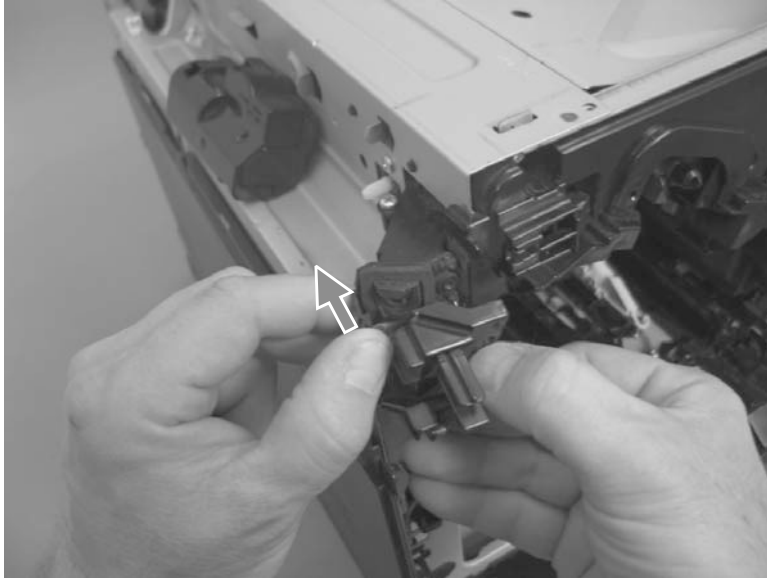
3. Remove one screw.

Figure 1-268 Remove the residual-toner transfer assembly (3 of 4)
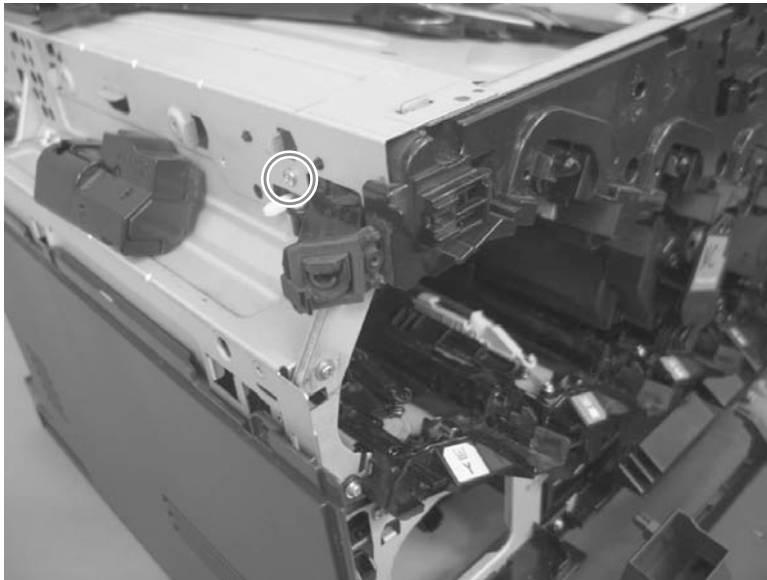
4. Push the residual-toner feed assembly into the product and then remove through the print cartridge cavity.

> ⚠ **CAUTION:** The waste toner feed assembly contains toner. Place a cloth below the work area to catch any spilled toner.

Figure 1-269 Remove the residual-toner transfer assembly (4 of 4)

Cartridge fan and environmental sensor

Before proceeding, remove the following assemblies

M651 models

- Upper left cover. See Upper left cover (M651) on page 117.

- Left rear cover. See Left rear cover on page 119.

- Left cover. See Left cover on page 120.

M680 models

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.

- Fan cover. See Fan cover (M680) on page 118.

- Left rear cover. See Left rear cover on page 119.

- Left cover. See Left cover on page 120.

Remove the cartridge fan and environmental sensor

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

   Figure 1-270 Remove the cartridge fan and environmental sensor (1 of 7)
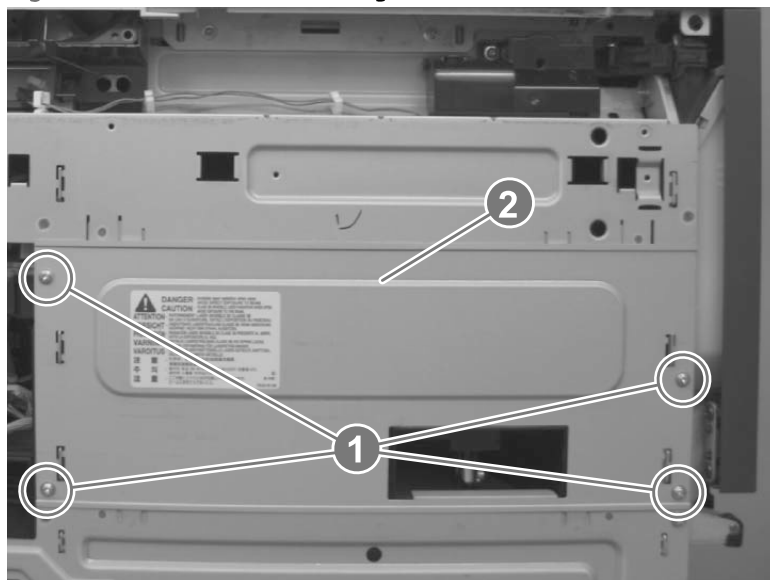
2. Release one spring.

☼ **TIP:** Close the front-door assembly to reduce tension in the spring.

Figure 1-271 Remove the cartridge fan and environmental sensor (2 of 7)

3. Release one tab and then slide the fan assembly toward the back of the product.

Figure 1-272 Remove the cartridge fan and environmental sensor (3 of 7)
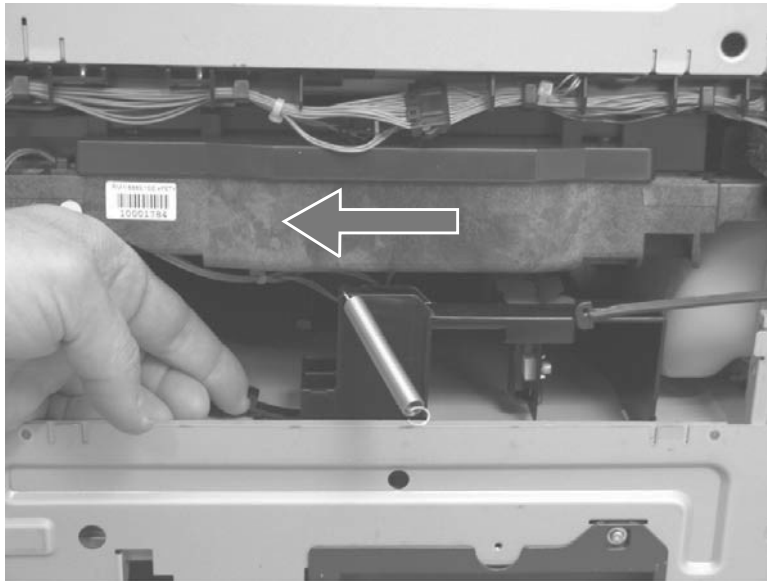
4. Pull the fan assembly out of the product, and then disconnect two connectors.

☼ **TIP:** One connector is below the sponge.

Figure 1-273 Remove the cartridge fan and environmental sensor (4 of 7)
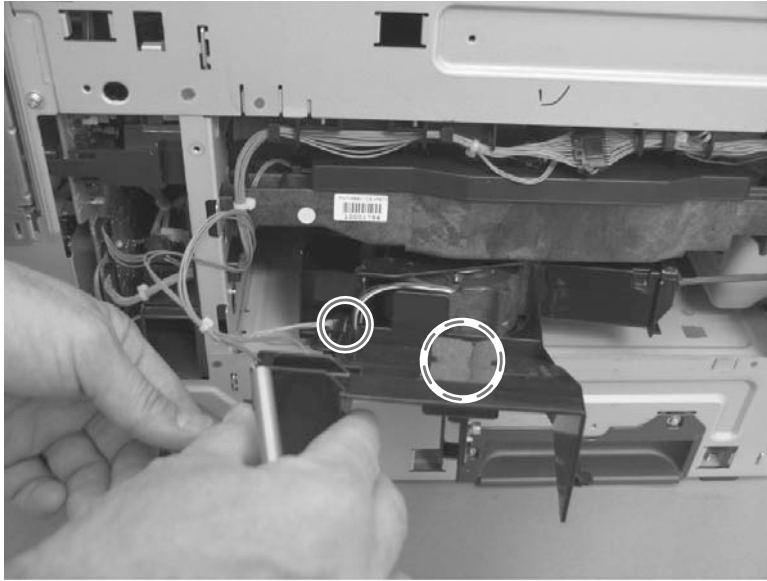
5. Release two tabs (callout 1), and then remove the cover (callout 2).

Figure 1-274 Remove the cartridge fan and environmental sensor (5 of 7)
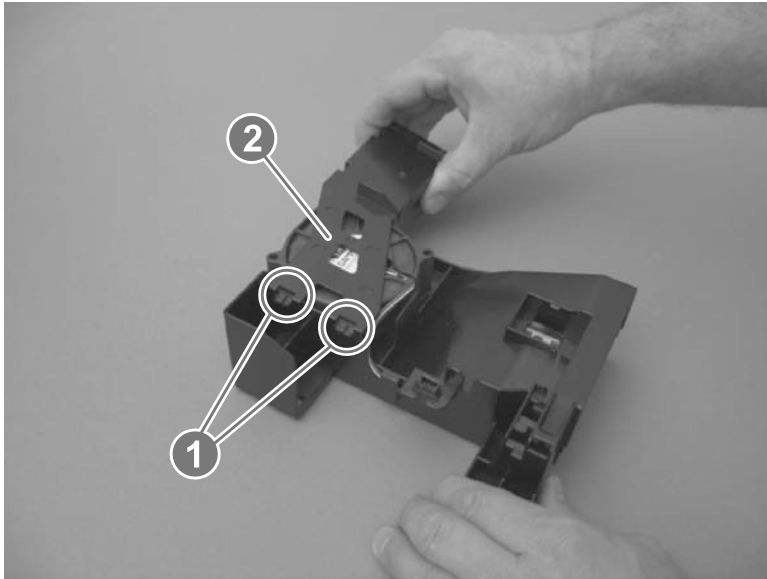
6. Disconnect one connector (callout 1), and then remove the fan (callout 2).

Figure 1-275 Remove the cartridge fan and environmental sensor (6 of 7)

7. Carefully release one tab, and then remove the environmental sensor.

⚠ CAUTION: ⚠ESD ESD-sensitive assembly.

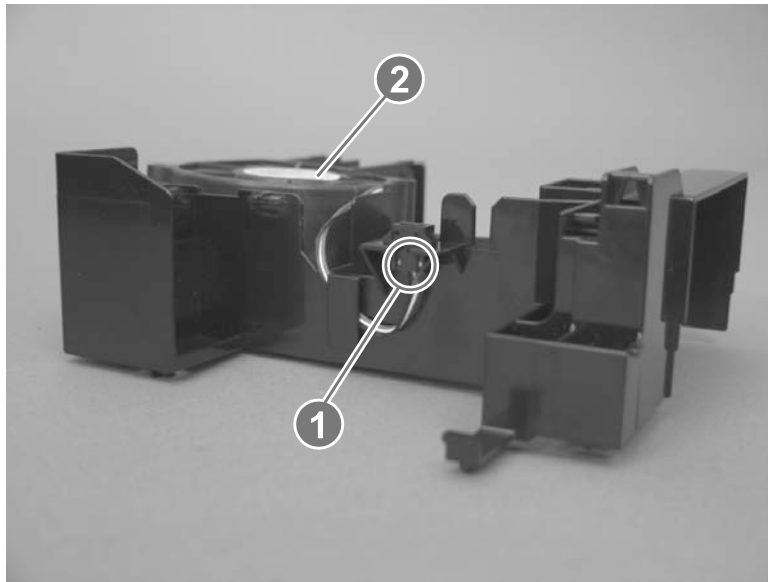Figure 1-276 Remove the cartridge fan and environmental sensor (7 of 7)
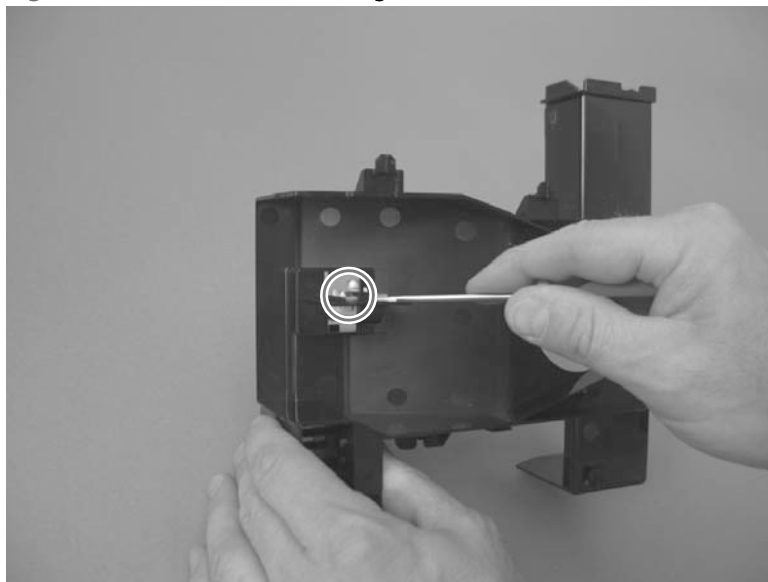
Residual toner full sensor

Before proceeding, remove the following assemblies

M651 models

- Toner-collection unit. See Toner-collection unit on page 6.
- Upper left cover. See Upper left cover (M651) on page 117.
- Left rear cover. See Left rear cover on page 119.
- Left cover. See Left cover on page 120.

M680 models

- Toner-collection unit. See Toner-collection unit on page 6.
- Standard output bin. See Standard output bin (M680) on page 52.
- Output bin bezel. See Output bin bezel (M680) on page 53.
- Fan cover. See Fan cover (M680) on page 118.
- Left rear cover. See Left rear cover on page 119.
- Left cover. See Left cover on page 120.

Remove the residual toner full sensor

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

   Figure 1-277 Remove the residual toner full sensor (1 of 3)
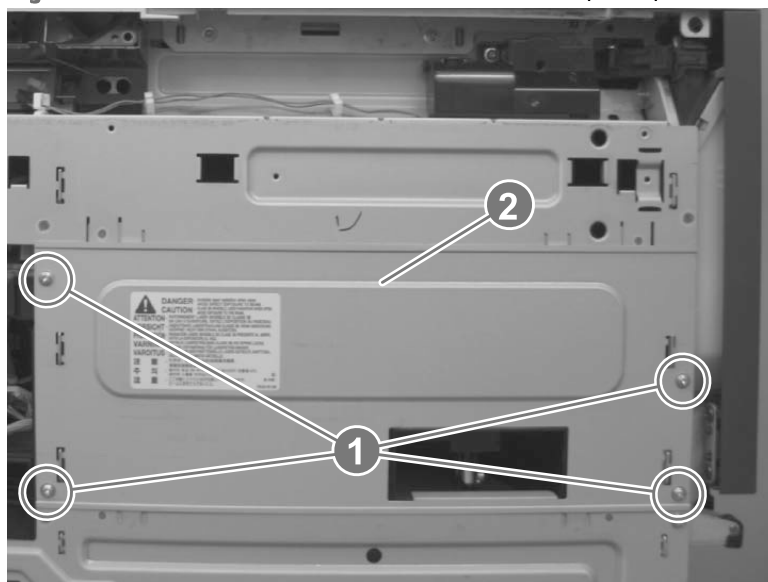
2. Open the front-door assembly, and then remove one screw.

Figure 1-278 Remove the residual toner full sensor (2 of 3)

3. Disconnect two connectors (callout 1), and then remove the residual toner full sensor (callout 2).

Figure 1-279 Remove the residual toner full sensor (3 of 3)

Delivery assembly (M651)

Before proceeding, remove the following assemblies

- Fuser. See Fuser on page 24.

- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 25.

- Control panel. See Control panel assembly (M651) on page 28.

- Upper left cover. See Upper left cover (M651) on page 117.

- Left-rear cover. See Left rear cover on page 119.
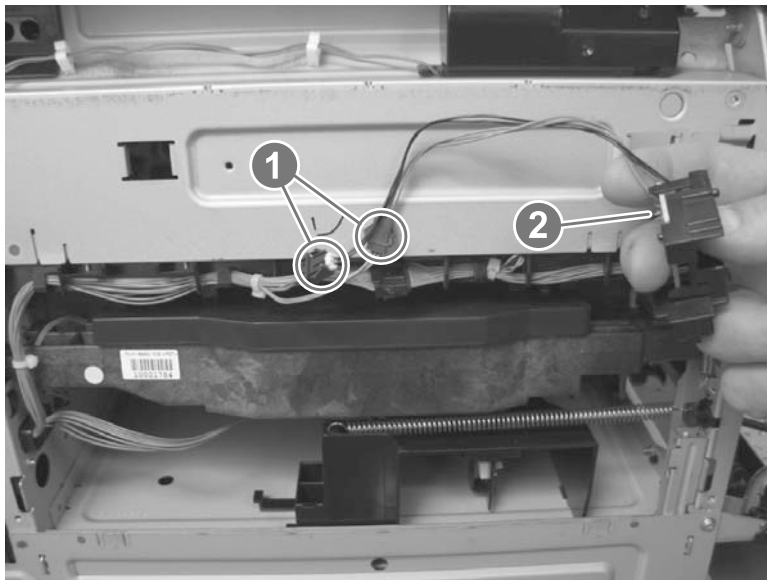
- Right-front cover. See Right-front cover on page 124.

- Face-down tray. See Face-down tray (M651) on page 134.

- Face-down rear cover. See Face-down rear cover (M651) on page 136.

- Delivery fan. See Paper-delivery fan (M651) on page 166.

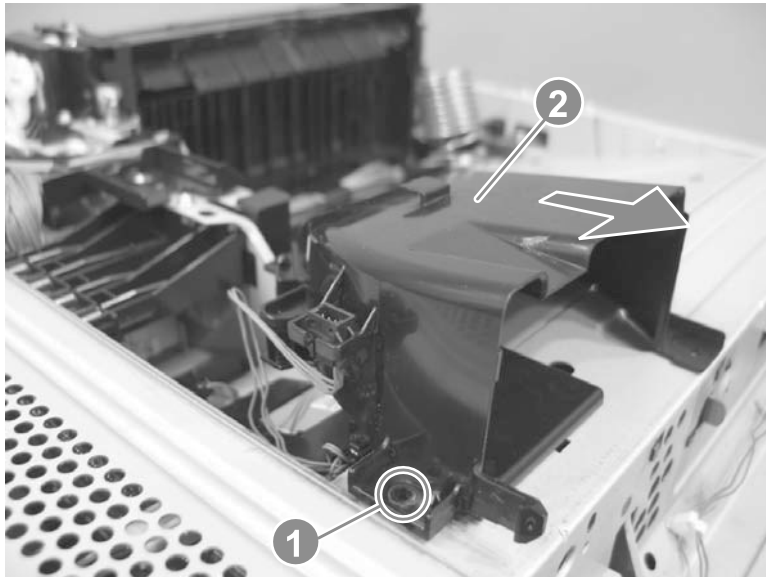**NOTE:** This assembly is also called the paper-delivery assembly.

Remove the delivery assembly (M651)

1. Remove one screw (callout 1), and then slide the fan duct (callout 2) in the direction of the arrow to release it from the delivery assembly.

    NOTE: Do not remove the fan duct from the product.

    Figure 1-280 Remove the delivery assembly (M651; 1 of 7)

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

NOTE: To create enough clearance to remove the paper guide (callout 2), press down on the duplex solenoid (callout 3).

TIP: The fuser delivery sensor is installed on the rear of the paper guide. Leave the sensor attached to the guide, and rotate the paper guide toward the rear of the product to access the delivery assembly.

Figure 1-281 Remove the delivery assembly (M651; 2 of 7)
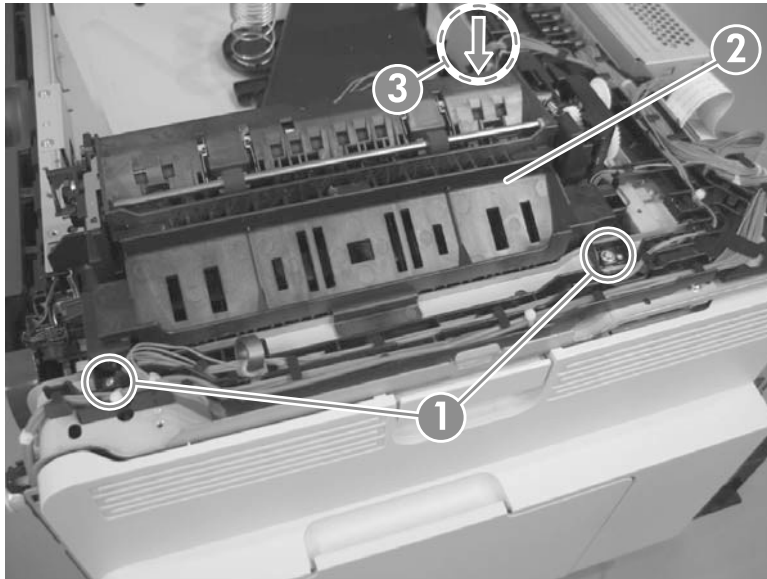
3. Release the wire harness from the guides (callout 1), and then disconnect one connector (callout 2).

Figure 1-282 Remove the delivery assembly (M651; 3 of 7)
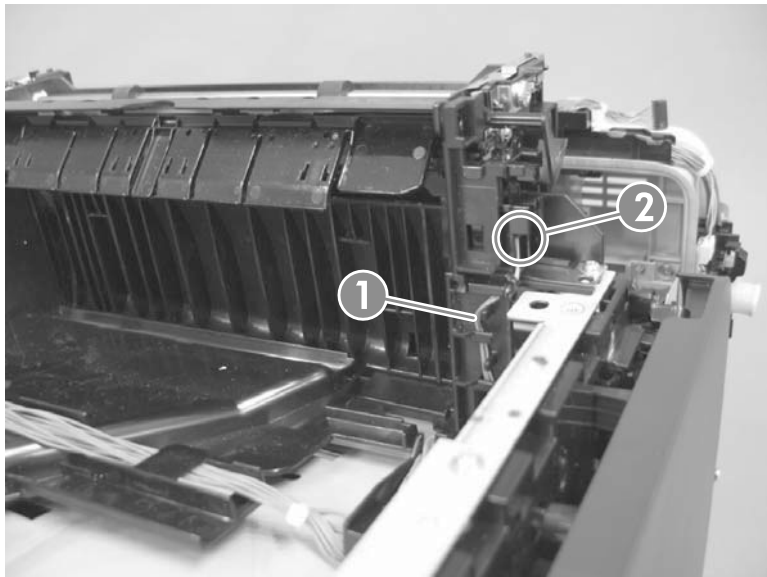
4.	Remove two screws.

	Figure 1-283 Remove the delivery assembly (M651; 4 of 7)

	

5.	Pull one tab out, and then push the tab down to release the bushing.

	Figure 1-284 Remove the delivery assembly (M651; 5 of 7)
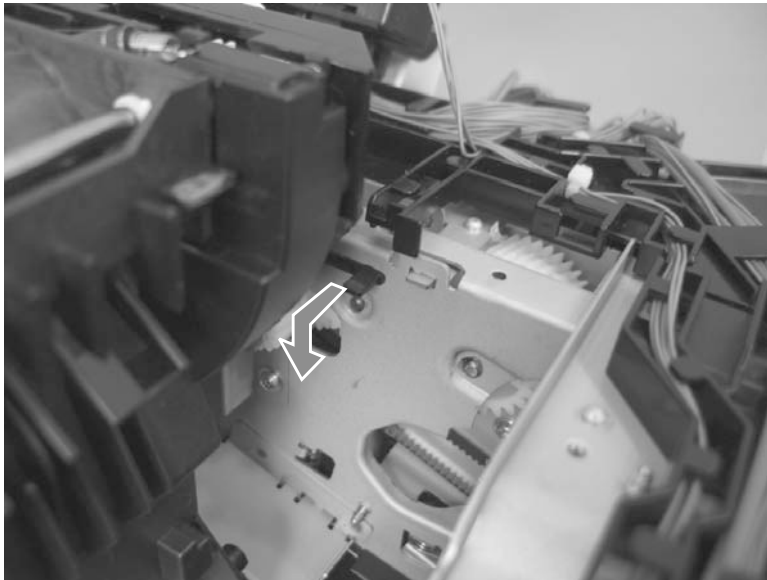
6. Remove two screws.

Figure 1-285 Remove the delivery assembly (M651; 6 of 7)

7. Remove the assembly.

Figure 1-286 Remove the delivery assembly (M651; 7 of 7)

Reinstall the delivery assembly (M651)

1. Transfer the solenoid plunger from the discarded assembly to the new one.

   Figure 1-287 Reinstall the delivery assembly (M651: 1 of 4)
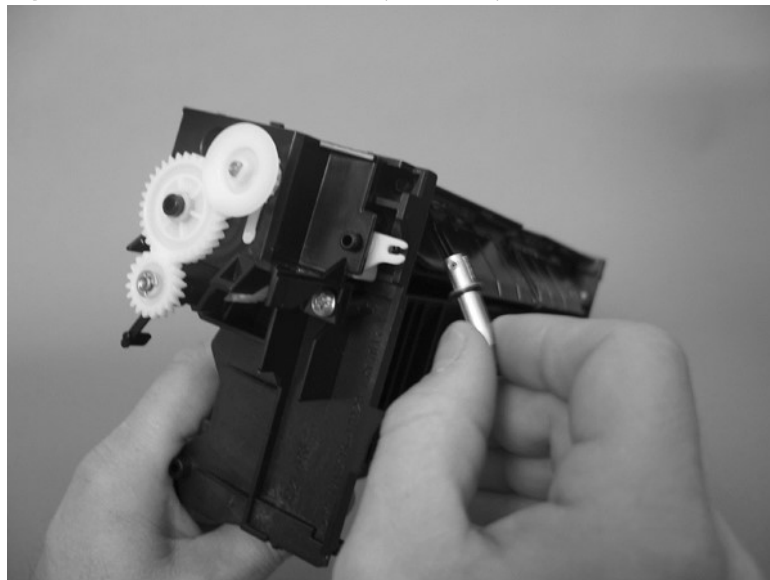
2. Transfer the output-bin full sensor from the discarded assembly to the new one. The sensor is held in place by one tab and two hooks (callout 1).

   Figure 1-288 Reinstall the delivery assembly (M651: 2 of 4)

3. Hold the delivery assembly with the diverter (callout 1) in the depressed position to move the sensor flag (callout 2) away from the sensor. Release one tab (callout 3).

Figure 1-289 Reinstall the delivery assembly (M651: 3 of 4)
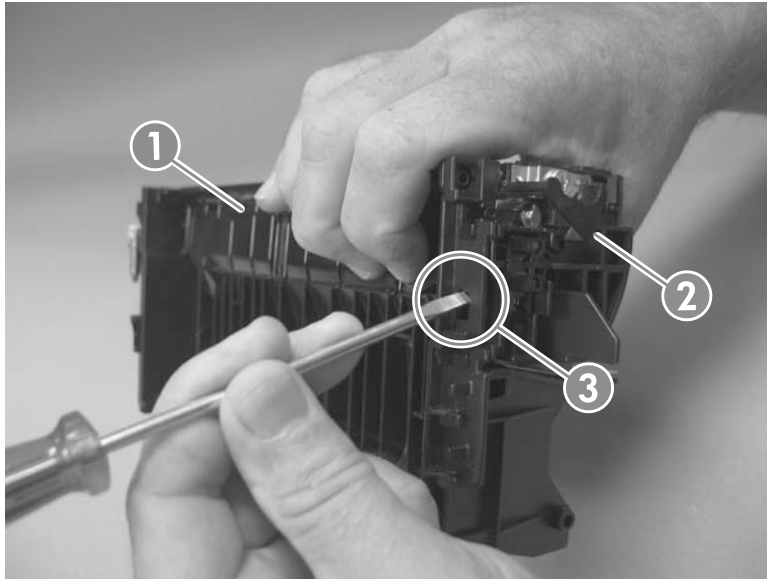
4. Slide the sensor up toward the top of the delivery assembly to release two hooks (callout 1), and then carefully remove the sensor from the assembly.

⚠ CAUTION: Do not damage the sensor holder or sensor flag when removing the sensor from the delivery assembly.

Figure 1-290 Reinstall the delivery assembly (M651: 4 of 4)
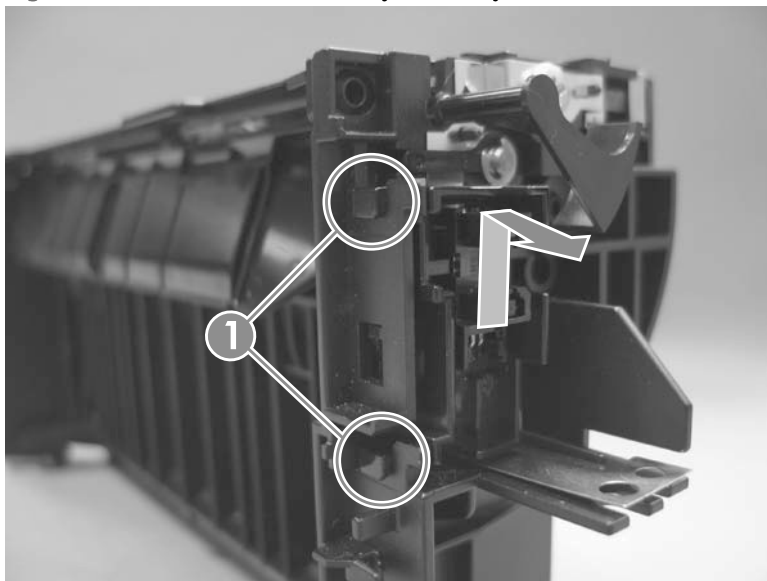
Delivery assembly (M680)

Before proceeding, remove the following assemblies

- Fuser. See Fuser on page 24.

- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 25.

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.

- Scanner rear cover. See Scanner rear cover on page 79.

- Document feeder. See Document feeder (ADF) on page 80.

- Scanner assembly. See Image scanner assembly on page 103.

- Fan cover. See Fan cover (M680) on page 118.

- Intermediate cover. See Intermediate cover assembly (M680) on page 145.

- IPTU. See IPTU (M680) on page 147.

NOTE: This assembly is also called the paper–delivery assembly.

Remove the delivery assembly (M680)

1. Remove one black-plastic cover (callout 1), and then remove two screws (callout 2).

   Figure 1-291 Remove the delivery assembly (M680; 1 of 4)
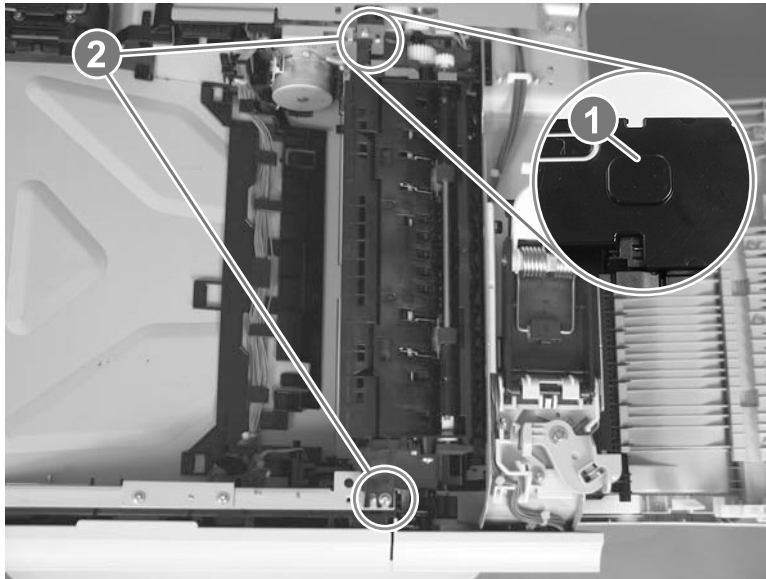
2. Pull one tab out, and then push the tab down to release the bushing.

Figure 1-292 Remove the delivery assembly (M680; 2 of 4)

NOTE: When reinstalling, make sure the tab is correctly installed and flush against the chassis.

3. Remove two screws.

Figure 1-293 Remove the delivery assembly (M680; 3 of 4)

4. Remove the assembly.

Figure 1-294 Remove the delivery assembly (M680; 4 of 4)
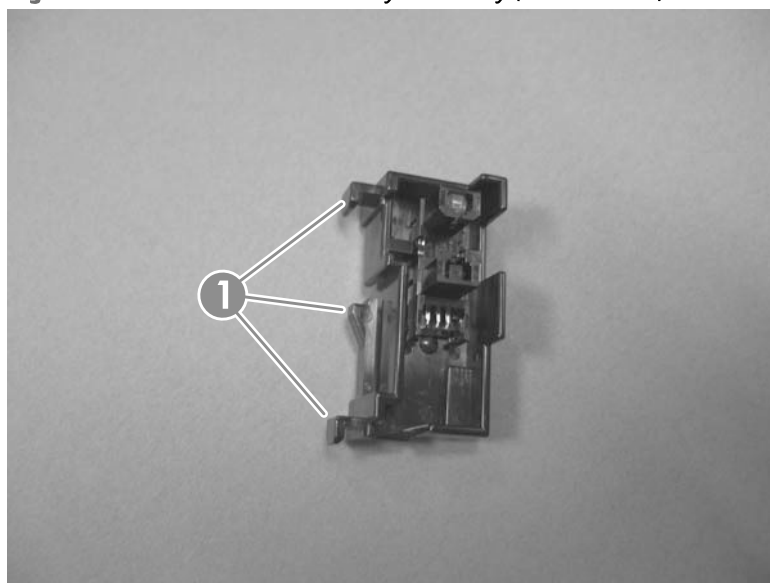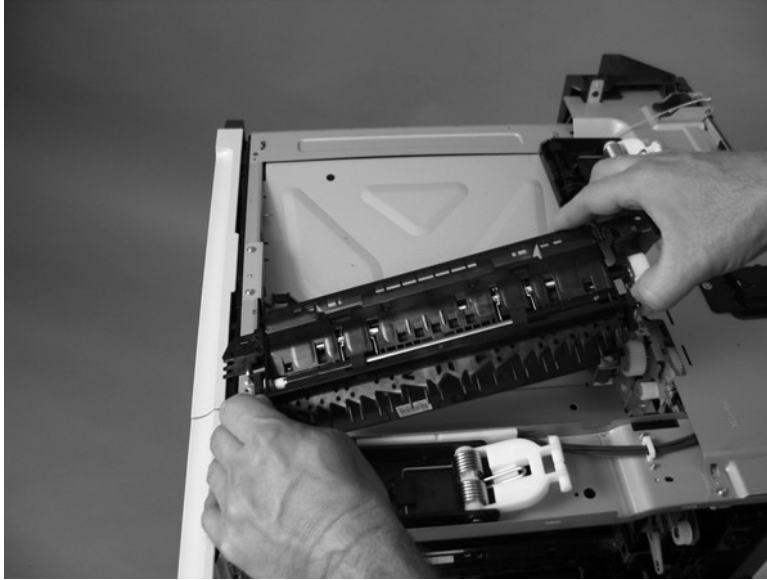

Reinstall the delivery assembly (M680)

▲ Make sure that the solenoid plunger is correctly installed on the replacement assembly.

Figure 1-295 Reinstall the delivery assembly (M680)
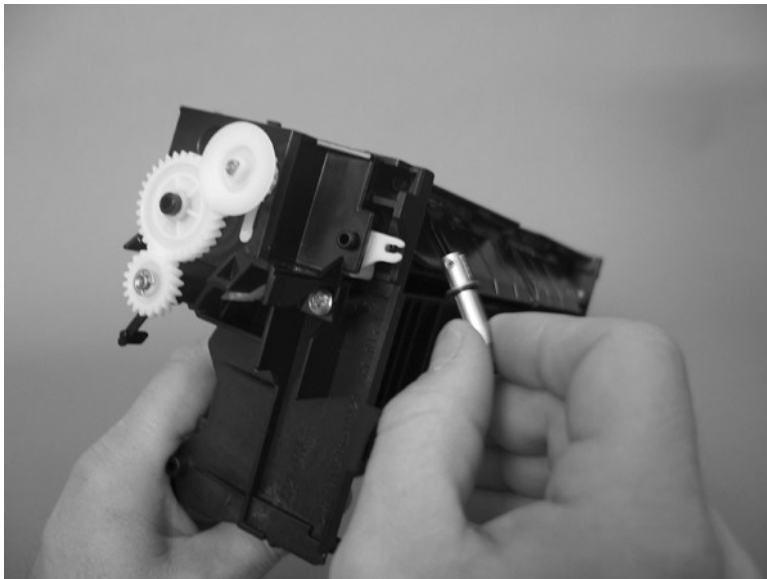
Duplex-drive assembly

Before proceeding, remove the following assemblies

M651 models

- Fuser. See Fuser on page 24.

- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 25.

- Control panel. See Control panel assembly (M651) on page 28.

- Upper left cover. See Upper left cover (M651) on page 117.

- Left-rear cover. See Left rear cover on page 119.

- Face-down tray. See Face-down tray (M651) on page 134.

- Face-down rear cover. See Face-down rear cover (M651) on page 136.

- Right-front cover. See Right-front cover on page 124.

- Delivery fan. See Paper-delivery fan (M651) on page 166.

- Delivery assembly. See Delivery assembly (M651) on page 180.

M680 models

- Fuser. See Fuser on page 24.

- Intermediate transfer belt (ITB). See Intermediate transfer belt (ITB) on page 25.

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.

- Scanner rear cover). See Scanner rear cover on page 79.

- Document feeder. See Document feeder (ADF) on page 80.

- Scanner assembly. See Image scanner assembly on page 103.

- Fan cover. See Fan cover (M680) on page 118.

- IPTU. See IPTU (M680) on page 147.

- Delivery assembly. See Delivery assembly (M680) on page 186.

📝 **NOTE:**   This assembly is also called the duplexing-drive assembly.

Remove the duplex-drive assembly

▲   Disconnect two connectors (callout 1), remove two screws (callout 2), and then remove the assembly (callout 3).
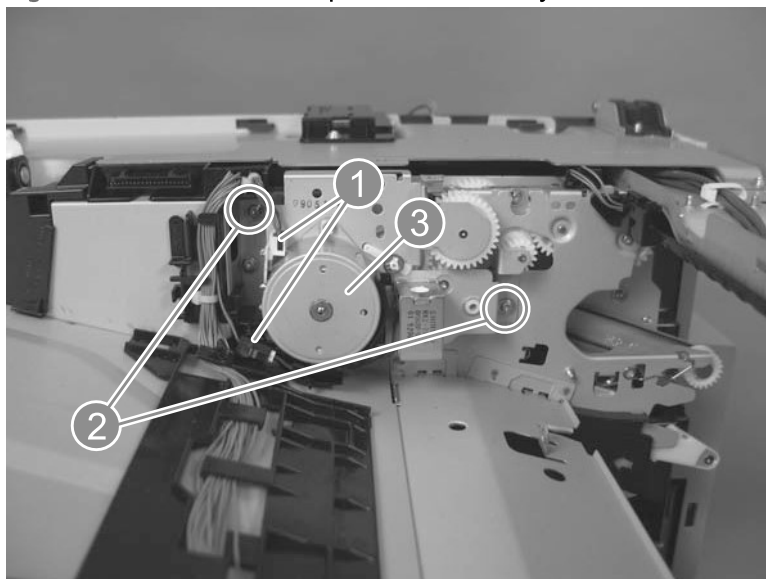
📝 **NOTE:**   The figure below shows the M680 product. For the M651 assembly, the connectors and solenoid are located in slightly different positions than shown below.

Figure 1-296 Remove the duplex-drive assembly

Power-supply fan (M651)

Before proceeding, remove the following assemblies

- Control panel assembly. See Control panel assembly (M651) on page 28.

- Upper left cover. See Upper left cover (M651) on page 117.

- Rear cover. See Rear cover (M651) on page 121.

- Face-down tray. See Face-down tray (M651) on page 134.

- Face-down rear cover. See Face-down rear cover (M651) on page 136.

- Upper cover. See Upper cover (M651) on page 139.

Remove the power-supply fan (M651)

1. Release the fan cable from the DC controller.

   Figure 1-297 Remove the power-supply fan (M651; 1 of 2)
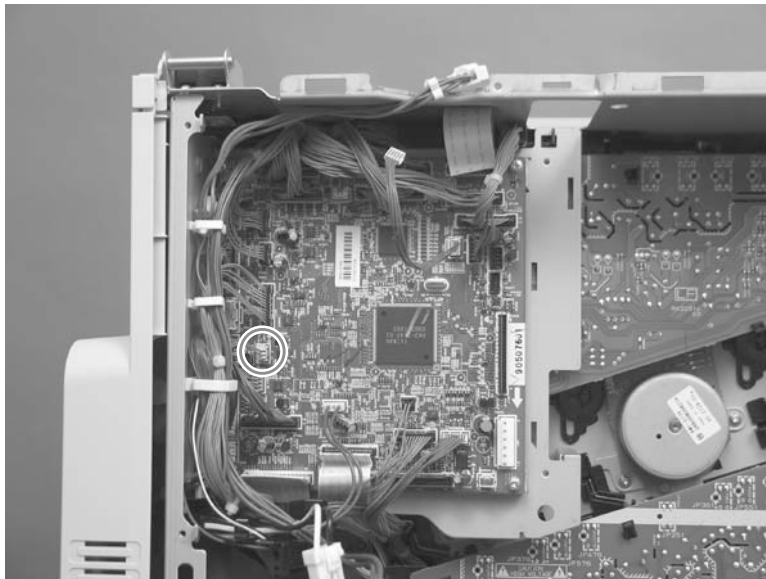
2. Release two tabs, and then remove the fan from the fan duct.

💡 **Reinstallation tip**   When the fan is reinstalled, the air must flow into the product. Check the arrows embossed on the fan frame that indicate air flow direction.
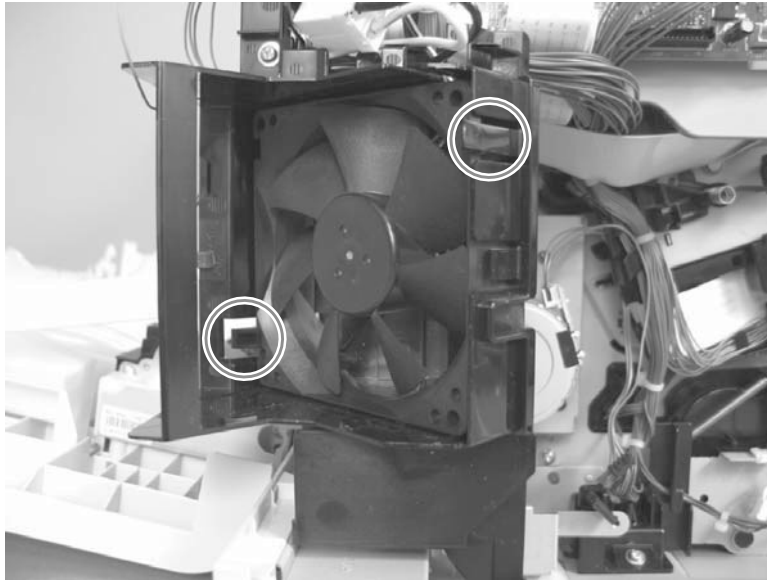
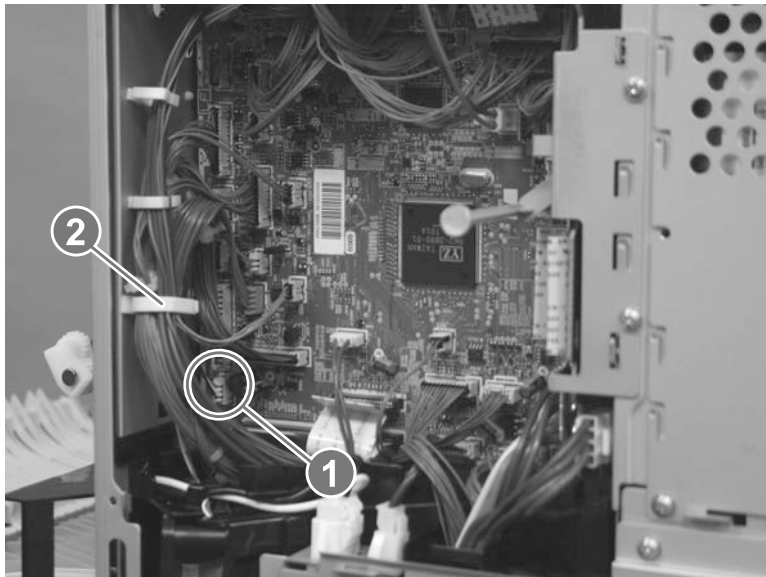**Figure 1-298** Remove the power-supply fan (M651; 2 of 2)

Power-supply fan (M680)

Before proceeding, remove the following assemblies

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.

- Scanner rear cover. See Scanner rear cover on page 79.

- Document feeder (M680). See Document feeder (ADF) on page 80.

- Scanner assembly (M680). See Image scanner assembly on page 103.

- Fan cover. See Fan cover (M680) on page 118.

- Left rear cover. See Left rear cover on page 119.

- Rear cover. See Rear cover (M680) on page 122.

- Right-rear cover. See Right-rear cover on page 146.

Remove the power-supply fan (M680)

1. Release the fan cable from the DC controller (callout 1), and then release the wire harness from one retainer (callout 2).

Figure 1-299 Remove the power-supply fan (M680; 1 of 3)

2. Release two tabs.

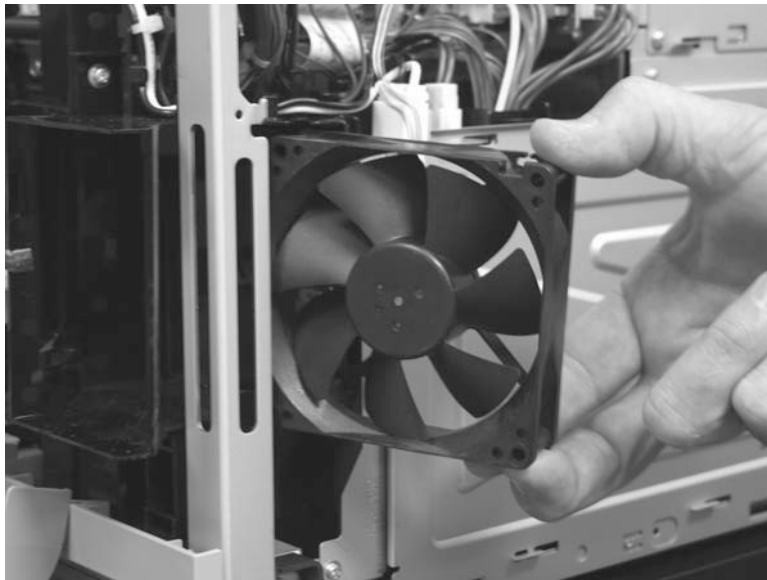Figure 1-300 Remove the power-supply fan (M680; 2 of 3)

3. Remove the fan from the fan duct.

☀ **Reinstallation tip**   When the fan is reinstalled, the air must flow into the product. Check the arrows embossed on the fan frame that indicate air flow direction.

Figure 1-301 Remove the power-supply fan (M680; 3 of 3)

Interconnect board (ICB) (M651)

Before proceeding, remove the following assemblies

- Formatter PCA. See Formatter PCA on page 9.

- Upper left cover. See Upper left cover (M651) on page 117.

- Left rear cover. See Left rear cover on page 119.

- Rear cover. See Rear cover (M651) on page 121.

- Face-down tray. See Face-down tray (M651) on page 134.

- Face-down rear cover. See Face-down rear cover (M651) on page 136.

📝 **NOTE:** This assembly is also called the inner connecting PCA assembly (M651).

Remove the interconnect board (M651)

⚠ **WARNING!** Do **not** remove the ICB from a product and then install it into a **different** product. Failure to follow this warning will result in severe damage to that product and cause it to be unusable. HP recommends that if the ICB is removed and replaced, the discarded ICB should be destroyed so that it can not accidentally be installed in a different product.

⚠ **CAUTION:** 🔲 ESD-sensitive assembly.

1. Disconnect two connectors (callout 1), one USB connector (callout 2), and then remove two screws (callout 3).

   Figure 1-302 Remove the interconnect board (M651; 1 of 2)
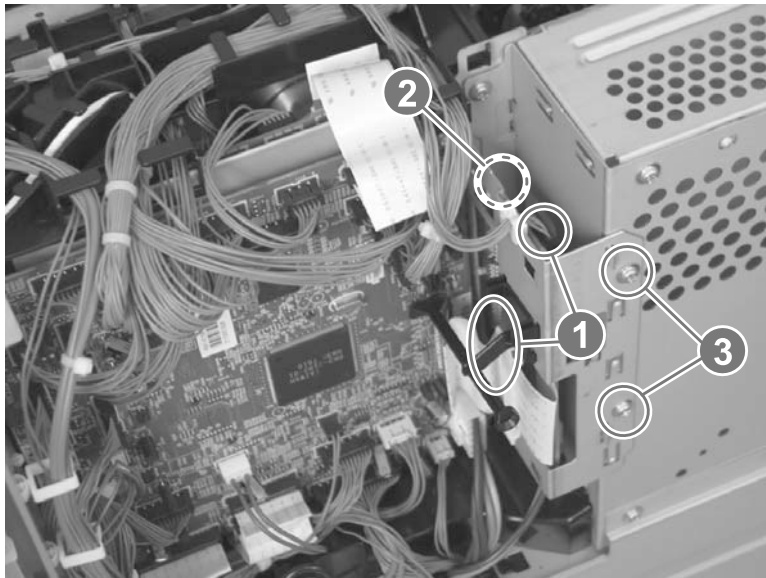
2. Carefully rotate and slide the ICB up and away from the chassis, disconnect one connector, and then remove the ICB.

Figure 1-303 Remove the interconnect board (M651; 2 of 2)
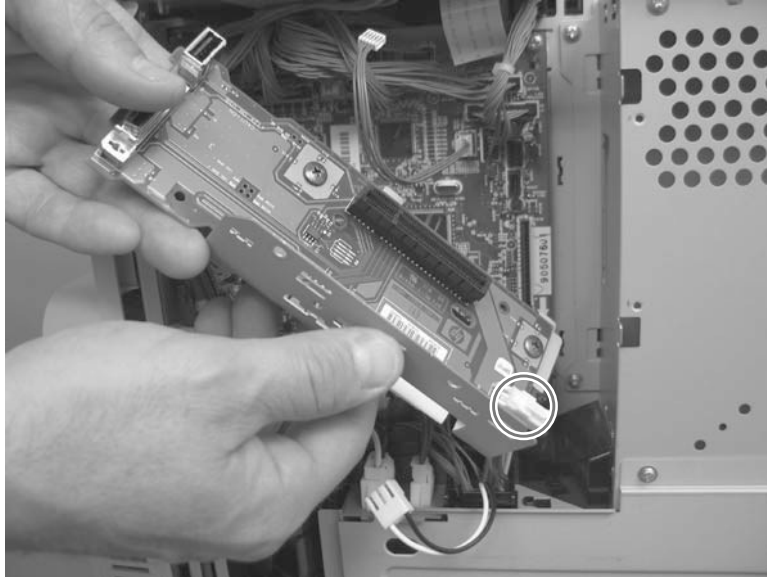
Interconnect board (ICB) (M680)

Before proceeding, remove the following assemblies

- Formatter. See Formatter PCA on page 9.
- Scanner rear cover. See Scanner rear cover on page 79.
- Document feeder. See Document feeder (ADF) on page 80.
- Scanner assembly. See Image scanner assembly on page 103.
- Fan cover. See Fan cover (M680) on page 118.
- Left rear cover. See Left rear cover on page 119.
- Rear cover. See Rear cover (M680) on page 122.

> **NOTE:** This assembly is also called the inner connecting PCA assembly (M680).

Remove the ICB (M680)

> **WARNING!** Do **not** remove the ICB from a product and then install it into a **different** product. Failure to follow this warning will result in severe damage to that product and cause it to be unusable. HP recommends that if the ICB is removed and replaced, the discarded ICB should be destroyed so that it can not accidentally be installed in a different product.

> **CAUTION:** ESD-sensitive assembly.

1. Remove three screws (callout 1), disconnect one FFC (callout 2), and remove the small cover (callout 3).

Figure 1-304 Remove the ICB (M680; 1 of 2)
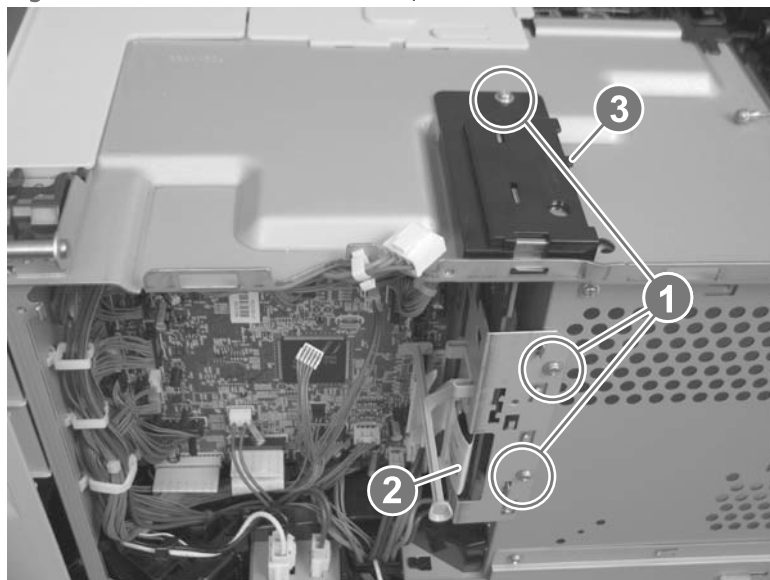
2. Carefully rotate and slide the ICB up and away from the chassis, disconnect one connector, and then remove the ICB.

Figure 1-305 Remove the ICB (M680; 2 of 2)

DC controller PCA only

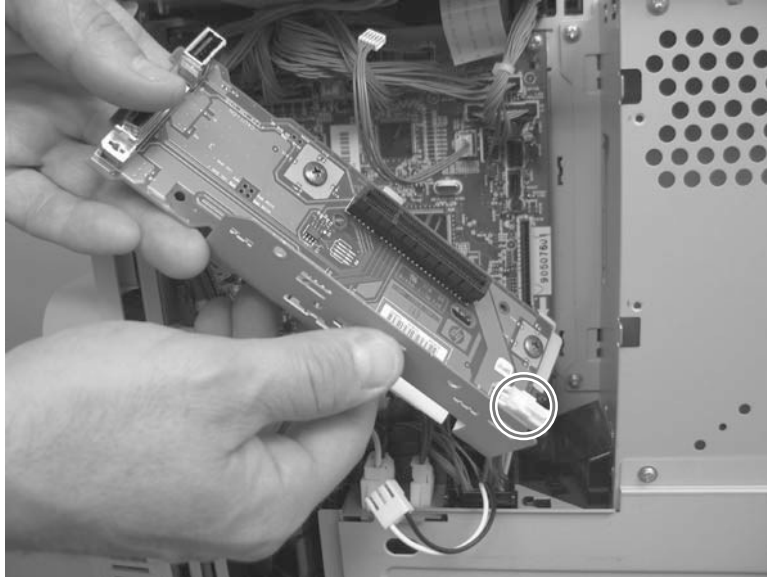## Before proceeding, remove the following assemblies

M651 models

- Formatter. See Formatter PCA on page 9.
- Upper left cover. See Upper left cover (M651) on page 117.
- Left rear cover. See Left rear cover on page 119.
- Rear cover. See Rear cover (M651) on page 121.
- Face-down tray. See Face-down tray (M651) on page 134.
- Face-down rear cover. See Face-down rear cover (M651) on page 136.
- Interconnect board. See Interconnect board (ICB) (M651) on page 194.

M680 models

- Formatter. See Formatter PCA on page 9.
- Standard output bin. See Standard output bin (M680) on page 52.
- Output bin bezel. See Output bin bezel (M680) on page 53.
- Scanner rear cover. See Scanner rear cover on page 79.
- Document feeder. See Document feeder (ADF) on page 80.
- Scanner assembly. See Image scanner assembly on page 103.
- Fan cover. See Fan cover (M680) on page 118.
- Left rear cover. See Left rear cover on page 119.
- Rear cover. See Rear cover (M680) on page 122.
- Interconnect board (ICB). See Interconnect board (ICB) (M680) on page 196.

> **NOTE:** This assembly is also called the DC controller PCA assembly.

Remove the DC controller PCA only

> **CAUTION:** ESD-sensitive assembly.

> **NOTE:** Use the following procedure to replace **only** the DC controller PCA. To access assemblies behind the DC controller, remove the PCA and the sheet-metal backing tray. See DC controller PCA and tray on page 204.

▲ Disconnect all the connectors. Remove four screws and then remove the DC controller PCA

> **Reinstallation tip** M651: The connector locations J101, J102, J106, and J154 are not used.
>
> M680: The connector locations J101 and J102 are not used.

Figure 1-306 Remove the DC controller PCA only

Low-voltage power supply (LVPS)

Before proceeding, remove the following assemblies

M651 models

- Formatter. See Formatter PCA on page 9.

- Upper left cover. See Upper left cover (M651) on page 117.

- Left rear cover. See Left rear cover on page 119.

- Rear cover. See Rear cover (M651) on page 121.

- Face-down tray. See Face-down tray (M651) on page 134.

- Face-down rear cover. See Face-down rear cover (M651) on page 136.

- Interconnect board. See Interconnect board (ICB) (M651) on page 194.

M680 models

- Formatter. See Formatter PCA on page 9.

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.

- Scanner rear cover. See Scanner rear cover on page 79.

- Document feeder. See Document feeder (ADF) on page 80.

- Scanner assembly. See Image scanner assembly on page 103.

- Fan cover. See Fan cover (M680) on page 118.

- Left rear cover. See Left rear cover on page 119.

- Rear cover. See Rear cover (M680) on page 122.

- Interconnect board (ICB). See Interconnect board (ICB) (M680) on page 196.

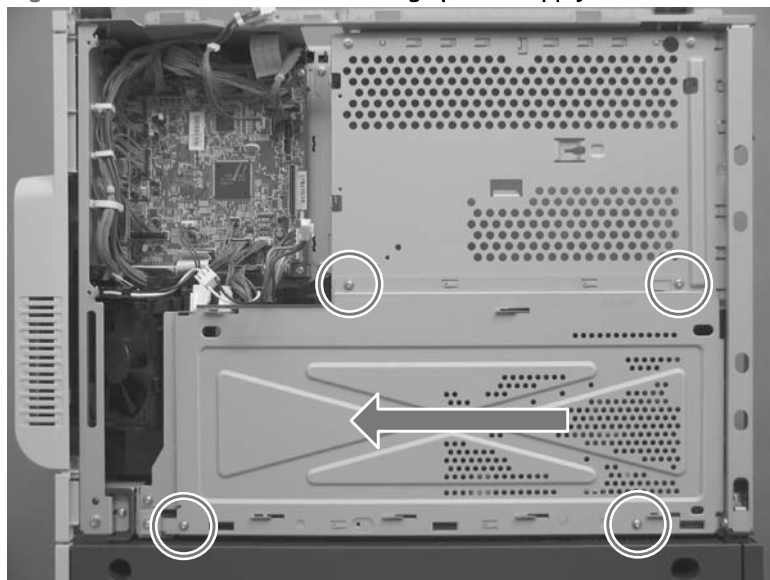> **NOTE:** This assembly is also called the low-voltage power supply PCA assembly.

Remove the low-voltage power supply

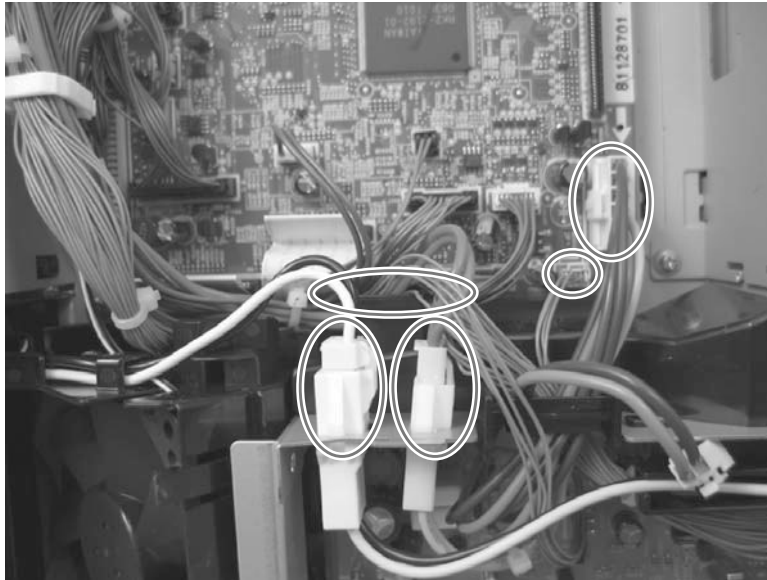> ⚠ **CAUTION:** ⚠ESD ESD-sensitive assembly.

1. Remove four screws, and then slide the sheet-metal plate to the left to remove it.

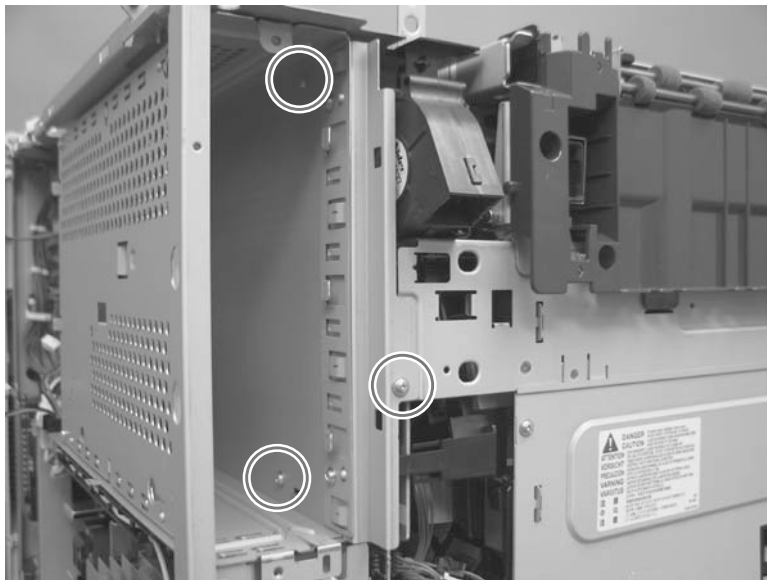**Figure 1-307** Remove the low-voltage power supply (1 of 8)

2. Disconnect five connectors, and then release the wire harnesses from the guides as necessary.
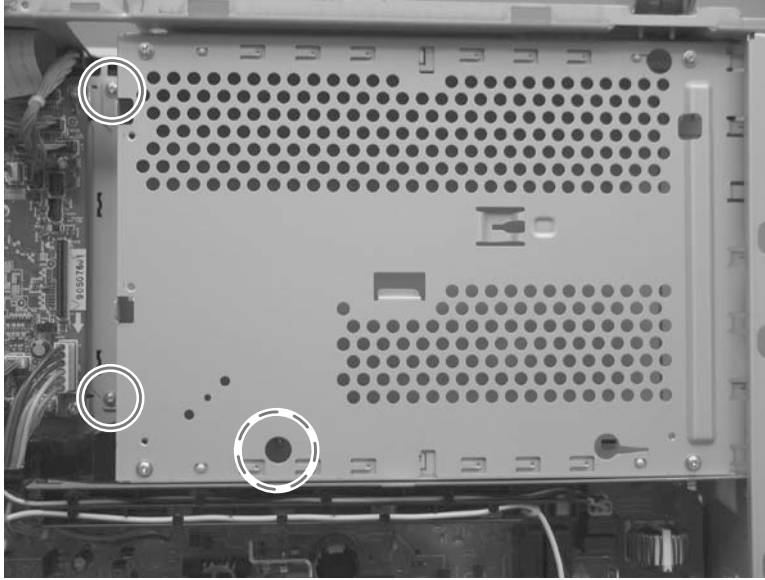
Figure 1-308 Remove the low-voltage power supply (2 of 8)

3. Remove three screws.

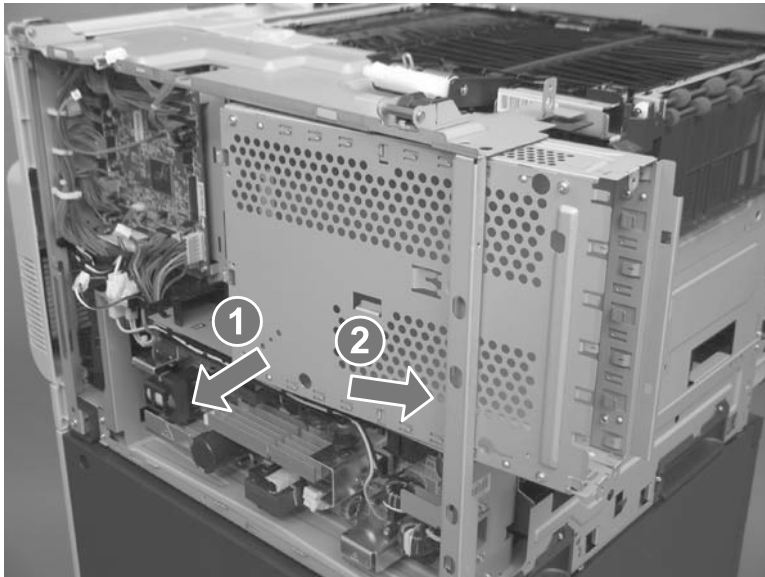Figure 1-309 Remove the low-voltage power supply (4 of 8)

4. Remove three screws.

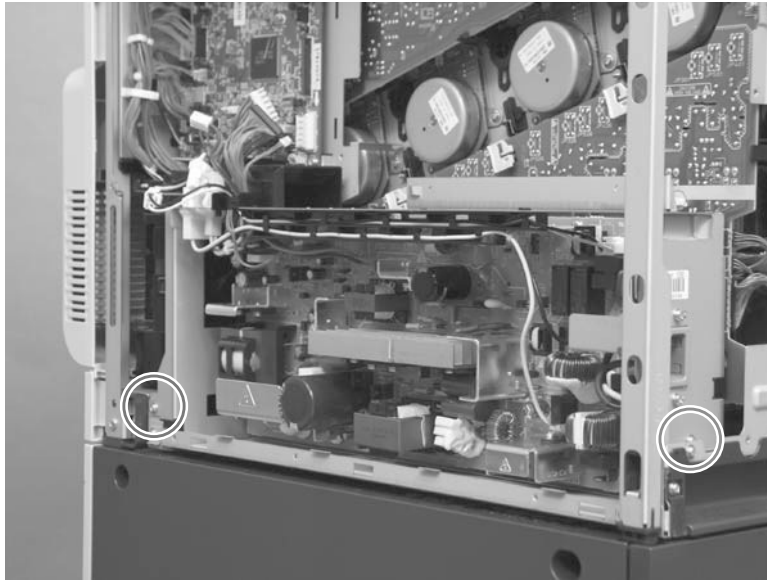**Figure 1-310** Remove the low-voltage power supply (5 of 8)

5. Slide the end of the formatter cage away from the product (callout 1) and the slide the cage out of the product (callout 2).

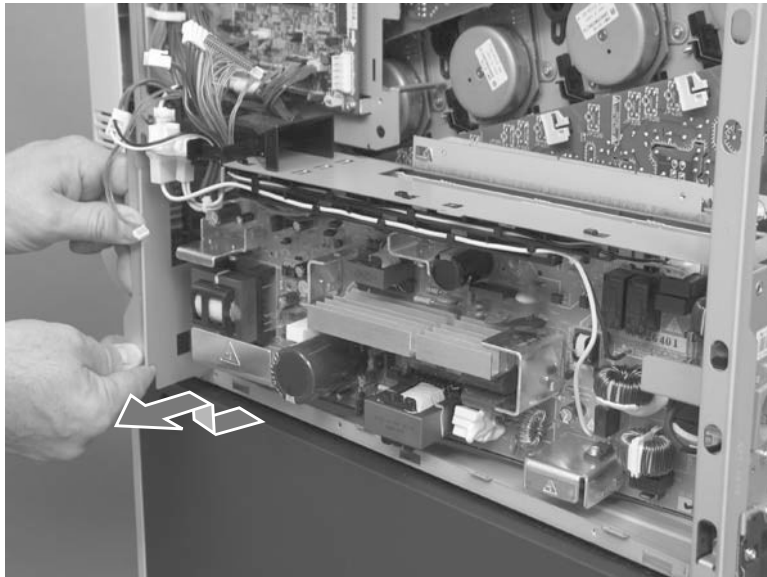**Figure 1-311** Remove the low-voltage power supply (6 of 8)

6. Remove two screws.

    Figure 1-312 Remove the low-voltage power supply (7 of 8)

7. Slide and then lift the end of low-voltage power supply until it is free of the product. Remove the low-voltage power supply.

    Figure 1-313 Remove the low-voltage power supply (8 of 8)

DC controller PCA and tray

Before proceeding, remove the following assemblies

M651 models

- Formatter. See Formatter PCA on page 9.

- Upper left cover. See Upper left cover (M651) on page 117.

- Left rear cover. See Left rear cover on page 119.

- Rear cover. See Rear cover (M651) on page 121.

- Face-down tray. See Face-down tray (M651) on page 134.

- Face-down rear cover. See Face-down rear cover (M651) on page 136.

- Interconnect board. See Interconnect board (ICB) (M651) on page 194.

- Low-voltage power supply. See Low-voltage power supply (LVPS) on page 200.

M680 models

- Formatter. See Formatter PCA on page 9.

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.

- Scanner rear cover. See Scanner rear cover on page 79.

- Document feeder. See Document feeder (ADF) on page 80.

- Scanner assembly. See Image scanner assembly on page 103.

- Fan cover. See Fan cover (M680) on page 118.

- Left rear cover. See Left rear cover on page 119.

- Rear cover. See Rear cover (M680) on page 122.

- Interconnect board (ICB). See Interconnect board (ICB) (M680) on page 196.

- Low-voltage power supply. See Low-voltage power supply (LVPS) on page 200.

Remove the DC controller PCA and tray

⚠ **CAUTION:** ⬛ESD ESD-sensitive assembly.

1. Disconnect all the connectors.

    💡 **Reinstallation tip** M651: The connector locations J101, J102, J106, and J154 are not used.

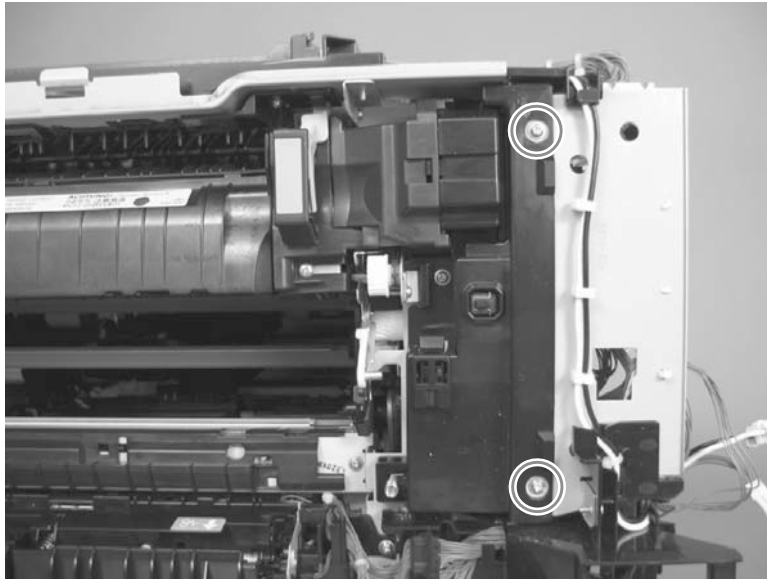   M680: The connector locations J101 and J102 are not used.

Figure 1-314 Remove the DC controller PCA and tray (1 of 3)
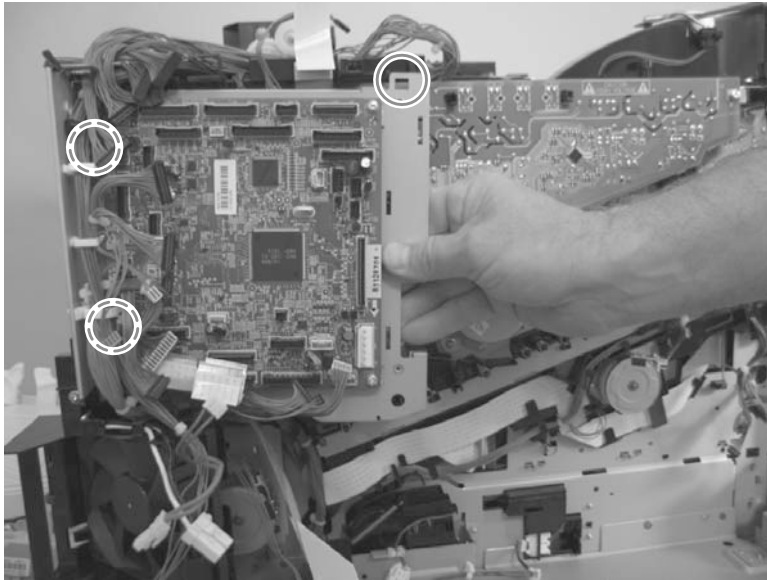

2.   Remove two screws.

Figure 1-315 Remove the DC controller PCA and tray (2 of 3)

3. Disengage three tabs (two along the left edge of the PCA and one at the top-right corner of the PCA).

Figure 1-316 Remove the DC controller PCA and tray (3 of 3)

High-voltage power supply lower (HVPS-D)

Before proceeding, remove the following assemblies

M651 models

- Formatter. See Formatter PCA on page 9.

- Upper left cover. See Upper left cover (M651) on page 117.

- Left rear cover. See Left rear cover on page 119.

- Rear cover. See Rear cover (M651) on page 121.

- Face-down tray. See Face-down tray (M651) on page 134.

- Face-down rear cover. See Face-down rear cover (M651) on page 136.

- Interconnect board. See Interconnect board (ICB) (M651) on page 194.

- Low-voltage power supply. See Low-voltage power supply (LVPS) on page 200.

M680 models

- Formatter. See Formatter PCA on page 9.

- Standard output bin. See Standard output bin (M680) on page 52.

- Output bin bezel. See Output bin bezel (M680) on page 53.

- Scanner rear cover. See Scanner rear cover on page 79.

- Document feeder. See Document feeder (ADF) on page 80.

- Scanner assembly. See Image scanner assembly on page 103.

- Fan cover. See Fan cover (M680) on page 118.

- Left rear cover. See Left rear cover on page 119.

- Rear cover. See Rear cover (M680) on page 122.

- Interconnect board (ICB). See Interconnect board (ICB) (M680) on page 196.

- Low-voltage power supply. See Low-voltage power supply (LVPS) on page 200.

> **NOTE:** This assembly is also called the high-voltage power supply PCA lower assembly.

Remove the high-voltage power supply lower

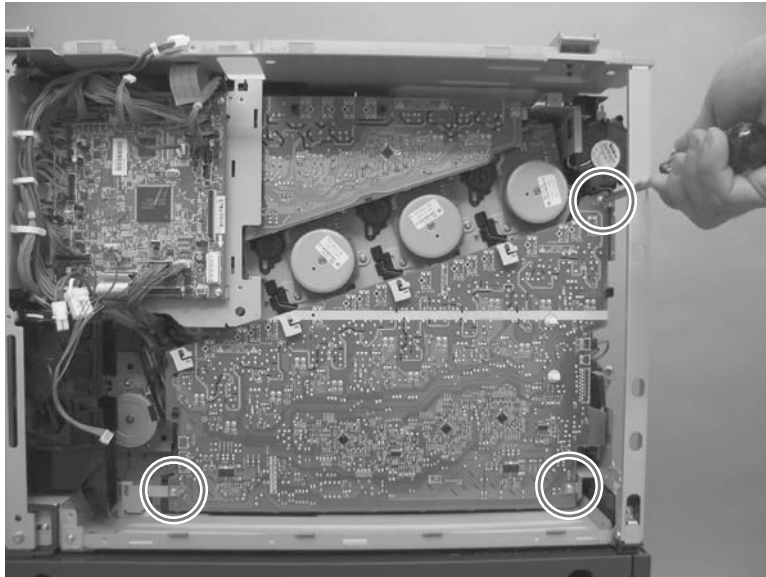> **CAUTION:** [ESD] ESD-sensitive assembly.

1. Disconnect three connectors.

Figure 1-317 Remove the high-voltage power supply lower (1 of 7)
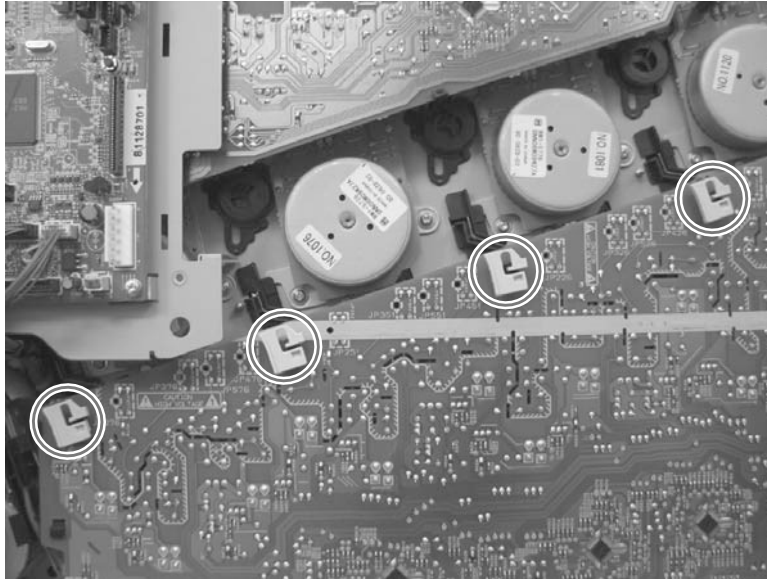

2. Remove three screws.

Figure 1-318 Remove the high-voltage power supply lower (2 of 7)

3. Release four locking clips.

📝 **NOTE:** Squeeze each locking clip to remove.

Figure 1-319 Remove the high-voltage power supply lower (3 of 7)

Figure 1-320 Remove the high-voltage power supply lower (4 of 7)