

Delivery fan

- 1 Remove the back cover. See page 228.
- 2 Disconnect one connector (callout 1).
- 3 Pry the two hooks (callout 2) away from the delivery fan.

Note

If you need to remove the duct, remove one screw (callout 3) and unhook the duct from the chassis. A long-shaft screwdriver might be needed.

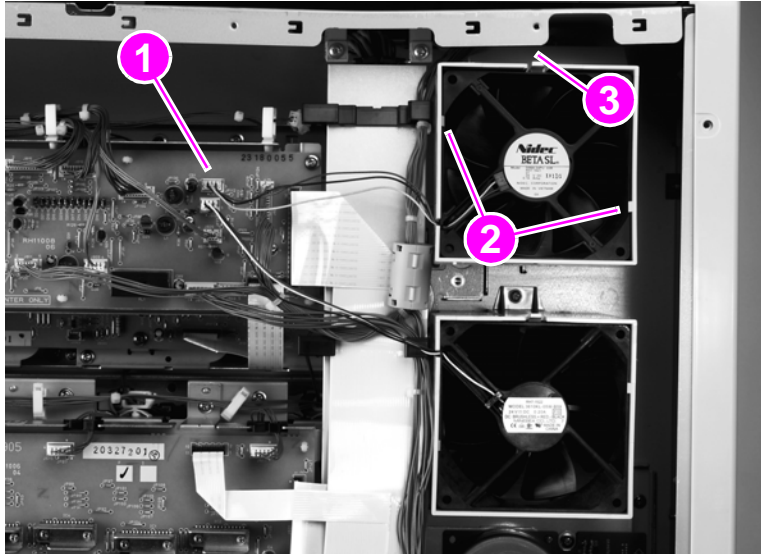


Figure 218. Remove the delivery fan

- 4 Remove the delivery fan.

Fuser fan

- 1 Remove the back cover. See page 228.
- 2 Disconnect one connector (callout 1).
- 3 Pry the two hooks (callout 2) away from the fuser fan.

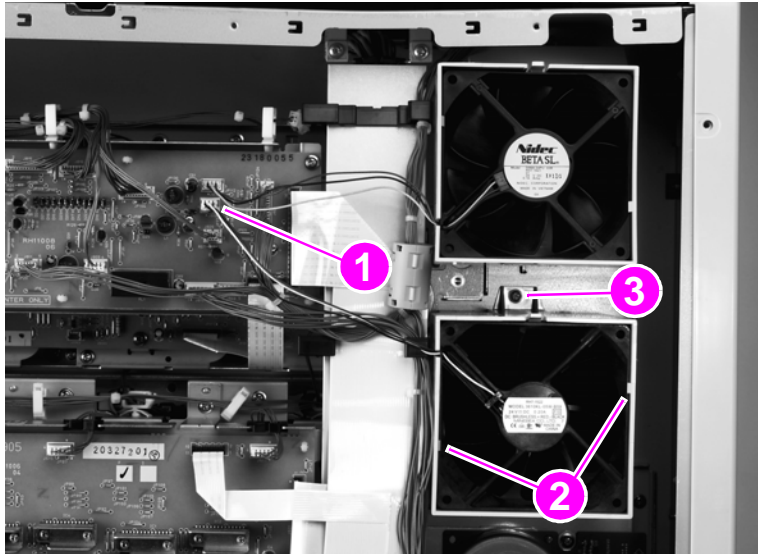


Figure 219. Remove the fuser fan

- 4 Remove the fuser fan.

Note

If you need to remove the duct, remove one screw (callout 3) and unhook the duct from the chassis. A long-shaft screwdriver might be needed.

P-crg (image drum) drive assembly

CAUTION

The P-crg drive assembly is heavy. Do not drop the assembly when you remove it. You *must* remove the four process cartridges (image drums) before removing the P-crg drive assembly. See page 203.

- 1 Remove the following covers and FRUs:
 - Back cover. See page 228.
 - Intermediate transfer belt. See page 260.
 - Delivery fan. See page 290.
 - Fuser fan and duct. See page 291.
 - High voltage power supply. See page 281.
 - High voltage contact. See page 306.
- 2 Remove three screws (callout 1). Disconnect two flat cables from the cable channel to the P-crg assembly (callout 2). Move the cable channel to the right, away from the P-crg assembly.

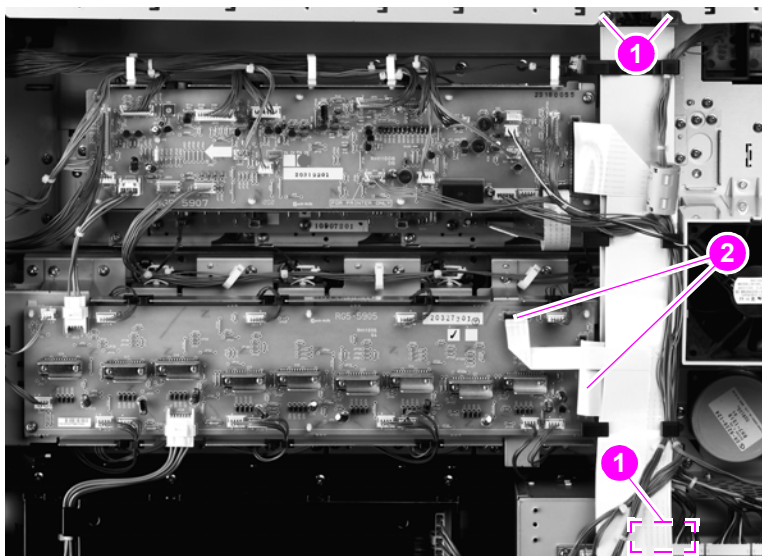


Figure 220. Disconnect the P-crg drive assembly connectors

3 Use the following steps to remove the right back ITB lift link:

CAUTION

Do *not* remove the e-ring (callout 5) from the cam assembly.

- a Remove the retainer clip and washer by using needlenose pliers (callout 3).
- b Use a small flatblade screwdriver to lift and unclip the retaining claw (callout 4) on the white, plastic cam assembly.

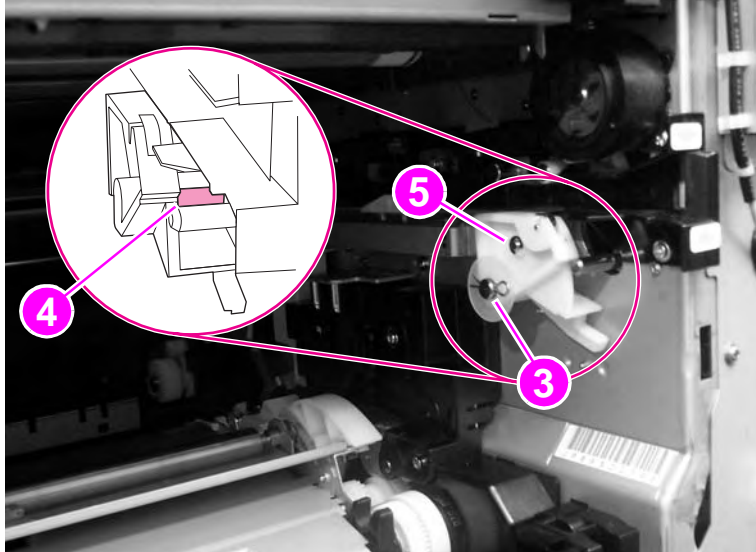


Figure 221. Remove the right back ITB lift link (1 of 2)

- c Slide the right back ITB lift cam to the left and off.

CAUTION

Make sure that you do not bend the right back ITB lift linkage by pulling out too far.



Figure 222. Remove the right back ITB lift link (2 of 2)

- 4 Disconnect the P-crg drive assembly connectors (callout 6; ribbon cables are not shown). Unhook the wire clips as required.

CAUTION

Make sure that you remove the P-crg drive assembly connectors carefully. The connectors and ribbon cables can break easily, particularly the three lead connectors from the p-crg drive assembly. Pull each wire with equal force and make sure to pull the connectors straight out and perpendicular to the board. Failing to properly remove the connectors might result in broken connectors, broken solder pads, or board leads.

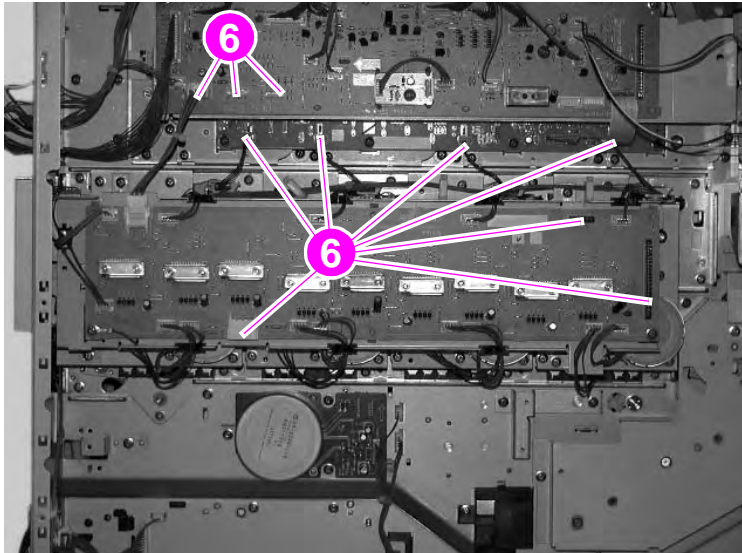


Figure 223. Disconnect the P-crg drive assembly

- 5 Remove twelve screws (callout 7).

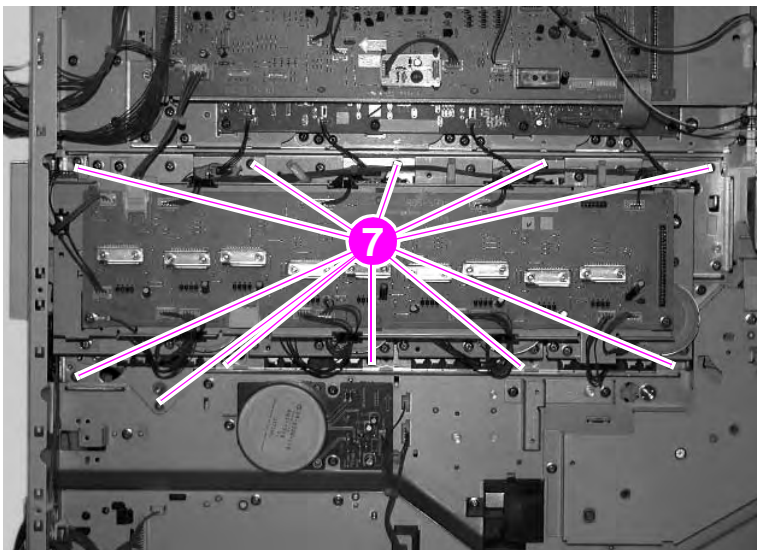


Figure 224. Remove the P-crg drive assembly mounting screws

CAUTION

The P-crg drive assembly is heavy.

Place the assembly upside-down on a table to avoid damage to the assembly.

Do not bend the high-voltage leaf spring on the backside of the assembly.

-
- 6** Lift the P-crg drive assembly off of the retaining hooks and remove it.
 - 7** Print a laser/scanner adjustment test page. Make sure that all of the laser/scanners are adjusted correctly. See page 233.

T-crg (print cartridge) drive assembly

Note

You *must* remove the four toner cartridges (print cartridges) prior to removing the T-crg drive assembly. See page 201.

- 1 Remove the following covers and FRUs:
 - Back cover. See page 228.
 - Delivery fan and fan duct. See page 290.
 - Fuser fan and duct. See page 291.
- 2 Remove three screws (callout 1). Disconnect two flat cables from the cable channel to the P-crg assembly (callout 2). Move the cable channel to the right, away from the T-crg assembly.

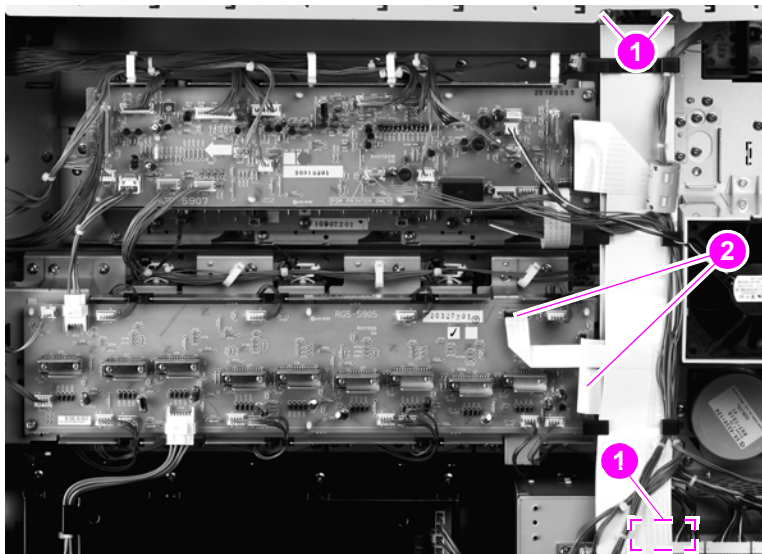


Figure 225. Disconnect the T-crg drive assembly

- 3 Disconnect all cable connectors except J813, J814, and J802. Remove 10 screws (callout 3).

CAUTION

Make sure that the T-crg drive assembly cable connectors are removed carefully. The connectors can break easily. Make sure that you remove the T-crg drive assembly connectors carefully. The connectors and ribbon cables can break easily, particularly the three lead connectors from the T-crg drive assembly. Pull each wire with equal force and make sure to pull the connectors straight out and perpendicular to the board. Failing to properly remove the connectors might result in broken connectors, broken solder pads, or board leads.

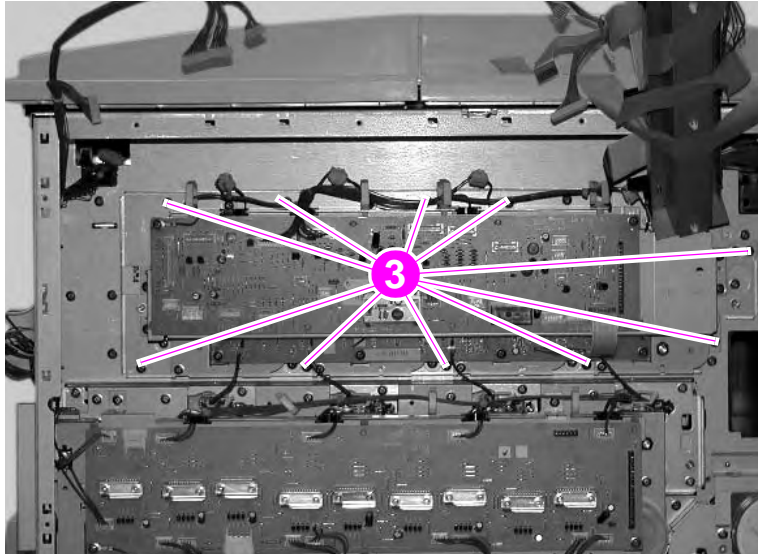


Figure 226. Remove the T-crg drive assembly mounting screws

- 4 Lift the T-crg drive assembly off of the retaining hooks and remove it.

CAUTION

Place the assembly upside-down on a table to avoid damage to the assembly.

Fuser motor

- 1 Remove the back cover. See page 228.
- 2 Remove three screws (callout 1), and disconnect one connector (callout 2).

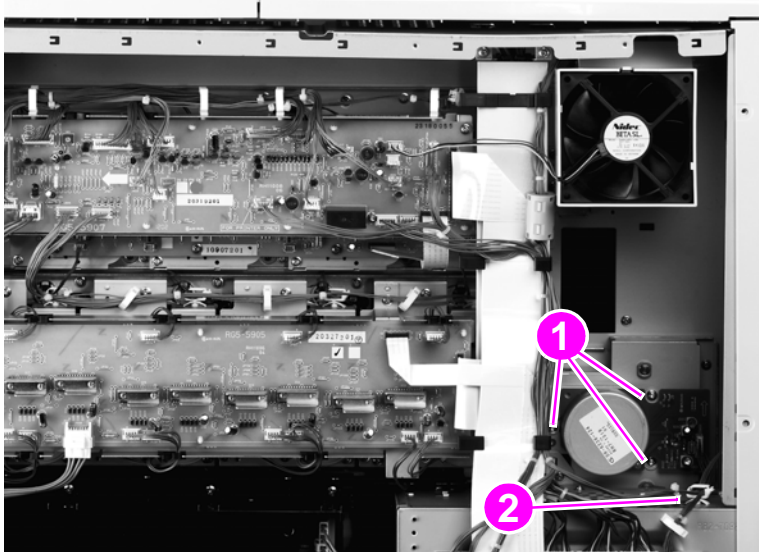


Figure 227. Remove the fuser motor

- 3 Remove the fuser motor.

Fuser drive assembly

- 1 Remove the following covers and FRUs:
 - Back cover. See page 228.
 - Fuser motor. See page 298.
 - Formatter cage. See page 304.
 - High voltage contact. See page 306.
- 2 Remove four screws (callout 1).

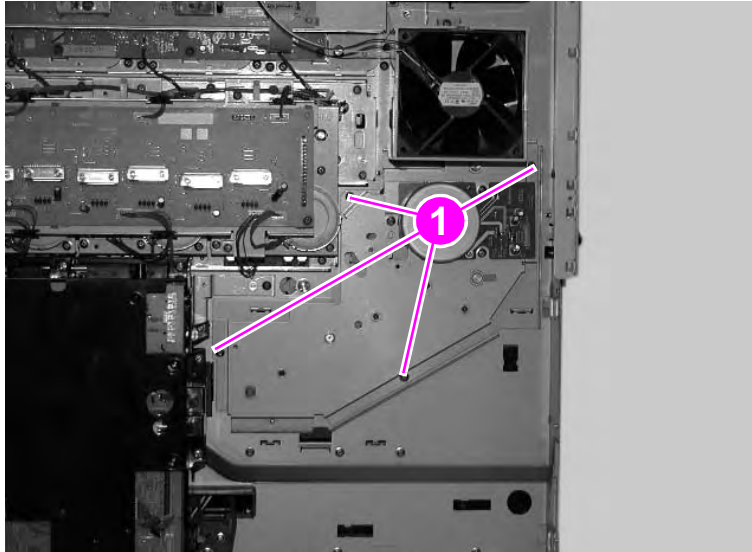


Figure 228. Remove the fuser drive assembly mounting screws

- 3 Remove the fuser drive assembly.

DC controller

- 1 Remove the back cover. See page 228.
- 2 Disconnect all of the connectors on the board.

CAUTION

Make sure that you remove the DC controller connectors carefully. The connectors and ribbon cables can break easily. Pull each wire with equal force and make sure to pull the connectors straight out and perpendicular to the board. Failing to properly remove the connectors might result in broken connectors, broken solder pads, or board leads.

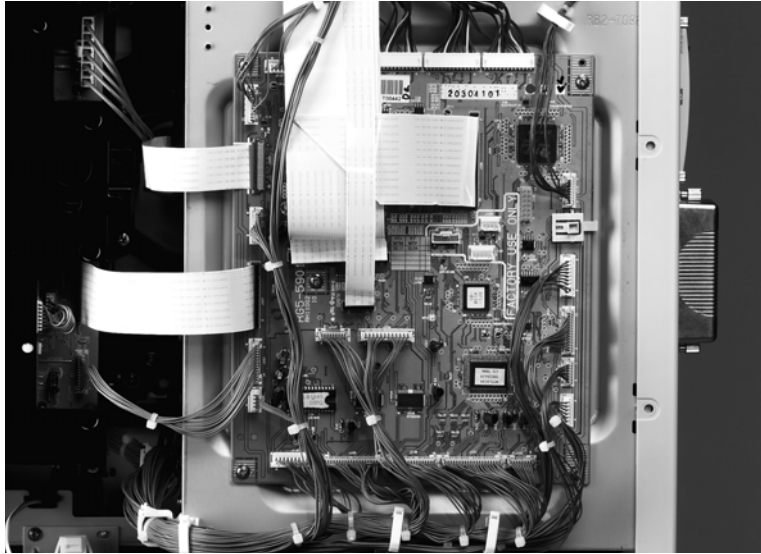


Figure 229. Disconnect the DC controller connectors

- 3 Remove five flat flexible cables (FFCs) (callout 1).

Note

The FFCs have three different types of connectors.

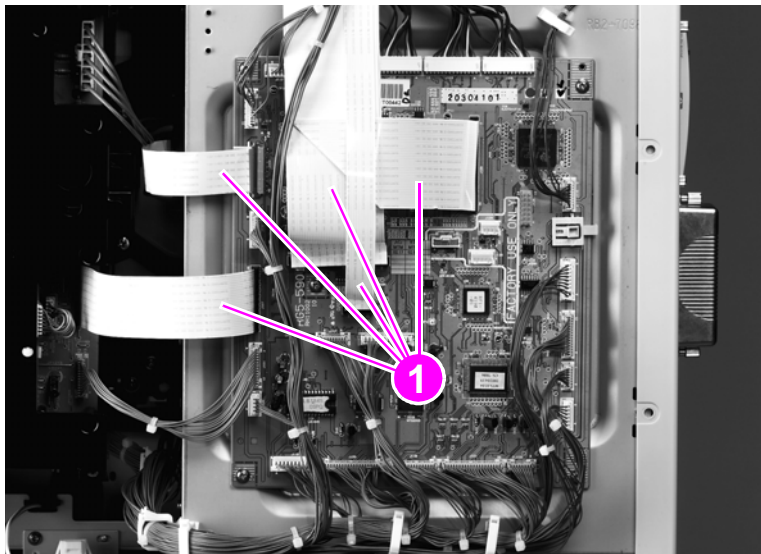


Figure 230. Remove the DC controller FFCs

- 4 Remove five screws (callout 2).

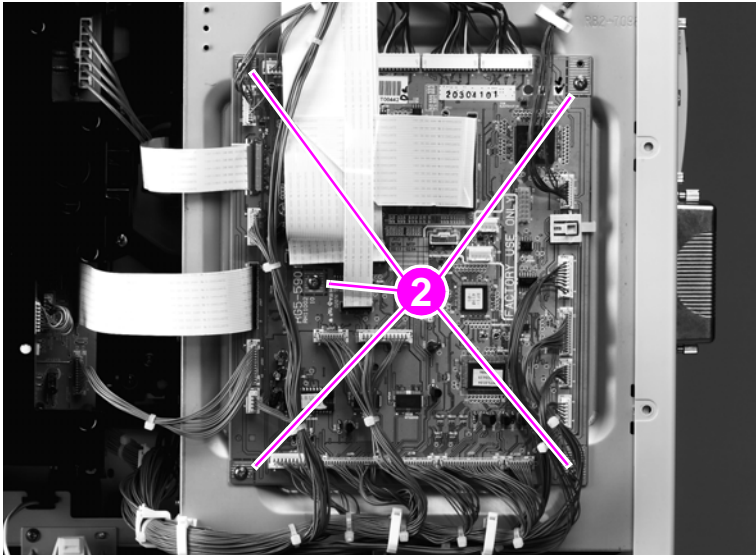


Figure 231. Remove the DC controller mounting screws

- 5 Remove the DC controller.

To reinstall

Make sure that the cables and the FFCs are reinstalled in the correct location, and that they are centered correctly into the connector. Not centering the cables and the FFCs correctly can cause motor, consumables, and other error messages.

Make sure that the FFC does not back out of the connector when the retaining clip is fastened.

CAUTION

One of the FFC connectors must be flipped up before removing or reinstalling the FFC.

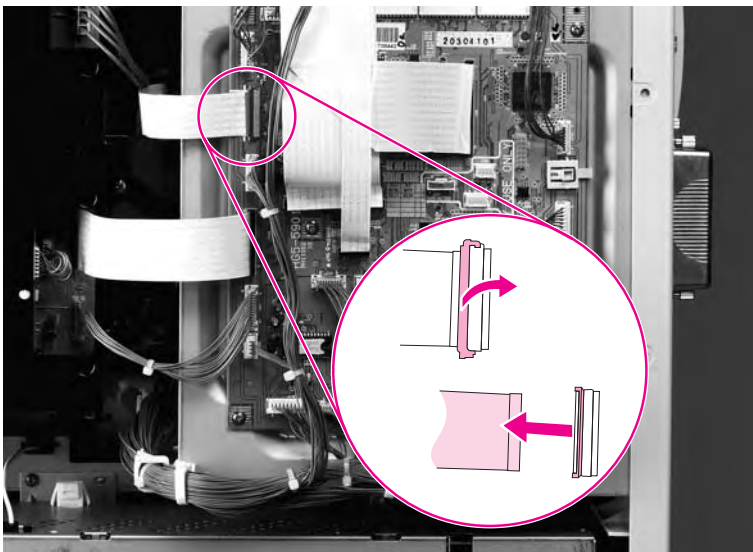


Figure 232. Verify that the DC controller connectors and FFCs are connected properly

Formatter PCB

CAUTION

When the formatter is replaced (for both the CLJ9500 and the CLJ 9500mfp) remove the firmware DIMM or compact flash memory and install it on the replacement formatter. Transferring the memory from the removed PCB to the replacement PCB will make sure that critical product values (for example, the serial number and page counts) are preserved and kept with the product.

Do not replace the formatter *and* firmware memory at the same time. If both the formatter and firmware memory must be replaced follow three steps. First, install the firmware memory from the removed formatter on the replacement formatter, and then install the replacement formatter in the product. Second, turn the product power on, and then off two times. Third, install the replacement firmware memory on the replacement formatter, reinstall the replacement formatter in the product, and turn the power on.

Note

Outdated firmware is the cause of many problems that result in formatter PCB replacement. Both the CLJ 9500 and the CLJ 9500mfp use flashable firmware memory. Up dating the firmware can solve most formatter PCB problems. Before replacing the formatter PCB, try upgrading the firmware. See “Firmware upgrades to the printer or MFP” on page 109.

Note

Although they are attached the same way, the formatter for the printer model is different from the one for the MFP. See “Formatter” on page 158.

The formatter in the HP LaserJet 9500 Series printer is similar to the formatter in the HP LaserJet 9500mfp, but the formatter is not an interchangeable component. Do not install a LJ 9500 formatter into a CLJ 9500mfp or a MFP formatter into a CLJ 9500.

- 1 Remove eight screws (callout 1).



Figure 233. Remove the formatter PCB mounting screws

2 Remove the formatter PCB.



Figure 234. Remove the formatter PCB

Formatter cage

Note

The formatter in the HP LaserJet 9500 Series printer is similar to the formatter in the HP LaserJet 9500mfp, but the formatter is not an interchangeable component. Do not install a LJ 9500 formatter into a LJ 9500mfp or a MFP formatter into a LJ 9500.

- 1 Remove the following covers and FRUs:
 - Back cover. See page 228.
 - DC controller. See page 300.
 - Formatter PCB. See page 302.
- 2 Remove three screws (callout 1).

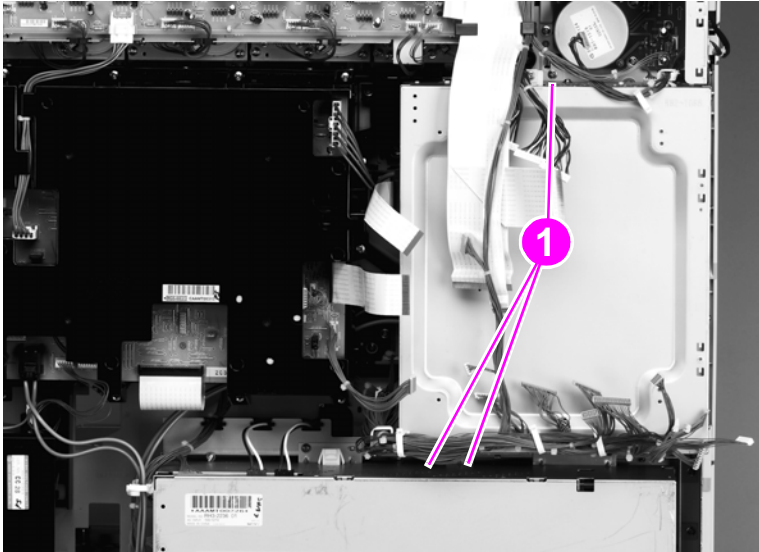


Figure 235. Remove the formatter cage mounting screws

- 3 Unclip six wire harnesses (callout 2).

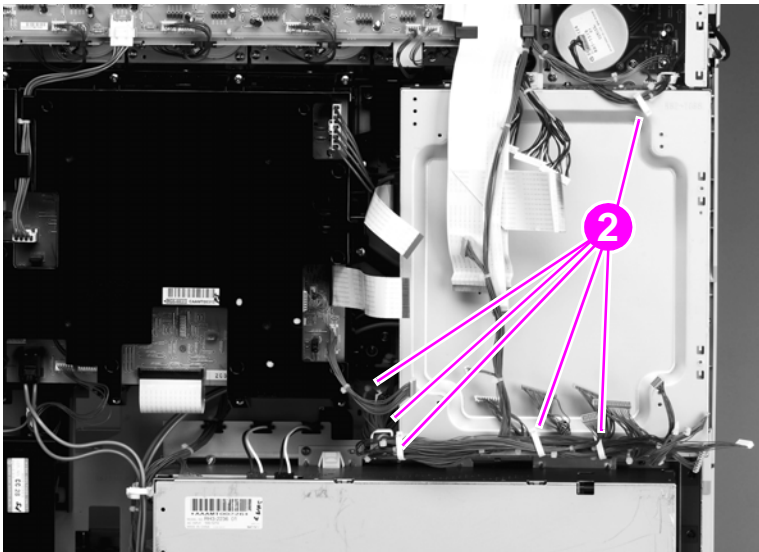


Figure 236. Unclip the formatter cage wire retainers

Hint

Disconnect the small, flat cable from the formatter connector.

- 4 Reach inside the formatter cage and squeeze the formatter connector locking tabs. Push the connector out of the cage.

Note

Do not pull the cable connector too hard.

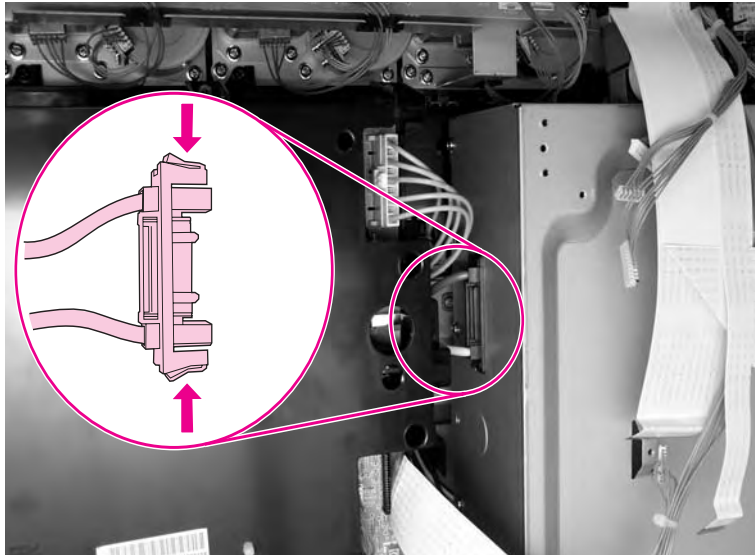


Figure 237. Unplug the formatter PCB connector

- 5 Remove six screws (callout 4).

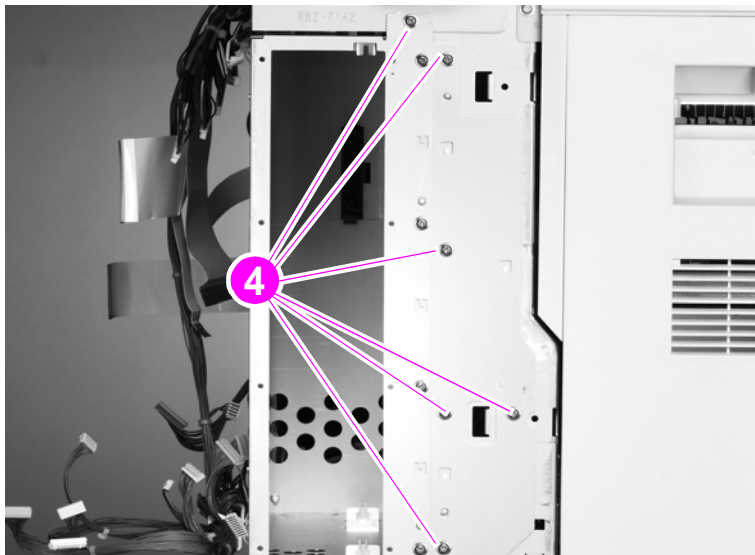


Figure 238. Remove the formatter cage mounting screws

- 6 Remove the formatter cage.

High-voltage contact

- 1 Disconnect one connector (callout 1), and remove three screws (callout 2).

Note

In this picture, the formatter cage is removed so that you can see the screws more easily. Removing the formatter cage is not required to remove the high-voltage contact. It is, however, much easier to remove the contact when the formatter cage is removed.

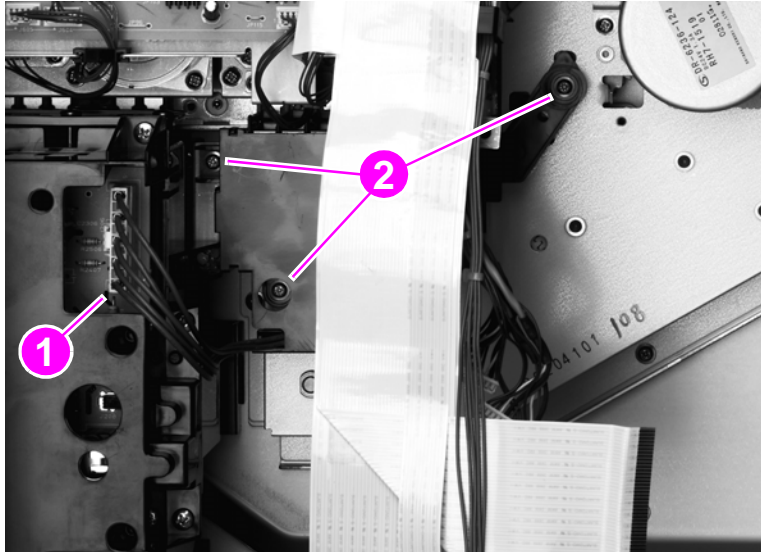


Figure 239. Remove the high-voltage contact

- 2 Remove the high-voltage contact.

Post charger power supply

- 1 Remove the back cover. See page 228.
- 2 Disconnect two connectors (callout 1).

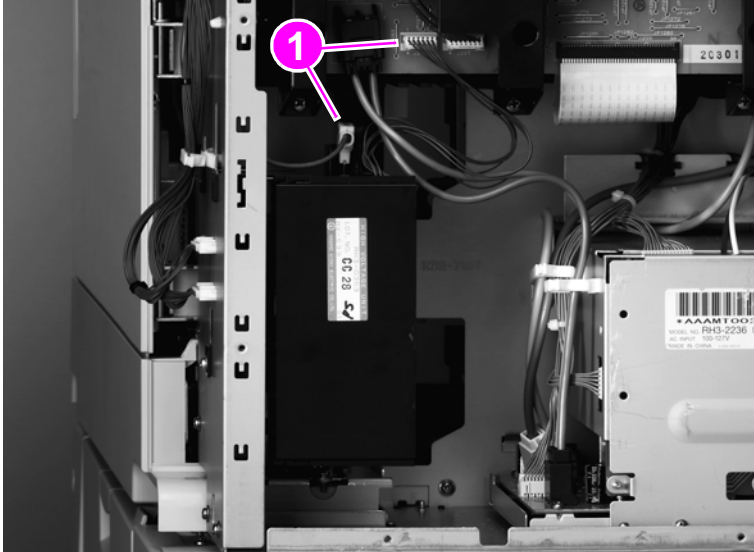


Figure 240. Disconnect the post charger connectors

- 3 Remove the shield (callout 2).

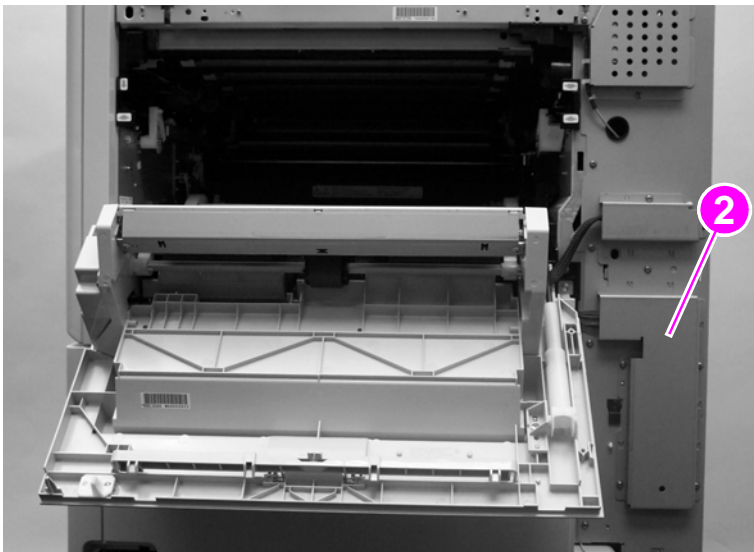


Figure 241. Remove the cable shield

- 4 Remove one screw (callout 3).

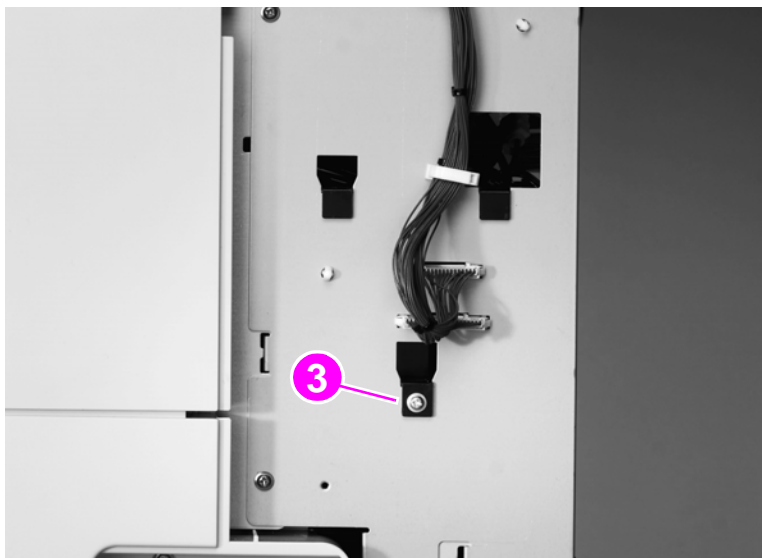


Figure 242. Remove the post charger mounting screw

- 5 Lift up the post charger slightly and remove it.

Tray 1 pickup roller

- 1 Open the ITB door.
- 2 Unhook one claw (callout 1), slide the roller holder (callout 2), and remove the tray 1 pickup roller (callout 3).

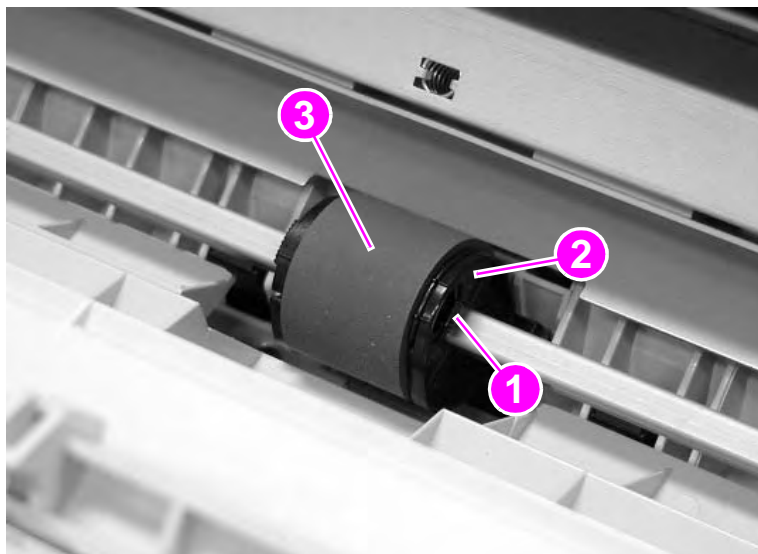


Figure 243. Remove the tray 1 pickup roller

Tray 1 separation pad

- 1 Remove the ITB door.
- 2 Remove the tray 1 pickup roller. See page 309.
- 3 Unhook two claws (callout 1), and remove the pad cover (callout 2).

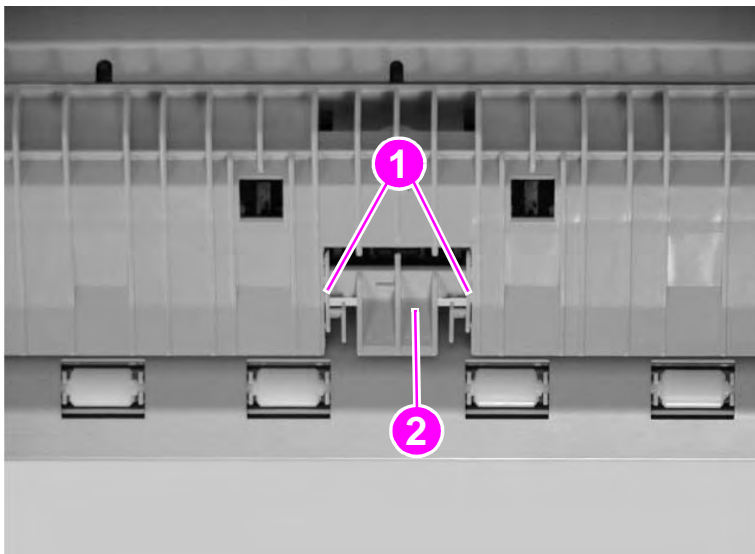


Figure 244. Unhook the tray 1 separation pad

- 4 Unhook two claws (callout 3), and remove the separation pad (callout 4).

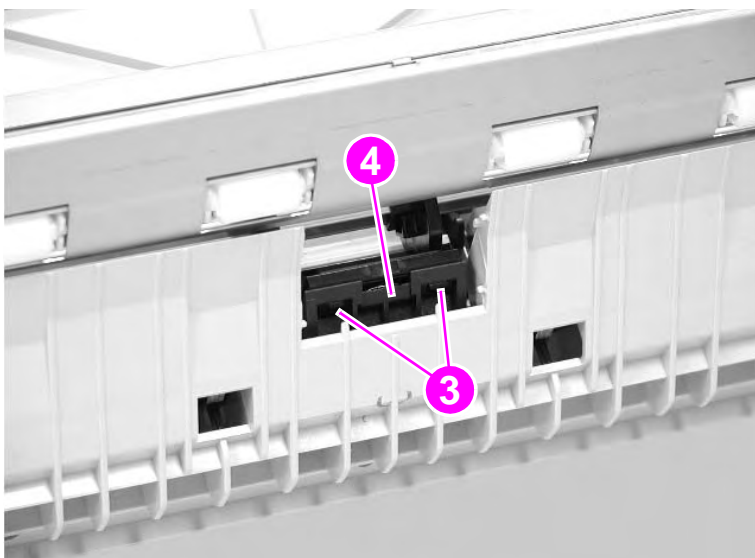


Figure 245. Remove the tray 1 separation pad

Left door switch

- 1 Remove the left front door. See page 217.
- 2 Remove the ITB cleaner
- 3 Open the drum door.
- 4 Remove three screws (callout 1), and remove the inner cover (callout 2).

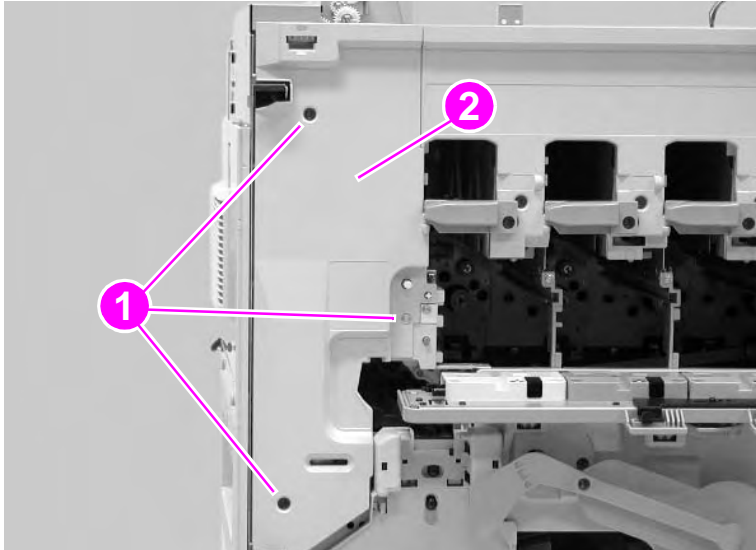


Figure 246. Remove the left door switch cover

- 5 Remove two screws (callout 3), disconnect one connector (callout 4), and remove the left door switch (callout 5).

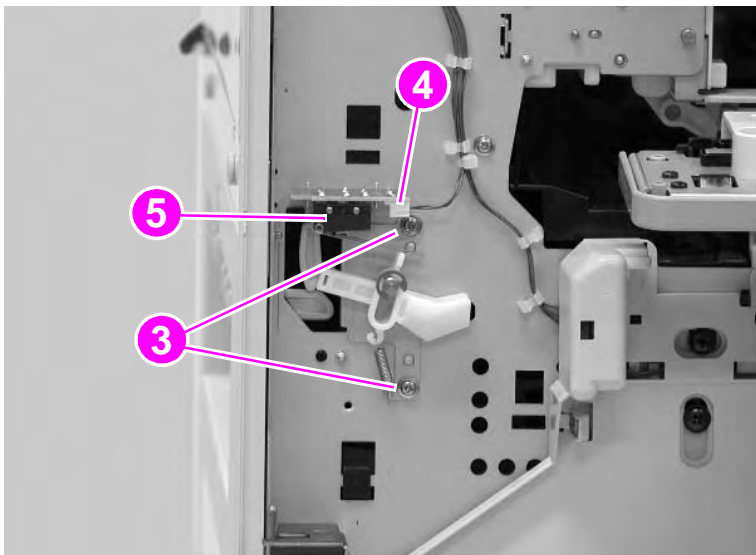


Figure 247. Remove the left door switch mounting screws

Right door switch (front and right side doors)

- 1 Remove the right upper cover. See page 210.
- 2 Remove two screws (callout 1), disconnect one connector (callout 2), and remove the right door switch (callout 3).

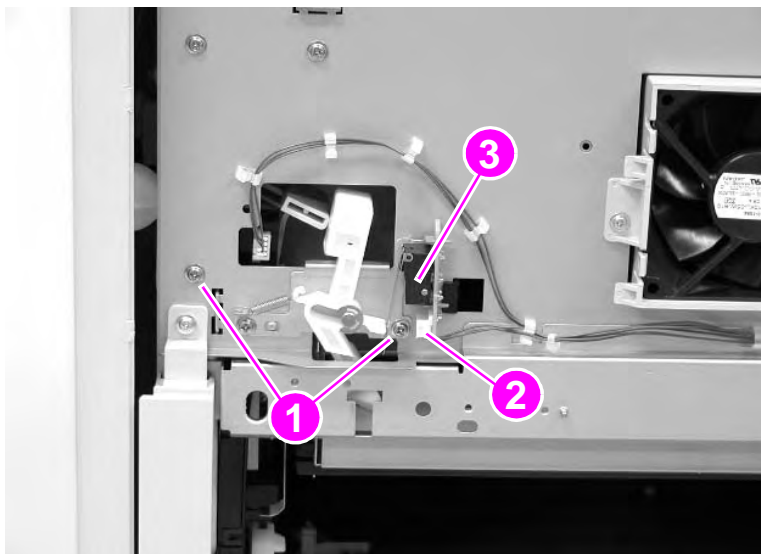


Figure 248. Remove the right door switch mounting screws

Hint It is easiest to reconnect the connector *before* fastening the right door switch to the printer chassis.

ITB sensor

- 1 Remove the density and registration sensor assembly. See page 262.
- 2 Unhook five claws (callout 1), and remove one cable cover (callout 2).

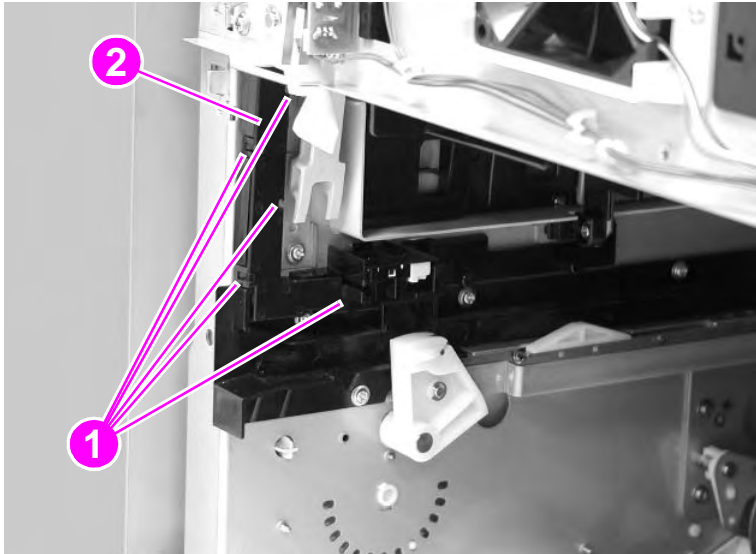


Figure 249. Unhook the ITB sensor cable cover

- 3 Disconnect one connector (callout 3), and remove the ITB sensor (callout 4).

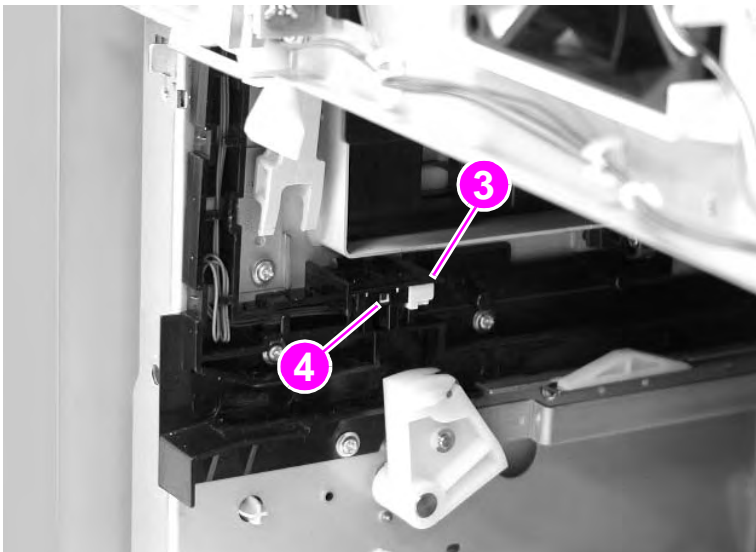


Figure 250. Disconnect the ITB sensor connector

Upper left door sensor

- 1 Remove the delivery unit. See page 249.
- 2 Disconnect one connector (callout 1), and remove the upper left door sensor (callout 2).

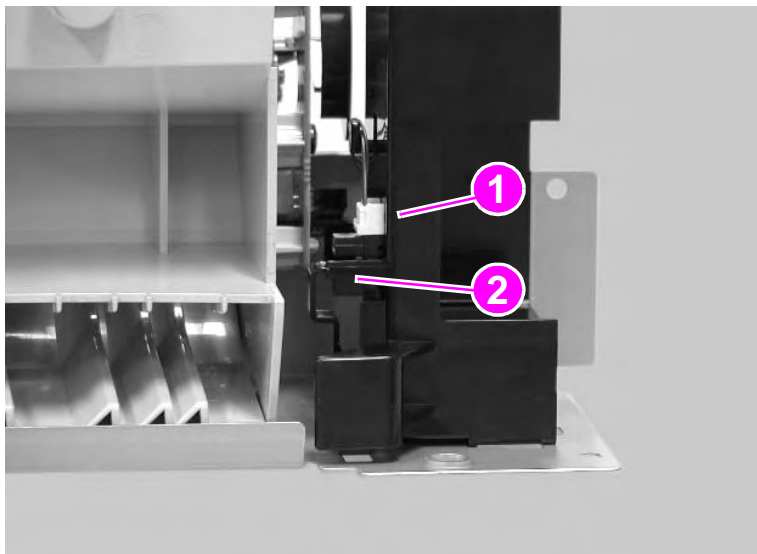


Figure 251. Disconnect the upper left door sensor

Fuser front paper sensor

- 1 Remove the fuser. See page 259.
- 2 Remove two screws (callout 1), unhook two claws (callout 2), and remove the fuser front guide (callout 3).

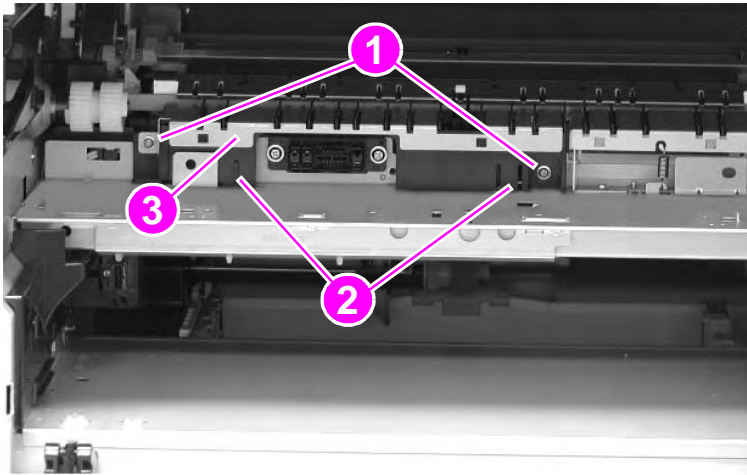


Figure 252. Remove the fuser front paper sensor mounting screws

- 3 Disconnect one connector (callout 4), and remove the fuser front paper sensor (callout 5).

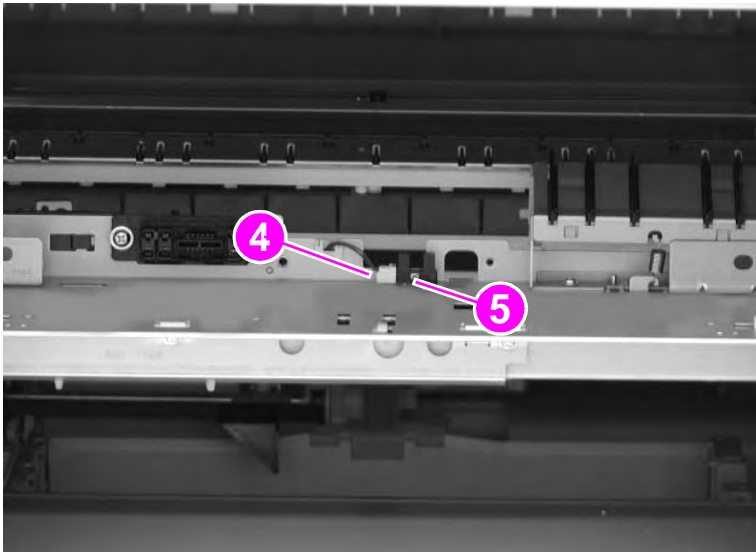


Figure 253. Disconnect the fuser front paper sensor

Fuser sensor PCA

- 1 Open the fuser door.
- 2 Remove the duplexer (if installed). See page 258.
- 3 Remove two screws (callout 1), and remove the fuser sensor bracket (callout 2).

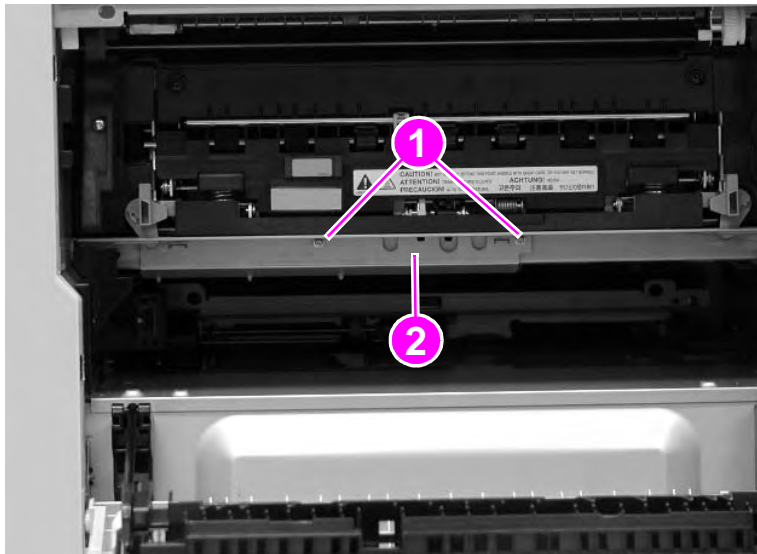


Figure 254. Remove the fuser sensor PCA mounting screws

- 4 Disconnect one connector (callout 3), remove two screws (callout 4), and remove the fuser sensor PCA (callout 5).

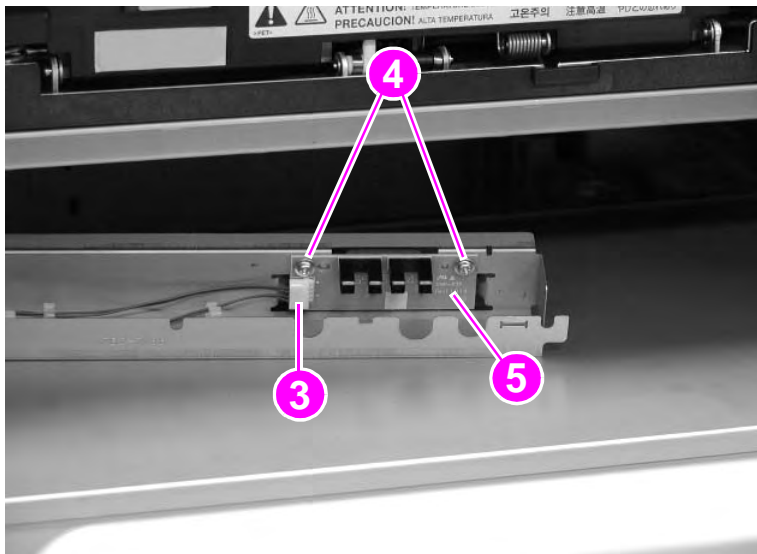


Figure 255. Disconnect the fuser sensor PCA

2,000-sheet tray 4 for the HP LaserJet 9500hdn printer

Note

The following removal and replacement procedures are for the 2,000-sheet feeder for the LJ 9500hdn printer. For removal and replacement instructions for the MFP 2,000-sheet side feeder, see the *2,000-sheet Side-input Tray Service Manual* (PN Q1891-90901).

Note

The printer shown below is not a HP color LaserJet 9500hdn. However, the tray 4 shown is the same one installed on a HP color LaserJet 9500hdn.

The following covers and assemblies can be removed from the 2000-sheet feeder:

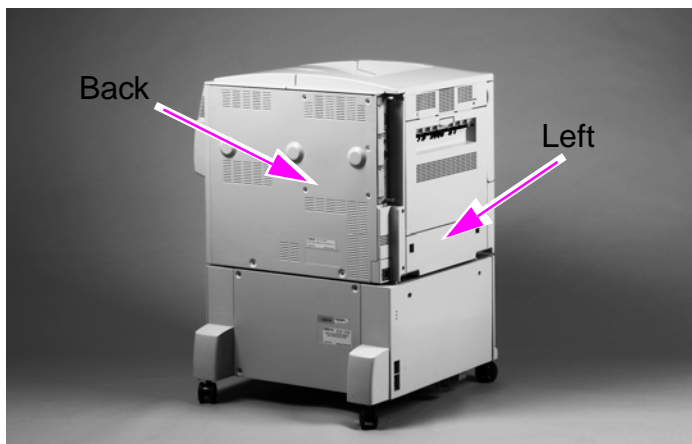
- left side cover
- right side cover
- back covers
- tray assembly
- tray 4 rollers (pickup, feed, and separation)
- registration assembly
- drive motor
- drive assembly
- controller board
- paper-size detection switch PCB
- power supply
- pickup assembly
- paper connecting unit

Front and right side orientation



Figure 256. View of front and right side

Back and left side orientation



Left side cover

- 1 Remove two screws (callout 1) from the left side cover.
- 2 Pull the top edge of the cover outward.
- 3 Lift the left side cover up and outward to remove it from the 2000-sheet feeder.

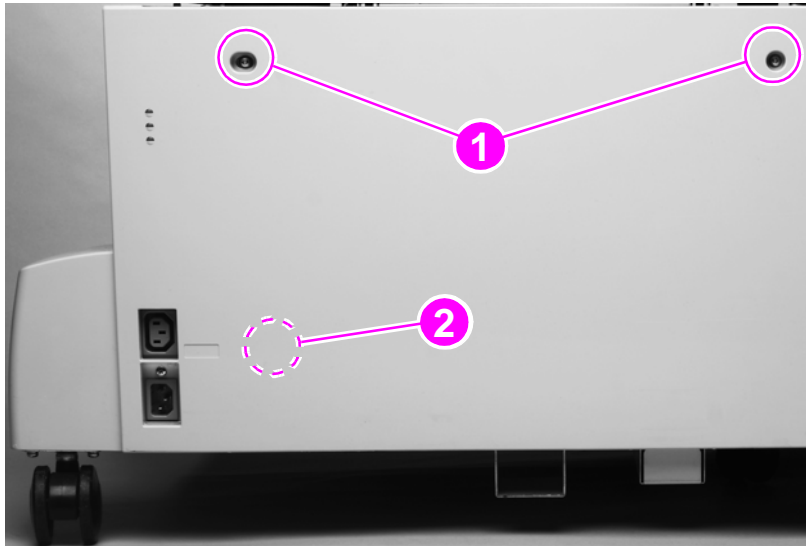


Figure 257. Removing the left side cover

To reinstall

Make sure the hook (callout 2) on the inside of the cover connects correctly.

Right side cover

- 1 Remove two screws (callout 1) from the right side cover.
- 2 Pull the top edge of the cover outward.
- 3 Lift the right side cover up and out to remove it from the 2000-sheet feeder.

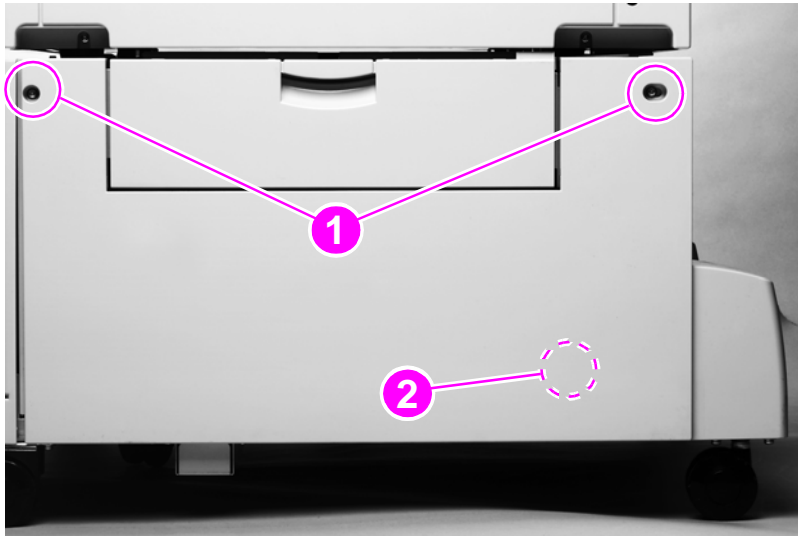


Figure 258. Removing the right side cover

To reinstall

Make sure the hook (callout 2) on the inside of the cover connects correctly.

Back covers

Center back cover

- 1 Remove four screws (callout 1) from the center back cover.
- 2 Remove the center back cover.

Right back cover

- 1 Remove the center back cover.
- 2 Slide the right back cover (callout 2) toward the center to release an interior tab.
- 3 Lift the right back cover straight up to release a second interior tab.

Note

Be sure to keep the right back cover vertically aligned with the 2000-sheet feeder. Otherwise, the second interior tab will not release.

- 4 Pull the right back cover out to remove it.

Left back cover

- 1 Remove the center back cover.
- 2 Slide the left back cover (callout 3) toward the center to release an interior tab.
- 3 Lift the left back cover straight up to release a second interior tab.

Note

Be sure to keep the left back cover vertically aligned with the 2000-sheet feeder. Otherwise, the second interior tab will not release.

- 4 Pull the left back cover out to remove it.

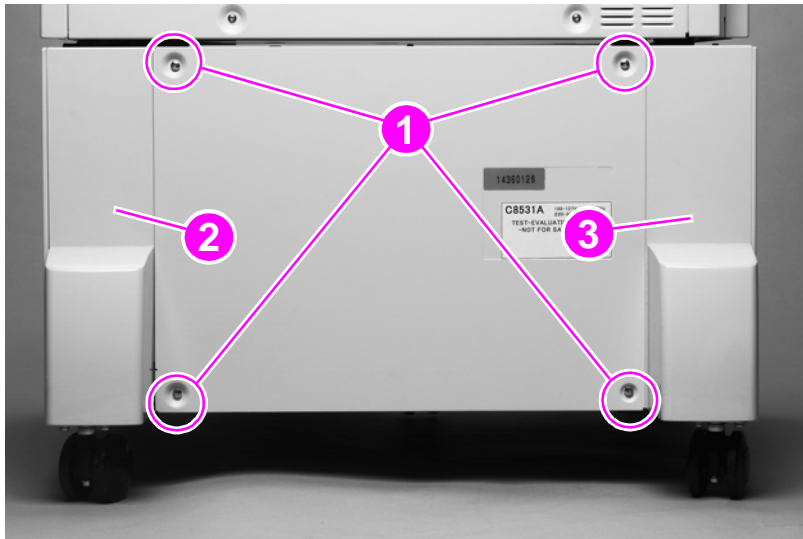


Figure 259. Removing the back covers

Tray 4

CAUTION

Tray 4 is heavy and can be damaged if dropped. Use both hands when removing the tray.

Note

The MFP uses a 2,000-sheet side-input feeder as tray 4. For information about the MFP feeder, see the *2,000-Sheet Side-input Tray Service Manual* (PN Q1891-90901).

- 1 Open tray 4 (the tray assembly), and remove all paper.
- 2 Pull the tray assembly out until it stops.
- 3 Press the release button (callout 1) on the right side of the tray and the release button (not shown) on the left side of the tray.
- 4 Continue to press the two release buttons, and pull the tray assembly out of the chassis.

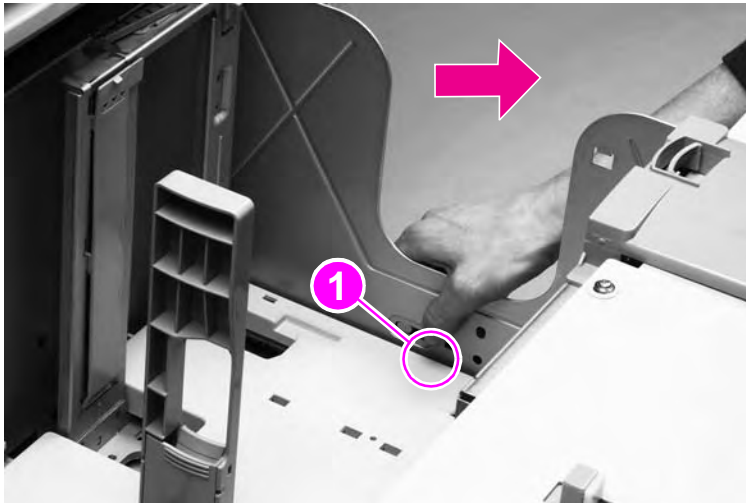


Figure 260. Removing tray 4

Rollers (pickup, feed, and separation)

- 1 Remove tray 4 (page 321).
- 2 Locate the appropriate roller on the upper right side of the tray cavity. The pickup roller (callout 1), feed roller (callout 2), and separation roller (callout 3) are all type 2 rollers.

Note

To gain access to the separation roller, slide the blue roller shield toward the back of the 2000-sheet feeder (as shown in figure 261).

- 3 Pinch the tab on the end of each roller to release it.
- 4 Slide the roller off the shaft.

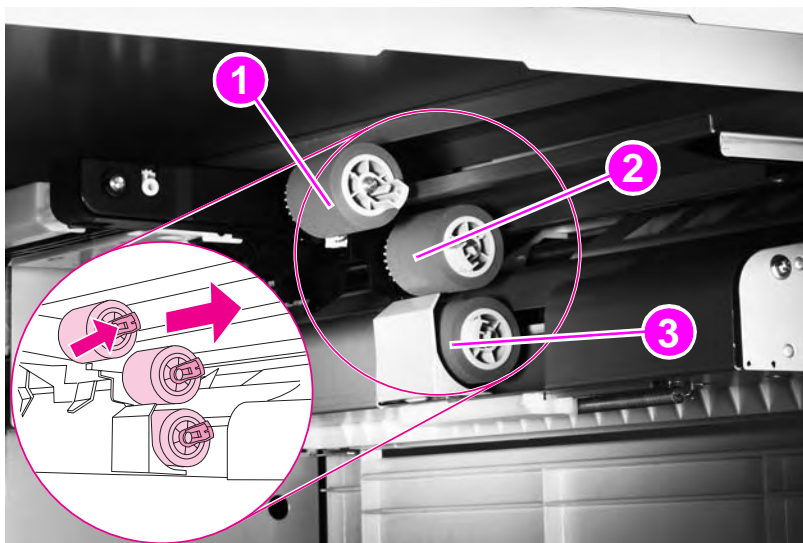


Figure 261. Removing the rollers

To reinstall

- You do not need to slide the blue shield back over the separation roller. It will reset automatically.
- Verify that each roller is locked in place by attempting to remove it without first pinching the tab.

Registration assembly

- 1 Remove the right side cover (page 319).
- 2 Remove four screws (callout 1).

CAUTION

Use care when following step 3. Three cables are connected to the registration assembly.

- 3 Gently lift the registration assembly off the 2000-sheet feeder, and unplug three connectors (callout 2) from the rear of the registration assembly.

Note

If you cannot reach the three cable connectors, remove the center back cover (page 228), remove the right back cover (page 320), and unplug the connectors (figure 263, callout 3) from the back of the 2000-sheet feeder.

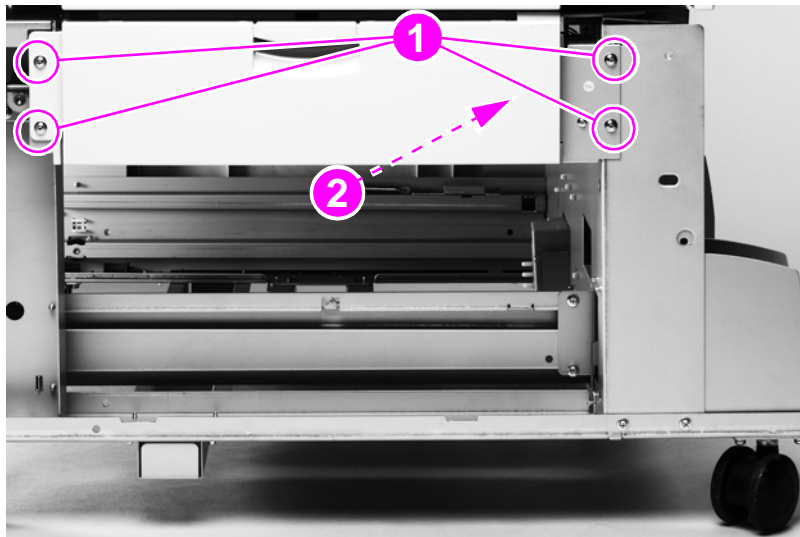


Figure 262. Removing the registration assembly (1 of 2)

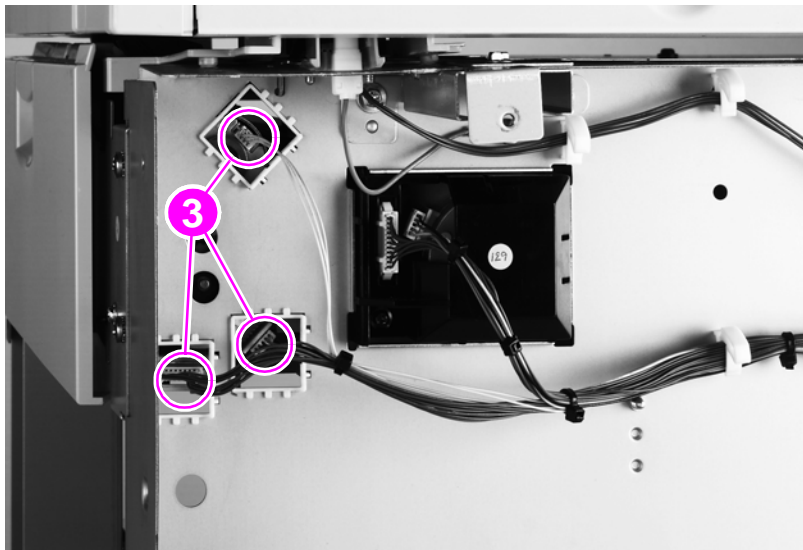


Figure 263. Removing the registration assembly (2 of 2)

Drive motor

- 1 Remove the center back cover (page 320).
- 2 Unplug the cable connector (callout 1) from the controller board.
- 3 Carefully unwind the cable from the cable guides (callout 2).
- 4 Remove two screws (callout 3).
- 5 Remove the drive motor from the 2000-sheet feeder.

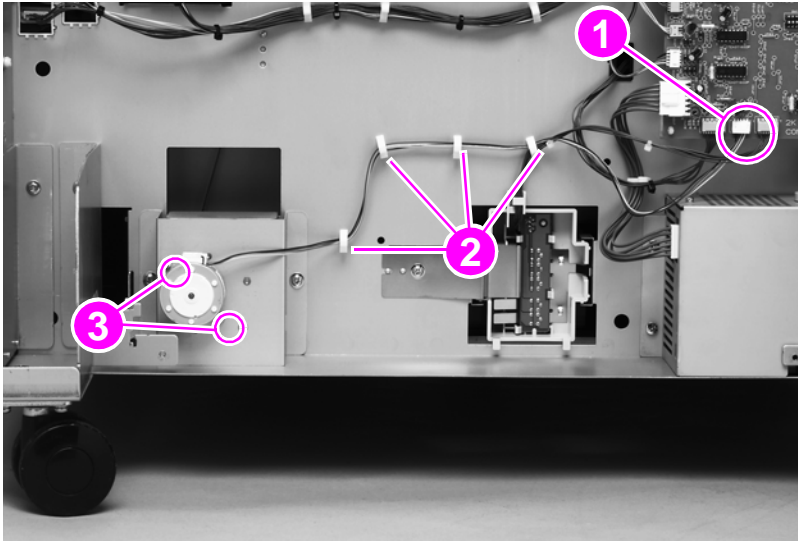


Figure 264. Removing the drive motor

Drive assembly

- 1 Remove the center back cover (page 320).
- 2 Unplug the cable connector (callout 1) from the controller board.
- 3 Carefully unwind the cable from the cable guides (callout 2).
- 4 Remove two screws (callout 3).
- 5 Remove the drive assembly from the 2000-sheet feeder.

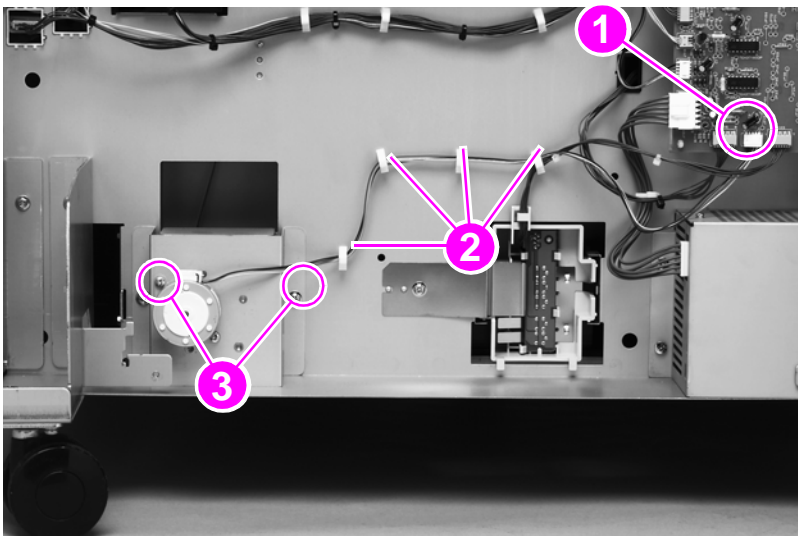


Figure 265. Removing the drive assembly

Controller board

- 1 Remove the center back cover (page 320) and the left back cover (page 320).
- 2 Unplug eleven connectors (callout 1).

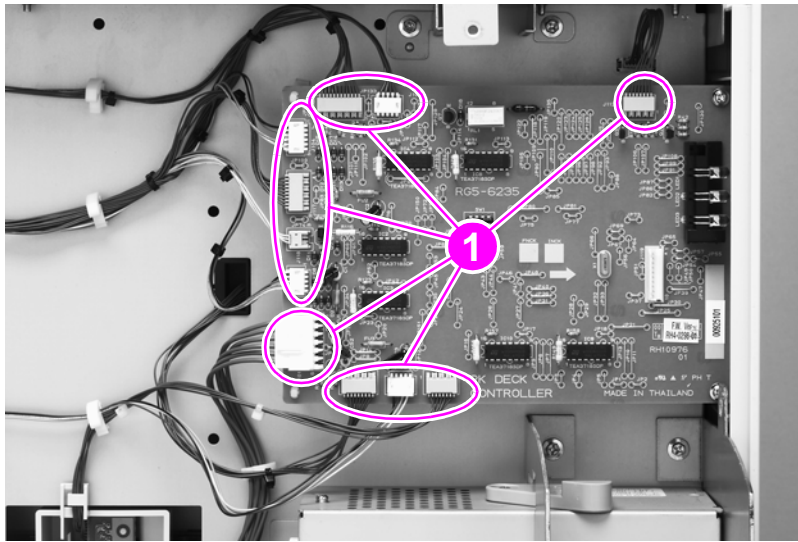


Figure 266. Removing the controller board (1 of 2)

- 3 Remove two screws (callout 2).
- 4 Release two holding pins (callout 3).
- 5 Remove the controller board from the 2000-sheet feeder.

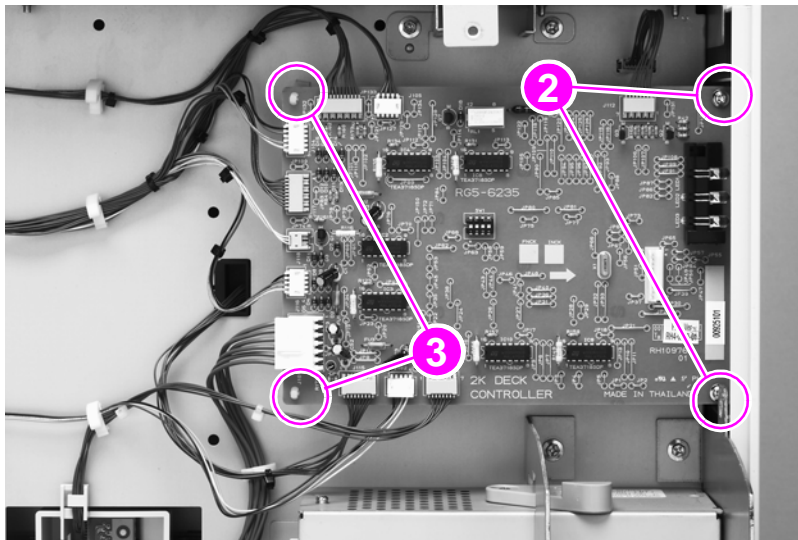


Figure 267. Removing the controller board (2 of 2)

Paper-size detection switch PCB

- 1 Remove the center back cover (page 320).
- 2 Remove one screw (callout 1) to remove the leaf spring (callout 2).

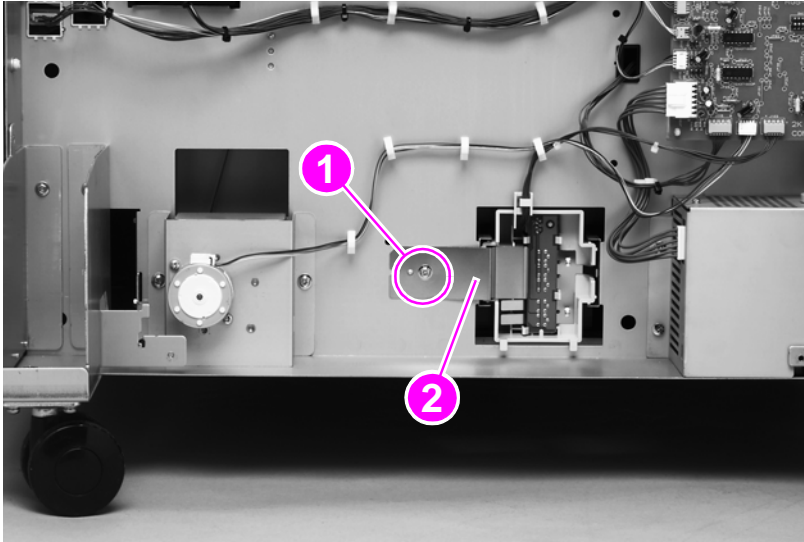


Figure 268. Removing the paper-size switch PCB (1 of 2)

- 3 Release four tabs (callout 3), and remove the PCB from the casing.
- 4 Unplug the cable connector (callout 4).

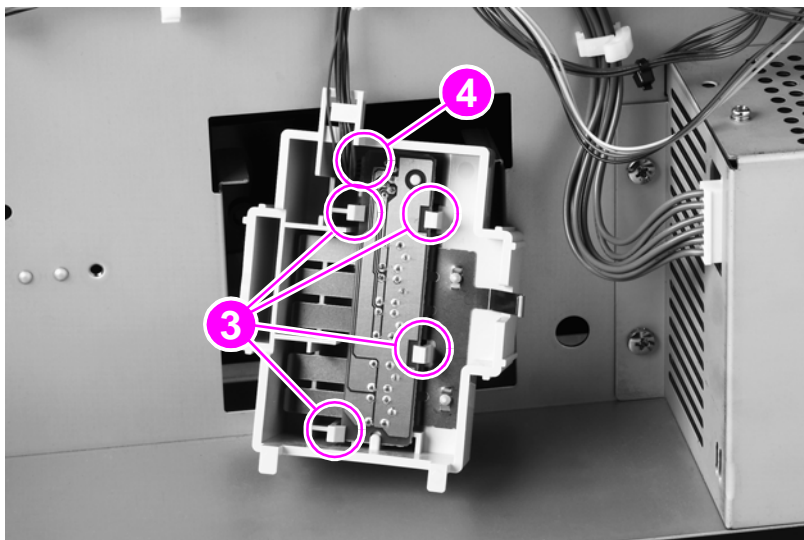


Figure 269. Removing the paper-size switch PCB (2 of 2)

To reinstall

Open the paper tray (tray 4) slightly, so that it does not put pressure on the casing.

Power supply

- 1 Remove the center back cover (page 320) and the left back cover (page 320).
- 2 Unplug one connector (callout 1).
- 3 Remove two screws (callout 2).
- 4 Slide the power supply to the left to remove it.

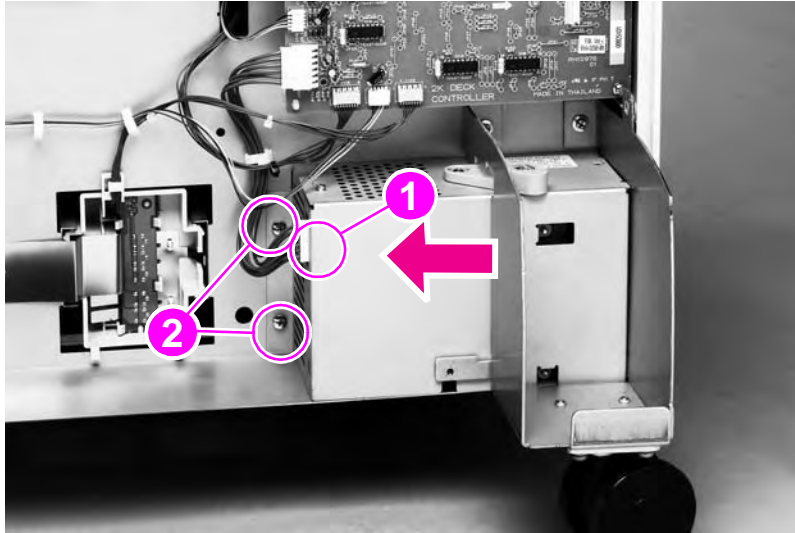


Figure 270. Removing the power supply

Pickup assembly

- 1 Remove the tray assembly (page 321).
- 2 Remove the right side cover (page 319), the center back cover (page 320), and the right back cover (page 320).
- 3 Remove the registration assembly (page 323).
- 4 From the back of the 2000-sheet feeder, unplug two connectors (callout 1).

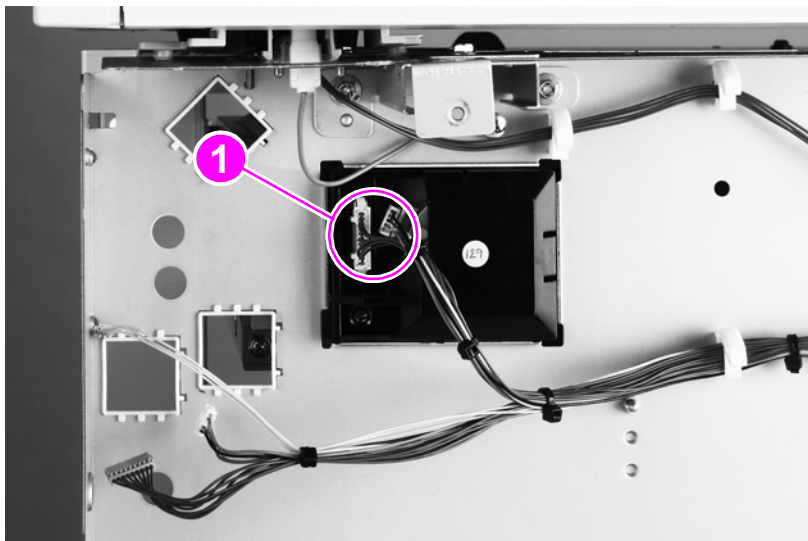


Figure 271. Removing the pickup assembly (1 of 2)

- 5 From the front of the 2000-sheet feeder, remove one screw (callout 2).
- 6 Lift the pickup assembly off the hook (callout 3) to remove it from the 2000-sheet feeder.

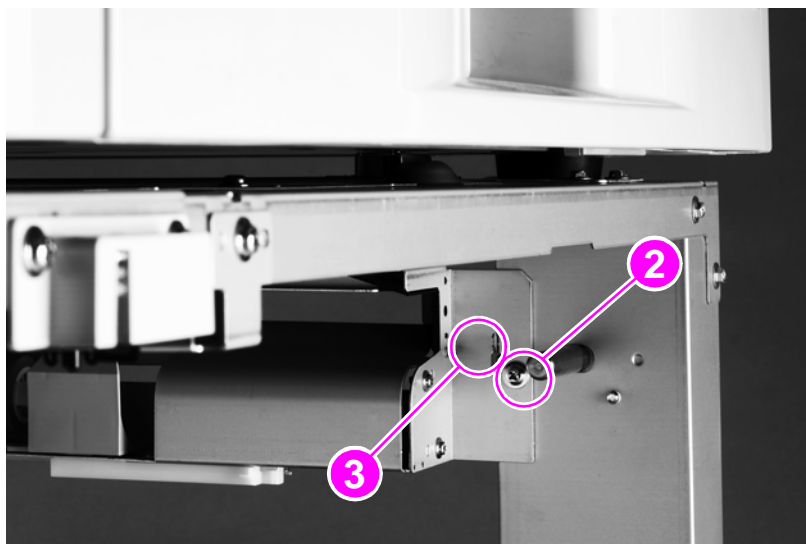


Figure 272. Removing the pickup assembly (2 of 2)

Paper connecting unit

- 1 Release the two levers (callout 1) by pulling them toward the center of the paper connecting unit.
- 2 Lift the paper connecting unit straight up and remove it.

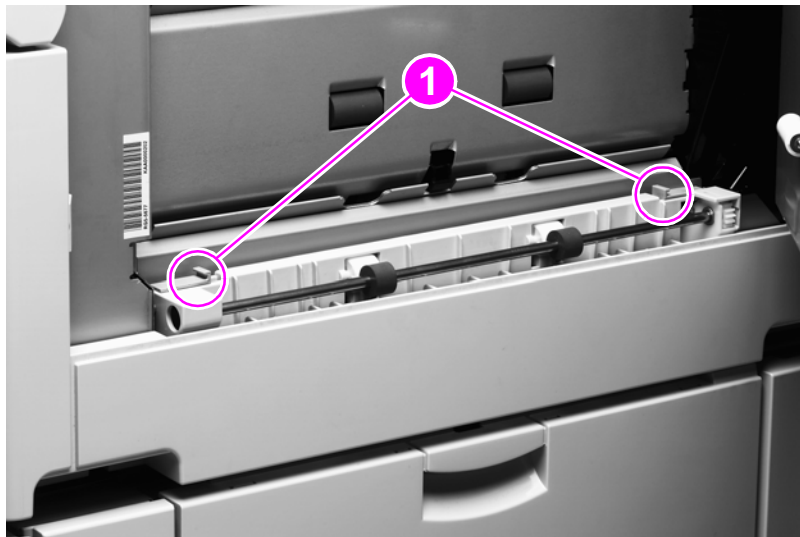


Figure 273. Removing the paper connecting unit