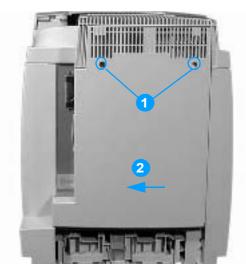
# **Replacing the Laser Scanner Assembly - HP LaserJet 4600 series**

### **Remove the Rear cover**

- 1 Remove the two screws shown in callout 1.
- 2 Pull out on the left side of the rear cover, and slide it to the left to remove it



### **Remove the Fuser**



### WARNING!

The fuser might be hot.

Wait 10 minutes for it to cool down before removing it.





# Remove the Top cover

- 1 Remove the fuser (covered in previous step.)
- 2 Using fingers or needle-nose pliers, pinch and release the white plastic clips (shown in callout 1) on the damper arm on the left side of the cover. It is easier to pinch these clips if you tip the top cover forward slightly.
- 3 Disengage the tab shown in callout 2 and remove the retaining block.
- 4 Push the cover to the left to release the hinge pin on the right side. Then pull the cover to the right to release the hinge pin on the left side.

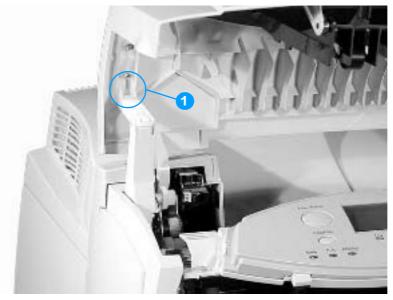
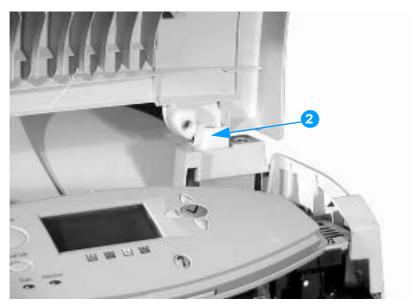


Figure 6-3 Removing and replacing the top cover (1 of 2)



#### Figure 6-4 Removing and replacing the top cover (2 of 2)

### Remove the Rear top cover

- **1** Remove the three screws shown in callout 1.
- 2 Insert a flat-blade screwdriver between the top and side covers on the left and right sides of the printer. Lift slightly to disengage the tabs (shown in callout 2) on the left and right sides of the printer.
- **3** Remove the rear top cover.

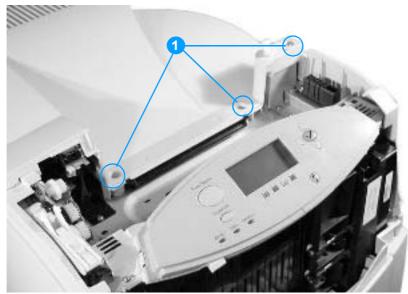


Figure 6-5 Remove 3 screws



Figure 6-6 Release right-side tab



Figure 6-7 Release left-side tab

# **Removing the Left cover**

- 1 Open the front cover.
- 2 Remove the screw shown in callout 1.
- 3 Disengage the two tabs (cicled as callout 2 in the 2 pictures below).
- 4 Tilt the top of the left cover away from the printer, and remove it.

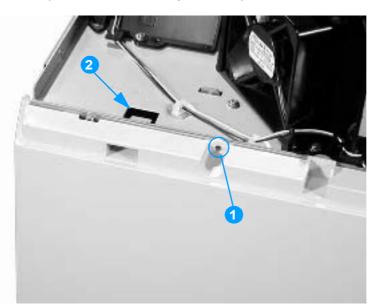


Figure 6-8 Screw, and Tab#1



Figure 6-9 Tab# 2

#### **Reinstallation tip**

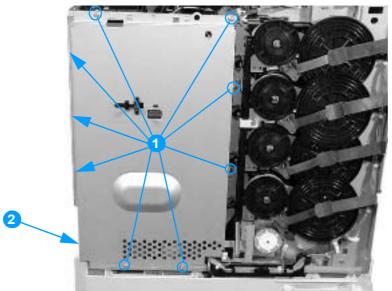
When reinstalling the left cover, be sure to insert the two hooks that are along the bottom edge of the cover into the holes in the printer frame.

### Remove the toner cartridges and transfer belt assembly

- 1 Open the front cover, pull on the green handle of the Transfer Belt assembly and lower it down.
- 2 At the bottom of the Transfer Belt Assembly, on either side are small blue latches. Press those latches in to release the assembly, while you lift the unit up, out, and away from the printer.
- **3** Remove the 4 toner cartridges.

# Remove the DC controller shield

- 1 Remove the 9 screws shown in callout 1.
- **2** A possible tenth screw might be located on the rear of the printer at the bottom of the DC controller shield (callout 2). If a screw is present, remove it.
- 3 Remove the DC controller shield.

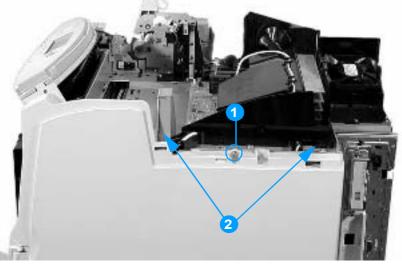


### Figure 6-17

Removing and replacing the DC controller shield

## **Removing the Right cover**

- 1 Open the front cover, and remove the screw shown in callout 1 of picture below.
- **2** Disengage the two tabs shown in callout 2.
- 3 Tilt the top of the right cover away from the printer and remove it.



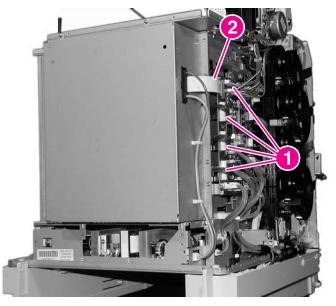
### **Reinstallation tip**

When reinstalling the right cover, be sure to insert the two hooks that are along the bottom edge of the cover into the holes in the printer frame.

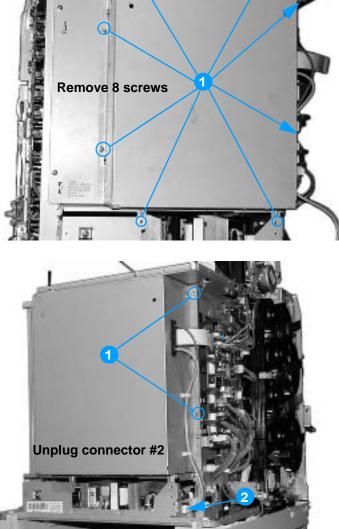
### **Replacing the Laser scanner**

#### Remove the laser/scanner cover plate

- 1 On the DC controller PCA, disconnect four connectors (callout 1 in picture below).
- 2 On the DC controller PCA, use a flatblade screwdriver to carefully release the brown tab over the ribbon cable, then disconnect the cable (callout 2 in picture below). Work gently to avoid tearing cable.



 Remove eight screws which hold the formatter case. Screw locations labeled callout 1 in pictures to the right.



Disconnect the connector shown in callout 3 in picture to the right.
Then remove the formatter case.

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5 At the rear of the printer, insert a cardboard spacer (or similar support piece) underneath the V mark on the bottom of the chassis (see callout 3 in picture below).

**CAUTION** Placing a spacer under the chassis will support the printer and keep it from flexing too much when the plate that covers the laser/scanner units is removed. If the chassis does flex, the laser beams can become skewed, resulting in print-quality problems.

6 Remove four screws (callout 4).

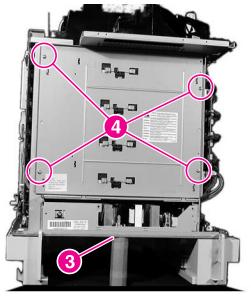


Figure 6-52 Remove the laser/scanner cover plate (1 of 2)

- 7 Using needle-nose pliers, pull down on the right side of the wire clip, then release the left side of the clip from the bracket. Repeat this step for each of the four clips.
- 8 Remove the plate that covers the laser/scanner units.

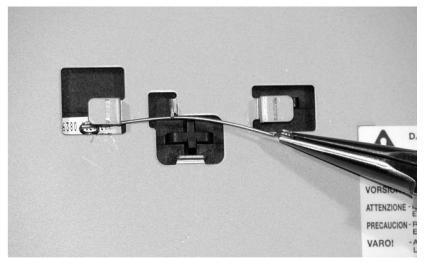


Figure 6-53 Remove the laser/scanner cover plate (2 of 2)

**Reinstallation tip** When reinserting the four wire clips, insert the left end of the clip first, thread the clip under the center notch, and then insert the right end of the clip.

#### Remove the laser/scanner retaining bars

- 1 Remove the laser/scanner cover plate. (covered in previous step)
- 2 Pull the cables for the four laser/scanner connectors free of the printer chassis.
- 3 On the left side of the printer, remove one screw above the DC controller (callout 1).

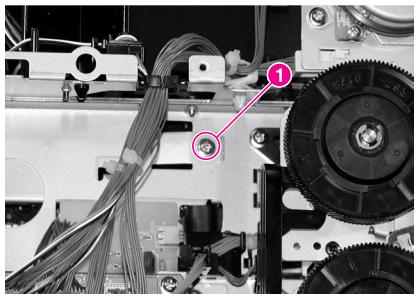


Figure 6-54 Remove the left side laser/scanner retaining bar (1 of 2, left side of printer)

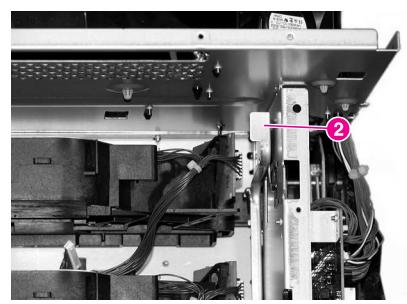
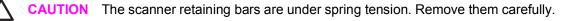


Figure 0-54 Remove the left side laser/scannel retaining bar (1 of 2, left side of printer)

4 Push the top of the sheet-metal scanner retaining bar towards the laser/scanner units (callout 2).

Figure 6-55 Remove the left side laser/scanner retaining bar (2 of 2, rear of printer)

5 Rotate the bar down and carefully remove it from the printer.



6 On the top surface of the right side of the printer, remove one screw (callout 3).

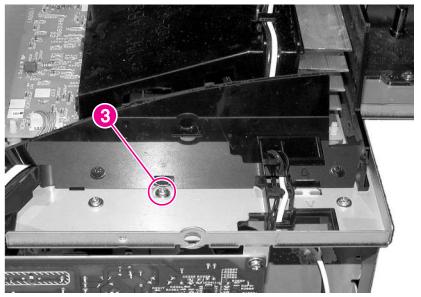


Figure 6-56 Remove the right side laser/scanner retaining bar (1 of 2, right side of printer)

7 On the right side of the printer, push the top of the sheet-metal scanner retaining bar in towards the laser/scanners (callout 4).

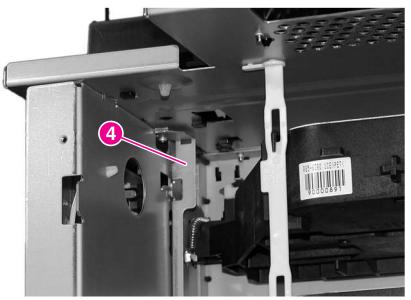


Figure 6-57 Remove the right side laser/scanner retaining bar (2 of 2, rear of printer)

8 Rotate the bar down and carefully remove it from the printer.

Reinstallation tip Reinstall the laser/scanner retaining bars in the same order that you removed them: the left side and then the right side. Feed the connector cables through the frame and reconnect the connectors to the DC controller.

#### To remove the laser/scanner assemblies

- 1 Remove the laser/scanner retaining bars. (covered in previous step)
- 2 Slide the cyan laser/scanner unit to the left and then pull it out of the printer.
- 3 For the yellow, magenta, and black laser/scanner units, first unhook each assembly from the white strap (callout 1). Then pull the laser/scanner units out of the printer.

**CAUTION** When reinstalling the laser/scanner units, always reconnect them to the strap (callout 1). Failure to do so could cause the laser/scanners to become distorted, and the laser beam could become skewed, resulting in image defects.

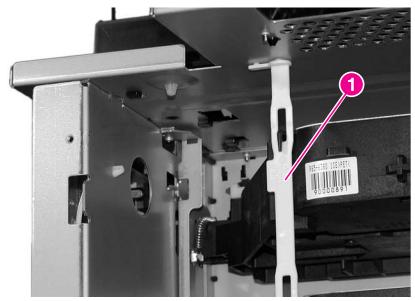


Figure 6-58 Remove the laser/scanner assemblies

- 4 Replace the appropriate laser scanner unit, reassemble in reverse order of disassembly steps.
- 5 After printer is re-assembled, we recommend performing several Full Calibrations to help with alignment of color tones, drums, and the color plane. Each Full Calibration takes about 4 minutes.

To perform a Full Calibration: Press MENU to enter the menus. Press Down Arrow to highlight CONFIGURE DEVICE. Press Checkmark to select. Press Down Arrow to highlight PRINT QUALITY. Press Checkmark to select. Press Down Arrow to highlight FULL CALIBRATE NOW. Press Checkmark to select. Wait for the printer to calibrate (usually takes 4 minutes or so), and then print a test page. If print quality still needs improvement, repeat the Calibration. If multiple Calibrations don't help, some of the toner cartridges may need replacement.