service

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2,000-sheet side-input tray

2,000-sheet side-input tray

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1 Product information

Chapter contents

Product features

HP 2,000-sheet side-input tray (Q1891A)

The side-input tray can feed 64 to 200 g/m^2 (17 to 53 lb bond) media. An LED on the front of the tray indicates whether the unit is functioning correctly, or requires attention. The tray also features four service LEDs on the rear of the tray that can be used to troubleshoot the tray.

Table 1. Features of the 2,000-sheet side-input tray

Pickup method	• Pickup roller • Separation and feed rollers • Registration roller
Media	• Plain paper • Colored paper • Recycled paper • For more information, see table 7, "Documents and media," on page 32
Media size and type	• Letter • A4 • 64 g/m^2 to 200 g/m^2 (17 to 53 lb bond) **NOTE**: Custom media sizes are not supported.
Capacity	2,000-sheets of 64 g/m^2 (17 lb bond) (an approximately 210-mm [8.27-inch] stack)

Note   Do not use overhead transparencies in the 2,000-sheet side-input tray.

Product specifications

Identification

An identification label is located on the back side of the product. The model number is alphanumeric, such as Q1891A.

The serial number contains information about the country/region of origin and the revision level, production code, and production number of the printer. An example of a serial number is USBB123456.

The identification label also contains electrical information and regulatory information (see figure 1).

Note   The electrical information and regulatory information vary by country/region.
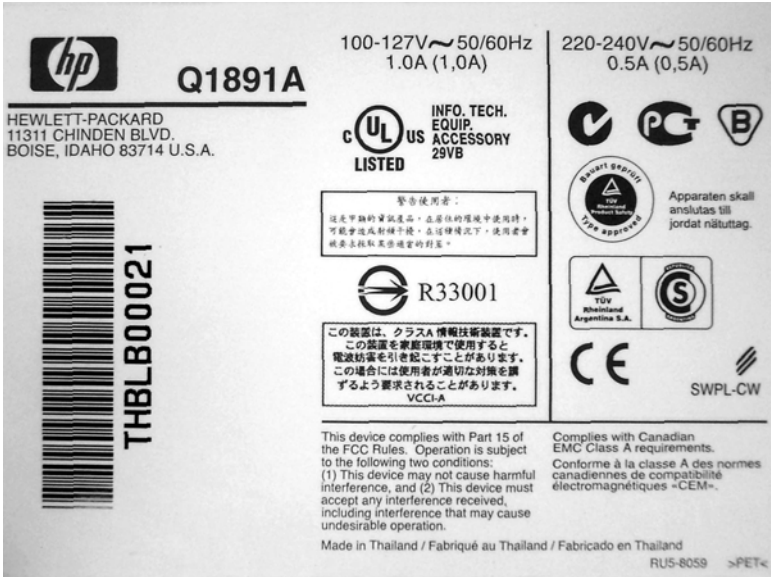
Figure 1.   **Sample identification label**

Specifications

Table 2. Out-of-box specifications

Specification	2,000-sheet side-input tray	
Height	475 mm (18.70 inches)	
Width	420 mm (16.54 inches)	
Depth	575 mm (22.64 inches)	
Weight	25 kg (55.12 lb)	

Table 3. Power requirements and circuit capacity

	110-volt models	**220-volt models**
Power requirements	100 to 127 V (+/- 10%) 50 to 60 Hz (+/- 2 Hz)	220 to 240 V (+/- 10%) 50 to 60 Hz (+/- 2 Hz)
Minimum recommended circuit capacity	15.0 amps (dedicated circuit) (for the MFP system)	10.0 amps (dedicated circuit) (for the MFP system)

WARNING! Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This can damage the printer and void the product warranty.

Table 4. Power consumption

Printer state	**HP color LaserJet 9500n**
Operating	45 W (20°C [68° F] ambient room temperature, operating at the rated supply voltage)

Environmental specifications

The environmental specifications must be maintained to ensure the proper operation of the side-input tray. Consider the following points before installing the tray:

- Install the tray in a well-ventilated, dust-free area.
- Install the tray on a firm level, flat surface that can support its size and weight. Make sure that all four tray feet are level.
- Install the tray where temperature and humidity are stable, with no abrupt changes (away from water sources and humidifiers, air conditioners, refrigerators, or other major appliances).
- Install the tray away from direct sunlight, areas that experience vibration, open flames, ammonia fumes, ultrasonic heaters, and devices that emit a magnetic field. If the tray is placed near a window, make sure that the window has a curtain or blind to block direct sunlight.
- Maintain enough space around the tray for proper access and ventilation.

Table 5. Environmental specifications

	Allowable condition	**Recommended condition**
Operating temperature	15° to 30°C (59° to 86°F)	20° to 26°C (68° to 79°F)
Relative humidity	10 to 80%	20 to 50%
Storage temperature	0° to 35°C (32° to 95°F)	0° to 35°C (32° to 959°F)
Storage humidity	10% to 95%	10% to 95%

Note Testing per International Standards Organization (ISO) 9296.

Product orientation and assemblies

The orientation for the 2,000-sheet side-input tray is slightly different from that of standard HP product. When you look at the tray from the MFP control panel, the door assembly appears to be the front of the product. However, in this manual the door assembly (callout 10) is considered to be the *right-side* door assembly. The actual front cover of the product is the cover that has the small, single operator LED (callout 3; this is the side that is parallel to the front of the printer and facing you when you look at the control panel).
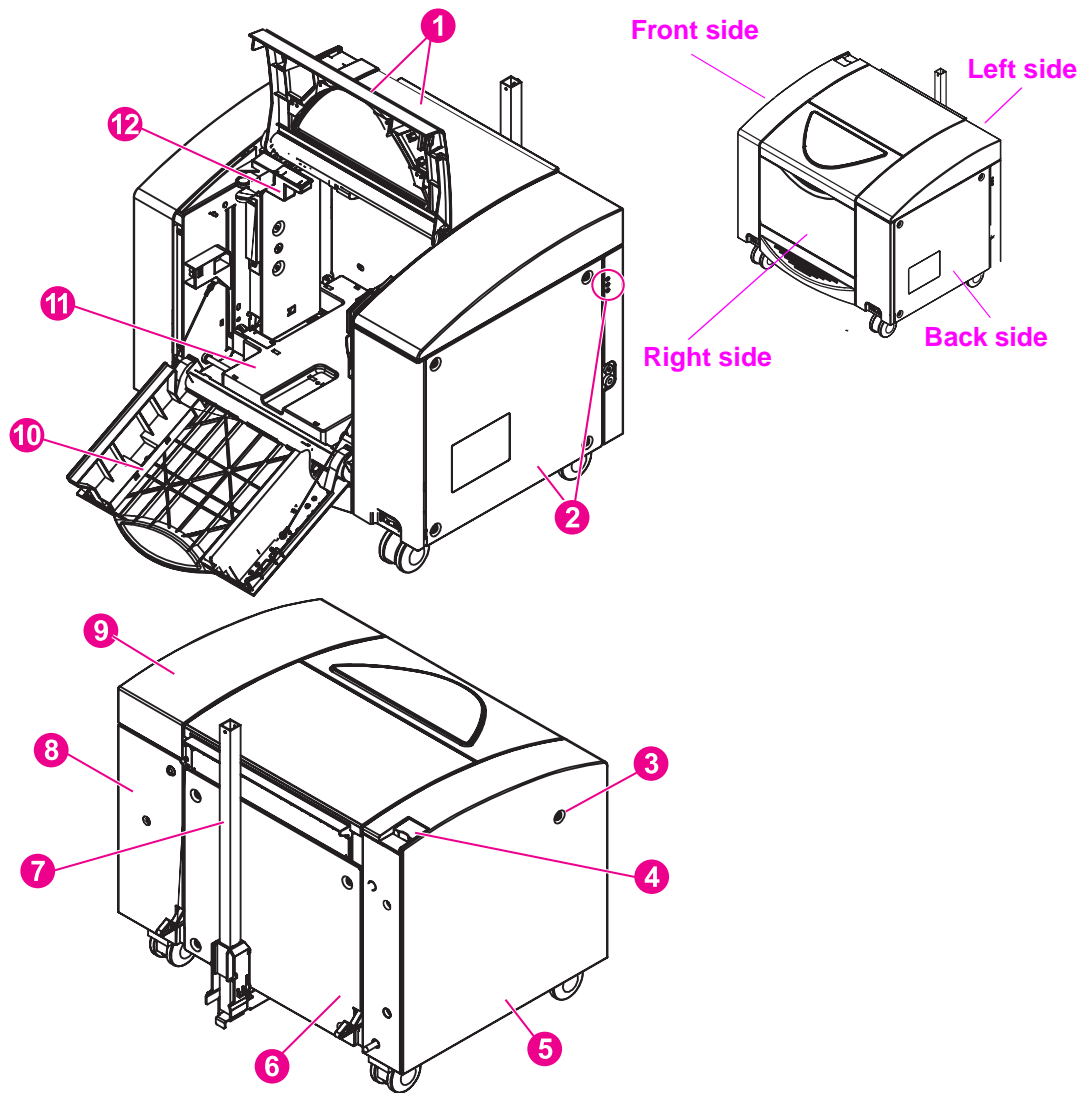
Figure 2. **Front, back and side assembly locations**

Table 6. Tray orientation and assemblies

1	Top-cover assembly	5	Front-cover assembly	9	Top rear cover
2	Back cover and service LEDs	6	Left-cover assembly	10	Right-door assembly
3	Operating LED	7	Slide rail	11	Lifter tray
4	Latch lever	8	Back-left cover	12	Paper-size guide

Space requirements

For information about installing the 2,000-sheet side-input tray, see chapter 3 in this manual.

The tray requires a minimum of 835 mm (32.8 inches) of clearance when it is moved away from the MFP and the slide rail is in the down position.

Before removing the side-input tray from the box, make sure that adequate space is available to install the tray on the printer.

Overall physical dimensions

Figure 3 shows the overall dimensions for the side-input tray with the top-cover assembly and right-side door in the open position. The depth dimension includes the slide rail in the raised position and the tray latches (not shown).

711.20 mm (28.00 inches)

673.10 mm (26.50 inches)
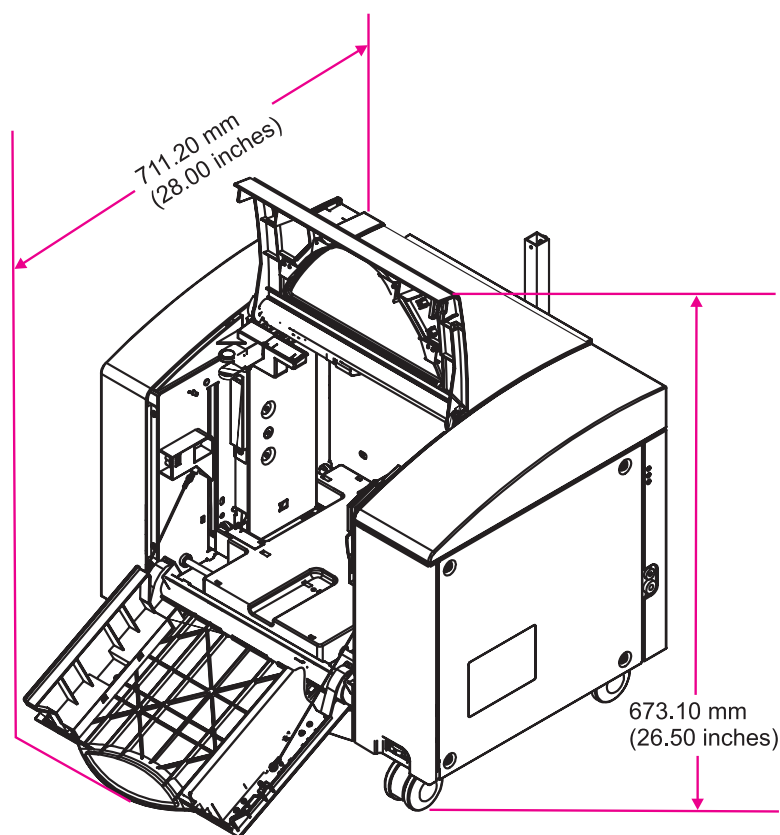
Figure 3.   **2,000-sheet side-input tray overall dimensions**

2 Service approach

Chapter contents

Service approach

The 2,000-sheet side-input tray is designed to be diagnosed over the phone and repaired in the field. Repair of the printer normally begins with a three-step process:

1   Isolate the problem to the major system (the host computer, the network or server, or the MFP).

2   Isolate the problem to the printer or the side-input tray.

3   Troubleshoot the problem by using the troubleshooting procedures described in chapter 7.

After a faulty part is located, repair is usually accomplished by assembly-level replacement of field replaceable units (FRUs). Some mechanical assemblies can be repaired at the subassembly level. Hewlett-Packard Company does not support replacement of components on the printed circuit assemblies. Some parts can be installed by the customer.

Parts and supplies

Ordering parts

"Ordering Parts" in chapter 8 of this manual contains FRU and replacement part numbers. Order replacement parts from Hewlett-Packard Customer Support-Americas (HPCS-A) or Hewlett-Packard Customer Support-Europe (HPCS-E).

All standard part numbers listed are stocked and can be ordered from the HP Customer Service and Support Organization. Use the following Web site to search for HP product parts by using the HP product name, model number, or part number, or by choosing an HP product from a list.

www.partsurfer.hp.com

To order parts, go to the following Web site:

www.hp.com/buy/parts

Consumables and accessories can be ordered from Hewlett-Packard.

Supplies, accessories, and consumables can be ordered from the following Web sites:

- North America:www.hp.com/sbso/product/supplies
- Canada: www.hp.ca/catalog/supplies
- Europe: www.hp.com/go/supplies
- Asia Pacific: www.hp.com/paper

Ordering supplies

Order supplies directly from the Hewlett-Packard Company. The following are phone numbers for ordering supplies:

- U.S. 800-538-8787
- Canada 800-387-3154; Toronto 416-671-8383
- United Kingdom 0734-441212

Exchange program

The Hewlett-Packard Company might offer remanufactured assemblies for parts. These can be ordered through Parts Direct Ordering.

Supplies

Media and print cartridges can be ordered directly from the Hewlett-Packard Company. See chapter 8 for ordering information.

World Wide Web

Printer drivers, updated HP printer software, and product and support information can be obtained from one of the following Web sites:

In the U.S.: www.hp.com/support/clj9500mfp

Printer drivers can be obtained from the following sites:

- www.hp.com (then select the appropriate country/region)
- www.hp.com/go/clj9500mfp_software

HP service parts information CD

This powerful, CD-ROM-based parts information tool is designed to give users fast, easy access to parts information such as pricing and recommended stocking lists for a wide range of HP products. To subscribe to this quarterly service in the U.S. or Canada, call (800) 336-5987. In Asia Pacific, call (65) 740-4484. Parts identification and pricing information can also be checked by visiting the World Wide Web at www.partsurfer.hp.com.

Customer care reseller sales and service support center

The Customer Care Reseller Sales and Support Center is available to assist resellers and service technicians. To reach this support center, call 800-544-9976.

HP authorized resellers and support

To locate authorized HP resellers and support, call 800-243-9816 in the U.S. or 800 387-3867 in Canada.

HP service agreements

Call 800-743-8305 in the U.S. or 800-268-1221 in Canada.

HP service in other areas

Outside of North America and Europe, contact the local HP sales office for assistance in obtaining technical support for resellers and service technicians.

Ordering related documentation and software

The following are telephone numbers for the various sources:

- HPCS-A:
  800-227-8164 (U.S. only)
- HPCS-E:
  (49 7031) 14 2253
- HP Distribution Center (HPD); 661-257-5565.
  Fax: 805-257-6995

Note   End-user documentation (the *HP color LaserJet 9500mfp User Reference Guide*, the *HP color LaserJet 9500mfp Use Guide*, and the *HP color LaserJet 9500mfp Getting Started Guide*) is available electronically at www.hp.com/support/clj9500mfp.

Warranty

For warranty information and requirements, see the *HP color LaserJet 9500 Use Guide.*

Onsite service agreements

To provide customers with the level of support best suited to their needs, HP offers the following onsite service agreements, with three response times:

- Next business day onsite, HW support, four years
- Next business day onsite, HW support, five years
- Four-hour, 13 x 5 onsite, HW support, four years
- Four-hour, 13 x 5 onsite, HW support, five years

For more information about HP service agreements, call 800-271-3113 (U.S.) or 800-268-1221 (Canada).

Priority onsite service

This agreement provides four-hour service response to your site for calls made during normal HP business hours.

Next-day onsite service

This agreement provides support by the next working day following a service request. Extended coverage hours and extended travel beyond HP's designated service zones are available on most onsite agreements (for additional charges).

3 Product configuration

Chapter contents

Installing the 2,000-sheet side-input tray

This section contains information about installing the 2,000-sheet side-input tray. For information about installing the MFP or a finishing device, see your *HP color laserJet 9500/9500mfp Print Engine Service Manual.*

WARNING!   The 2,000-sheet side-input tray is heavy. Two people are required in order to lift it out of the box.

1   Remove the external styrofoam pieces from the cardboard box.
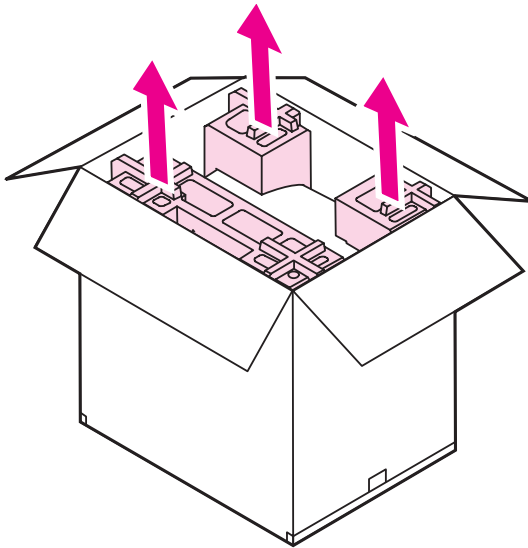
Figure 4.   **Installing the 2,000-sheet side-input tray (1 of 8)**

2   Remove the tray from the cardboard box.
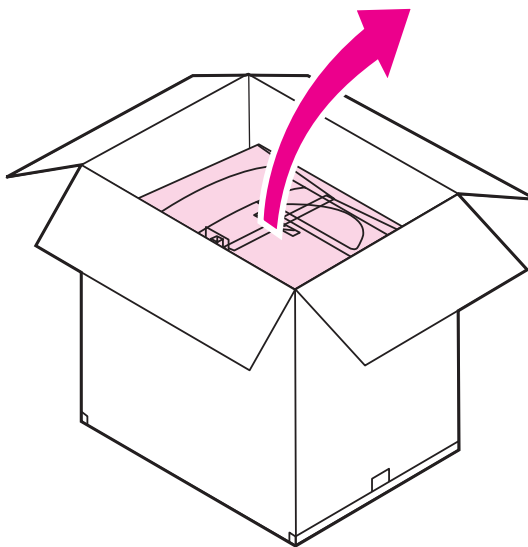
Figure 5.   **Installing the 2,000-sheet side-input tray (2 of 8)**

Note   See the illustrations on the box for information about removing the tray from its packaging.

3 Position the tray with the casters on the floor.
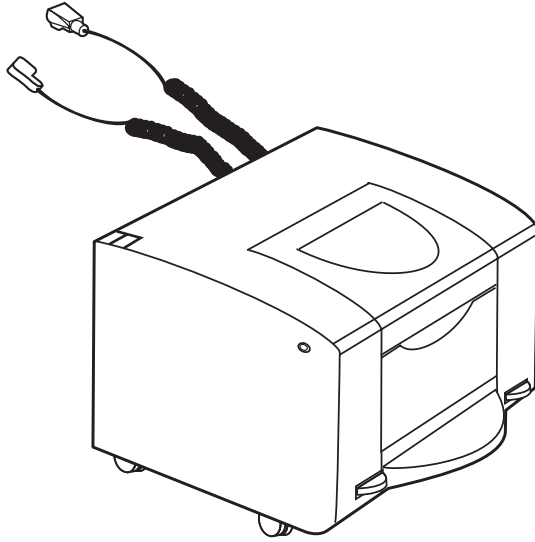
Installing the 2,000-sheet side-input tray (3 of 8)

4 Remove all of the orange plastic shipping locks from the tray.

5 Remove the plastic bags from the cables and the slide rail.

Note Make sure that the MFP is turned off while installing the tray.

6 Position the tray at the right side of the MFP (callout 1) and slide the blue bracket up to unlock the slide rail. Lower the slide rail to a horizontal position (callout 2).

CAUTION The blue bracket will break if you do not slide it upward before lowering the slide rail.
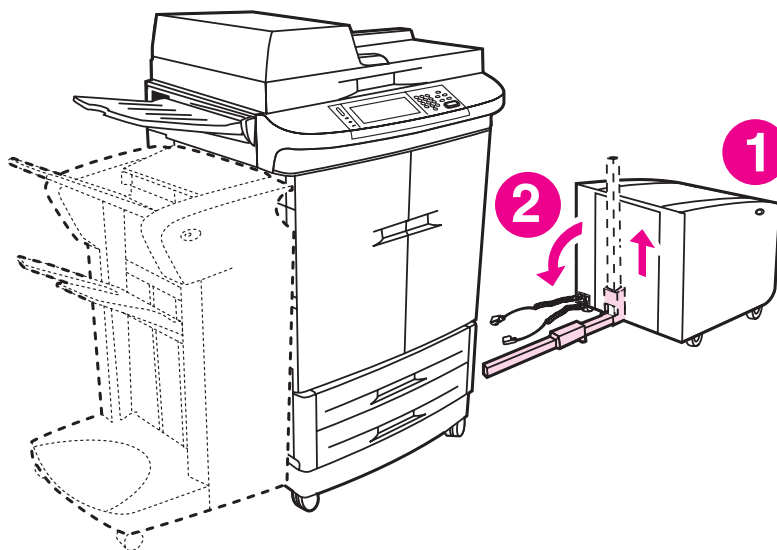
Figure 7. **Installing the 2,000-sheet side-input tray (4 of 8)**

7 Put the end of the slide rail into the U-shaped metal slot on the pedestal (callout 3). Pinch the tabs on each side of the blue plastic bracket (callout 4), and slide the blue, plastic bracket into the metal slot until it locks into place.
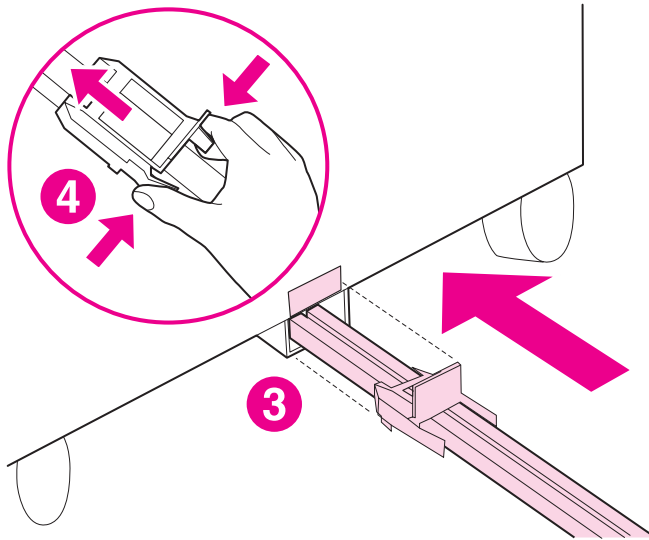
Figure 8. **Installing the 2,000-sheet side-input tray (5 of 8)**

8 Connect the data cable on the tray to the data port on the MFP pedestal (callout 5). Connect the power cord on the tray to the power connection on the MFP pedestal (callout 6).
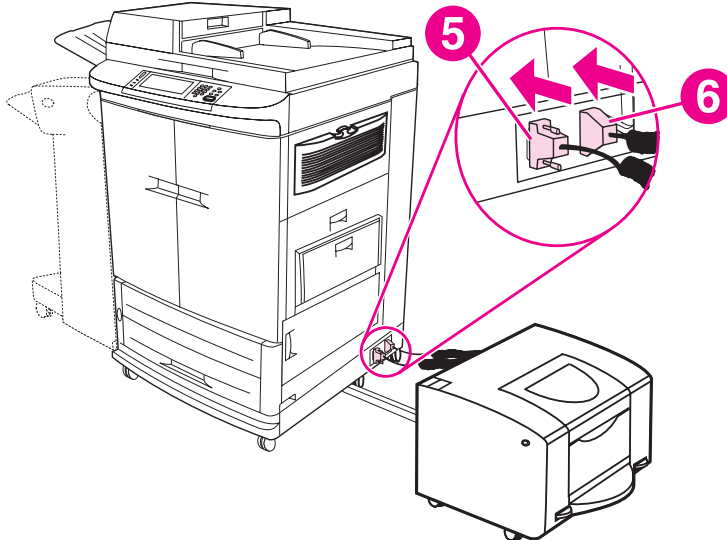
Figure 9. **Installing the 2,000-sheet side-input tray (6 of 8)**

9 Push the tray toward the MFP. The two plastic hooks at the base of the tray lock into the pedestal. See figure 10.

CAUTION Remove any obstructions around the tray before attaching it to the MFP, and make sure that the two cables are correctly positioned at the back of the tray.
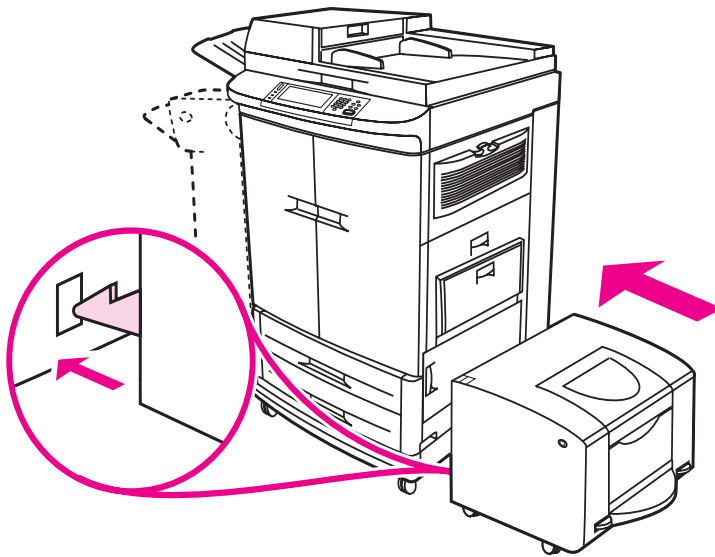
Figure 10.   **Installing the 2,000-sheet side-input tray (7 of 8)**

10 If a gap exists between the MFP and the tray, either at the top or at the bottom, adjust the blue levelers above the tray wheels until the gap closes.
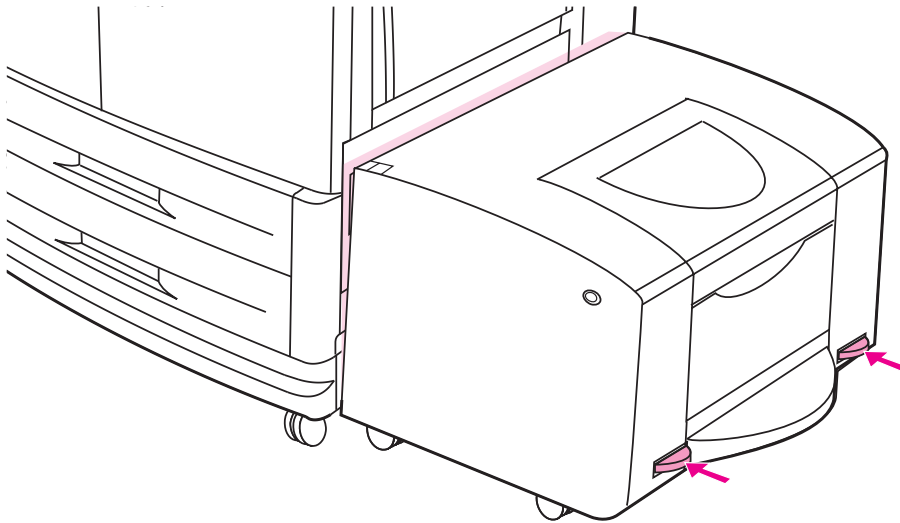
Figure 11.   **Installing the 2,000-sheet side-input tray (8 of 8)**

Loading media into the tray

CAUTION To avoid a jam, never add or remove paper from the 2,000-sheet side-input tray while printing or copying from that tray.

The 2,000-sheet side-input tray (tray 4) holds up to 2,000 sheets of media.

This tray only supports A4-, letter-, A4-rotated-, or letter-rotated-size media. Use the control panel to set the media type for the tray. To set the media type for the tray, see the *HP color LaserJet 9500/9500mfp Print Engine Service Manual*.

1 Open the top cover, and then open the right door.
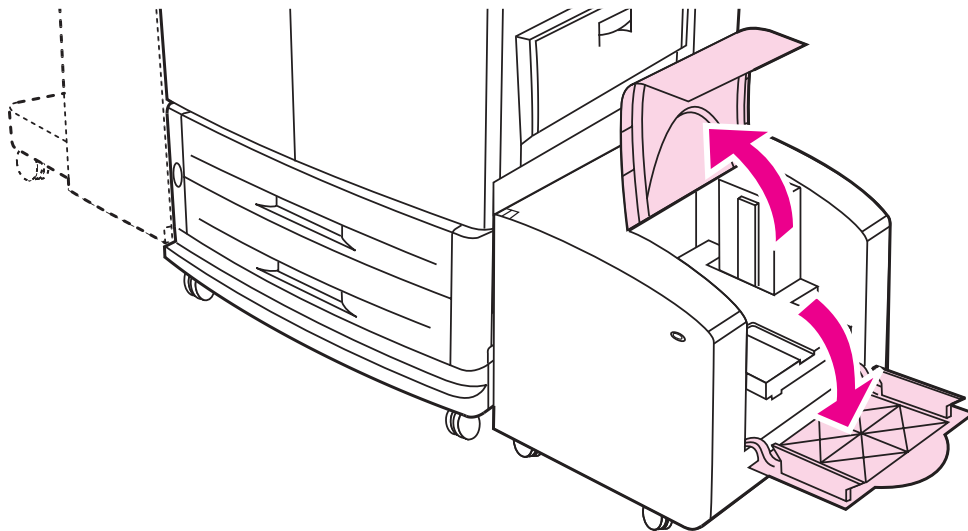
Figure 12. **Loading media into the 2,000-sheet side-input tray (1 of 3)**

2 Load the media so that the side to be printed on faces up (for duplex printing, the side to be the first page should be face down) and the long edge is toward the MFP (the short edge is toward the MFP if you are printing letter- or A4-rotated). Do not load more media than the maximum that is indicated by the media-fill triangles at the back of the tray.

Note The number of sheets that can be loaded might vary depending on the type of media. Use the media-fill triangles to determine how much media to load.

Make sure that the corners of the media are not folded.

The 2,000-sheet side-input tray supports letter, A4, A4-rotated, and letter-rotated media.

The following illustration shows the media being loaded in the rotated position. HP recommends that you load the media with the long edge toward the MFP for optimum MFP system performance.
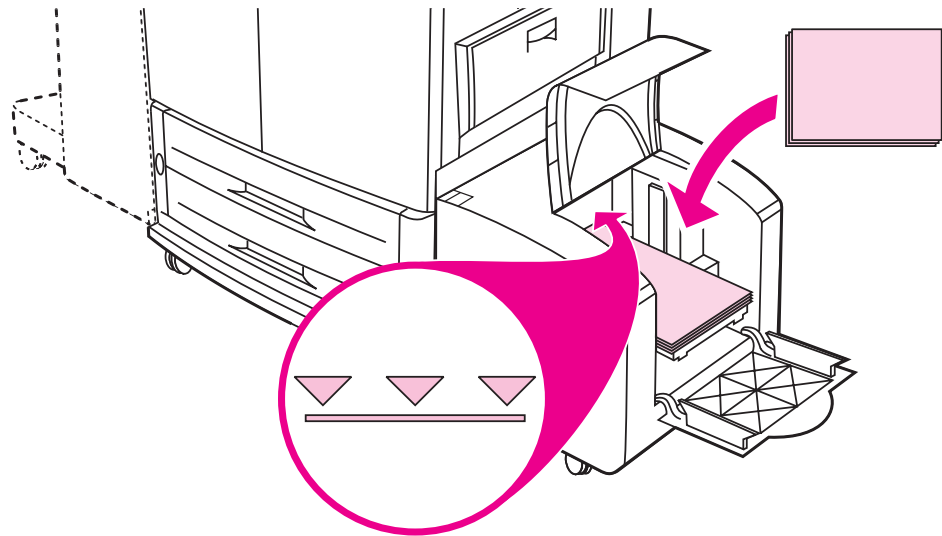
Figure 13. **Loading media into the 2,000-sheet side-input tray (2 of 3)**

3 Close the right door, and then close the top cover.

Note Make sure that the top cover is completely closed. Failure to completely close the top cover will result in a lifting error.
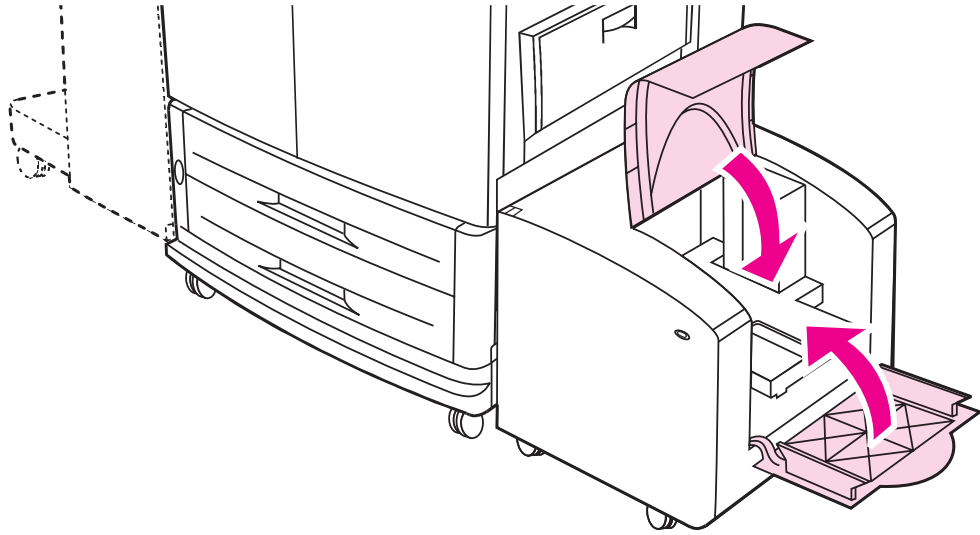
Figure 14. **Loading media into the 2,000-sheet side-input tray (3 of 3)**

4 The control-panel display prompts you to select the size and type of the media that you want to use.

5 Scroll to the size that you want and then select it.

6 Scroll to the type that you want and then select it.

Note See your *HP color LaserJet 9500/9500mfp Print Engine Service Manual* for more information about media types.

Using the control panel to configure the tray

At the control panel, you can print a menu map that indicates the layout and some current settings of the control-panel menu items and a configuration page that shows the current MFP configuration. Always print a menu map and configuration page before making changes to the printer setting through the control panel. For more information about control-panel operation, see your *HP color LaserJet 9500/9500mfp Print Engine Service Manual.*

Basic control-panel operation

Use the following procedure to use the control panel menus.

1 Press the MENU button to open the control-panel menus.
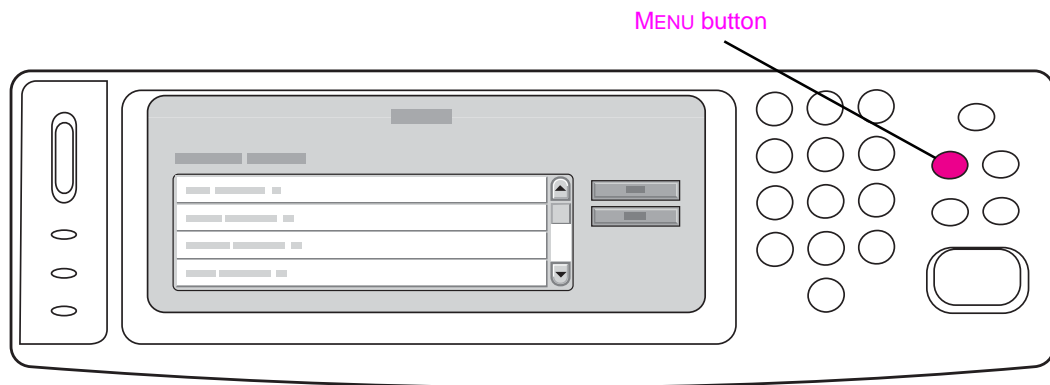
Figure 15. **HP color LaserJet 9500mfp control panel**

2 Scroll to and touch the menu item that you want. (If you need to select a submenu, use the arrows to scroll again, and then touch the submenu.)

Note An arrow next to a menu item indicates that a submenu is available.
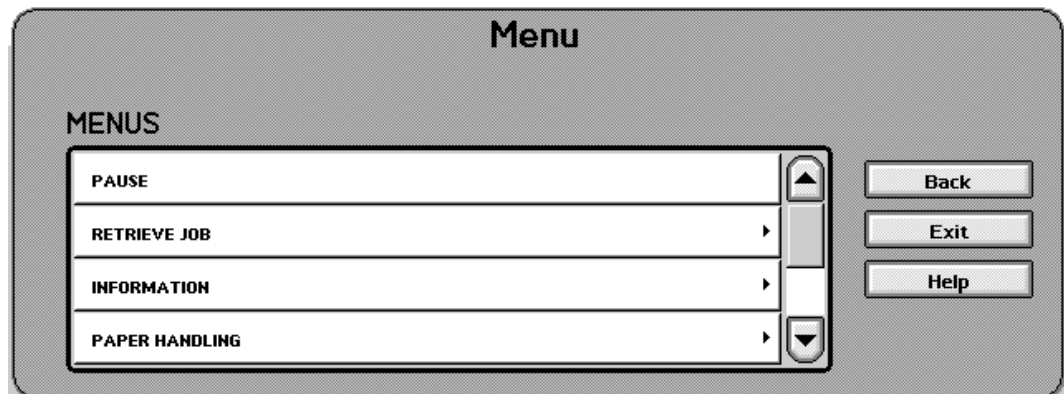
Figure 16. **HP color LaserJet 9500mfp touchscreen**

3 Scroll to and touch the value that you want. An asterisk (*) appears next to the selection on the display, indicating that it is now the default.

4 At any time, touch B<small>ACK</small> to back up one level in the menu tree or to clear a numeric value.

5 Touch E<small>XIT</small> to close the menu.

Note To print a menu map or configuration page, open the **Information** menu, touch PRINT MENU MAP or PRINT CONFIGURATION PAGE, and then touch OK.

Setting the media size

Note When media is loaded into the tray and the MFP is turned on, the MFP automatically detects the size that is loaded. Manually setting the media size is not required.

Use the following procedure to manually change or set the media size for the 2,000-sheet side-input tray.

1 Press the MENU button to open the menus.

2 Scroll to the **Paper handling menu**, and then touch **Paper handling menu** to select it.

3 Scroll to TRAY <4> SIZE and then touch TRAY <4> SIZE to select it.

4 Select letter, letter rotated, A4, or A4 rotated as the media size.

Setting the media type

Use the following procedure to manually change or set the media type for the tray.

1 Press the MENU button to open the menus.

2 Scroll to the **Paper handling menu**, and then touch **Paper handling menu** to select it.

3 Scroll to TRAY <4> TYPE and then touch TRAY <4> TYPE to select it.

4 Select the type of media that you are using.

Table 7. Documents and media

Document	Suggested media and product number	Characteristics	Type
General office copying and printing	HP Office Recycled Paper letter (HPE1120) 3-hole prepunched (HPE113H)	75 g/m^2 (20-lb bond), 500 sheets, matte finish on both sides, contains 30% post-consumer content (satisfies U.S. Executive Order 13101)	PLAIN
Color document	HP Color Laser Paper letter (HPL245R) letter (HPL285R)	HPL245R and HPL2417: 90 g/m^2 (24-lb bond), 500 sheets, matte finish on both sides HPL285R and HPL2817: 105 g/m^2 (28-lb bond), 500 sheets, matte finish on both sides	PLAIN
Photograph/ image	HP High Gloss Laser Paper letter (Q2419A) A4 (Q2421A)	120 g/m^2 (32-lb bond), 216 mm x 279 mm (8.5 x 11 inches), 200 sheets, satin finish coating on both sides	HP HEAVY GLOSSY

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Table 7. Documents and media

Document	Suggested media and product number	Characteristics	Type
Correspondence	HP LaserJet Paper letter (HPJ1124) 3-hole prepunched (HPJ113H) A4 (Europe) (CHP310)	90 g/m^2 (24-lb bond), 500 sheets, matte finish on both sides	PLAIN
Letterhead	HP LaserJet Paper letter (HPJ1124) 3-hole prepunched (HPJ113H) A4 (Europe) (CHP310)	90 g/m^2 (24-lb bond), 500 sheets, matte finish on both sides	PLAIN
Transparency	Not recommended for the 2,000-sheet side-input tray.		
Report	HP LaserJet Paper letter (HPJ1124) 3-hole prepunched (HPJ113H) A4 (Europe) (CHP310)	90 g/m^2 (24-lb bond), 500 sheets, matte finish on both sides	PLAIN
Cover	HP Premium Cover Paper letter (Q2413A) A4 (Q2414A)	Q2413A and Q2414A: 200 g/m^2 (75-lb cover), 100 sheets, super-smooth matte finish on both sides. 01109: 163 g/m^2 (60-lb cover), 250 sheets, coated, premium white	CARDSTOCK >164 g/m^2
Business plan	HP High Gloss Laser Paper letter (Q2419A) A4 (Q2421A)	120 g/m^2 (32-lb bond), 200 sheets, high-gloss finish coating on both sides	HP HEAVY GLOSSY or HIGH GLOSS IMAGES
Proposal	HP Premium Choice Laser- Jet Paper letter (HPU1132) A4 (CHP410) A4 (Asia) (Q2397A) A4 (Europe) (CHP413)	HPU1132, HPU1732, CHP410, Q2397A, and Q2396A: 120 g/m^2 (32-lb bond), 500 sheets, matte finish on both sides, 98 bright CHP413 and CHP421: 160 g/m^2 (42-lb bond), 250 sheets, matte finish on both sides, 98 bright	HEAVY 106-163 g/m^2
Brochure	HP High Gloss Laser Paper letter (Q2419A) A4 (Q2421A)	120 g/m^2 (32-lb bond), 200 sheets, high-gloss finish coating on both sides	HEAVY GLOSSY or HIGH GLOSS IMAGES

Table 7. Documents and media

Document	Suggested media and product number	Characteristics	Type
Handout, proposal, sales brief, flyer, and color image	HP Soft Gloss Laser Paper letter (C4179A) A4 (C4179B) letter (Q2415A) A4 (Q2417A)	C4179A and C4179B: 120 g/m^2 (32-lb bond), 200 sheets, satin finish coating on both sides Q2415A, Q2416A, Q2417A and Q2418A: 105 g/m^2 (28-lb bond), 500 sheets, satin finish coating on both sides, 96 bright	`HEAVY GLOSSY` or `HIGH GLOSS IMAGES`
Catalog	HP High Gloss Laser Paper letter (Q2419A) A4 (Q2421A)	120 g/m^2 (32-lb bond), 200 sheets, high-gloss finish coating on both sides	`HP HEAVY GLOSSY` or `HIGH GLOSS IMAGES`
Postcard	HP Premium Cover Paper letter (Q2413A) A4 (Q2414A)	200 g/m^2 (75-lb bond), 100 sheets, matte finish on both sides	`CARDSTOCK >164 g/m`^{2}
Chart	HP Premium Choice Laser-Jet Paper letter (HPU1132) A4 (CHP410) A4 (Asia) (Q2397A) A4 (Europe) (CHP413)	HPU1132, HPU1732, CHP410, Q2397A, and Q2396A: 120 g/m^2 (32-lb bond), 500 sheets, matte finish on both sides, 98 bright CHP413 and CHP421: 160 g/m^2 (42-lb bond), 250 sheets, matte finish on both sides, 98 bright	`HEAVY 106-163 g/m`^{2}
Sign	HP Tough Paper letter (Q1298A) A4 (Q1298B)	0.127 mm (5 mils) thick (approximately 44-lb bond equivalent), 50 sheets, satin finish coating on both sides	`TOUGH PAPER`
Map	HP Tough Paper letter (Q1298A) A4 (Q1298B)	0.127 mm (5 mils) thick (approximately 44-lb bond equivalent), 50 sheets, satin finish coating on both sides	`TOUGH PAPER`
Newsletter	HP Color Laser Paper letter (HPL245R) letter (HPL285R)	HPL245R and HPL2417: 90 g/m^2 (24-lb bond), 500 sheets, matte finish on both sides HPL285R and HPL2817: 105 g/m^2 (28-lb bond), 500 sheets, matte finish on both sides	`PLAIN`
Restaurant menu	HP Tough Paper letter (Q1298A) A4 (Q1298B)	0.127 mm (5 mils) thick (approximately 44-lb bond equivalent), 50 sheets, satin finish coating on both sides	`TOUGH PAPER`

Table 7. Documents and media

Document	Suggested media and product number	Characteristics	Type
Waterproof document	HP Tough Paper letter (Q1298A) A4 (Q1298B)	0.127 mm (5 mils) thick (approximately 44-lb bond equivalent), 50 sheets, satin finish coating on both sides	TOUGH PAPER
Tearproof document	HP Tough Paper letter (Q1298A) A4 (Q1298B)	0.127 mm (5 mils) thick (approximately 44-lb bond equivalent), 50 sheets, satin finish coating on both sides	TOUGH PAPER
Training manual	HP Office Recycled Paper letter (HPE1120) 3-hole prepunched (HPE113H)	75 g/m² (20-lb bond), 500 sheets, matte finish on both sides, contains 30% post-consumer content (satisfies U.S. Executive Order 13101)	PLAIN
User manual	HP LaserJet Paper letter (HPJ1124) 3-hole prepunched (HPJ113H) A4 (Europe) (CHP310)	90 g/m² (24-lb bond), 500 sheets, matte finish on both sides	PLAIN

4 Product maintenance

Chapter contents

Preventative maintenance

This section describes preventative maintenance for the 2,000-sheet side-input tray.

The tray parts that require maintenance/replacement are the pickup roller, feed roller, and separation roller.

Image transfer kit

The image transfer kit contains parts (pickup, feed, and separation rollers) that are used in the preventative maintenance routine for the 2,000-sheet side-input tray.

The image transfer kit (part number C8555-67901) contains the following parts: one printer transfer roller, one printer transfer belt, one printer charcoal filter, one toner wipe, two small printer-tray rollers, and seven large printer-tray rollers (three of the large rollers are for the side-input tray).

Replacing the image transfer kit

The image transfer kit should be replaced after every 200,000 pages of printing. When the counter reaches 200,000 pages, the printer stops printing until the kit is replaced and the count is reset at the control panel.

The Hewlett-Packard Company recommends that the user place an order for a replacement image transfer kit when the ORDER TRANSFER KIT message first appears on the control-panel display.

The product number for the image transfer kit for the HP color LaserJet 9500/9500mfp is C8555A.

Storing the image transfer kit

- Do not remove the image transfer kit from its package until you are ready to use it. Touching the printer transfer belt can degrade print quality.
- Store the kit in a cool, dry location. Sudden changes in temperature and humidity can cause condensation to form on the printer transfer belt, which degrades print quality.
- Store the kit in a horizontal position.
- Do not handle the rubber portion of the rollers. Skin oils on the rollers can cause print-quality problems.

Cleaning the 2,000-sheet side-input tray

To maintain superior print quality and performance, use the following procedures to thoroughly clean the tray.

WARNING! In order to avoid shock hazard, turn the printer *and* the side-input tray off and unplug all power cords before you begin these steps.

CAUTION Do not use ammonia-based cleaners on the side-input tray. While cleaning the tray, be careful not to touch the rollers. Skin oils on the rollers can cause print-quality problems.

- Clean the outside of the tray with a water-dampened cloth.
- Clean the inside of the tray with a dry, lint-free cloth.

Jams

This section describes how to clear jammed media from the 2,000-sheet side-input tray and explains some common causes for jams in the tray.

Note   If a gap exists between the MFP and the tray, either at the top or at the bottom, adjust the blue levelers above the tray wheels until the gap closes.

Clearing a jam in the 2,000-sheet side-input tray

Use the following procedure to clear a jam in the tray.

Note   The illustrations in this section show the media loaded in the rotated position. HP recommends that you load the media with the long edge toward the MFP for optimum tray operation.

1   Open the top cover, and then open the right side door on the tray.
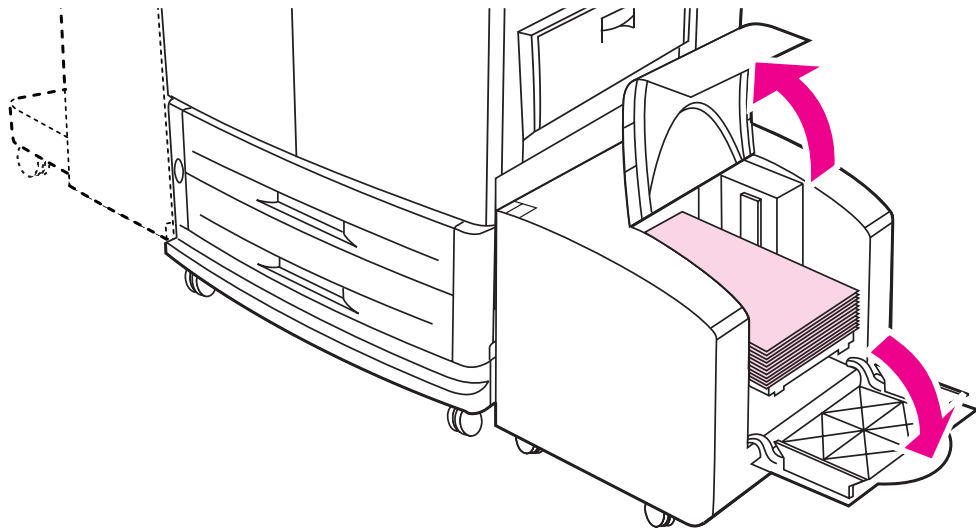
Figure 17.   **Clearing a jam in the 2,000-sheet side-input tray (1 of 4)**

2   Remove any jammed media from this area. Make sure that you have removed all of the pieces of torn media.

3   Close the right side door, and then close the top cover.
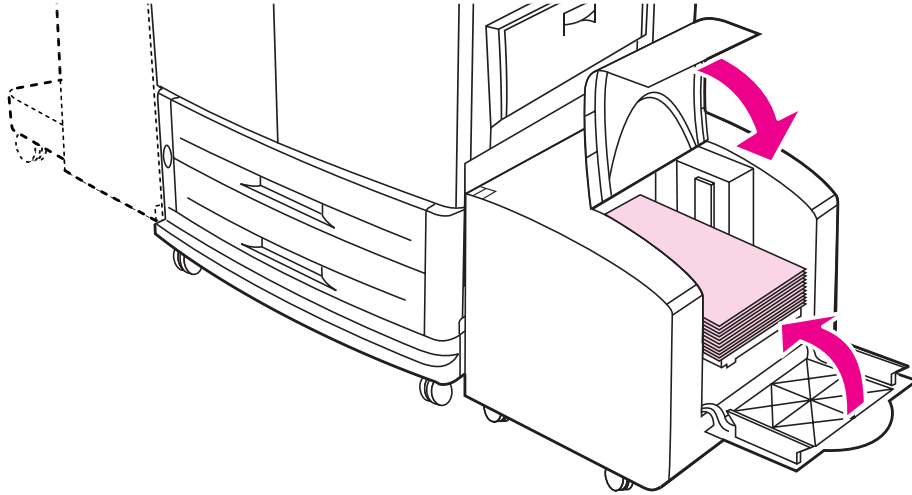
Figure 18.   **Clearing a jam in the 2,000-sheet side-input tray (2 of 4)**

4   Depress the latch, and then slide the tray away from the MFP. Check for jammed media between the tray and the MFP.
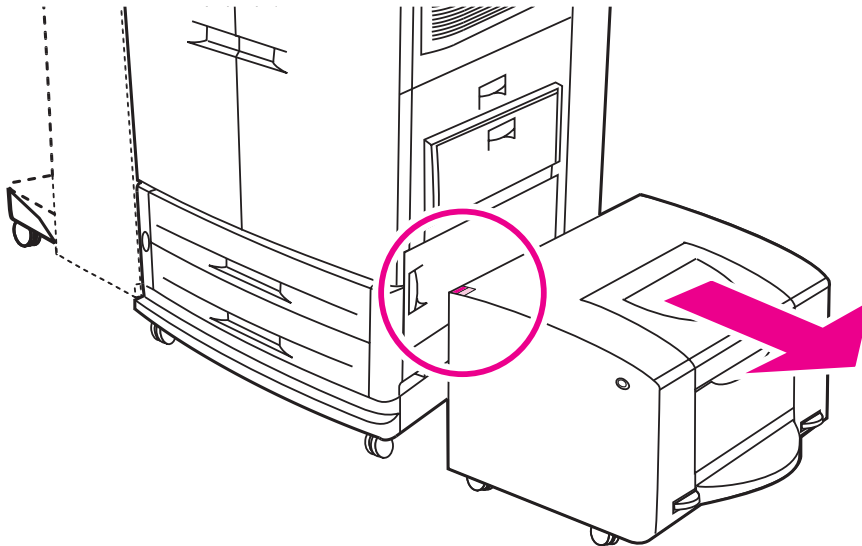
Figure 19.   **Clearing a jam in the 2,000-sheet side-input tray (3 of 4)**

5 Open the MFP upper right-side door.
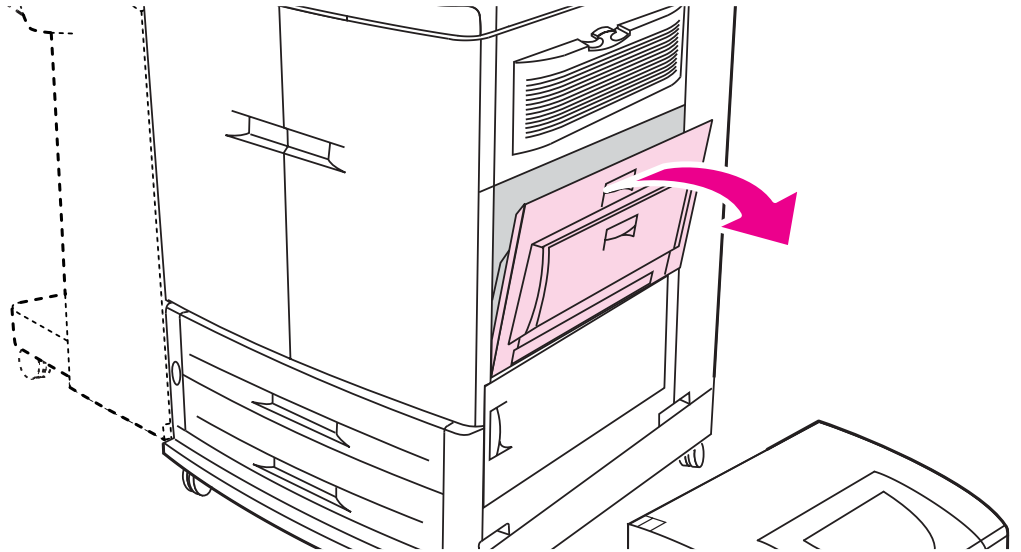
Figure 20. **Clearing a jam in the 2,000-sheet side-input tray (4 of 4)**

6 Check for jammed media that was fed from the tray into the MFP.

Note After you reinstall the tray, make sure that a gap does not exists between the tray and the MFP. If a gap exists between the MFP and the tray, either at the top or at the bottom, adjust the blue levelers above the tray wheels until the gap closes.

Jam locations

Jams in the tray occur in the pickup area (callout 1) or registration area (callout 2) of the tray. See figure 21 to locate the pickup and registration areas of the tray. Use table 8 on page 43 to identify the jam and find a solution.
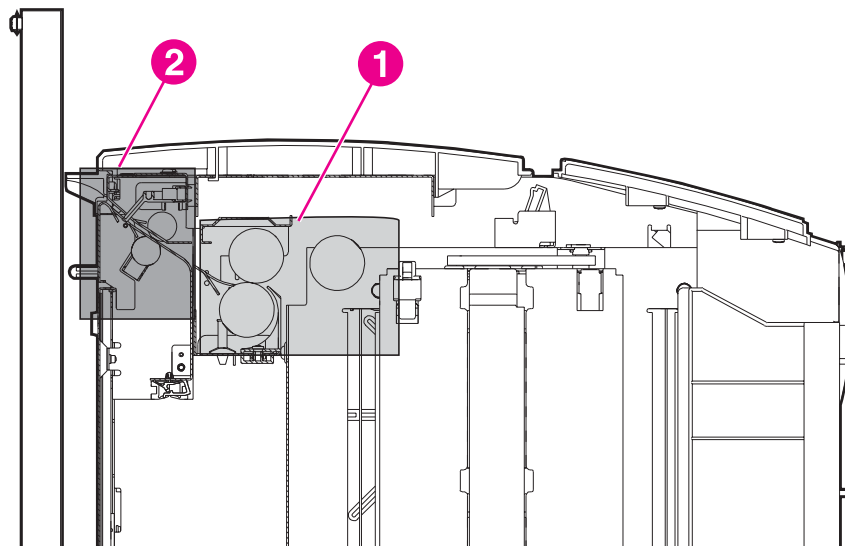
Figure 21.   **2,000-sheet side-input tray pickup and registration block diagram**

Note   If a gap exists between the MFP and the tray, either at the top or at the bottom, adjust the blue levelers above the tray wheels until the gap closes.

Table 8. Common jams and solutions

Issue	Cause	Action
Jam in the pickup area	The media is not correctly loaded in the tray.	Make sure that the media is flat and level in the tray. Make sure that none of the corners of the media are folded under the stack. If the media is pre-punched (three-holed drilled), make sure that the sheets are loose and not sticking together.
Jam in the pickup area	The pickup or feed rollers are worn or damaged.	Replace the rollers. **Note** Always replace all three rollers at the same time, even if only one roller is worn or damaged.
Jam in the pickup area	The pickup motor connectors are loose or disconnected.	Verify that the pickup motor connector (J104) and intermediate connector (J318) are firmly seated on the paper-deck-controller PCA. Verify that the connector at the motor is connected correctly.
Jam in the pickup area	The registration-sensor flag is damaged or deformed or the flag spring is not in the correct position.	Verify that the flag spring is positioned correctly and that the flag can move freely. Replace the flag.
Jam in the pickup area	The between-sheets sensor (PS12) is damaged or deformed flag or the flag spring is not in the correct position.	Verify that the flag spring is positioned correctly and that the flag can move freely. Replace the flag.
Jam in the pickup area	The registration sensor (PS11) has failed.	Perform the sensor diagnostic procedure. See "Sensor test" on page 107. If the sensor fails the sensor check, replace the pickup and feed assembly (RM1-0397-000CN). See "Paper-pickup and feed assembly" on page 98.
Jam in the pickup area	The between-sheets sensor (PS12) has failed.	Perform the sensor diagnostic procedure. See "Sensor test" on page 107. If the sensor fails the sensor check, replace the pickup and feed assembly (RM1-0397-000CN). See "Paper-pickup and feed assembly" on page 98.
Jam in the pickup area	The lifter-drive assembly gears are worn or damaged.	Replace the lifter driver assembly (RM1-0516-000CN). See "Lifter-driver assembly" on page 85.
Jam in the pickup area	The pickup motor (M101) has failed.	Perform the motor diagnostic procedure. See "Motor test" on page 110. Replace the pickup and feed assembly (RM1-0397-000CN). See "Paper-pickup and feed assembly" on page 98.
Jam in the pickup area	The paper-deck-controller PCA has failed.	Replace the paper-deck-controller PCA (RG1-4286-000CN). See "Paper-deck-controller PCA" on page 88.
Jam in the registration area	The registration roller is worn, dirty or damaged.	Clean the roller if it is dirty. Replace the pickup and feed assembly (RM1-0397-000CN). See "Paper-pickup and feed assembly" on page 98.

Table 8. Common jams and solutions

Issue	Cause	Action
Jam in the registration area	The pickup motor connectors are loose or disconnected.	Verify that the pickup motor connector (J104) and intermediate connector (J318) are firmly seated on the paper-deck-controller PCA. Verify that the connector at the motor is connected correctly.
Jam in the registration area	The registration clutch connector is Loose or disconnected.	Verify that the registration clutch connector (J104) and intermediate connector (J318) are firmly seated on the paper-deck-controller PCA. Verify that the connector at the registration clutch is connected correctly.
Jam in the registration area	The feed motor (M102) has failed.	Perform the motor diagnostic procedure. See "Motor test" on page 110. Replace the pickup and feed assembly (RM1-0397-000CN). See "Paper-pickup and feed assembly" on page 98.
Jam in the registration area	The registration gears are worn or damaged.	Perform the motor diagnostic procedure. See "Motor test" on page 110. Replace the pickup and feed assembly (RM1-0397-000CN).
Jam in the registration area	The registration-roller clutch has failed.	Perform the motor diagnostic procedure. See "Motor test" on page 110. Replace the pickup and feed assembly (RM1-0397-000CN). See "Paper-pickup and feed assembly" on page 98.
Jam in the registration area	The paper-deck-controller PCA has failed.	Replace the paper-deck-controller PCA (RG1-4286-000CN). See "Paper-deck-controller PCA" on page 88.

5 Theory of operation

Chapter contents

Basic operation

Major side-input tray systems

This chapter provides information about the following systems:

- Pickup and feed system
  - Paper-level and paper-size detection
  - Pickup and feed operation
  - Between-pages adjustments
  - Tray-lifting operation
- Power supply

The 2,000-sheet side-input tray provides high capacity media handling for the HP color LaserJet 9500mfp. The paper-deck-controller PCA controls operation of the tray. The paper-deck-controller PCA drives the tray clutch and motors in response to signals from the printer.

Relationships between the two systems is represented in figure 22.
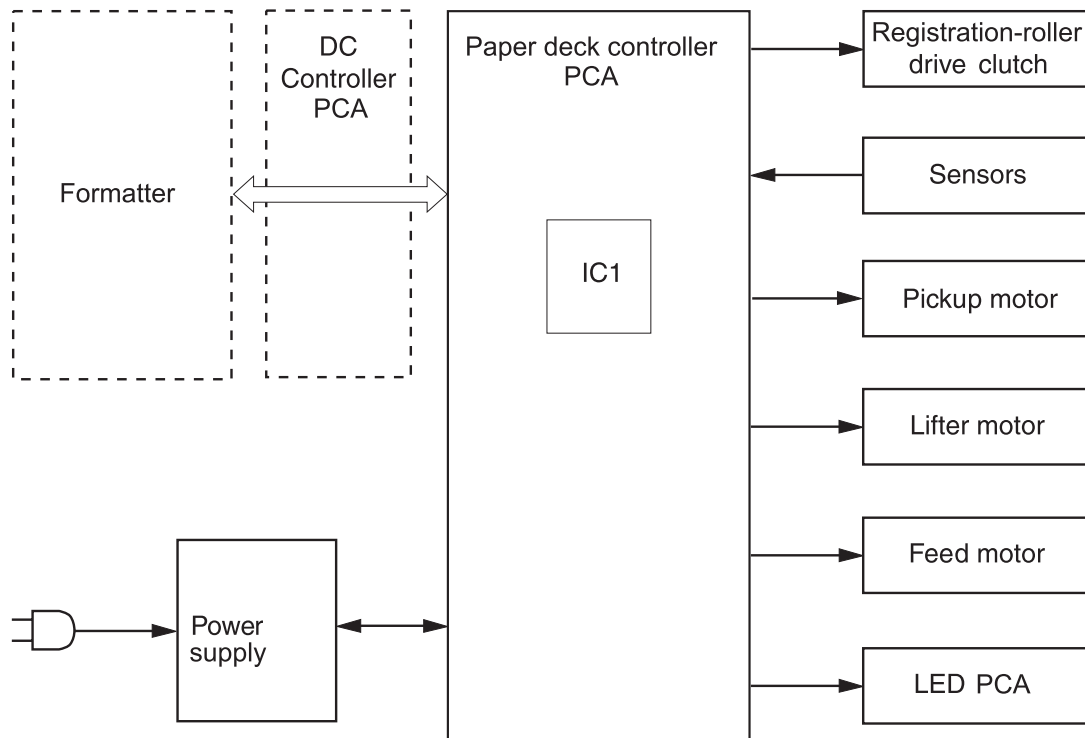
Figure 22.   **2,000-sheet side-input tray systems**

Side-input tray input and output signals

See figure 23 on page 47, figure 24 on page 48, and figure 25 on page 49 to identify the tray input and output (I/O) signals. Table 9 on page 5-49 describes each connector pin and provides signal descriptions.

Registration sensor PCA

Registration paper sensor	PS11	J301-5 / -3	J304-1 / -3	J305-11 / -9	J106-1 / -3	+5V REG-ROL — "L" when the sensor detects paper
Between-sheets sensor	PS12	J301-4 / -2 / -1	J304-2 / -4 / -5	J305-10 / -8 / -7	J106-2 / -4 / -5	+5V REG-CAS — "L" when the sensor detects paper
Paper-surface-level sensor	PS101	J302-3 / -1 / -2	J304-6 / -8 / -7	J305-6 / -4 / -5	J106-6 / -8 / -7	+5V PAP-LFT — "H" when the sensor detects the paper surface
Tray paper-out sensor	PS102	J303-3 / -1 / -2	J304-9 / -11 / -10	J305-3 / -1 / -2	J106-9 / -11 / -10	+5V PAP-EXT — "L" when the sensor detects paper on the lifter tray
Jam sensor	PS106	J319-3 / -1 / -2	J321L-4 / -6 / -5	J321D-3 / -1 / -2	J117-4 / -6 / -5	+5V JAM — "L" when the sensor detects paper
Contact sensor	PS107	J320-3 / -1 / -2	J321L-1 / -3 / -2	J321D-6 / -4 / -5	J117-1 / -3 / -2	+5V CONTACT — "H" when the HCI is not connected to the printer
Door sensor	PS108	J322-3 / -1 / -2			J120-1 / -3 / -2	+5V DOOR — "H" when the top cover is opened

Paper-deck controller PCA

Paper level sensor

Paper-level sensor 1	PS21	J332-8 / -5	J115-1 / -4	+5V PAP-V1	
Paper-level sensor 2	PS22	J332-7 / -4	J115-2 / -5	+5V PAP-V2	Detects the level of paper
Paper-level sensor 3	PS23	J332-6 / -3 / -2	J115-3 / -6 / -7	+5V PAP-V3	

Figure 23. Side-input tray I/O signals (1of 3)
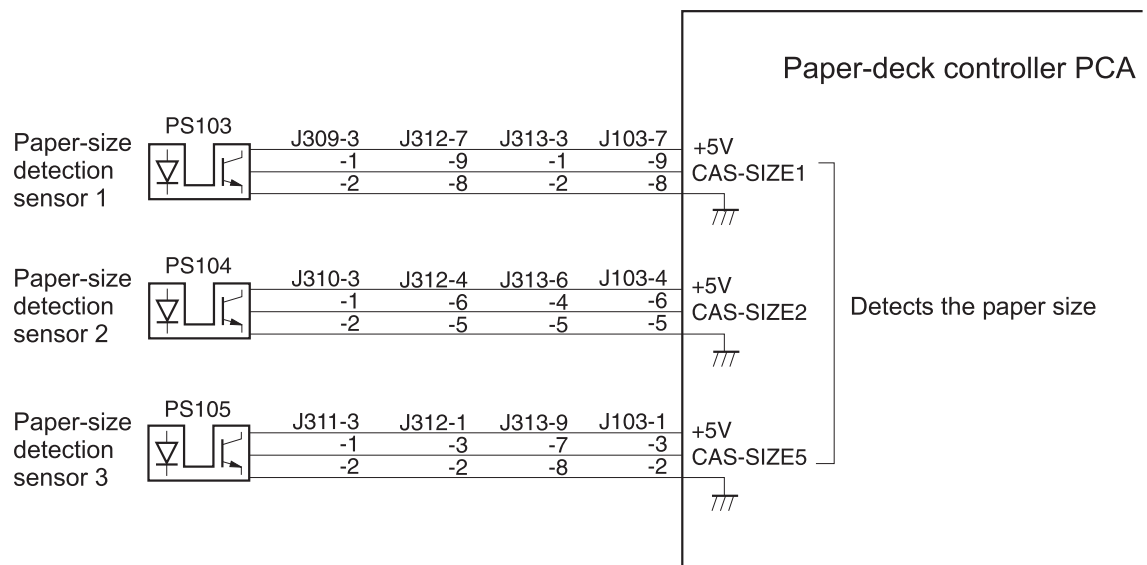
Figure 24. **Side-input tray I/O signals (2 of 3)**
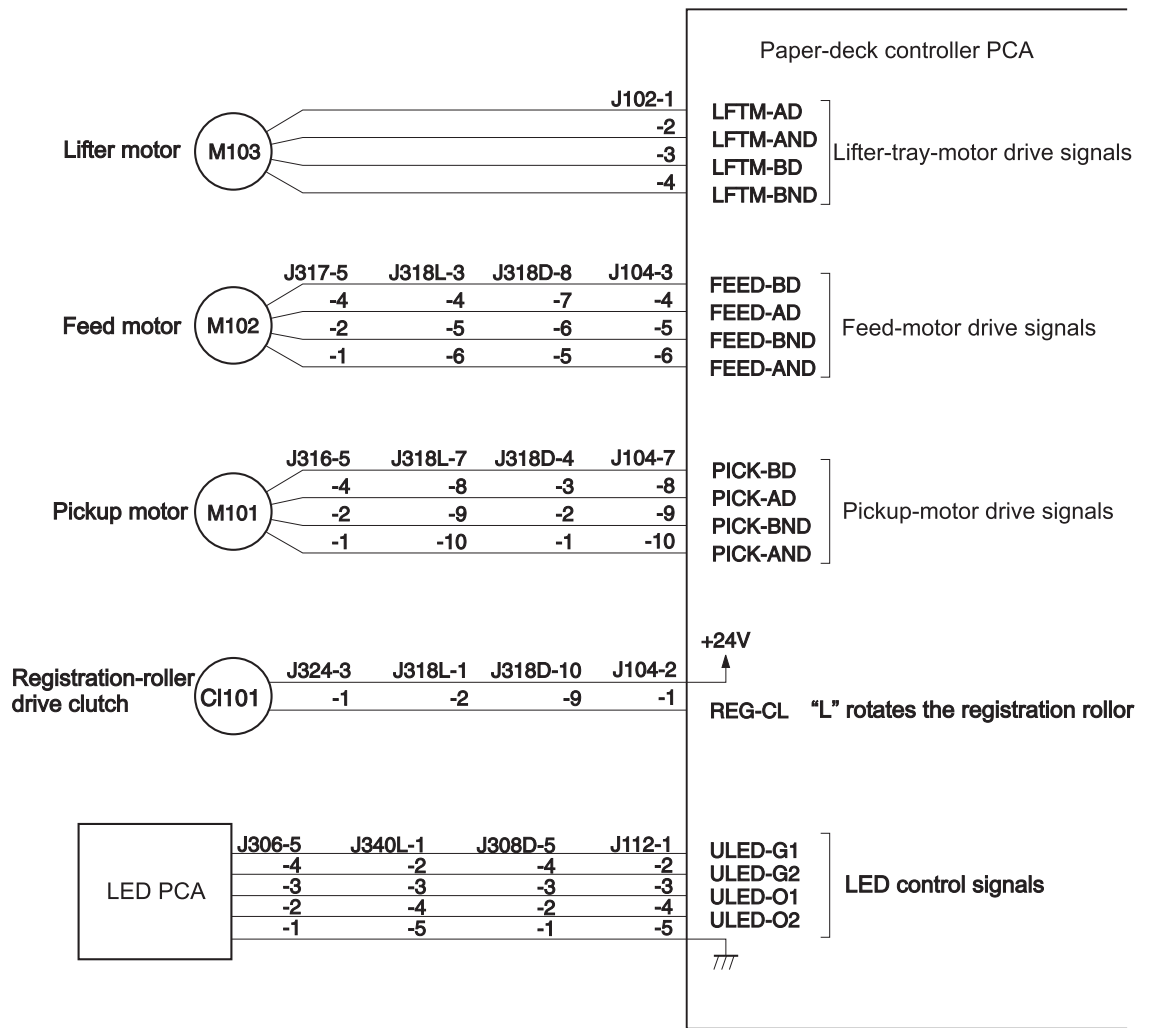
Figure 25. Side-input tray I/O signals (3of 3)

Table 9. Side-input tray signals (paper-deck-controller PCA)

Connector	Pin	Description	Input/Output	Logic	Signal name
J101	1 2 3 4 5 6	+24v +24v PWRON-IN +5V GND GND	I I O I	H	POWER ON
J102	1 2 3 4	LFTM-AD LFTM-AND LFTM-BD LFTM-BND	O O O O		LIFTER-MOTOR DRIVE LIFTER-MOTOR DRIVE LIFTER-MOTOR DRIVE LIFTER-MOTOR DRIVE

Table 9. Side-input tray signals (paper-deck-controller PCA) (continued)

Connector	Pin	Description	Input/Output	Logic	Signal name
J103	1	P5VB11	O		
	2	GND			
	3	CAS-SIZE5	I		PAPER-SIZE DETECTION
	4	P5VB12	O		
	5	GND			
	6	CAS-SIZE2	I		PAPER-SIZE DETECTION
	7	P5VB13	O		
	8	GND			
	9	CAS-SIZE1	I		PAPER-SIZE DETECTION
J104	1	REG-CL	O		REGISTRATION-ROLLER DRIVE CLUTCH
	2	+24V	O		
	3	FEED-BD	O		FEED-MOTOR DRIVE
	4	FEED-AD	O		FEED-MOTOR DRIVE
	5	FEED-BND	O		FEED-MOTOR DRIVE
	6	FEED-AND	O		FEED-MOTOR DRIVE
	7	PICK-BD	O		PICKUP-MOTOR DRIVE
	8	PICK-AD	O		PICKUP-MOTOR DRIVE
	9	PICK-BND	O		PICKUP-MOTOR DRIVE
	10	PICK-AND	O		PICKUP-MOTOR DRIVE
J105	1	CANH-IN			
	2	CANL-IN			
	3	PWRON-IN	O	H	POWER ON
	4	GND			
J106	1	P5VB1	O		
	2	P5VB2	O		
	3	REG-ROL	I	L	REGISTRATION-PAPER
	4	REG-CAS	I	L	BETWEEN-SHEETS
	5	GND			
	6	P5VB9	O		
	7	GND			
	8	PAP-LFT	I	L	PAPER-SURFACE LEVEL DETECTION
	9	P5VB10	O		
	10	GND			
	11	PAP-EXT	I	H	TRAY-PAPER OUT
J112	1	ULED-G1	O		USER LED CONTROL
	2	ULED-G2	O		USER LED CONTROL
	3	ULED-01	O		USER LED CONTROL
	4	ULED-O2	O		USER LED CONTROL
	5	GTND			
J115	1	P5VB8	O		
	2	P5VB7	O		
	3	P5VB6	O		
	4	PAP-V1	I		PAPER LEVEL
	5	PAP-V2	I		PAPER LEVEL
	6	PAP-V3	I		PAPER LEVEL
	7	GND			
	8	N.C.			
J117	1	P5VB5	O		
	2	GND			
	3	CONTACT	I	H	CONTACT
	4	P5VB3	O		
	5	GND			
	6	JAM	I	L	JAM
J120	1	P5VB4	O		
	2	GND			
	3	DOOR	I	H	DOOR-OPEN

Figure 26. **Side-input tray motors and rollers**

Formatter

JetLink

Paper-deck-controller PCA

JAM signal (JAM)

REGISTRATION PAPER signal (REG-ROL)

BETWEEN-SHEETS signal (REG-CAS)

TRAY PAPER OUT signal (PAP-EXT)

PAPER SURFACE LEVEL DETECTION signal (PAP-LFT)

PAPER LEVEL signal

DOOR OPEN/CLOSE signal (DOOR)

PAPER SIZE DETECTION signal

PS106

PS11

PS12

PS102

PS101

PS21

PS22

PS23

PS103

PS104

PS105

PS11 : Registration paper sensor
PS12 : Between-pages sensor
PS21~23 : Paper-level sensors #1~ #3
PS101 : Paper-surface-level sensor
PS102 : Tray-paper-out sensor
PS103~105 : Paper-size-detection sensors #1 ~ #3
PS106 : Jam sensor

Figure 27.   **Side-input tray sensors**

Pickup and feed system

Introduction

The pickup and feed system uses the following sensors to detect paper presence, paper size, paper level, and tray operation.

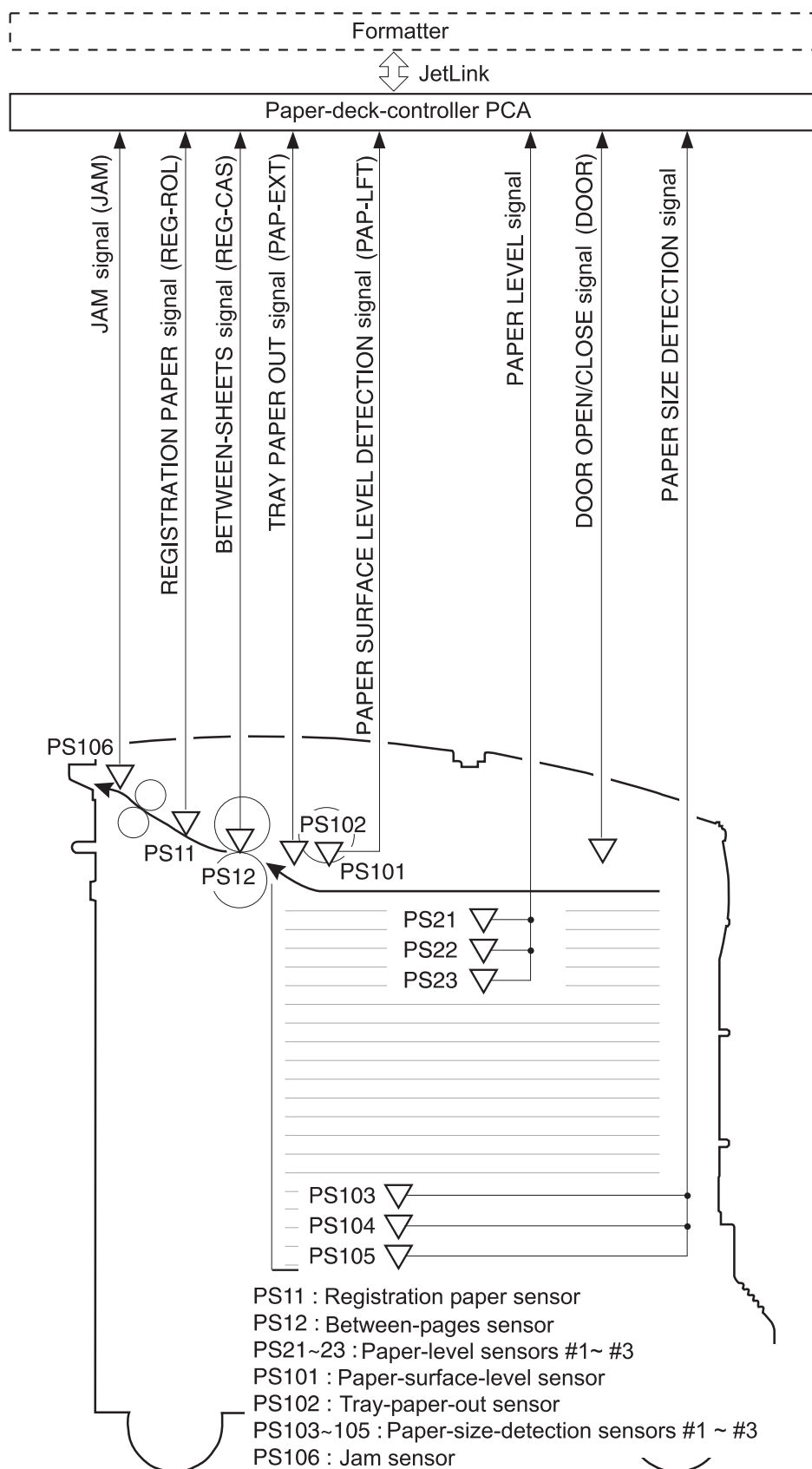- Tray paper-out sensor PS101 detects media on the lifting tray.
- Paper-level sensors PS21 to PS 23 detect the level of media on the lifting tray.
- Paper-size sensors PS103 to PS105 detect the size of the media on the tray.
- Door sensor PS108 detects the opening and closing of the tray top-cover assembly.
- Contact sensor PS107 detects whether or not the side-input tray is attached to the MFP.

When media is placed into the side-input tray and the top-cover assembly is closed, the tray begins a paper lifting operation. The lifting operation raises the paper to the correct position to be fed into the MFP.

When a signal is received from the MFP, the side-input tray begins the pickup and feed operation. The paper-deck-controller PCA activates the feed motor (M102) and the pickup motor (M101). These motors rotate the pickup and feed rollers, which feed paper toward the registration rollers. The registration rollers correct page skew and align the sheet to feed into the MFP. After the skew correction, the registration-roller-drive clutch is activated and the sheet is feed into the MFP.

The pickup and feed system uses the following sensors to monitor media moving through the paper path:

- Registration paper sensor (PS11); detects media at the registration rollers and controls the feed-motor speed
- Between-pages sensor (PS12); detects the trailing and leading edges during multiple-sheet feeding
- Jam sensor (PS103); detects jammed media in the tray

See figure 26 on page 51, and figure 27 on page 52 to identify the relationship between the paper-deck-controller PCA and the tray motors, rollers, and sensors. These sensors are described in detail later in is chapter.

Media-level and media-size detection

The paper-level sensors (PS21 to PS23) detect the amount of media that is loaded in the side-input tray. Table 10 describes the sensor signals that correspond to the amount of media in the tray.

The paper-size sensors (PS103 to PS105) detect the size of media that is loaded in the side-input tray. Table 11 describes the sensor signals that correspond to the size of media in the tray.

The paper-deck-controller PCA sends a media-level and media-size signal to the MFP.

Table 10. Paper-level sensors

Media level (%)	Paper-level sensor		
	PS21	PS22	PS23
100% (full)	LOW	HIGH	HIGH
40%	LOW	HIGH	LOW
30%	HIGH	HIGH	HIGH
20%	HIGH	HIGH	LOW
10%	HIGH	LOW	HIGH
5%	HIGH	LOW	LOW

Table 11. Paper-size sensors

Media size	Paper-size sensor		
	PS103	PS104	PS105
Letter	LOW	LOW	LOW
Letter (horizontal)	LOW	HIGH	HIGH
A4	LOW	LOW	LOW
A4 (horizontal)	HIGH	HIGH	HIGH

Pickup and feed operation

The formatter sends a pickup signal the paper-deck-controller PCA. The paper-deck-controller PCA then signals the feed motor (M102) and pickup motor (M101) to begin rotating. These motors rotate the pickup, feed, and separation rollers. The media is fed into the paper path as the pickup roller begins to rotate. The separation roller prevents multiple-sheet feeding so that a single sheet is fed into the registration roller. The pickup motor (M101) initially operates at a high speed, and then returns to normal speed (when the registration sensor [PS11] detects the sheet) to adjust the timing between pickup operations.

Page skew is corrected as the sheet moves through the registration assembly. The sheet then moves toward the tray-printer merge point (where the page will exit the tray paper path and enter the printer paper path). If the paper-deck-controller PCA receives the merge-point permission signal, the sheet is fed into the printer. If the signal is not received, the paper-deck-controller PCA stops the sheet at the tray-printer merge point and waits for the signal.

Figure 28 shows the side-input tray timing during the pickup and feed operation. Figure 29 shows the relation ship between the major pickup and feed operation components.

Units: seconds

	Print
Pickup command	
Feed motor (M102)	About 0.005
Pickup motor (M101)	About 0.3 / About 1.36
Between-sheets sensor (PS12)	About 0.15
Registration paper sensor (PS11)	About 0.15
Registration-roller drive clutch (Cl101)	About 0.33
Jam sensor (PS106)	About 0.5
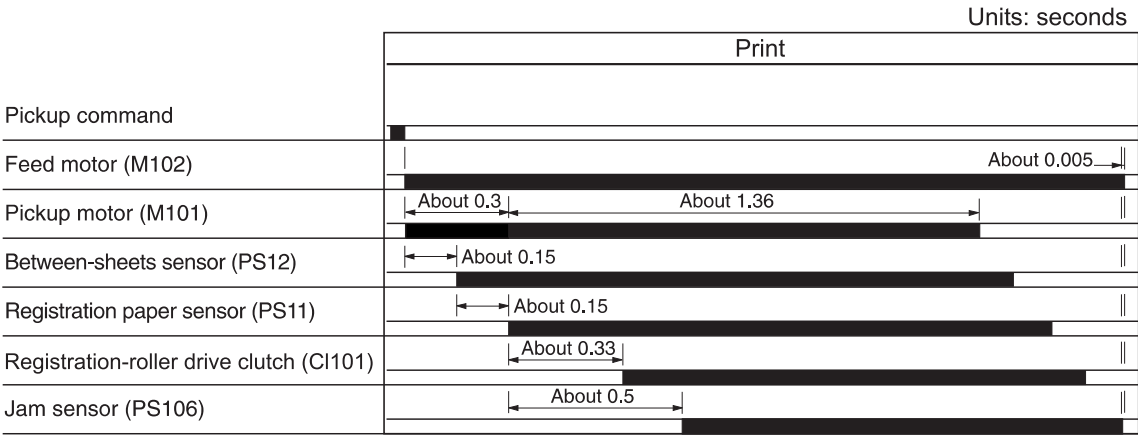
Figure 28. **Side-input tray timing diagram**

M101 : Pickup motor
M102 : Feed motor
M103 : Lifter motor
CL101 : Registration-roller drive clutch
PS11 : Registration paper sensor
PS12 : Between-pages sensor
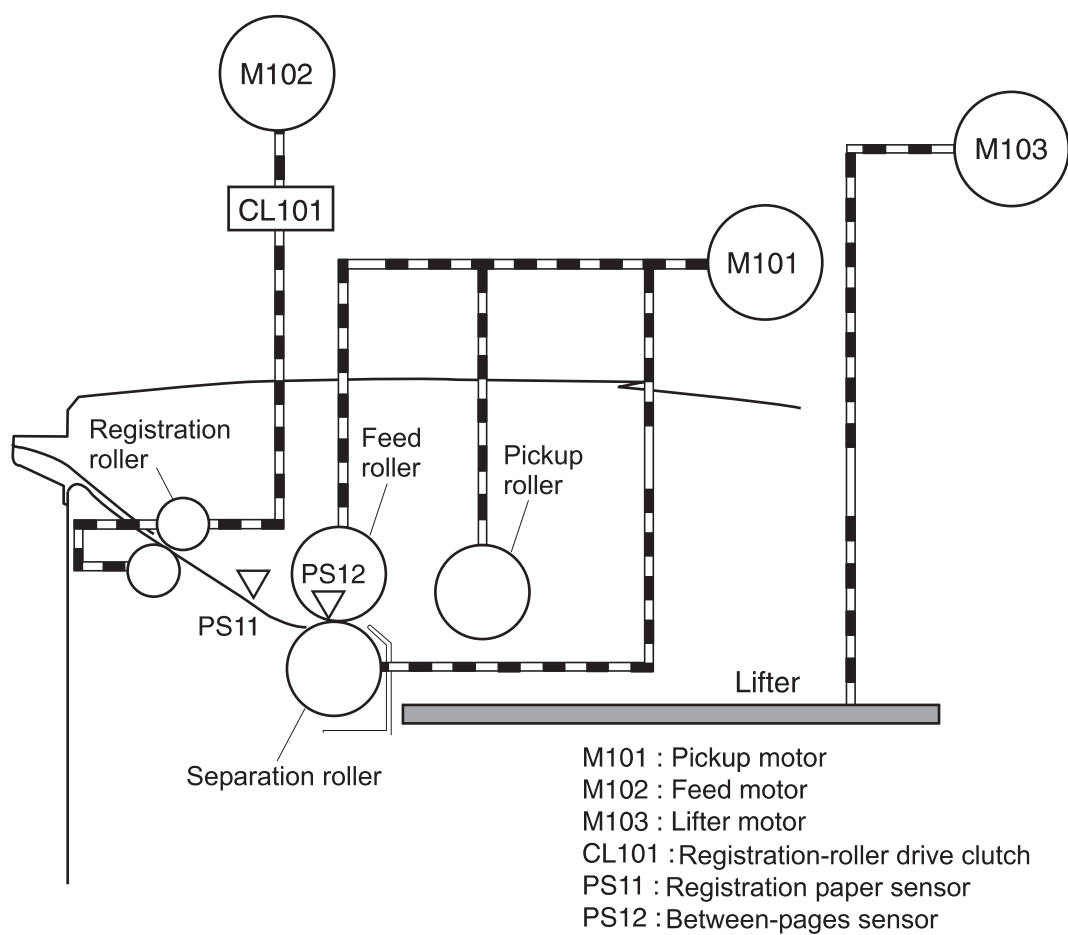
Figure 29.   **Side-input tray major components**

Between-page adjustment

Correct spacing between the trailing edge of one sheet and the leading edge of the next sheet is required in order to avoid jams during a continuous pickup and feed operation. The between-pages sensor (PS12) sends a signal to the paper-deck-controller PCA when a sheet reaches a specific point along the paper path. The paper-deck-controller PCA controls the rotation of the pickup motor. After receiving a signal from the between-pages sensor, the paper-deck-controller PCA starts the pickup motor rotation.
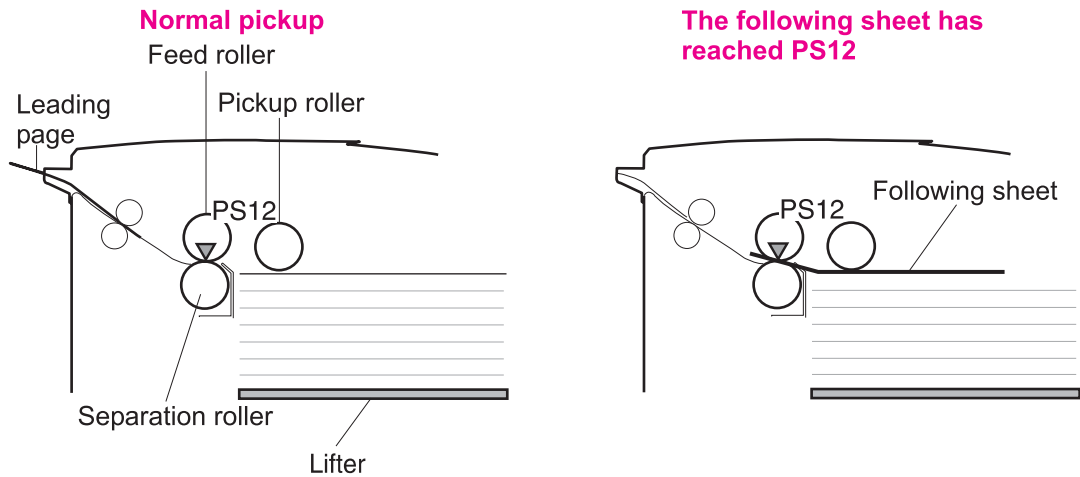

Figure 30.   **Side-input tray between-pages adjustment**

Tray-lifting operation

When the tray power is turned on, the tray that holds the media rises into position under the pickup and feed roller assembly. The paper-deck-controller PCA sends a signal to the lifter motor (M103) and the motor begins to rotate. Through a series of gears and pulleys, the tray is raised until the paper-surface level sensor (PS101) detects the media stack. If there is not any media loaded in the tray, the paper-out sensor (PS102) sends a signal to the paper-deck-controller PCA, which then sends a paper-out signal to the MFP. The tray lifts when the top cover is closed. and lowers when the top cover is opened. The tray also lifts during the pickup operation.

Note   If the paper-deck-controller PCA does not receive a media-detected signal from the paper-surface level sensor (PS101) within a specific time during a tray- lifting operation, the paper-deck-controller PCA sends a lifter-failed signal to the MFP.
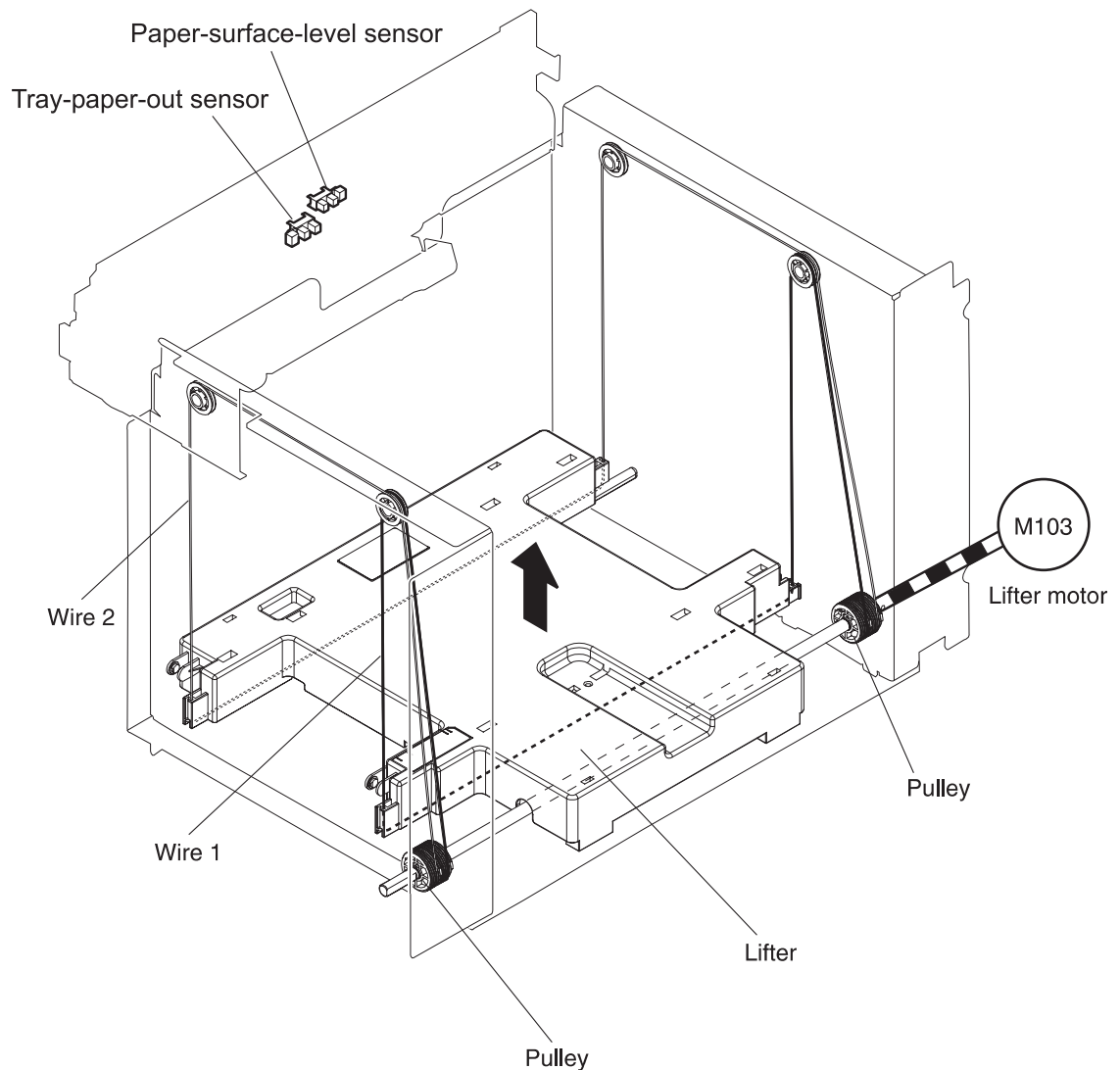

Figure 31.   **2,000-sheet side-input tray lifting operation**

Tray lift when the top cover is closed

The door sensor (PS108) sends a signal to the paper-deck-controller PCA when the side-input tray doors are closed. When the paper-deck-controller receives this signal, the lifting operation raises the paper into position under the pickup and feed roller assembly.

Tray lift when during the pickup operation

The paper-surface level sensor (PS101) detects a decrease in the height of the media stack during a continuous-feed operation, and sends a signal to the paper-deck-controller PCA. When the paper-deck-controller receives this signal, the lifting operation raises the paper into position under the pickup and feed roller assembly.

Power supply

Introduction

The power supply provides power to the paper-deck-controller PCA. The +24 volts supplies power to the tray motors. The +5 volts supplies power to the tray sensors, clutches, and other low-voltage components.

Power supply protection

The power supply has over-current and over-voltage protection circuits. These protective circuits prevent damage to the power supply if an excessive current or voltage (for example, a short circuit) is detected on the load side of the power supply. If the either of the protective circuits is activated, the power supply shuts down the +24 and +5 volt circuits. Turn the printer power off, and wait at least two minutes for the protective circuits to reset.

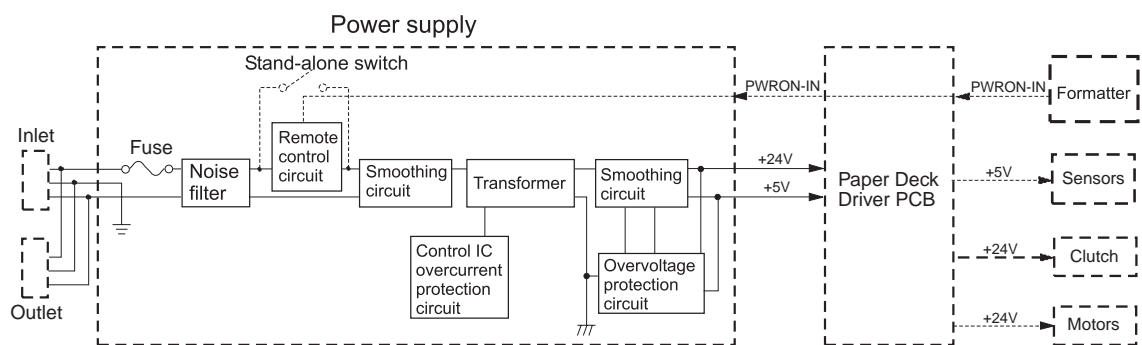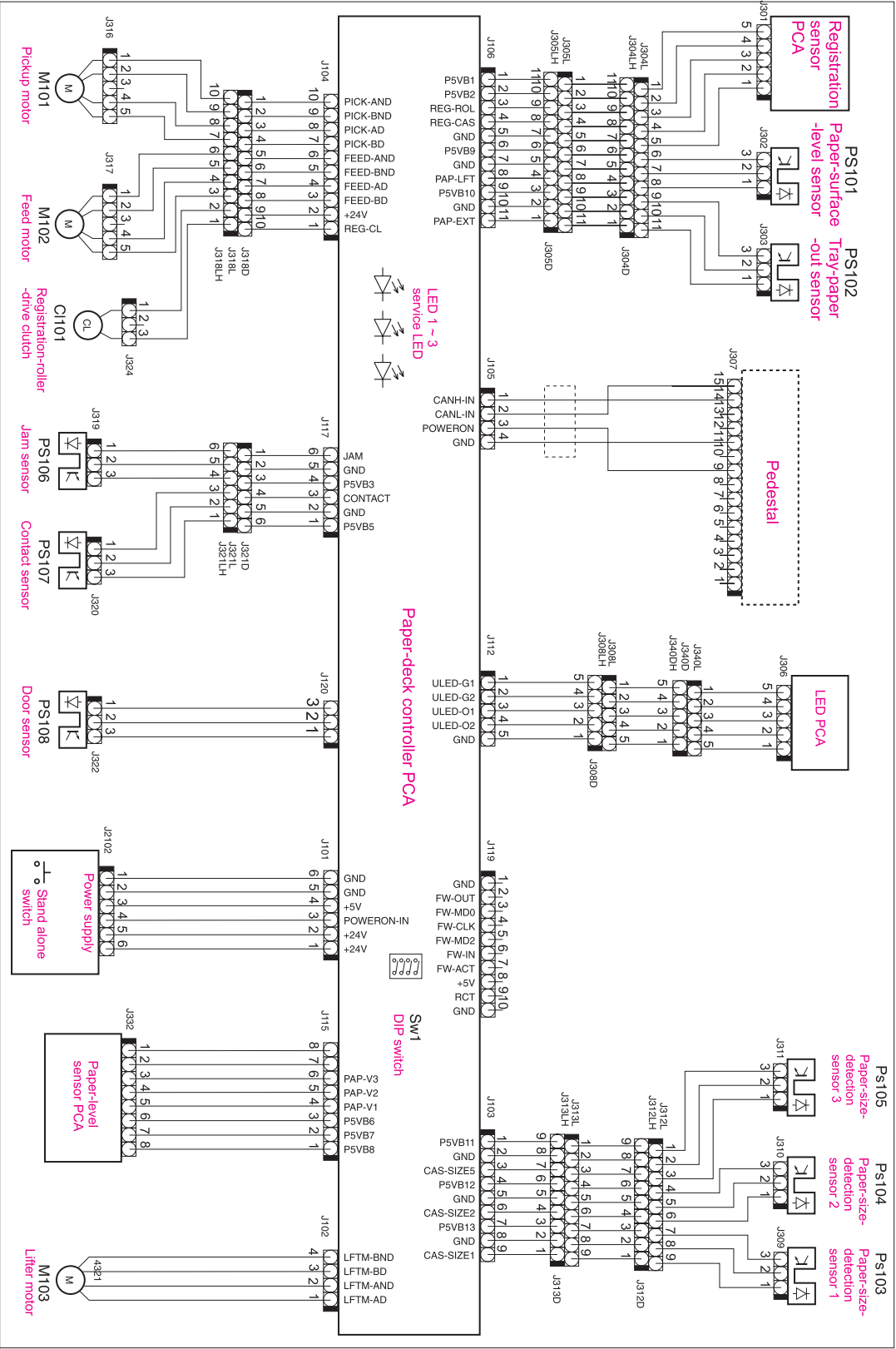**Figure 32.**   **Side-input tray power supply**

Diagrams

Wiring

Figure 33.   **Side-input tray wiring diagram**

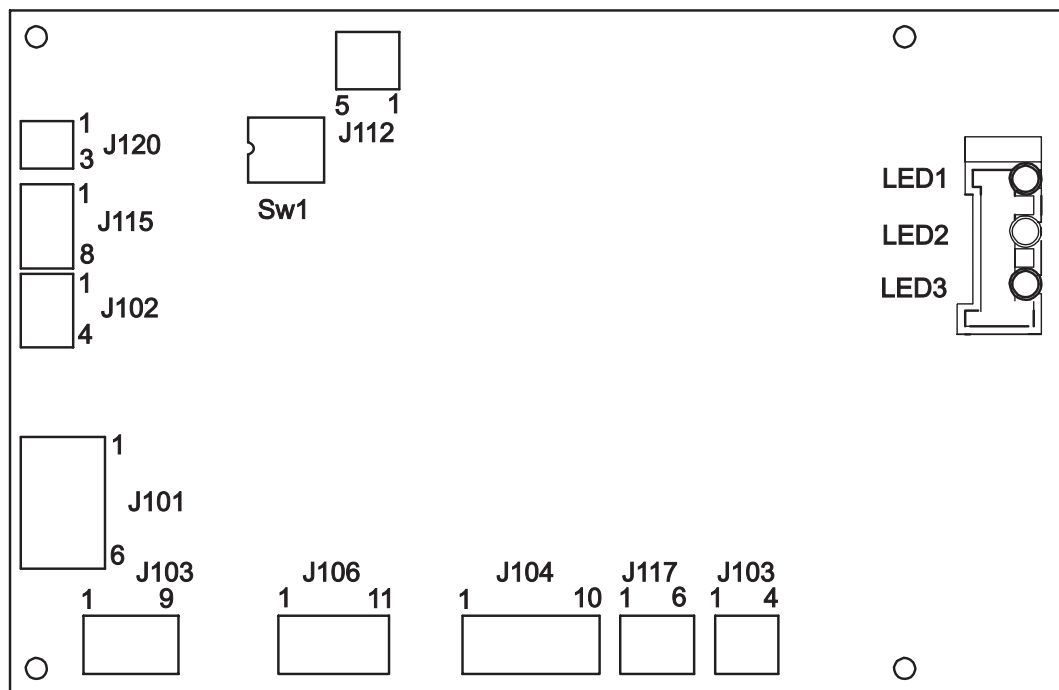## Connectors

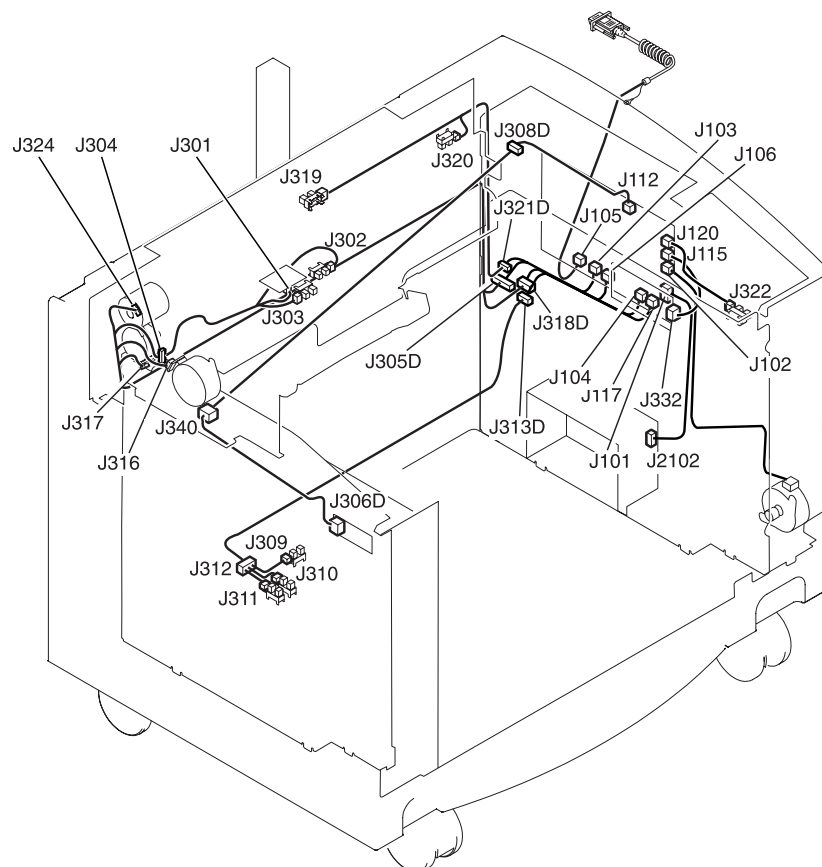**Figure 34.** Side-input tray paper-deck-controller connectors

Figure 35. Side-input tray connectors

Main assemblies

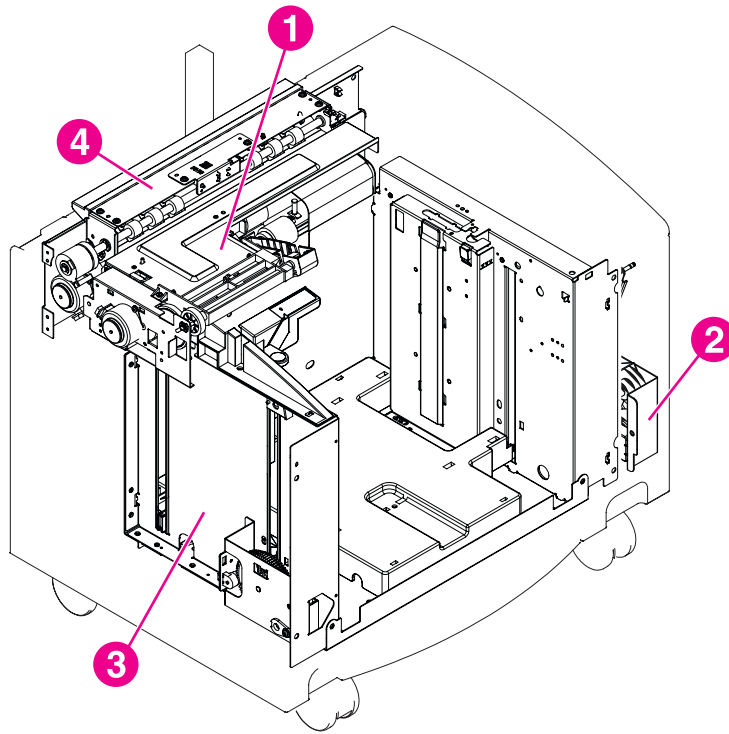**Figure 36.** Side-input tray main assemblies

Table 12. Side-input tray main assemblies

Item	Description
1	Pickup assembly
2	Lifter drive assembly
3	Tray assembly
4	Registration-roller assembly

Sensors
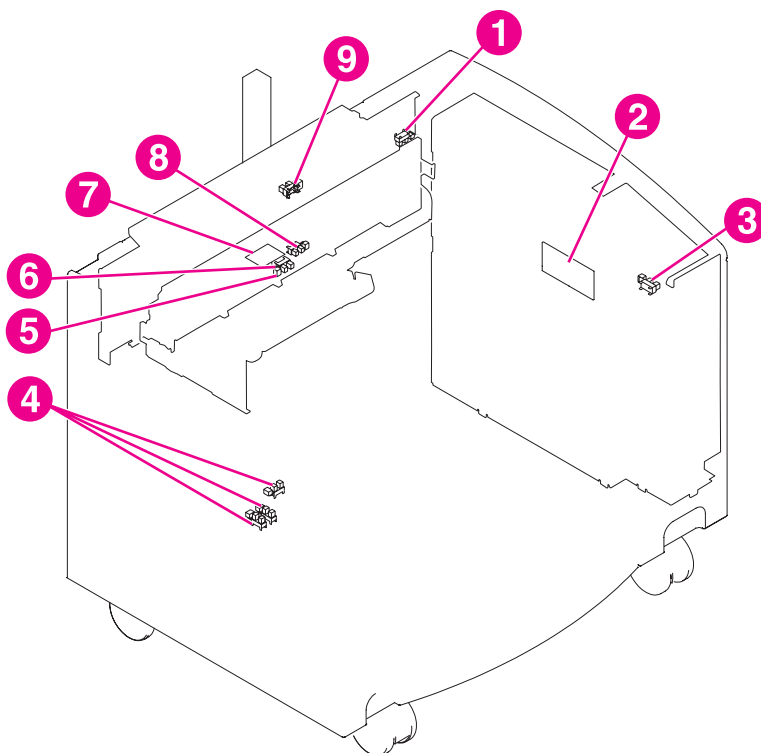
Figure 37.   **Side-input tray sensors**

Table 13. Side-input tray sensors

Item	Sensor	Description
1	PS107	Contact sensor
2	PS21, PS22, PS23	Paper-level sensors
3	PS108	Door sensor
4	PS103, PS104, PS105	Paper-size-detection sensors
5	PS102	Tray paper-out sensor
6	PS12	Between-pages sensor
7	PS11	Registration paper sensor
8	PS101	Paper-surface-level sensor
9	PS106	Jam-detection sensor

Clutch and motors
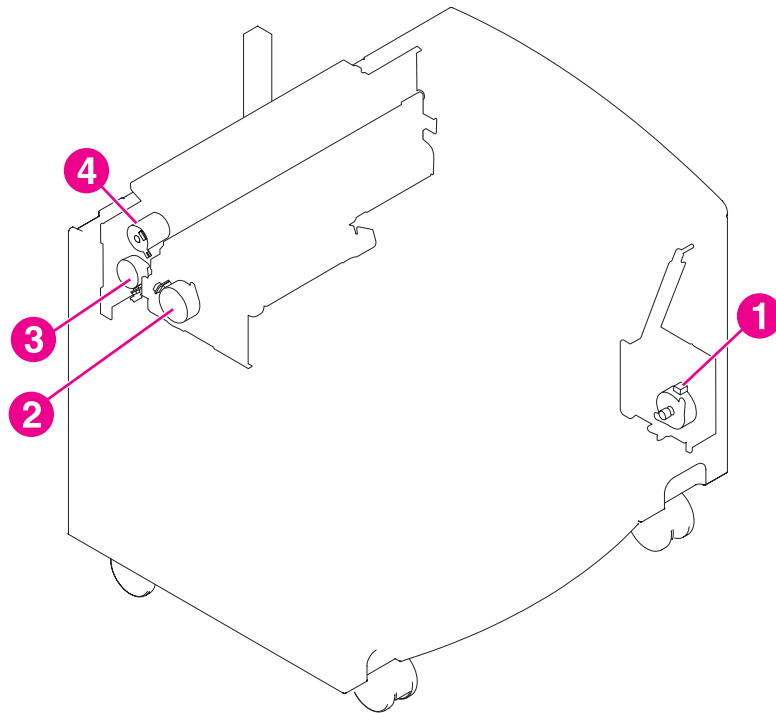
Figure 38. Side-input tray clutch and motors

Table 14. Side-input tray clutch and motors

Item	Clutch or motor	Description
1	M103	Lifter motor
2	M101	Pickup motor
3	M102	Feed motor
4	CL101	Registration-roller clutch

PCAs
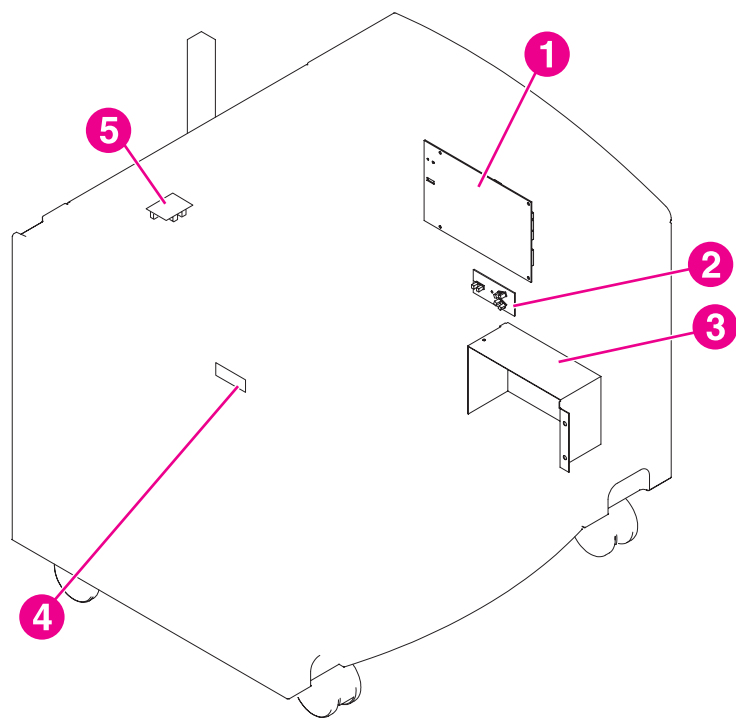
Figure 39. **Side-input tray PCAs**

Table 15. Side-input tray PCAs

Item	Description
1	Paper-deck-controller PCA
2	Paper-level-sensor PCA
3	Power-supply PCA
4	LED PCA
5	Registration-sensor PCA

Rollers and lifter mechanism

Figure 40.   **Side-input tray rollers and lifter mechanism**

Table 16. Side-input tray rollers and lifter mechanism

Item	Description
1	Pickup roller
2	Lifter mechanism
3	Separation roller
4	Feed roller

6 Removal and replacement

Chapter contents

Introduction

Removal and replacement strategy

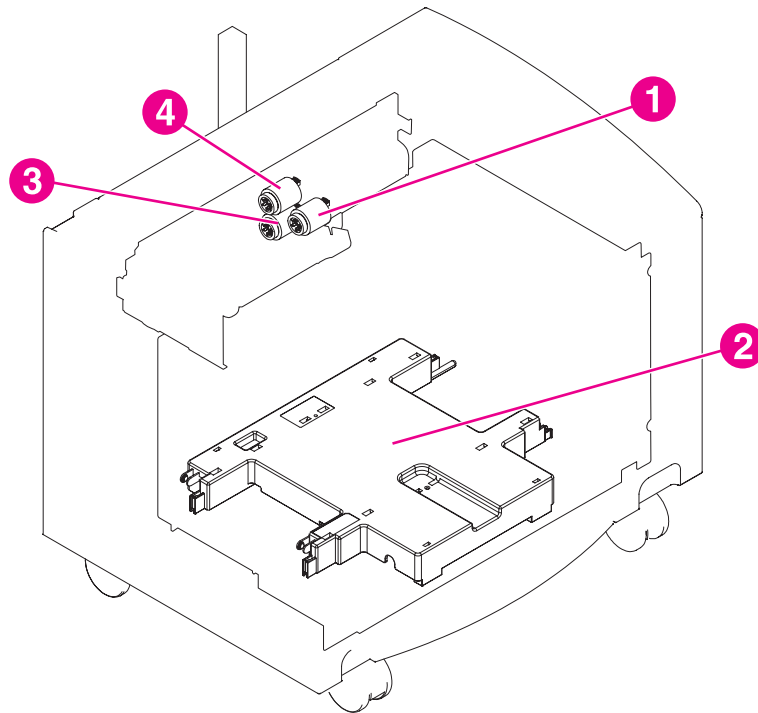This chapter documents the removal and replacement of field replaceable units (FRUs) for the 2,000-sheet side-input tray. If the removal and replacement of a failed component is not described in this chapter, and the component is not offered as an orderable part in chapter 8, then you must replace the entire 2,000-sheet side-input tray.

Installing a replacement component is the reverse of removal, unless otherwise noted.

General cautions during removal and replacement

Observe these precautions before removing or replacing assemblies and parts:

- Make sure that the tray is disconnected from the printer (unlatch the tray and slide it away from the MFP).
- Disconnect all cables and cords.

WARNING! Exercise caution when working on the side-input tray. The tray can have sharp sheet-metal edges.

CAUTION Slide the blue latch away from the tray along the slide rail *before* raising the slide rail into the upright position to prevent it from being damaged.

Note Note the lengths, diameters, and locations of screws. Be sure to return each screw to its original location during reassembly.

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

Electrostatic discharge

The 2,000-sheet side-input tray contains parts that are sensitive to electrostatic discharge (ESD). Always service the printer at an ESD-protected workstation, or use an ESD mat.

CAUTION Watch for the ESD cautions to identify the parts that are sensitive to ESD. Protect these parts by using an ESD wrist strap and protective ESD pouches.

If an ESD workstation or wrist strap is not available, ground your self by touching the metal chassis of the tray before touching an ESD-sensitive component.

Required tools

You need the following tools to service the printer and the finishing device:

- #2 Phillips screwdriver with magnetic tip
- Small flatblade screwdriver
- Small needle-nose pliers
- ESD mat and wrist strap
- Penlight

CAUTION A pozidriv screwdriver will damage screw-heads on the tray. Be sure to use a #2 Phillips screwdriver. If you have an electric or multi-speed screwdriver, use a torque limiter or set the clutch to apply low torque.

Table 17. Commonly used hardware table

Example	Type
	• Short with serrated washer (M4 x 8 with washer) • Short with large shoulder (TP M4 x 8) • Short with small shoulder (TP M3 x 6) • Self-threading with black finish (Tapping truss head M4 x 8)

Table 18. Common torque values

Material	HP recommended torque value
Plastic to metal	5.5 lb-inch
Metal to metal	10 lb-inch
PCBA	5.5 lb-inch
Plastic to plastic	5.5 lb-inch

Side-input tray orientation

The orientation for the 2,000-sheet side-input tray is slightly different from that of a standard HP product. When you look at the tray, the door assembly appears to be the front of the product. However, in this manual the door assembly is considered the *right-side* door assembly. The actual front cover of the product is the cover that has the small, single LED (this is the side that is parallel to the front of the printer and facing you when you look at the control panel).

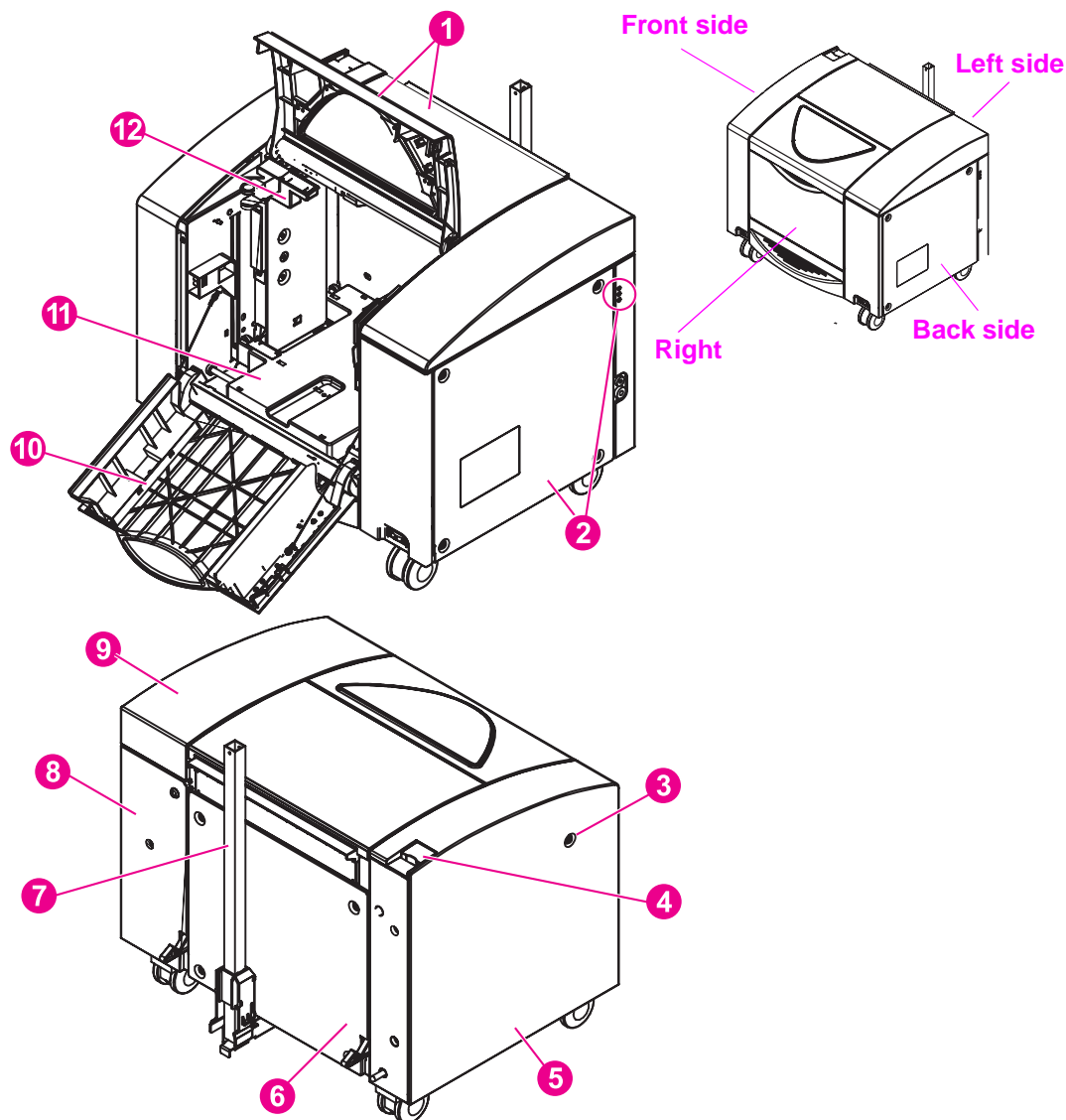**Figure 41.** **Front, back and side assembly locations**

Table 19. Tray orientation and assemblies

1	Top-cover assembly	5	Front-cover assembly	9	Top rear cover
2	Back cover and service LEDs	6	Left-cover assembly	10	Right-door assembly
3	Operating LED	7	Slide rail	11	Lifter tray
4	Latch lever	8	Back-left cover	12	Paper-size guide

Covers, panels, and doors

Left cover

1 Remove four screws (callout 1).

2 Remove the left cover.
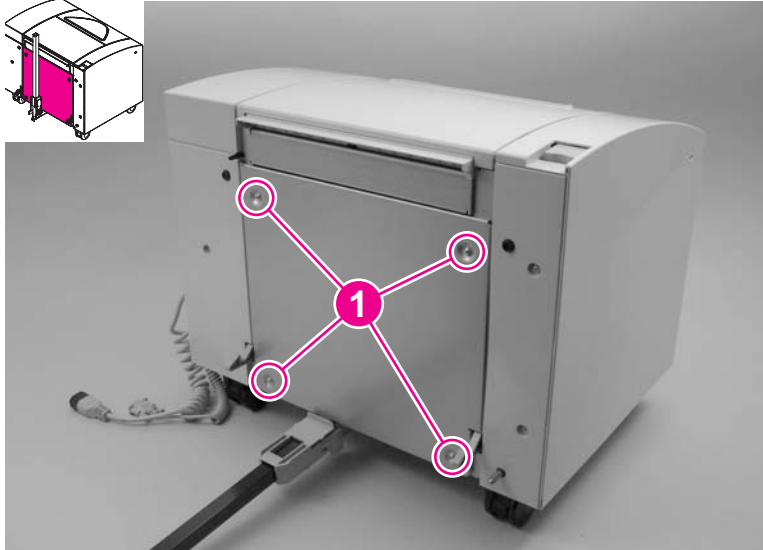
Figure 42. **Remove the left cover**

Left front cover

1 Remove two screws (callout 1).

2 Remove the left front cover.

Figure 43. **Remove the left front cover**

Back-left cover

1 Remove one screw (callout 1).

2 Pull the top of the cover away from the tray, and then slide the cover up to remove it.
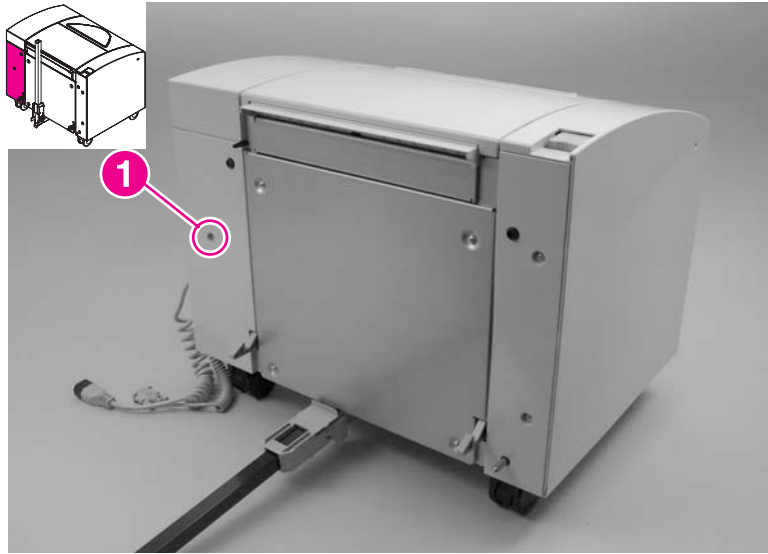
Figure 44. **Remove the back-left cover**

Back cover

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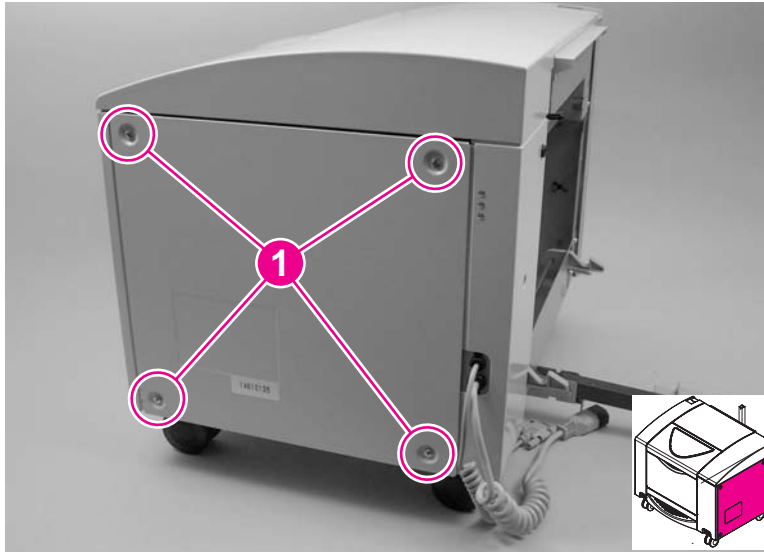
2   Remove the back cover.

Right door

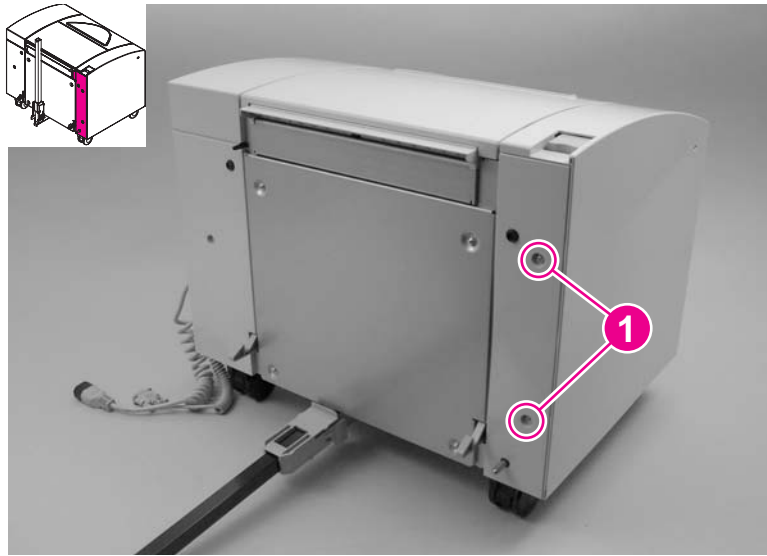**1** Open the top cover.

2 Open the right door, and remove the two door retainer strap screws (callout 1; front side shown).
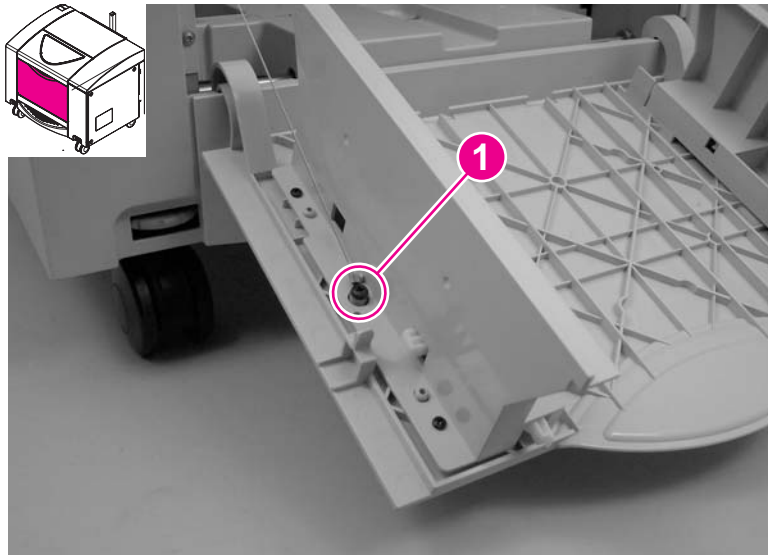
Figure 46.   **Remove the right door (1 of 2)**

3 Support the door, remove the two hinge screws (callout 2), and then remove the right door.
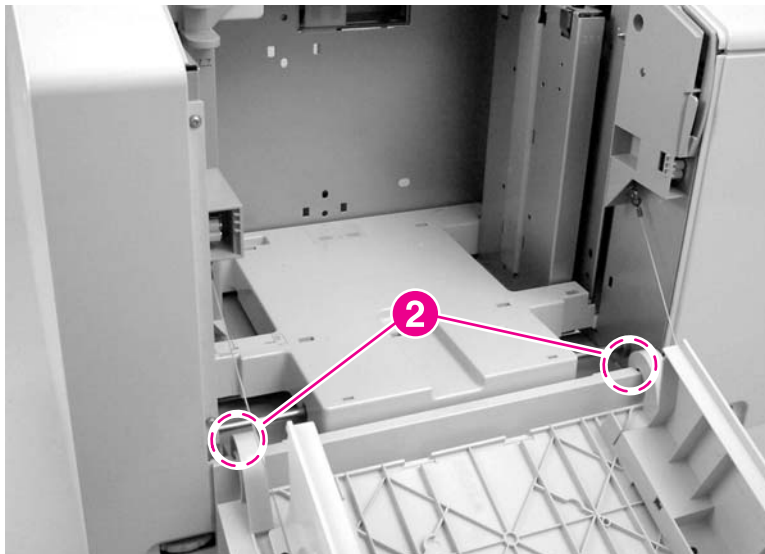
Figure 47.   **Remove the right door (2 of 2)**

Top rear cover

1 Remove the left back cover. See .

1 Open the top cover.

2 Remove one screw (callout 1).

3 Lift up on the left end of the cover, and then slide it toward the right side door to remove it.
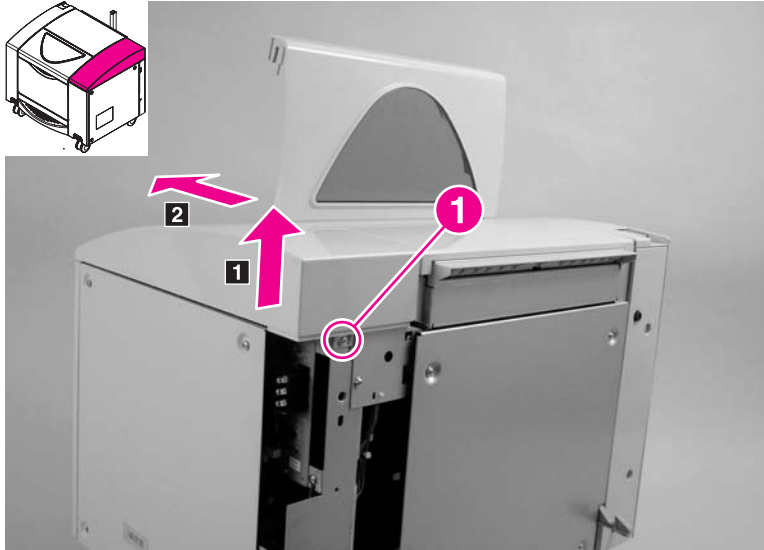
Figure 48. **Remove the top rear cover**

Front cover

1 Remove the left front cover. See "Left front cover" on page 74.

2 Open the top cover and right side door.

3 Remove two screws (callout 1), and then lift the cover up to remove it.
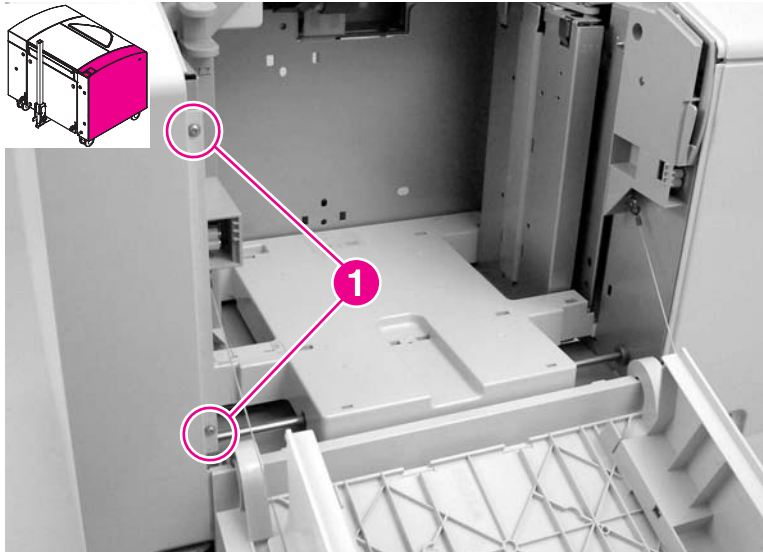
Figure 49. Remove the front cover

Top-cover assembly

1 Remove the following assemblies.

- Top rear cover. See "Top rear cover" on page 78.
- Front cover. See "Front cover" on page 79.

2 Remove four screws (callout 1).
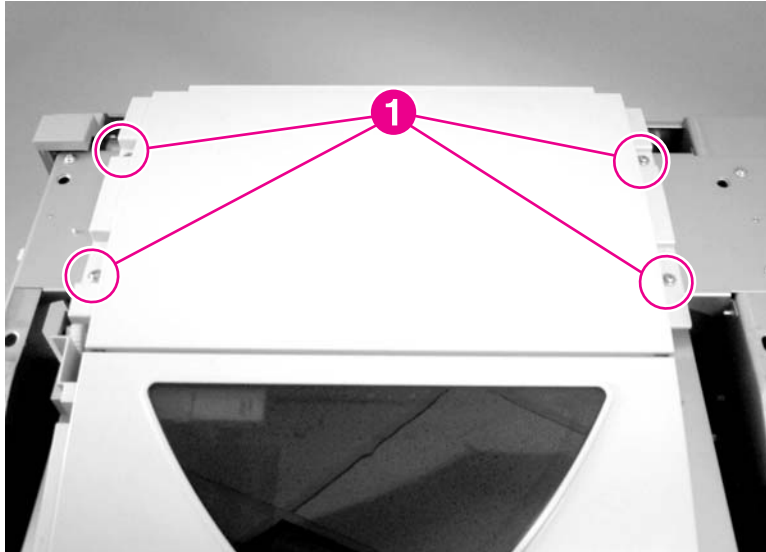
Figure 50.   **Remove the top-cover assembly (1 of 2)**

3 Lift up on the edge of the cover near the right side door to unlock the cover pins, and then slide the cover toward the right side door to remove it.

Figure 51.   **Remove the top-cover assembly (2 of 2)**

When reinstalling the top cover, make sure that the tab on the cover snaps into the hole on the tray chassis. If this tab is broken off when the cover is removed, make sure that you look inside the tray and find the broken tab.
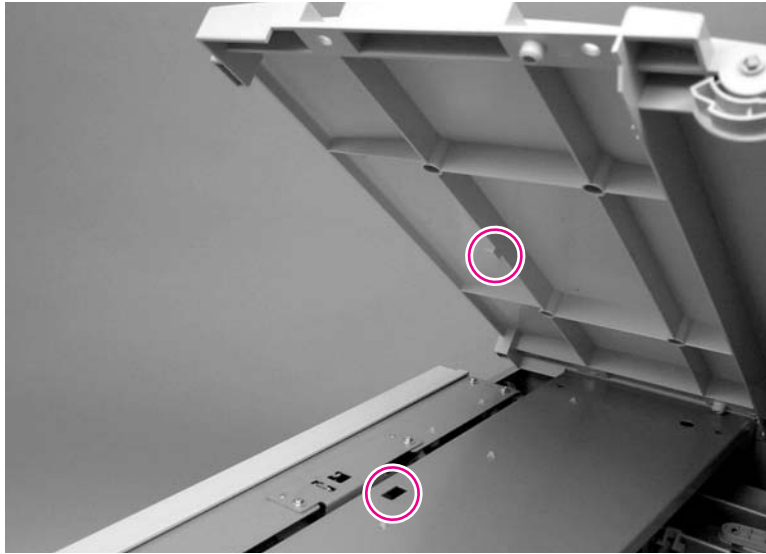
Figure 52.   **Reinstalling the top-cover assembly**

Right rear cover

1 Remove the top cover. See "Top-cover assembly" on page 80.

2 Remove one screw (callout 1), and then remove the right rear cover.
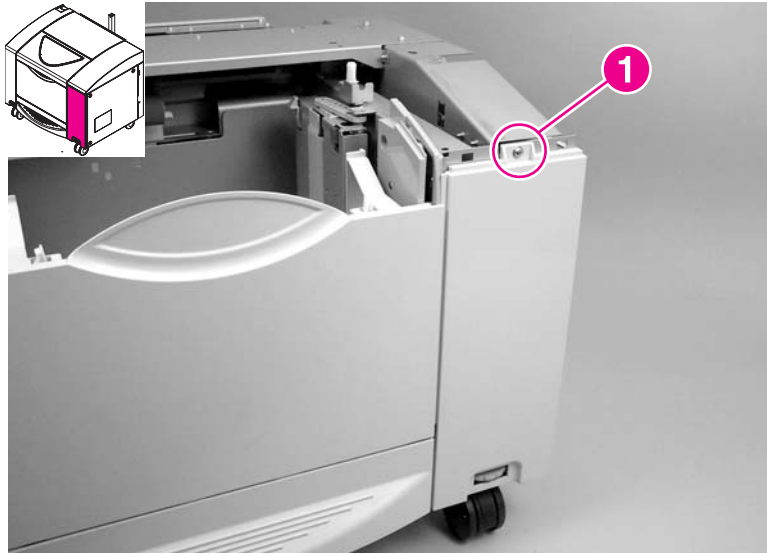
Figure 53. **Remove the right rear cover**

Right lower cover

1 Remove the following assemblies.

● Front cover. See "Front cover" on page 79.

● Right rear cover. See "Right rear cover" on page 82.

2 Remove two screws (callout 1), and then rotate the bottom of the cover away from the tray to remove it.
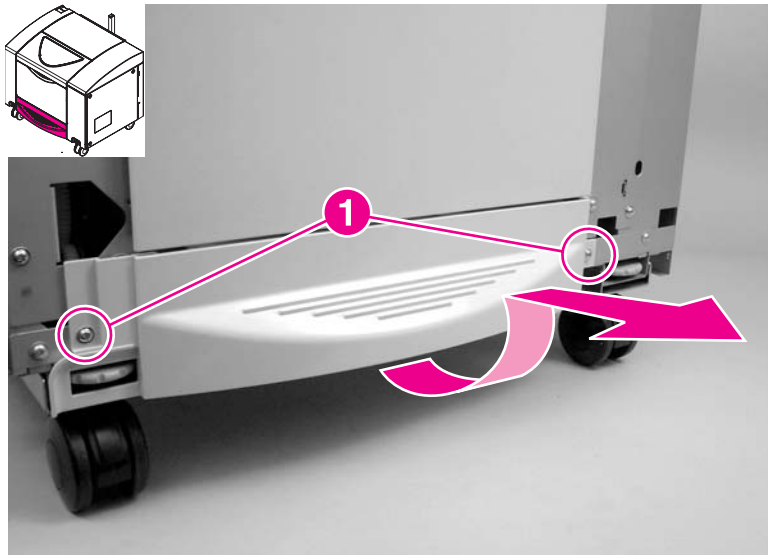
Figure 54.   **Remove the right lower cover**

Internal assemblies

Pickup, feed, and separation rollers

1 Open the top cover.

2 Pinch the locking lever on the inside of a roller (near the roller shaft; callout 1) to release the roller, and then slide the roller off of the shaft.

3 Repeat this procedure for the remaining rollers.

When installing the rollers, make sure that the bar on the shaft locks into the slot on the rear of the roller.

Figure 55. **Remove the pickup, feed, and separation rollers**

Lifter-driver assembly

1   Remove the back cover. See .

2   Disconnect one spring (callout 1), remove one e-ring (callout 2), and then slide the black lifter-sensor lever off of the shaft.
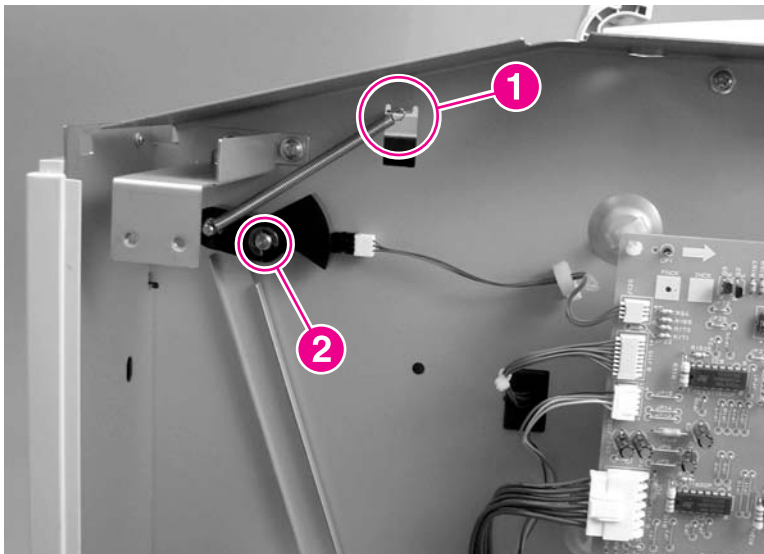
Figure 56.   **Remove the lifter-driver assembly (1 of 4)**

Note   The shaft has a lever-locking pin (callout 3) that is not captive when the lever is removed. Do not lose the pin when removing the lever.
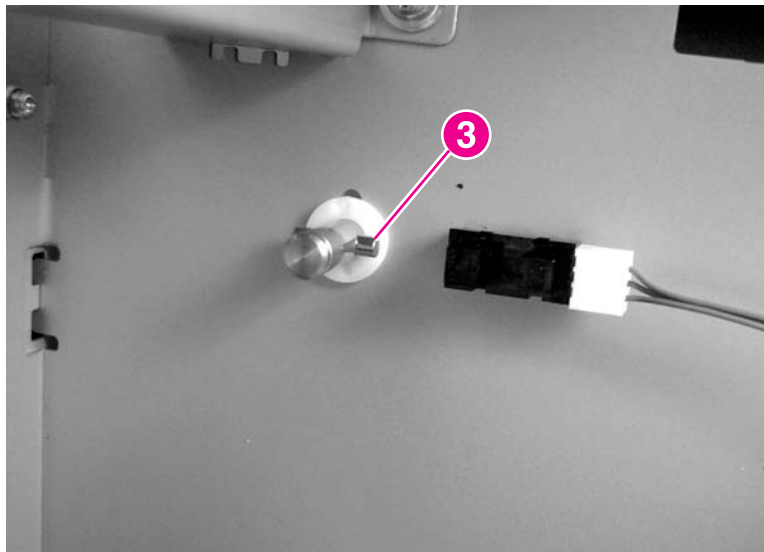
Figure 57.   **Remove the lifter-driver assembly (2 of 4)**

3   Disconnect one connector (callout 4), release the wire harness from the harness clips (callout 5).
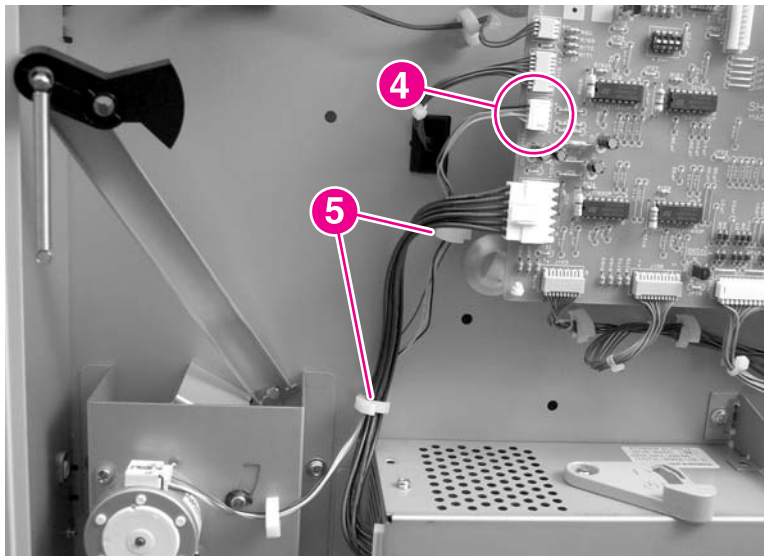
Figure 58.   **Remove the lifter-driver assembly (3 of 4)**

4   Remove two screws (callout 6), and then remove the lifter-driver assembly (callout 7).
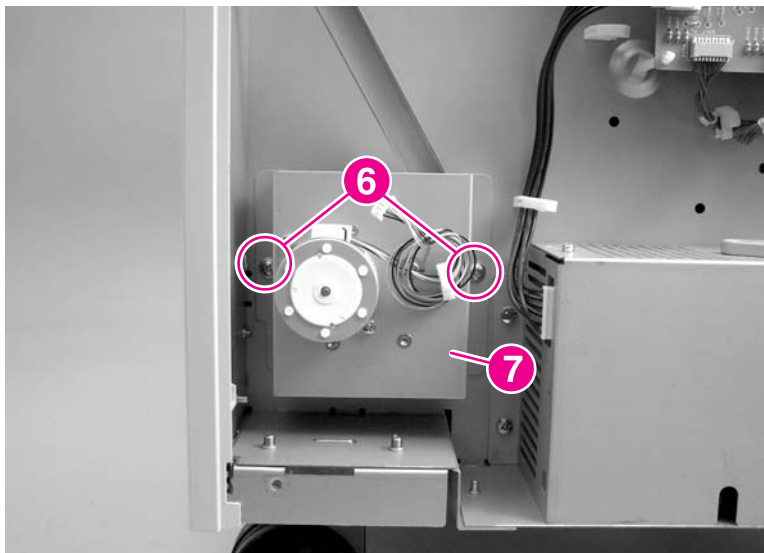
Figure 59.   **Remove the lifter-driver assembly (4 of 4)**

Door sensor

1 Remove the back cover. See "Back cover" on page 76.

2 Disconnect one connector (callout 1).
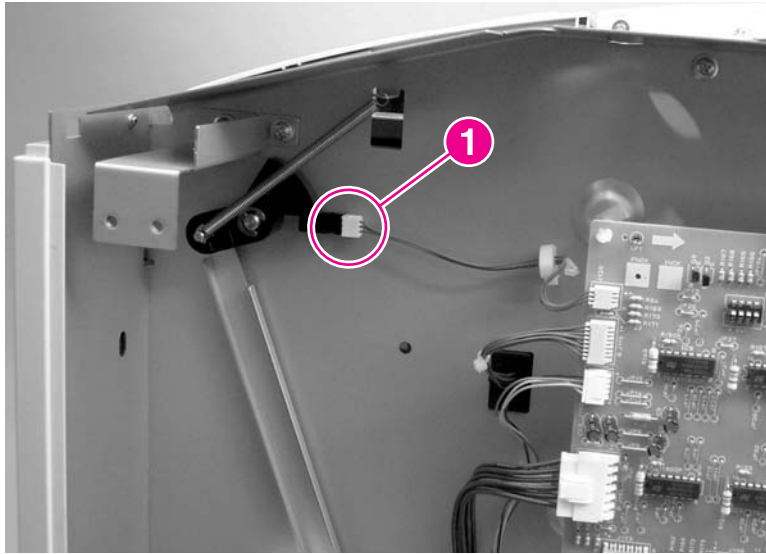
3 Remove the door sensor.
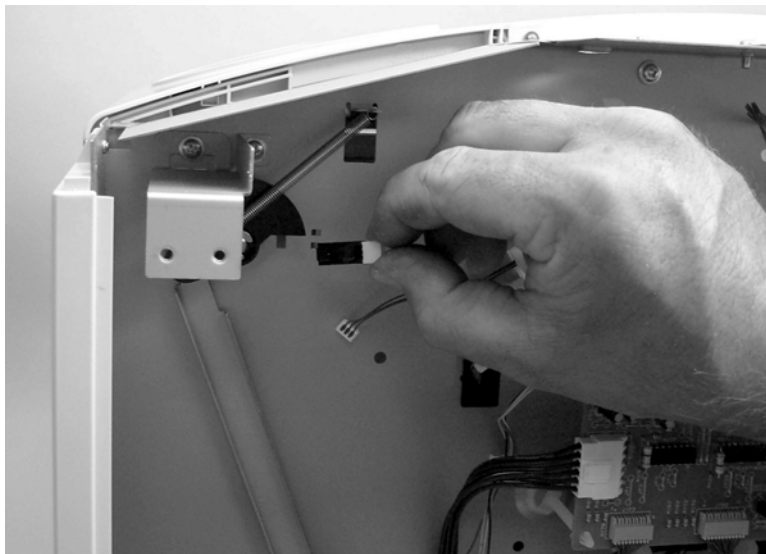
Figure 61. Remove the door sensor (2 of 2)

Paper-deck-controller PCA

1 Remove the back cover. See "Back cover" on page 76.

2 Disconnect all of the connectors on the paper-deck-controller PCA, remove two screws (callout 1), and then use a pair or needle nose pliers to release the PCA locking pins (callout 2).
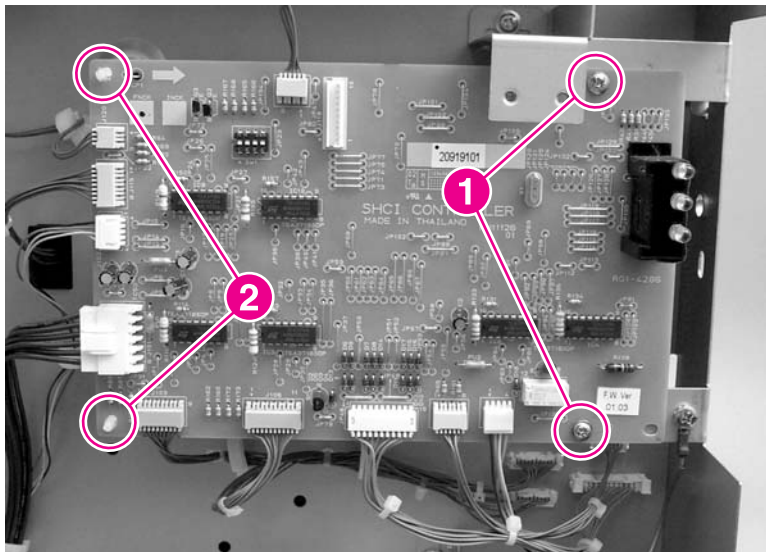
Figure 62.   **Remove the paper-deck-controller PCA**

Jam-detection sensor

Only the jam-detection photo sensor is available as a FRU. If the sensor spring or sensor lever is damaged, replace the paper-pickup and feed assembly. See "Paper-pickup and feed assembly" on page 98.

1   Remove the top cover. See "Top-cover assembly" on page 80.

2   Remove two screws (callout 1), and then remove the sensor assembly (callout 2).
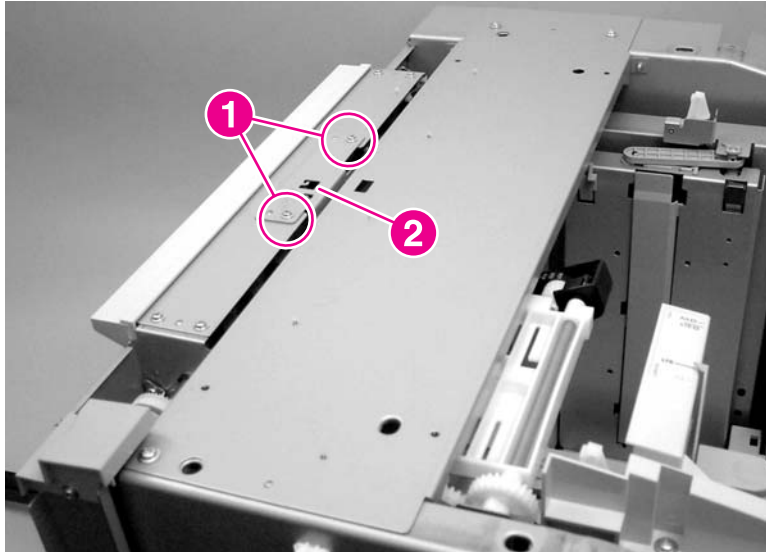
Figure 63.   **Remove the jam-detection sensor (1 of 2)**

3   Disconnect one connector (callout 3), and then remove the sensor (callout 4) from its mounting bracket.
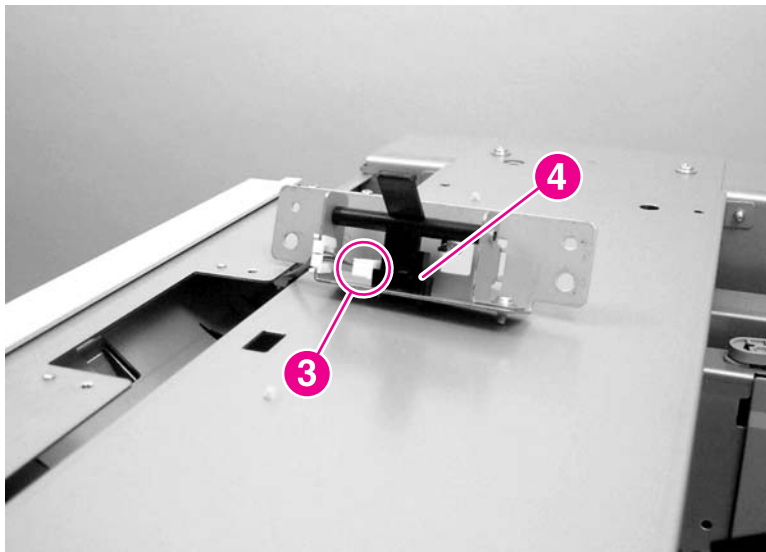
Figure 64.   **Remove the jam-detection sensor (2 of 2)**

Power-supply assembly

1 Remove the back cover. See "Back cover" on page 76.

2 Disconnect two connectors (callout 1), remove two screws (callout 2), and then slide the power-supply assembly toward the lifter driver assembly to remove it.
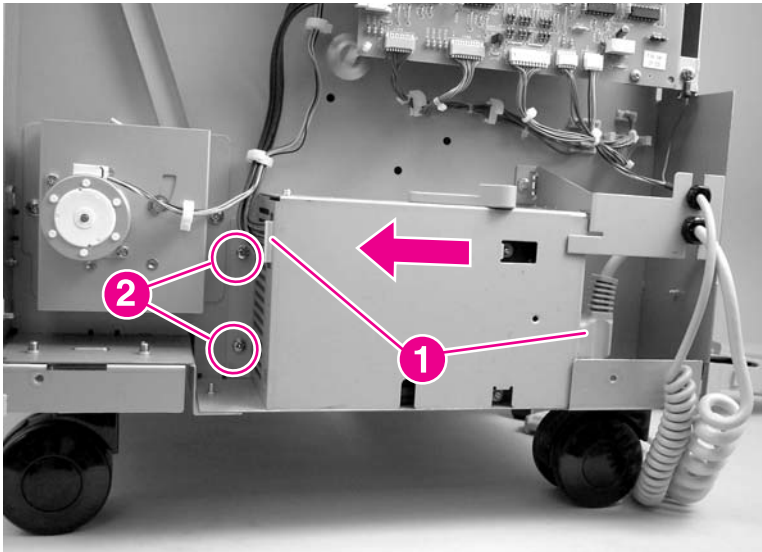
Figure 65.   **Remove the power-supply assembly**

LED PCA

1 Remove the front cover. See "Front cover" on page 79.

2 Remove two screws (callout 1).
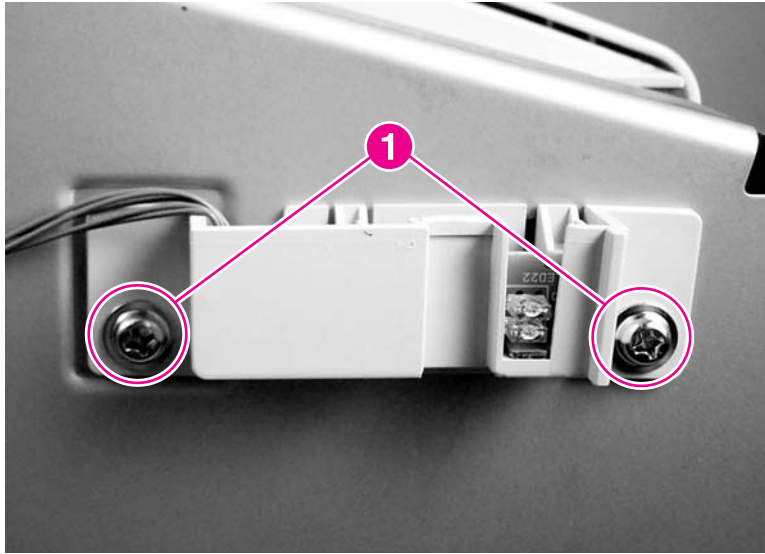
Figure 66. **Remove the LED PCA (1 of 3)**

3 Release two locking tabs (callout 2), and then slide the LED PCA out of the mounting bracket.
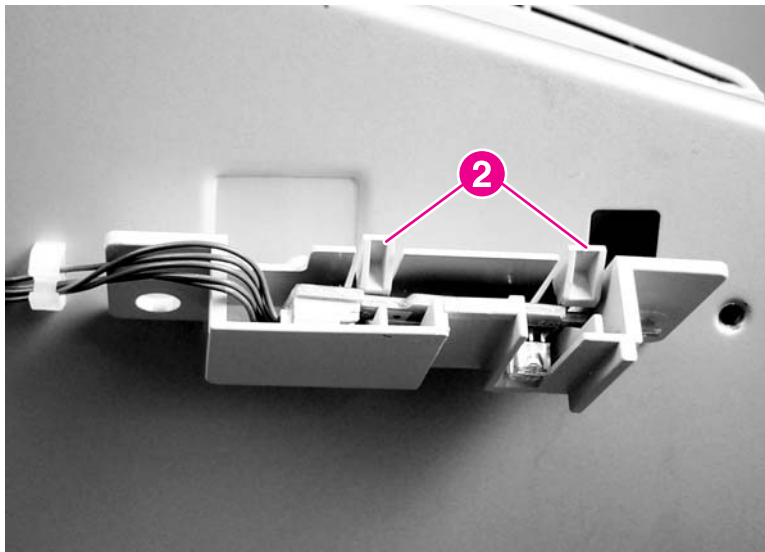
Figure 67. **Remove the LED PCA (2 of 3)**

4 Disconnect one connector (callout 3), and then remove the LED PCA.
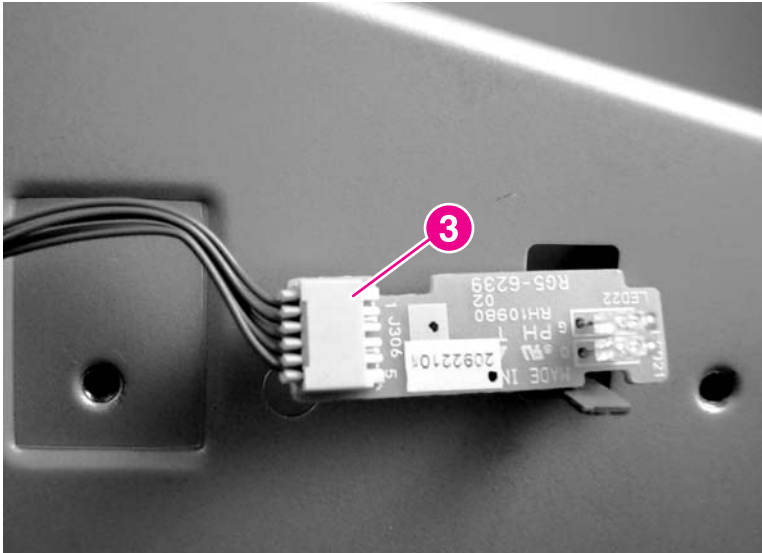
Figure 68. **Remove the LED PCA (3 of 3)**

Tray assembly

The tray assembly is not a FRU. However, you must remove the tray assembly in order to gain access to other FRU components.

1   Remove the following assemblies.

●   Covers, panels and doors. See "Covers, panels, and doors" on page 73.

●   Drive assembly. See "Lifter-driver assembly" on page 85.

2   Remove two screws (callout 1), disconnect one connector (callout 2).
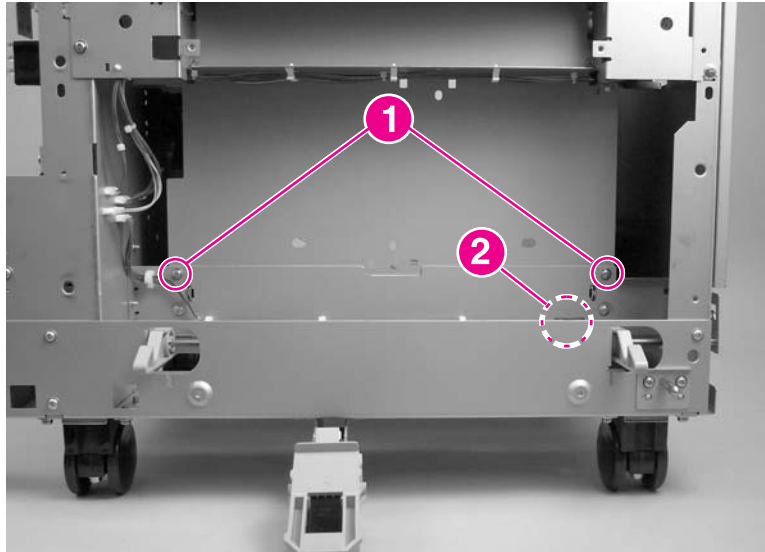
Figure 69.   **Remove the tray assembly (1 of 7)**

3   Remove two screws (callout 3), and then remove the side shield (callout 4).
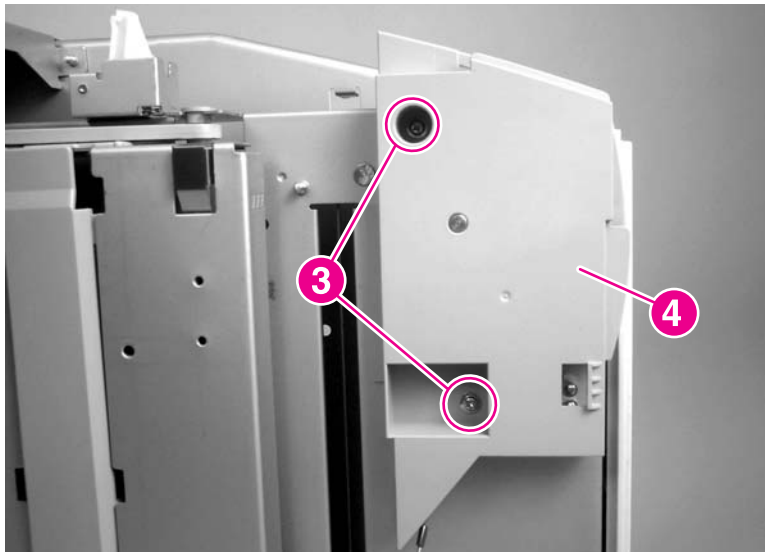
Figure 70.   **Remove the tray assembly (2 of 7)**

4 Disconnect one spring (callout 5), remove one e-ring (callout 6), and then slide the black lifter-sensor lever off of the shaft.
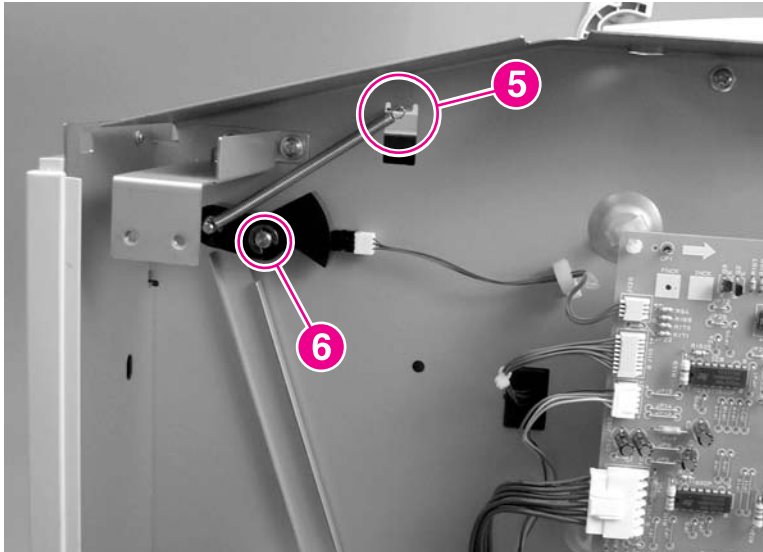
Figure 71.   **Remove the tray assembly (3 of 7)**

5 Remove the lever-locking pin (callout 7) from the shaft.
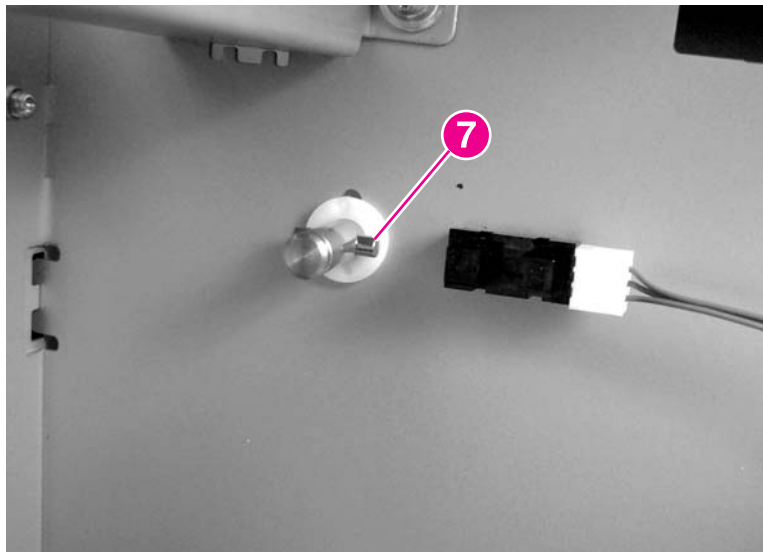
Figure 72.   **Remove the tray assembly (4 of 7)**

6 Slide the lever and the shaft out of the tray.
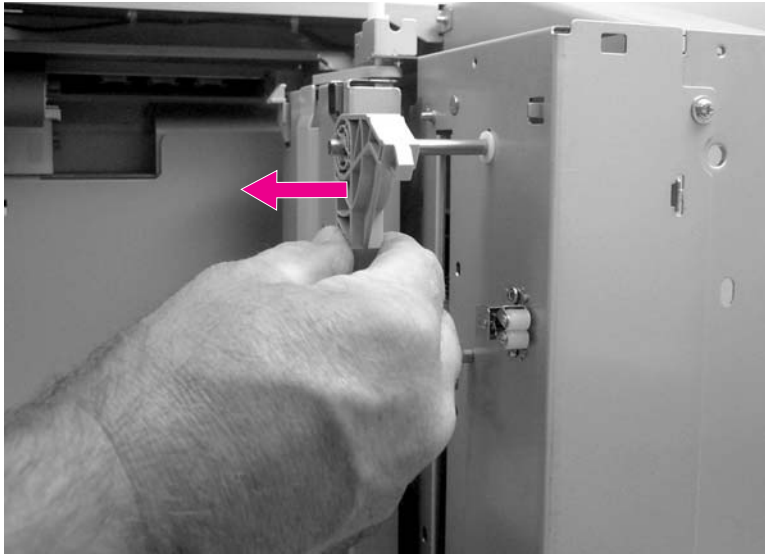
Figure 73.   **Remove the tray assembly (5 of 7)**

7 Remove four screws (callout 8).
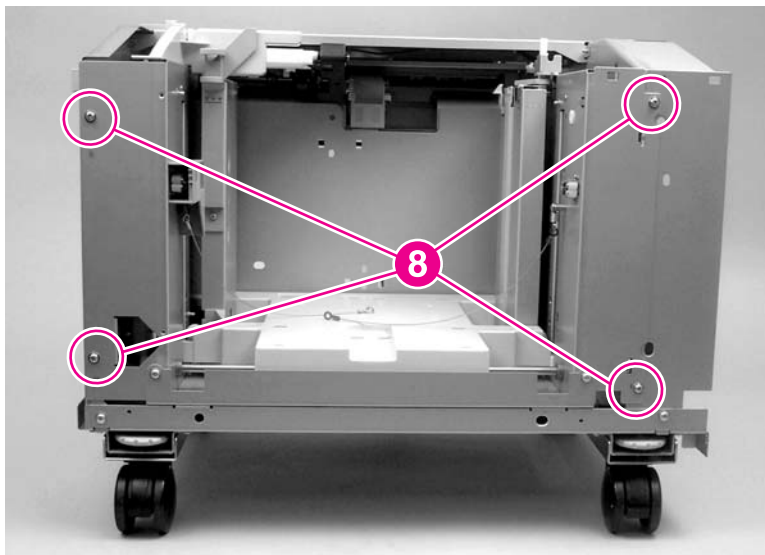
Figure 74.   **Remove the tray assembly (6 of 7)**

8 Lift the tray assembly up and out of the tray chassis.

Figure 75. **Remove the tray assembly (7 of 7)**

Paper-level-sensor PCA

1 Remove the tray assembly. See .

2 Disconnect one connector (callout 1).
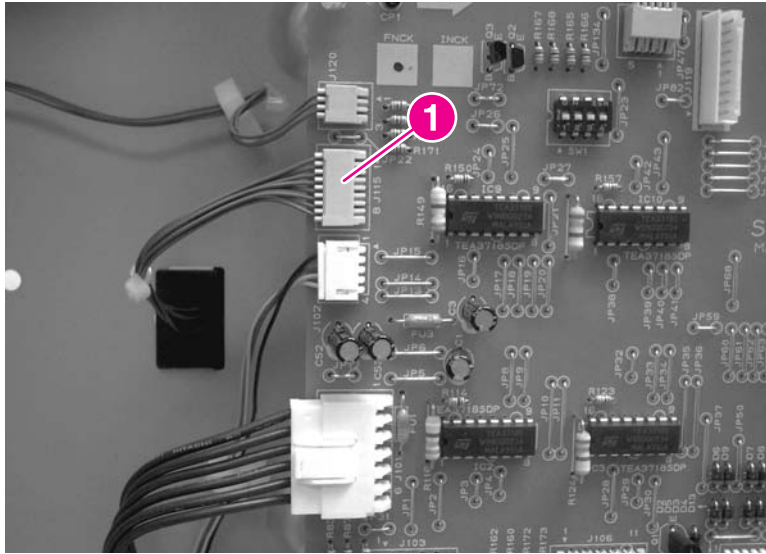
Figure 76.   **Remove the paper-level-sensor PCA (1 of 2)**

3 Release two locking tabs (callout 2), and then remove the paper-level sensor PCA (callout 3).
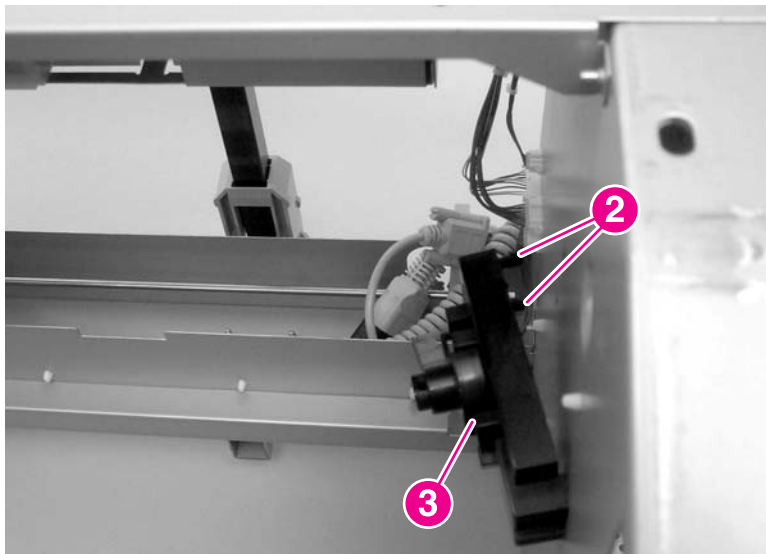
Figure 77.   **Remove the paper-level-sensor PCA (2 of 2)**

Paper-pickup and feed assembly

1 Remove the following assemblies.

● Left cover. See "Left cover" on page 73.

● Top rear cover. See "Top rear cover" on page 78.

● Front cover. See "Front cover" on page 79.

2 Remove four screws (callout 1) and disconnect three connectors (callout 2).

Note It is not necessary to remove the fourth connector (callout 2).
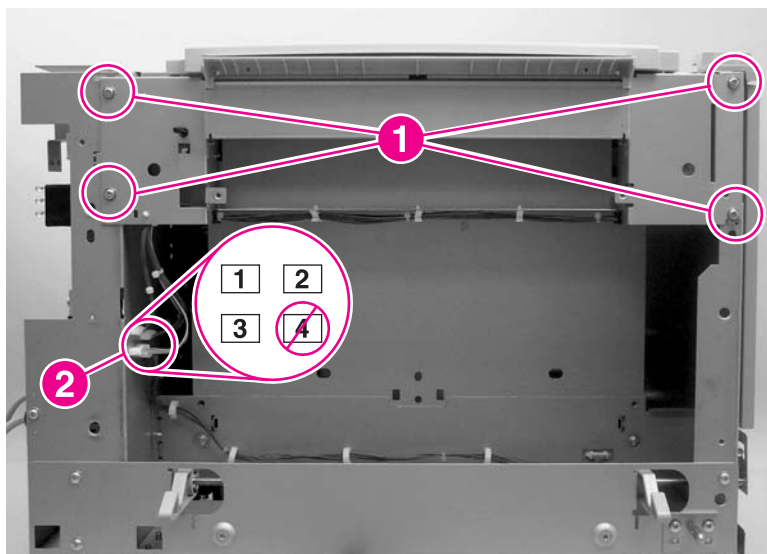
Figure 78. **Remove the paper-pickup and feed assembly (1 of 2)**

3 Remove the registration roller assembly.
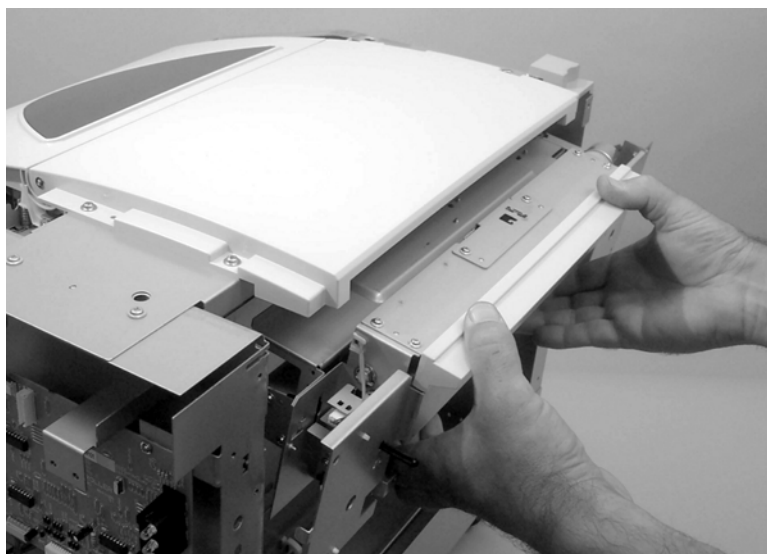
Figure 79. **Remove the paper-pickup and feed assembly (2 of 2)**

7 Troubleshooting

Chapter contents

Introduction

This chapter contains information, tools, and procedures to use in isolating, identifying, and correcting problems with the 2,000-sheet side-input tray. This tray is designed for effective technician-supported, over-the-phone diagnosis. Always check online data bases for updates on known issues and troubleshooting methods.

Troubleshooting process

The following table describes basic questions to ask the customer to help quickly define the problem(s).

Pre-troubleshooting checklist

Check the following items before diagnosing a malfunction. As the service technician, you can clear any problem that you discover and give the instruction to the customer.

Table 20. Pre-troubleshooting checklist

Environment	- Are the printer and tray installed on a solid, level surface? - Is there a gap between the tray and the MFP? If there is a gap, adjust the casters (see figure 11 on page 27. - Is the power-supply voltage to the printer within ± 10 volts of the specified power source? The side-input tray is powered by a jumper power cord that is attached to the printer. - Is the power-supply plug inserted in the printer and the outlet, and between the tray and the printer? - Is the operating environment within the specified parameters, as listed in the *HP color LaserJet 9500/9500mfp Print Engine Service Manual*? - Is the tray exposed to direct sunlight? - Is the room temperature maintained between 15°C and 30°C (59° to 86°F), and is the relative humidity between 20% and 50%? - Is the tray near sites that generate ammonia gas, high temperature or high humidity (near a water faucet, kettle, or humidifier, for example), or near cold places, open flames, or dusty areas?
Media	- Is the correct media type selected on the control panel? - Is the media ream broken? Slightly bend the stack before loading the media. - Does the customer use only supported media (A4, letter, rotated A4, rotated letter)? - Is the media in good condition (no curls, folds, or other defects)? - Is the media stored correctly and within environmental limits? - Is the media clean, not damp or dirty? - Was the media not opened until it was ready to use? - Is the amount of media in the input source within specifications? - Are the media guides aligned with the media?
Cover, door, and tray body	- Are the top cover and right side door closed? - Is the side-input tray pushed fully against the printer, and are the two side latches latched and locked onto the printer?

Power checks

Table 21. Power checks

Check	What to do
Are the printer and tray plugged in?	1 Make sure that the printer is plugged into a known good source of ac power, and that the power cord from the side-input tray is plugged into the printer.
Are the printer and tray on/off switch set to the on position?	Push the switch to the "on" position.
Is ac power available at the print-engine power outlet?	1 Make sure that power is available. See the electrical specifications in the *HP color LaserJet 9500/9500mfp Print Engine Service Manual*. 2 Test outlet with a known good appliance or in a known good power outlet.

Troubleshooting tools and procedures

Use these troubleshooting tools and procedures to help diagnose and correct problems with the 2,000-sheet side-input tray.

Electrostatic discharge

The 2,000-sheet side-input tray contains parts that are sensitive to electrostatic discharge (ESD). Always service the printer at an ESD-protected workstation, or use an ESD mat.

CAUTION   Watch for the ESD cautions to identify the parts that are sensitive to ESD. Protect these parts by using an ESD wrist strap and protective ESD pouches.

If an ESD workstation or wrist strap is not available, ground your self by touching the metal chassis of the tray before touching an ESD-sensitive component.

The following list identifies the troubleshooting tools that are available to solve tray problems:

- User LEDs
- Service mode and service LEDs
  - Normal operation check
  - Sensor test
  - Paper-pickup test
  - Motor test

General troubleshooting procedures

Table 22. **Troubleshooting with the tray connected to the printer**

Troubleshooting item	Status	Action
Is the printer in a ready status?	Yes	Proceed to the next troubleshooting item.
	No	Use the troubleshooting chapter in the *HP LaserJet Color 9500/9500mfp Print Engine Service Manual* to diagnose and solve the printer problem.
Does the tray user LED indicate an error?	Yes	See "User LEDs" on page 103.
	No	Proceed to the next troubleshooting item.
Is media being picked up during a feed operation?	Yes	Perform a service mode paper path test. If the sheet jams, see "Paper-path test" on page 109.
	No	See "Pickup and registration jams" on page 112.
Does the sheet feed to the output area correctly?	Yes	Proceed to the next troubleshooting item.
	No	See "Paper-path test" on page 109.
Do the service LEDs indicate an error?	Yes	See "Service mode" on page 104.
	No	End of general troubleshooting process.

Table 23. **Troubleshooting with the tray not connected to the printer**

Troubleshooting item	Status	Action
Is the service mode-paper pickup-test successful?	Yes	Proceed to the next troubleshooting item.
	No	If the user LEDs indicate and error, proceed to "Jams and media problems" on page 111.
Did a jam occur?	Yes	See "Jams and media problems" on page 111.S
	No	Proceed to the next troubleshooting item.
Does the sheet feed to the output area correctly?	Yes	Proceed to the next troubleshooting item.
	No	See "Pickup and registration jams" on page 112.
Do the service LEDs indicate an error?	Yes	See "Service mode" on page 104.
	No	End of general troubleshooting process.

User LEDs

Introduction

The user LEDs indicate the status of the 2,000-sheet side-input tray. The LEDs can appear continuously illuminated, or can flash, and they show different colors depending on the tray status. The following four LED configurations indicate the tray status:

- The green LED is continuously illuminated: The tray is in the ready state, and is communicating with the MFP.
- The green LED is flashing: The tray is lifting the media.
- Both LEDs are off: The tray is not communicating with the printer, the tray is performing the service-mode sensor test, the MFP is in sleep mode, or the tray power is off.
- The red LED is flashing: The tray requires some user action to resolve a jam, or the top cover or right side door are not shut correctly.
- The red LED is continuously illuminated: The tray is experiencing an error condition.
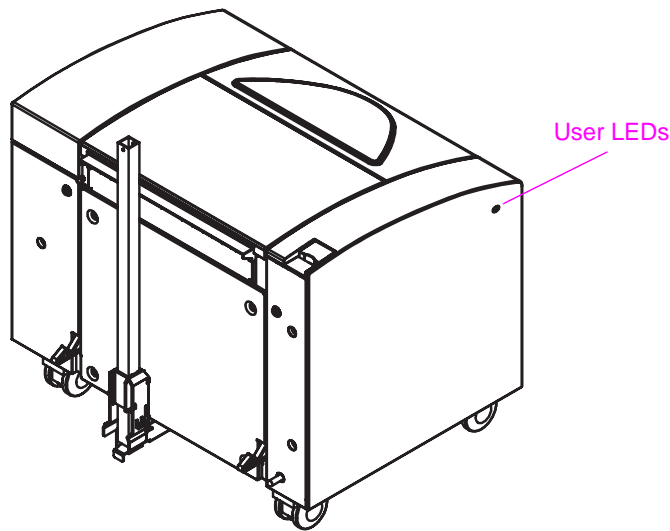
Figure 80.   **2,000-sheet side-input tray user LEDs**

Note   When the MFP power is turned off, the green LED might stay illuminated for ten minutes.

Service mode

Introduction

The tray features a standalone diagnostic function. The tray power can be turned on even when the printer power is off. By using various DIP switch settings in combination with three service LEDs on the paper-deck-controller PCA, the tray can perform service tests and provide information about the success or failure of these tests.

To use the tray service mode, disconnect the cables between the tray and the MFP, unlatch the tray, and then slide it away from the MFP. Reconnect the tray power cable to the MFP pedestal power outlet. Do *not* reconnect the communication cable. See table 25 to set the service DIP switch to perform a service test or check. Use the standalone power switch (callout 4) to turn on the tray power on.
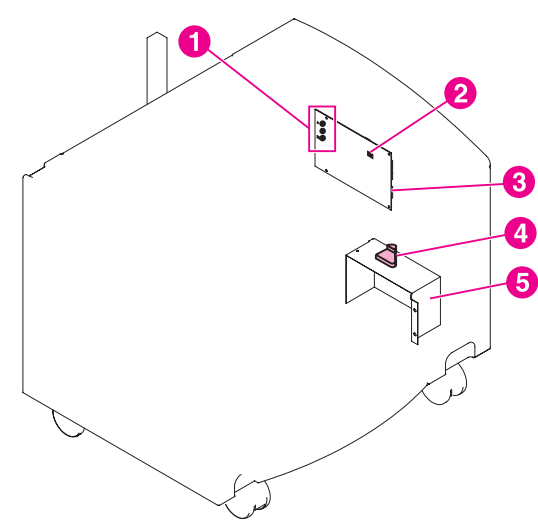
Figure 81. **2,000-sheet side-input tray service DIPs, power switch, and service LEDs**

Table 24. 2,000-sheet side-input tray service DIP switch, power switch, and service LEDs

Item	Description
1	Service LEDs (LED1 = red; LED2 = yellow; LED3 = green)
2	Service DIP switches (1 through 4)
3	paper-deck-controller PCA
4	Standalone power switch
5	Power-supply PCA

Table 25. Side-input tray service DIP switch settings

Legend		
All switched shown in the *off* position	All switched shown in the *on* position	

| Service test	Description	DIP switch setting (SW1)
Normal operation	The service LEDs show the tray status.	
Sensor test	This test performs a tray sensor and switches functioning test.	
Paper pickup test (paper path test)	This test performs a media pickup operation.	
Motor test	This test operates the motors and solenoids.	

Normal operation check

The normal operation check indicates the status of the tray. If the tray is ready for operation, service LED3 (green) is continuously illuminated.

If an error exists in the tray, one of the service LEDs begins to flash. The color of the LED and the number of times it flashes before being off for one second (and then repeating the flash pattern) determines the tray status (see table 26).

Note
The flash pattern begins with a service LED flashing. The LED then is off for one second. After one second the LED flashes again. This pattern repeats until the indicated problem is solved.

Table 26. Normal operation check, service LEDs

Service LED	Flash rate	Error	Action
Green	0 (continuously illuminated)	No errors	No action required.

Table 26. Normal operation check, service LEDs (continued)

Service LED	Flash rate	Error	Action
Green	1 (one flash per pattern)	Incorrect media size	Make sure that the correct size of media is loaded in the tray. Use the control panel to set the correct size. See "Setting the media size" on page 32.
	2 (two flashes per pattern)	Top cover open	Close the top cover and right side door.
	3 (three flashes per pattern)	Paper out	Load media. See "Loading media into the tray" on page 28.
	4 (four flashes per pattern)	Tray lifting	No action required.
	6 (six flashes per pattern)	Feeder initializing	No action required.
Yellow	1 (one flash per pattern)	Registration paper-sensor delay jam	Make sure that the sensor flag can move freely. Check the connections on the paper-deck-controller PCA. Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.
	2 (two flashes per pattern)	Registration paper-sensor stationary jam	Make sure that the sensor flag can move freely. Check the connections on the paper-deck-controller PCA. Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.
	3 (three flashes per pattern)	Registration paper-sensor residual jam	Make sure that the sensor flag can move freely. Check the connections on the paper-deck-controller PCA. Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.
	4 (four flashes per pattern)	Jam-sensor delay jam	Make sure that the sensor flag can move freely. Check the connections on the paper-deck-controller PCA. Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.
	5 (five flashes per pattern)	Jam-sensor stationary jam	Make sure that the sensor flag can move freely. Check the connections on the paper-deck-controller PCA. Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.
	6 (six flashes per pattern)	Jam-sensor residual jam	Make sure that the sensor flag can move freely. Check the connections on the paper-deck-controller PCA. Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.

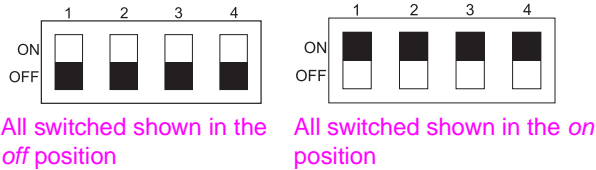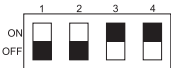**Table 26. Normal operation check, service LEDs (continued)**

Service LED	Flash rate	Error	Action
Red	1 (one flash per pattern)	Lifter malfunction	Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.
Red	4 (four flashes per pattern)	EEprom error	Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.

Sensor test

The sensor test checks the tray sensors to make sure that they function correctly. Turn the printer off, disconnect the tray from the printer (leave the power cable connected, disconnect the communication cable), set the service DIP switch, and then use the standalone power switch to turn the tray power on. This test checks the following sensors:

- Registration paper sensor (PS1)
- Between-pages sensor (PS12)
- Paper-level sensors (PS21, PS22, PS23)
- Paper-surface-level sensor (PS101)
- Tray paper-out sensor (PS102)

- Paper-size detection sensor (PS103, PS104, PS105)
- Jam sensor (PS106)
- Contact sensor (PS107)
- Door sensor (PS108)

Table 27. Sensor test DIP switch settings

Legend		
All switched shown in the *off* position	All switched shown in the *on* position	
Service test	**Description**	**DIP switch setting (SW1)**
Sensor test	This test performs a tray sensor and switches test.	

Perform the service sensor test

1 Disconnect the tray from the printer (disconnect the communication cable, but leave the power cable connected between the tray and the MFP), and then remove the back cover. "Back cover" on page 76.

2 Before starting the sensor test, make sure that the paper guide size selector is set to A4-rotated, and that the top cover and right side door are closed and latched.

3 Set the service DIP switch (use table 27), and then use the standalone power switch to turn the tray power on.

4 To gain access the sensor levers, perform the following steps.

    a. Between-pages, paper-surface-level, tray paper-out, door, paper-level, or paper-size detection sensors: Open the top cover.

    b. Registration-paper sensor: open the top cover and remove the feed roller.

    c. Jam sensor: Open the top cover, and then remove the jam sensor assembly.

    d. Paper-size detection sensor: Move the sliding tray guides, and then use a small screwdriver to move the sensor lever.

5 Move the lever of the sensor that you are testing. The following service LEDs flash if that sensor is functioning correctly.

- Registration-paper sensor (PS11): red service LED flashes
- Paper-level sensor (PS21): yellow service LED flashes
- Paper-level sensor (PS22): green service LED flashes
- Paper-level sensor (PS23): red service LED flashes
- Paper-size-detection sensor (PS103): yellow service LED flashes
- Paper-size-detection sensor (PS104): green service LED flashes
- Paper- size-detection sensor (PS105): red service LED flashes
- All remaining sensors: green service LED flashes

6 Return the service DIP switch to the normal-operation-check setting, and use the standalone power switch to turn off the tray power.
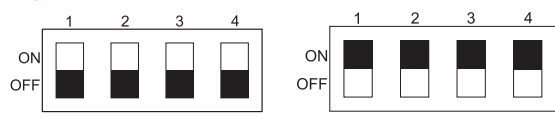
CAUTION Make sure that you reset the service DIP switch to the normal-operation-check setting and that you place the standalone power switch in the off position before reinstalling the rear cover.

Paper-path test

The paper path test performs a media-pickup operation. Turn the printer off, disconnect the tray from the MFP (disconnect the communication cable, but leave the power cable connected between the tray and the MFP), set the service DIP switch, and then use the standalone power switch to turn on the tray power.

Table 28. Paper-path DIP switch settings

Legend		
All switched shown in the *off* position	All switched shown in the *on* position	
Service test	**Description**	**DIP switch setting (SW1)**
Paper pickup test (paper path test)	This test performs a media pickup operation.	

Perform the paper pickup test

1 Disconnect the tray from the MFP (disconnect the communication cable, but leave the power cable connected between the tray and the MFP), and then remove the back cover.

2 Set the service DIP switch (use table 28), and then use the standalone power switch to turn the tray power on.

3 The tray will start the pickup operation. Move post one on the service DIP switch to the off position. The pickup operation stops. Return post one on the service DIP switch to the on position to continue the pickup operation.

Note   Remove pages as they are fed from the tray to avoid jams in the registration area of the tray. See "Jams and media problems" on page 111.

4 Return the service DIP switch to the normal-operation-check setting, and use the standalone power switch to turn off the tray power.

CAUTION   Make sure that you reset the service DIP switch to the normal-operation-check setting and that you place the standalone power switch in the off position before installing the rear cover.

Motor test

The motor test activates the tray motors and solenoids. Turn the printer off, disconnect the tray from the printer (leave the power cable connected, disconnect the communication cable), set the service DIP switch, and then use the standalone power switch to turn the tray power on.

Table 29. Motor test DIP switch settings

Legend		
ON OFF (1 2 3 4 — all off) **All switched shown in the *off* position**	ON OFF (1 2 3 4 — all on) **All switched shown in the *on* position**	
Service test	**Description**	**DIP switch setting (SW1)**
Motor test	This test operates the motors and solenoids.	(1 2 3 4) ON OFF

Perform the motor test

1 Disconnect the tray from the printer (leave the power cable connected from the tray to the printer, and then remove the back cover. .

2 Open the top cover (to view the feed motor or the registration drive clutch, remove the top cover.

3 Set the paper guide size selector is set to A4. Set the service DIP switch (use table 29), and then use the standalone power switch to turn on the tray power.

4 To check the motors and solenoids, perform the following steps.

    a. Pickup motor: Verify that the feed roller rotates.

    b. Feed motor and registration roller drive clutch solenoid: Verify that the registration roller rotates.

    c. Lifter motor: Verify that the gear in the lifter driver assembly rotates

5 Return the service DIP switch to the normal-operation-check setting, and use the standalone power switch to turn off the tray power.

CAUTION Make sure that you reset the service DIP switch to the normal-operation-check setting and that you place the standalone power switch in the off position before reinstalling the rear cover.

Jams and media problems

Introduction

Jams and media problems that occur in the 2,000-sheet side-input tray can usually be isolated to the paper-pickup (callout 1) or the registration (callout 2) location in the tray. However, jams and media problems can also be caused by mechanical-part failures. This section describes jams and media problems, and describes solutions for jams or media problems.
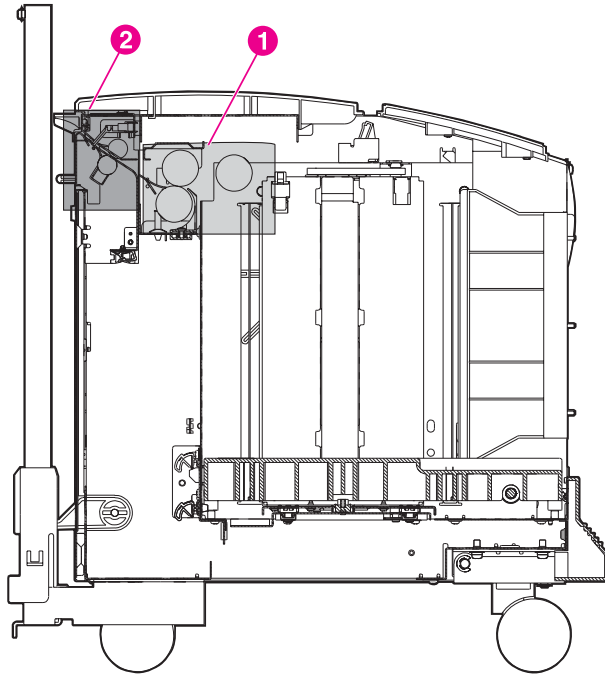
Figure 82.   **2,000-sheet side-input tray pickup and registration locations**

Note   A gap between the tray and the MFP might cause a jam. If a gap exists between the MFP and the tray, either at the top or at the bottom, adjust the blue levelers above the tray wheels until the gap closes.
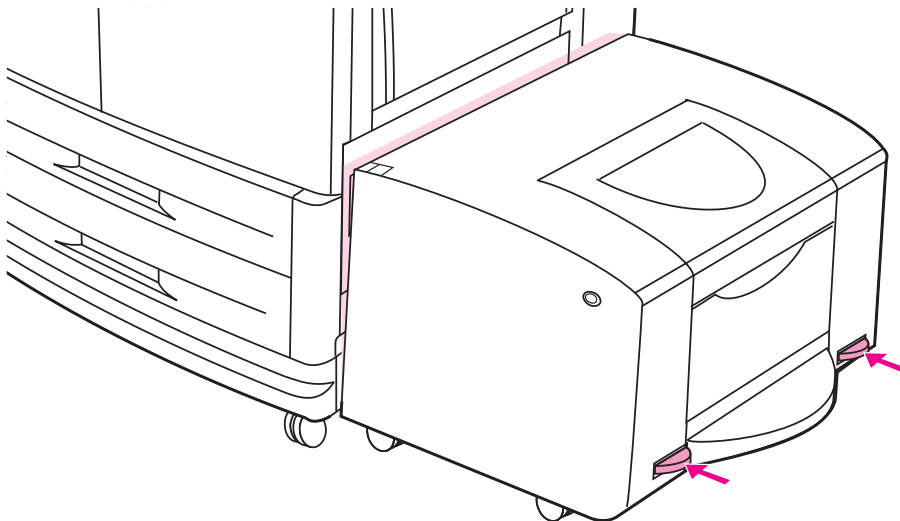
Figure 83.   **Adjust the gap between the tray and the MFP**

Pickup and registration jams

Table 30 describes jams and media problems that are associated with the pickup and registration locations of the tray.

Table 30. Pickup and registration jams

Issue	Solution
The pickup or feed rollers are worn or damaged.	Replace the pickup, feed, and separation rollers. See "Pickup, feed, and separation rollers" on page 84.
The registration roller is worn or damaged.	Replace the pickup, feed, and separation rollers. See "Paper-pickup and feed assembly" on page 98.
The pickup assembly motors did not receive the PICKUP MOTOR DRIVE or FEED MOTOR DRIVE signals.	Make sure that the pickup motor connectors are fully seated. Disconnect and then reconnect the pickup motor (J316), the feed motor (J317), the intermediate PCA connector (J318), and the paper-deck-controller PCA (J104) connector.
The pickup assembly did not receive the FEED MOTOR CLUTCH DRIVE signal.	Make sure that the feed-motor-clutch connectors are fully seated. Disconnect and then reconnect the registration roller clutch (J324), intermediate PCA connector (J318), and the paper-deck-controller PCA (J104) connector.
The registration-paper sensor (PS1) or sensor lever are damaged or deformed.	Use the service-mode sensor test (see "Sensor test" on page 107) to test the sensor. If the sensor fails the test, replace the paper-pickup assembly. See "Paper-pickup and feed assembly" on page 98.
The between-pages sensor (PS12) or jam sensor (PS106) (or sensor levers) are damaged or deformed.	Use the service-mode sensor test (see "Sensor test" on page 107) to test the sensors. If a sensor fails the test, replace the paper-pickup assembly. See "Paper-pickup and feed assembly" on page 98.
The paper-pickup or registration assembly drive gears are damaged.	Remove the paper-pickup assembly (see "Paper-pickup and feed assembly" on page 98). If the gears or springs are damaged, replace the paper-pickup assembly.
The paper-pickup assembly motors are damaged.	Use the service-mode sensor test (see "Motor test" on page 110) to test the motor. If a motor fails the test, replace the paper-pickup assembly. See "Paper-pickup and feed assembly" on page 98.
The registration-roller-assembly clutch is damaged.	Perform the service-mode motor test (see "Motor test" on page 110) to test the clutch. If the clutch fails the test, replace the paper-pickup assembly. See "Paper-pickup and feed assembly" on page 98.
The paper-deck-controller PCA has failed.	If the problem persists, replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.

General tray problem solving

Table 31 describes general tray problems that cannot be isolated to the pickup or registration locations in the tray.

Note Make sure that the media is flat and level in the tray. Make sure that none of the corners of the media are folded under the stack.

Always replace all three rollers (pickup, feed, and separation) at the same time, even if only one is damaged or worn.

Table 31. General tray problem troubleshooting

Issue	Cause	Solution
Multiple sheets feed.	The separation roller is damaged, worn, or has slipped off of the shaft.	Make sure the roller is installed correctly on the shaft. If the roller is damaged or worn, replace the pickup, feed, and separation roller. See "Pickup, feed, and separation rollers" on page 84.
	The separation roller spring is damaged or worn.	Replace the paper-pickup and feed assembly. See "Paper-pickup and feed assembly" on page 98.
The leading edge of the sheet is wrinkled or folded.	The rollers are damaged or worn.	Inspect the rollers, and then replace the pickup, feed, and separation rollers if necessary. See "Pickup, feed, and separation rollers" on page 84 and "Paper-pickup and feed assembly" on page 98.
	Dust or dirt is in the paper path or on the rollers.	Use a water-dampened, lint-free cloth to clean the paper path and rollers.
	Parts are damaged along the paper path.	Inspect the paper path, and then replace damaged parts as necessary.
The sheets skew.	Dust or dirt is in the paper path or on the rollers.	Use a water-dampened, lint-free cloth to clean the paper path and rollers
	The rollers are damaged or worn.	Inspect the rollers, and then replace the pickup, feed, and separation rollers if necessary. See "Pickup, feed, and separation rollers" on page 84 and "Paper-pickup and feed assembly" on page 98.
The image is offset on the page.	The image registration is not calibrated correctly.	Use the control-panel to gain access to the PRINT QUALITY SUBMENU. Use the SET REGISTRATION menu item to set the printed image at the center of a single-page or duplexed print job. The PRINT TEST option prints a test page. Use the SOURCE option to print a test page from the 2,000-sheet side-input tray. Use the ADJUST TRAY X options to adjust the image alignment using values between -20 and +20

Table 31. General tray problem troubleshooting (continued)

Issue	Cause	Solution
	The MFP is not connected to a functioning ac receptacle or the tray power cable is not correctly plugged into the receptacle in the MFP.	**1** Make sure that the MFP power cord is plugged into a known operating ac source. **2** Make sure that the ac cable (the jumper inside the print engine) between the print engine and the printer pedestal is correctly connected at both ends. **3** Unplug the tray power cord at the MFP, and then plug it in again. Turn on the tray power.
	The communication cable is not connected.	**1** Make sure that the tray communication cable is fully seated. Turn the tray power off. **2** Unplug tray communication cable at the MFP, and make sure that the connector pins are not bent. **3** Plug the cable in, and then turn on the tray power.
	A fuse is open.	Replace the power supply. See "Power-supply assembly" on page 90.
No power is being supplied to the tray.	The overcurrent/overvoltage circuit detected an over-current or over-voltage situation.	**1** Disconnect the ac power supply and wait at least two minutes for the circuit to reset itself. **2** If the problem persists, attempt to isolate the component that is causing the over-current or over-voltage situation. Replace the component. **3** If the over-current or over-voltage situation cannot be isolated to a tray component, replace the power supply. See "Power-supply assembly" on page 90.
	The power supply is defective.	**1** Turn the printer power off. **2** Disconnect the power supply connector (J101) on the paper-deck-controller PCA. **3** Turn the printer power on. **4** Verify that pin 4 of the connector is at + 5 volts. *Do not* short-circuit the connector. If +5 volts is not found on pin 4, replace the power supply. See "Power-supply assembly" on page 90. **5** Check for damaged wire-harnesses. **6** If the problem persists, replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.

Table 31. General tray problem troubleshooting (continued)

Issue	Cause	Solution
A lift failure occurred.	The top cover is not completely closed.	Make sure that the top cover is completely closed.
	Check for damaged, frayed, or pinched wire harnesses.	Replace the wire-harnesses as necessary.
	The paper-surface-level sensor (PS101) or lever is damaged.	Perform the service-mode sensor test. See "Sensor test" on page 107 to test the sensor. If the sensor fails the test, replace the paper-pickup and feed assembly. See "Paper-pickup and feed assembly" on page 98.
	The lifter-driver-assembly gears are damaged.	Remove the lifter-driver assembly (see "Lifter-driver assembly" on page 85) and examine the gears. Replace the lifter-drive assembly if necessary.
	Poor connections exist between the paper-surface-level sensor (PS101) and the paper-deck-controller PCA.	Make sure that the paper-surface-level sensor (PS101) connector (J302), the intermediate connectors (J304, J305), and the paper-deck-controller PCA connector (J106) are fully seated.
	The lifter motor is not receiving the LIFTER MOTOR DRIVE signal.	Make sure that the paper-deck-controller PCA connector (J102) Is fully seated.
	The lifter-driver-assembly motor has failed.	Perform the service-mode motor test. See "Motor test" on page 110 to test the motor. If the motor fails the test, replace the paper-pickup and feed assembly. See"Paper-pickup and feed assembly" on page 98.
	The paper-deck-controller PCA failed.	Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.
The tray does not enter the ready state after media is loaded (service LEDs indicate paper out).	The tray-paper-out sensor (PS102) or lever is damaged.	Perform the service mode sensor test. See "Sensor test" on page 107 to test the sensor. If the sensor fails the test, replace the paper-pickup and feed assembly. See "Paper-pickup and feed assembly" on page 98.
	The paper-deck-controller PCA failed.	Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.

Table 31. General tray problem troubleshooting (continued)

Issue	Cause	Solution
The tray does not enter the ready state after the registration assembly is closed (service LEDs indicate door open).	The registration roller assembly is damaged.	Replace the paper-pickup and feed assembly. See "Paper-pickup and feed assembly" on page 98.
	Poor connections exist between the door open sensor (PS108) and the paper-deck-controller PCA.	Make sure that the door-open sensor (PCS108, J309), the intermediate connector (J311), and the paper-deck-controller PCA connector (J117) are fully seated.
	The door sensor (PS108) is damaged.	Perform the service-mode sensor test. See "Sensor test" on page 107 the sensor. If necessary, replace the door sensor (PS108). See "Door sensor" on page 87.
	The paper-deck-controller PCA failed.	Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.
The tray does not enter the ready state and the user LEDs indicate a jam, but no jam exists (the service LEDs indicate a sensor jam).	The registration paper sensor (PS11) or lever is damaged.	Perform the service-mode sensor test. See "Sensor test" on page 107 to test the sensor. If the sensor fails the test, replace the paper-pickup and feed assembly. See "Paper-pickup and feed assembly" on page 98.
	The jam detection sensor (PS106) or lever damaged.	Perform the service-mode sensor test. See "Sensor test" on page 107 to test the sensor. If the sensor fails the test, replace the paper-pickup and feed assembly. See "Paper-pickup and feed assembly" on page 98.
	Multiple sensors have failed.	Perform the service-mode sensor test. See "Sensor test" on page 107 to test the sensors. If a sensor fails the test, replace the paper-pickup and feed assembly. See "Paper-pickup and feed assembly" on page 98.
The tray does not enter the READY state after media is loaded (the service LEDs indicate an incorrect paper size).	Poor connections exist between the paper size sensors (PS103, PS104, PS105) and the paper-deck-controller PCA.	Make sure that the paper-size sensors (PS103, PS104, PS105, J309, J310, J311) intermediate connectors(J312, J313), and the paper-deck-controller PCA connector (J103) are fully seated.
	The paper size sensors (PS103, PS104, PS105) or levers are damaged.	Perform the service-mode sensor test. See "Sensor test" on page 107 to test the sensors. If a sensor fails the test, replace the paper-size sensors. See "Paper-level-sensor PCA" on page 97.
	The paper-deck-controller PCA failed.	Replace the paper-deck-controller PCA. See "Paper-deck-controller PCA" on page 88.

Error messages

This section describes error messages that appear on the MFP control-panel display when an error occurs in the 2,000-sheet side-input tray.

Table 32. Error messages

Message	Cause	Solution

`INPUT PAPER PATH OPEN`
 	
`Reattach Tray 4 unit to main unit.`
	The 2,000-sheet side-input tray is not attached to the MFP properly.	Make sure that the tray is installed correctly. See "Installing the 2,000-sheet side-input tray" on page 24.

`13.11.yz Jam IN INPUT ACCESSORY`
 	
`Move tray 4 unit away from the MFP device. Remove any paper found`
 	
followed by
 	
`13.11.yz Jam IN INPUT ACCESSORY`
 	
`If jam recurs remove paper, check stack, and reload into tray. Then close doors.`
 	
followed by
 	
`13.11.yz Jam IN INPUT ACCESSORY`
 	
`Then close doors and reattach tray v4 to main unit.`
	Media is jammed in the tray paper path (stay or initialization jam).	Unlatch the tray and move it away from the MFP. Remove jammed media from the output area of the tray or the input area of the MFP. Reattach the tray to the MFP.

8 Parts and diagrams

Chapter contents

Introduction

The figures in this chapter illustrate the major subassemblies in the 2,000-sheet side-input tray and their component parts. Parts shown in magenta are field replaceable units (FRUs). A table accompanies each exploded-view diagram. Each table lists the item number for represented parts, the associated part number for the item (if it can be ordered), the quantity, and a description of the part. Parts cannot be ordered separately are available by ordering the higher-level assembly or FRU.

Note   When looking for an electrical part, pay careful attention to the voltage that is listed in the description column to ensure that the part number corresponds to the correct printer model.

Ordering parts

All listed part numbers are stocked and can be ordered from HP's Customer Services and Support Organization. Use the following Web site to search for HP product parts by using the HP product name or model number, or part number, or by choosing an HP product from a list.

www.partsurfer.hp.com

To order parts, go to the following Web site:

www.hp.com/buyparts

Supplies, accessories, and consumables can be ordered from HP at the following Web sites

- North America: www.hp.com/sbso/product/supplies
- Canada: www.hp.ca/catalog/supplies
- Europe: www.hp.com/go/supplies
- Asia Pacific: www.hp.com/paper

Customer support information

Before visiting the printer support Web site (URL: www.hp.com/support/clj9500) or the Customer Services and Support Organization, obtain the following information and print the specified diagnostic pages:

- Printer model, on the upper-right corner of the front doors of the printer
- Serial number, inside the front doors, in the lower-right corner
- Configuration page, EIO Jetdirect card page, event log

Hardware identification

Table 33. Commonly used hardware table

Example	Type
	• Short with serrated washer (M4 x 8 with washer) • Short with large shoulder (TP M4 x 8) • Short with small shoulder (TP M3 x 6) • Self-threading with black finish (Tapping truss head M4 x 8)

Table 34. Common torque values

Material	HP recommended torque value
Plastic to metal	5.5 lb-inch
Metal to metal	10 lb-inch
PCBA	5.5 lb-inch
Plastic to plastic	5.5 lb-inch

Illustrations and parts lists

The following illustration and parts tables show the field replaceable units (FRUs). Two tables at the end of this chapter list all of the parts that are shown in this chapter. Both tables also contain the figure numbers in this chapter that show the parts.

Parts shown in magenta are FRUs. Other parts are not service-replaceable. Callout numbers that are followed by a "T" indicate the number of teeth on the specified gear.

2,000-sheet side-input tray

Note If a failed tray component is not a field replaceable unit (FRU) or the tray has been severely damaged during shipping, use the part number in table 35 to order a complete replacement 2,000-sheet side input tray.
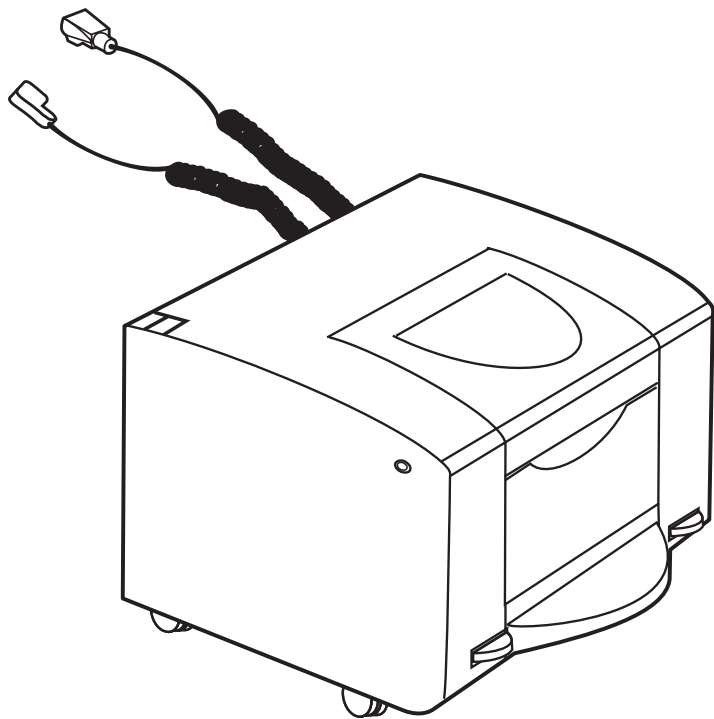
Figure 84. 2,000-sheet side-input tray

Table 35. 2,000-sheet side-input tray

Ref	Description	Part number	Qty
Figure 84; all	2,000-sheet side-input tray	Q1891-67901	1

External covers and panels
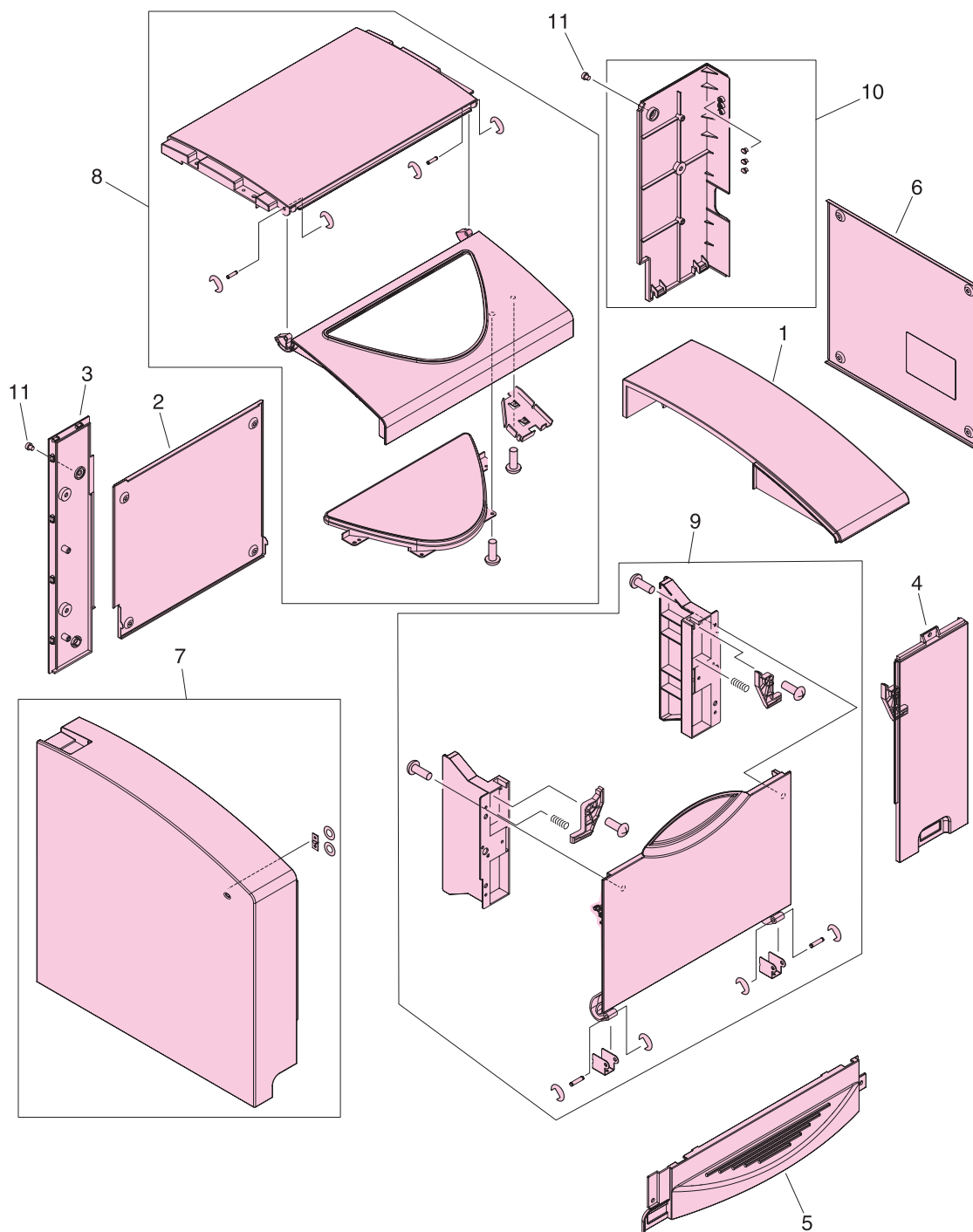
Figure 85. External covers and panels

Table 36. External covers and panels (1 of 2)

Ref	Description	Part number	Qty
Figure 85; 1	Cover, top rear	RC1-0821-000CN	1
Figure 85; 2	Cover, left	RC1-0822-000CN	1
Figure 85; 3	Cover, front left	RC!-0823-000CN	1
Figure 85; 4	Cover, right rear	RC1-0825-000CN	1
Figure 85; 5	Cover, lower right	RC1-0826-000CN	1
Figure 85; 6	Cover, back	RC1-0827-000CN	1
Figure 85; 7	Cover, front	RM1-0403-000CN	1
Figure 85; 8	Top-cover assembly	RM1-0404-000CN	1
Figure 85; 9	Right door assembly	RM1-0405-000CN	1
Figure 85; 10	Cover, back left	RM1-0406-000CN	1
Figure 85; 11	Foot	RB1-3001-000CN	2

Internal components (1 of 2)
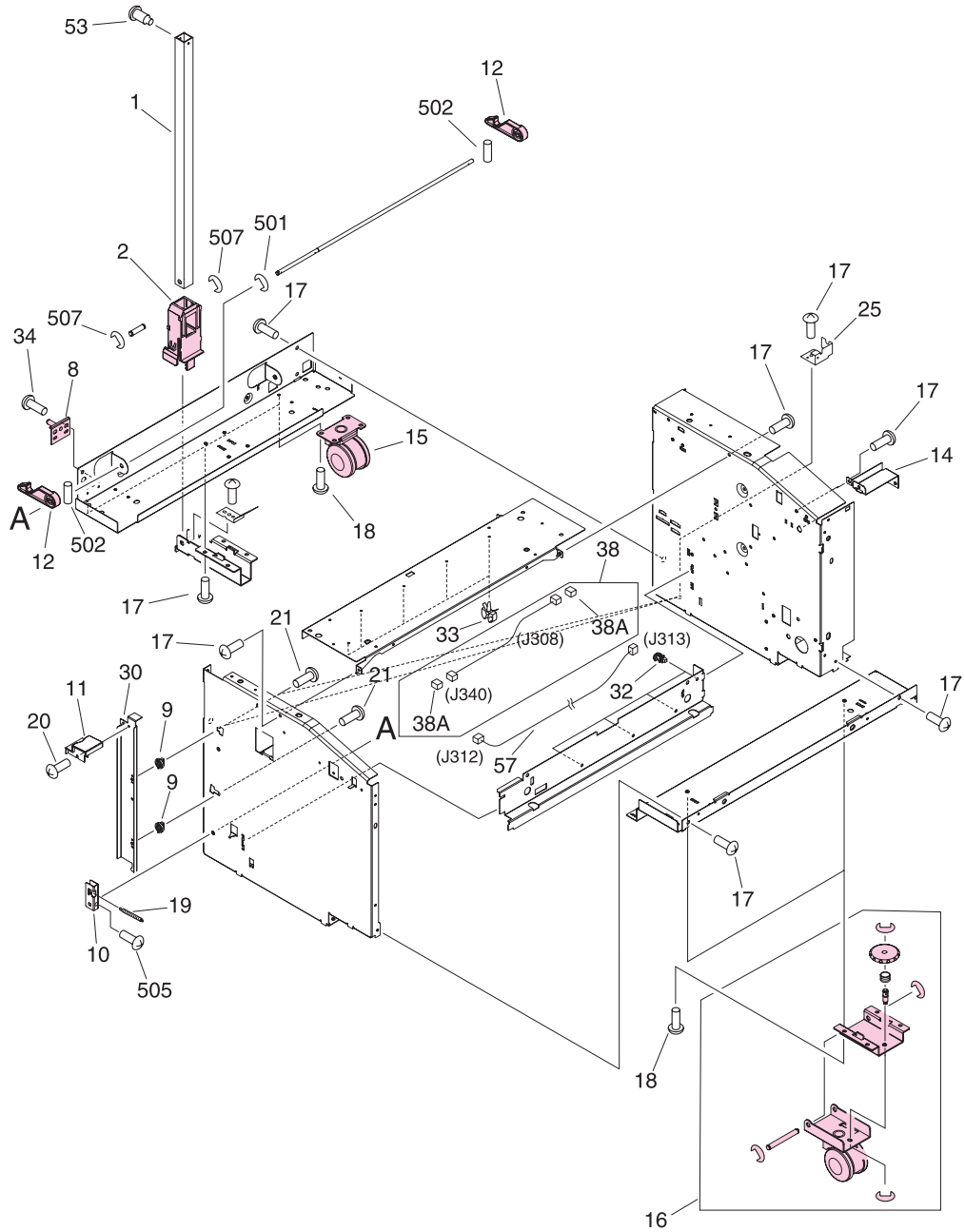
Internal components (2 of 2)
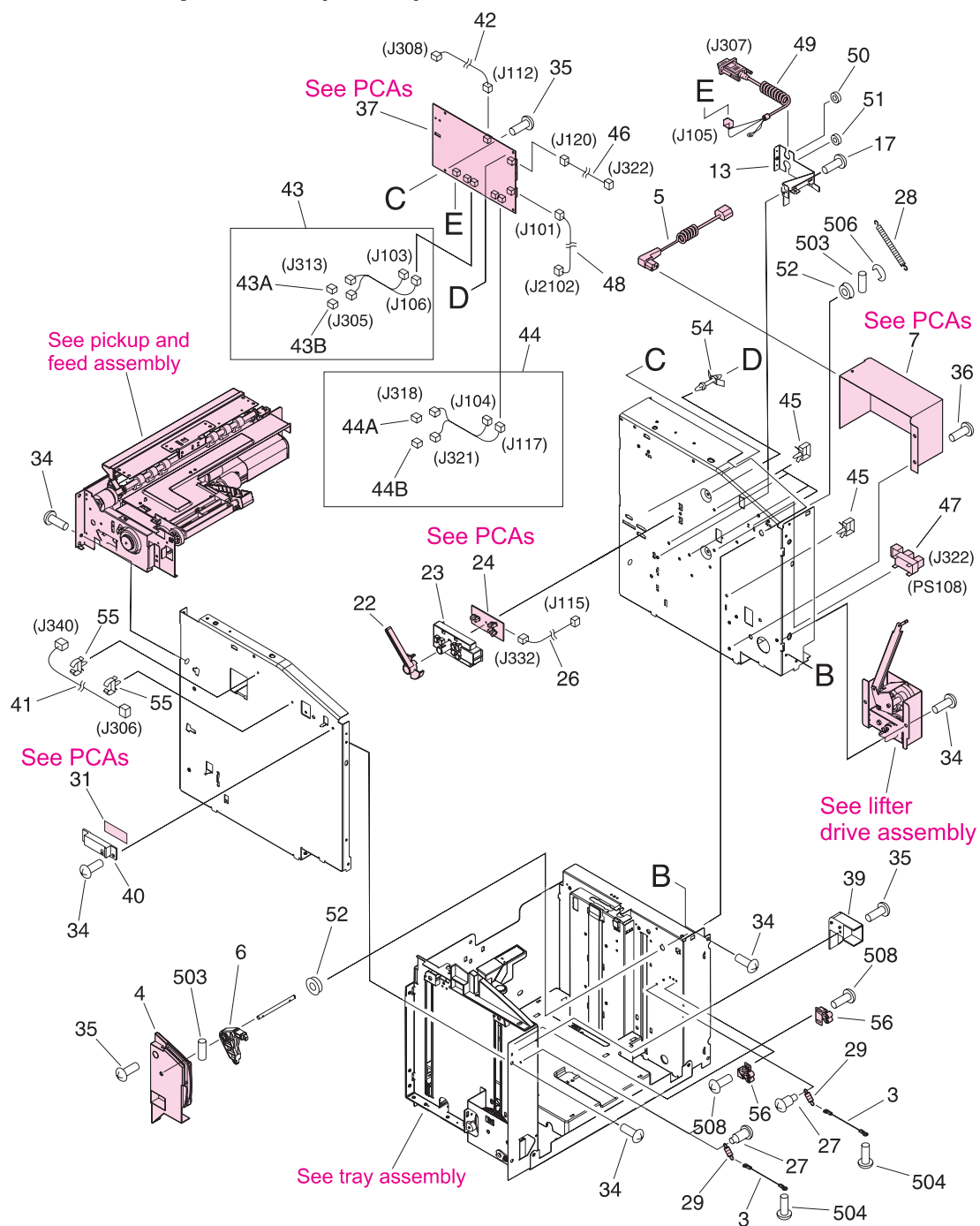
Figure 87. Internal components (2 of 2)

Table 37. Internal components

Ref	Description	Part number	Qty
Figure 86; 1	Rail, slide	Not orderable	1
Figure 86; 2	Latch, rail (latches the slide rail to the printer body)	RC1-0815-000CN	1
Figure 87; 3	Wire, door (keeps the door from over extending when opened)	RC1-0833-000CN	2
Figure 87; 4	Cover, cam	RC1-0884-000CN	1
Figure 87; 5	Power cable (from the HCI to the printer)	RH2-9008-000CN	1
Figure 87; 6	Arm, cam	Not orderable	1
Figure 87; 7	Power-supply assembly	See "PCAs" on page 137.	1
Figure 86; 8	Pin, positioning (aligns the HCI tray body to the printer body)	RL1-0180-000CN	1
Figure 86; 9	Stud, guide	Not orderable	2
Figure 86; 10	Link	Not orderable	1
Figure 86; 11	Lever, latch	Not orderable	1
Figure 86; 12	Latch (arm portion of the latch that connects the HCI tray to the printer body)	RC1-0801-000CN	2
Figure 87; 13	Bracket, cable	Not orderable	1
Figure 86; 14	Bracket, cover	Not orderable	1
Figure 86; 15	Caster (left side [closest to the printer], fixed)	RC1-0808-000CN	2
Figure 86; 16	Caster, assembly (right side [under the right-door assembly], adjustable)	RM1-0396-000CN	2
Figure 86; 17	Screw, TP, M3X6	Not orderable	25
Figure 86; 18	Screw, w/washer, M5X12	Not orderable	16
Figure 86; 19	Spring, tension	Not orderable	1
Figure 86; 20	Screw, TP, M3X6	Not orderable	1
Figure 86; 21	Screw, M3X12	Not orderable	2
Figure 87; 22	Lever, sensor (paper-volume-sensor flag)	RB2-7808-000CN	1
Figure 87; 23	Holder, PCB	Not orderable	1
Figure 87; 24	Paper-volume-PCB assembly	See "PCAs" on page 137.	1
Figure 86; 25	Holder, door-stopper, rear	Not orderable	1
Figure 87; 26	Paper-volume cable	Not orderable	1
Figure 87; 27	Screw, stepped, M3	Not orderable	2
Figure 87; 28	Spring, tension	Not orderable	1
Figure 87; 29	Spring, tension (attaches the door retaining wires to the HCI chassis)	RU5-2130-000CN	2
Figure 86; 30	Lever, latch	Not orderable	1
Figure 87; 31	LED PCB	See "PCAs" on page 137.	
Figure 86; 33	Clip, cable	Not orderable	5
Figure 86; 34	Screw, TP, M4X6	Not orderable	31
Figure 87; 35	Screw, TP, M3X6	Not orderable	6
Figure 87; 36	Screw, w/washer, M4	Not orderable	7
Figure 87; 37	Controller-PCA assembly	See "PCAs" on page 137.	1
Figure 86; 38	Cable, LED	Not orderable	1
Figure 86; 38A	Housing	Not orderable	2

Table 37. Internal components (continued)

Ref	Description	Part number	Qty
Figure 87; 39	Cover, roller latch	Not orderable	1
Figure 87; 40	Holder LED	Not orderable	1
Figure 87; 41	LED cable	Not orderable	1
Figure 87; 42	LED cable	Not orderable	1
Figure 87; 43	Cable, paper-size	Not orderable	1
Figure 87; 43A	Connector, snaptight	Not orderable	1
Figure 87; 43B	Connector, 11 pin	Not orderable	1
Figure 87; 44	Cable, main	Not orderable	1
Figure 87; 44A	Connector, 10 pin	Not orderable	1
Figure 87; 44B	Connector, 6 pin	Not orderable	1
Figure 87; 45	Clamp, cable	Not orderable	5
Figure 87; 46	Cable, door	Not orderable	1
Figure 87; 47	Photo interrupter, GP1SQ73P (PS108, right-door sensor)	WG8-5364-000CN	1
Figure 87; 48	Cable, dc power	Not orderable	1
Figure 87; 49	Cable interface (HCI tray to printer communication cable)	RH2-5569-000CN	1
Figure 87; 50	Bushing cord	Not orderable	1
Figure 87; 51	Bushing	Not orderable	1
Figure 87; 52	Bushing	Not orderable	1
Figure 87; 53	Screw, stepped	Not orderable	1
Figure 87; 54	Support, PCB	Not orderable	2
Figure 87; 55	Clip, cable	Not orderable	2
Figure 87; 56	Latch, roller action catch (right-door latch)	XZ9-0403-000CN	2
Figure 86; 57	Cassette size cable	Not orderable	1
Figure 86; 501	E-ring	Not orderable	1
Figure 86; 502	Pin, dowel	Not orderable	2
Figure 87; 503	Pin, dowel	Not orderable	2
Figure 87; 504	Screw, self-tapping truss head, M4X8	Not orderable	2
Figure 86; 505	Screw, TP, M3X12	Not orderable	1
Figure 87; 506	E-ring	Not orderable	1
Figure 86; 507	E-ring	Not orderable	2
Figure 87; 508	Screw, machine truss head, M3X6	Not orderable	8

Tray assembly (1 of 2)
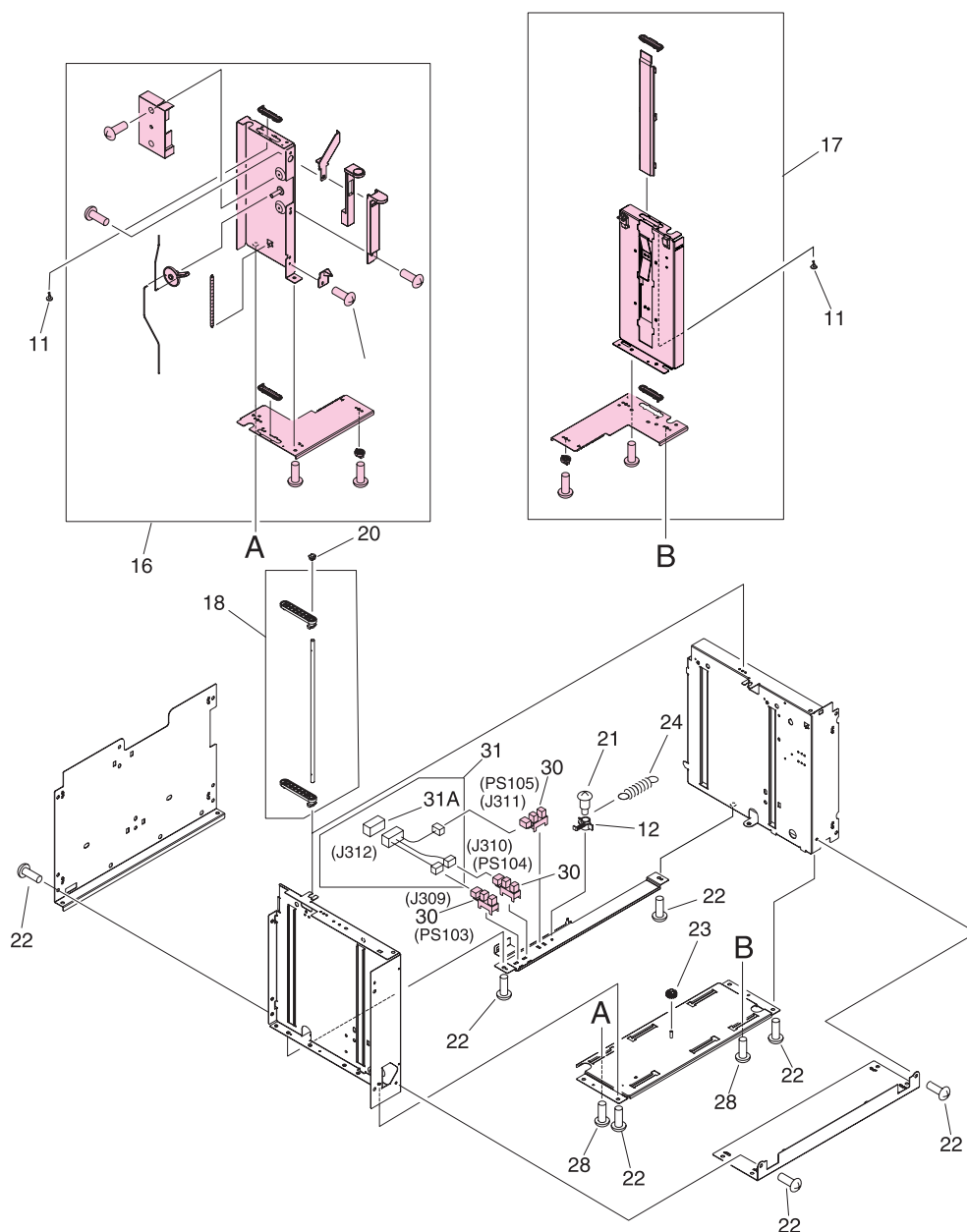
Figure 88. Tray assembly (1 of 2)

Tray assembly (2 of 2)

Figure 89. Tray assembly (2 of 2)

Table 38. Tray assembly

Ref	Description	Part number	Qty
Figure 89; 1	Key, positioning	Not orderable	2
Figure 89; 2	Pulley	Not orderable	4
Figure 89; 3	Cover, pulley	Not orderable	2
Figure 89; 4	Pulley	Not orderable	2
Figure 89; 5	Pulley	Not orderable	2
Figure 89; 6	Cover, pulley	Not orderable	2
Figure 89; 7	Cover, pulley	Not orderable	2
Figure 89; 8	Holder, pin	Not orderable	1
Figure 89; 9	Bracket, wire roller	Not orderable	4
Figure 89; 10	Shaft, drive	Not orderable	1
Figure 88; 11	Stop, arm	Not orderable	2
Figure 88; 12	Flag, sensor	Not orderable	1
Figure 89; 13	Guide, paper-size	RL1-0236-000CN	1
Figure 89; 14	Wire, tray, right	Not orderable	1
Figure 89; 15	Wire, tray, left	Not orderable	1
Figure 88; 16	Paper-limit-guide assembly	RM1-0411-000CN	1
Figure 88; 17	Paper-limit-guide assembly	RNM1-0412-000CN	1
Figure 88; 18	Limit plate shaft assembly	Not orderable	2
Figure 89; 19	Bushing	Not orderable	2
Figure 88; 20	Bushing	Not orderable	2
Figure 88; 21	Screw, stepped	Not orderable	1
Figure 88; 22	Screw, TP, M4X8	Not orderable	27
Figure 88; 23	Gear, 16 teeth	Not orderable	1
Figure 88; 24	Spring, tension	Not orderable	1
Figure 89; 25	Tray assembly	Not orderable	1
Figure 89; 25A	Label, tray	Not orderable	1
Figure 89; 25B	Label, paper-size	Not orderable	1
Figure 89; 26	Damper assembly	RNM1-0515-000CN	1
Figure 89; 27	Gear, 22 teeth	Not orderable	1
Figure 88; 28	Screw, M3X12	Not orderable	2
Figure 89; 29	Guide, tray	Not orderable	1
Figure 88; 30	Photo interrupter, GP1SQ73P	WG8-5364-000CN	3
Figure 88; 31	Cable, paper-size	Not orderable	1
Figure 88; 31A	Connector, snaptight	Not orderable	1
Figure 89; 32	Door-stop front assembly	RM1-0407-000CN	1
Figure 89; 33	Door-stop rear assembly	RM1-0408-000CN	1
Figure 89; 501	E-ring	Not orderable	4
Figure 89; 502	Pin, dowel	Not orderable	1

Lifter-driver assembly
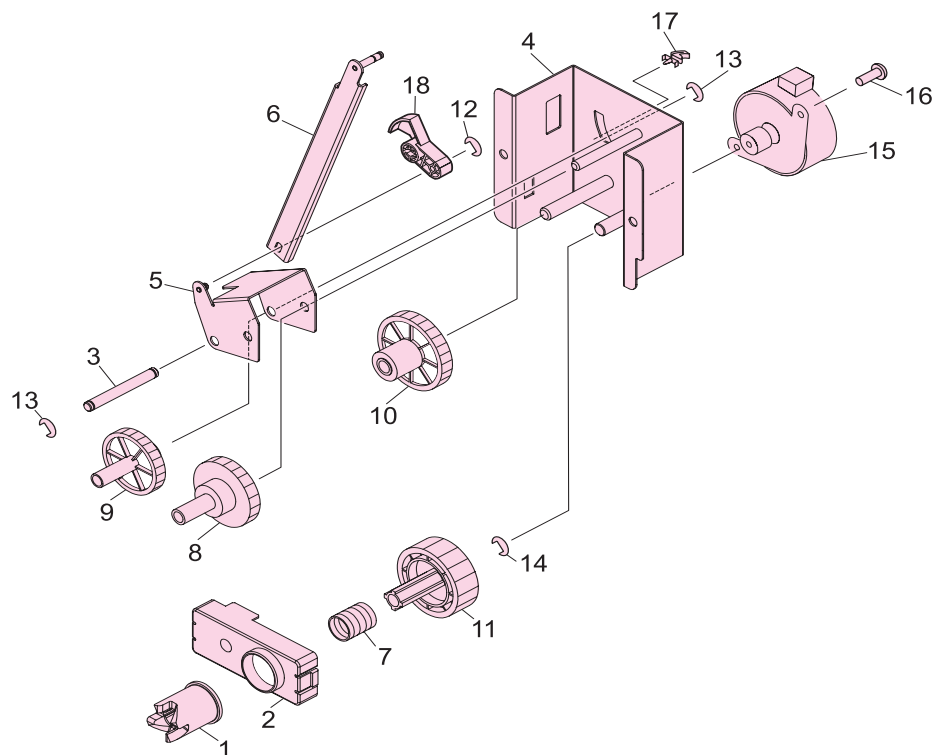
Figure 90.   **Lifter-driver assembly**

Table 39. Lifter-driver assembly

Ref	Description	Part number	Qty
Figure 90; all	Lifter-driver assembly	RM1-0516-00016	1
Figure 90; 1	Pulley	Not orderable	1
Figure 90; 2	Holder, coupling	Not orderable	1
Figure 90; 3	Shaft, gear	Not orderable	1
Figure 90; 4	Mount, drive	Not orderable	1
Figure 90; 5	Plate, swing	Not orderable	1
Figure 90; 6	Link-plate assembly	Not orderable	1
Figure 90; 7	Spring, compression	Not orderable	1
Figure 90; 8	Gear, 33/84 teeth	Not orderable	1
Figure 90; 9	Gear, 66/17 teeth	Not orderable	1
Figure 90; 10	Gear, 59/17 teeth	Not orderable	1
Figure 90; 11	Gear, 44 teeth	Not orderable	1
Figure 90; 12	E-ring	Not orderable	1
Figure 90; 13	E-ring	Not orderable	2
Figure 90; 14	E-ring	Not orderable	1
Figure 90; 15	Motor, DC	Not orderable	1
Figure 90; 16	Screw, w/washer, M3X6e	Not orderable	2
Figure 90; 17	Clamp, cable	Not orderable	1
Figure 90; 18	Link	Not orderable	1

Pickup and feed assembly (1 of 2)
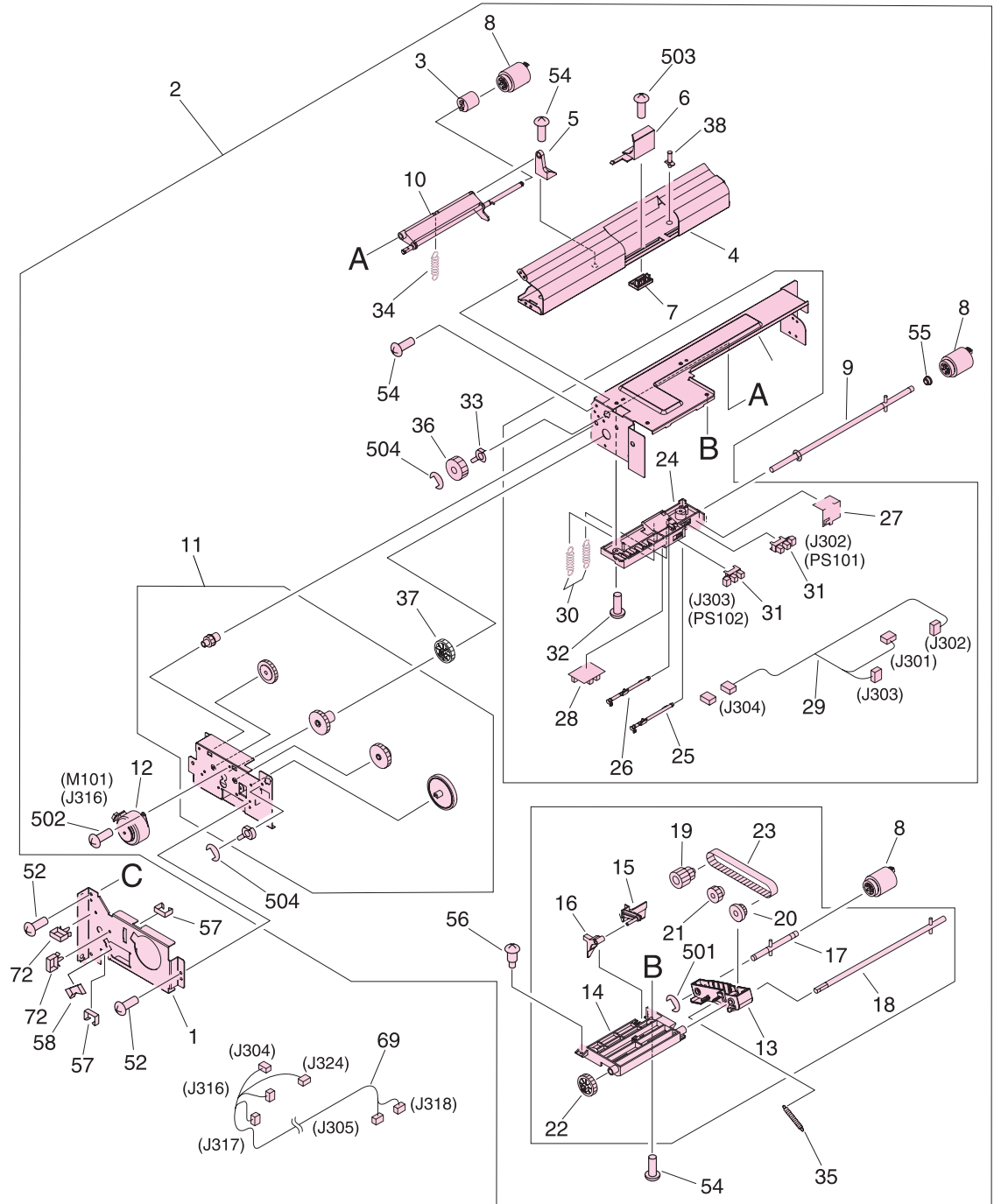
Figure 91. Pickup and feed assembly (1 of 2)

Pickup and feed assembly (2 of 2)
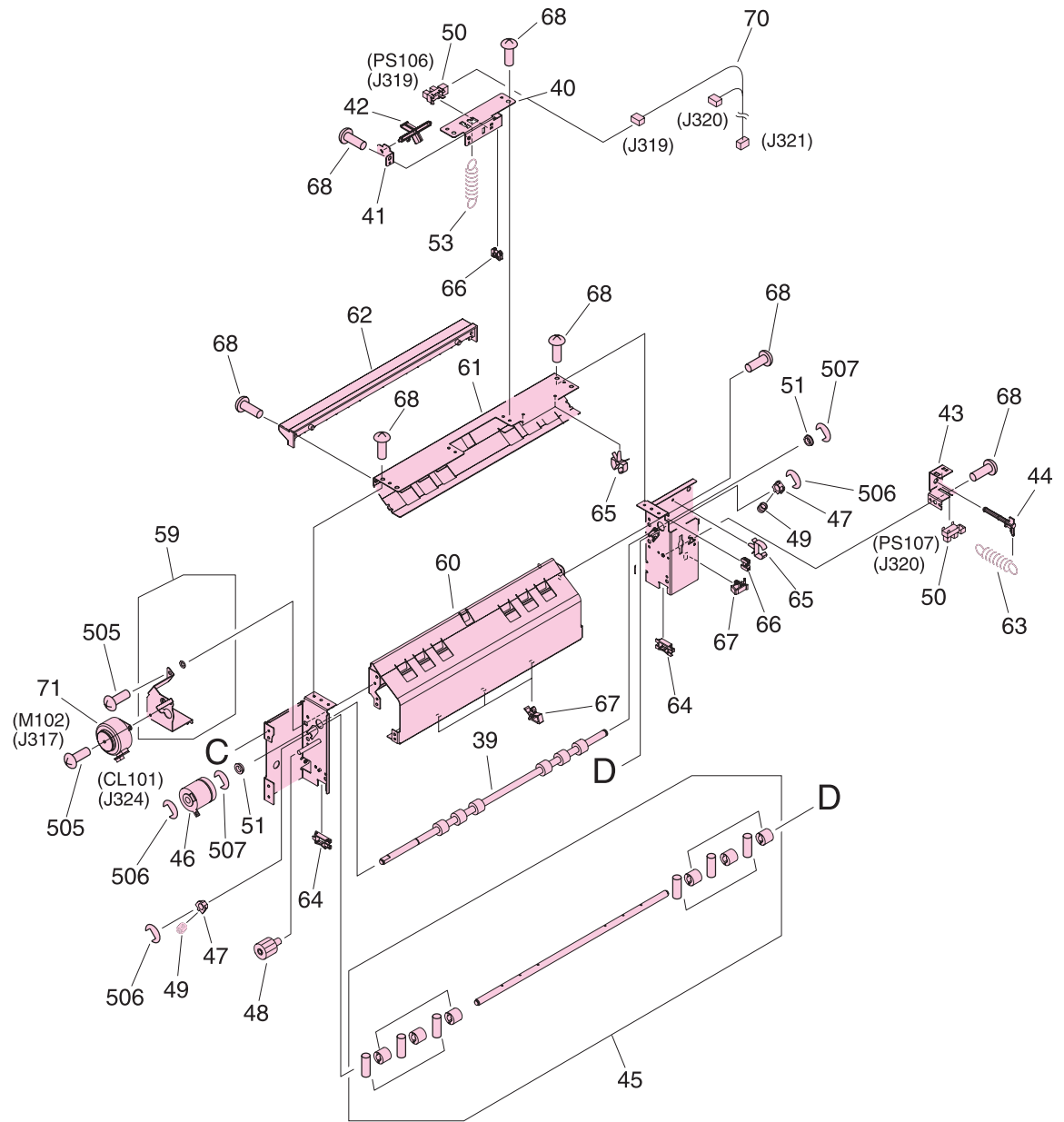
Figure 92.   Pickup and feed assembly (2 of 2)

Table 40. Pickup and feed assembly

Ref	Description	Part number	Qty
Figure 91; all Figure 92; all	Pickup-and-feed assembly	RM1-0397-000CN	1
Figure 91; 1	Plate, connecting	Not orderable	1
Figure 91; 2	Paper-pickup assembly	Not orderable	1
Figure 91; 3	Limiter, torque	Not orderable	1
Figure 91; 4	Guide, lower	Not orderable	1
Figure 91; 5	Bushing	Not orderable	1
Figure 91; 6	Guide, NIP	Not orderable	1
Figure 91; 7	Holder, stop	Not orderable	1
Figure 91; 8	Roller, feed	RF5-3338-000CN	3
Figure 91; 9	Shaft, feed	Not orderable	1
Figure 91; 10	Right arm assembly	Not orderable	1
Figure 91; 11	Paper pickup, gear assembly	Not orderable	1
Figure 91; 12	Motor	Not orderable	1
Figure 91; 13	Arm, pickup	Not orderable	1
Figure 91; 14	Holder, pickup	Not orderable	1
Figure 91; 15	Lever, paper limit	Not orderable	1
Figure 91; 16	Lever, end	Not orderable	1
Figure 91; 17	Shaft, pickup shaft	Not orderable	1
Figure 91; 18	Shaft, separation	Not orderable	1
Figure 91; 19	Gear, 26 teeth	Not orderable	1
Figure 91; 20	Gear, 16 teeth	Not orderable	1
Figure 91; 21	Gear 19 teeth, pulley 22 teeth	Not orderable	1
Figure 91; 22	Gear, 28 teeth	Not orderable	1
Figure 91; 23	Belt, timing	Not orderable	1
Figure 91; 24	Holder, sensor	Not orderable	1
Figure 91; 25	Lever, registration	Not orderable	1
Figure 91; 26	Lever, sensor	Not orderable	1
Figure 91; 27	Cover, sensor	Not orderable	1
Figure 91; 28	Sensor, registration	Not orderable	1
Figure 91; 29	Cable, sensor	Not orderable	1
Figure 91; 30	Spring, tension	Not orderable	2
Figure 91; 31	Photo interrupter, GP1SQ73P	WG8-5364-000CN	2
Figure 91; 32	Screw, TP M3X6	Not orderable	3
Figure 91; 33	Bushing	Not orderable	1
Figure 91; 34	Spring, tension	Not orderable	1
Figure 91; 35	Spring, tension	Not orderable	1
Figure 91; 36	Gear, 26 teeth	Not orderable	1
Figure 91; 37	Gear, 52 teeth	Not orderable	1
Figure 91; 38	Spacer, PCB	Not orderable	1
Figure 92; 39	Roller, registration	Not orderable	1

Table 40. Pickup and feed assembly (continued)

Ref	Description	Part number	Qty
Figure 92; 40	Mount, sensor	Not orderable	1
Figure 92; 41	Plate, sensor	Not orderable	1
Figure 92; 42	Flag, sensor	Not orderable	1
Figure 92; 43	Holder, sensor	Not orderable	1
Figure 92; 44	Lever, sensor	Not orderable	1
Figure 92; 45	Registration shaft assembly	Not orderable	1
Figure 92; 46	Clutch, EM	Not orderable	1
Figure 92; 47	Bushing	Not orderable	2
Figure 92; 48	Gear, 33 teeth	Not orderable	1
Figure 92; 49	Spring, compression	Not orderable	2
Figure 92; 50	Photo interrupter, GP1SQ73P	WG8-5364-000CN	2
Figure 92; 51	Ball bearing	Not orderable	2
Figure 91; 52	Screw, TP, M3X6	Not orderable	5
Figure 92; 53	Spring, tension	Not orderable	1
Figure 91; 54	Screw, TP, M3X6	Not orderable	10
Figure 91; 55	Bushing	Not orderable	1
Figure 91; 56	Screw, stepped, M3	Not orderable	1
Figure 91; 57	Clip, cable	Not orderable	2
Figure 91; 58	Clip, cable	Not orderable	1
Figure 92; 59	Mount, motor	Not orderable	1
Figure 92; 60	Guide, feed lower	Not orderable	1
Figure 92; 61	Guide, feed upper	Not orderable	1
Figure 92; 62	Guide, feed front	Not orderable	1
Figure 92; 63	Spring, tension	Not orderable	1
Figure 92; 64	Clip, cable	Not orderable	2
Figure 92; 65	Clip, cable	Not orderable	3
Figure 92; 66	Clip, cable	Not orderable	2
Figure 92; 67	Clamp	Not orderable	4
Figure 92; 68	Screw, TP, M3X6	Not orderable	15
Figure 91; 69	Cable, registration	Not orderable	1
Figure 92; 70	Cable, sensor	Not orderable	1
Figure 92; 71	Motor	Not orderable	1
Figure 91; 72	Clip, cable	Not orderable	2
Figure 91; 501	E-ring	Not orderable	1
Figure 91; 502	Screw, w/washer, M3X6	Not orderable	2
Figure 91; 503	Screw, TP	Not orderable	1
Figure 91; 504	E-ring	Not orderable	2
Figure 92; 505	Screw, w/washer, M3X6	Not orderable	4
Figure 92; 506	E-ring	Not orderable	3
Figure 92; 507	E-ring	Not orderable	2

PCAs
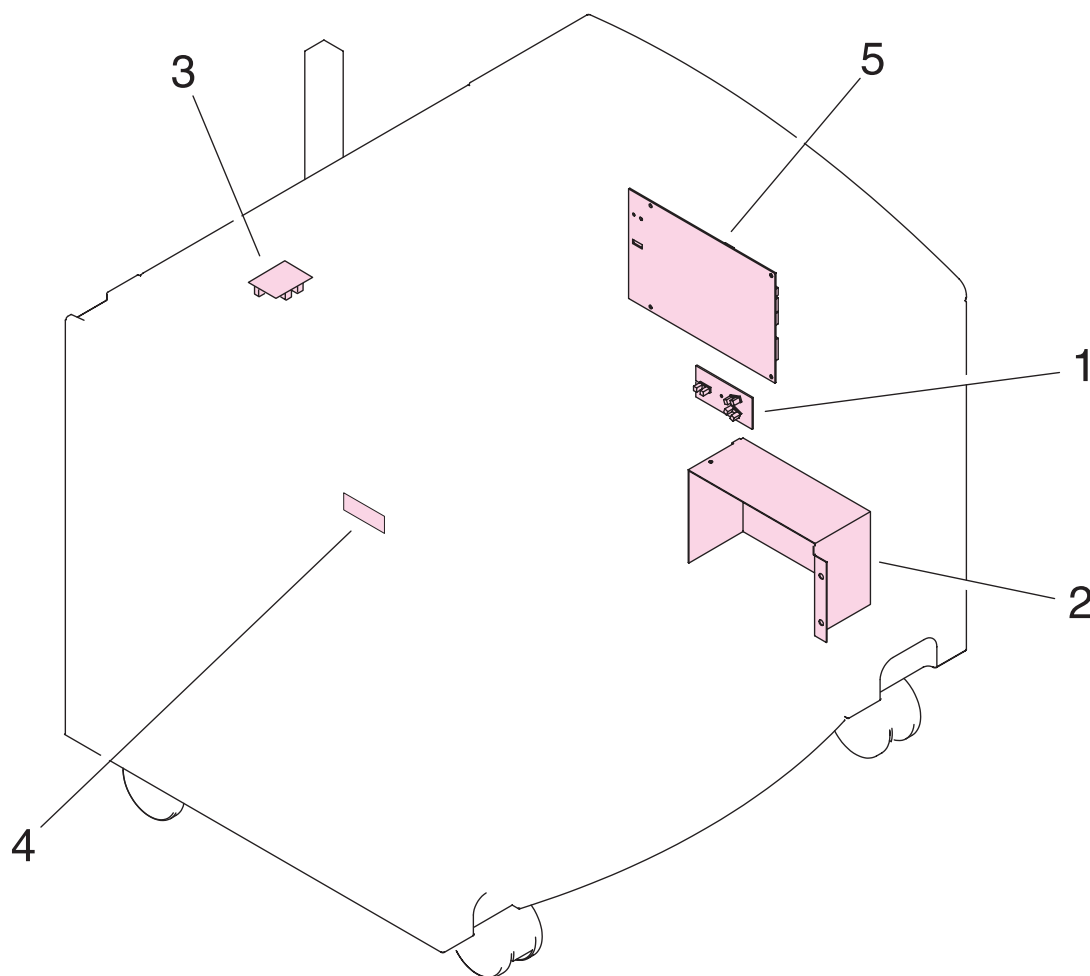
Figure 93.　　**PCAs**

Table 41. PCAs

Ref	Description	Part number	Qty
Figure 93; 1	Paper-volume PCA	RG5-6237-000CN	1
Figure 93; 2	Power-supply assembly	RG5-6250-000CN	1
Figure 93; 3	Registration-sensor assembly	RG5-6236-000CN	1
Figure 93; 4	LED PCA assembly	RG5-6239-000CN	1
Figure 93; 5	Paper-deck-controller PCA	RG1-4286-000CN	1

Alphabetical parts list

Table 42. Alphabetical parts list

Ref	Description	Part number	Qty
Figure 84; all	2,000-sheet side-input tray	Q1891-67901	1
Figure 87; 49	Cable interface (HCI tray to printer communication cable)	RH2-5569-000CN	1
Figure 86; 15	Caster (left side [closest to the printer], fixed)	RC1-0808-000CN	2
Figure 86; 16	Caster, assembly (right side [under the right-door assembly], adjustable)	RM1-0396-000CN	2
Figure 85; 6	Cover, back	RC1-0827-000CN	1
Figure 85; 10	Cover, back left	RM1-0406-000CN	1
Figure 87; 4	Cover, cam	RC1-0884-000CN	1
Figure 85; 7	Cover, front	RM1-0403-000CN	1
Figure 85; 3	Cover, front left	RC!-0823-000CN	1
Figure 85; 2	Cover, left	RC1-0822-000CN	1
Figure 85; 5	Cover, lower right	RC1-0826-000CN	1
Figure 85; 4	Cover, right rear	RC1-0825-000CN	1
Figure 85; 1	Cover, top rear	RC1-0821-000CN	1
Figure 89; 26	Damper assembly	RNM1-0515-000CN	1
Figure 89; 32	Door-stop front assembly	RM1-0407-000CN	1
Figure 89; 33	Door-stop rear assembly	RM1-0408-000CN	1
Figure 85; 11	Foot	RB1-3001-000CN	2
Figure 86; 12	Latch (arm portion of the latch that connects the HCI tray to the printer body)	RC1-0801-000CN	2
Figure 86; 2	Latch, rail (latches the slide rail to the printer body)	RC1-0815-000CN	1
Figure 87; 56	Latch, roller action catch (right-door latch)	XZ9-0403-000CN	2
Figure 93; 4	LED PCA assembly	RG5-6239-000CN	1
Figure 87; 22	Lever, sensor (paper-volume-sensor flag)	RB2-7808-000CN	1
Figure 90; all	Lifter-driver assembly	RM1-0516-00016	1
Figure 93; 5	Paper-deck-controller PCA	RG1-4286-000CN	1
Figure 88; 16	Paper-limit-guide assembly	RM1-0411-000CN	1
Figure 88; 17	Paper-limit-guide assembly	RNM1-0412-000CN	1
Figure 93; 1	Paper-volume PCA	RG5-6237-000CN	1
Figure 88; 30	Photo interrupter, GP1SQ73P	WG8-5364-000CN	3
Figure 91; 31	Photo interrupter, GP1SQ73P	WG8-5364-000CN	2
Figure 92; 50	Photo interrupter, GP1SQ73P	WG8-5364-000CN	2
Figure 87; 47	Photo interrupter, GP1SQ73P (PS108, right-door sensor)	WG8-5364-000CN	1
Figure 91; all Figure 92; all	Pickup-and-feed assembly	RM1-0397-000CN	1
Figure 86; 8	Pin, positioning (aligns the HCI tray body to the printer body)	RL1-0180-000CN	1
Figure 87; 5	Power cable (from the HCI to the printer)	RH2-9008-000CN	1
Figure 93; 2	Power-supply assembly	RG5-6250-000CN	1
Figure 93; 3	Registration-sensor assembly	RG5-6236-000CN	1

Table 42. Alphabetical parts list (continued)

Ref	Description	Part number	Qty
Figure 85; 9	Right door assembly	RM1-0405-000CN	1
Figure 91; 8	Roller, feed	RF5-3338-000CN	3
Figure 87; 29	Spring, tension (attaches the door retaining wires to the HCI chassis)	RU5-2130-000CN	2
Figure 85; 8	Top-cover assembly	RM1-0404-000CN	1
Figure 87; 3	Wire, door (keeps the door from over extending when opened)	RC1-0833-000CN	2

Numerical parts list

Table 43. Numerical parts list

Ref	Description	Part number	Qty
Figure 84; all	2,000-sheet side-input tray	Q1891-67901	1
Figure 85; 11	Foot	RB1-3001-000CN	2
Figure 87; 22	Lever, sensor (paper-volume-sensor flag)	RB2-7808-000CN	1
Figure 85; 3	Cover, front left	RC!-0823-000CN	1
Figure 86; 12	Latch (arm portion of the latch that connects the HCI tray to the printer body)	RC1-0801-000CN	2
Figure 86; 15	Caster (left side [closest to the printer], fixed)	RC1-0808-000CN	2
Figure 86; 2	Latch, rail (latches the slide rail to the printer body)	RC1-0815-000CN	1
Figure 85; 1	Cover, top rear	RC1-0821-000CN	1
Figure 85; 2	Cover, left	RC1-0822-000CN	1
Figure 85; 4	Cover, right rear	RC1-0825-000CN	1
Figure 85; 5	Cover, lower right	RC1-0826-000CN	1
Figure 85; 6	Cover, back	RC1-0827-000CN	1
Figure 87; 3	Wire, door (keeps the door from over extending when opened)	RC1-0833-000CN	2
Figure 87; 4	Cover, cam	RC1-0884-000CN	1
Figure 91; 8	Roller, feed	RF5-3338-000CN	3
Figure 93; 5	Paper-deck-controller PCA	RG1-4286-000CN	1
Figure 93; 3	Registration-sensor assembly	RG5-6236-000CN	1
Figure 93; 1	Paper-volume PCA	RG5-6237-000CN	1
Figure 93; 4	LED PCA assembly	RG5-6239-000CN	1
Figure 93; 2	Power-supply assembly	RG5-6250-000CN	1
Figure 87; 49	Cable interface (HCI tray to printer communication cable)	RH2-5569-000CN	1
Figure 87; 5	Power cable (from the HCI to the printer)	RH2-9008-000CN	1
Figure 86; 8	Pin, positioning (aligns the HCI tray body to the printer body)	RL1-0180-000CN	1
Figure 86; 16	Caster, assembly (right side [under the right-door assembly], adjustable)	RM1-0396-000CN	2
Figure 91; all Figure 92; all	Pickup-and-feed assembly	RM1-0397-000CN	1
Figure 85; 7	Cover, front	RM1-0403-000CN	1
Figure 85; 8	Top-cover assembly	RM1-0404-000CN	1
Figure 85; 9	Right door assembly	RM1-0405-000CN	1
Figure 85; 10	Cover, back left	RM1-0406-000CN	1
Figure 89; 32	Door-stop front assembly	RM1-0407-000CN	1
Figure 89; 33	Door-stop rear assembly	RM1-0408-000CN	1
Figure 88; 16	Paper-limit-guide assembly	RM1-0411-000CN	1
Figure 90; all	Lifter-driver assembly	RM1-0516-00016	1
Figure 88; 17	Paper-limit-guide assembly	RNM1-0412-000CN	1
Figure 89; 26	Damper assembly	RNM1-0515-000CN	1
Figure 87; 29	Spring, tension (attaches the door retaining wires to the HCI chassis)	RU5-2130-000CN	2

Table 43. Numerical parts list (continued)

Ref	Description	Part number	Qty
Figure 87; 47	Photo interrupter, GP1SQ73P (PS108, right-door sensor)	WG8-5364-000CN	1
Figure 88; 30	Photo interrupter, GP1SQ73P	WG8-5364-000CN	3
Figure 91; 31	Photo interrupter, GP1SQ73P	WG8-5364-000CN	2
Figure 92; 50	Photo interrupter, GP1SQ73P	WG8-5364-000CN	2
Figure 87; 56	Latch, roller action catch (right-door latch)	XZ9-0403-000CN	2

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