

**hp** LaserJet 4200 4200n • 4200tn 4200dtn • 4200dtns

**hp** LaserJet 4300 4300n • 4300tn 4300dtn • 4300dtns

HP LaserJet 4200 and 4300 series printers

Use

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## About the documentation

## Where to look for information

Several references are available for use with this printer. For additional information or an updated version of the user guide, visit <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4200</a> or <a href="http://www.hp.com/support/lj4300">http://www.hp.com/support/lj4300</a>.

## Setting up the printer



#### **Getting Started Guide**

The getting started (*start*) guide that came with the printer contains information for setting up your printer. You can print a new copy from either of these websites: <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4200</a> or <a href="http://www.hp.com/support/lj4300">http://www.hp.com/support/lj4300</a>.



#### **HP Jetdirect Print Server Administrator's Guide**

The administrator's guide contains information for configuring and troubleshooting an HP Jetdirect (network) print server. You can print a copy from the CD-ROM that came with the printer.

## Using the printer



#### User guide

This guide (*use*), which you are currently reading, contains information about using the printer and troubleshooting. It also contains support, warranty, and regulatory information. See the contents for a list of topics covered.



#### **Online Help**

The online Help contains information about printer options that are available in the printer drivers. Gain access to the online Help through the printer driver.



### **Accessory guides**

These guides (*install*) contain instructions for installing and using accessories or print cartridges. These guides are included with the accessory.

About the documentation ENWW

Printer basics

## **Overview**

Thank you for purchasing an HP LaserJet 4200 series or 4300 series printer. If you have not done so, see the getting started (*start*) guide provided with the printer for setup instructions.

Now that the printer is set up and ready to use, take a few moments to familiarize yourself with the printer. This section introduces the following topics:

- "Printer features and benefits" on page 10
- "Printer configurations" on page 12
- "Printer parts and locations" on page 13
- "Accessories and supplies" on page 15
- "Moving the printer" on page 16
- "Ordering information" on page 17
- "Control panel layout" on page 24
- "Accessory lights" on page 27
- "Printer software" on page 28

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## **Printer features and benefits**

The following table describes the features for the HP LaserJet 4200 series and the HP LaserJet 4300 series printers. Bulleted items in blue denote differences between the two series.

	HP LaserJet 4200 series	HP LaserJet 4300 series
Speed and throughput	<ul> <li>Prints letter-size paper at up to 35 pages per minute (ppm) or A4-size paper at up to 33 ppm.</li> <li>Instant-on fuser prints the first page in less than 8.5 seconds, saving energy and reducing costs.</li> <li>"RIP ONCE" capability. (For more information, see "RIP ONCE" on page 68.)</li> </ul>	<ul> <li>Prints letter-size paper at up to 45 pages per minute (ppm) or A4-size paper at up to 43 ppm.</li> <li>Instant-on fuser prints the first page in less than 8.5 seconds, saving energy and reducing costs.</li> <li>"RIP ONCE" capability. (For more information, see "RIP ONCE" on page 68.)</li> </ul>
Resolution	<ul> <li>FastRes 1200 — produces 1200-dpi print quality for fast, high-quality printing of business text and graphics.</li> <li>ProRes 1200 — produces 1200-dpi printing for the best quality in line art and graphic images.</li> <li>HP UltraPrecise toner for crisp, sharp output.</li> </ul>	<ul> <li>FastRes 1200 — produces 1200-dpi print quality for fast, high-quality printing of business text and graphics.</li> <li>ProRes 1200 — produces 1200-dpi printing for the best quality in line art and graphic images.</li> <li>HP UltraPrecise toner for crisp, sharp output.</li> </ul>
Paper handling	<ul> <li>HP LaserJet 4200 and 4200n: hold 600 sheets of paper.</li> <li>HP LaserJet 4200tn, 4200dtn, 4200dtns, and 4200dtnsl: hold 1,100 sheets of paper.</li> <li>HP LaserJet 4200dtn, 4200dtns, and 4200dtnsl include a duplexer (duplex printing accessory) for automatic two-sided printing. All other models are compatible with the optional duplexer.</li> <li>HP LaserJet 4200dtns includes a 500-sheet stacker.</li> <li>HP LaserJet 4200dtnsl includes a 500-sheet stapler/stacker.</li> <li>All models are expandable with optional accessories to hold up to 2,600 sheets of paper.</li> <li>All print on a wide range of sizes, types, and weights of paper.</li> </ul>	<ul> <li>paper.</li> <li>HP LaserJet 4300tn, 4300dtn, 4300dtns, and 4300dtnsl: hold 1,100 sheets of paper.</li> <li>HP LaserJet 4300dtn, 4300dtns, and 4300dtnsl</li> </ul>
Memory and processor	<ul> <li>HP LaserJet 4200: 48 megabytes (MB) of random access memory (RAM). All other models: 64 MB RAM.</li> <li>300-megahertz (MHz) processor.</li> </ul>	<ul> <li>HP LaserJet 4300: 64 MB of RAM. All other models: 80 MB RAM.</li> <li>350-MHz processor.</li> </ul>
Language and fonts	<ul> <li>HP PCL 6, PCL 5e, and PostScript 3<sup>™</sup> (PS 3) emulation.</li> <li>80 fonts for Microsoft<sup>®</sup> Windows<sup>®</sup>.</li> </ul>	<ul><li>HP PCL 6, PCL 5e, and PS 3 emulation.</li><li>80 fonts for Windows.</li></ul>
Print cartridge	<ul> <li>12,000-page print cartridge.</li> <li>Supplies status page with toner gauge, page count, and information about paper sizes used.</li> <li>No-shake cartridge design.</li> <li>Check for authentic HP print cartridges.</li> </ul>	<ul> <li>18,000-page print cartridge.</li> <li>Supplies status page with toner gauge, page count, and information about paper sizes used.</li> <li>No-shake cartridge design.</li> <li>Check for authentic HP print cartridges.</li> </ul>

## Expandable design

- Two EIO (enhanced input/output) slots for connecting to networks or additional devices.
- Expandable memory up to 416 MB.
- Optional, stackable 500-sheet tray and feeder units. Up to two optional tray and feeder units can be installed.
- Optional 1,500-sheet tray and feeder. Up to two optional tray and feeder units can be installed, only one of which can be a 1,500-sheet tray and feeder.
- Optional envelope feeder that holds up to 75 envelopes.
- Optional duplexer for two-sided printing.
- Optional stacker that can hold up to 500 sheets.
- Optional stapler/stacker that can staple jobs of up to 15 sheets or hold up to 500 unstapled sheets.
- Optional storage cabinet.
- Optional flash storage for forms, fonts, and signatures.
- Optional hard disk for job storage.

- Two EIO slots for connecting to networks or additional devices.
- Expandable memory up to 416 MB.
- Optional, stackable 500-sheet tray and feeder units. Up to two optional tray and feeder units can be installed.
- Optional 1,500-sheet tray and feeder. Up to two optional tray and feeder units can be installed, only one of which can be a 1,500-sheet tray and feeder.
- Optional envelope feeder that holds up to 75 envelopes.
- Optional duplexer for two-sided printing.
- Optional stacker that can hold up to 500 sheets.
- Optional stapler/stacker that can staple jobs of up to 15 sheets or hold up to 500 unstapled sheets.
- Optional storage cabinet.
- Optional flash storage for forms, fonts, and signatures.
- Optional hard disk for job storage.

## **Printer configurations**

The HP LaserJet 4200 series and 4300 series printers have six models each: the base, n, tn, dtn, dtns, and dtnsl models. The following table describes the features of each model for each series.

#### **HP LaserJet 4200 series**

#### **HP LaserJet 4300 series**

#### **Base model**

- 48 MB RAM, expandable up to 416 MB
- one 100-sheet tray and one 500-sheet tray
- 64 MB RAM, expandable up to 416 MB
- one 100-sheet tray and one 500-sheet tray

#### n model



- 64 MB RAM, expandable up to 416 MB
- one 100-sheet tray and one 500-sheet tray
- HP Jetdirect 10/100Base-TX print server card for network connection
- 80 MB RAM, expandable up to 416 MB
- one 100-sheet tray and one 500-sheet tray
- HP Jetdirect 10/100Base-TX print server card for network connection

#### tn model



- 64 MB RAM, expandable up to 416 MB
- one 100-sheet tray and two 500-sheet trays
- HP Jetdirect 10/100Base-TX print server card for network connection friend
- 80 MB RAM, expandable up to 416 MB
- one 100-sheet tray and two 500-sheet trays
- HP Jetdirect 10/100Base-TX print server card for network connection

#### dtn model



- 64 MB RAM, expandable up to 416 MB
- one 100-sheet tray and two 500-sheet trays
- HP Jetdirect 10/100Base-TX print server card for network connection
- duplexer for automatic two-sided printing
- 80 MB RAM, expandable up to 416 MB
- one 100-sheet tray and two 500-sheet trays
- HP Jetdirect 10/100Base-TX print server card for network connection
- duplexer for automatic two-sided printing

#### dtns model



- 64 MB RAM, expandable up to 416 MB
- one 100-sheet tray and two 500-sheet trays
- HP Jetdirect 10/100Base-TX print server card for network connection
- duplexer for automatic two-sided printing
- 500-sheet stacker output accessory
- 80 MB RAM, expandable up to 416 MB
- one 100-sheet tray and two 500-sheet trays
- HP Jetdirect 10/100Base-TX print server card for network connection
- duplexer for automatic two-sided printing
- 500-sheet stacker output accessory

#### dtnsl model

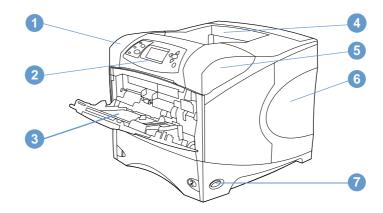


- 64 MB RAM, expandable up to 416 MB
- one 100-sheet tray and two 500-sheet trays
- HP Jetdirect 10/100Base-TX print server card for network connection
- duplexer for automatic two-sided printing
- 500-sheet stapler/stacker output accessory
- 80 MB RAM, expandable up to 416 MB
- one 100-sheet tray and two 500-sheet trays
- HP Jetdirect 10/100Base-TX print server card for network connection
- duplexer for automatic two-sided printing
- 500-sheet stapler/stacker output accessory

## **Printer parts and locations**

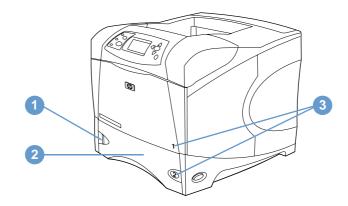
This section describes the basic printer features. The accessories included with some models, such as the stapler/stacker that is included in the HP LaserJet 4200dtnsl model, are not shown. For more information about optional accessories, see "Accessories and supplies" on page 15.

## Front view, tray 1 open



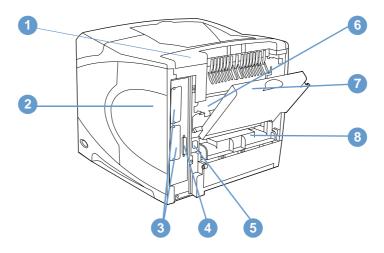
- 1 Top cover (print cartridge underneath)
- 2 Control panel
- 3 Tray 1 (100-sheet)
- 4 Top (standard) output bin
- **5** Serial and model numbers (under top cover)
- 6 Slots for additional memory
- 7 Power switch

## Front view, tray 1 closed



- 1 Paper level indicator
- 2 Tray 2 (500-sheet)
- 3 Tray numbers

## **Rear view**



- 1 Accessory cover
- 2 Memory-access door (more than one DIMM can be installed)
- 3 EIO slots
- 4 Parallel interface port
- **5** Power connector
- 6 Fuser (can be removed to clear paper jams)
- **7** Rear output bin (straight-through paper path)
- 8 Duplexer cover (not installed if the optional duplexer is installed)

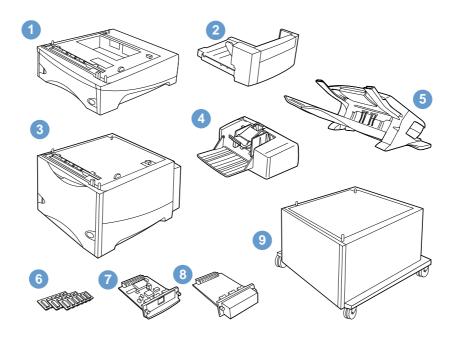
## **Accessories and supplies**

You can increase the capabilities of the printer with optional accessories and supplies, as shown below. See "Ordering information" on page 17.

Note

Use accessories and supplies specifically designed for the printer to ensure optimum performance.

The printer supports two EIO cards. One of the card slots is already used in the HP LaserJet 4200n/tn/dtns/dtnsl and 4300 n/tn/dtns/dtnsl models for the HP Jetdirect 10/100Base-TX print server card.



- 1 500-sheet tray and feeder\*
- 2 Duplexer (duplex printing accessory) for two-sided printing
- 3 1,500-sheet tray and feeder\*
- 4 Envelope feeder
- 5 Stacker or stapler/stacker accessory
- 6 Memory DIMM, flash DIMM, or font DIMM
- 7 HP Jetdirect print server (EIO card)
- 8 Hard disk accessory (EIO card)
- 9 Storage cabinet for the printer

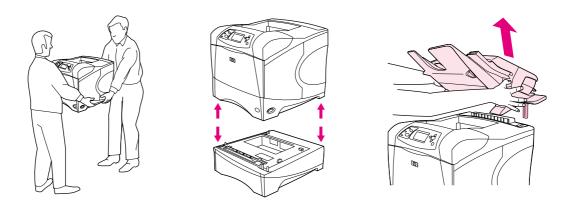
<sup>\*</sup> The paper capacity of any HP LaserJet 4200 or HP LaserJet 4300 series printer can be expanded to a maximum of 2,600 sheets, achieved by installing one optional 500-sheet tray and feeder and one optional 1,500-sheet tray and feeder. The printer supports installing 1) one optional 500-sheet tray and feeder and one optional 1,500-sheet tray and feeder, 2) one optional 500-sheet tray and feeder, 3) one optional 1,500-sheet tray and feeder, or 4) two optional 500-sheet tray and feeder units.

## Moving the printer

The printer is heavy and should be lifted by two people. To lift the printer, grip the handles on the sides of the printer. If the bottom of the printer is attached to an optional accessory (such as a 500-sheet tray and feeder, 1,500-sheet tray and feeder, or storage cabinet), the accessory latches must be unlocked before moving the printer.

#### **WARNING!**

To prevent possible injury or damage to the printer, separate the printer from any currently installed optional accessories (for example, an optional tray and feeder or a stapler/stacker) before lifting the printer.

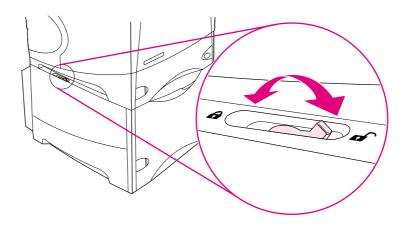


## Locking and unlocking optional accessories

For more stability against tipping over, the optional tray and feeder units and the cabinet can be locked to the bottom of the printer.

To lock the accessories, locate the lever on the upper left side of the optional tray and feeder and rotate the lever to the rear (locked) position.

To unlock the accessories, rotate the lever to the forward (unlocked) position.



## **Ordering information**

This section contains information about how to order accessories and their part numbers. Use only parts and accessories specifically designed for this printer. The section, "Part numbers" on page 18, is organized according to these types of accessories:

- paper handling
- memory, fonts, and mass storage
- cables and interfaces
- documentation
- maintenance
- printing supplies

## Ordering through service or support providers

To order a part or accessory, contact an HP-authorized service or support provider. (See "Ordering parts and supplies" on page 143.)

## Ordering directly through the embedded Web server

Use the following steps to order printing supplies directly through the embedded Web server. (See "Gaining access to the embedded Web server" on page 76 for an explanation of this feature.)

## To order directly through the embedded Web server

- 1 In your Web browser, enter the IP address for the printer home, page found on the EIO Jetdirect page. (See "Configuration page" on page 83.) This takes you to the device status page.
- 2 On the **Information** tab, click **Order Supplies** in the **Other Links** section. This provides a URL from which to purchase supplies.
- 3 If asked to provide a password, enter the password (provided by the network administrator).
- 4 Supplies information with part numbers and printer information is provided.
- 5 Select the part numbers you want to order and follow the instructions on the screen.

## Ordering directly through the printer software

The printer software gives you the ability to order supplies and accessories directly, by using your computer. Three things are required to use this feature:

- The Printer Status and Alerts software must be installed on your computer. (Use the Custom installation option to install this software.)
- The printer must be connected to your computer using a parallel cable, a TCP/ICP connection, or a network.
- You must have access to the Internet.

## To order directly through the printer software

- 1 In the status area of the Windows taskbar (near the clock), click the **Printer** icon. This opens the status window.
- 2 On the left side of the status window, click the **Printer** icon for which you want to obtain status.
- 3 In the **Device Status** section, scroll down to the **Supplies** subsection and click the **Supplies Details** link.
- 4 Click **Order Supplies**. This opens a browser that provides a URL from which to purchase supplies.
- 5 Select the supplies you want to order.

### Part numbers

Paper handling		
Item	Part number	Description or use
500-sheet tray and feeder unit	Q2440A	Consists of the tray and feeder. Order this item if you want to add paper capacity to the printer. In addition to the <i>base</i> printer, you can have a maximum of two more trays.
1,500-sheet tray and feeder unit	Q2444A	Adds paper capacity to the printer. In addition to the base printer, you can have a maximum of two more trays. (Only one of those trays can be a 1,500-sheet tray.)
Envelope feeder	Q2438A	Holds up to 75 envelopes.
Duplexer (duplex printing accessory)	Q2439A	Allows automatic printing on both sides of paper.
500-sheet stacker	Q2442A	Provides an additional output bin that holds 500 sheets.
500-sheet stapler/stacker	Q2443A	Allows for High-volume output with automatic job finishing. Staples up to 15 sheets of paper.
1,000-staple cartridge	Q3216A	Provides three staple cartridges.
Stapler unit	Q3216-60501	Holds the staple cartridge and stapler head. (The staple cartridge is not included with the stapler unit and must be ordered separately, if it needs to be replaced.) Order the stapler unit if you are experiencing stapler failure and an HP-authorized service or support provider advises you to replace the unit.
Storage cabinet	Q2445A	Raises the height of the printer and provides room to store paper.

**ENWW** 

18 Chapter 1 Printer basics

Memory.	fonts, and	mass s	torage
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lte	em	Part number	Description or use
SDRAM DIMM (dual inline memory module)			Boosts the ability of the printer to handle large or complex print jobs (maximum 416 MB with
•	8 MB	C7842A	HP-brand DIMMs).
•	16 MB	C7843A	
•	32 MB	C7845A	
•	64 MB	Q9680A	
•	128 MB	Q9121A	
Fla	ash DIMM		DIMM for storing fonts and forms if an EIO slot is
•	2 MB	C4286A	not available.
•	4 MB	C4287A	
•	8 MB	C8530A	
•	12 MB	C7867A	
Fo	nt DIMM		8-MB font DIMM for printing Korean, simplified
•	Korean	D4838A	Chinese, and traditional Chinese characters.
•	Simplified Chinese	C4293A	
•	Traditional Chinese	C4292A	
El	O hard disk	J6054B	Greater than 5-GB permanent storage for fonts and forms. Also used for making multiple original prints and for job-storage features.

## **Cables and interfaces**

Item Part number		Part number	Description or use
Pa	rallel cables		For directly connecting the printer to a PC.
•	2-meter IEEE-1284 cable	C2950A	
•	3-meter IEEE-1284 cable	C2951A	
El	O cards		HP Jetdirect print server cards for connecting to a network.
•	Token Ring networks	J4167A	
•	Fast Ethernet (10/100Base-TX single RJ-45 port)	J6057A	
•	Connectivity card for USB, Serial, and LocalTalk	J4135A	

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#### **Documentation**

Ite	em	Part number	Description or use
print media <b>guide for the HP</b> LaserJet family of printers		5980-8424 ENUS	A guide to using paper and other print media with HP LaserJet printers (English only).  To obtain an updated version of the media guide, go to <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4200</a> or to <a href="http://www.hp.com/support/lj4300">http://www.hp.com/support/lj4300</a> .
HP LaserJet 4200/4300 series CD-ROM			An additional copy of the CD-ROM containing software, the <i>use</i> guide, and Readmes.
•	English, French, Italian, Spanish, German, Dutch, Portuguese, Hebrew, Greek	Q2431-60104	
•	English, Danish, Finnish, Norwegian, Swedish, Czech, Hungarian, Polish, Russian, Turkish, Arabic, French	Q2431-60105	
•	English, Japanese, Korean, Simplified Chinese, Traditional Chinese, Thai	Q2431-60106	Note: The PCL 5e printer driver is not available on the Asian-language CD-ROM. You can download the PCL 5e driver from the Internet at <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4200</a> or at <a href="http://www.hp.com/support/lj4300">http://www.hp.com/support/lj4300</a> .
getting started (start) guide			You can download a copy of the <i>start</i> guide from the Internet at <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4300</a> .

**Note:** These items are also available for download at no cost by visiting <a href="http://www.hp.com">http://www.hp.com</a>. In the **Select your country/region** field at the top of the Web browser, select your country/region and click the **Support** block.

### **Maintenance**

Item	Part number	Description or use	
Printer maintenance kit		User-replaceable parts and instructions for	
<ul> <li>110 V printer kit (HP LaserJet 4200 series)</li> </ul>	Q2429A	printer maintenance. The printer maintenance kit is a consumable item, and its cost is not covered under warranty or most extended warranty options.	
<ul> <li>110 V printer kit (HP LaserJet 4300 series)</li> </ul>	Q2436A		
<ul> <li>220 V printer kit (HP LaserJet 4200 series)</li> </ul>	Q2430A		
<ul> <li>220 V printer kit (HP LaserJet 4300 series)</li> </ul>	Q2437A		

Printing supplies				
Item		Part number and where available	Description or use	
Pri	nt cartridges		HP UltraPrecise print cartridge.	
•	12,000 pages (HP LaserJet 4200 series)	Q1338A		
•	18,000 pages (HP LaserJet 4300 series)	Q1339A		
1,0	000-staple cartridge	Q3216A	Box of three staple cartridges.	
HP	LaserJet paper		For use with HP LaserJet printers.	
•	Letter (8.5 by 11 inch), 500 sheets/ream, 10-ream carton	HPJ1124/North America	Good for letterhead, high-value memos, legal documents, direct mail, and correspondence.	
•	Legal (8.5 by 14 inch), 500 sheets/ream, 10-ream carton	HPJ1424/North America	Specifications: 96 bright, 24 lb (90 g/m²).	
•	A Letter (220 by 280 mm), 500 sheets/ream, 5-ream carton	Q2398A/Asia-Pacific countries/regions		
•	A4 (210 by 297 mm), 500 sheets/ream, 5-ream carton	Q2400A/Asia-Pacific countries/regions		
•	A4 (210 by 297 mm), 500 sheets/ream	CHP310/Europe		
HP LaserJet Soft Gloss paper			For use with HP LaserJet printers.	
•	Letter (220 by 280 mm), 50 sheets/box	C4179A/Asia-Pacific countries/regions	Coated paper, good for business documents with high impact, such as brochures, sales material, and	
•	A4 (210 by 297 mm), 50 sheets/box	C4179B/Asia-Pacific countries/regions and Europe	documents with graphics and photographic images.  Specifications: 32 lb (120 g/m²).	
НР	Multipurpose paper		For use with all office equipment—	
•	Letter (8.5 by 11 inch), 500 sheets/ream, 10-ream carton	HPM1120/North America	laser and inkjet printers, copiers, and fax machines. Created for businesses that want one paper for all their office	
•	Letter (8.5 by 11 inch), 500 sheets/ream, 5-ream carton	HPM115R/North America	needs. Brighter and smoother than other office papers.	
•	Letter (8.5 by 11 inch), 250 sheets/ream, 12-ream carton	HP25011/North America	Specifications: 90 bright, 20 lb (75 g/m <sup>2</sup> )	
•	Letter (8.5 by 11 inch), 3-hole, 500 sheets/ream, 10-ream carton	HPM113H/North America		
•	Legal (8.5 by 14 inch), 500 sheets/ream, 10-ream carton	HPM1420/North America		

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Pr	inting supplies			
Item		Part number and where available	Description or use	
HP	Office paper		For use with all office equipment—	
•	Letter (8.5 by 11 inch), 500 sheets/ream, 10-ream carton	HPC8511/North America and Mexico	laser and inkjet printers, copiers, an fax machines. Good for high-volume printing.	
•	Letter (8.5 by 11 inch), 3-hole, 500 sheets/ream, 10-ream carton	HPC3HP/North America	Specifications: 84 bright, 20 lb (75 g/m²).	
•	Legal (8.5 by 14 inch), 500 sheets/ream, 10-ream carton	HPC8514/North America		
•	Letter (8.5 by 11 inch), Quick Pack, 2,500-sheet carton	HP2500S/North America and Mexico		
•	Letter (8.5 by 11 inch), Quick Pack 3-hole, 2,500-sheet carton	HP2500P/North America		
•	A Letter (220 by 280 mm), 500 sheets/ream, 5-ream carton	Q2408A/Asia-Pacific countries/regions		
•	A4 (210 by 297 mm), 500 sheets/ream, 5-ream carton	Q2407A/Asia-Pacific countries/regions		
•	A4 (210 by 297 mm), 500 sheets/ream, 5-ream carton	CHP110/Europe		
•	A4 (210 by 297 mm), Quick Pack 2500 sheets/ream, 5-ream carton	CHP113/Europe		
HP	Office recycled paper		For use with all office equipment—	
•	Letter (8.5 by 11 inch), 500 sheets/ream, 10-ream carton	HPE1120/North America	laser and inkjet printers, copiers, an fax machines. Good for high-volume printing.	
•	Letter (8.5 by 11 inch), 3-hole, 500 sheets/ream, 10-ream carton	HPE113H/North America	Satisfies U.S. Executive Order 1310 for environmentally preferable	
•	Legal (8.5 by 14 inch), 500 sheets/ream, 10-ream carton	HPE1420/North America	products.  Specifications: 84 bright, 20 lb, 30 percent post-consumer content.	
HP	Premium Choice LaserJet paper		HP's brightest LaserJet paper. Expe	
•	Letter (8.5 by 11 inch), 500 sheets/ream, 10-ream carton	HPU1132/North America	brilliantly white. Ideal for presentation	
•	Letter (8.5 by 11 inch), 250 sheets/ream, 6-ream carton	HPU1732 North America		
•	A4 (210 by 297 mm), 5-ream carton	Q2397A/Asia-Pacific countries/regions		
•	A4 (210 by 297 mm), 250 sheet/ream, 5-ream carton	CHP412/Europe	(, • 9, ).	
•	A4 (210 by 297 mm), 500 sheet/ream, 5-ream carton	CHP410/Europe		
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CHP413/Europe

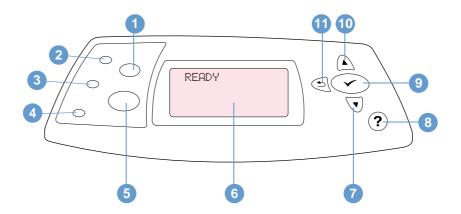
A4 (210 by 297 mm), 160g/m<sup>2</sup>

500 sheet/ream, 5-ream carton

Pr	Printing supplies				
Item		Part number and where available	Description or use		
HF	Printing paper		For use with HP LaserJet and inkjet		
•	Letter (8.5 by 11 inch), 500 sheets/ream, 10-ream carton	HPP1122/North America and Mexico	printers. Created especially for small and home offices. Heavier and brighter than copier paper.		
•	Letter (8.5 by 11 inch), 500 sheets/ream, 3-ream carton	HPP113R/North America	Specifications: 92 bright, 22 lb.		
•	A4 (210 by 297 mm), 500 sheets/ream, 5-ream carton	CHP210/Europe			
•	A4 (210 by 297 mm), 300 sheets/ream, 5-ream carton	CHP213/Europe			
HP LaserJet transparencies			For use only with HP LaserJet		
•	Letter (8.5 by 11 inch), 50 sheets to a carton	92296T/North America, Asia-Pacific countries/ regions, and Europe	monochrome printers. For crisp, sharp text and graphics, rely on the only transparencies specifically designed and tested to work with monochrome		
•	A4 (210 by 297 mm),	922296U/Asia-Pacific	HP LaserJet printers.		
	50 sheets to a carton	countries/regions and Europe	Specifications: 4.3-mil thickness.		
HP LaserJet tough paper			For use with HP LaserJet printers. This		
•	Letter (8.5 by 11 inch), 50 sheets to a carton	Q1298A/North America	satin-finish paper is waterproof and tear-proof, yet doesn't compromise on print quality or performance. Use it for		
•	A4 (210 by 297 mm), 50 sheets to a carton	Q1298B/Asia-Pacific countries/regions and Europe	signs, maps, menus, and other business applications.		

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## **Control panel layout**



- 1 CANCEL JOB button
- 2 Ready light
- 3 Data light
- 4 Attention light
- 5 PAUSE/RESUME button
- 6 Control panel display
- 7 DOWN ARROW button
- 8 HELP button
- **9** SELECT button
- **10** UP ARROW button
- 11 BACK ARROW button

## **Control panel lights**

Light	Indication when lit
Ready	The printer is ready to print.
Data	The printer is processing information.
Attention	Action is required. See the control panel display for an associated message.

## **Control panel buttons**

Button	Function		
CANCEL JOB	<ul> <li>Cancels the print job that the printer is processing, clears the paper path, and clears any continuable errors associated with the canceled job. The time that it takes to cancel depends on the size of the print job. (Press it only once.)</li> </ul>		
PAUSE/RESUME	<ul> <li>When the printer is processing a print job, pauses the print job.</li> <li>When the printer is paused, resumes printing or returns the printer to the Ready state.</li> <li>Exits the menus or Help.</li> </ul>		
(SELECT)	<ul> <li>Opens the menus.</li> <li>In the menus, selects the menu item currently highlighted.</li> <li>Finishes a print job that is waiting for a form feed.</li> <li>Clears a continuable error, or shows the options for resolving the continuable error.</li> </ul>		
(BACK ARROW)	<ul> <li>Returns to the previous level of menus or to the previous numeric entry.</li> <li>Exits Help.</li> <li>Exits the menus if pressed for one full second or more.</li> </ul>		
(UP ARROW)	<ul> <li>Navigates to the previous item on the current menu.</li> <li>For numeric values, increases the value to the next increment. If the button is held down for more than one second, the value increases rapidly.</li> <li>In Help, scrolls up to the previous four lines of the current topic (if any).</li> </ul>		
(Down Arrow)	<ul> <li>Navigates to the next item on the current menu.</li> <li>For numeric values, decreases the value to the previous increment. If the button is held down for more than one second, the value decreases rapidly.</li> <li>In Help, scrolls down to the next four lines of the current topic (if any).</li> </ul>		
(HELP)	<ul> <li>Shows additional Help for the message currently displayed. (Not all messages have additional Help topics.)</li> <li>Exits Help.</li> </ul>		

## Using the printer Help (?) system

This printer features a Help system at the control panel that provides instructions for resolving most printer errors. Some Help topics include animations that appear on the printer control panel display to show you how to resolve an error.

To view Help for a message (if available), press HELP (?). If the Help topic is longer than four lines, use the UP ARROW (▲) or DOWN ARROW (▼) to scroll through the entire topic.

To exit the Help system, press HELP (?) again.

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## Printing and changing control panel menus

To see the current settings for the menus and items available at the control panel, print a control panel menu map. You might want to store the menu map near the printer for reference.

For a complete list of menu items and possible values, see "Control panel menus" on page 151. Certain menu options appear only if the associated tray or accessory is installed. For example, the EIO menu appears only if you have an EIO card installed.

## To print a control panel menu map

- 1 Press SELECT (✓) to open the menus.
- 2 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to INFORMATION, and the press SELECT (▼).
- 3 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to PRINT MENU MAP, and then press SELECT (✔).

## To change a control panel setting

- 1 Press SELECT (✓) to open the menus.
- 2 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the menu that you want, and then press SELECT (✔).
- 3 Some menus might have several submenus. Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the submenu item that you want, and then press SELECT (✓).
- 4 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the setting, and then press SELECT (✓). Some settings change rapidly if UP ARROW (▲) or DOWN ARROW (▼) is held down. An asterisk (\*) appears next to the selection on the display, indicating that it is now the default.
- 5 Press Pause/Resume to exit the menu.

Note

Settings in the printer driver and program override control panel settings. (Program settings override printer driver settings.)

If you cannot gain access to a menu or item, it is either not an option for the printer, or you have not enabled the associated higher-level option. See your network administrator if a function has been locked. (ACCESS DENIED MENUS LOCKED appears on the printer control panel display.)

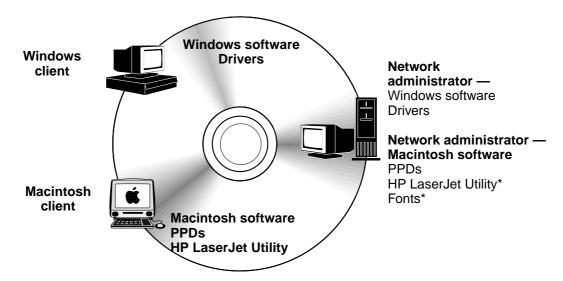
## **Accessory lights**

Use the following table to interpret the status lights on the optional 500-sheet stacker or 500-sheet stapler/stacker accessory.

Light	Meaning for accessory		
Solid green	<ul> <li>The accessory is on and ready.</li> <li>The accessory has an error condition that needs attention. (See "Understanding accessory lights for the stacker and stapler/stacker" on page 122.)</li> </ul>		
Solid amber	<ul> <li>The accessory is experiencing a hardware malfunction. (See "Understanding accessory lights for the stacker and stapler/stacker" on page 122.)</li> </ul>		
Blinking amber	<ul> <li>The accessory has an error condition that needs attention. (See "Understanding accessory lights for the stacker and stapler/stacker" on page 122.)</li> </ul>		
Off	<ul> <li>The printer might be in PowerSave mode. Press any button on the printer control panel.</li> <li>The accessory has an error condition that needs attention. (See "Understanding accessory lights for the stacker and stapler/stacker" on page 122.)</li> </ul>		

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## **Printer software**



Not supported for the languages of Czech, Japanese, Korean, Russian, Simplified Chinese, Traditional Chinese, or Turkish.

The printer CD-ROM contains the software components and drivers for end users and network administrators. The printer drivers provided on the CD-ROM must be installed to take full advantage of printer features. The other programs are recommended, but are not required for operation. See the Readme file for more information.

The CD-ROM includes software designed for end users and network administrators operating in the following environments:

- Microsoft Windows 95, Windows 98, and Windows Millennium Edition (Me)
- Microsoft Windows NT 4.0
- Microsoft Windows 2000 and Windows XP
- Apple Mac OS, version 8.6 to 9.xx, 10.1 or greater

Additional drivers include AutoCAD™ drivers for Windows 9.x and Windows NT 4.0).

The most recent printer drivers for all supported operating systems are available at http://www.hp.com/support/lj4200 or http://www.hp.com/support/lj4300. If you do not have access to the Internet, see the support flyer that came in the printer box for information about obtaining the most recent software.

## **Printer drivers**

Printer drivers allow you to gain access to the printer features and allow the computer to communicate with the printer (by using a printer language). Check the Readme file provided on the CD-ROM for additional software included and supported languages.

The following printer drivers are included with the printer. The most recent drivers are available at <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4200</a> or <a href="http://www.hp.com/support/lj4300">http://www.hp.com/support/lj4300</a>. Depending on the configuration of Windows-based computers, the installation program for the printer software automatically checks the computer for Internet access to obtain the latest drivers.

Operating system	PCL 6	PCL 5e <sup>1</sup>	PS	PPDs <sup>2</sup>
Windows 95, 98, Me	✓	<b>√</b>	✓	✓
Windows NT 4.0	1	1	✓	✓
Windows 2000, XP	✓	✓	✓	✓
Mac OS			✓	✓

- 1. Not included on Asian-language CD-ROM.
- 2. PostScript printer description files.

You can obtain printer drivers for UNIX<sup>®</sup> and Linux Model Scripts by downloading them from the Internet or by requesting them from an HP-authorized service or support provider. (See the support flyer that came in the printer box.)

OS/2 drivers are available from IBM and are packaged with OS/2. They are not available for the languages of Japanese, Korean, Simplified Chinese, or Traditional Chinese.

Note

If the printer driver you want is not on the CD-ROM or is not listed here, check the installation software or the printer Readme file to see if the printer driver is supported for the printer. If it is not supported, contact the manufacturer or distributor of the program you are using and request a driver for the printer.

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## Software for Windows-based computers

The CD-ROM contains printer drivers and other programs for Windows computers.

#### Network administrators

If the printer is attached to a network through an HP Jetdirect EIO card, you must configure the printer for that network before you can print. For Microsoft and Novell NetWare networks, you can use the printer installation software. For other options, see the HP Jetdirect Print Server Administrator's Guide (included with printers that contain an HP Jetdirect print server).

Select the Create Customized Installer option in the Customization Utility to create an installer with the exact software that you want the end users to use. The installer can be configured to execute without user interaction and to install pre-configured driver settings for all PCL drivers and for the PS driver in Windows 2000 and Windows XP. (Select Silent Installer, and then select Yes, allow me to configure the drivers.) The Copy Printer Drivers Only option in the Customization Utility also allows you to create a set of disks with drivers that can be installed through the Microsoft Windows **Add Printer** wizard.

### Select the right printer driver for your needs

Select a printer driver based on the way you use the printer. Certain printer features are available only in the PCL 6 drivers. See the printer driver Help for availability of features.

- Use the PCL 6 driver to take full advantage of printer features. For general office printing, the PCL 6 driver is recommended to provide optimum performance and print quality.
- Use the PCL 5e driver if you encounter documents that print incorrectly with PCL 6 or if font DIMM support is missing.
- Use the PS driver if you are printing primarily from PostScript-specific programs such as Adobe<sup>®</sup> or Corel<sup>®</sup>.
- The printer automatically switches between PS and PCL printer languages.

### Gain access to the Windows printer driver

To configure the driver, gain access to it in one of the following ways:

Operating system	Temporarily change settings (in a program)	Change default settings (across all programs)
Windows 95, 98, and Me	On the <b>File</b> menu, click <b>Print</b> , and then click <b>Properties</b> . (The actual steps can vary; this is the most common method.)	Click the <b>Start</b> button, point to <b>Settings</b> , and then click <b>Printers</b> . Right-click the printer icon and select <b>Properties</b> .
Windows NT 4.0	On the <b>File</b> menu, click <b>Print</b> , and then click <b>Properties</b> . (The actual steps can vary; this is the most common method.)	Click the <b>Start</b> button, point to <b>Settings</b> , and then click <b>Printers</b> . Right-click the printer icon and select <b>Document Defaults</b> or <b>Properties</b> .
Windows 2000	On the <b>File</b> menu, click <b>Print</b> , and then click <b>Properties</b> . (The actual steps can vary; this is the most common method.)	Click the <b>Start</b> button, point to <b>Settings</b> , and then click <b>Printers</b> . Right-click the printer icon and select <b>Printing Preferences</b> or <b>Properties</b> .
Windows XP	On the <b>File</b> menu, click <b>Print</b> , and then click <b>Preferences</b> .	Click the <b>Start</b> button, and then click <b>Printers and Faxes</b> . Right-click the printer icon, and then select <b>Printing Preferences</b> or <b>Properties</b> .

Note

Settings in the printer driver and program override control panel settings. (Program settings override printer driver settings.)

## **Printer driver Help**

Each printer driver has Help screens that can be activated by using either the **Help** button, the F1 button on the computer keyboard, or a question-mark symbol in the upper right corner in the printer driver (depending on the Windows operating system used). These Help screens give detailed information about the specific driver. Printer driver Help is separate from your program Help.

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## **Software for Macintosh computers**

The HP installer provides PPDs and the HP LaserJet Utility for use with Macintosh computers. The embedded Web server can be used by Macintosh computers if the printer is connected to a network. See "Software for networks" on page 33 for more information.

#### **PPDs**

PPDs, in combination with the Apple LaserWriter 8 driver for OS 8 to 9.xx and PS Converter for OS X 10.1 or later, allow you to gain access to the printer features and allow the computer to communicate with the printer. An installation program for the PPDs and other software is provided on the CD-ROM. Use the appropriate PS driver that comes with the operating system.

#### **PDEs**

PDEs (Printer Dialog Extensions), in combination with the Apple LaserWriter Driver for OS X, allow you to gain access to the printer features and allow the computer to communicate with the printer. An installation program for the PPDs, PDEs, and other software is provided on the CD-ROM. Use the Apple LaserWriter driver that comes with the operating system.

## **HP LaserJet Utility**

The HP LaserJet Utility allows control of features that are not available in the driver. The illustrated screens make selecting printer features by using the Macintosh computer easier than ever. Use the HP LaserJet Utility to do the following operations:

- customize the printer control panel messages
- name the printer, assign it to a zone on the network, download files and fonts, and change most of the printer settings
- set a password for the printer
- use the computer to lock out functions at the printer control panel to prevent unauthorized access (see the printer software Help)
- configure and set the printer for IP printing

Note	The HP LaserJet Utility currently is not supported for OS X, but the utility is supported for the Classic environment.
Note	The HP LaserJet Utility is not supported for the languages of Czech, Japanese, Korean, Russian, Simplified Chinese, Traditional Chinese, or Turkish.

### Software for networks

The printer software provides a link for the HP Web Jetadmin software for managing the printer. For a summary of available HP network installation and configuration software solutions, see the HP Jetdirect Print Server Administrator's Guide (included with printers that contain an HP Jetdirect print server).

#### **HP Web Jetadmin software**

HP Web Jetadmin 6.5 is a Web-based software solution for remotely installing, monitoring, and troubleshooting network-connected peripherals. The software's intuitive browser interface simplifies cross-platform management of a wide range of devices, including HP and non-HP printers. Management is proactive, allowing network administrators the ability to resolve printer issues before users are affected. Download this free, enhanced-management software at <a href="http://www.hp.com/go/webjetadmin">http://www.hp.com/go/webjetadmin</a>. To obtain plug-ins to HP Web Jetadmin, click **plug-ins**, and then click **applications**.

When installed on a host server, HP Web Jetadmin can be accessed by any client through a supported Web browser by browsing to the HP Web Jetadmin host.

If installed on a host server, HP Web Jetadmin is available to any client through a supported Web browser (such as Microsoft Internet Explorer 4.x or Netscape Navigator 4.x or later) by browsing to the HP Web Jetadmin host.

HP Web Jetadmin features include:

- Proactively manages devices with features such as e-mail notification, consumables status, and configurable alerts
- Remotely installs and configures devices
- Conducts remote diagnostics of devices
- Resource Manager plug-in manages disk drive, flash, and RAM memory, as well as the forms and fonts stored on the hard drives of network printers
- Integrated firmware download manager enables batch configuration upgrades to HP Jetdirect print servers and selected printers to multiple device configuration
- Configures multiple devices simultaneously
- Task-oriented, Web-based interface (no client software required)
- Automatically discovers devices on your network
- Allows you to create custom profiles and views
- Easily organizes peripherals into logical groups with virtual office maps for ease of navigation
- Manages legacy devices that do not have an HP embedded Web server
- Supports multiple protocols (TCP/IP and IPX)
- Universal printer support manages third-party standard MIB-compliant printers
- Integrated Web server runs HP Web Jetadmin without a dedicated Web server (HP Web Jetadmin runs on Windows NT 4.0, Windows 2000 Professional, or Linux operating systems, storing information in one central database)
- Easily integrates with enterprise management solutions such as OpenView®, Computer Associates (UniCenter)®, and Tivoli®

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- Views all devices across your network
- Configures all devices within a device group
- Creates print paths
- Intelligent Update provides LAN administrators with an easy way to add components including new languages, device support, and application plug-ins without re-installing HP Web Jetadmin
- Enhanced asset tracking and utilization provides exportable fields such as printer capabilities and date-settable page count
- Available in 20 languages to match the HP Jetdirect products
- Various levels of security

#### **HP Jetdirect Printer Installer for UNIX**

The HP Jetdirect Printer Installer for UNIX is a simple printer installation utility for HP-UX and Solaris networks. It is available for download at <a href="http://www.hp.com/support/net\_printing">http://www.hp.com/support/net\_printing</a>.

# Printing tasks

#### **Overview**

This section presents basic printing tasks, such as:

- "Selecting the output bin" on page 36
- "Stapling documents" on page 39
- "Loading trays" on page 42
- "Selecting which tray is used for printing" on page 46
- "Selecting the correct fuser mode" on page 50
- "Printing envelopes" on page 51
- "Printing special paper" on page 57, for paper such as letterhead and transparencies
- "Printing both sides of paper (optional duplexer)" on page 64

This section also introduces some advanced printing tasks, such as:

- "Collating (mopying)" on page 68 for printing multiple originals
- "RIP ONCE" on page 68
- "Saving printer setup information (Quick Sets)" on page 68 for different kinds of print jobs
- "Fit to Page" on page 68
- "Printing booklets" on page 68
- "Printing a watermark" on page 69
- "Printing on a different first page" on page 69
- "Printing multiple pages on one sheet of paper (pages per sheet)" on page 69
- "Using job-storage features" on page 70

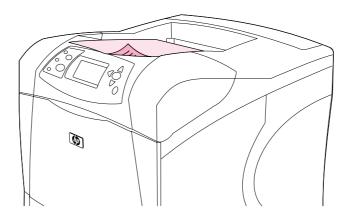
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# Selecting the output bin

The printer has these output locations: the top (standard) output bin, the rear output bin, and the optional stacker or stapler/stacker.

# Printing to the top (standard) output bin

The top output bin collects paper face-down, in the correct order. The top output bin should be used for most print jobs, including transparencies. To use the top output bin, be sure that the rear output bin is closed. To avoid paper jams, do not open or close the rear output bin while the printer is printing.



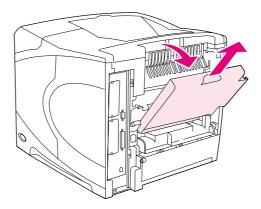
#### Printing to the rear output bin

The printer always prints to the rear output bin if it is open. Paper printed to this bin will be face up, with the last page on top (reverse order).

Printing from tray 1 to the rear output bin provides the straightest paper path. Opening the rear output bin might improve performance with the following items:

- envelopes
- labels
- small custom-size paper
- postcards
- paper heavier than 120 g/m<sup>2</sup> (32 lb)

To open the rear output bin, grasp the handle at the top of the bin. Pull the bin down, and slide out the extension.



Opening the rear output bin disables the optional duplexer (if installed) and the top output bin. To avoid paper jams, do not open or close the rear output bin while the printer is printing.

# Printing to the optional stacker or stapler/stacker

The optional stacker or optional stapler/stacker can hold up to 500 sheets of paper (20-lb paper). The stacker accepts standard and custom paper sizes. The stapler/stacker accepts standard and custom paper sizes, but only letter, legal, and A4 sizes can be stapled. Do not try to send other types of print media, such as labels or envelopes.

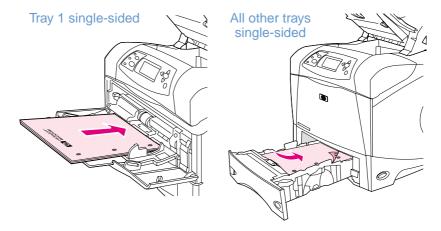
When a stapler/stacker is installed, the printer automatically rotates the printed images 180° on all paper sizes, regardless of whether the job is stapled. Paper types that must be printed in the correct orientation (such as letterhead or prepunched paper) might need to be loaded in a different direction. See "Orientation of paper when a stapler is installed" on page 38.

To print to the optional stacker or optional stapler/stacker, select the option in the program, in the printer driver, or at the printer control panel. (Before you use the optional stacker or optional stapler/stacker, ensure that the printer driver is set to recognize it. You need to set this setting only once. See the printer driver online Help for details.)

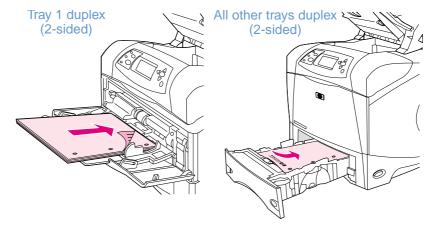
For more information about supported paper, see "Supported sizes and weights of paper" on page 183. For more information about stapling, see "Stapling documents" on page 39.

# Orientation of paper when a stapler is installed

When an optional stapler/stacker is installed, the printer automatically rotates the printed images 180° on all paper sizes, even if the job is not stapled. If you are printing on paper that requires a specific orientation (such as letterhead, preprinted paper, prepunched paper, and paper with watermarks), make sure that the paper is loaded correctly in the tray. The correct orientation of the paper in the trays is shown below.



For single-sided printing and stapling from tray 1, load the front side facing up and the top edge toward you. For single-sided printing and stapling from all other trays, load the front side facing down and the top edge toward the printer.



For duplex (two-sided) printing and stapling from tray 1, load the front side facing down and the top edge toward the printer. For duplex printing and stapling from all other trays, load the front side facing up and the top edge toward you.

# Stapling documents

The optional stapler/stacker can staple jobs of up to 15 sheets of paper (20-lb paper). The stapler can staple letter-, A4-, or legal-size paper.

- Paper weight can range from 60 to 120 g/m<sup>2</sup> (16 to 32 lb). Heavier paper might have a stapling limit of fewer than 15 sheets.
- If the job you want stapled consists of only one sheet, or if it consists of more than 15 sheets, the printer will print the job to the bin, but the printer will not staple the job.
- The stapler supports paper only. Do not try to staple other types of print media, such as transparencies or labels.

When you are ready to have the printer staple a document, select stapling in the software. You can usually select the stapler in your program or printer driver, although some options might be available only in the printer driver. Where and how you make selections depends on your program or printer driver.

If you cannot select the stapler in the program or printer driver, select the stapler at the printer control panel. (You might need to configure the printer driver to recognize the optional stapler/stacker. You need to set this setting only once. See the printer driver online Help for details.)

The stapler will accept print jobs if it is out of staples, but the pages will not be stapled. The print driver can be configured to disable the staple option if staples are out.

#### To select the stapler in the software (Windows)

- 1 On the File menu, click Print, and then click Properties.
- 2 Select the stapler according to which driver you are using:
  - PCL: On the Finishing tab, select Staple.
  - PS: On the Advanced tab, open the Document Options section, open the Printer Features section, select Stapling Options/Output Destinations, and then select One Staple Angled/Stapler.

#### To select the stapler in the software (Mac)

- 1 On the File menu, click **Print**, and then select **Finishing** from the selectable print options.
- 2 In the Output Destination dialog box, select the Stapler option.
- 3 In the **Stapler** dialog box, select the stapler style.

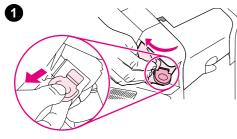
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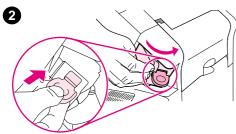
#### To select the stapler at the control panel

- **1** Press SELECT (✓) to open the menus.
- 2 Use Up ARROW (▲) or Down ARROW (▼) to scroll to CONFIGURE DEVICE, and then press SELECT (✓).
- 3 Use Up ARROW (▲) or Down ARROW (▼) to scroll to OUTPUT SETUP, and then press SELECT (✓).
- 4 Use Up arrow (▲) or Down arrow (▼) to scroll to STAPLER/STACKER, and then press Select (✓).
- 5 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to □NE, and then press SELECT (✔).

**Note** 

Selecting the stapler at the printer control panel changes the default setting to staple. It is possible that all print jobs will be stapled.





# **Loading staples**

Load staples if the printer control panel display prompts you with a STAPLER LOW ON STAPLES message (the stapler has fewer than 70 staples left) or a STAPLER OUT OF STAPLES message (the stapler is empty). If the stapler runs out of staples, jobs continue to print to the stapler/stacker, but they will not be stapled.

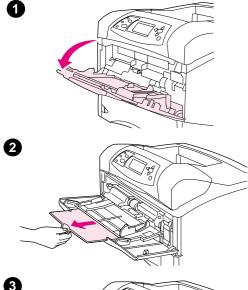
#### To load staples

- On the right side of the stapler/stacker, turn the stapler unit toward the front of the printer until the unit clicks into the open position. Grasp the blue staple-cartridge handle and pull the cartridge out of the stapler unit.
- Insert the new staple cartridge into the stapler unit and rotate the stapler unit toward the rear of the printer until the unit snaps into place.

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# **Loading trays**

This section describes how to load the standard and optional printer trays.

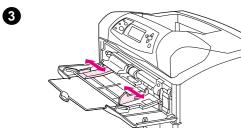


#### Loading tray 1

Tray 1 is a multipurpose tray that holds up to 100 sheets of paper, 10 envelopes, or 20 index cards. The printer default is to pull paper from tray 1 first, if it is loaded. To change this behavior, see "Customizing tray 1 operation" on page 47.

Tray 1 provides a convenient way to print envelopes, transparencies, custom-size paper, or other types of media without having to unload the other trays. It can also be used just as a convenient additional tray. For supported sizes of paper, see "Supported sizes and weights of paper" on page 183.

If an optional stapler/stacker is installed, the printer automatically rotates the printed images 180° on all paper sizes, even if the job is not stapled. If you are printing on paper that requires a specific orientation (such as letterhead, preprinted paper, prepunched paper, and paper with watermarks), make sure that the paper is loaded correctly in the tray. (See "Orientation of paper when a stapler is installed" on page 38.)



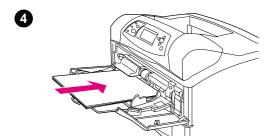
#### Note

The printer might print at a slower speed when using tray 1.



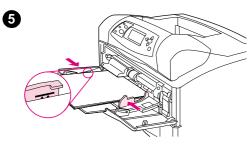
To avoid paper jams, do not load trays while the printer is printing.

Do not fan the paper. Fanning can cause misfeeds.



#### To load tray 1

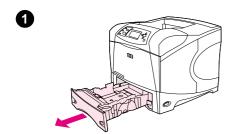
- 1 Open tray 1.
- 2 Pull out the tray extension.
- **3** Set the side guides to the correct width.
- 4 Load paper in the tray. Make sure that the paper fits under the tabs and below the maximum-height indicators.

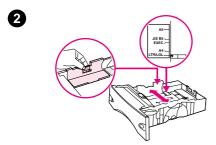


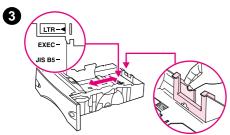
#### Note

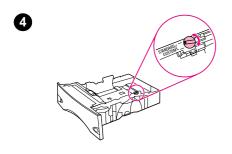
Load paper with the front side facing up and the top, short edge toward the printer. For information about loading special paper, see "Printing special paper" on page 57.

5 Adjust the side guides so that they lightly touch the paper stack but do not bend the paper.









# Loading tray 2 or an optional 500-sheet tray

The 500-sheet tray adjusts for six standard sizes (letter, A4, legal, executive, A5, and JIS B5), as well as for many custom sizes. (See "Supported sizes and weights of paper" on page 183.) The printer senses standard sizes if you set the tray guides to a standard size and the paper knob to **Standard**.

If an optional stapler/stacker is installed, the printer automatically rotates the printed images 180° on all paper sizes, even if the job is not stapled. If you are printing on paper that requires a specific orientation (such as letterhead, preprinted paper, prepunched paper, and paper with watermarks), make sure that the paper is loaded correctly in the tray. (See "Orientation of paper when a stapler is installed" on page 38.)

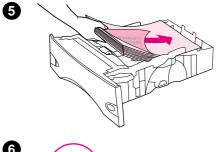
#### **CAUTION**

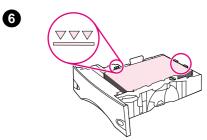
To avoid paper jams, do not load trays while the printer is printing.

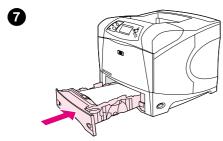
#### To load tray 2 or an optional 500-sheet tray

- 1 Remove the tray from the printer.
- 2 Pinch the release that is located on the left guide and slide the side guides to the correct paper size.
- 3 Pinch the release that is located on the rear paper guide and slide it to the correct paper size.
- On the right side of the tray, turn the knob to Standard for LTR (letter), A4, LGL (legal), EXEC (executive), A5, or JIS B5 paper. Turn the knob to Custom for supported custom paper sizes.

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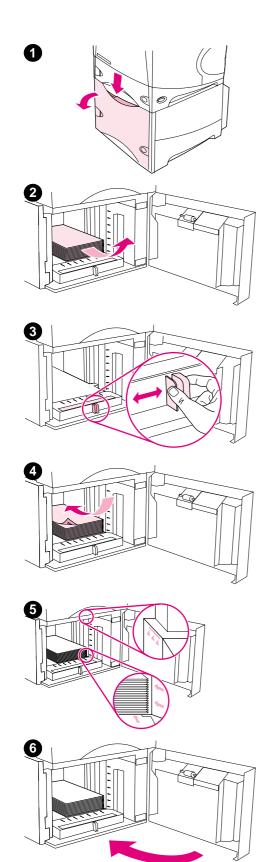


5 Load paper with the front side facing down and the top edge toward the front of the tray.

#### **CAUTION**

Do not fan the paper. Fanning can cause misfeeds.

- 6 Make sure that the stack is flat at all four corners and that the top of the stack is below the maximum-height indicators.
- 7 Slide the tray completely into the printer.



#### Loading an optional 1,500-sheet tray

The optional 1,500 sheet tray adjusts for letter, A4, and legal sizes. The printer automatically senses which size is loaded if the tray guides are properly adjusted.

If an optional stapler/stacker is installed, the printer automatically rotates the printed images 180° on all paper sizes, even if the job is not stapled. If you are printing on paper that requires a specific orientation (such as letterhead, preprinted paper, prepunched paper, and paper with watermarks), make sure that the paper is loaded correctly in the tray. (See "Orientation of paper when a stapler is installed" on page 38.)

#### **CAUTION**

To avoid paper jams, do not load trays while the printer is printing.

#### To load an optional 1,500-sheet tray

- 1 Open the door of the 1,500-sheet tray.
- 2 If there is paper in the tray, remove it. The guides cannot be adjusted in the next step, when paper is in the tray.
- 3 Pinch the guides at the front of the tray and slide them to the correct paper size.
- **4** Load paper with the front side facing down and the top edge toward the front of the tray.

#### **CAUTION**

Do not fan the paper. Fanning can cause misfeeds.

- 5 Make sure that the height of the stack does not exceed the maximum-height indicators on the guides and that the front edge of the stack is aligned with the arrows.
- 6 Close the door on the tray.

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# Selecting which tray is used for printing

You can select how the printer pulls paper from the trays.

#### **Understanding tray order**

When the printer receives a print job, it selects the tray by trying to match the requested paper type and size with what has been loaded in the trays. Using an "autoselect" process, it searches all available trays for the paper that satisfies the request, starting with the bottom tray and ending with the top tray (tray 1). The printer begins printing the job as soon as it finds the proper type/size.

Note

The "autoselect" process occurs only if no specific tray is requested for the job. If a specific tray is requested, the job prints from the requested tray.

- If paper is loaded in tray 1 and tray 1 is set TRAY 1 TYPE=ANY and TRAY 1 SIZE=ANY on the Paper Handling menu, the printer will always pull paper from tray 1 first. See "Customizing tray 1 operation" on page 47 for more information.
- If the search fails, a message appears on the printer control panel display requesting that
  you load the correct paper type/size. You can load that paper type/size, or you can override
  the request by selecting a different type/size at the printer control panel.
- If a tray runs out of paper during a print job, the printer automatically switches to any tray that contains the same paper type/size.

The autoselect process changes somewhat if you customize tray 1 operation (as explained in "Customizing tray 1 operation" on page 47) or set tray 1 for manual feed (as explained in "Manually feeding paper from tray 1" on page 49).

#### **Customizing tray 1 operation**

The printer can be set to print from tray 1 as long as it is loaded, or to print only from tray 1 if the type of paper loaded is specifically requested. (See "Paper Handling menu" on page 154.)

Setting	Explanation	
TRAY 1 TYPE=ANY TRAY 1 SIZE=ANY	Means that the printer usually pulls paper from tray 1 first unless it is empty or closed. If you do not keep paper in tray 1 all the time, or you use tray 1 only for manually feeding paper, keep the default setting of TRAY 1 TYPE=ANY and TRAY 1 SIZE=ANY on the Paper Handling menu.	
TRAY 1 TYPE or SIZE= a type other than ANY	Means that the printer treats tray 1 like the other trays. Instead of looking for paper in tray 1 first, the printer pulls paper from the tray that matches type and size settings selected from the software.	
	In the printer driver, you can select paper from any tray (including tray 1) by type, size, or source. To print by type and size of paper, see "Printing by type and size of paper (locking trays)" on page 48.	

You can also determine whether the printer displays a prompt asking you if it can pull paper from tray 1 if it cannot find the type and size you requested in another tray. You can set the printer to always prompt you before pulling from tray 1 or only prompt you if tray 1 is empty. Set the USE REQUESTED TRAY setting on the System Setup submenu of the Configure Device menu. See "USE REQUESTED TRAY" on page 162.

# Printing by type and size of paper (locking trays)

Printing by type and size is a way to be sure that print jobs always print on the paper that you want. You can configure the trays for the type (such as plain or letterhead) and size (such as letter or A4) loaded in them.

If you configure the trays this way and then select a certain type and size in the printer driver, the printer automatically selects the tray loaded with that type or size; you no longer have to select a specific tray (selecting by *source*). Configuring the printer this way is especially helpful if the printer is shared, and more than one person loads or removes paper frequently.

Some older model printers have a feature that "locks out" trays to prevent printing on the wrong paper. Printing by type and size of paper eliminates the need to lock out trays. For more information about type and size, see "Supported sizes and weights of paper" on page 183 and "Supported types of paper" on page 187.

Note

To print by type and size from tray 2, the optional trays, or the optional envelope feeder, it might be necessary to unload tray 1 and close it, or set TRAY 1 TYPE and TRAY 1 SIZE to types other than ANY on the Paper Handling menu at the printer control panel. For more information, see "Customizing tray 1 operation" on page 47.

Settings in a program or the printer driver override control panel settings. (Program settings generally override printer driver settings.)

#### To print by type and size of paper

- 1 Be sure to load the trays correctly. (See the sections about loading paper, starting with "Loading trays" on page 42.)
- 2 At the printer control panel, open the Paper Handling menu. Select the paper type for each tray. If you are unsure which type you are loading (such as bond or recycled), check the label on the package of paper.
- 3 Select the paper size settings at the printer control panel.
  - Tray 1: Set the paper size on the Paper Handling menu if the printer is set to TRAY 1

    TYPE= a type other than ANY. If custom paper is loaded, also set the custom-paper size on the Paper Handling menu. (For more information, see "Guidelines for custom-size paper" on page 62.)
  - Tray 2 and optional 500-sheet trays: Standard paper sizes are automatically detected if paper is properly loaded in the tray and the guides are properly adjusted. (See "Loading tray 2 or an optional 500-sheet tray" on page 43 for information about tray adjustments.) If custom paper is loaded, set the knob in the tray to Custom and set the custom-paper size on the Paper Handling menu. (For more information, see "Guidelines for custom-size paper" on page 62.)
  - Optional 1,500-sheet tray: Standard paper sizes are automatically detected if paper is properly loaded in the tray and the guides are properly adjusted. (See "Loading an optional 1,500-sheet tray" on page 45 for information about tray adjustments.) Custom paper is not supported.
  - Optional envelope feeder: Set the paper size on the Paper Handling menu.
- 4 In the program or printer driver, select the type and size of paper.

Note

The type and size settings can also be configured in the HP Web Jetadmin software for networked printers.

## Manually feeding paper from tray 1

The manual feed feature is another way of printing on special paper from tray 1. Setting MANUAL FEED to 0N either in the printer driver or at the printer control panel stops the printer after each job is sent, allowing you time to load special paper or other print media in tray 1. (See "MANUAL FEED" on page 158.) Press PAUSE/RESUME to continue printing.

If there is already paper in tray 1 when you send the print job, and the printer control panel has TRAY 1 TYPE=ANY and TRAY 1 SIZE=ANY as the default configuration for tray 1 operation, the printer will not stop and wait for paper to be loaded. To have the printer wait, set TRAY 1 TYPE and TRAY 1 SIZE to types other than ANY on the Paper Handling menu.

If you have selected MANUAL FEED=ON at the printer control panel, this setting will override the printer driver, and all print jobs sent to the printer will request manually fed paper in tray 1 unless a specific tray has been selected in the printer driver. If this feature is to be used only occasionally, it is best to set MANUAL FEED=OFF at the printer control panel and to select the manual feed option in the printer driver on a job-by-job basis.

Note

If the SIZE and TYPE are set to ANY, and MANUAL FEED PROMPT is set to UNLESS LOADED, then the paper will be pulled from tray 1 without prompting. If MANUAL FEED PROMPT is set to ALWAYS, then the printer will prompt you to load paper, even if tray 1 is set to TYPE=ANY and SIZE=ANY. (See "MANUAL FEED PROMPT" on page 162.)

# Selecting the correct fuser mode

The printer automatically adjusts the fuser mode based on the paper type to which the tray is set. For example, heavy paper (such as card stock) might need a higher fuser-mode setting (such as HIGH 2) in order to make the toner adhere better to the page, but transparencies need the LOW fuser-mode setting to avoid damage to the printer. The default fuser mode is NORMAL for all types except transparencies (default is LOW), and rough paper (default is HIGH 1). The default setting generally provides the best performance for most print media types.

The fuser mode can be changed only if the paper type has been set for the tray that you are using. (See "Printing by type and size of paper (locking trays)" on page 48.) After the paper type has been set for the tray, then the fuser mode for that type can be changed on the Print Quality submenu at the printer control panel. (See "Print Quality submenu" on page 159.)

**Note** 

Using a higher fuser mode (such as HIGH 1 or HIGH 2) improves the ability of the toner to adhere to paper, but it might cause other problems, such as excessive curl.

The printer might print at a slower speed when the fuser mode is set to HIGH 1 or HIGH 2.

To reset the fuser modes to the default settings, open the Configure Device menu at the printer control panel. On the Print Quality submenu, select FUSER MODES, and then select RESTORE MODES.

# **Printing envelopes**

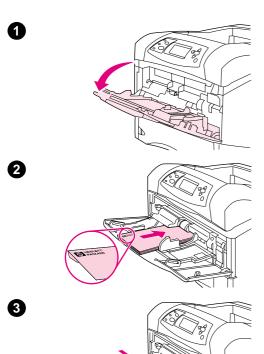
You can print envelopes from tray 1 or the optional envelope feeder. Tray 1 holds up to 10 envelopes and supports standard or custom sizes. The optional envelope feeder holds up to 75 envelopes and supports only standard envelope sizes.

For printing on any size of envelope, make sure to set the margins in your program at least 15 mm (0.6 inch) from the edge of the envelope.

Printing performance depends on the construction of the envelope. Always test a few sample envelopes before purchasing a large quantity. For envelope specifications, see "Envelopes" on page 191.

WARNING!	Never use envelopes with coated linings, exposed self-stick adhesives, or other synthetic materials. These items can emit noxious fumes.
CAUTION	Envelopes with clasps, snaps, windows, coated linings, exposed self-stick adhesives, or other synthetic materials can severely damage the printer.
	To avoid jamming and possible printer damage, never try to print on both sides of an envelope.
	Before you load envelopes, make that sure they are flat and not damaged or stuck together. Do not use envelopes with pressure-sensitive adhesive.
Note	The printer might print at a slower speed when printing envelopes.

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# Loading envelopes in tray 1

Many types of envelopes can be printed from tray 1. Up to 10 can be stacked in the tray. (See "Envelopes" on page 191 for specifications.)

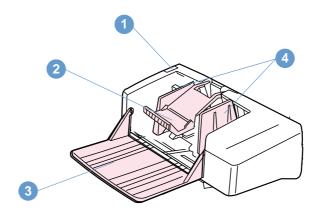
#### To load envelopes in tray 1

- 1 Open tray 1, but do not pull out the extension. (Most envelopes feed best without the extension. However, oversize envelopes might need the extension.)
- 2 Load up to 10 envelopes in the center of tray 1 with the front side facing up, and the postage-end toward the printer. Slide the envelopes into the printer as far as they will go without forcing them.
- Adjust the guides to touch the envelope stack without bending the envelopes. Make sure that the envelopes fit under the tabs and maximum-height indicators on the guides.
- 4 To reduce curl and jams, open the rear output bin to use the straight-through paper path. (See "Printing to the rear output bin" on page 37.)

# Feeding envelopes automatically (optional envelope feeder)

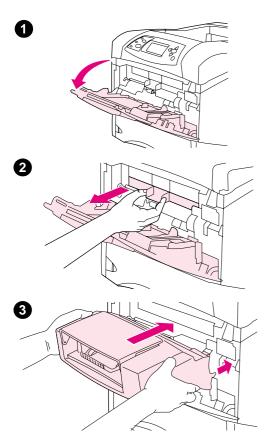
With the optional envelope feeder, the printer will automatically feed up to 75 standard-size envelopes. To order an optional envelope feeder, see "Ordering information" on page 17.

- Print only on envelopes approved for use in the printer. (See "Envelopes" on page 191.)
- Before you use the optional envelope feeder, ensure that the printer driver is set to recognize it. (You need to set this setting only once. See the printer driver online Help for details.)
- Ensure that you are familiar with the parts of the optional envelope feeder, as shown below.



- Release lever
- 2 Envelope weight
- 3 Tray extension
- 4 Guides

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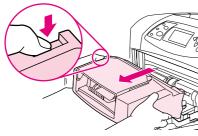
# Installing the optional envelope feeder

Use these steps to install the optional envelope feeder onto the printer.

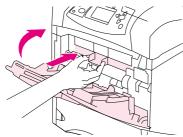
#### To install the optional envelope feeder

- 1 Open tray 1.
- 2 Remove the plastic envelope-entrance cover from the printer.
- Insert the optional envelope feeder firmly into the printer until it latches into position. Pull outward on the optional envelope feeder to be sure that it is securely in place.

0







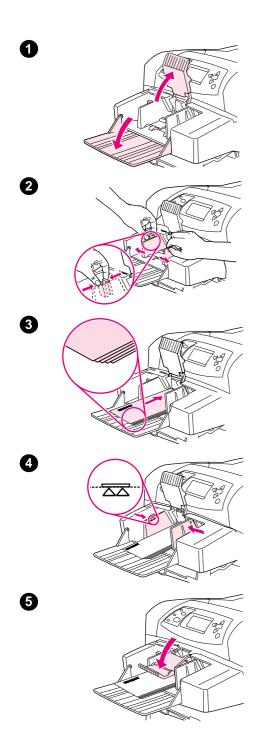
# Removing the optional envelope feeder

Use these steps to remove the optional envelope feeder from the printer.

# To remove the optional envelope feeder

- 1 Press the release button that is located on the left side and pull the optional envelope feeder away from the printer.
- 2 Replace the plastic envelope-entrance cover in the printer and close tray 1.

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# Loading envelopes in the optional envelope feeder

Use these steps to load envelopes in the optional envelope feeder.

#### To load envelopes in the optional envelope feeder

- 1 Fold down the envelope-feeder tray. Lift the envelope weight.
- 2 Squeeze the release lever that is located on the left envelope guide and slide the guides apart.
- 3 Load envelopes with the front side facing up, and the postage-end toward the printer. (Stack envelopes no higher than the arrows on the guides.) Slides the envelopes into the printer as far as they will go without forcing them. The envelopes at the bottom of the stack should slide in slightly further than the envelopes at the top of the stack.
- 4 Adjust the guides to touch the envelopes without bending them.
- **5** Lower the envelope weight onto the envelopes.
- 6 To reduce curl and jams, open the rear output bin to use the straight-through paper path. (See "Printing to the rear output bin" on page 37.)

#### Note

Select the envelope size in one of these locations, trying them in this order: in the program, in the printer driver, or on the Paper Handling menu at the printer control panel. (See "Paper Handling menu" on page 154.)

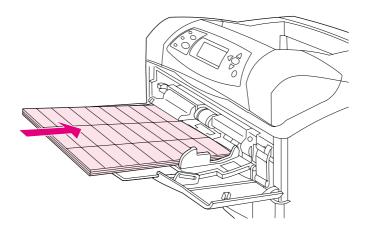
# **Printing special paper**

This section discusses printing on types of paper that require special handling:

- "Printing labels" on page 58
- "Printing transparencies" on page 59
- "Printing letterhead, prepunched, or preprinted paper (single-sided)" on page 60
- "Printing on paper with a special finish" on page 61
- "Printing small sizes, custom sizes, or heavy paper" on page 62 and "Setting custom paper sizes" on page 63
- "Setting custom paper sizes" on page 63

# **Printing labels**

Use only labels recommended for use in laser printers. Make sure that labels meet the correct specifications. (See "Labels" on page 190.)



#### Do:

- Print a stack of up to 50 label sheets from tray 1 or a stack of up to 100 label sheets from other trays.
- Load labels in tray 1 with the front side facing up, and the top, short edge toward the printer. For other trays, load paper with the front side facing down, and the top edge toward you.
- Try opening the rear output bin to reduce curl and other problems. (See "Printing to the rear output bin" on page 37.)

#### Do not:

- Load the trays to maximum capacity because labels are heavier than paper.
- Use labels that are separating from the backing sheet, wrinkled, or damaged in any way.
- Use labels that have the backing sheet exposed. (Labels must cover the entire backing sheet with no exposed spaces.)
- Feed a sheet of labels through the printer more than once. The adhesive backing is designed for only one pass through the printer.
- Print on both sides of labels.
- Print on sheets from which labels have been removed.

**CAUTION** 

Failure to follow these instructions can damage the printer.

# **Printing transparencies**

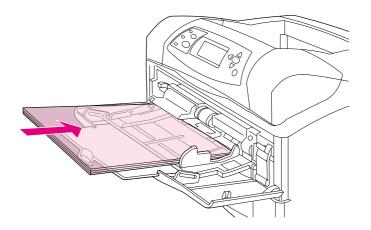
Use only transparencies recommended for use in laser printers. For transparency specifications, see "Transparencies" on page 190.

- At the printer control panel, open the Configure Device menu. On the Print Quality submenu, select FUSER MODES. Make sure that the fuser mode is set to TRANSPARENCY=LOW.
- In the printer driver, set the paper type to Transparency.
- At the printer control panel, open the Paper Handling menu. Set the tray type to TRANSPARENCY for the tray that you are using.

#### **CAUTION**

Failure to set the fuser mode to LOW can permanently damage the printer and fuser.

- Load transparencies face up in tray 1 with the top toward the printer. Up to 50 transparencies can be loaded in tray 1.
- A stack of up to 100 transparencies can be printed from tray 2 and the optional trays (although stacking more than 50 at a time is not recommended). Because transparencies are heavier than paper, do not load trays to maximum capacity. Load them with the side to be printed facing down, and the top, short edge toward you.
- To prevent transparencies from becoming too hot or sticking together, use the top output bin and remove each transparency from the output bin before printing another.
- Print only on one side of a transparency.
- Place transparencies on a flat surface to cool after removing them from the printer.
- If two or more transparencies feed at the same time, try fanning the stack.
- Do not feed transparencies through the printer more than once.



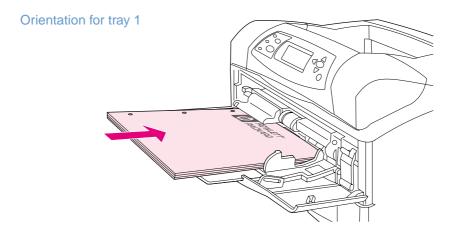
# Printing letterhead, prepunched, or preprinted paper (single-sided)

When printing letterhead, prepunched, or preprinted paper, it is important to orient the paper correctly. Follow the guidelines in this section for printing on one side only. For duplexing guidelines, see "Guidelines for printing both sides of paper" on page 65.

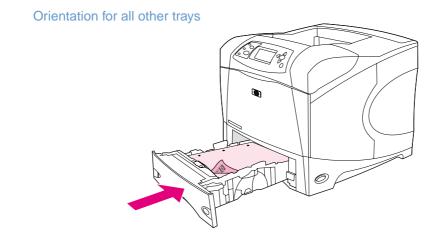
Note

For more information about paper with a special finish, such as laid or bond paper, see "Printing on paper with a special finish" on page 61.

For tray 1, load paper with the front side facing up, and the top, short edge toward the printer.



For tray 2, optional 500-sheet trays, and the optional 1,500-sheet tray, load paper with the front side facing down, and the top, short edge toward you.



#### Printing on paper with a special finish

Some paper has a special finish, such as laid paper, bond paper, and cockled paper. These types of paper can cause issues in regard to toner adhesion and print quality. Follow these guidelines when printing on paper with a special finish.

• At the printer control panel, open the Configure Device menu. On the Print Quality submenu, select FUSER MODES, and then select the paper type you are using (such as BOND). Set the fuser mode to HIGH 1 or HIGH 2. HIGH 2 provides better toner adhesion and optimal print quality for paper with a highly textured finish. Open the Paper Handling menu and set TRAY TYPE to HIGH 1 or HIGH 2 to enable the fuser mode.

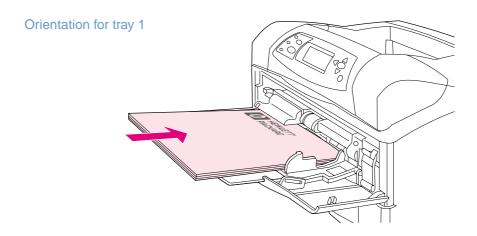
Note

The printer might print at a slower speed when set at HIGH 1 or HIGH 2.

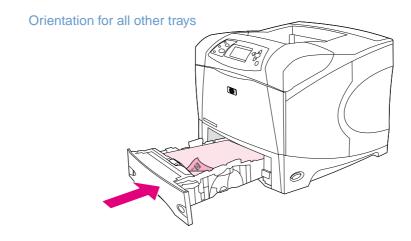
Use the HIGH 1 and HIGH 2 settings only if you are experiencing toner-adhesion problems. The HIGH 1 and HIGH 2 settings might increase curl and jam problems.

 Some makers of these types of paper are now coating one side of the paper to enhance toner adhesion and print quality. To take advantage of this feature, make sure to load the paper correctly. The side on which you can read the watermark correctly is the front side, or the side to be printed.

For tray 1, load paper with the front side facing up, and the top, short edge toward the printer.



For tray 2, optional 500-sheet trays, and the optional 1,500-sheet tray, load paper with the front side facing down, and the top, short edge toward you.



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# Printing small sizes, custom sizes, or heavy paper

Paper heavier than 120 g/m<sup>2</sup> (32 lb) should be printed only from tray 1. Custom-size paper can be printed from tray 1, tray 2, or an optional 500-sheet tray.

Note

The printer might print at a slower speed when printing small sizes, custom sizes, and heavy paper.

For more information about paper with a special finish, such as laid or bond paper, see "Printing on paper with a special finish" on page 61.

#### Weight and sizes

See below for specifications when printing on custom or heavy paper. For more information, see "Paper specifications" on page 182.

Tray	Minimum size	Maximum size	Supported weights
Tray 1	76 by 127 mm	216 by 356 mm	60 to 200 g/m <sup>2</sup>
	(3 by 5 inches)	(8.5 by 14 inches)	(16 to 53 lb)
Tray 2 and optional 500-sheet tray	148 by 210 mm	216 by 356 mm	60 to 120 g/m <sup>2</sup>
	(5.8 by 8.2 inches)	(8.5 by 14 inches)	(16 to 32 lb)

#### **Guidelines for heavy paper**

Follow these guidelines when printing on heavy paper:

- On the Paper Handling menu, set TRAY TYPE=ROUGH for the tray that you are using.
- Some heavy paper requires that you also select a higher fuser mode to help prevent unwanted toner from rubbing off onto the paper. At the printer control panel, open the Configure Device menu. On the Print Quality submenu, select FUSER MODES, and then select ROUGH=HIGH 2. The HIGH 2 setting might increase curl and jam problems.
- To reduce curl and other problems, print heavy paper from tray 1 to the rear output bin. (See "Printing to the rear output bin" on page 37.)

#### Guidelines for custom-size paper

Follow these guidelines when printing on any custom-size paper:

- Feed short-edge first.
- In your program, set page margins at least 4.23 mm (0.17 inch) away from the edges.
- Set custom size in the program, in the printer driver, or at the printer control panel. Make sure that you set the switch in the tray to Custom. (See "Setting custom paper sizes" on page 63.)

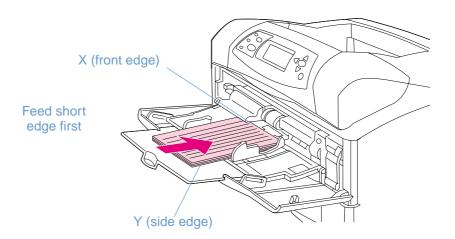
#### Additional guidelines for small or narrow paper

Follow these additional guidelines when printing on small or narrow paper:

- Do not attempt to print on paper smaller than 76 mm (3 inches) wide or 127 mm (5 inches) long.
- To reduce curl and other problems, print very small custom-size paper from tray 1 to the rear output bin. (See "Printing to the rear output bin" on page 37.)
- HP does not recommend printing large quantities of small or narrow paper. Printing large quantities of small or narrow paper can cause toner to leak from the print cartridge and damage the printer or cause print-quality problems.

#### Setting custom paper sizes

When custom paper is loaded, size settings need to be selected in the program (the preferred method), in the printer driver, or at the printer control panel. To reduce curl and other problems, heavy paper and very small custom-size paper should be printed from tray 1 to the rear output bin. (See "Printing to the rear output bin" on page 37.)



If the settings are not available in your program, set the custom paper size at the printer control panel.

#### To set custom paper sizes

- 1 If you loaded a 500-sheet tray with custom paper, be sure that the knob is set to **Custom**. (See "Loading tray 2 or an optional 500-sheet tray" on page 43.)
- **2** Press SELECT (✓) to open the menus.
- 3 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to PAPER HANDLING, and then press SELECT (✔).
- 4 Use UP ARROW ( $\triangle$ ) or DOWN ARROW ( $\nabla$ ) to scroll to TRAY 1 SIZE or TRAY [N] SIZE (where [N] is the number of the tray), and then press SELECT ( $\checkmark$ ).
- 5 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to CUSTOM, and then press SELECT (✓).
- 6 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to INCHES or MM (millimeters), and then press SELECT (✓). This selects the measurement units for determining the size of your custom paper.
- 7 Use Up ARROW (▲), then DOWN ARROW (▼), and then press SELECT (✔) to set the X dimension (the front edge of the paper, as shown in the figure above). The X dimension can be 76 to 216 mm (3 to 8.5 inches).
- 8 Use UP ARROW (▲), then DOWN ARROW (▼), and then press SELECT (✔) to set the Y dimension (the side edge of the paper, as shown in the figure above). The Y dimension can be 127 to 356 mm (5 to 14 inches). For example, if the custom paper is 203 by 254 mm, set X=203 mm and Y=254 mm.

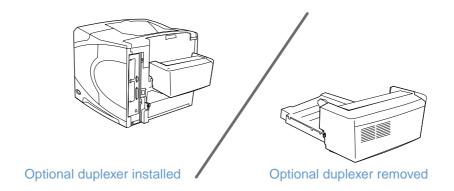
**ENWW** 

# Printing both sides of paper (optional duplexer)

The printer can automatically print on both sides of paper with an optional duplexer. This is called duplexing. The optional duplexer supports the following paper sizes: letter, legal, executive, A4, A5, and JIS B5.

The duplex slot cover that is located at the rear of the printer must be removed when the optional duplexer is installed. See the documentation included with the optional duplexer for installation instructions. When duplexing very complex pages, additional memory might be required. (See "Printer memory and expansion" on page 169.)

When the printer prints using the duplexer, the page partially protrudes into the top output bin, and then reverses to print on the second side.



#### Guidelines for printing both sides of paper

#### **CAUTION**

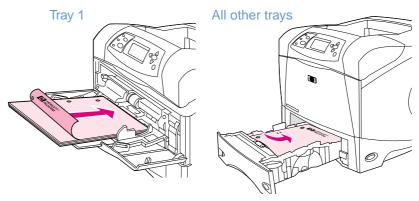
Do not print on both sides of labels, transparencies, envelopes, vellum, custom sizes, or paper heavier than 28 lb (105 g/m<sup>2</sup>) because jams or damage to the printer might occur.

Note the following guidelines:

- Before you use the optional duplexer, ensure that the printer driver is set to recognize it. (You need to set this setting only once. See the printer driver online Help for details.)
- To print on both sides of paper, make the selection in your program or the printer driver. (See the printer driver online Help.)
- If you do not use the printer driver that came with the printer, you might need to change the duplex setting at the printer control panel, set DUPLEX=ON on the Printing submenu (on the Configure Device menu). Also on the Printing submenu, set DUPLEX BINDING to LONG EDGE or SHORT EDGE. (For more information, see "Layout options for printing both sides of paper" on page 67.)
- The rear output bin must be closed to use the optional duplexer. (See "Selecting the output bin" on page 36.) Opening the rear output bin disables the optional duplexer.
- HP does not recommend manually duplexing by printing one side of a page, and then feeding the page through the printer again to print the other side. When printing using the optional duplexer, the printer automatically makes necessary adjustments to reduce jams and print-quality problems. If paper is refed through the printer, the printer is not able to make these adjustments.

# Orientation of paper for duplexing

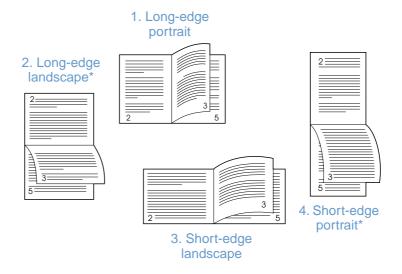
Several kinds of paper (such as letterhead, preprinted paper, prepunched paper, and paper with watermarks) require a specific orientation when you duplex. The optional duplexer prints the second side of paper first. The proper orientation of the paper in the trays is shown below.



For tray 1, load the front side facing down and the top edge toward you. For all other trays, load the front side facing up and the top edge toward the printer.

## Layout options for printing both sides of paper

The four duplex orientation options are shown below. These options can be selected in the printer driver (the preferred method) or at the printer control panel. (If you use the printer control panel, go to Configure Device menu, then the Printing submenu. Select DUPLEX BINDING. On the PCL submenu, select a setting for ORIENTATION.)



	every printed image oriented right-side-up. Facing pages are read from top to bottom on the left page, then from top to bottom on the right page.
2. Long-edge landscape*	This layout is often used in accounting, data processing, and spreadsheet programs. Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom.
3. Short-edge landscape	Each printed image is oriented right-side-up. Facing pages are read from top to bottom on the left page, then from top to bottom on the right page.

This is the default printer setting, and the most common layout used, with

4. Short-edge portrait\* This layout is often used with clipboards. Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom.

1. Long-edge portrait

<sup>\*</sup> When using Windows drivers, select Flip Pages Up to get the designated binding options.

# **Using printer driver features**

When you print from a program, many printer features are available in the printer driver. To gain access to Windows printer drivers, see "Gain access to the Windows printer driver" on page 31.

Note

Certain printer features might not be available with all drivers. Check the drivers for available options.

Settings in a program or the printer driver override control panel settings. (Program settings generally override printer driver settings.)

#### **Collating (mopying)**

The Printer Collation feature allows multiple original prints (mopying) and provides you the following advantages:

- reduced network traffic
- faster return to program
- all documents are original

The default driver setting for the collating feature is on (**Mopier Enabled**). See the program or printer driver online Help for specific steps to turn off collating.

#### **RIP ONCE**

RIP ONCE allows the print job to be processed one time at the printer. If your printer driver includes this capability, the RIP ONCE function creates an image of the page and then saves a compressed image of the page into memory. Pages are printed by decompressing page images without pausing to process the print job again. The print job prints exactly the same every time because the compressed image does not depend on any other printer data.

#### Saving printer setup information (Quick Sets)

Printer drivers allow you to save the printer settings you use most often as the default settings. For example, the driver might be set to print on letter size-paper with portrait orientation and automatic tray selection (from the first available tray).

Some versions of the printer driver allow you to save printer settings for multiple kinds of print jobs. For example, you might want to create a Quick Set for envelopes, or for printing the first page of a document on letterhead.

See the printer driver online Help for more information about the Quick Sets feature.

#### Fit to Page

Some versions of the printer driver include a feature called **Fit to Page** that lets you scale the page image from any page size to any page size. You can do this either by a numeric percentage or by specifying a different paper size scale.

See the printer driver online Help for more information about the Fit to Page feature.

#### Printing booklets

Some versions of the printer driver let you control the printing of booklets when duplexing. You can select binding on the left or right side on Letter, Legal, or A4 paper size.

See the printer driver online Help for more information about the printing booklets feature.

#### Printing a watermark

A watermark is a notice, such as "Confidential," printed in the background of each page in a document. Check the driver for available options, or see the printer driver online Help for more information.

#### Printing on a different first page

Follow these instructions for printing a first page that is different from other pages in the print job.

For Windows, select Use different paper for first page in your printer driver. Select one tray (or Manual Feed) for the first page and one of the other trays for the remaining pages. Place the paper for the first page in tray 1 (or whichever tray you selected). (For manual feed, place paper in tray 1 after the job is sent to the printer and the printer requests paper.) For loading tray 1, place the paper with the side to be printed up and the top facing the rear of the printer.

For Macintosh computers, select **First from** and **Remaining from** in the **Print** dialog box.

Note

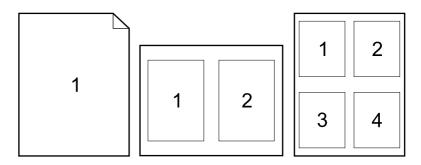
Where and how you make selections depends on your program or associated printer driver. Some options might be available only in the printer driver.

2 Load the paper for the remaining pages of the document in another tray. You can select the first and remaining pages by type of paper. For more information, see "Manually feeding paper from tray 1" on page 49.

#### Printing multiple pages on one sheet of paper (pages per sheet)

You can print more than one page on a single sheet of paper. This feature is available in some printer drivers, and provides a cost-effective way to print draft pages.

To print more than one page on a sheet of paper, look for a Layout or Pages Per Sheet option in the printer driver.



# **Using job-storage features**

The printer supports four distinct job-storage features that allow printing to be initiated from the printer control panel after the print job is sent from the computer: quick copy, proof and hold, private job, and stored job. Some features are available without an optional hard disk installed, but to use all of the job-storage features, you must install an optional hard disk accessory in the printer and properly configure the drivers. (For information about ordering accessories, see "Ordering information" on page 17.)

To support job-storage features for complex jobs, HP recommends that you install additional memory. (See "Ordering information" on page 17.)

#### **CAUTION**

Make sure that you identify your jobs in the printer driver before printing. Using default names might override previous jobs with the same default name or cause the job to be deleted.

**Note** 

If you turn the printer power off, all quick copy, proof and hold, and private jobs are deleted. A job can also be deleted at the printer control panel.

# Quick copying a job

The quick copy feature prints the requested number of copies of a job and stores a copy on the optional hard disk or on the RAM disk, if an optional hard disk is not installed. Additional copies of the job can be printed later. This feature can be turned off in the printer driver.

For more information about specifying the number of quick copy jobs that can be stored, see "JOB STORAGE LIMIT" on page 162.

Note

If you turn the printer power off, all quick copy, proof and hold, and private jobs are deleted. A job can also be deleted at the printer control panel.

#### To print copies of a stored job

- 1 Press SELECT (✓) to open the menus.
- 2 Use UP ARROW (▲) or Down ARROW (▼) to scroll to RETRIEVE JOB, and then press SELECT (✓).
- 3 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user name that you want, and then press SELECT (✓).
- 4 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to the user or job name, and then press SELECT (✔).
- 5 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to PRINT, and then press SELECT (✔).
- 6 Use UP ARROW (▲) or DOWN ARROW (▼) to select the number of copies, and then press SELECT (✓).

#### Deleting a quick copy job

When you send a quick copy job, the printer overwrites any previous jobs with the same user and job name. If no quick copy job is already stored under the same user and job name and the printer needs additional space, the printer might delete other quick copy jobs starting with the oldest job. The default number of quick copy jobs that can be stored is 32. The number of quick copy jobs that can be stored is set at the printer control panel. (See the description of "JOB STORAGE LIMIT" on page 162.)

Note

If you turn the printer power off, all quick copy, proof and hold, and private jobs are deleted. A quick copy job can also be deleted at the printer control panel (see below) or in HP Web Jetadmin.

#### To delete a quick copy job

- 1 Press SELECT (✓) to open the menus.
- 2 Use Up ARROW (▲) or Down ARROW (▼) to scroll to RETRIEVE JOB, and then press SELECT (❤).
- 3 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user name that you want, and then press SELECT (▼).
- **4** Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user or job name, and then press SELECT (▼).
- 5 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to DELETE, and then press SELECT (✓).

#### Proofing and holding a job

The proof and hold feature provides a quick and easy way to print one copy of a job for proofing before printing the additional copies.

**Note** 

If you turn the printer power off, all quick copy, proof and hold, and private jobs are deleted.

To store the job permanently and prevent the printer from deleting it if space is needed for something else, install an optional hard disk, and select the **Stored Job** option in the printer driver. (In order to store a job, the printer must have an optional hard disk installed.)

#### To print the remaining copies of a held job

- 1 Press Select ( $\checkmark$ ) to open the menus.
- 2 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to RETRIEUE JÜB, and then press SELECT (▼).
- 3 Use Up ARROW (▲) or Down ARROW (▼) to scroll to the user name, and then press SELECT (❤).
- **4** Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user or job name, and then press SELECT (▼).
- 5 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to PRINT, and then press SELECT (✓).
- 6 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the number of copies, and then press SELECT (▼).

#### Deleting a held job

When you send a proof and hold job, the printer automatically deletes your previous proof and hold job. If no proof and hold job already exists with that job name, and the printer needs additional space, the printer might delete other proof and hold jobs starting with the oldest one.

**Note** 

If you turn the printer power off, all quick copy, proof and hold, and private jobs are deleted. A held job can also be deleted at the printer control panel.

#### To delete a held job

- 1 Press Select ( ) to open the menus.
- 2 Use Up ARROW (▲) or Down ARROW (▼) to scroll to RETRIEVE JOB, and then press SELECT (✓).
- 3 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user name, and then press SELECT (▼).
- 4 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to the user or job name, and then press SELECT (▼).
- 5 Use Up arrow ( $\triangle$ ) or Down arrow ( $\nabla$ ) to scroll to DELETE, and then press Select ( $\checkmark$ ).

#### Printing a private job

The private printing feature lets you specify that a job is not printed until you release it using a four-digit personal identification number (PIN) at the printer control panel. You specify the PIN in the printer driver, and it is sent to the printer as part of the print job.

#### To specify a private job

To specify in the driver that a job is private, select the **Private Job** option and type a 4-digit PIN.

#### To print a private job

- 1 Press SELECT (✓) to open the menus.
- 2 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to RETRIEUE JOB, and then press SELECT (✓).
- 3 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user name, and then press SELECT (▼).
- **4** Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user or job name, and then press SELECT (✓).
- 5 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to PPINT. A lock symbol appears next to PPINT. Press SELECT (✓).
- 6 You are prompted to enter the PIN number. Use UP ARROW (▲) or DOWN ARROW (▼) to change the first number of the PIN, and then press SELECT (✔). An \* appears in place of the number. Repeat these steps to change the remaining three numbers of the PIN.
- 7 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the number of copies, and then press SELECT (▼).

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#### Deleting a private job

A private job is automatically deleted after the user releases it for printing, unless the user selects the **Stored Job** option in the printer driver. (In order to store a job, the printer must have an optional hard disk installed.)

**Note** 

If you turn the printer power off, all quick copy, proof and hold, and private jobs are deleted. A private job can also be deleted at the printer control panel before it is ever printed.

#### To delete a private job

- 1 Press SELECT (✓) to open the menus.
- 2 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to RETRIEVE JOB, and then press SELECT (▼).
- 3 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user name, and then press SELECT (▼).
- **4** Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user or job name, and then press SELECT (▼).
- 5 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to DELETE, and then press SELECT (✓).
  (A lock symbol appears next to DELETE.)
- 6 You are prompted to enter the PIN number. Use UP ARROW (▲) or DOWN ARROW (▼) to change the first number of the PIN, and then press SELECT (✓). An \* appears in place of the number. Repeat these steps to change the remaining three numbers of the PIN.

#### Storing a print job

You can download a print job to the optional hard disk without printing it. You can then print the job at any time at the printer control panel. For example, you might want to download a personnel form, calendar, time sheet, or accounting form that other users can gain access to and print.

#### To store a print job

To store a print job permanently on the optional hard disk, select the **Stored Job** option in the driver when printing the job.

#### To print a stored job

- 1 Press SELECT (✓) to open the menus.
- 2 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to RETRIEUE JOB, and then press SELECT (▼).
- 3 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user name, and then press SELECT (▼).
- **4** Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user or job name, and then press SELECT (✓).
- 5 Use UP ARROW ( $\triangle$ ) or DOWN ARROW ( $\nabla$ ) to scroll to PRINT, and then press SELECT ( $\checkmark$ ).
- 6 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the number of copies, and then press SELECT (▼).

#### Deleting a stored job

Jobs stored on the optional hard disk can be deleted at the printer control panel.

#### To delete a stored job

- 1 Press Select ( ) to open the menus.
- 2 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to RETRIEVE JOB, and then press SELECT (▼).
- 3 Use Up ARROW (▲) or Down ARROW (▼) to scroll to the user name, and then press SELECT (▼).
- **4** Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to the user or job name, and then press SELECT (▼).
- 5 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to DELETE, and then press SELECT (✔).

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# 3 Managing and maintaining the printer

#### **Overview**

This section explains how to manage and maintain the printer.

- "Using the embedded Web server" on page 76
- "Managing the print cartridge" on page 80
- "Configuring e-mail alerts" on page 79
- "Checking the printer configuration" on page 83
- "Cleaning the printer" on page 87
- "Cleaning the fuser" on page 89 (cleaning manually or automatically)
- "Performing preventative maintenance" on page 91
- "Replacing the stapler unit" on page 92

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#### Using the embedded Web server

This printer comes equipped with an embedded Web server. Use your computer's standard Web browser to gain access to printer information provided in the embedded Web server, including:

- printer control panel messages
- supply levels
- tray configuration
- printer control panel menu configuration
- printer configuration page
- supplies status page (available only if you are using genuine HP supplies)
- printer event log
- printer usage (types of print jobs)
- network information
- instant support (troubleshooting)
- product support
- printer alerts

You can also use the embedded Web server to perform the print job management functions that would usually be done at the printer control panel. These functions include:

- changing printer settings
- changing printer configuration
- canceling print jobs

#### Updating embedded Web servers for multiple printers

You can use the embedded Web server plug-in for HP Web Jetadmin to configure embedded Web server parameters, such as alerts, on multiple printers at a time. The plug-in allows for batch configuration of all printers with both an embedded Web server and an optional hard disk installed. To obtain this plug-in, visit http://www.hp.com/go/webjetadmin, click plug-ins, and then click applications.

#### Gaining access to the embedded Web server

**Note** 

To use the embedded Web server, you must have an IP-based network and Web browser.

Type the IP address assigned to the printer into your Web browser to gain access to the embedded Web server. For example, if the printer IP address is 123.456.789.123, you would enter http://123.456.789.123 into your Web browser.

If you do not know the IP address for the printer, see the printer configuration page. For more information about printing a configuration page, see "Configuration page" on page 83.

#### Viewing embedded Web server pages

The embedded Web server has three different sections for providing detailed information about the printer:

- Information pages
- Settings pages
- Network pages

The embedded Web server contents appear within three tabs located at the top of your Web browser screen. These tabs are divided into sections that are located on the left side of the browser. Click the section that you want to view. Under the section is a list of additional websites (**Other Links**) that you might use frequently.

**Note** 

Each page on the Networking tab of the embedded Web server has access to Help. For information about a particular page, click the **Help** icon.

#### Information pages

The information pages of the embedded Web server are the informational pages for the printer. These include:

#### Device status page

This page shows the printer control panel and the message that currently appears. The PAUSE/RESUME button also appears, so you can change the printer control panel menu settings by using this page. Supply levels and the tray print media configuration are also shown.

#### Configuration page

The printer configuration page is displayed from this site in the embedded Web server. For more information, see "Configuration page" on page 83.

#### Event log page

This page shows the printer event log. For more information, see "PRINT EVENT LOG" on page 167.

Supplies status page (available only if you are using genuine HP Supplies)
 This page shows the levels of the supplies for the printer, calculation of the number of pages remaining, and cartridge-usage information.

#### Device information page

Provides network management information, including device description and IP address, as well as printer name, model number, and serial number.

#### Control panel page

This page shows the current control panel message.

#### **Settings pages**

The settings pages of the embedded Web server allow you to configure the printer by using your computer. These pages can be password-protected. Always consult with your network administrator before changing the printer configuration.

#### Configure device page

This page allows you to configure all of the printer settings.

#### Alerts page

This page allows you to configure who will be notified electronically for a variety of different printer events.

#### E-mail page

This page lists the e-mail addresses of the people who will receive electronic notification of printer events.

#### Security page

This page configures the password information for the embedded Web server. Password information should be configured only by the network administrator.

#### Other links page

This page is used to add other websites as direct links in the embedded Web server. These sites are displayed on the navigational bar throughout the embedded Web server pages.

#### Language page

This page allows you to configure the language in which the embedded Web server is displayed.

#### **Device information page**

This page allows you name the device for network management needs, and shows the IP address and server for the printer.

#### Time services page

Shows the network time server address and allows configuration of the time server address, synchronization interval, and the time server port.

#### **Network pages**

This section of the embedded Web server allows the network administrator to configure the HP Jetdirect print server for the printer.

#### **Configuring e-mail alerts**

You can use HP Web Jetadmin or the embedded Web server to configure the system to alert you of problems with the printer. The alerts take the form of e-mail messages to the e-mail account or accounts that you specify.

You can configure the following:

- the device that you want to monitor (in this case, the printer)
- what alerts are to be received (for example, alerts for jams, paper out, ORDER CARTRIDGE, REPLACE CARTRIDGE, and cover open)
- the e-mail account to which the alerts should be forwarded

For	See the following section	
HP Web Jetadmin	•	"HP Web Jetadmin software" on page 33 for general information about HP Web Jetadmin HP Web Jetadmin online Help for details about alerts and how to set them up
Embedded Web server	•	"Using the embedded Web server" on page 76 for general information about the embedded Web server

#### Managing the print cartridge

This section provides information about HP print cartridges, how to store them, how to identify genuine ones, and their life expectancy. Information also appears about non-HP print cartridges.

#### **HP print cartridges**

When you use a genuine new HP print cartridge, part number Q1338A (12,000-page cartridge for the HP LaserJet 4200 series) or Q1339A (18,000-page cartridge for the HP LaserJet 4300 series), you can obtain several types of information, such as the following:

- amount of toner remaining
- estimated number of pages remaining
- number of pages printed

#### Non-HP print cartridges

Hewlett-Packard Company cannot recommend use of non-HP print cartridges, either new or remanufactured. Because they are not HP products, HP cannot influence their design or control their quality. Service or repair required as a result of using a non-HP print cartridge will not be covered under the printer warranty.

If you use a non-HP print cartridge, the printer is unable to report the levels of the supplies for the printer, calculation of the number of pages remaining, and cartridge-usage information.

If the non-HP print cartridge was sold to you as a genuine HP product, please call the HP fraud hotline. (See "Contacting the HP fraud hotline" on page 145.)

#### **Print-cartridge authentication**

The printer will let you know that a print cartridge is not a genuine HP print cartridge when you insert it into the printer.

If the printer control panel message states that this is not a genuine HP print cartridge and you believe you purchased an HP print cartridge, call the HP fraud hotline. See "Contacting the HP fraud hotline" on page 145.

#### Print-cartridge storage

Do not remove the print cartridge from its package until you are ready to use it. The shelf life of a print cartridge in an unopened package is approximately 2.5 years.

#### **CAUTION**

To prevent damage to the print cartridge, do not expose it to light for more than a few minutes.

#### Print-cartridge life expectancy

The life of the print cartridge depends on the amount of toner that print jobs require and the length of life for the components inside the cartridge. When printing text at 5 percent coverage (typical for a business letter), an HP print cartridge lasts an average of 12,000 pages (HP LaserJet 4200 series) or 18,000 pages (HP LaserJet 4300 series). This assumes that toner density is set to 3 and EconoMode is off. (These are the default settings. For details about these settings, see the description of ECONOMODE and TONER DENSITY in "Print Quality submenu" on page 159.)

At any time, you can verify life expectancy by checking the supply level, as described in "Checking the supply level" on page 81.

#### Checking the supply level

You can check the supply (toner) level at the printer control panel, the embedded Web server, printer software, or HP Web Jetadmin.

#### To check the supply level at the control panel

- Press Select ( ) to open the menus.
- 2 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to INFORMATION, and then press SELECT ( ).
- Use Up arrow (▲) or Down arrow (▼) to scroll to PRINT SUPPLIES STATUS PAGE, and then press SELECT ( ). See "Supplies status page" on page 85 for information about the supplies status page.

#### To check the supply level using the embedded Web server

- In your Web browser, enter the IP address for the printer home page. This takes you to the printer status page. (See "Gaining access to the embedded Web server" on page 76.)
- 2 On the left side of the screen, click **Supplies Status**. This takes you to the supplies status page, which provides supply level information. (See "Supplies status page" on page 85 for information about the supplies status page.)

#### To check the supply level using the printer software

Three things are required to use this feature:

- The Printer Status and Alerts software on the CD-ROM that came with the printer must be enabled on your computer.
- The printer must be directly connected to your computer with a parallel cable.
- You must have access to the Internet.
- 1 At the bottom right of your screen, double-click the **Printer** icon. This opens the status window.
- 2 On the left side of the status window, click the **Printer** icon from which you want to obtain status.
- 3 At the top of the status window, click the **Supplies** link. You can also scroll down to Supplies Status.

**Note** 

If you want to order supplies, click Order Supplies. This opens a browser that produces a URL from which to purchase supplies. Select the supplies you wish to order and finish the ordering process.

#### To check the supply levels in HP Web Jetadmin

In HP Web Jetadmin, select the printer device. The device status page shows supply-level information.

#### **Print-cartridge interaction (shaking)**

When you install a print cartridge for the first time, gently shake it from side to side to distribute the toner evenly inside the print cartridge. Due to the cartridge design, this is the only time you will need to shake the print cartridge.

#### Cartridge Low and Cartridge Out conditions

The printer alerts you if the print cartridge is low on toner or out of toner.

#### When the cartridge is low on toner

When the cartridge is low on toner, the printer control panel shows the ORDER CARTRIDGE message. The ORDER CARTRIDGE message first appears when about 15 percent of the toner remains in the print cartridge (at 5 percent coverage, about 1,800 pages remaining for the 12,000-page cartridge in the HP LaserJet 4200 series and about 2,700 pages remaining for the 18,000-page cartridge in the HP LaserJet 4300 series).

The default is for the printer to continue printing until the toner runs out, but you might prefer to have the printer stop instead of continuing when the ORDER CARTRIDGE message first appears for example, if you want print quality to remain consistently high during print jobs, or if you do not want the cartridge to run out during a long print job. To configure the printer to stop, set CARTRIDGE LOW=STOP (in the System Setup submenu of the Configure Device menu). (See "CARTRIDGE LOW" on page 163.) Then, when ORDER CARTRIDGE appears, the printer will stop printing. You can resume printing by pressing SELECT (✓) for each print job.

#### When the cartridge is out of toner or drum life

The REPLACE CARTRIDGE message appears in one of these situations:

- When the print cartridge is out of toner. If CARTRIDGE OUT is set to CONTINUE (in the System Setup submenu of the Configure Device menu), the printer continues printing without interaction until the cartridge reaches the end of drum life. HP does not guarantee print quality after the REPLACE CARTRIDGE message is first displayed. Replace the print cartridge as soon as possible. (See "Ordering information" on page 17.) The REPLACE CARTRIDGE message remains until you replace the print cartridge. If CARTRIDGE OUT is set to STOR, the printer stops printing until you replace the print cartridge or resume printing by pressing SELECT (✓) for each print job.
- When the drum life of the print cartridge is out. You must replace the print cartridge to continue printing. No override is possible, even if toner remains in the cartridge. (See "Ordering information" on page 17.) This situation occurs to protect the printer.

#### Checking the printer configuration

At the printer control panel, you can print pages that give details about the printer and its current configuration. The following information pages are described here:

- Menu map
- Configuration page
- Supplies status page (includes information about print-cartridge use)
- PS or PCL font list

For a complete list of printer information pages, see the Information menu at the printer control panel ("Information menu" on page 153).

Keep these pages nearby for troubleshooting. They are also useful if you contact HP Customer Care.

#### Menu map

Print the menu map to see the current settings for the menus and items available at the printer control panel.

#### To print a menu map

- 1 Press Select (✓) to open the menus.
- 2 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to INFORMATION, and then press SELECT **(✓**).
- 3 Use Up ARROW (▲) or Down ARROW (▼) to scroll to PRINT MENU MAP, and then press SELECT ( ).

You might want to store the menu map near the printer for reference. The content of the menu map varies, depending on the options currently installed in the printer. (Many of these values can be overridden in the program or printer driver.)

For a complete list of control panel items and possible values, see "Control panel menus" on page 151. To change a control panel setting, see "Printing and changing control panel menus" on page 26.

#### **Configuration page**

Use the configuration page to view current printer settings, to help troubleshoot printer problems, or to verify installation of optional accessories, such as memory (DIMMs), trays, and printer languages.

**Note** 

If an HP Jetdirect print server is installed, an HP Jetdirect configuration page prints as well. HP LaserJet 4200n/tn/dtn/dtns/dtnsl and 4300n/tn/dtn/dtns/dtnsl printers come with an HP Jetdirect printer server installed.

#### To print a configuration page at the control panel

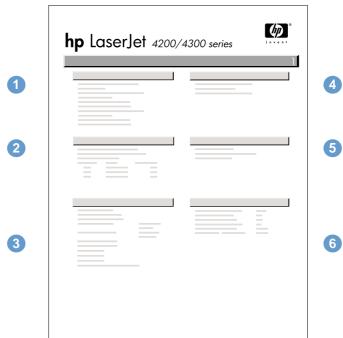
- Press SELECT (✓) to open the menus.
- Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to INFORMATION, and then press SELECT **(\sqrt)**.
- Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to PRINT CONFIGURATION, and then press SELECT ( ).

An example of the configuration page follows. The content of the configuration page varies, depending on the options currently installed in the printer.

**Note** 

You can also obtain configuration information in the embedded Web server. For details, see "Using the embedded Web server" on page 76.

#### configuration page



1	Printer Information	Lists the serial number, page counts, and other information for the printer.
2	Event Log	Lists the number of entries in the event log, the maximum number of entries viewable, and the last three entries.
3	Installed Personalities and Options	Lists all printer languages that are installed (such as PS and PCL) and lists options that are installed in each DIMM slot and EIO slot.
4	Memory	Lists printer memory, PCL Driver Work Space (DWS), and I/O buffering and resource saving information.
5	Security	Lists the status of the printer control panel lock, control panel password, and optional disk drive.
6	Paper Trays and Options	Lists the size settings for all trays and lists optional paper-handling accessories that are installed.

#### Supplies status page

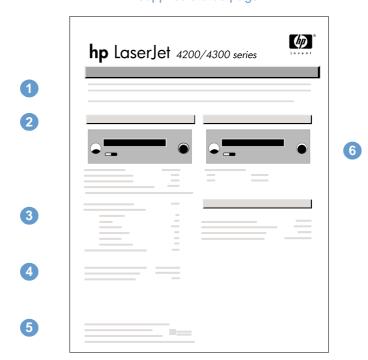
Use the supplies status page to obtain information about the print cartridge installed in the printer, the amount of life left in the print cartridge, and the number of pages and jobs that have been processed. The page also lets you know when you should perform the next preventative maintenance. (See "Performing preventative maintenance" on page 91.)

**Note** 

You can also obtain supplies status information in the embedded Web server. For details, see "Using the embedded Web server" on page 76.

#### To print a supplies status page at the control panel

- Press Select ( ) to open the menus.
- 2 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to INFORMATION, and then press SELECT
- Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to PRINT SUPPLIES STATUS PAGE, and then press Select ( $\checkmark$ ).



#### supplies status page

- 1 Supplies website Lists the local website for ordering supplies through the Internet.
- 2 Cartridge information Provides information about the amount of toner available in the print cartridge, printcartridge part number, and estimated pages remaining for the amount of toner left in the cartridge.
- 3 Printing statistics Lists statistics about total number of pages and jobs processed using this print cartridge, as well as the first and last use date for this print cartridge.
- 4 Manufacture information Lists the print-cartridge serial number.
- 5 Recycling website Lists the website for information about returning used HP print cartridges.
- 6 Maintenance kit gauge Shows a gauge to let you know the remaining life of the maintenance kit components.

#### PS or PCL font list

Use the font lists to see which fonts are currently installed in the printer. (The font lists also show which fonts are resident on an optional hard disk accessory or flash DIMM.)

#### To print a PS or PCL font list

- Press Select  $(\checkmark)$  to open the menus.
- Use Up ARROW (▲) or Down ARROW (▼) to scroll to INFORMATION, and then press Select  $(\checkmark)$ .
- Use Up arrow (▲) or Down arrow (▼) to scroll to PRINT PS FONT LIST OF PRINT PCL FONT LIST, and then press SELECT ( $\checkmark$ ).

The PS font list shows the PS fonts installed, and gives a sample of those fonts. The following information can be found on the PCL font list:

- **Font** gives the font names and samples.
- **Pitch/Point** indicates the pitch and point size of the font.
- **Escape Sequence** (a PCL 5e programming command) is used to select the designated font. (See the legend at the bottom of the font list page.)

Note

For step-by-step instructions about using printer commands to select a font with MS-DOS® programs, see "Selecting PCL 6 and PCL 5e fonts" on page 177.

- **Font** # is the number used to select fonts at the printer control panel (not in the program). Do not confuse the font # with the font ID, described below. The number indicates the DIMM slot where the font is stored.
  - SOFT: Downloaded fonts, which stay resident in the printer until other fonts are downloaded to replace them, or until the printer power is turned off.
  - INTERNAL: Fonts that permanently reside in the printer.
- Font ID is the number you assign to soft fonts when you download them through software.

#### **Cleaning the printer**

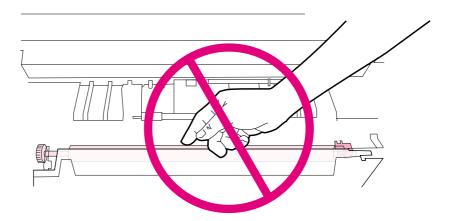
Use the cleaning procedure on the following page every time you change the print cartridge or whenever print-quality problems occur. As much as possible, keep the printer free from dust and debris.

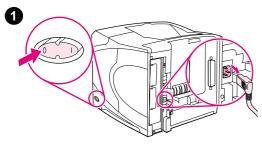
- Clean the outside of the printer with a slightly water-dampened cloth.
- Clean the inside with a dry, lint-free cloth.

#### **CAUTION**

Do not use ammonia-based cleaners on or around the printer.

While cleaning the printer, be careful not to touch the transfer roller (the black, rubber roller located underneath the print cartridge). Skin oils on the roller can cause print-quality problems.



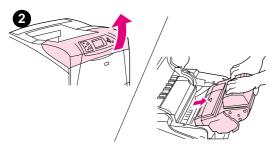


#### Cleaning the inside of the printer

Use these steps to clean dust and residue from the inside of the printer.

#### To clean the inside of the printer

- Turn the printer power off and unplug the power cord.
- 2 Open the top cover and remove the print cartridge.



#### **WARNING!**

Avoid reaching too far into the printer. The adjacent fusing area might

#### **CAUTION**

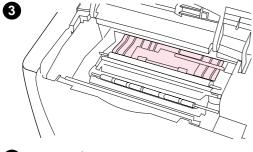
To prevent damage to the print cartridge, do not expose it to light for more than a few minutes.

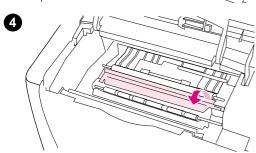
Wipe any dust or dirt off the paper feed guides (shaded areas) with a dry, lint-free cloth.

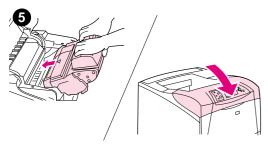


If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. (Hot water sets toner into fabric.)

- Using the green handle, lift the paper-access plate and wipe off any residue with a dry, lint-free cloth.
- Reinstall the print cartridge, close the top cover, plug in the power cord, and turn the printer power on.







#### Cleaning the fuser

Run the printer cleaning page to keep the fuser free of toner and paper particles that can sometimes accumulate. Accumulation of toner and particles can cause specks to appear on the front or back side of your print jobs. (See "Specks" on page 125.)

To ensure optimum print quality, HP recommends that you use the cleaning page every time you replace the print cartridge or on an automatic interval that you can set up. If you have an optional duplexer installed, you must run cleaning pages manually.

The cleaning procedure takes about 2.5 minutes to complete. A message (either CREATING CLEANING PAGE or CLEANING) appears on the printer control panel display while the cleaning is taking place.

#### Running the cleaning page manually

In order for the cleaning page to work properly, print the page on copier-grade paper (not bond, heavy, or rough paper).

If you have an optional duplexer installed, this cleaning method is the only one you can use. To ensure that automatic cleaning is off, see "Running the cleaning page automatically" on page 90.

#### To run the cleaning page manually

- 1 If a duplexer is installed, open the rear output bin.
- **2** Press SELECT (✓) to open the menus.
- 3 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to CONFIGURE DEVICE, and then press SELECT (▼).
- 4 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to PRINT QUALITY, and then press SELECT (▼).
- 5 Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to CREATE CLEANING PAGE, and then press SELECT (▼).
- **6** Follow the instructions on the cleaning page to complete the cleaning process.
- **7** Close the rear output bin.

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#### Running the cleaning page automatically

Using the procedure below, you can set the printer to print cleaning pages automatically at an interval that you select. In order for the cleaning page to run without intervention, you must keep the selected size and plain paper type available in the printer. The printer will not interrupt a printing job in process.

If you have an optional duplexer installed, make sure that automatic cleaning is turned off. Run cleaning pages manually only. (See "Running the cleaning page manually" on page 89.)

#### To run the cleaning page automatically

- Press Select  $(\checkmark)$  to open the menus.
- 2 Use Up ARROW (▲) or Down ARROW (▼) to scroll to CONFIGURE DEVICE, and then press SELECT ( ).
- 3 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to PRINT QUALITY, and then press SELECT ( ).
- 4 Use Up ARROW (▲) or DOWN ARROW (▼) to scroll to AUTO CLEANING, and then press SELECT ( ).
- Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to ①N, and then press SELECT (✔).
- Use UP ARROW (▲) or DOWN ARROW (▼) to scroll to CLEANING INTERVAL, and then press SELECT ( ).
- 7 Use Up ARROW (▲) or Down ARROW (▼) to scroll to the desired interval between 1,000 and 20,000 pages, and then press SELECT ( $\checkmark$ ) to save your selection.
- 8 Use Up arrow (▲) or Down arrow (▼) to scroll to AUTO CLEANING SIZE, and then press SELECT ( ).
- Use UP ARROW (▲) or Down ARROW (▼) to scroll to the paper size that you want the printer to use for cleaning pages (A4 or LETTER), and then press SELECT (>>) to save your selection.

The printer automatically prints a cleaning page at the interval and page size that you selected. You can discard the output page created by the cleaning process.

#### **Performing preventative maintenance**

You should replace certain parts when the PERFORM PRINTER MAINTENANCE message appears on the printer control panel display. This will help ensure that your printer maintains optimum performance.

The maintenance message will appear every 200,000 pages. The message can be temporarily cleared for approximately 10,000 pages using the CLEAR MAINTENANCE MESSAGE item on the Resets submenu. (See "CLEAR MAINTENANCE MESSAGE" on page 166.) To check the number of pages the printer has printed since new maintenance-kit components were installed, print either a configuration page or a supplies status page. (See "Configuration page" on page 83 or "Supplies status page" on page 85 for details.)

To order the printer maintenance kit, see "Ordering information" on page 17. The kit includes:

- fuser
- rollers (transfer, pickup, and feed)
- installation instructions

Note

The printer maintenance kit is a consumable item and is not covered under the original printer warranty or under most extended warranties.

After a maintenance kit is installed, the maintenance-kit counter must be reset.

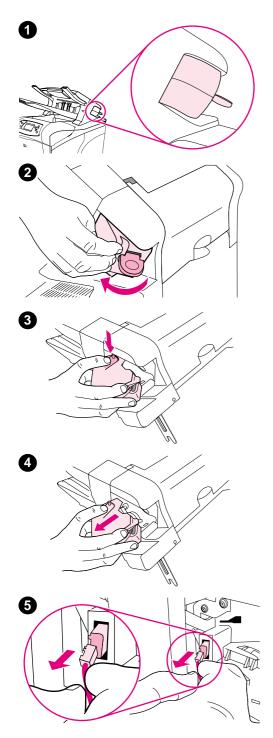
#### To reset the maintenance-kit counter

- Turn the printer power off.
- 2 Hold down SELECT ( ), and then turn the printer power on. Continue holding down SELECT ( ) until all three printer control panel lights flash once, and then remain on. This might take up to 10 seconds.
- Press UP ARROW ( ) to scroll to NEW MAINTENANCE KIT.
- Press Select ( ) to reset the maintenance-kit counter.

**Note** 

Perform this procedure only after a maintenance kit has been installed. Do not use this procedure to temporarily clear the PERFORM PRINTER MAINTENANCE message.

#### Replacing the stapler unit

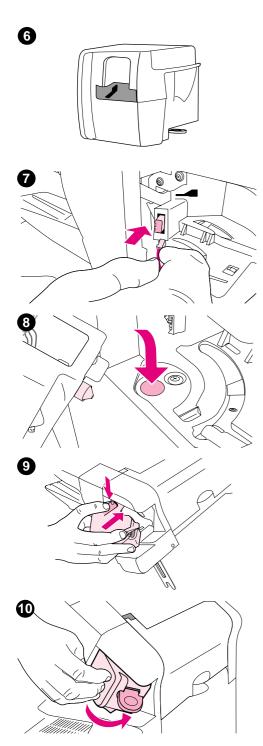


#### Removing and replacing the stapler unit

Use these steps to replace a defective stapler unit in the optional stapler/stacker.

#### To remove and replace the stapler unit

- Locate the stapler unit on the right side of the stapler/stacker.
- 2 Rotate the stapler unit toward the front of the printer until the unit clicks. Hold the stapler unit in this open position.
- Push down on the tab at the top of the stapler unit.
- Hold the tab down and pull the stapler unit up and out of the stapler/ stacker.
- Disconnect cable that connects the stapler unit to the stapler/ stacker. (Only the blue part detaches.) Release the white tab that contains the blue cable connector by opening the tab to the left.



- 6 Remove the new stapler unit from its packaging.
- 7 Connect the cable on the new stapler unit to the stapler/stacker.
- 8 Place the peg located on the bottom of the new stapler unit into the hole in the stapler/stacker.
- **9** Press down on the tab at the top of the stapler unit and push the unit into the stapler/stacker.
- **10** Rotate the stapler unit toward the rear of the printer until the unit clicks into place.
- 11 If the stapler cartridge is not installed in the stapler unit, install it now. (See "To load staples" on page 41.)

## Problem solving

#### Overview

This section will help you to troubleshoot and solve minor printer problems.

"Clearing jams" on page 96 Occasionally, paper can jam during printing. This section will help you to locate jams, properly clear them from the printer, and solve repeated jams.

"Understanding printer messages" on page 109

The printer control panel display shows various messages. It shows printer status messages, such as INITIALIZING, and messages that require action, such as CLOSE TOP COVER. This section lists messages that require action or indicate a problem and provides instructions for what to do. Self-explanatory messages are not included.

"Understanding accessory lights for the stacker and stapler/stacker" on page 122 This section explains errors that might occur when you are printing to the stacker or stapler/stacker accessory. This section describes error conditions indicated by the accessory lights and solutions to try.

"Correcting print-quality problems" on page 124

The printer should produce print jobs of the highest quality. If print jobs do not look sharp and clear, defects such as lines, specks, or smears appear, or paper is wrinkled or curled, use this section to troubleshoot and solve the output-quality problem.

"Determining printer problems" on page 131

Before you can fix a printer problem, you must understand where the problem lies. Use the flowchart in this section to determine the printer problem, and then follow the corresponding troubleshooting suggestions.

"Troubleshooting the optional hard disk" on page 139

If you have an optional printer hard disk accessory, this section can help you identify errors that might occur while using it.

page 140

"Troubleshooting PS errors" on This section describes errors that might occur when you are printing PostScript print jobs and solutions to try.

"Communicating with an optional HP Jetdirect print server" on page 141

If you have an optional HP Jetdirect print server card and network print jobs are not reaching the printer, you can use the steps in this section to troubleshoot the issue.

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#### **Clearing jams**

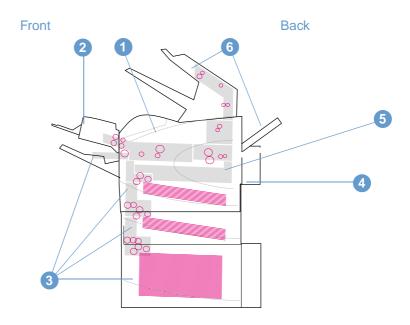
If a jam message appears on the printer control panel display, look for jammed paper or other print media in the locations indicated in the figure below. Then see the procedure for clearing the jam. You might need to look for paper in other locations than indicated in the jam message. If the location of the jam is not obvious, look first in the top-cover area underneath the print cartridge.

When clearing jams, be very careful not to tear jammed paper. If a small piece of paper is left in the printer, it could cause additional jams. If paper jams are a recurring problem, see "Solving repeated paper jams" on page 108.

**Note** 

After you have cleared the jammed paper, you must open and then close the top cover to clear a jam message.

#### Jam locations

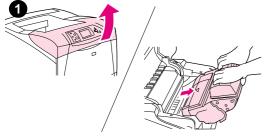


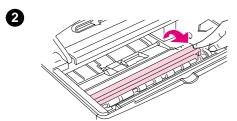
- 1 Top-cover and print-cartridge areas
- 2 Optional envelope feeder
- 3 Tray areas (tray 1, tray 2, and optional trays)
- 4 Optional duplexer
- 5 Fuser area
- **6** Output areas (top, rear, and optional stacker or stapler/stacker)

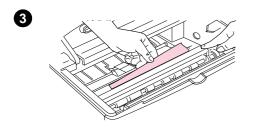
**Note** 

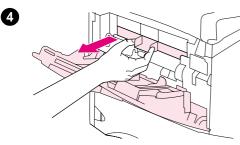
Loose toner might remain in the printer after a jam and cause output-quality problems. These problems should clear up within a few pages.

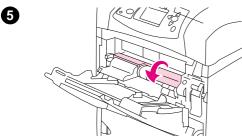
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## Clearing jams from the top-cover and print-cartridge areas

Clear paper jams that occur during the printing process using this procedure.

### To clear jams from the top-cover and print-cartridge areas

1 Open the top cover and remove the print cartridge.

#### **CAUTION**

To prevent damage to the print cartridge, do not expose it to light for more than a few minutes.

- 2 Use the green handle to lift the paper-access plate.
- 3 Slowly pull the jammed paper out of the printer. Do not tear the paper. If paper is difficult to remove, try clearing it from the tray area. (See "Clearing jams from the trays" on page 100.)

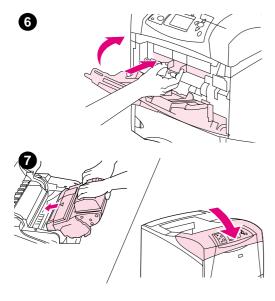
#### Note

Avoid spilling loose toner. Using a dry, lint-free cloth, clean any loose toner that might have fallen into the printer. If loose toner falls into the printer, it might cause temporary problems with print quality. Loose toner should clear from the printer after a few pages are printed.

If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. (Hot water sets toner into fabric.)

- 4 Open tray 1 and remove the entrance cover. If paper is present, remove it.
- 5 Rotate the paper guide to check for additional jammed paper underneath. If jammed paper is present, remove it.

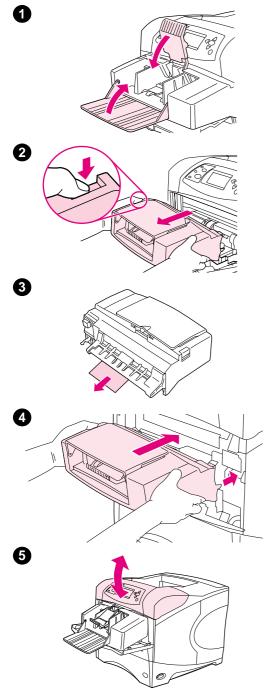
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- 6 Replace the entrance cover and close tray 1.
- 7 Reinstall the print cartridge and close the top cover.
- 8 If a jam message persists, there is still jammed paper in the printer. Look for the jam in another location. (See "Jam locations" on page 96.)

If you are using a non-HP print cartridge, the message NON HP CARTRIDGE DETECTED might appear on the printer control panel display. Press PAUSE/RESUME to continue.

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## Clearing jams from the optional envelope feeder

This section applies only to jams that occur when you are using an optional envelope feeder.

#### To clear jams from the optional envelope feeder

- 1 Remove any envelopes loaded in the optional envelope feeder. Lower the envelope weight and lift the tray extension up to the closed position.
- 2 Press and hold the release button on the left side of the optional envelope feeder. Grasp both sides of the optional envelope feeder and carefully pull it out of the printer.
- 3 Slowly remove any envelopes from the optional envelope feeder and the printer.
- Insert the optional envelope feeder into the printer until it locks into place. (The connector on the top right side of the optional envelope feeder fits into the plug in the printer.) Pull gently on the optional envelope feeder to be sure that it is securely in place.
- **5** Open and close the top cover to clear the jam message.
- 6 If a jam message persists, there is still a jammed envelope in the printer. Look for the jam in another location. (See "Jam locations" on page 96.)
- 7 Reload envelopes, making sure that you push the bottom envelopes in slightly further than the top envelopes. (See "Loading envelopes in the optional envelope feeder" on page 56.)

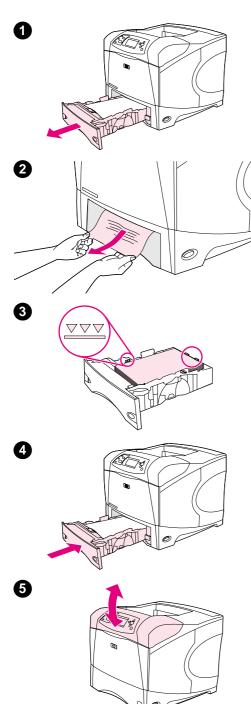
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#### Clearing jams from the trays

This section describes how to clear jams from the trays. Also see "Clearing jams from the optional envelope feeder" on page 99.

#### To clear jams from tray 1

Slowly pull the jammed paper or other print media out of the printer. If part of the paper has already been pulled into the printer, follow the steps under "To clear jams from the top-cover and print-cartridge areas" on page 97.



#### To clear jams from tray 2 or an optional 500-sheet tray

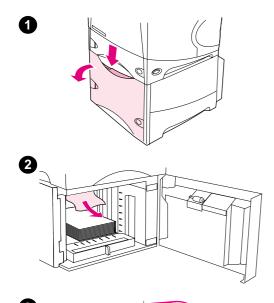
- Slide the tray out of the printer, and remove any damaged paper from the tray.
- 2 If the edge of the jammed paper is visible in the feed area, slowly pull the paper down and out of the printer. (Do not pull the paper straight out, or it will tear.) If the paper is not visible, look in the next tray or in the top-cover area. (See "To clear jams from the top-cover and print-cartridge areas" on page 97.)

#### Note

Do not force the paper if it will not move easily. If the paper is stuck in a tray, try removing it through the tray above (if applicable) or through the top-cover area.

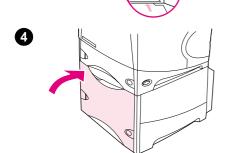
- **3** Make sure that the paper is flat in the tray at all four corners and below the maximum-height indicators.
- 4 Slide the tray back into the printer.
- **5** Open and close the top cover to clear the jam message.
- 6 If a jam message persists, there is still jammed paper in the printer. Look for the jam in another location. (See "Jam locations" on page 96.)

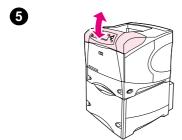
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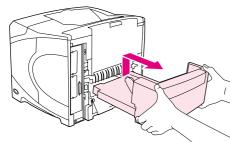
#### To clear jams from the optional 1,500-sheet tray

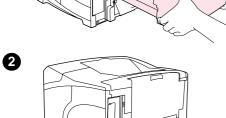
- 1 Open the front door of the tray.
- 2 If the edge of the jammed paper is visible in the feed area, slowly pull the paper down and out of the printer. (Do not pull the paper straight out, or it will tear.) If the paper is not visible, look in the top-cover area. (See "To clear jams from the top-cover and print-cartridge areas" on page 97.)
- 3 Make sure that the paper does not exceed the fill marks on the paper guides, and that the front edge of the stack is aligned with the arrows.
- 4 Close the front door of the tray.
- **5** Open and close the top cover to clear the jam message.
- 6 If a jam message persists, there is still jammed paper in the printer. Look for the jam in another location. (See "Jam locations" on page 96.)



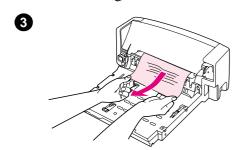


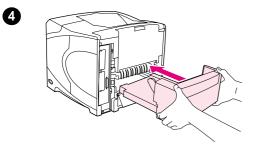
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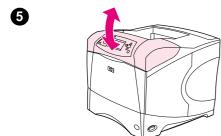




0







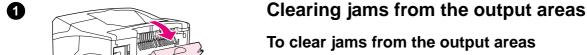
#### Clearing jams from the optional duplexer

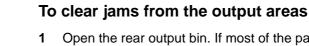
If you are duplexing a print job and experience a jam, use this procedure to check for the jam and to clear it.

#### To clear jams from the optional duplexer

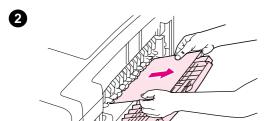
- 1 Lift the optional duplexer up and then pull it out to remove it.
- 2 Remove any paper on top of tray 2. (You might need to reach inside the printer.)
- 3 Slowly pull any paper out of the optional duplexer.
- 4 Insert the optional duplexer into the printer.
- **5** Open and close the top cover to clear the jam message.
- If a jam message persists, there is still jammed paper in the printer. Look for jam in another location. (See "Jam locations" on page 96.)

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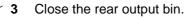
- Open the rear output bin. If most of the paper is still inside the printer, it might be easier to remove it through the top-cover area. (See "To clear jams from the top-cover and print-cartridge areas" on page 97.)
- Grasp both sides of the paper, and slowly pull the paper out of the printer. (There might be loose toner on the paper. Be careful not to spill it on yourself or into the printer.)



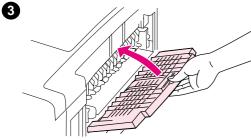
#### **Note**

If the jammed paper is difficult to remove, try opening the top cover all the way to release pressure on the paper.

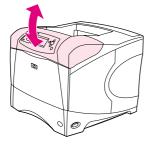
If the paper has torn, or you still cannot remove it, see "Clearing jams from the fuser area" on page 104.



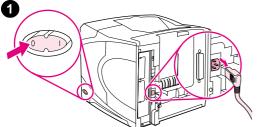
- Open and close the top cover to clear the jam message.
- If a jam message persists, there is still jammed paper in the printer. Look for the jam in another location. (See "Jam locations" on page 96.)







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Use this procedure only in these situations:

- Paper has jammed inside the fuser and cannot be removed from the top-cover area or the rear-output area.
- A sheet of paper has torn while you were trying to clear a jam from the fuser.

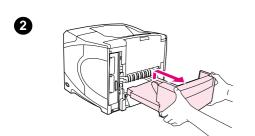
#### To clear jams from the fuser area

1 Turn the printer power off and unplug the power cord from the printer.

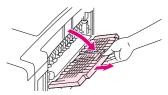


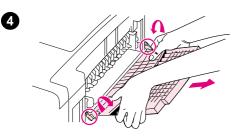
The fuser is very hot. To avoid minor burns, wait 30 minutes for the fuser to cool before removing it from the printer.

- 2 Turn the printer so that its rear cover faces you. If it is installed, remove the optional duplexer by lifting it up and then pulling it out.
- **3** Open the rear output bin and pull the extension outward until it stops.
- 4 Remove the rear output bin and extension by bending the middle of the bin down and releasing the two hinge pins.
- **5** Firmly grasp each side of the fuser. Push the blue levers upward and pull the fuser straight out of the printer.

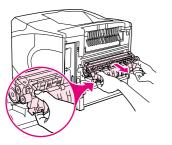




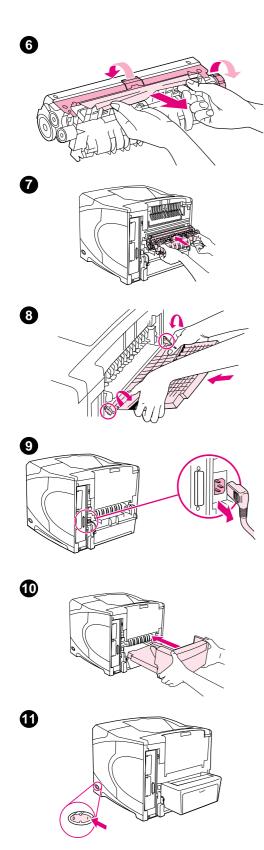








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6 Remove the jammed paper. If necessary, lift the black plastic guide that is located on the top of the fuser to gain access to the jammed paper. You can also turn the jam-clearing wheel that is located on the side of the fuser to attempt to eject the jammed paper.

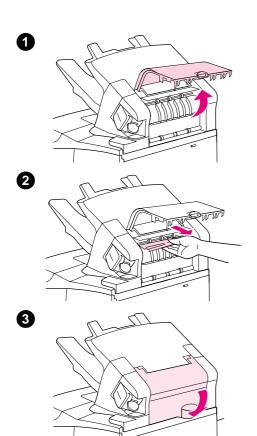
#### **CAUTION**

Do not use a sharp object to clear paper from the fuser area. You might damage the fuser.

- **7** Push the fuser firmly into the printer until the blue levers on both sides click into place.
- 8 Install the rear output bin. Pull gently on the bin to make sure that the hinge pins are fully inserted.
- 9 Plug the power cord into the printer.
- 10 Replace the optional duplexer, if it was removed.
- **11** Turn the printer power on.
- 12 If a jam message persists, there is still jammed paper in the printer. Look for the jam in another location. (See "Jam locations" on page 96.)

After clearing all jams, you will need to send the print job again because the printer power has been turned off.

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## Clearing jams from the optional stacker or stapler/stacker

Paper jams can occur in the optional stacker or the optional stapler/stacker. Staple jams can occur only in the optional stapler/stacker.

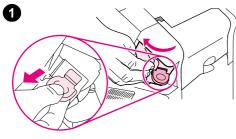
## To clear paper jams from the optional stacker or stapler/stacker

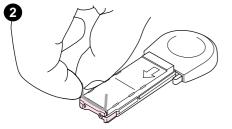
- 1 At the back of the printer, open the door on the stacker or stapler/ stacker.
- 2 Carefully remove any jammed paper.
- 3 Close the door on the stacker or stapler/stacker.
- 4 If a paper-jam message persists, there is still a paper jam. Look for it in another location. Check the front of the accessory and carefully remove any jammed paper. (See "Jam locations" on page 96.)

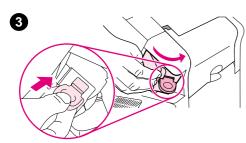
#### Note

The output bin must be pushed down into the lowest position for printing to continue.

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### To clear staple jams from the optional stapler/stacker

### Note

Clear staple jams when the message  $\mbox{\tt JAM}\ \mbox{\tt IN}\ \mbox{\tt STAPLER}$  appears on the printer control panel display.

- 1 On the right side of the stapler/stacker, turn the stapler unit toward the front of the printer until the unit clicks into the open position. Pull outward on the blue staple cartridge to remove it.
- **2** Rotate the green cover on the end of the staple cartridge upward and remove the jammed staple.
- 3 Insert the staple cartridge into the stapler unit and rotate the stapler unit toward the rear of the printer until the unit snaps into place.

The stapler needs to reload after clearing a staple jam, so the first few documents (up to five) might not be stapled. If a print job is sent and the stapler is jammed or is out of staples, the job will still print as long as the path to the stacker bin is not blocked.

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### Solving repeated paper jams

### If paper jams occur frequently, try the following:

- Check all the paper-jam locations. (See "Clearing jams" on page 96.) A piece of paper might
  be stuck somewhere in the printer. Even a small torn piece of paper in the printer path can
  cause repeated jams.
- Check that the trays are properly adjusted. (See "Loading trays" on page 42.) The guides should click into place without being too tight against the paper.
- Check that paper is correctly loaded in the trays and that the trays are not overfilled. Make sure paper is under the tabs and below the maximum-height indicators. See the sections about loading paper, starting with "Loading trays" on page 42.
- Check that all trays and paper-handling accessories are completely inserted into the printer.
   (If a tray is opened during a print job, this might cause a jam.)
- Check that all covers and doors are closed. (If a cover or door is opened during a print job, this might cause a jam.)
- Try printing to a different output bin. (See "Selecting the output bin" on page 36.)
- The sheets might be sticking together. Try bending the stack to separate each sheet. Do not fan the stack.
- If you are printing from tray 1, try reducing the size of the stack.
- If you are printing from the optional envelope feeder, make sure it is loaded correctly (with the bottom envelopes in slightly farther than the top envelopes). (See "Loading envelopes in the optional envelope feeder" on page 56.)
- If you are printing small sizes, feed the paper with the short edge first. (See "Guidelines for custom-size paper" on page 62.)
- Turn over the stack of paper in the tray. Also try rotating the paper 180°.
- Check the characteristics of the paper or other print media that you are using. Use only
  paper that meets HP specifications. (See "Paper specifications" on page 182.) Try using
  different paper to see if the problem goes away. Do not use curled, deformed, damaged, or
  irregular paper.
- Check that the environmental conditions for the printer are met. (See "Environmental specifications" on page 194.)
- Avoid using paper that has already been used in a printer or copier.
- Try using paper from a freshly opened ream.
- Try a different brand of paper.
- Do not print on both sides of envelopes or transparencies. (See "Printing envelopes" on page 51 or "Printing transparencies" on page 59.)
- Print only on full sheets of labels and do not print on both sides of label sheets. (See "Printing labels" on page 58.)
- Check that the power supplied to the printer is steady and meets printer specifications. (See "Electrical specifications" on page 194.)
- Clean the printer. (See "Cleaning the printer" on page 87.)
- Perform preventative printer maintenance if maintenance is due. (See "Performing preventative maintenance" on page 91.)

# **Understanding printer messages**

The table in this section explains messages that might appear on the printer control panel display. Printer messages and their meanings are listed in alphabetical order, with numbered messages first.

### If a message persists:

- If a message persists requesting that you load a tray, or if a message indicates that a previous print job is still in the printer memory, press PAUSE/RESUME to print or press CANCEL JOB to clear the job from the printer memory.
- If a message persists after performing all of the recommended actions, contact an HPauthorized service or support provider. (See "Getting support" on page 144.)

Note

Not all messages are described in this user guide (many are self-explanatory).

Some printer messages are affected by the Auto Continue and Clearable Warning settings on the System Setup submenu (on the Configure Device menu) at the printer control panel. See the description of "CLEARABLE WARNINGS" on page 163.

### Using the printer online Help system

This printer features a Help system at the control panel that provides instructions for resolving most printer errors. Some Help topics include animations that appear on the control panel display to show you how to resolve an error.

To view Help for a message (if available), press HELP (?). If the Help topic is longer than four lines, use the UP ARROW ( $\blacktriangle$ ) or DOWN ARROW ( $\blacktriangledown$ ) to scroll through the entire topic.

To exit the Help system, press HELP (?) again.

# **Control panel messages**

Message	Explanation or recommended action	
10.00.00 SUPPLIES MEMORY ERROR  or  10.10.00 SUPPLIES MEMORY ERROR For help press ?  13.XX.YY DUPLEX JOB INTERRUPTED For help press ?  alternates with Discard top sheet and press ✓ or alternates with Discard top 2 sheets and press ✓	The printer is unable to read the electronic information (e-label) on the print cartridge so that the printer can keep track of the page count for the print cartridge.  Open the top cover, remove the print cartridge, and reinstall it.  Install a new HP print cartridge.  There was an error while the printer was duplexing.  Remove the number of sheets indicated on the printer control panel display and press SELECT (  ). The printer should print the job correctly.	
13.XX.YY JAM IN TOP COVER AREA For help press <b>?</b> alternates with Check under print cartrid9e	Paper has jammed in the top-cover area of the printer.  1. Open the top cover.  2. Clear all paper from the area. If necessary, remove and reinstall the print cartridge.  3. If the message persists, check for paper in all other areas.  CAUTION  Ensure that all jammed paper is removed before closing the cover or tray. Open and close the top cover to clear the message. See "Clearing jams" on page 96 for more information.	
13.XX.YY JAM [LOCATION] For help press ? alternates with Then open and close top cover	Paper has either jammed in the printer or has been caught in a tray or accessory.  1. Open the tray indicated by the message.  2. Clear all paper from the area. If necessary, remove the print cartridge, duplexer, trays, stacker, or stapler/stacker accessory.  3. If the message persists, check for paper in all other areas.  CAUTION  Ensure that all jammed paper is removed before closing the cover or tray. Open and close the top cover to clear the message. See "Clearing jams" on page 96 for more information.	
20 INSUFFICIENT MEMORY For help press ? alternates with To continue press ✓ 21 PAGE TOO COMPLEX For help press ? alternates with	The printer received more data than can fit in its available memory. You might have tried to transfer too many macros, soft fonts, or complex graphics.  Press Select (✓) to print the transferred data (some data might be lost), then simplify the print job or install additional memory. (See "Printer memory and expansion" on page 169.)  The data (dense text, rules, raster or vector graphics) sent to the printer was too complex.  Press Select (✓) to print the transferred data. (Some data might be lost.)	
To continue press ✓  22 EIO [X] BUFFER OVERFLOW  To continue press ✓	Too much data was sent to the EIO card in the specified slot [X]. An improper communications protocol might be in use.  1. Press Select (✓) to clear the message. (The job will not be printed.)  2. Check the host configuration.	

essage Explanation or recommended action	
22 PARALLEL I/O BUFFER OVERFLOW For help press ?	<ol> <li>Too much data was sent to the parallel port.</li> <li>Check for a loose cable connection and be sure to use a high-quality cable. (See "Ordering information" on page 17.) Some non-HP parallel cables might be missing pin connections or</li> </ol>
alternates with	might otherwise not conform to the IEEE-1284 specification.
To continue press 🗸	2. This error can occur if the driver you are using is not IEEE-1284 compliant. For best results, use an HP driver that came with the printer. (See "Printer drivers" on page 29.)
	3. Press Select (✓) to clear the error message. (The job will not be printed.)
40 EIO [X] BAD TRANSMISSION	The connection has been broken between the printer and the EIO card in the specified slot [X]. (Data loss might occur in this situation.)
To continue press 🗸	<ul> <li>Press Select (</li></ul>
41.X PRINTER ERROR	A temporary printing error occurred.
For help press ? alternates with	<ol> <li>Press Select (✓). The page containing the error automatically reprints if jam recovery is enabled.</li> </ol>
To continue press 🗸	2. If the error does not clear, turn the printer power off, and then turn the printer power on.
41.3 UNEXPECTED SIZE IN TRAY [XX]	The printer detected a paper size different than what it was expecting. This is typically caused if two or more sheets stick together in the printer or if the tray is not properly adjusted.
For help press ?	Reload the tray with the correct paper size.
alternates with LOAD TRAY [XX]:	2. If you are printing from tray 1, verify that the correct paper size is selected at the printer control panel. (See "Paper Handling menu" on page 154.)
[TYPE] [SIZE] For help press <b>?</b>	3. If you are printing from any tray except tray 1, verify that the three paper size adjustments on the tray have been made correctly. See the description of adjustments in "Loading tray 2 or an optional 500-sheet tray" on page 43 and "Loading an optional 1,500-sheet tray" on page 45.
	4. After performing the actions above, press Select (✓). The page containing the error will automatically be reprinted if jam recovery is enabled. (Or, you might want to press CANCEL JOB to clear the job from the printer memory.)
49.XXXX PRINTER ERROR	A critical firmware error has occurred.
To continue turn off then on	<ol> <li>Press Select (✓). The page containing the error automatically reprints if jam recovery is enabled.</li> </ol>
	2. If the error does not clear, turn the printer power off, then turn the printer power on.
50.X FUSER ERROR	A fuser error has occurred.
For help press ?	1. Turn the printer power off, and then turn the printer power on.
	2. If the message persists, contact HP Customer Support. (See "Getting support" on page 144.)
50.5 FUSER ERROR	The printer detected that the wrong fuser is installed.
For help press ?	1. If this error occurred immediately after installing a maintenance kit, verify that the correct kit was installed. (See "Part numbers" on page 18.)
	2. If the message persists, contact HP Customer Support. (See "Getting support" on page 144.)
51.XX or 52.XX PRINTER ERROR	A temporary printing error occurred.
For help press ?	1. Turn the printer power off, and then turn the printer power on.
alternates with  To continue turn off then on	2. If the message persists, contact HP Customer Support. (See "Getting support" on page 144.)

Message	Explanation or recommended action	
53.XY.ZZ PRINTER ERROR To continue press Cancel Job Or	There is a problem with the printer memory. The DIMM that caused the error will not be used. Values of X and Y are as follows:  X = DIMM type  B = ROM  1 = RAM	
To continue turn off then on	<ul> <li>∀ = Device location</li> <li>∅ = Internal memory (ROM or RAM)</li> <li>1 to 4 = DIMM slots 1, 2, 3, or 4</li> <li>You might need to replace the specified DIMM. Turn the printer power off, and then replace the DIMM that caused the error.</li> </ul>	
55.X PRINTER ERROR For help press ?	<ul> <li>A temporary printing error occurred.</li> <li>1. Press SELECT (✓). The page containing the error automatically reprints if jam recovery is enabled.</li> </ul>	
alternates with To continue turn off then on	<ol> <li>If the error does not clear, turn the printer power off, and then turn the printer power on.</li> <li>If the message persists, contact HP Customer Support. (See "Getting support" on page 144.)</li> </ol>	
56.X PRINTER ERROR For help press <b>? alternates with</b> To continue turn off then on	A temporary printing error occurred as a result of incorrect input or output request.  Turn the printer power off, and then turn the printer power on.	
57.X PRINTER ERROR	A temporary printing error occurred in one of the printer fans.	
alternates with	Turn the printer power off, and then turn the printer power on.	
To continue turn off then on	2. If the message persists, contact HP Customer Support. (See "Getting support" on page 144.)	
58.X PRINTER ERROR For help press ?	A printer error has occurred where a memory tag CPU error was detected, or there is a problem with the air sensor or power supply.	
alternates with	To resolve problems with the power supply:	
To continue turn off then on	<ol> <li>Remove the printer from any UPS supplies, additional power supplies, or power strips. Plug the printer into a wall outlet and see if this resolves the problem.</li> </ol>	
	2. If the printer is already plugged into a wall outlet, try another power source in the building that is independent of the one currently being used.	
	The line voltage and current source at the printer location might need to be inspected to ensure that it meets the electrical specifications for the printer. (See "Electrical specifications" on page 194.)	
	If the message persists, contact HP Customer Support. (See "Getting support" on page 144.)	
59.XX PRINTER ERROR	A temporary printing error occurred.	
For help press ?	1. Turn the printer power off, and then turn the printer power on.	
<b>alternates with</b> To continue turn off then on	2. If the message persists, contact HP Customer Support. (See "Getting support" on page 144.)	
59.4 PRINTER ERROR	A printing error occurred.	
For help press ?	Turn the printer power off, and then turn the printer power on.	
alternates with	If the message returns, replace the print cartridge.	
To continue turn off then	3. If the message persists, contact HP Customer Support. (See "Getting support" on page 144.)  Output  Description:  Descriptio	

Message	Explanation or recommended action	
60.X PRINTER ERROR	A tray [X] that was opened or filled is trying to lift into position, but there is an obstruction in the tray.	
•	1. Open the tray, remove the paper, and remove the obstruction. Reload the paper and close the tray. Make sure that the paper is neatly stacked and that the guides are not too tight against the paper. Make sure that the tray is fully inserted into the printer and is not overfilled.	
	2. If the message persists, contact HP Customer Support. (See "Getting support" on page 144.)	
62 NO SYSTEM	This message indicates that no system was found. The printer software system is corrupt.	
To continue turn off then on	Turn the printer power off, and then turn the printer power on.	
64 PRINTER ERROR	A temporary printing error occurred in the scan buffer.	
For help press ?	Turn the printer power off, and then turn the printer power on.	
alternates with		
To continue turn off then on		
66.XY.ZZ INPUT DEVICE FAILURE	An error occurred in an external paper-handling accessory.  1. Turn the printer power off.	
For help press ?	<ol> <li>Make sure that the device is properly connected to the printer. If the accessory uses cables,</li> </ol>	
	disconnect and reconnect them.	
	3. Turn the printer power on.	
	4. If the error reappears, record the message, and contact HP Customer Support. (See "Getting support" on page 144.)	
66.XY.ZZ OUTPUT DEVICE	An error occurred in an external paper-handling accessory.	
FAILURE	1. Turn the printer power off.	
For help press ?	2. Check that the accessory is properly seated on and connected to the printer, without any gaps between the printer and the accessory. If the accessory uses cables, disconnect and reconnect them.	
	3. Turn the printer power on.	
	4. If the error reappears, record the message, and contact HP Customer Support. (See "Getting support" on page 144.)	
66.00.15 EXTERNAL DEVICE	An error occurred in an external paper-handling accessory.	
FAILURE	1. Turn the printer power off.	
For help press ?	2. Check that the accessory is properly seated on and connected to the printer, without any gaps between the printer and the accessory. If the accessory uses cables, disconnect and reconnect them.	
	3. Turn the printer power on.	
	If the error reappears, record the message, and contact HP Customer Support. (See "Getting support" on page 144.)	
68.X PERMANENT STORAGE ERROR	An error occurred in the printer permanent storage and one or more printer settings has been reset to its factory default.	
For help press ? alternates with	<ul> <li>Print a configuration page and check the printer settings to determine which values have changed. (See "Configuration page" on page 83.)</li> </ul>	
To continue press 🗸		
68.X PERMANENT STORAGE FULL	The printer permanent storage is full. Some settings might have been reset to the factory defaults.	
For help press ? alternates with	Print a configuration page and check the printer settings to determine which values have changed. (See "Configuration page" on page 83.)	
To continue press 🗸	2. Turn the printer power off. Hold down CANCEL JOB while turning the printer power on. This cleans up the permanent storage by removing old areas that are not being used.	

Message	Explanation or recommended action	
68.X PERMANENT STORAGE WRITE FAIL	The storage device is failing to write. Printing can continue, but there might be some unexpected behaviors because an error occurred in permanent storage.	
To continue press 🗸	<ul> <li>Press Select (✓) to continue.</li> </ul>	
79.XXXX PRINTER ERROR	The printer detected a critical hardware error.	
To continue turn off then on	1. Press Cancel Job to clear the print job from the printer memory. Turn the printer power off, and then turn the printer power on.	
	2. Try printing a job from a different program. If the job prints, go back to the first program and try printing a different file. (If the message appears only with a certain program or print job, contact the software vendor for assistance.)	
	If the message persists with different programs and print jobs, try these steps.	
	1. Disconnect all cables to the printer that connect it to the network or computer.	
	2. Turn the printer power off.	
	3. Remove all memory DIMMs or third-party DIMMs from the printer. (See "Installing memory" on page 170.)	
	4. Remove all EIO devices from the printer. (See "Installing EIO cards or mass storage devices" on page 173.)	
	5. Turn the printer power on.	
	If the error no longer exists, follow these steps.	
	<ol> <li>Install each DIMM and EIO device one at a time, making sure to turn the printer power off and back on as you install each device.</li> </ol>	
	2. Replace a DIMM or EIO device if you determine that it causes the error.	
	3. Reconnect all cables that connect the printer to the network or computer.	
8X. YYYY	The EIO accessory in slot [X] has encountered a critical error. [X] description:	
EIO ERROR	i = EIO slot 1 - The printer detected an error with the EIO accessory.	
	2 = EIO slot 2 - The printer detected an error with the EIO accessory.	
	6 = EIO slot 1 - The EIO accessory detected an error. The EIO accessory might be defective.	
	7 = EIO slot 2 - The EIO accessory detected an error. The EIO accessory might be defective.	
	1. Turn the printer power off, and then turn the printer power on.	
	2. Turn the printer power off, reseat the EIO accessory in slot [X], and then turn the printer power on.	
	3. Turn the printer power off, remove the EIO accessory from slot [X], install it in a different EIO slot, and then turn the printer power on.	
	4. Replace the EIO accessory in slot [X].	
ACCESS DENIED MENUS LOCKED	The printer control panel function you are trying to use has been locked to prevent unauthorized access.	
	See your network administrator.	
BAD DUPLEXER CONNECTION	The optional duplexer is not properly connected to the printer.	
For help press ?	Make sure that you are using the right-angle power cord that came with the printer.	
	<ol> <li>Try removing and reinstalling the optional duplexer. Then turn the printer power off and back on.</li> </ol>	
BAD ENV FEEDER CONNECTION	The optional envelope feeder is not connected properly to the printer.	
	<ul> <li>Try removing and reinstalling the optional envelope feeder. Then, turn the printer power off and back on.</li> </ul>	
[BINNAME] FULL	The indicated output bin [BINNAME] is full.	
Remove all paper from bin	Empty the bin.	
	<u> </u>	

Message Explanation or recommended action		
CARTRIDGE FAILURE	The print cartridge still contains part of the sealing tape.	
For help press ?	Try to remove the sealing tape.	
alternates with	2. If it cannot be removed, insert a new print cartridge and return the faulty print cartridge to	
RETURN FOR REPLACEMENT	receive a replacement.	
For help press ?		
CHECKING PRINTER	The printer is checking for possible jams or paper that was not cleared from the printer.	
CHOSEN PERSONALITY NOT AVAILABLE	The printer received a request for a personality that does not exist in the printer. The print job is canceled.	
For help press ?	To see a list of available personalities, print a configuration page. (See "To print a	
alternates with	configuration page at the control panel" on page 84.)	
To continue press 🗸		
CREATING CLEANING PAGE	The printer is printing the cleaning page.	
	Follow the instructions on the printed cleaning page to complete the cleaning.	
DETECTABLE SIZE IN TRAY	The printer detects that there is a standard size of paper loaded in the tray indicated.	
[XX]	1. If the paper is a standard size, move the knob to the <b>Standard</b> position. (See "Loading"	
For help press ?	tray 2 or an optional 500-sheet tray" on page 43.)	
alternates with	2. If the paper is a custom size, make sure that the guides are positioned correctly in the tray.	
Recommend move switch to STANDARD		
DIFFERENT PAPER SIZES IN	The stapler cannot align the paper for stapling if different paper sizes are in the job. Printing	
JOB	continues, but the job will not be stapled.	
	If stapling is required, modify the job.	
DISK DEVICE FAILURE	The EIO disk had a critical failure and can no longer be used.	
To enter menus press 🗸	<ul> <li>Remove the EIO disk and replace it with a new one. (See "To remove an installed EIO card or mass storage device (optional hard disk)" on page 173.)</li> </ul>	
DISK FILE	The requested operation could not be performed. You might have attempted an illegal	
OPERATION FAILED	operation, such as trying to download a file to a non-existent folder.	
To enter menus press 🗸		
DISK FILE	The EIO disk is full.	
SYSTEM IS FULL  To enter menus press	<ul> <li>Delete files from the EIO disk and then try again. Use the Device Storage Manager in HP Web Jetadmin to download or delete files and fonts. (See the HP Web Jetadmin</li> </ul>	
TO STITUTE TO SEE .	software Help for more information.)	
DISK IS	The EIO disk is protected, and no new files can be written to it.	
WRITE PROTECTED	Use the Device Storage Manager in HP Web Jetadmin to disable the write protection.	
To enter menus press 🗸		
DUPLEXER ERROR REMOVE DUPLEXER	The optional duplexer has an error.	
Install duplexer with	<ul> <li>Turn off the printer power and reattach the optional duplexer. (Any print jobs at the printer might be lost.)</li> </ul>	
Power off	might be lost.)	
EIO [X] disk	The disk accessory in EIO slot [X] is initializing.	
initializin9		
EIO DISK [X]	The EIO disk is not working correctly.	
NOT FUNCTIONAL	1. Remove the EIO disk from the slot indicated by [X]. (See "To remove an installed E	
For help press ?	card or mass storage device (optional hard disk)" on page 173.)	
	<ol><li>Replace it with a new EIO disk. (See "To install EIO cards or mass storage devices" on page 173.)</li></ol>	
EIO [X] disk	The disk accessory in EIO slot [X] is initializing.	
spinnin9 up	, v	

Message	Explanation or recommended action	
ENV FEEDER LOAD	A job has been sent to the optional envelope feeder and the feeder is not loaded with the correct envelope size.	
	Load the correct size in the feeder.	
	2. Make sure that the envelope size is set correctly on the Paper Handling menu at the printer control panel. (See "Paper Handling menu" on page 154.)	
	3. Pressing Pause/Resume will prompt a question asking if you would rather print on another available size of envelope in the printer. Use UP ARROW (▲) or Down ARROW (▼) to scroll through the available sizes, and then press Select (✓) to select one.	
FLASH DEVICE	The flash DIMM had a critical failure and no longer can be used.	
FAILURE	Remove the flash DIMM and replace it with a new one. (See "To install memory" on	
For help press ?	page 170.)	
FLASH FILE OPERATION FAILED	The requested operation could not be performed. You might have attempted an illegal operation, such as trying to download a file to a non existent folder.	
For help press ?		
FLASH FILE SYSTEM IS FULL For help press ?	<ul> <li>The flash DIMM is full.</li> <li>Delete files from the flash DIMM. Use Device Storage Manager in HP Web Jetadmin to download or delete files and fonts. (See the HP Web Jetadmin software Help for more information.)</li> </ul>	
FLASH IS	The flash DIMM is protected, and no new files can be written to it.	
WRITE PROTECTED For help press ?	<ul> <li>Use Device Storage Manager in HP Web Jetadmin to disable the write protection. (See the HP Web Jetadmin software Help for more information.)</li> </ul>	
INSERT OR CLOSE TRAY [XX]	The specified tray is open or missing.	
For help press ?	Insert or close the tray for printing to continue.	
INSTALL CARTRIDGE	The print cartridge has been removed and must be reinstalled for printing to continue. Make	
For help press ?	sure that the print cartridge is fully inserted.	
INSTALL FUSER	The fuser is not fully seated or has been removed and must be reinstalled for printing to	
For help press ?	continue.	
	1. If the fuser is in the printer, remove and reinstall it. If the fuser is not in the printer, install it.	
	2. Push the fuser firmly into the printer until the blue levers on both sides click into place.	
	WARNING! The fuser is very hot. To avoid minor burns, wait 30 minutes for the fuser to cool before removing it from the printer.	

Message	Explanation or recommended action	
Message  LOAD TRAY 1 [TYPE] [SIZE]  For help press ?  might alternate with  To use another tray press	<ul> <li>Explanation or recommended action</li> <li>This message occurs for the following reasons:</li> <li>Tray 1 was requested in the program, but the tray is empty.</li> <li>The printer cannot find the requested size of paper in the printer.</li> <li>If the correct paper size is loaded, the adjustments to the tray have not been set correctly, either at the printer control panel or on the tray itself. To set the type at the printer control panel, see the description of TRAY 1 TYPE in "Paper Handling menu" on page 154. To set adjustments on the tray, see "Loading trays" on page 42.</li> <li>Load the requested paper in tray 1, or press SELECT (✓) to override the message and print on a loaded paper size.</li> <li>If printing does not continue, press PAUSE/RESUME.</li> <li>If you are trying to print A4- or letter-size paper and this message appears, make sure that the default paper size is set correctly on the Printing submenu (on the Configure Device menu) at the printer control panel and also in the program. See the description of PAPER SIZE in "Configure Device menu" on page 157.</li> </ul>	
	<ul> <li>a. Press Pause/Resume to print from the next available tray.</li> <li>b. Use UP ARROW (▲) or DOWN ARROW (▼) to scroll through the available types and sizes.</li> <li>c. Press Select (✔) to accept the alternate type or size.</li> <li>Note</li> <li>If a custom size is being used, another line appears in the message giving the x and y dimensions of the paper.</li> </ul>	
LOAD TRAY [XX]: [TYPE] [SIZE] For help press ? might alternate with To use another tray press	This message occurs for the following reasons:  The tray indicated was requested, but the tray is empty.  The tray indicated was requested, but the adjustments are not set for the requested type or size.	
LOADING PROGRAM [XX] Do not power off	Programs and fonts can be stored in the printer file system. When the printer is turned on, these entities are loaded into RAM. (These entities can take a long time to load into RAM depending on the size and number of entities being loaded.) The [XXI specifies a sequence number indicating the current program being loaded.	
LOWER THE OPTIONAL BIN	The bin on the optional stapler/stacker is in the up position.  • Lower the bin.	

Message	Explanation or recommended action	
MANUALLY FEED [TYPE] [SIZE]	<ol> <li>Load the requested paper in tray 1. Press SELECT ( ) if the correct paper is already loaded in tray 1.</li> </ol>	
alternates with	2. To have the printer use paper from another tray, press SELECT ( ) when tray 1 is empty.	
To continue press 🗸	The printer will allow you to select a type and size loaded in a different tray.	
or		
To use another tray press		
NON HP CARTRIDGE DETECTED	The printer has detected that the print cartridge is not a genuine HP print cartridge.	
For help press ?	<ul> <li>If you believe you purchased an HP print cartridge, call the HP fraud hotline. (See "Contacting the HP fraud hotline" on page 145.)</li> </ul>	
	If a new cartridge has been installed, it might take up to 20 printed pages to correctly verify.	
	Note	
	Any printer repair required as a result of using non-HP toner or print cartridges is not covered under the printer warranty.	
OPTIONAL BIN 1 FULL	The stacker or stapler/stacker output bin is full.	
Remove all paper from bin	Remove the paper stacked in the bin.	
ORDER CARTRIDGE	The message first appears when about 15 percent of the toner is remaining in the print cartridge	
[XXXX] PAGES LEFT	(at 5 percent coverage, about 1,800 pages remaining for the 12,000-page cartridge in the LaserJet 4200 series and about 2,700 pages remaining for the 18,000-page cartridge in the	
For help press ?	LaserJet 4300 series). Depending on how the printer has been configured, it will either continue to print or stop.	
	1. If the printer has stopped, you can resume printing by pressing PAUSE/RESUME for each job	
	2. You might want to ensure that you have a replacement print cartridge on hand.	
	3. See "Cartridge Low and Cartridge Out conditions" on page 82 for information about how to configure printer response to toner messages.	
OUTPUT PAPER PATH OPEN	1. Make sure that the jam-access door on the optional stacker or stapler/stacker is closed.	
For help press ?	2. If your accessory is a stapler/stacker, make sure that the stapler unit is snapped into the closed position.	
PAPER WRAPPED AROUND FUSER	Turn the printer power off to keep the paper from wrapping more firmly around the fuser.	
For help press ?	2. Open the top cover and remove the print cartridge.	
alternates with	3. Remove all visible paper.	
Then open and close top cover	4. If you cannot locate the paper, leave printer power turned off and remove the fuser to remove paper. (See "Clearing jams from the fuser area" on page 104.)	
	WARNING! The fuser is very hot. To avoid minor burns, allow the fuser to cool for 30 minutes before	
	removing it from the printer.	
PERFORM PRINTER MAINTENANCE	To ensure optimum print quality, the printer prompts you to perform routine maintenance every 200,000 pages. To order a printer maintenance kit, see "Ordering information" on page 17. For	
For help press ?	information about maintenance, see "Performing preventative maintenance" on page 91.	
PROCESSING JOB	The printer is processing the print job.	
RAM DISK DEVICE	The RAM disk had a critical failure and can no longer be used.	
FAILURE	Contact an HP authorized service or support provider. (See "Ordering parts and supplies"	
To enter menus press 🗸	on page 143.)	
RAM DISK FILE OPERATION FAILED	The requested operation could not be performed. You might have attempted an illegal operation, such as trying to download a file to a non existent folder.	
To enter menus press 🗸		

Message	Explanation or recommended action	
RAM DISK FILE	The RAM disk is full.	
SYSTEM IS FULL To enter menus press ✔	1. Delete files and then try again, or turn the printer power off, and then turn the printer power on to delete all files on the device. (Use Device Storage Manager in HP Web Jetadmin or another software utility to delete the files. (See the HP Web Jetadmin software Help for more information.)	
	2. If the message persists, increase the size of the RAM disk. Change the RAM disk size on the System Setup submenu (on the Configure Device menu) at the printer control panel. See the description of the RAM disk menu items in "System Setup submenu" on page 162.	
RAM DISK IS	The RAM disk is protected, and no new files can be written to it.	
WRITE PROTECTED	Use the Device Storage Manager in HP Web Jetadmin to disable the write protection.	
To enter menus press 🗸		
REPLACE CARTRIDGE For help press ?	The REPLACE CARTRIDGE message appears in one of the following situations. Depending on how the printer has been configured, it will either continue to print or stop. (See "CARTRIDGE LOW" on page 163 and "CARTRIDGE OUT" on page 163.)	
	The print cartridge has run out of toner. If CARTRIDGE OUT is set to CONTINUE (in the System Setup submenu of the Configure Device menu), the printer continues printing without interaction until the cartridge reaches the end of drum life. HP does not guarantee print quality after the REPLACE CARTRIDGE message is first displayed. Replace the print cartridge as soon as possible. (See "Ordering information" on page 17.) The REPLACE CARTRIDGE message appears until you replace the print cartridge.	
	If CARTRIDGE OUT is set to STOP, the printer stops printing until you replace the print cartridge or resume printing by pressing SELECT for each print job. The printer can continue printing (without interaction) until the cartridge reaches the end of drum life, but HP does not guarantee print quality after the REPLACE CARTRIDGE message is displayed. Replace the print cartridge as soon as possible. (See "Ordering information" on page 17.)	
	<ul> <li>The print cartridge has reached the end of its drum life. You must replace the print cartridge immediately. No override is possible, even if toner remains in the cartridge. This situation occurs to protect the printer.</li> </ul>	
	See "Cartridge Low and Cartridge Out conditions" on page 82 for details about how to configure printer response to toner messages.	
SIZE MISMATCH	The tray indicated is loaded with a different size of paper than the size configured for the tray.	
TRAY [XX]= [SIZE]	Load the tray with the size configured for the tray.	
For help press ?	<ul> <li>Make sure that the guides are positioned correctly in the tray, and then make sure that the knob is set correctly to <b>Standard</b> or <b>Custom</b>.</li> </ul>	
STANDARD BIN FULL	The top (standard) output bin is full and needs to be emptied.	
Remove all paper from bin		
STAPLER LOW ON STAPLES For help press ?	Fewer than 70 staples remain in the optional stapler/stacker staple cartridge. Printing continues until the cartridge runs out of staples, and the STAPLER OUT OF STAPLES message appears on the printer control panel display.	
	<ul> <li>Replace the staple cartridge. For information about replacing the staple cartridge, see "Loading staples" on page 41. For information about ordering a new staple cartridge, see "Ordering information" on page 17.</li> </ul>	
STAPLER OUT OF STAPLES For help press ?	The stapler in the optional stapler/stacker is out of staples. The printer behavior depends on how STAPLES OUT is configured. (See "Output Setup submenu" on page 164.)	
•	<ul> <li>If STAPLES OUT=STOP, the printer stops printing until you refill the stapler or press Select.</li> <li>This is the default setting.</li> </ul>	
	• If STAPLES OUT=CONTINUE, printing continues, but the job will not be stapled.	
	<ul> <li>Replace the staple cartridge. For information about refilling the stapler, see "Loading staples" on page 41. For information about ordering a new staple cartridge, see "Ordering information" on page 21.</li> </ul>	
TOO MANY PAGES IN JOB TO STAPLE	The maximum number of sheets the stapler can staple is 15. The print job finishes printing but will not be stapled.	

Message	Explanation or recommended action	
TOO MANY TRAYS INSTALLED	Too many optional trays are installed. A maximum of two optional trays is allowed. Turn off the	
Turn power off and	printer power and remove a tray.	
uninstall a tray		
TRAY [XX]	This message appears if the tray is closed, but the knob position was not changed. It also	
[TYPE] [SIZE]	appears if the switch is set to Custom, and the tray is opened, and then closed.	
If size is detectable:	Select the paper size at the printer control panel. If the size is Custom, make sure that the knob is set to <b>Custom</b> .	
Size detected by tray		
alternates with		
To change type press 🗸		
·		
If size is not detectable:		
Size specified by user		
alternates with		
To change type press 🗸		
TRAY [XX] EMPTY	Load paper in the empty tray [XX] to clear the message.	
[TYPE] [SIZE]	If you do not load the specified tray, the printer will continue printing from the next tray with the	
To enter menus press 🗸	same paper size and type, and the message will continue to appear.	
TRAY [XX] OPEN	The tray cannot feed paper to the printer because tray [X] is open and must be closed for printing	
For help press <b>?</b>	to continue.	
•	Check the trays and close any that are open.	
TRAY [N] TYPE=[XXXX]	The printer has received a job under the following conditions:	
	the type of paper requested by the job is not available in the printer	
	<ul> <li>paper has been placed in tray 1 (thus triggering the tray-1 paper sensor)</li> </ul>	
	If you press any printer control panel buttons, the message disappears in about 1 minute. You can take either of the following actions:	
	<ul> <li>Press SELECT (  ✓) to accept the type of paper.</li> </ul>	
	<ul> <li>Use UP ARROW (▲) or DOWN ARROW (▼) to change the type, and then press SELECT</li> <li>(✓) to accept the new type.</li> </ul>	
	Note	
	Changing the type here changes the default for TRAY 1 TYPE on the Paper Handling menu. See the description of "TRAY 1 TYPE" on page 155.	
	If you do not do anything during the timeout period (about 1 minute), the printer will print on the paper in tray 1. It will also change the default for TRAY 1 TYPE on the Paper Handling menu to the type requested by the program that sent the job.	
Unable to mory job [JOBNAME]	Memory or file system failures would not allow a mopy job to occur. Only one copy will be produced.	
Unable to store job	The print job named cannot be stored due to a memory, disk, or configuration problem.	
[JOBNAME]	Correct the error and then try again to store the job.	
USE INSTEAD?	If the requested paper size or type is not available, the printer asks if it should use another paper size or type instead.	
TRAY [X]:	Use UP ARROW (▲) or Down ARROW (▼) to scroll through the available types and sizes.	
[TYPE]	Press Select ( ) to accept the alternate type or size.	
[SIZE]		
Wait for printer to reinitialize	The RAM disk setting has been changed at the printer control panel. This change will not take effect until the printer reinitializes.	
	If you change the mode of the external device, turn the printer power off, turn the printer power on, and wait for the printer to reinitialize.	

# Mopy disk error messages

The following table lists the disk mopy (multiple original copy) error numbers reported on either the Printer Collation or Job Storage Disk Error page, which is printed when an error exists. Use the disk jobs task to delete jobs from the disk. Use the Device Storage Manager in HP Web Jetadmin to initialize the disk.

uninitialized.  HP Web Jetadmin. If the problem persists, replace the hard disk. (See "Installing EIO cards or mass storage devices" on page 173.)  RAM disk: Turn the printer power off and then on again.  Invalid number of bytes given in a read/write request.  Attempt to create a file or folder that already exists.  Bad disk.  Hard disk: Initialize the hard disk using the Device Manager in HP Web Jetadmin. If the problem persists, replace the hard disk. (See "Installing EIO cards or mass storage devices" on page 173.)  Bad seek request — the resulting offset would be negative.  Jensel of Jensel or J	Disk error number	Error description	Solution
found.  Invalid number of bytes given in a read/write request.  Attempt to create a file or folder that already exists.  The user has sent a username that is the same as an existing folder. Change the username in the driver and resend the job.  Hard disk: Initialize the hard disk using the Device Manager in HP Web Jetadmin. If the problem persists, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Bad seek request – the resulting offset would be negative.  Unexpected internal error.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Bad file system.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Bad file system.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.  If the problem persists on a hard disk, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Hardware failure.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.  If the problem persists on a hard disk, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  For a maximum number of directories has been reached.  There is a maximum number of folders that can be put on a disk. Stored jobs are stored in folders created for each user.  To solve this problem:  Delete other directories on the hard disk.	1		(See"Installing EIO cards or mass storage devices" on page 173.)
Attempt to create a file or folder that already exists.  The user has sent a username that is the same as an existing folder. Change the username in the driver and resend the job.  Bad disk.  Hard disk: Initialize the hard disk using the Device Manager in HP Web Jetadmin. If the problem persists, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  No volume label.  Hard disk: Initialize the hard disk using the Device Manager in HP Web Jetadmin. If the problem persists, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Bad seek request – the resulting offset would be negative.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Bad file system.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Hardware failure.  Replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  There is a maximum number of folders that can be put on a disk. Stored jobs are stored in folders created for each user.  To solve this problem:  Delete all jobs stored for a user. The firmware will automatically delete the folder for a user with no stored jobs.  Delete other directories on the hard disk.	3	-	Possible data corruption. Delete the job that prompted the error.
already exists.  Change the username in the driver and resend the job.  Bad disk.  Hard disk: Initialize the hard disk using the Device Manager in HP Web Jetadmin. If the problem persists, replace the hard disk. (See'Installing EIO cards or mass storage devices' on page 173.)  No volume label.  Hard disk: Initialize the hard disk using the Device Manager in HP Web Jetadmin. If the problem persists, replace the hard disk. (See'Installing EIO cards or mass storage devices' on page 173.)  Bad seek request – the resulting offset would be negative.  Unexpected internal error.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.  If the problem persists on a hard disk, replace the hard disk. (See'Installing EIO cards or mass storage devices' on page 173.)  Bad file system.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the hard disk. (See'Installing EIO cards or mass storage devices' on page 173.)  Hard disk. If the problem persists on a hard disk replace the hard disk. (See'Installing EIO cards or mass storage devices on page 173.)  The maximum number of directories has been reached.  To solve this problem:  Delete all jobs stored for a user. The firmware will automatically delete the folder for a user with no stored jobs.  Delete other directories on the hard disk.	5		Possible data corruption. Delete the job that prompted the error.
HP Web Jetadmin. If the problem persists, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  16 No volume label. Hard disk: Initialize the hard disk using the Device Manager in HP Web Jetadmin. If the problem persists, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  23 Bad seek request – the resulting offset would be negative.  24 Unexpected internal error. Possible data corruption. Delete the job that prompted the error.  25 Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk. (See"Installing EIO cards or mass storage devices" on page 173.)  25 Bad file system. Possible data corruption. Delete the job that prompted the error.  26 Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk. (See"Installing EIO cards or mass storage devices" on page 173.)  26 Hardware failure. Replace the hard disk. (See"Installing EIO cards or mass storage devices on page 173.)  27 The maximum number of directories has been reached.  28 There is a maximum number of folders that can be put on a disk. Stored jobs are stored in folders created for each user.  29 To solve this problem:  29 Delete all jobs stored for a user. The firmware will automatically delete the folder for a user with no stored jobs.  29 Delete other directories on the hard disk.	6		
HP Web Jetadmin. If the problem persists, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Bad seek request – the resulting offset would be negative.  Unexpected internal error.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.  If the problem persists on a hard disk, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Bad file system.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.  If the problem persists on a hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.  If the problem persists on a hard disk, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Replace the hard disk. (See"Installing EIO cards or mass storage devices on page 173.)  The maximum number of directories has been reached.  There is a maximum number of folders that can be put on a disk. Stored jobs are stored in folders created for each user.  To solve this problem:  Delete all jobs stored for a user. The firmware will automatically delete the folder for a user with no stored jobs.  Delete other directories on the hard disk.	15	Bad disk.	HP Web Jetadmin. If the problem persists, replace the hard disk.
Offset would be negative.  24 Unexpected internal error.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.  If the problem persists on a hard disk, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Bad file system.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.  If the problem persists on a hard disk, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Replace the hard disk. (See"Installing EIO cards or mass storage devices on page 173.)  The maximum number of directories has been reached.  The maximum number of directories on the hard disk.  Delete all jobs stored for a user. The firmware will automatically delete the folder for a user with no stored jobs.  Delete other directories on the hard disk.	16	No volume label.	HP Web Jetadmin. If the problem persists, replace the hard disk.
Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.  If the problem persists on a hard disk, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Bad file system.  Possible data corruption. Delete the job that prompted the error.  Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.  If the problem persists on a hard disk, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)  Hardware failure.  Replace the hard disk. (See"Installing EIO cards or mass storage devices on page 173.)  The maximum number of directories has been reached.  There is a maximum number of folders that can be put on a disk. Stored jobs are stored in folders created for each user.  To solve this problem:  Delete all jobs stored for a user. The firmware will automatically delete the folder for a user with no stored jobs.  Delete other directories on the hard disk.	23		Possible data corruption. Delete the job that prompted the error.
<ul> <li>Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.</li> <li>If the problem persists on a hard disk, replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)</li> <li>Hardware failure.</li> <li>Replace the hard disk. (See"Installing EIO cards or mass storage devices on page 173.)</li> <li>The maximum number of directories has been reached.</li> <li>There is a maximum number of folders that can be put on a disk. Stored jobs are stored in folders created for each user.</li> <li>To solve this problem:</li> <li>Delete all jobs stored for a user. The firmware will automatically delete the folder for a user with no stored jobs.</li> <li>Delete other directories on the hard disk.</li> </ul>	24	Unexpected internal error.	<ul> <li>Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.</li> <li>If the problem persists on a hard disk, replace the hard disk.</li> </ul>
on page 173.)  The maximum number of directories has been reached.  There is a maximum number of folders that can be put on a disk. Stored jobs are stored in folders created for each user.  To solve this problem:  Delete all jobs stored for a user. The firmware will automatically delete the folder for a user with no stored jobs.  Delete other directories on the hard disk.	55	Bad file system.	<ul> <li>Disk media problem. Initialize the hard disk accessory, or turn the printer power off and then on to reinitialize the RAM disk.</li> <li>If the problem persists on a hard disk, replace the hard disk.</li> </ul>
has been reached.  jobs are stored in folders created for each user.  To solve this problem:  Delete all jobs stored for a user. The firmware will automatically delete the folder for a user with no stored jobs.  Delete other directories on the hard disk.	56	Hardware failure.	Replace the hard disk. (See"Installing EIO cards or mass storage devices" on page 173.)
70 Disk error. Contact HP Customer Support. (See "Contacting HP" on page 144.)	59		<ul> <li>jobs are stored in folders created for each user.</li> <li>To solve this problem:</li> <li>Delete all jobs stored for a user. The firmware will automatically delete the folder for a user with no stored jobs.</li> </ul>
	70	Disk error.	Contact HP Customer Support. (See "Contacting HP" on page 144.)

# Understanding accessory lights for the stacker and stapler/stacker

The following table lists accessory (such as the stacker or stapler/stacker) errors reported by the accessory lights and on the printer control panel display.

# **Accessory lights**

Light	Explanation and solution
Solid green	<ul> <li>The accessory is receiving power and is ready.</li> <li>The stapler is low on staples. STAPLER LOW ON STAPLES appears on the printer control panel display. (See "STAPLER LOW ON STAPLES" on page 119.)</li> <li>The number of pages in the job exceeds the 15-page limit for stapling. TOO MANY PAGES IN JOB TO STAPLE appears on the printer control panel display. (See "TOO MANY PAGES IN JOB TO STAPLE" on page 119.)</li> <li>The job contains different paper sizes. DIFFERENT PAPER SIZES IN JOB appears on the printer control panel display. (See "DIFFERENT PAPER SIZES IN JOB" on page 115.)</li> </ul>
Solid amber	<ul> <li>The accessory is experiencing a hardware malfunction. 66.XY.ZZ OUTPUT DEVICE FAILURE appears on the printer control panel display. (See "66.XY.ZZ OUTPUT DEVICE FAILURE" on page 113.)</li> </ul>
Blinking amber	<ul> <li>The accessory has a staple jam. 13.XX.YY JAM IN STAPLER appears on the printer control panel display. (See "13.XX.YY JAM [LOCATION]" on page 110.)</li> </ul>
	<ul> <li>The accessory has a paper jam, or a sheet needs to be removed from the unit, even if the sheet is not jammed. 13.XX.YY JAM IN OUTPUT DEVICE appears on the printer control panel display. (See "13.XX.YY JAM [LOCATION]" on page 110.)</li> </ul>
	<ul> <li>The bin is full. OPTIONAL BIN 1 FULL appears on the printer control panel display. (See "OPTIONAL BIN 1 FULL" on page 118.)</li> </ul>
	<ul> <li>The stapler is out of staples. STAPLER OUT OF STAPLES appears on the printer control panel display. (See "STAPLER OUT OF STAPLES" on page 119.)</li> </ul>
	<ul> <li>The bin is in the up position. LOWER THE OPTIONAL BIN appears on the printer control panel display. (See "LOWER THE OPTIONAL BIN" on page 117.)</li> </ul>
	<ul> <li>The jam-access door is open. OUTPUT PAPER PATH OPEN appears on the printer control panel display. (See "OUTPUT PAPER PATH OPEN" on page 118.)</li> </ul>
	<ul> <li>The stapler unit is open. OUTPUT PAPER PATH OPEN appears on the printer control panel display. (See "OUTPUT PAPER PATH OPEN" on page 118.)</li> </ul>
Off	<ul> <li>The printer might be in PowerSave mode. Press any button on the printer control panel.</li> </ul>
	<ul> <li>The accessory is not receiving power. Turn the printer power off. Check that the accessory is properly seated on and connected to the printer, without any gaps between the printer and the accessory. Turn the printer power on.</li> </ul>
	<ul> <li>The accessory might have been disconnected and reconnected while the printer power was on. 66.00.15 EXTERNAL DEVICE FAILURE appears on the printer control panel display. (See "66.00.15 EXTERNAL DEVICE FAILURE" on page 113.)</li> </ul>
	<ul> <li>The job might have stalled between the printer and the accessory.</li> <li>PROCESSING JOB appears on the printer control panel display. (See "PROCESSING JOB" on page 118.) Turn the printer power off, and then turn the printer power on.</li> </ul>

### Replacing accessories or accessory components

If you are unable to resolve problems indicated by the stacker or stapler/stacker accessory lights, contact the HP Customer Care Center. (See "Contacting HP" on page 144.) If an HP Customer Care Center representative recommends replacement of the stacker, stapler/ stacker, or stapler/stacker components, you can either perform the replacement procedure yourself or have your HP-authorized dealer replace it.

- For the steps to replace the entire stacker accessory (HP part number Q2442A) or the entire stapler/stacker accessory (HP part number Q2443A), see the install guide that came with the accessory.
- For the steps to replace the stapler unit (HP part number Q3216-60501), see "Replacing the stapler unit" on page 92.
- For the steps to replace the staple cartridge (HP part number Q3216A), see "Loading staples" on page 41.

For more details about ordering replacement parts or supplies, see "Ordering information" on page 17.

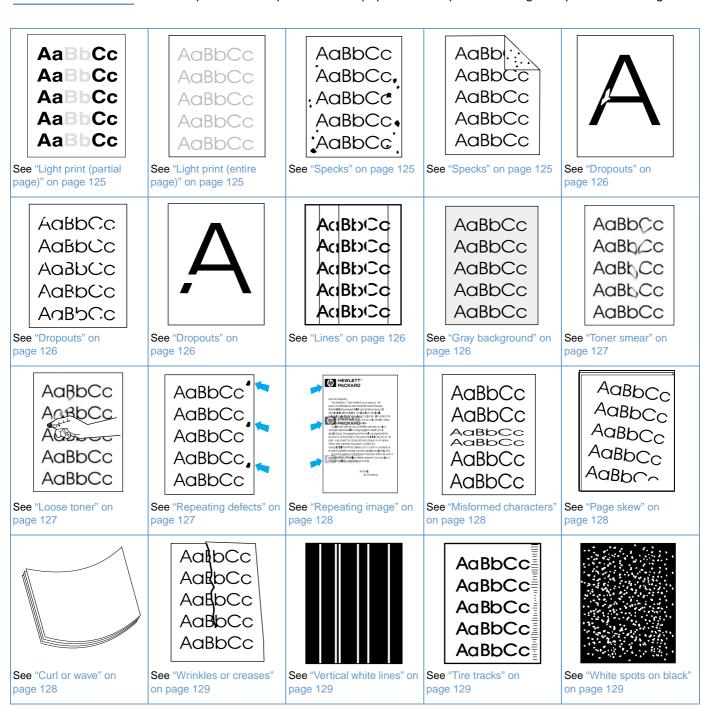
# **Correcting print-quality problems**

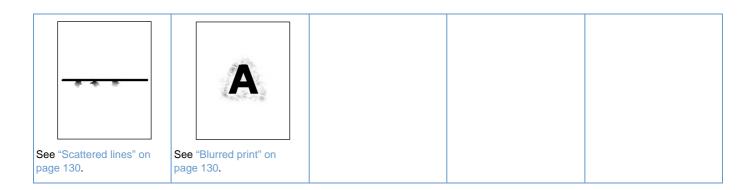
This section helps you define print-quality problems and what to do to correct them. Often print-quality problems can be handled easily by making sure that the printer is properly maintained, using print media that meets HP specifications, or running a cleaning page.

Use the examples in this image defect table to determine which print-quality problem you are experiencing, and then see the corresponding reference pages to troubleshoot. These examples identify the most common print-quality problems. If you still have problems after trying the suggested remedies, contact HP Customer Support. (See "Service and support" on page 143.)

Note

The examples below depict letter-size paper that has passed through the printer short-edge first.





Aa Cc Aa Cc Aa Cc Aa Cc

### Light print (partial page)

- 1 Make sure that the print cartridge is fully installed.
- 2 The toner level in the print cartridge might be low. Replace the print cartridge.
- Maintenance might be due. Check this by printing a copy of the supplies status page. (See "Supplies status page" on page 85). If maintenance is due, order and install the printer maintenance kit. (See "Performing preventative maintenance" on page 91.)

AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc

### Light print (entire page)

- 1 Make sure that the print cartridge is fully installed.
- 2 Make sure that the EconoMode setting is turned off at the control panel and in the printer driver. (See "ECONOMODE" on page 161.)
- Open the Configure Device menu at the printer control panel. Open the Print Quality submenu and increase the TONER DENSITY setting. (See "TONER DENSITY" on page 161.)
- 4 Try using a different type of paper.
- 5 The print cartridge might be almost empty. Replace the print cartridge.

# AaBbCc AaBbCc AaBbCc AaBbCc

### **Specks**

Specks might appear on a page after a jam has been cleared.

- 1 Print a few more pages to see if the problem corrects itself.
- 2 Clean the inside of the printer and run a manual cleaning page to clean the fuser. (See "Cleaning the printer" on page 87 and "Running the cleaning page manually" on page 89.) If specks occur frequently, you can set the printer to run a cleaning page automatically, if the printer does *not* have an optional duplexer installed. (See "Running the cleaning page automatically" on page 90.)
- AaBbCc 3 Try

AaBbCc AaBbCc

AaBbl.

- 3 Try using a different type of paper.
- 1 Check the print cartridge for leaks. If the print cartridge is leaking, replace it.

# A

AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc

### **Dropouts**

- 1 Make sure that the environmental specifications for the printer are being met. (See "General specifications" on page 195.)
- 2 If the paper is rough, and the toner easily rubs off, open the Configure Device menu at the printer control panel. Open the Print Quality submenu, select FUSER MODES, and then select the paper type you are using. Change the setting to HIGH 1 or HIGH 2, which helps the toner fuse more completely onto the paper. (See "FUSER MODES" on page 160.)
- 3 Try using a smoother paper.



## AciBbyCc AciBbyCc AciBbyCc AciBbyCc AciBbyCc

### Lines

- 1 Print a few more pages to see if the problem corrects itself.
- 2 Clean the inside of the printer and run a manual cleaning page to clean the fuser. (See "Cleaning the printer" on page 87 and "Running the cleaning page manually" on page 89.)
- 3 Replace the print cartridge.
- 4 Maintenance might be due. Check this by printing a copy of the supplies status page. (See "Supplies status page" on page 85.) If maintenance is due, order and install the printer maintenance kit. (See "Performing preventative maintenance" on page 91.)

### AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc

### Gray background

- 1 Do not use paper that has already been run through the printer.
- 2 Try using a different type of paper.
- 3 Print a few more pages to see if the problem corrects itself.
- **4** Turn over the stack of paper in the tray. Also, try rotating the paper 180 °.
- 5 Open the Configure Device menu at the printer control panel. On the Print Quality submenu, increase the TONER DENSITY setting. See the description of "TONER DENSITY" on page 161.
- 6 Make sure that the environmental specifications for the printer are being met. (See "General specifications" on page 195.)
- 7 Replace the print cartridge.

AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc

### Toner smear

- Print a few more pages to see if the problem corrects itself.
- 2 Try using a different type of paper.
- Make sure that the environmental specifications for the printer are being met. (See "General specifications" on page 195.)
- 4 Clean the inside of the printer and run a manual cleaning page to clean the fuser. (See "Cleaning the printer" on page 87 and "Running the cleaning page manually" on page 89.)
- Maintenance might be due. Check this by printing a copy of the supplies status page. (See "Supplies status page" on page 85.) If maintenance is due, order and install the printer maintenance kit. (See "Performing preventative maintenance" on page 91.)
- 6 Replace the print cartridge.

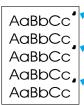
Also see "Loose toner" on page 127.



### Loose toner

Loose toner, in this context, is defined as toner that can be rubbed off the page.

- If paper is heavy or rough, open the Configure Device menu at the printer control panel. On the Print Quality submenu, select FUSER MODES, and then select the paper type you are using. Change the setting to HIGH 1 or HIGH 2, which helps the toner fuse more completely onto the paper. (See "FUSER MODES" on page 160.) You must also set the type of paper for the tray you are using. (See "Printing by type and size of paper (locking trays)" on page 48.)
- 2 If you have observed a rougher texture on one side of your paper, try printing on the smoother side.
- 3 Make sure that the environmental specifications for the printer are being met. (See "Printer specifications" on page 193.)
- 4 Make sure that type and quality of the paper you are using meet HP specifications. (See "Paper specifications" on page 182.)
- Maintenance might be due. Check this by printing a copy of the supplies status page. (See "Supplies status page" on page 85.) If maintenance is due, order and install the printer maintenance kit. (See "Performing preventative maintenance" on page 91.)



### Repeating defects

- Print a few more pages to see if the problem corrects itself.
- 2 If the distance between defects is 38 mm (1.5 inches) or 94 mm (3.76 inches), the print cartridge might need to be replaced.
- Clean the inside of the printer and run a manual cleaning page to clean the fuser. (See "Cleaning the printer" on page 87 and "Running the cleaning page manually" on page 89.)
- 4 Maintenance might be due. Check this by printing a copy of the supplies status page. (See "Supplies status page" on page 85.) If maintenance is due, order and install the printer maintenance kit. (See "Performing preventative maintenance" on page 91.)

Also see "Repeating image" on page 128.

# Description Does No Ampril Does No Ampril Brown Committee of the control of th

### Repeating image

This type of defect might occur when using preprinted forms or a large quantity of narrow paper.

- 1 Print a few more pages to see if the problem corrects itself.
- 2 Make sure that type and quality of the paper you are using meet HP specifications. (See "Paper specifications" on page 182.)
- 3 Maintenance might be due. Check this by printing a copy of the supplies status page. (See "Supplies status page" on page 85.) If maintenance is due, order and install the printer maintenance kit. (See "Performing preventative maintenance" on page 91.)
- 4 If the distance between defects is 38 mm (1.5 inches) or 94 mm (3.76 inches), the print cartridge might need to be replaced.



### Misformed characters

- 1 Print a few more pages to see if the problem corrects itself.
- 2 Make sure that the environmental specifications for the printer are being met. (See "General specifications" on page 195.)
- 3 The printer might be due for maintenance. Check this by printing a copy of the supplies status page. (See "Supplies status page" on page 85.) If maintenance is due, order and install the printer maintenance kit. (See "Performing preventative maintenance" on page 91.)



### Page skew

- 1 Print a few more pages to see if the problem corrects itself.
- 2 Verify that there are no torn pieces of paper inside the printer.
- 3 Make sure that paper is loaded correctly and that all adjustments have been made. (See "Loading trays" on page 42.) Make sure that the guides in the tray are not too tight or too loose against the paper.
- 4 Turn over the stack of paper in the tray. Also, try rotating the paper 180 °.
- Make sure that the type and quality of the paper you are using meet HP specifications. (See "Paper specifications" on page 182.)
- 6 Make sure that the environmental specifications for the printer are being met. (See "General specifications" on page 195.)
- 7 The printer might be due for maintenance. (See "Performing preventative maintenance" on page 91.)



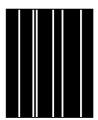
### **Curl or wave**

- 1 Turn over the stack of paper in the tray. Also, try rotating the paper 180°.
- 2 Make sure that the type and quality of the paper you are using meet HP specifications. (See "Paper specifications" on page 182.)
- 3 Make sure that the environmental specifications for the printer are being met. (See "Printer specifications" on page 193.)
- 4 Try printing to a different output bin.
- 5 If paper is lightweight and smooth, open the Configure Device menu at the printer control panel. On the Print Quality submenu, select FUSER MODES, and then select the paper type you are using. Change the setting to LOW, which helps reduce the heat in the fusing process. (See "FUSER MODES" on page 160.) You must also set the type of paper for the tray you are using. (See "Printing by type and size of paper (locking trays)" on page 48.)



### Wrinkles or creases

- Print a few more pages to see if the problem corrects itself.
- 2 Make sure that the environmental specifications for the printer are being met. (See "General specifications" on page 195.)
- 3 Turn over the stack of paper in the tray. Also, try rotating the paper 180 ° F.
- 4 Make sure that paper is loaded correctly and all adjustments have been made. (See "Loading trays" on page 42.)
- 5 Make sure that the type and quality of the paper you are using meet HP specifications. (See "Paper specifications" on page 182.)
- 6 If envelopes are creasing, try storing envelopes so that they lie flat.



### Vertical white lines

- Print a few more pages to see if the problem corrects itself.
- Make sure that the type and quality of the paper you are using meet HP specifications. (See "Paper specifications" on page 182.)
- 3 Replace the print cartridge.

AaBbCc AaBbCc AaBbCc AaBbCc

### Tire tracks

This defect typically occurs when the print cartridge has far exceeded its rated usage of 12,000 pages (HP LaserJet 4200 series) or 18,000 pages (HP LaserJet 4300 series)-for example, if you are printing a very large quantity of pages with very little toner coverage.

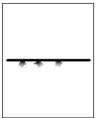
- Replace the print cartridge.
- 2 Reduce the number of pages that you print with very low toner coverage.



### White spots on black

- 1 Print a few more pages to see if the problem corrects itself.
- 2 Make sure that the type and quality of the paper you are using meet HP specifications. (See "Paper specifications" on page 182.)
- Make sure that the environmental specifications for the printer are being met. (See "General specifications" on page 195.)
- 4 Replace the print cartridge.

### **Scattered lines**



- Make sure that the type and quality of the paper you are using meet HP specifications. (See "Paper specifications" on page 182.)
- 2 Make sure that the environmental specifications for the printer are being met. (See "General specifications" on page 195.)
- 3 Turn over the stack of paper in the tray. Also, try rotating the paper 180°.
- 4 Open the Configure Device menu at the printer control panel. Open the Print Quality submenu and change the TONER DENSITY setting. (See "TONER DENSITY" on page 161.)
- 5 Open the Configure Device menu at the printer control panel. On the Print Quality submenu, open OPTIMIZE and set LINE DETAIL=ON.

### **Blurred print**



- 1 Make sure that the type and quality of the paper you are using meet HP specifications. (See "Paper specifications" on page 182.)
- 2 Make sure that the environmental specifications for the printer are being met. (See "General specifications" on page 195.)
- 3 Turn over the stack of paper in the tray. Also, try rotating the paper 180 °.
- 4 Do not use paper that already has been run through the printer.
- 5 Decrease the toner density. See the description of "TONER DENSITY" on page 161.
- Open the Configure Device menu at the printer control panel. On the Print Quality submenu, open OPTIMIZE and set HIGH TRANSFER=ON. (See "OPTIMIZE" on page 160.)

# **Determining printer problems**

# **Troubleshooting flowchart**

If the printer is not responding properly, use the flowchart to determine the problem. If the printer does not pass a step, follow the corresponding troubleshooting suggestions.

If you cannot resolve the problem after following the suggestions in this guide, contact an HP authorized service or support provider. (See "Contacting HP" on page 144.)

Note

Macintosh users: For more troubleshooting information, see "Troubleshooting flowchart for Macintosh users" on page 136.

### 1 Does the control panel display read READY?

YES →	Go to step 2.			
NO ↓				
The display is blank, and the printer fan is off.	The display is blank, but the printer fan is on.	The display is in the wrong language.	The display shows garbled or unfamiliar characters.	A message other than READY appears on the printer control panel display.
<ul> <li>Check the power cord connections and the power switch.</li> <li>Plug the printer into a different outlet.</li> <li>Check that the power supplied to the printer is steady, and meets printer specifications. (See "Electrical specifications" on page 194.)</li> </ul>	<ul> <li>Press a printer control panel button to see if the printer responds.</li> <li>Turn the printer power off, and then turn the printer power on.</li> </ul>	Turn the printer power off. Hold down SELECT (✓) while turning the printer power on until all three lights stay on. Then, press SELECT (✓). Press UP ARROW (▲) or DOWN ARROW (▼) to scroll through the available languages. Press SELECT (✓) to save the desired language as the new default.	<ul> <li>Make sure that the desired language is selected at the printer control panel.</li> <li>Turn the printer power off, and then turn the printer power on.</li> </ul>	Go to     "Understanding     printer messages"     on page 109.

# 2 Can you print a configuration page?

(See "Configuration page" on page 83.)

YES	\$ →	Go to step 3.			
NO	<b>\</b>				
A c	onfiguration page	does not print.	Αŀ	olank page prints.	A message other than READY or PRINTING CONFIGURATION appears on the printer control panel display.
•	adjusted, and insta Using the compute queue or print spoo has been paused. with the current pri is paused, a config	or, check the print oler to see if the printer of the print of the printer of the prin	•	Check that the sealing tape is not still in the print cartridge. (See the getting started [start] guide or the instructions that came with the print cartridge.)  The print cartridge might be empty. Install a new print cartridge.	Go to "Understanding printer messages" on page 109.

### 3 Can you print from a program?

YES →

Go to step 4.

NO ↓

### The job will not print.

- If the job will not print, and a message appears on the printer control panel display, see "Understanding printer messages" on page 109.
- Using the computer, check to see if the printer has been paused. Press PAUSE/RESUME to continue.
- If the printer is on a network, check that you are printing to the correct printer. To verify that it is not a network problem, connect the computer directly to the printer with a parallel cable, change the port to LPT1, and try to print.
- Check the interface cable connections. Disconnect and reconnect the cable at the computer and the printer.
- Test the cable by trying it on another computer.
- If you are using a parallel connection, make sure that the cable is IEEE-1284 compliant.
- If the printer is on a network, print a configuration page, (See "Configuration page" on page 83.) If an HP Jetdirect print server is installed, the Jetdirect page will print with the configuration page. Check the Jetdirect page to verify in the Protocol Information section that server and node name match the names in the printer driver.
- To verify that it is not a computer problem, print from another computer (if possible).
- Make sure that the print job is being sent to the correct port (LPT1 or network printer port, for example).
- Check that you are using the proper printer driver. (See "Select the right printer driver for your needs" on page 30.)
- Reinstall the printer driver. (See the getting started [start] guide.)
- Check that the computer port is configured and working properly. (Try connecting another printer to that port and printing.)
- If printing with the PS driver, on the Printing submenu (on the Configure Device menu) at the printer control panel, set PRINT PS ERRORS=ON, and then print the job again. (See "PRINT PS ERRORS" on page 158.) If an error page prints, see the instructions in the next
- On the System Setup submenu (on the Configure Device menu) at the printer control panel, make sure that PERSONALITY=AUTO. (See "PERSONALITY" on page 162.)
- You might be missing a printer message that could help you solve the problem. On the System Setup submenu (on the Configure Device menu) at the printer control panel, temporarily turn the Clearable Warnings and Auto Continue settings off. (See "CLEARABLE WARNINGS" on page 163 and "AUTO CONTINUE" on page 163.) Then, print the job again.

### A PS error page or list of commands prints.

- The printer might have received a nonstandard PS code. On the System Setup submenu (on the Configure Device menu) at the printer control panel, set PERSONALITY=PS for this print job only. After the job has printed, return the setting to AUTO. (See "PERSONALITY" on page 162.)
- Make sure that the print job is a PS job, and that you are using the PS driver.
- The printer might have received PS code although it is set to PCL. On the System Setup submenu (on the Configure Device menu), set PERSONALITY=AUTO. (See "PERSONALITY" on page 162.)

# 4 Does the job print as expected?

ΥE	$S \rightarrow Go to step 5.$			
NC	<b>)</b>			
	nt is garbled, or only a portion of the page nts.	Printing stops in the middle of the job.	Print speed is slower than expected.	A printer control panel setting is not taking effect.
•	Check that you are using the proper printer driver. (See "Select the right printer driver for your needs" on page 30.)  The data file sent to the printer might be corrupt. To test, try printing it on another printer (if possible), or try a different file.  Check the interface cable connections. Test the cable by trying it on another computer (if possible).  Replace the interface cable with a high-quality cable (see "Ordering information" on page 17).  Simplify the print job, or print at a lower resolution. See the description of "RESOLUTION" on page 160, or install more printer memory. (See "Printer memory and expansion" on page 169.)  You might be missing a printer message that could help you solve the problem. On the System Setup submenu (on the Configure Device menu) at the printer control panel, temporarily turn the Clearable Warnings and Auto Continue settings off. (See "CLEARABLE WARNINGS" on page 163 and "AUTO CONTINUE" on page 163). Then print the job again.	CANCEL JOB might have been pressed. Check that the power supplied to the printer is steady, and that it meets printer specifications. (See "Electrical specifications" on page 194.)	<ul> <li>Simplify the print job.</li> <li>Add more memory to the printer. (See "Printer memory and expansion" on page 169.)</li> <li>Turn banner pages off. (See your network administrator.)</li> <li>Note that slower speeds should be expected if you are printing narrow paper, printing from tray 1, using the HIGH 2 fuser mode, or have set Small Paper Speed to SLOW.</li> </ul>	Check settings in the printer driver or program. (The printer driver and program settings override printer control panel settings.)
Th	e print job is not formatted correctly.	Paper is not fed correct	ly or is damaged.	There are print-quality problems.
•	Check that you are using the proper printer driver. (See "Select the right printer driver for your needs" on page 30.) Check the program settings. (See the program Help.) Try a different font. Downloaded resources might have been lost. You might need to download them again.	<ul> <li>Make sure that the paper is loaded correctly and that the guides are not too tight or too loose against the paper stack.</li> <li>If you are having problems printing custom-size paper, see "Guidelines for custom-size paper" on page 62.</li> <li>If pages are wrinkled or curled, or if the image is skewed on the page, see "Correcting print-quality problems" on page 124.</li> </ul>		<ul> <li>Adjust the print resolution. (See "RESOLUTION" on page 160.)</li> <li>Check that RET is on. (See "RET" on page 161.)</li> <li>Go to "Correcting print-quality problems" on page 124.</li> </ul>

# 5 Does the printer select the proper trays and paper-handling accessories?

YES → For other problems, ch	neck the Contents, the Index, or the printer di	TVOI OTIMIO TICIPI	
•	An optional accessory is not working properly.	A message other than READY appears on the printer control panel display.	
Make sure that you have selected the correct tray. (See "Selecting which tray is used for printing" on page 46.)  Make sure that trays are correctly configured for paper size and type. (See "Loading tray 2 or an optional 500-sheet tray" on page 43.) Print a configuration page to see current tray settings. (See "Configuration page" on page 83.)  Make sure that the tray selection (Source) or Type in the printer driver or program is set correctly. (The printer driver and program settings override the printer control panel settings.)  By default, paper loaded in tray 1 will be printed first. If you do not want to print from tray 1, remove any paper loaded in the tray or change the USE REQUESTED TRAY setting. (See "Customizing tray 1 operation" on page 47.) Change TRAY 1 SIZE and TRAY 1 TYPE to a setting other than ANY.  If you want to print from tray 1, but cannot select the tray in a program, see "Customizing tray 1 operation" on page 47.	<ul> <li>Print a configuration page to verify that the accessory is installed properly and is functional. (See "Configuration page" on page 83.)</li> <li>Configure the printer driver to recognize the installed accessories (including trays). (See the printer driver online Help.)</li> <li>Turn the printer power off, and then turn the printer power on.</li> <li>Verify that you are using the correct optional accessory for the printer.</li> <li>If the optional duplexer will not duplex, check that the rear output bin is closed.</li> <li>If the optional duplexer will not duplex, you might need to install more memory. (See "Printer memory and expansion" on page 169.)</li> <li>If the optional stacker or stapler/stacker is not working properly, check the accessory lights. (See "Accessory lights" on page 122.)</li> <li>If the optional stacker or stapler/stacker is not working properly, check to see if a message appears on the printer control panel display. (See "Control panel messages" on page 110.)</li> <li>If the optional stapler/stacker is not stapling, but the accessory light is solid green, and neither TOO MANY PAGES IN JOB nor DIFFERENT PAPER SIZES IN JOB appears on the printer control panel display, call for support. (See "Getting support" on page 144.)</li> </ul>	Go to "Understanding printer messages" on page 109.	

# **Troubleshooting flowchart for Macintosh users**

# 1 Can you print from a program?

YES → Go to step 2.			
NO ↓			
	Auto Setup did not automatically set up the printer.	The printer driver icon does not appear in the Chooser (OS 9) or Print Center (OS X)	
control panel display. (See the first page of "Troubleshooting flowchart" on page 131.)  Make sure that the correct printer driver is selected in the left half of the Chooser (OS 9) or Print Center (OS X). Then make sure that the desired printer name is selected (highlighted) on the right half of the Chooser or Print Center.	<ul> <li>Set up the printer manually by selecting Configure (OS 9).</li> <li>Reinstall the printer software. (See the getting started [start] guide.)</li> <li>Select an alternate PPD. (See "Selecting an alternate PPD" on page 138.)</li> <li>The PPD might have been renamed. If so, select the renamed PPD. (See "Selecting an alternate PPD" on page 138.)</li> <li>Auto Setup works only in AppleTalkand USB-connected devices.</li> </ul>	<ul> <li>Make sure that the Apple LaserWriter 8 Chooser (OS 9) or Print Center (OS X) extension resides in the Extensions folder.</li> <li>If the Chooser or Print Center is not present anywhere on your system, contact Apple Computer, Inc.</li> </ul>	

# 2 Does the job print as expected?

YES	$\rightarrow$	For other problems, o	chec	k the Contents, the Index, or the print	ter (	online Help.
NO	o <b>↓</b>					
The	The print job is not sent to the desired printer.		The print job has incorrect fonts.		The computer cannot be used while the printer is printing.	
n th th (:	nother printer with the sample in the sample in the printer name matche the <b>Chooser</b> (OS 9) or <b>F</b> See "Selecting an alternage 138.)	print job. Verify that s the name selected in Print Center (OS X).	•	If you are printing an .eps file, try downloading the fonts contained in the .eps file to the printer before printing. Use the HP LaserJet Utility. (See "HP LaserJet Utility" on page 32.) If the document is not printing with New York, Geneva, or Monaco fonts, open the <b>Page Setup</b> dialog box, and select <b>Options</b> to clear substituted fonts.	•	Select Print in Background on the Background Printing menu in the Print dialog box. Status messages will be redirected to the Desktop Print Monitor, allowing the computer to continue working while the printer is printing.

### Selecting an alternate PPD

- 1 Open the Chooser (OS 9) or Print Center (OS X) on the Apple menu.
- 2 Click the LaserWriter 8 icon.
- 3 If you are on a network with multiple zones, select the zone in the AppleTalk Zones box where the printer is located.
- 4 Click the printer name you want to use in the Select a PostScript Printer box. (Double-clicking will immediately generate the next few steps.)
- 5 Click **Setup**. (This button might read **Create** for first-time setup.)
- 6 Click Select PPD.
- 7 Find the PPD that you want in the list and click **Select**. If the PPD is not listed, select one of the following options:
  - Select a PPD for a printer with similar features.
  - Select a PPD in another folder.
  - Select the generic PPD by clicking **Use Generic**. The generic PPD allows you to print, but limits your access to printer features.
- 8 In the Setup dialog box, click Select, and then click OK to return to the Chooser or Print Center.

Note

If you manually select a PPD, an icon might not appear next to the selected printer in the **Select** a **PostScript Printer** box. In the **Chooser** or **Print Center**, click **Setup**, click **Printer Info**, and then click **Update Info** to show the icon.

9 Close the Chooser or Print Center.

### Renaming the printer

If you are going to rename the printer, do this before selecting the printer in the **Chooser** (OS 9) or **Print Center** (OS X). If you rename the printer after selecting it in the **Chooser** or **Print Center**, you will have to go back to the **Chooser** or **Print Center** and reselect it.

Use the Set Printer Name feature in the HP LaserJet Utility to rename the printer.

# **Troubleshooting the optional hard disk**

Item	Explanation				
The printer does not recognize the optional hard disk.	Turn the printer power off and verify that the hard disk is inserted correctly and is securely fastened. Print a configuration page to confirm that the optional hard disk has been recognized. (See "Configuration page" on page 83.)				
You receive this message: DISK FAILURE. EIO X DISK NOT FUNCTIONAL	Turn the printer power off and make sure that the EIO disk is inserted correctly and securely fastened. If the printer control panel message continues to appear, the optional hard disk needs to be replaced.				
You receive this message: Disk is Write Protected.	Fonts and forms cannot be stored on the optional hard disk when it is write protected. Use the Device Storage Manager in HP Web Jetadmin or the Macintosh-based HP LaserJet Utility to remove the write protection from the optional hard disk.				
	Press SELECT (✓) to open the printer control panel menus.				
You attempted to use a disk-resident font, but the printer substituted a different font.	If you are using PCL, print the PCL Font Page, and verify that the font is on the optional hard disk. If you are using PS, print the PS Font Page and make sure that the font is on the optional hard disk. If the font is not on the optional hard disk, use Device Storage Manager in HP Web Jetadmin or the Macintosh-based HP LaserJet Utility to download the font. (See "PS or PCL font list" on page 86.)				

# **Troubleshooting PS errors**

Item	Explanation					
A text listing of PS commands prints instead of your PS printing job.	The printer control panel PERSONALITY=AUTO setting might have been confused by a nonstandard PS code. Check the PERSONALITY setting (on the System Setup submenu of the Configure Device menu) to see if it is set to PS or PCL. (See "PERSONALITY" on page 162.) If it is set to PCL, set it to PERSONALITY=AUTO. If it is set to AUTO, set it to PS for this print job only. When the job has printed, return the setting to AUTO.					
The job prints in Courier (the default font) instead of the font	The requested font is not available in the printer or is not present on the disk. Use a font download utility to download the desired font.					
you requested.	Fonts downloaded to memory are lost if the printer power is turned off. They are also lost if Resource Saving is not used and a personality switch is performed to print a PCL job. Disk fonts are not affected by PCL jobs or by turning the printer power off.					
	Print a PS Font Page to verify that the font is available. (See "PS or PCL font list" on page 86.) If a disk font appears to be missing, it might be because a software utility was used to delete the font, because the disk was re-initialized, or because the disk drive is not installed correctly. Print a configuration page to verify that the disk drive is installed and functioning correctly. (See "Configuration page" on page 83.)					
	Print a file folder to help identify available fonts. (See "Information menu" on page 153.)					
A page fails to print.	Set PRINT PS ERRORS=ON (in the System Setup submenu of the Device Configuration menu). (See "PERSONALITY" on page 162.) Then, send the job again to print a PS error page.					
A PS error page prints.	<ul> <li>Make sure that the print job is a PS job.</li> <li>Check to see whether your software expected you to send a setup or PS header file to the printer.</li> <li>Check the printer setup in your program to make sure that the printer is selected.</li> <li>Check cable connections to ensure that they are secure.</li> <li>Simplify the graphic.</li> </ul>					
The printer pulls paper from the wrong tray.  Use the information in "Selecting which tray is used for printing" on page 46 to change being used.						

# Communicating with an optional HP Jetdirect print server

If the printer contains an optional HP Jetdirect print server, and you cannot communicate with the printer over the network, verify the operation of the print server.

- Check the HP Jetdirect configuration page. To print one, see "Configuration page" on page 83.
- If the message "I/O Card Ready" does not appear on the HP Jetdirect configuration page, see the troubleshooting section of the HP Jetdirect Print Server Administrator's Guide.

If the printer contains an HP Jetdirect 10/100TX print server, check to see that the print server was able to link to the network:

- Check the link-speed indicators (10 or 100) on the print server. If both are off, the print server failed to link to the network.
- Check the HP Jetdirect configuration page. The message "Loss of Carrier Error" indicates that the print server failed to link to the network.

If the print server failed to link, verify that all cables are correctly connected. If all cables are correctly connected and the print server still fails to link, follow the steps below to reconfigure the print server:

- 1 Use the EIO menu to set the link speed (10 or 100 Mbps) and duplex mode (full- or half-duplex) so that they match the network. (See "EIO [X]" on page 165.) For example, if the port on the network switch is set for 100TX full-duplex operation, you must set the print server for 100TX full-duplex operation.
- 2 Turn the printer power off and back on and check the print server operation. If the print server fails to link, try a different network cable.

# Service and support

#### Introduction

This section contains information to help you order supplies and contact HP. It also provides warranty, repacking, and software license information.

### **Ordering parts and supplies**

This section provides information regarding ordering parts, supplies, and documentation directly from HP.

#### **Parts**

In the United States, order replacement parts at <a href="http://www.hp.com/hps/parts">http://www.hp.com/hps/parts</a> or at <a href="http://partsurfer.hp.com">http://partsurfer.hp.com</a>. Outside the United States, order parts by contacting your local authorized HP service center.

For information about ordering printer supplies, see "Ordering information" on page 17.

#### Related documentation and software

Order documentation and software from the websites listed in "Getting support" on page 144. Some documentation and software are available for download at the listed websites.

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### **Contacting HP**

This section provides information regarding how to contact HP to obtain product support (using the Internet or telephone) or to obtain additional service and extended support. It also contains information for contacting the HP fraud hotline if you suspect that the HP supply you purchased is not a genuine HP supply.

### **Getting support**

This section provides information for getting support from HP by using HP websites or by telephone.

#### **Technical support websites**

Support specifically for the HP LaserJet 4200 series or 4300 series printer

Answers to frequently asked questions for your specific printer

http://www.hp.com/support/lj4200 or http://www.hp.com/support/li4300

#### **HP Customer Care Online**

Printer drivers, support documentation, and answers to frequently asked questions

#### http://www.hp.com

Select your country/region in the **Select a country/region** field located at the top, right corner of the page. Then select the **Support** block.

#### **Parts**

Parts information

http://www.hp.com/hps/parts

#### **Telephone support**

HP provides free telephone support during the product warranty period. When you call, you will be connected to a responsive team waiting to help you. For the number you should call in your country/region, see the support sheet that came in the box with your product. Before calling, have the following information available:

- Product name (for example, HP LaserJet 4300).
- Product serial number (found on the inside edge of the printer, under the top cover).
- The date of purchase of your product and a description of the problem you are experiencing.
- A printed configuration page. (See "Configuration page" on page 83.)

Before you call, try these basic troubleshooting measures:

- Test your software installation. Attempt to print a test page from your program.
- Try reinstalling the software.
- If reinstalling the software does not correct the problem, see the Readme file on the CD-ROM that came in the printer box, or call the telephone number for your country/region listed on the support sheet that came in the printer box.

You can also find answers to frequently asked questions at the following websites: <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4200</a> or <a href="http://www.hp.com/support/lj4300">http://www.hp.com/support/lj4200</a>.

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### Obtaining extended service and support

You can obtain extended service agreements or support packs for your HP product.

#### **HP** service agreements

To obtain an HP service agreement, visit <a href="http://www.hp.com">http://www.hp.com</a>. In the **Select a country/region** field at the top, select your country/region and click the **Support** block. You can also contact your HP-authorized dealer.

#### **HP SupportPacks**

The HP SupportPack is a packaged service agreement that upgrades your basic HP LaserJet product warranty (1 year) and extends coverage up to 5 years.

HP SupportPacks are sold by HP resellers and are available in either a shrink-wrap version for a 3-year service package only (register with HP to activate this service) or an electronic version for a 1-, 2-, 3-, 4-, or 5-year service package (register by fax or on the Internet).

For ordering and pricing details, as well as other HP printer support services, contact your local HP reseller or visit the HP website at <a href="http://www.hp.com/go/printerservices">http://www.hp.com/go/printerservices</a> for more information.

### Contacting the HP fraud hotline

Call the HP fraud hotline when you install an HP LaserJet print cartridge and a printer message says the cartridge is a non-HP cartridge. HP will help determine if the product is genuine and take steps to resolve the problem.

Your print cartridge might not be a genuine HP one if you notice the following issues:

- You are experiencing a high number of problems with the print cartridge.
- The print cartridge does not look like it usually does (for example, the pull tab or the box is different).
- A message appears on the printer control panel display indicating that the printer has detected a non-HP print cartridge.

In the United States: Call toll-free at 1-877-219-3183.

**Outside the United States:** You can call collect. Dial the operator and ask to place a collect call to the telephone number 1-770-263-4745. If you do not speak English, a representative at the HP fraud hotline who speaks your language will assist you. Or, if someone who speaks your language is not available, a language line interpreter will connect approximately one minute after the beginning of the call. The language line interpreter is a service that will translate between you and the representative for the HP fraud hotline.

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### **Warranty information**

For warranty statements, see "Hewlett-Packard limited warranty statement" on page 147 and "Limited warranty for print-cartridge life" on page 148. You can also locate printer warranties on the Internet. (See "Getting support" on page 144.)

For service during and after the warranty period, use the following resources:

- If printer hardware fails during the warranty period, go to <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4200</a>, or contact an HP-authorized service or support provider.
- If you have an HP service agreement or HP SupportPack, request service as specified in the agreement.
- If you do not have an HP service agreement or HP SupportPack, contact an HP-authorized service or support provider.

If you are shipping equipment to be serviced, see "Guidelines for repacking the printer" on page 148.

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### **Hewlett-Packard limited warranty statement**

#### HP PRODUCT DURATION OF WARRANTY

HP LaserJet 4200, 4200n, 4200tn, 4200dtn, 4200dtns, and 4200dtnsl

1 year from purchase date - return for repair

HP LaserJet 4300, 4300n, 4300tn, 4300dtn,

1 year from purchase date - return for repair

4300dtns, and 4300dtnsl

- 1. HP warrants to you, the end-user customer, that HP hardware and accessories will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.
- 2. HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace the software which does not execute its programming instructions due to such defects.
- HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a
  reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of
  the purchase price upon prompt return of the product.
- 4. HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.
- 5. Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.
- 6. TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province.
- 7. HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit, or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons.
- 8. TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries/regions, states, or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

### Limited warranty for print-cartridge life

#### Note

The warranty below applies to the print cartridge that came with this printer. This warranty supersedes all previous warranties (19 July 1996).

This HP product is warranted to be free from defects in materials and workmanship during its useful life. (End of life is indicated by the ORDER CARTRIDGE message on the printer control panel display.)

The warranty does not cover print cartridges that have been refilled, are emptied, abused, misused, or tampered with in any way.

This limited warranty gives you specific legal rights. You might have other rights that vary from country/region to country/region, state to state, and province to province.

To the extent allowed by applicable law, in no event shall Hewlett-Packard Company be liable for any incidental, consequential, special, indirect, punitive, or exemplary damages or lost profits from any break of this warranty or otherwise.

### **Guidelines for repacking the printer**

- Remove and retain any DIMMs (dual inline memory modules) installed in the printer. (See "Installing memory" on page 170.)
- Remove and retain any optional accessories installed in the printer (such as the optional duplexer or optional hard disk).
- Remove and retain the print cartridge.

#### **CAUTION**

To prevent damage to the print cartridge, store the cartridge in its original packing material, or store it so that it is not exposed to light.

- Use the original shipping container and packing material, if possible. (Shipping damage as a
  result of inadequate packing is the customer's responsibility.) If you have already disposed
  of the printer's packing material, contact a local mailing service for information on repacking
  the printer.
- If possible, include print samples and 50 to 100 sheets of paper or any other print media that
  is not printing correctly.
- Include a completed copy of the Service Information Form ("Service information form" on page 149).
- HP recommends insuring the equipment for shipment.

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### **Service information form**

WHO IS RETURNING THE EQUIP	MENT?	Date:
Person to contact:		Phone: ( )
Alternate contact:		Phone: ( )
Return shipping address:	Special shipping instructions:	
WHAT IS BEING SENT?		
Model name:	Model number:	Serial number:
Please attach any relevant printouts wh repair (manuals, cleaning supplies, etc.)		essories that are not required to complete the
WHAT NEEDS TO BE DONE? (A	ttach a separate sheet if necessary.	)
Describe the conditions of the failure.     were you running? Is the failure repeated.		ing when the failure occurred? What software
2. If the failure is intermittent, how much	time elapses between failures?	
3. Is the unit connected to any of the fol	lowing? (Give manufacturer and model nur	mber.)
Personal computer:	Modem:	Network:
4. Additional comments:		
HOW WILL YOU PAY FOR THE RE	PAIR?	
☐ Under warranty	Purchase/received date:	
_ 5.135. 113.113,	(Enclose proof of purchase or receiving document v	
☐ Maintenance contract number:		
☐ Purchase order number:		
	orices do not apply, a minimum purchase o	uthorized signature must accompany any order is required. Standard repair prices can be
Authorized signature:		Phone: ( )
Billing address:	Special billing instructions:	

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#### No Disassembly or decryption

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#### **Export requirements**

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# Control panel menus

#### **Overview**

You can perform most routine printing tasks from the computer by using the program or printer driver. These two methods are the most convenient way to control the printer, and they will override the printer control panel settings. See the Help file for your program, or, for more information about gaining access to the printer driver, see "Gain access to the Windows printer driver" on page 31.

You can also control the printer by changing settings at the printer control panel. Use the control panel to gain access to printer features not supported by the program or printer driver.

### **Understanding the menus**

You can print a menu map at the printer control panel that shows the settings with the currently selected values. (See "To print a control panel menu map" on page 26.) The sections that follow list the settings and possible values. In the Values column, the default value for each setting is the one with an asterisk (\*) next to it.

Some menus or menu items appear only if certain options are installed in the printer. For example, the ENUELOPE FEEDER TYPE menu item appears only if an optional envelope feeder is installed in the printer. Quick Copy and Stored Job both require that an optional hard disk is installed in the printer.

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### Retrieve Job menu

This menu provides a list of the stored jobs in the printer and access to all the Job Storage features. You can print or delete these jobs at the printer control panel. See "Printing a private job" on page 72 and "Storing a print job" on page 74 for more information about using this menu.

**Note** 

If you turn the printer power off, all stored jobs are deleted unless an optional hard disk is installed.

Item	Values	Explanation
[USERNAME]	There is no value to select.	The name of the person who sent the job.
[JOBNAME]	There is no value to select.	The name of the job stored in the printer. Select one of your jobs or all of your private jobs (those that were assigned a PIN in the printer driver). To select all of your private jobs, select ALL PRIVATE JOBS.
NO STORED JOBS	There is no value to select.	Indicates that there are no stored jobs to print or delete.
ALL PRIVATE JOBS	There is no value to select.	Appears if two or more private jobs are stored in the printer. Selecting this item prints all private jobs stored in the printer for that user, after the correct PIN is entered.
Print	There is no value to select.	Prints the selected job.
ENTER PIN TO PRINT	*0000 to 9999	A prompt that appears for jobs that were assigned a personal identification number (PIN) in the printer driver. You must enter the PIN to print the job.
COPIES	*1 to 32000	Allows you to select the number of copies that you want to print.
		1-32000: Prints the requested number of copies of the job.
Delete	There is no value to select.	Deletes the selected job from the printer.
ENTER PIN TO DELETE	*0000 to 9999	A prompt that appears for jobs that were assigned a PIN in the printer driver. You must enter the PIN to delete the job.

### Information menu

This menu contains printer information pages that give details about the printer and its configuration. To print an information page, scroll to the desired page and press  $SELECT(\checkmark)$ .

Item	Explanation	
PRINT MENU MAP	The menu map shows the layout and current settings of the printer control panel menu items. For more information, see "Checking the printer configuration" on page 83.	
PRINT CONFIGURATION	The configuration page shows the current printer configuration. If an HP Jetdirect print server is installed, an HP Jetdirect configuration page will print out as well. For more information, see "Configuration page" on page 83.	
PRINT SUPPLIES STATUS PAGE	The supplies status page shows the levels of the supplies for the printer, calculation of the number of pages remaining, and cartridge-usage information. This page is available only if you are using genuine HP supplies. For more information, see "Supplies status page" on page 85.	
PRINT USAGE	The usage page shows the quantity of pages printed, as well as the paper source used. It also shows the number of one-sided versus two-sided pages that have been printed.	
	Note Appears only if a mass-storage device that contains a recognized file system is installed in the printer, such as an optional flash DIMM or optional hard disk accessory. This item generates a page containing information that can be used for accounting purposes.	
PRINT FILE DIRECTORY	Appears only if a mass storage device that contains a recognized file system is installed in the printer, such as an optional flash DIMM or optional hard disk accessory. The file directory shows information for all installed mass storage devices. For more information, see "Printer memory and expansion" on page 169.	
PRINT PCL FONT LIST	The PCL font list shows all the PCL fonts currently available to the printer. For more information, see "PS or PCL font list" on page 86.	
PRINT PS FONT LIST	The PS font list shows all the PS fonts currently available to the printer. For more information, see "PS or PCL font list" on page 86.	

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### **Paper Handling menu**

If paper-handling settings are correctly configured at the printer control panel, you can print by selecting the type and size of paper in the program or printer driver. For more information about configuring for paper types and sizes, see "Printing by type and size of paper (locking trays)" on page 48. For more information about supported paper types and sizes, see "Supported sizes and weights of paper" on page 183 and "Supported types of paper" on page 187.

Some items on this menu (such as duplex and manual feed) are available in the program or printer driver (if the appropriate driver is installed). Program and printer driver settings override control panel settings. For more information, see "Using printer driver features" on page 68.

Item	Values	Explanation
ENVELOPE FEEDER SIZE	ANY *COM10 ENVELOPE MONARCH ENVELOPE C5 ENVELOPE DL ENVELOPE B5 ENVELOPE	Appears only if the optional envelope feeder is installed. Set the value to correspond with the envelope size currently loaded in the optional envelope feeder.
ENVELOPE FEEDER TYPE	ANY *PLAIN PREPRINTED LETTERHEAD PREPUNCHED LABELS BOND RECYCLED COLOR CARDSTOCK > 64 9/m² ROUGH	Appears only if the optional envelope feeder is installed. Set the value to correspond with the envelope type currently loaded in the optional envelope feeder.
TRAY 1 SIZE	*ANY LETTER LEGAL EXECUTIVE A4 A5 ISOB5 JISB5 JEXEC JPOSTD 16 COM 10 ENVELOPE MONARCH ENVELOPE C5 ENVELOPE DL ENVELOPE B5 ENVELOPE CUSTOM	Sets the value to correspond with the paper size currently loaded in tray 1.  INY: If both the type and size for tray 1 are set to INY, the printer will pull paper from tray 1 first as long as paper is loaded in the tray.  A size other than INY: The printer does not pull from this tray unless the type or size of the print job matches the type or size loaded in this tray.  For more information, see "Customizing tray 1 operation" on page 47.

Item	Values	Explanation
TRAY 1 TYPE	*ANY PLAIN PREPRINTED LETTERHEAD TRANSPARENCY PREPUNCHED LABELS BOND RECYCLED COLOR CARDSTOCK > 64 9/m² ROUGH	Sets the value to correspond with the type of paper or other print media currently loaded in tray 1.  INNY: If both the type and size for tray 1 are set to INNY, the printer will pull paper from tray 1 first as long as paper is loaded in the tray.  A type other than INNY: The printer does not pull from this tray unless the type or size of the print job matches the type or size loaded in this tray.
TRAY 2 SIZE	*LETTER LEGAL A4 EXECUTIVE A5 ISO B5 CUSTOM	Set the value to correspond with the paper size currently loaded in the specified tray, where [N] is the number of the tray.
TRAY 2 TYPE  TRAY [N] TYPE	ANY  *PLAIN  PREPRINTED  LETTERHEAD  TRANSPARENCY  PREPUNCHED  LABELS  BOND  RECYCLED  COLOR  CARDSTOCK > 64 a/m²  ROUGH  ANY  *PLAIN	Sets the value to correspond with the type of paper or other print media currently loaded in the specified tray, where [N] is the number of the tray.  This item appears only if an optional tray is installed.
	PREPRINTED LETTERHEAD TRANSPARENCY PREPUNCHED LABELS BOND RECYCLED COLOR CARDSTOCK > 64 9/m² ROUGH	
TRAY [N] SIZE	*LETTER LEGAL A4	This item appears only if an optional tray is installed. The available sizes might vary depending upon the optional feeder device that is installed.
Tray [N] Custom	There is no value to select.	This item appears only if a tray is set to a custom size.
UNIT OF MEASURE	INCHES MM	Selects the unit of measure to use when you set custom paper sizes for the specified tray.
X DIMENSION	3.0 <b>to</b> 8.50 INCHES 76 to 216 MM	Sets the measurement of the width of the paper (measurement from side to side in the tray).

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Item	Values	Explanation
Y DIMENSION	5.0 <b>to</b> 14.00 INCHES	Sets the measurement of the length of the paper (measurement from front to back in the tray).
		After the Y DIMENSION value is selected, a summary screen appears. This screen contains feedback that summarizes all the information entered on the previous three screens, such as TRAY 1 SIZE= $8.50\times14$ INCHES, Setting saved.

### **Configure Device menu**

This menu contains administrative functions.

### **Printing submenu**

Some items on this menu are available in the program or printer driver (if the appropriate driver is installed). Program and printer driver settings override control panel settings. In general, it is better to change these settings in the printer driver, if applicable.

Item	Values	Explanation
COPIES	*1 to 32000	Sets the default number of copies by selecting any number from 1 to 32000. Use UP ARROW (▲) or DOWN ARROW (▼) to select the number of copies. This setting applies only to print jobs that do not have the number of copies specified in the program or printer driver, such as a DOS, UNIX, or Linux application.  Note It is best to set the number of copies in the program or printer driver. (Program and printer driver settings override control panel settings.)
DEFAULT PAPER SIZE	ANY *LETTER LEGAL EXECUTIVE A4 A5 ISOB5 JISB5 JEXEC JPOSTD 16K COM10 ENVELOPE MONARCH ENVELOPE C5 ENVELOPE DL ENVELOPE CUSTOM	Sets the default image size for paper and envelopes. (The item name changes from paper to envelope as you scroll through the available sizes.) This setting applies only to print jobs that do not have the paper size specified in the program or printer driver.
DEFAULT CUSTOM PAPER SIZE	UNIT OF MEASURE X DIMENSION Y DIMENSION	Sets a default custom paper size for tray 1 or any 500-sheet tray. This menu appears only if the Custom-Standard switch in the selected tray is set to Custom.
PAPER DESTINATION	*STANDARD OUTPUT FACE UP OPTIONAL BIN	Configures the output paper bin destination. Only installed optional bins appear on the menu.
DUPLEX	*OFF ON	Appears only if an optional duplex printing accessory is installed. Set the value to <code>ON</code> to print on both sides (duplex) or <code>OFF</code> to print on one side (simplex) of a sheet of paper.
DUPLEX BINDING	*LONG EDGE SHORT EDGE	Changes the binding edge for duplex printing. The menu item appears if an optional duplexer is installed in the printer and DUPLEX=ON.
OVERRIDE A4/ LETTER	*NO YES	Allows the printer to print an A4-size job on letter-size paper if A4-size paper is not loaded in the printer (or vice versa).

Item	Values	Explanation
MANUAL FEED	*OFF ON	Feeds the paper manually from tray 1, rather than automatically from a tray. If MANUAL FEED=0N and tray 1 is empty, the printer goes offline when it receives a print job. MANUALLY FEED [PAPER SIZE] appears on the printer control panel display.
COURIER FONT	*REGULAR DARK	Selects the version of Courier font to use:  REGULAR: The internal Courier font available on the HP LaserJet 4 series printers.  DARK: The internal Courier font available on the HP LaserJet III series printers.
WIDE A4	*NO YES	Changes the number of characters that can be printed on a single line of A4-size paper.  No: Up to 78 10-pitch characters can be printed on one line.  YES: Up to 80 10-pitch characters can be printed on one line.
PRINT PS ERRORS	*OFF ON	Determines whether a PS error page prints or not.  OFF: PS error page never prints.  ON: PS error page prints when PS errors occur.

### PCL submenu

Item	Values	Explanation
FORM LENGTH	5 to 128 (*60)	Sets vertical spacing from 5 to 128 lines for default paper size.
ORIENTATION	*PORTRAIT LANDSCAPE	Allows you to select default page orientation.  Note It is best to set the page orientation in the program or printer driver. (Program and printer driver settings override control panel settings.)
FONT SOURCE	*INTERNAL SOFT SLOT 1, 2, or 3	INTERNAL: Internal fonts.  SOFT: Permanent soft fonts. This option is available only if it is installed.  SLOT 1, 2, or 3: Fonts stored in one of the three DIMM slots. This option is available only if it is installed.
FONT NUMBER	*0 to 999	The printer assigns a number to each font and lists the numbers on the PCL Font List. The font number appears in the Font # column of the printout.
FONT PITCH	0.44 <b>to</b> 99.99 <b>(*</b> 10.00 <b>)</b>	Selects the font pitch. This item might not appear, depending on the font selected.
FONT POINT SIZE	4.00 to 999.75 (*12.00)	Selects the font point size. This appears only if a font with a scalable point size is selected as the default font.
SYMBOL SET	*PC-8 Several	Selects any one of several available symbol sets at the printer control panel. A symbol set is a unique grouping of all the characters in a font. PC-8 or PC-850 is recommended for line-draw characters.

Item	Values	Explanation
APPEND CR TO LF	*NO YES	Select YES to append a carriage return to each line feed encountered in backward-compatible PCL jobs (pure text, no job control). Some environments, such as UNIX, indicate a new line using only the line feed control code. This option allows you to append the required carriage return to each line feed.

### **Print Quality submenu**

Some items on this menu are available in the program or printer driver (if the appropriate driver is installed). Program and printer driver settings override control panel settings. For more information, see "Using printer driver features" on page 68. In general, it is best to change these settings in the printer driver, if applicable.

Item	Values	Explanation
SET REGISTRATION	There is no value to select.	Shifts the margin alignment to center the image on the page from top to bottom, and left to right. You can also align the image that is printed on the front with the image that is printed on the back.
PRINT TEST PAGE	There is no value to select.	Prints a test page to show the current registration settings.
SOURCE	ALL TRAYS TRAY 1 *TRAY 2 TRAY [N]	Selects the tray for which you want to print the test page. If installed, optional trays appear as selections, where [N] is the number of the tray.
ADJUST TRAY [N] X1 Shift X2 Shift Y Shift	-20 to 20 (*0)	Sets the registration for the specified tray, where [N] is the number of the tray. A selection appears for each tray that is installed, and registration must be set for each tray.
		X1 SHIFT: Registration of the image on the paper from side to side, as the paper lies in the tray. For duplexing, this side is the second side (back) of the paper.
		X2 SHIFT: Registration of the image on the paper from side to side, as the paper lies in the tray, for the first side (front) of a duplexed page. This item appears only if an optional duplexer is installed and enabled. Set the X1 SHIFT first.
		Y SHIFT: Registration of the image on the paper from top to bottom as the paper lies in the tray.

Item	Values	Explanation
FUSER MODES  PLAIN PREPRINTED LETTERHEAD TRANSPARENCY PREPUNCHED LABELS BOND RECYCLED COLOR CARDSTOCK>164 G/M2 ROUGH	[Paper Type]= NORMAL HIGH1 LOW HIGH2 RESTORE MODES	Configures the fuser mode associated with each paper types.  Change the fuser mode only if you are experiencing problems printing on certain paper types. After you select a type of paper, you can select a fuser mode that is available for that type. The available selections might include some or all of the following modes:  NORMAL: Used for most types of paper.  HIGH 1: Used for rough paper.  LOW: Used for transparencies.  HIGH 2: Used for paper with a special or rough finish. The default fuser mode is NORMAL for all print media types except transparencies (LOW), and rough paper (HIGH 1).  CAUTION  Do not change the fuser mode for transparencies. Failure to use the LOW setting while printing transparencies can result in permanent damage to the printer and fuser. Always select Transparencies as the Type in the printer driver and set the tray type at the printer control panel to TRANSPARENCY.  When selected, RESTORE MODES resets the fuser mode for each media type back to its default setting.
OPTIMIZE	There is no value to	o select.
HIGH TRANSFER	*Off ON	Set to ON if you are using highly resistive, lower-quality papers. (See "Scattered lines" on page 130 and "Blurred print" on page 130.) HP recommends using only HP paper and print media.
LINE DETAIL	*Off On	Set to ON to improve the appearance of lines if scattered lines are appearing. (See "Scattered lines" on page 130 and "Blurred print" on page 130.)
RESTORE OPTIMIZE	There is no value to select.	Returns to the defaults for the Optimize settings.
RESOLUTION	300 600 *FASTRES 1200 PRORES 1200	Selects the resolution. All values print at the same speed.  300: Produces draft print quality and can be used for compatibility with the HP LaserJet III family of printers.  600: Produces high print quality for text and can be used for compatibility with the HP LaserJet 4 family of printers.  FASTRES 1200: Produces 1200-dpi print quality for fast, high-quality printing of business text and graphics.  PRORES 1200: Produces 1200-dpi printing for the best quality in line art and graphic images.  Note  It is best to change the resolution in the program or printer driver. (Program and printer driver settings override control panel settings.)

Item	Values	Explanation
RET	OFF LIGHT *MEDIUM DARK	Use the Resolution Enhancement technology (REt) setting to produce print with smooth angles, curves, and edges.  REt does not affect print quality if the print resolution is set to FastRes 1200. All other print resolutions benefit from REt.  Note  It is best to change the REt setting in the program or printer driver. (Program and printer driver settings override control panel settings.)
ECONOMODE	*OFF ON	Turn EconoMode (IN) (to save toner) or (IFF) (for high quality).  EconoMode creates draft-quality printing by reducing the amount of toner on the printed page.  Note  It is best to turn EconoMode on or off in the program or printer driver. (Program and printer driver settings override control panel settings.)  CAUTION  HP does not recommend full-time use of EconoMode. If EconoMode is used full-time, it is possible that the toner supply will outlast the mechanical parts in the print cartridge.
TONER DENSITY	1 2 *3 4 5	Lighten or darken the print on the page by setting the toner density. Select a setting ranging from 1 (light) to 5 (dark). The default setting of 3 usually produces the best results.  Note It is best to change the toner density in the program or printer driver. (Program and printer driver settings override control panel settings.)
AUTO CLEANING	*OFF ON	Clean the fuser automatically using this feature. This setting is unavailable if an optional duplexer is installed. If a duplexer is installed, run the cleaning page manually. (See CREATE CLEANING PAGE (below) and "Running the cleaning page manually" on page 89.)
CLEANING INTERVAL	1000 *2000 5000 10000 20000	If auto cleaning is on, set how often it runs. The intervals correspond to the number of pages the printer has printed. This setting is unavailable if an optional duplexer is installed.
AUTO CLEANING SIZE	Letter A4	If auto cleaning is on, set the size of paper that the printer should use when it is cleaning the printer automatically. This setting is unavailable if an optional duplexer is installed.
CREATE CLEANING PAGE	There is no value to select.	Press Select ( ) to print a cleaning page manually (for cleaning toner from the fuser). Open the rear output bin. Follow the instructions on the cleaning page. For more information, see "Running the cleaning page manually" on page 89.
PROCESS CLEANING PAGE	There is no value to select.	This item is available only after a cleaning page has been created. Follow the instructions printed on the cleaning page. The cleaning process might take up to 2.5 minutes.

### System Setup submenu

Items on this menu affect printer behavior. Configure the printer according to your printing needs.

Item	Values	Explanation
JOB STORAGE LIMIT	1 to 100 (*32)	Specifies the number of quick copy jobs that can be stored on the printer. This item appears only if an optional hard disk accessory is installed.
JOB HELD TIMEOUT	*OFF 1 HOUR 4 HOURS 1 DAY 1 WEEK	Sets the amount of time that held jobs are kept before being automatically deleted from the queue.
TRAY BEHAVIOR	There is no value to select.	Determines how the printer responds to jobs that request certain trays.
USE REQUESTED TRAY	Exclusively *First	Determines whether the printer tries to pull paper from a different tray than the one you selected in the printer driver.  EXCLUSIVELY: Sets the printer to pull paper only from the
		tray you selected and not pull from another tray, even if the tray you selected is empty.
		FIRST: Sets the printer to pull from the tray you selected first, but allows the printer to pull from another tray automatically if the tray you selected is empty.
MANUAL FEED PROMPT	Always *Unless Loaded	Determines when the printer shows a prompt regarding pulling from tray 1 if your print job does not match the type or size loaded in any other tray.
		ALWAYS: Select this option if you always want to be prompted before the printer pulls from tray 1.
		UNLESS LOADED: Prompts you only if tray 1 is empty.
	15 MINUTES *30 MINUTES	Sets how long the printer remains idle before it enters PowerSave mode.
	60 MINUTES	PowerSave mode does the following:
	90 MINUTES 2 HOURS 4 HOURS	<ul> <li>minimizes the amount of power consumed by the printer when it is idle</li> </ul>
		<ul> <li>reduces wear on electronic components in the printer (turns off the display backlight, but the display is still readable)</li> </ul>
		The printer automatically comes out of PowerSave mode when you send a print job, press a printer control panel button, open a tray, or open the top cover.
		To turn PowerSave mode on and off, see "POWERSAVE" on page 166.)
PERSONALITY	*AUTO PS PCL	Selects the default printer language (personality). Possible values are determined by which valid languages are installed in the printer.
		Normally, you should not change the printer language. If you change it to a specific printer language, the printer will not switch automatically from one language to another unless specific software commands are sent to the printer.

Item	Values	Explanation
CLEARABLE WARNINGS	*JOB ON	Sets the amount of time that a clearable warning is shown on the printer control panel display.
		JOB: The clearable warning message appears until the end of the job that generated the message.
		○N: The clearable warning message appears until you press Select (✓).
AUTO CONTINUE	OFF *ON	Determines how the printer reacts to errors. If the printer is on a network, you probably want to turn AUTO CONTINUE to ON.
		ON: If an error occurs that prevents printing, the message appears on the printer control panel display, and the printer goes offline for 10 seconds before returning online.
		OFF: If an error occurs that prevents printing, the message remains on the printer control panel display, and the printer remains offline until you press SELECT ( ).
CARTRIDGE LOW	STOP *CONTINUE	Determines how the printer behaves if the print cartridge is low. The ORDER CARTRIDGE message first appears when about 15 percent of the toner remains in the print cartridge at 5 percent coverage. (For the 12,000-page cartridge in the LaserJet 4200 series, 15 percent is about 1,800 pages remaining. For the 18,000-page cartridge in the LaserJet 4300 series, 15 percent is about 2,700 pages remaining.) Print quality is not guaranteed if you print after receiving this message.
		STOP: The printer pauses printing until you replace the print cartridge or press SELECT ( ) before each job to print it. The message appears until you replace the print cartridge.
		CONTINUE: The printer continues to print, and the message appears until you replace the print cartridge.
		For more information, see "Cartridge Low and Cartridge Out conditions" on page 82.
CARTRIDGE OUT	STOP *CONTINUE	Determines how the printer reacts if the print cartridge is empty.  STOP: The printer stops printing until you replace the print cartridge.
		CONTINUE: The printer continues to print, and the REPLACE CARTRIDGE message appears until you replace the print cartridge. HP does not guarantee print quality if you select CONTINUE after a REPLACE CARTRIDGE condition. Replace the print cartridge as soon as possible to ensure print quality.
		If the end of drum life is reached, the printer stops, regardless of the CARTRIDGE OUT setting.
JAM RECOVERY	OFF ON *AUTO	Determines how the printer behaves if a jam occurs.  OFF: The printer does not reprint pages following a jam.  Printing performance might be increased with this setting.
		©N: The printer automatically reprints pages after a jam is cleared.
		AUTO: The printer automatically selects the best mode for printer jam recovery (usually ON).

Item	Values	Explanation
RAM DISK	OFF *AUTO	Determines how the RAM disk is configured. This item appears only if there is no optional hard disk accessory installed.
		OFF: The RAM disk is disabled.
		AUTO: Allows the printer to determine the optimal RAM-disk size based on the amount of available memory.
		Note If you change the setting from OFF to AUTO, the printer automatically reinitializes when it becomes idle.
LANGUAGE	*ENGLISH Several	Selects the language for the messages that appear on the printer control panel display.

### **Output Setup submenu**

This submenu allows you to select settings for the optional stapler/stacker, if it is installed.

Some items on this menu are available in the program or printer driver (if the appropriate driver is installed).

Item	Values	Explanation
STAPLER/STACKER	There is no value to select.	Configure behavior for the optional stapler/stacker.
STAPLES	*NONE ONE	Determines whether print jobs are stapled or not.  NONE: Turns off stapling.  ONE: Turns on stapling.  Note  Selecting the stapler at the printer control panel changes the default setting to staple. It is possible that all print jobs will be stapled.  For information about selecting the stapler at the printer control panel, see "To select the stapler at the
STAPLES OUT	*STOP CONTINUE	control panel" on page 40.  Determines how the printer behaves if the stapler runs out of staples, as indicated by the STAPLER OUT OF STAPLES message on the printer control panel display.
		STOP: The printer stops printing until you refill the stapler.  CONTINUE: The stapler accepts print jobs if it is out of staples, but the pages will not be stapled.  For information about ordering a new staple cartridge, see "Ordering information" on page 17. For information about refilling the stapler, see "Loading staples" on page 41.

### I/O submenu

Items on the I/O (input/output) menu affect the communication between the printer and the computer. The contents of the I/O submenu depend on which EIO card is installed.

Item	Values	Explanation
I/O TIMEOUT	5 to 300 (*15)	Select the I/O timeout period in seconds.  This setting allows you to adjust timeout for best performance. If data from other ports appear in the middle of your print job, increase the timeout value.
PARALLEL INPUT	There is no value to select.	Configure the parallel features.
HIGH SPEED	NO *YES	Select YES to enable the printer to accept the faster parallel communications that are used for connections with newer computers.
ADVANCED FUNCTIONS	OFF *ON	Turn the bidirectional parallel communication on or off. The default is set for a bidirectional parallel port (IEEE-1284).  The function allows the printer to send status readback messages to the computer. (Turning the parallel advanced functions on might slow language switching.)
EIO [X]	There is no value to select.	The [X] represents the slot in which the optional HP Jetdirect print server is installed, if any. Which of the following submenus appears depends on the type of print server that is installed.
TCP/IP	There is no value t	o select.
ENABLE	OFF *ON	Select whether the TCP/IP protocol stack is enabled or disabled. You can set several TCP/IP parameters.
CONFIG METHOD	*BootP DHCP MANUAL	Select the TCP/IP configuration method.  For the MANUAL option, set the values for IP ADDRESS,  SUBNET MASK, DEFAULT GATEWAY, SYSLOG SERVER, and IDLE  TIMEOUT.
IPX/SPX	There is no value t	o select.
ENABLE	OFF *ON	Select whether the IPX/SPX protocol stack (in Novell NetWare networks, for example) is enabled or disabled.
FRAME TYPE	*AUTO OFF	Select whether the frame type is automatically determined or turned off.
APPLETALK	There is no value t	o select.
ENABLE	OFF *ON	Select whether the Apple EtherTalk protocol stack is enabled or disabled.
DLC/LLC	There is no value t	o select.
ENABLE	OFF *ON	Select whether the DLC/LLC protocol stack is enabled or disabled.
LINK SPEED	*AUTO 10T HALF 10T FULL 100TX HALF 100TX FULL	Selects the network link speed (10 or 100 Mbps) and the communication mode (full-duplex or half-duplex).

### Resets submenu

Items on the Resets submenu relate to returning settings to the defaults and changing settings such as PowerSave.

Item	Values	Explanation
RESTORE FACTORY SETTINGS	There is no value to select.	Performs a simple reset and restores most of the factory (default) settings. This item also clears the input buffer for the active I/O. Restoring factory settings does not affect network parameter settings on the optional HP Jetdirect print server.  CAUTION  Restoring memory during a print job cancels the print job.
CLEAR MAINTENANCE MESSAGE	There is no value to select.	Appears after the PERFORM PRINTER MAINTENANCE message. The PERFORM PRINTER MAINTENANCE message can be temporarily cleared for approximately 10,000 pages, and then the message appears again. When the PERFORM PRINTER MAINTENANCE message first appears, a new maintenance kit should be installed to maintain optimum print quality and feed performance.  For more information, see "Performing preventative maintenance" on page 91. To order the printer maintenance kit, see "Ordering information" on page 17.
POWERSAVE	OFF *ON	Turns PowerSave mode on or off. PowerSave mode does the following:  • minimizes the amount of power consumed by the printer when it is idle  • reduces wear on electronic components in the printer (turns off the display backlight, but display is still readable)  The printer automatically comes out of PowerSave mode when you send a print job, press a printer control panel button, open a tray, or open the top cover.  You can set how long the printer remains idle before it enters PowerSave mode. (See the POWERSAVE TIME in the "System Setup submenu" on page 162.)

### **Diagnostics** menu

Administrators can use this submenu to isolate parts and to troubleshoot jam and print-quality issues.

The section that follows lists the settings and possible values. In the Values column, the default value for each setting is the one with an asterisk (\*) next to it.

Item	Values	Explanation
PRINT EVENT LOG	There is no value to select.	Press Select ( ) to generate a list of the 50 most recent entries in the event log. The printed event log shows error number, page count, error code, and description or personality.
SHOW EVENT LOG	There is no value to select.	Press SELECT (✓) to scroll through the contents of the event log at the printer control panel and shows the 50 most recent events. Use UP ARROW (▲) or DOWN ARROW (▼) to scroll through the event log contents.
PAPER PATH TEST	There is no value to select.	Generates a test page that is useful for testing the paper-handling features of the printer.
PRINT TEST PAGE	There is no value to select.	Press Select ( ) to start the paper path test using the source (tray), destination (output bin), duplex, and number of copies settings that you set in the other items on the Paper Path Test menu. Set the other items before choosing PRINT TEST PAGE.
SOURCE	ALL TRAYS TRAY 1 *TRAY 2 TRAY [N]	Select the tray whose paper path you want to test. You can select any tray that is installed. Select ALL TRAYS to test all tray paper paths. (Paper must be loaded in the selected trays.)
DESTINATION	ALL BINS *STANDARD OUTPUT FACE UP (rear) BIN OPTIONAL BIN [N]	Select the output bin whose paper path you want to test. You can select any output bin that is installed. Optional bins (stacker or stapler/stacker bin) must also be correctly configured in the printer driver. Select ALL BINS to test all bin paper paths.
DUPLEX	*OFF ON	Determine whether or not the paper goes through the duplexer during the paper path test. This item is available only if the duplexer is installed.
COPIES	*1 10 50 100 500	Set how many sheets of paper are used from each tray during the paper path test. If you are testing the optional stapler stacker (DESTINATION item), select 10 or higher.

### Service menu

The Service menu is locked and is intended for use by authorized service personnel only.

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# Printer memory and expansion

#### Overview

The printer has three dual inline memory module (DIMM) slots for upgrading with:

- More printer memory DIMMs (SDRAM) are available in 8, 16, 32, 64, 128, and 256 MB, for a maximum of 416 MB.
- Flash memory DIMMs (font DIMMs) These DIMMs are available in 2, 4, 8, 12, and 16 MB.
   Unlike standard printer memory, flash DIMMs can be used to store downloaded items, such as fonts and forms, in the printer permanently, even when the printer is off.
- Font DIMMs These DIMMs allow the printer to print characters for traditional Chinese, simplified Chinese, and Korean.
- DIMM-based accessory fonts, macros, and patterns.
- Other DIMM-based printer languages and printer options.

Note

Single inline memory modules (SIMMs) used in previous HP LaserJet printers are not compatible with the printer.

You might want to add more memory to the printer if you often print complex graphics, print PostScript (PS) documents, or use many downloaded fonts. Added memory also gives you more flexibility in supporting job-storage features, such as quick copying.

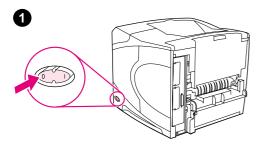
The printer has two EIO slots for expanding the printer capability with a mass storage device, such as an optional hard disk for storing forms and fonts, and for certain job-storage functions. The EIO slots are also used for adding a network card or a connectivity card for serial, USB, or AppleTalk.

To find out how much memory is installed in the printer, or to find out what is installed in the EIO slots, print a configuration page. (See "Configuration page" on page 83.)

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### **Installing memory**

If you have not already done so, print a configuration page to find out how much memory is installed in the printer before adding more memory. (See "Configuration page" on page 83.)

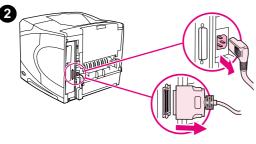


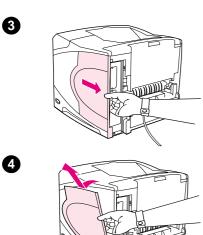
#### To install memory

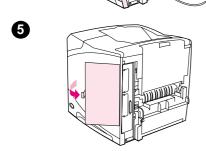
#### **CAUTION**

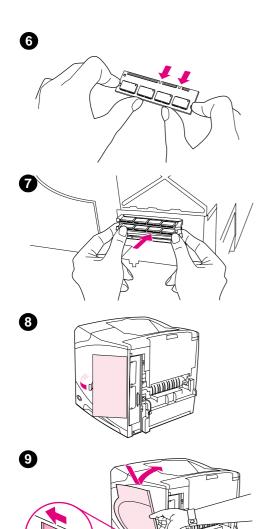
Static electricity can damage DIMMs. When handling DIMMs, either wear an antistatic wrist strap or frequently touch the surface of the DIMM antistatic package, then touch bare metal on the printer.

- 1 Turn the printer power off.
- 2 Unplug the power cord and disconnect any cables.
- **3** Grasp the cover on the right side of the printer and pull it firmly toward the rear of the printer until it stops.
- 4 Remove the cover from the printer.
- 5 Open the DIMM-access door by pulling on the metal tab.









1

- 6 Remove the DIMM from the antistatic package. Hold the DIMM with your fingers against the side edges and thumbs against the back edge. Align the notches on the DIMM with the DIMM slot. (Check that the locks on each side of the DIMM slot are open, or outward.)
- 7 Press the DIMM straight into the slot (press firmly). Make sure the locks on each side of the DIMM snap inward into place. (To remove a DIMM, the locks must be released.)

#### **CAUTION**

Do not move or remove the DIMM in the upper slot.

- 8 Close the DIMM-access door. Make sure it locks into place.
- **9** Set the bottom of the cover onto the printer. Make sure the bottom tab on the cover fits into the corresponding slot in the printer. Rotate the cover up, toward the printer.
- 10 Slide the cover toward the front of the printer until it clicks into place.
- 11 Reattach any cables and the power cord, then turn the printer power on and test the DIMM. (See "Checking memory installation" on page 172.)

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### **Checking memory installation**

Follow this procedure to verify that DIMMs are installed correctly.

#### To check memory installation

- 1 Check that READY appears on the printer control panel display when the printer power is turned on. If an error message appears, a DIMM might have been incorrectly installed. Check the printer messages. (See "Understanding printer messages" on page 109).
- 2 Print a new configuration page. (See "Configuration page" on page 83.)
- 3 Check the memory section on the configuration page and compare it to the configuration page printed before the DIMM installation. If the amount of memory has not increased, the DIMM might not be installed correctly (repeat the installation procedure) or the DIMM might be defective (try a new DIMM).

Note

If you installed a printer language (personality), check the Installed Personalities and Options section on the configuration page. This area should list the new printer language.

### **Saving resources (permanent resources)**

Utilities or jobs that you download to the printer sometimes include resources (for example, fonts, macros, or patterns). Resources that are internally marked as permanent remain in the printer memory until you turn the printer power off.

Use the following guidelines if you use the page description language (PDL) ability to mark resources as permanent. For technical details, see an appropriate PDL reference for PCL or PS.

- Mark resources as permanent only when it is absolutely necessary that they remain in memory while the printer power is turned on.
- Send permanent resources to the printer only at the beginning of a print job and not while the printer is printing.

Note

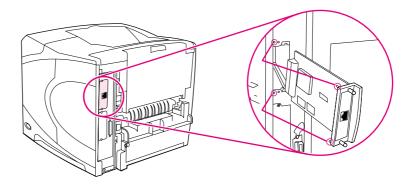
Overusing permanent resources or downloading them while the printer is printing might affect printer performance or the ability to print complex pages.

### Installing EIO cards or mass storage devices

Follow this procedure to install an EIO card or mass storage device (optional hard disk).

#### To install EIO cards or mass storage devices

- **1** Turn the printer power off.
- 2 Remove the two screws and cover plate from the EIO 1 or EIO 2 slot on the back of the printer.
- 3 Install the EIO card or mass storage device in the EIO slot and tighten the screws. See the figure below for orientation of the EIO card.



4 Turn the printer power on and print a configuration page to verify that the new EIO device is recognized. (See "Configuration page" on page 83.)

**Note** 

For information about connecting an EIO card to a network and installing the network software, see "Software for networks" on page 33, the getting started (*start*) guide that came with the printer, and also the *HP Jetdirect Print Server Administrator's Guide*.

# To remove an installed EIO card or mass storage device (optional hard disk)

- **1** Turn the printer power off.
- 2 Remove the EIO card or mass storage device from the EIO slot.
- 3 Place the cover plate from the EIO 1 or EIO 2 slot onto the back of the printer. Insert and tighten the two screws.
- **4** Turn the printer power on.

Use Device Storage Manager in HP Web Jetadmin to manage fonts on a mass storage device. For more information, see the Help in HP Web Jetadmin.

HP is constantly introducing new software tools for use with your printer and accessories. These tools are available on the Internet free of charge. See "Contacting HP" on page 144 for more information.



## Printer commands

#### **Overview**

Most programs do not require you to enter printer commands. See your computer and software documentation to find the method for entering printer commands, if needed.

PCL 6 and PCL 5e

PCL 6 and PCL 5e printer commands tell the printer which tasks to perform or which fonts to use. This section provides a quick reference for users who are already familiar with PCL 6 and PCL 5e command structure.

HP-GL/2

The printer has the ability to print vector graphics using the HP-GL/2 graphics language. Printing in the HP-GL/2 language requires that the printer leave PCL 5e language and enter HP-GL/2 mode, which can be done by sending the printer PCL 5e code. Some programs switch languages through their drivers.

**PJL** 

HP's Printer Job Language (PJL) provides control above PCL 5e and other printer languages. The four major functions provided by PJL are: printer language switching, job separation, printer configuration, and status readback from the printer. PJL commands can be used to change printer default settings.

Note

The table at the end of this section contains commonly used PCL 5e commands. (See "Common PCL 6 and PCL 5e printer commands" on page 179.) For a complete listing and explanation of how to use PCL 5e, HP-GL/2, and PJL commands, see the HP PCL/PJL Reference Set, available on CD-ROM (HP part number 5961-0975).

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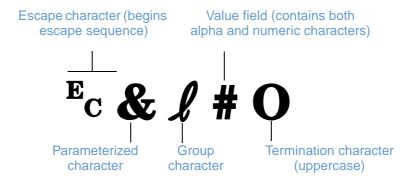
### Understanding PCL 6 and PCL 5e printer command syntax

Before using printer commands, compare these characters:

Lowercase I:  $\ell$  Uppercase O: O Number one: 1 Number 0:  $\emptyset$ 

Many printer commands use the lowercase letter I ( $\ell$ ) and the number one (1), or the uppercase letter O (O) and the number zero (Ø). These characters might not appear on your screen as shown here. You must use the exact character and case specified for PCL 6 or PCL 5e printer commands.

The figure below displays the elements of a typical printer command (in this instance, a command for page orientation).



### **Combining escape sequences**

Escape sequences can be combined into one escape sequence string. There are three important rules to follow when combining code:

- 1 The first two characters after the Ec character (the parameterized and group characters) must be the same in all of the commands to be combined.
- 2 When combining escape sequences, change the uppercase (termination) character in each individual escape sequence to lower case.
- **3** The final character of the combined escape sequence must be uppercase.

The following is an example of an escape sequence string that would be sent to the printer to select legal paper, landscape orientation, and eight lines per inch:

Ec&13AEc&11OEc&18D

The following escape sequence sends the same printer commands by combining them into a shorter sequence:

Ec& £3a1o8D

### **Entering escape characters**

Printer commands always begin with the escape character (Ec).

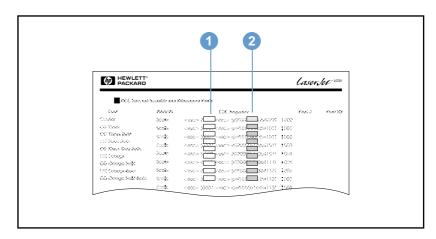
The following table shows how the escape character can be entered in various MS-DOS® programs.

appears
R(27)+" "
F

### Selecting PCL 6 and PCL 5e fonts

The printer font list provides PCL 6 and PCL 5e printer commands for selecting fonts. (See "PS or PCL font list" on page 86 for information about how to print the list.) A sample section is shown below.

There is one variable box for entering symbol sets and one for entering point size. These variables must be filled in, or the printer will use defaults. For example, if you want a symbol set that contains line-draw characters, select the 10U (PC-8) or 12U (PC-850) symbol set. Other common symbol set codes are listed in the table beginning on the next page.



Font list

- 1 Symbol set
- 2 Point size

#### Note

Fonts are either "fixed" or "proportional" in spacing. The printer contains both fixed fonts (Courier, Letter Gothic, and Lineprinter) and proportional fonts (CG Times, Arial®, Times New Roman®, and others).

Fixed-spaced fonts are generally used in programs such as spreadsheets and databases, where it is important for columns to line up vertically. Proportional-spaced fonts are generally used in text and word processing programs.

## Common PCL 6 and PCL 5e printer commands

	Function	Command	Options (#)
	Reset	EcE	n/a
l	Number of copies	Ec&l#X	1 to 999
	2-sided/1-sided printing	Ec&l#S	0 = Simplex (1-sided) printing 1 = Duplex (2-sided) with long edge binding 2 = Duplex (2-sided) with short edge binding
	Paper source	Ec&l#H	0 = Prints or ejects current page 1 = Tray 2 2 = Manual feed, paper 3 = Manual feed, envelope 4 = Tray 1 5 = Tray 3 6 = Optional envelop feeder 7 = Auto select 8 = Tray 4 20-69 = external trays
	Paper size	Ec&l#A	1 = Executive 2 = Letter 3 = Legal 25 = A5 26 = A4 45 = JIS B5 80 = Monarch envelope 81 = Commercial 10 envelope 90 = DL ISO envelope 91 = C5 ISO envelope 100 = B5 ISO envelope/B5 ISO 101 = Custom
	Paper type	Ec&n#	5WdBond = Bond 6WdPlain = Plain 6WdColor = Color 7WdLabels = Labels 9WdRecycled = Recycled 11WdLetterhead = Letterhead 10WdCardstock = Cardstock 11WdPrepunched = Prepunched 11WdPreprinted = Preprinted 13WdTransparency = Transparency #WdCustompapertype = Custom <sup>1</sup>
	Orientation	Ec& <b>l</b> #O	0 = Portrait 1 = Landscape 2 = Reverse portrait 3 = Reverse landscape
	Top margin	Ec&l#E	# = Number of lines
	Text length (bottom margin)	Ec&ℓ#F	# = Number of lines from top margin
	Left margin	<sup>E</sup> c&a#L	# = Column number
	Right margin	<sup>E</sup> c&a#M	# = Column number from left margin
	Horizontal motionindex	Ec&k#H	1/120-inch increments (compresses print horizontally)
	Vertical motion index	Ec&l#C	1/48-inch increments (compresses print vertically)
	Line spacing	Ec&l#D	# = Lines per inch (1, 2, 3, 4, 5, 6, 12, 16, 24, 48)
ŀ	Perforation skip	Ec&l#L	0 = Disable 1 = Enable

Function	Command	Options (#)
Vertical position (rows)	<sup>E</sup> c&a#R	# = Row number
Vertical position (dots)	Ec*p#Y	# = Dot number (300 dots = 1 inch)
Vertical position (decipoints)	Ec&a#V	# = Decipoin number (720 decipoints = 1 inch)
Horizontal position (columns)	Ec&a#C	# = Column number
Horizontal position (dots)	<sup>E</sup> c*p#X	# = Dot number (300 dots = 1 inch)
Horizontal position (decipoints)	<sup>E</sup> c&a#H	# = Decipoint number (720 decipoints = 1 inch)
End of line wrap	Ec&s#C	0 = Enable 1 = Disable
Display functions on	EcY	n/a
Display functions off	EcZ	n/a
Enter PCL 6 or PCL 5e mode	E <sub>C</sub> %# <b>A</b>	0 = Use previous PCL 5e cursor position 1 = Use current HP-GL/2 pen position
Enter HP-GL/2 mode	<sup>E</sup> c%#B	0 = Use previous HP-GL/2 pen position 1 = Use current PCL 5e cursor position
Symbol sets	Ec(#	8U = HP Roman-8 Symbol Set  10U = IBM Layout (PC-8) (code page 437) Default Symbol St  12U = IBM Layout for Europe (PC-850) (code page 850)  8M = Math-8  19U = Windows 3.1 Latin 1  9E = Windows 3.1 Latin 2 (commonly used in Eastern Europe 5T = Windows 3.1 Latin 5 (commonly used in Turkey)  579L = Wingdings Font
Primary spacing	Ec(s#P	0 = Fixed 1 = Proportional
Primary pitch	<sup>E</sup> c(s#H	# = characters/inch
Set pitch mode <sup>2</sup>	<sup>E</sup> c&k#S	0 = 10 4 = 12 (elite) 2 = 16.5 - 16.7 (compressed)
Primary height	Ec(s#V	# = Points
Primary style	Ec(s#S	0 = Upright (solid) 1 = Italic 4 = Condensed 5 = Condensed italic
Primary stroke wt.	Ec(s#B	0 = Medium (book or text) 1 = Semi bold 3 = Bold 4 = Extra bold
Typeface	Ec(s#T	Print a PCL 6 or PCL 5e font list to view the command for ea internal font.

<sup>1.</sup> For custom paper, replace "Custompapertype" with the name of the paper, and replace the "#" with the number of characters in the name, plus 1.

<sup>2.</sup> The preferred method is to use the primary pitch command.

# Specifications

## **Overview**

This section includes information about these topics:

- "Paper specifications" on page 182
- "Printer specifications" on page 193

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## **Paper specifications**

HP LaserJet printers produce excellent print quality. This printer accepts a variety of print media, such as cut-sheet paper (including recycled paper), envelopes, labels, transparencies, and custom-size paper. Paper properties such as weight, grain, and moisture content are important factors affecting printer performance and output quality.

The printer can use a variety of paper and other print media in accordance with the guidelines in this user guide. Paper that does not meet these guidelines can cause the following problems:

- poor print quality
- increased jams
- premature wear on the printer, requiring repair

#### Note

For best results, use only high-quality media, such as HP-brand paper and print media. Hewlett-Packard Company cannot recommend the use of other brands. Because they are not HP products, HP cannot influence or control their quality.

It is possible for paper to meet all of the guidelines in this user guide and still not produce satisfactory results. This might be the result of improper handling, unacceptable temperature and humidity levels, or other variables over which Hewlett-Packard has no control.

Before purchasing a large quantity of paper, make sure that it meets the requirements specified in this user guide and in the *print media guide for the HP LaserJet family of printers*. (To order the guide, see "Ordering information" on page 17, or visit the supplies website at <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4200</a> or at <a href="http://www.hp.com/support/lj4300">http://www.hp.com/support/lj4300</a>.) Always test paper before purchasing a large quantity.

#### **CAUTION**

Using paper outside HP specifications can cause problems for the printer, requiring repair. This repair is not covered by the Hewlett-Packard warranty or service agreements.

## Supported sizes and weights of paper

Size	Dimensions <sup>1</sup>	Weight	Capacity <sup>2</sup>	
Letter	216 by 279 mm (8.5 by 11 inch)			
A4	210 by 297 mm (8.3 by 11.7 inch)			
Legal	216 by 356 mm (8.5 by 14 inch)			
Executive	184 by 267 mm (7.3 by 10.5 inch)			
A5	148 by 210 mm (5.8 by 8.3 inch)		100 sheets of 75 g/m <sup>2</sup> (20 lb) paper	
B5 (ISO)	176 by 250 mm (6.9 by 9.8 inch)			
B5 (JIS)	182 by 257 mm (7.2 by 10.1 inch)	60 to 200 g/m <sup>2</sup> (16 to 53 lb)		
Executive (JIS)	216 by 330 mm (8.5 by 13 inch)			
Double postcard (JIS)	148 by 200 mm (5.8 by 7.9 inch)			
16K	197 by 273 mm (7.8 by 10.8 inch)			
Custom <sup>3</sup>	Minimum: 76 by 127 mm (3 by 5 inch)			
	Maximum: 216 by 356 mm (8.5 by 14 inch)			
Envelope Commercial #10	105 by 241 mm (4.1 by 9.5 inch)			
Envelope DL ISO	110 by 220 mm (4.3 by 8.7 inch)			
Envelope C5 ISO	162 by 229 mm (6.4 by 9.0 inch)	75 to 105 g/m <sup>2</sup> (20 to 28 lb)	10 envelopes	
Envelope B5 ISO	176 by 250 mm (6.9 by 9.8 inch)			
Envelope Monarch #7-3/4	98 by 191 mm (3.9 by 7.5 inch)			
Transparencies	Minimum: 76 by 127 mm (3 by 5 inch)	Thickness: 0.099 to 0.114 mm (0.0039 to 0.0045 inch)	50 transparencies	
	Maximum: 216 by 356 mm (8.5 by 14 inch)			

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Tray 1 supported sizes and weights						
Labels	Minimum: 76 by 127 mm (3 by 5 inch) Maximum: 216 by 356 mm (8.5 by 14 inch)	Thickness: 0.127 to 0.229 mm (0.005 to 0.009 inch)	50 labels			

- 1. The printer supports a wide range of sizes. Check the printer software for supported sizes.
- 2. Capacity can vary depending on paper weight and thickness, as well as environmental conditions.
- 3. To print custom-size paper, see "Printing small sizes, custom sizes, or heavy paper" on page 62.

#### Tray 2 and optional 500-sheet tray supported sizes and weights

Size	Dimensions <sup>1</sup>	Weight	Capacity <sup>2</sup>
Letter	216 by 279 mm (8.5 by 11 inch)		
A4	210 by 297 mm (8.3 by 11.7 inch)		
Executive	184 by 267 mm (7.3 by 10.5 inch)		
Legal	216 by 356 mm (8.5 by 14 inch)		
B5 (JIS)	182 by 257 mm (7.2 by 10.1 inch)	60 to 120 g/m <sup>2</sup> (16 to 32 lb)	500 sheets of 75 g/m <sup>2</sup> (20 lb) paper
A5	148 by 210 mm (5.8 by 8.3 in)		
Custom <sup>3</sup>	Minimum: 148 by 210 mm (5.8 by 8.3 inch)		
	Maximum: 216 by 356 mm (8.5 by 14 inch)		

- 1. The printer supports a wide range of sizes. Check the printer software for supported sizes.
- 2. Capacity can vary depending on paper weight and thickness, as well as environmental conditions.
- 3. To print custom-size paper, see "Printing small sizes, custom sizes, or heavy paper" on page 62.

#### Optional 1,500-sheet tray supported sizes and weights

Size	Dimensions	Weight	Capacity <sup>1</sup>
Letter 216 by 279 mm (8.5 by 11 inch)			
A4	210 by 297 mm (8.3 by 11.7 inch)	60 to 120 g/m <sup>2</sup> (16 to 32 lb)	1,500 sheets of 75 g/m <sup>2</sup> (20 lb) paper
.egal 216 by 356 mm (8.5 by 14 inch)			

<sup>1.</sup> Capacity can vary depending on paper weight and thickness, as well as environmental conditions.

## Optional duplexer supported sizes and weights

Size	Dimensions	Weight
Letter	216 by 279 mm (8.5 by 11 inch)	
A4	210 by 297 mm (8.3 by 11.7 inch)	
Executive	184 by 267 mm (7.3 by 10.5 inch)	60 to 120 g/m <sup>2</sup>
Legal	216 by 356 mm (8.5 by 14 inch)	(16 to 32 lb)
B5 (JIS)	182 by 257 mm (7.2 by 10.1 inch)	
A5	148 by 210 mm (5.8 by 8.3 inch)	

## Optional envelope feeder supported sizes and weights

Size	Dimensions	Weight	Capacity
Monarch #7-3/4	98 by 191 mm (3.9 by 7.5 inch)		
Commercial#10	105 by 241 mm (4.1 by 9.5 in)		
DL ISO	110 by 220 mm (4.3 by 8.7 inch)	75 to 105 g/m <sup>2</sup> (20 to 28 lb)	75 envelopes
C5 ISO	162 by 229 mm (6.4 by 9.0 inch)		
B5 ISO	176 by 250 mm (6.9 by 9.8 inch)		

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## Optional stacker or stapler/stacker supported sizes and weights

Size	Dimensions <sup>1</sup>	Weight	Capacity <sup>2</sup>	
Stacker or stacker p	part of stapler/stacker only			
Letter	216 by 279 mm (8.5 by 11 inch)			
A4	210 by 297 mm (8.3 by 11.7 inch)			
Executive	184 by 267 mm (7.3 by 10.5 inch)			
Legal	216 by 356 mm (8.5 by 14 inch)			
B5 (JIS)	182 by 257 mm (7.2 by 10.1 inch)	60 to 120 g/m <sup>2</sup> (16 to 32 lb)	500 sheets of 75 g/m <sup>2</sup> (20 lb) paper	
A5	148 by 210 mm (5.8 by 8.3 inch)			
Custom <sup>3</sup>	Minimum: 148 by 210 mm (5.8 by 8.3 inch)			
	Maximum: 216 by 356 mm (8.5 by 14 inch)			
Stapler part of stap	ler/stacker only <sup>4</sup>			
Letter	216 by 279 mm (8.5 by 11 inch)			
A4	210 by 297 mm (8.3 by 11.7 inch)	60 to 120 g/m <sup>2</sup> (16 to 32 lb)	15 sheets of 75 g/m <sup>2</sup> (20 lb) paper	
Legal 216 by 356 mm (8.5 by 14 inch)				

- 1. The printer supports a wide range of sizes. Check the printer software for supported sizes.
- 2. Capacity can vary depending on paper weight and thickness, as well as environmental conditions.
- 3. To print custom-size paper, see "Printing small sizes, custom sizes, or heavy paper" on page 62.
- 4. All sizes can be stacked, but only letter, legal, and A4 can be stapled.

## Supported types of paper

The printer supports the following types of paper or other print media:

- plain
- letterhead
- prepunched
- bond
- color
- rough
- preprinted

- transparency
- labels
- recycled
- card stock
- user-defined (5 types)
- envelopes

## **Guidelines for using paper**

For best results, use conventional 75 to 90 g/m<sup>2</sup> (20 to 24 lb) paper. Make sure that the paper is of good quality, and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, and curled or bent edges.

If you are unsure what type of paper you are loading (such as bond or recycled), check the label on the package of paper.

#### **CAUTION**

Some paper causes print-quality problems, jamming, or damage to the printer.

Symptom	Problem with paper	Solution
Poor print quality or toner adhesion.	<ul><li>Too moist, too rough, too smooth, or embossed.</li><li>Ragged edges.</li><li>Faulty paper lot.</li></ul>	<ul> <li>Try another kind of paper, between 100 to 250 Sheffield, 4 to 6 percent moisture content.</li> <li>Change the fuser mode. (See "Correcting print-quality problems" on page 124 and "FUSER MODES" on page 160.)</li> </ul>
Dropouts, jamming, curl.	Stored improperly.	Store paper flat in its moisture-proof wrapping.
Increased gray background shading.	Too heavy.	<ul><li>Use lighter paper.</li><li>Open the rear output bin.</li></ul>
	<ul> <li>Too smooth.</li> </ul>	Use less smooth paper.
Excessive curl. Problems with feeding.	<ul> <li>Too moist, wrong grain direction, or short- grain construction.</li> </ul>	<ul> <li>Use the rear output bin.</li> <li>Turn the paper stack over in the tray.</li> <li>Use long-grain paper.</li> <li>Store paper in a drier environment.</li> <li>Change the fuser mode. (See "Curl or wave" on page 128 and "FUSER MODES" on page 160.)</li> </ul>

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#### Note

Do not use letterhead paper that is printed with low-temperature inks, such as those used in some types of thermography.

Do not use raised letterhead.

The printer uses heat and pressure to fuse toner to the paper. Make sure that any colored paper or preprinted forms use inks that are compatible with the printer's temperature of 230° C (446° F) for 0.05 second.

Avoid using paper that has been damaged due to having already been used in a printer or copier. (Do not print on both sides of envelopes, transparencies, or labels.)

## Paper weight equivalence table

Use the following table to determine approximate equivalent points in weight specifications other than U.S. bond weight. For example, to determine the equivalent of 20 lb U.S. bond weight paper in U.S. cover weight, locate the bond weight (in row 3, second column) and scan across the row to the cover weight (in the fourth column). The equivalent is 28 lb.

Shaded areas indicate a standard weight for that grade.

U.S. postcard <sup>1</sup> thickness (mm)	U.S. bond weight (lb)	U.S. text/book weight (lb)	U.S. cover weight (lb)	U.S. Bristol weight (lb)	U.S. index weight (lb)	U.S. tag weight (lb)	Metric weight (g/m²)
	16	41	22	27	33	37	60
	17	43	24	29	35	39	64
	20	50 <sup>2</sup>	28	34	42	46	75
	21	54	30	36	44	49	80
	24	60 <sup>b</sup>	33	41	50	55	90
	27	68	37	45	55	61	100
	28	70 <sup>b</sup>	39	49	58	65	105
	29	74	41	50	61	68	110
	32	80 <sup>b</sup>	44	55	67	74	120
	36	90	50	62	75	83	135
0.18	39	100	55	67	82	91	148
	40	101	55	68	83	92	150
0.20	43	110	60	74	90	100	163
	45	115	63	77	94	104	170
0.23	47	119	65	80	97	108	176
	51	128	70	86	105	117	190
	53	134	74	90	110	122	200
	54	137	75	93	113	125	203
	58	146	80	98	120	133	216
	65	165	90	111	135	150	244
	66	169	92	114	138	154	250
	67	171	94	115	140	155	253
	70	178	98	120	146	162	264
	72	183	100	123	150	166	271

<sup>1.</sup> U.S. postcard measurements are approximate. Use for reference only.

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 $<sup>2. \ \ \, \</sup>text{Text and book grades actually calculate out to 51, 61, 71, and 81, but are standardized to book/text weights of 50, 60, 70, and 80.}$ 

#### Labels

#### **CAUTION**

To avoid damaging the printer, use only labels recommended for use in laser printers.

If you have problems printing labels, use tray 1 and open the rear output bin.

Do not print on the same sheet of labels more than once—peeling, adhesive contamination, and printer damage might result.

#### Label construction

When selecting labels, consider the quality of each component:

- Adhesives: The adhesive material should be stable at 230° C (446° F), the printer's maximum temperature.
- Arrangement: Use only labels with no exposed backing between them. Labels can peel off sheets that have spaces between the labels, causing serious jams.
- **Curl:** Prior to printing, labels must lie flat with no more than 13 mm (0.5 inch) of curl in any direction.
- Condition: Do not use labels with wrinkles, bubbles, or other indications of separation.

To print sheets of labels, see "Printing labels" on page 58.

## **Transparencies**

Transparencies used in the printer must be able to withstand 230° C (446° F), the printer's maximum temperature. Close the rear output bin to print transparencies to the top output bin.

If you have problems printing transparencies, use tray 1 and print to the top output bin. Be sure to remove each transparency from the output bin as it prints to keep them from sticking together.

#### **CAUTION**

To avoid damaging the printer, use only transparencies recommended for use in laser printers.

To print transparencies, see "Printing transparencies" on page 59.

## **Envelopes**

## **Envelope construction**

Envelope construction is critical. Envelope fold lines can vary considerably, not only between manufacturers, but also within a box from the same manufacturer. Successful printing on envelopes depends upon the quality of the envelopes.

When selecting envelopes, consider the components listed below. Many envelope manufacturers are now making envelopes optimized for laser printers.

- **Weight:** The weight of the envelope paper should be 75 to 105 /m<sup>2</sup> (20 to 28 lb), or jamming might result.
- **Construction:** Prior to printing, envelopes should lie flat with less than 6 mm (0.25 inch) curl, and should not contain air. (Envelopes that trap air might cause problems.)
- Condition: Make sure that envelopes are not wrinkled, nicked, or otherwise damaged.
- Sizes in tray 1: Standard and custom sizes from 76 by 127 mm (3 by 5 inch) to 216 by 356 mm (8.5 by 14 inch).
- Sizes in the optional envelope feeder: Standard sizes from Monarch (#7-3/4) (98 by 191 mm, or 3.9 by 7.5 inch) to B5 (ISO) (176 by 250 mm, or 6.9 by 9.8 inch).

If you do not have an optional envelope feeder, always print envelopes from tray 1. (See "Printing envelopes" on page 51.) To print envelopes with the optional envelope feeder, see "Feeding envelopes automatically (optional envelope feeder)" on page 53. If envelopes curl, try opening the rear output bin.

## **Envelopes with double-side-seams**

Double-side-seam construction has vertical seams at both ends of the envelope rather than diagonal seams. This style might be more likely to wrinkle unless properly constructed. Be sure the seam extends all the way to the corner of the envelope.

## **Envelopes with adhesive strips or flaps**

Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the heat and pressure in the printer. The extra flaps and strips might cause wrinkling, creasing, or jams.

## **Envelope margins**

The following table gives typical address margins for a Commercial #10 or DL envelope.

Type of address	Top margin	Left margin	
Return address	15 mm (0.6 inch)	15 mm (0.6 inch)	
Delivery address	51 mm (2 inch)	89 mm (3.5 inch)	

Note

For the best print quality, position margins no closer than 15 mm (0.6 inch) from the edges of the envelope.

#### Envelope storage

Proper storage of envelopes helps contribute to good print quality. Envelopes should be stored flat. If air is trapped in an envelope, creating an air bubble, then the envelope might wrinkle during printing.

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## Card stock and heavy paper

Many types of card stock can be printed from tray 1, including index cards and postcards. Some card stock performs better than others because its construction is better suited for feeding through a laser printer.

For optimum printer performance, do not use paper heavier than 200 g/m<sup>2</sup> (53 lb) in tray 1 or 120 g/m<sup>2</sup> (32 lb) in other trays. Paper that is too heavy might cause misfeeds, stacking problems, jams, poor toner fusing, poor print quality, or excessive mechanical wear.

**Note** 

Printing on heavier paper might be possible if the tray is not filled to capacity, and short-grain paper with a smoothness rating of 100 to 180 Sheffield is used.

#### Card stock construction

- Smoothness: Card stock should have smoothness in the range of 100 to 180 Sheffield.
- Construction: Card stock should lie flat with less than 5 mm (0.2 inch) of curl. It should be short-grain paper to improve feeding and reduce wear on the printer.
- Condition: Make sure that card stock is not wrinkled, nicked, or otherwise damaged.
- Sizes: Use only card stock within the following size ranges:
  - minimum: 76 by 127 mm (3 by 5 inch)
  - maximum: 216 by 356 mm (8.5 by 14 inch)

Before loading card stock in tray 1, make sure that it is regular in shape and not damaged. Also, make sure that the cards are not stuck together.

## Card stock guidelines

- If cards curl or jam, try printing from tray 1 and opening the rear output bin.
- Set margins at least 6 mm (0.24 inch) away from the edges of the paper.

## **Printer specifications**

## **Physical dimensions**

Maximum length with trays and rear output bin open HP LaserJet 4200/4200n/4200tn/ 4200dtn/4200dtns/4200dtnsl HP LaserJet 4300/4300n/4300tn/ 412 mm 4300dtn/4300dtns/4300dtnsl (16.2 inches) 1,045 mm (41.1 inches) HP LaserJet 4200/4200n/4300/4300n (top cover open) 547 mm (21.5 inches) HP LaserJet 4200tn/4200dtn/ 4300tn/4300dtn 670 mm (top cover open) (26.4 inches) 1,045 mm (41.1 inches) HP LaserJet 4200dtns/4200dtnsl/ 4300dtns/4300dtnsl 740 mm (29.1 inches)

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## Printer weight (without print cartridge)

HP LaserJet 4200/4200n printers	20 kg (45 lb)
HP LaserJet 4200tn printer	27 kg (60 lb)
HP LaserJet 4200dtn printer	30 kg (66 lb)
HP LaserJet 4200dtns printer	32 kg (72 lb)
HP LaserJet 4200dtnsl printer	34 kg (75 lb)
HP LaserJet 4300/4300n printers	21 kg (46 lb)
HP LaserJet 4300tn printer	28 kg (61 lb)
HP LaserJet 4300dtn printer	30 kg (66 lb)
HP LaserJet 4300dtns printer	33 kg (73 lb)
HP LaserJet 4300dtnsl printer	34 kg (76 lb)
	·

## **Environmental specifications**

## **Electrical specifications**

**CAUTION** 

Power requirements are based on the country/region in which the printer is sold. Do not convert operating voltages. Converting operating voltages can damage the printer and void the product warranty.

Beloton and del	Power consumption (average, in watts) <sup>1</sup>			
Printer model	Printing	Standby	PowerSave <sup>2</sup>	Off
HP LaserJet 4200	580 (35 ppm)	21	20.4	.07
HP LaserJet 4200n	580 (35 ppm)	22	20.7	.07
HP LaserJet 4200tn	580 (35 ppm)	23	21.8	.07
HP LaserJet 4200dtn	580 (35 ppm)	24	24.2	.07
HP LaserJet 4200dtns	580 (35 ppm)	26	24.1	.07
HP LaserJet 4200dtnsl	580 (35 ppm)	26	24.2	.07
HP LaserJet 4300	685 (45 ppm)	21	21	.07
HP LaserJet 4300n	685 (45 ppm)	23	22.7	.07
HP LaserJet 4300tn	685 (45 ppm)	24	22.6	.07
HP LaserJet 4300dtn	685 (45 ppm)	26	24	.07
HP LaserJet 4300dtns	685 (45 ppm)	26	24.5	.07
HP LaserJet 4300dtnsl	685 (45 ppm)	27	24.9	.07

Values are subject to change. See <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4200</a> or <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4200</a> for current information.

<sup>2.</sup> PowerSave default activation time is 30 minutes.

## Minimum recommended circuit capacity HP LaserJet 4200 series and HP LaserJet 4300 series

	110-volt models	220-volt models
•	110 to 127 volt (+/-10 percent) 50/60 Hz (+/-2 Hz)	220 to 240 volt (+/-10 percent) 50/60 Hz (+/-2 Hz)
Minimum recommended circuit capacity for typical product	8.2 amps	3.3 amps

#### **Acoustic emissions**

Sound power level	Declared per ISO 9296
Printing, 35 ppm (HP LaserJet 4200 series) Printing, 45 ppm (HP LaserJet 4300 series) PowerSave	L <sub>WAd</sub> = 6.8 bels (A) L <sub>WAd</sub> = 7.0 bels (A) L <sub>WAd</sub> = 4.0 bels (A)
SPL - Bystander position	Declared per ISO 9296
Printing, 35 ppm (HP LaserJet 4200 series) Printing, 45 ppm (HP LaserJet 4300 series) PowerSave	L <sub>pAm</sub> = 54 dB (A) L <sub>pAm</sub> = 56 dB (A) L <sub>pAm</sub> = 27 dB (A)

Values are subject to change. See <a href="http://www.hp.com/support/lj4200">http://www.hp.com/support/lj4300</a> for current information.

## **General specifications**

Description	HP LaserJet 4200	HP LaserJet 4300
Operating temperature	10° to 32° C (50° to 90° F)	10° to 32° C (50° to 90° F)
Relative humidity	20 percent to 80 percent	20 percent to 80 percent
Speed, in pages per minute (ppm)	Up to 35 ppm, letter-size paper Up to 33 ppm, A4-size paper	Up to 45 ppm, letter-size paper Up to 43 ppm, A4-size paper
Expandable memory	Up to 416 MB total, combining standard and accessory memory DIMMs	Up to 416 MB total, combining standard and accessory memory DIMMs

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## Regulatory information

## **FCC** regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If this equipment is not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase separation between equipment and receiver.
- Connect equipment to an outlet on a circuit different from that to which the receiver is located.
- Consult your dealer or an experienced radio/TV technician.

Note

Any changes or modifications to the printer that are not expressly approved by HP could void the user's authority to operate this equipment.

Use of a shielded interface cable is required to comply with the Class B limits of Part 15 of FCC rules.

ENWW FCC regulations 197

## **Environmental product stewardship program**

## **Protecting the environment**

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize impacts on our environment.

## **Energy consumption**

Energy usage drops while in PowerSave mode, which saves natural resources and saves money without affecting the high performance of this product. This product qualifies for Energy Star®, which is a voluntary program to encourage the development of energy-efficient office products.



ENERGY STAR<sup>®</sup> is a U.S. registered service mark of the U.S. Environmental Protection Agency. As an ENERGY STAR<sup>®</sup> Partner, Hewlett-Packard Company has determined that this product meets ENERGY STAR<sup>®</sup> Guidelines for energy efficiency. For more information, see <a href="http://www.energystar.gov">http://www.energystar.gov</a>.

## **Toner consumption**

EconoMode uses significantly less toner, which might extend the life of the print cartridge.

## Paper use

This product's optional automatic duplex feature (two-sided printing, "Printing both sides of paper (optional duplexer)" on page 64), and n-up printing (multiple pages printed on one page, "Printing multiple pages on one sheet of paper (pages per sheet)" on page 69) capability can reduce paper usage and the resulting demands on natural resources.

#### **Plastics**

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

#### **HP LaserJet printing supplies**

In many countries/regions, this product's printing supplies (for example the print cartridge, drum, and fuser) can be returned to HP through the HP Printing Supplies Returns and Recycling Program. An easy-to-use and free takeback program is available in more than 48 countries/regions. Multi-lingual program information and instructions are included in every new HP LaserJet print cartridge and supplies package.

## **HP Printing Supplies Returns and Recycling program information**

Since 1990, the HP Printing Supplies Returns and Recycling program has collected millions of used LaserJet print cartridges that otherwise might have been discarded in the world's landfills. The HP LaserJet print cartridges and supplies are collected and bulk shipped to our resource and recovery partners who disassemble the cartridge. After a thorough quality inspection, selected parts are reclaimed for use in new print cartridges. Remaining materials are separated and converted into raw materials for use by other industries to make a variety of useful products.

#### U.S. returns

For a more environmentally responsible return of used cartridges and supplies, HP encourages the use of bulk returns. Simply bundle two or more cartridges together and use the single, prepaid, pre-addressed UPS label that is supplied in the package. For more information in the U.S., call (1-800-340-2445) or visit the HP LaserJet Supplies website at <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a>.

#### Non-U.S. returns

Non-U.S. customers should call their local HP sales and service office or visit the <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> website for further information regarding availability of the HP Supplies Returns and Recycling Program.

## **Paper**

This product is capable of using recycled papers when the paper meets the guidelines outlined in the *HP LaserJet Printer Family Paper Specification Guide*. (See "Ordering information" on page 17.) This product is suitable for the use of recycled paper according to DIN 19309.

#### **Material restrictions**

This HP product does not contain added mercury.

This HP product contains lead in solder that might require special handling at end-of-life.

This HP product does not contain batteries.

For recycling information, you can contact <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a>, your local authorities, or the Electronics Industries Alliance at <a href="http://www.eiae.org">http://www.eiae.org</a>.

## **Material Safety Data Sheet**

Material Safety Data Sheets (MSDS) can be obtained by contacting the HP LaserJet Supplies website at <a href="http://www.hp.com/go/msds">http://www.hp.com/go/msds</a>.

#### For more information

To obtain more information about the following environmental topics, visit <a href="http://www.hp.com/go/environment">http://www.hp.com/go/environment</a> or <a href="http://www.hp.com/hpinfo/community/environment">http://www.hp.com/hpinfo/community/environment</a>:

- product environmental profile sheet for this and many related HP products
- HP's commitment to the environment
- HP's environmental management system
- HP's end-of-life supplies return and recycling program
- MSDSs

## **Declarations of Conformity**

## **Declaration of Conformity**

according to ISO/IEC Guide 22 and EN 45014

Hewlett-Packard Company Manufacturer's Name: Manufacturer's Address: 11311 Chinden Boulevard

Boise, Idaho 83714-1021, USA

declares that the product

**Product Name:** HP LaserJet 4200 series HP LaserJet 4300 series

**Regulatory Model Numbers:** BOISB-0203-00

BOISB-0204-00

**Product Options:** conforms to the following Product Specifications: 1)

IEC 60950:1999 / EN 60950:2000 Safety:

IEC 60825-1:1993+A1 / EN 60825-1+A11 Class 1 Laser/LED Product

GB4943:1995

CISPR 22:1993+A1+A2 / EN 55022:1994+A1+A2 Class B \*2) EMC:

> EN 61000-3-2:1995 / A14 EN 61000-3-3:1995 EN 55024:1998

FCC Title 47 CFR. Part 15 Class B<sup>3</sup> / ICES-003. Issue 3

AS /NZS 3548:1995+A1+A2 GB9254:1998

#### **Supplementary Information:**

The product herewith complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC, and carries the CE-Marking accordingly.

- <sup>1)</sup> The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.
- 2) The product includes LAN (local area network) options. When the interface cable is attached to LAN connectors, the product meets the requirements of EN55022 Class A in which case the following applies: Warning — This is a class A product. In a domestic environment, this product may cause radio interference in which case a user may be required to take adequate measures.
- 3) This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two Conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Boise, Idaho, USA 17 April 2002

#### For regulatory topics ONLY, contact:

Australia Contact: Product Regulations Manager, Hewlett-Packard Australia Ltd., 31-41 Joseph Street, Blackburn, Victoria 3130, Australia

**Europe Contact:** Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard Gmbh, Department HQ-TRE / Standards

Europe, Herrenberger Straße 130, D-71034 Böblingen (FAX: +49-7031-14-3143)

**USA Contact:** Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, ID 83707-0015 (Phone:

208-396-6000)

## Canadian DOC regulations

Complies with Canadian EMC Class B requirements.

Conforme à la classe B des normes canadiennes de compatibilité électromagnétique (CEM).

## **Safety statements**

## Laser safety statement (U.S.)

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration has implemented regulations for laser products manufactured since August 1, 1976. Compliance is mandatory for products marketed in the United States. The printer is certified as a "Class 1" laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. Because radiation emitted inside the printer is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.

#### **WARNING!**

Using controls, making adjustments, or performing procedures other than those specified in this user guide can result in exposure to hazardous radiation.

## **EMI statement (Korea)**

사용자 안내문 (B급 기기)

이 기기는 비업무용으로 전자파장해 검정을 받은 기 기로서, 주거지역에서는 물론 모든지역에서 사용할 수 있읍나다.

## **VCCI statement (Japan)**

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取り扱い説明書に従って正しい取り扱いをして下さい。

ENWW Safety statements 201

## **Laser statement (Finland)**

#### Luokan 1 laserlaite

## Klass 1 Laser Apparat

HP LaserJet 4200 series, 4300 series laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalissa käytössä kirjoittimen suojakotelointi estää lasersäteen pääsyn laitteen ulkopuolelle. Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (1994) mukaisesti.

#### Varoitus!

Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

## Varning!

Om apparaten används på annat sätt än i bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

#### **HUOLTO**

HP LaserJet 4200 series, 4300 series -kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.

#### Varo!

Mikäli kirjoittimen suojakotelo avataan, olet alttiina näkymättömälle lasersäteilylle laitteen ollessa toiminnassa. Älä katso säteeseen.

#### Varning!

Om laserprinterns skyddshölje öppnas då apparaten är i funktion, utsättas användaren för osynlig laserstrålning. Betrakta ej strålen.

Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista:

Aallonpituus 775-795 nm Teho 5 mW Luokan 3B laser

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