

HP LaserJet 6L Printer

User's Manual

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Customer Support Options Worldwide

In addition to the phone numbers listed below, appendix A, "Warranty and Support Information" contains worldwide sales and service addresses and phone numbers for countries not listed here.

U.S. and Canada:		Call (208) 323-2551 Mon-Fri 6 am to 10 pm and Saturday 9 am to 4 pm (Mountain Time) <i>free of charge during the Warranty Period; however, your standard long-distance phone charges still apply.</i> Please have your serial number ready when calling.			
Customer Support & Product Repair Assistance					
(Please refer to the warranty chapter of this manual for additional product repair information.)		Post-warranty telephone assistance is available to answer your product questions. Call (900) 555-1500 (\$2.50* per minute, U.S. only), or call (800) 999-1148 (\$25* per call, Visa or MasterCard, U.S. and Canada) Mon-Fri 7 am to 6 pm and Saturday from 9 am to 3 pm (Mountain Time). <i>Charges begin only when you connect with a support technician. *Prices subject to change.</i>			
European Customer Support Center Language and In-Country Options Available Open Monday-Friday 8:30-18:00 CET					
HP provides a free telephone support service during the warranty period. By calling a telephone number listed below, you will be connected to a responsive team waiting to help you. If you require support after your warranty has expired, you can receive support for a fee through the same telephone number. The fee is charged on a per-incident basis. When calling HP please have the following information ready:					
• Product name and serial number		Date of purchase		Description of the problem	
Dutch	Belgium:	02 626 8806	Norwegian	Norway:	22 11 6299
	Netherlands:	020 606 8751	Danish	Denmark:	3929 4099
English	Ireland:	01 662 5525	Finnish	Finland:	0203 47288
	UK:	0171 512 5202	Swedish	Sweden:	08 619 2170
	International:	44 171 512 52 02	Italian	Italy:	02 26410350
French	France:	04 50 43 9853	Spanish	Spain:	902 321 123
	Belgium:	02 626 8807	Portuguese	Portugal:	01 441 7199
	Switzerland:	084 880 1111			
German	Germany:	0180 5 25 81 43			
	Austria:	0660 6386			
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Argentina		(54 1) 781-4059/69	Mexico D.F.		(52 5) 326-4600
Australia		(03) 9272 8000	Mexico Guadalajara		(52 3) 669 95 00
Brazil		(55 11) 709-1444	Mexico Monterey		(52 83) 378 42 40
Canada		(208) 323-2551	New Zealand		(64 9) 356-6640
China		(8610) 6261-4174; 6261-4175; 6261-4176; 6262-5666	Philippines		(63 2) 894-1451
Czech Republic		(42 2) 471 7321	Poland		(48 22) 37-5065
Greece		(30 1) 689 64 11	Portugal		(351 1) 301 7330
Hong Kong		800-7729	Russia		(7 095) 923-5001
Hungary		(36 1) 252 4505	Singapore		(65) 272-5300
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Japan		(31 20) 581-3318	Thailand		(662) 661-4011; 661-4012
Korea		(82 2) 3270-0700; outside Seoul, call 080-999-0700	Turkey		(90 1) 224-5925

HP LaserJet 6L Printer

User's Manual

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Documentation Warranty Statement

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Material Safety Data Sheet (MSDS)

The Toner Material Safety Data Sheet (MSDS) can be obtained by calling HP First at (800) 333-1917 or (208) 344-4809. International customers should refer to "Hewlett-Packard Services Worldwide" at the front of this manual for appropriate numbers and 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, and if not installed and used in accordance with the instructions, 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 connected.

Consult your dealer or an experienced radio/TV technician.

Note: Any changes or modifications to the printer 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.

Canadian DOC Regulations

Complies with Canadian EMC Class B requirements.

<<Conforme à la classe B des normes canadiennes de compatibilité électromagnétique.
<<CEM>>.>>

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Set Up

Introduction

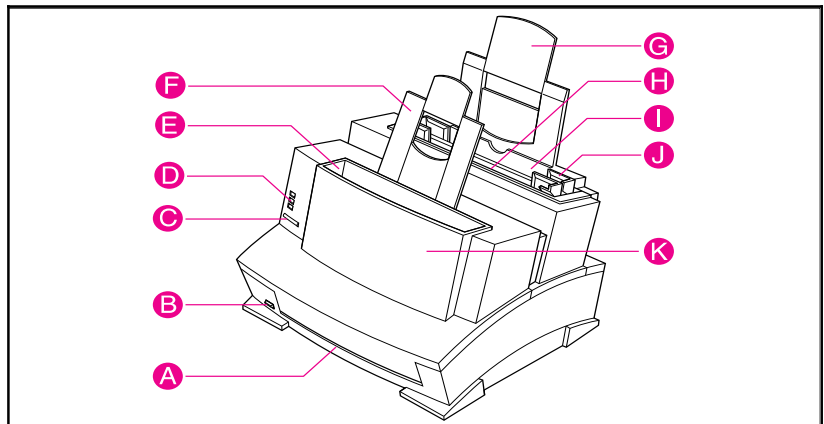
Congratulations on your purchase of the HP LaserJet 6L printer. The following items are required to set up your printer:

- HP LaserJet 6L Printer
- HP LaserJet Toner Cartridge
- IEEE-1284 Compliant Parallel Cable (not included)
- Power Cord
- Sheet of Printer Labels
- HP LaserJet 6L Printer Software Disks

Identifying Your Printer's Parts

Before using your printer, make sure you can identify the following parts:

Figure 1-1

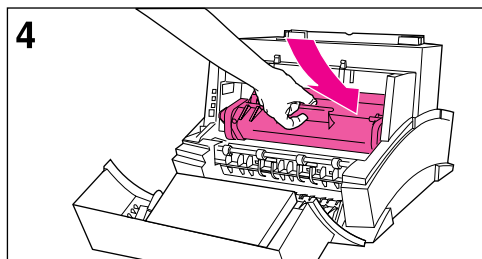
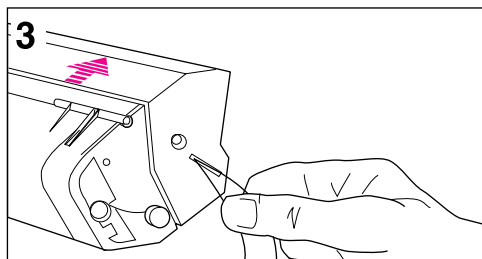
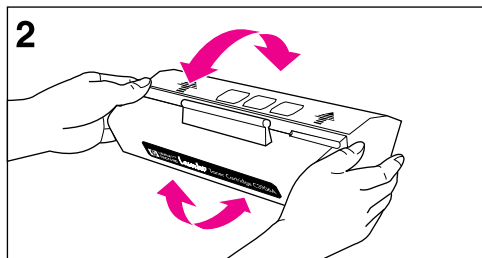
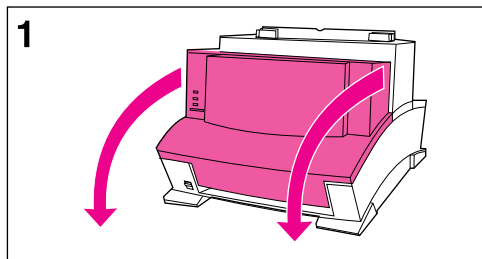


A = Front Output Slot
 B = Paper Path Lever
 C = Front Panel Button
 D = Indicator Lights
 E = Paper Output Bin
 F = Paper Output Support

G = Paper Input Support
 H = Single-Sheet Input Slot
 I = Paper Input Bin
 J = Paper Guides
 K = Printer Door

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Installing the HP LaserJet Toner Cartridge



It is recommended that you use HP LaserJet toner cartridges. HP has designed the printer, toner cartridges, and toner formula to work together to give you optimal image quality from your printer.

Caution

To prevent damage, do not expose the toner cartridge to light for more than a few minutes. For extended periods outside the printer, place the cartridge in a closed drawer, return it to the original packaging, or cover it completely with a cloth.

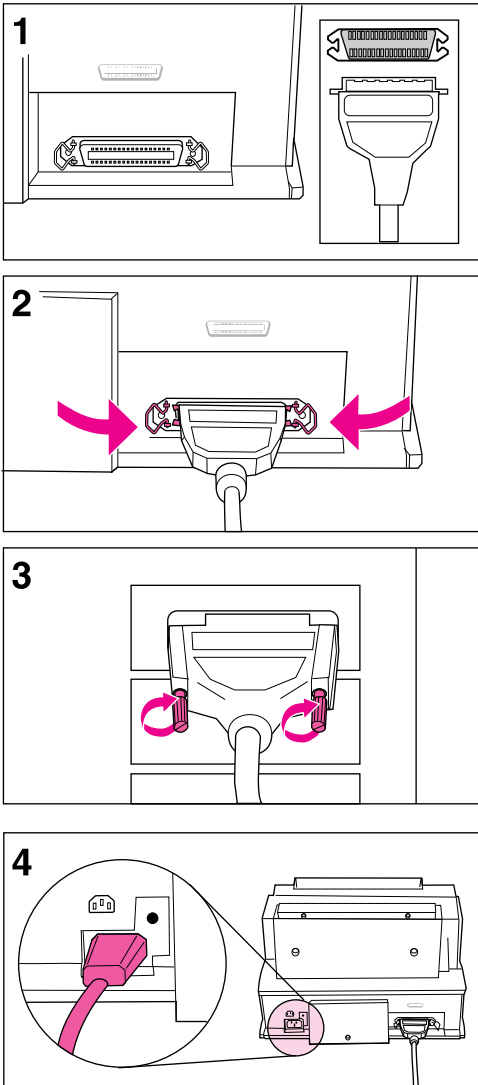
To install your HP LaserJet toner cartridge, you will need to first remove the toner cartridge from its packaging. (Save the packaging for possible cartridge storage and recycling.)

- 1 Open the Printer Door by pulling it toward you in a forward motion using both hands.
- 2 Roll the toner cartridge back and forth briskly to distribute the toner evenly inside the cartridge.
- 3 Grasp the end of the clear sealing tape on the side of the cartridge and pull firmly to remove the entire length of the tape. Once removed, the tape should measure twice the length of the toner cartridge or 490 mm (19.3 inches).
- 4 Hold the cartridge by the handle (so that the arrows are facing the printer) and slide it down and back into the printer. The ends of the cartridge slide into the black plastic grooves in the printer. Push it firmly into place and close the printer door.

Note

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.

Connecting Your Printer's Cable and Cord



Note

For best results, it is imperative that you use a high-quality IEEE-1284 compliant parallel cable, such as the HP LaserJet cable, between the printer and computer. This cable supports all of your printer's advanced printing capabilities. If you experience problems with your computer not being recognized by your printer, you may have a faulty cable.

- 1 Connect a parallel cable to your printer. Be sure not to force the cable on upside down.
- 2 Secure the cable by snapping the two wire clips from the printer to the cable. A secure cable helps prevent communication problems between the computer and printer.
- 3 Connect the other end of the cable to a parallel port on your computer. Secure the cable by tightening the attached screws.

Caution

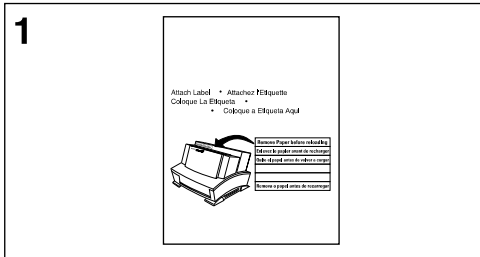
Be sure to connect the cable to a parallel port on your computer rather than a serial port. Connecting to the wrong port can cause damage to your printer. See your computer's documentation for more information about the computer's ports.

- 4 Connect the power cord between the printer and a grounded power strip or wall outlet.

Once the power is connected, the indicator lights on the printer's front panel will turn on and then blink in sequence. The Error (top) light will stay on if the Paper Input Bin is empty.

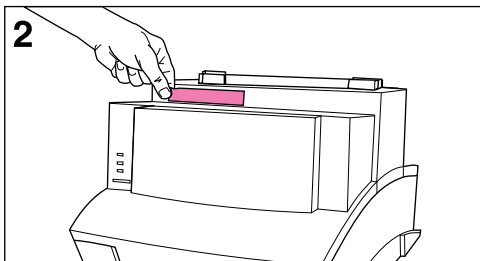
You will not find an on/off switch on your printer. After 15 minutes of inactivity, the printer will automatically shift to a powered-down state called SleepMode.

Attaching the Label to the Printer



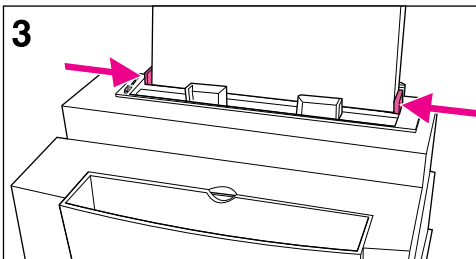
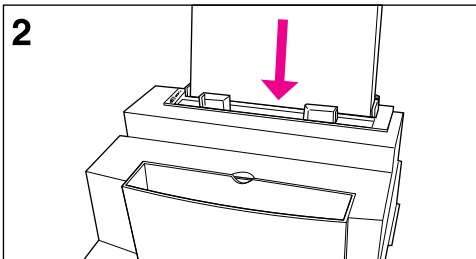
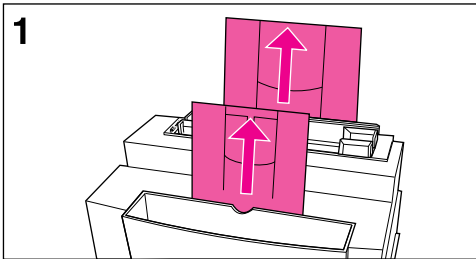
A sheet of labels was shipped in the Paper Output Bin of your printer. You will need to attach the label titled “Remove Paper Before Reloading” to your printer.

- 1 Carefully remove the label from its backing sheet.
- 2 Attach the label to the printer's Paper Input Bin.



As the label indicates, always remove and realign all paper before reloading. By doing so, you can reduce multiple paper feeds or paper jams or both.

Loading Paper into the Printer



Before loading paper into the printer, you will want to raise the paper supports located behind the Paper Input Bin and the Paper Output Bin. Using paper supports can help prevent unwanted paper curl and paper jams. These supports can be extended for different lengths of paper.

- 1 Raise the supports on the Paper Input Bin and on the Paper Output Bin until they snap into place.
- 2 Insert up to 100 sheets of paper into the Paper Input Bin. Be careful not to overfill the bin. The Ready (bottom) light will come on.
- 3 Center the paper using the paper guides on the Paper Input Bin.

If you want to test your printer, you can print the self-test page. To do so, make sure the Ready (bottom) light is on and all other indicator lights are off. Press and release the Front Panel button. (If the printer is in SleepMode [all lights are off], you will need to press the Front Panel button twice.) The Data (middle) light will come on and the Ready (bottom) light will blink. The self-test page prints.

Note

When adding paper to an existing stack in the Paper Input Bin, always remove and realign all paper to avoid multiple paper feeds or paper jams or both.

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Printer Software Information

Before you can use your printer with any software programs, you must first install the printer's software. Your printer's software includes two printer drivers that support both Windows® 3.1x and Windows 95. The printer's software will automatically select the optimal printer driver based on the requirements listed below.

Minimum System Requirements

PCL Driver

- 386 processor
- 4 MB RAM (Windows 3.1x) or 16 MB RAM (Windows 95)
- 5 MB free disk space

Host-Based Driver

- 486 processor
- 8 MB RAM (Windows 3.1x) or 16 MB RAM (Windows 95)
- 10 MB free disk space
- DOS 5.0
- Bidirectional communication

Installation Considerations

Some devices (such as a switchbox, zip drive, or software key) connected between the printer and the computer may prevent the printer from sending data back to the computer. If you are using one of these devices, some of your printer's features will not be available to you, such as the status window.

During installation, if you get the message "HP LaserJet 6L printer has not been found," check the following:

- Check the power cord connections and power source.
- Make sure you are using a high-quality IEEE-1284 compliant parallel cable.
- Ensure that any devices connected between the printer and the computer (such as a switch box or zip drive) have bidirectional capabilities.

If, after checking the items listed above, you still see the "HP LaserJet 6L printer has not been found" message, click **Continue** to proceed with the PCL driver installation.

If the installation could not be successfully completed, see the Alternative Installation instructions later in this chapter.

Installing Your Printer's Software

The following section lists several different methods of installation. Use the method that is appropriate for your computer system.

Standard Installation for Windows 3.1x

This setup installs the printer software for Windows 3.1x.

- 1 Connect your HP LaserJet 6L printer to your computer using a high-quality IEEE-1284 compliant parallel cable.
- 2 Ensure the power cord is connected to the printer.
- 3 Insert Disk 1 into Drive A: (or B:).
- 4 Select **File** from the Program Manager and choose **Run**.
- 5 Type **A : SETUP** (or **B : SETUP**) and click **OK**.
- 6 Follow the instructions on your screen to complete the installation.
- 7 Remove the disk when the installation is complete.

Standard Installation for Windows 95

This setup installs the printer software for Windows 95.

- 1 Click **Start**, select **Shut Down**, choose **Shut Down the Computer**, and click **Yes**.
 - 2 Turn off your computer.
 - 3 Connect your HP LaserJet 6L printer to your computer using a high-quality IEEE-1284 compliant parallel cable.
 - 4 Ensure the power cord is connected to the printer.
 - 5 Turn on your computer and restart Windows 95. The "New Hardware Found" screen appears.
- Note** If your computer does not display the "New Hardware Found" screen, you will need to follow these instructions: 1) Insert disk 1 into Drive A: (or B:), 2) Select **Start**, then select **Run**, 3) Type **A : SETUP** (or **B : SETUP**) and click **OK**, then 4) Follow the instructions on your screen.
- 6 Select "Driver from Disk Provided by Hardware Manufacturer."
 - 7 Click **OK**. The "Install From Disk" screen appears.
 - 8 Insert Disk 1 into Drive A: (or B:) and click **OK**.
 - 9 Follow the instructions on your screen to complete the installation.
 - 10 Remove the disk when the installation is complete.

Note

If after installing the software and restarting Windows 95 your computer displays the screen "New Hardware Detected" and lists the HP LaserJet 6L printer, you will want to select "Do not install a driver (Windows will not prompt you again)" and click **OK**.

Custom versus Typical Installation

During installation, you may see a dialog box asking if you prefer a Typical or a Custom installation. The Typical installation installs all of the HP recommended software.

If you choose to do a Custom installation, you will be asked whether you want to install the host-based driver or the PCL driver. (See the system requirements for the PCL driver and the host-based driver.) If you meet the system requirements and your printer is connected directly to your computer, select the host-based driver. If you meet the system requirements and you are going to access the printer across a network, select the PCL driver.

You will also need to select or clear the HP LaserJet 6L Help files. Select this option if you want to include online help files for your printing software. Finally, you will be asked to select or clear TrueType Fonts. Select this option if you want to install TrueType fonts.

Note

By following the Alternative Installation instructions below, the PCL driver files and some help files will be installed. This setup will not install the status window.

Caution

Make sure that you quit all software that is currently running, such as Microsoft® Office Manager, virus checkers, and fax utilities.

Alternative Installation for Windows 3.1 x

- 1 Quit all software that is currently running.
- 2 From the Program Manager, open the Main group.
- 3 Open the **Control Panel** and **Printers**.
- 4 Click **Add**. A list of printers will appear on your screen with **Install Unlisted or Updated Printer** highlighted.
- 5 Click **Install**.
- 6 Insert Disk 2 and click **OK**.
- 7 Follow the instructions on your screen to complete the installation.
- 8 Remove the disk when the installation is complete.

Alternative Installation for Windows 95

- 1 Quit all software that is currently running.
- 2 Click **Start**, then select **Settings/Printers**.
- 3 Double-click on **Add Printer**.
- 4 Click **Next** until you come to the List of Printer Manufacturers.
- 5 Click **Have Disk**.
- 6 Insert Disk 2 and click **OK**. The name of the printer driver will appear.
- 7 Click **Next**. Then click **Next** again.
- 8 Remove the disk when the installation is complete.

Using Online Help

When you installed your printer software, you also installed online help. Online help contains detailed procedures that guide you through any task you want to perform with your printer. It provides information that is specific to the current printing task. You can access online help by selecting Help in your HP LaserJet 6L program group.

Online help is also a troubleshooting tool. When problems occur, the quickest way to find a solution is to access your online help.

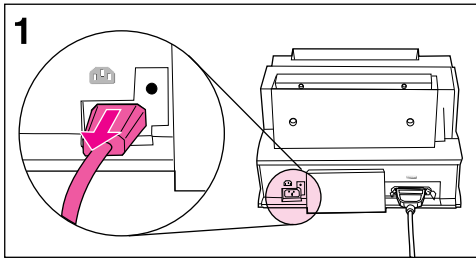
Online help supports the following software topics:

- **Installation**—provides installation information.
- **Overview**—summarizes information about the printer driver, the status window, and accessing online help.
- **Driver Software**—describes options available for your printer, such as number of copies and paper size.
- **Status Window**—describes options and features of your printer and gives detailed descriptions of status window messages.
- **Troubleshooting**—leads you through a question and answer troubleshooting scenario to determine and resolve problems.
- **How Do I**—provides information on printing tasks.

Note

Online help will not be available if you followed the Alternative Installation instructions.

Installing Memory Cards (DRAM)

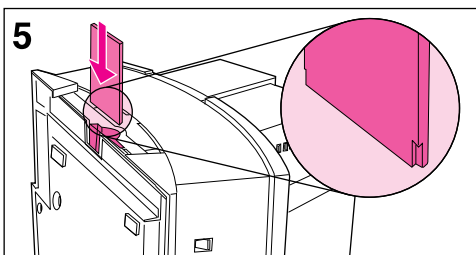
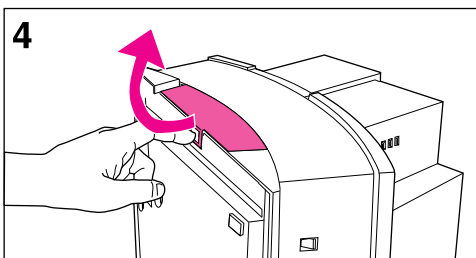
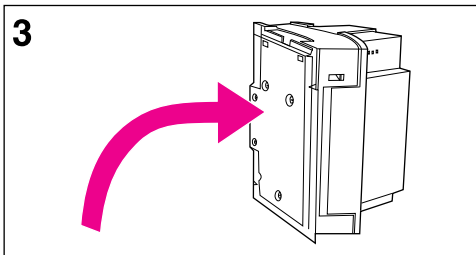
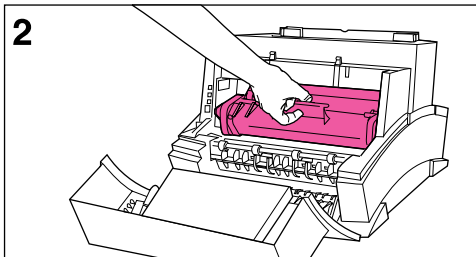


Your HP LaserJet 6L printer is capable of accepting any 70ns or faster (such as a 50ns), 5V, DRAM memory card meeting JEIDA specifications.

Hewlett-Packard offers 1-, 2-, and 4-MB DRAM memory cards.

Note

Some printer drivers have an adjustable memory setting. After installing or removing a memory card, this setting may require an adjustment to reflect the new memory total.



- 1 Unplug the power cord from the printer.
- 2 Open the Printer Door, remove the toner cartridge, and close the Printer Door. Protect the toner cartridge from light while working on the printer.
- 3 Gently tip the printer onto its side so that the memory cover is on top.
- 4 Remove the Memory Expansion Cover by placing a finger through the hole and pulling away from the printer.
- 5 Align the memory card with the corner notch so it is positioned as shown. Push it firmly into the printer.

Replace the Memory Expansion Cover, set the printer upright, reinstall the toner cartridge, load the paper, and plug the power cord back into the printer.

Print a self-test page to ensure that the printer recognizes the additional memory you have added. Your Total Memory in the "Printer Configuration" section will show the new memory total.

Printer Control Panel

Using the Front Panel

The Front Panel consists of one button and three indicator lights.



• **Error** (Amber)



• **Data** (Green)



• **Ready** (Green)

The lights will be in one of the following states:



On




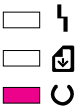



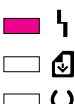

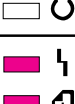

Off



Blinking

The Front Panel

Use the Front Panel to determine the status of your printer and to accomplish the following tasks:

Status	Condition	Cause	Action
	No lights are on or blinking.	Printer is in SleepMode or power has been disconnected.	If you wish to print, press and release the Front Panel button or send the job to print. If no response, check the power cord.
	Ready light is on steadily.	Printer is ready to print.	No action is necessary. However, if you press and release the Front Panel button, a self-test page will print.
	Data light is on steadily and the Ready light is blinking.	Printer is receiving or processing data.	No action is necessary.
	Data light and Ready light both remain on.	Unprinted data is in the printer.	Press and release the Front Panel button to print the remaining data.
	Data light is blinking.	Printer is in Manual Feed mode.	Check that you have loaded the correct paper. Then, press and release the Front Panel button to print.
	Error light remains on.	Printer is out of paper. Printer has a paper jam. No toner cartridge. Printer door is open.	Load paper. Clear the paper path. Install the toner cartridge. Close the printer door.
	Error light is blinking.	Page may be too complex for the printer's memory capacity.	See Chapter 4, "Troubleshooting."
	All lights are on.	Printer is indicating an internal problem.	See Chapter 4, "Troubleshooting."
	All three lights are flashing simultaneously.	The memory card may be slower than 70 ns.	See Chapter 4, "Troubleshooting."

Printing

Selecting Print Media

The type of media you select will affect printer performance and print quality.

Selecting Media Types

If available in your area, it is recommended that you use HP LaserJet or HP Multipurpose paper (since it has been designed specifically for use with your printer) or paper meeting HP's specifications. You can also use recycled paper when the paper meets HP's requirements. To order HP paper or the *HP LaserJet Printer Family Paper Specification Guide*, see "Accessories and Supplies Information" in appendix A.

Selecting Media Sizes

The Paper Input Bin can hold up to 100 sheets of 75 g/m² (20 pound) print media. The Single-Sheet Input Slot is designed to hold one sheet. Both can be adjusted to hold media measuring from 76.2 x 127 mm (3 x 5 inches) to 215.9 x 355.6 mm (8.5 x 14 inches). This includes, but is not limited to, the following paper and envelope sizes:

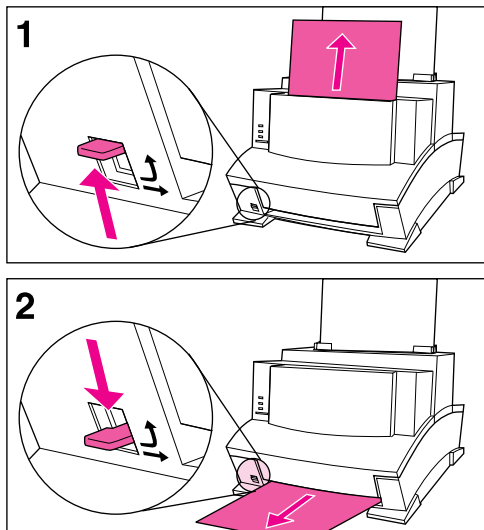
- Letter (8.5 x 11 in)
- Legal (8.5 x 14 in)
- Executive (7.25 x 10.5 in)
- A4 (210 x 297 mm)
- COM10 Envelopes (4.125 x 9.5 in)
- DL Envelopes (110 x 220 mm)
- C5 Envelopes (162 x 229 mm)
- B5 Envelopes (176 x 250 mm)
- Monarch Envelopes (3.875 x 7.5 in)
- Other Custom-Sized Media

Note

Insert all media lengthwise (vertically) into the printer. If you want to print horizontally (landscape), make this selection through your software. Do not print on paper smaller than 76.2 x 127 mm (3 x 5 inches).

TONER

Selecting the Output Paper Path



Caution

To avoid paper jams, do not switch the Paper Path Lever once printing begins.

- 1 Set the Paper Path Lever to the **upper position** to use the Paper Output Bin. By doing so, the sheets will stack in the correct order.
- 2 Set the Paper Path Lever to the **lower position** to use the Front Output Slot. This straight-through path is the best output option to print postcards, transparencies, labels, envelopes, and heavy paper (100- to 157-g/m² [28- to 42-lb] bond weight).

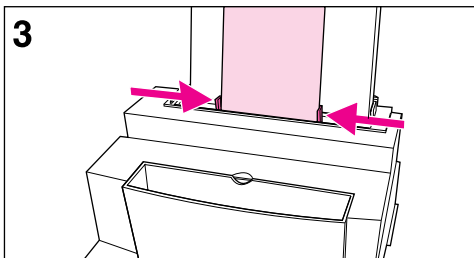
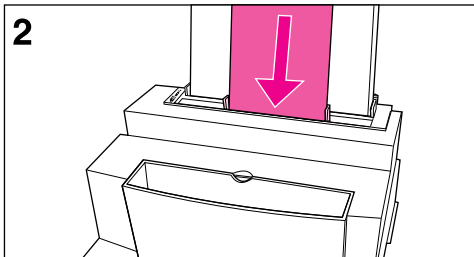
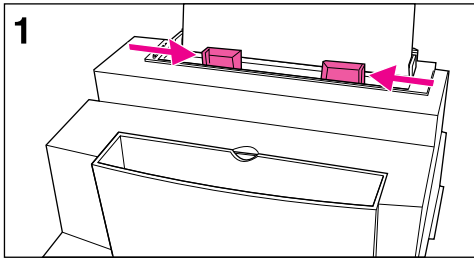
Caution

Do not allow more than one transparency, 20 sheets of paper, or other media to stack up in front of the Front Output Slot. A paper jam could result.

Adding Paper

When adding paper to an existing stack in the Paper Input Bin, always remove and realign all paper before reloading to avoid multiple paper feeds.

Using the Single-Sheet Input Slot



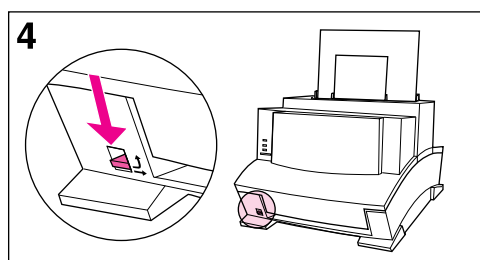
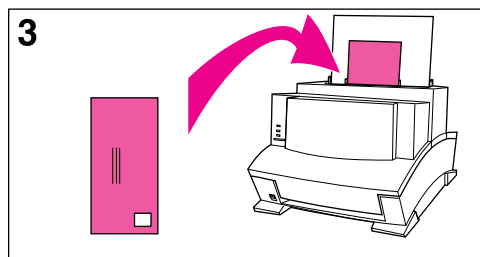
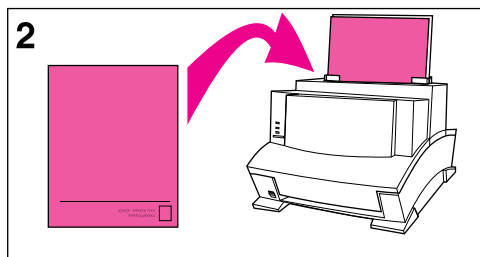
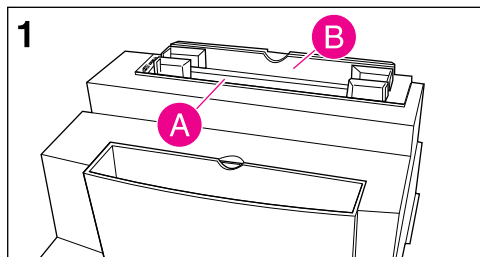
You can print one sheet of print media at a time without unloading the Paper Input Bin. To do so, you will need to load one sheet into the Single-Sheet Input Slot. The printer will take from the Single-Sheet Input Slot before it takes from the Input Bin.

Note

The Single-Sheet Input Slot is helpful when the first page of your job is different from the rest. For example, you may want the first page of your print job on letterhead, or you may want to print an envelope first.

- 1 Center the paper guides to the approximate size of the sheet you are using.
- 2 Insert one sheet of print media, print side forward and top side down, into the Single-Sheet Input Slot.
- 3 Readjust the paper guides to center the sheet.

Printing on Letterhead and Envelopes



Letterhead

- 1 If you are printing a sheet of letterhead followed by regular sheets of paper, place a sheet of letterhead into the (A) Single-Sheet Input Slot and regular sheets of paper into the (B) Paper Input Bin. If you are printing several sheets of letterhead in succession, fill the Paper Input Bin (B) with the letterhead.
- 2 Insert the letterhead with the print side forward and the top side down.

Note

If printing on embossed or pre-printed paper, make sure the paper meets HP's paper specifications. To order the *HP LaserJet Printer Family Paper Specification Guide*, see "Accessories and Supplies Information" in appendix A.

Envelopes

If you are printing one envelope followed by regular sheets of paper, place the envelope into the (A) Single-Sheet Input Slot and regular sheets of paper into the (B) Paper Input Bin.

If you are printing several envelopes in succession, fill the Paper Input Bin (B) with up to 10 envelopes, depending on envelope construction and operating environment. (In some cases, you may only be able to load up to 7 envelopes, such as if you live in an area with high humidity.)

If you are printing only one envelope, use the Single-Sheet Input Slot.

- 3 Insert the envelopes print side forward as shown.
- 4 Set the Paper Path Lever to the Lower position to reduce wrinkling and curling.

Printing Tasks

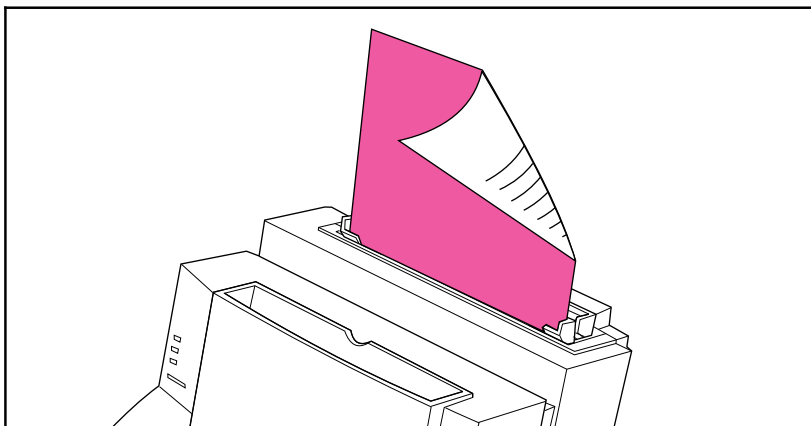
Your HP LaserJet 6L printer's capabilities include duplex printing, pausing between pages, and stopping a print job. You can also reset your printer if necessary.

Printing on Both Sides (Duplexing)

When you print on both sides of a sheet, you may notice a difference in the way the printer performs. When printing on the second side, you may experience some difficulties such as getting the sheet to feed into the printer, or multiple feeds. In addition, the print quality may be different on the second side of the sheet. To minimize these problems, you will want to use paper meeting HP's paper specifications. To order HP paper or the *HP LaserJet Printer Family Paper Specification Guide*, see "Accessories and Supplies Information" in appendix A.

- 1 Print the first side of the sheet as you normally would. Some software programs include options that are useful when duplex printing such as printing just the "odd pages" or the "even pages." Consult your software user's manual.
- 2 Allow the sheet to cool and flatten before printing on the second side to get the best possible print quality.
- 3 Print the second side by placing the sheet back into the Paper Input Bin or the Single-Sheet Input Slot. Make sure the side that has already been printed is facing the back of the printer and the top edge of the paper is down, as illustrated in Figure 3-1.

Figure 3-1



Tips for Duplex Printing

- To avoid paper curl, set the Paper Path Lever to the Lower position and use the Front Output Slot for a straight-through paper path.
- To print one page at a time, select the Manual Feed option in your software to pause the printer between pages.
- Make certain that the sheet's leading edge is not bent or curled.

Pausing Your Printer Between Pages

Occasionally, you may need the printer to pause so that you can load special media, such as letterhead. If you specify Manual Feed in your software, the printer will pause before the first page and between each page you print. This will give you time to load the special media. To resume printing, press and release the Front Panel button.

- 1 In your software's printer menu or bin/tray selection, select the **Manual Feed** mode.
- 2 From your software, print the document.
- 3 The Data light will blink when the page is ready to print, indicating that the printer is paused and waiting.
- 4 After inserting the correct medium, briefly press and release the Front Panel button to print the page. The printer will take media from the Single-Sheet Input Slot first. If it does not find media in the Single-Sheet Input Slot, it will take media from the Paper Input Bin.

Resetting Your Printer

Resetting the printer accomplishes the following:

- Clears all data from the printer's memory (including unprinted data, downloaded fonts, and macros).
- Finishes printing the current page.
- Removes some error conditions.
- Resets the printer to its factory default settings.

To Reset the Printer:

Press and hold the Front Panel button until the three indicator lights begin to blink in succession (about 5 seconds), then let go of the button. After resetting, the Ready light will remain lit if no printer errors are found.

Stopping a Print Job

If the file you send to the printer is only one or two pages long, you can stop the print job by resetting the printer as described above.

If you want to stop a large print job, follow the steps below:

- 1 Remove the media from the Paper Input Bin except for any sheet that is currently being fed into the printer.
- 2 Stop and delete the print job through your software.
- 3 Reset the printer.

Printing on Special Media

Your printer is designed to print on a variety of media, including transparencies, envelopes, and custom-made paper. It is recommended that you use HP media or media meeting HP's specifications. See appendix A, "Accessories and Supplies Information" to order HP's special media or the *HP LaserJet Printer Family Paper Specification Guide*.

- 1 Set the Paper Path Lever to the Lower position to use the Front Output Slot for a straight-through paper path. This is important when printing media such as postcards, transparencies, labels, envelopes, and heavy paper (100- to 157-g/m² [28- to 42-pound] bond weight).
- 2 Adjust the paper guides to the approximate size of media you are using.
- 3 Insert the media print side forward and top side down into the Single-Sheet Input Slot or the Paper Input Bin.
- 4 Readjust the paper guides to center the media.
- 5 Set the correct margins, paper size, and orientation in your software.
- 6 Choose **Print** in your software.

Additional Tips for Custom Sizes

- Do not print on media smaller than 76.2 mm (3 inches) wide or 127 mm (5 inches) tall.
- Set margins of at least 6.4 mm (.25 inches) in your software.
- Always insert media lengthwise (vertically) into the printer. If you want to print in landscape mode, make this selection through your software.

Additional Tips for Transparencies

To avoid transparency curl, remove the transparency as it comes out of the printer and set it on a flat surface to cool.

Additional Tips for Printing Labels

- Do not use labels that are separating from the backing sheet or that are wrinkled or damaged in any way.
- Do not use any sheet of labels that has spaces in it where some of the labels have been removed.
- Do not feed a sheet of labels through your printer more than once.

Managing HP LaserJet Toner Cartridges

It is recommended that you use HP LaserJet toner cartridges. HP has designed the printer, toner cartridge, and toner formula to work together to give you optimal image quality from your printer. To order an HP LaserJet toner cartridge, see “Accessories and Supplies Information” in appendix A.

You can expect a toner cartridge to print approximately 2500 pages when you are printing typical business letters with text covering about 5% of the page. A page containing graphics uses more toner and shortens the life of the cartridge.

Extending Toner Life through EconoMode

An excellent way to extend the life of your toner cartridge is by using EconoMode. EconoMode uses approximately 50% less toner than normal printing. The printed image is much lighter, but is adequate for printing drafts or proofs. You can set the EconoMode option through your software (refer to online help for more information).

Extending Toner Life by Redistributing Toner

Areas of faded print are often an indicator that the toner cartridge is near the end of its toner life. You can temporarily reestablish print quality by redistributing the remaining toner in the cartridge. (This is typically successful only one time.)

- 1 Open the Printer Door and remove the toner cartridge.
- 2 Hold the toner cartridge by the handle and pull it toward you so that it slides out of the plastic grooves. (Remember to protect the cartridge from light.)
- 3 Briskly roll the toner cartridge back and forth to redistribute the toner evenly inside the cartridge.
- 4 Reinsert the toner cartridge and close the door.

Recycling Toner Cartridges

To reduce landfill waste, HP has adopted a recycling program for empty toner cartridges. A postage-paid shipping label can be found inside your HP LaserJet toner cartridge box. Up to 95% of each returned toner cartridge is recycled for use as raw materials in the manufacture of new cartridges and in other industries. To join this recycling effort, follow the instructions provided in the toner cartridge box.

Troubleshooting

Solving Common Problems

This chapter helps you solve common problems you may experience while using your printer. If you cannot resolve a problem, contact HP Customer Support for assistance. Phone numbers are listed on the support pages at the front of this manual.

Printing a Self-Test Page

A self-test page can be useful in identifying your printer's configuration and to ensure that your printer is working properly.

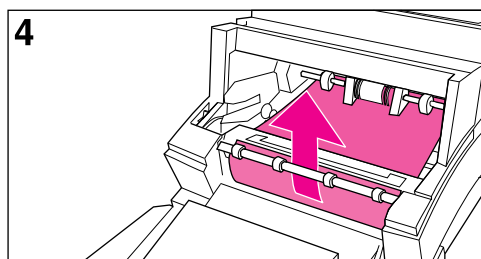
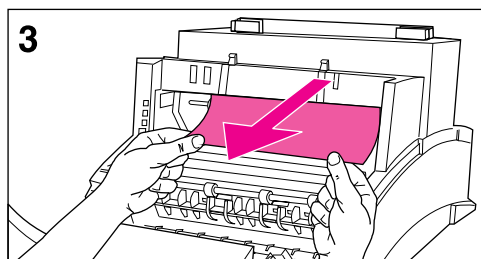
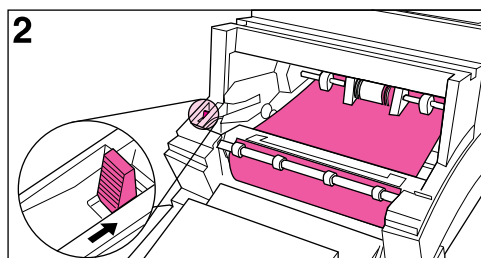
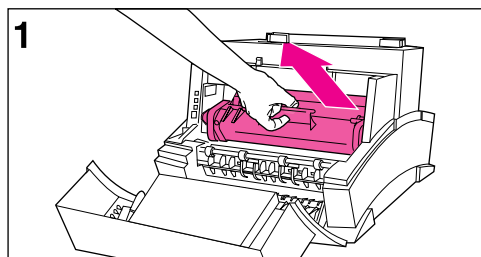
To print a self-test page:

- 1 Make sure that the Ready light is on and all other lights are off. If necessary, wake up the printer by briefly pressing and releasing the Front Panel button.
- 2 Now briefly press and release the Front Panel button again. The Data light will come on and the Ready light will blink. Please wait for a self-test page to print.

If the self-test page does not print, try the following:

- 1 Ensure that paper is loaded in the printer.
- 2 Check the printer indicator lights to determine the status of your printer (See "Solving Printer Problems" later in this chapter).
- 3 Contact Customer Support for assistance (refer to the support pages at the front of this manual for support options).

Clearing Paper Jams



Occasionally, paper can become jammed while printing. The following list shows some possible causes:

- The paper was loaded improperly.
- The Paper Path Lever was adjusted while a job was printing.
- The Printer Door was opened while a job was printing.
- The paper being used does not meet HP's specifications.
- The paper being used was smaller than 76.2 x 127 mm (3 x 5 inches).

To clear a paper jam:

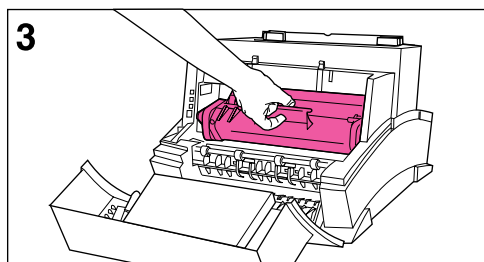
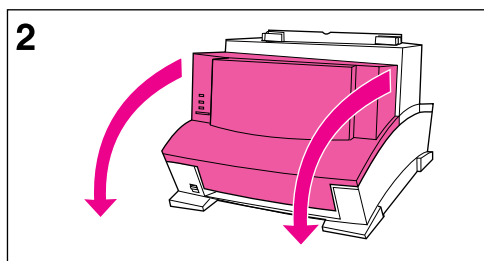
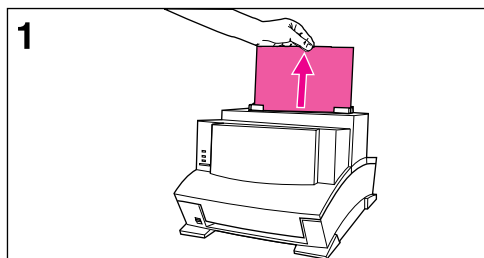
Caution

Do not touch the black sponge roller inside your printer. Touching it may reduce the print quality on your media.

- 1 Open the Printer Door and remove the toner cartridge. Be sure to protect the toner cartridge from light while you work on the printer.
- 2 Press the Paper Release Lever.
- 3 If your paper jam is in the printer's input area, reach inside the printer and carefully pull the sheet toward you.
- 4 If your paper jam is in the printer's output area, grasp the sheet and carefully pull it upward.
- 5 After removing all sheets and fragments of paper, replace the toner cartridge and close the Printer Door.

The printer should return to a Ready state as soon as you reload the paper.

Paper Will Not Feed



If your print media does not feed into the printer, briefly press and release the Front Panel button. The printer will again attempt to feed the media. If this is unsuccessful, try the following procedure:

- 1 Remove the print medium from the Paper Input Bin, realign the media, and reload it into the printer.

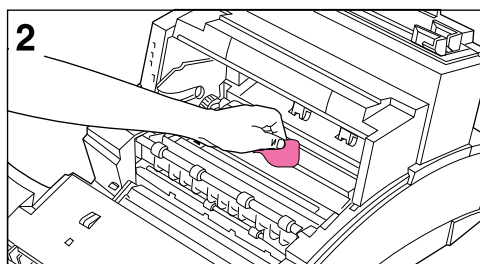
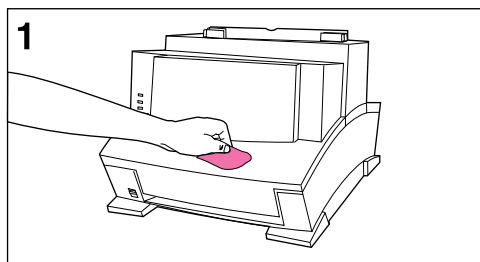
Note

Be sure to center print media with the paper guides. Also, verify that the guides are not adjusted too tightly or too loosely against the media.

- 2 Open the Printer Door.
- 3 Remove the toner cartridge, making sure you protect it from light, and check for a paper jam.
- 4 Replace the toner cartridge and close the door.

The printer will automatically resume printing.

Cleaning Your Printer



To prevent excessive wear and preserve print quality, keep the printer free of excessive dust and debris.

Note

If you are noticing excessive amounts of toner inside your printer, your toner cartridge may be defective. It is recommended that you use HP LaserJet toner cartridges to insure high quality printing and to reduce incidents of excessive toner in your printer.

WARNING!

Before cleaning the printer, disconnect it from the power source.

Caution

Using ammonia-based cleaners on or around the printer can cause damage to the printer. Also, do not touch the black sponge roller inside the printer. By doing so, you can reduce the print quality of your media.

- 1 Clean the outside of the printer with a slightly damp cloth (use only water).
 - 2 Clean the inside of the printer with a dry, lint-free cloth. Remove all dust, spilled toner, and particles of paper.
-

Note

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

Solving Printer Problems


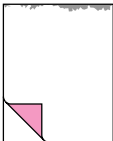

Use the following table to help pinpoint and solve printer problems.

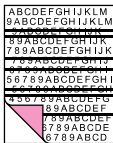

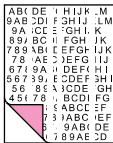

Symptom	Possible Cause	Solution(s)
The printer isn't responding after "print" is selected in the software.	The printer may be paused.	Resume printing from the status window or Print Manager.
	The printer may be in Manual Feed mode (Data light blinking).	Press and release the Front Panel button.
	The parallel cable between the printer and the computer is not connected properly.	Disconnect and reconnect the parallel cable between the printer and the computer.
	The parallel cable is defective.	If possible, attach your cable to another system and print a job that you know works. You may also try using a different parallel cable (IEEE-1284).
	The wrong printer was selected in your software.	Check your software's printer selection menu to see if you selected the HP LaserJet 6L printer.
	The software for your printer is not configured for the correct printer port.	Check your software's printer selection menu to make sure it is accessing the correct printer port. If your computer has more than one parallel port, make sure the parallel cable is connected to the correct one.
	The power cord is not connected to the printer or the power source is not active.	Check the power cord connection and the power source. Try a different outlet.
	The printer is connected to a switchbox that is not set up correctly.	Check the switchbox setting. Try connecting the printer directly to the computer. The switchbox may be defective.
	The printer is malfunctioning.	If all the lights are on, the printer may be signaling a hardware error. See "All the printer's lights are on" on the following page.
The Error (top) light stays on.	The printer is out of print media.	Add paper or other print media.
	The printer door is open.	Close the door securely.
	The toner cartridge is not installed completely.	Open the door, reinstall the toner cartridge, then close the door securely.
	Paper is jammed in the printer.	See "Clearing Paper Jams" earlier in this chapter.
The Error (top) light is blinking.	The page is too complex for the printer's memory capacity, or the printer may not be able to create the image fast enough to keep pace with the printing process.	Briefly press and release the Front Panel button to resume printing. Some data loss may occur.
		See your printer driver Help for suggestions regarding printer memory usage.
		Change your page to make it less complex by reducing resolution to 300 dpi, or add optional printer memory (see chapter 1).
Both the Data (middle) light and the Ready (bottom) light are on steadily (not blinking).	Unprinted data is in the printer. (Your software did not send an "end of job" or "form feed" command.)	Briefly press and release the Front Panel button to print the rest of the data.


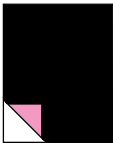

Symptom	Possible Cause	Solution(s)
The Data (middle) light is blinking.	The printer is in Manual Feed mode.	Make sure the correct paper is loaded into the printer. Briefly press and release the Front Panel button to resume printing.
All the printer's lights are off and the printer does not respond after attempts to wake it up.	The printer is unplugged from the power source.	Check the power cord connections and power source. Try a different outlet.
	The printer has malfunctioned.	Refer to the support pages on the inside front cover for support options.
All the printer's lights are on.	The printer has a hardware error.	Disconnect the printer from the power source for 10 seconds, then reconnect it. If the lights remain on, disconnect the printer from its power source again, this time reconnecting after a 15-minute wait. If all three lights come back on again, contact your HP authorized service representative.
		If you have added a memory card to your printer, remove it and check the indicator lights. See chapter 1 for adding and removing printer memory cards.
All three printer lights are flashing simultaneously.	An incompatible memory card has been installed.	Remove the incompatible memory card and replace it with a 1-, 2-, 4-, or 8-MB, 70ns or faster (such as 50ns) memory card. See chapter 1 for adding memory cards.
The printer is feeding multiple sheets or jams frequently.	Paper guides are not adjusted properly.	Remove the paper from the Paper Input Bin or the Single-Sheet Input Slot. Tap the sides of the paper stack together, then reinsert the stack. Or reinsert the single sheet into the slot. Slide the paper guides against the sides of the stack in the Paper Input Bin or against the single sheet in the Single-Sheet Input Slot to center the paper. Make sure the guides are not adjusted too tightly.
	The Paper Input Bin is too full.	Remove some of the sheets. The Paper Input Bin can hold up to 100 sheets of 75g/m ² (20-pound) bond weight paper (less for heavier paper) or up to 10 envelopes (no more than 7 envelopes for areas with climates having high humidity).
	More than one sheet was added into the Single-Sheet Input Slot.	Add only one sheet at a time into the Single-Sheet Input Slot. If printing more than one sheet of the same type of media, use the Paper Input Bin.
	The paper was poorly cut by the manufacturer and is sticking together.	"Break" the ream of paper by curving it into an upside-down u-shape; this may effectively decrease multi-feeds. You may also try turning the paper around to feed the opposite end first.
	The paper does not meet HP's specifications for print media.	Order HP's paper specification guide. To order, see appendix A, "Accessories and Supplies Information."
	The output capacity was exceeded in the Paper Output Bin or Front Output Slot.	Do not allow more than 100 sheets of 75g/m ² (20-pound) bond weight paper (less for heavier paper) to fill the Paper Output Bin. Do not allow more than one transparency or 20 sheets of other media to stack up in front of the Front Output Slot.


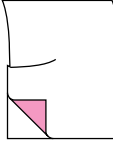
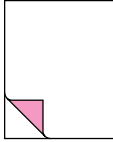
Solving Print Quality Problems

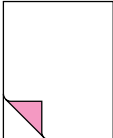
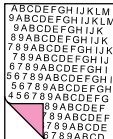
Use the following table to help pinpoint and solve print quality problems.

Problem	Cause	Solution(s)
Print is faded or you notice a block of vertically aligned white streaks. 	<p>The toner cartridge may be getting low on toner.</p> <p>The paper you are using may not meet HP's paper specifications (for example, it may be too moist or too rough).</p> <p>Toner density setting may need to be adjusted.</p> <p>EconoMode may be on.</p>	<p>See chapter 3, "Managing HP LaserJet Toner Cartridges."</p> <p>Order HP's paper specification guide listed in "Accessories and Supplies Information" in appendix A.</p> <p>Adjust the setting through your software or printer driver.</p> <p>Turn EconoMode off through your software or printer driver.</p>
Stains or smudges appear as small, round, black dots on the front or back of a page. Sometimes inconsistent stains appear. 	<p>The paper you are using may not meet HP's paper specifications (for example, it may be too moist or too rough).</p> <p>You may be printing on the wrong side of the paper.</p> <p>The printer may need cleaning.</p> <p>The toner cartridge may be damaged.</p>	<p>Order HP's paper specification guide listed in "Accessories and Supplies Information" in appendix A.</p> <p>Remove the paper from the Paper Input Bin and turn it over. (The wrapper on many reams of paper has an arrow indicating the print side.)</p> <p>See "Cleaning Your Printer" in this chapter.</p> <p>Replace it if maintenance procedures do not improve print quality. See chapter 3, "Managing HP LaserJet Toner Cartridges."</p>
Vertically-aligned black streaks or smears appear on successive pages. 	<p>The toner cartridge may be damaged.</p> <p>The printer may need cleaning.</p>	<p>Replace it if maintenance procedures do not improve print quality. See chapter 3, "Managing HP LaserJet Toner Cartridges."</p> <p>See "Cleaning Your Printer" in this chapter.</p>

Problem	Cause	Solution(s)
<p>Horizontally aligned black streaks or smears appear.</p> 	<p>The toner cartridge may not be installed properly.</p> <p>The toner cartridge may be defective and need replacing.</p> <p>Printer may need repair.</p>	<p>Remove the cartridge and reinsert it. See chapter 1, "Installing the HP LaserJet Toner Cartridge" for installation information.</p> <p>The toner cartridge may still be under warranty. See "HP LaserJet Toner Cartridge Warranty" in appendix A.</p> <p>See the support pages at the front of this manual for support options.</p>
<p>Light character shadows or repetitive marks appear on the page.</p> 	<p>The printer may need cleaning.</p> <p>If you are using transparencies, they may not meet HP's specifications.</p> <p>The paper's texture may be too coarse.</p> <p>The toner cartridge may be damaged, causing a repetitive black flaw on every printout.</p> <p>The toner cartridge's photosensitive drum may have been overexposed to bright light, causing repetitive defects (usually a fuzzy black area).</p>	<p>See "Cleaning Your Printer" in this chapter.</p> <p>For ordering information, see "Accessories and Supplies Information" in appendix A.</p> <p>Try changing to a paper with a smoother finish.</p> <p>Replace the toner cartridge. See "Accessories and Supplies Information" in appendix A.</p> <p>Replace the toner cartridge. See "Accessories and Supplies Information" in appendix A.</p>
<p>Vertical white stripes appear on the page.</p> 	<p>The printer's internal mirror is contaminated.</p>	<p>Contact an authorized HP service representative to replace the printer's internal mirror. See the support pages at the front of this manual for support options.</p>
<p>Character voids appear (white areas within the parts of characters that should be solid black).</p> 	<p>If you are using transparencies, they may not meet HP's specifications.</p> <p>You may be printing on the wrong surface of the paper.</p> <p>The paper may not meet HP's specifications.</p>	<p>HP's LaserJet transparencies are designed to minimize character voids. For ordering information, see "Accessories and Supplies Information" in appendix A.</p> <p>Remove the paper and turn it around. (The wrapper on many reams of paper has an arrow indicating the print side.)</p> <p>Order HP's paper specification guide listed in "Accessories and Supplies Information" in appendix A.</p>

Problem	Cause	Solution(s)
Background scatter appears on a printed page. 	Background scatter results from bits of toner distributed on the front or back of a printed page. Background scatter often is isolated to a specific area of the page.	<p>Change the paper type, weight, or surface finish. To order HP's paper specification guide, see "Accessories and Supplies Information" in appendix A. If background scatter occurs on an envelope, try moving the text to an area with no seams. Printing on seams can cause this problem.</p> <p>If this problem occurs on the back of a printed page, it may be caused by spilled toner inside the printer. See "Cleaning Your Printer" in this chapter.</p>
The page is completely black. 	<p>The toner cartridge may not be installed properly.</p> <p>The toner cartridge may be defective and need replacing.</p> <p>The printer may need to be repaired if the problem continues after replacing the toner cartridge.</p>	<p>Remove the cartridge and reinstall it. See "Installing the HP LaserJet Toner Cartridge" in chapter 1.</p> <p>The toner cartridge may still be under warranty. See "HP LaserJet Toner Cartridge Warranty" in appendix A.</p> <p>See the support pages at the front of this manual for support options.</p>
Characters are only partially printed (also referred to as dropouts). 	<p>A single sheet of paper may be defective.</p> <p>The print density may need adjusting.</p> <p>The moisture content of the paper may be inconsistent or the paper may have moist or wet spots on the surface.</p> <p>The paper may have been damaged by inconsistent manufacturing processes.</p>	<p>Try reprinting the job.</p> <p>Adjust the print density through your software or printer driver.</p> <p>Use paper from a fresh ream or a different source. To order HP's paper specification guide, see "Accessories and Supplies Information" in appendix A.</p> <p>Try using paper from a different source. To order HP's paper specification guide, see "Accessories and Supplies Information" in appendix A.</p>

Problem	Cause	Solution(s)
<p>The bottom of the page is blank or part of a graphic's image is cut off.</p> 	<p>Your page may be too complex for the standard printer memory.</p>	<p>Set the resolution to 300 dpi through your software or printer driver.</p> <p>You may need to install additional memory. See chapter 1, "Installing Memory Cards (DRAM)."</p> <p>Check your printer driver's online help for suggestions that are specific to your driver's settings.</p>
<p>Pages are coming out of the printer curled or wrinkled.</p> 	<p>Paper is curled or wrinkled when using the Paper Output Bin.</p> <p>Paper may not be stored properly.</p>	<p>Use the Front Output Slot by pushing the Paper Path Lever to the lower position. This provides the straightest paper path. See "Selecting the Output Paper Path" in chapter 3.</p> <p>Use the Paper Input Support located behind the Paper Input Bin. See "Loading the Paper into the Printer" in chapter 1.</p> <p>Whenever possible, store paper in its sealed ream at room temperature.</p>
<p>Blank Page (Occasional)</p> 	<p>Page length and margins are not set correctly for the paper size.</p> <p>Some sharing devices or networks may generate a blank page as a separator (contact your Network Administrator).</p> <p>Your printer may be feeding two or more sheets of paper at a time because the paper is difficult to separate.</p> <p>Your software application may be sending an extra page-eject command.</p>	<p>If you are printing on small paper and your page is blank, try printing on larger paper to see where the image is printing. Adjust the margins accordingly.</p> <p>If you are on a network, try connecting the printer directly to the computer.</p> <p>Remove the paper from the Paper Input Bin and align the edges of the paper. "Break" the ream of paper by curving it into an upside-down u-shape; this may effectively decrease multi-feeds. You may also try turning the paper around to feed the opposite end first.</p> <p>Check your software's printing configuration information. If you are using a word-processing program, check for a natural page break and a forced page break that are close to each other.</p>

Problem	Cause	Solution(s)
Blank Pages (All Pages) 	<p>The toner cartridge may be improperly installed.</p> <p>The toner cartridge may be completely out of toner.</p> <p>The printer may need to be serviced.</p>	<p>Make sure you removed the entire length of the sealing tape from the toner cartridge before you installed it. See "Installing the HP LaserJet Toner Cartridge" in chapter 1.</p> <p>Replace the toner cartridge. See "Accessories and Supplies Information" in appendix A.</p> <p>Try printing a self-test page as described earlier in this chapter. If the page is still blank, the printer may need service. See the support pages at the front of this manual for support options.</p>
Print is misaligned on the page (Skewed pages). 	<p>The Paper Input Bin may be too full.</p> <p>The paper guides may not be adjusted properly.</p> <p>The paper's weight or surface finish may not meet HP's specifications.</p>	<p>Try removing some of the paper.</p> <p>Be sure to center the paper with the paper guides. Also, verify that the guides are not adjusted too tightly or too loosely against the paper.</p> <p>To order HP's paper specification guide, see "Accessories and Supplies Information" in appendix A.</p>

Solving Software Problems

If you are having installation problems, check the following table. Also, you can refer to online help by selecting Help on your menu bar.

Installation Tips	
Symptoms	Solution(s)
<i>Window message during installation reads: "File in Use."</i>	Quit all software. Remove all software from the Startup group and then restart Windows. Reinstall the printer drivers.
<i>Cannot install the printer drivers.</i>	Try the Alternative Installation as described in chapter 1.
<i>Bidirectional communication has not been established during installation.</i>	The cable is not bidirectional. Use only a high-quality IEEE-1284 compliant parallel cable. The cable is loose, or not directly connected. In Windows 3.1x open the Control Panel and Printers . Select HP LaserJet 6L and click Connect . Be sure that the correct port has been selected and that "Fast Printing Direct to Port" is checked. Note: If any of the above apply, choose skip and continue installation.
<i>Your computer cannot read the installation disks.</i>	Check for the proper floppy drive (e.g., A: or B:). Check the disks for damage. Copy disks to the hard drive; then install from your hard drive.

Printing Tips	
<i>Printer is printing too slowly (PCL driver only).</i>	In your printer software, select the Print Quality tab, then select Manual Settings . Click Settings , then choose HPGL/2 under the Graphics mode. Select 300 DPI under the Print Quality tab in your printer software.
<i>Window message reads: "Out of memory, unable to print" (Host-based only).</i>	Run HPWPRS.EXE in the directory C:\windows. Then, reboot.
<i>All Front Panel lights remain on when printing from spreadsheet software.</i>	In your printer driver settings, select the Print Quality tab, then select Manual Settings . Click Settings , then choose HPGL/2 under the graphics mode (PCL driver only). Note: In your spreadsheet software this change must be made under "Page Setup."
<i>Printer is not responding; the system is locked up.</i>	Free up disk space on your computer or defragment the drive. Enable "Print Manager in Windows 3.1x systems" on your PC. Run fewer software programs at the same time on your PC. Do not perform I/O or processor-intensive tasks on your PC while printing (e.g., sending a fax or playing a video).
<i>Window message reads: "No Toner or Door Open."</i>	Check the toner cartridge for proper installation. Make sure the Printer Door is closed. Reset the printer by unplugging the power cord and then plugging it back into the outlet.



Solving Hard-to-Resolve Problems

The following instructions will help you troubleshoot Windows printing problems using DOS.

Note

Before troubleshooting from DOS, make sure your printer can print a self-test page. (See “Printing a Self-Test Page” earlier in this chapter.)

To establish basic communication to the printer, follow the steps below:

- 1 Exit Windows 3.1x. If in Windows 95, choose **Start, Shut Down**, and **Restart the computer in MS-DOS® mode**, respectively.
- 2 At the command prompt (for example, c:\), type: **Dir>PRN** and press **ENTER**. This will send a directory of your hard drive to the printer.
- 3 See the chart below for recommended solutions.

Printer Status	Response	Solution(s)
<i>Both the Data light and the Ready light are on steadily (not blinking).</i>	Command prompt (c:\) returned.	Press the Front Panel button. You will receive a printout of your hard drive's directory. Communication verified; return to Windows.
<i>Data light comes on; Ready light flashes.</i>	Command prompt (c:\) returned.	No action is needed. Communication has been verified; return to Windows.
<i>Printer is not responding.</i>	Flashing cursor; command prompt (c:\) not returned; keyboard locked up.	Verify that the Ready light is on. Hold down CTRL , then press and release Break to free the keyboard. Disconnect, then reconnect the cable at both ends. Reboot your computer. Ensure a direct connection to the printer. Try using a different parallel cable (IEEE-1284), parallel port, or both.
<i>Printer is not responding.</i>	DOS Message: “Write fault error writing device PRN.”	Verify that the Ready light is on. Specify the port name when sending directory (for example, LPT1). Verify that the power cord and the parallel cable are plugged into the proper ports. Disconnect, then reconnect the cable at both ends. Ensure a direct connection to the printer. Try using a different parallel cable (IEEE-1284), parallel port, or both.
<i>Printer is not responding.</i>	Command prompt (c:\) returned.	Disconnect, then reconnect the parallel cable at both ends. Ensure a direct connection to the printer. Hold down CTRL , then press and release Break to free the keyboard. Try using a different parallel cable (IEEE-1284), parallel port, or both.

Printer Status	Response	Solution(s)
<i>Data light comes on; Ready light flashes. Printed text is not legible, or random characters are occurring on the page.</i>	Command prompt (c:\) returned.	Disconnect, then reconnect the parallel cable at both ends. Ensure a direct connection to the printer. Try using a different parallel cable (IEEE-1284), parallel port, or both.
<i>Data light comes on; Ready light flashes. Only one line of text prints or all text is on one line.</i>	Command prompt (c:\) returned.	Disconnect, then reconnect the parallel cable at both ends. Ensure a direct connection to the printer. Try using a different parallel cable (IEEE-1284), parallel port, or both.
<i>Text files will print. Graphic files do not print or print garbage.</i>	No error messages. All appears ok.	Disconnect, then reconnect the parallel cable at both ends. Ensure a direct connection to the printer. If copying a graphic file, type the following command at the command prompt: copy <i>filename</i> LPT1 where <i>filename</i> is the name of the graphic file. (Be sure to leave a space before and after the file name.) Try using a different parallel cable (IEEE-1284), parallel port, or both.

Networks and Switchboxes

The printer's status read-back feature requires a direct connection between the printer and the computer. Most devices connected between the printer and the host computer prevent the printer from sending data back to the computer.

If you use a mechanical switchbox, follow these guidelines:

- Do not switch while the printer is printing or receiving data (when the Ready light is blinking).
- Do not switch to a host computer that is OFF and then turn that computer ON. The Ready light on the printer will blink as if the computer is sending data. If the Error light is blinking, reset the printer. To do so, press and hold the Front Panel button for five seconds, then send the job again.
- Use a surge protector.

Out of Memory

If the Error light is blinking, the page may be too complex for the printer's memory capacity. To clear this error, briefly press and release the Front Panel button. Printing will resume; however, some data loss may occur. To avoid this error in the future:

- Reset the printer. To do so, press and hold the Front Panel button for five seconds.
- See your online help for more suggestions regarding printer memory usage.
- Reduce resolution to 300 dpi with your software.
- Install additional printer memory. See chapter 1, "Installing Memory Cards (DRAM)," for information on installing additional memory.

Warranty and Support Information

HP Limited 1-Year Warranty Statement

- 1 HP warrants to you the end-user customer, that HP hardware, accessories and supplies, 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.
- 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 software media which does not execute its programming instructions due to such defects.
- 3 HP does not warrant that the operation of HP products will be uninterrupted or error free. HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use. 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 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.
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Hardware Service during the Warranty Period

If your hardware should fail during the warranty period, HP offers the following support options:

- Express Exchange (available in the U.S. and Canada only): HP provides a printer (remanufactured to like new condition) to you on the next working day.
- HP Authorized Service Provider: You can return your printer to a local authorized service dealer.
- HP Repair Services: You can return your printer to an HP repair office.

When sending equipment, we recommend insuring the equipment for shipment. Also include a copy of your proof of purchase.

Caution

Shipping damage as a result of inadequate packaging is the customer's responsibility. Use the original packing materials whenever possible.

For technical support assistance regarding your printer within the one-year warranty period, see the support pages at the front of this manual.

Hardware Service after the Warranty Period

If your hardware fails after the warranty period, contact an authorized Hewlett-Packard Dealer Repair Center or a designated Hewlett-Packard Repair Center. If you have a Hewlett-Packard Maintenance Agreement, request service under your agreement.

HP LaserJet Toner Cartridge Warranty

HP LaserJet toner cartridges are warranted to be free from defects in materials and workmanship until the HP toner is depleted. You know your HP toner is depleted when you begin to see faded or light type on your printed page.

The warranty, extended for the life of the cartridge, covers any defects or malfunctions in your new Hewlett-Packard toner cartridge. HP will, at HP's option, either replace products which prove to be defective or refund your purchase price.

In the event the cartridge proves to be defective, attach a printout sample illustrating what the defective cartridge is printing and return to the place of purchase.

IN NO EVENT SHALL HEWLETT-PACKARD COMPANY BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES OR LOST PROFITS FROM ANY BREACH OF THIS WARRANTY OR OTHERWISE.

Accessories and Supplies Information

The following table lists items that are available from HP Direct Ordering and through your local authorized HP dealer.

- For most items, call HP Direct Ordering at (800) 538-8787 (U.S.). To order HP LaserJet paper, call (800) 471-4701.
- To find a dealer near you (or if your dealer is temporarily out of stock), call the HP Customer Information Center (800) 752-0900.
- For ordering information outside of the U.S., see “Worldwide Sales and Service Offices” in this appendix.

Option	Part Number
HP LaserJet Printer Family Paper Specification Guide	5002-1801
HP LaserJet toner cartridge	C3906A C3906F (Asia only)
HP LaserJet parallel printer cable (IEEE-1284) Two meter A to B: Three meter A to B:	C2950A C2951A
1 MB Memory Upgrade 2 MB Memory Upgrade 4 MB Memory Upgrade	C3939A HP Jeida Memory Card C3938A HP Jeida Memory Card C3148A HP Jeida Memory Card
Transparencies Letter A4	C2934A C2936A
Labels	92296A - H/J/K Various Sizes
HP MultiPurpose Paper HP LaserJet Paper	HPM 1120 - High bright, 20 lb., 8.5 x 11 inch HPJ 1124 - Extra bright, 24 lb., 8.5 x 11 inch

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Worldwide Sales and Service Offices

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Argentina: Hewlett-Packard Argentina Montañeses 2140/50/60 1428 Buenos Aires Phone: (54 1) 787-7100 Fax: (54 1) 787-7213	Australia: Hewlett-Packard Australia Ltd. 31-41 Joseph Street Blackburn, VIC 3130 Phone: (61 3) 272-2895 Fax: (61) 3/898-7831 Hardware Repair Center and Extended Warranty Support: 131047 Customer Information Center: 131347	Before calling an HP Sales and Service office, be sure to contact the appropriate Customer Support Center number listed in the front of your manual.
Austria: Hewlett-Packard GmbH PO Box 72 Lieblgasse 1 A-1222 Wien Phone: (43) 1-25 000-0 Fax: (43) 1-25 000-444	Belgium: Hewlett-Packard Belgium SANV Boulevard de la Woluwe 100 Woluwedal B-1200 Bruxelles Phone: (32 2) 761-31-11 Fax: (32 2) 763-06-13	Canada: Hewlett-Packard (Canada) Ltd. 17500 Trans Canada Highway South Service Road Kirkland, Québec H9J 2X8 Phone: (514) 697-4232 Fax: (514) 697-6941 Hewlett-Packard (Canada) Ltd. 5150 Spectrum Way Mississauga, Ontario L4W 5G1 Phone: (905) 206-4725 Fax: (905) 206-4739
Brazil: Edisa Hewlett-Packard SA Av. Do Contorno, 6321 12° andar 30110-110—Belo Horizonte—MG Phone: (55 31) 221-8845 Fax: (55 31) 221-8836	China: China Hewlett-Packard Co. Ltd. Level 5, West Wing Office China World Trade Center No. 1, Jian Guo Men Wai Avenue Beijing 100004 Phone: (86 1) 505-3888, ext. 5450 Fax: (86 1) 505-1033 Hardware Repair Center and Extended Warranty Support: (8610) 6262-5666 ext. 6101/2 6261-4167	Czech Republic: Hewlett-Packard S.R.O. Novodvorská 82 CZ-14200 Praha 4 Phone: (42 2) 613 07 111 Fax: (42 2) 47 17 611
Denmark: Hewlett-Packard A/S Kongevejen 25 DK-3460 Birkerød Phone: (45 45) 99 10 00 Fax: (45 42) 81 58 10	Far East Region: Hewlett-Packard Asia Pacific Ltd. 17-21/F Shell Tower, Times Square 1 Matheson Street, Causeway Bay Hong Kong Phone: (852) 2599-7777 Fax: (852) 2506-9244 Hardware Repair Center: (852) 2599-7000 Extended Warranty Support: (852) 2599-7000 Customer Information Center: (852) 2599-7066	Finland: Hewlett-Packard Oy Piispankalliontie 17 FIN-02200 Espoo Phone: (358 0) 887 21 Fax: (358 0) 887 2477
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Hungary: Hewlett-Packard Magyarország Erzsebet kiralyne utja 1/c H-1146 Budapest Phone: (36 1) 122-7411 (36 1) 252-4505 Fax: (36 1) 122-3692	India: Hewlett-Packard India Ltd. Paharpur Business Centre 21 Nehru Place New Delhi 110 019 Phone: (91 11) 6472311 Fax: (91 11) 6461117 Hardware Repair Center and Extended Warranty Support: (011) 6425073	Italy: Hewlett-Packard Italiana SpA Via Giuseppe di Vittorio, 9 Cernusco Sul Naviglio I-20063 (Milano) Phone: (39 2) 92 12 1 Fax (39 2) 921 044 73
Japan: Hewlett-Packard Japan, Ltd. 3-29-21 Takaido-higashi Suginami-ku, Tokyo 168 Phone: (81 3) 3331-6111 Fax: (81 3) 3335-1478 Hardware Repair Center: 0473-55-6660	Korea: Hewlett-Packard Korea 25-12, SHP House Yoido-dong, Youngdeungpo-ku Seoul 150-010 Phone: (82 2) 769-0114 Fax: (82 2) 784-7084 Hardware Repair Center: (02) 3270-0710 Extended Warranty Support: (82 2) 3770-0365, 3770-0359	Latin American Headquarters: 5200 Blue Lagoon Drive Suite 950 Miami, FL 33126 U.S.A. Phone: (305) 267-4220
México, D.F.: Hewlett-Packard de México, SA de CV Prolongación Reforma No. 700 Lomas de Santa Fe 01210 México, DF Phone: (52 5) 326-4600 Fax: (52 5) 326-4274	México, Guadalajara: Hewlett-Packard de México, SA de CV Monte Morelos No. 299 Fracc. Loma Bonita 45060 Guadalajara, Jal. Phone: (52 3) 669-9302 Fax: (52 3) 669-9560	México Monterrey: Hewlett-Packard de México, S.A. de C.V. Batallón de San Patricio 111 Piso 23-Torre Comercial América Colonia del Valle 66269 Garza Garcia, Nuevo León Phone: (52 8) 368-5100 Fax: (52 8) 356-7498
Middle East/Africa: ISB HP Response Center Hewlett-Packard SA Rue de Veyrot 39 P.O. Box 364 CH-1217 Meyrin - Geneva Switzerland Phone: (41) 22 780 41 11	Netherlands: Hewlett-Packard Nederland BV Startbaan 16 NL-1187 XR Amstelveen Postbox 667 NL-1180 AR Amstelveen Phone: (31 20) 547 69 11 Fax: (31 20) 547 77 55	New Zealand: Hewlett-Packard (NZ) Limited Ports of Auckland Building Princes Wharf, Quay Street PO Box 3860 Auckland Phone: (64 9) 356-6640 Fax: (64 9) 356-6620 Hardware Repair Center and Extended Warranty Support: 0800 733 547 Customer Information Center: 0800-651-651
Norway: Hewlett-Packard Norge A/S Postboks 60 Skøyen Drammensveien 169 N-0212 Oslo Phone: (47) 22 73 56 00 Fax: (47) 22 73 56 10	Poland: Hewlett-Packard Polska ul.Newelska 6 PK-01-447 Warszawa Phone: (48) 22 375065 Fax: (48) 22 374783	Portugal: Hewlett-Packard Portugal Rua Gregório Lopes Lote 1732B P-1400 Lisboa Phone (351 1) 3017330 Fax: (351 1) 3017345
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Venezuela: Hewlett-Packard de Venezuela CA Los Ruices Norte 3A Transversal Edificio Segre Caracas 1071 Phone: (58 2) 239 42 44 Fax: (58 2) 239 30 80		

Printer Specifications

Printer Specifications

Environmental Specifications	
Operating Environment	(Printer plugged into an AC outlet): Temperature: 10 °C to 32.5 °C (50 °F to 90.5 ° F) Humidity: 20%-80% (no condensation)
Storage Environment	(Printer unplugged from the AC outlet): Temperature: 0 °C to 40 °C (32 °F to 104 °F) Humidity: 10%-80% (no condensation)
Noise Level	During printing: 5.5 Bels Sound Power Level (per ISO 9296) During Standby and SleepMode: silent
Electrical Specifications	
Power Requirements	100-120 v (+/-10%), 50/60 Hz (+/- 2); 127 v NOM, 6C 220 v (+/-10%), 50/60 Hz (+/- 2 Hz) 240 v (+/-10%), 50 Hz (+/- 2 Hz)
Power Consumption	During printing: 120 W (average) During standby or SleepMode: 5 W
Minimum Recommended Circuit Capacity	4.5 A @ 115 V, 2.0 A @ 230 V
Physical Specifications	
Dimensions:	
Width	335.2 mm (13.2 in)
Depth	312.4 mm (12.3 in)
Storage Height	228.6 mm (9.0 in)
Operating Height (Letter Height)	370.8 mm (14.6 in)
Weight (Cartridge Installed)	7.0 kg (15.5 lb)
Print speed	6 pages per minute
Paper Input Bin capacity	Holds up to 100 sheets of regular weight paper or up to 10 envelopes
Paper Output Bin capacity	Holds up to 100 sheets
Front Output Slot capacity	Stack 1 transparency or up to 20 sheets of other media in front of the Front Output Slot
Minimum paper size	76.2 x 127 mm (3 x 5 in)
Maximum paper size	215.9 x 355.6 mm (8.5 x 14 in)
Base memory	2 MB of ROM and 1 MB of RAM
Upgradable Memory Expansion	One slot available for a 1-, 2-, 4-, or 8-MB, 70ns or faster, 5 V JEIDA card
Print Resolution	600 dots per inch (dpi)
Duty Cycle	6000 single-sided pages per month

Regulatory Information

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）の基準に基づく第二種情報技術装置です。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。

The VCCI statement, similar to the FCC regulations, is required in Japan.

Laser Statement for Finland

LASERTURVALLISUUS

LUOKAN 1 LASERLAITE

KLASS 1 LASER APPARAT

HP LaserJet XXXX -laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalisissa käytössä kirjoittimen suojakotelointi estää lasersäteiden pääsyn laitteen ulkopuolelle.

Laitteen turvallisuusluokka on määritetty standardin EN 60825 (1991) mukaisesti.

VAROITUS !

Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

WARNING !

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 XXXX -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.

WARNING !

Om laserprinterns skyddshölje öppnas då apparaten är i funktion, utsättas användaren för osynlig laserstrålning. Betrakta ej strålen.

Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista:

Aallonpituus 770-795 nm

Teho 5 mW

Luokan 3B laser

Environmental Product Stewardship

Hewlett-Packard has created the Environmental Product Stewardship program on a corporate-wide level to ensure that HP products conform to national and worldwide environmental standards.

Protecting the Environment

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

This HP LaserJet printer design eliminates:

- Ozone production

This HP LaserJet printer does not use high-voltage corona wires in the electrophotographic process. Instead, it uses charging rollers in the toner cartridge and in the print engine. Therefore, this printer does not generate appreciable ozone gas (O₃).

- CFC usage

Ozone-depleting chemicals (Chloroflorocarbons, for example) have been eliminated from the manufacturing sites of this printer. CFCs are not used in the manufacturing of the packaging.

This HP LaserJet printer design reduces:

- Energy consumption

Energy usage drops from an average of 120W during printing to as little as 5W while in Standby/Sleep mode. Not only does this save natural resources, but it also saves money without affecting the high performance of this printer. This product qualifies for the United States Environmental Protection Agency's ENERGY STAR Program. ENERGY STAR is a voluntary program established to encourage the development of energy-efficient office products.



As an ENERGY STAR partner, Hewlett-Packard Company has determined that this product meets ENERGY STAR Guidelines for energy efficiency.

- Toner consumption

EconoMode uses about 50% less toner thereby extending the life of the toner cartridge.



- Paper use

This printer allows manual duplexing (two-sided printing) and this reduces paper usage and the resulting demands on natural resources.

- Transportation fuel consumption and emissions

HP LaserJet printers are shipped from manufacturing sites to distribution centers in bulk packs. Because more printers can fit on each pallet, fuel consumption and emissions are reduced.

HP LaserJet Printer: Worldwide Recycling

- Plastics

Major plastic parts have markings which enhance the ability to identify and recycle the materials at the end of the printer's life.

- Manuals

The manuals are printed on recycled paper using vegetable-based inks without added heavy metals. Therefore, the manuals are recyclable.

- Paper

This printer is suited for the use of recycled papers that meet the HP LaserJet Printer Family Paper Specification Guide. See Appendix A for part numbers and ordering information.

HP LaserJet Printer: U.S.A. Recycling

- Toner cartridges

Each HP LaserJet Toner Cartridge box sold in the U.S. contains instructions and a shipping label for returning the cartridge to HP for recycling. HP pays the postage.

- Printer and parts

HP's Hardware Recycling Organization will take back this printer and other HP products when you have no further use for them. HP disposes of these products in an environmentally-sound manner. Many of the functional parts are recovered, tested, and reused as fully warranted service parts (used parts are not used in new product manufacturing). The remainder of the product parts are recycled if possible. Call (800) 535-7933 for this service

Laser Safety Statement

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. This 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. Since radiation emitted inside this printer is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.

WARNING!

Use of controls or adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

DECLARATION OF CONFORMITY according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name: Hewlett-Packard Company
Manufacturer's Address: 11311 Chinden Boulevard
 Boise, Idaho 83714-1021, U.S.A.

declares that the product

Product Name: HP LaserJet 6Lprinter, Laser Printer
Model Number: C3990A
Product Options: All

conforms to the following Product Specifications:

Safety:	IEC 950: 1991+A1+A2+A3/EN 60950: 1992+A1+A2+A3 IEC 825-1:1993/EN 60825:1994 Class 1 (Laser/LED)		
EMC:	CISPR 22:1993+A1 / EN 55022:1994 Class B ¹ EN 50082-1:1992		
	IEC 801-2:1991 / prEN 55024-2:1992-	4 kV CD, 8 kV AD	
	IEC 801-3:1984 / prEN 55024-3:1991-	3 V/m	
	IEC 801-4:1988 / prEN 55024-4:1992-	0.5 kV Signal Lines	
		1.0 kV Power Lines	
	IEC 1000-3-2:1995 / EN61000-3-2:1995		
	IEC 1000-3-3:1994 / EN61000-3-3:1995		
	FCC Title 47 CFR, Part 15 Class B ² / ECES-003, Issue 2/VCCI-2 ¹		
	AS/NZS 3548:1992/CISPR 22:1993 Class B ¹		

Supplementary Information:

The product herewith complies with the requirements of the following Directives and carries the CE-marking accordingly.

- the EMC Directive 89/336/EEC
- the Low Voltage Directive 73/23/EEC

- 1) The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.
- 2) This Device complies with Part 15 of the FCC rules. Operation is subject to the following 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.

December 1, 1996

For Compliance Information ONLY, contact:

Australia Contact: Product Regulations Manager, Hewlett-Packard Australia Ltd., 31-41 Joseph Street, Blackburn, Victoria 3130, Australia
 (Phone: 61 3- 272-2895; Fax: 613-898-7831)

European Contact: Your local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE/Standards Europe, Herrenberger Strabe 130, D-71034 Böblingen (FAX: 49-7031-14-6429)

USA Contact: Product Regulations Manager, Hewlett-Packard Company, P.O. Box 15, MS 160, Boise, ID 83707-0015 (Phone: 208-396-6000)



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