

# *LaserJet 4*

Your Guide to  
Setting Up the  
HP LaserJet 4 Printer

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# Your Guide to Setting Up the HP LaserJet 4 Printer



**HEWLETT  
PACKARD**

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## Printing History

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First Edition

October 1992

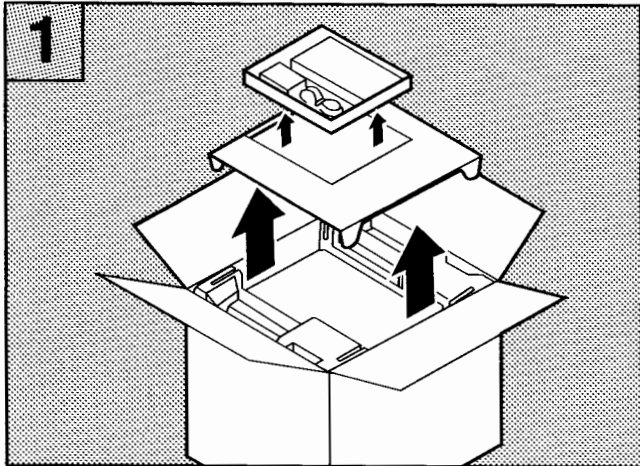
C2001-90951

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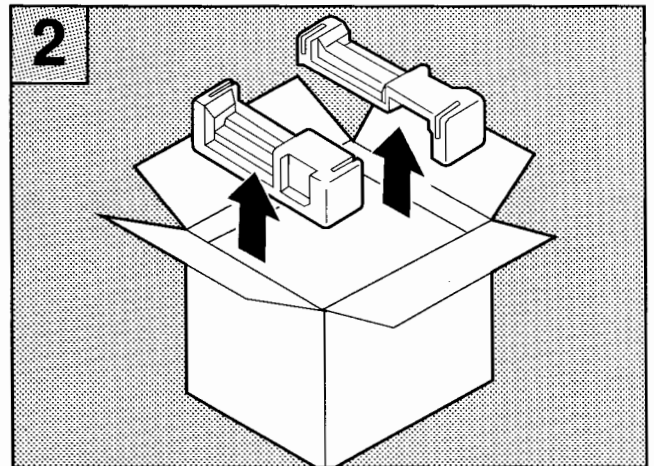
# B

## Removing the Printer from the Box

Save all packing material. You may need to repack your printer at a later date.

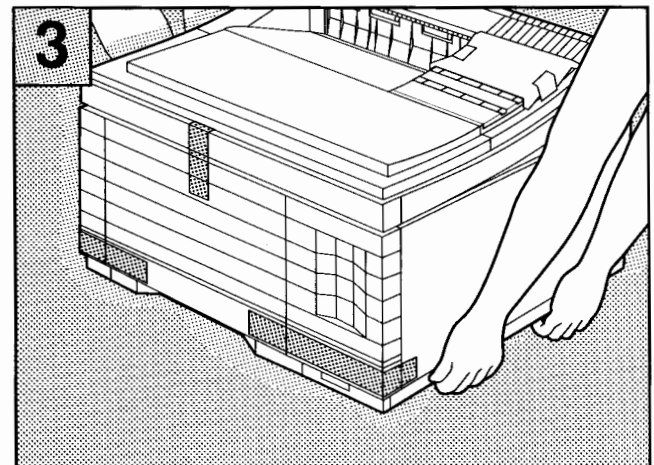


Remove all accessories from the tray and lift the tray from the box.

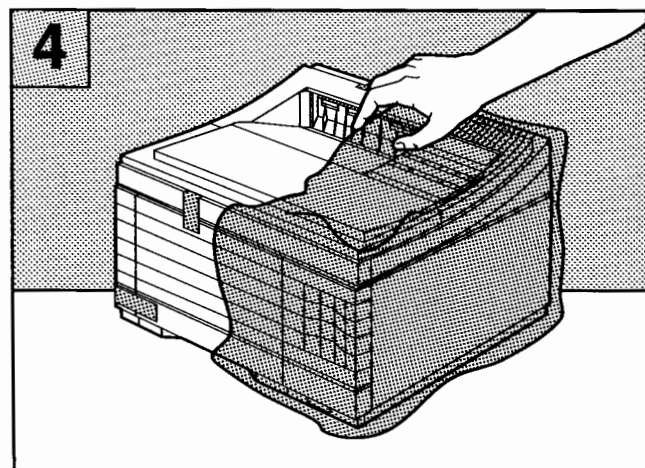


Remove the packing pieces from the top of the printer.

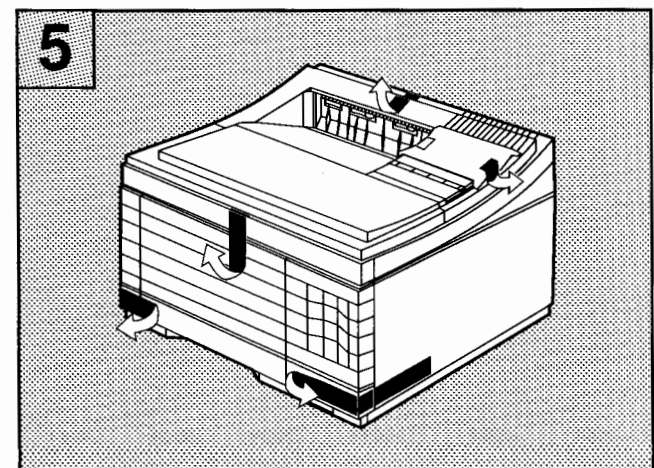
**CAUTION**  
The printer weighs 35 lbs (15.9 kgms).  
Get help to lift it from the box.



Lift the printer by its sides. Set it on a flat surface.

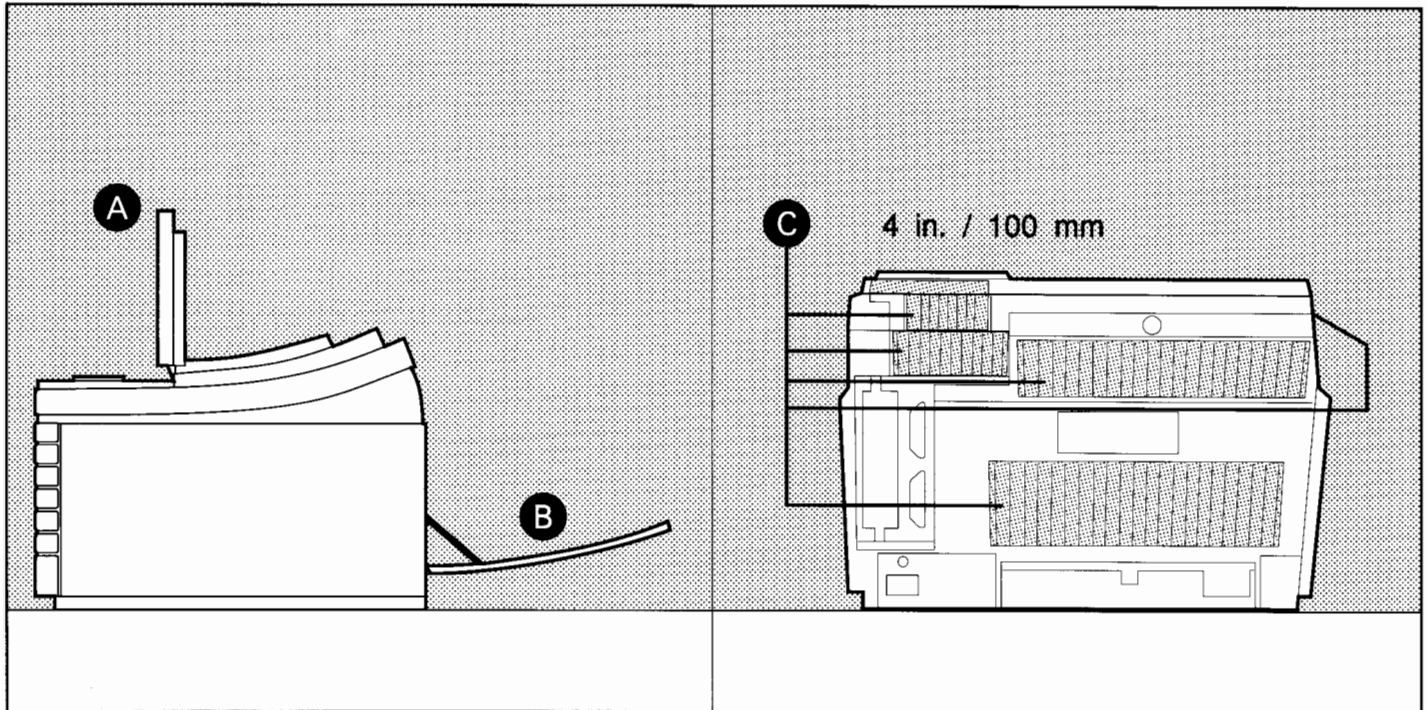


Remove the bag from the printer.



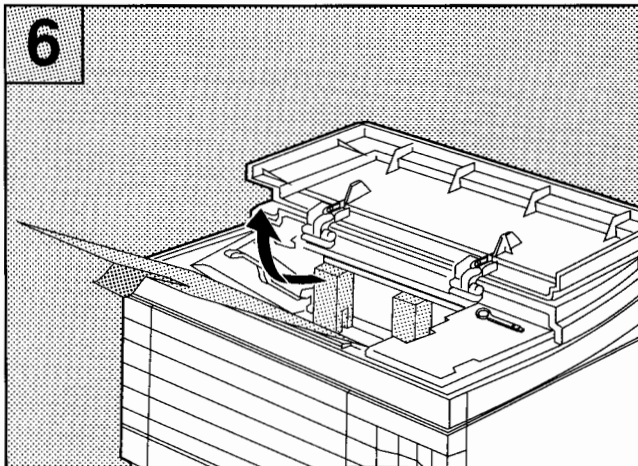
Remove the tape from the five areas on the printer.

# Preparing a Location for the Printer

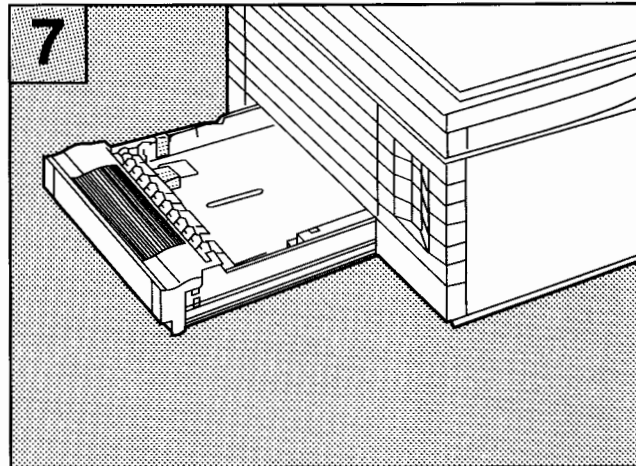


## Location Requirements for your Printer:

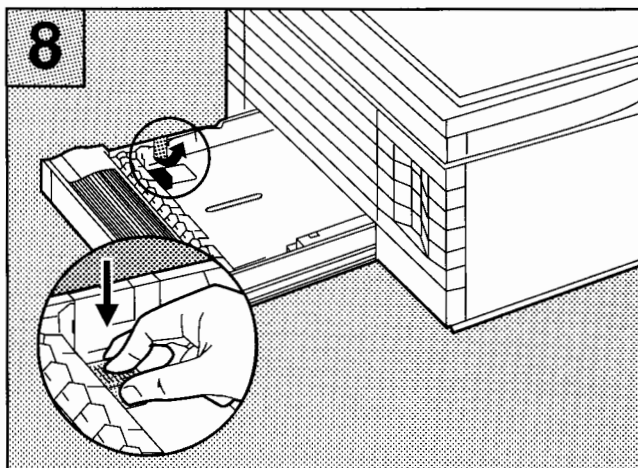
- A sturdy, level surface for placement.
- Adequate space to:
  - open the top cover (A).
  - to open the rear door (B) and remove paper, if a paper jam occurs.
  - allow air circulation around vents to prevent the printer from overheating (C).
- A well-ventilated room.
- Room temperature 50° to 91° F (10° to 32.5° C).
- Relative humidity 20% to 80%.
- A stable environment – no abrupt temperature or humidity changes.
- No exposure to direct sunlight or chemicals.



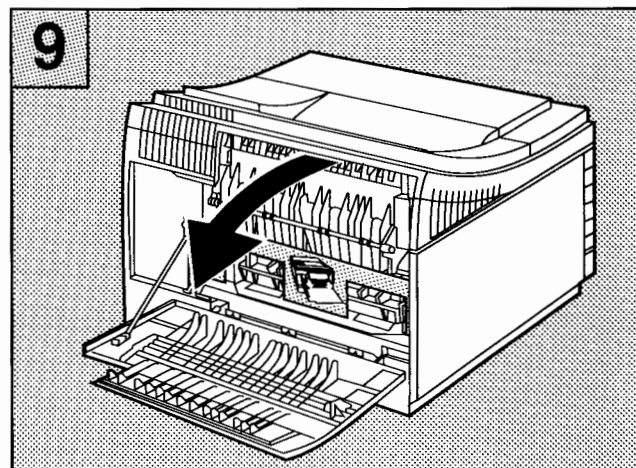
Remove the cardboard and the two packing pieces securing the transfer roller from the inside of the printer.



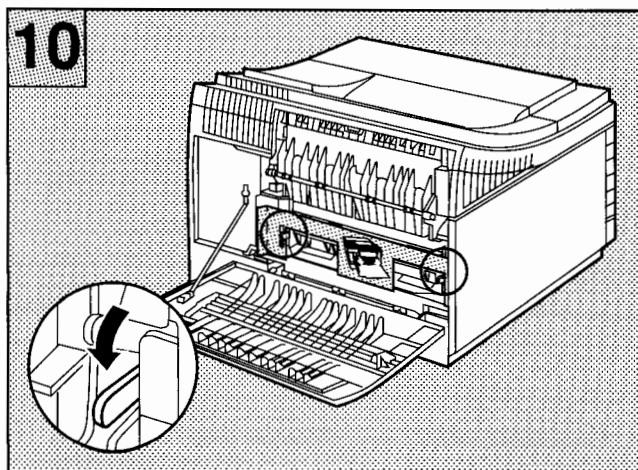
Slide the Paper Cassette out of the printer.



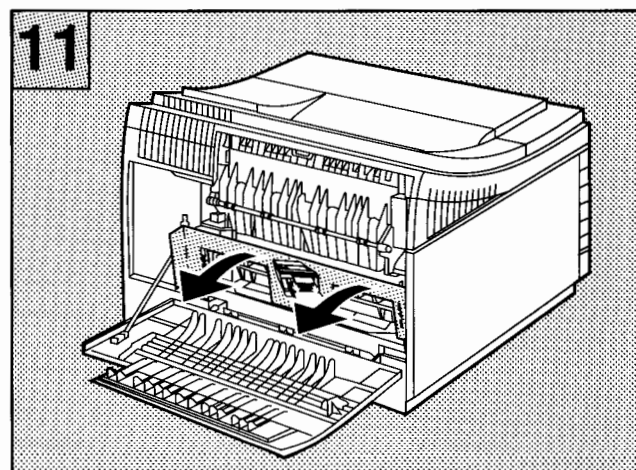
Remove the packing pieces from inside the Paper Cassette (press down on the plastic piece and pull it straight out).



Open the back door of the printer.



**IMPORTANT!** Follow the instructions on the packing piece to lower the fuser assembly levers. Push the levers downward.



Remove the packing piece and close the back door.

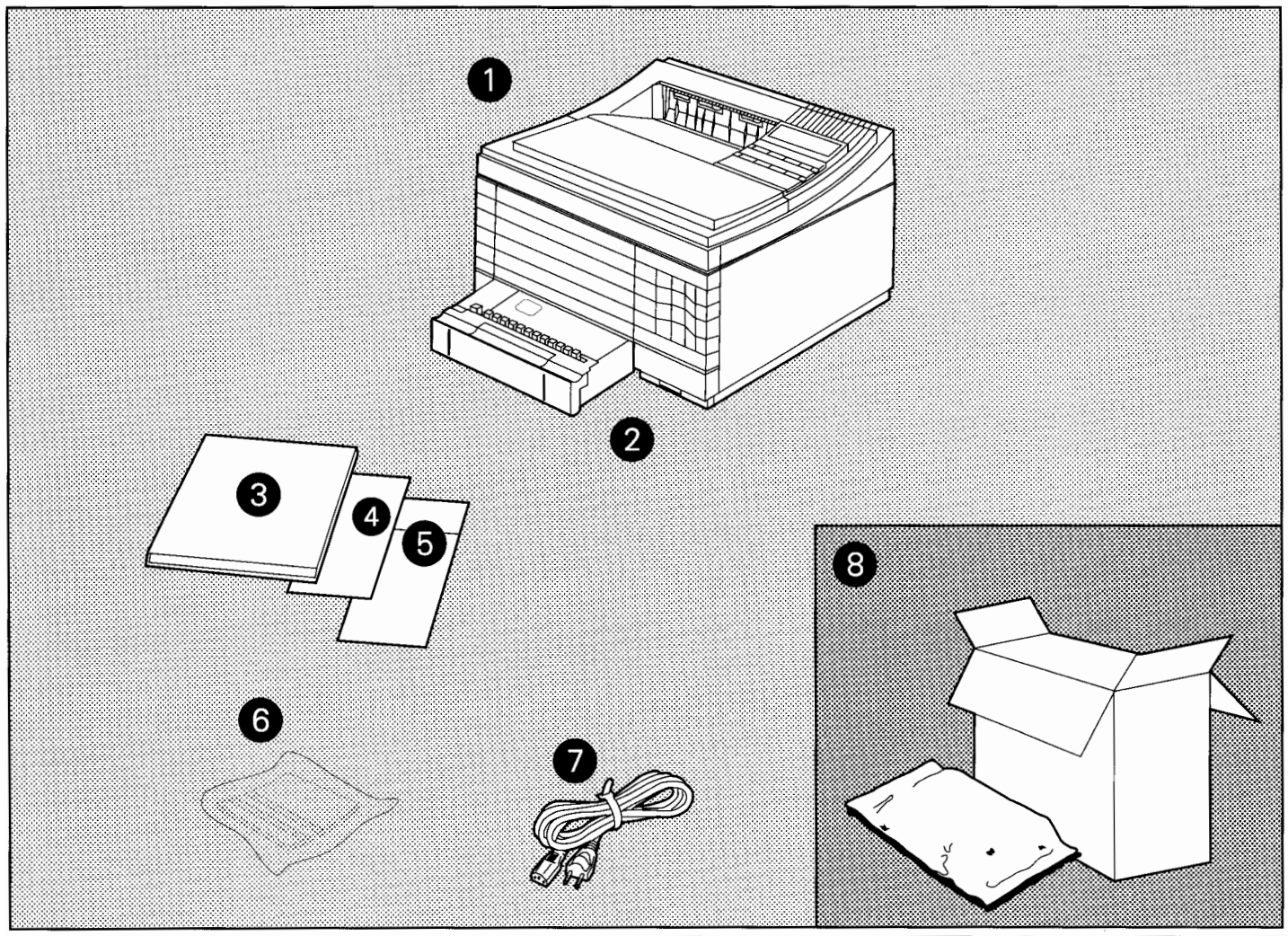
# C

## Checking Package Contents

Locate each item listed below:

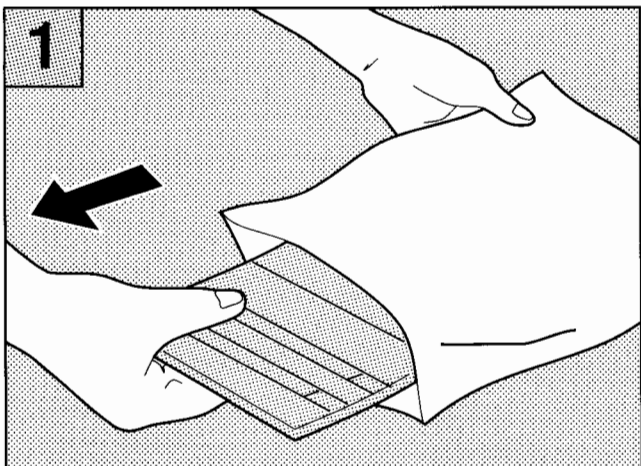
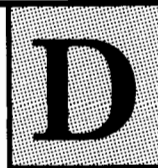
1. HP LaserJet 4 printer
2. Paper Cassette  
(slides underneath your printer)
3. *HP LaserJet 4 and 4M Printer User's Manual*
4. *HP LaserJet 4 and 4M Printer User's Quick Reference Guide*
5. Adhesive clear envelope – Place your *Quick Reference Guide* in this envelope, and attach it to the left side of your printer or somewhere near your printer.
6. Control Panel Overlay  
(See page **D** for installation instructions)
7. Power cord
8. Toner cartridge  
(HP part number 92298A, packaged separately.)

\*\*\*Notify your Hewlett-Packard dealer immediately if any parts are missing or damaged\*\*\*

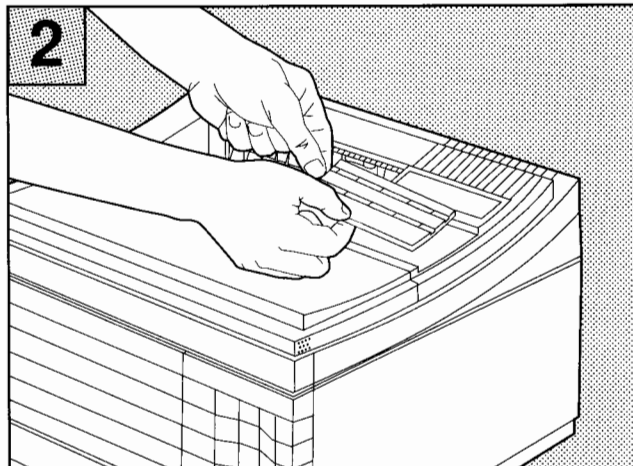




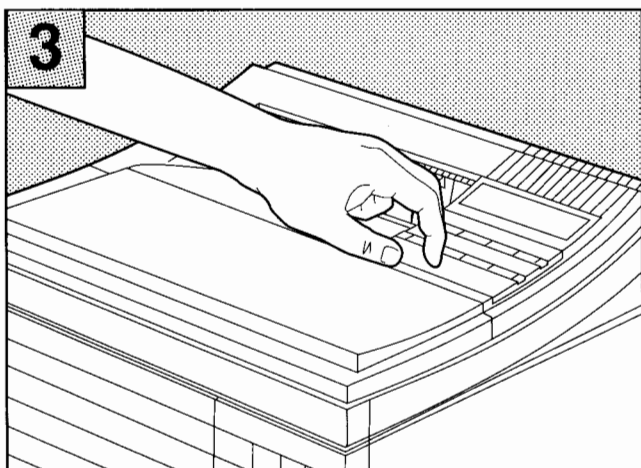
# Installing the Control Panel Overlay



Remove the overlay from its package.



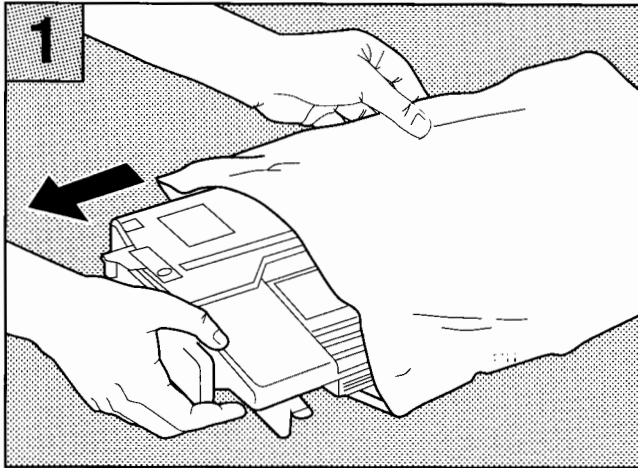
Position the overlay, as shown.



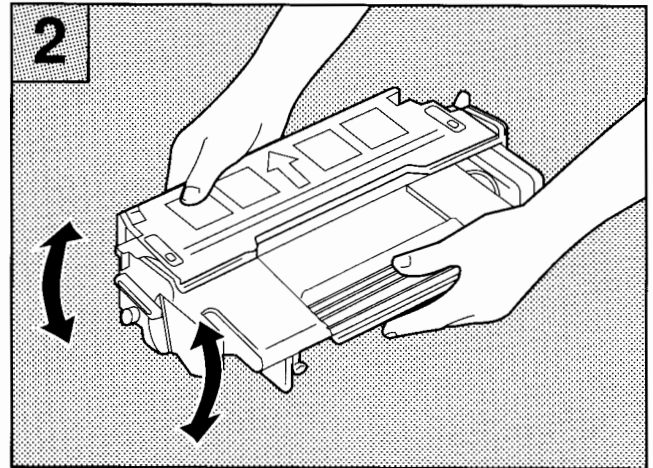
Snap the overlay into place.

# E

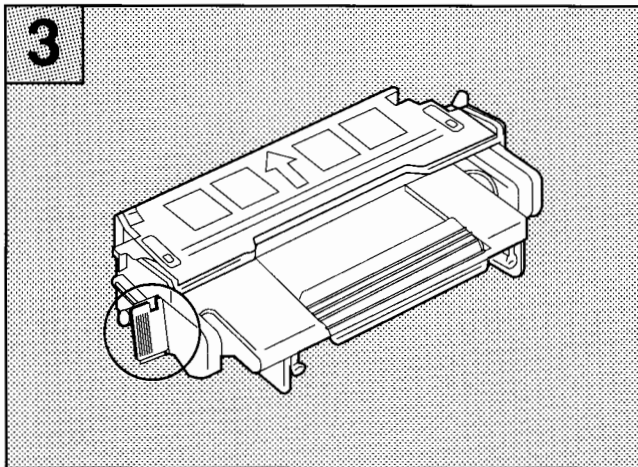
## Installing the Toner Cartridge



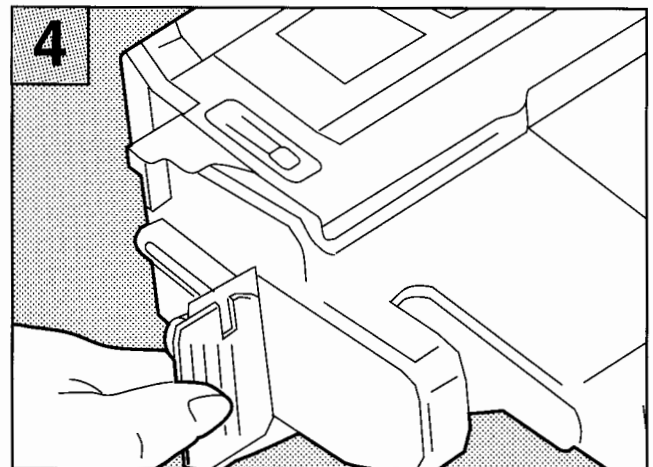
1 Locate the toner cartridge (it is in a separate box). Remove the cartridge from its bag.



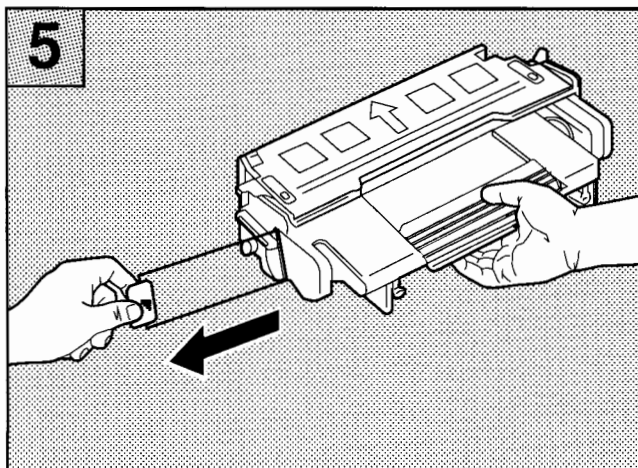
2 Distribute the toner by rotating the cartridge back and forth 5 to 6 times.



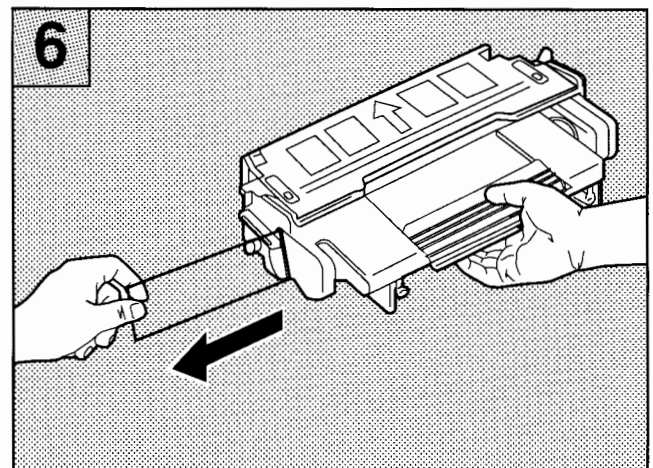
3 Position the cartridge so the sealing tape tab faces left.



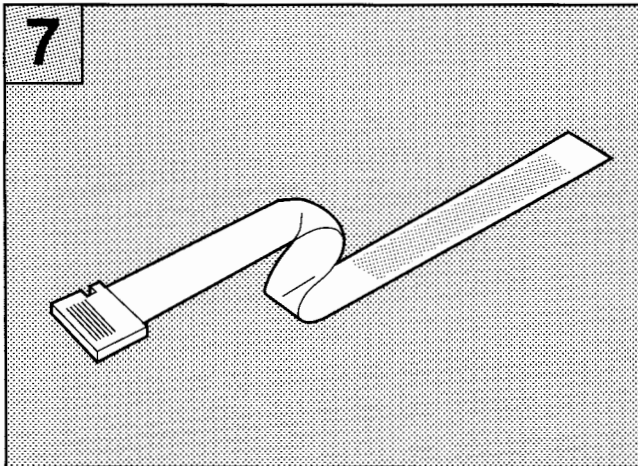
4 Carefully bend the tab back and forth until it separates from the cartridge.



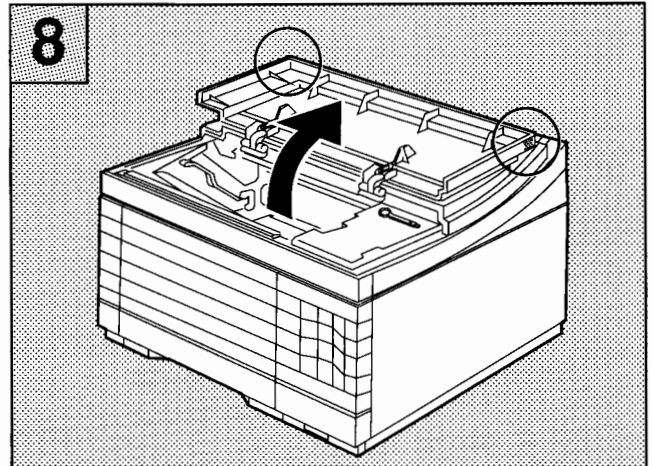
5 Hold the cartridge with one hand and pull the tape straight out from the cartridge. The tape is hard to pull.



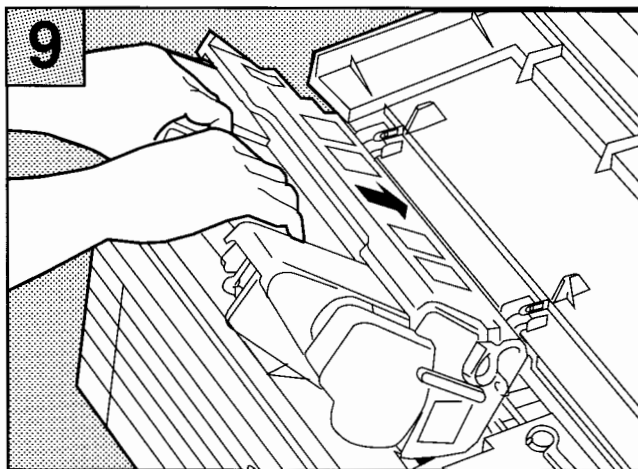
6 If the tab separates from the tape, pull out the tape. Avoid touching the black part of tape.



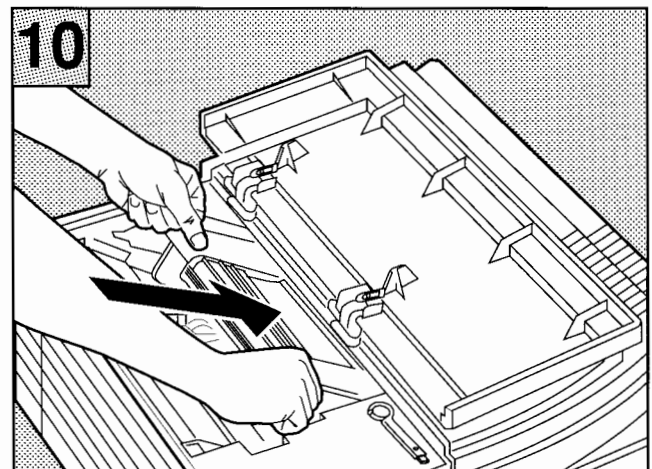
Throw away the sealing tape strip.



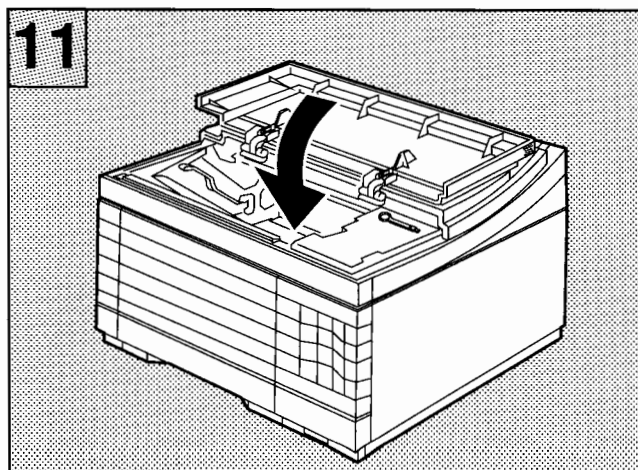
Use the grips on the sides of the top cover to lift the printer's top cover.



Position the cartridge with the arrow facing into the printer.



Slide the cartridge into the printer as far as it will go. Gently push the cartridge in and downward with your thumbs to secure it in place.



Close the printer's top cover.

### NOTE

If the top cover does not close, the cartridge is not installed correctly.

# F

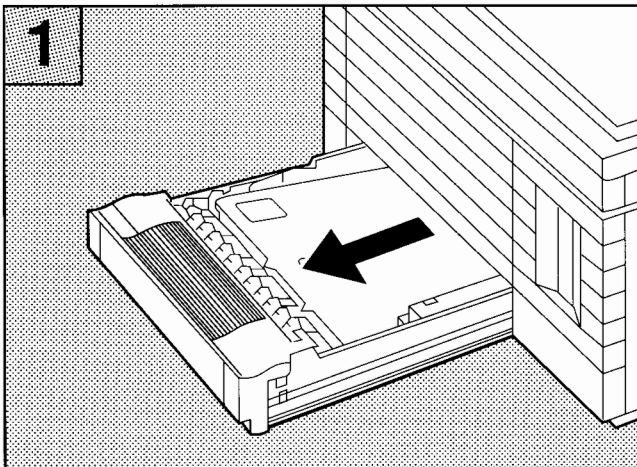
## Loading the Paper

### Paper Specifications

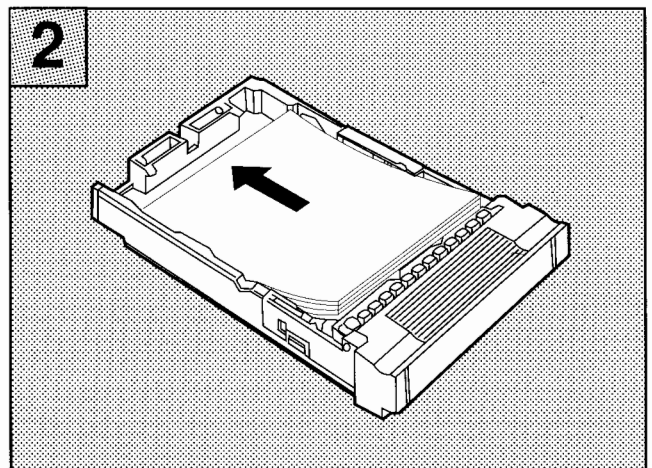
Your HP LaserJet 4 printer works well with many common papers, particularly xerographic bond papers with basis weights from 16 to 36 pounds (60 to 135 g/m<sup>2</sup>). However, we recommend that you test your paper for acceptable performance. See Appendix E, "Media Specifications," in the *HP LaserJet 4 and 4M Printer User's Manual* for paper information.

### NOTE

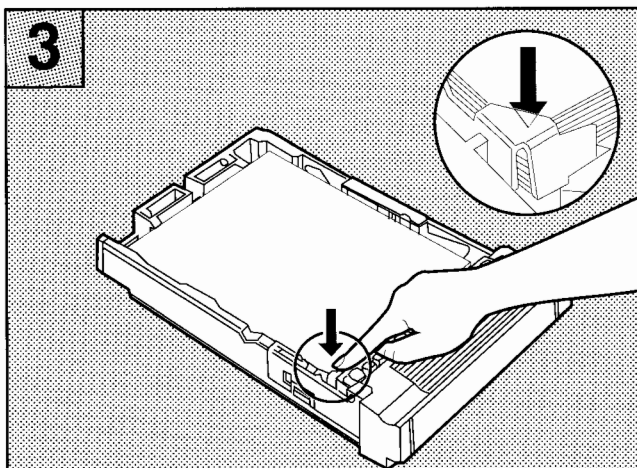
Hewlett-Packard neither warrants nor recommends the use of any particular paper. Paper properties are subject to change by paper manufacturers and Hewlett-Packard has no control over such changes. The customer assumes all responsibility for the quality and performance of paper. Although testing helps to characterize performance, long-term satisfaction requires process quality control by the paper manufacturer and proper paper handling prior to use.



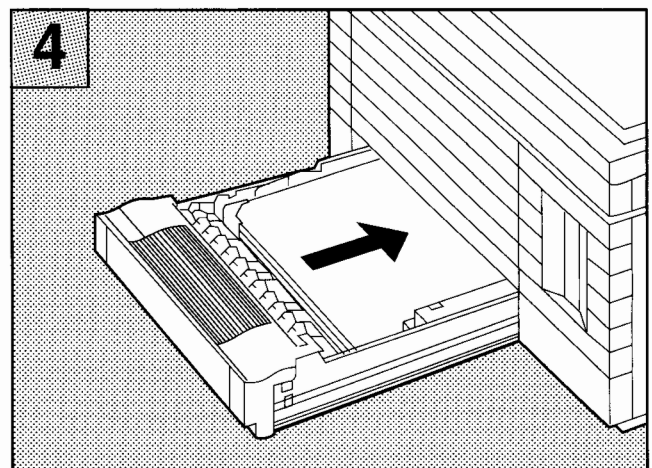
Slide the Paper Cassette out of the printer.



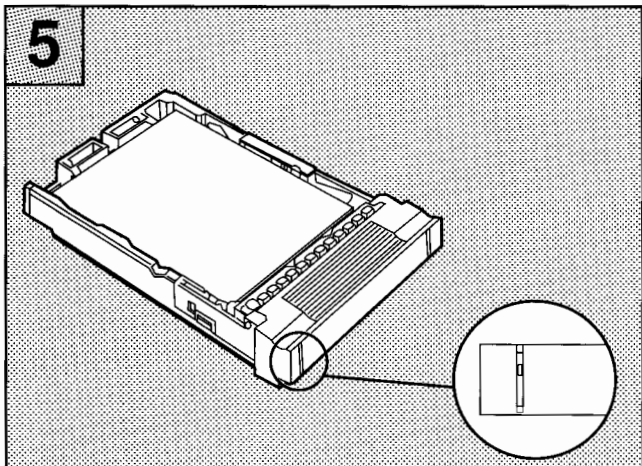
Load paper into the Cassette. It holds 250-sheets of paper.



Make sure that the paper is flat in the Cassette at all four corners and that paper fits under the left metal holder.



Slide the Cassette into the printer.



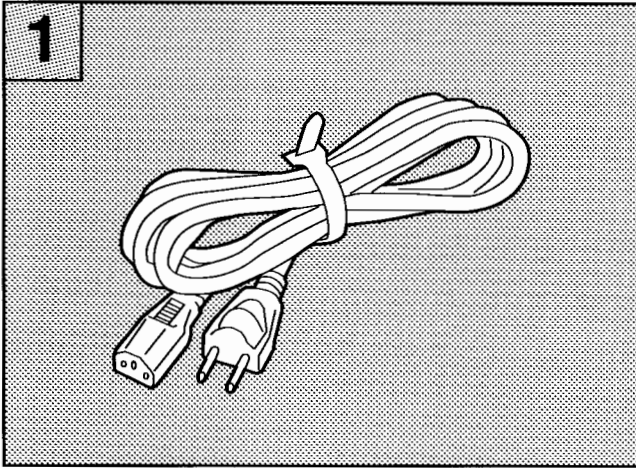
The paper level indicator shows you how much paper is in the Cassette (if the gauge is at the top, the Cassette is full of paper).

### NOTE

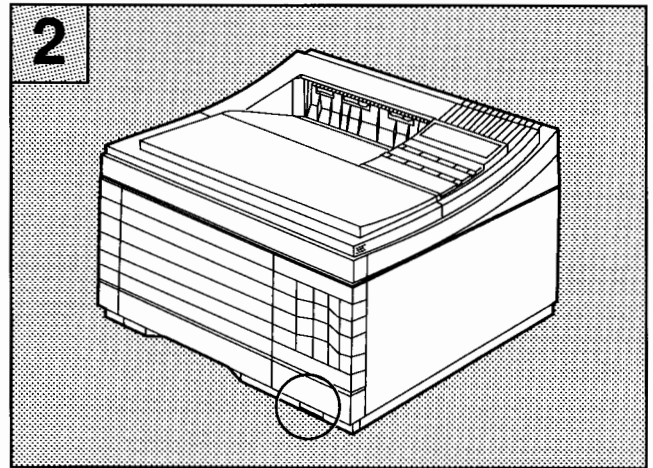
You can order optional 250-sheet Paper Cassettes and 500-sheet Lower Cassettes for your printer. See Chapter 1, "Printer Features," in your *HP LaserJet 4 and 4M Printer User's Manual* for part number and ordering information.

# G

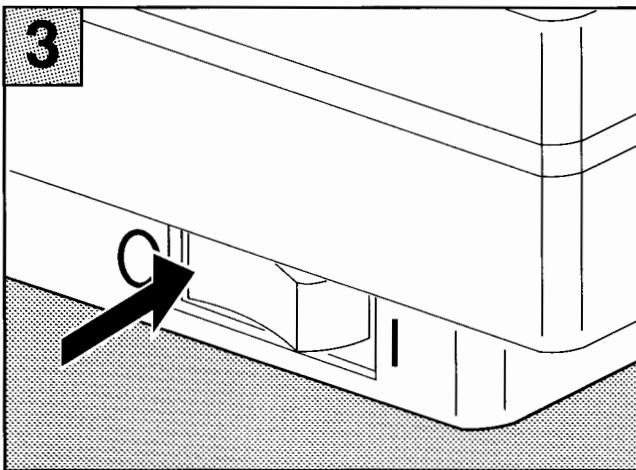
## Connecting the Printer to a Power Supply



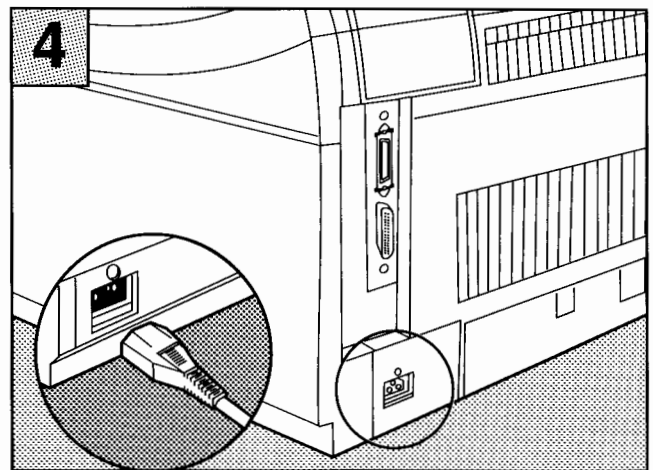
Locate the power cord.



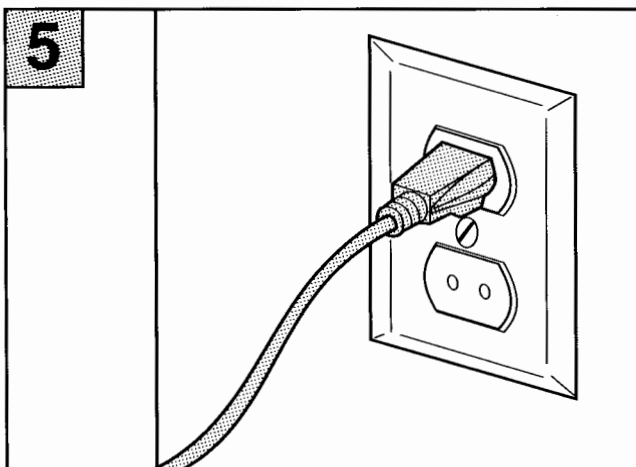
Locate the power switch on the front of the printer.



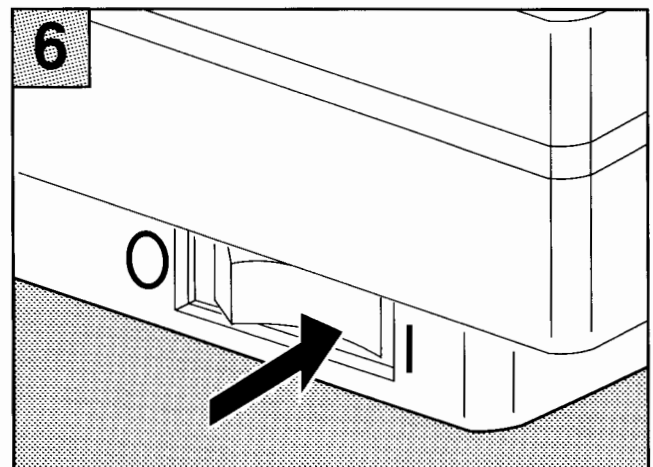
Make sure the power switch is OFF (0).



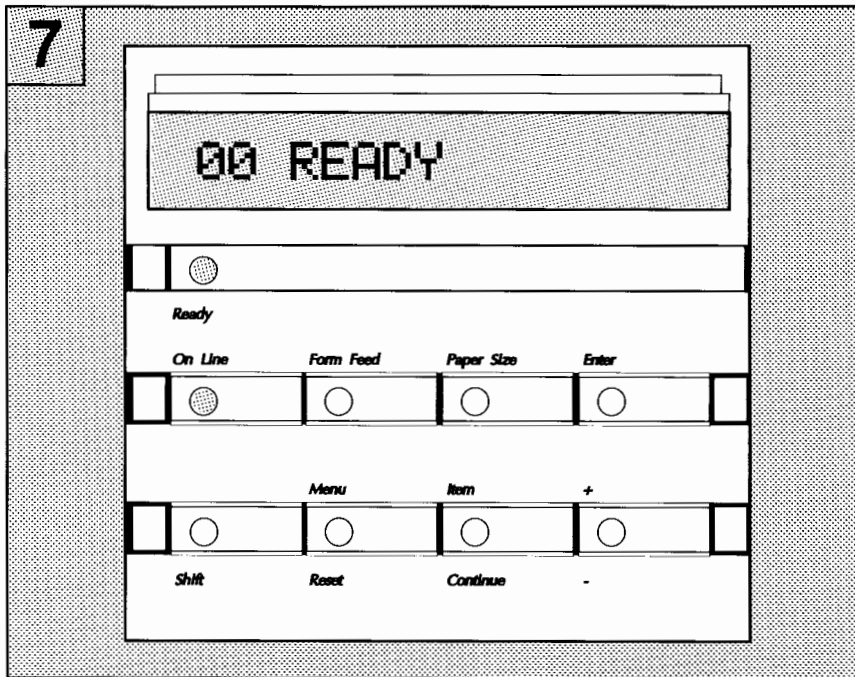
Insert the power cord into the power connector plug on the back of the printer.



Insert the other end of the power cord into an AC power outlet.



Switch the printer ON (I).



After the printer warms up, the **Ready** and **On Line** indicators light up and the display shows 00 READY.

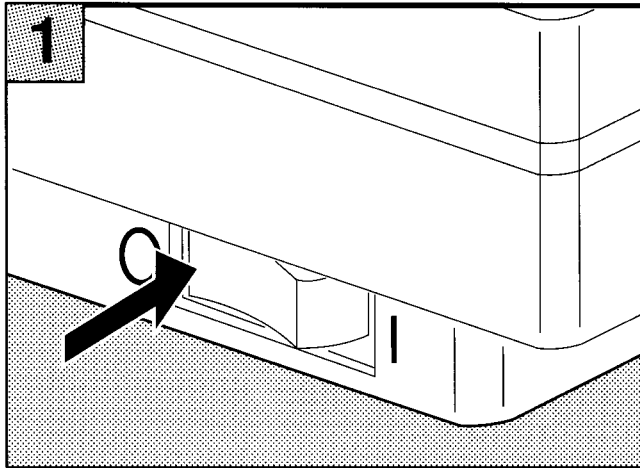
### NOTE

If a printer message displays, see Chapter 7, "Troubleshooting," in your *HP LaserJet 4 and 4M Printer User's Manual* for help. If problems continue, contact your internal support organization or your HP dealer.

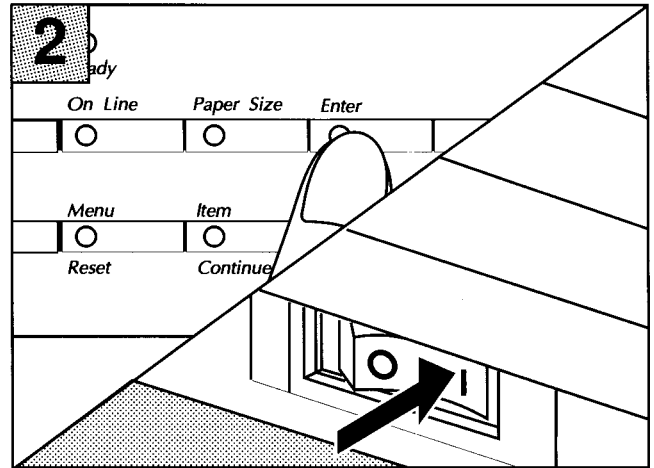
# H

## Changing the Display Language

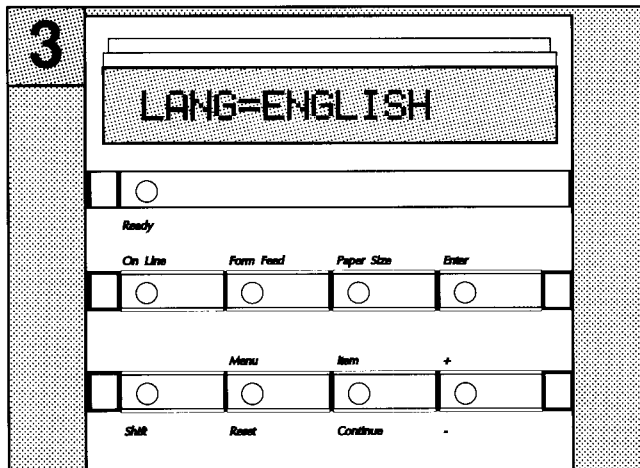
The control panel display language is set for English. Follow these instructions to change the language to French, German, Italian, Spanish, Finnish, Danish, Dutch, Swedish, Norwegian and Portuguese.



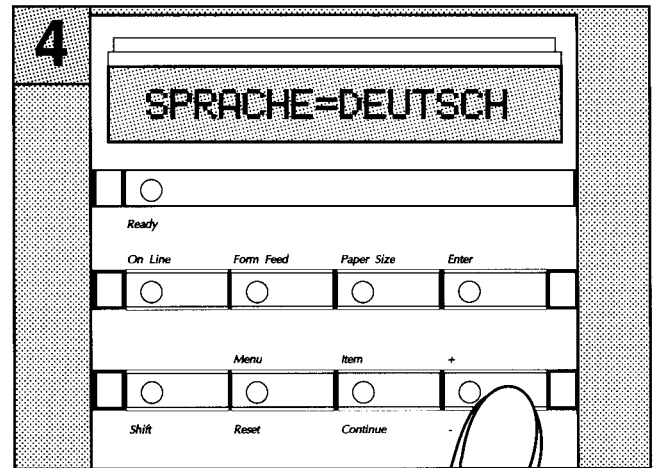
Switch the printer OFF (0).



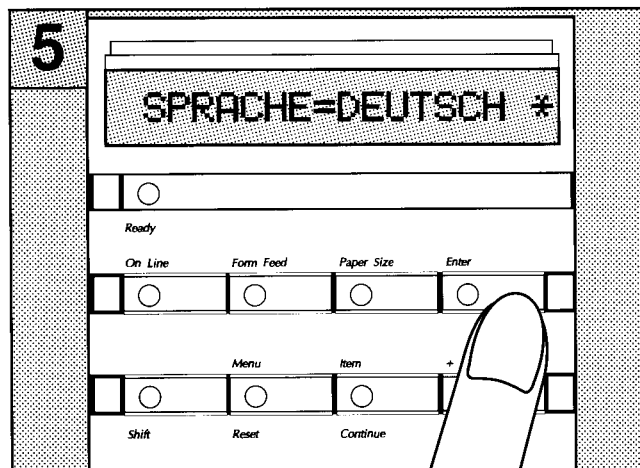
Hold **Enter** while switching the printer back ON (1).



Wait for LANG=ENGLISH to appear.



Press **Enter** repeatedly until the desired language appears in the display.

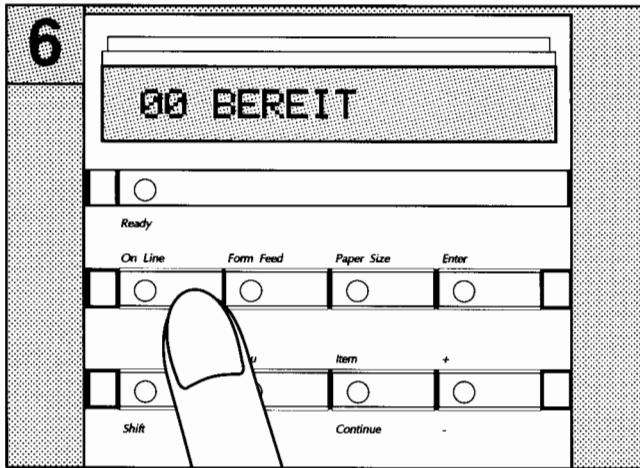


Press **Enter** to save your selection. An asterisk (\*) appears beside your language selection.

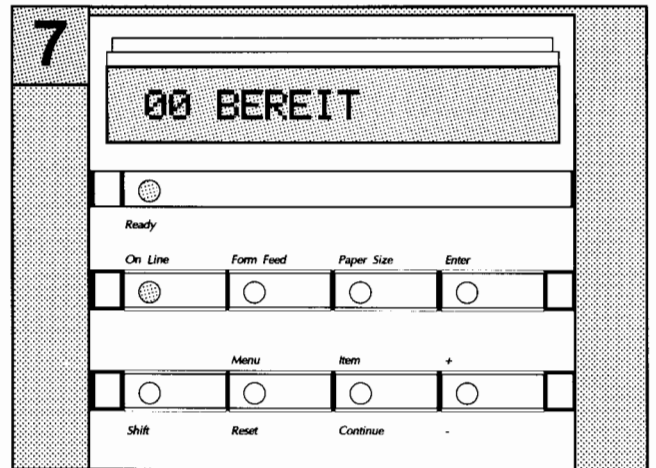
### NOTE

If the language does not change, you may not have pressed **Enter** to save your new selection.





Press **On Line**. The **On Line** indicator light comes on.



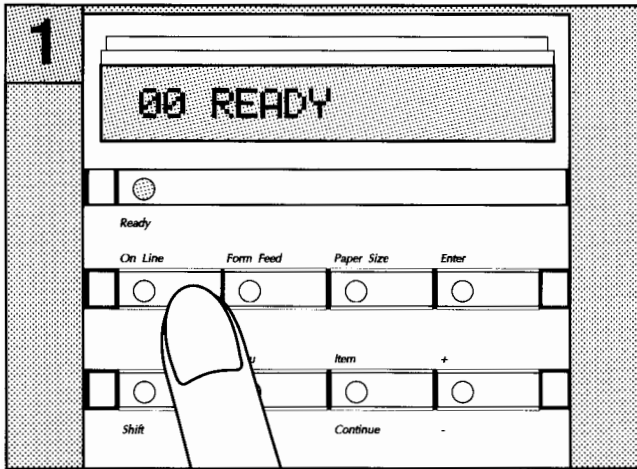
The printer messages will now display in the language you selected.



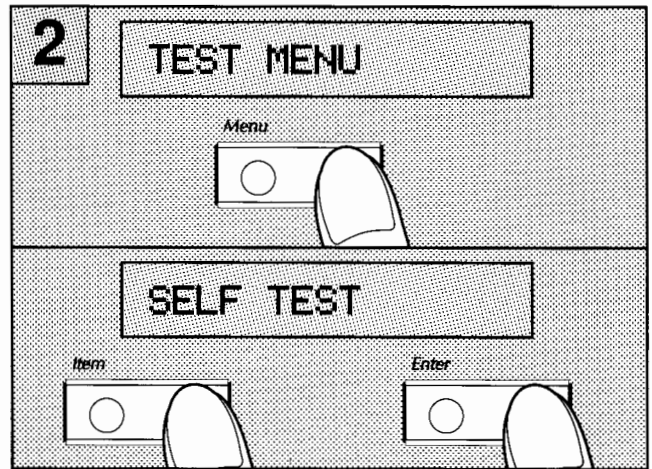
# I

## Testing Printer Operation

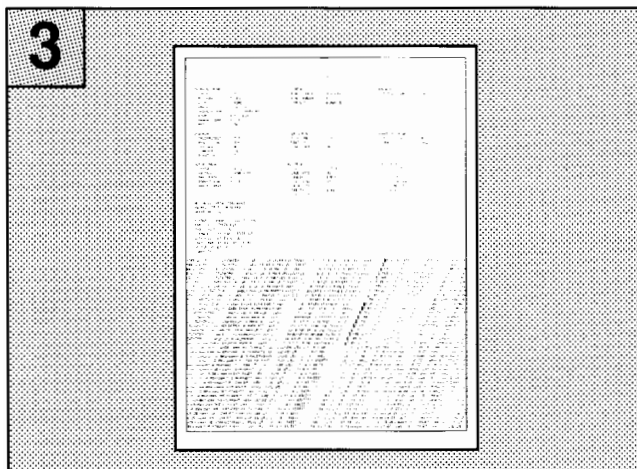
Print a Self Test and a PCL Typeface List to make sure your printer is operating correctly.



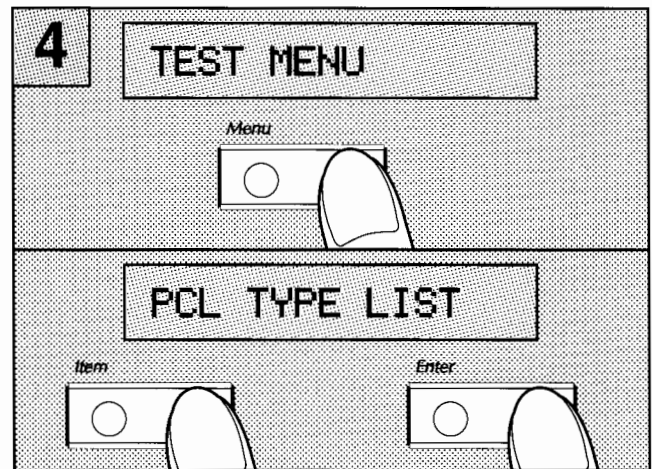
Press **On Line** to take the printer off line (the **On Line** indicator light goes out).



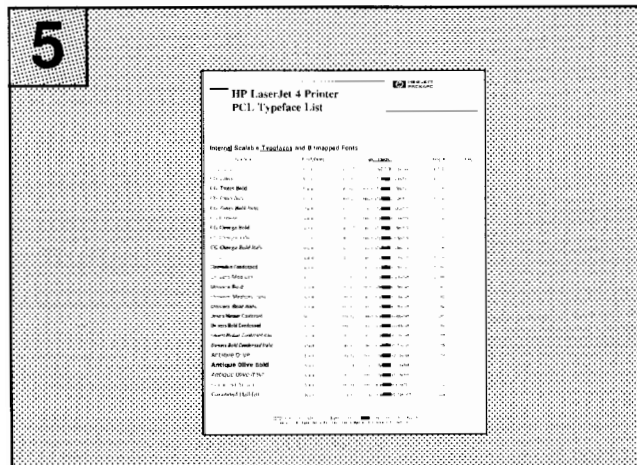
Press **Menu** repeatedly until **TEST MENU** appears. Next, press **Item** until **SELF TEST** appears. Then, press **Enter**.



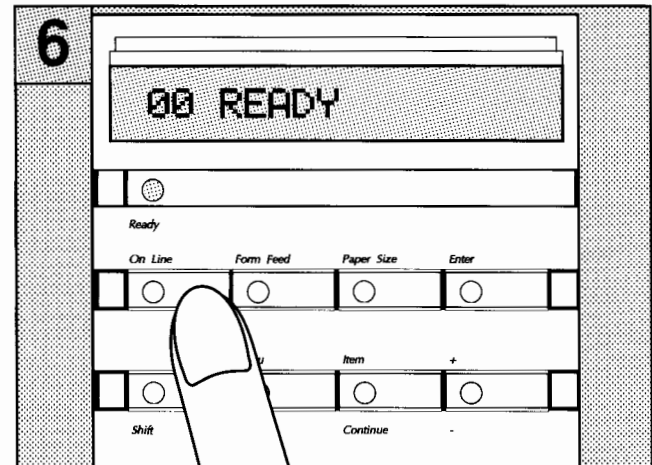
The Self Test prints (it will take a few moments to print).



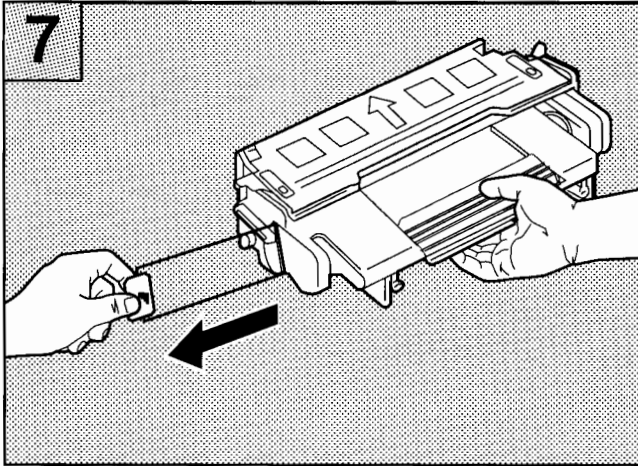
At **00 READY**, press **Menu** repeatedly until **TEST MENU** appears. Next, press **Item** until **PCL TYPE LIST** appears. Then, press **Enter**.



The PCL Typeface List prints. **00 READY** appears when the PCL Typeface List printout is complete.



When printing stops, press **On Line** to return the printer on line.



If blank pages print, make sure you have removed the sealing tape from the toner cartridge.

## NOTE

The Self Test tells you how your printer is configured, and the PCL Typeface List shows you what typefaces are resident in your printer. For a detailed explanation of the Self Test and PCL Typeface List, see your *HP LaserJet 4 and 4M Printer User's Manual*.

If a printer message displays other than `00 READY`, see Chapter 7, "Troubleshooting," in your *HP LaserJet 4 and 4M Printer User's Manual* for help.

If problems continue, contact your internal support organization or your HP dealer.



# Selecting the Interface (I/O) for Your Printer

Your printer's three I/O ports — modular I/O (MIO), standard Bi-Tronics parallel, and serial — are active at the same time. This means your printer can talk with up to three host systems at once. All you need to do is attach a printer cable (and install an MIO board and/or adjust interface protocols for your environments, if necessary) to your printer and computer port.

If you are configuring your printer with:

- Bi-Tronics parallel: (compatible with Centronics parallel) see the next page of this guide for information about identifying and selecting a Bi-Tronics parallel interface cable.

(Bi-Tronics parallel is compatible with Centronics parallel. It uses the same cable, hardware, and software as Centronics parallel; but to receive its enhanced capabilities, such as, bi-directional communication between the computer and printer, faster transmission of data, and autoconfiguration of printer drivers, you need software that supports these features. Check with your software vendor to see if your software supports Bi-Tronics parallel features.)

- Serial: see the next page of this guide for information about identifying and selecting a serial interface cable.
- Modular I/O: (such as Novell, AppleTalk, EtherTalk, LAN Manager, etc.) see the manual that came with your modular I/O board.

## NOTE

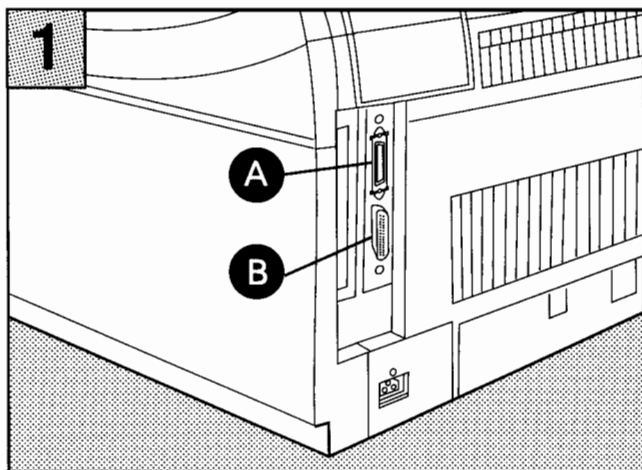
**The I/O cable, which connects the printer to the computer, is not provided with the printer. It must be purchased separately.**

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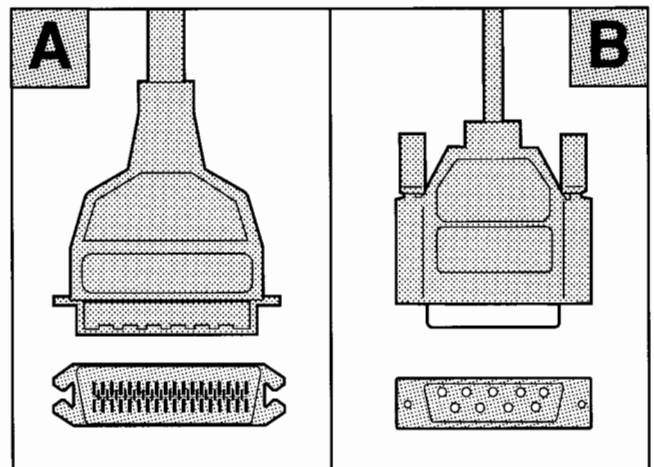
# About the Bi-Tronics Parallel or Serial Interface Cable

A computer communicates with a printer through an interface cable. Two standard interface cables that your HP LaserJet 4 printer supports are serial and Bi-Tronics parallel. These cables insert into the back of your printer and computer.

The illustrations below show you where to insert the cable into your printer port and what the end of each cable looks like. If you are not sure which cable best fits your situation, the information on the next two pages will help you decide. (To order your cable, contact your authorized HP dealer. You can use the part numbers listed in the illustrations on the next two pages.)



Location of Bi-Tronics parallel (A) and serial (B) ports on the back of your printer.



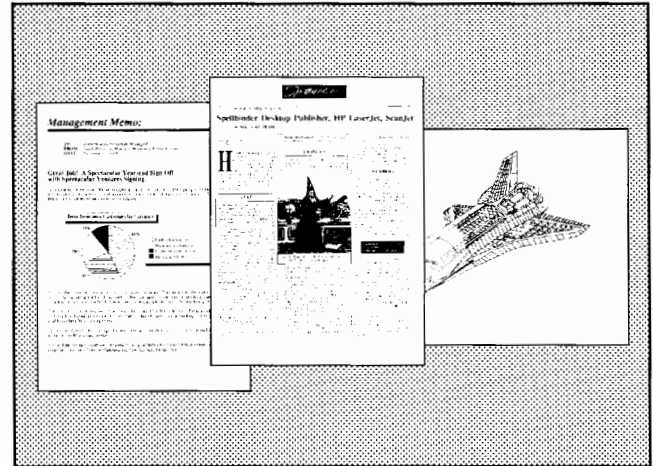
Bi-Tronics parallel cable, printer end

Serial cable, printer end

# Bi-Tronics Parallel Interface

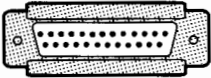
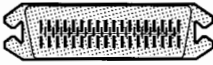
## Use a Bi-Tronics parallel interface when:

- You want the fastest transfer of data to your printer.
- You send a lot of graphic information or soft fonts to the printer.
- You position your printer less than 10 feet (3 meters) from your computer.



Graphic Information

A typical Bi-Tronics parallel cable looks like this:

Computer End	Parallel Interface Cable		Printer End
	HP Part Number	Length	
25 Pin Male Plug	HP 92284A	7.0' (2.1 m)	36 Pin Male Plug

If you plan to use a Bi-Tronics parallel cable, go to section **K**.

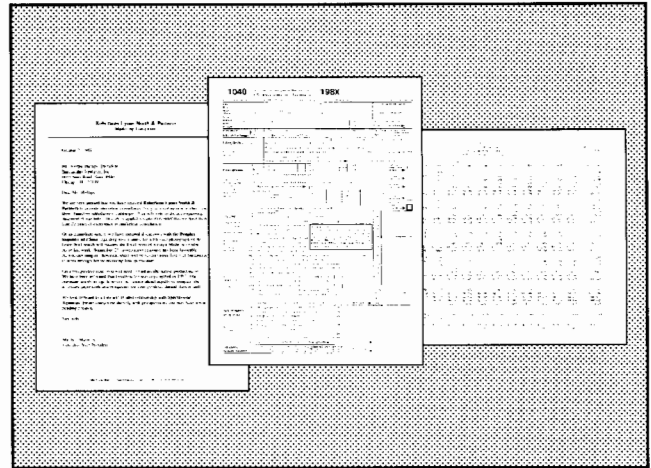
# Serial Interface

## Use a serial interface when:

- Your computer does not have an available Bi-Tronics parallel interface.
- Your computer is using multiple ports and can send textual information through a dedicated port.

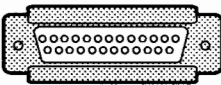
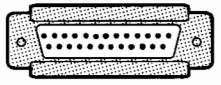
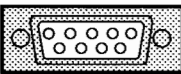
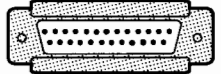
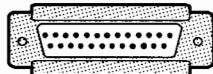
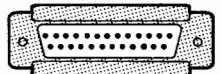
The RS-232C interface cable can support printers located up to 50 feet away from the computer.

The RS-422A interface cable can support printers located up to 4000 feet away from the computer.

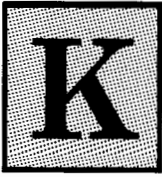


Textual Information

A typical serial cable looks like this:

Computer End	Serial Interface Cable	Printer End						
 25 Pin Female Plug	<table border="0"> <tr> <td>HP Part Number</td> <td>Length</td> </tr> <tr> <td>HP 17255D (RS232C)</td> <td>3.3' (1.0 m)</td> </tr> <tr> <td>HP 92219J (RS232C)</td> <td>16.7' (5.0 m)</td> </tr> </table>	HP Part Number	Length	HP 17255D (RS232C)	3.3' (1.0 m)	HP 92219J (RS232C)	16.7' (5.0 m)	 25 Pin Male Plug
HP Part Number	Length							
HP 17255D (RS232C)	3.3' (1.0 m)							
HP 92219J (RS232C)	16.7' (5.0 m)							
 9 Pin Female Plug	<table border="0"> <tr> <td>HP Part Number</td> <td>Length</td> </tr> <tr> <td>HP 24542G (RS232C)</td> <td>9.9' (3.0 m)</td> </tr> </table>	HP Part Number	Length	HP 24542G (RS232C)	9.9' (3.0 m)	 25 Pin Male Plug		
HP Part Number	Length							
HP 24542G (RS232C)	9.9' (3.0 m)							
 25 Pin Male Plug	<table border="0"> <tr> <td>HP Part Number</td> <td>Length</td> </tr> <tr> <td>HP 17255M (RS232C)</td> <td>3.9' (1.2 m)</td> </tr> <tr> <td>HP 13242-60010 (RS232C)</td> <td>16.7' (5.0 m)</td> </tr> </table>	HP Part Number	Length	HP 17255M (RS232C)	3.9' (1.2 m)	HP 13242-60010 (RS232C)	16.7' (5.0 m)	 25 Pin Male Plug
HP Part Number	Length							
HP 17255M (RS232C)	3.9' (1.2 m)							
HP 13242-60010 (RS232C)	16.7' (5.0 m)							

If you plan to use a serial cable, go to section **K**.

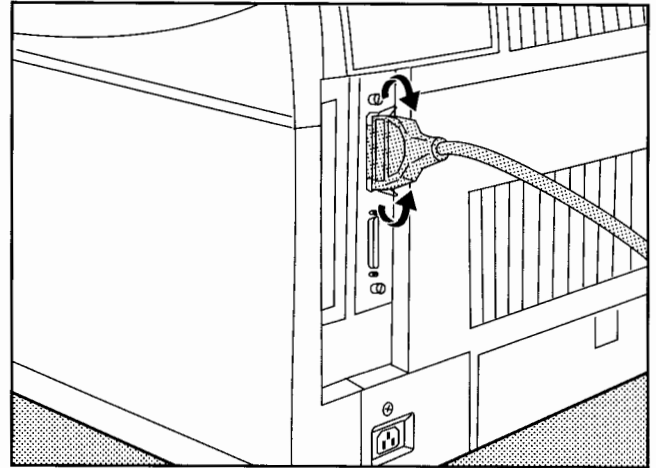


# Installing Your Interface Cable

## Bi-Tronics parallel:

1. Make sure your computer and printer are switched OFF.
2. Plug the cable into your computer and printer ports. Use the wire clips to attach the cable to your printer.
3. Switch your computer and printer ON.
4. Since the printer has automatic I/O switching, you do not need to configure your interface from the printer's control panel.

Continue to section **L**.

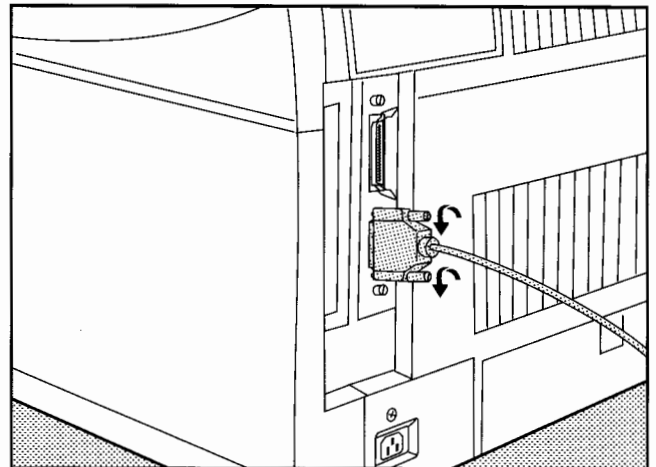


Snap the clips into the notch on the cable connector.

## Serial:

1. Make sure your computer and printer are switched OFF.
2. Plug the cable into your computer and printer ports.
3. Switch your computer and printer ON.
4. Since the printer has automatic I/O switching, you do not need to configure your interface from the printer's control panel.

You will, however, need to specify I/O type (RS-232C or RS-422A), baud rate, pacing, and DTR polarity from the printer's control panel. See your *HP LaserJet 4 and 4M Printer User's Manual* for information about selecting these items.



Turn the connector screws into the cable connector (you may need to use a small screwdriver).

## Other interfaces:

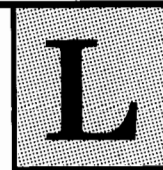
For other interfaces, such as Novell, AppleTalk, EtherTalk, Lan Manager, etc., see the documentation that came with your MIO board.

Continue to section **L**.



---

# Using a Printer Driver



A printer driver allows your software application to control features of your printer, such as scalable typefaces, paper cassettes, and 300 or 600 dpi (dots-per-inch) resolution. Some drivers also support printer accessories such as a typeface cartridge and an envelope feeder.

You need to install a printer driver into your software so your software can talk with your printer. These steps will help you locate or obtain an HP LaserJet 4 printer driver:

- Check your software for an HP LaserJet 4 printer driver.
- If your software does not contain an HP LaserJet 4 printer driver, select a substitute driver, such as an HP LaserJet III, IIID, or IIIP printer driver. (These substitute drivers allow you to use your HP LaserJet 4 printer, but they do not support the new features of your printer, such as 600 dpi, all scalable typefaces, automatic language switching; and printer accessories, such as an envelope feeder or optional paper cassettes.)
- Contact your authorized HP dealer to obtain your HP LaserJet 4 printer driver.
- See your software documentation or the information included with your printer driver (usually a “read me” file on the disk) for instructions about installing your printer driver.

## Using a Macintosh Printer Driver

A printer driver allows your operating system to control features of your printer, such as number of copies and paper source. It also supports printer accessories such as an envelope feeder and optional paper cassettes.

You need to install an AppleTalk interface board (HP part number J2341A) and a PostScript SIMM board (HP part number C2080A) before your computer can communicate with your printer. After installing these accessories, obtain an HP LaserJet 4 printer driver from your authorized HP dealer. Printer driver installation instructions are usually on the “read me” file on the disk.





# Setting Up an MS-DOS AUTOEXEC.BAT File

*If the MODE statement in your AUTOEXEC.BAT file is already set up for your printer, you do not need to follow these instructions.*

If you are familiar with your AUTOEXEC.BAT file, check your current MODE statement with the statement listed below. If you are unfamiliar with your AUTOEXEC.BAT file, see your network administrator or computer services personnel for assistance.

A MODE statement is entered in your AUTOEXEC.BAT file to allow infinite retry if your interface is busy. Usually a MODE statement is entered when a new printer is installed. If you are replacing a printer, your MODE statement may already be entered correctly and you will not need to change it.

The MODE statements for Bi-Tronics parallel and serial are listed below. Use a word processing application that saves ASCII text or a text line editor, such as MS-DOS Edlin or MS-DOS 5.0 Edit, to enter the appropriate MODE statement into your AUTOEXEC.BAT file. For more information about MODE statements and your AUTOEXEC.BAT file, see your MS-DOS documentation.

## PARALLEL

```
MODE LPT1:.,,P
```

**For MS-DOS version 4.0 and above, enter:**

```
MODE LPT1:.,,B
```

## SERIAL

```
MODE COM1:9600,N,8,1,P  
MODE LPT1:=COM1:
```

```
MODE COM1:9600,N,8,1,B  
MODE LPT1:=COM1:
```





Continue to section **N**.

# Verifying Communication Between the Computer and Printer



To make sure your printer and computer are communicating, print a directory listing.

## For MS-DOS users, follow these steps:

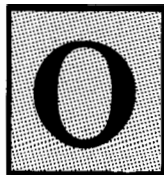
1. Make sure your computer and printer are ON and your printer is on line. (**On Line** indicator is lit.)
2. At the root directory (A:\> or C:\>), type DIR>PRN .
3. If the form feed light is ON, press  to take the printer off line, then press  to eject the page.
4. Press  to put the printer back on line.
5. If the printer does not print the list of files and the printer's control panel does not display a message, read through the troubleshooting checklist on the next page for help in solving the problem.
6. If a printer message appears on the control panel display, see Chapter 7, "Troubleshooting," in your *HP LaserJet 4 and 4M Printer User's Manual* for information about the message.

If the list of files printed without a problem, printer set up is complete and you can start using your new HP LaserJet 4 printer.

## For Macintosh, OS/2, and operating systems other than MS-DOS, follow these steps:

1. Print a file or job from your computer. For example, for Macintosh users, print a directory.
2. If the printer does not print your job, file, or directory, and the printer's control panel does not display a message, read through the troubleshooting checklist on the next page for help in solving the problem.
3. If a printer message appears on the control panel display, see Chapter 7, "Troubleshooting," in your *HP LaserJet 4 and 4M Printer User's Manual* for information about the message.
4. See your specific operating system documentation for troubleshooting information.

If the list of files printed without a problem, printer set up is complete and you can start using your new HP LaserJet 4 printer.



# Troubleshooting Checklist

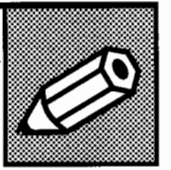
## General Troubleshooting Checklist:

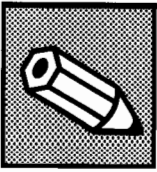
(This list does not include AUTOEXEC.BAT errors. See "AUTOEXEC.BAT Troubleshooting Checklist" below.)

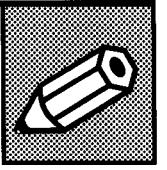
- **Is the On Line indicator on the printer's control panel lit?**  
If not, press .
- **Do you have the correct interface cable?**  
You may be using the wrong interface cable. If you are using a Bi-Tronics parallel or serial cable, see section **J** to identify your cable. If you are using another cable, see your interface documentation for information about your cable.
- **Is the interface cable installed correctly?**  
Your interface cable may be installed in the wrong port in the back of your computer, or the cable connections may be loose. If you are using a Bi-Tronics parallel or serial cable, read through the installation instructions in section **K**. If you are using another cable, see your interface documentation for information about installing your cable. Also, make sure the cable connections are secure on your printer and computer.
- **Was the computer or printer ON when you connected the interface cable?**  
Switch the computer and printer OFF, wait 15 seconds, then switch them ON again.
- **Is your printer working correctly?**  
Print the Self Test described in section **I** to make sure your printer is operational. See your *HP LaserJet 4 and 4M Printer User's Manual* for troubleshooting and maintenance information. If necessary, call your authorized HP dealer.
- **Is your computer working correctly?**  
Run a reliable software application on your computer. If necessary, call your computer dealer or manufacturer.

## MS-DOS AUTOEXEC.BAT Troubleshooting Checklist:

- **Did you reboot your computer after editing your AUTOEXEC.BAT file?**  
After entering the MODE command into your AUTOEXEC.BAT file, and saving the files (see section **M**), reboot the computer. Hold down + + at the same time.
- **Did you set up your AUTOEXEC.BAT file correctly?**  
Recheck your AUTOEXEC.BAT file. At your root directory (**A:\>** or **C:\>**), type `TYPE AUTOEXEC.BAT` and press . Examine your MODE statement carefully for errors; a missing character or space, an additional character or space, a typing error. To correct an error, refer to your MS-DOS manual.

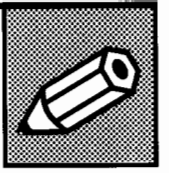


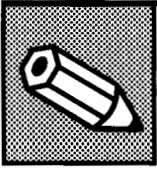












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