Operator's Guide

HP LaserJet 4Si Printer

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Conventions

This manual uses the following conventions:

Italic refers to a related document, or is used for emphasis.

COMPUTER type indicates text visible on the printer display or commands as seen on a computer terminal.

[Keyface] indicates one of several keys (such as [Menu]) on the printer control panel or on your computer keyboard.

Note Notes contain important information set off from the text.

CAUTION Caution messages appear before procedures which, if not observed, can result in loss of data or in damage to equipment.

WARNING Warning messages alert you to a specific procedure or practice which, if not followed correctly, can cause personal injury.

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1

Your HP LaserJet Printer

Introduction

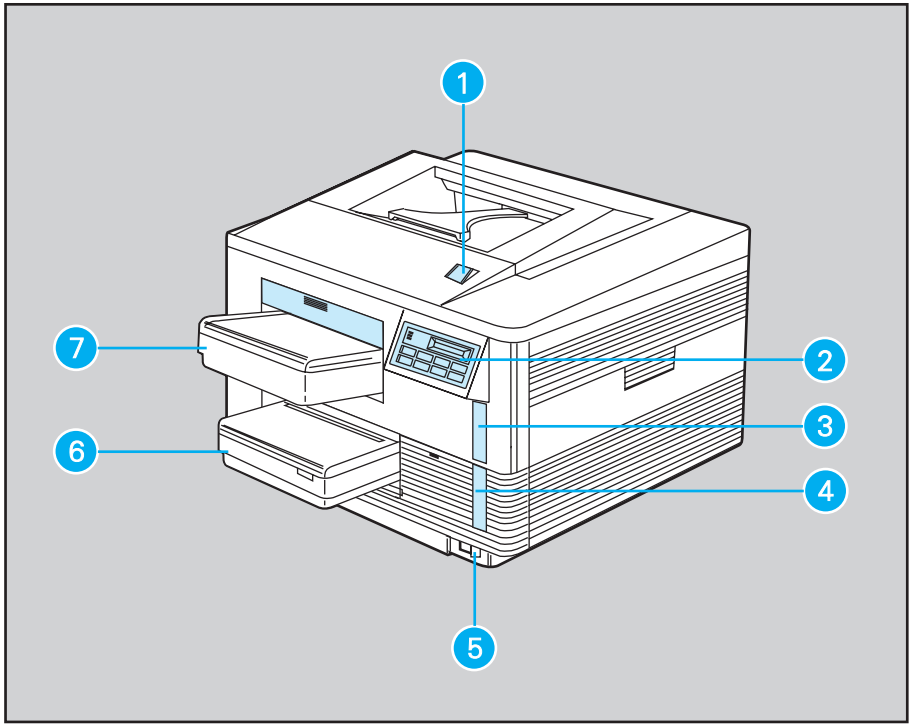
This guide provides procedures for:

- Changing the toner cartridge and adjusting the print density.
- Loading the paper trays, and clearing paper jams if they occur.
- Cleaning the printer.
- Performing periodic operator maintenance (required every 200,000 pages).
- Solving printer problems.

Locating Printer Features

The illustrations on the next two pages will help you locate the key external features of your printer. Take a few minutes to familiarize yourself with these features.

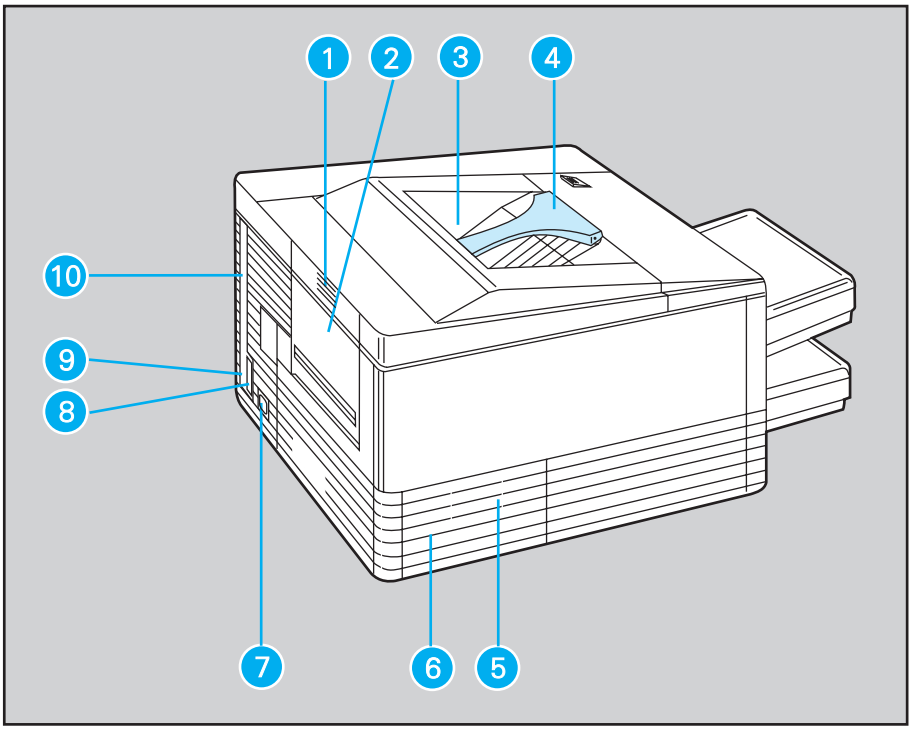
Figure 1 - 1



Front and Right-Side View of the Printer

1. Top release button. Press here to open the printer's top cover.
2. Control Panel. Printer status and error messages appear in the display window.
3. Top font cartridge slot.
4. Bottom font cartridge slot.
5. Power ON/OFF switch.
6. Lower paper tray.
7. Upper paper tray.

Figure 1 - 2



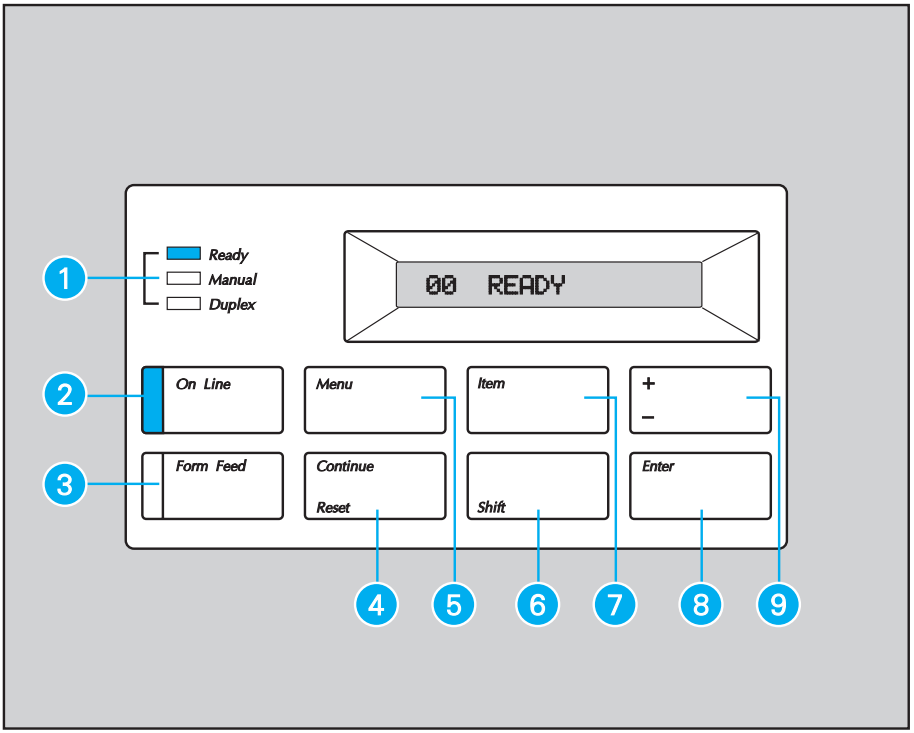
Rear and Left-Side View of the Printer

1. Press-and-release latch. Press here briefly to open the rear output bin.
2. Lower (rear) output bin.
3. Upper output bin.
4. Bin full sensor arm.
5. Press-and-release latch. Press here briefly to open the duplex access door.
6. Duplex access door.
7. Power connector plug.
8. Bi-Tronics Parallel Connector.
9. Lower I/O slot.
10. Upper I/O slot.

Locating Control Panel Features

The illustration below will help you locate the key features of the control panel on your printer. Take a few minutes to familiarize yourself with these features.

Figure 1 - 3



Control Panel Features

1. Ready, Manual Feed, and Duplex Indicator.
2. On Line Key and Indicator.
3. Form Feed Key and Indicator.
4. Continue and Reset Key.
5. Menu Key.
6. Shift Key.
7. Item Key.
8. Enter Key.
9. + (Plus) and – (Minus) Key.

Control Panel keys (overview)

On Line key
Use this key to switch the printer on line and off line.

Form Feed key
Clicking [Form Feed] tells the printer to print all stored page data.

Menu key
Clicking [Menu] accesses the available menus.

Continue and Reset key
Clicking this key clears most errors and returns the printer on line. Clicking this key while pressing and holding [Shift] causes 07 RESET to appear on the control panel and resets the printer.

Item key
Clicking [Item] steps you through the menu items for the selected menu.

Shift key
Using [Shift] in conjunction with other keys resets the printer or displays previous values for the current menu item.

+ (Plus) and – (Minus) key
Clicking this key displays the next value for the current menu item. Clicking this key while pressing and holding [Shift] displays the previous value for the current menu item.

Enter key
Clicking [Enter] while in a menu saves the menu selection. Clicking [Enter] while in the Test Menu, runs the selected test.

To make control panel menu selections

1 If the printer is on line, click [On Line] to take the printer off line.

The On Line indicator is no longer lit.

2 Click [Menu] until the menu you desire appears on the printer's display.

PRINTING MENU
PCL MENU
JOB MENU
CONFIG MENU
MEM CONFIG MENU
PARALLEL MENU
TEST MENU

3 Click [Item] until the menu item you desire appears on the printer's display.

4 Click [+] to select the value you desire for that menu item.

5 Click [Enter] to save your selection.

An asterisk (*) appears to the right of your selection.

6 Click [On Line].

The On Line indicator lights and the printer returns on line.

7 If the message 10 RESET TO SAVE appears on the display, hold down [Shift] and click [Reset] to perform a 07 RESET. This saves your selection as the new default. (See the note on the following page regarding the effects of a reset.)

For detailed information on control panel selections, see the *LaserJet 4Si Printer User's Reference Manual.*

Saving menu selections

After you make changes to the Printing Menu selections (and to some of the Config Menu selections), clicking [Enter] saves your menu selection. An asterisk (*) appears in the display to indicate current menu selections. If the printer does not contain buffered data, temporary fonts, or temporary macros, an internal reset occurs when you click [Enter].

If the printer is in a print job, contains buffered data, temporary fonts, or temporary macros,10 RESET TO SAVE appears in the display when you exit the menu. If you see this message, the printer will save the selections, but will not activate them until after the buffered data is printed or deleted. You can do one of the following:

- Click [Reset] while pressing and holding [Shift] to reset the printer and save your new selections. Although your new selections are saved, buffered data (temporary fonts, macros, and unprinted pages) are erased. If the personality setting has been changed but not saved, the change takes place with the reset.
- Click [On Line] to return the printer on line without resetting. Although your selection is saved, it remains inactive until you reset the printer or the print job is completed.

Note

Generally, with personality resource savings disabled, permanent soft fonts or macros remain in memory until overwritten, deleted by a software command, the system language is switched, page protect is changed, resolution is changed, or the printer is turned off. Except in these conditions, resetting your printer erases only temporary soft fonts and macros from memory - not permanent soft fonts or macros. For information on saving soft fonts and macros, see “To allocate memory for printer resources” in this chapter.

Printing Menu selections

Menu Item	Selections
COPIES	1 to 999
OUT BIN	UPPER LOWER
PAPER/ENVELOPE	LETTER LEGAL A4 EXEC COM10 MONARC DL
ORIENTATION	P (Portrait) L (Landscape)
FORM = NNN LINES	5 to 128
MANUAL FEED	OFF ON
JOB OFFSET	OFF ON
RET (Resolution Enhancement)	OFF ON
DUPLEX *	OFF ON
BIND **	LONG (Long Edge Binding) SHORT (Short Edge Binding)

* This item is available only when the optional duplex unit is installed on the printer.
** This item is available only if the duplex unit is installed and DUPLEX is set to ON.

PCL Menu selections

Menu Item	Selections
FONT SOURCE	I (Internal fonts) TOP (Top font cartridge) * BTM (Bottom font cartridge) * S (Permanent soft fonts) * Mn (Fonts in ROM SIMMs, n = 1 to 4) *
FONT NUMBER	0 to 999
PITCH **	0.44 to 99.97
PT. SIZE (Point Size) **	4.00 to 999.75
SYM SET (Symbol Set)	(Refer to the *LaserJet 4Si Printer User's Reference Manual* for selections)

* This item is available only if the font is installed.
** This item is optional depending on the font type selected with FONT SOURCE and FONT NUMBER.

PS (PostScript™) Menu selections

Menu Item	Selections
PRT PS ERRS (Print PostScript Errors)	OFF ON
JAM RECOVER	OFF ON

Note The PS (PostScript) Menu is available only if the PostScript option is installed in the printer.

Job Menu selections

Menu Item	Selections
PAGEPROTECT	OFF LTR (Letter) A4 LGL (Legal)
RESOLUTION	300 600
PERSONALTY	AUTO PCL PS (PostScript)
TIMEOUT	5 to 300 (seconds)

Config Menu selections

Menu Item	Selections
LOCK	NONE LC (Lower tray locked out) UC (Upper tray locked out)
CLR WARN	ON JOB
AUTO CONT	OFF ON
SERVICE MSG *	OFF ON
LOW TONER	STOP CONT (Continue)

* This item appears only when the USER MAINTENANCE message appears on the printer's display (every 200,000 pages). For more information, see the *LaserJet 4Si Printer User's Reference Manual*.

Mem Config Menu selections

Menu Item	Selections
RESORCE SAV *	OFF ON
PCL MEM **	0 K, 500 Kbytes to maximum available for Resource Saving
PS MEM **	0 K, 900 Kbytes to maximum available for Resource Saving

* This item is available only if a second personality such as the PostScript language is installed and at least 10 Mbytes of memory is installed (or 14 Mbytes with the duplex unit installed).
** This item is available only if RESORCE SAV in the Mem Config Menu is set ON.

Parallel Menu selections

Menu Item	Selections
HIGH SPEED	NO YES
ADV FNCTNS (Advance Functions)	NO YES

Note

Up to two MIO menus (MIO MENU 1 and MIO MENU 2) may appear after the Parallel Menu if optional MIO boards are installed in the printer.

Test Menu selections

Menu Item	Selections
SELF TEST	(Press Enter to perform the test)
CONT SELF TEST	(Press Enter to perform the test)
PCL TYPE LIST	(Press Enter to perform the test)
PCL DEMO PAGE	(Press Enter to perform the test)
PS CONFIG PAGE *	(Press Enter to perform the test)
PS TYPEFACE LIST *	(Press Enter to perform the test)
PS DEMO PAGE *	(Press Enter to perform the test)

* This item is available only if the PostScript language option is installed.

To reset the printer to factory defaults

1 If the printer is on line, click [On Line] to take the printer off line.

The On Line indicator is no longer lit.

2 Press and hold [Shift] and [Reset] until RESET=MENU appears on the printer's display.

Note

The default selection RESET=MENU clears the page buffer, removes all temporary personality data such as downloaded typefaces, resets the printing environment parameters (such as number of copies, paper size, etc.), and sets user-selectable defaults to their factory defaults. Items in the Config, Parallel, Mem Config, and MIO Menus are not reset. If you want to reset the active I/O or all I/O, click [+] until either RESET=ACTIVE I/O or RESET=ALL I/O appears, then click [Enter] to save your selection. For more information, see the L*aserJet 4Si Printer User's Reference Manual*.

3 Click [On Line] to reset the printer.

The printer resets, then returns on line.

Factory defaults

Menu	Item	Factory Default
PRINTING	COPIES	1
PRINTING	OUT BIN	UPPER
PRINTING	PAPER	LETTER *
PRINTING	ORIENTATION	P (Portrait)
PRINTING	FORM = NNN LINES	60
PRINTING	MANUAL FEED	OFF
PRINTING	JOB OFFSET	ON
PRINTING	RET	ON
PRINTING	DUPLEX	OFF
PRINTING	BIND	LONG
PCL	FONT SOURCE	I (Internal)
PCL	FONT NUMBER	0
PCL	PITCH	10.00
PCL	PT. SIZE	12.00
PCL	SYM SET	ROMAN-8
JOB	PAGEPROTECT	OFF
JOB	RESOLUTION	600
JOB	PERSONALTY	AUTO
JOB	TIMEOUT	15
CONFIG	LOCK	NONE
CONFIG	CLR WARN	ON
CONFIG	AUTO CONT	ON
CONFIG	LOW TONER	STOP
CONFIG	SERVICE MSG	OFF
MEM CONFIG	RESORCE SAV	OFF
PARALLEL	HIGH SPEED	YES
PARALLEL	ADV FNCTNS	YES

* This setting may default to A4 in some countries.

To allocate memory for printer resources

This printer allows you to set aside memory to save each personality's permanent resources (fonts and macros) while switching between personalities (PCL to the PostScript language), changing resolution, or changing page protect. This is accomplished through the Mem Config Menu of the control panel.

Note

Allocate memory for saving personality resources before downloading your printer resources to the printer. Otherwise, printer resources may be lost when the printer is reset to save your memory settings for personalities. The maximum memory available for saving personality resources differs from the amount of memory installed in the printer. This is due to other memory consumers such as resolution, page protection, page size, duplex, and the memory currently reserved by other personalities. Memory will be made available for personality resource saving only after all other memory requirements are satisfied.

1 Print out a Self Test page and see how much memory is available for Resource Saving.

   For more information on printing a Self Test page, see "To print a test page" in Chapter 6.

2 If the printer is on line, click [On Line] to take the printer off line.

   The On Line indicator is no longer lit.

3 Click [Menu] until MEM CONFIG MENU appears on the printer's display.

Note

The MEM CONFIG MENU is available only if a second personality such as the PostScript language is installed and at least 10 Mbytes of memory is installed (14 Mbytes if the optional duplex unit is installed).

4 Click [Item] until RESOURCE SAV= appears on the printer's display.

5 Click [+] to select RESOURCE SAV=ON.

6 Click [Enter] to save your selection.

An asterisk (*) appears to the right of your selection and the current personalities are set to their minimum values.

Minimum Memory Allocated for PCL and PostScript Language Personalities

Personality	Minimum Memory Allocated
PCL	500 Kbytes *
PostScript	900 Kbytes *

* The amount of memory you allocate for each personality may be greater than the value listed above depending on the type and number of printer resources you download.

7 Click [Item] until PCL MEM= appears in the printer's display.

8 Estimate the amount of printer memory you use for downloaded fonts, macros, and other resources for PCL. Then click [+] to set PCL MEM to that value.

Pressing and holding [+] allows you to scroll through the possible values for this setting in 100 Kbyte increments. Clicking [–] while pressing and holding [Shift] takes you back to a previous value.

9 Click [Enter] to save your selection.

An asterisk (*) appears to the right of your selection.

10 Click [Item] until PS MEM= appears in the printer's display.

Note If you have a different optional personality installed, a message similar to PS MEM = will appear on the printer's display. Set up memory for your installed personality as shown in step 11 for the PostScript language personality.

11 Estimate the amount of printer memory you use for downloaded fonts, forms, patterns, and other resources for the PostScript language. Then click [+] to set PS MEM to that value.

12 Click [Enter] to save your selection.

An asterisk (*) appears to the right of your selection.

13 Click [On Line].

14 When 10 RESET TO SAVE appears in the control panel, click [Reset] while pressing and holding [Shift].

The printer resets and enables your settings.

15 Print a Self Test page and verify your memory allocations.

To install font and typeface cartridges

1 If the Ready indicator is blinking, wait until it stops blinking.

2 If the printer is on line, click [On Line] to take the printer off line.

The On Line indicator is no longer lit.

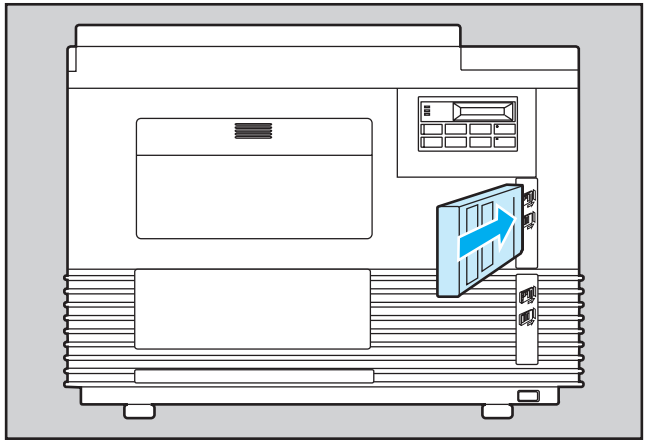
3 If the Form Feed indicator is lit, click [Form Feed] to print the remaining data.

CAUTION Make sure the printer is off line before removing or installing font cartridges.

4 Hold the cartridge with its label facing to the right.

5 Slide the cartridge into one of the vertical cartridge slots.

Figure 1 - 4



Inserting a Cartridge

6 Push the cartridge in firmly until you feel it snap into place.

You should hear and feel the cartridge snap into place. Do not be afraid to push hard.

Note

If a message other than *00 READY* appears on the printer's display, see "Printer Messages" in Chapter 6 for help.

To verify the cartridge is installed

1 Click [Menu] until PCL MENU appears on the printer's display.

2 Click [Item] until FONT SOURCE appears on the printer's display.

3 Click [+] until TOP or BTM (depending on the physical location of the cartridge) appears on the display.

If the correct location (TOP or BTM) appears in the display, the cartridge is installed correctly.

4 Click [On Line].

The On Line indicator lights and the printer returns on line.

If the correct location (TOP or BTM) does not appear in the display in step 3, the font cartridge is not installed correctly. Make sure the font cartridge label faces away from the printer and the cartridge is seated properly (you should feel the cartridge snap into place).

To select an optional printer personality

1 If the printer is on line, click [On Line] to take the printer off line.

The On Line indicator is no longer lit.

2 Click [Menu] until JOB MENU appears on the printer's display.

3 Click [Item] until PERSONALTY appears on the printer's display.

4 Click [+] to select the printer personality.

AUTO allows automatic switching between printer personalities.
PCL sets the printer personality to PCL 5.
PS sets the printer personality to the PostScript language.

Note The AUTO selection is available only if a second personality such as the PostScript language is installed in the printer. PS is available only if the PostScript language option is installed.

5 Click [Enter] to save your selection.

An asterisk (*) appears to the right of your selection.

6 Click [On Line].

The On Line indicator lights and the printer returns on line.

7 If the message 10 RESET TO SAVE appears in the display, click [Reset] while holding down [Shift]. This resets the printer and saves your selection as the new printer default.

Power Save Mode

The power save mode on your LaserJet 4Si and 4Si MX printers reduces power consumption when the printer is not in use.

NOTE

When in Power Save mode, the printer will enter a warm-up condition when it receives a print job. After warming up, your job will print.

The printer will not enter the Power Save mode if a paper tray has been removed, or if a print job has been interrupted by an error condition, such as having run out of paper during a print job.

To set the power save mode

1 Click [On Line] until the On Line indicator is no longer lit.

2 Click [Menu] until JOB MENU appears on the printer's display.

3 Click [Item] until PWRSAVE appears on the printer's display.

4 Click [+] to set the time between 15 minutes (15 MIN) and 3 hours (3 HRS), or to **TURN OFF** power save mode.

5 Click [-] to view the previous value. Press and hold [+] or [-] to scroll through the possible values for the power save mode. The default is 1 hour (1 HR).

6 Click [Enter] to save your selection. An asterisk (*) appears to the right of your selection.

7 Click [On Line] to return the printer on line. The On Line indicator lights. When in Power Save mode, the printer's display will read 00 POWERSAVE.

2

Toner

The Microfine Toner Cartridge

The toner cartridge (HP Part Number 92291A) in your printer contains an electrophotographic print drum and a supply of toner.

When you use the printer to print typical word-processed text, a toner cartridge lasts approximately 8000 pages. Depending on the print density setting and the amount of text and graphics you print, your toner cartridge life may be longer or shorter.

Do not remove the toner cartridge from its packaging until you are ready to use it. The shelf life of an unopened cartridge package is approximately two and a half years of storage plus usage; the maximum shelf life of an opened cartridge package is approximately six months plus usage.

Toner Low Messages

If the 16 TONER LOW X message (where X is 1, 2, or 3) appears on the printer's display, the toner level in the toner cartridge is getting low. The print will become lighter and white streaks may appear. The TONER LOW message progresses from "1" to "2" and finally to "3." If LOW TONER is set to STOP in the Config Menu, the printer stops at each point until [Continue] is pressed. If LOW TONER is set to CONT, the printer will display the 16 TONER LOW X messages, but will continue printing. These messages remain active in the display until the toner is redistributed or the cartridge is changed. With TONER LOW set to CONT, the printer could conceivably run out of toner while printing, losing image data.

- 16 TONER LOW 1 - pressing [Continue] allows your job to continue. You should be able to print approximately 200 additional pages before the 16 TONER LOW 2 message appears.
- 16 TONER LOW 2 - pressing [Continue] allows your job to continue. Approximately 200 additional pages print before the 16 TONER LOW 3 message appears. Print quality will begin to degrade noticeably.
- 16 TONER LOW 3 - Any additional pages are likely to be illegible. Change the toner cartridge.

To temporarily improve print quality

1 Open the printer's top cover.

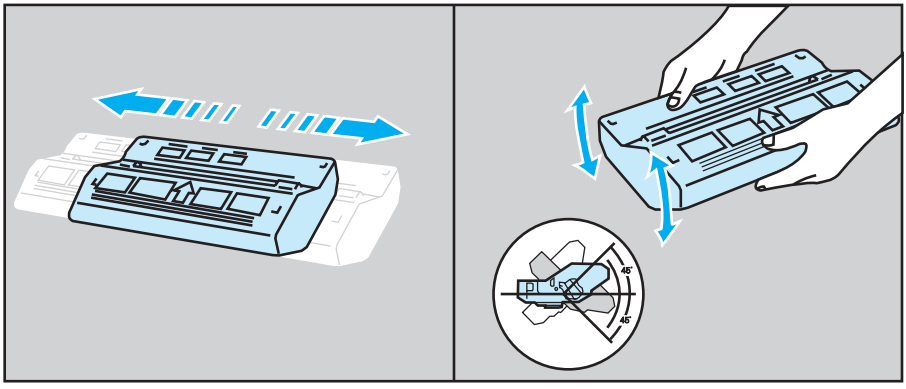
2 Remove the toner cartridge.

3 Shake the toner cartridge as shown in Figure 2-1 to redistribute toner.

4 Reinsert the toner cartridge.

The 16 TONER LOW X message still may appear, but the print quality should improve temporarily. If the print remains light, replace the toner cartridge.

Figure 2 - 1

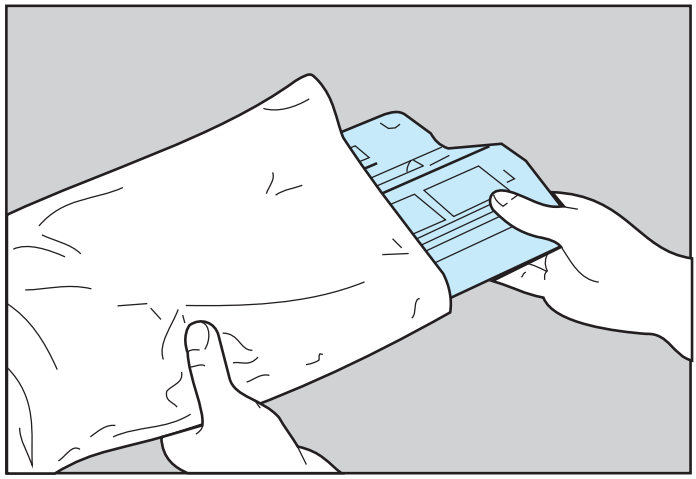


Shaking and Rocking the Toner Cartridge

To change the toner cartridge

1 Remove the toner cartridge from its bag.

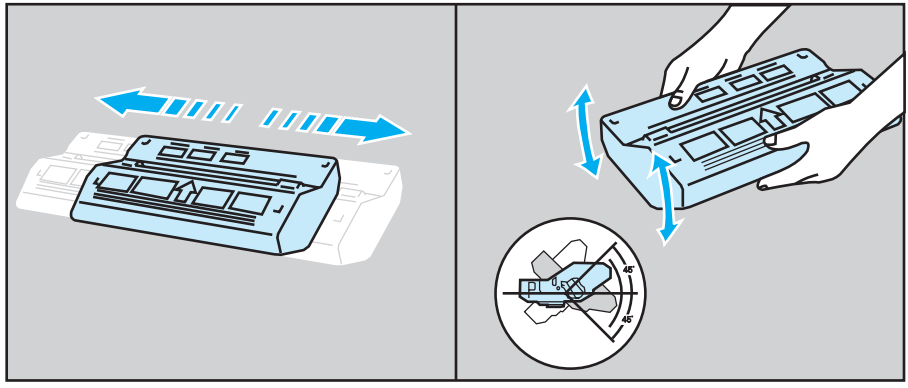
Figure 2 - 2



Removing the Toner Cartridge

2 Distribute the toner evenly by shaking and rocking the cartridge as shown in Figure 2-3. Repeat each sequence five or six times.

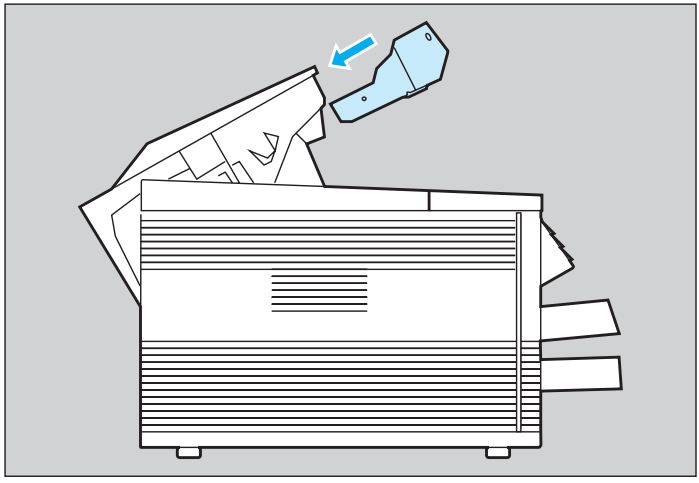
Figure 2 - 3



Shaking and Rocking the Toner Cartridge

3 Open the printer to the half-open position. Remove and recycle the old toner cartridge.

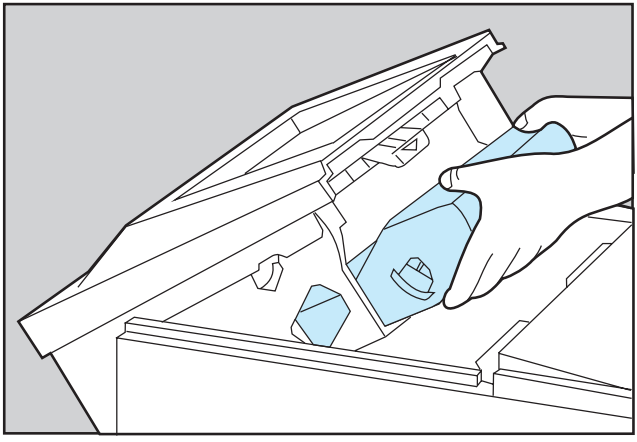
Figure 2 - 4



Opening the Printer

4 Insert the toner cartridge into the top of the printer.

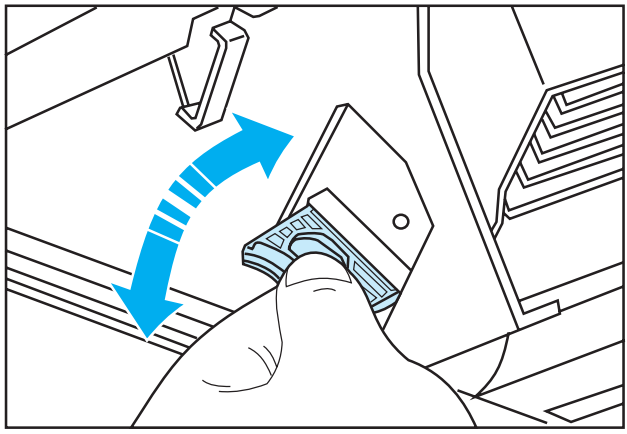
Figure 2 - 5



Inserting the Toner Cartridge

5 Bend the tab on the left side of the toner cartridge back and forth until it breaks.

Figure 2 - 6

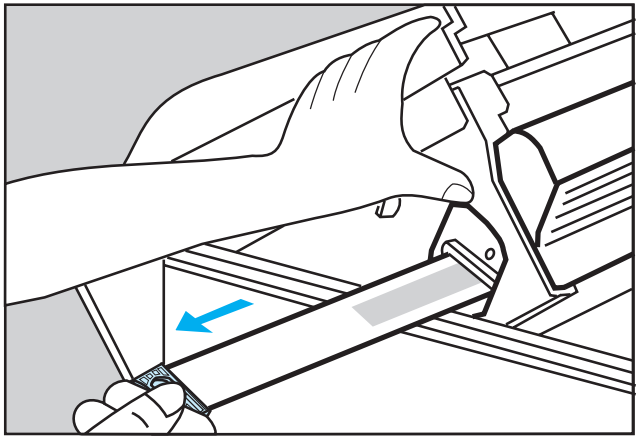


Bending the Tab

6 Hold the printer steady and firmly pull the tab connected to the sealing tape all the way out.

Make sure you pull the strip straight out from the cartridge, and not at an angle. The tape strip is about 22 in/55 cm long.

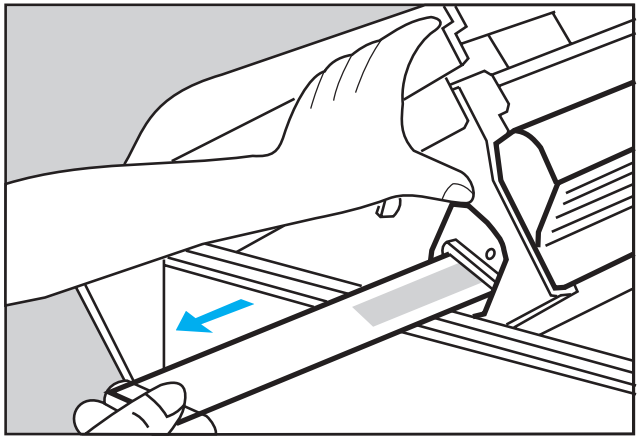
Figure 2 - 7



Pulling Out the Sealing Tape

7 If the tab separates from the tape, pull out the tape.

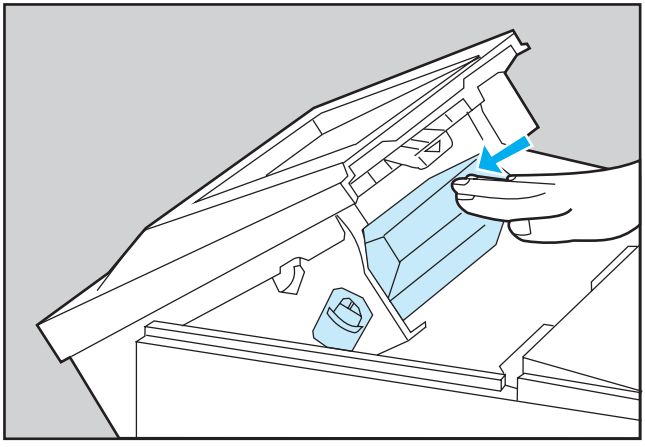
Figure 2 - 8



Pulling the Tape Out When It Separates

8 Push firmly against the toner cartridge to make sure it is seated correctly, and close the printer's top cover.

Figure 2 - 9

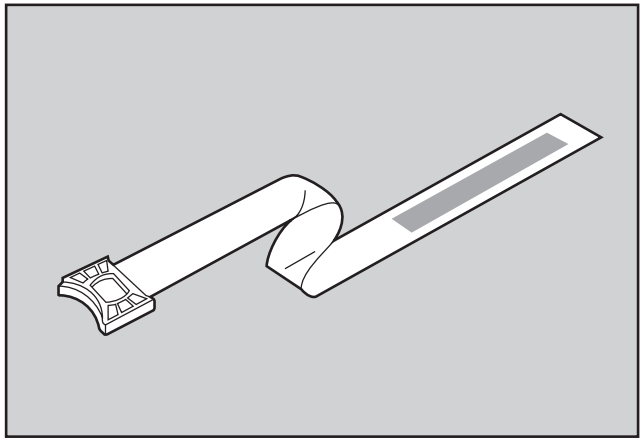


Make Sure the Cartridge is Firmly Seated

9 Discard the sealing tape strip.

Handle the strip carefully to avoid getting toner on you.

Figure 2 - 10



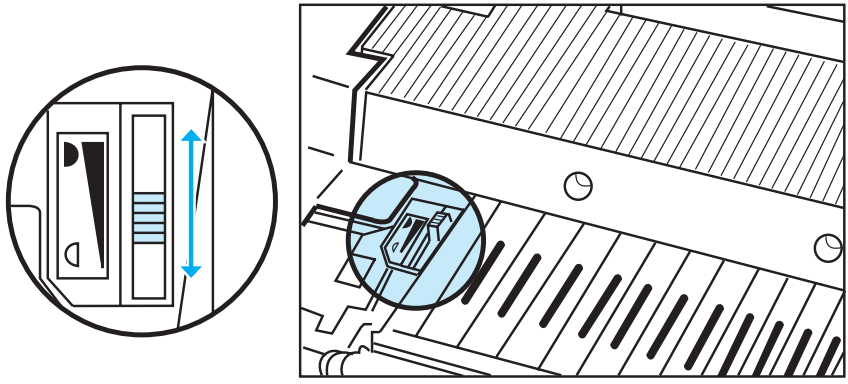
Discard the Sealing Tape

To adjust print density

1 Open the printer's top cover.

2 Locate the print density control inside the printer near the left side of the fuser (see Figure 2-11).

Figure 2 - 11



Adjusting Print Density

3 Set the print density control for the desired setting:

- Medium: Set control at midpoint (the standard setting).
- Dark: Set control toward the rear of the printer.
- Light: Set control toward the front of the printer.

As you move the control through the medium setting, you can feel a discernible "click."

4 Firmly close the printer's top cover.

5 Print approximately 20 pages to stabilize the new density setting.

Print density refers to the relative darkness of the print on the paper. Very dense print appears dark. Less dense print looks lighter, and solid filled areas may be less uniformly black.

When the density slide is set toward the rear of the printer (the thick end of the wedge-shaped scale), more toner is placed on the page.

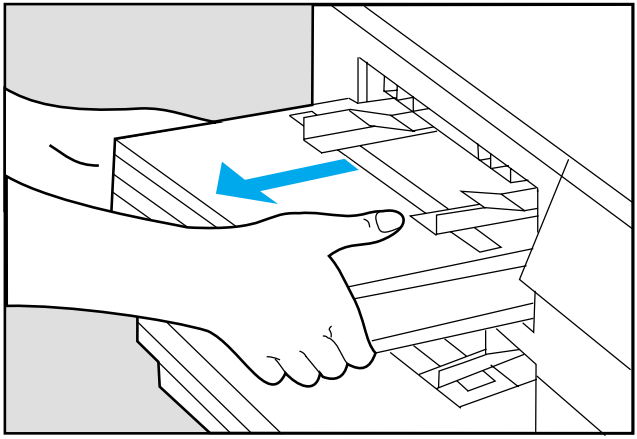
3

Paper

To load paper

1 Remove the empty paper tray from the printer by lifting up and pulling outward on the tray.

Figure 3 - 1

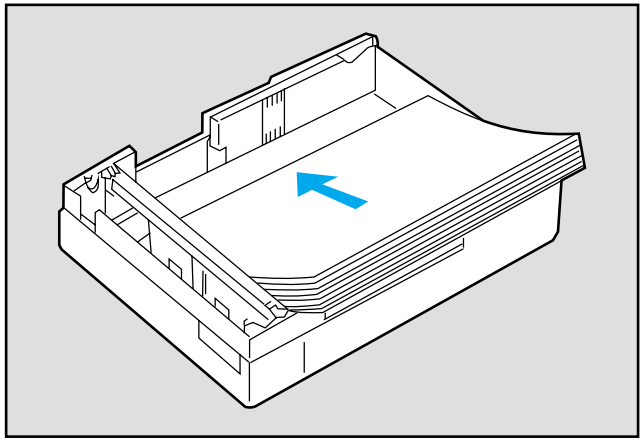


Removing the Paper Tray

2 Remove the cover and load the paper into the paper tray.

Each tray holds 500 sheets of 20 pound paper.

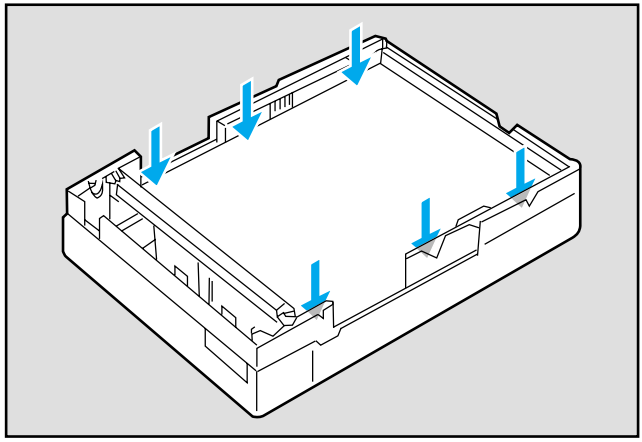
Figure 3 - 2



Loading the Paper

3 Make sure that the paper is flat at all four corners of the tray.

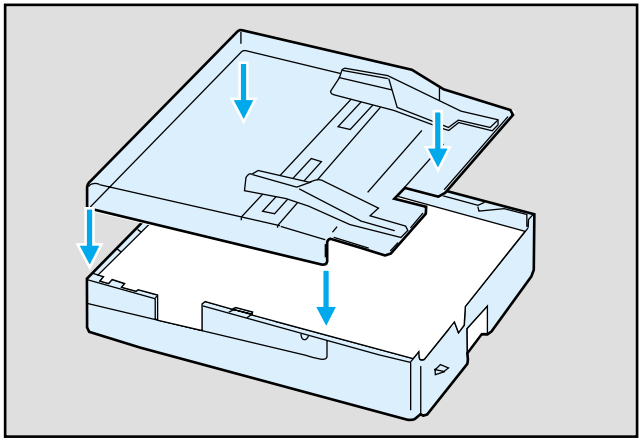
Figure 3 - 3



Flattening the Paper

4 Replace the tray cover.

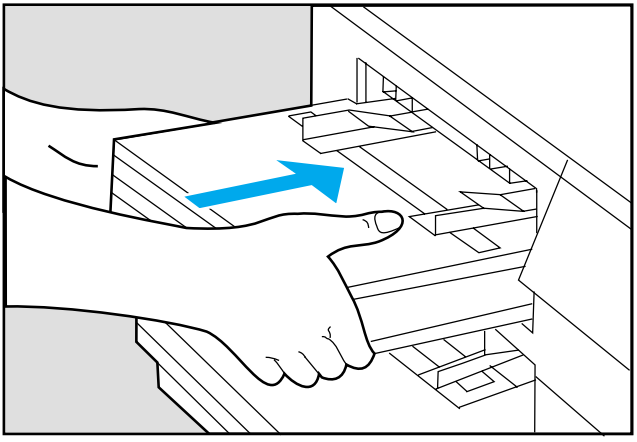
Figure 3 - 4



Replacing the Tray Cover

5 Insert the tray into the printer.

Figure 3 - 5



Re-inserting the Paper Tray

To manually feed media and envelopes

Normally, media size, orientation, and manual feed are selected through your software and not through the control panel of the printer (steps 1 through 12). If your software does not have this capability, then use the control panel of the printer, but still format your text from your software.

1 If the printer is on line, click [On Line] to take the printer off line.

The On Line indicator is no longer lit.

2 Click [Menu] until PRINTING MENU appears on the printer's display.

3 Click [Item] until PAPER = appears on the printer's display.

4 Click [+] until the media size or envelope you want appears on the printer's display.

PAPER =	LETTER	**ENVELOPE =**	COM10
	LEGAL		MONARC
	A4		DL
	EXEC		

5 Click [Enter] to save your selection.

An asterisk (*) appears to the right of your selection.

6 Click [Item] until ORIENTATION appears on the printer's display.

7 Click [+] until the orientation you want appears on the printer's display.

Note To format correctly, envelopes must be printed in the Landscape (L) orientation.

8 Click [Enter] to save your selection.

An asterisk (*) appears to the right of your selection.

9 Click [Item] until MANUAL FEED appears on the printer's display.

10 Click [+] until MANUAL FEED = ON appears on the printer's display.

11 Click [Enter] to save your selection.

An asterisk (*) appears to the right of your selection.

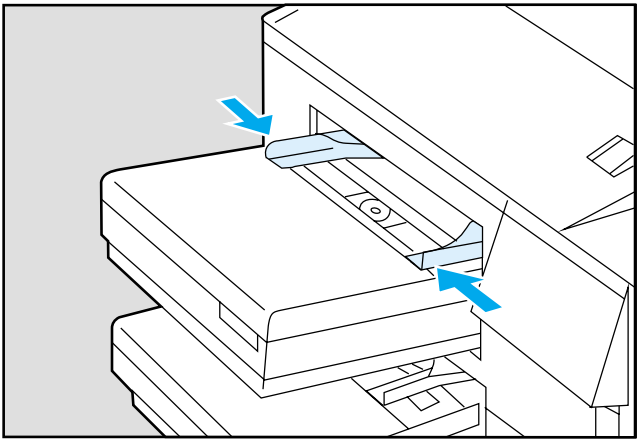
12 Click [On Line] to return the printer on line.

The On Line and Manual indicators light.

13 Send your data to the printer.

14 Adjust the manual feed guides to the size of your media or envelope.

Figure 3 - 6

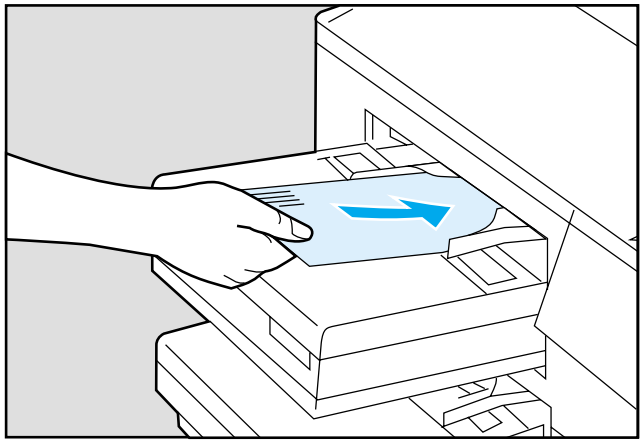


Adjusting the Manual Feed Guides

15 When the printer prompts you, slide the specified media size or envelope between the manual feed guides until it stops. The proper orientation is:

- The side you want printed facing up.
- The top edge of the envelope flush against the left manual feed guide and the stamp end first.

Figure 3 - 7



Manually Feeding Envelopes

16 Wait for the printer to prompt you before feeding additional media.

To clear paper jams

If a 13.X message (PAPER JAM) appears, look for jammed paper in the specific area indicated (see Figure 3-8). Paper may also be jammed in other areas or a paper sensor may be blocked. Check the entire paper path. Procedures are included on the following pages for clearing paper jams.

When paper jams occur, always open the top cover and visual inspect the paper path for paper jams. Remove the paper trays for easier access when checking the paper path.

- 13.1 INTERNL JAM: Open the printer's top cover and inspect the image transfer and fusing assembly areas.
- 13.2 INPUT JAM: Check the paper pickup and switchback areas.
- 13.3 DUPLEX JAM: Check the duplex and switchback areas.
- 13.4 OUTPUT JAM: Check the internal paper feed path to the output bin area and the external output bin.

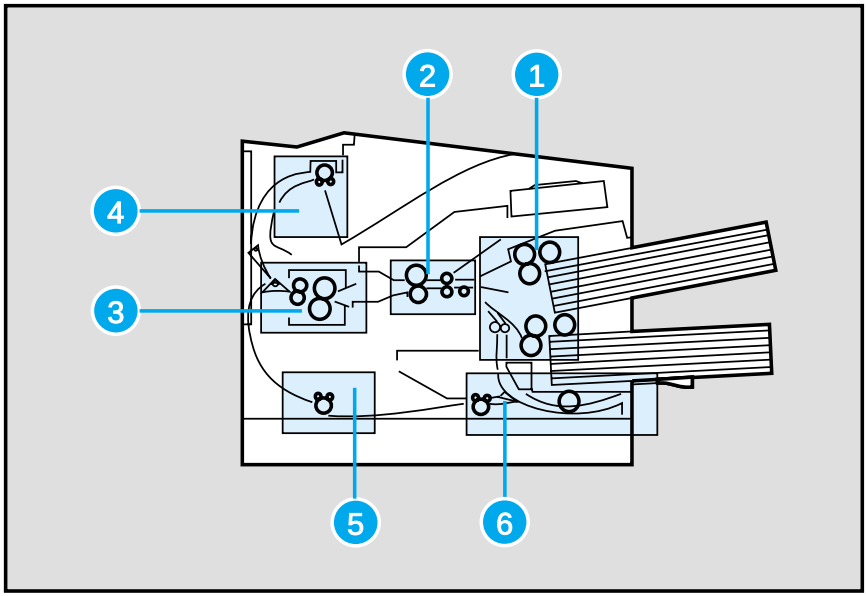
Note

The top cover of the printer must be opened and then closed to clear the paper jam message from the display.

If the bin full sensor arm is installed, make sure that it is lowered all the way once the cover is closed.

If paper tears while clearing paper jams, make sure that all torn pieces of paper have been removed.

Figure 3 - 8



Paper Path Jam Locations

1. Paper pickup area.
2. Image transfer area.
3. Fusing assembly area.
4. Paper output area.
5. Duplex area (if duplex option installed).
6. Switchback area (if duplex option installed).

Note

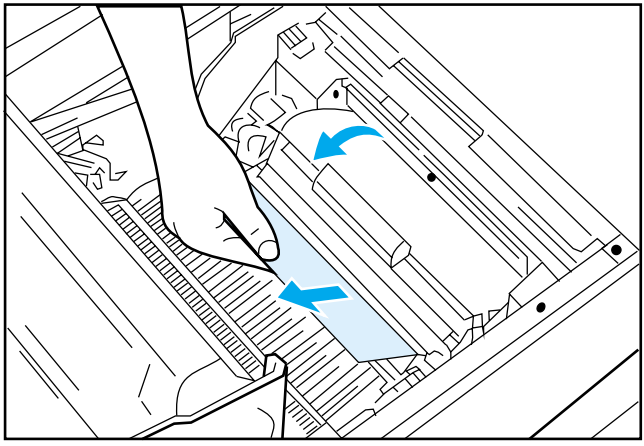
If paper jams occur frequently, clean the printer and check the quality of your paper or other print media. For print media specifications, see the *Paper Specification Guide* or *LaserJet 4Si Printer User's Reference Manual*. For more information on troubleshooting paper jams, see the section "Paper jams in the printer" in Chapter 6.

To clear paper pickup area jams

1 Open the top cover.

2 Open the upper paper transfer guide door by lifting the green handle and remove the jammed paper (see Figure 3-9). (If necessary, remove the paper trays first.)

Figure 3 - 9



Clearing the Paper Pickup Area

3 If no paper is visible beneath the upper paper transfer guide door, lift the lower paper transfer guide door (metal flap with small green handle at the left side) to check for jammed paper from the lower paper tray.

4 If no jammed paper is visible beneath the upper or lower paper feed guide doors, check the paper tray areas.

Note

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

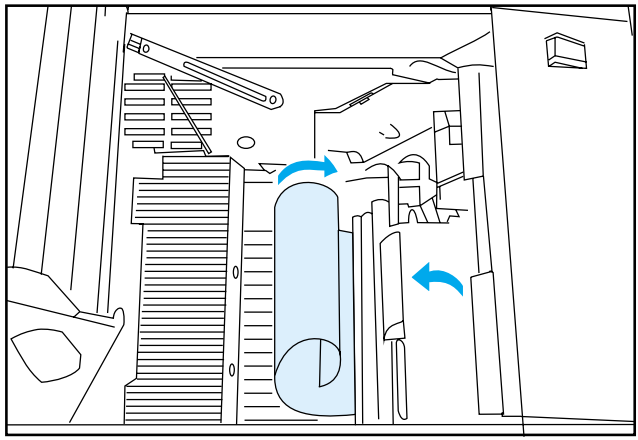
To clear image transfer area jams

- Remove the jammed paper by rolling it toward you as shown in Figure 3-10.

By rolling the paper toward you, loose (unfused) toner stays on the paper. (Remove the paper carefully to avoid getting the toner on your hands or clothing.)

CAUTION Avoid touching the transfer roller with your fingers, as it will leave fingerprints on the roller surface and degrade print quality.

Figure 3 - 10



Clearing the Image Transfer Guide Area (side view)

To clear fusing assembly area jams

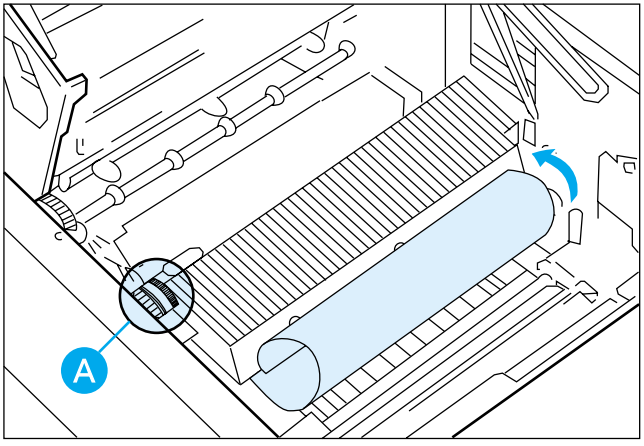
WARNING The fusing assembly area can become very HOT. To avoid burns, handle paper around the fusing assembly area very carefully.

1 For jams at the front of the fusing assembly, remove the paper by turning the green plastic knob, located at the left of the fuser (A in Figure 3-11), toward the rear of the printer.

Roll the paper toward you to avoid spilling loose (unfused) toner (see Figure 3-11).

CAUTION Pull the paper toward the front of the printer, so it does not go through the fusing assembly. Unfused toner on the paper is loose and may fall into the fusing assembly, causing print quality problems.

Figure 3 - 11



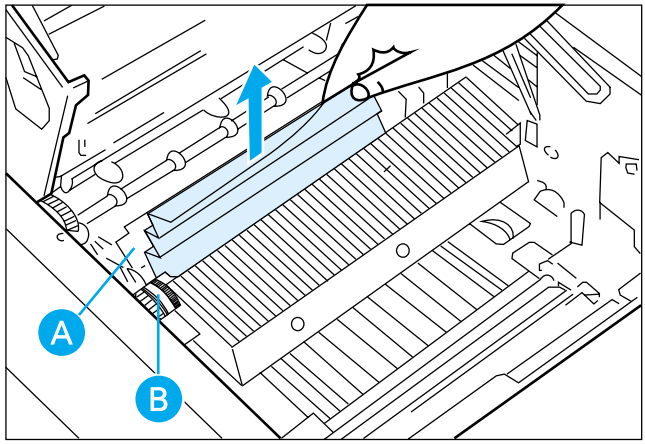
Clearing the Front Fusing Assembly Area

2 For jams at the rear of the fusing assembly, open the green-colored rear door of the fusing assembly by pushing it toward the back of the printer (see A in Figure 3-12).

3 Remove the paper by turning the green plastic knob, located at the left of the fuser (B in Figure 3-12), toward the front of the printer.

If necessary, carefully pull the paper up and out as shown in Figure 3-12. Be careful not to touch the HOT fusing roller or to disturb the paper sensor flag (see A in Figure 5-2, page 5-6).

Figure 3 - 12



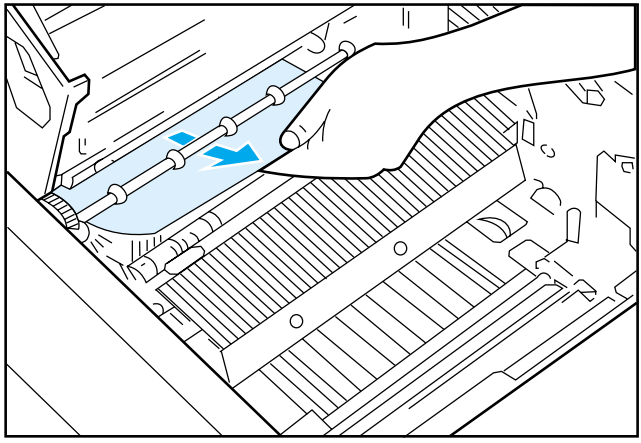
Clearing the Rear Fusing Assembly Area

To clear paper output area jams

1 Open the top cover.

2 If the jammed paper passed completely through the fusing assembly, grasp the trailing edge and remove it as shown in Figure 3-13.

Figure 3 - 13

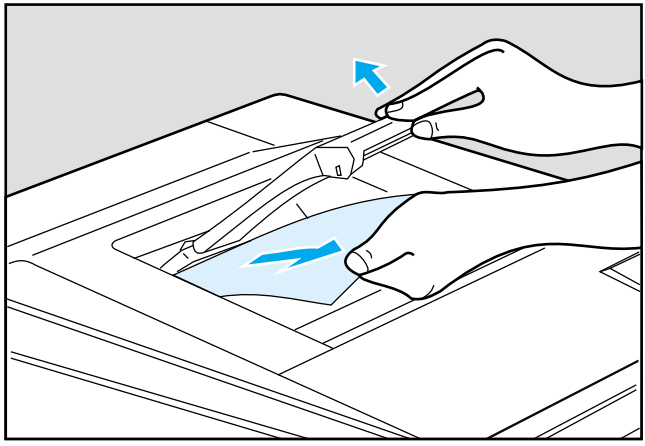


Paper Output/Fusing Assembly Area

3 If the jammed paper passed partially into the upper output bin, lift the bin full sensor arm (if installed) and pull the paper out slowly (see Figure 3-14).

Be careful not to damage the sensor arm. (After removing the paper, be sure the sensor arm is in its lowered position or an OUTPUT BIN FULL message will be displayed on the control panel.)

Figure 3 - 14



Upper Output Bin Area

To clear duplex access area jams

1 Open the duplex access door by pressing on the upper middle edge (look for the pattern as shown in Figure 3-15).

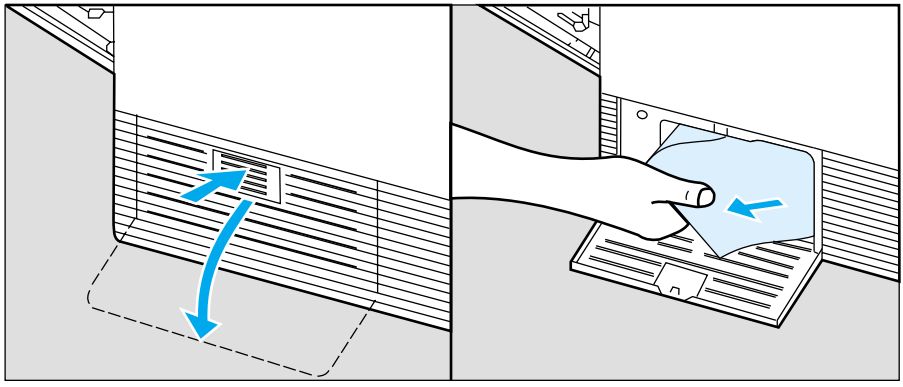
The pressure-sensitive door latch clicks and the door springs open.

2 Carefully remove the jammed paper (see Figure 3-15). If the paper tears, remove all pieces.

3 Close the access door.

Jams may occur in the duplex area if the duplex unit has been installed and you are printing in duplex mode. Jams may also occur in other jam areas during duplex printing or in the duplex area while single-sided printing. If the latter occurs frequently, call your service representative.

Figure 3 - 15



Duplex Access Area

To clear switchback area jams

4 Remove the lower paper tray to reach the switchback area.

5 Remove any paper that protrudes from the switchback area in the front of the printer (see Figure 3-16).

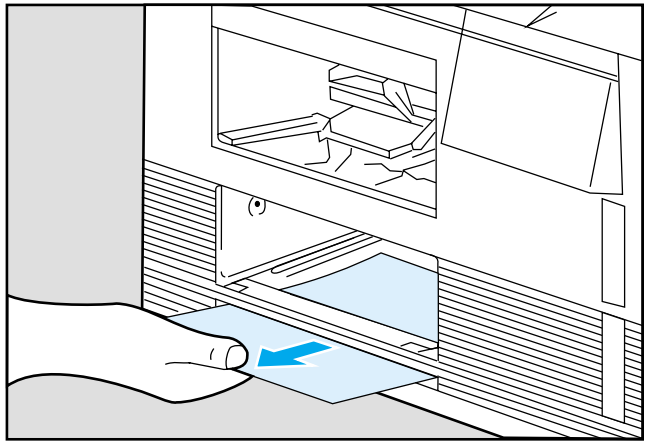
The jammed paper may not be readily visible; check the area carefully. If necessary, check from the duplex area.

CAUTION

Do not try to pry out jammed paper with a pointed object, such as a pen or a pencil. Damage to the internal printer mechanism may occur.

If the paper is jammed underneath the black plastic strip in back of the switchback area, be careful not to damage the strip when removing the paper. This strip helps deflect paper moving through the duplex area. Damage to the strip causes paper jams.

Figure 3 - 16



Switchback Area

To detect when the upper output bin is full

The printer can operate without the bin full sensor arm attached. If installed, it detects when the upper bin is full. When the upper bin is full, the bin full sensor causes the message OUTPUT BIN FULL to be displayed. The printer prints the remaining pages that are ready to print, then goes off line. The lower rear output bin is "locked out" and the printer cannot default to this bin. When the upper bin is emptied, the display clears (this may take several seconds), and the printer prints the remainder of the job.

To clear this message, remove the paper stack from the upper bin. Be sure the sensor arm is in its lowered position.

If you frequently run large print jobs, the bin full sensor arm helps control the stacking of some paper or other print media. It is recommended that you remove the bin full sensor arm for lightweight media, such as 16 pound paper.

To install the bin full sensor arm

1 Rotate the bin full sensor arm holder into position - pulled down, and facing the front of the printer (see A in Figure 3-17).

2 Push the bin full sensor arm into the rectangular socket (see B in Figure 3-17).

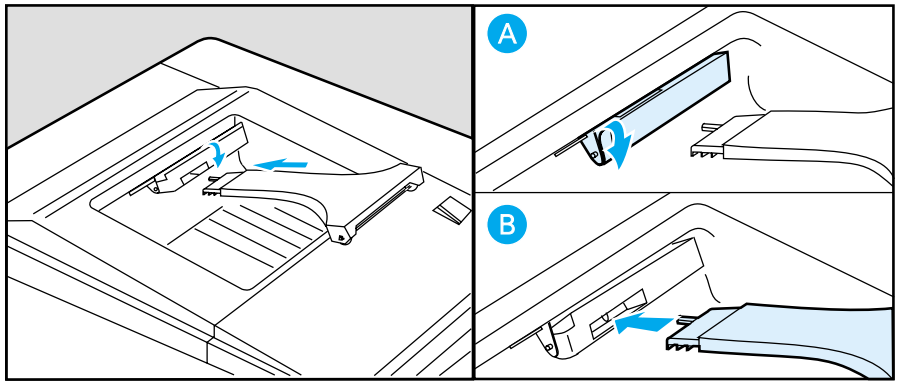
To remove the bin full sensor arm

1 Grasp the bin full sensor arm (see Figure 3-17) while holding the spring-loaded holder.

2 Pull the bin full sensor arm straight out. Do not twist or bend the sensor arm while removing it.

3 Let the holder rotate up to its rest position.

Figure 3 - 17



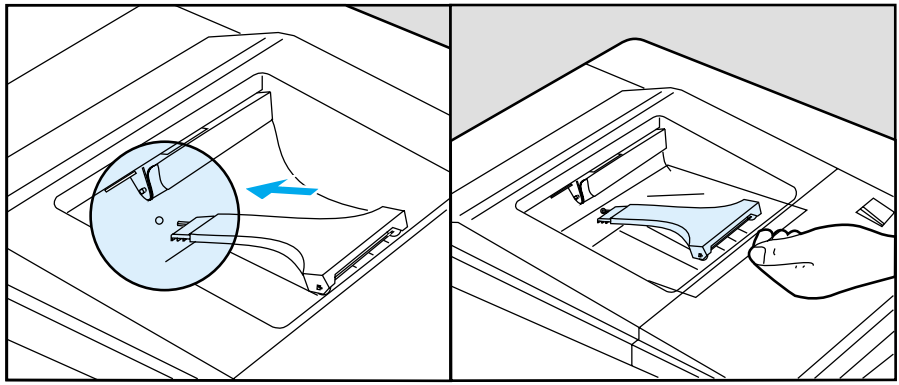
Sensor Arm Attachment

To use the bin full sensor arm with transparencies and labels

1 When outputting transparencies or labels to the upper output bin, attach the bin full sensor arm in the hole below the spring-loaded holder (see Figure 3-18).

2 If you have problems with excessive curl, sticking, or jams, use the lower rear output bin and remove each sheet as it comes out.

Figure 3 - 18



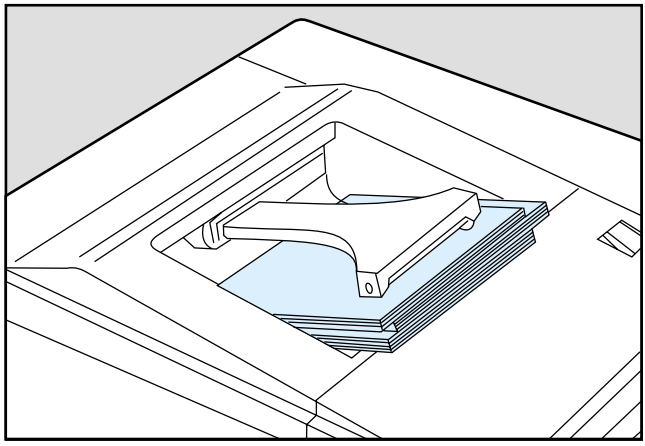
Sensor Arm Position for Transparencies and Labels

To separate printer jobs

When Job Offset is selected from the Printing Menu of the control panel, the printer separates jobs into groups by shifting the position of the paper stack as in Figure 3-19.

The bin full sensor arm aids in stacking the paper.

Figure 3 - 19



Job Offset Using the Sensor Arm

To select single or two-sided printing and binding

Normally, single or two-sided printing and binding are selected through your software and not through the control panel of the printer. If your software does not have this capability, then use the control panel of the printer, but still format your text from your software.

1 If the printer is on line, click [On Line] to take the printer off line.

The On Line indicator is no longer lit.

2 Click [Menu] until PRINTING MENU appears on the printer's display.

3 Click [Item] until DUPLEX = appears on the printer's display.

DUPLEX and BIND only appear on the printer's display when the duplex unit is installed on the printer.

4 Click [+] to turn DUPLEX on or off.

Set DUPLEX to ON for two-sided printing.
Set DUPLEX to OFF for single-sided printing.

5 Click [Enter] to save your selection.

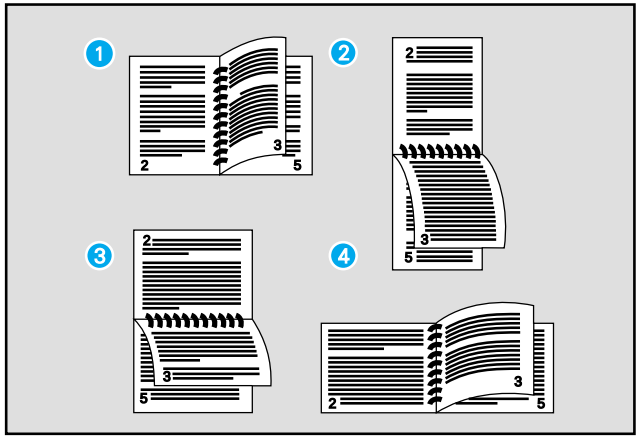
An asterisk (*) appears to the right of your selection.

6 If you selected two-sided printing, click [Item] until BIND appears on the printer's display.

7 Click [+] to select your binding option.

BIND=LONG refers to vertical binding along the long edge of the paper (see 1 and 3 in Figure 3-20).
BIND=SHORT refers to horizontal binding across the short edge of the paper (see 2 and 4 in Figure 3-20).

Figure 3 - 20



Binding Options

8 Click [Enter] to save your selection.

An asterisk (*) appears to the right of your selection.

9 Click [On Line] to return the printer on line.

The On Line indicator lights.

4

Printer Cleaning

Introduction

Clean the printer any time you observe reduced print quality or you replace the toner cartridge.

CAUTION

Do not touch or clean the transfer roller when cleaning the printer. Finger oils or other contaminants can reduce print quality.

Any cleaning fluid except water used in and around the printer can damage the printer. Do NOT use ammonia-based cleaning materials on the printer covers or in the vicinity of the printer. Ammonia causes permanent damage to the toner cartridge.

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

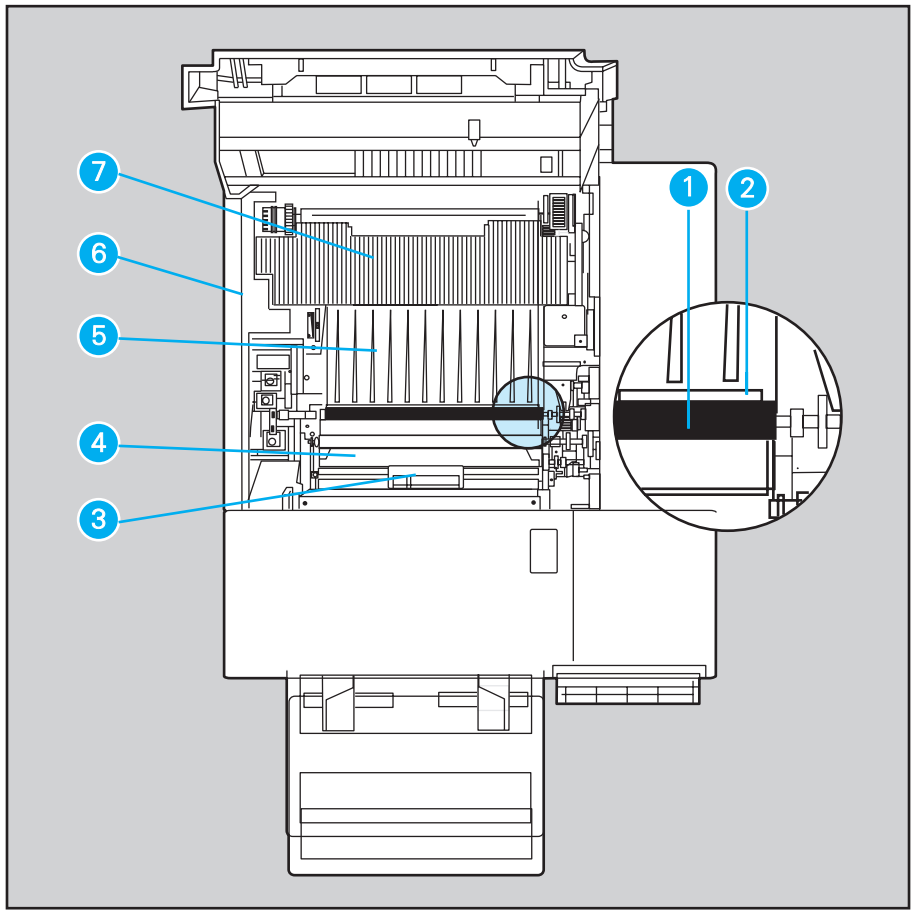
Although toner is non toxic, care should be taken to avoid breathing toner particles.

Printer Cleaning Locations

Figure 4-1 lists the cleaning locations for this printer.

Printer Cleaning Locations

Figure 4 - 1



Printer Cleaning Locations (top cover open)

1. Transfer roller (do not clean).
2. Antistatic teeth.
3. Transfer guide lock tray area (green handle).
4. Transfer guide plate (silver).
5. Paper feed guide (metal).
6. Cleaning brush (attached to inside panel).
7. Fusing assembly.

To clean the printer

1 Turn off the printer and unplug the power cord.

2 Remove the paper trays (for easier access).

3 Press the top release button and open the printer's top cover.

4 Wait 30 minutes for the fuser to cool down before continuing.

5 Clean the inside of the printer (except for the transfer roller) by wiping any visible toner away with a water-dampened, lint-free cloth.

6 Clean the remaining areas as described in the following sections. Figure 4-1 on page 4-3 shows the interior of the printer, including locations which require cleaning.

To clean the paper transfer guide area

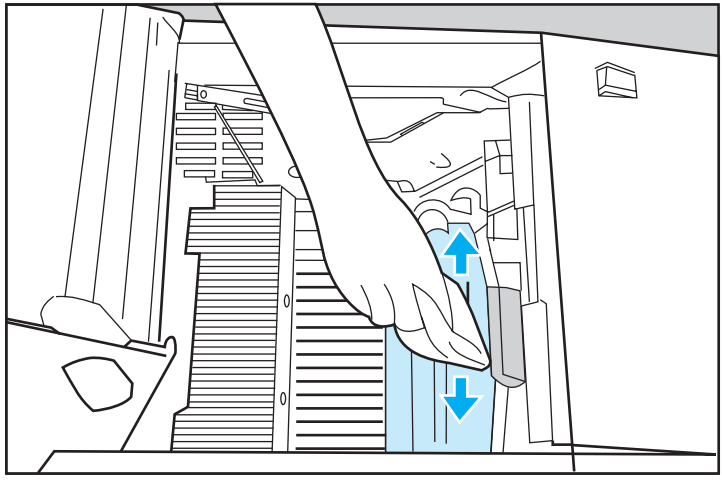
1 With a damp lint-free cloth (use water only), wipe residue off the paper transfer guide (green handle) and the adjacent silver metal strip (see Figure 4-2).

CAUTION Do not touch or clean the transfer roller when cleaning the printer. Reduced print quality may result.

2 Open the paper transfer guide by lifting the green handle and wipe any residue off the lower paper transfer guide below (metal plate with green tab at its left end).

3 Close the paper transfer guide.

Figure 4 - 2



Cleaning the Paper Transfer Guide Area

To clean the antistatic teeth

CAUTION Be careful not to touch the transfer roller when cleaning the antistatic teeth.

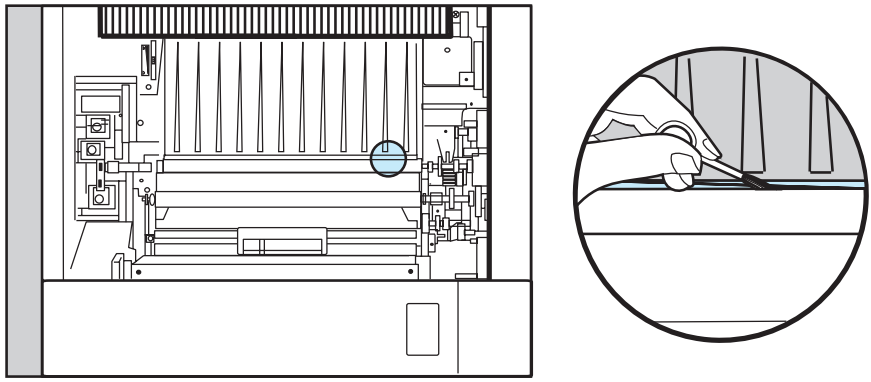
1 Remove the cleaning brush (see 6 in Figure 4-1) from its holder.

2 Locate the antistatic teeth in the long groove beside the transfer roller (see Figure 4-3).

3 Carefully brush paper dust and other foreign material from the antistatic teeth.

4 Return the cleaning brush to its holder.

Figure 4 - 3



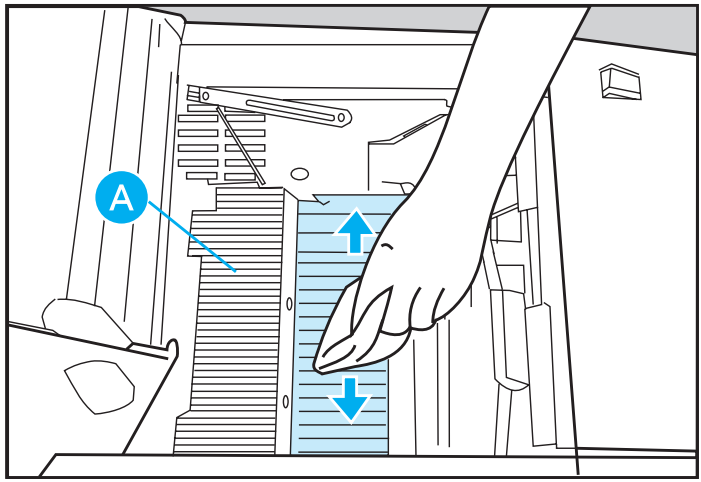
Cleaning the Antistatic Teeth

To clean the paper feed guide

1 Wipe any dust or toner off the metal paper feed guide (see Figure 4-4) with a damp cloth (use water only). Be careful not to touch the transfer roller.

WARNING The adjacent fusing area (A in Figure 4-4) gets HOT. Touching the fusing area may cause severe burns.

Figure 4 - 4



Cleaning the Paper Feed Guide

2 Close the top cover.

3 Plug in the power cord and turn on the printer.

5

Operator Maintenance

Introduction

When your printer has printed 200,000 pages, USER MAINTENANCE is displayed in place of the *OO* READY message. Parts described in this section must be replaced to keep your printer at optimal performance. When the maintenance is completed, clear the message (see "To clear maintenance and service messages" at the end of this chapter) and continue printing.

Contact your dealer or Hewlett Packard Company's Direct Marketing Division to order the maintenance kit (HP Part Number C2026A for 110 volt operation or C2087A for 220 volt operation).

The parts to be replaced are:

1. Fusing assembly.
2. Transfer roller and clip.
3. Pickup and separation rollers.
4. Duplex pickup roller (if duplex unit is installed).

WARNING

Failure to turn off and unplug the printer before replacing parts may result in personal injury or damage to the printer. After turning OFF the printer and unplugging the printer, allow the printer to cool for 30 minutes before replacing parts.

Note

As you begin the maintenance procedures, read through the whole procedure first.

Unless specifically noted, replacement is the reverse of removal. Carefully observe the position and alignment of the part you are removing; this is your best guide to replacement.

Use the gloves provided in the maintenance kit when replacing the transfer roller. For optimal performance, do not touch the roller without gloves.

The terms, right and left, used in these procedures assume that you are standing at the front of the printer facing the control panel.

LIGHT-BLUE COLORING IS USED TO INDICATE COMPONENTS REPLACEABLE BY THE USER.

To replace the fusing assembly

Tools Required

1 - Standard screwdriver.

WARNING The fusing area gets HOT. Turn OFF the printer, unplug the power cord, and allow the fusing assembly to cool for 30 minutes before removing it.

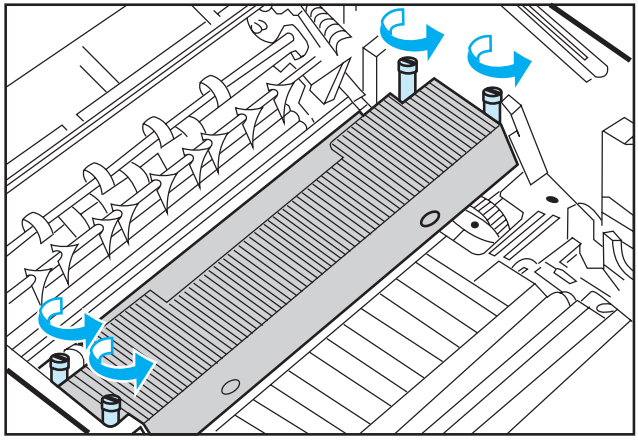
Removal

1. Turn OFF and unplug the printer.
2. Remove the paper trays.
3. Press the top release button and open the printer's top cover.
4. Remove the toner cartridge.
5. Store the toner cartridge out of direct light.
6. Allow the fusing assembly to cool for 30 minutes before removing it.

7 Use a screwdriver to loosen the 4 screws which attach the fusing assembly to the printer (see Figure 5-1), then use your fingers to remove the screws.

The fusing assembly is located inside the printer at the rear below the toner cartridge. The screws appear as tall posts on each corner of the fusing assembly.

Figure 5 - 1



Removing the Fusing Assembly Screws

CAUTION

Be careful not to damage the black plastic paper sensor flag above the right rear corner of the fusing assembly (see A in the expanded view of Figure 5-2). If the flag cannot move freely, it will produce a false 13.X PAPER JAM message when the printer is turned ON again, or paper will jam when the printer tries to feed the first sheet of paper after being turned ON.

8 Slide the fusing assembly to the left, then up and out.

Lift the fusing assembly toward the front of the printer to avoid the toner cartridge holder.

Replacement

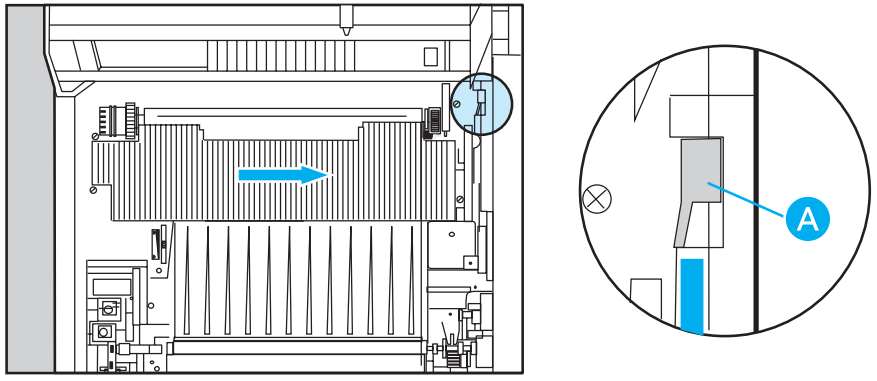
1 Remove the spacing brackets and cardboard from the fusing assembly.

CAUTION Failure to remove the spacing brackets and cardboard may damage the printer when the printer is in operation.

2 Lower the new fusing assembly into place against the left side of the printer, then slide it to the right until the electrical connector is firmly inserted into the socket at the right side of the printer.

The slots on the underside of the fusing assembly fit into metal tabs on the plate the fusing assembly rests on; they help to guide the assembly into place. Be sure that the electrical connector is seated firmly and that the paper sensor flag (A in Figure 5-2) can move back and forth freely.

Figure 5 - 2



Replacing the Fusing Assembly

3 Replace the screws by starting them with your fingers, then tightening them with the screwdriver.

4 Replace the toner cartridge and close the top cover.

To replace the transfer roller and clip

Removal

1 Turn OFF and unplug the printer.

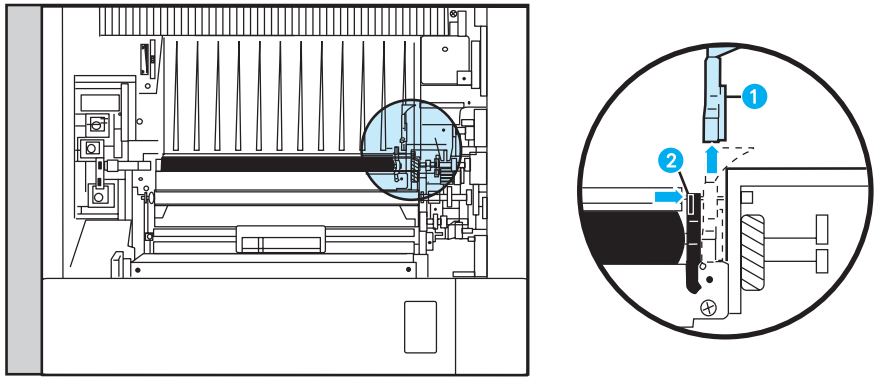
2 Remove the paper trays.

3 Press the top release button and open the printer's top cover.

4 Remove the light-blue plastic retaining clip (item 1 in Figure 5-3), which holds the right end of the roller in place, by pulling up on its rear-most edge. Make sure a new clip is included, then discard the old clip.

The transfer roller is the black sponge-rubber roller located inside the printer just to the front of the paper feed guide (see Figure 5-3).

Figure 5 - 3



Removing the Transfer Roller

5 Hold the transfer roller in place and slide the black bushing (item 2 in Figure 5-3) to the right so that it separates from the roller's shaft.

For replacement, observe and remember how the guide pins fit into the slots in the left socket.

6 Remove the transfer roller, lifting its right end up and out. Discard the used roller.

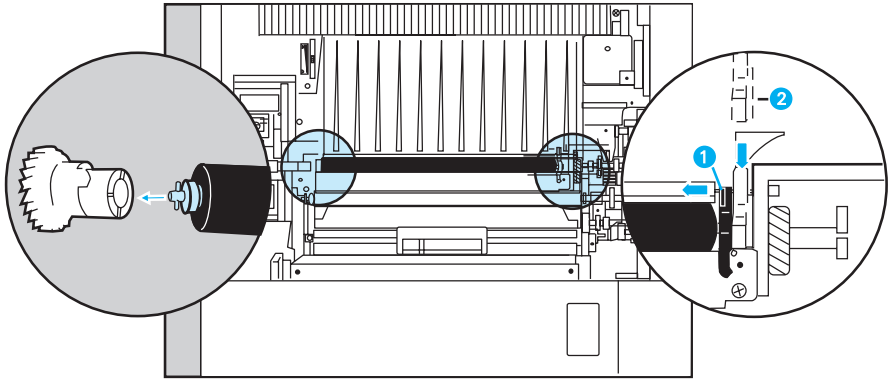
Replacement

1 Put on the gloves provided in your maintenance kit.

2 Slide the left end of the new roller into the left end socket, making sure that the guide pins fit into the slots.

3 While raising the right end of the roller up slightly, push the bushing (item 1 in Figure 5-4) on the right end socket to the right. Then, lower the roller into place, and slide the right end socket to the left and over the transfer roller's metal shaft.

Figure 5 - 4



Replacing the Transfer Roller

4 Install the new light-blue plastic retaining clip (item 2 in Figure 5-4), which holds the right end plastic socket in place.

   If the roller is properly installed, the clip should fit easily over the shaft, and the transfer roller should not move from side to side.

5 Verify that the transfer roller is seated correctly by rotating it back and forth while watching the gear on the left (see Figure 5-4).

   Both the gear and the transfer roller should turn freely.

6 Remove the gloves.

7 Close the top cover.

To replace the pickup and separation rollers

Removal

1 Turn OFF and unplug the printer.

2 Remove both paper trays.

3 Remove each roller in the paper tray slots by pinching the light-blue plastic retaining clip at the end of the roller and sliding it off its shaft (see Figure 5-5).

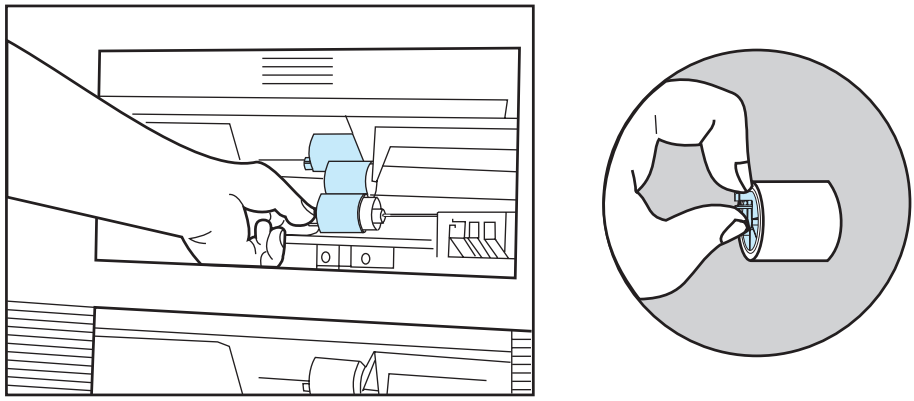
You may find it easiest to pinch the clip with your left hand and use your right index finger to slide the roller to the left. You can rotate the roller for easy access to the clip.

Note

Three pickup and separation rollers are located in the back of the upper and lower paper tray slots (see Figure 5-5). (There are six pickup and separation rollers — three for each slot.) The six rollers are identical.

4 Discard the used rollers.

Figure 5 - 5



Replacing the Pickup and Separation Rollers

Replacement

1 Slide each new roller over its shaft and snap it into place.

You should feel the light-blue plastic clip “click” into place when the roller is seated.

2 To check the installation, release the clip and try to pull the roller off the shaft; it should stay in place.

3 Reinstall the paper trays.

To replace the duplex pickup roller

If the optional duplex unit is installed on your printer, you need to replace the duplex pickup roller at the same time as the pickup and separation rollers.

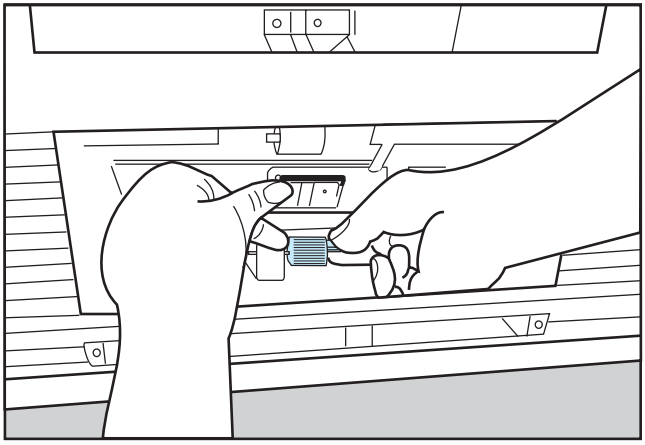
Removal

1 Turn OFF and unplug the printer.

2 Remove both paper trays.

3 Locate the duplex pickup roller through the lower paper tray slot, as shown in Figure 5-6.

Figure 5 - 6



Removing the Duplex Pickup Roller

4 With your left hand, lift the plate above the roller, and raise the roller off the bottom of the printer.

5 With your right hand, pinch the ends of the roller and slide it off to the right.

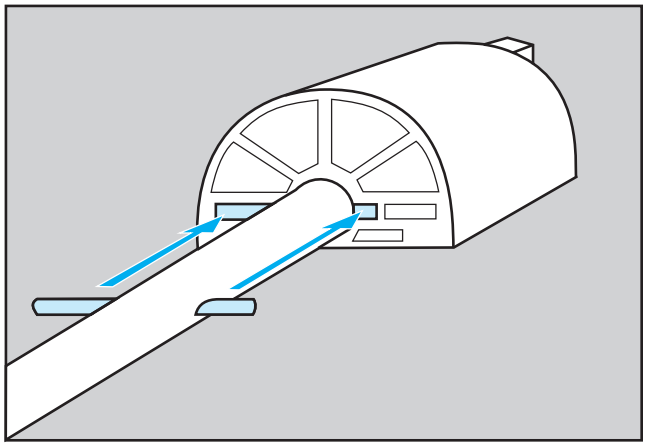
You may find it helpful to push the roller to the right with the fingers of your left hand.

Replacement

1 Examine how the duplex pickup roller is keyed on the shaft (see Figure 5-7).

The shaft has two posts, one longer than the other. There are corresponding slots on either side of the hole through the duplex pickup roller.

Figure 5 - 7



Keying the Roller on the Shaft

2 Slide the roller onto the shaft, aligning the slots with the post on the shaft.

3 Slide the roller to the left until you feel the pickup roller click into place.

Note

After you replace the fuser and turn ON the printer again, the message 50 SERVICE may appear on the display. This usually indicates the printer was not powered OFF long enough before the fuser was replaced. Turn OFF the printer again for 30 minutes' cooling time. This should clear the error message. If the problem persists, review the instructions for this message in Chapter 6, "Solving Problems."

To clear maintenance and service messages

USER MAINTENANCE is displayed in place of the *00* READY message when the printer has printed 200,000 pages. When you have completed the preceding replacement procedures, use the following procedure to clear the display message.

1 If the printer is on line, click [On Line] to take the printer off line.

The On Line indicator is no longer lit.

2 Click [Menu] until CONFIG MENU appears on the printer's display.

3 Click [Item] until SERVICE MSG=ON* appears on the printer's display.

4 Click [+] to change the message to SERVICE MSG=OFF.

5 Click [Enter] to turn the message OFF.

An asterisk (*) appears to the right of your selection.

6 Click [On Line].

The On Line indicator lights and the printer returns on line.

6

Solving Problems

Introduction

This chapter is a quick reference to some of the more common kinds of printing problems you may encounter.

To print a test page

1 If the printer is on line, click [On Line] to take the printer off line.

The On Line indicator is no longer lit.

2 Click [Menu] until TEST MENU appears on the printer's display.

Note TEST MENU is not available while the printer is running a print job. Wait until the print job is complete before accessing the TEST MENU.

3 Click [Item] until the selection you want appears on the display.

SELF TEST	PS CONFIG PAGE
CONT SELF TEST	PS TYPEFACE LIST
PCL TYPE LIST	PS DEMO PAGE
PCL DEMO PAGE	

Note The PS TYPEFACE LIST, PS DEMO PAGE, and PS CONFIG PAGE are only available if the PostScript™ language option is installed.

4 Click [Enter] to run the test.

The test is performed and the test page is printed.

5 If you selected CONT SELF TEST, click [On Line] to exit the test and return the printer on line.

Several additional test pages will print before the printer returns on line.

6 If you selected a test other than CONT SELF TEST, after the test is complete, click [On Line] to return the printer on line.

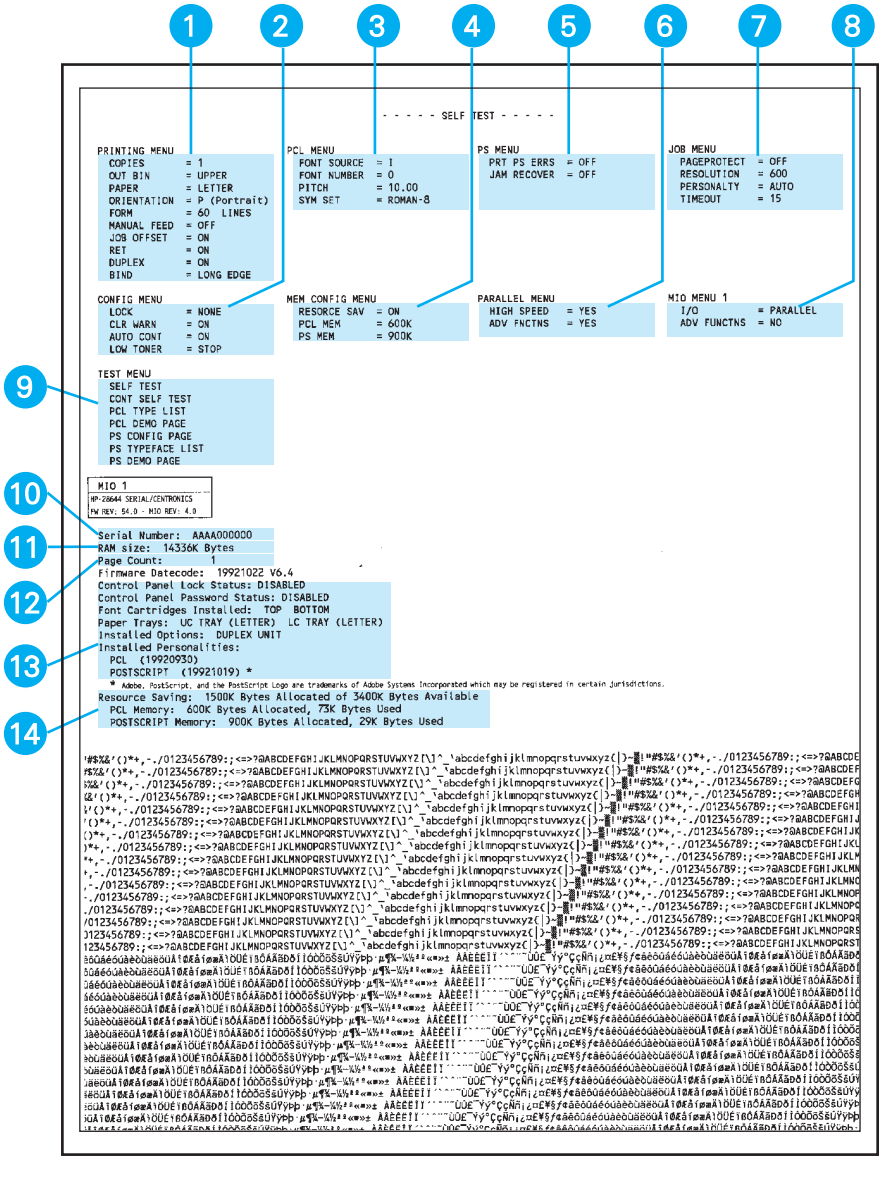
The On Line indicator lights.

Interpreting the Self Test Page

Item	Description
1	PRINTING MENU. Shows the current Printing Menu selections in the order they appear in the control panel display.
2	CONFIG MENU. Shows the current Config Menu selections in the order they appear in the control panel display, except for I/O settings.
3	PCL MENU. Shows the current PCL Menu selections in the order they appear in the control panel display.
4	MEM CONFIG MENU. Shows the current Mem Config Menu selections in the order they appear in the control panel display.
5	PS MENU. Displayed only when the optional PostScript language is installed. Shows the current PS Menu selections in the order they appear in the control panel display.
6	PARALLEL MENU. Shows the current Parallel Menu selections in the order they appear in the control panel display.
7	JOB MENU. Shows the current Job Menu selections in the order they appear in the control panel display.
8	MIO MENU. Displayed only when an optional MIO board is installed. Shows the current I/O description and configuration. There may also be extensive additional diagnostic information printed here.
9	TEST MENU. Shows the current Test Menu selections available in the order they appear in the control panel display.
10	Serial Number. Shows the printer's serial number.
11	RAM size. Shows the total amount of installed printer memory, including added optional memory. Two Mbyte of installed memory is standard with the printer. If you install optional memory, use the self test to verify proper installation.
12	Page Count. Shows approximately how many pages have been printed. Page count can be used to track printer usage.
13	This area verifies the installation of font cartridges, paper trays, and installed options.
14	This area lists the current memory allocations and memory available for the Mem Config Menu.

To print a test page

Figure 6 - 1



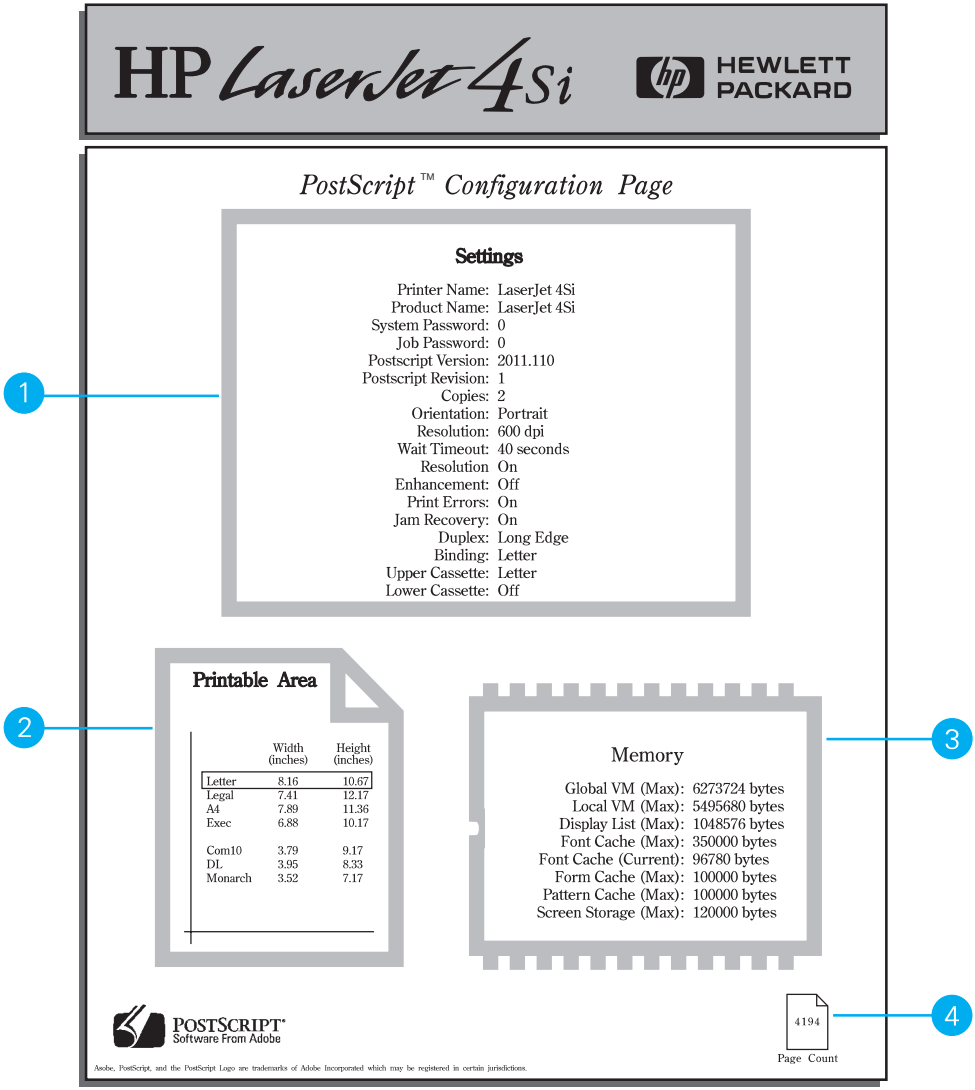
PCL Test Page

Interpreting the PostScript Config Page

Item	Description
1	Settings. Contains current control panel default settings that affect the PostScript personality as well as product-specific information such as Printer Name and PostScript version. PostScript specific settings include. • Wait Timeout: The PostScript timeout, not the timeout value set from the Job Menu of the control panel. • Printer Name: Name set up by the user (such as a network name). • Print Errors: Value set through the PS Menu of the control panel. • PostScript Version: The version of PostScript language currently installed. • System Password/Job Password: To protect passwords, these values are either “0" (the default) or ”Not Default" (indicating that a password is present).
2	Printable Area. Gives the dimensions within the margins of the image area. Printable area is dependent on the amount of memory installed. For legal-sized paper, page protect must be set to LEGAL or the printable area that appears here is reduced.
3	Memory. Shows how the PostScript language uses printer memory. This may be useful for more experienced PostScript users since the PostScript Level 2 language allows users to configure memory parameters (see your PostScript documentation for specific information about these values).
4	Page Count. Shows how many pages have been printed in all printer personalities (PCL or PostScript personalities). You can use the page count to track printer use. The page count is always updated.

To print a test page

Figure 6 - 2



PostScript Config Page

Printer Response Problems

No display message

Possible Cause	Solution
Is the AC power cord firmly plugged into both the printer and the power receptacle?	Remove and reconnect the power cord.
Is the printer's power switch in the on position?	Turn on the printer.
Is the line voltage correct for the printer's power configuration?	Connect the printer to the correct line voltage, as specified on the Power Rating label on the back of the printer.
Is the AC power cord damaged or excessively worn?	Replace the power cord.
Is the power source receptacle working correctly?	Connect the printer to a different power receptacle.

Printer on, but not receiving data

Possible Cause	Solution
Is the printer's On Line indicator lit?	Click [On Line] to return the printer on line.
Does a printer message other than *OO* READY appear on the printer's display?	Refer to "Printer Messages" at the end of this chapter for help.
Was the proper interface cable selected?	Select the proper interface cable. For more information, see the manual *Your Guide to Setting Up the HP LaserJet 4Si Printer*.
Is your interface cable securely connected to both the printer and the computer?	Remove and reconnect the interface cable.
Is the printer configured correctly?	For configuration information, see the manual *Your Guide to Setting Up the HP LaserJet 4Si Printer*.
Is your software setup correctly?	To check your computer, print from an application you know works.
Is the correct printer driver selected?	Make sure the printer driver for this printer is selected. If it is not available, load the correct printer driver, then select this printer.
Is the computer port configured and working correctly?	Run a different peripheral connected to this port to check the port's operation.
If you are using a Macintosh computer, is the printer correctly named?	Name the printer in the Chooser menu of your computer.
Are you on a network?	See your system administrator.
Are you using a sharing device?	Remove the sharing device to verify that the sharing device is not the source of the problem.

Printer on, but nothing prints

Possible Cause	Solution
Is the printer's On Line indicator lit?	Click [On Line] to return the printer on line.
Is the top cover of the printer closed?	Close the top cover firmly, making sure that it is properly latched.
Is the Ready indicator flashing?	Wait for the Ready indicator to stop flashing. The printer is probably still receiving data.
Is there a toner low message on the printer's display?	Shake the toner cartridge to redistribute toner, Change the toner cartridge, or Click Continue to ignore the message.
Does a printer message other than 00 READY appear on the printer's display?	Refer to "Printer Messages" at the end of this chapter for help.
Is the Form Feed indicator lit?	Click [On Line] to take the printer off line, then click [Form Feed].

Printer on, cannot print a PostScript file

Possible Cause	Solution
Is the PostScript option installed on the printer?	Install the PostScript option.
Is PERSONALTY in the Job Menu set to PCL?	Set PERSONALTY to PS or AUTO.
Does a printer message other than 00 READY appear on the printer's display?	Refer to "Printer Messages" at the end of this chapter for help.
Are you using the DOS COPY command with the /B option (COPY /B <filename> PRN: or COPY <filename> PRN: /B)?	Use the DOS COPY command without the /B option.

Control Panel Problems

Control panel settings work incorrectly

Possible Cause	Solution
Does the message MENUS LOCKED appear on the printer's display?	Control panel security is in effect and changes to most menu items have been disallowed. See your system administrator for help.
Do the printer settings in your software application differ from the control panel settings?	The settings in your software application override the settings on the printer's control panel.
Did you save the printer settings after changing them?	Reselect your settings, then click [Enter]. An asterisk should appear to the right of the setting.
If the Form Feed indicator was lit, did you activate the settings after changing them?	Reselect your printer settings, then, if the Form Feed indicator is lit, hold down [Shift] and click [Reset] to activate your settings and clear the printer's buffer.

Cannot select the PostScript personality

Possible Cause	Solution
Is the PostScript option installed on the printer?	Install the PostScript option.
If you are using context switching to switch between PostScript and PCL files, is PERSONALTY in the Job Menu set to AUTO?	Set PERSONALTY to AUTO.

Cannot access the Mem Config Menu

Possible Cause	Solution
Do you have a second personality (such as the PostScript language) installed?	Install the PostScript language or another optional printer personality.
Do you have at least 10 Mbytes of memory installed in the printer?	The printer requires 10 Mbytes of memory to use the personality resource saving features of the Mem Config Menu. Install additional printer memory for at least 10 Mbytes of total memory.
Is the optional duplex unit installed?	The printer requires an additional 4 Mbytes of memory to use the personality resource saving features of the Mem Config Menu with the duplex unit installed. Install additional printer memory for at least 14 Mbytes of total memory.

Printer Self Test Problems

Cannot access the Test Menu

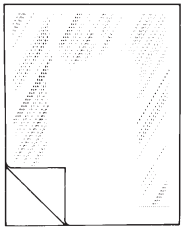
Possible Cause	Solution
Is the printer's On Line indicator lit?	Click [On Line] to take the printer off line.
Is the Form Feed indicator lit?	Click [Form Feed] or reset the printer.
Does a printer message other than 00 READY appear on the printer's display?	Refer to "Printer Messages" at the end of this chapter for help.
Did you reset the printer after changing a selection in the Mem Config Menu?	Reset the printer to activate your changes and re-enable the Test Menu.

Cannot print a test page

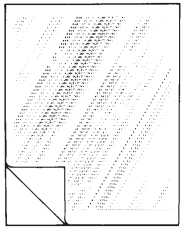
Possible Cause	Solution
Did you click [Enter] after selecting the test in the Test Menu?	Reselect your test, then click [Enter] to run the test and print the results.
Did you click [Enter] more than once after selecting the test?	Reselect your test, then click [Enter] once to run the test and print the results.
Did you click [On Line] before clicking [Enter] or before the test was completed?	Reselect your test, then click [Enter] once to run the test and print the results. Clicking [On Line] after the test is started, or before clicking [Enter], aborts the test and returns the printer on line.
Does a printer message other than 00 READY appear on the printer's display?	Refer to "Printer Messages" at the end of this chapter for help.

Print Quality Problems

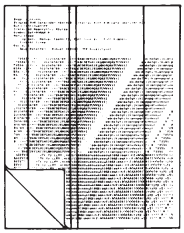
Faded print or vertical white streaks



Possible Cause	Solution
Is there a TONER LOW message on the printer's display?	Follow the steps for rocking the toner cartridge in the section "To temporarily improve print quality" in Chapter 2. If rocking the cartridge does not improve print quality, replace the toner cartridge as described in the section "To change the toner cartridge" in Chapter 2.
Is the print density adjustment too light?	Adjust the print density slider to a higher setting to darken the print. See "To adjust print density" in Chapter 2.
Is the moisture content of the paper uneven, or does the paper have moist spots on its surface?	Try paper from a different source.
Is the paper lot bad?	The manufacturing processes can cause areas of paper to reject toner. Try paper from a different source.
Is the transfer roller dirty?	Replace the transfer roller.

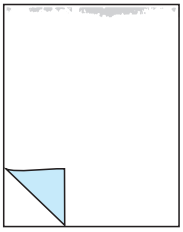


Vertical streaks



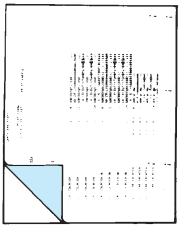
Possible Cause	Solution
Do sharp vertical streaks appear on the page?	The photosensitive drum inside the toner cartridge is probably scratched. Replace the toner cartridge as described in the section “To change the toner cartridge” in Chapter 2.
Do smeared black vertical streaks appear on the page?	The fuser is most likely bad. Replace the fusing assembly as described in the section “To replace the fusing assembly” in Chapter 5.

Toner smear



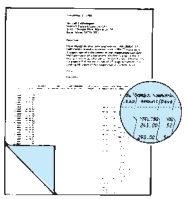
Possible Cause	Solution
Do toner smears appear on the leading edge of the paper?	The paper guides are dirty. Clean the printer as described in Chapter 4, “Printer Cleaning.”

Repetitive vertical defects



Possible Cause	Solution
Does the repetitive mark occur every 2.5 in/64 mm on the back of the page?	The transfer roller has toner on it. The problem should correct itself within a few pages.
Does a repetitive mark occur every 3.75 in/95 mm on the page?	The toner cartridge is damaged. Replace the toner cartridge as described in the section “To change the toner cartridge” in Chapter 2.
Does the repetitive mark occur every 2 in/51 mm on the page?	The developer roller is defective. Replace the toner cartridge as described in the section “To change the toner cartridge” in Chapter 2.
Does a horizontal black line occur every 1.5 in/38 mm on the page?	The charger roller in the toner cartridge is defective. Replace the toner cartridge as described in the section “To change the toner cartridge” in Chapter 2.

Improperly formed characters



Possible Cause	Solution
Do the characters appear hollow?	The paper stock may be too slick. Try paper from a different source.
Do the characters appear wavy?	The laser scanner needs service. Call an authorized dealer or HP Service Representative.

Paper Feed Problems

Printer feeds multiple sheets

Possible Cause	Solution
Is the input tray overfilled?	Remove the excess media from the input tray.
Is the media sticking together?	Remove any remaining paper, rotate it 180 degrees, then set it back in the input tray.
Does your media meet the specifications for this printer?	For complete specifications, see the *LaserJet 4Si Printer User's Reference Manual* or the *Paper Specification Guide*.

Printer feeds incorrect page size

Possible Cause	Solution
Is the correct media size and input tray selected in your software application?	Select the correct media size and input tray in your software application.
Is the correct default paper size selected on the printer's control panel?	Select the correct paper size in the Printing Menu of the printer's control panel.

Paper does not feed automatically

Possible Cause	Solution
Is manual feed selected?	Select the correct media source.
Is the correct size media loaded?	Load the correct size media in the input tray.
Is the input tray empty?	Load the correct size media in the input tray.
Is your software sending a page eject or form feed?	Click [On Line] to take the printer off line, then click [Form Feed].

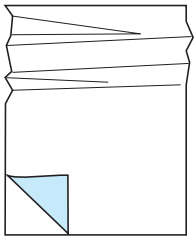
Paper does not feed manually

Possible Cause	Solution
Is manual feed selected?	Select manual feed in your software application.
Are you inserting media before the printer prompts you?	Remove the paper and wait for the printer to prompt you before inserting paper in the manual feed slot. If manual feed is selected, a message will prompt you to feed media.
Are you inserting media far enough into the manual feed slot?	Insert the media into the manual feed slot until the media is tight against the manual feed input.

Paper jams in the printer

Possible Cause	Solution
Is the input tray overfilled?	Remove any excess paper from the input tray.
Is the paper below the tabs of the input tray?	Press the media down in the input tray until the media is below the tabs.
Is the paper binding or sticking together?	Remove any remaining paper, rotate it 180 degrees, then set it back in the input tray.
Is the wrong paper size selected for manual feed?	Select the correct paper size.
Does your paper or other print media meet the proper specifications?	For complete specifications, see the *LaserJet 4Si Printer User's Reference Manual* or the *Paper Specification Guide*.
Is the paper or other print media in poor condition?	Replace the print media.
Does the printer need cleaning?	For information on cleaning the printer, see Chapter 4, "Printer Cleaning."
Are the printer maintenance assemblies wearing out?	Check the printer's display for messages prompting you to replace maintenance assemblies.

Curled or wrinkled output



Possible Cause	Solution
Does your media meet the specifications for your printer?	For complete specifications, see the *LaserJet 4Si Printer User's Reference Manual* or the *Paper Specification Guide*.
Is the correct output bin selected?	If you are printing heavy weight paper, envelopes, or transparencies, use the face up rear output bin.
Is the current print media bad?	Remove the print media from the input tray and load media from a different source.
Are you operating the printer in excessive humidity conditions?	Make sure the printer is operating within humidity specifications. For more information, see the *LaserJet 4Si Printer User's Reference Manual*.

Incorrect Printer Output

Incorrect fonts on the printout

Possible Cause	Solution
Was the font selected correctly in your software application?	Reselect the font in your software application.
Is the font available to the printer?	Use a different font, download the font you desire, or install a font cartridge with the correct font.
Is the correct driver loaded?	Select the correct printer driver.
If your application uses set-up strings or escape sequences to control fonts, have you entered the correct strings?	Enter the correct strings for your desired fonts.
Were your downloaded fonts accidentally erased?	Reload your downloaded fonts.

Cannot print all characters in a symbol set

Possible Cause	Solution
Is the correct symbol set selected?	Select the correct symbol set.
Is the selected character supported by your software application?	Select a different character or check the documentation for your software application for supported characters.
Is the selected symbol supported by the printer?	See the *LaserJet 4Si Printer User's Reference Manual* for a list of supported symbol sets. Install a font cartridge that supports the desired symbol.

Erratic or interrupted printout

Possible Cause	Solution
Is the interface cable loose?	Remove and reconnect the interface cable.
Is the interface cable damaged or bad?	Try a different interface cable.
Is the power cable loose?	Remove, then firmly plug the AC power cable into both the printer and power receptacle.
Are you on a network?	Connect your computer directly to the printer to verify that the network is not the source of the problem.
Are you using a sharing device?	Remove the sharing device to verify that the sharing device is not the source of the problem.

Partial printout

Possible Cause	Solution
Was [Form Feed] pressed while the Ready indicator was flashing?	Reprint the file from your software application. Do not select [Form Feed] until the Ready indicator stops flashing. A flashing Ready indicator means that the computer is still sending data to the printer, or the printer is still processing data.
Did the printer run out of memory?	Free up memory by deleting unwanted downloaded fonts and macros from printer memory.
Do the printer files contain errors?	Check your software application to make sure the print files are error free.
Does a printer message other than *OO* READY appear on the printer's display?	See "Printer Messages" at the end of this chapter for help.
Is there insufficient memory for your printout?	Add more memory to the printer.
Is there a Mode command in your AUTOEXEC.BAT file?	Add the Mode command to your AUTOEXEC.BAT file. For more information, see the manual *Your Guide to Setting Up the LaserJet 4Si Printer*.

Creeping text between printouts

Possible Cause	Solution
Is your software application resetting the printer to the top of the page?	Select the proper page length for your media size. For example, the default lines per inch for letter is 60 (64 for A4). Set your software to match this setting.

No output

Possible Cause	Solution
Is the printer turned off or off line?	Turn on the printer or click [On Line] to return the printer on line.
Is the desired print media loaded in the printer?	Load the desired print media.
Is the correct paper tray installed?	Install the correct input tray.
Does a printer message other than *OO* READY appear on the printer's display?	See "Printer Messages" at the end of this chapter for help.
Is the Ready indicator flashing?	Wait for the Ready indicator to stop flashing. A flashing Ready indicator means that the computer is still sending data to the printer, or the printer is still processing data.
Is the Form Feed indicator lit?	Your application may not have sent a page eject command at the end of the print job. Make sure the printer is finished processing data (the Ready indicator is not flashing), then click [On Line] to take the printer off line, and click [Form Feed] to eject the page.
If you are on a network with multiple printers, was your print job routed to the correct printer?	Check your network printer setup to make sure your print job is going to the correct printer.
If you are on a network, is your network operating?	Verify network operation with your network administrator.

Software Application Problems

Cannot switch between PCL and PostScript

Possible Cause	Solution
Is PERSONALITY in the Job Menu set to PCL or PS?	Set PERSONALITY to AUTO in the printer's control panel.
Does your software application support switching between PCL and PostScript personalities?	For specific information, see the documentation for your software application.
Is the correct printer driver loaded?	Load the correct printer driver.
Is the correct driver selected?	Select the correct printer driver.

Cannot select a font in the software application

Possible Cause	Solution
Is the correct printer driver selected?	Select the correct printer driver.
Is the font available to your software application?	Contact your software vendor.

Printer Messages

If a printer message has a numeric prefix, the following table lists the printer messages in order of the two digit number beside the printer message. Printer messages without numeric prefixes are listed in alphabetical order at the beginning of this table.

Message	Description	Recommended Action
CONFIG LANGUAGE	Display language configuration has been selected.	Wait for the Display Language menu to appear on the printer's display. Then select the local display language.
EE LOAD [envelope size]	The printer received a request for an envelope size that is not currently loaded in the large capacity envelope tray attached to the printer.	Load the correct envelope size into the envelope tray, or click [Continue] to feed from the default paper tray.
EE TRAY = [envelope size]	The large capacity envelope tray was just installed on the printer.	
FE CARTRIDGE	A font cartridge was removed while the printer was on line.	Turn off the printer, then turn the printer back on to clear the message.
FI INSERT BTM	The bottom font cartridge was removed while the printer was in an error state.	Re-install the cartridge, clear any pending error conditions, take the printer off line, then remove the cartridge.
FI INSERT TOP	The top font cartridge was removed while the printer was in an error state.	Re-install the cartridge, clear any pending error conditions, take the printer off line, then remove the cartridge.
FR REMOVE BTM	The bottom font cartridge was inserted while the printer was in an error state.	Remove the cartridge, clear any pending error conditions, take the printer off line, then install the cartridge.
FR REMOVE TOP	The top font cartridge was inserted while the printer was in an error state.	Remove the cartridge, clear any pending error conditions, take the printer off line, then install the cartridge.
LC LOAD [paper size]	The printer received a request for a paper size that is not currently loaded in the lower input tray.	Load the correct media size into the lower input tray, or click [Continue] to feed from the default paper tray.
LC TRAY EMPTY	The lower input tray is out of paper.	Load the correct media size into the lower input tray.
ME FEED [envelope size]	The printer received a request to manually load an envelope.	Feed the proper media size into the manual feed slot, or click [Continue] to feed from the default paper tray.

Message	Description	Recommended Action
MENUS LOCKED	Control panel security is in effect and changes to most menu items have been disallowed. This message is cleared automatically after approximately two seconds.	See your system administrator.
MF FEED [paper size]	The printer received a request to manually load a sheet of paper.	Feed the proper media size into the manual feed slot, or click [Continue] to feed from the default paper tray.
OUTPUT BIN FULL	The upper output bin is full of media.	Remove media from the upper output bin and let the sensor return to its normal position. Then, in approximately 3 seconds, the printer will automatically clear the message and return on line.
UC LOAD [paper size]	The printer received a request for a paper size that is not currently loaded in the upper input tray.	Load the correct media size into the upper input tray, or click [Continue] to feed from the default paper tray.
UC TRAY EMPTY	The upper input tray is out of paper.	Load the correct media size into the upper input tray.
W0 JOB 600/A4	The job parameters of resolution and page protection cannot be met with the available memory. The job was printed at a resolution of 600 dpi, and page protect was set to A4 to fit available memory.	Click [Continue] to continue printing. Add more memory to prevent this error in the future.
W1 IMAGE ADAPT	Adaptive data compression went to Lossy compression to fit the raster graphics in the available memory. Data loss occurred in the raster output.	Click [Continue] to continue printing. Add more memory to prevent this error in the future.
W2 INVALID PERS	PJL encountered a request for a personality (printer language) that did not exist in the printer. The job was aborted and no pages were printed.	
W3 JOB ABORTED	The personality for the current job cannot be run in the available memory. The job was aborted and no pages were printed.	Add more memory to prevent this error in the future.
W4 JOB 300/OFF	The job parameters of resolution and page protection cannot be met with the available memory. The job was downgraded to a resolution of 300 dpi, and page protect was turned off to fit available memory.	Click [Continue] to continue printing. Add more memory to prevent this error in the future.

Message	Description	Recommended Action
W5 JOB 300/LTR	The job parameters of resolution and page protection cannot be met with the available memory. The job was downgraded to a resolution of 300 dpi, and page protect was set to LTR (Letter) to fit available memory.	Click [Continue] to continue printing. Add more memory to prevent this error in the future.
W6 JOB 300/A4	The job parameters of resolution and page protection cannot be met with the available memory. The job was downgraded to a resolution of 300 dpi, and page protect was set to A4 to fit available memory.	Click [Continue] to continue printing. Add more memory to prevent this error in the future.
W7 JOB 300/LGL	The job parameters of resolution and page protection cannot be met with the available memory. The job was downgraded to a resolution of 300 dpi, and page protect was set to LGL (Legal) to fit available memory.	Click [Continue to continue printing. Add more memory to prevent this error in the future.
W8 JOB 600/OFF	The job parameters of resolution and page protection cannot be met with the available memory. The job was printed at a resolution of 600 dpi, and page protect was turned off to fit available memory.	Click [Continue] to continue printing. Add more memory to prevent this error in the future.
W9 JOB 600/LTR	The job parameters of resolution and page protection cannot be met with the available memory. The job was printed at a resolution of 600 dpi, and page protect was set to LTR (Letter) to fit available memory.	Click [Continue] to continue printing. Add more memory to prevent this error in the future.
WL WARNING LOST	The buffer for clearable warnings overflowed and subsequent warnings were lost. Warnings will continue to be discarded until this warning is acknowledged.	Click [Continue to continue printing.
WM CHK MEM CNFIG	The printer still has sufficient memory for personality resource saving, but the current setting cannot be satisfied, or the save area for a personality (printer language) was changed by the printer.	Click [Continue] to continue printing. Reconfigure personality resource saving in the Mem Config Menu. Reconfiguring this menu will delete any current fonts and macros in printer memory.
WM MEM CNFIG N/A	Due to configuration changes or insufficient memory, personality resource saving is no longer available.	Print a self test page and check your current configuration. The printer requires at least 10 Mbytes of memory (14 Mbytes with the duplex unit) for personality resource saving.
00 READY	Printer is ready for use.	
02 WARMING UP	The fuser is warming up.	Wait until the printer displays *00* READY.

Message	Description	Recommended Action
04 SELF TEST	The printer is in the continuous self test mode.	Click [On Line] or [Continue] to abort the test.
05 SELF TEST	The printer is performing the non-printing portion of the self test.	
06 CONFIG PAGE	The printer is printing a configuration page. After the print is completed, the printer returns to the ready state, but remains off line.	
06 DEMO PAGE	The printer is printing a demo page. After the print is completed, the printer returns to the ready state, but remains off line.	
06 PRINTING TEST	The printer is printing a self test page. After the test is completed, the printer returns to the ready state, but remains off line.	
06 TYPEFACE LIST	The printer is printing a typeface list. After the print is completed, the printer returns to the ready state, but remains off line.	
07 RESET	The printer is resetting the Printing, Config, Job, Parallel, and MIO Menu settings to their operator defined default settings. When the reset is complete, the printer returns to the ready state and automatically goes on line.	
08 COLD RESET	The printer is resetting all printing environment parameters, PCL defaults, and device defaults to their factory defaults. When the reset is complete, the printer returns to the ready state, but remains off line.	
09 MENU RESET	The printer is resetting the Printing, Job, Config, Parallel, and optional MIO Menus to their factory defaults. When the reset is complete, the printer returns to the ready state and automatically goes on line.	
09 RESET ALL I/O	The printer is clearing all I/O channels of data and resetting the I/Os. When the reset is complete, the printer returns to the ready state and automatically goes on line.	
09 RST ACTIVE IO	The printer is executing an active I/O reset. When the reset is complete, the printer returns to the ready state and automatically goes on line.	

Message	Description	Recommended Action
10 RESET TO SAVE	A menu was exited after changes were made and buffered data, temporary fonts, or temporary macros are still present in printer memory.	Hold down [Shift] and click [Reset] to reset the printer, go on line, and immediately activate your selections. Buffered data, temporary macros, and temporary fonts will be deleted. Or Click [Continue] or [On Line] to go on line without resetting the printer. Your changes remain recorded in the menu (marked with an asterisk (*)) but won't become active until the printer is reset or the buffered data is printed.
12 PRINTER OPEN	The top cover of the printer is not closed properly.	Close the top cover firmly, making sure that it is latched properly.
13.1 INTERNL JAM	Paper is jammed in the paper path.	See Chapter 3 to clear paper jams.
13.2 INPUT JAM	Paper is jammed in the paper path.	See Chapter 3 to clear paper jams.
13.3 DUPLEX JAM	Paper is jammed in the paper path.	See Chapter 3 to clear paper jams.
13.4 OUTPUT JAM	Paper is jammed in the paper path.	See Chapter 3 to clear paper jams.
14 NO TONER CART	The toner cartridge either is not installed or not correctly installed in the printer.	Install a toner cartridge or make sure the installed toner cartridge is fully seated. Then click [On Line] or [Continue] to return the printer on line.
15 ENGINE TEST	The printer is performing an engine system test and printout. If the test passes, the printer returns to the ready state, but remains off line.	
16 TONER LOW [1-3]	The toner cartridge is out (or almost out) of toner.	See instructions in Chapter 2, "Toner."
18 LOWER MIO	The lower MIO card is not ready.	
18 UPPER MIO	The upper MIO card is not ready.	
20 MEM OVERFLOW	The printer received more data from the computer than fits in its internal memory. You may have tried to transfer too many macros or soft fonts, or graphics that were too complex.	Click [Continue] to print the transferred data. You may need additional memory.
21 PRINT OVERRUN	The page formatting process was not fast enough for the printer engine.	Click [Continue] to continue printing.
22 ERROR	The printer's receiving buffer has overflowed during a busy state.	Click [Continue] to continue printing. Data may be lost.
25 XXXX MEM FULL	The personality resource saving area is full. XXXX indicates the name of the personality.	Click [Continue] to continue printing. Data may be lost.

Message	Description	Recommended Action
40 ERROR	The printer encountered a data error while transferring data from the computer.	Click [Continue] to continue printing.
41.x ERROR	A temporary error occurred in the printing page. The values of x are: 1 : Noisy VSREQ signal 2 : Beam detect malfunction 3 : Printer multifeed 4 : Late VSYNC 5 : Unknown state	Remove the paper from the output bin, then click [Continue].
49 REMOVE PAGE	A sheet of media is in one or both manual feed slots at power-on, or a tray was inserted during power-on.	Remove any sheets of media from the manual feed slots, or remove the input tray until power-on has completed.
50 SERVICE	The printer identified an internal service error. This usually indicates the printer was not powered OFF long enough during the fuser replacement.	Turn OFF the printer, wait at least 30 minutes, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
51 ERROR	A beam detect malfunction occurred.	Click [Continue] to continue printing.
52 ERROR	A scanner malfunction occurred.	Click [Continue] to continue printing.
53 SERVICE	A laser malfunction occurred.	Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
53.XY.ZZ ERROR	An error occurred on a ROM/RAM SIMM.	Click [Continue] to continue printing. For information on the XY.ZZ references, see the *LaserJet 4Si Printer User's Reference Manual*.
54 ERROR	The duplex feed assembly shift plate is defective.	Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
55 ERROR	A printer command error occurred. Commands cannot be exchanged between the print engine and the controller.	Click [Continue] to continue printing.
56 ERROR	The automatic envelope feeder is the designated input source and DUPLEX is enabled.	Click [Continue] to continue printing in the simplex mode.
57.1 SERVICE	A drum motor failure occurred.	Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.

Message	Description	Recommended Action
57.2 SERVICE	Internal fan motor A failed.	Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
57.3 SERVICE	Internal fan motor B failed.	Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
57.4 SERVICE	Internal fan motor C failed.	Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
61.x SERVICE	A parity error occurred when accessing the SIMM in slot “x.”	Turn the printer OFF, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
62.x SERVICE	A problem occurred with printer memory. The “x” value is: 0 : internal memory 1 - 4 : SIMM slots 5 - 6 : upper and lower cartridges.	
63.0 SERVICE	Onboard DRAM (base DRAM) is faulty.	Service is required, contact your dealer or your HP Service Representative.
64 SERVICE	A scan buffer error occurred.	Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
65 SERVICE	A dynamic RAM error occurred.	Turn the printer OFF, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
67 SERVICE	A miscellaneous interface hardware error occurred.	Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
68 READY/SERVICE	An NVRAM recoverable error occurred or the NVRAM is full. No parameter changes will be saved in NVRAM.	Click [Continue] to continue printing.
70 ERROR	The firmware cartridge cannot be executed. The cartridge is not designed for this printer’s formatter, or the cartridge parameters are inappropriate for this hardware environment.	Remove the firmware cartridge.
71 ERROR	The firmware cartridge cannot use this version of the BIOS.	
72 SERVICE	The font cartridge was removed while the firmware was trying to read it.	Turn OFF the printer, then turn the printer back ON to clear the message.

Message	Description	Recommended Action
79 SERVICE (XXXX)	The firmware detected an unrecoverable error.	The XXXX indicates the error type. Report this number to your authorized service vendor. Turn the printer OFF, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
80 SERVICE (00XX)	An unrecoverable Modular I/O (MIO) protocol error occurred.	Report the XX value to your authorized service vendor. Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
80 SERVICE (01XX)	An indeterminate Modular I/O (MIO) error occurred.	Report the XX value to your authorized service vendor. Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
80 SERVICE (02XX)	A Modular I/O (MIO) system test failure occurred.	Report the XX value to your authorized service vendor. Turn OFF the printer, then turn the printer back ON. If the problem persists, contact your dealer or your HP Service Representative.
80 SERVICE (03XX)	A fatal Modular I/O (MIO) error by an “Inquire I/O Status Response” occurred.	Report the XX value to your authorized service vendor.
80 SERVICE (04XX)	A fatal Modular I/O (MIO) error by an “Asynchronous Status Request” occurred.	Report the XX value to your authorized service vendor.

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