

Printer Specifications

Printing

Printing method: Laser beam scanning and dry

electrophotographic process

Resolution: 300 X 300 dpi

Printing speed: 6 pages per minute (letter or A4)

(depending on the font and quantity of data)

First print: Less than 25 seconds with A4 or letter, face

up or face down

Warm-up time: 70 seconds or less at normal temperature

Internal modes:

- PostScript mode
- PS binary mode
- HP LaserJet emulation

IC card slots: 2 slots for font cards

Resident fonts:

The following are the 35 outline fonts available in PostScript mode. The name is in the format used by the PostScript language, and the number with each font is the number used by the PostScript language.

- 0 Courier
- 1 Courier-Bold
- 2 Courier-Oblique
- 3 Courier-BoldOblique

- 4 Times-Roman
- 5 Times-Bold
- 6 Times-Italic
- 8 Helvetica
- 9 Helvetica-Bold
- 10 Helvetica-Oblique

Times-BoldItalic

- 11 Helvetica-BoldOblique
- 12 Symbol
- 13 AvantGarde-Book
- 14 AvantGarde-BookOblique
- 15 AvantGarde-Demi
- 16 AvantGarde-DemiOblique
- 17 Bookman-Demi
- 18 Bookman-Demiltalic
- 19 Bookman-Light
- 20 Bookman-Lightltalic
- 21 Helvetica-Narrow
- 22 Helvetica-Narrow-Bold
- 23 Helvetica-Narrow-BoldOblique
- 24 Helvetica-Narrow-Oblique
- 25 NewCenturySchlbk-Roman
- 26 NewCenturySchlbk-Bold
- 27 NewCenturySchlbk-Italic
- 28 NewCenturySchlbk-BoldItalic
- 29 Palatino-Roman
- 30 Palatino-Bold
- 31 Palatino-Italic
- 32 Palatino-BoldItalic
- 33 Zapf Chancery-MediumItalic
- 34 Zapf Dingbats

Bitmap fonts

Bitmap data for the fonts in the point-size shown below are cached in the ROM. This can significantly reduce printing time for these fonts in these sizes.

Times-Roman 10 points Helvetica 10 points Courier 12 points

Font Samples

Courier

Courier Bold

Courier Oblique

Courier Bold Oblique

Times Roman

Times Bold

Times Italic

Times Bold Italic

ITC Bookman Demi

ITC Bookman Demi Italic

ITC Bookman Light

ITC Bookman Light Italic

EPL-7500 LASER PRINTER

New Century Schoolbook Roman New Century Schoolbook Bold

New Century Schoolbook: Italic

New Century Schoolbook Bold Italic

Palatino Roman Palatino Bold Palatino Italic

Palatino Bold Italic

Helvetica

Helvetica Bold
Helvetica Oblique

Helvetica Bold Oblique

Helvetica Narrow

Helvetica Narrow Bold

Helvetica Narrow Bold Oblique

Helvetica Narrow Oblique

ITC Avant Garde Book

ITC Avant Garde Book Oblique

ITC Avant Garde Demi

ITC Avunt Garde Demi Oblique

ITC Zapf Chancery Medium Italic*

'This font comes only in the calligraphic italic style shown above.

Symbol

αβχδεφγηιφκλμνοπθυστυσωξ ψ ζ AΒΧΔΕΦΓΗΙϑΚΛΜΝΟΠΘΡΣΤΥς Ω Ξ Ψ Ζ 0123456789..;?:-() \Rightarrow \forall !+[] \exists %&*/ ==# $\{$ }<> \bot -|

ITC Zapf Dingbats

Paper and paper delivery

Paper specifications

Types: Plain paper

Application paper:
• Gummed labels
. OHP sheets
. Colored paper
. Cardstock

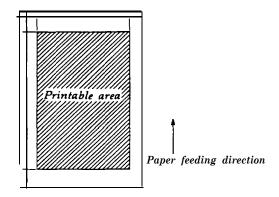
Envelope

Epson does not recommend or guarantee the use of any particular brand of paper. Because paper characteristics are subject to change by individual manufacturers, it is your responsibility to ensure the quality of paper used with the printer.

Paper weight: Plain paper: 60 - 90 g/m², 16 - 24 lb

Cardstock: 90 - 157 g/m^2 , 24 - 42 lb

Paper size and prirtable area



Paper type		6:	0: 4-1-1-	Margin			
		Size	Printable area	ľ	r	t	b
Letter	inches dots	8.50×11.00 2550×3300	8.21×10.67 2454× 3204	0.14 43	0.14 43	0.16 48	0.16 48
Lettersmall	inches dots	8.50×11.00 2550×3300	7.68×10.16 2304× 3048	0.41 123	0.41 123	0.42 126	0.42 126
Legal	inches dots	8.50×14.00 2550×4200	8.11×13.67 2432×4100	0.20 59	0.20 59	0.16 48	0.16 48
Half-Letter	inches dots	5.50×8.50 1650×2550	5.23×8.18 1568×2454	0.14 41	0.14	0.16 48	0.16 48
Executivepage	inches dots	7.25×10.50 2175×3150	7.04×10.18 2112×3054	0.10 31	0.11 32	0.16 48	0.16 48
Goverment	Legal inches dots	8.5×13.0 2550×3900	8.21×12.68 2464×3804	0.14 43	0.14 43	0.16 48	0.16 48
Goverment	Letter inches dots	8.0×10.5 2400×3150	7.79×10.18 2336×3054	0.11 43	0.11 32	0.16 48	0.16 48
A4	mm inches dols	210×297 8.27×11.69 2480×3507	8.00×11.22 2385×3411	0.13 40	0.13 40	0.16 48	0.16 48
A4smail	mm inches dots	210×297 8.27×11.69 2480×3507	7.47×10.85 2240×3255	0.40 120	0.40 120	0.42 126	0.42 126
A5	mm inches dots	148×210 5.83×8.27 1748×2480	5.55×8.00 1664×2400	0.14 42	0.14 42	0.13 40	0.13 40

Paper type		Size	Printable area	Margin			
	1 aper type	Size P	Printable area	l	٢	t	b
B5	m m Inches dots	182X257 7.16X10.12 2149X3035	6.93 X 9.82 2080X2946	0.11 34	0.12 35	0.15 44	0.15 45
F4	mm inches dots	210X330 8.27X 12.99 2480X3897	8.00X 12.68 2400X3804	0.13 40	0.13 40	0.15 46	0.16 47

The width and height are accurate to the exact pixel. The margins are assumed to be centered on the page.

Range of paper width and length:

	Width	Length
Paper cassette	98-216 mm (3.86 - 8.5 inches)	160-356 mm (6.3 - 14 inches)
Manual feed	92-216 mm (3.62 - 8.5 inches	160 - 356 mm (6.3 - 14 Inches

Special sizes: Any size within the usable paper size range

listed above.

Paper feed alignment and direction:

Center alignment for all sizes.

Paper feed: Automatic or manual feed

Input paper supply (75 g/ m^2 or 20 lb. paper):

250 sheets

Paper eject: Face-up or face-down selection

Paper eject capacity (75 g/m² or 20 lb. paper):

Face-down 250 sheets

Consumable products

Imaging cartridge (S051003):

Storing temperature: 0 to $30^{\circ}C$ (32 to $86^{\circ}F$)

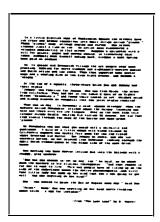
Storing humidity: 30 to 85% RH

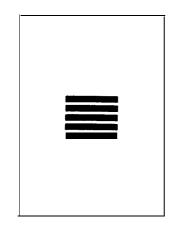
Term of validity: 18 months after production Life: Typical imaging cartridge life

Typical imaging cartridge life is about 6000 pages under the following conditions: Letter-

or A4-size paper, continuous printing, and 5% print ratio. Examples of a 5% print ratio

are shown below.





The number of pages that you can print with an imaging cartridge varies depending on the type of printing you do. If you print a few pages at a time or print dense text exceeding the 5% print ratio, your cartridge may print fewer pages.

Ozone filter (S091001):

Needs to be replaced every six months.

Mechanical

Dimensions and weight:

 Height:
 185 mm (7.3 inches)

 Width:
 495 mm (19.5 inches)

 Depth:
 381 mm (15.0 inches)

Weight: Approx. 18.2 Kg (40.1 lb.) including paper

cassette and imaging cartridge.

MPBF (Mean Prints Between Failures):

30,000 sheets (3,000 per month X 10 months)

MTBF (Mean Time Between Failures):

3,000 hours

Durability: 5 years or 180,000 sheets (3,000 per month X

60 month); whichever comes first.

Electrical

Voltage: 120 V model : 90 to 132 VAC

220/240 V model: 198 to 264 VAC

Rated frequency 50 Hz to 60 Hz ± 3Hz

range:

Power consumption: Less than 550 W

Insulation 2 $M\Omega$ minimum

resistance:

Dielectric strength (between AC line and chassis):

 120 V model can withstand 1000 VAC rms for one minute or 1200 VAC rms for one second.

 220/240 V model can withstand 1500 VAC rms for one minute or 1650 VAC rms for one second.

Controller hardware

RAM: Standard: 2 MB (expandable to 6 MB)

Environmental

Temperature: Operation: 10 to 35°C (50 to 95°F)

Storage: 0 to 35°C (32 to 95°F)

Humidity: Operation: 15 to 85 % RH

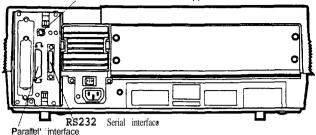
Storage: 30 to 85 % RH

Altitude: 2500 meters (8200 feet) maximum

Levelness: Should be kept level.

Interface Specifications

RS422 Serial interface and AppleTalk





CAUTION: The EPL-7500 is factory-set for the parallel interface. To use another interface, you must change the INTERFACE setting in SelecType Level 2 before you connect the interface cable. See Chapter 3 for instructions on changing SelecType settings.

The printer has the following resident interfaces:

- Parallel
- RS-232/RS-422 serial
- AppleTalk

Parallel interface

Your printer is equipped with an 8-bit parallel interface.

Signal level: TTL compatible

Serial interface

The printer's resident serial interface can be set for either RS-232 or RS-422 operation. These interfaces have the following characteristics.

Data format

Word length:

Parity: Space or none, odd or even, mark or none

Stop bits: 1 or **2**

Printer ready protocol: enabled (DTR and XON/XOFF protocol

set to ON.)

The data format can be set using functions and menu items in SelecType.

Baud rate

RS-232: 300, 600. 1200, 2400, 4800. 9600, 19,200, 38,400 bits per

RS-422: 300, 600, 1200, 2400, 4800, 9600, 19,200, 38,400, 57,600 bits per second.

Signal level

RS-232: Conforms to EIA RS-422: Conforms to EIA

Handshaking

The printer's serial interface can use DTR (Data Terminal Ready) signal levels and XON/XOFF communication protocols either separately or in combination. When the vacant area for data in the input buffer drops to 128 bytes, the printer outputs an XOFF code or sets the DTR signal level to low (MARK, indicating that it cannot receive any more data).

Once the vacant area for data in the buffer recovers to 256 bytes, the printer outputs an XON code or sets the DTR flag to high (SPACE), indicating that it is again ready to receive data.

Connector

D-sub 25-pin connector DIN S-pin connector

Initialization

There are four ways that the printer can be initialized (returned to a fixed set of conditions).

Hardware initialization	 When the power is turned on. When the FACTORY RESET option in SelecType Level 2 is executed.
Software initialization	Software sends the printer-initialize command.

The following tables list the default conditions that become valid when the printer is initialized. The default conditions differ according to the printer mode.

Default settings in HP emulation mode

Item	Factory Reset	Reset
Paper input	Standard paper cassette	SelecType setting
Paper size	Letter or A4	SelecType setting
VMI	8 (6 lines per inch)	8 inch (6 lines per inch)
НМІ	12 (10 cpi)	HMI of the selected font
Top margin	1/2 inch (150 dots or 3 lines)	1/2 inch (150 dots or 3 lines)
Text lines	66 lines or 70 line	66 lines
Text length Portrait	64 lines	64 lines
Left margin	logical page left margin	logical page left margin
Right margin	logical page right margin	logical page right margin
Line termination	CR=CR. LF=LF. FF=FF	CR=CR, LF=LF. FF=FF
Fonts (both primary and secondary) Symbol set Spacing Pitch Height Style Strokeweight Typeface	Roman-8 Fixed 10 cpi 12 point Upright Medium Courier	_ _ _ _ _
Underline	Off	Off
Font ID	0	0
Character code	0	0

Item	Factory Reset	Reset
Raster graphic resolution	75 dpi	75 dpi
Macro ID	0	0
End of line wrap	Off	Off
Display function	Off	Off
Advanced graphics	H-size=0, V-size=0, ID=0	H-size=0, V-size=0, ID=0
Symbol set	Roman-8	_

Default settings in PostScript mode

Item	Factory Reset	Reset
Paper input	Standard paper cassette	SelecType setting
Paper size	Letter or A4	SelecType setting
Top margin	0.16 inches	0.16 inches
Left margin	0.16 inches	0.16 inches
Right margin	0.16 inches	0.16 inches
Bottom margin	0.16 Inches	0.16 Inches

Application Software

PostScript mode

Check to see that the SOFTWARE option in SelecType Level 1 is set to PostScript. If not, follow the steps described in Chapter 3 to change the printer mode with SelecType.

For PC users: Choose EPL-7500 from the printer selection menu in your application program. If the menu does not list the EPL-7500, choose any PostScript printer.

For Macintosh users: Check your Macintosh documentation for instructions on installing a printer. If the EPL-7500 is not listed among the printer options, choose the LaserWriter".

HP emulation mode

If your application program doesn't support the PostScript language, or if you are using a program written specifically for the HP LaserJet, use the SelecType Level 1 SOFTWARE option to set your printer to HP emulation mode. Then choose the first printer available from the list below from your application program's printer selection menu.

HP LaserJet series IITM

HP LaserJet PlusTM

HP LaserJet 500TM

HP LaserJetTM

If none of these printers are listed among your program's options, select any printer that uses the HP Printer Command Language (PCL).

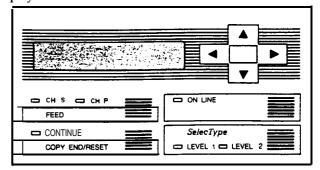
Printing a test file

After you install the software, create and print a test file using the fonts, symbols, features and formats that you use most often. Printing the test file shows you how the EPL-7500 works with your application program.

Control Panel

The printer control panel is made up of three elements: buttons, indicator lights, and a liquid crystal display. You use the buttons to select printer settings and functions, and the indicator lights and display let you monitor the current status of the printer.

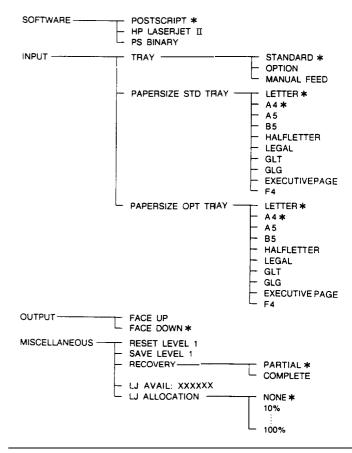
Display



SelecType

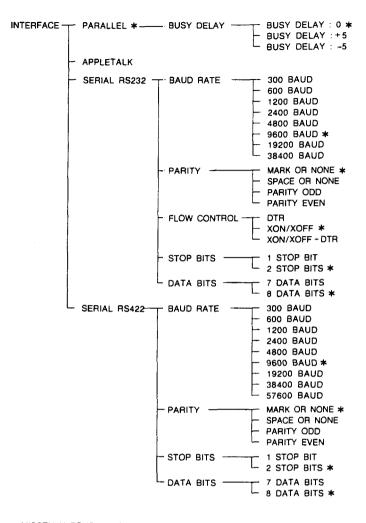
The following menu maps show the possible menus and options available in SelecType mode. An asterisk (*) Indicates the factory setting. See Chapter 3 for a description of each option.

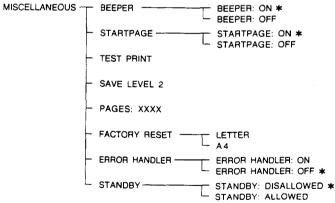
SelecType Level 1



Note: The factory settings of PAPERSIZE STD TRAY and PAPERSIZE OPT TRAY depend on the country.

SelecType Level 2



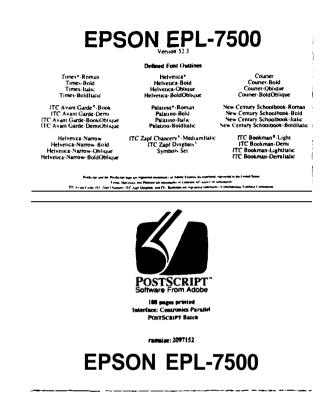


Testing the Printer

When you turn on the printer, it automatically prints a start page, containing simple text and graphics. Normally, processing of the start page begins about 70 seconds after you turn the printer on. The start page does not print if the STARTPAGE option in SelecType Level 2 is set to OFF or if the printer takes more than three minutes to warm up,

Note: In most cases, leave the STARTPAGE option set to on. The start page lists useful information about your printer's current settings and lets you know the printer is working properly and ready to print.

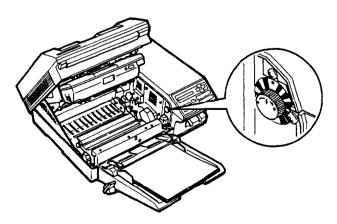
You can also print test prints with the TEST PRINT option in SelecType Level 2. See Chapter 3.



Adjusting print density

You can control the overall density of the printed image with the print density control knob. If your test print is too light or too dark, adjust the print density as follows:

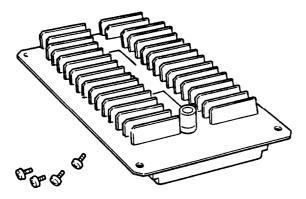
- 1. Lift the latch to open the printer cover to the lower position.
- Locate the yellow density control knob inside the front right comer of the printer, as shown below.



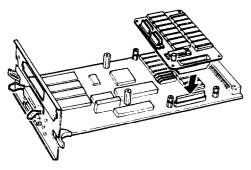
Options

Memory expansion board (C822021 or C822022)

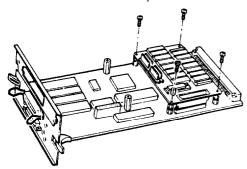
The memory expansion board adds an extra 4 MB of RAM to your printer. With this board, you can increase your printer's memory to a powerful 6 MB of RAM for rapid processing of the most complex graphics.



Locate mating connector CN5 on the controller board. Lower the memory expansion board into position, as shown below, and carefully insert the connector on the board into the mating connector.

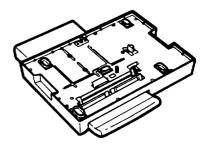


Secure the board with the screws provided

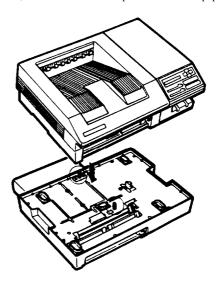


The Lower paper cassette (C812051 or C812061)

The optional lower paper cassette fits directly beneath the printer and feeds up to 250 sheets of paper into the printer. The optional cassette expands your standard paper cassette's 250-sheet capacity to 500 sheets.

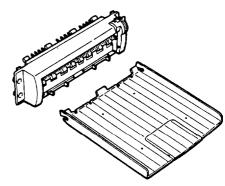


Guide the printer into place, using the two alignment pins as shown below, until it rests on top of the lower paper cassette.



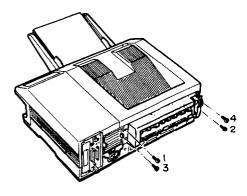
The face-up output tray (C812071 or C812072)

The face-up output tray delivers paper face-up for immediate viewing of your printed output. Also use the face-up output tray for printing that requires a straight-through paper path, such as labels, overhead transparencies and heavy paper.

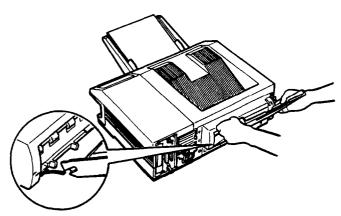


Carefully fit the drive unit into the opening in the back of the printer with the blue paper path lever in the upper right comer of the opening.

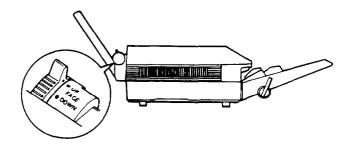
Insert the four screws in the holes in the drive unit, as shown below. Partially tighten each screw in the order indicated by the numbers below. Repeat this gradual tightening process until all screws are fully tightened.



Install the face-up tray by fitting the notches of the tray over the pins of the drive unit, as shown below. Notice that the tray, when installed, is nearly vertical, as shown in the illustration at the bottom of this page.



The printer is factory-set for face-down output on top of the printer. To set the printer for face-up delivery, move the paper path lever (located **on** the drive unit) to the FACE UP position as shown below.



Option Specifications

Lower paper cassette C812051/C812061

Electrical

AC power supply: DC 24V supplied by the printer

Insulation resistance: 10M ohm minimum

Dielectric strength (between AC line and chassis)

Can withstand 3750 VAC rms for one

minute.

Power consumption: 4W or less

Paper and paper delivery

Size: **C812051**: Letter (8.5 X 11.0 inches)

C812061: A4 (210 X 298 mm)

Weight: $60 - 90 \text{ g/m}^2 (16 - 24 \text{ lb.})$

Paper feed: Automatic feed delivery system. Tray

capacity up to 250 sheets (75 g/m² or 20

lb. paper)

Feeding speed: For first sheet, 25 seconds or less (A4 or

letter-size paper).

For subsequent sheets, 6 pages per minute (letter-size paper) and 5.8 pages per minute

(A4-size paper).

Types: Plain paper, such as copier paper, memo

sheets, and letterheads

Mechanical

Dimensions and weigh:
Height:
Width:
Depth:
Weight:
Weight:
Weight:
Weight:
Without the printer:
95.7mm (3.7 inches)
487mm (19.1 inches)
500 mm (19.6 inches)
500 kg (11.0 lb.)

Face-up output tray C812071 / C812072

Dimensions and weight: Without the printer:
Height: 198mm (7.7 inches)
Width: 311mm (12.2 inches)
Depth: 246 mm (9.6 inches)
Weight: 0.7 kg (1.5 lb.)

Paper eject capacity: 100 sheet (75 g/m² or 20 lb. paper)

Status and Error Messages

If an error occurs, your best source of information is the display on the control panel. The error messages displayed there tell you what is wrong and, in some cases, indicate the actions you should take to correct the problem.

Status messages also appear on the display during the printer's normal operation. They indicate the printer's current status.

This section contains an alphabetical list of status and error messages you may encounter and includes the steps you need to take to correct any problems. SelecType messages are not included.

Status messages are preceded by [S], warning messages are preceded by [W], and error messages are preceded by [E]. In some cases the message you see on your display also shows the printer mode.

[E] COVER OPEN

The printer cover is open or the imaging cartridge is not installed. Close the printer cover or install the imaging cartridge.

[E] LOW ON TONER

The imaging cartridge must be replaced. Replace the imaging cartridge as described in Chapter 6.

[E] MANUAL FEED

This message appears when manual feed is selected. The printer is ready to print a page and is waiting for paper to be fed manually.

(S) OFF LINE

The printer is off line and not in the SelecType mode. In this status, you can enter SelecType mode by pressing the SelecType button.

[E] OUT OF PAPER

No paper cassette is installed, or there is no paper in the standard paper cassette and the optional lower paper cassette (if installed), or the paper set lever is in the manual position and you are not feeding pages correctly. Insert more paper into the selected paper cassette or manually feed a sheet of paper into the printer. See Chapter 4 for more information on loading paper.

[E] PAPER ENTRY JAM

Paper is not feeding into the printer from the specified cassette or has jammed on its way into the printer. If the paper is jammed at the paper cassette, open the printer case, remove the jammed paper from the standard paper cassette or optional paper cassette and then close the printer. See the PAPER ENTRY JAM section later in this chapter for more information.

[E] PAPER EXIT JAM

Paper is jammed inside the paper path. You need to open the printer and clear the jammed paper as described later in this chapter.

[S] PRINTING

The printer has received data and is printing.

[S] PRINTING TEST

The printer is printing the test page.

[S] PROCESSING

The printer is processing data.

(S) OUIT THE JOB

The ON LINE button was pressed while a print job was in progress. The job can then be flushed by pressing the RESET button, or a reset can be cancelled by pressing any other button.

[S] QUITTING THE JOB

The printer is flushing a job from the buffer.

[S] READY

In PostScript mode, the printer is between jobs and has nothing to process from the communication channels. You can use the control panel while the printer is ready.

[S] RESETTING

This message appears initially when the printer is first started up and momentarily between jobs.

[S] WAIT FOR READY

The ON LINE button was pressed while a print job was in progress. The printer continues printing until the current job is completed; then it goes off line.

[S] WAITING

The printer is in the process of executing a job and has run out of data and is waiting for the channel to provide more data

[S] WARMING UP

The printer is warming up,

Service faults

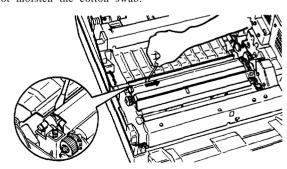
The service messages listed below are caused by a printer malfunction and can sometimes be serious:

SCAN MOTOR ERROR HSYNC ERROR HEATER LAMP ERROR MAIN MOTOR ERROR FAN MOTOR ERROR

If one of these error messages appears, follow the steps below.

- 1. Press the RESET button.
- 2. If the error does not clear, turn the printer off for at least five seconds. Then turn it back on.
- If the problem remains, service is required. Write the message down and turn the printer off. Then contact a qualified service person or your dealer.

Clean the transfer charger wire by gently rubbing the cotton swab along the length of the wire, as shown below. Only wipe from left to right when cleaning the transfer charger wire. Do not moisten the cotton swab.



EPL-7500-9

Installation/Support Tips

Software

PostScript Mode

- For PC users: choose EPL-7500 from the printer selection menu in the application program. If the menu does not list EPL-7500, choose any PostScript printer.
- For Macintosh users: check your Macintosh documentation for instructions on installing a printer. If the EPL-7500 is not listed among the printer options, choose the LaserWriter.

HP Emulation Mode

 If the application program does not support the PostScript language, or if the program was written specifically for the HP LaserJet, then configure the printer to HP emulation mode. Then choose the first printer available in the list below from the application program's printer selection menu.

```
HP LaserJet series IIP
HP LaserJet series II
HP LaserJet +
HP LaserJet 500
HP LaserJet
```

Set Up

- The EPL-7500 is factory-set for the parallel interface. To use another interface, you must change the INTERFACE setting in SelecType level 2 and save the new setting. After changing and saving the setting, turn off the printer before attaching the Interface cable, or the printer could be damaged.
- If an AppleTalk cable is connected, never operate the printer with the SelecType INTERFACE option set to any other interface. Failure to use the AppleTalk setting may leave the printer inoperable or bring down the entire system.
- To print complex pages, it may be necessary to increase the printer's amount of memory by adding a memory board.