EPSON®

Laser Printer

EPL-5700L/EPL-5700i

Reference Guide

Printer Parts

printer cover

ready light (green)

error light (red)

latch

extension output tray

power switch

paper-tray

manual feed slot

paper path selector

USB interface connector

AC inlet

Parallel interface connector
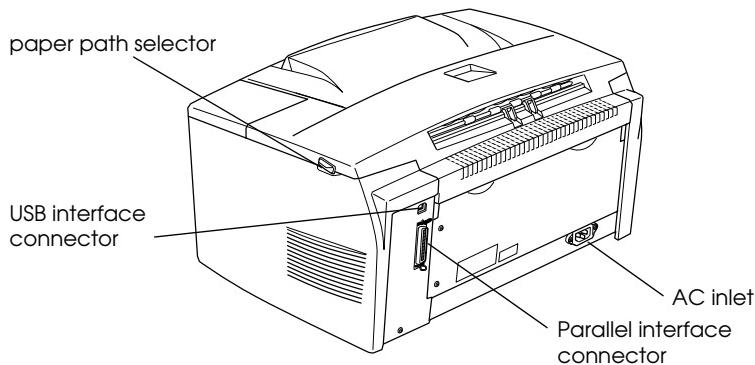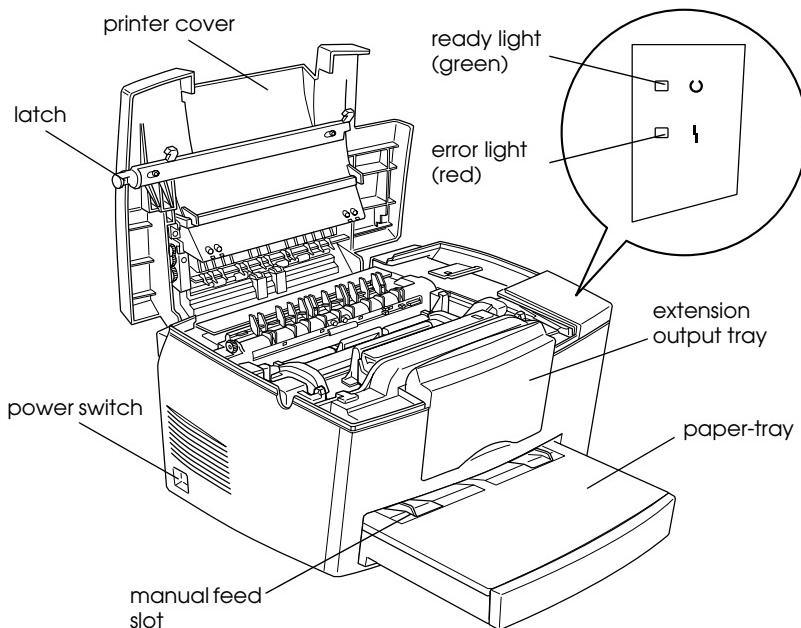
Declaration of Conformity

According to ISO/IEC Guide 22 and EN 45014

Manufacturer: SEIKO EPSON CORPORATION
Address: 3-5, Owa 3-chome, Suwa-shi,
Nagano-ken 392 Japan

Representative: EPSON EUROPE B.V.
Address: Prof. J. H. Bavincklaan 5 1183
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Declares that the Product:

    Product Name: Laser Printer
    Model: L270-D

Conforms to the following Directive(s) and Norm(s):

    Directive 89/336/EEC:

                    EN 55022 Class B
                    EN 50082-1
                       IEC 801-2
                       IEC 801-3
                       IEC 801-4
                    EN 61000-3-2
                    EN 61000-3-3

    Directive 73/23/EEC:

                    EN 60950

October 1999

Y. Ishii
President of EPSON EUROPE B.V.

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Getting Started

The EPSON EPL-5700L/EPL-5700i printer combines high performance and reliability with a wide range of features.

To get started with your laser printer, please:

❏ Read the laser printer precautions and important safety instructions in the *Getting Ready* guide.

❏ Use your *Getting Ready* guide to install the options and printer software.

See this Reference Guide for detailed information about your printer.

About This Guide

This guide contains information about using your printer. For information about installing and setting up the printer, see the *Getting Ready* guide.

Chapter 1, "Using Your Printer," describes how to operate the printer. It also contains information on loading paper and setting up the printer for paper type and size.

Chapter 2, "Using Options," gives step-by-step instructions for installing the options available for the printer.

Chapter 3, "EPSON Status Monitor 3 Utility," allows you to view printer status information such as the remaining amount of toner and check for any printer errors.

Chapter 4, "Troubleshooting," gives helpful information for what to do if you encounter problems.

Chapter 5, "Maintenance and Transportation," provides instructions on how to clean and transport your printer.

Appendix A, "Technical Specifications," contains the technical specifications about the printer.

Appendix B, "Contacting Customer Support," explains customer support information.

About Your Printer

Your printer is the latest in EPSON's advanced line of laser printers.

The printer's 600/300-dpi (dots per inch) resolution is enhanced by EPSON's Resolution Improvement Technology (RITech), which smooths the jagged edges of diagonal and curved lines in both text and graphics. This gives your documents a clean, crisp professional appearance.

The printer is easy to install and use. You simply set up the printer, connect it to your computer, and install the printer driver as described in the *Getting Ready* guide.

The printer supports ECP mode in Windows 95/98 and Windows NT 4.0. ECP mode is useful for high-speed data transfer and bidirectional communication with your computer.

Features

The printer comes with a full set of features that contributes to ease of use and consistent, high-quality output. The main features are described below.

High-quality printing

Your printer provides 600/300-dpi printing at a speed of up to eight pages per minute. You'll appreciate the professional print quality produced by your printer and its quick processing speed.

Toner Save Mode

To reduce the amount of toner used in printing documents, you can print drafts using the Toner Save Mode.

Options

The printer comes with built-in bidirectional parallel interface, USB interface, and 2 MB of memory, which can be expanded up to 13 MB. The 500-Sheet Lower Cassette Unit (C81287✽ for A4 size paper, C81288✽ for Letter size paper), automatically feeds up to 500 A4 and Letter size sheets without reloading. The Face-up Tray (C81286✽) is recommended for printing on media such as labels and transparencies that require a straight-through paper path.

Warnings, Cautions, and Notes

Warnings must be followed carefully to avoid bodily injury.

Cautions must be observed to avoid damage to your equipment.

Notes contain important information and useful tips on the operation of your printer.

Using Your Printer

Ready and Error lights

The ready (green) and error (red) lights on the top of the printer indicate the printer status. Whether the lights are flashing or not indicates different things, as described below. More detailed information can be found in the Alert window in the EPSON Status Monitor 3.

Ready Light (green)	Error Light (red)	Printer Status
Not lighted	Not lighted	Printer is off.
Lighted	Not lighted	Printing is possible.
Flashing	Not lighted	Printer is warming up or receiving data.
Not lighted	Flashing	Either the printer is out of paper or there is an error that can be easily remedied.
Not lighted	Lighted	This is an error that requires a service call. Alternatively, try turning off the printer and then turning it back on. If this does not remedy the error, contact your dealer or a qualified service person.

Controlling the Printer

To control your printer and change its settings, use the printer driver. The printer driver allows you to easily make all the print settings, including paper source, paper size, and orientation. To access the driver menus, see below.

Accessing the printer driver

You can access your printer driver directly from most Windows-based applications, or from your Windows operating system, as explained below. The printer driver settings made from many Windows applications override settings made when the driver is accessed from the operating system, so in most cases you should access the driver from your application to make sure you get the results you want.

❑ To access the printer driver from your application software, click the Print or Page Setup command on the File menu. You also may need to click Setup, Options, Properties, or a combination of these buttons.

❑ To access the printer driver from Windows 98/95 and Windows NT 4.0, click Start, point to Settings, and click Printers. Next, right-click the EPSON EPL-5700L/EPL-5700i Advanced icon and click Properties (in Windows 98/95) or Document Defaults (in Windows NT 4.0).

❑ To access the printer driver from Macintosh, Choose Chooser from the Apple menu. Then click the EPL-5700L/EPL-5700i icon and click Setup.

Accessing Online Help

You can access the Online Help from the printer driver. The Online Help provides you with detailed information and instructions on the printer driver that controls your printer. It is automatically installed when you install the printer driver.

Note for using shared printers in Windows NT 4.0

If you are using a shared printer in Windows NT 4.0, it is important that you follow the instructions below carefully, especially "Accessing the printer through a network," which describes how to install the printer driver on NT 4.0 clients. If you do not follow these instructions, you may not be able to properly install or use the printer driver.

First, you need to set up the printer as a shared printer on the computer to which the printer is connected. Then, you must specify the network path to the printer from each computer that will use it, and install the printer software on those computers.

Setting up your printer as a shared printer

Follow these steps to share a printer that is connected directly to your computer with others on a network.

1. Click Start, point to Settings, and click Printers.

2. Select your printer, then click Sharing on the File menu.

3. Click Shared and enter the Share Name.

Printer settings	Optional Settings	Font Substitution	Utility
General	Ports	Scheduling	Sharing	Security

EPSON EPL-5700L Advanced

Print to the following port(s). Documents will print to the first free checked port.

Port	Description	Printer
☐ COM1:	Local Port	
☐ COM2:	Local Port	
☐ COM3:	Local Port	
☐ COM4:	Local Port	
☐ FILE:	Local Port	
☑ \\ComputerName\ShareName	Local Port	

Add Port...   Delete Port   Configure Port...

☐ Enable bidirectional support
☐ Enable printer pooling

OK   Cancel   Help

4. Click OK.

Note:
Do not choose any drivers from the Alternate Drivers list.

Accessing the printer through a network

To access your printer from another computer on the network, follow these steps.

Note:
Your printer must be set up as a shared resource on the computer to which it is directly connected before you can access it from another computer.

1. Install the printer driver to the client computer from the software CD-ROM.

2. Open the Printer folder from the Control Panel, then open the Properties for your printer.
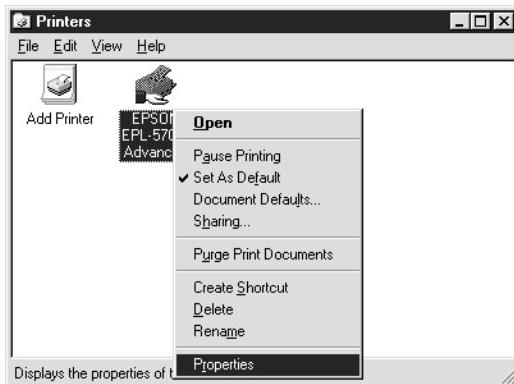
3. Click the Ports tab, then click Add Port.
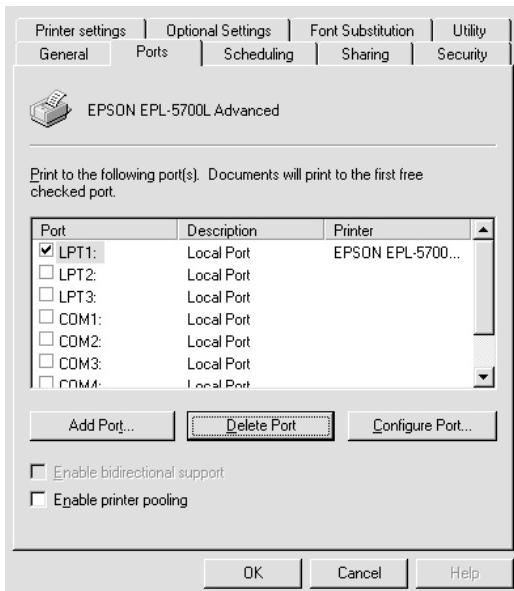
4. The following dialog box appears. Select Local Port, then click New Port.
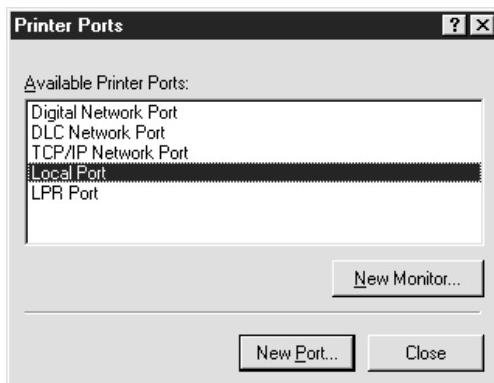
5. The following dialog box appears. In the text box, type the following information:

\\name of computer that is connected to the printer\name of the shared printer

Then click OK.
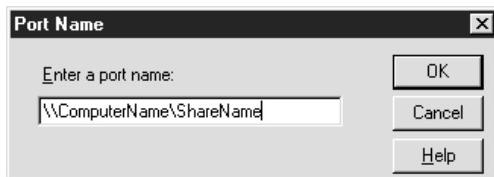
6. In the Printer Ports dialog box, click Close to return to the Ports menu.
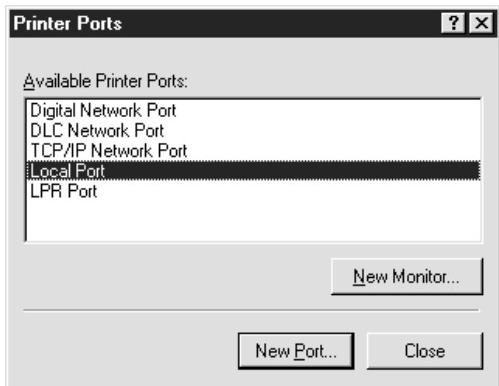
7. On the Ports menu, make sure that the new port is added and the check box is selected. Click OK to close the printer driver.
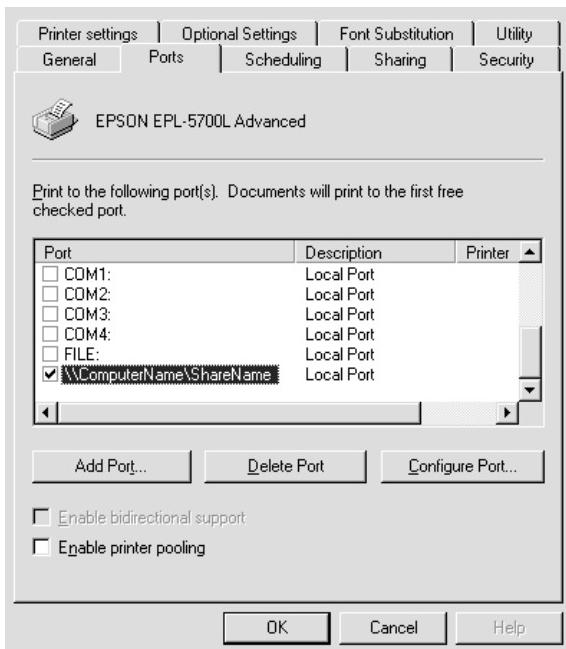
Using the DMA

Faster printing with a Direct Memory Access (DMA) is possible if your printer is connected to your computer through an Extended Capability Port (ECP), a type of parallel port with expanded specifications. With the DMA and the ECP, you can send print-job data directly to the printer without going through the CPU, which increases the effectiveness of data flow.

Before using DMA to transmit a print job confirm the following points.

❏ Check if your computer supports DMA. To confirm if your computer has an ECP chip installed, contact the manufacturer or look in the computer's documentation.

❏ Confirm the parallel port setting is "ECP" or "ENHANCED" through the BIOS Setup. Refer to your computer's documentation to set the BIOS. However, before setting the BIOS, uninstall the EPL-5700L/EPL-5700i printer driver. After setting the BIOS, re-install the printer driver.

Confirming if you can use DMA

Using DMA increases your printing speed. You can confirm if your computer can use DMA by checking the Optional Settings tab under Properties in your Printer driver.

Paper Handling

The printer can feed paper from either of two sources: the standard paper-tray or the optional lower cassette.

Please note the following points:

❏ Paper should be high quality and relatively smooth with a weight between 60 and 90 g/m² (16 to 24 lb).

❏ The printer is extremely sensitive to moisture. Be sure to store your paper in a dry environment.

❏ Use of colored paper is acceptable, but coated paper should be avoided.

❏ You may use paper with preprinted letterheads, provided that the paper and ink are both laser-printer type.

Loading the paper-tray

You can load up to 150 sheets of plain paper into the paper-tray. To load paper, follow these steps:

1. Lift off the tray cover.
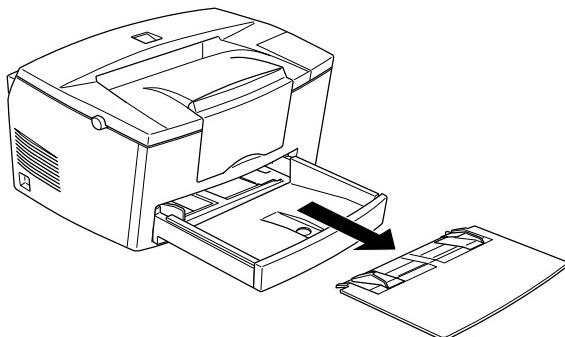
2. Fan a stack of paper and tap it on a flat surface to even the edges. Insert the paper printable side up into the tray and adjust the paper guides.
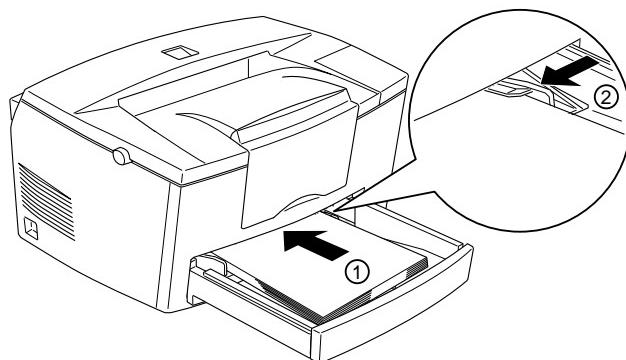
Note:
Before printing make sure the Paper Size setting in your printer driver matches the paper you load.

3. Place the cover on the paper-tray.
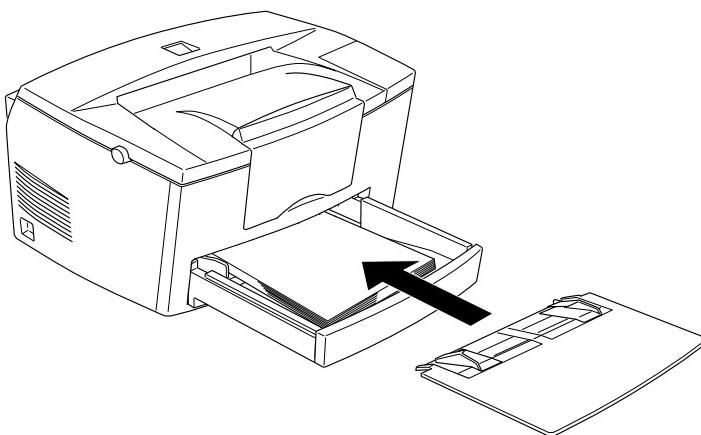
4.   Raise the extension output tray.
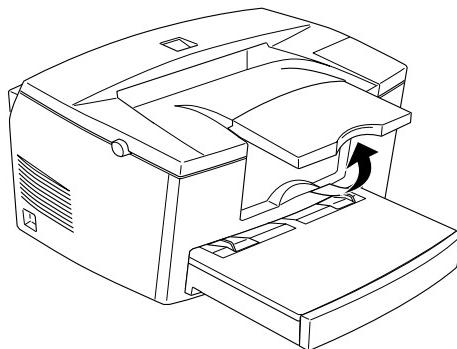
Note:

❏   *If you want to print on paper heavier than 90g/m2 (24 lb) or on special paper (such as envelopes, labels, or transparencies), see "Printing on special media" on page 1-13.*

❏   *When you feed paper manually, be sure to change the* Paper Source *setting to the* MP tray *before printing from the manual feed slot. Insert a single sheet with the printable side up, as far as it will go into the manual feed slot above the paper-tray cover. Adjust the paper guides to match the paper size you are using.*
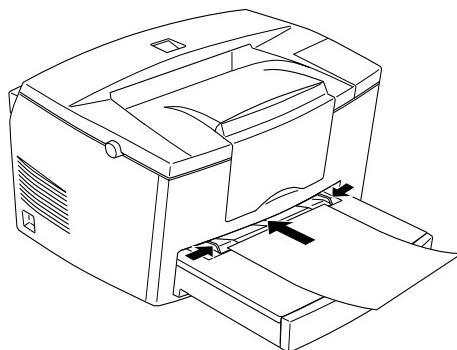
Printing on special media

Note:
Since the quality of any particular brand or type of paper may be changed by the manufacturer at any time, EPSON cannot guarantee the quality of any type of paper. Always test samples of paper stock before purchasing large quantities or printing large jobs.

The EPL-5700L/EPL-5700i Laser Printer can print on special paper stock such as heavy paper, envelopes, labels, and transparencies.

Envelopes

You can load five to ten envelopes depending on thickness (60 to 90 g/m²) in the paper-tray. Load envelopes with the flap side down and short edge first.

The printing quality on envelopes may be irregular because different parts of an envelope have different thicknesses. Print one or two envelopes to check the print quality. If the printing is too light, adjust the print density as described in "Adjusting print density" on page 1-15.

Do not use window envelopes unless they are specially designed for laser printers. The plastic on most window envelopes will melt when it comes into contact with the hot fuser.

Labels

You can load five to ten sheets of labels in the paper-tray. However, you may need to feed some types of labels one sheet at a time in the paper-tray.

Use only labels designed for laser printers or plain-paper copiers.

To prevent the adhesive from coming into contact with printer parts, always use labels that completely cover the backing sheet, with no gaps between the individual labels.

You should test the label sheet for leaking adhesive by pressing a sheet of paper on top of a sheet of labels. If the paper sticks, do not use the labels.

Transparencies

You can load up to five transparencies in the paper-tray. However, you may need to feed some types of Labels one sheet at a time in the paper-tray.

You can use only overhead projector transparencies and adhesive drafting film made for use with laser printers or plain-paper copiers.

Optimizing Print Quality

Using RITech

Resolution Improvement Technology (RITech) is EPSON's original printer technology that improves the appearance of printed lines, text, and graphics.

The RITech setting

The factory setting for RITech is on. The RITech gives the best quality text and graphics for nearly all purposes. You may not need to turn the setting off. However, if you are printing gray shading or screen patterns, change the setting to Off.

To change the RITech setting, follow these steps:

Using the printer driver:
Check or uncheck the RITech check box on the Panel menu in the printer driver.

If the pattern still needs to be improved, you may also have to change the print density setting. See the next section for more information.

Adjusting print density

Do not change the print density unless it is necessary. Changing the print density affects all text and graphics, so check the new setting by printing several pages with various kinds of text and graphics.

If your printout is too light or too dark, adjust the print density by using the printer driver. Change the Density setting on the Panel menu in the printer driver.

Note:
Increasing the print density increases toner consumption. If you select darker print, you may need to replace the developer cartridge more often.

Enhanced MicroGray

Enhanced MicroGray (Enh. MG) is EPSON's new printer technology created especially for high quality output of photos and other images with smooth tonal changes.
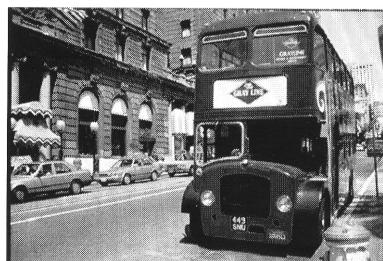
Enh. MG off   Enh. MG on

To use the Enhanced MicroGray function, select Enh. MG on the printer driver's Graphics menu.

Chapter 2

Using Options

Printer Options

You can add to your printer's capabilities by installing any of the following options:

❑ 500-Sheet Lower Cassette Unit (C81287✽ for A4 size paper, C81288✽ for Letter size paper) increases paper feeding capacity, up to 500 sheets of paper.

❑ Face-up Tray (C81286✽) enables face-up output.

❑ Optional memory module expands your printer's memory.

Note:
The asterisk (✽) is a substitute for the last digit of the product number, which varies by country.

Each of these options is discussed in its own section.

If you purchased your printer and options at the same time, first set up the printer and run the print test by following the instructions in the *Getting Ready* guide. Then install the options.

> **Caution:**
> *Before installing an option, carefully read the manual that comes with the option.*

500-Sheet Lower Cassette Unit

The optional 500-Sheet Lower Cassette Unit gives you a second paper source in addition to the standard paper-tray. This section describes how to install the cassette and load paper.

Installing

1. Turn off the printer.

2. Unplug the printer's power cord from the electrical outlet and from the printer.

3. Remove all interface cables from the interface connectors.

4. Make sure the printer and cassette are facing the same way. Lift the printer and align the pins on the cassette with the holes on the bottom of the printer. Then, lower the printer until it rests securely on the Lower Cassette Unit.
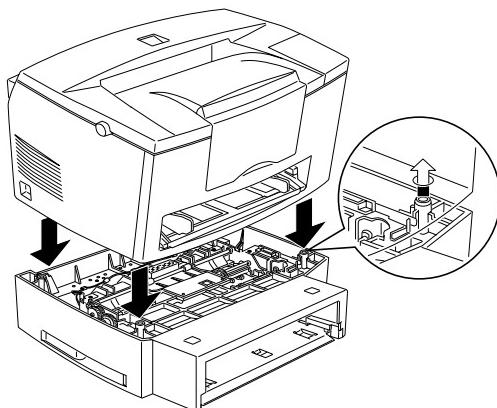
5. Reconnect any interface cables you removed.

6. Make sure the printer's power switch is turned off, then plug the power cord into the printer and into an electrical outlet.

7. Turn on the printer.

Note:
After installing the printer driver, you can confirm the optional 500-Sheet Lower Cassette Unit is installed correctly. Windows users can check in the Printer Driver by selecting the Optional Settings *tab under* Properties, *and Macintosh users can check the memory installation in the EPSON Status Monitor 3.*

Be sure to select the paper source in your application program. Since the selection method varies from application to application, see your software documentation for more information.

Loading paper

1. Pull out the paper-tray from the paper cassette.

2. Press down the plate in the paper-tray until it locks into position.
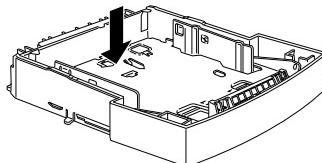
3. Fan a stack of paper and tap it on a flat surface to even the edges. Insert the paper printable side up into the tray.

4. Insert the paper-tray in the paper cassette.
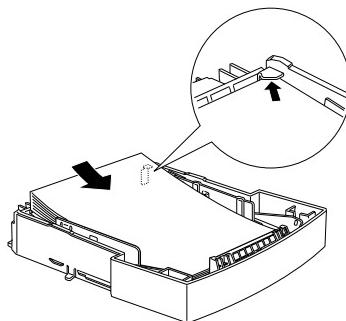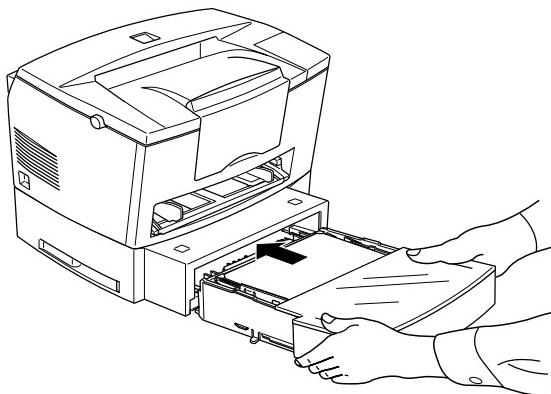
Face-up Tray

The printer normally outputs paper face down on top of the printer. If you want face-up output, you can install the optional Face-up Tray (C81286✽). This tray gives you immediate viewing of your printed output and is recommended for printing on media such as labels and transparencies that require a straight-through paper path.

Installing

1. Turn off the printer.

2. Install the Face-up Tray by sliding the mounting pins into the designated slots, one at a time. Do not force both sides in at once.
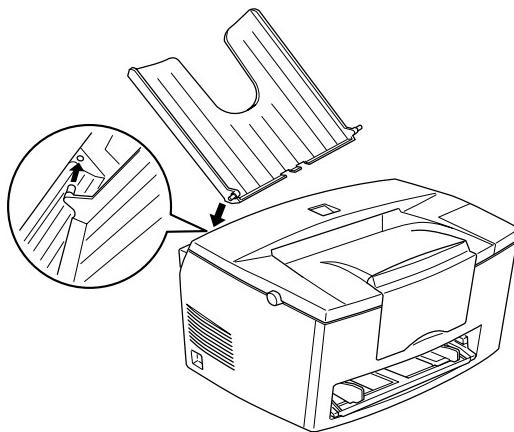
Using

The printer is factory set for face-down output. After installing the Face-up Tray, you can switch the paper path from face-up to face-down. The selector is located on the right side of the printer near the back.
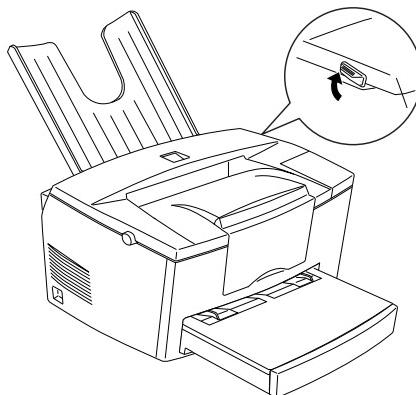
Memory Module

By installing a Single In-line Memory Module (SIMM), you can increase printer memory up to 13 MB (printer default 2MB + optional 4, 8, 16 or 32 MB). You may want to add additional memory if you are having difficulty printing complex graphics or if you regularly use numerous downloaded fonts.

Note:
The maximum amount of memory is 13 MB. Even though a 16 or 32 MB SIMM is installed, only 13 MB is accessible.

You can purchase SIMMs from various vendors. Be sure that the SIMM you purchase meets the following requirements:

❏ 72-pin, EDO type

❏ Capacity of 4, 8, 16 or 32 MB

❏ Access speed of 60 ns or less

❏ Dimensions within 108 mm (4.25 inches) × 26 mm (1.02 inches), with a thickness of 10 mm (0.4 inch)

Installing

1. Turn off the printer.

   Warning:
   To avoid electrical shock, do not attempt to install a SIMM unless the printer is turned off.

2. Unplug the power cord from the electrical outlet.

3. Turn the printer so that its right side faces you.

4. Open the printer cover by pressing the latch on the left side of the printer.

5. Remove the printer's side cover by lifting the clip and sliding the side cover backward. Then lift the side cover away from the printer.
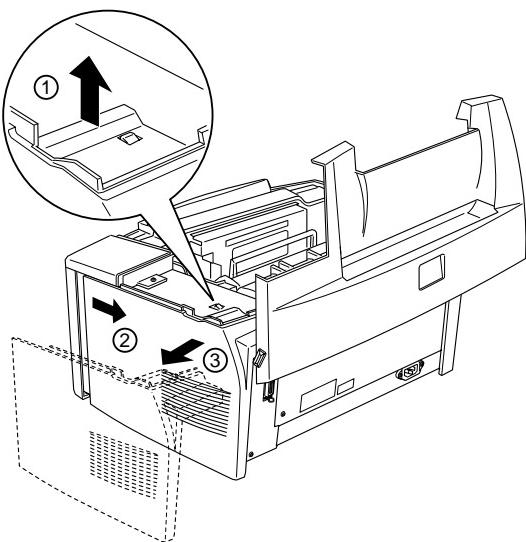
6. Loosen the retaining screws securing the shield cover, and remove the cover.
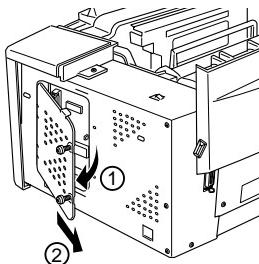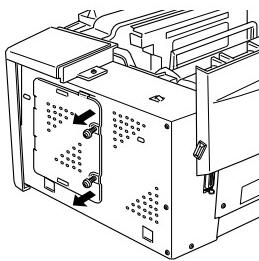
> ⚠ **Caution:**
> *Before you install the module, be sure to discharge any static electricity by touching the printer's shield cover. Otherwise, you may damage static-sensitive components.*

7. Insert the SIMM module into the RAM slot at an angle, making sure the pin numbers either 1 or 72 of the slot and the SIMM match.
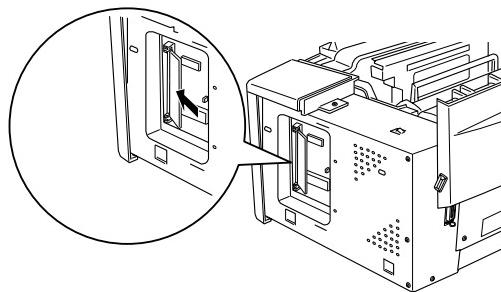
8. Press the module down until it clicks into place at right angles to the slot. Do not apply too much force.
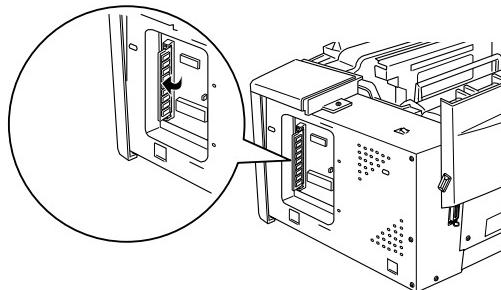
9. Replace the shield cover and tighten its screws.
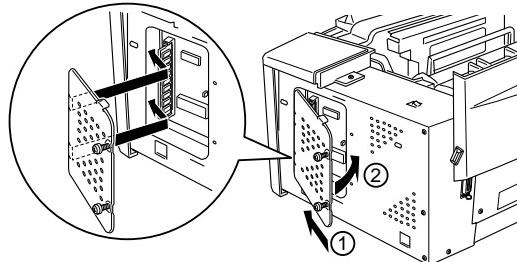
! Caution:
When replacing the shield cover, be sure not to pinch wires in the printer between the case and the shield cover.

10. Replace the printer's side cover.
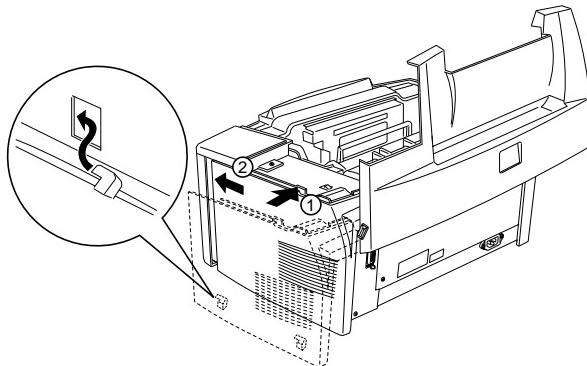
11. Gently close the printer cover.

12. Plug the power cord back in and turn on the printer.

Note:
After installing the printer driver, you can confirm the optional memory is installed correctly. Windows users can check in the Printer Driver by selecting the Optional Settings *tab under* Properties, *and Macintosh users can check the memory installation in the EPSON Status Monitor 3.*

If an incorrect amount of memory is shown on the status sheet, turn off the printer and review the steps above to make sure you correctly installed the SIMM. If the amount of memory is still incorrect, contact your dealer or a qualified service person for assistance.

Note:
The maximum amount of memory is 13 MB. Even though a 16 or 32 MB SIMM is installed, only 13 MB is accessible.

Removing

1. To access the printer's RAM slots, perform steps 1 through 7 in "Memory Module" on page 2-7.

2. Pull the clips on each side of the RAM slot outward to release the memory module.
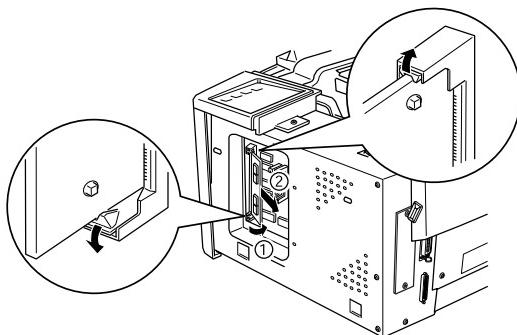
3. Grasp both sides of the SIMM and pull it out.

4. To complete the procedure, follow steps 8 through 11 in "Memory Module" on page 2-7.

Chapter 3

EPSON Status Monitor 3 Utility

3

About the EPSON Status Monitor 3

EPSON Status Monitor 3 is a utility program that monitors your printer and gives you information about its current status, including the amount of remaining toner. If a print error occurs, the Status Monitor also provides you with a message describing the error. You can access EPSON Status Monitor 3 from your printer driver.

Before using Status Monitor 3, be sure to read the printer driver's README file. This file contains the latest information on the printer driver including Status Monitor 3.

Environment for EPSON Status Monitor 3

Protocols

The protocols that must be installed to run EPSON Status Monitor 3 vary depending on your operating system and printer type. The following table divides printers into two categories: Local printers and Windows shared printers.

Use this table to determine what protocols you need to install according to your operating system and printer type, then see the corresponding section for your operating system.

	Local Printer	Windows Shared Printers
Windows 98	LPT/USB	LPT/USB
Windows 95	LPT	LPT
Windows NT 4.0	LPT	LPT
Macintosh	USB	—

Windows shared printer

To monitor a shared printer from the client through the server machine, select Allow monitoring of shared printer in the Monitoring Preference dialog box in the server machine. For information, see "Setting Monitoring Preferences" on page 3-9.
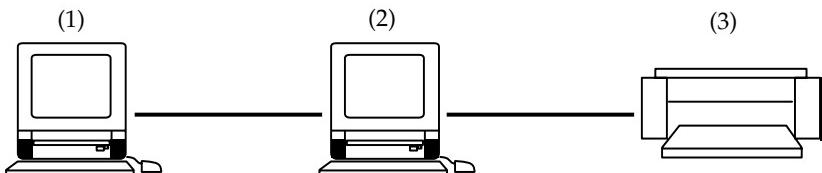
1: client machine
2: server machine
3: Windows shared printer

See the README file for more information about support for Windows shared printers.

Local Printer

Connect the printer directly to the printer port of your computer.
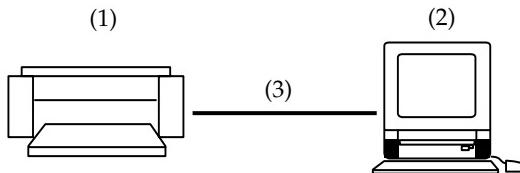
1: local printer
2: Windows 98/95/NT4.0
3: Parallel cable/USB cable

Windows 98/95	Windows NT 4.0
Bi-directional support is necessary.	Do not need any special settings.

For Windows 98/95:
You need to set the bi-directional support in the printer's properties dialog box. Click the Details tab and click Spool Settings. Then click the Enable bi-directional support for this printer radio button.

Accessing the EPSON Status Monitor 3

EPSON Status Monitor 3 monitors the printer during printing or when the EPSON Status Monitor 3 dialog box is opened.

For Windows users

Follow these steps to access EPSON Status Monitor 3.

1. Double-click the My Computer icon.

2. Double-click the Printers folder.

3. Right-click the icon of your printer, and click Properties. If you are using Windows NT 4.0, you can choose either Document Defaults or Properties.

4. Click the Utility tab.
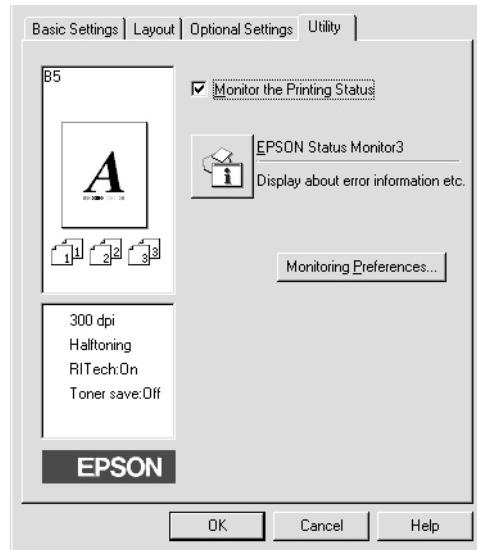
5. Click EPSON Status Monitor 3 to start EPSON Status Monitor 3.

Note:
Unchecking the Monitor the Printing Status check box during normal operation causes the Status Alert window to stop monitoring some errors.

For Macintosh users

You can find the EPSON Status Monitor 3 for EPL-5700L and EPL-5700i by selecting the EPSON Status Monitor 3 (alias) in the Apple menu.

Note:
❏ *The appropriate printer port must be selected in the* Chooser *to receive the necessary information from the selected printer driver when the EPSON Status Monitor 3 starts. If the printer port is not correct an error will occur.*

❏ *If you change the printer driver in the* Chooser, *while the spool file is being printed in background printing, the output to the printer may be disrupted.*

❏ *The printer status and display of the consumables, in the status window, can only be seen when the status is normally acquired in the* Chooser.

Getting Printer Status Details

You can monitor the current status and consumable information of the printer in the EPSON Status Monitor 3 dialog box.

For Windows Users
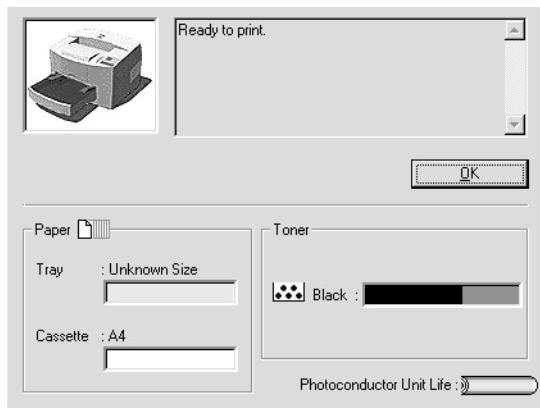
Printer image:	The image at the upper left shows the printer status graphically.
Text box:	The text box next to the printer image displays the current status of the printer. When a problem occurs, the most likely solution is displayed.
OK button:	Click OK to close the dialog box.
Paper:	Displays the paper size and approximate amount of remaining paper in each paper source. Optional cassettes are displayed only if they are installed.
Toner:	Displays the amount of toner remaining. The toner icon flashes when the toner is low (10 percent or less).
Photoconductor Unit Life:	Displays the Photoconductor unit's remaining functional life.

3

For Macintosh Users
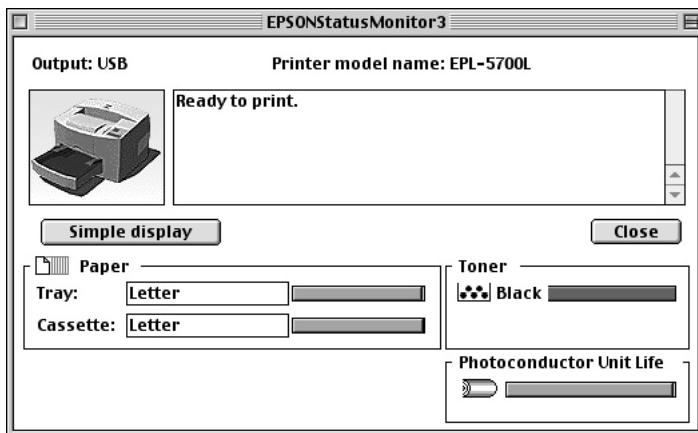
Printer image: The image at the upper left shows the printer status graphically.

Text box: The text box next to the printer image displays the current status of the printer. When a problem occurs, the most likely solution is displayed.

Close button: Click Close to close the dialog box.

Simple display Reduces the display and shows only the status details screen.

Paper: Displays the paper size and approximate amount of remaining paper in each paper source. Optional cassettes are displayed only if they are installed.

Toner: Displays the amount of toner remaining. The toner icon flashes when the toner is low (10 percent or less).

| Photoconductor Unit Life: | Displays the Photoconductor unit's remaining functional life. |

Setting Monitoring Preferences

For Windows users

To make specific monitoring settings, click the Monitoring Preferences button in the Utility menu of the printer driver's properties dialog box. The Monitoring Preferences dialog box appears.
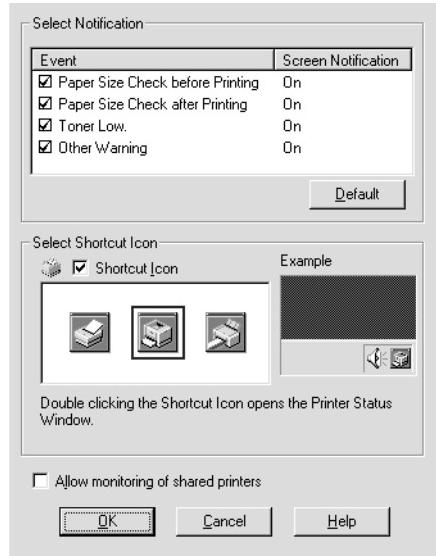
Note:
This utility is only available in Windows.

Settings:

Select Notification:	Select the error notification type you want.
Default button:	Restores default settings.
Select Shortcut Icon:	To use the shortcut icon, check the Shortcut Icon check box and select the icon. The icon you select appears on the right side of the task bar. Right-click the shortcut icon and select Monitoring Preferences to open the Monitoring Preferences dialog box; and EPSON EPL-5700i/L Advanced to open the EPSON Status Monitor 3 dialog box. Double-clicking the shortcut icon also opens the EPSON Status Monitor 3 dialog box.
Allow monitoring of shared printers:	To monitor shared printer, check this box. You need to make this setting with EPSON Status Monitor 3 on the server.
OK button:	Saves new changes.
Cancel button:	Cancels any changes.
Help button:	Opens the Help screen of the Monitoring Preferences dialog box.

Status Alert Window

The Status Alert window opens under the conditions you select in the Monitoring Preferences dialog box. This Status Alert window indicates what type of error has occurred and offers you a possible solution. The Status Alert window automatically closes when the problem is cleared.

For Windows users
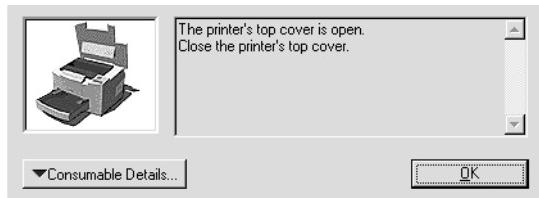
If you want to see the consumable information of the printer, click the Consumable Details button. If you click this button, this dialog box will no longer disappear even if the problem is cleared unless you click the OK button.

For Macintosh users

The EPSON Status Monitor 3 automatically appears when a problem occurs with your printer, if background printing is ON.
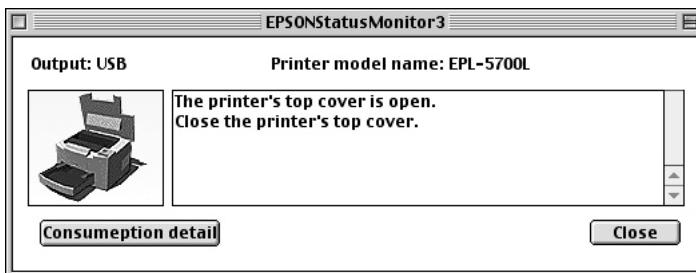
Stopping Monitoring (Windows only)

EPSON Status Monitor 3 monitors the printer during printing or when the EPSON Status Monitor 3 dialog box is opened.

To monitor during printing only, close EPSON Status Monitor 3.

To stop monitoring a printer completely, clear the Monitor the Printing Status check box in the Utility menu. If you want to speed up printing or you don't need to monitor the printer at all, clear this item.

If you clear the Monitor the Printing Status check box, the Alert window no longer notifies you when errors occur; however, you can still monitor the current printer status by clicking the EPSON Status Monitor 3 icon on the Utility menu.

Note:
For Windows NT 4.0, the Monitor the Printing Status *check box is displayed in the Utility menu of Document Defaults.*

Troubleshooting

4

Problems and Solutions

Ready and Error Lights

The ready (green) and error (red) lights on the top of the printer may be the first indication of trouble. Whether the lights are flashing or not indicates different things, as described below. The StatusAlert window in the EPSON Status Monitor 3 utility indicates what type of error has occurred and offers you a possible solution. Look through this section to find the kind of problem you have, then try the recommended solutions in the order they are presented until your problem is solved.

Ready Light (green)	Error Light (red)	Printer Status
Not lighted	Not lighted	Printer is off.
Lighted	Not lighted	Printing is possible.
Flashing	Not lighted	Printer is warming up or receiving data.
Not lighted	Flashing	Either the printer is out of paper or there is an error that can be easily remedied.
Not lighted	Lighted	This is an error that requires a service call. Alternatively, try turning off the printer and then turning it back on. If this does not remedy the error, contact your dealer or a qualified service person.

Note:
If the problem remains after you work through the suggestions in this section, contact your dealer for assistance.

Preventing paper feed and paper jam problems

If you have frequent paper feed or paper jam problems, use this checklist of corrective measures:

❏ Fan the stack of paper and then tap its edges to align them before loading.

❏ Be sure you do not load too much paper in the tray.

❏ Be sure to adjust the paper guides so that the paper feeds freely.

❏ Never allow more than 100 sheets to accumulate on the extension output tray.

❏ Try turning over the stack of paper in the paper-tray. Most paper packages indicate the best side for printing.

Clearing paper jams

The printer stops and the error light (red) is flashing

The following steps describe how to remove paper when it is jammed in the manner shown. Other types of paper jams are described later in the chapter.
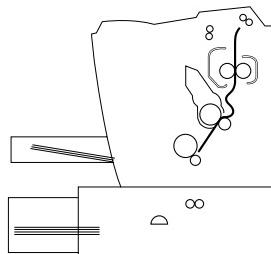
1. Make sure the printer is turned off.

2. Open the printer cover by pressing the latch on the left side of the printer and lifting the cover up all the way.
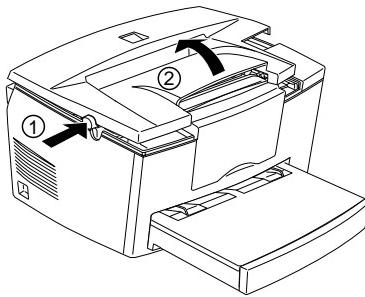
![Warning icon] *Warning:*
Opening the printer cover exposes the fuser, which is marked CAUTION Hot Surface Avoid Contact. Be careful not to touch the fuser. If the printer has been in use, the fuser may be very hot.

CAUTION Hot Surface Avoid Contact
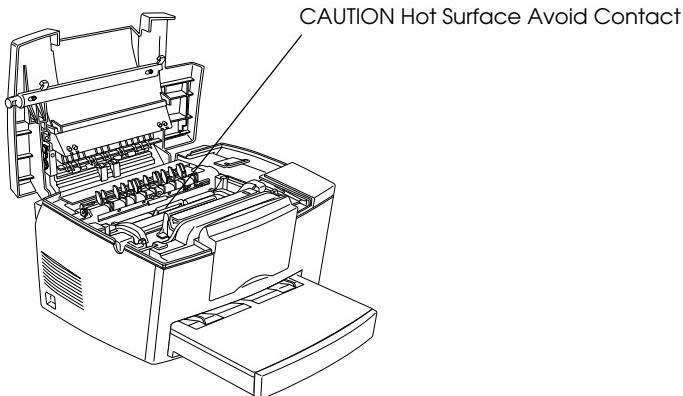
3. Remove the developer cartridge.
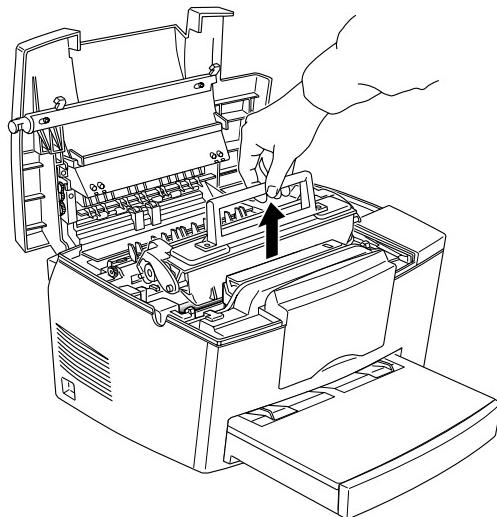
> ![Caution] **Caution:**
> *When removing the developer cartridge, never touch the developing roller under the flap; otherwise, the print quality may be impaired.*
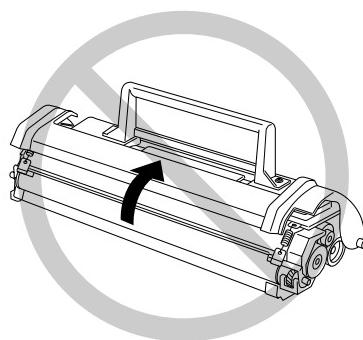
4. Remove the photoconductor unit.
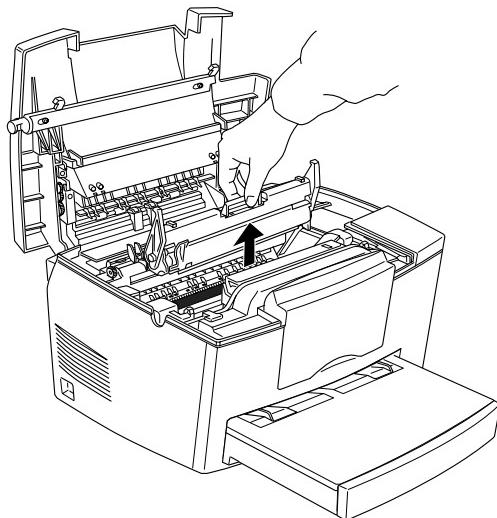
⚠ *Caution:*
Never touch the photoconductor unit's light-sensitive drum; otherwise, the print quality may be impaired.
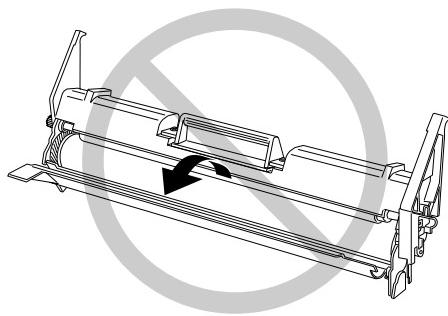
5. Remove any paper from the paper path.
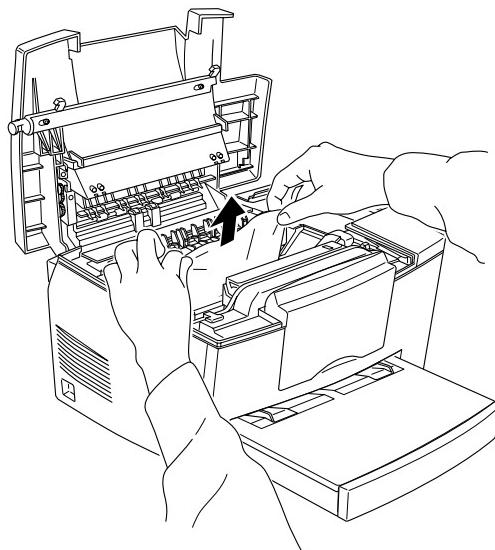
Note:
If paper is jammed at the fuser, grasp the bottom of the paper and pull it out.
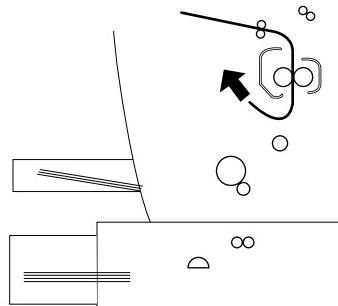
6. Reinstall the photoconductor unit, then the developer cartridge.

7. Close the printer cover.

8. Tap the edges of the paper on a flat surface and carefully reload it into the paper-tray. (Do not reload curled or wrinkled sheets.)

Printing automatically restarts from the page that jammed. If the error light (red) continues flashing after removing all jammed paper, open and close the printer cover to clear the error.

Feed Jams

Note:
Feed jams are shown in the illustration below.
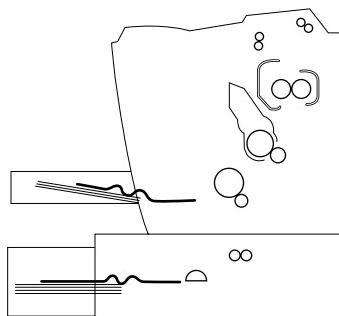
1. Remove the paper-tray cover and the stack of paper.
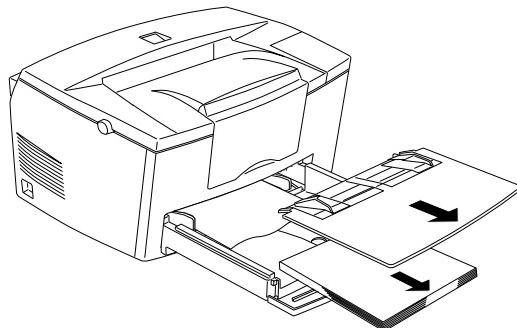
2. Carefully remove all the paper from the paper-tray along with any sheets that have fed part way into the printer.
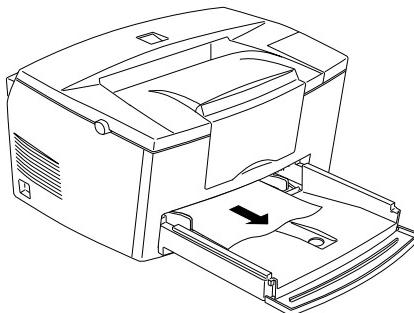
3. Open the printer cover. Be sure to remove any pieces of paper that may have torn off or are remaining in the printer.

    If necessary, remove the developer cartridge and photoconductor unit, and any paper left in the paper feed path. Then reinsert the cartridge and the unit.

4. Tap the edges of the paper stack on a flat surface and carefully reload it into the paper-tray. (Do not reload curled or wrinkled sheets.) Then reinstall the paper-tray cover.

5. Close the printer cover. The jammed page's print data is automatically reprinted.

Feed Jam when using the optional 500-Sheet Lower Cassette Unit

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Note:
When a feed jam occurs, the jammed paper looks like the illustration below.
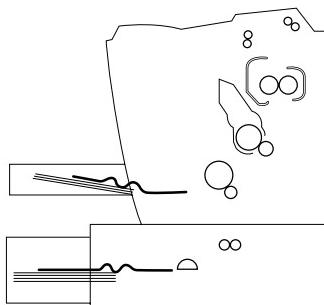
1. Remove the cassette from the 500-Sheet Lower Cassette Unit.
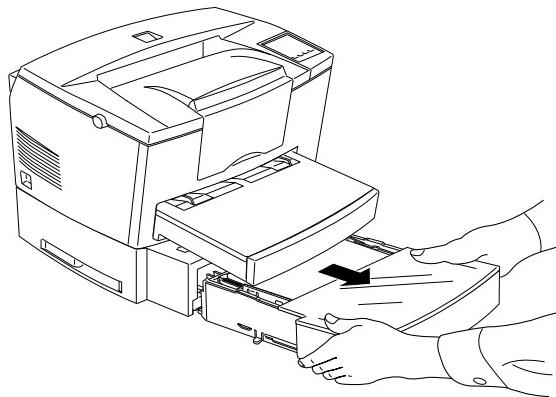
2. Remove any jammed paper from the paper-tray or the cassette, and discard any curled or wrinkled sheets.
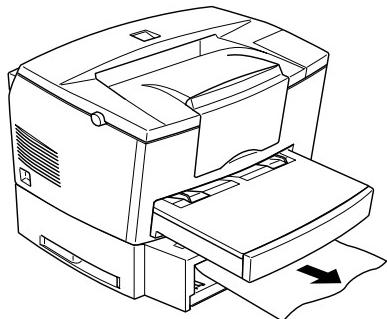
3. Remove all paper from the cassette and press down the plate in the cassette until it locks into position.
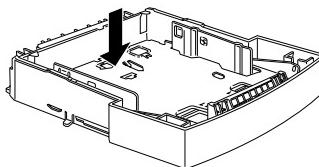
4. Tap the edge of the stack of paper, then replace it in the cassette, making sure the paper is evenly aligned and the top sheet is below the maximum paper mark.

5. Make sure you are using the correct paper size. The cassette (C81287✽) accomodates A4 size paper, and the cassette (C81288✽) accomodates Letter size paper. Also make sure you are using paper that meets the specifications for this printer.

6. Reinstall the cassette to the 500-Sheet Lower Cassette Unit.

7. Open then close the printer cover. The jammed page's print data is automatically reprinted.

Operational problems

The ready light (green) does not turn on when you turn the printer on

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Turn off the printer and check the power cord connections between the printer and the electrical outlet; then turn the printer back on.

If the electrical outlet is controlled by an outside source such as a wall switch, make sure the switch is turned on or plug another electrical device into the outlet to check whether the outlet is operating properly.

The ready light (green) is on but nothing prints

Your computer may not be properly connected to the printer. Perform the procedure described in "Connecting to the computer" in the *Getting Ready* guide.

The interface cable may not be plugged in securely. Check both ends of the cable between the printer and the computer. Be sure to secure the connector using the wire retaining clips.

Make sure you use a double-shielded, twisted-pair interface cable no more than six feet in length.

The developer cartridge may be empty. To replace the cartridge, see "Replacing the developer cartridge" on page 5-2.

Printout problems

Some or all of the printout is garbled or printed as asterisks

Make sure both ends of the interface cable are plugged in securely.

Make sure you use a double-shielded, twisted-pair interface cable no more than six feet in length.

If the printer still does not print correctly, contact your dealer or a qualified service person.

Position of the printout is not correct

Make sure you are using the correct page length, margin settings and offset settings in your software program.

Graphics don't print correctly

Graphics require large amounts of memory; see "Option problems" on page 4-18.

Print quality problems

The background is dark or dirty

Turn off the printer. Clean the paper path inside the printer using a soft, dry, lint-free cloth.

Clean internal printer components by printing three pages with only one character per page.

You may not be using the correct type of paper for your printer. If the surface of your paper is too coarse, printed characters may appear distorted or broken. Smooth, high-quality copier paper is recommended for best results. See "Specifications" on page A-2 for information on choosing paper.

There may be a problem with the developer cartridge. Remove the cartridge and shake it gently from side to side and then from front to back to distribute the toner evenly, then reinstall it. If this does not solve the problem, replace the developer cartridge. For more information, see "Replacing the developer cartridge" on page 5-2.

You may need to replace the photoconductor unit. For more information, see "Replacing the photoconductor unit" on page 5-6.

Black or white bands appear in the printout

Turn off the printer. Clean the paper path inside the printer using a soft, dry, lint-free cloth.

Clean internal printer components by printing three pages with only one character per page.

There may be a problem with the developer cartridge. Remove the cartridge and shake it gently from side to side and then from front to back to distribute the toner evenly, then reinstall it. If this does not solve the problem, see "Replacing the developer cartridge" on page 5-2.

You may need to replace the photoconductor unit. For more information, see "Replacing the photoconductor unit" on page 5-6.

Uneven darkness

❏ Your paper may be moist or damp. Do not store your paper in a humid or damp environment.

❏ Make sure the paper type is correct.

❏ Check whether the printer is in Toner Save mode.

❏ Confirm if the density setting is light.

Turn off the printer. Take out the developer cartridge, shake it gently from side to side and then from front to back to distribute the toner evenly, and then reinstall it.

If this does not solve the problem, install a new cartridge. For more information, see "Replacing the developer cartridge" on page 5-2. Then print several pages to check the print quality.

Toner smudges

Your paper may be moist or damp. Do not store your paper in a humid or damp environment.

You may not be using the correct type of paper for your printer. If the surface of your paper is too rough, printed characters may appear distorted or broken. Smooth, high-quality copier paper is recommended for best results. See "Specifications" on page A-2 for information on choosing paper.

Turn off the printer. Remove the developer cartridge, shake it from side to side to distribute the toner, and wipe the cartridge's bottom with a clean, dry, lint-free cloth.

Clean the paper path inside the printer using a clean, soft, dry, lint-free cloth.

Clean internal printer components by printing three pages with only one character per page.

If the problem remains, replace the developer cartridge. For more information, see "Replacing the developer cartridge" on page 5-2.

Missing areas on printed image

Your paper may be moist or damp. Printing is sensitive to moisture absorbed by the paper. The higher the moisture content in the paper, the lighter the printed output. Do not store your paper in a humid or damp environment.

You may not be using the correct type of paper for your printer. If the surface of your paper is too coarse, printed characters may appear distorted or broken. Smooth, high-quality copier paper is recommended for best results. See "Specifications" on page A-2 for information on choosing paper.

Completely blank pages

If, after checking the toner status in the EPSON Status Monitor 3, the Toner LOW message indicates that the amount of toner is low, see "Replacing the developer cartridge" on page 5-2.

To check that the photoconductor unit and the developer cartridge are correctly installed, see "Replacing the developer cartridge" on page 5-2.

The problem may be with your software program or interface cable. Print out a status sheet through the printer driver. If blank pages continue to print, the problem may be with the printer. Turn off the printer and contact your dealer.

The printed image is light or faint

Darken the Density setting on the Panel menu of your printer driver.
You may be using the wrong type of paper.

Your paper may be moist or damp. The higher the moisture content in the paper, the lighter the printed output. Do not store your paper in a humid or damp environment.

Take out the developer cartridge, shake it gently from side to side to distribute the toner, and then reinstall it. If the problem persists, see "Replacing Consumable Products" on page 5-2.

The Toner Save mode may be on. Turn off the Toner Save mode using the printer driver.

The image is too dark

Lighten the Density setting on the Panel menu of your printer driver.

If the problem persists, see "Replacing Consumable Products" on page 5-2.

Non-printed side of the page is dirty

Toner may have spilled in the paper feed path. Turn off the
printer. Remove the developer cartridge and the photoconductor
unit and then clean the paper path of the printer using a clean,
soft, lint-free cloth.

> **Caution:**
> *Opening the printer exposes the fuser, which is marked by a
> CAUTION Hot Surface Avoid Contact label. Be careful not to
> touch the fuser.*

Memory problems

Under Run Error

This message indicates that there is not enough memory available
for the print job. The printer may not print correctly or an under
run error may occur. The under run error is displayed in the alert
window in the EPSON Status Monitor 3. For information on
installing more memory, see "Memory Module" on page 2-7.

Option problems

Paper does not feed from the optional 500-Sheet Lower Cassette Unit

Make sure you have selected the proper paper source in your
software.

There may be no paper in the 500-Sheet Lower Cassette Unit. Load
it with paper.

Be sure that the 500-Sheet Lower Cassette Unit is properly installed and that you have not tried to load it with too many sheets of paper. The cassette can hold a maximum of 500 sheets of 75g/m² (20lb) paper.

The 500-Sheet Lower Cassette Unit may not be installed properly. See Chapter 2, "Using Options," for instructions on installing the 500-Sheet Lower Cassette Unit.

Feed Jam when using the optional 500-Sheet Lower Cassette Unit

See "Feed Jam when using the optional 500-Sheet Lower Cassette Unit" on page 4-10.

Problems Using EPSON Status Monitor 3

The Status Alert Window in the EPSON Status Monitor 3 shows the various troubles and the methods to solve them. To solve your particular problem open the EPSON Status Monitor 3, find the trouble and solve the problem. For Macintosh users, the EPSON Status Monitor 3 automatically appears when a problem occurs with your printer, if background printing is on.

A communication error has occurred

The printer may be turned off, check to see that your printer is turned on. If it is, then check the power cord to see if it is plugged into the electrical outlet. Then turn on the printer.

The printer may be running a self-test or initializing itself. If this is the case, allow the computer enough time to finish initialization.

The problem may be that the printer is not ready to print. Make sure the printer is ready to print. For more information, see the *Getting Ready* Guide.

The status information does not match the real status of the printer

EPSON Status Monitor 3 monitors the printer at regular intervals. You may need to wait until EPSON Status Monitor 3 monitors the printer again, and automatically changes the status.

Windows shared printers cannot be monitored

Monitoring of shared printers is set internally by EPSON Status Monitor 3. To monitor Windows shared printers, right-click the Network Neighborhood and then click Properties. Verify that file and printer sharing for Microsoft Networks is shown in the list of installed components.

Also, verify that EPSON Status Monitor 3 is installed in the computer hosting the Windows shared printer, and be sure that the Allow monitoring of shared printers check box is checked in the Monitoring Preferences dialog box.

In Windows 98/95, IPX/SPX compatible protocols cannot be set on the network module.

Cannot install the printer driver in Windows

If your computer did not have Windows 98 pre-installed, it is an upgrade from Windows 95 to 98. It may not support USB connectors, and may not print. Confirm whether your computer supports USB connectors by calling the manufacturer.

The printer driver is installed as an "unknown device" in the device manager

During plug-and-play installation, some problem disrupted the installation. While the printer is connected through the USB cable and the power is on, check the Device Manager in the My Computer menu. If USB printer or EPL 5700L/i is installed in unknown device, then the printer hasn't been properly installed. Disconnect the USB cable from the printer, then reconnect it and reinstall the printer driver.

Cannot print from Windows

The driver's printer port may be incorrect. To check the setting of the printer port, select properties in the file menu of the printer dialog box in the program group.

Your printer is not displayed in the selector dialog box

Make sure that the printer's power is on. The printer port does not appear on the menu because the computer does not recognize the printer connection. Try disconnecting and then re-connecting the USB cable.

Although connected to the USB hub, the printer does not operate correctly

The printer may not be connected to the first level USB hub. There are five levels of USB connectors, make sure that your printer is connected to the first level.

Make sure that the computer has correctly recognized the USB hub. Check the USB hub under universal serial bus in the device manager.

Chapter 5

Maintenance and Transportation

5

Replacing Consumable Products

Your printer uses two consumable components, which are listed below along with their approximate life expectancies.

Developer cartridge (S050010)
   Up to 6000 pages depending on the complexity of print jobs

Photoconductor unit (S051055)
   Up to 20000 pages

The conditions of the consumable products are displayed in the Status Monitor 3.

Replace the developer cartridge if you notice a decline in print quality. Replace the photoconductor unit only if print quality problems remain after replacing the developer cartridge.

Replacing the developer cartridge

Follow these steps to replace the developer cartridge.

1. Make sure the printer is turned off.

2. Open the printer cover by pressing the latch on the left side of the printer and lifting the cover up all the way.
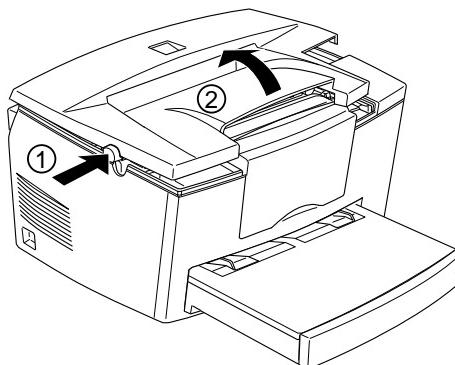
> **c** *Caution:*
> *You must completely open the printer cover when replacing the developer cartridge; otherwise, you may damage the printer.*

3. Hold the cartridge by the handle and pull it straight up and out of the printer.
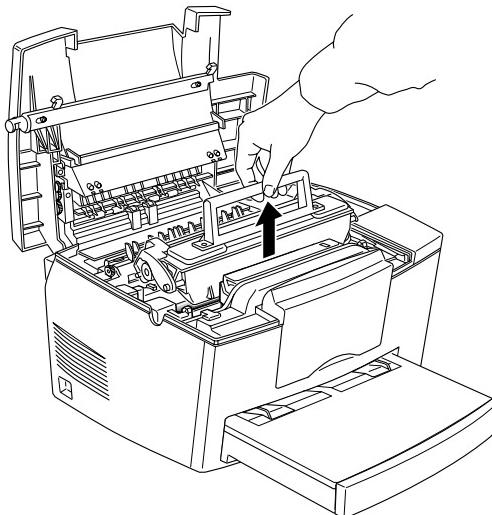
> **⚡** *Warning:*
> *Do not touch the fuser, which is marked CAUTION Hot Surface Avoid Contact.*

4. Dispose of the used developer cartridge properly.

> **c** *Caution:*
> *Do not turn the developer cartridge upside down.*

5. Remove the new developer cartridge from its bag. While holding the cartridge horizontally, gently shake it a few times from side to side and then from front to back to distribute the toner evenly.
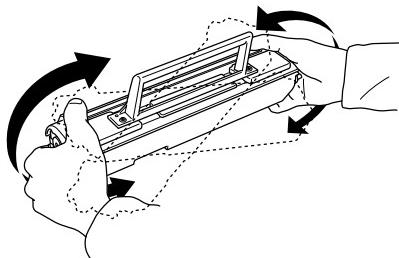
6. Remove the protective tape seal from the cover of the developer cartridge.
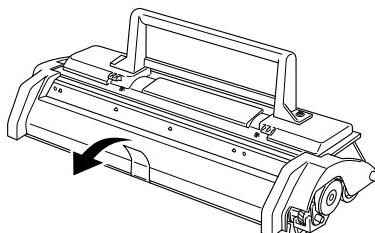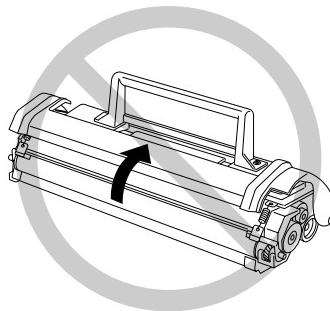
7. Hold the cartridge by its handle and lower it into the printer, making sure that the pins on each side of the cartridge fit into the grooves inside the printer. Slide the cartridge gently into the opening until it locks into place.
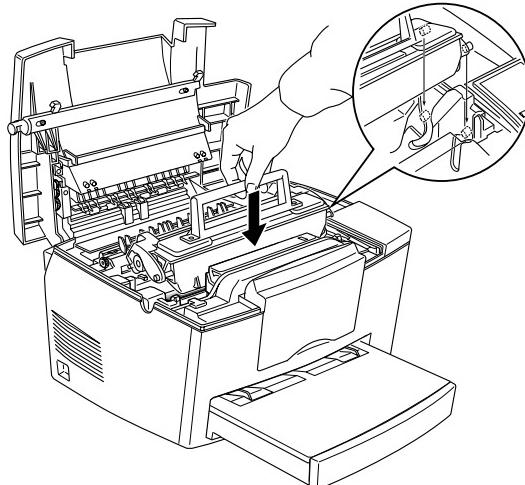
8. Gently press down on the printer cover until it clicks shut.
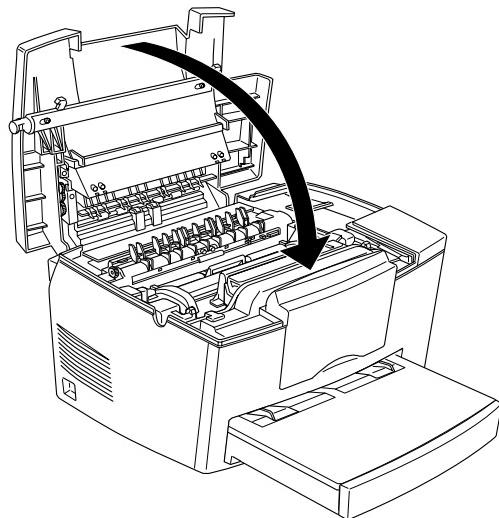
9. When turning on the printer, access the printer settings dialog box in the printer driver, and click the Toner Level Clear button. The Toner level clear dialog box is displayed.

10. Click OK to reset the toner level counter.

   Whenever you replace the developer cartridge, you should clean the paper roller as described in "Cleaning the inside of the printer" on page 5-9.

Replacing the photoconductor unit

1. Make sure the printer is turned off.

2. Open the printer cover by pressing the latch on the left side of the printer and lifting the cover up all the way.

> ⚠ *Caution:*
> *You must completely open the printer cover to replace the*
> *photoconductor unit; otherwise, you may damage the*
> *printer.*

3. Remove the developer cartridge.

4. Slide the photoconductor unit gently out of the printer as shown below.
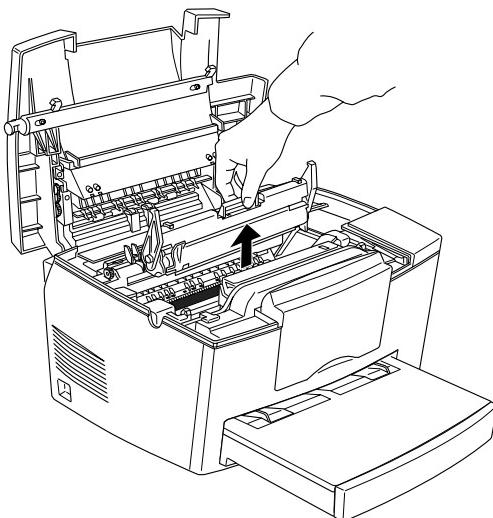
> ⚠ *Warning:*
> *Do not touch the fuser, which is marked CAUTION Hot*
> *Surface Avoid Contact.*

5. Remove the new photoconductor unit from its bag.

> ⚠ **Caution:**
> *Never touch the photoconductor unit's light-sensitive drum;
> otherwise, print quality may be impaired.*
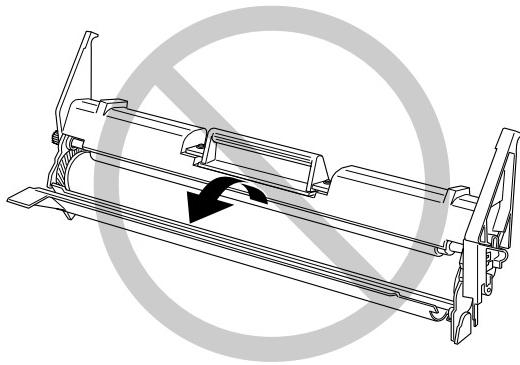
6. Insert the pins on each side of the new photoconductor unit
   into the grooves inside the printer. Slide the unit gently into
   the opening until it locks into place.
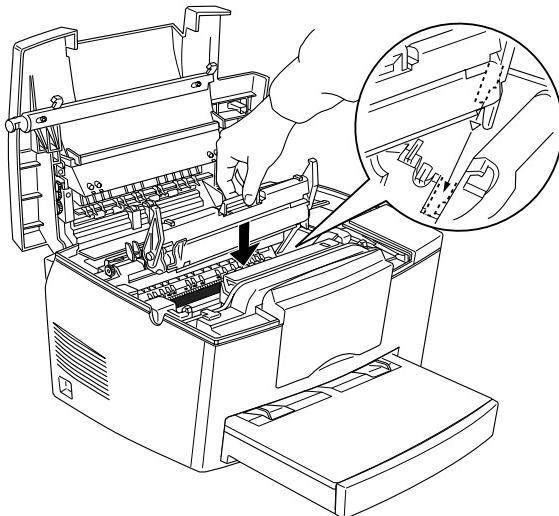
7. Reinstall the developer cartridge.

8. Press down the printer cover until it clicks shut.

9. When turning on the printer, access the printer settings dialog box in the printer driver, and click the OPC Level Clear button. The OPC level clear dialog box is displayed.

10. Click OK to reset the Photoconductor level counter.

Cleaning the Printer

The printer needs only minimal cleaning. If you notice a decline in print quality, clean the inside of the printer as described in this section.

You should also clean the paper cassette and the printer cover every few months. These procedures are described later in this section.

Cleaning the inside of the printer

Fine particles of dust can collect inside the printer. Follow the steps below to clean the inside of the printer and the paper feeder:

1. Make sure the printer is turned off.

2. Open the printer cover.

Warning:
Opening the printer exposes the fuser, which is marked CAUTION Hot Surface Avoid Contact.

3. Remove the developer cartridge and the photoconductor unit as each are described in "Replacing Consumable Products" on page 5-2.

4. Remove any dirt inside the printer with a clean, dry, lint-free cloth. Do not use compressed air. If you have paper feed problems, clean the paper roller by opening the roller cover, and wiping the roller with a clean, dry, lint-free cloth.
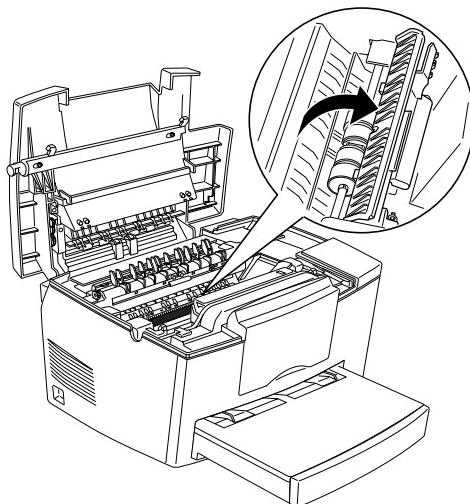
5. Replace the photoconductor unit, then replace the developer cartridge.

6. Close the printer cover.

7. Remove all the paper from the paper-tray and clean the tray with a clean, dry, lint-free cloth.

Removing spilled toner

If toner spills inside the printer, do not use the printer until you remove all the spilled toner.

If only a small amount of toner is present, carefully wipe out the inside of the printer with a clean, dry, lint-free cloth.

If a large amount of toner is present, use a small vacuum cleaner (available from computer supply stores) to remove it. Then carefully wipe with a clean, dry, lint-free cloth.

> ⚠ *Caution:*
> *Toner and other fine powders can damage some vacuum cleaners. Be sure to read the instructions for your vacuum cleaner before you use it on spilled toner.*

Note:
If you spill toner on your clothing, rinse it off with cold water. Do not use hot water as it may cause the toner to leave a permanent stain.

Cleaning the printer case

If the printer's outer case is dirty or dusty, turn off the printer and clean it with a clean, dry, lint-free cloth, dampened with a mild detergent.
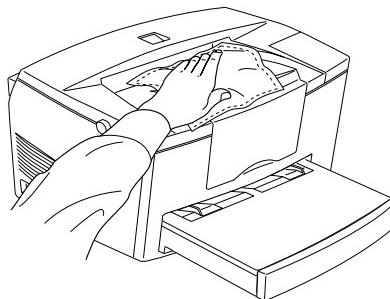
> ⚠ *Caution:*
> *Never use alcohol or thinner to clean the printer cover; these chemicals can damage the components and the case. Be careful not to get water on the printer mechanism or any electronic components.*

Transporting the Printer

If you need to transport your printer, carefully repack it using the original box and packing materials as follows:

1. Turn off the printer.

2. Lift off the paper-tray cover. Remove all paper from the paper-tray.

3. Grasp the base part of the paper-tray with both hands, press inward on the edges, and pull it out of the printer.
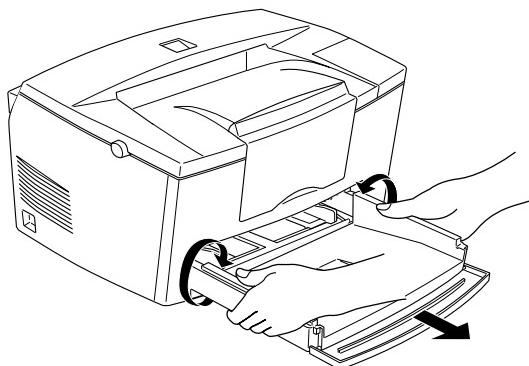
4. Unplug the power cord from the electrical outlet; then disconnect the interface cable from the printer.

5. Remove the optional 500-Sheet Lower Cassette Unit, if installed.

6. Replace the printer's protective materials, then repack the printer in its original box.

Caution:
Do not expose the photoconductor unit and the developer cartridge to light any longer than necessary.

Appendix A

Technical Specifications

A

Paper

Specifications

Note:
Since the quality of any particular brand or type of paper may be changed by the manufacturer at any time, EPSON cannot guarantee the quality of paper. Always test samples of paper stock before purchasing large quantities or printing large jobs.

Paper Types:	Plain paper, recycled paper, labels, envelopes, transparencies, colored paper, card stock, letterhead

Note:
Use recycled paper under normal temperature and humidity conditions only. Poor quality paper may reduce print quality, cause paper jams and other problems.

Paper weight:

Plain paper	60 to 90 g/m², 16 to 24 lb
Card stock	90 to 157 g/m², 24 to 42 lb

Paper size:

Paper	A4 (210 mm × 297 mm)
	A5 (148 mm × 210 mm)
	B5 (182 mm × 257 mm)
	Letter (8 1/2 in. × 11 in.)
	Half Letter (5 1/2 × 8 1/2 in.)
	Legal (8 1/2 × 14 in.)
	Executive (7 1/4 × 10 1/2 in.)
	Government Legal (8 1/2 × 13 in.)
	Government Letter (8 × 10 1/2 in.)
	F4 (210 mm × 330 mm)
	Custom
	(76 mm × 127 mm to 215 mm × 355 mm, 3 × 5 in. to 8.5 × 14 in.)

Envelopes: Monarch (3 7/8 × 7 1/2 in.)
Commercial 10 (4 1/8 × 9 1/2 in.)
DL (110 mm × 220 mm)
C5 (162 mm × 229 mm)
C6 (114 mm × 162 mm)
International B5 (176 mm × 250 mm)

Caution:
Only load paper sizes that are listed above.

Printable area: The area on a page contained within a 4
mm minimum margin on all sides

A

Printer

General

Printing method:	Laser beam scanning and dry electrophotographic process
Resolution:	600×600 dpi, 300×300 dpi
Printing speed:	Up to 8 pages per minute depending on the font and quantity of data
First print:	Less than 19 seconds with A4/letter
Warm-up time:	About 20 seconds at normal temperature
Paper feed:	Automatic
Paper feed alignment:	Center alignment for all sizes
Input paper supply ($75g/m^2$ paper):	Up to 150 sheets in the tray Up to 500 sheets per optional 500-Sheet Lower Cassette Unit Up to 10 envelopes, depending on thickness
Paper output:	Face-down or face-up (optional) selection
Paper output capacity ($75g/m^2$ paper):	Face-down 100 sheets Face-up 20 sheets with the optional Face-up Tray
RAM:	2 MB, expandable up to 13 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:	Maximum 2,500 meters (8200 feet)	

Mechanical

Dimensions and weight:	Height:	251 mm (9.9 in.)
	Width:	397 mm (15.6 in.)
	Depth:	463 mm (18.2 in.)
	Weight:	Approx. 7.5 kg (14.5 lb) not including the developer cartridge and the photoconductor unit
Durability:	5 years or 180,000 sheets, whichever comes first	

A

Electrical

	110 V model	230 V model
Voltage	90 V to 132 V	198 V to 264 V
Rated frequency	50 Hz to 60 Hz ± 3 Hz	50Hz to 60Hz ± 3Hz
Rated current	5.3 A	3.0 A
Power consumption	Less than 580 W	Less than 580 W
Power consumption * in Standby mode	Less than 30 W	Less than 30 W

* No option installed

Note:
Check the label on the back of the printer for its specified voltage.

Interface

Parallel interface

The parallel (IEEE 1284-B compliant) interface connector pin assignments are shown in the table below.

Note
Windows 98/95 and NT 4.0 support the parallel interface.

Pin No.	Direction	IEEE 1284-B connector		
		Compatibility	Nibble	ECP
1	IN	nStorbe	HostClk	
2	IN/OUT	DATA1		
3	IN/OUT	DATA2		
4	IN/OUT	DATA3		
5	IN/OUT	DATA4		
6	IN/OUT	DATA5		
7	IN/OUT	DATA6		
8	IN/OUT	DATA7		
9	IN/OUT	DATA8		
10	OUT	nACK	PtrClk	PeriphClk
11	OUT	Busy	PrtBusy	PeriphAck
12	OUT	PError	AckDataReq	nAckReverse
13	OUT	Select	Xflag	
14	IN	nAutoFd	HostBusy	HostAck
15		NC		
16		GND		
17		CG		

Pin No.	Direction	IEEE 1284-B connector		
		Compatibility	Nibble	ECP
18	OUT	PeripheralLogicHigh		
19 - 30		GND		
31	IN	nInit		nReverse Request
32	OUT	nFault	nDataAvail	nPeriphRequest
33		GND		
34		NC		
35	OUT	+5V		
36	IN	nSelectIn	IEEE1284 Active	

Note:
The column heading "Direction" refers to the direction of signal flow in to or out of the printer.

A

nStrobe/HostClk

Compatibility mode: Latch pulse used to read in print data. When low, DATA is valid

Negotiation phase: Latch pulse used to read in extensibility request values

Nibble mode: Always high

ECP mode: Used to transfer data and addresses from the host to the printer with handshaking via PeriphAck (Busy)

DATA1 to DATA8 (bidirectional, but may always be an input if ECP or EPP mode is not supported)

Compatibility mode: Forward channel data

Negotiation phase: Extensibility request value

Nibble mode: Not used

ECP mode: Bi-directional data

nACK/PtrClk/PeriphClk

All modes: DTA8 is the MSB, DATA1 is the LSB

Compatibility mode: Acknowledgment low pulse in order to indicate that data was transferred from the host

Negotiation phase: Low signal indicates IEEE 1284 is supported; Set to high afterwards to indicate that the Xflag and "data available" flag are valid

Reverse data transfer phase: In nibble mode, a low signal indicates that the nibble data is valid

Reverse idle phase: When switched from low to high, generates an interrupt that notifies the host that there is data available.

ECP mode: Used to transfer data from the printer to the host with handshaking via HostAck (nAutoFd)

Busy/PtrBusy/PeriphClk

Compatibility mode: High signal indicates that the printer is not ready to receive data

Negotiation phase: Reflects the BUSY status of the forward channel

Reverse data transfer phase: In nibble mode, this signal serves as nibble data bit 3 and then 7

Reverse idle phase: Reflects the BUSY status of the forward channel

ECP mode: Used for forward direction flow control. In reverse direction, this signal is used as a ninth data bit that indicates whether the data signals indicate a command or data.

PError/AckDataReq/nAckReverse

Compatibility mode: High signal indicates that a feed jam occurred in the paper supply section, or that there is no paper in the paper-tray or cassette.

Negotiation phase: High signal indicates whether or not IEEE 1284 is supported or not. Afterwards, this signal conforms with nDataAvail (nFault).

Reverse data transfer phase: In nibble mode, this signal serves as nibble data bit 2 and then 6.

Reverse idle phase: High until the host requests a data transfer. Afterwards, this signal conforms with nDataAvail (nFault).

ECP mode: Low signal authorizes nReverseRequest. The host looks at this signal in order to determine whether or not it has permission to drive the data signals.

Select/Xflag

Compatibility mode: Always high

Negotiation phase: Xflag indicates the extensibility flag. Used to respond to the extensibility request value sent from the host.

Reverse data transfer phase: In nibble mode, this signal serves as nibble data bit 1 and then 5.

Reverse idle phase: Same as negotiation phase

ECP mode: Same as negotiation phase

nAutoFd/HostBusy/HostAck

Compatibility mode: Not used

Negotiation phase: In order to request 1284 mode, this signal is set low and IEEE 1284active (nSelectIn) is set high. Afterwards, this signal is set high when PtrClk (nAck) is set low.

Reverse data transfer phase: In nibble mode, setting this signal low indicates to the printer that the host is ready to receive data. When this signal is subsequently set high, it indicates that the host received the data.

Reverse idle phase: This signal is set high in response to a PtrClk (nAck) low pulse in order to return to the reverse data phase. If this signal is set high at the same time that IEEE 1284active (nSelectIn) is set low, the IEEE 1284 idle phase is aborted and the interface returns to compatibility mode.

ECP mode: Used for reverse direction flow control. Also used for handshaking via PeriphClk (nAck).

NC

Not used

PeripheralLogicHigh

Parallel B: NC

Parallel C: Pull up to +5V with 3.9 KΩ

nInit/nReverseRequest

Compatibility mode: When a low signal is detected, the printer is deemed to be BUSY until the low signal is released.

Negotiation phase: Always high

Reverse data transfer phase: Always high

ECP mode: Low when switching to reverse direction. The peripheral device has permission to drive the data signals only when this signal is low and 1284 active is high.

nFault/nDataAvail/nPeriphRequest

Compatibility mode: Low signal indicates that an error occurred.

Negotiation phase: This signal is set high in order to authorize 1284 compatibility. In nibble mode, after the host sets HostBusy (nAutoFd) high, this signal is set low in order to indicate that the transmission data is ready.

Reverse data transfer phase: This signal is set low in order to indicate to a nibble mode host that the transmission data is ready. Afterwards, this signal serves as nibble data bit 0 and then 4.

Reverse idle phase: Indicates whether or not the data is valid.

ECP mode: This signal is set low to request communications with the host. Valid in both forward and reverse directions.

nSelectIn/IEEE1284active

Compatibility mode: Always low

Negotiation phase: This signal is set high at the same time that HostBusy is low in order to request 1284 mode.

Reverse data transfer phase: This signal is set high to indicate that the bus direction is from the printer to the host. This signal is set low to terminate 1284 mode, setting the bus direction from the host to the printer.

Reverse idle phase: Same as reverse data transfer phase

ECP mode: Always high. This signal is set low to terminate ECP mode and return to compatibility mode.

GND

Twisted pair return signal

CG

Connected to the printer chassis. This signal and GND are connected.

+5V

Pull up to +5V with 1 kΩ

Using the ECP mode

To use the ECP mode with a parallel (IEEE 1284-B compliant) connector, your computer must support the ECP mode.

Note:
The ECP mode is available with Windows 98/95 and Windows NT4.0.

To use the ECP mode, follow these steps:

1. Make the ECP mode settings in the BIOS setting program that comes with your computer. (For details of the settings and the program, see your computer manual.)

2. Click the Start button, point to Settings, and then click Control Panel.

3. Right-click the System icon, and click Open in the menu that appears.

4. Select the Device Manager tab.

5. Select the ECP Printer Port under Ports [COM & LPT], then click the Properties button.

6. Select the Resources tab.

7. Make the appropriate setting in the Resource settings dialog box. (This setting depends on your computer system. For details, see your computer manual.)

8. Click OK to save the settings.

USB interface

Universal Serial Bus 1.0 compliant.

Note:
Only Macintosh and Windows 98 pre-installed PCs support the USB interface.

For Windows 98

1. Click the Start button, point to Settings, and then click Printers.

2. Right-click the EPSON EPL-5700L/EPL-5700i icon, and click Properties in the menu that appears.

3. Select the Details tab.

4. Click the arrow next to the Printer Port drop-down list. Then select a EPUSB1 port.

5. Click OK to save this setting.

> **!** *Caution:*
> *The USB interface is not compatible with QuickDraw GX in Macintosh OS version.*

Options and Consumables

500-Sheet Lower Cassette Unit (C81287✽/C81288✽)

Paper size:	A4 (Unit C81287✽)
	Letter (Unit C81288✽)
Paper weight:	60 to 90 g/m² (16 to 24 lb)
Paper feed:	Automatic feed delivery system
	Tray capacity up to 500 sheets (75 g/m² or 20 lb paper)
Paper feed speed:	For the first sheet, 21 seconds or less; subsequent sheets, 8 pages per minute
Paper types:	Plain paper, such as copier paper, and recycled paper
Power supply:	5Vdc supplied by the printer

Dimensions and weight:

Height	120 mm (4.7 in.)
Width	397 mm (15.4 in.)
Depth	472 mm (18.6 in.) including the tray
Weight	4.2 kg (9.3 lb) including the tray

Face-up Tray (C81286✽)

Dimensions (including printer) and weight:

Height	433 mm (17.0 in.)
Width	397 mm (15.4 in.)
Depth	580 mm (22.8 in.)
Weight	0.3 kg (0.7 lb)

Paper output capacity: 20 sheets (75 g/m² or 20 lb paper)

Developer cartridge (S050010)

Storage temperature: 0 to 35 °C (32 to 95 °F)

Storage humidity: 30 to 85% RH

Shelf life: 18 months after production

Life: Up to 6000 pages under the following conditions: Letter or A4 size paper, continuous printing, and 5% print ratio

Photoconductor unit (S051055)

Storage temperature: 0 to 35 °C (32 to 95 °F)

Storage humidity: 30 to 85% RH

Shelf life: 18 months after production

Life: Up to 20000 pages under the following conditions: Letter or A4 size paper, continuous printing, and 5% print ratio

The number of pages you can print with a developer cartridge or a photoconductor unit varies depending on the type of printing. If you print a few pages at a time or print dense text exceeding the 5% print ratio, the unit may print fewer pages. The 5% print ratio is equivalent to printing double-spaced standard text.

Appendix B
Contacting Customer Support

B

Where to Get Help

If your printer is not operating properly and you cannot solve your problem with the troubleshooting information in this guide contact EPSON customer support services for assistance.

We will be able to help you much more quickly if you are able to give the exact information indicated below.

Serial number of your printer
(The serial number label is on the back of the printer.)

Printer model

Brand and model of your computer

Printer software version
(Click About on the printer driver's Main menu.)

Windows version (95, 98, NT 4.0, etc.) you are using

Version of applications you normally use with your printer

For United Kingdom and the Republic of Ireland Users

If you purchased your product in the UK or the Republic of Ireland, EPSON (UK) LTD provides a range of customer services and technical support.

Support Via the World Wide Web

❏ For information on the latest EPSON products, software drivers, on-line user guides and answers to frequently asked questions:

http://www.epson.co.uk

❏ To e-mail EPSON Technical Support:

http://www.epson.co.uk/support/email/

❏ For a full list of EPSON Customer and Warranty Support services:

http://www.epson.co.uk/support/

Support Via Telephone

Our Customer and Warranty Support teams can be contacted by calling 0870 163 7766 in the UK or 0044 0870 163 7766 from the Republic of Ireland. They can provide the following services:

❏ Technical information on installing, configuring and operating your EPSON products

❏ Arranging for faulty EPSON products to be repaired within the warranty period

Before you call, please have the following information ready:

Product Model

Serial number of your product
(The serial number label is on the back of the product.)

Brand and model of your computer

Driver software version
(Click About on the printer driver's Main menu.)

Operating System
(For example, Windows 98/95, NT 4.0, or Macintosh 8.01)

Application(s)
The application(s) you normally use with your product and its version number(s)

B

Pre Sales Enquiry Desk

Our Enquiry Desk team can be contacted by calling 0800 220546 in the UK or 1 800 409132 from the Republic of Ireland, by faxing 01442 227271 in the UK or 0044 1442 227271 from the Republic of Ireland, and via e-mail at info@epson.co.uk. They can provide the following information:

❏ Pre sales information and literature on new EPSON products (also available via our world wide web site at http://www.epson.co.uk)

❏ Where to purchase genuine EPSON consumables, accessories, and options

For Australian Users

EPSON Australia wishes to provide you with a high level of Customer Service. As well as this *Reference Guide*, we provide the following sources for obtaining information:

EPSON FAXBACK

EPSON FAXBACK will fax you the latest specifications and pricing for most EPSON products offered in Australia. There is also technical information including details of the latest software and drivers available. Phone (02) 9903 9075 and the system will guide you through a number of choices before faxing the information to your fax machine.

EPSON Bulletin Board System

This is where you can download the latest software and drivers. Visit the BBS to check out the latest versions. If you have a modem, phone (02) 9417 5090.

Internet URL http://www.epson.com.au

Access the EPSON Australia World Wide Web pages. Worth taking your modem here for the occasional surf! You can get the same information as offered on the EPSON FAXBACK and the EPSON Bulletin Board plus more.

Your Dealer

Don't forget that your dealer can often help identify and resolve problems. The dealer should always be the first call for advice on problems. They can often solve problems quickly and easily as well as give you advice on the next step to take.

EPSON Helpdesk

EPSON Helpdesk is provided as a final backup to make sure our clients have access to advice. Operators on the Helpdesk can aid you in diagnosing hardware and software problems. They can also advise you on the latest EPSON products and where the nearest dealer or service agent is located. Many types of queries are answered here.

The Helpdesk numbers are:

Phone:	(02) 9903 9040
Fax:	(02) 9903 9189

We encourage you to have all the relevant information on hand when you ring. The more information you prepare, the faster we can help solve the problem. This information includes the *Reference Guide* for your EPSON product, type of computer, operating system, application programs, and any other information you feel is required.

For Singapore Users

Contact the telephone and fax numbers below:

Phone: (065) 337-7911
Fax: (065) 334-1185

For Hong Kong Users

To obtain technical support as well as other after-sales services, users are welcome to contact EPSON Hong Kong Limited.

Internet home page

EPSON Hong Kong has established a local home page in both Chinese and English on the Internet to provide users with the following information:

❏ Product information

❏ Answers to Frequently Asked Questions (FAQs)

❏ Latest versions of EPSON scanner drivers

Users can access our World Wide Web home page at: http://www.epson.com.hk.

Electronic bulletin board system

An electronic bulletin board system (BBS) is also available to obtain scanner information and the latest versions of scanner drivers. You can log on to the following number for the BBS service:

BBS: (852) 2827-4244

Technical Support Hotline

You can also contact our technical staff at the following telephone and fax numbers:

Phone: (852) 2585-4399
Fax: (852) 2827-4383

For Philippines Users

To obtain technical support as well as other after sales services, users are welcome to contact the EPSON Philippines Representative Office at the telephone and fax numbers below:

Phone: (632) 813-6552
Fax: (632) 813-6545
BBS: (632) 814-0595

B

Glossary

default
A value or setting that takes effect when the printer is turned on, reset, or initialized.

dots per inch (dpi)
The number of dots per inch is a measure of printer resolution. The higher the number of dots, the higher the resolution.

download
To transfer information from the computer to the printer.

dpi
See *dots per inch*.

driver
The part of a software program that converts commands from the program into commands used by the printer. Also known as the printer driver.

drum
The part of the printer mechanism where the image is formed and transferred to the paper.

initialization
The act of returning the printer to its defaults (fixed set of conditions).

interface
The connection between the printer and the computer. A parallel interface transmits data one character or code at a time, and a serial interface transmits data one bit at a time.

memory
The part of the printer's electronic system that is used to store information. Some information is fixed and is used to control how the printer operates. Information that is sent to the printer from the computer (such as downloaded fonts) is stored in memory temporarily. See also *RAM* and *ROM*.

orientation
Refers to the direction in which characters are printed on a page. This direction is either portrait, like this page, or landscape in which the page is rotated 90°.

photoconductor unit
A component of the printer that contains a photosensitive print drum.

printer driver
See *driver*.

RAM

Random Access Memory (RAM) is where temporary information is stored.

reset

To refresh the printer's memory and erase the current print jobs.

resolution

A measure of the fineness and clarity of images produced by the printer or monitor. Printer resolution is measured in dots per inch. Monitor resolution is measured in pixels.

RITech

Resolution Improvement Technology. A feature that smooths the jagged edges of printed lines or shapes.

ROM

Read Only Memory (ROM) is where permanent information is stored.

status sheet

A report that lists the printer settings and other printer information.

Index

Numerics