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Control Panel Buttons and Lights

Font button

Selects the font.
See Chapter 5.

Font lights

Indicate which font is selected.

Pause button

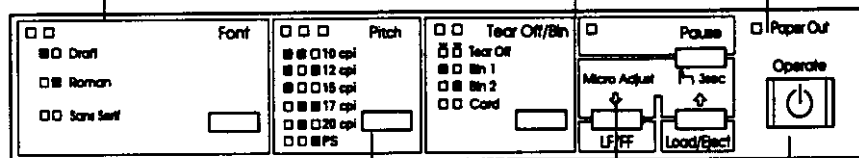
Stops printing temporarily, and resumes printing when pressed again. When pressed for 3 seconds, turns on the *micro adjust mode. To turn off, press again.

Pause light

On when the printer is paused.
Flashes when the printer is in the *micro adjust mode.

Paper Out light

On when no paper is loaded in the selected paper source or paper is not loaded correctly.
Flashes when paper has not been fully ejected or a paper jam has occurred.



Tear Off/Bin button

Advances continuous paper to the tear-off position.
Feeds continuous paper backward from the tear-off position to the top-of-form position.
Selects a cut-sheet feeder bin when the cut-sheet feeder is installed.
Turns on the card mode to print on postcards and envelopes. See Chapter 3.

Tear Off/Bin lights

On when continuous paper is in the tear-off position.
On when bin 1 of the optional cut-sheet feeder is selected.
On when bin 2 of the optional cut-sheet feeder is selected.
On when the printer is in the card mode.

LF/FF button

Feeds paper line by line when pressing shortly.
Feeds paper form by form pressing for a few seconds.
Ejects a single sheet or advances continuous paper to the next top-of-form position in micro adjust mode.

Operate button

Turns the printer on and off. The printer is off when the top of this button is even with the button protectors.

Load/Eject button

Loads a single sheet of paper.
Ejects a single sheet of paper if a sheet is loaded.
Loads continuous paper from the standby position.
Feeds continuous paper backward to the standby position in micro adjust mode.

On
Flashing
Off

*Micro Adjust mode

When you hold down the Pause button for three seconds, the printer enters the micro adjust mode. In this mode, you can press the LF/FF and Load/Eject buttons to adjust the top-of-form or tear-off position. See Chapter 2.

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EPSON®

9-Pin Dot Matrix Printer

FX-980

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User's Guide

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**FCC Compliance Statement
For United States Users**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

For Canadian Users

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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 392-8502 Japan

Representative: EPSON EUROPE B.V.
 Address: Prof. J. H. Bavincklaan 5 1183 AT Amstelveen The Netherlands

Declares that the Product:
 Product Name: Dot Matrix Printer
 Model: P922A

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

- Directive 73/23/EEC:
EN 60950
- Directive 89/336/EEC:
EN 55022 Class B
EN 61000-3-2
EN 61000-3-3
EN 50082-1
IEC 801-2
IEC 801-3
IEC 801-4

March 1999
 H. Horiuchi
 President of EPSON EUROPE B.V.

Contents

Getting to Know Your Printer

| | |
|-------------------------------------|----|
| Easy-to-Use Features | 2 |
| Available Paper Paths | 3 |
| Printing on continuous paper | 4 |
| Printing on single sheets | 8 |
| Options | 9 |
| Ribbon Cartridge | 10 |
| Important Safety Instructions | 10 |
| Print Head Caution Symbol | 12 |
| ENERGY STAR Compliance | 12 |
| For United Kingdom Users | 12 |
| Use of options | 12 |
| Safety information | 13 |
| How To Use Your Manuals | 14 |
| Warnings, Cautions, and Notes | 14 |

Chapter 1 Setting Up the Printer

| | |
|---|------|
| Unpacking the Printer | 1-2 |
| Choosing a Place for the Printer | 1-4 |
| Positioning the continuous paper supply | 1-5 |
| Installing or Replacing the Ribbon Cartridge | 1-6 |
| Attaching the Paper Guide Base | 1-12 |
| Plugging in the Printer | 1-13 |
| Connecting the Printer to Your Computer | 1-14 |
| Installing the Printer Software | 1-17 |
| Installing the printer software in Windows 98, 95, or NT 4.0 | 1-18 |
| Installing the printer software in Windows 3.1 or NT 3.5x For DOS programs | 1-20 |

Chapter 2 Printing on Continuous Paper

Setting the Paper Release Lever 2-2

Setting the Paper Thickness Lever 2-4

Using the Rear Push Tractor 2-6

 Loading paper onto the rear push tractor 2-6

 Removing a printed document from the rear push tractor 2-10

Using the Front Push Tractor 2-12

 Installing the tractor in the front push position 2-12

 Loading paper onto the front push tractor 2-13

 Removing a printed document from the front push tractor 2-18

 Removing the front push tractor 2-19

Using the Tractor in the Pull Position 2-20

 Installing the tractor in the pull position 2-21

 Loading paper onto the pull tractor 2-23

 Removing the paper from the pull tractor 2-28

 Using two tractors in a push/pull combination 2-29

 Removing the pull tractor 2-31

Loading multi-part Forms 2-33

Loading Continuous Paper With Labels 2-33

 Removing continuous paper with labels 2-35

Switching Between Printing on Continuous Paper
and Printing on Single Sheets 2-36

 Switching to printing on single sheets 2-36

 Switching to printing on continuous paper 2-37

Adjusting the Top-of-Form Position 2-38

Advancing the Paper to the Tear-Off Edge 2-41

 Using the Tear Off/Bin button 2-41

 Advancing the paper to the tear-off position automatically 2-42

 Adjusting the tear-off position 2-42

Chapter 3 Printing on Single Sheets

| | |
|---|------|
| Using Single Sheets | 3-2 |
| Available paper types and paper slots | 3-2 |
| Loading single-sheet multi-part forms | 3-4 |
| Loading envelopes | 3-6 |
| Loading postcards | 3-7 |
| Loading Single Sheets in the Top Paper Slot | 3-8 |
| Loading Single Sheets in the Front Paper Slot | 3-10 |

Chapter 4 Using the Printer Software

| | |
|--|------|
| About Your Printer Software | 4-2 |
| Using the Printer Driver With Windows 95 or 98 | 4-3 |
| Accessing the printer driver from Windows applications | 4-3 |
| Accessing the printer driver from the Start menu | 4-5 |
| Printer driver settings overview | 4-6 |
| Using the Printer Driver With Windows 3.1 | 4-10 |
| Accessing the printer driver from Windows applications | 4-10 |
| Accessing the printer driver from the Control Panel | 4-12 |
| Printer driver settings overview | 4-12 |
| Using the Printer Driver With Windows NT 4.0 | 4-14 |
| Accessing the printer driver from Windows applications | 4-14 |
| Accessing the printer driver from the Start menu | 4-16 |
| Printer driver settings overview | 4-16 |
| Using the Printer Driver With Windows NT 3.5x | 4-19 |
| Accessing the printer driver from Windows applications | 4-19 |
| Accessing the printer driver from the Control Panel | 4-21 |
| Printer driver settings overview | 4-22 |
| Using the EPSON Remote! Utility | 4-24 |
| Installing EPSON Remote! | 4-24 |
| Accessing EPSON Remote! | 4-24 |

Chapter 5 Changing Printer Settings From the Printer's Control Panel

| | |
|--|-----|
| Selecting a Built-In Font | 5-2 |
| About Your Printer's Default Settings..... | 5-3 |
| Changing default settings | 5-8 |

Chapter 6 Using EPSON Status Monitor 2

| | |
|--|------|
| About the EPSON Status Monitor 2 Utility | 6-2 |
| Installing EPSON Status Monitor 2 | 6-3 |
| Accessing EPSON Status Monitor 2 | 6-4 |
| Checking Printer Status Information..... | 6-4 |
| Using the EPSON Status Monitor 2 window | 6-4 |
| Using the Printer Status window | 6-10 |
| Making Monitoring Preference Settings..... | 6-11 |
| Turning on background monitoring | 6-12 |
| Background monitoring icon..... | 6-13 |

Chapter 7 Troubleshooting

| | |
|--|------|
| Using the Error Indicators..... | 7-2 |
| Problems and Solutions..... | 7-4 |
| Power supply problems | 7-5 |
| Single-sheet paper loading or feeding problems | 7-6 |
| Continuous paper loading or feeding problems | 7-8 |
| Wrong top-of-form position | 7-9 |
| Wrong tear-off position | 7-10 |
| Printing or printout quality problems | 7-11 |
| Clearing Paper Jams..... | 7-16 |
| Aligning Vertical Lines in Your Printout | 7-17 |
| Printing a Self Test..... | 7-18 |
| Printing a Hex Dump..... | 7-19 |

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Rev. B

A5 size
11/30/98

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Appendix A Enhancing Your Printer With Options

| | |
|--|------|
| Options | A-2 |
| Paper handling options | A-2 |
| Optional interface cards | A-3 |
| Using the Optional Cut-Sheet Feeders | A-4 |
| Installing the high-capacity or double-bin cut-sheet feeder | A-4 |
| Loading paper in the high-capacity cut-sheet feeder | A-6 |
| Selecting the paper source (bin 1 or bin 2) | A-10 |
| Switching between continuous paper and single-sheet paper in the cut-sheet feeder | A-11 |
| Using the Roll Paper Holder | A-12 |
| Assembling the roll paper holder | A-12 |
| Installing the roll paper holder | A-13 |
| Loading roll paper | A-14 |
| Removing roll paper | A-16 |
| Installing an Interface Card | A-17 |

Appendix B Cleaning and Transporting the Printer

| | |
|--------------------------------|-----|
| Cleaning the Printer | B-2 |
| Transporting the Printer | B-3 |

Appendix C Specifications

| | |
|------------------------------|------|
| Printer Specifications | C-2 |
| Mechanical | C-2 |
| Electrical | C-4 |
| Environmental | C-4 |
| Paper | C-5 |
| Paper alignment | C-8 |
| Printable area | C-9 |
| Safety approvals | C-11 |
| CE marking | C-11 |

| | |
|---|------|
| Command Lists | C-12 |
| EPSON ESC/P control codes | C-12 |
| IBM 2380 Plus emulation control codes | C-16 |
| Character Tables | C-17 |
| International character sets for the Italic table | C-28 |

Appendix D Customer Support Information

| | |
|--|-----|
| Contacting Customer Support | D-2 |
| For North American Users | D-2 |
| Electronic support services | D-2 |
| Automated telephone services | D-3 |
| For United Kingdom and the Republic of Ireland Users | D-4 |
| Enquiry Desk | D-4 |
| Customer Support | D-4 |
| Faxon EPSON | D-5 |
| EPtec - Bulletin Board Service for latest drivers and utilities | D-5 |
| World Wide Web | D-5 |
| For Australian Users | D-6 |
| EPSON FAXBACK | D-6 |
| EPSON Bulletin Board System | D-6 |
| Internet URL http://www.epson.com.au | D-6 |
| Your dealer | D-6 |
| EPSON Helpdesk | D-7 |
| For Singapore Users | D-7 |
| For Hong Kong Users | D-8 |
| Internet home page | D-8 |
| Electronic bulletin board system | D-8 |
| Technical support hotline | D-8 |
| For Philippines Users | D-9 |

Glossary

Index

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A5 size
11/27/98

INTRO.FM
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Getting to Know Your Printer

Your EPSON® Fx-980 9-pin dot matrix printer provides high-quality printing and great performance in a compact design. Features include:

- a variety of paper paths to suit your printing needs
- the ability to handle a wide range of paper types, including continuous paper, multi-part forms with one original and up to six copies, labels, single sheets, envelopes, and postcards
- high-speed printing of up to 569 characters per second at 12 characters per inch

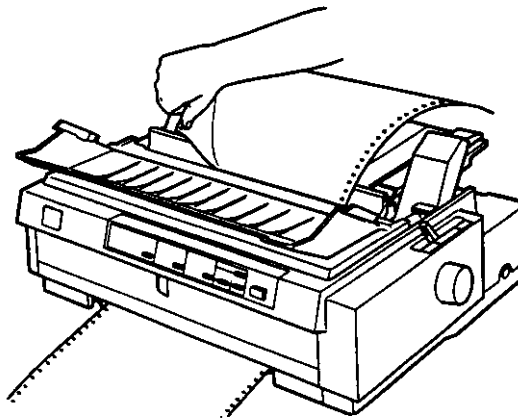
Your printer also comes with printer driver software, the EPSON Status Monitor 2 utility for Microsoft® Windows® 95 or 98 that lets you check the status of your printer quickly and easily, and other software. In addition, several options are available to suit your individual needs.

Easy-to-Use Features

This section highlights some easy-to-use features that you'll find helpful.

- ❑ Use the **tear-off feature** to save paper.

If you load paper in the rear or front push tractor, you can use the tear-off feature to advance your continuous paper to the printer's tear-off edge when you finish printing. Then you can easily tear off printed sheets and save paper normally lost between documents. For more information, see Chapter 2.



- ❑ Use the **paper release lever** to change the paper path without removing continuous paper from the tractors.

Using the paper release lever, you can easily switch to printing on single sheets without removing the continuous paper loaded in the rear or front push tractor. You can also easily switch to printing on continuous paper on a different tractor. For more information, see Chapter 2.

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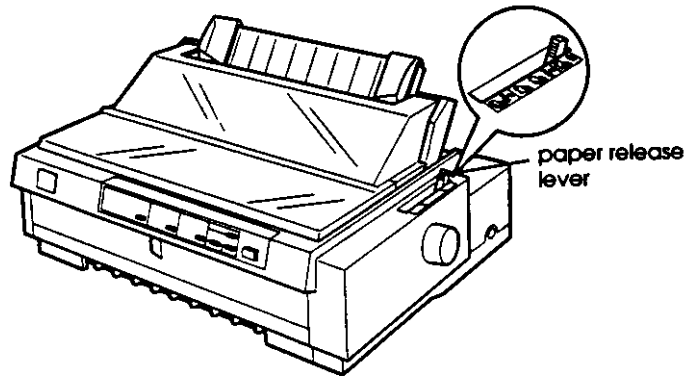
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Rev. B

A5 size
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- Use the **micro adjust feature** to adjust the top-of-form and tear-off positions. (See the Glossary for explanations of the top-of-form and tear-off positions.)

The micro adjust feature allows you to move the paper forward or backward in 1/216 inch increments so that you can make precise adjustments to the top-of-form and tear-off positions. For more information, see Chapter 2.

Available Paper Paths

Your printer provides a variety of paper paths for printing on continuous and single-sheet paper. As described below, paper can be fed into the printer from the top, front, bottom, or rear. You select the paper path that best suits your current printing needs.

Printing on continuous paper

You can choose from three tractor positions (front push, rear push, and pull) and three paper entry slots (front, rear, and bottom) for continuous paper printing. This section helps you determine which paper paths and tractor positions are best for your continuous paper printing needs. See the appropriate sections in Chapter 2 for tractor installation and paper loading instructions.

Using a push tractor

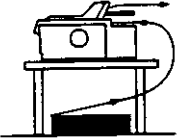
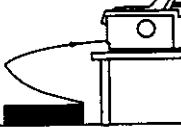
If you often need to tear off sheets of continuous paper (for example, if you are printing purchase orders or sales slips), it is best to use a push tractor. This allows you to use the printer's tear-off edge to easily tear off printed sheets of continuous paper at the perforation. Also, when continuous paper is loaded on a push tractor, you can load single sheets of paper from the paper guide without removing the continuous paper from the tractor.

There are two push tractor positions: front and rear. The tractor is installed in the rear push position when the printer is shipped. See the table below for details about the push positions and the corresponding paper-feeding paths.

Note:

- Always load multi-part forms with seven parts (one original plus six copies) from the front or bottom slot onto the pull tractor.*
- The rear push tractor cannot be removed.*



| Tractor position | Description |
|--|---|
|  <p data-bbox="475 699 600 724">rear push</p> | <p data-bbox="659 453 1205 573">To use this tractor, load paper in the rear slot. When you print on multi-part forms that are bound on only one side by point glueing, load them in the rear paper slot; the front push tractor cannot feed this type of form.</p> <p data-bbox="659 621 1205 695">Note: Because thick multi part forms require a straight paper path, load them in the front slot.</p> <p data-bbox="659 730 1205 825">Caution: Do not load continuous paper with labels in the rear slot; the labels may come off their backing sheet inside the printer and cause a paper jam.</p> |
|  <p data-bbox="475 1050 600 1075">front push</p> | <p data-bbox="659 846 1205 961">To use this tractor, load paper in the front slot. If you print on thick paper such as multi-part forms or continuous paper with labels, use the front paper slot because this paper path from this slot is almost straight. This reduces the chance of paper jams.</p> |

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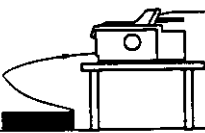
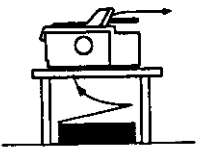
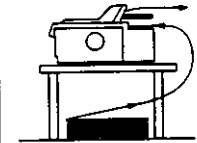
Using a pull tractor

If you often print on thick or heavy continuous paper, such as multi-part forms or continuous paper with labels, use a tractor in the pull position. The pull tractor provides you with the best paper jam prevention, and allows you to load continuous paper from the front, rear, or bottom of the printer. However, you cannot use the tear-off feature with the pull tractor.

Note:

If you plan to use a pull tractor in the pull position, you can remove the tractor from the rear push position and reinstall it in the pull position, or you can purchase the optional additional tractor unit (C80033*) and install it in the pull position. See Chapter 2 for instructions.

You can use the front, bottom, or rear paper slot with the pull tractor.

| Paper slot | Description |
|---|--|
|  <p data-bbox="506 758 570 785">front</p> | <p data-bbox="669 541 1193 646">If you print on thick paper such as multi-part forms or continuous paper with labels, use the front paper slot because this paper path is almost straight. This reduces the chance of paper jams.</p> |
|  <p data-bbox="492 1010 591 1037">bottom</p> | <p data-bbox="669 800 1193 898">The bottom paper slot has the straightest paper path, so it is the best slot to use when printing on thick paper, such as multi-part forms or continuous paper with labels.</p> <p data-bbox="669 936 1193 1035">Note: When loading paper in the bottom slot, be sure to use a printer stand with an opening large enough for the paper to feed through it without obstruction.</p> |
|  <p data-bbox="516 1266 574 1293">rear</p> | <p data-bbox="669 1052 1193 1104">You can also load continuous paper from the rear pull tractor position.</p> <p data-bbox="669 1115 1193 1234">Note: Paper loaded from the rear slot results in a curved paper path, which may affect loading performance, so use the front or bottom slot whenever possible.</p> <p data-bbox="669 1272 1193 1371">Caution: Do not load continuous paper with labels in the rear slot; the labels may come off their backing sheet inside the printer and cause a paper jam.</p> |

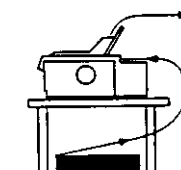

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Using the push and pull tractors in combination

You can improve paper feeding and reduce paper jams, by using two tractors at the same time. This is especially helpful for printing on continuous pre-printed forms, multi-part forms, or labels, and for printing high-quality graphics. When using two tractors in combination, you can load paper either in the front paper slot both the front push tractor and the pull tractor, or in the rear paper slot with both the rear push tractor and the pull tractor.

| Combination | Description |
|---|--|
|  rear push and pull | <p>To use the rear push tractor with the pull tractor, you need to remove the standard tractor that comes in the front push position and install it in the pull position.</p> <p>Note: Because thick multi-part forms require a straight paper path, load them in the front slot.</p> <p>Caution: Do not load continuous paper with labels onto the rear push tractor even when it is used in combination with the pull tractor. If you load continuous paper with labels onto the rear push/pull tractor, the labels may come off their backing sheet inside the printer and cause a paper jam.</p> |
|  front push and pull | <p>To use the front push tractor with the pull tractor, you need to purchase the optional pull tractor (C80033*) and install it in the pull position.</p> |

Note:

For more information on how to use two tractors in a push and pull combination, see page 2-29.

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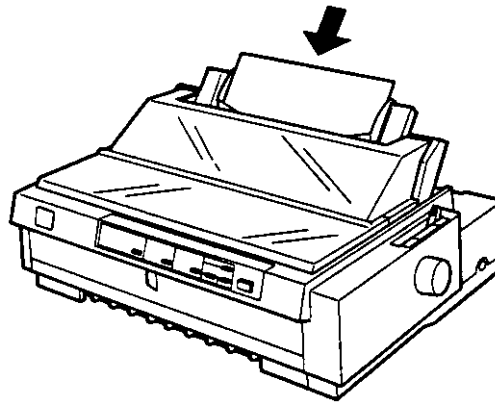
Printing on single sheets

As shown below, you can load single sheets from the top or the front of the printer. You can load ordinary single sheets from either position, even with continuous paper already loaded in the front or rear push tractor.

This section helps you determine which paper slot best suits your single-sheet printing needs. See Chapter 3 for paper loading instructions.

Loading paper in the top slot

You can load ordinary single sheets, single-sheet multi-part forms, envelopes, or postcards in the top slot.



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Note:

Load envelopes in the top slot only.

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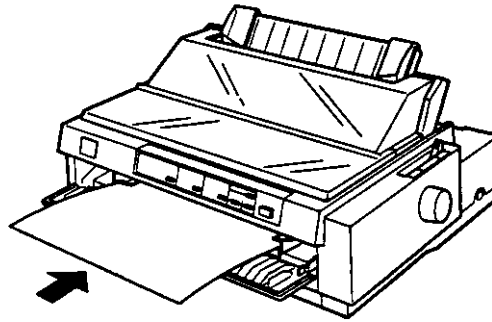
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Loading paper in the front slot

You can load ordinary single sheets, single-sheet multi-part forms, or postcards in the front slot.



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Note:

Always use the front paper slot to load glue-fastened single-sheet multi-part forms bound at the side of the form.

Options

Your printer comes with everything necessary to print on continuous paper and single sheets using a variety of paper paths. By adding options, such as a cut-sheet feeder, pull tractor unit, or roll paper holder, you can further expand your printer's versatility. Optional interface cards are also available to supplement your printer's built-in parallel interface and built-in serial interface. For more information on options for your printer, see Appendix A, "Enhancing Your Printer With Options".

Ribbon Cartridge

Your printer uses the following ribbon cartridge:

EPSON black ribbon cartridge S015091

When printing becomes faint, you need to replace the ribbon cartridge. Genuine EPSON ribbon cartridges are designed and manufactured to work properly with your EPSON printer. They ensure proper operation and long life of the print head and other printer parts.

To replace a used ribbon cartridge, follow the instructions under "Installing or Replacing the Ribbon Cartridge" on page 1-6.


Important Safety Instructions

Read all of these instructions and save them for later reference. Follow all warnings and instructions marked on the printer.

- Do not place the printer on an unstable surface or near a radiator or heat source.
- Place the printer on a flat surface. The printer will not operate properly if it is tilted or at an angle.
- Do not block or cover the openings in the printer's cabinet. Do not insert objects through the slots.
- Use only the type of power source indicated on the printer's label.
- Connect all equipment to properly grounded power outlets. Avoid using outlets on the same circuit as photocopiers or air control systems that regularly switch on and off.
- Do not use a damaged or frayed power cord.

- If you use an extension cord with the printer, make sure the total ampere rating of all devices plugged into the extension cord does not exceed the cord's ampere rating. Also, make sure the total of all devices plugged into the wall outlet does not exceed the wall outlet's ampere rating.
- Unplug the printer before cleaning, and clean it with a damp cloth only.
- Do not spill liquid on the printer.
- Except as specifically explained in this guide, do not attempt to service the printer yourself.
- Unplug the printer and refer servicing to qualified personnel under the following conditions:

If the power cord or plug is damaged; if liquid has entered the printer; if the printer has been dropped or the cabinet damaged; or if the printer does not operate normally or exhibits a distinct change in performance. Adjust only those controls that are covered by the operating instructions.

-  Printer parts marked with this symbol may be hot. Turn off the printer and let it cool for a few minutes before you touch any printer part marked with this symbol.
- If you plan to use the printer in Germany, observe the following:

To provide adequate short-circuit protection and over-current protection for this printer, the building installation must be protected by a 16 Amp circuit breaker.

Note for German-speaking users:

Bei Anschluß des Druckers an die Stromversorgung muß sichergestellt werden, daß die Gebäudeinstallation mit einem 16 A-Überstromschalter abgesichert ist.

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Print Head Caution Symbol



The symbol on the print head indicates that this part may be hot. Never touch the print head just after the printer has been used. Let the print head cool for a few minutes before touching it.

ENERGY STAR Compliance



As an ENERGY STAR Partner, EPSON has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

The International ENERGY STAR Office Equipment program is a voluntary partnership with the computer and office equipment industry to promote the introduction of energy-efficient personal computers, monitors, printers, fax machines, copiers, and scanners, in an effort to reduce air pollution caused by power generation.

For United Kingdom Users

Use of options

Epson (UK) Limited shall not be liable against any damages or problems arising from the use of any options or consumable products other than those designated as Original EPSON Products or EPSON Approved Products by Epson (UK) Limited.

Safety information



Warning:

This appliance must be earthed. Refer to rating plate for voltage and check that the appliance voltage corresponds to the supply voltage.

Important: The wires in the mains lead fitted to this appliance are coloured in accordance with the following code:

Green and yellow — Earth

Blue — Neutral

Brown — Live

If you have to fit a plug:

As the colours of the mains lead of this appliance may not match coloured markings used to identify the terminals in a plug, please proceed as follows:

The green and yellow wire must be connected to the terminal in the plug which is marked with the letter E or the Earth symbol (\perp).

The blue wire must be connected to the terminal in the plug marked with the letter N.

The brown wire must be connected to the terminal in the plug marked with the letter L.

If damage occurs to the plug, replace the cord set or consult a qualified electrician.

Replace fuses only with a fuse of the correct size and rating.

How To Use Your Manuals

This *User's Guide* provides detailed information on setting up and using your printer. The *Quick Reference Guide* that also comes with the printer summarizes basic information on how to use the printer.

Warnings, Cautions, and Notes

This guide uses the following conventions:



Warnings must be followed 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.

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Chapter 1

Setting Up the Printer

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| | |
|--|------|
| Unpacking the Printer..... | 1-2 |
| Choosing a Place for the Printer | 1-4 |
| Positioning the continuous paper supply..... | 1-5 |
| Installing or Replacing the Ribbon Cartridge | 1-6 |
| Attaching the Paper Guide Base | 1-12 |
| Plugging in the Printer | 1-13 |
| Connecting the Printer to Your Computer | 1-14 |
| Installing the Printer Software..... | 1-17 |
| Installing the printer software in Windows 98, 95, or NT 4.01..... | 1-18 |
| Installing the printer software in Windows 3.1 or NT 3.5x .. | 1-19 |
| For DOS programs | 1-20 |

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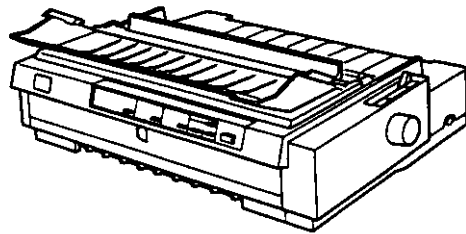
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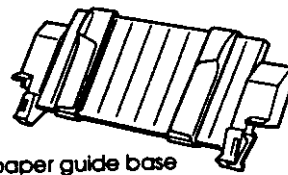
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Unpacking the Printer

Besides this guide, your printer box should include a EPSON printer software disk, a Notice Sheet, and the following items:

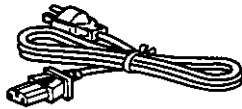


printer



paper guide base

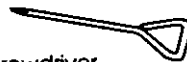
New.eps



power cord



ribbon cartridge



screwdriver

Note:

Depending on your printer model, the power cord may be permanently attached to the printer. Also, the shape of the power cord plug varies depending on the country of purchase; be sure the plug you have is the right one for your location.

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Caution:

There are several models of the printer designed for different voltages, and it is not possible to adjust the printer for use with another voltage. If the label on the back of the printer does not show the correct voltage for your country, contact your dealer.

1

You must remove all protective materials packed around and inside your printer before you set it up and turn on the power. Follow the directions on the Notice Sheet (packed with the printer) to remove these materials. A screwdriver has been provided for removing the transportation screw.

Save all packing and protective materials, including the transportation screw and the protective locking clips on the paper tension unit, in case you need to ship the printer in the future. It should always be transported in its original packaging or equivalent materials.

Choosing a Place for the Printer

Follow the guidelines below when selecting a location for your printer.

- Place the printer on a flat, stable surface. The printer will not operate properly if it is tilted or at an angle.
- Place the printer where you can easily connect it to a network interface cable, if necessary.
- Leave adequate room around the printer for easy operation and maintenance.
- Avoid using or storing the printer in places subject to rapid changes in temperature and humidity. Keep it away from direct sunlight, strong light, heat sources, or excessive moisture or dust.
- Avoid places subject to shocks and vibrations.
- Place the printer near a wall outlet where you can easily unplug the power cord.

Note for French-speaking users:

Placez l'imprimante près d'une prise de contact où la fiche peut être débranchée facilement.

- Avoid electrical outlets controlled by wall switches or automatic timers. An interruption in power can erase information in the memory of your printer or computer. Also avoid outlets on the same circuit as large motors or other appliances that can cause voltage fluctuations.
- Keep the entire computer system away from potential sources of electromagnetic interference, such as loudspeakers or the base units of cordless telephones.



- Use a grounded power outlet; do not use an adapter plug.
- Make sure the paper path is clear and unobstructed before you print on continuous paper. (See the next section.)

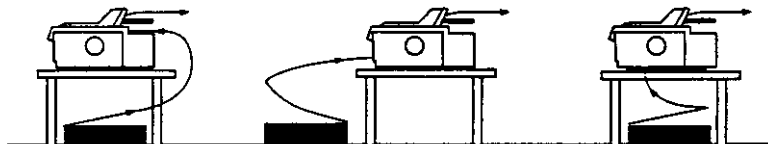


If you plan to use a printer stand, follow these guidelines:

- Use a stand that supports at least 22 kg (48.5 lb).
- Never use a stand that tilts the printer. The printer should always be kept level.
- Position your printer's power cord and interface cable so they do not interfere with paper feeding. If possible, secure the cables to a leg of the printer stand.

Positioning the continuous paper supply

Before using continuous paper, make sure you line up your paper supply with the tractor feeder so the paper feeds smoothly into the printer, as shown below.



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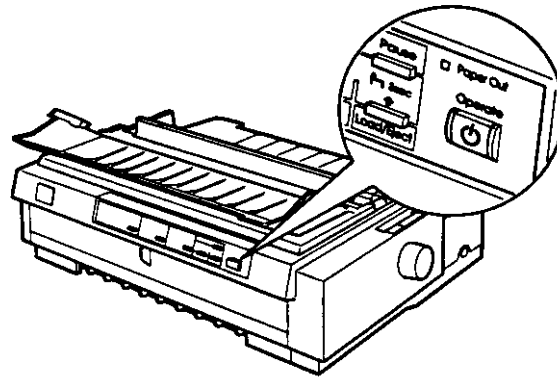
Installing or Replacing the Ribbon Cartridge

EPSON recommends the use of genuine EPSON ribbon cartridges (S015091). Products not manufactured by EPSON may cause damage to your printer not covered by warranties.

**Warning:**

You will need to move the print head by hand to install or replace the ribbon cartridge. If you have just used the printer, the print head may be hot; let it cool for a few minutes before touching it.

1. Make sure the printer is turned off. The printer is off when the surface of the **Operate** button is even with the button protectors as shown.



G1-10a.eps

**Caution:**

Moving the print head while the printer is on may damage the printer.

2. If the printer is connected to an electrical outlet, unplug it from the outlet.

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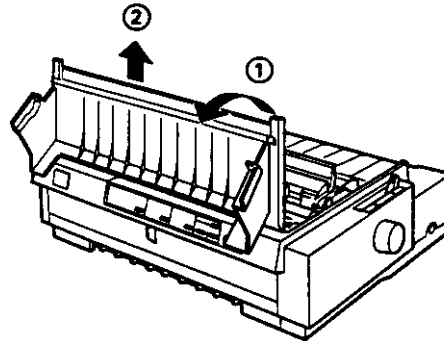
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3. Lift the printer cover by its back edge and then pull it straight up and off.

1



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4. Make sure that the print head is not hot; if it is, let it cool for a few minutes before touching it. Then slide the print head to the ribbon installation position (the indented portion of the paper tension unit) by hand.

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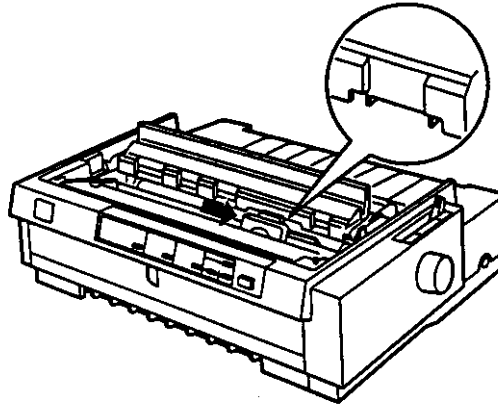
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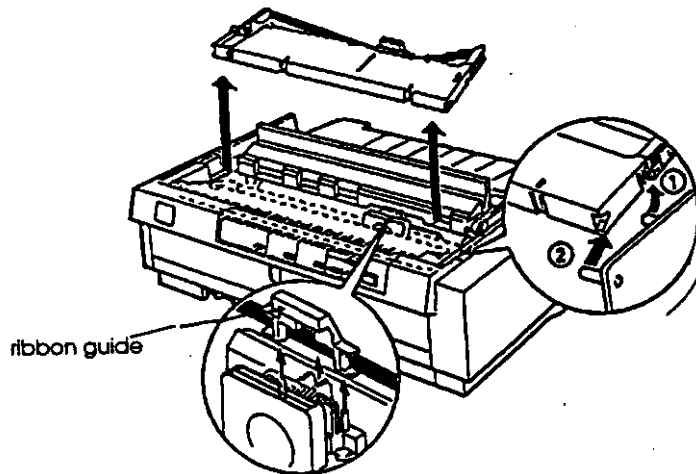
Note:

When the pull tractor is installed, you can replace the ribbon cartridge when the print head is not in the ribbon installation position.



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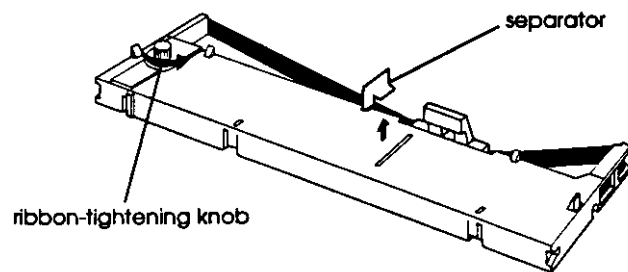
5. If a used ribbon cartridge is installed, grasp it by grasping the cartridge and pull it slightly forward and up; the ribbon guide snaps away from the metal pins behind the print head. Properly dispose of the used ribbon cartridge.



1-4.eps

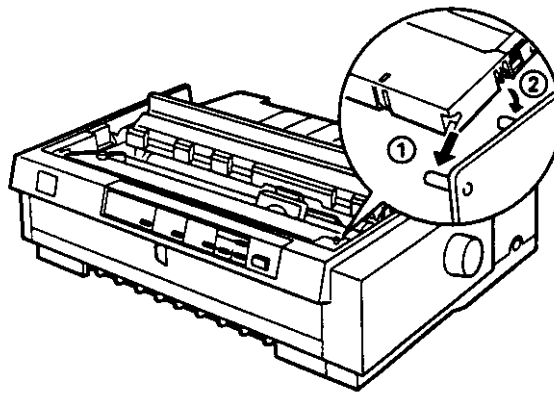
6. Remove the new ribbon cartridge from the package. Then remove the separator from the middle of the ribbon cartridge and discard the separator. Turn the ribbon-tightening knob in the direction of the arrow to remove any slack in the ribbon.

1



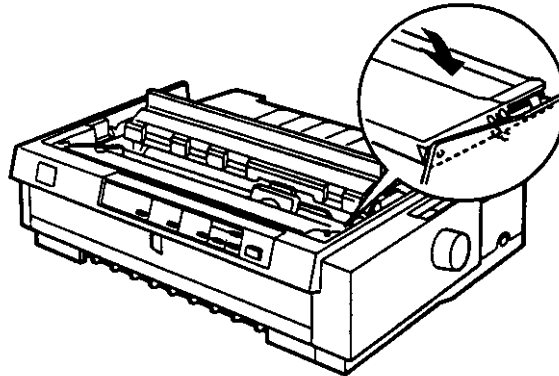
1-5a.eps

7. Hold the cartridge with the ribbon-tightening knob up. Fit the two front notches of the ribbon cartridge over the small pegs on each side of the printer as shown below. Then lay the cartridge flat.



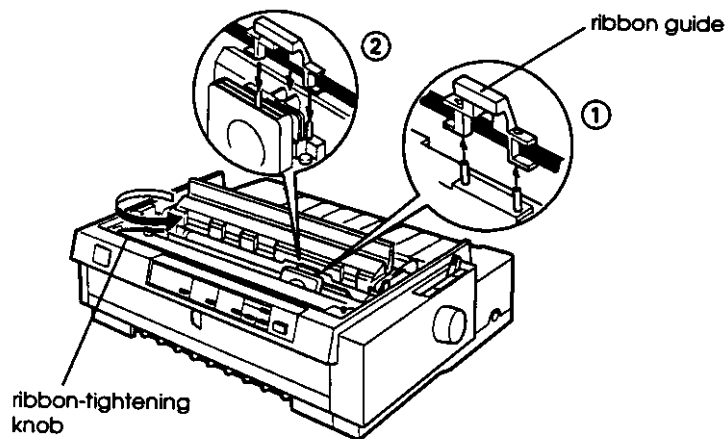
1-5b.eps

8. Make sure that the two rear notches of the cartridge fit over the small pegs on each side of the printer. Then gently press down the cartridge until both ends click into place.



1-6su.eps

9. Lift the cartridge's ribbon guide (①) and insert it firmly over the metal pins behind the print head (②). Make sure the ribbon is not twisted or creased and that it is in place behind the print head. Then press down the guide until it clicks into place.

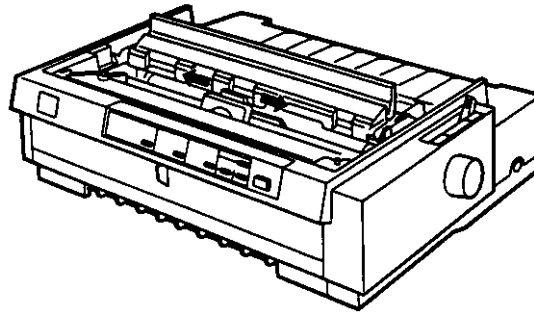


1-7.eps



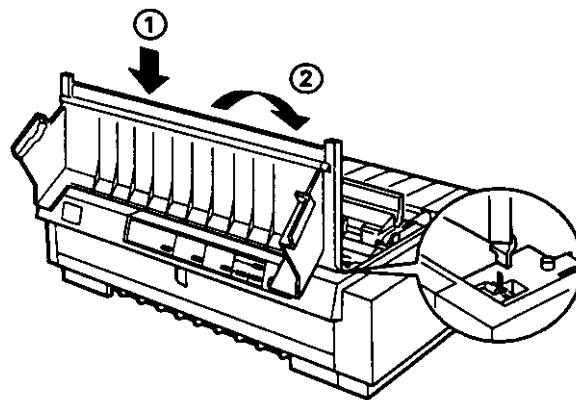
10. Turn the ribbon-tightening knob in the direction of the arrow to remove any slack in the ribbon as shown in step 9. Then slide the print head from side to side to make sure it moves smoothly.

1



1-8.eps

11. Replace the printer cover by first inserting the front tabs into the slots on the printer and then lowering the cover into place. Push it down until it clicks.



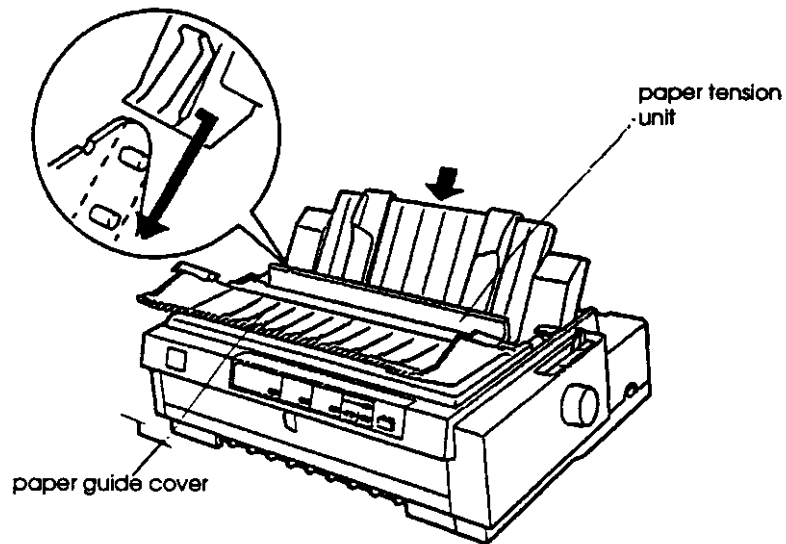
1-9n.eps

Attaching the Paper Guide Base

To install the paper guide base follow these steps:

1. Make sure the paper guide cover is open as shown below. Attach the paper guide base by sliding the slots on the bottom over the pegs located behind the paper tension unit, then tilt the guide back until it stops.

1-9.eps

**Caution:**

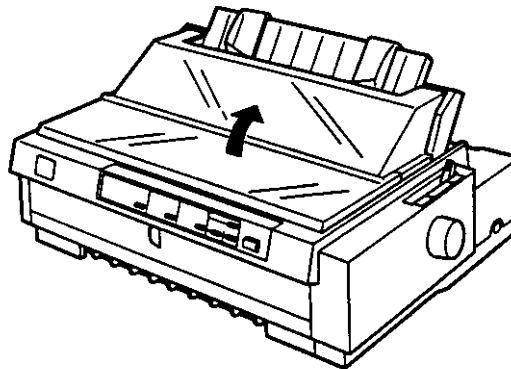
Make sure to slide the slots on the bottom of the paper guide over the pegs located behind the paper tension unit on each side of the printer.

1-11.eps



2. Close the paper guide cover.

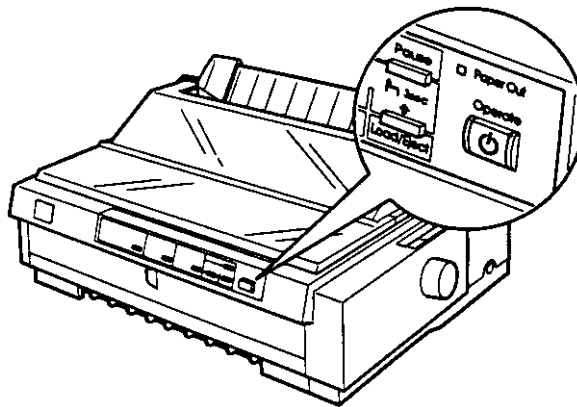
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Plugging in the Printer

1. Make sure the printer is turned off. The printer is off when the surface of the Operate button is even with the button protectors as shown below.



2. Check the label on the back of the printer to make sure its voltage matches that of your electrical outlet. Also make sure the plug on your printer's power cord matches your electrical outlet.

**Warning:**

It is not possible to change the printer's voltage. If the rated voltage and your outlet voltage do not match, contact your dealer for assistance. Do not plug in the power cord.

3. If the power cord is not attached to the printer, plug the appropriate end into the AC inlet on the back of the printer.
4. Plug the power cord into a properly grounded electrical outlet.

Connecting the Printer to Your Computer

Your printer has three separate interface connections: an IEEE-1284 compatible parallel interface, an EIA-232D serial interface and Type B optional interface. See page A-3 for more information.

If your computer requires a different type of printer interface, you should be able to use one of the optional interfaces described on page A-3.

Follow the steps below to connect the printer to your computer using a parallel or serial interface connector, or a ground wire connector.

1. Make sure both the printer and computer are turned off. The printer is off when the surface of the Operate button is even with the button protectors.

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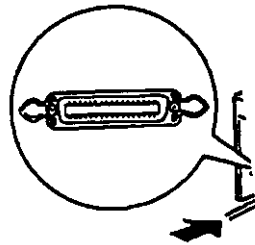
2. Plug the cable connector securely into the printer's interface connector as shown.

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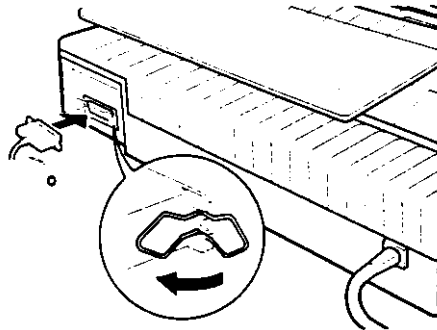
Parallel interface

Plug the cable connector securely into the parallel interface connector.

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Squeeze the wire clips together until they lock in place on both sides of the connector.



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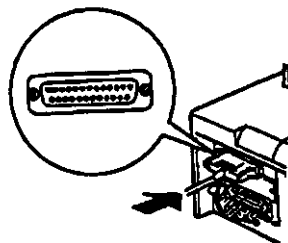
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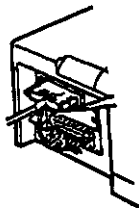
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Serial interface

Plug the cable connector securely into the serial interface connector.



Tighten the screws on the both sides of the connector.

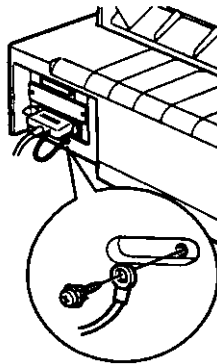


Note:

If the screws that come with the cable do not fit into the connector lock nuts on the interface, replace the lock nuts with the optional lock nuts provided with the printer.

3. If your cable has a ground wire, connect it to the printer's ground connector as shown below.

1



4. Plug the other end of the cable into the computer.

After you connect the printer to your computer, install the printer software as described in the next section.

Installing the Printer Software

After you connect the printer to your computer, you need to install the software included on the EPSON printer software CD-ROM shipped with your printer.

Your printer software includes:

- Printer driver**
The printer driver is the software that runs, or "drives," your printer. With it, you can make printer settings such as print quality, resolution, and paper size.
- EPSON Status Monitor 2 (Windows 95 or 98 only)**
The EPSON Status Monitor 2 notifies you of printer errors and displays printer status information.

31run.tif

- EPSON Remote! (a DOS-based printer setup utility)
The EPSON Remote! utility allows you to easily change the printer's default settings from the computer screen. To use the EPSON Remote! utility with DOS, see page 4-24.

To install the printer software, see "Installing the printer software in Windows 98, 95, or NT4.0" or "Installing the printer software in Windows 3.1 or NT3.5x" in this section. If you are using DOS, see "For DOS programs" on page 1-20.

Installing the printer software in Windows 98, 95, or NT 4.0

Follow the steps below to install the printer software in Windows 98, 95, or NT 4.0.

Note:

- Installing the printer software for Windows NT® 4.0 may require network administration privileges. Ask your network administrator for more information.*
 - If you wish to make a diskette version of the printer software on your CD-ROM, insert the CD and run the EPSETUP program. In the dialog box that appears, click the Driver disk creation utility button and follow the on-screen instructions.*
 - If you are using the diskette version of the EPSON software, make a backup copy of the EPSON printer software disk or disks before you begin installation.*
1. Make sure Windows 98, 95, or NT 4.0 is running and the printer is off.
 2. Insert the printer software CD-ROM in the CD-ROM drive. The Install dialog box appears. (If you are using diskettes, insert the diskette in a disk drive, then double-click the drive icon and double-click the Setup.exe icon.)
 3. Click Install to start the printer software installation, and follow the instructions.

Note:

- If the New Hardware Found screen or any other wizard appears when you turn on your computer, click CANCEL and follow the steps above.*
- Installation time varies depending on your computer.*



For information on opening and using the software, see "Using the Printer Software" in Chapter 4. After you install the printer driver for Windows 98, 95, or NT 4.0, you can install the EPSON Status Monitor 2 utility program. See Chapter 6 for information on installing and using the Status Monitor.

Installing the printer software in Windows 3.1 or NT 3.5x

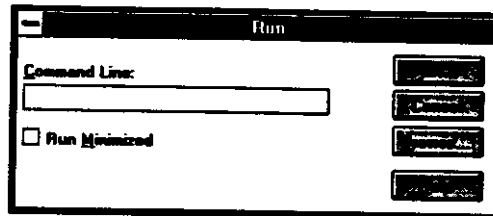
Follows the steps below to install the printer software on Windows 3.1 or NT 3.5x systems.

Note:

Installing the printer software on Windows NT 3.5x may require network administration privileges. Ask your network administrator for more information.

1. Make sure Windows is running and the Program Manager window is open.
2. Insert the printer software CD-ROM shipped with your printer in the CD-ROM drive. (If you are using diskettes, insert Disk1 of your printer software in a disk drive.)

3. Choose RUN from the File menu. The Run dialog box appears. In the Command Line box, type D:SETUP, (If your CD-ROM drive has a drive letter other than "D", or if you are using a diskette, substitute the appropriate drive letter.) Then click OK.



- If you wish to make a diskette version of the printer software on your CD-ROM, type EPSETUP instead of SETUP. In the dialog box that appears, click the Driver disk creation utility button and follow the on-screen instructions.
4. The installation program begins copying the printer software files.
 5. When the installation is complete, click OK to exit the installation program.

The installation program automatically selects the FX-980 as the default printer for Windows applications.

For information on opening and using the software, see "Using the Printer Software" in Chapter 4.

For DOS programs

To control the printer from DOS application programs, you must select the printer you are using or another available printer from the printer list of your application.

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Choose the EPSON FX-980 printer at the appropriate step in the setup or installation procedure. If the list in your application does not include the FX-980 printer, choose the first available printer from this list:

1

FX-880
FX-870
FX-850
FX-800
FX-85
FX-80+
FX-80

If none of these printers is listed, choose the first one available from the following:

FX
LX
RX
MX
EPSON printer
Standard printer
Draft Printer
ASCII printer

Note:

If your application does not list a suitable alternative, contact the software manufacturer to see if an update is available.

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Chapter 2

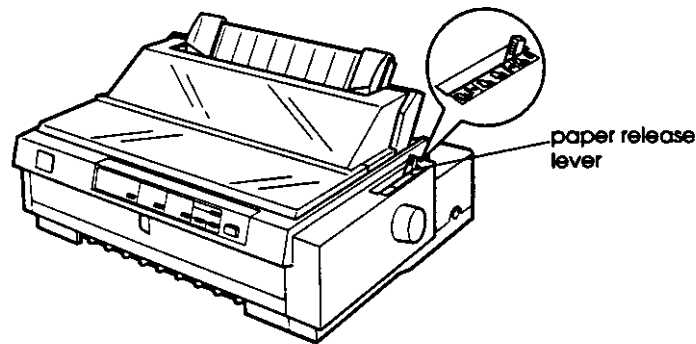
Printing on Continuous Paper

| | |
|--|------|
| Setting the Paper Release Lever | 2-2 |
| Setting the Paper Thickness Lever | 2-4 |
| Using the Rear Push Tractor | 2-6 |
| Loading paper onto the rear push tractor..... | 2-6 |
| Removing a printed document from the rear push tractor . | 2-10 |
| Using the Front Push Tractor..... | 2-12 |
| Installing the tractor in the front push position..... | 2-12 |
| Loading paper onto the front push tractor..... | 2-13 |
| Removing a printed document from the front push tractor | 2-18 |
| Removing the front push tractor | 2-19 |
| Using the Tractor in the Pull Position | 2-20 |
| Installing the tractor in the pull position | 2-21 |
| Loading paper onto the pull tractor | 2-23 |
| Removing the paper from the pull tractor | 2-28 |
| Using two tractors in a push/pull combination | 2-29 |
| Removing the pull tractor | 2-31 |
| Loading multi-part Forms | 2-33 |
| Loading Continuous Paper With Labels | 2-33 |
| Removing continuous paper with labels | 2-35 |
| Switching Between Printing on Continuous Paper and Printing on Single Sheets..... | 2-36 |
| Switching to printing on single sheets | 2-36 |
| Switching to printing on continuous paper | 2-37 |
| Adjusting the Top-of-Form Position..... | 2-38 |
| Advancing the Paper to the Tear-Off Edge | 2-41 |
| Using the Tear Off/Bin button..... | 2-41 |
| Advancing the paper to the tear-off position automatically | 2-42 |
| Adjusting the tear-off position..... | 2-42 |

Setting the Paper Release Lever

You can load continuous paper in the printer from various paper sources, such as the rear push tractor or the front push tractor. Use the paper release lever to indicate the paper source you want to use, as described in the table below.

To decide which paper source and paper path best suits your printing needs, see "Available Paper Paths" on page -3.



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The table below describes each paper release lever position.

| Paper release lever position | Description |
|------------------------------|--|
| <p>CUT</p> | <p>Single-sheet position For loading single-sheet paper from the top or front slot. For information on loading single sheets, see Chapter 3.</p> |
| <p>FF PUSH</p> | <p>Rear push tractor position For loading continuous paper from the tractor installed in the rear push position. Also set the lever to this position when using the rear push and pull tractors in combination.</p> |

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2-4g
2-3g
2-5g



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| Paper release lever position | Description |
|---|--|
|  | Front push tractor position For loading continuous paper from the tractor installed in the front push position. Also set the lever to this position when using the front push and pull tractors in combination. |
| FF PULL  | Pull tractor position For loading continuous paper from the tractor installed on top of the printer in the pull position. When the tractor is in the pull position, you can load paper in the front, rear, or bottom slot. |

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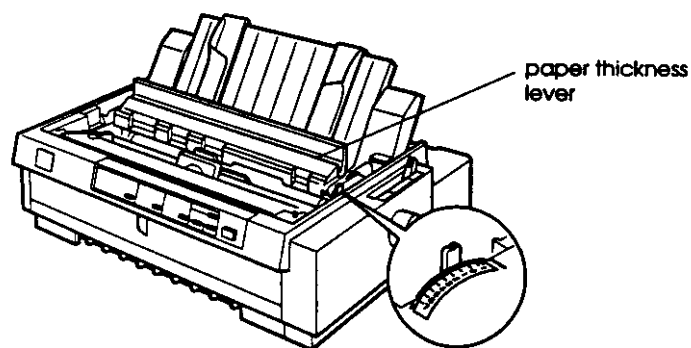
Note:

you can load two different types of continuous paper onto the front and rear push tractors, and easily switch between them using the paper release lever. Before moving the paper release lever, always press the Load/Eject button to feed the paper in the paper path backward to the standby position.

2-38n.eps

Setting the Paper Thickness Lever

Setting the paper thickness lever allows the printer to accommodate various thicknesses of paper. The paper thickness lever is located under the printer cover. You can select one of nine positions identified by the scale next to the lever.



Use the following table to set the paper thickness lever to match the thickness of your paper.

| Paper type* | Lever position |
|--|----------------------------|
| Ordinary (single sheets or continuous paper) | 0 |
| Thin paper | -1 or 0 |
| Carbonless multipart forms with:** 2 parts (original + 1 copy) 3 parts (original + 2 copies) 4 parts (original + 3 copies) 5 parts (original + 4 copies) 6 parts (original + 5 copies) 7 parts (original + 6 copies)**** | 1 3 4 5 6 6 |
| Continuous paper with labels*** | 2 |
| Postcard | 3 |
| Envelopes | 4 or 5 |

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- * See Appendix C for complete paper specifications.
- ** It is recommended that multi-part forms be used with the optional tractor unit installed in the front push or pull position.
- *** Continuous paper with labels cannot be used with the rear push tractor. To use them, install the optional tractor unit in the front push or pull position.
- **** Always load multi-part forms with 7 parts (one original plus 6 copies) from the front or bottom slot onto the pull tractor.

2

Note:

- If the printed image is smeared, you may need to set the paper thickness lever one position higher to improve print quality.*
- If the printed image is faint or has many gaps, you may need to set the paper thickness lever one position lower to improve print quality.*

Using the Rear Push Tractor

To use the rear push tractor, load continuous paper in the rear slot. For information on when to use the rear push tractor, see "Available Paper Paths" on page -3.

Note:

The tractors are installed in the front push and rear push positions when the printer is shipped. The rear push tractor cannot be removed.

Loading paper onto the rear push tractor

If a tractor is installed in the pull position, you need to remove it and install the paper tension unit as described on page 2-32 before using the rear push tractor.

Note:

To avoid paper jams, it is best to load thick multi-part forms using the front or bottom slot and the pull or front push tractor.



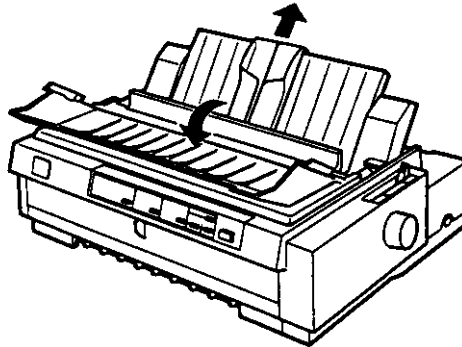
Caution:

Do not load continuous paper with labels in the rear paper slot; the labels may come off their backing sheet inside the printer and cause a paper jam.

To load paper onto the rear push tractor, follow these steps:

1. Make sure the printer is turned off.

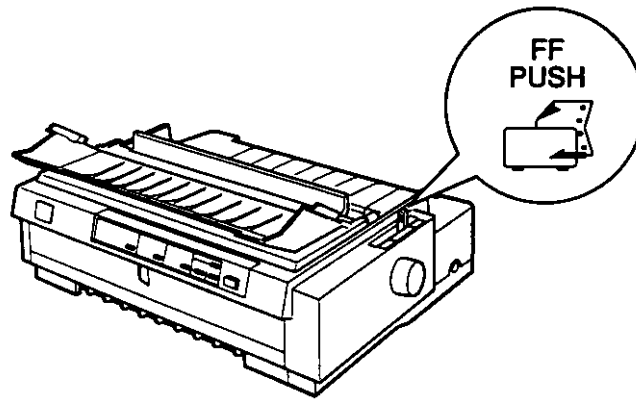
2. Open the paper guide cover and remove the paper guide base by holding the both edges and lifting it up.



2

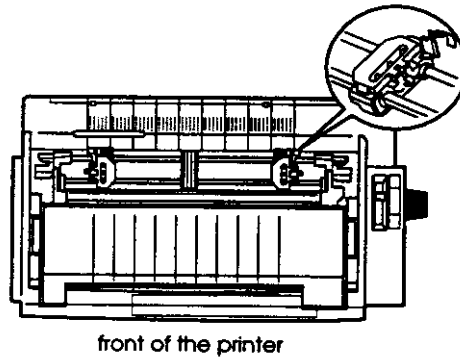
3. Set the paper release lever to the rear push tractor position. Set the paper thickness lever (located under the printer cover) to the proper position for your paper's thickness.

G3-19.eps

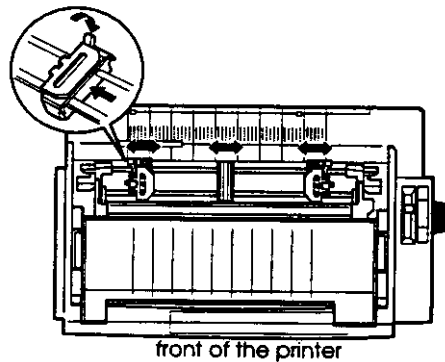




4. Release the left and right sprockets by pulling the sprocket lock levers forward.



5. Slide the left sprocket to the left margin of the paper using the scale on the printer. (Printing starts at the "0" mark.) Then push the lever back to lock it in place.



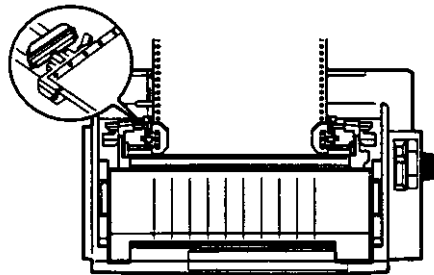
Note:

See "Paper alignment" and "Printable area" in Appendix C for more information on the left margin position.

6. Slide the right sprocket to match the width of your paper, but do not lock it. Move the paper support midway between the two sprockets as shown above.

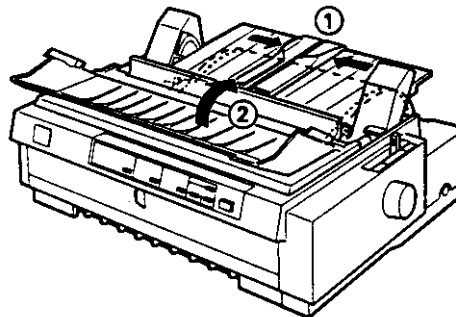
2-10.eps

7. Make sure your paper has a clean, straight edge. Then open both sprocket covers and fit the first three holes of the paper, printable side down, over the tractor pins. Then close the sprocket covers.



front of the printer

8. Slide the right sprocket to remove any slack in the paper; then lock it in place by pushing the sprocket lock down.
9. Attach the paper guide base as described on page 1-12. After installing the paper guide, grab the center section of the paper guide, lift it up and lay it flat.
10. Slide the edge guides to the middle of the paper guide base. Then close the paper guide cover.



Note:

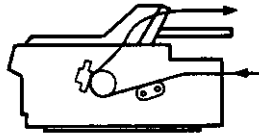
The printer cannot print when the cover is open.

2

2-17.eps

2-20.eps

11. Turn on the printer. You may need to check and change the printer driver settings as described in Chapter 4. When the printer receives data, it automatically loads the paper and starts printing. The printed pages are fed over the paper guide toward the back of the printer.



2-20a.eps

12. After you finish printing, follow the steps in the next section to tear off your printed document. If the first printed line on your page appears too high or low, you can change its position by using the micro adjust feature. See "Adjusting the Top-of-Form Position" on page 2-38.

**Caution:**

Never use the knob to adjust the top-of-form position; this may damage the printer or cause it to lose the top-of-form position.

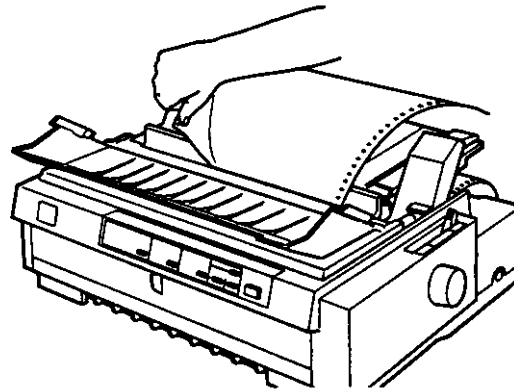
Removing a printed document from the rear push tractor

To remove the printed document, follow these steps:

1. Make sure the Tear Off/Bin lights are flashing. (This indicates your paper is at the current tear-off position). You may need to press the Tear Off/Bin button.

2-21.eps

2. Open the paper guide cover, and tear off the printed document using the tear-off edge of the printer.



2

2-22.eps

Note:

If your paper's perforation is not properly aligned with the tear-off edge, you can adjust the tear-off position using the micro adjust feature. See "Adjusting the tear-off position" on page 2-42.



Caution:

Never use the knob to adjust the tear-off position; this may damage the printer or cause it to lose the tear-off position.

3. Close the paper guide cover.

When you resume printing, the printer automatically feeds the paper back to the top-of-form position and starts printing.

To feed continuous paper to the standby position where you can remove the paper, press the Load/Eject button. (See the Glossary for an explanation of the standby position.) Then open the sprocket covers of the tractor and remove the paper.

2-23.eps



Caution:

Always tear off your printed document before you press the Load/Eject button. Reverse feeding several pages at a time may cause a paper jam.

Using the Front Push Tractor

To use the front push tractor, load continuous paper in the front slot. For more information on when to use the front push tractor, see "Available Paper Paths" on page -3.

Note:

The tractors are installed in the front push and rear push positions when the printer is shipped. The rear tractor cannot be removed.

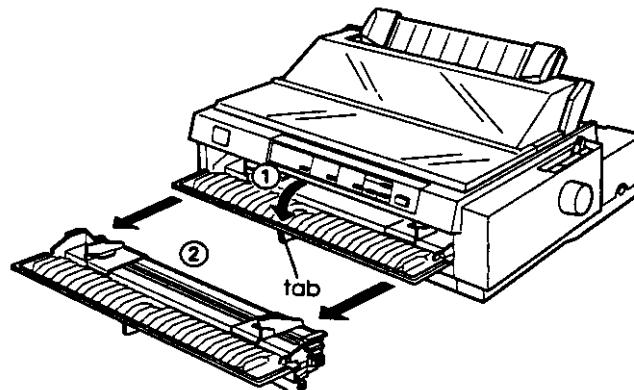
Installing the tractor in the front push position

If a tractor is installed in the front push position, skip to "Loading paper onto the front push tractor" on the next page.

If a tractor is installed in the pull position, you need to remove it and install the paper tension unit as described on page 2-32 before using the front push tractor.

To install the tractor in the front push position, follow these steps:

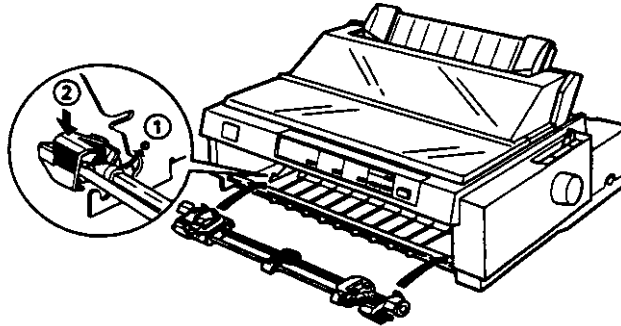
1. Make sure the printer is turned off.
2. Open the front paper guide by pulling the tab at the center of the guide. Then remove the guide by grasping both sides and pulling it straight out of the printer.



2-24.eps

2-24a.eps

3. Insert the tractor into the printer's mounting slots and press down both ends of the tractor to make sure that it is firmly seated.



2

2-35a.eps

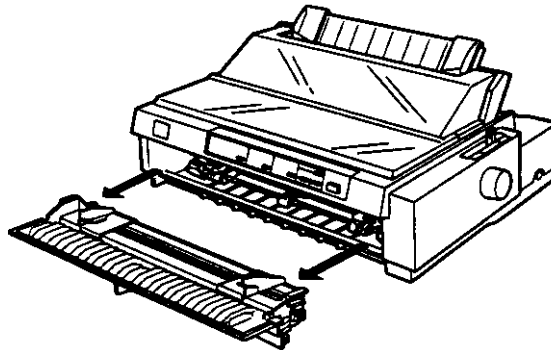
You are now ready to load continuous paper onto the front push tractor as described in the next section. To remove the tractor, see page 2-19.

Loading paper onto the front push tractor

To load paper onto the front push tractor, follow these steps:

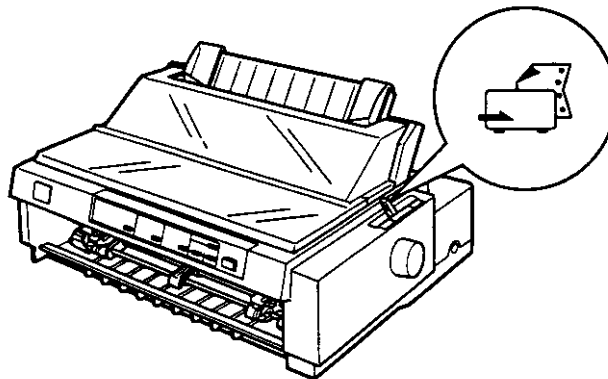
1. Make sure the printer is turned off.

2. Open the front paper guide by pulling the tab at the center of the guide. Then remove the guide by grasping both sides and pulling it straight out of the printer. Check that the tractor is installed in the front push position.

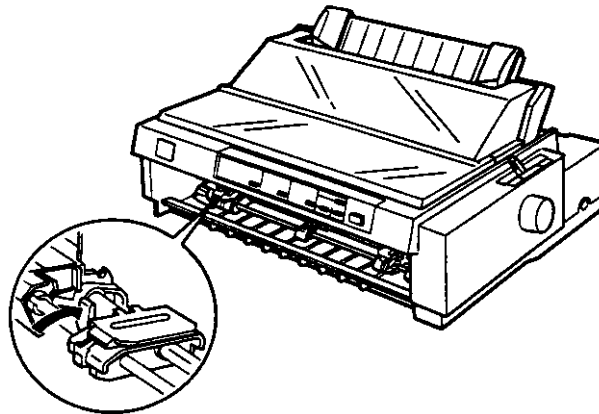


1-1.eps

3. Set the paper release lever to the front push tractor position. Also set the paper thickness lever (located under the printer cover) to the proper position for your paper's thickness.

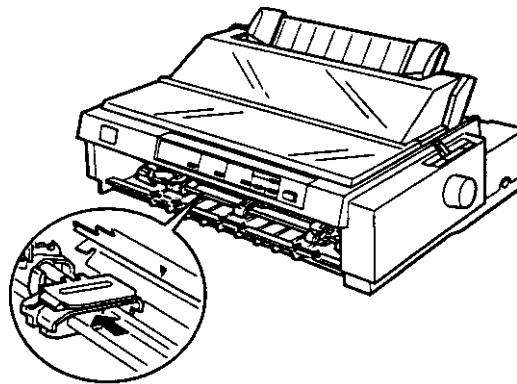


4. Release the left and right sprockets by pushing the sprocket lock levers backward.



2

5. Slide the left sprocket to the left margin of your paper using the arrow mark inside the printer. (Printing starts at the arrow mark.) Then pull the lever forward to lock it in place.



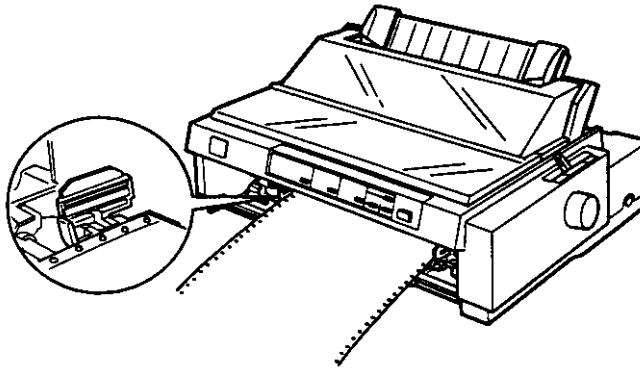
2-17nn.eps

Note:

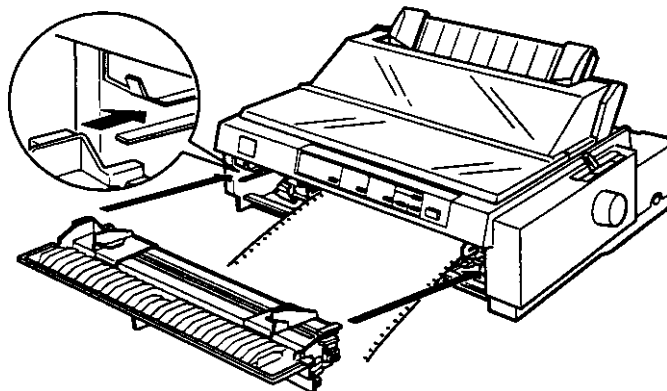
See "Paper alignment" and "Printable area" in Appendix C for more information on the left margin position.

2-16b.eps

6. Slide the right sprocket to match the width of your paper, but do not lock it. Move the paper support midway between the two sprockets as shown above.
7. Make sure your paper has a clean, straight edge. Then open both sprocket covers and fit the first three holes on each side of the paper, printable side up, over the tractor pins. Then close the sprocket covers.



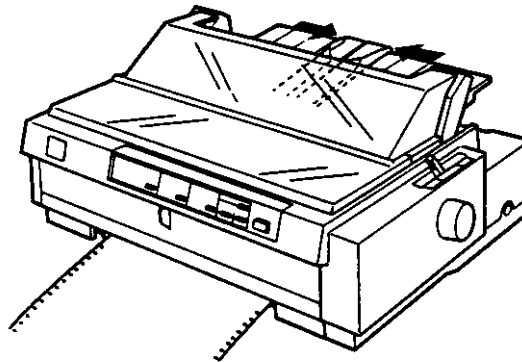
8. Slide the right sprocket to remove any slack in the paper; then lock it in place by pushing the sprocket lock down.
9. Attach the front paper guide by sliding it along the printer's mounting slots as shown below. Then close the front paper guide.



C.eps



- Slide the edge guides to the middle of the top paper guide. Lift the center section of the paper guide up and lay it flat. Make sure that the printer cover and the paper guide cover are closed.



2

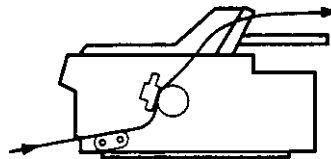
2-26.eps

Note:

The printer cannot print when the printer cover is open.

- Turn on the printer. You may need to check and change the printer driver settings as described in Chapter 4. When the printer receives data, it automatically loads the paper and starts printing. The printed pages are fed over the paper guide toward the back of the printer.

2-27.eps



- After you finish printing, follow the steps in the next section to tear off your printed document.

If the first line on your page appears too high or low, you can change its position by using the micro adjust feature. See "Adjusting the Top-of-Form Position" on page 2-38.

**Caution:**

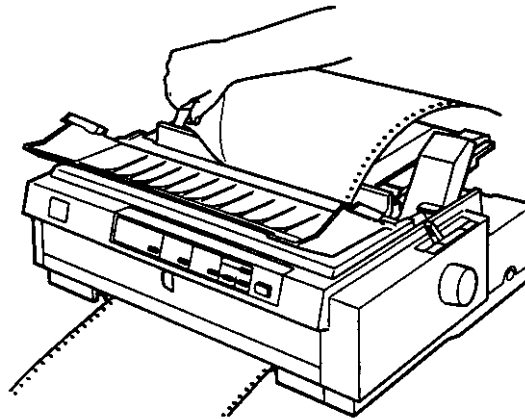
Never use the knob to adjust the top-of-form position; this may damage the printer or cause it to lose the top-of-form position.

2-28.eps

Removing a printed document from the front push tractor

To remove the printed document, follow these steps:

1. Make sure the Tear/Off Bin lights are flashing. (This indicates your paper is at the current tear-off position.) You may need to press the Tear Off/Bin button.
2. Open the paper guide cover, and tear off the printed document using the tear-off edge of the printer.



2-29.eps

Note:

If your paper's perforation is not properly aligned with the tear-off edge, you can adjust the tear-off position using the micro adjust feature. See "Adjusting the tear-off position" on page 2-42.



Caution:

Never use the knob to adjust the tear-off position; this may damage the printer or cause it to lose the tear-off position.

3. Close the paper guide cover.

When you resume printing, the printer automatically feeds the paper back to the top-of-form position and starts printing.

To remove the remaining paper from the printer, press the Load/Eject button to feed the paper backward to the standby position. (See the Glossary for an explanation of the standby position.) Then open the sprocket covers of the tractor and remove the paper.



Caution:

Always tear off your printed document before you press the Load/Eject button. Reverse feeding several pages at a time may cause a paper jam.

Removing the front push tractor

To remove the tractor from the front push position, follow these steps:

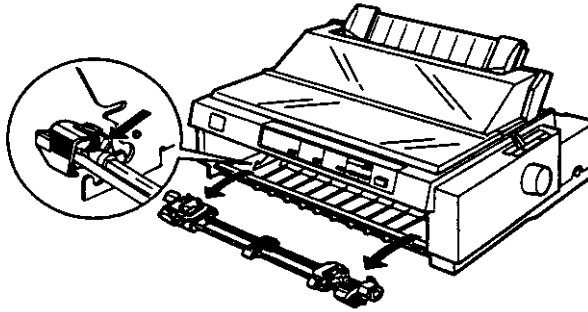
1. Remove
2. Remove any paper from the tractor as described in the previous section.
3. Turn off the printer.
4. Open the front paper guide by pulling the tab at the center of the guide. Then remove the guide by grasping both sides and pulling it straight out of the printer.



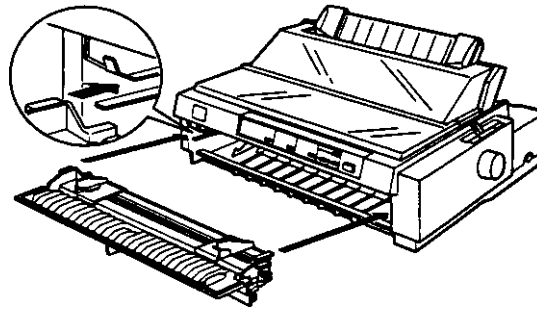
2-29a.eps

2-35c.eps

5. Press the tractor's lock tabs, tilt the tractor up, and lift it out of the printer.



6. Replace the front paper guide by sliding it along the printer's mounting slots until it locks in place. Then close the front paper guide.



P3-9.eps

Using the Tractor in the Pull Position

Using the tractor in the pull position is ideal for printing on thick and heavy continuous paper, such as multi-part forms or continuous paper with labels. However, you cannot use the tear-off feature with the pull tractor.

Because thick paper requires a straight paper path to avoid paper jams, you should load paper in the front or bottom slot when using the pull tractor.