paper guide cover

edge guides

paper guide

printer cover

paper release lever

front cover (closed)

control panel

User Replaceable Parts

User replaceable part	Part number
Upper connector cover	1037223
C.B.S-tite screw	1002674
Front edge guide	1050231
Front cover assembly	1053455
Knob	1039337
Logo plate	1053118
Paper separator	1025296
Paper eject assembly	1050319
Printer cover assembly	1050320
Rear tractor assembly	1040231
Rear sheet guide assembly	1050324

Options

Paper Handling Options

High-capacity cut-sheet feeder (C806381)

Feeds up to 150 sheets of paper or 25 plain bond envelopes into the printer without reloading. If you also install the single-bin cut-sheet feeder, you can use both feeders as a double-bin cut-sheet feeder.

Single-bin cut-sheet feeder (C806371)

Feeds up to 50 sheets of ordinary single-sheet paper and is used in conjunction with the high-capacity cut-sheet feeder to create a double bin.
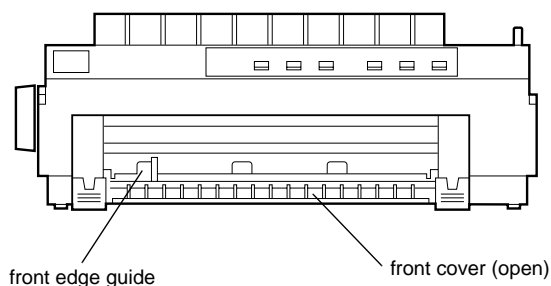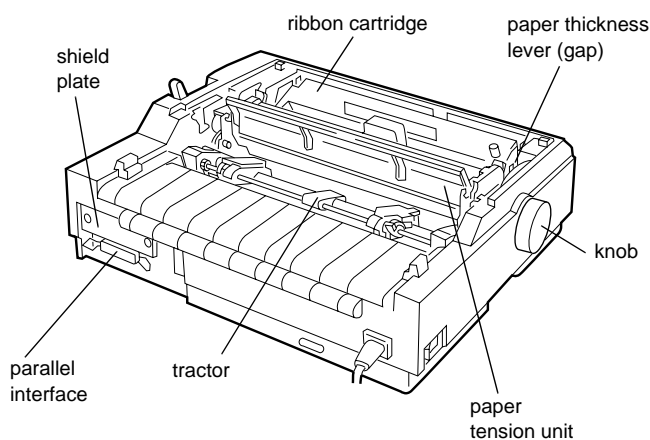
Additional tractor unit (C800201)

Used in combination with the other tractor, improves continuous paper handling and reduces the chance of paper jams. This is especially useful for printing on continuous multipart forms.

Roll paper holder (#8310)

Allows you to use your printer with 8.5-inch roll paper like that used with telex machines.

Front sheet guide (C814231)

Allows you to easily load single sheets, including single sheet mulitpart forms, from the front paper slot.

shield plate

ribbon cartridge

paper thickness lever (gap)

knob

parallel interface

tractor

paper tension unit

front edge guide

front cover (open)

Optional Interface Cards

You can install an optional interface card to supplement your printer's built-in parallel interface and provide added network compatibility. The EPSON interface cards in the table below are compatible with your printer.

Model number	Card type
C823051	Serial Type B interface card
C823071	32KB serial Type B interface card
C823121	LocalTalk interface card
C823141	Coax Type B interface card
C823151	Twinax Type B interface card
C823451	IEEE-1284 (Type B bidirectional) parallel interface card
C823622	Type B Ethernet interface card for 10 Base 2 / 10 Base T
C823642	Type B Ethernet interface card for 10/100 Base TX with AC adapter

* If you install the C823051 optional serial interface card, be sure to set the transfer speed to one of the following: 300, 600, 1200, 2400, 4800, 9600, or 19200 bps.

Printer Specifications

Mechanical

Printing method   24-pin impact dot matrix

Emulation   EPSON ESC/P®2 and IBM 2390 Plus

Printing speed   High-speed draft
    400 cps at 10 cpi

    Draft
    300 cps at 10 cpi
    360 cps at 12 cpi
    450 cps at 15 cpi

    Draft condensed
    257 cps at 17 cpi
    300 cps at 20 cpi

    LQ
    100 cps at 10 cpi
    120 cps at 12 cpi
    150 cps at 15 cpi

    LQ condensed
    171 cps at 17 cpi
    200 cps at 20 cpi

Printing direction   Bidirectional logic seeking for text and graphics printing. Unidirectional text or graphics printing can be selected using software commands.

Line spacing   1/6 inch or programmable in 1/360-inch increments

Printable columns   80 columns (at 10 cpi)

Resolution (maximum)   Letter quality: 360×180 dpi

    Raster graphics: 360×360 dpi

Interfaces   1 standard bidirectional, 8-bit parallel interface with IEEE-1284 nibble mode support, and 1 optional interface slot

Paper feed methods   Friction (front or top paper entry)

    Push tractor (rear paper entry)

    Pull tractor (front, bottom, or rear paper entry)

    Push and pull tractor (optional)

    High-capacity cut-sheet feeder (optional)

    Roll paper holder (optional)

Paper feed speed   Continuous
    5 inches/second

    Intermittent
    45 ms/line at 1/6-inch line spacing

Paper capacity   Optional high-capacity cut-sheet feeder
    up to 150 sheets of 22 lb (82 g/m²) paper
    up to 25 plain or bond envelopes
    up to 30 airmail envelopes
    up to 30 postcards

    Single-bin cut-sheet feeder
    up to 50 sheets of 22 lb (82 g/m²) paper

Note   The total thickness of the paper stack can be up to 0.20 inch (5 mm).

Buffer   64KB

Built-in fonts	*Bitmap fonts*
	EPSON Draft 10, 12, 15 cpi

Bitmap fonts

EPSON Draft 10, 12, 15 cpi

EPSON Roman 10, 12, 15 cpi, proportional

EPSON Sans Serif 10, 12, 15 cpi, proportional

EPSON Courier 10, 12, 15 cpi

EPSON Prestige 10, 12 cpi

EPSON Script 10 cpi

EPSON OCR-B 10 cpi

EPSON Orator 10 cpi

EPSON Orator-S 10 cpi

EPSON Script C proportional

Scalable fonts

EPSON Roman 10.5, 8–32 pt (every 2 pt)

EPSON Sans Serif 10.5, 8–32 pt (every 2 pt)

EPSON Roman T 10.5, 8–32 pt (every 2 pt)

EPSON Sans Serif H 10.5, 8–32 pt (every 2 pt)

Barcode fonts

EAN-13, EAN-8, Interleaved 2 of 5, UPC-A, UPC-E, Code 39, Code 128, POSTNET

Character tables — 1 Italic table and 12 graphical character tables (35 graphical character tables are available in some countries)

Character sets — 14 international character sets and 1 legal character set

Reliability — Total print volume
19 million lines (except print head)
MTBF 10,000 POH (25% duty)

Print head life
approximately 200 million strokes per wire

Dimensions and weight	Height	6.3 inches (160 mm)
	Width	16.3 inches (415 mm)
	Depth	14.5 inches (368 mm)
	Weight	16.5 lb (7.5 kg)

Ribbon — Black ribbon cartridge (#7753)
Film ribbon cartridge (#7768)

Black ribbon life: 2 million characters (LQ, 10 cpi, 48 dots/character)

Film ribbon life: 0.2 million characters (LQ, 10 cpi, 48 dots/character)

Electrical

	120 V	220 to 240 V
Input voltage range	99 to 132 V	198 to 264 V
Rated frequency range	50 to 60 Hz	
Input frequency range	49.5 to 60.5 Hz	
Rated current	1.0 A (maximum 2.6 A depending on the character type)	0.5 A (maximum 1.4 A depending on the character type)
Power consumption	Approx. 36 W (ISO/IEC 10561 letter pattern)	

Environmental

	Temperature	Humidity (without condensation)
Operation	41 to 95 °F (5 to 35 °C)	10 to 80% RH
Storage	–22 to 140 °F (–30 to 60 °C)	0 to 85% RH

Paper

Note

Use recycled paper and envelopes only under normal temperature and humidity conditions, as follows:

Temperature 59 to 77 °F (15 to 25 °C)
Humidity 30 to 60% RH

Do not load paper that has been folded or is damaged, wrinkled, or curled.

Ordinary single sheets:
front, top, and cut-sheet feeder entry

Width — Front and top
10.1 to 14 inches (257 to 356 mm)
High-capacity cut-sheet feeder
3.9 to 14.3 inches (100 to 364 mm)
Second bin cut-sheet feeder
7.2 to 8.5 inches (182 to 216 mm)

Length — Front and top
3.9 to 14.3 inches (100 to 364 mm)
High-capacity cut-sheet feeder
10.1 to 14 inches (257 to 356 mm)
Second bin cut-sheet feeder
10.1 to 14 inches (257 to 356 mm)

Thickness	0.0025 to 0.0055 inch (0.065 to 0.14 mm) Cut sheet feeder: 0.0028 to 0.0055 inch (0.07 to 0.14 mm)
Weight	14 to 24 lb (52 to 90 g/m^2) Cut sheet feeder: 18 to 24 lb (64 to 90 g/m^2)

Single-sheet multipart forms:
front entry only

Width	3.9 to 10.1 inches (100 to 257 mm)
Length	3.9 to 14.3 inches (100 to 364 mm)
Copies	1 original + up to 4 copies
Thickness	0.0047 to 0.015 inch (0.12 to 0.39 mm)
Weight	12 to 15 lb (40 to 58 g/m^2)
Binding	Line glue at the top of form

Envelopes: top entry only

Size	No. 6	6.5×3.6 inches (165×92 mm)
	No. 10	9.5×4.1 inches (241×105 mm)
Thickness	0.0063 to 0.0205 inch (0.16 to 0.52 mm)	
Weight	12 to 24 lb (45 to 90 g/m^2)	

Postcards: front and top entry

Width	Front and top: 3.9 to 7.9 inches (100 to 200 mm) Cut sheet feeder: 3.9 to 5.8 inches (100 to 148 mm)
Length	Front: 5.8 to 7.9 inches (148 to 200 mm) Top: 3.9 to 7.9 inches (100 to 200 mm) Cut sheet feeder: 3.9 to 5.8 inches (100 to 148 mm)
Thickness	0.0087 inch (0.22 mm)
Weight	51 lb (192 g/m^2)

Continuous paper (standard and multipart):
front, rear, and bottom entry

Width	4 to 10 inches (101.6 to 254 mm)
Length	4 to 22 inches (101.6 to 558.8 mm)
Copies	1 original + up to 4 copies

Thickness	Printable area
	  0.0025 to 0.015 inch (0.065 to 0.39 mm)
	Perforated edges
	  up to 0.035 inch (0.9 mm)

Weight (not multipart)	14 to 22 lb (52 to 82 g/m^2)
Weight (1 multipart sheet)	12 to 15 lb (40 to 58 g/m^2)
Binding	Point glue or paper staples on both sides (front, bottom, or rear entry)

- The continuous multipart forms should be securely joined together along the left and right edges by crimping. Crimping should be pressed in from the original sheet side and go completely through all copy sheets.
- The ratio of the cut/uncut length at the perforation should be between 3:1 and 5:1.
- The perforation between pages should not extend all the way to the edges of the paper.
- At the perforation between pages, the horizontal and vertical perforation cuts should not cross.
- The thickness of the perforation part when extended should be 1 mm or less.

Continuous paper with labels:
front and bottom entry

| Label size (minimum)	0.938×2.5 inches (23.8×63.5 mm) 0.1 inch (2.5 mm) corner radius
Backing sheet width	4 to 10 inches (101.6 to 254 mm)
Backing sheet length	4 to 22 inches (101.6 to 558.8 mm)
Backing sheet thickness	0.0028 to 0.0035 inch (0.07 to 0.09 mm)
Total thickness	0.0063 to 0.0075 inch (0.16 to 0.19 mm)
Label weight	17 lb (64 g/m^2)

Roll paper:
rear entry with optional roll paper holder only

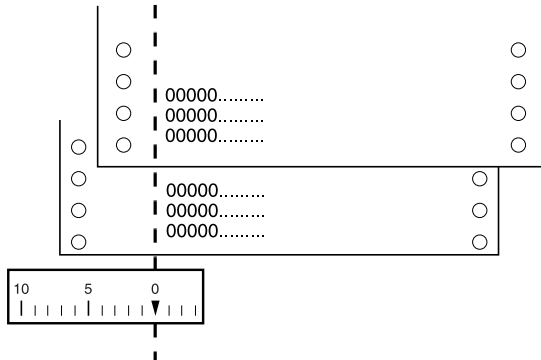| Width	8.5 ± 0.12 inch (216 ± 3 mm)
Thickness	0.0028 to 0.0035 inch (0.07 to 0.09 mm)
Weight	14 to 22 lb (52 to 82 g/m^2)

Paper Alignment

Front entry

Printing starts at "0" on the scale. The unprintable area is to the left of the "0".
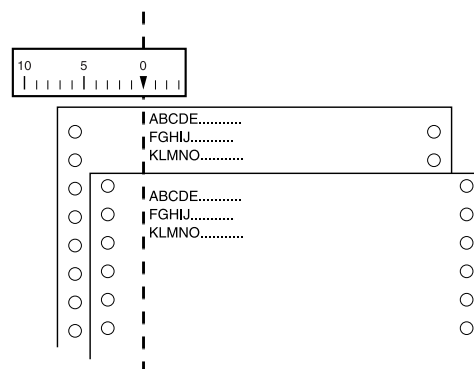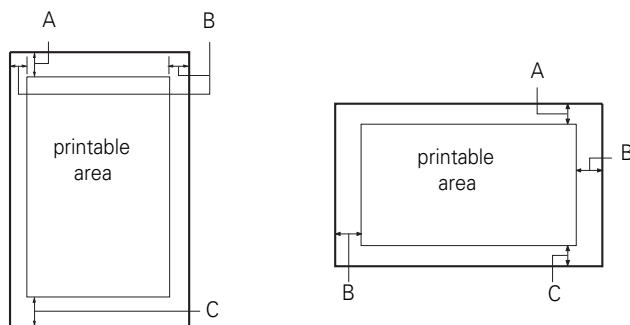
Rear entry

Printing starts at "0" on the scale. The unprintable area is to the left of the "0."

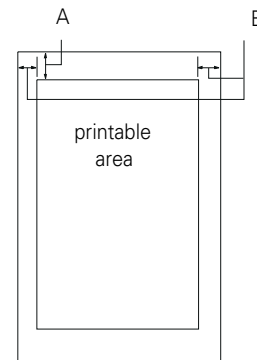# Printable Area

Single sheets, envelopes, and postcards

A   The minimum top margin is 0.17 inch (4.2 mm).

B   The minimum left and right margins are 0.12 inch (3 mm).
The maximum paper width is 10.1 inches (257 mm).
The maximum printable width is 8 inches (203.2 mm).
For single sheets wider than 8.23 inches (209.2 mm), the side margins increase to match the width of the paper.

C   The minimum bottom margin is 0.17 inch (4.2 mm).

Continuous paper
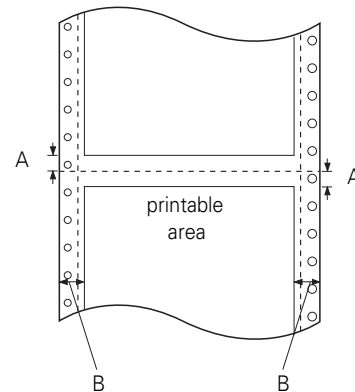
A   The minimum top and bottom margins above and below the perforation are 0.17 inch (4.2 mm).

B   The minimum left and right margins are 0.51 inch (13 mm).
The maximum paper width is 10 inches (254 mm).
The maximum printable width is 8 inches (203.2 mm).
For continuous paper wider than 9 inches (229.2 mm), the side margins increase proportionally to match the width of the paper.

Roll paper

A   The minimum top margin is 0.17 inch (4.2 mm).

B   The minimum left and right margins are 0.12 inch (3 mm).
The maximum printable width is 8 inches (203.2 mm).

Safety Approvals

120 V

|	
Safety standards	UL 1950 CSA C22.2 No. 950
EMI	FCC part 15 subpart B class B CSA C108.8 class B

230 V

Safety standards	EN 60950
EMI	EN 55022 (CISPR pub. 22) class B AS/NZS 3548 class B
Acoustic noise	Approx. 49 dB (A) (ISO 7779 pattern)

CE Marking

230 V

Low Voltage Directive 73/23/EEC	EN 60950
EMC Directive 89/336/EEC	EN 55022 Class B EN 61000-3-2 EN 61000-3-3 EN 50082-1 IEC 60801-2 IEC 60801-3 IEC 60801-4

Control Panel Buttons and Lights
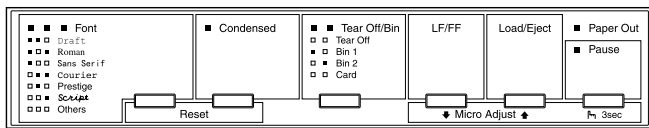
Font button

Selects the font.

Font lights

Indicate which font is selected.

Condensed button

Turns condensed mode on and off.

Condensed light

On when condensed mode is on.

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 and the release lever is in the single sheet position.

❑ Turns on the card mode to print on postcards and envelopes.

Tear Off/Bin lights

❑ ▯̈ ▯̈ when continuous paper is in the tear-off position.

❑ ■ ▯ when bin 1 of the optional cut-sheet feeder is selected.

❑ ▯ ■ when bin 2 of the optional cut-sheet feeder is selected.

❑ ▯ ▯ when the printer is in the card mode.

▯ = on, ■ = off, ▯̈ = flashing

LF/FF button

❑ Feeds paper line by line when pressed quickly.

❑ Ejects a single sheet or advances continuous paper to the next top-of-form position when held down.

Load/Eject button

❑ Loads a single sheet of paper.

❑ Ejects a single sheet of paper when a sheet is loaded.

❑ Loads continuous paper from the standby position.

❑ Feeds continuous paper backward to the standby position in micro adjust mode.

Micro Adjust mode

When you hold down the Pause button for 3 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.

Pause button

Stops printing temporarily, and resumes printing when pressed again. When pressed for 3 seconds, turns on micro adjust mode.

Pause light

❑ On when the printer is paused.

❑ Flashes when the printer is in the micro adjust mode or when the print head has overheated.

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.

Error Indicators

You can identify many common printer problems using the lights on the control panel. If your printer stops working and one or more control panel lights are on or flashing, or the printer beeps, use the following table to diagnose and fix the problem.

State of panel lights	Beep pattern	Problem / Solution
☐ Pause	—	**The printer is paused.**
		Press the Pause button to resume printing.
	•••••	**Paper from another paper source is currently in the paper path.**
		Move the paper release lever back to the appropriate position and press the Load/Eject button to feed the paper out of the paper path. Then set the lever to the position you want to use. Press the Pause button to turn off the Pause light, if necessary.
☐ Paper Out ☐ Pause	•••	**No paper is loaded in the selected paper source.**
		Load paper in the printer. Then press the Pause button to turn off the Pause light, if necessary.
	•••	**The paper is not loaded correctly.**
		Remove your paper and reload it. Then press the Pause button to turn off the Pause light, if necessary.
	•••	**Paper is jammed in the printer.**
		Clear the paper jam as described on page 14.
☼ Paper Out ☐ Pause	•••	**Continuous paper is not fed to the standby position.**
		Tear off the printed document at the perforation; then press the Load/Eject button. The printer feeds the paper to the standby position. Press the Pause button to turn off the Pause light.
	•••	**A single sheet of paper is not fully ejected.**
		Press the Load/Eject button to eject the sheet. Then press the Pause button to turn off the Pause light, if necessary.
	•••	**Paper is jammed in the printer.**
		Clear the paper jam as described on page 14.
☼ Pause	—	**The print head is overheated.**
		Wait a few minutes; the printer resumes printing automatically once the print head cools.
☼ Paper Out ☼ Pause ☼ ☼ Tear Off/Bin ☼ ☼ ☼ Font	—	**An unknown printer error has occurred.**
		Turn off the printer and leave it off for several minutes; then turn on the printer again. If the error recurs, contact your dealer.

☐ = on, ☼ = flashing

••• = short series of beeps (three beeps)

••••• = long series of beeps (five beeps)

The printer beeps once if you press a control panel button when the corresponding function is not available.

Status Monitor

The EPSON Status Monitor 3 utility comes with the printer but is available only for use with Windows 95, 98, or NT 4.0. It allows you to monitor your printer's status, alerts you when printer errors occur, and provides troubleshooting instructions.

Paper Positions

Top-of-Form Position

The top-of-form position is where the printer starts printing on single sheets or continuous paper.
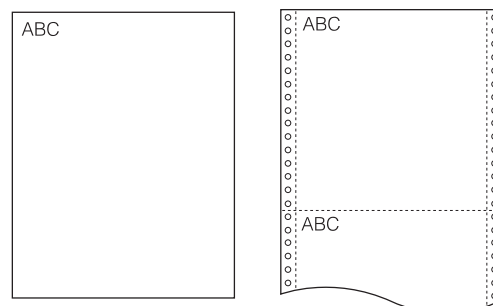
The letters ABC are printed at the top-of-form position

Tear-off Position

Continuous paper is in the tear-off position when the perforation is aligned with the tear-off edge. You can easily tear off your printed document at this position.

Standby Position

Continuous paper is in the standby position when it is attached to the tractor but not loaded in the printer.

Available Paper Paths

The printer provides a variety of paper paths for single sheets and continuous paper. This section describes how paper feeds into the printer from the top, front, bottom, or rear.

Printing on Continuous Paper

You can choose from two tractor positions (push and pull) and three paper entry slots (front, bottom, and rear) for printing on continuous paper. This section helps you determine which paper paths and tractor positions are best for your continuous paper printing needs.

Using the push tractor

If you often need to tear off sheets of continuous paper (for printing purchase orders or sales slips, for example), it is best to use the push tractor. This allows you to use the tear-off edge to easily tear off printed sheets of continuous paper at the perforation. When continuous paper is loaded on the push tractor, you can also load single sheets from the paper guide without removing the continuous paper from the tractor.
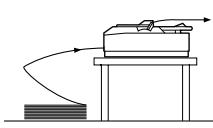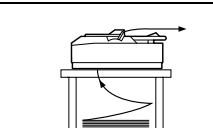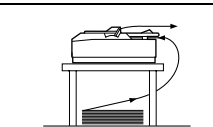
The tractor is installed in the push position when the printer is shipped.

Using a pull tractor

If you often print on thick or heavy continuous paper, such as multipart forms or continuous paper with labels, use a tractor in the pull position. The pull tractor provides 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. You can use the front, bottom, or rear paper slot with the pull tractor.
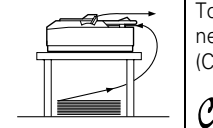
Note

If you plan to use a 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 an optional tractor unit (C800201) and install it in the pull position.

Paper slot	Description
front	If you print on thick paper, such as multipart 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.
bottom	The bottom paper slot has the straightest paper path, so it is the best slot to use when printing on thick paper, such as multipart forms or continuous paper with labels. 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.
rear	You can also load continuous paper from the rear pull tractor position. *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.* *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.*

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 preprinted forms, multipart forms, and for printing high-quality graphics.

Combination	Description
rear push and pull	To use the push tractor with the pull tractor, you need to purchase the optional pull tractor (C800201) and install it in the pull position. *Caution Do not load continuous paper with labels onto the 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.*

Printing on Single Sheets

You can load ordinary single sheets from the top or front of the printer, even with continuous paper already loaded in the push tractor.
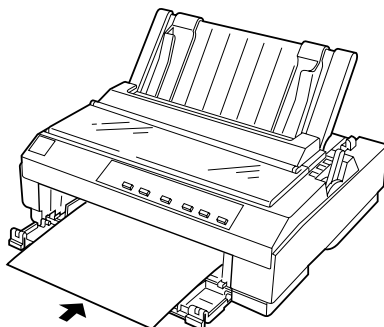
Loading paper in the top slot

You can load ordinary single sheets, envelopes, or postcards in the top slot. Load envelopes in the top slot only.
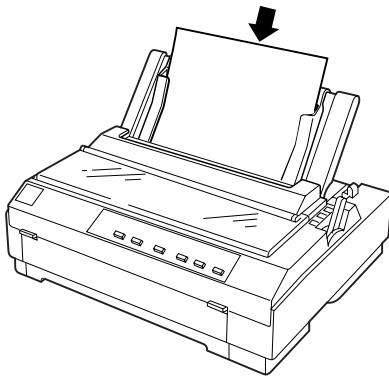
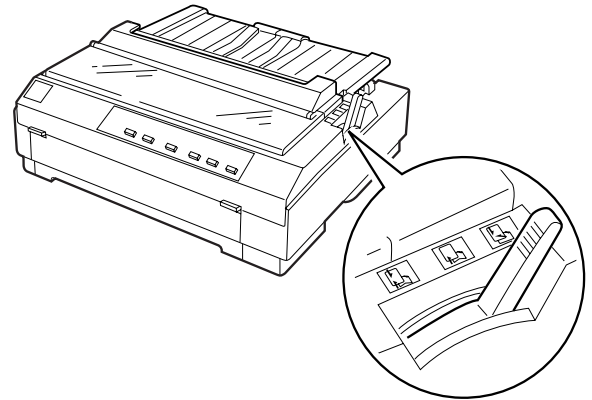### Loading paper in the front slot

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


Note

Always use the front paper slot to load single-sheet multipart forms.

Paper Release Lever Positions

Use the paper release lever to indicate the paper source you want to use. The table below describes each paper release lever position.

Paper release lever position	Description
	Single-sheet position For loading single sheets from the top or front slot.
PUSH	**Push tractor position** For loading continuous paper from the tractor installed in the push position. Set the lever to this position when using the push and pull tractors in combination.
PULL	**Pull tractor position** For loading continuous paper from the tractor 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.

Paper Thickness Lever Positions

The paper thickness lever allows the printer to accommodate various thicknesses of paper. You can select one of 8 positions identified by the scale next to the lever.
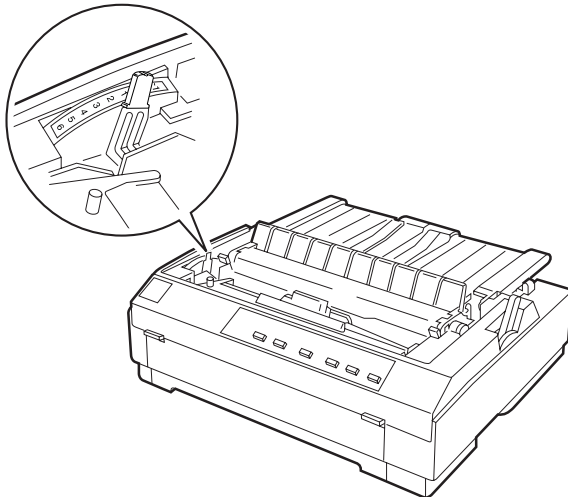
Use the following table to set the paper thickness lever to match the thickness of your paper.

Paper type	Lever position
Ordinary (single sheets or continuous paper)	–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)
	
	1
	2
	3
	5

Continuous paper with labels*	2
Postcard	2
Envelopes	2 to 6

* Continuous paper with labels cannot be used with the push tractor. To use them, install the tractor unit in the pull position.

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.

Paper Handling

Loading Multipart Forms

You can use carbonless multipart forms of up to 5 parts (the original plus up to 4 copies). Make sure you set the paper thickness lever to the proper position based on the number of layers in your form.

For best results with multipart forms, select a straight or almost straight paper path. It is best to load multipart forms using the front or bottom slot and the pull tractor.

Except for setting the paper thickness lever, load multipart forms the same way you load ordinary continuous paper.

Note

Be sure your multipart forms do not exceed 0.015 inch (0.39 mm) in thickness for the printable area and 0.03 inch (0.76 mm) for the perforated edges.

Do not load paper that is damaged, curled, or wrinkled.

If you are using crimp bound paper, make sure the protruding side of the crimp faces away from the print head when you print. Hitting the crimp protrusion with the print head could severely damage the print head.

Loading Continuous Paper with Labels

When printing, use only labels that are mounted on continuous backing sheets with sprocket holes for a tractor feeder. Do not try to print on single sheets because the printer may not properly feed labels on a shiny backing sheet.

Continuous paper with labels requires a straight or almost straight paper path. Be sure to use the tractor in the pull position and load the labels in the front or bottom.

You load labels the same way you load ordinary continuous paper, except you must set the paper thickness lever to 2 before printing.

Caution

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

Because labels are sensitive to temperature and humidity, use them only under normal operating conditions, as follows:

Temperature   59 to 77 °F (15 to 25 °C)
Humidity   30 to 60% RH

Do not load damaged, curled, or wrinkled continuous paper with labels.

Do not leave labels loaded in the printer between jobs; they may curl around the platen and jam when you resume printing.

Removing continuous paper with labels

To avoid peeling labels off the backing sheet and jamming the printer, follow these steps when you remove continuous paper with labels from the printer:

1. After you finish printing, tear off the fresh supply of continuous labels at the perforation nearest the paper entry slot.
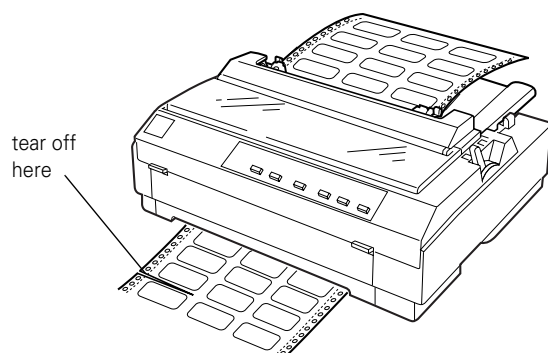
tear off here

2. Hold down the LF/FF button to eject the remaining labels from the printer.

Caution
Never press the **Load/Eject** or **Tear Off/Bin** button. When fed backward, labels can easily come off the backing sheet and cause a paper jam.

Using the Push Tractor

When using the push tractor, load continuous paper in the rear slot. For information on when to use the push tractor, see "Available Paper Paths" on page 8. For instructions on loading paper on the push tractor and removing a printed document, see the *User's Guide*.
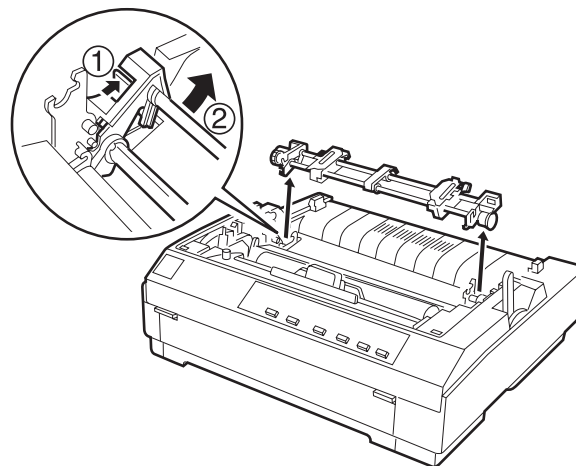
Note
The tractor is installed in the push position when the printer is shipped. If a tractor is not installed in the push position, see " Reinstalling the tractor in the push position " below.

Removing the push tractor

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

1. Remove any paper from the tractor.

2. Turn off the printer.

3. Remove the paper guide by holding both edges and lifting it up.

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

Reinstalling the tractor in the push position

If a tractor is installed in the pull position, you need to remove it and install the paper tension unit (as described under "Removing the pull tractor" on page 12) before using the push tractor.

To reinstall the tractor in the push position, follow these steps:

1. Make sure the printer is turned off.

2. Remove the paper guide by holding both edges and lifting it up.

3. Lower the tractor into the mounting slots (①), and press down both ends (②) of the tractor to make sure that it is firmly seated.
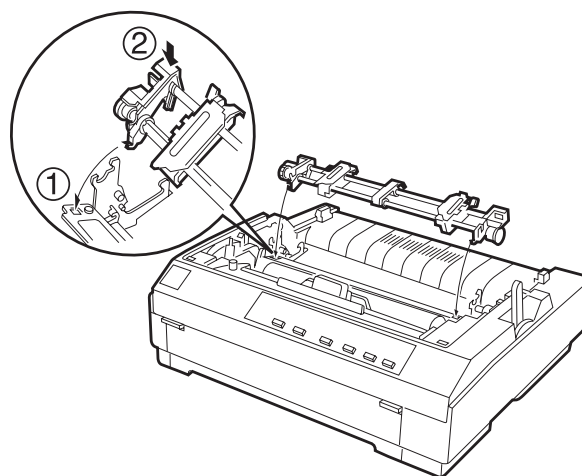
You are now ready to load continuous paper onto the push tractor. If you need instructions, see the *User's Guide*.

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 multipart 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.

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 further reduce the chance of paper jams and improve the performance of continuous paper, you can use two tractors in combination. When using this printing method, load the paper onto both a push and a pull tractor.
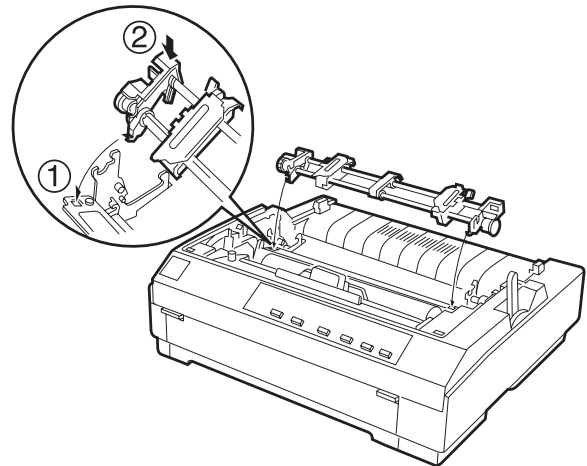
Installing the tractor in the pull position

To install a tractor in the pull position, you must either remove the push tractor or purchase the optional pull tractor (C800201). To remove the push tractor, see "Removing the push tractor" on page 11.

To install a tractor in the pull position, follow these steps:

1. Make sure the printer is turned off. Lift the printer cover up and off the printer.

2. Push up the tabs on each side of the paper tension unit and lift the unit up and off the printer. Store the paper tension unit in a safe place.
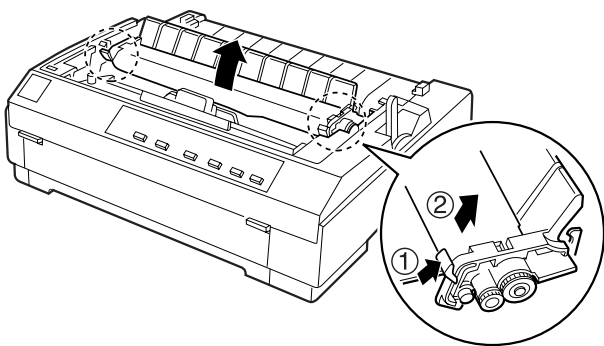
3. Lower the tractor into the mounting slots (①), and press down both ends (②) of the tractor to make sure it is firmly seated.

You are now ready to load continuous paper onto the pull tractor. If you need instructions, see the *User's Guide*.

Removing the pull tractor

To remove the tractor from the pull position, follow these steps:

1. Remove any paper loaded on the pull tractor.

2. Turn off the printer. Then remove the printer cover and lift the paper guide up and off the printer.

3. Press the tractor's lock tabs, tilt the tractor toward you, and lift it off the printer.
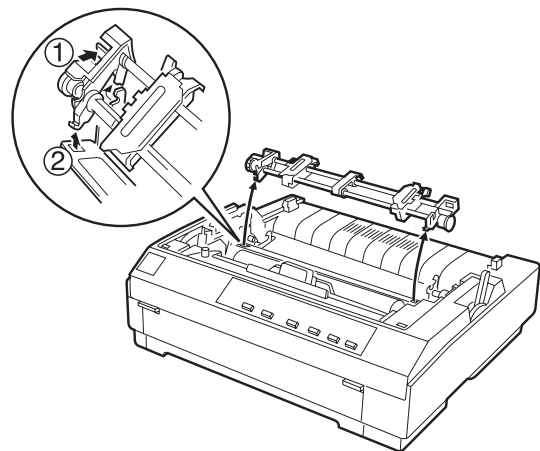
4. Store the tractor in a safe place, or install it in the push position.

5. Replace the paper tension unit by lowering it onto the mounting pegs. Then press down both ends of the unit until it clicks into place.

6. Replace the paper guide and the printer cover. Then close the paper guide cover.

Adjusting the Top-of-Form Position

The top-of-form position is where the printer will start printing on the page. If your printing appears too high or low, follow the steps below to use the micro adjust feature to adjust the top-of-form position.

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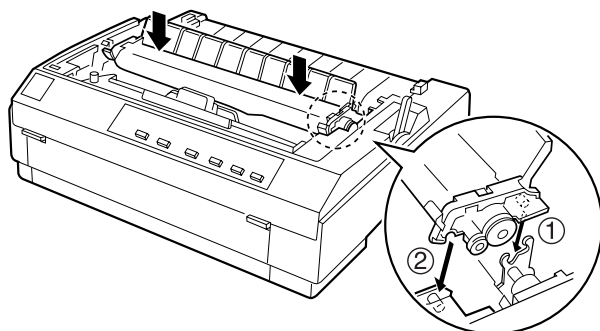Never use the knob to adjust the top-of-form position; this may damage the printer or cause it to lose the top-of-form position.

Note
Your top-of-form position setting remains in effect until you change it, even if you turn off the printer.

The top margin setting made in some application software overrides the top-of-form position setting you make with the micro adjust feature. If necessary, adjust the top-of-form position in your software.

1. Make sure the printer is turned on.

2. If necessary, load paper as described earlier. If you load paper onto the push tractor, press the Load/Eject button to advance the paper to the current top-of-form position.

3. Lift the printer cover up and off the printer.

4. Hold down the Pause button for about 3 seconds. The Pause light starts flashing and the printer enters the micro adjust mode.

5. Press the LF/FF ⬇ button to move the top-of-form position up on the page, or press the Load/Eject ⬆ button to move the top-of-form position down on the page.

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.
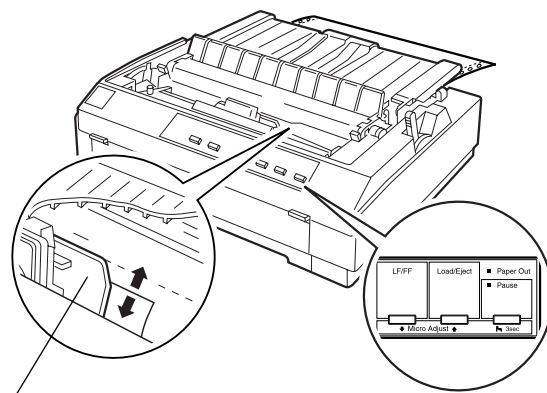
plastic ribbon cover

Note
The printer has a minimum and maximum top-of-form position. If you try to adjust it beyond these limits, the printer beeps and stops moving the paper.

When the paper reaches the default top-of-form position, the printer also beeps and stops moving the paper briefly. You can use the default setting as a reference point when adjusting the top-of-form position.

To adjust the top-of-form position for continuous paper loaded on the pull tractor, see the following example:

First mark a point 0.26 inch (6.5 mm) above the paper's perforation; then position the paper so that the mark is even with the top edge of the plastic ribbon cover. This gives you a 0.33-inch (8.5-mm) margin on the next page, meaning the printer starts printing 0.33 inch (8.5 mm) below the perforation. If you mark a point 0.22 inch (5.5 mm) above the perforation, you get a 0.37-inch (9.5-mm) margin on the next page.
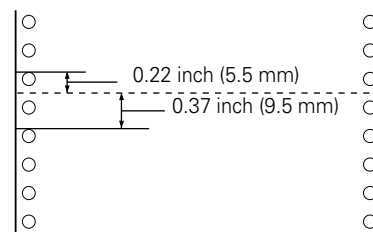
6. After you set the top-of-form position, press the Pause button to exit micro adjust mode.

Advancing the Paper to the Tear-Off Edge

If you use the push tractor, you can use the tear-off feature to advance your continuous paper to the tear-off edge when you finish printing. You can then easily tear off the printed document. When you resume printing, the printer automatically feeds the paper back to the top-of-form position, saving the paper normally lost between documents.

You can use the tear-off feature manually by pressing the Tear Off/Bin button, or automatically by turning on the auto tear-off mode.

If the perforation between pages is not aligned with the tear-off edge, you can adjust the position of the perforation using the micro adjust feature.

Caution: Never use the tear-off feature (by pressing the Tear Off/Bin button or turning on the auto tear-off mode) to feed continuous paper with labels backward; they may come off their backing sheet and jam the printer.

Using the Tear Off/Bin button

After your document prints, check that the Tear Off/Bin lights are not flashing. Then press the Tear Off/Bin button. The Tear Off/Bin lights start flashing and the paper advances to the tear-off edge.

Note: If the Tear Off/Bin lights are flashing, the paper is in the tear-off position. If you press the Tear Off/Bin button again, your paper feeds to the top-of-form position.

Advancing the paper to the tear-off position automatically

To automatically advance your printed documents to the tear-off position, you need to turn on the auto tear-off mode and select the appropriate page length for continuous paper in the default setting mode. For instructions, see "Changing Default Settings" on page 15.

When auto tear-off is on, the paper automatically advances to the tear-off position when the printer receives a full page of data or a form feed command followed by no more data.

Adjusting the tear-off position

If the paper perforation is not aligned with the tear-off edge, you can use the micro adjust feature to move the perforation to the tear-off position. Follow the steps below.

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.

**Note:** Your tear-off position setting remains in effect until you change it, even if you turn off the printer.

1. Make sure the Tear Off/Bin lights are flashing (the paper is at the current tear-off position). If necessary, press the Tear Off/Bin button to advance the paper to the tear-off position.

2. Open the paper guide cover.

3. Hold down the Pause button for about 3 seconds. The Pause light begins flashing and the printer enters the micro adjust mode.

4. Press the LF/FF ⬇ button to feed the paper backward, or press the Load/Eject ⬆ button to feed the paper forward until the paper perforation is aligned with the tear-off edge.

tear-off edge
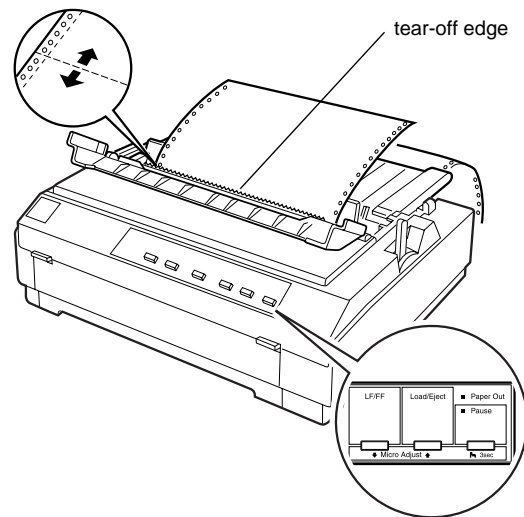
Note: The printer has a minimum and maximum tear-off position. If you try to adjust the tear-off position beyond these limits, the printer beeps and stops moving the paper.

5. After you set the tear-off position, press the Pause button to turn off the micro adjust mode.

6. Tear off the printed page(s).

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

Clearing Paper Jams

1. Turn off the printer.

2. If a single sheet of paper is stuck on the paper guide, gently remove it.

3. Remove the printer cover. If continuous paper from the rear slot is loaded in the printer, remove the paper guide.

4. If continuous paper is jammed in the printer, tear off the supply at the perforation nearest the paper entry slot.

5. Turn the knob away from you to eject the paper in the printer. Remove any remaining pieces of paper.

Caution: Use the knob to clear paper jams only when the printer is turned off; otherwise, you may damage the printer or lose the top-of-form or tear-off position.

6. Replace the paper guide, if necessary, and replace the printer cover. Then close the paper guide cover.

7. Turn on the printer. Make sure the Paper Out and Pause lights are off.

Your Printer's Default Settings

While you can often set the default settings through your application software or printer driver, you may need to change a default setting from the printer's control panel using the default setting mode. The table below lists the default settings (in bold) and options you can select in this mode.

Settings	Options
Page length for tractor	Length in inches: 3, 3.5, 4, 5.5, 6, 7, 8, 8.5, **11**, 70/6, 12, 14, 17
Skip over perforation	On, **Off**
Auto tear-off	On, **Off**
Auto line feed	On, **Off**
Print direction	**Bi-D**, Uni-D, Auto
Software	**ESC/P2**, IBM 2390 Plus
0 slash	**0**, 0̸
High speed draft	**On**, Off
I/F mode	**Auto**, Parallel, Optional
Auto I/F wait time	**10 seconds**, 30 seconds
Parallel I/F bidirectional mode	**On**, Off
Packet mode	Auto, **Off**
Auto CR (IBM 2390 Plus)*	On, **Off**
A.G.M. (IBM 2390 Plus)*	On, **Off**
Character table*	Standard model: Italic, **PC 437**, PC 850, PC 860, PC 863, PC 865, PC 861, BRASCII, Abicomp, Roman 8, ISO Latin 1, PC 858, ISO 8859-15, All other models: Italic, PC 437, PC 850, PC 437 Greek, PC 853, PC 855, PC 852, PC 857, PC 864, PC 866, PC 869, MAZOWIA, Code MJK, ISO 8859-7, ISO Latin 1T, Bulgaria, PC 774, Estonia, ISO 8859-2, PC 866 LAT, PC 866 UKR, PC APTEC, PC 708, PC 720, PC AR864, PC 860, PC863, PC 865, PC 861, BRASCII, Abicomp, Roman 8, ISO Latin 1, PC 858, ISO 8859-15, PC 771
International character set for Italic table	**Italic U.S.A**., Italic France, Italic Germany, Italic U.K., Italic Denmark1, Italic Sweden, Italic Italy, Italic Spain1
Font	OCR-B, Orator, Orator-S, Script C, **Roman T**, Sans Serif H
Manual feed wait time	1 second, **1.5 seconds**, 2 seconds, 3 seconds
Buzzer	**On**, Off
Roll paper	On, **Off**

* These settings take effect only when IBM 2390 Plus emulation is selected.

Changing Default Settings

Follow the steps below to enter the default setting mode and change the printer's default settings.

Note To print the language selection and default setting mode instructions, you need 5 sheets of letter- or A4-size single-sheet paper or 5 pages of continuous paper. If you use single sheets, you need to load a new sheet each time the printer ejects a printed sheet.

1. Make sure paper is loaded and the printer is turned off.

Caution Whenever you turn off the printer, wait at least 5 seconds before turning it back on; otherwise you may damage the printer.

2. While holding down the Font button, turn on the printer. The printer enters the default-setting mode and prints the language selection instructions.

3. If you need to select a different language, press the Font button until the Font lights indicate the language you want, as described in the language selection instructions.

4. Press the Tear Off/Bin button to confirm your language selection and print the current default settings.

5. If you do not need to change any settings, go to step 6. If you want to change any of the default settings, press the Tear Off/Bin button to print the instructions (three pages) in the language you selected.

   Follow these instructions to change the default settings using the buttons on the printer's control panel.

   Note The arrows on the instruction sheets indicate the printer's current settings.

6. When you finish, turn off the printer and exit the default setting mode. The current settings remain in effect until you change them again.

Bidirectional Alignment

If you notice that the vertical lines in your printout are not properly aligned, you can use the printer's bidirectional adjustment mode to correct this problem.

Note To complete the steps below, you need 5 single sheets or 5 pages of continuous paper. If you use single sheets, you need to load a new sheet of paper each time the printer ejects a printed sheet onto the paper guide.

1. Make sure paper is loaded and the printer is turned off.

Caution Whenever you turn off the printer, wait at least 5 seconds before turning it back on; otherwise you may damage the printer.

2. While holding down the Pause button, turn on the printer. It enters the bidirectional adjustment mode, then prints instructions and the first set of alignment patterns.

3. As described in the instructions, compare the alignment patterns and select the pattern with the best alignment.

4. Follow the instructions to print the remaining sets of alignment patterns and select the pattern with the best alignment in each set.

5. After you select the best pattern in the final set of alignment patterns, turn off the printer and exit the bidirectional adjustment mode. Your selections are saved automatically.

Printing a Self Test

Running the self test helps you determine whether the printer or the computer is causing a printing problem. You can print the self test using either single sheets or continuous paper.

1. Make sure paper is loaded and the printer is turned off.

   Caution Whenever you turn off the printer, wait at least 5 seconds before turning it back on; otherwise you may damage the printer.

2. To run the test using the Draft font, hold down the LF/FF button while you press the Operate button to turn on the printer. To run the test using the printer's letter-quality fonts, hold down the Load/Eject button while you turn on the printer. Either self test can help you determine the source of your printing problem; however, the draft test prints faster than the letter-quality test.

   After a few seconds, the printer loads the paper automatically and begins printing the self test. A series of characters is printed.

   Note To temporarily stop the self test, press the Pause button. To resume the test, press the Pause button again.

3. To end the self test, press the Pause button to stop printing and the Load/Eject button to eject the printed page. Then turn off the printer.

If the self test results are satisfactory, the printer is working properly and the problem probably results from your printer driver settings, application settings, computer, or interface cable. (Be sure to use a shielded interface cable.)

If the self test does not print properly, there is a problem with the printer.

Printing a Hex Dump

If you are an experienced user or a programmer, you can print a hexadecimal dump to isolate communication problems between the printer and your software program. In hex dump mode, the printer prints all data received from the computer as hexadecimal values.

You can print a hex dump using either single sheets or continuous paper.

1. Make sure paper is loaded and the printer is turned off.

   Caution Whenever you turn off the printer, wait at least 5 seconds before turning it back on; otherwise you may damage the printer.

2. To enter hex dump mode, hold down both the LF/FF and Load/Eject buttons while you turn on the printer.

3. Open a software application and send a print job to the printer. Your printer prints all the codes it receives in hexadecimal format.

```
Hex Dump

1B 40 0D 1B 74 01 1B 36 1B 52 00 1B 50 1B 28 55    .@..t..6.R..P.(U
01 00 0A 1B 28 43 02 00 78 0F 1B 28 63 04 00 3C    ....(C..x..(c..<
00 3C 0F 1B 19 30 0D 1B 4A 18 1B 24 AA 05 1B 2A    .<...0..J..$¬..*
27 24 00 00 00 08 00 00 08 00 00 08 00 00 08 00    '$..............
00 08 00 00 08 00 00 08 00 00 08 00 00 08 00 00    ................
08 00 00 08 00 00 08 00 00 08 00 00 08 00 00 08    ................
00 00 08 00 00 08 00 00 08 00 00 08 00 00 08 00    ................
00 08 00 00 08 00 00 08 00 00 08 00 00 08 00 00    ................
08 00 00 08 00 00 08 00 00 08 00 00 08 00 00 08    ................
00 00 08 00 00 08 00 00 08 00 00 08 00 00 08 0D    ................
1B 4A 78 1B 24 0A 01 1B 2A 27 EC 03 00 00 38 00    .Jx.$...*'∞...8.
10 44 00 10 82 00 21 02 00 21 02 00 21 02 00 21    .D..é.!..!..!..!
02 00 21 02 00 21 04 00 21 04 00 11 08 00 0F FE    ..!..!..!......■
```

If characters are printable, they appear in the right column as ASCII characters. Nonprintable codes, such as control codes, are represented by dots. By comparing the characters printed in the right column with the printout of the hexadecimal codes, you can check the codes the printer is receiving.

4. To exit hex dump mode, press the Pause button to stop printing and the Load/Eject button to eject the printed page(s). Then turn off the printer.

Cleaning the Printer

To keep your printer operating at its best, you should clean it thoroughly several times a year. Follow these steps:

1. Remove any paper loaded in the printer and turn it off.

2. Unplug the power cord from the electrical outlet; then disconnect the interface cable from the printer.

3. Remove the paper guide. If a pull tractor or an optional cut-sheet feeder is installed, remove it.

4. Use a soft brush to carefully brush away all dust and dirt from the outer case and paper guide.

5. If the outer case or paper guide is still dirty, clean it with a soft, clean cloth dampened with mild detergent dissolved in water. Keep the printer cover in place and lower it until it lies flat on the top of the printer to prevent water from getting inside the printer.

Caution

Never use alcohols or thinners to clean the printer; these chemicals can damage the printer components as well as the case.

Be careful not to get water on the printer mechanism or electronic components.

Do not use a hard or abrasive brush.

Do not spray the inside of the printer with lubricants; unsuitable lubricants can damage the printer mechanism. Contact an EPSON dealer if you think lubrication is needed.

Transporting the Printer

If you need to transport your printer some distance, carefully repack it using the original box and packing materials, as described below.

Warning

You need to move the print head by hand to remove 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. Remove any paper in the printer and turn it off.

2. Unplug the power cord from the electrical outlet; then disconnect the interface cable from the printer.

3. Remove the paper guide.

4. If a pull tractor is installed, remove it. If any options are installed, remove them and pack them in their original boxes.

5. Make sure that the print head is not hot. Then remove the ribbon cartridge.

6. Remove the paper tension unit. Attach the protective locking clips on both sides of the printer roller. Then install the paper tension unit.

7. Make sure the tractor that came with your printer is installed in the push position.

8. Repack the printer, ribbon cartridge, and paper guide in the original packing materials and place them in the printer's original box.

Related Documentation

4011805	EPSON LQ-570e Quick Reference Guide
4011804	EPSON LQ-570e User's Guide
4012108	EPSON LQ-570e Read This First
TM-LQ570e	EPSON LQ-570e Service Manual
PL-LQ570e	EPSON LQ-570e Parts Price List