

EPSON®

24-pin Dot Matrix Printer

DLQ-3500

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Printed on Recycled Paper.

Reference Guide

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Selecting a Paper Source

Your printer can print on a wide variety of paper types, including single sheets, continuous paper, multipart forms, labels, envelopes, postcards, overlapping forms, and continuous forms with labels.

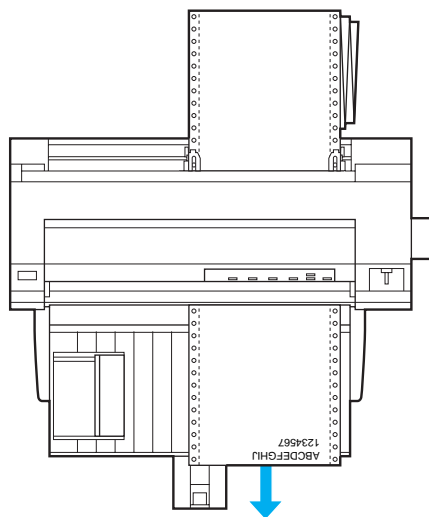
**Caution:**

Do not use paper that is folded (except envelope flaps), creased, curled, torn, stained, or stamped. Always use new, clean paper that meets the paper specifications. See “Paper” on page A-10 for more detailed information.

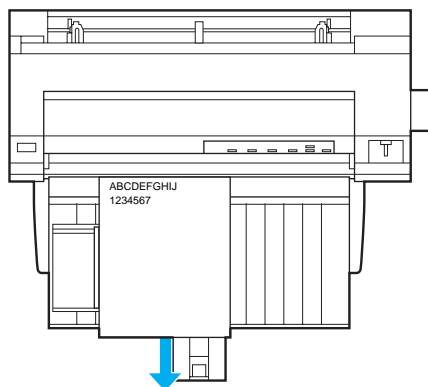
Your printer can accommodate various paper types through three paper sources: paper guide, tractor, or optional cut-sheet feeder. You should select the paper source depending on the type of paper you are using. You can select the paper source by pressing the Paper Source button on the control panel. See “Buttons and Lights” on page 3-1 for more information. You can also select the paper source from the printer driver.

Depending on the paper source, the printer prints on the paper and then ejects it differently as shown below.

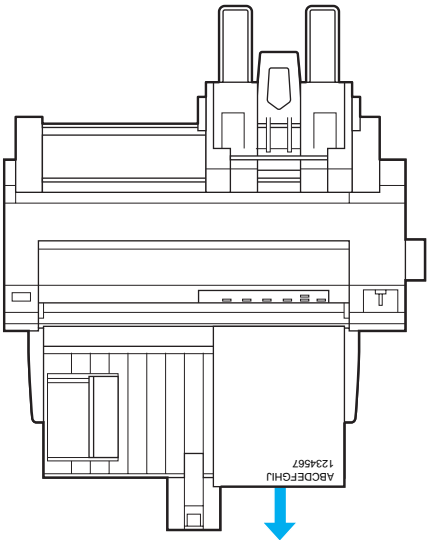
Paper source: Tractor



Paper source: Paper guide, automatic sheet alignment unit (option)



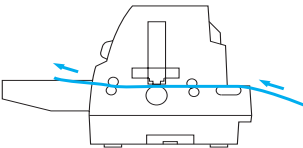
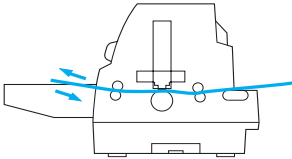
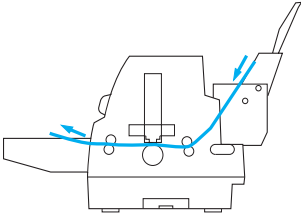
Paper source: Cut-sheet feeder (option)



Note:
Be sure to load paper with the printable side up.

Paper source and paper types

Basically, there are two paper types and three paper sources. The table below shows the relationship between paper sources and paper types, as well as paper loading and ejecting orientation.

	Paper path	Paper source selection
Continuous paper *	Tractor 	Tractor
Single sheets **	Paper guide or automatic sheet alignment unit (option) 	Manual/CSF
	Cut-sheet feeder (option) 	Manual/CSF

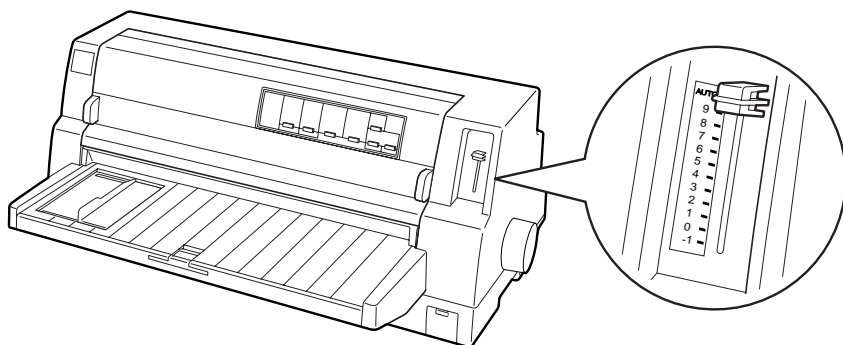
* **Continuous paper** includes labels, multipart forms, continuous forms with labels, overlapping multipart forms, and overlapping multipart forms with labels.

** **Single sheets** include envelopes, postcards, and single-sheet multipart forms. You can use only single-sheet multipart forms that are glued at the top of the forms in the optional cut sheet feeder.

Adjusting the Paper-Thickness Lever

You can get the best printing quality by adjusting the paper-thickness lever according to the type of paper you are using.

Usually, set the paper-thickness lever to the AUTO position as shown below; your printer automatically adjusts itself to the thickness of the paper loaded in the printer.



If you are not content with the printing quality, especially when using special paper such as multipart forms, you can manually set the paper-thickness lever to the appropriate position.

The higher the number you set the paper-thickness lever to, the wider the space between the platen and print head. If your printout appears faint or characters seem skipped or missing, this setting may be too high. On the other hand, if the setting is too low, your printout may appear smudged, the paper may not feed correctly, or the ribbon may become damaged.

The following table provides guidelines for selecting the appropriate lever position for the type of paper you are using.

Paper type	Paper-thickness lever position	
Ordinary paper (single sheets or continuous paper)	-1 to 1	Auto
Multipart forms (carbonless)	0 or 1 1 or 2 2 to 4 3 to 5 4 to 6 5 to 8 6 to 9	
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)		
8 parts (original + 7 copies)		
Labels	2 or 3	
Envelopes	2 to 7	
Postcards	2	
Continuous forms with labels	Auto	
Overlapping multipart forms	Auto	
Overlapping multipart forms with labels	Auto	



Caution:

Do not set the paper-thickness lever to AUTO when using labels whose backing sheet is exposed. Set it to the appropriate position according to the table above.

Note:

- *When Overlapping Forms is turned on in the default-setting mode, the printer automatically operates on AUTO function even though the paper-thickness lever may be set to another position.*

- ❑ *It is recommended to set the paper-thickness lever to AUTO when printing on multipart forms, because the total thickness of multipart forms may vary depending on the kind of paper even if the number of parts is the same. However, if your printout appears faint, set the paper-thickness lever to a lower position within the range specified in the table above. Similarly, if your printout appears smudged, set the lever to a higher position.*
- ❑ *Your printout appears faint or characters seem skipped or missing, this setting may be too high. On the other hand, if the setting is too low, your printout may appear smudged*

Loading Continuous Paper

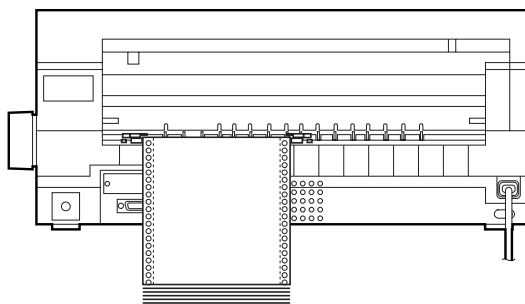
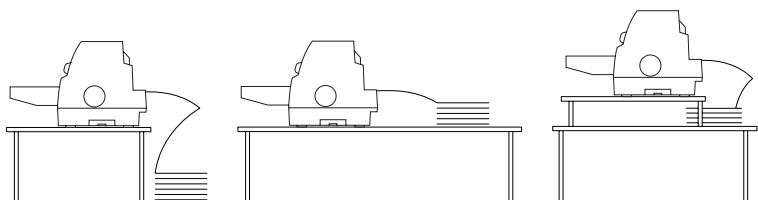
You can load continuous paper from the built-in tractor unit.

Note:

See “Continuous paper” on page A-12 for detailed specifications on continuous paper.

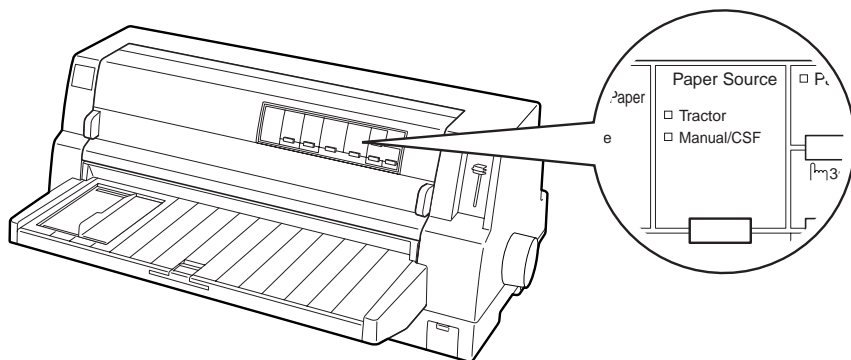
Positioning the continuous paper supply

When you load continuous paper, make sure to line up the paper supply with the tractor so the paper feeds smoothly into the printer as shown below.

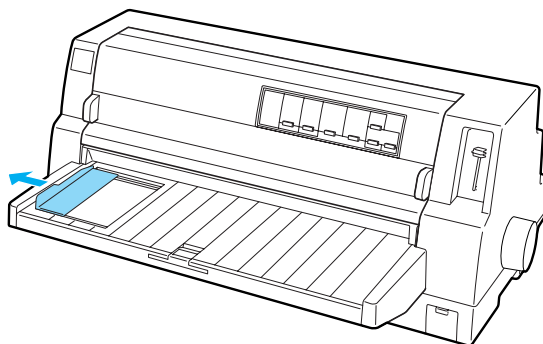


Loading continuous paper with the tractor

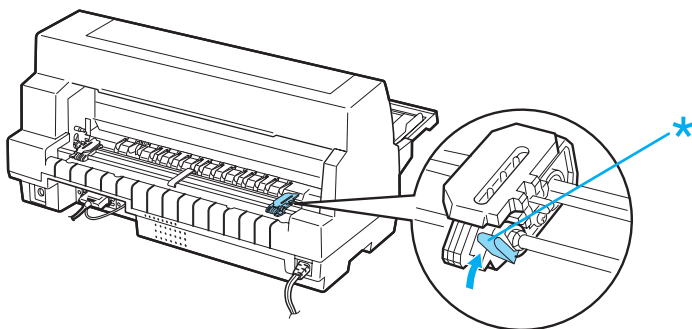
1. Make sure that Tractor is selected as the paper source on the control panel. If not, select it by pressing the Paper Source button.



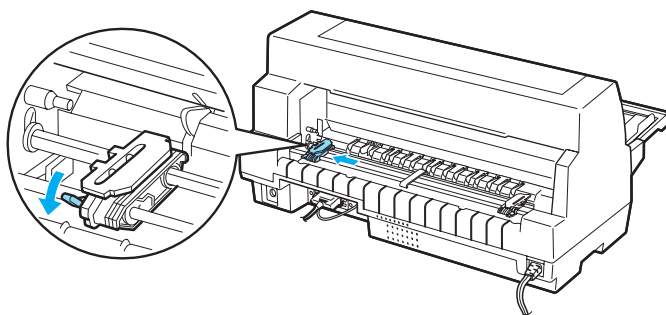
2. Slide the edge guide all the way to the left.



3. Facing the back of the printer, release the sprocket lock levers by pushing them up.



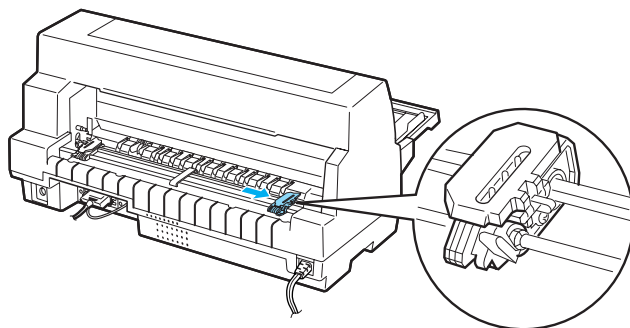
4. Position the left sprocket so that the sprocket pins are to the left of the arrow mark on the back of the printer. Then push down the lock lever to lock the sprocket in place.



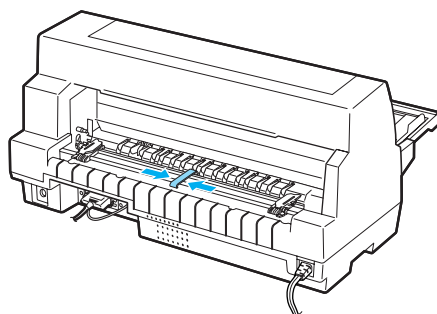
Note:

Printing starts at the arrow mark on the back of the printer. The unprintable area is to the left of the arrow mark.

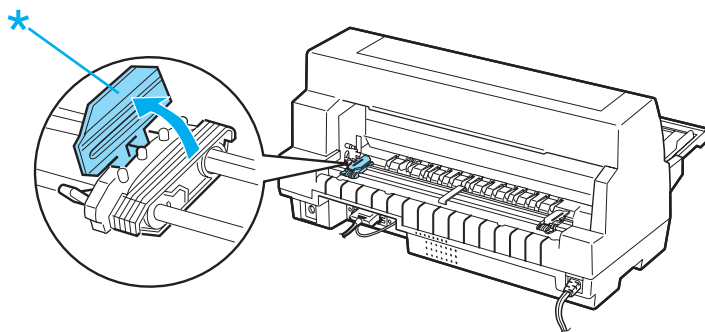
5. Slide the right sprocket to roughly match the width of your paper, but do not lock it.



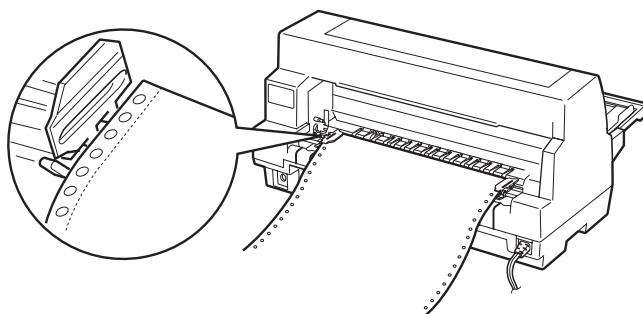
6. Slide the center paper support to the middle of the two sprockets.



7. Open the sprocket covers.



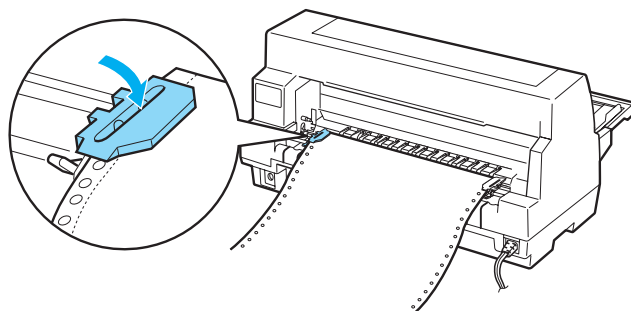
8. Fit the first three holes of the continuous paper over the sprocket pins on both sides. Be sure to position your paper supply so that the printable side faces up.



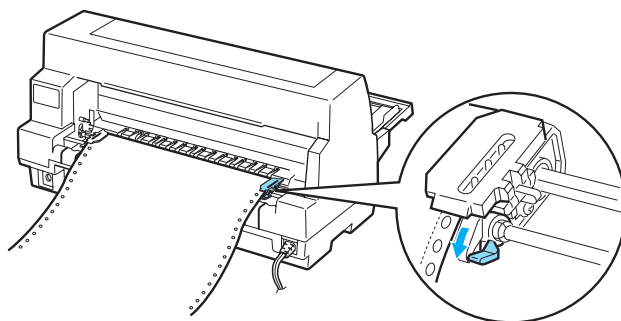
Caution:

Make sure the first sheet of your continuous paper has a clean, straight edge so that it can feed smoothly into the printer.

9. Close the sprocket covers.



10. Slide the right sprocket to remove any slack in the paper. Then push down the sprocket lock lever to lock the sprocket in place.



11. Turn on the printer if it is turned off. The printer is ready to start printing.

When using continuous paper, you can use the tear-off function to tear off printed pages and save the blank pages that are usually wasted between print jobs. For more information, see “Using the tear-off function” on page 1-14.

Note:

Always make sure there is at least one more sheet than required; continuous paper may not feed properly if it is not fed through the sprockets.

**Caution:**

- ☐ Use the knob on the right side of the printer only to clear paper jams when the printer is off. Otherwise, you may damage the printer or cause it to lose the top-of-form position.
- ☐ Do not open the printer cover while paper is being fed; otherwise you cannot load the paper correctly.

Note:

If the first line on your page appears too high or low, you can change its position by using the Micro Adjust function as described in “Adjusting the top-of-form position” on page 1-39.

Using the tear-off function

You can use the tear-off function to advance your continuous paper to the printer’s tear-off edge when you finish printing. You can then easily tear off the printed sheets. When you resume printing, the printer automatically feeds the paper back to the top-of-form position so that you can save the paper normally lost between documents.

You can use the tear-off function in two ways: manually by pressing the printer’s Tear Off/Special Paper button or automatically by turning on auto tear-off mode. The Tear Off/Special Paper lights flash when the paper is in the tear-off position.

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 function. See “Adjusting the tear-off position” on page 1-37 for more information.

**Caution:**

Never use the tear-off function to feed continuous paper with labels backward; they may come off their backing sheet and jam the printer.

Using the Tear Off/Special Paper button

Follow these steps to advance continuous paper to the tear-off position using the Tear Off/Special Paper button:

1. After the printer finishes printing your document, check that the Tear Off/Special Paper lights are not flashing.

Note:

If the Tear Off/Special Paper lights are flashing, the paper is in the tear-off position. If you press the Tear Off/Special Paper button again, the printer feeds your paper to the next top-of-form position.

2. Press the Tear Off/Special Paper button. The printer advances the paper to the tear-off edge.

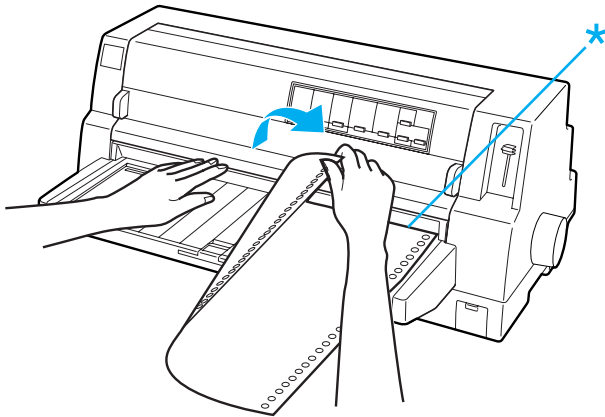
Note:

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 function as described in "Adjusting the tear-off position" on page 1-37.

**Caution:**

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

3. Tear off all printed pages using the tear-off edge of the printer cover.



When you resume printing, the printer feeds the paper back to the top-of-form position and begins printing. (You can also manually feed the paper back to the top-of-form position by pressing the Tear Off/Special Paper button.)

Advancing paper to the tear-off position automatically

To automatically advance your printed documents to the tear-off position, turn on the auto tear-off mode and select the appropriate page length for continuous paper in the default-setting mode. See “Changing default settings” on page 3-12 for instructions on how to change the default settings.

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

The steps below describe how to use auto tear-off.

1. When printing is finished, the printer advances the perforation of the final printed page to the tear-off position.

2. Tear off all printed pages using the tear-off edge of the printer cover.

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 function as described in "Adjusting the tear-off position" on page 1-37.

3. When you resume printing, the printer feeds the paper back to the top-of-form position and begins printing. (You can also manually feed the paper back to the top-of-form position by pressing the Tear Off/Special Paper button.)

Removing continuous paper

Follow these steps to remove continuous paper from the printer:

1. Press the Tear Off/Special Paper button after the printer finishes printing your document. The printer advances the paper to the tear-off position.

Note:

When the auto tear-off function is on, the printer advances the paper perforation to the tear-off position automatically. You can turn on the auto tear-off function by changing the default settings. See "Changing default settings" on page 3-12 for instructions.

2. Tear off the printed pages.
3. Press the Load/Eject button to feed the continuous paper backward out of the printer and into the standby position.
4. To completely remove continuous paper from the printer, open the sprocket covers. Remove the paper from the tractor unit, and then close the sprocket covers.

Loading Single Sheets

Your printer can print on single sheets of paper from 90 to 420 mm (3.5 to 16.5 inches) wide. See “Single sheets” on page A-11 for detailed single-sheet paper specifications.

You can load one sheet of paper at a time using the paper guide or optional automatic sheet alignment unit. See “Automatic Sheet Alignment Unit” on page 5-14 for more information on the optional automatic sheet alignment unit. Also you can load a stack of paper in the optional cut-sheet feeder. See “Cut-Sheet Feeder” on page 5-5 for more information on the optional cut-sheet feeder.

Note:

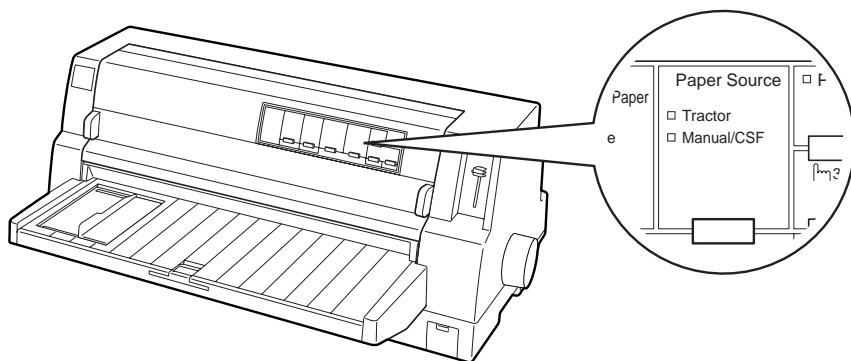
If you load long paper (for example, legal size paper), leave enough space at the back of the printer so that the paper is not obstructed.

Loading single sheets from the front

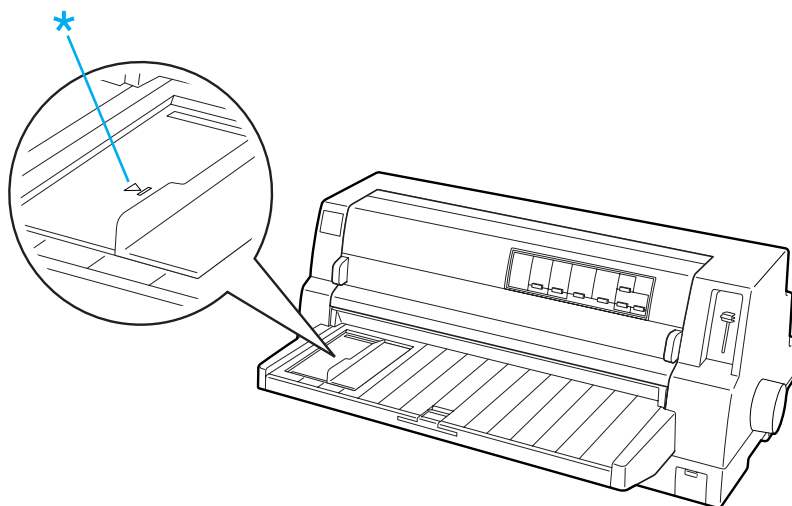
Follow these steps to load single sheets from the paper guide.

1. Make sure the paper guide is attached as described in the *Setup Guide*. Then close the tractor unit sprocket covers located on the back of your printer and push down the sprocket lock levers to lock the sprockets in place.
2. Turn on the printer.

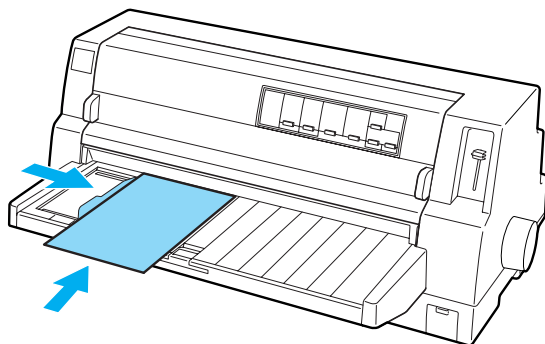
3. Make sure that Manual/CSF is selected as the paper source on the control panel. If not, select it by pressing the Paper Source button.



4. Slide the edge guide until it rests against the guide mark.



5. While aligning the left side of a sheet of paper with the edge guide, insert it into the printer until it meets resistance. Be sure to load paper printable side up.



After a few seconds, the printer automatically advances the paper to the loading position. The printer is ready to start printing.



Caution:

- ❑ Use the knob on the right side of the printer only to clear paper jams when the printer is off. Otherwise, you may damage the printer or cause it to lose the top-of-form position.
- ❑ Do not open the printer cover while paper is being fed; otherwise the printer cannot load the paper correctly.

Note:

- ❑ If the platen rotates but the printer does not load the paper, completely remove the paper and then insert it all the way into the printer again.
- ❑ If the paper feeds before you can adjust its position properly, increase the Manual feed wait time in the default-setting mode. See “Changing default settings” on page 3-12 for more information.
- ❑ If you need to adjust the position of the paper after it is loaded, see “Adjusting the top-of-form position” on page 1-39 and follow the instructions.

After printing a sheet, the printer ejects it onto the paper guide and the Paper Out and Pause lights come on. If you are printing a multiple-page document, remove the printed sheet and insert a new sheet into the paper guide. The printer automatically advances the paper and resumes printing.

Note:

If the printer does not eject the printed sheet, press the Load/Eject button.

Loading single sheets from the rear

You can load a stack of paper from the rear of the printer using the optional cut-sheet feeder. See “Cut-Sheet Feeder” on page 5-5 for more information.

Loading Special Paper

Multipart forms

Your printer can print on both single-sheet and continuous multipart forms. It can use multipart forms with up to eight parts including the original.



Caution:

Use only carbonless multipart forms.

Before printing, set the paper-thickness lever to the appropriate position for your multipart forms referring to the table in “Adjusting the Paper-Thickness Lever” on page 1-5.

You can load single-sheet multipart forms from the paper guide, or with the optional cut-sheet feeder or optional automatic sheet alignment unit. For instructions, see “Loading Single Sheets” on page 1-18, “Loading paper to the cut-sheet feeder” on page 5-8, or “Loading paper using the automatic sheet alignment unit” on page 5-16. You can load continuous multipart forms in the same way as you load ordinary continuous paper. For instructions, see “Loading Continuous Paper” on page 1-7.

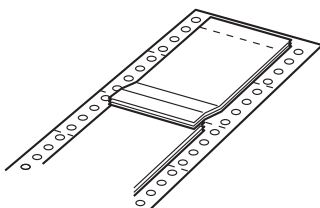


Caution:

- ❑ *When printing on multipart forms, make sure that your software settings keep the printing entirely within the printable area of the forms. Printing on the edge of a multipart form can damage the print head. For information about the printable area, see “Printable area” on page A-24.*
- ❑ *Single-sheet multipart forms that are glued at the side of the form should be loaded only from the paper guide, not from the optional cut-sheet feeder.*

Overlapping multipart forms

Overlapping multipart forms are a type of continuous paper with multipart forms. The page length of the multipart forms is longer than that of the backing continuous paper. So when extended, one page’s multipart forms overlap the next page’s multipart forms as shown below. This overlapping area is thicker than the printable area.



Follow these steps to load overlapping multipart forms:

**Caution:**

Use overlapping multipart forms only under normal operating conditions.

1. Make sure of the following:
 - ☐ Your software settings keep the printing entirely within the printable area. See “Printable area” on page A-24 for more information.
 - ☐ Tractor is selected as the paper source on the control panel.
 - ☐ The setting of the page length for tractor in the default settings matches the page length of the form you use. See “Changing default settings” on page 3-12 for more information.
2. Turn on Overlapping Forms and Skip over perforation settings in the default-setting mode.

Note:

When Overlapping Forms is turned on in the default-setting mode, the printer automatically activates the auto paper thickness function even though the paper-thickness lever may be set to another position.

**Caution:**

- ☐ *Printing on the edge of overlapping multipart forms can damage the print head.*
 - ☐ *Be sure to turn on Overlapping Forms and Skip over perforation settings in the default-setting mode when using this type of paper; otherwise your printer may be damaged.*
3. Follow the instructions in “Loading continuous paper with the tractor” on page 1-9.

To tear off and eject overlapping multipart forms

Always tear off and eject overlapping multipart forms following the instructions described below.

Note:

When Overlapping Forms is turned on in the default-setting mode, the Tear Off/Special Paper button is disabled and the Load/Eject button only feeds forms forward.

1. At the back of your printer, tear off the last overlapping multipart form that has entered the printer.
2. Press the LF/FF button to eject the last overlapping multipart forms forward.

Labels

When selecting labels for printing, always choose labels mounted on continuous backing sheets with sprocket holes for use with a tractor. Do not use labels on shiny single-sheet backing, because the backing sheet tends to slip and may not feed properly.

Follow these steps to load labels:



Caution:

Use labels only under normal operating conditions because labels are especially sensitive to temperature and humidity.

1. Make sure of the following:
 - ☐ Your software settings keep the printing entirely within the printable area. For information about the printable area, see “Printable area” on page A-24.



Caution:

Printing on the edge of a label can damage the print head.

- ❑ The auto tear-off function is turned off in the default-setting mode.
 - ❑ If you use labels whose backing sheet is exposed, make sure the paper-thickness lever is not set to AUTO. Set it to the appropriate position. See “Adjusting the Paper-Thickness Lever” on page 1-5 for more information.
2. Load labels as described in “Loading continuous paper with the tractor” on page 1-9.

To tear off and eject labels

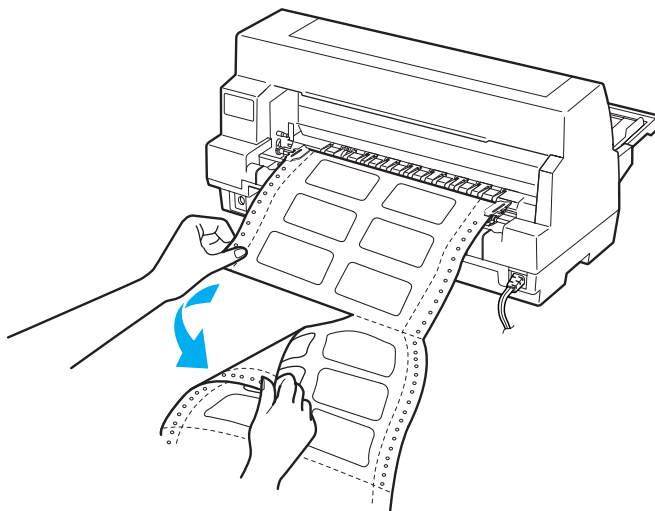
Always tear off and eject labels as described below.



Caution:

Never feed labels backward using the Load/Eject button, Tear Off/Special Paper button, or knob on the right side of the printer. Labels can easily peel off their backing and jam the printer.

1. At the back of your printer, tear off the last label form that has entered the printer, but do not press the Tear Off/Special Paper button. See the illustration below.



2. Press the LF/FF button to eject the last label form forward.

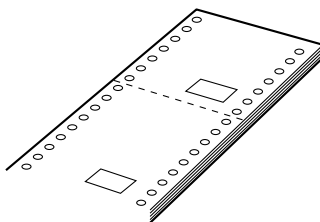


Caution:

Do not leave labels loaded in the printer between print jobs; they tend to curl and may come off their backing sheet and jam the printer when you resume printing.

Continuous forms with labels

The continuous forms with labels is a type of continuous paper with one label on each page. This is different from label paper, which consists entirely of labels. When printing on this type of paper, the printer must adjust the height of the print head for the extra thickness of the labels.



Follow these steps to load continuous forms with labels:



Caution:

Use continuous forms with labels only under normal operating conditions.

1. Make sure of the following:
 - ☐ Your software settings keep the printing entirely within the printable area. See “Printable area” on page A-24 for more information.
 - ☐ Tractor is selected as the paper source on the control panel.
2. Turn on Overlapping Forms and Skip over perforation settings in the default-setting mode.

Note:

When Overlapping Forms is turned on in the default-setting mode, the printer automatically activates the auto paper thickness function even though the paper-thickness lever may be set to another position.

3. Follow the instructions in “Loading continuous paper with the tractor” on page 1-9.



Caution:

- ❑ *Printing on the edge of continuous forms with labels can damage the print head.*
- ❑ *When loading continuous forms with labels, make sure the left edge of the form is no further than 3 cm to the left of the arrow mark (when facing the back of the printer).*

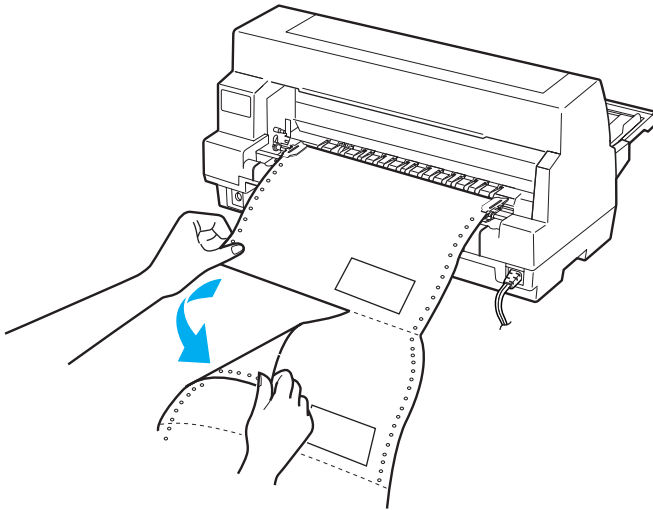
To tear off and eject continuous forms with labels

Always tear off and eject continuous forms with labels by following the procedure below.

Note:

When Overlapping Forms is turned on in the default-setting mode, the Tear Off/Special Paper button is disabled and the Load/Eject button only feeds forms forward.

1. At the back of your printer, tear off the last continuous form with labels that has entered the printer.



2. Press the LF/FF button to eject the last form forward.
3. To print on another type of paper, turn off Overlapping Forms and Skip over perforation settings in the default-setting mode.

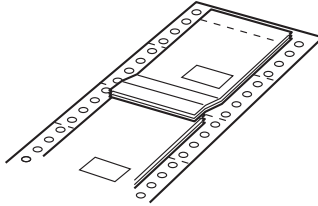


Caution:

Do not leave continuous forms with labels loaded in the printer between print jobs; they tend to curl and may come off their backing sheet and jam the printer when you resume printing.

Overlapping multipart forms with labels

This kind of continuous paper is a combination of the two types of forms; overlapping multipart forms and continuous forms with labels. Be sure to follow any special instructions intended for either type of forms.



Caution:

Use overlapping multipart forms with labels only under normal operating conditions because labels are especially sensitive to temperature and humidity.

Follow these steps to load overlapping multipart forms with labels:

1. Make sure of the following:
 - ☐ Your software settings keep the printing entirely within the printable area. See “Printable area” on page A-24 for more information.
 - ☐ Tractor is selected as the paper source on the control panel.
 - ☐ The setting of the page length for tractor in the default settings matches the page length of the form you use. See “Changing default settings” on page 3-12 for more information.
2. Turn on Overlapping Forms and Skip over perforation settings in the default-setting mode.

Note:

When Overlapping Forms is turned on in the default-setting mode, the printer automatically activates the auto paper thickness function even though the paper-thickness lever may be set to another position.

3. Follow the instructions in “Loading continuous paper with the tractor” on page 1-9.

**Caution:**

- ❑ *Printing on the edge of overlapping multipart forms with labels can damage the print head.*
- ❑ *When loading overlapping multipart forms with labels, make sure the left edge of the form is no further than 3 cm to the left of the arrow mark (when facing the back of the printer).*

To tear off and eject overlapping multipart forms with labels

Always tear off and eject overlapping multipart forms with labels by following the procedure below.

Note:

When Overlapping Forms is turned on in the default-setting mode, the Tear Off/Special Paper button is disabled and the Load/Eject button only feeds forms forward.

1. At the back of your printer, tear off the last overlapping multipart form with labels that has entered the printer.
2. Press the LF/FF button to eject the last form forward.
3. To print on another type of paper, turn off Overlapping Forms and Skip over perforation settings in the default-setting mode.

**Caution:**

Do not leave overlapping multipart forms with labels loaded in the printer between print jobs; they tend to curl and may come off their backing sheet and jam the printer when you resume printing.

Envelopes

You can print on a variety of envelopes by loading them the same way you load single sheets—from the paper guide or with the optional cut-sheet feeder or optional automatic sheet alignment unit.

Follow these steps to load envelopes:

**Caution:**

Use envelopes only under normal operating conditions.

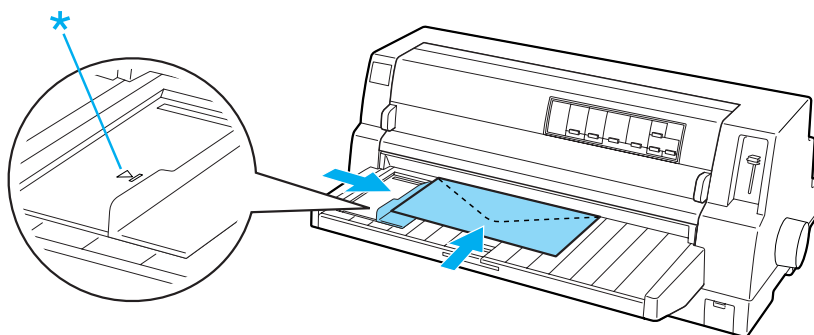
1. Make sure that your software settings keep the printing entirely within the printable area. See “Printable area” on page A-24 for more information.

**Caution:**

Printing on the edge of an envelope can damage the print head.

2. Make sure that Manual/CSF is selected as the paper source on the control panel. If not, select it by pressing the Paper Source button.
3. Select Envelope on the control panel by pressing the Tear Off/Special Paper button.
4. Load envelopes following the instructions in “Loading single sheets from the front” on page 1-18, “Loading paper to the cut-sheet feeder” on page 5-8, or “Loading paper using the automatic sheet alignment unit” on page 5-16. Be sure to fold the flap and be careful of the flap’s orientation.

from the paper guide



Postcards

You can print on a variety of postcards by loading them the same way you load single sheets from the paper guide or with the optional cut-sheet feeder or optional automatic sheet alignment unit.

Follow these steps to load postcards.



Caution:

Use postcards only under normal operating conditions.

1. Make sure that your software settings keep the printing entirely within the printable area. See "Printable area" on page A-24 for more information.



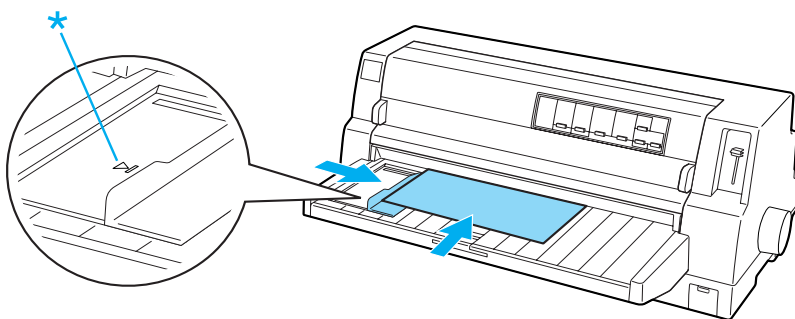
Caution:

Printing on the edge of a postcard can damage the print head.

2. Make sure that Manual/CSF is selected as the paper source on the control panel. If not, select it by pressing the Paper Source button.

3. Select Card on the control panel by pressing the Tear Off/Special Paper button.
4. Load cards following the instructions in “Loading single sheets from the front” on page 1-18, “Loading paper to the cut-sheet feeder” on page 5-8, or “Loading paper using the automatic sheet alignment unit” on page 5-16.

from the paper guide



Switching Between Continuous Paper and Single Sheets

When using the tractor, you can easily switch between continuous paper and single sheets (including envelopes or postcards) without removing the continuous paper from the tractor.

Switching to single sheets

Follow these steps to switch from continuous paper to single sheets:

1. When you have finished printing on continuous paper, press the Tear Off/Special Paper button to advance the paper to the tear-off position.

Note:

If the auto tear-off mode is turned on, the printer advances the paper perforation to the tear-off position automatically.

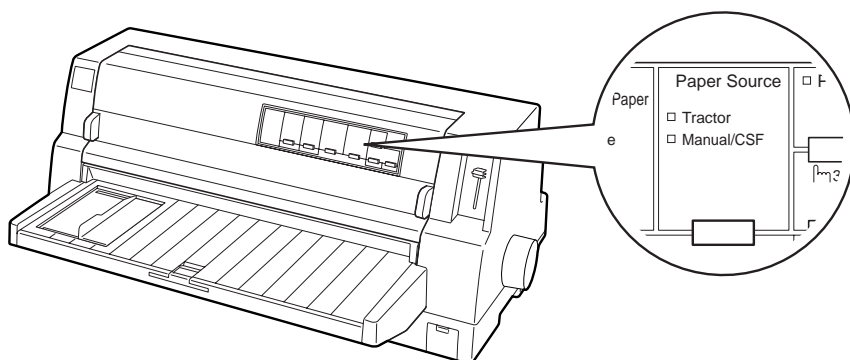
2. Tear off the printed pages.



Caution:

- ❑ *Always tear off paper before feeding it backwards; feeding too many sheets backwards can cause a paper jam.*
 - ❑ *Never feed labels backward using the Load/Eject button, Tear Off/Special Paper button, or knob on the right side of the printer. Labels can easily peel off their backing and jam the printer. For information on removing labels from the paper path, see “To tear off and eject labels” on page 1-25.*
3. Press the Load/Eject button to feed the continuous paper back to the standby position. The paper is still attached to the tractor, but is no longer in the paper path.

4. Select Manual/CSF as the paper source on the control panel by pressing the Paper Source button.



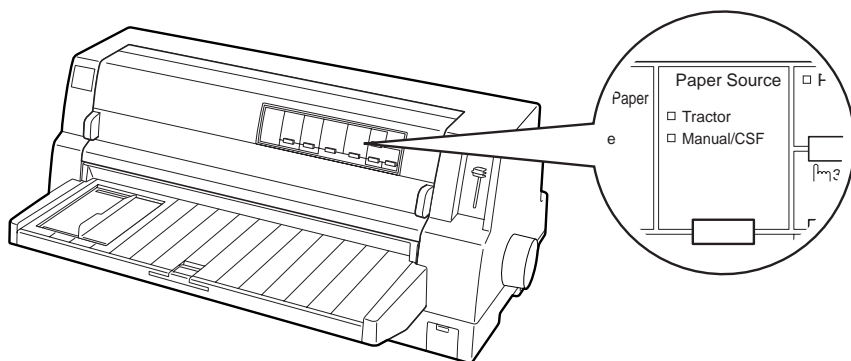
Now you can load single sheets from the paper guide. See “Loading Single Sheets” on page 1-18 for more information.

Switching to continuous paper

Follow these steps to switch from single sheets to continuous paper:

1. If necessary, press the Load/Eject button to eject the last printed single sheet.
2. Make sure continuous paper is loaded in the printer as described in “Loading continuous paper with the tractor” on page 1-9.

3. Select Tractor as the paper source on the control panel by pressing the Paper Source button.



The printer automatically advances the continuous paper from the standby position to the loading position when it receives data.

Using the Micro Adjust Function

The Micro Adjust function allows you to move the paper forward or backward in 0.141 mm (1/180-inch) increments so that you can make precise adjustments to the top-of-form and tear-off positions.

Adjusting the tear-off position

If your paper perforation is not aligned with the tear-off edge, you can use the Micro Adjust function to move the perforation to the tear-off position.



Follow these steps to adjust the tear-off position:

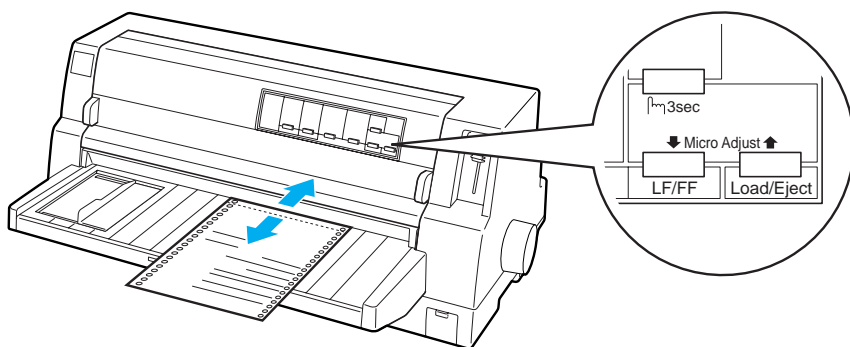
**Caution:**

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. Press the Pause button if the printer is printing.
2. Make sure the Tear Off/Special Paper lights are flashing (the paper is at the current tear-off position). You may need to press the Tear Off/Special Paper button to advance the paper to the tear-off position.
3. Hold down the PAUSE button for about three seconds. The Pause light begins flashing and the printer enters the Micro Adjust mode.
4. Press the LF/FF  button to feed paper backward, or press the Load/Eject  button to feed paper forward, until the paper perforation is aligned with the tear-off edge of the printer cover.



Note:

The printer has a minimum and a 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. Tear off the printed pages.
6. Press the Pause button to exit the Micro Adjust mode.

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

Adjusting the top-of-form position

The top-of-form position is the position on the page where the printer starts printing. If your printing appears too high or low on the page, you can use the Micro Adjust function to adjust the top-of-form position.

Follow these steps 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 function. If necessary, adjust the top-of-form position in your software.*
1. Make sure the printer is turned on.
 2. Press the Pause button to stop printing. The Pause light comes on.

3. Load paper. Press the Load/Eject button to advance continuous paper to the current top-of-form position. If necessary, lift up the printer cover so you can see the paper position.
4. Hold down the Pause button for about three 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 down on the page, or press the Load/Eject ⬆ button to move the top-of-form position up on the page.

Note:

- ❑ *The printer has a minimum and a 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.*
6. After you set the top-of-form position, press the Pause button to exit the Micro Adjust mode.

About Your Printer Software

The EPSON printer software that comes with your printer includes the printer driver software and the EPSON Status Monitor 3 utility.

The printer driver is software that allows your computer to control the printer. You need to install the printer driver so your Windows software applications can take full advantage of the printer's capabilities.

The EPSON Status Monitor 3 utility program allows you to monitor the status of your printer, alerts you when errors occur, and provides you with troubleshooting tips. Status Monitor 3 is automatically installed when you install the printer driver.

Note:

Before proceeding, make sure you have installed the printer driver on your computer as described in the Setup Guide.

Using the Printer Driver with Windows Me, 98, and 95

You can access the printer driver from your Windows applications or from the Start menu.

- ❑ When you access the printer driver from a Windows application, any settings you make apply only to the application you are using. See Accessing the printer driver from Windows applications for more information.

- ❑ When you access the printer driver from the Start menu, the printer driver settings you make apply to all your applications. See *Accessing the printer driver from the Start menu* for more information.

See *Changing the printer driver settings* to check and change printer driver settings.

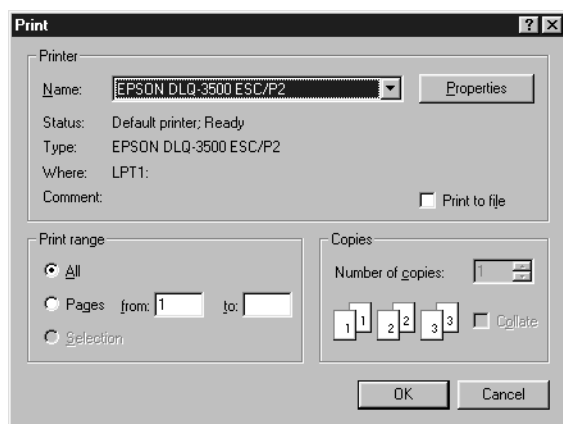
Note:

While many Windows applications override the settings made with the printer driver, some do not, so you must verify that the printer driver settings match your requirements.

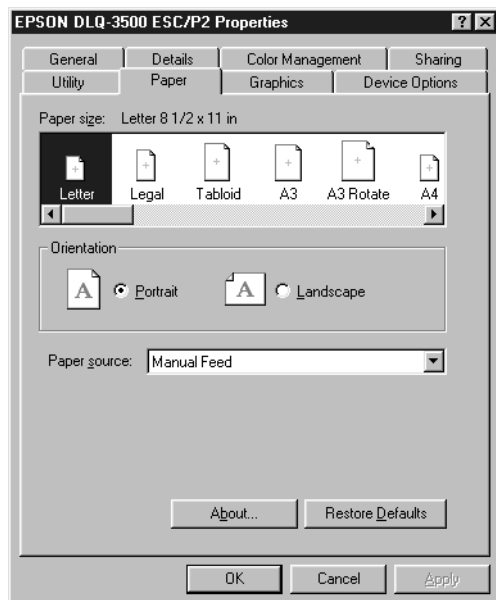
Accessing the printer driver from Windows applications

Follow these steps to access the printer driver from a Windows application:

1. Select **Print Setup** or **Print** from the **File** menu of your application software. The **Print** or **Print Setup** dialog box appears.



2. Make sure that your printer is selected and then click Printer, Setup, Properties, or Options. (You may need to click a combination of these buttons.) The Properties window appears, and you see the Paper, Graphics, and Device Options menu. These menus contain the printer driver settings.



3. To view a menu, click the corresponding tab at the top of the window. See Changing the printer driver settings to change the settings.

Accessing the printer driver from the Start menu

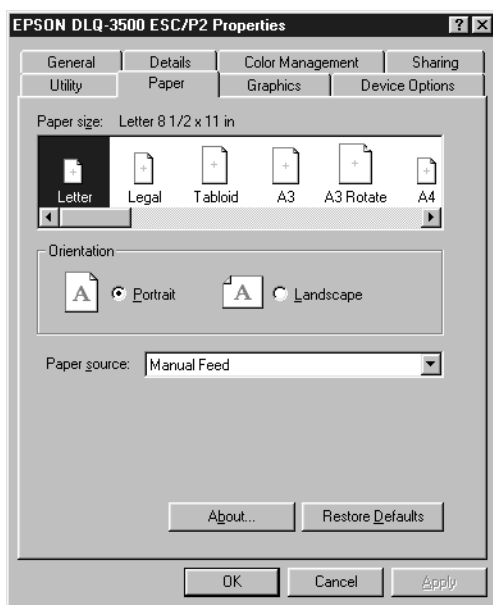
Follow these steps to access the printer driver from the Start menu:

1. Click the Start button, and then go to Settings.
2. Click Printers.

3. Right-click your printer icon, and click Properties. The screen displays the Properties window, which contains the Paper, Graphics, Device Options, and Utility menus. These menus display the printer driver settings.
4. To view a menu, click the corresponding tab at the top of the window. See Changing the printer driver settings to change the settings.

Changing the printer driver settings

5. Your printer driver has four menus: Paper, Graphics, Device Options, and Utility. For an overview of the available settings, see Printer Driver Settings Overview. You can also view online help by right-clicking items in the driver and selecting What's this?



When you finish making printer driver settings, click OK to apply the settings, or click Restore Defaults to return the settings to their default values.

Once you have checked your printer driver settings and made any necessary changes, you are ready to print.

Using the Printer Driver with Windows 2000 and NT 4.0

You can access the printer driver from your Windows applications or from the Start menu.

- ☐ When you access the printer driver from a Windows application, any settings you make apply only to the application you are using. See Accessing the printer driver from Windows applications for more information.
- ☐ When you access the printer driver from the Start menu, the printer driver settings you make apply to all your applications. See Accessing the printer driver from the Start menu for more information.

To check and change printer driver settings, see Changing the printer driver settings.

Note:

While many Windows applications override the settings made with the printer driver, some do not, so you must verify that the printer driver settings match your requirements.

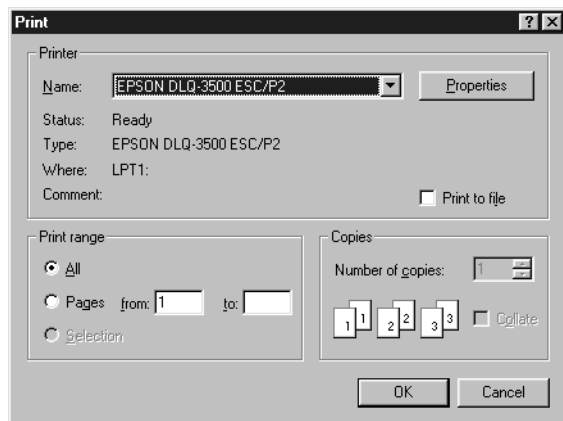
Accessing the printer driver from Windows applications

Follow these steps to access the printer driver from a Windows application:

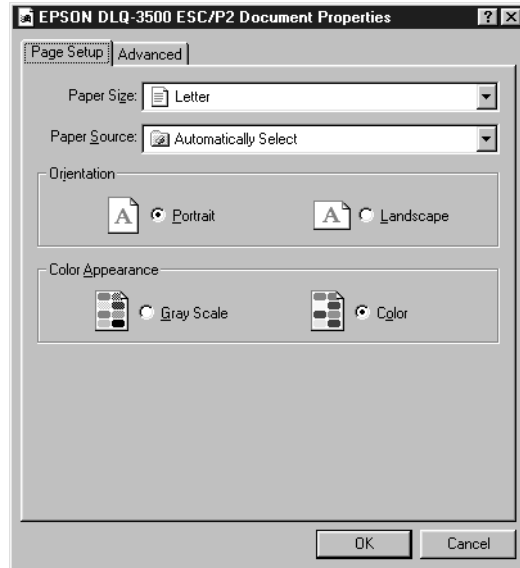
Note:

- ❑ *The examples in the following section are from the Windows NT 4.0 operating system. They may vary in appearance from what actually appears on your screen; however, the instructions are the same.*

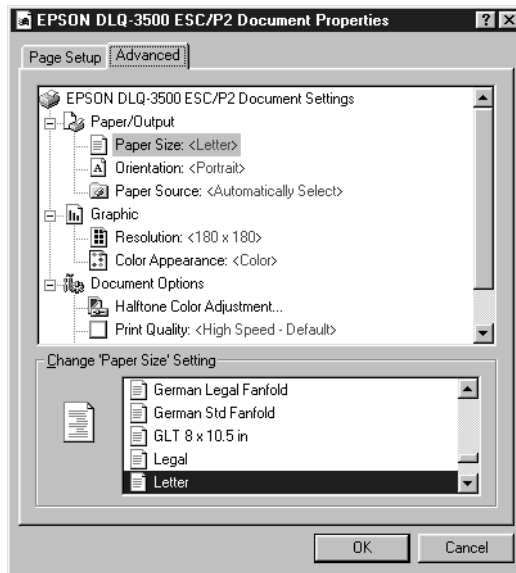
1. Select Print Setup or Print from the File menu of your application software. The Print or Print Setup dialog box appears.



2. Make sure that your printer is selected and then click Printer, Setup, Properties, or Options. (You may need to click a combination of these buttons.) The Document Properties window appears, and you see the Page Setup and Advanced menus. These menus contain the printer driver settings.



3. To view a menu, click the corresponding tab at the top of the window. See Changing the printer driver settings to change the settings.



Accessing the printer driver from the Start menu

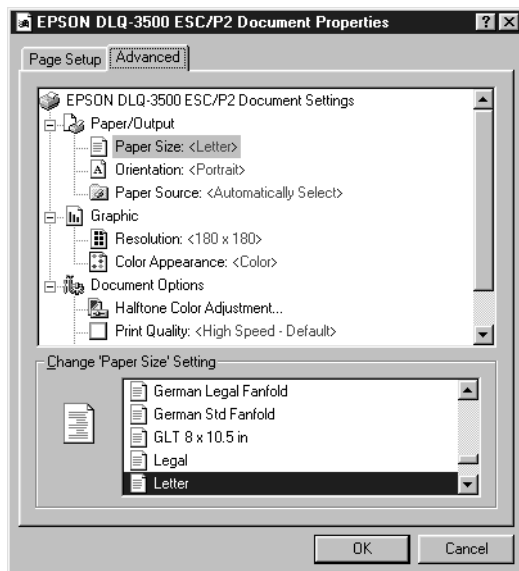
Follow these steps to access the printer driver from the Start menu:

Note:

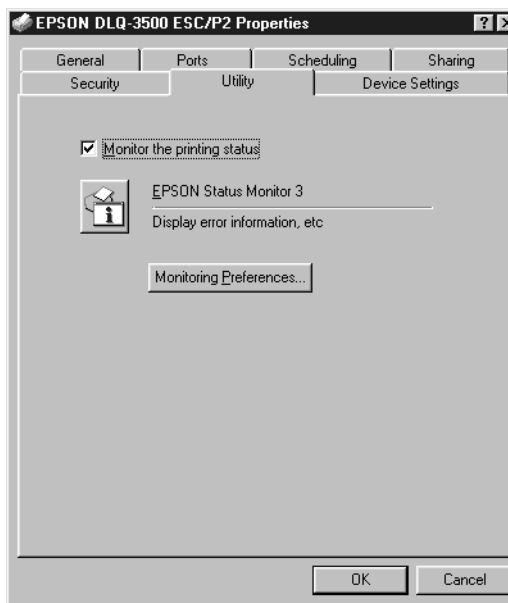
The screen shots used in this procedure are from the Windows NT 4.0 operating system. They may vary in appearance from what actually appears on your screen; however, the instructions are the same.

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

3. Right-click your printer icon, and click Document Defaults. The screen displays the Default Document Properties window, which contains the Page Setup and Advanced menus. These menus display the printer driver settings.



When you click Properties, the printer software window appears, which includes menus used to make the printer driver settings.



4. To view a menu, click the corresponding tab at the top of the window. See Changing the printer driver settings to change the settings.

Changing the printer driver settings

Your printer driver has two menus from which you can change the printer driver settings; Page Setup and Advanced. You can also change settings on the Utility menu in the printer software. For an overview of the available settings, see Printer Driver Settings Overview. You can also view online help by right-clicking items in the driver and selecting What's this?

When you finish making your printer driver settings, click **OK** to apply the settings, or click **Cancel** to cancel your changes.

Once you have checked your printer driver settings and changed them if necessary, you are ready to print.

Printer Driver Settings Overview

The following tables show the Windows printer driver settings. Note that not every setting is available in all versions of Windows.

Printer settings

Settings	Explanations
Paper size	Select the size of the paper you want to use. If you do not see your paper size, use the scroll bar to scroll through the list. If your paper size is not included in the list, click Custom or User Defined Size and enter the paper size in the dialog box that appears.
Orientation	Select Portrait or Landscape.
Paper Source	Select the paper source you want to use.
Resolution/ Graphics Resolution	Select the printing resolution you want. The higher the resolution you select, the more detailed your printout will be; however, increasing the resolution slows printing.
Dithering	You can leave this option set to Fine, which is the default setting, or select another dithering pattern depending on the kind of printout you want.
Intensity/ Intensity Control	Move the slider to make your printout lighter or darker.
Print quality	Select a print quality option from the Print quality list. If you turn on Hi-speed, you will enter bi-directional printing mode and printing speed will increase. Turning Hi-speed off will return the printer to uni-directional printing mode. Printing speed will decrease, but printing precision will improve. Printing with the default settings uses the settings stored in the printer.
EPSON Status Monitor 3	You can access the EPSON Status Monitor 3 utility when you click this button. To monitor the printer, make sure the Monitor the printing status check box is selected.
Monitoring Preferences	Click this button to open the Monitoring Preferences dialog box where you can make settings for the EPSON Status Monitor 3 utility.
Paper/Output	Check the Paper Size, Orientation, and Paper Source settings you made on the Page Setup menu and change them if necessary. Select the setting and then choose an option from the Change Setting list box.

Settings	Explanations
Halftone	Click this button to set the brightness and contrast, input the RGB gamma, or make other settings. The Halftone Color Adjustment dialog box appears. For details, click the Help button in this dialog box.

Monitoring settings

Settings	Explanations
EPSON Status Monitor 3	You can access the EPSON Status Monitor 3 utility when you click this button. To monitor the printer, make sure the Monitor the printing status check box is selected.
Monitoring Preferences	Click this button to open the Monitoring Preferences dialog box where you can make settings for the EPSON Status Monitor 3 utility. See "Setting up EPSON Status Monitor 3" on page 2-14 for more information.

Using the EPSON Status Monitor 3 Utility

The EPSON Status Monitor 3 utility that comes with your printer is available for Windows Me, 98, 95, 2000 or NT 4.0. It allows you to monitor your printer's status, alerts you when printer errors occur, and provides troubleshooting instructions when needed.

The EPSON Status Monitor 3 utility is available only when:

- ☐ The printer is connected directly to the host computer via the parallel port [LPT1] or the USB port.
- ☐ Your system is configured to support bidirectional communication.

The EPSON Status Monitor 3 utility is installed when you install the printer driver as described in the *Setup Guide*.

Note:

If you install the driver using Add Printer in the Printers folder, or using the "Point and Print" method, EPSON Status Monitor 3 may not function properly. If you want to use EPSON Status Monitor 3, reinstall the driver as described in the Setup Guide.

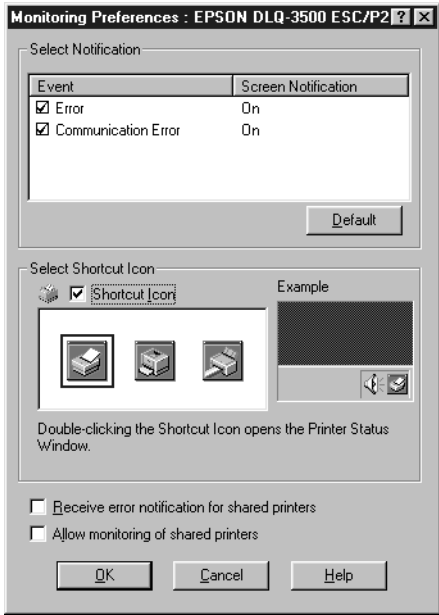
Before using the EPSON Status Monitor 3 utility, be sure to read the README file on the driver disk. This file contains the latest information on the utility.

Setting up EPSON Status Monitor 3

Follow these steps to set up EPSON Status Monitor 3:

1. Open the Utility menu as described in Using the Printer Driver with Windows Me, 98, and 95 or Using the Printer Driver with Windows 2000 and NT 4.0.

- Click the Monitoring Preferences button. The Monitoring Preferences dialog box appears.



- The following settings are available:

Select Notification	Displays the error item check box ON/OFF status. Turn on this check box to display the selected error notification.
Select Shortcut icon	The selected icon is displayed in the system tray on the taskbar on the computer screen. The setting's example is shown on the right window. By clicking the shortcut icon, you can access the Monitoring Preferences dialog box easily.
Receive error notification for shared printers	Error notification for a shared printer can be received when this check box is selected.

Allow monitoring of shared printer	When this check box is selected, a shared printer can be monitored by other PCs.
---------------------------------------	---

Note:

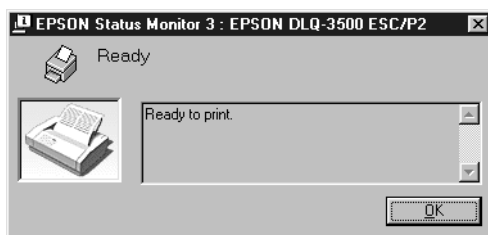
Click the Default button to revert all items to the default settings.

Accessing EPSON Status Monitor 3

Do one of the following to access the EPSON Status Monitor 3 utility:

- ☐ Double-click the printer-shaped shortcut icon on the taskbar. To add a shortcut icon to the taskbar, go to the Utility menu and follow the instructions.
- ☐ Open the Utility menu, then click the EPSON Status Monitor 3 icon. To find out how to open the Utility menu, See Using the Printer Driver with Windows Me, 98, and 95 or Using the Printer Driver with Windows 2000 and NT 4.0.

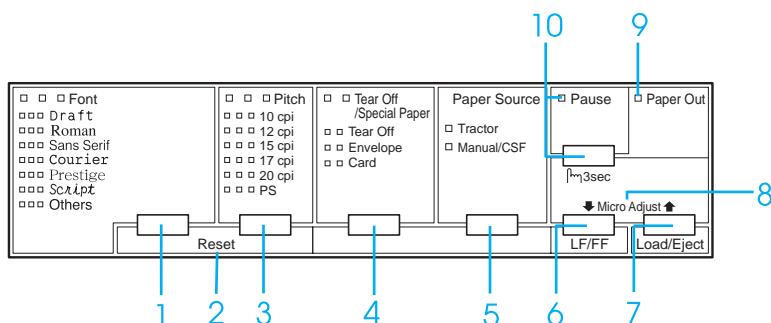
When you access the EPSON Status Monitor 3 utility as described above, the following printer status window appears.



You can view printer status information in this window.

Control Panel

Buttons and Lights



- 1 Font button

Selects one of the available fonts. To select a font, see “Selecting a Font and Pitch” on page 3-4.

Font lights

Indicate which font is selected.

- 2 Reset

When you press both the Font and Pitch buttons simultaneously, the printer clears buffer and returns to its default settings.

3 Pitch button

Selects one of the pitch settings. To select a pitch, see “Selecting a Font and Pitch” on page 3-4.

Pitch lights

Indicate which pitch is selected.

4 Tear Off/Special Paper button

- ☐ Feeds continuous paper forward to the tear-off position.
- ☐ Feeds continuous paper backward from the tear-off position to the top-of-form position.
- ☐ Selects special paper (envelope or card) as the paper type.

Tear Off/Special Paper lights

- ☐ Flash when continuous paper is in the tear-off position.
- ☐ Only the right one is on when envelope is selected as the paper type.
- ☐ Only the left one is on when card is selected as the paper type.

- 5 Paper Source button
- Selects a paper source.
- Tractor light
- On when continuous paper is selected.
- Manual/CSF light
- On when single-sheet is selected.
- 6 LF/FF button
- ☐ Feeds paper line by line when pressed shortly.
 - ☐ Ejects a single sheet or advances continuous paper to the next top-of-form position when held down for a few seconds.
- 7 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 if a sheet is loaded.
- 8 Micro Adjust
- When you hold down the Pause button for three seconds, the printer enters the Micro Adjust mode. In this mode, you can adjust the top-of-form and tear-off positions by pressing the LF/FF↓ and Load/Eject↑ buttons. See “Using the Micro Adjust Function” on page 1-37.

- 9 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.
- 10 Pause button
- ☐ Stops printing temporarily, and resumes printing when pressed again.
 - ☐ When held down for three seconds, enters the Micro Adjust mode. When pressed again, exits the Micro Adjust mode.
- Pause light
- ☐ On when the printer is paused.
 - ☐ Flashes when the printer is in the Micro Adjust mode.

Selecting a Font and Pitch

You can select one of the printer's fonts and pitch by using the buttons on the printer's control panel as described below.

Note:

- ☐ *Follow the instructions below to change either the font or pitch only.*
- ☐ *Others means the font selected in the default-setting mode. See "Changing default settings" on page 3-12 for more information.*

- ❑ *The available pitch depends on the font you select. See the table below for more information.*

Font	Pitch
Draft	10, 12, 15
Roman	10, 12, 15, PS
Sans Serif	10, 12, 15, PS
Courier	10, 12, 15
Prestige	10, 12
Script	10

- ❑ *Settings you make in application programs usually override settings you make from the printer's control panel. For best results, use your application to select a font and make other settings.*

1. Make sure that the printer is not printing. If it is, press the Pause button to stop printing.
2. Press the FONT button until the three Font lights indicate the desired font as shown below.

■ □	USD
■ □	HSD
□ ■	Draft
□ □	Roman
□ □	Sans Serif

□=On, □=Flashing, ■=Off

3. Press the Pitch button until the three Pitch lights indicate the desired pitch as shown below.

■ □	USD
■ □ ^{flashing}	HSD
□ ■	Draft
□ □	Roman
□ □ ^{flashing}	Sans Serif

□=On, □^{flashing}=Flashing, ■=Off



4. Make sure that the desired font and pitch are selected.

About Your Printer's Default Settings

The default settings control many printer functions. While you can often set these functions through your software or printer driver, you may sometimes need to change a default setting from the printer's control panel using the default-setting mode.

For a detailed description of the settings you can change in the default-setting mode, see "Understanding default settings" on page 3-6. For instructions on changing the settings, see "Changing default settings" on page 3-12.

Understanding default settings

This section describes the settings and options available in the default-setting mode. These settings are shown in the following table and explained in detail after the table.

To access and change a setting, see "Changing default settings" on page 3-12.

Default-setting mode

Setting	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	Off, On
Auto tear-off	Off, On
Auto line feed	Off, On
Print direction	Bi-D, Uni-D, Auto
Software	ESC/P2, IBM PPDS
0 slash	0, Ø (the zero character with a slash)
High speed draft	Off, On
I/F (interface) mode	Auto, Parallel, USB, Option
Auto I/F (interface) wait time	10 seconds, 30 seconds
Parallel I/F bidirectional mode	Off, On
Packet mode	Auto, Off
Auto CR (carriage return)*	Off, On
A.G.M*	Off, On
Character table	<p>Standard model: italic, PC437, PC850, PC860, PC863, PC865, PC861, BRASCII, Abicomp, Roman8, ISO Latin 1, PC858, ISO 8859-15</p> <p>All other models: Italic, PC437, PC850, PC437 Greek, PC853, PC855, PC852, PC857, PC864, PC866, PC869, MAZOWIA, Code MJK, ISO 8859-7, ISO Latin 1T, Bulgaria, PC 774, Estonia, ISO 8859-2, PC 866 LAT., PC 866UKR, PC APTEC, PC708, PC720, PCAR 864, PC860, PC865, PC861, PC863, BRASCII, Abicomp, Roman8, ISO Latin 1, PC858, ISO8859-15, PC 771</p>
International character set for italic table**	Italic U.S.A., Italic France, Italic Germany, Italic U.K., Italic Denmark 1, Italic Sweden, Italic Italy, Italic Spain 1

Setting	Options
Font	OCR-B, Orator, Orator-S, Script C, Roman T, Sans Serif H
Manual feed wait time	0.5 second, 1 second, 1.5 seconds, 2 seconds
Buzzer	Off, On
Overlapping Forms	Off, On

* This setting is available only in IBM PPDS emulation mode.

** The options available for this setting vary depending on the country.

Page length for tractor

This setting allows you to set the page length (in inches) for the continuous paper loaded on the tractor.

Skip over perforation

This feature is available only when continuous paper is selected as the paper source. When you turn on this feature, the printer provides a one-inch (25.4 mm) margin between the last line printed on one page and the first line printed on the next page. Because most application program margin settings override margin settings from the control panel, you should use this setting only if you cannot set your top and bottom margins using your application.

Auto tear-off

When auto tear-off is on and you are using continuous paper with the tractor, the printer automatically advances the paper perforation to the tear-off position, where you can easily tear off the printed page(s). When the printer receives data again, it automatically moves the paper back to the top-of-form position and starts printing, so you can use all of the next page.

When auto tear-off is off and you are using continuous paper with the tractor, you need to move the perforation to the tear-off position manually by pressing the Tear Off/Special Paper button. See “Using the tear-off function” on page 1-14 for more information.

Auto line feed

When auto line feed is on, the printer accompanies each carriage return (CR) code received with a line feed (LF) code.

Print direction

You can select auto print direction, bidirectional printing (Bi-D), or unidirectional printing (Uni-D). Printing is normally bidirectional; however, unidirectional printing allows for precise vertical printing alignment.

Software

When you select ESC/P2, the printer operates in the EPSON ESC/P2 mode. When you select IBM PPDS, the printer emulates an IBM printer.

0 slash

Select the zero character with a slash (0) (this feature is on) or without a slash (0) (This feature is off). The slash allows you to easily distinguish between the uppercase letter “O” and a zero.

High speed draft

When high speed draft is on, the printer prints up to 550 cps (characters per second) at 10 cpi (characters per inch). When it is off, the printer prints 495 cps at 10 cpi.

I/F (interface) mode

The printer provides a slot for an optional interface in addition to its built-in parallel interface and USB interface. You can choose Auto (automatic), Parallel, USB or Option for the interface mode. When you select Auto, the printer automatically selects the interface that is receiving data, and uses that interface until the end of the print job. The Auto setting allows you to share the printer among multiple computers without changing the interface mode.

If only one computer is connected to the printer, you can select Parallel, USB or Option, depending on which interface your computer uses.

Auto I/F (interface) wait time

When the printer is in the auto interface mode and it receives no data from the currently selected interface for the amount of time specified with this setting, it determines which interface is receiving data and switches to that interface. You can specify either 10 seconds or 30 seconds for the auto interface wait time.

Parallel I/F bidirectional mode

The Parallel Interface bidirectional transfer mode is used when this feature is on. If bidirectional transfer mode is unnecessary, turn this off.

Packet mode

Be sure to select Auto when printing from Windows applications using the printer driver included in the CD-ROM that comes with the printer. In case you encounter any communication troubles when printing from applications based on other operating systems such as DOS, turn off this mode.

Auto CR (carriage return)

This setting is available only in IBM PPDS emulation mode. When auto carriage return is on, each line feed (LF) code or ESC J code is accompanied by a carriage return (CR) code so the printer moves the next printing position to the left margin. When this setting is off, you must send a CR code after the line feed code to move the printing position to the left margin.

A.G.M. (IBM)

Turn on the alternate graphic mode (A.G.M.) to make the ESC 3, ESC A, ESC J, ESC K, ESC L, ESC Y, ESC Z, and ESC * commands in IBM PPDS emulation mode work the same way as in ESC/P 2 mode.

The A.G.M. feature is available only in IBM PPDS emulation mode.

Character table

You can select from among 13 to 36 standard character tables, depending on the country of purchase. See "Default-setting mode" on page 3-7 for more information.

International character set for italic table

You can select among several international character sets for the italic character table. Each character set contains eight characters that vary depending on the country or language, so you can customize the italic table to suit your printing needs.

Font

One of these fonts selected in the default setting is corresponding to Others on the control panel. You can select the following fonts directly on the control panel: Draft, Roman, Sans Serif, Courier, Prestige and Script.

Manual feed wait time

This setting allows you to set the amount of wait time between when paper is inserted into the paper guide and it is fed. If the paper feeds before you can adjust its position properly, you should increase the wait time.

Buzzer (beeper)

The printer beeps when an error occurs. See “Using the Error Indicators” on page 4-2 for more information on printer errors. If you do not want the printer to beep when an error occurs, turn off this setting.

Overlapping forms

This setting takes effect only when the skip-over-perforation setting is on. When overlapping-forms setting is on, the printer lifts up the print head each time it makes a one-inch margin with the skip-over-perforation feature. You need to turn on both the overlapping-forms and the skip-over-perforation settings when you use overlapping forms.

Changing default settings

Follow these steps 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 three sheets of A4 or letter size single-sheet paper or three pages of continuous paper that is at least 279 mm (11 inches) long and 210 mm (8.3 inches) wide. See “Loading Continuous Paper” on page 1-7 and “Loading Single Sheets” on page 1-18 for instructions on loading continuous paper and single sheets.*
- ❑ *If you use single sheets, you need to load a new sheet of paper each time the printer ejects a printed sheet from 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 five seconds before turning it back on; otherwise, you may damage the printer.

2. Turn on the printer while holding down the Font button.

The printer enters the default-setting mode and prints the language selection instructions (one page).

3. Press the Font button until the Font and Pitch lights indicate the language you want, as described in the language selection instructions.
4. Press the Tear Off/Special Paper button to print the default-setting mode instructions (two pages) in the language you selected.

The printed instructions list the settings you can change, describe how to change them, and show you how the control panel lights help you make settings. Use these instructions to change the printer's default settings from the control panel.

Note:

The arrows in the instructions indicate the printer's current settings.

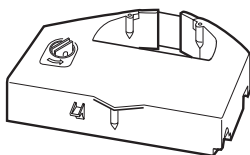
5. When you finish making settings, turn off the printer and exit the default-setting mode.

Note:

You may exit the default-setting mode by turning off the printer at any time. Any settings you have made remain in effect until you change them again.

Printing in Color

When you install a color ribbon cartridge, the printer can print in color if you select a printer driver capable of printing in color. See the *Setup Guide* for information on installing the ribbon cartridge, and “About Your Printer Software” on page 2-1 for information on the printer driver. See your software manual for details on color printing.



Note:

IBM emulation mode does not support color printing.

Using the 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. If you cannot fix your printer problem using this table, see “Problems and Solutions” on page 4-3.

State of panel lights	Beep pattern	Problem Solution
<input type="checkbox"/> Paper Out <input type="checkbox"/> Pause	•••	No paper is loaded in the selected paper source.
		Load paper in the selected paper source; the Paper Out and Pause lights go off and the printer resumes printing.
<input type="checkbox"/> Paper Out <input type="checkbox"/> Pause	•••	Paper is not loaded correctly.
		Remove and reload your paper correctly, then press the Pause button. See “Loading Continuous Paper” on page 1-7, “Loading Single Sheets” on page 1-18, or “Loading Special Paper” on page 1-21 for paper-loading instructions.
	•••	Paper is jammed in the printer.
		To clear the paper jam, see “Clearing a Paper Jam” on page 4-26.
	•••	Paper is not fully ejected.
		Press the Load/Eject button to eject the sheet.
<input checked="" type="checkbox"/> Paper Out <input type="checkbox"/> Pause	•••	The paper source is not selected correctly on the control panel.
		Select the proper paper source. Then press the Pause button.
	•••	The printer cover is open.
		Close the printer cover and press the Pause button.

<input type="checkbox"/> Paper Out <input type="checkbox"/> Pause <input type="checkbox"/> Tear Off/ Special Paper <input type="checkbox"/> <input type="checkbox"/> Font <input type="checkbox"/> <input type="checkbox"/> Pitch	•••••	An unknown printer error has occurred.
		Turn off the printer and leave it off for several minutes; then turn it on again. If the error recurs, contact your dealer.
<input checked="" type="checkbox"/> Paper Out <input type="checkbox"/> Pause	–	The print head is overheated.
		Wait for a few minutes; the printer resumes printing automatically once the print head cools.

☐ = on, ☒ = off, ☐ = flashing

••• = short series of beeps (three beeps), ••••• = long series of beeps (five beeps)

Note:

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

Problems and Solutions

Most problems you may encounter while operating your printer have simple solutions. Use the information in this section to find the source of and solution to printer problems that occur.

Determine the type of problem that occurred, and see the appropriate section below:

“Power supply problems” on page 4-4

“Paper loading or feeding problems” on page 4-5

“Printing position problems” on page 4-13

“Printing or printout quality problems” on page 4-16

You can also use the self test to determine whether the printer or the computer is causing the problem. See “Printing a Self Test” on page 4-29 for instructions on printing a self test. To pinpoint communication problems, experienced users may want to use the printer’s hex dump mode described in “Printing Hex Dump” on page 4-30.

To clear a paper jam, see “Clearing a Paper Jam” on page 4-26.

Power supply problems

The control panel lights come on briefly but then go off and stay off.

Cause	What to do
The printer’s voltage rating does not match the voltage of your electrical outlet.	Check the printer and the outlet voltage ratings. If the voltages do not match, unplug the printer immediately and contact your dealer.



Warning:

Do not reconnect the power cord to an electrical outlet with the wrong voltage for your printer.

The printer does not work and the control panel lights are off.

Cause	What to do
The printer is turned off.	Turn on the printer. The Power light comes on.

The power cord is not properly plugged into the electrical outlet; or if your power cord is not permanently attached to your printer, the power cord is not properly plugged into the printer.	Turn off the printer and make sure the power cord is firmly plugged into the electrical outlet and the printer, if necessary. Then turn on the power switch.
The electrical outlet is controlled by an outside switch or automatic timer.	Use a different outlet.
The electrical outlet does not work.	Plug another electrical device, such as a lamp, into the outlet to check if the outlet is working properly. If it is not, use a different outlet.

Paper loading or feeding problems

Single sheets

The printer does not load single-sheet paper or does not feed it properly.

Cause	What to do
Continuous paper is in the paper path.	Press the Load/Eject button to remove the continuous paper. Select Manual/CSF as the paper source on the control panel and insert a new sheet. (See “Switching to single sheets” on page 1-34 for more information.)

Tractor is selected as the paper source on the control panel.

Select Manual/CSF as the paper source on the control panel. (See “Buttons and Lights” on page 3-1.)

The platen rotates but the printer does not feed the paper.
--

Cause	What to do
--------------	-------------------

Tractor is selected as the paper source on the control panel.	Select Manual/CSF as the paper source on the control panel. (See “Buttons and Lights” on page 3-1.)
---	---

Paper feeding is crooked or the paper jams.
--

Cause	What to do
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The paper guide is not properly installed.	Remove the paper guide and install it as described in “Attaching the paper guide” in the <i>Setup Guide</i> .
--	---

The edge guide is not positioned correctly.	Move the edge guide so that they match the width of your paper.
---	---

You may not be using the right type of paper for the printer.	Be sure you’re using the right type of paper. See “Paper” on page A-10.
---	---

The paper is old or creased.	Use only new, clean sheets of paper.
------------------------------	--------------------------------------

Note:

If paper is jammed in the paper path, see “Clearing a Paper Jam” on page 4-26.

The printer does not fully eject the paper.

Cause	What to do
You may not be able to fully eject your paper using the LF/FF button.	Use the Load/Eject button to eject the paper.
Your paper may be too long.	Make sure the page length of your paper is within the specified range. See the single-sheet paper specifications in “Single sheets” on page A-11. Also check and adjust the paper size setting in your application or the printer driver.

When the printer ejects the paper, the Paper Out flashes and the Pause light comes on.

Cause	What to do
The printer has not fully ejected your paper.	Remove the paper by hand; the Paper Out light goes out. If you are printing a multiple-page document, insert a new sheet of paper into the paper guide. The Pause light goes out and the printer automatically loads the paper and resumes printing.

Continuous paper

The printer does not load continuous paper or does not feed it properly.

Cause	What to do
Manual/CSF is selected as the paper source on the control panel.	Select Tractor as the paper source on the control panel. (See “Buttons and Lights” on page 3-1.)
The paper has come off the tractor.	Reattach the paper to the tractor as described in “Loading Continuous Paper” on page 1-7.

When you send data or press the Load/Eject button, the platen rotates but the printer does not feed the paper.

Cause	What to do
Manual/CSF is selected as the paper source on the control panel.	Select Tractor as the paper source on the control panel. (See “Buttons and Lights” on page 3-1.)
The paper has come off the tractor.	Reattach the paper to the tractor as described in “Loading Continuous Paper” on page 1-7.
The paper has been fed back to the standby position.	Press the Load/Eject button to load the paper.

Paper feeding is crooked or the paper jams.

Cause	What to do
The paper supply is obstructed.	Make sure the paper supply is not obstructed by a cable or some other object.

The paper supply is not aligned with the printer.	Make sure you align your paper supply with the paper loaded in the tractor so the paper feeds smoothly into the printer. See "Positioning the continuous paper supply" on page 1-8.
The paper supply is too far away from the printer.	Make sure that your paper supply is within 1 meter (3 feet) of the printer.
The holes on the sides of the paper are misaligned.	Check that the holes on the sides of the paper are aligned with each other. Also make sure the sprocket units are locked and their covers are closed.
The paper-thickness lever is set incorrectly.	Set the paper-thickness lever to match the thickness of your paper. See "Adjusting the Paper-Thickness Lever" on page 1-5.
Your paper may be the wrong size or thickness for the printer.	Make sure that the paper size and thickness are within the specified ranges. See "Paper" on page A-10 for information on the continuous paper specifications.
The sprocket units are positioned incorrectly for the width of paper you are using.	Adjust the position of the sprockets to remove any slack along the width of the paper. Note: <i>If paper is jammed in the paper path, see "Clearing a Paper Jam" on page 4-26 for instructions.</i>

<p>The printer does not eject your continuous paper properly.</p>
--

Cause

What to do

You may be trying to feed too much paper backward.	If you are using normal continuous paper, tear off the last printed page and press the Load/Eject button to feed the paper backward. If you are using labels, tear off the paper entering the printer, and then press the LF/FF button to feed the labels forward.
Your paper may be too long or too short.	Make sure the page length of your paper is within the specified range. See "Paper" on page A-10 for information on the continuous paper specification.
The paper size setting in your application or the printer driver may not match the size of the paper you are using.	Check the paper size setting in your application or the printer driver.
The printer's page length setting for the tractor may not match the size of the continuous paper you are using.	Check Page length for tractor of the printer's default settings. See "Changing default settings" on page 3-12.
Paper is jammed inside the printer.	Clear the paper jam as described in "Clearing a Paper Jam" on page 4-26.

Single sheets loaded from the optional cut-sheet feeder

The platen rotates but the cut-sheet feeder does not feed the paper.

Cause

What to do

The cut-sheet feeder is installed incorrectly.	Reinstall it correctly. See “Installing the cut-sheet feeder” on page 5-5.
Tractor is selected as the paper source on the control panel.	Select Manual/CSF as the paper source on the control panel. (See “Buttons and Lights” on page 3-1.)
The right and left paper guides are too close to the paper stack, preventing the paper from feeding smoothly.	Adjust the paper guides to match the width of your paper.
Paper is jammed inside the printer.	Clear the paper jam as described in “Clearing a Paper Jam” on page 4-26.
There are only a few sheets of paper left in the bin.	Add more paper.
You may have loaded too many sheets in the bin.	Remove some sheets. See “Paper” on page A-10 for information on the types and quantity of paper that can be loaded with the cut-sheet feeder.

The cut-sheet feeder feeds more than one sheet at a time.

Cause	What to do
You may have loaded too many sheets in the bin.	Remove some sheets. See “Paper” on page A-10 for information on the types and quantity of paper that can be loaded with the cut-sheet feeder.
Sheets of paper are stuck together.	Remove the paper stack, fan it, and then reload it.

Paper feeding is crooked.

Cause	What to do
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The right and left paper guides are too far apart.	Position the paper guides to match the width of your paper.
The paper is old or creased.	Use only new, clean sheets of paper.
You may not be using the right type of paper for the cut-sheet feeder. For example, your paper may be too heavy or too light.	Make sure your paper meets the requirements of your printer and cut-sheet feeder. See “Paper” on page A-10 for information on the paper specifications.

When the printer ejects the paper, the Paper Out flashes and the Pause light comes on.

Cause	What to do
The printer has not fully ejected your paper.	Remove the paper by hand; the Paper Out light goes out. Press the Pause button to resume printing.

When you try to load single-sheet paper manually, the printer loads the paper from the cut-sheet feeder.

Cause	What to do
The paper was not properly loaded in the paper guide.	Load the paper in the paper guide as “Loading single sheets from the front” on page 1-18.

One page of your document is printed on two pages.

Cause	What to do
The paper size setting in your application software does not match the size of the paper loaded in the printer.	Adjust the paper size setting in your application or the printer driver.

The printer does not load the paper you want when you switch between the cut-sheet feeder and the tractor.

Cause

What to do

The paper source is not selected correctly.

Select the proper paper source on the control panel. (See “Buttons and Lights” on page 3-1.)

Printing position problems

Wrong top-of-form position

Your printing appears too high or low on the page.

Cause

What to do

The paper size setting in your application software or printer driver does not match the size of the paper you are using.

Check the paper size setting in your application or printer driver.

The printer’s page length setting for the tractor does not match the size of the continuous paper you are using.

Change Page length for tractor setting using the printer’s default-setting mode. See “Changing default settings” on page 3-12.

The top margin or top-of-form position setting is incorrect.

Check and adjust the margin or top-of-form position settings in your application software. See “Printable area” on page A-24 for more information.

You can also adjust the top-of-form position using the Micro Adjust function. However, settings made in Windows applications override settings made in the Micro Adjust mode. See “Adjusting the top-of-form position” on page 1-39.

The printer driver settings you want to use are not selected in your software.

Choose the correct printer driver setting from the Windows desktop or in your application before printing.

You moved the paper using the knob while the printer was on.

Adjust the top-of-form position using the Micro Adjust function. See “Adjusting the top-of-form position” on page 1-39.



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.

Wrong tear-off position

The printer prints on (or too far away from) the perforation of your continuous paper.

Cause

What to do

The tear-off position setting is incorrect.

Adjust the tear-off position using the micro adjust feature. See “Adjusting the top-of-form position” on page 1-39.



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.

You moved the paper using the knob while the printer was on.

Adjust the tear-off position using the Micro Adjust function. See “Adjusting the top-of-form position” on page 1-39.

The printer you want to use is not selected in your software.

Choose the correct printer from the Windows desktop or in your application before printing.

The paper size setting in your application or printer driver does not match the size of the paper you are using.

Check the paper size setting in your application or printer driver.

The printer’s page length setting for the tractor does not match the size of the paper you are using.

Change Page length for tractor setting using the printer’s default-setting. See “Changing default settings” on page 3-12.

Printing or printout quality problems

The Pause light is off but the printer does not print.

Cause	What to do
The interface cable is not plugged in securely.	Check that both ends of the cable between the printer and the computer are plugged in securely. If the cable is connected correctly, run a self test as described in “Printing a Self Test” on page 4-29.
Your interface cable does not meet the printer and/or computer specifications.	Use an interface cable that meets the requirements of both the printer and computer. See the <i>Setup Guide</i> and your computer documentation.
Your software is not properly set up for your printer.	Make sure that your printer is properly selected in your application software. If necessary, install or reinstall the printer driver software. Refer to the <i>Setup Guide</i> for detailed instruction.

The Paper Out and Pause lights are on and the printer does not print.

Cause	What to do
The printer is out of paper for the selected paper source.	Make sure the correct paper source is selected on the control panel, and load paper in the current paper source. Press the Pause button to resume printing.

Paper on the paper guide is positioned too far to the left, right or inside for the paper sensor to detect it.

Move the paper a little to the right, left or inside. When it is positioned properly, the Paper Out and Pause lights go off.

The printer sounds like it is printing, but nothing prints.
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Cause	What to do
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The ribbon cartridge is not installed properly.	Reinstall the ribbon cartridge as described in "Replacing the ribbon cartridge" on page 5-1.
---	--

The ribbon is worn out.	Replace the ribbon cartridge as described in "Replacing the ribbon cartridge" on page 5-1.
-------------------------	--

The paper source is not selected correctly.	Select the desired paper source on the control panel. See "Buttons and Lights" on page 3-1.
---	---

The printer makes a strange noise and stops abruptly.
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Cause	What to do
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The paper is jammed.	Clear the paper jam as described in "Clearing a Paper Jam" on page 4-26.
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The ribbon is jammed because it has too much slack or it is worn out.	Remove any slack from the ribbon by turning the ribbon-tightening knob, or replace the ribbon cartridge. See "Replacing the ribbon cartridge" on page 5-1.
---	--

The printer stops printing and the Pause light flashes.

Cause	What to do
The print head is overheated.	Wait for a few minutes; the printer resumes printing automatically once the print head cools.

Part of the printout is missing, or dots are missing in random positions.

Cause	What to do
The ribbon cartridge is not installed properly.	Reinstall the ribbon cartridge as described in "Replacing the ribbon cartridge" on page 5-1.
There is too much slack in the ribbon or the ribbon has come loose.	Remove any slack in the ribbon by turning the ribbon-tightening knob, or replace the ribbon cartridge as described in "Replacing the ribbon cartridge" on page 5-1.

Lines of dots are missing in the printout as shown below.

ABCD

ARCD

ABCD

Cause	What to do
The ribbon cartridge is not installed correctly, and the ribbon is twisting or slackening.	Stop printing and reinstall the ribbon cartridge as described "Replacing the ribbon cartridge" on page 5-1.

The print head is damaged.

Stop printing and contact your dealer to have the print head replaced.



Warning:

Never try to replace the print head yourself because other parts of the printer must be checked at the same time.

Incorrect characters are printed.	
--	--

Cause	What to do
Your printer and the computer may not be communicating correctly.	Make sure that you use the correct interface cable and that the communications protocol is correct. Refer to the <i>Setup Guide</i> and your computer documentation. If you installed the optional serial interface card, also see "Interface Cards" on page 5-21.
The wrong character table is selected in your software.	Select the correct character table in your software or the printer's default settings. Note that the character table setting in your software overrides the settings made in the default-setting mode.

The font or characters set in your application software cannot be printed.	
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Cause	What to do
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Your application software is not correctly configured for your printer.

Make sure that your application software is correctly configured for your printer. See your application documentation.

The printer does not print the font you selected on the control panel or in the default settings.
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Cause	What to do
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Software settings override settings you make in the control panel or in the default settings.	Use your software to select the font.
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Printing starts too high or too low on the page.

Cause	What to do
--------------	-------------------

The paper size settings in your application software do not match the size of the paper loaded in the printer.	Change the paper size settings in your application software or printer driver to match the size of the paper you are using.
--	---

The top margin or loading position setting is incorrect.	Check and adjust the top margin and loading position settings in your software, or adjust the top-of-form position using the Micro Adjust function. See "Printable area" on page A-24 and "Adjusting the top-of-form position" on page 1-39. However, settings made in Windows applications override settings made on the control panel.
--	--

Top margin and loading position settings made in your Windows applications override settings you make in the SelecType mode.

Use your application software to make these settings.

Note:

If you want to eliminate the top margin and print at the very top of the page, adjust the top margin in your Windows application little by little until text is printed at the very top of the page.

All the text is printed on the same line.
--

Cause	What to do
-------	------------

No line feed command is sent at the end of each line of text.

Turn on the auto line feed option in the default-settings mode, so that the printer automatically adds a line feed code to each carriage return. See "Changing default settings" on page 3-12.
--

The printout has extra blank lines between lines of text.
--

Cause	What to do
-------	------------

Two line feed commands are being sent at the end of each line of text.
--

Turn off the auto line feed option in the default-settings mode. See "Changing default settings" on page 3-12.
--

The line space setting in your application software is incorrect.

Adjust the line space setting in your application software.

The length of the printing on the page does not match your paper length.

Cause	What to do
-------	------------

The paper size setting in your application or the printer driver may not match the size of the paper you are using.

Check the paper size setting in your application or the printer driver.

The printer's page length setting for the tractor may not match the size of the continuous paper you are using.

Check Page length for tractor of the printer's default settings. See "Changing default settings" on page 3-12.

Printing starts lower on the page than you expect, or the bottom of a page is printed at the top of the next page.

Cause	What to do
--------------	-------------------

The lines-per-page, top and bottom margin, or form length setting is incorrect.	
---	--

Adjust these settings in your application software, as follows: If your application software has a lines-per-page setting, set it to 66 for letter size paper or 70 for A4 size paper. If your software does not have a lines-per-page setting, try decreasing the top margin or increasing the bottom margin, or both, until you get the results you want. Adjust the form length setting if your software has this option.

Vertical printed lines are not aligned.
--

Cause	What to do
--------------	-------------------

Bidirectional printing, which is the printer's standard printing mode, may be out of alignment.	
---	--

Use the printer's bidirectional adjustment mode to correct this problem. See "Aligning Vertical Lines in Your Printout" on page 4-27.

Correcting USB Problems

If you are having difficulty using your printer with a USB connection, read the information in this section.

Make sure that your computer is a Windows Me, Windows 98 or Windows 2000 pre-installed model

Your computer must be a Windows Me, Windows 98 or Windows 2000 pre-installed model. You may not be able to install or run the USB printer driver on a computer which is not equipped with a USB port or which has been upgraded from Windows 95 to Windows Me, 98 or 2000.

For details about your computer, contact your dealer.

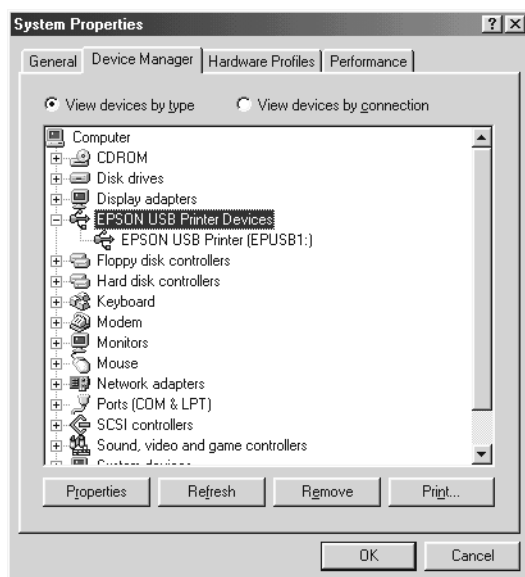
Make sure that EPSON USB Printer Devices appears on the Device Manager menu (for Windows Me and Windows 98 only)

If you canceled the plug-and-play driver installation before the procedure was complete, either the USB printer device driver or the printer driver may be incorrectly installed.

Follow these steps to check the installation and reinstall the drivers:

1. Turn the printer on, and plug the USB cable into the printer and the computer.
2. Right-click the My Computer icon on your desktop, then click Properties.
3. Click the Device Manager tab.

If your drivers are correctly installed, EPSON USB Printer Devices should appear on the Device Manager menu.



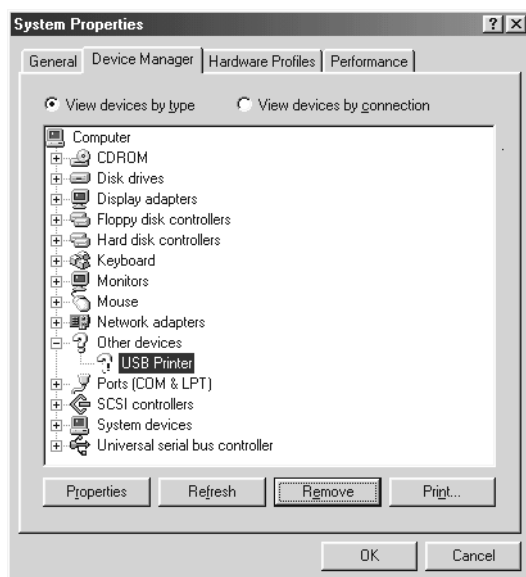
If EPSON USB Printer Devices does not appear on the Device Manager menu, click the plus (+) sign beside Other devices to view the installed devices.



If USB Printer appears under Other devices, the USB printer device driver is not installed correctly. If EPSON DLQ-3500 appears, the printer driver is not installed correctly.

If neither USB Printer nor EPSON DLQ-3500 appears under Other devices, click Refresh or unplug the USB cable from the printer, then plug it into the printer again.

4. Under Other devices, select USB Printer or EPSON DLQ-3500 and click Remove. Then, click OK.



5. When the following dialog box appears, click OK. Then click OK again to close the System Properties dialog box.

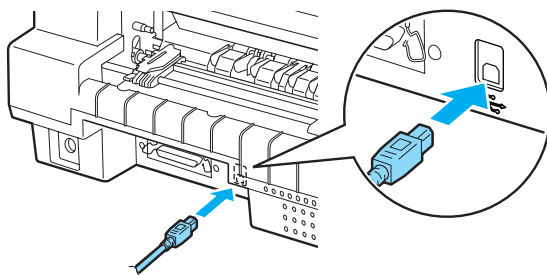


6. Turn off the printer and restart your computer. Then, reinstall the drivers from the beginning, following the instructions in the *Setup Guide*.

Printer does not work correctly with the USB cable

If your printer does not work correctly with the USB cable, try one or more of these solutions:

- ❑ Make sure that the cable you are using is a standard, shielded USB cable.
- ❑ If you are using a USB hub, connect the printer to the first tier of the hub, or connect the printer directly to the computer's USB port.
- ❑ For Windows 98, try reinstalling the USB printer device driver and the printer software. First, uninstall EPSON Printer Software using the Add/Remove Programs utility in the Control Panel, then uninstall EPSON USB Printer Devices. Next, reinstall the software as described in the *Setup Guide*. If EPSON USB Printer Devices is not registered in the Add/Remove Programs list, access the CD-ROM and double-click epusbun.exe in Win9x folder. Then follow the on-screen instructions.



Clearing a Paper Jam

Follow these steps to clear a paper jam:

1. Turn off the printer.

2. Open the printer cover.
3. If continuous paper is jammed in the printer, tear off the fresh supply at the back of the printer.
4. Turn the knob on the right side of the printer to remove the paper. Remove any remaining pieces of paper.

If the paper is stuck where the printer ejects it, gently pull the paper out of the printer.



Caution:

Use the knob on the right side of the printer to clear paper jams only when the printer is off. Otherwise, you may damage the printer or change the top-of-form or tear-off position.

5. Close the printer cover and turn on the printer. Make sure the Paper Out and Pause lights are off.

Aligning Vertical Lines in Your Printout

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.

During bidirectional adjustment, the printer prints three sheets of alignment patterns, Draft, Bit Image, and LQ (letter quality). Select the best alignment pattern from each sheet to align vertical lines.

Follow the steps below to perform bidirectional adjustment.

Note:

- ❑ *To print the instruction sheet and alignment patterns, you need four sheets of A3 size single-sheet paper or 15-inch (recommended) continuous paper. (See “Loading Continuous Paper” on page 1-7 or “Loading Single Sheets” on page 1-18 for paper-loading instructions.)*
 - ❑ *If you use single-sheet paper, be sure to load a new sheet of paper each time the printer ejects a printed sheet. Otherwise, you cannot proceed to the next step.*
1. Make sure paper is loaded, then turn off the printer.

**Caution:**

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

2. While holding down the PAUSE button, turn on the printer. The printer enters the bidirectional adjustment mode and then prints the instruction sheet and the first set of alignment patterns.
3. As described in the instructions, compare the alignment patterns and select the number of the pattern with the best alignment using the LF/FF ⬇ and LOAD/EJECT ⬆ buttons. Font lights show the pattern number which is selected at that time.
4. Enter the number of the pattern of your choice by pressing the Font button. The printer prints the next set of alignment patterns.
5. Repeat steps 3 and 4 to select and enter the number of the pattern with the best alignment for each of the remaining sets.
6. Turn off the printer and exit the bidirectional adjustment mode.

Printing a Self Test

Running the printer's self test helps you determine whether the printer or the computer is causing the problem:

- ❑ If the self test results are satisfactory, the printer is working properly and the problem is probably caused by 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. See "Problems and Solutions" on page 4-3 for possible causes and solutions to the problem.

You can print the self test using either single sheets or continuous paper. See "Loading Continuous Paper" on page 1-7 or "Loading Single Sheets" on page 1-18 for paper-loading instructions.

Follow these steps to perform a self test:

1. Make sure paper is loaded, and the proper paper source is selected on the control panel. Then turn off the printer.



Caution:

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

2. To run the test using the Draft font, turn on the printer while holding down the LF/FF button. To run the test using the printer's letter-quality fonts, turn on the printer while holding down the Load/Eject button. Either self test can help you determine the source of your printing problem; however, the draft self 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. If paper remains in the printer, press the Load/Eject button to eject the printed page. Then turn off the printer.

**Caution:**

Do not turn off the printer while it is printing the self test. Always press the Pause button to stop printing and the Load/Eject button to eject the printed page before you turn off the printer.

Printing Hex Dump

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

Follow these steps to print a hex dump:

Note:

The hex dump feature is designed for a connection with DOS-based PC.

1. Make sure that A4 (210 × 297 mm, 8.3 × 11.7 inches) or wider paper (such as letter size paper) is loaded in the printer and the printer is turned off.
2. To enter hex dump mode, turn on the printer while holding down both the LF/FF and Load/Eject buttons.

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

```
1B 40 20 54 68 69 73 20 69 73 20 61 6E 20 65 78  .@ This is an ex
61 6D 70 6C 65 20 6F 66 20 61 20 68 65 78 20 64  ample of a hex d
75 6D 70 20 70 72 69 6E 74 6F 75 74 2E 0D 0A  ump printout...
```

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

4. To exit the hex dump mode, press the **PAUSE** button and eject the printed page(s), and turn off the printer.

Contacting Customer Support

If your EPSON product is not operating properly and you cannot solve the problem using the troubleshooting information in your product documentation, contact customer support services for assistance. If customer support for your area is not listed below, contact the dealer where you purchased your product.

Customer support will be able to help you much more quickly if you give them the following information:

- ☐ Product serial number
(The serial number label is usually on the back of the product.)
- ☐ Product model

- ❑ Product software version
(Click About, Version Info, or similar button in the product software.)
- ❑ Brand and model of your computer
- ❑ Your computer operating system name and version
- ❑ Names and versions of the software applications you normally use with your product

EPSON TAIWAN TECHNOLOGY & TRADING LTD.

Address: 10F, NO.287, Nanking E. Road, Sec.3, Taipei, Taiwan,
R.O.C

Service Phone: (02) 2547-3000

Fax: (02) 2713-2155

URL: <http://www.epson.com.tw>

Ribbon Cartridge

Genuine EPSON ribbon cartridge

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. Other products not manufactured by EPSON may cause damage to your printer, which is not covered by EPSON's warranties.

Your printer uses the following ribbon cartridges:

EPSON black ribbon cartridge: S015139 (long-life cartridge)
S015066 (normal cartridge)

EPSON color ribbon cartridge: S015067

Replacing the ribbon cartridge

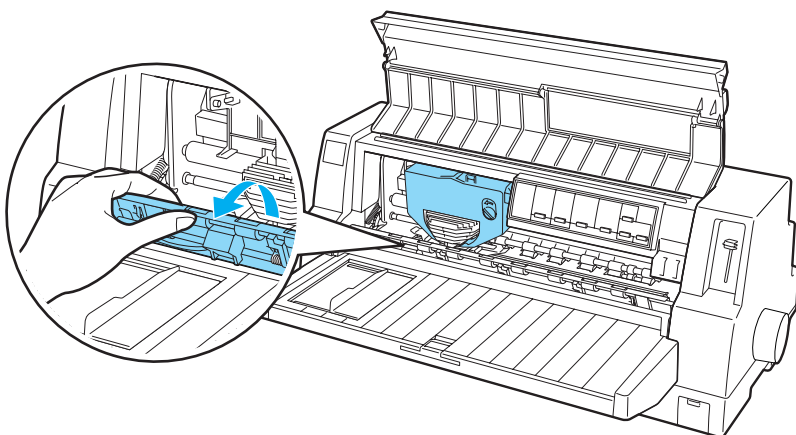
Follow these steps to replace a used ribbon cartridge:

1. Make sure the printer is turned off.
2. Open the printer cover by holding the finger grips on both ends of the cover and lifting it up. Then open the paper bail.

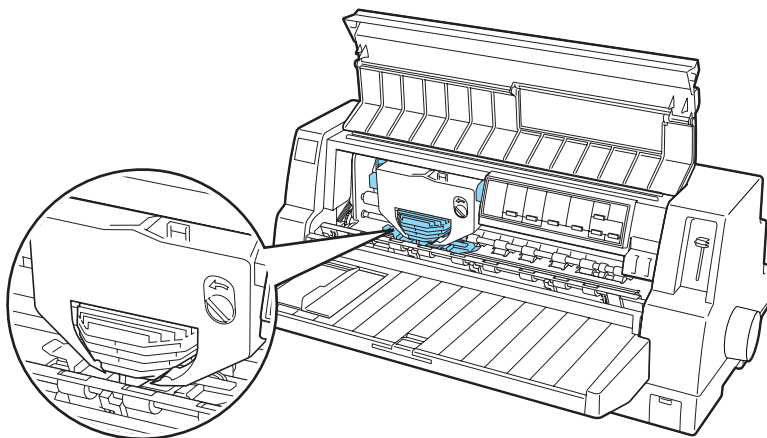


Warning:

If you have just used the printer, the print head may be hot; let it cool for a few minutes before replacing the ribbon cartridge.



3. The print head should be in the replacement position shown in the illustration below.



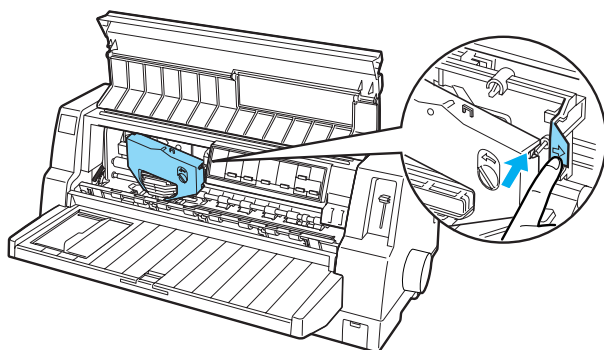
If it is not, close the printer cover and turn the printer on to move the print head to the replacement position. Wait a few seconds, then turn the printer off again and open the printer cover.



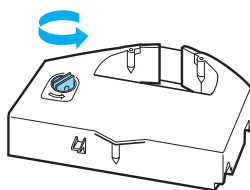
Caution:

Following the steps below while the printer is turned on can damage the printer.

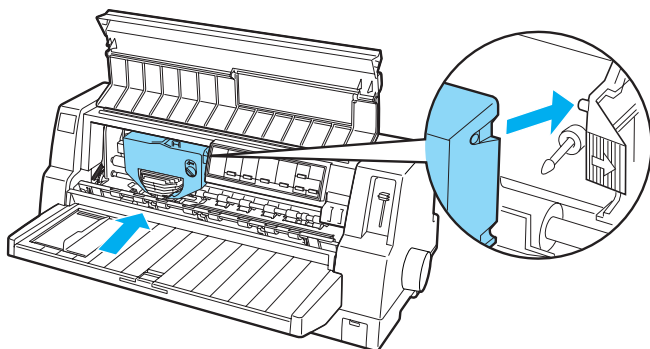
4. Press the tab at the upper right of the cartridge holder and pull the cartridge out of the printer.



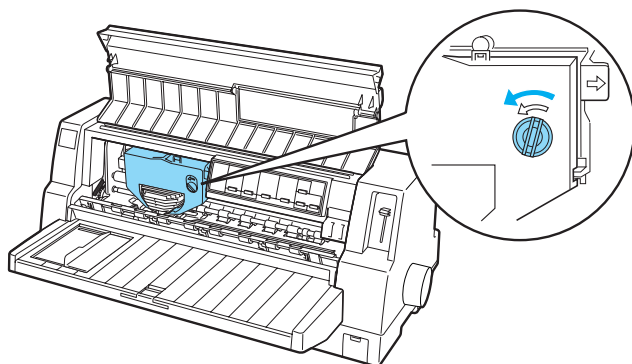
5. Remove the new ribbon cartridge from its package and turn the ribbon-tightening knob in the direction of the arrow to remove any slack in the ribbon.



6. Hold the ribbon cartridge with the part where the ribbon is exposed facing down and the ribbon-tightening knob facing to the front of the printer. Then guide the ribbon under the print head, and snap the cartridge into place so that the tabs on both sides of the cartridge fit into the notches in the cartridge holder.



7. Turn the ribbon-tightening knob again to remove any slack in the ribbon so that the ribbon moves freely.



8. Close the paper bail and the printer cover.

Cut-Sheet Feeder

The optional cut-sheet feeder C80683* gives you easier and more efficient handling of single-sheet paper, single-sheet multipart forms, envelopes, and postcards. You can use the cut-sheet feeder without removing continuous paper.

You can load the following quantities of paper to the cut-sheet feeder:

Single sheets

A3 size paper	Up to 130 sheets of 82 g/m ² (22 lb) paper Up to 170 sheets of 64 g/m ² (17 lb) paper
Other paper	Up to 200 sheets of 82 g/m ² (22 lb) paper Up to 250 sheets of 64 g/m ² (17 lb) paper
Single-sheet multipart forms	Up to 40 sheets of 47 g/m ² (12.5 lb) paper
Envelopes	Up to 20 plain or bond envelopes Up to 30 airmail envelopes
Postcards	Up to 50 plain paper cards

Note:

You cannot install the cut-sheet feeder and optional automatic sheet alignment unit at the same time.

Installing the cut-sheet feeder

Follow these steps to install the cut-sheet feeder:

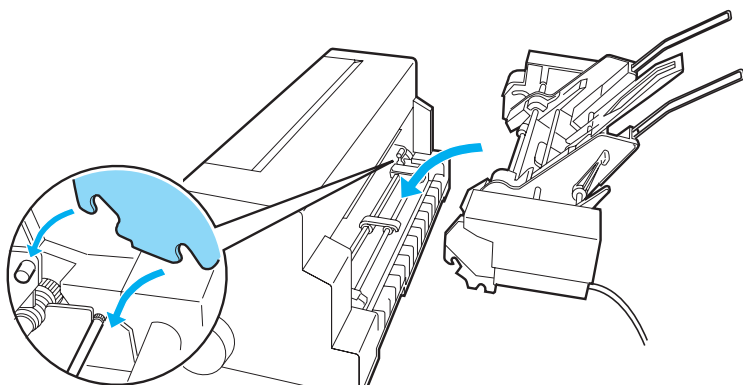
1. Make sure that the printer is turned off.

2. Assemble the cut-sheet feeder by following the instructions provided in the documentation that comes with the feeder.
3. Close the sprocket covers if they are open, and lock the sprockets by pushing down the lock levers if necessary.

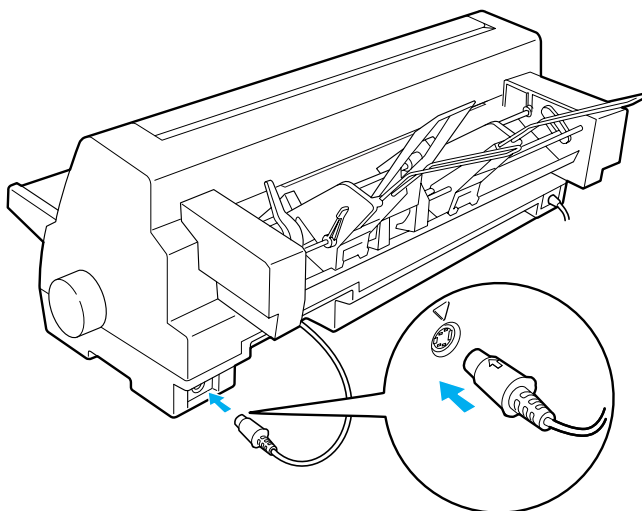
Note:

You do not need to remove your continuous paper from the tractor to use the cut-sheet feeder. See "Switching between the tractor and the cut-sheet feeder" on page 5-13 for information on switching between the cut-sheet feeder and continuous paper.

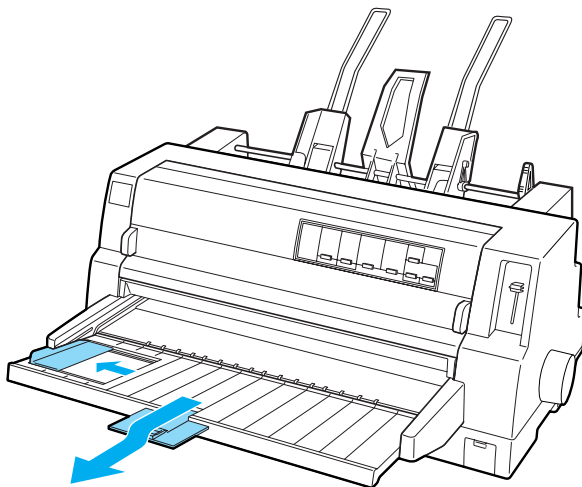
4. Make sure that Manual/CSF is selected as the paper source on the control panel. If not, select it by pressing the Paper Source button.
5. Hold the cut-sheet feeder horizontally with both hands. Fit the notches on each side of the feeder over the mounting posts on the printer. Lower the cut-sheet feeder until it is seated securely on the printer.



6. Plug the cable connector of the cut-sheet feeder in the printer.



7. Pull out the paper guide and the paper guide extension completely. Then slide the edge guide all the way to the left.



8. Turn on the printer and adjust the paper size in your software, if necessary.

You are now ready to load paper to your cut-sheet feeder. To remove the cut-sheet feeder, reverse the steps described above.

Loading paper to the cut-sheet feeder

For single-sheet multipart forms, use only the type of forms that are glued at the top.

To avoid paper jams, do not allow too many printed sheets to be stacked on the paper guide at one time. Remove the stack when it is half as thick as the paper loading limit marked on the cut-sheet feeder.

Follow these steps to load paper to the cut-sheet feeder:

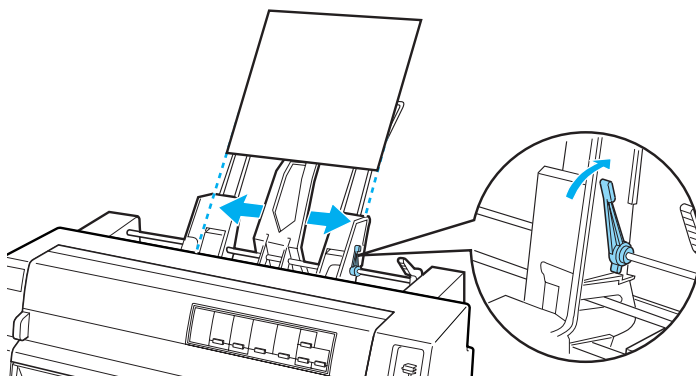
1. Pull the paper set lever forward until the paper guides retract to allow paper loading.



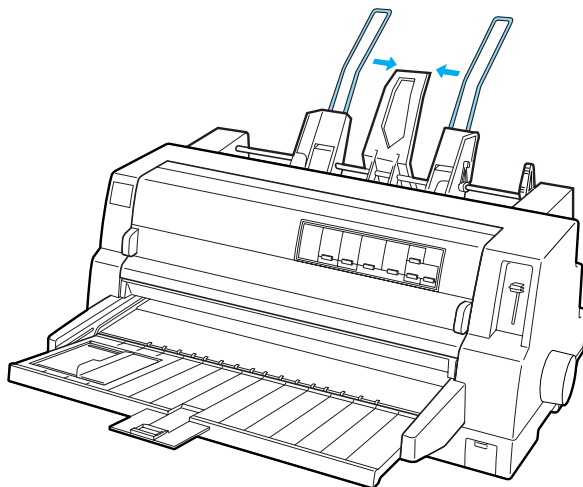
2. Release the paper guide lock levers by pulling them forward.



3. Slide the right paper guide so that its edge is even with the guide mark on the cut-sheet feeder and push back the lever to lock the paper guide in place. Next, slide the left paper guide to roughly match the width of the paper.



4. Slide the center support midway between the paper guides.



5. Fan a stack of paper, and tap the sides and bottom of the stack on a flat surface to even it up.



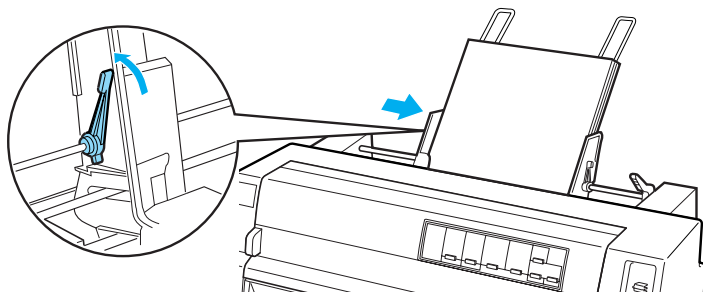
Caution:

Do not load labels to the cut-sheet feeder.

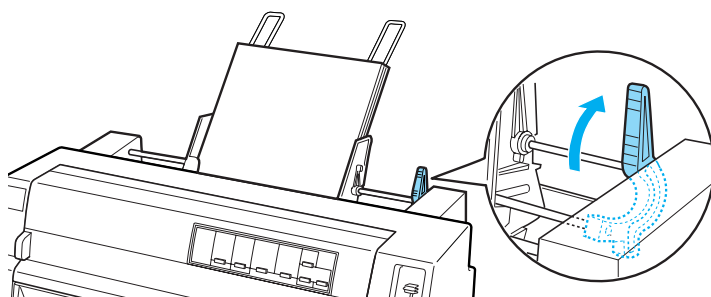
6. Insert the paper along the right paper guide and adjust the position of the left paper guide so that it matches your paper's width. Make sure the position of the guide allows the paper to move up and down freely. Then lock the left guide in place.

Note:

Load paper with the printable side up. If you are using pre-printed forms, load the forms top-down.



7. Push back the paper set levers to clamp the paper against the guide rollers.



8. Before printing, make sure that Manual/CSF is selected as the paper source on the control panel. If not, select it by pressing the Paper Source button. Also set the paper-thickness lever to the appropriate position for the paper loaded in the cut-sheet feeder as described in "Adjusting the Paper-Thickness Lever" on page 1-5. In your printer driver software, select your paper size from the Paper Size list.

The cut-sheet feeder feeds paper when you send data to the printer. You can also feed paper by pressing the Load/Eject button.

Note:

- ❑ *If the platen turns without loading the paper, completely remove the paper and then insert it all the way into the printer again.*
- ❑ *If you need to adjust the position of the paper after it is loaded, see “Adjusting the top-of-form position” on page 1-39 and follow the instructions.*

Loading paper manually using the paper guide

The cut-sheet feeder’s single-sheet loading feature allows you to switch to a different type or size of paper without replacing the paper already loaded in the cut-sheet feeder or removing the feeder.

Follow these steps to load paper manually using the paper guide:

1. Make sure that Manual/CSF is selected as the paper source on the control panel. If not, select it by pressing the Paper Source button.
2. Push the paper guide and the paper guide extension all the way in.
3. Adjust the edge guide so that it is aligned with the guide mark on the paper guide.
4. While aligning the left side of paper with the edge guide, insert it until it meets resistance. Be sure to load paper printable side up. After a few seconds, the printer automatically advances the paper to the loading position. The printer is ready to accept data from your computer and print.

After printing a page of your document, the printer ejects it onto the paper guide and the Paper Out and Pause lights come on. If you are printing a multiple-page document, remove the printed sheet and insert a new sheet into the paper guide. The printer automatically advances the paper and resumes printing.

Switching between the tractor and the cut-sheet feeder

You can easily switch between continuous paper loaded from the tractor and single sheets loaded from the cut-sheet feeder without removing your continuous paper.

Switching to continuous paper

Follow these steps to switch to continuous paper loaded from the tractor:

1. If any single sheets are in the paper path, press the Load/Eject button to eject them.
2. Select Tractor as the paper source on the control panel by pressing the Paper Source button.

Switching to single sheets

Follow these steps to switch back to single sheets loaded to the cut-sheet feeder:

1. If there is any continuous paper remaining in the printer, press the Tear Off/Special Paper button to advance the paper to the tear-off position.
2. Tear off the printed pages.
3. Press the Load/Eject button. The printer feeds the paper backward to the standby position. The paper is still attached to the tractor but is no longer in the paper path.

4. Select Manual/CSF as the paper source on the control panel by pressing the Paper Source button.

Note:

To load another type of continuous paper, you need to remove the cut-sheet feeder.

Automatic Sheet Alignment Unit

You can load single-sheet paper more easily by using the optional automatic sheet alignment unit C80688*. It automatically positions the paper straight and feeds into the printer.

You can use single-sheet paper, single-sheet multipart forms, envelopes, and postcards with the automatic sheet alignment unit. See “Paper” on page A-10 for information on the paper specifications.

Note:

You cannot install the automatic sheet alignment unit and optional cut-sheet feeder at the same time.

Installing the automatic sheet alignment unit

Follow these steps to install the automatic sheet alignment unit.

1. Turn off the printer.

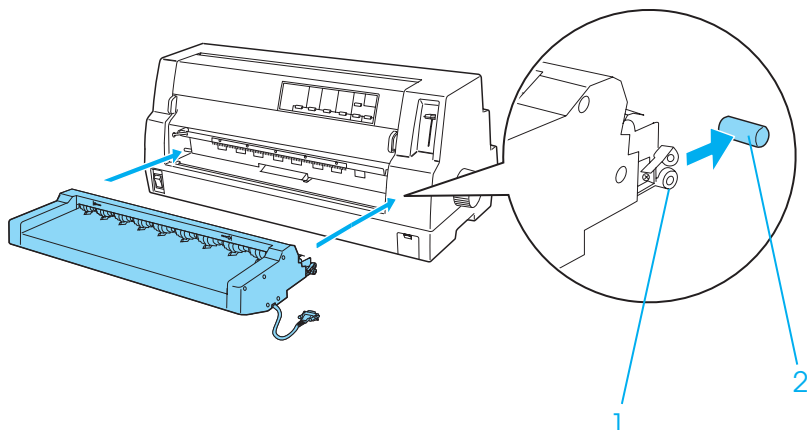


Warning:

If you have just used the printer, the print head may be hot. Be careful not to touch it until it cools down.

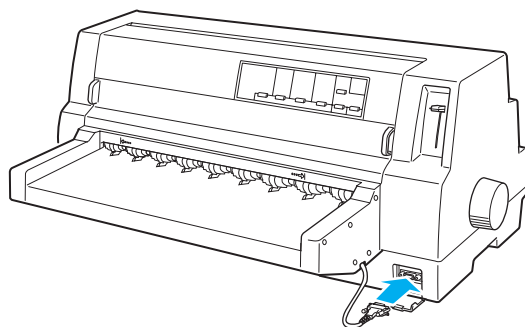
2. Remove the paper guide.

3. Hold the automatic sheet alignment unit horizontally with both hands, and slide the slots on both sides of it onto the mounting pegs in the printer as shown below. Then lower the unit until it locks into place.

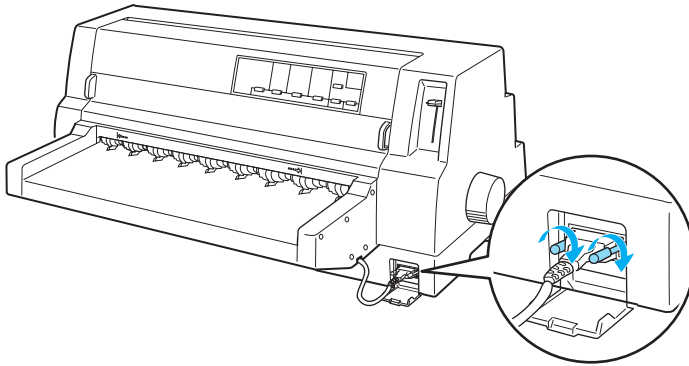


1. slots
2. mounting pegs

4. Open the cover of the printer's connecting port and plug the cable connector into the port. Make sure the cable is connected firmly into the port.



5. Secure the cable to the port by tightening the two screws attached to the connector.



Caution:

Make sure the printer is turned off before connecting the cable.

Note:

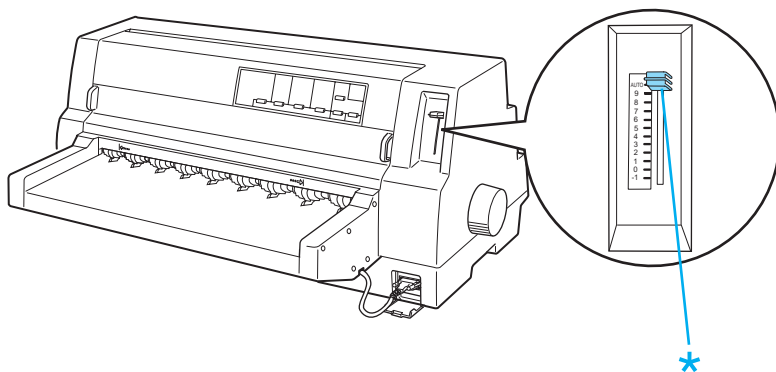
To remove the automatic sheet alignment unit, turn off the printer and follow the installing procedure in reverse from the last step.

Loading paper using the automatic sheet alignment unit

Follow these steps to load paper using the automatic sheet alignment unit:

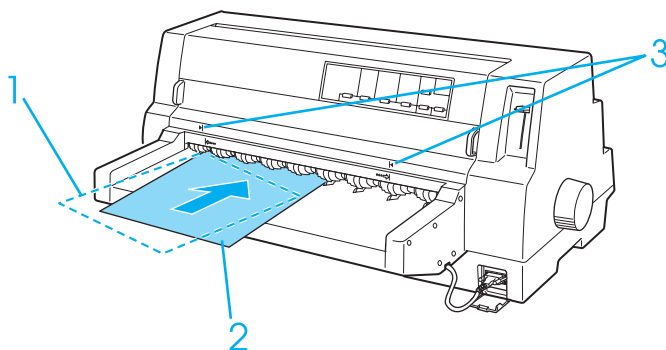
1. Make sure that Manual/CSF is selected as the paper source on the control panel. If not, select it by pressing the Paper Source button.

2. Set the paper-thickness lever to the appropriate position for the type of single sheet you are using referring to the table in “Adjusting the Paper-Thickness Lever” on page 1-5.
Normally set it to AUTO.



* paper-thickness lever

3. Insert paper into the automatic sheet alignment unit so that the tip of the paper goes behind the rollers of the unit. The printer automatically aligns the paper, recognizes the right and left edges (the width) of the paper and starts feeding.



1. inserted position
2. aligned position
3. arrow marks

Note:

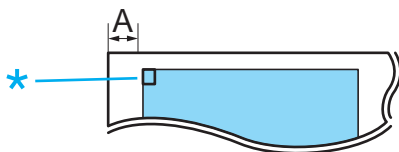
Make sure to insert paper between the two arrow marks on the unit.



Caution:

Use the knob on the right side of the printer only to clear paper jams when the printer is off.

4. The printer starts printing when it receives data. The printing position (the position of the first letter of the first line) is set to 3 mm (0.12 inch) from the left edge of the paper by default. See “Adjusting the printing position” on page 5-18 for more information on the printing position.



A. 3 mm

* the printing position

5. The printer automatically ejects paper when it finishes printing. If the printed sheet remains in the printer, press the Load/Eject button to eject it.

Adjusting the printing position

You can choose among 26 patterns of the printing position for the automatic sheet alignment unit. The patterns vary in 1.06 mm (5/120-inch) increments.

Follow these steps to adjust the printing position:

Note:

- ❑ The range of printing position is from 1.9 mm (9/120 inch) to 25.4 mm (120/120 inch) from the left edge of the paper. The default is the pattern No. 2, which is about 3 mm (14/120 inch).
- ❑ The automatic sheet alignment unit must be installed prior to adjusting the printing position.
- ❑ To print the instruction and print-position patterns, you need two sheets of A4 or larger size single-sheet paper.
- ❑ Make sure that Manual/CSF is selected as the paper source on the control panel. If not, select it by pressing the Paper Source button.

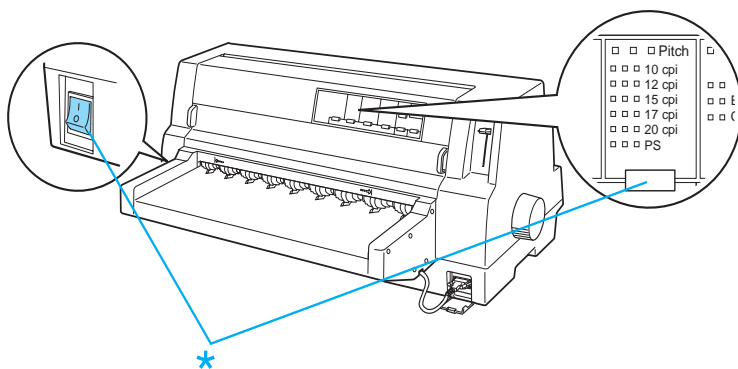
1. Turn off the printer.



Caution:

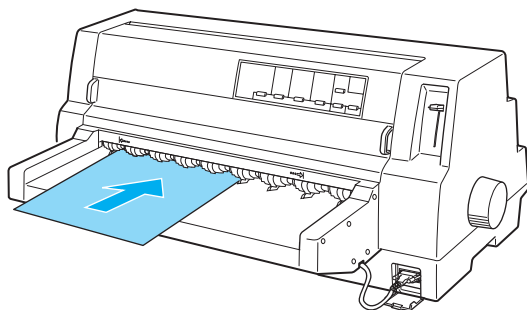
Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise you may damage the printer.

2. While holding down the Pitch button, turn on the printer.

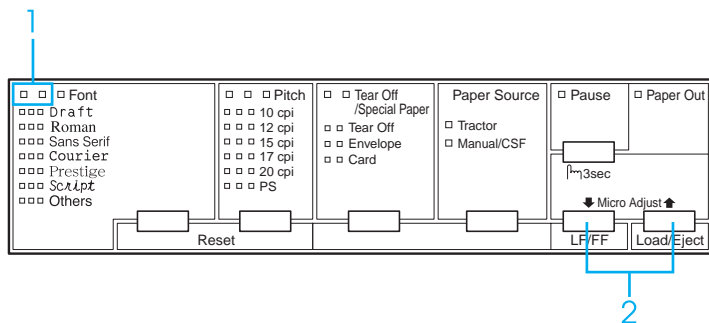


* While holding down the Pitch button, turn on the printer.

3. Load paper into the automatic sheet alignment unit. The printer prints the instruction and the printing-position patterns.



4. As described in the instruction, compare the patterns of the printing position and select the number of the desired pattern using the LF/FF ↓ and Load/Eject ↑ buttons. Font lights indicate the pattern number currently selected. Check if the pattern shown by these lights matches that of the number of your desired printing position pattern.



1. These lights indicate the pattern number selected.
2. Press either of these buttons to change the pattern number.
5. Turn off the printer.

Note:

The new setting of the printing position is stored in the printer's memory when you turn off the printer.

Interface Cards

You can use optional interface cards to supplement your printer's built-in parallel and USB interfaces. The EPSON interface cards listed below are compatible with your printer. (Not all interfaces are available worldwide.)

Model number	Card type
C82307*/C82308*	32KB intelligent serial interface
C82305*/C82306*	Serial interface
C82312*	LocalTalk interface
C82313*	32KB IEEE-488 interface
C82314*	Coax interface
C82315*	Twinax interface
C82345*	IEEE-1284 parallel interface
C82362*	EpsonNet 10 Base 2/T Int. Print Server
C82363*/C82364*	EpsonNet 10/100 Base TX Int. Print Server
C82384*	EpsonNet 10/100 Base TX Int. Print Server
C82391*	EpsonNet 10/100 Base TX Int. Print Server 2

The asterisk (*) is a substitute for the last digit, which varies by country.

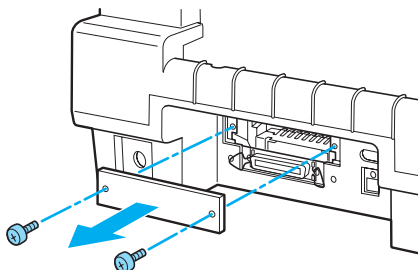
* When you use Ethernet interface card C82363*, you need to attach the optional interface adapter (C82525*) to the interface card.

If you are not sure whether you need an optional interface or would like to know more about interfaces, contact your dealer.

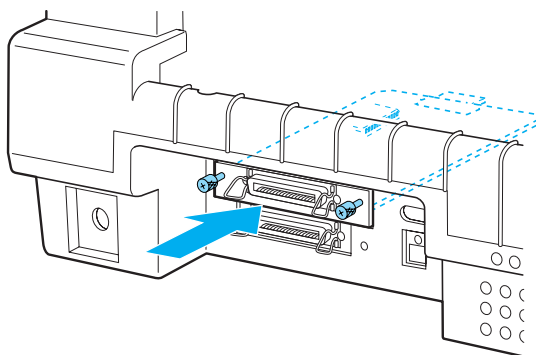
Installing an interface card

Follow these steps to install an optional interface card.

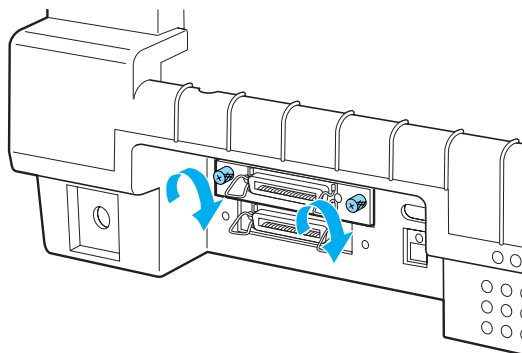
1. Make sure the printer is turned off. Unplug the printer's power cord and disconnect the interface cable.
2. Remove the screws securing the shield plate on the back of the printer and remove the plate.



3. Slide the interface card into the slot of the interface compartment. Firmly push in the card to make sure the connector at the back of the card is fully inserted into the printer's internal socket.



Then reinsert the screws and tighten them.



Note:

Store the shield plate in a safe place; you will need to reattach it when you remove the interface card.

To remove the interface card, reverse the steps described above.

Product Information

Safety Instructions

Warnings, cautions, and notes



Warnings must be followed carefully to avoid bodily injury.



Cautions must be observed to avoid damage to your equipment.

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

Hot parts caution symbol



This symbol is placed on the print head and other parts to indicate that they may be hot. Never touch those parts just after the printer has been used. Let them cool for a few minutes before touching them.

Important safety instructions

Read all of these safety instructions before using the printer. In addition, follow all warnings and instructions marked on the printer itself.

- ☐ 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 placed at an angle.
- ❑ Do not block or cover the slots and openings in the printer's cabinet, and 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 ampere of all devices plugged into the wall outlet does not exceed the wall outlet's ampere rating.
- ❑ Unplug the printer before cleaning it, and always clean it with a piece of damp cloth only.
- ❑ Replace fuses only with a fuse of the correct size and rating.
- ❑ Do not spill liquid onto 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 service personnel under the following conditions:
 - i. If the power cord or plug is damaged.
 - ii. If liquid has entered the printer.
 - iii. If the printer has been dropped or the cabinet damaged.

iv. 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.

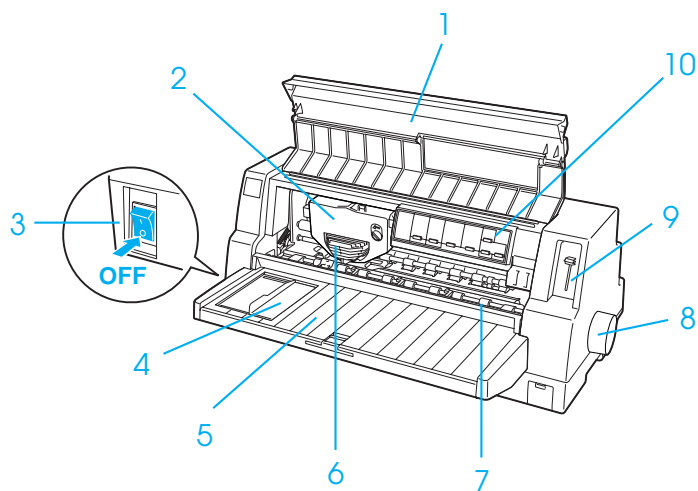
ENERGY STAR compliance



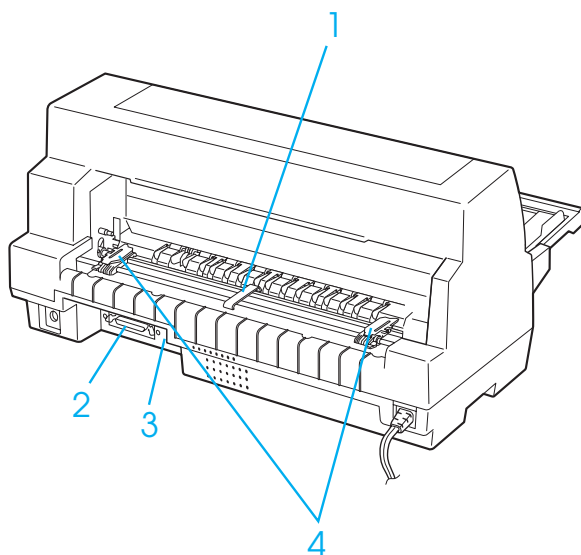
As an ENERGY STAR® Partner, EPSON has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

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.

Printer Parts



1. printer cover
2. ribbon cartridge
3. power switch
4. edge guide
5. paper guide
6. print head
7. paper bail
8. knob
9. paper-thickness lever
10. control panel



1. center paper support*
2. parallel interface
3. USB interface
4. sprockets*

* tractor unit parts

Printer Specifications

Mechanical

Printing method:	24-pin impact dot matrix	
Printing speed:	High speed draft	550 cps at 10 cpi
	Draft	495 cps at 10 cpi (594 cps at 12 cpi maximum)
	Letter quality	165 cps at 10 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:	136 columns (at 10 cpi)	
Resolution:	Maximum 360 × 180 dpi (letter-quality mode)	
Paper feed methods:	Friction (front)	
	Push tractor (rear)	
	Cut-sheet feeder (optional)	
	Automatic sheet alignment unit (optional)	
Paper feed speed:	Continuous	8 inches/second
	Intermittent	37 msec/line at 1/6-inch line spacing
Paper capacity:	optional cut-sheet feeder up to 200 sheets of 82 g/m ² (22 lb) paper (A3 size: up to 130 sheets of 82 g/m ² (22 lb) paper)	

Reliability:	Total print volume	25 million lines (except print head) MTBF 10,000 POH (25% duty)
	Print head life	approx. 200 million strokes/wire x 2 (monochrome) approx. 100 million strokes/wire x 2 (color)
Dimensions and weight (with paper guide):	Height	276 mm (10.8 inches)
	Width	660 mm (25.8 inches)
	Depth	432 mm (17.0 inches)
	Weight	approx. 18.1 kg (40.0 lb)
Ribbon:	Black ribbon cartridge	S015139 (long-life cartridge) S015066 (normal cartridge)
	Color ribbon cartridge	S015066
	Ribbon life (at 10 cpi in the letter-quality mode with 48 dots/character)	black ribbon approx. 9 million characters (long-life cartridge) approx. 6 million characters (normal cartridge) color ribbon approx. 1.5 million characters (Black) approx. 1.1 million characters (Magenta) approx. 1.1 million characters (Cyan) approx. 0.8 million characters (Yellow)
Acoustic noise:	Approx. 59 dB (A) (ISO 7779 pattern)	

Note

The paper-thickness lever position or an overheated print head may affect the print speed.

Electronic

Interfaces:	One standard bidirectional, 8-bit, parallel interface with IEEE 1284 nibble mode support, one USB (ver 1.1) interface and one optional Type B interface slot	
Buffer:	128KB	
Built-in fonts:	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 Script C	proportional
	EPSON Orator	10 cpi
	EPSON Orator S	10 cpi
	EPSON OCR-B	10 cpi
	Scalable fonts	
	EPSON Roman	10.5, 8 to 32 points, in 2-point increments
	EPSON Sans Serif	10.5, 8 to 32 points, in 2-point increments
	EPSON Roman T	10.5, 8 to 32 points, in 2-point increments
	EPSON Sans Serif H	10.5, 8 to 32 points, in 2-point increments
	Barcode fonts	

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

Character tables: Standard version

One italic and 12 graphics character tables:

Italic table,

PC 437 (US, Standard Europe),

PC 850 (Multilingual), PC 860 (Portuguese),

PC 861 (Icelandic), PC 865 (Nordic),

PC 863 (Canadian-French), BRASCII,

Abicomp, ISO Latin 1, Roman 8, PC 858,

ISO 8859-15

Following 23 graphical character tables are also
available in some countries:

PC 864 (Arabic), PC 437 Greek,

PC 852 (Eastern Europe), PC 853 (Turkish),

PC 855 (Cyrillic), PC 857 (Turkish),

PC 866 (Russian), PC 869 (Greek),

MAZOWIA (Poland), Code MJK (CSFR),

ISO 8859-7 (Latin/Greek),

ISO Latin 1T (Turkish), Bulgaria (Bulgarian),

PC 774 (LST 1283: 1993), Estonia (Estonian),

PC 771 (Lithuanian), ISO 8859-2,

PC 866 LAT. (Latvian), PC 866 UKR

(Ukraine),

PC APTEC (Arabic), PC 708 (Arabic),

PC 720 (Arabic), PC AR 864 (Arabic)

Character sets: 14 international character sets and one legal
character set:

USA, France, Germany, UK, Denmark I,

Sweden, Italy, Spain I, Japan, Norway,

Denmark II, Spain II, Latin America, Korea,

Legal

Electrical

	120 V Model	220 to 240 V Model
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	1.6 A	0.7 A
Power consumption	Approx. 85 W (ISO/IEC 10561 letter pattern)	

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

Environmental

	Temperature	Humidity (without condensation)
Operation (plain paper)	5 to 35°C (41 to 95°F)	10 to 80% RH
Operation (recycled paper, envelope, label, or postcard)	15 to 25°C (59 to 77°F)	30 to 60% RH
Storage	-30 to 60°C (-22 to 140°F)	0 to 85%

Paper

Note:
☐ *Use recycled paper, multipart paper, labels, envelopes, and postcards only under normal temperature and humidity conditions described below.*

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

- ❑ *Do not load paper that is curled, folded, or crumpled.*

Single sheets

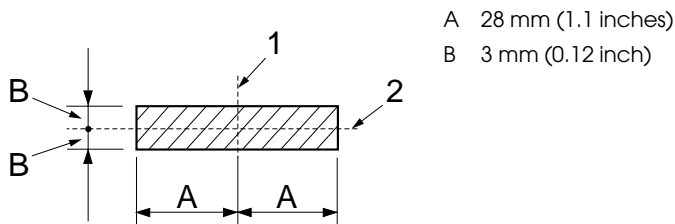
See also “Multipart forms” on page A-14 for detailed information on the specification for single-sheet multipart forms.

Width	90 to 420 mm (3.5 to 16.5 inches)/100 to 420 mm (3.9 to 16.5 inches)* * When loading single sheets and single-sheet multipart forms that are glued at the top of the form from the cut-sheet feeder or automatic sheet alignment unit
Length	80 to 420 mm (3.15 to 16.5 inches)/92 to 420 mm (3.6 to 16.5 inches)* * When loading single sheets and single-sheet multipart forms that are glued at the top of the form from the cut-sheet feeder
Thickness	
single sheets	0.065 to 0.19 mm (0.0025 to 0.0074 inch)
multipart forms	0.12 to 0.62 mm (0.0047 to 0.024 inch)
Weight	
single sheets	52.3 to 157 g/m ² (14 to 42 lb)
multipart forms	40 to 58 g/m ² (10 to 15 lb)
Quality	
single sheets	Plain paper and recycled paper
multipart forms	Carbonless multipart forms with a line of glue at the top or the side of the form
Copies	1 original + 7 copies

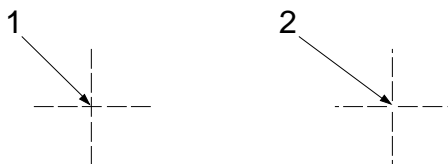
Continuous paper

See also “Multipart forms” on page A-14 for detailed information on the specifications for continuous multipart forms.

- ☐ The sprocket hole must be a circle or notched circle.
- ☐ The holes must be cleanly cut.
- ☐ If the horizontal and vertical perforations are crossed, the shaded area below should not be printed on. Uncrossed perforations do not have this restricted area.

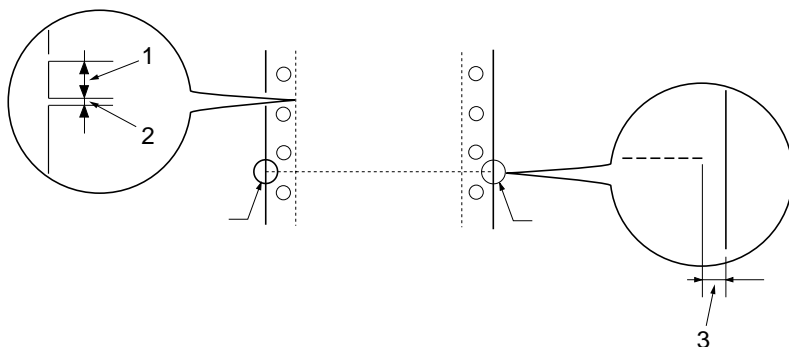


1. vertical perforation
2. horizontal perforation



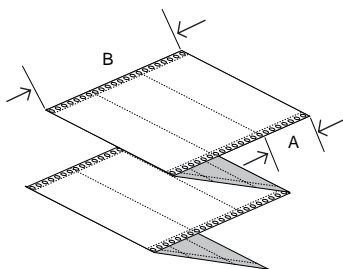
1. crossed perforation
2. uncrossed perforation

- ❑ The ratio of the cut/uncut length at the perforation should be between 3:1 and 5:1. And expansion at the perforation (when the paper is kept flat) should be less than 1 mm (0.04 inch) as follows.



1. 3 mm cut
2. 1 mm uncut
3. 1 mm or more

- ❑ If you use continuous paper whose page length (A in the next illustration) is under 101.6 mm (4.0 inches), make sure that the length between folds (B) is over 101.6 mm (4.0 inches.)

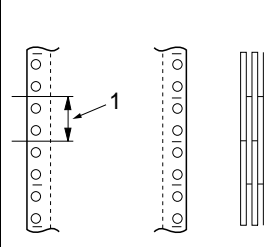
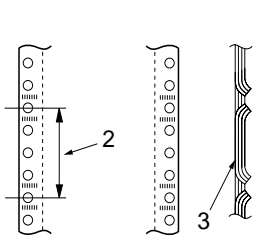
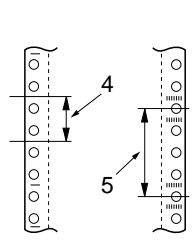


Width	101.6 to 406.4 mm (4.0 to 16.0 inches)
Length/page	76.2 to 558.8 mm (3.0 to 22.0 inches)
Copies	1 original + 7 copies
Total thickness	
single sheets	0.065 to 0.19 mm (0.0025 to 0.0074 inch)
multipart forms	0.12 to 0.62 mm (0.0047 to 0.024 inch)
Weight	
single sheets	52.0 to 157 g/m ² (14 to 42 lb)
multipart forms	40 to 58 g/m ² (11 to 15 lb) (weight/part)
Quality	
single sheets	Plain paper, recycled paper, and carbonless
multipart forms	multipart forms with spot gluing or paper stapling on both sides

Multipart forms

The specifications for the dimensions of multipart forms are the same as those for single sheets and continuous paper. See “Single sheets” on page A-11 and “Continuous paper” on page A-12 for detailed information.

- ❑ The form sheets of continuous multipart forms should be securely joined together along the left and right edges by crimping or, spot-gluing. For the best printing quality, use multipart forms joined with spot-gluing.

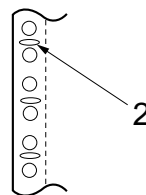
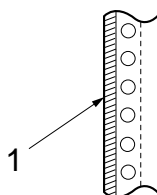
spot-gluing	crimping	spot-gluing and crimping on each side
		

1. 1 inch or less
2. 3 inches or less
3. printing side
4. 1 inch or less
5. 3 inches or less



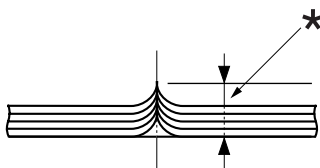
Caution

Never use continuous multipart forms that are joined with metal staples or bar-gluing.



1. bar-gluing
2. metal stapling

- ❑ The thickness of the folded part when extended should be 2 mm or less.

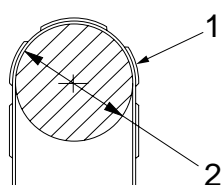


* 2 mm or less

- ❑ The binding area should be flat and have no creases.
- ❑ The sprocket holes of all sheets in the form should be aligned properly.
- ❑ The binding position should be outside the printable area. See “Printable area” on page A-24 for more information.

Labels

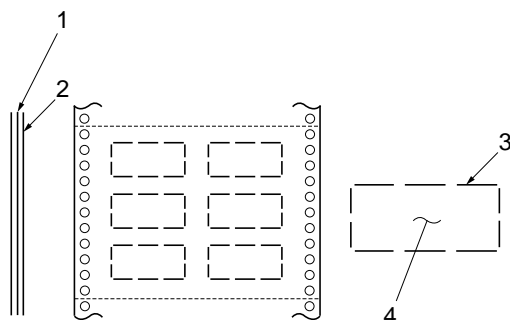
- ❑ Labels should be securely attached to the backing sheet and the label surface must be flat.
- ❑ The labels should not peel off their backing sheet under the conditions below.



wrapping drum radius	27 mm
wrapping angle	180°
wrapping time	24 hours
ambient temperature	40°C
ambient humidity	30%

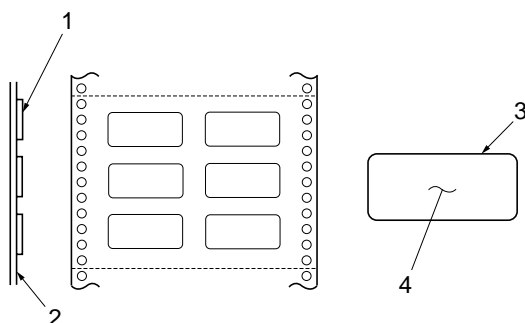
1. label
2. 27 mm

- ❑ When using labels whose backing sheet is entirely covered, make sure the cuts around the edges of the labels are perforated.



1. backing sheet
2. label sheet
3. several uncut areas on each side
4. label

- ❑ When using labels whose backing sheet is not covered with the label material, see the illustration below and do not set the paper-thickness lever to the AUTO position, set it manually.



1. label
2. backing sheet
3. corner radius is more than 2.5 mm
4. label

Backing sheet	
Width	101.6 to 406.4 mm (4.0 to 16.0 inches)
Length/page	76.2 to 558.8 mm (3.0 to 22.0 inches)
Labels	
Width	63.5 mm (2.5 inches), minimum
Height	23.8 mm (0.94 inch), minimum
Corner radius	2.5 mm (0.1 inch), minimum
Weight	64 g/m ² (17 lb)
Thickness	
Backing sheet	0.07 to 0.09 mm (0.0028 to 0.0035 inch)
Total	0.16 to 0.19 mm (0.0063 to 0.0075 inch)
Quality	Plain paper or the same quality labels with continuous backing sheet

Envelopes

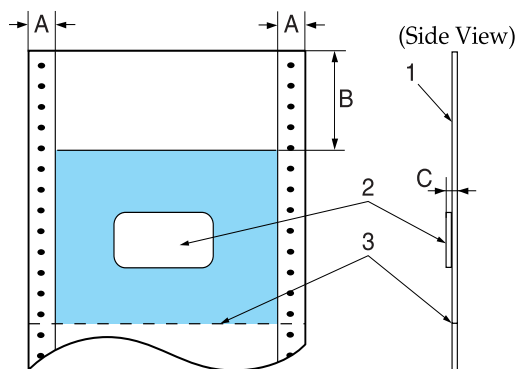
Size	No. 6 165 × 92 mm (6.5 × 3.6 inches)
	No. 10 241 × 105 mm (9.5 × 4.1 inches)
Thickness	0.16 to 0.52 mm (0.0063 to 0.021 inch) Any differences in thickness within the printable area must be less than 0.25 mm (0.0098 inch).
Weight	45 to 90 g/m ² (12 to 24 lb)
Quality	Bond envelopes, plain envelopes, and airmail envelopes not glued on the flap

Postcards

Width	100 to 200 mm (3.9 to 7.8 inches)
Length	100 to 200 mm (3.9 to 7.8 inches)
Thickness	0.22 mm (0.0087 inch)
Weight	192 g/m ² (51 lb)
Quality	Plain paper and recycled paper

Continuous forms with labels

The specifications for the continuous forms with labels are the same as those for labels except for the following items:



1. continuous forms
2. label
3. perforation

- ❑ The label on your form should be placed within the shaded area above, but not on the vertical or horizontal perforation.

Area measurements

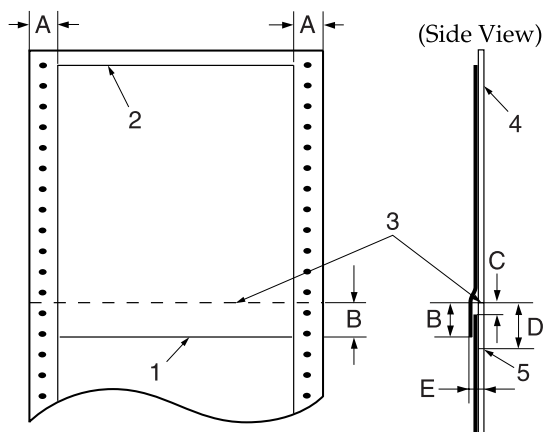
A 12 mm (0.47 inch)

B 44.2 mm (1.74 inches)

C total thickness: 0.56 mm (0.022 inch) or less

Overlapping multipart forms

The specifications for the overlapping multipart forms are the same as those for the continuous paper (multipart) except for the following items:



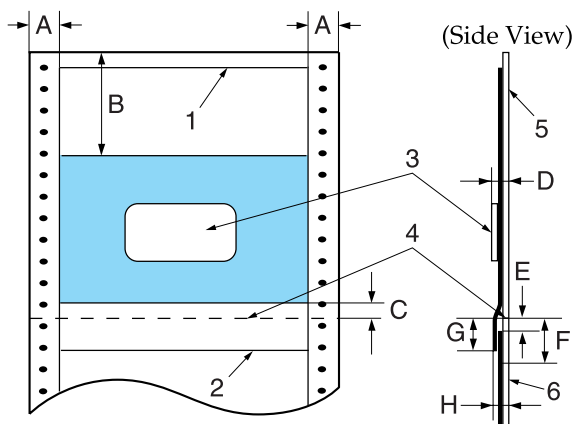
1. the bottom edge of overlapping form
2. the top of overlapping form
3. perforation
4. backing sheet
5. the bottom edge of the glue point area

Area measurements

- A 17 ± 3 mm (0.15 ± 0.12 inch)
- B 13.3 mm (0.52 inch) or less
- C from perforation to the top of the next overlapping form:
3.3 mm (0.13 inch) or more
- D from perforation to the bottom edge of the glue point area:
17 mm (0.67 inch) or less
- E total thickness including glue point dilation:
0.7 mm (0.026 inch) or less

Overlapping multipart forms with labels

The specifications for the overlapping multipart forms with labels are the same as those for labels except for the following items:



1. the top of overlapping form
 2. the bottom edge of overlapping form
 3. label
 4. perforation
 5. backing sheet
 6. the bottom edge of the glue point area
- ☐ The label on your form should be placed within the shaded area above, but not on the vertical or horizontal perforation.

Area measurements

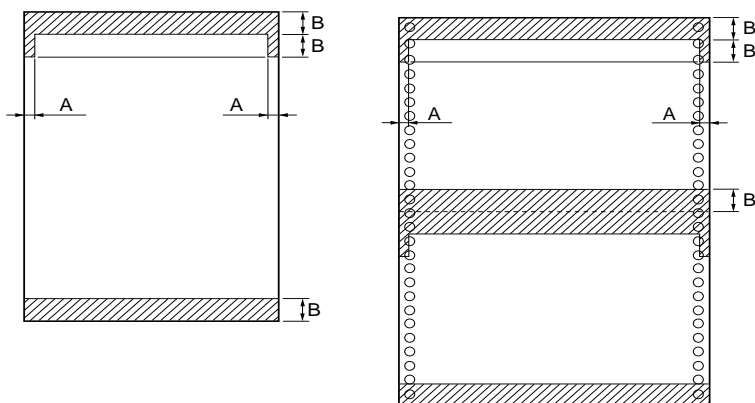
- A 17 ± 3 mm (0.51 ± 0.12 inch)
- B 62.5 mm (2.46 inches) or more
- C 4.2 mm (0.165 inch) or less
- D thickness of area where label is attached:
0.53 mm (0.02 inch) or less
- E from perforation to the top of the next overlapping form:
3.3 mm (0.13 inch) or more
- F from perforation to the bottom edge of the glue point area:
17 mm (0.67 inch) or less
- G from perforation to the bottom edge of the previous
overlapping form 13.3 mm (0.52 inch) or less
- H total thickness including glue point dilation:
0.7 mm (0.028 inch) or less

Pre-printed Paper

Pre-printed paper is paper with white space in the middle and ruled lines, letters, or figures printed in the top and bottom margins. The margins are printed the first time the paper is loaded in the printer, and a document is printed in the white space the second time the paper is loaded in the printer. The margin areas are often used for letterheads, borders, and so on. You can make your own pre-printed paper or you can purchase it.

You cannot preprint in the area with the diagonal shading in the illustrations below, and can preprint only with colors whose reflectivity is under 60% (for instance black). Avoid punching holes in the restricted area below because punctures are also recognized as colors whose reflectivity is under 60%.

Before printing on pre-printed sheets, verify that the area your document will print on does not overlap with the pre-printed area by printing separate sample sheets and comparing their printed areas.



Area measurements

A 5 mm (0.20 inch)

B 12 mm (0.47 inch)

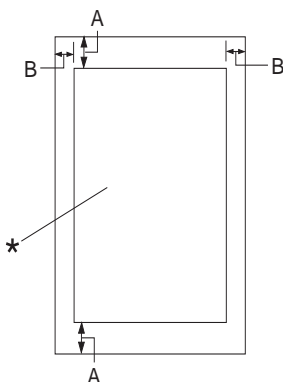
Printable area

Single sheets (including single-sheet multipart forms)

A 0 mm (0 inch) or more

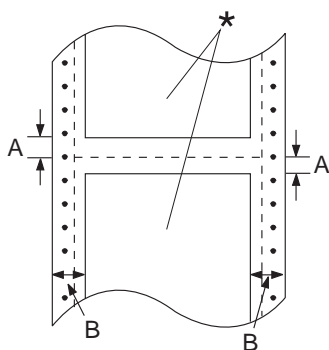
B The minimum left and right margins are 3.0 mm (0.12 inch) each.

The maximum printable width is 345.44 mm (13.6 inches). For single sheets wider than 351.44 mm (13.8 inches), the side margins increase proportionally to match the width of the paper.



* printable area

Continuous paper (including continuous multipart forms)

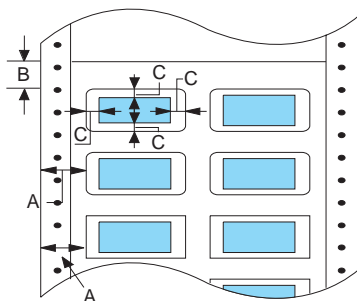


A The minimum top and bottom margins (above and below the perforation) are 4.2 mm (0.165 inch).

B The minimum left or right margin is 9 mm (0.354 inch).
18 mm for the paper whose page width is 406.4 mm (16 inches).

* printable area

Labels

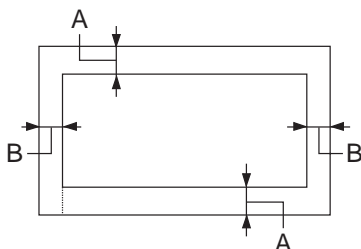


A 13 mm (0.51 inch) or more

B 1.2 mm (0.0472 inch) or more

C 3 mm (0.118 inch) or more

Envelopes and postcards

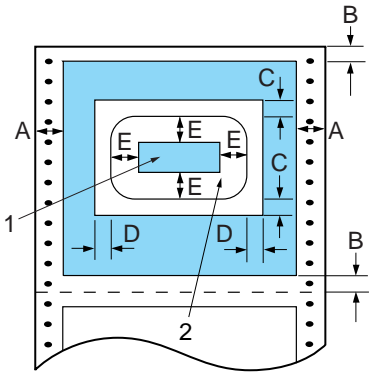


A 0 mm (0 inch) or more
The minimum top margin for
feeder from the cut-sheet feeder
is 4.2 mm (0.165 inch)

B 3 mm (0.118 inch) or more

Continuous forms with labels

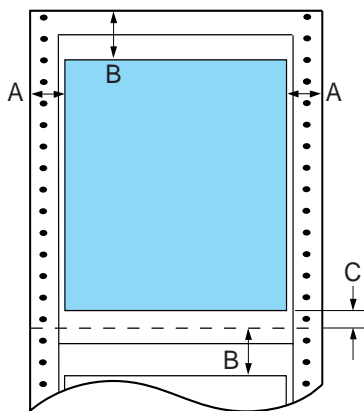
Area measurements



- A 13 mm (0.51 inch) or more
- B 4.2 mm (0.165 inch) or more
- C 25 mm (0.984 inch) or more
- D 45 mm (1.77 inches) or more
- E 3 mm (0.118 inch) or more

- 1. printable area on a label
- 2. label

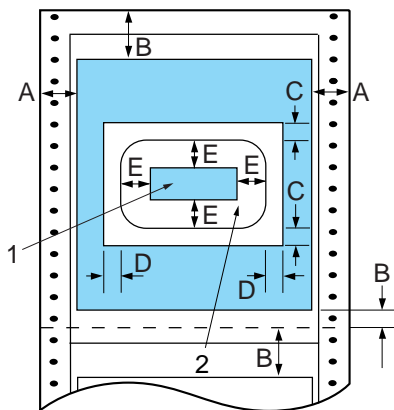
Overlapping multipart forms



Area measurements

- A 23 mm (0.906 inch) or more
- B 21.2 mm (0.835 inch) or more
- C 4.2 mm (0.165 inch) or more

Overlapping multipart forms with labels



Area measurements

- A 23 mm (0.906 inch) or more
- B 21.2 mm (0.83inch) or more
- C 25 mm (0.984 inch) or more
- D 45 mm (1.77 inches) or more
- E 3 mm (0.118 inch) or more
- F 4.2 mm (0.165 inch) or more

1. printable area on a label
2. label

Standards and Approvals

U. S. model:

Safety	UL1950 CSA C22.2 No. 950
EMC	FCC Part 15 Subpart B Class B CSA C108.8 class B

European model:

Low Voltage Directive 73/23/EEC	EN 60950
EMC Directive 89/336/EEC	EN 55022 Class B EN 55024 EN 61000-3-2 EN 61000-3-3

Australian model:

EMC	AS/NZS 3548 Class B
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Command Lists

EPSON ESC/P 2 control codes

Selecting EPSON ESC/P 2 printer in your software allows you to use the most advanced font and graphics.

General operation:

ESC@, ESC U, ESC EM

Paper feeding:

FF, LF, ESC 0, ESC 2, ESC 3, ESC +, CR

Page format:

ESC (C, ESC C, ESC C 0, ESC Q, ESC l, ESC (c, ESC N, ESC O

Print position motion:

ESC \$, ESC \, ESC (V, ESC (v, ESC D, HT, ESC B, VT, ESC J

Font selection:

ESC k, ESC x, ESC y, ESC X, ESC P, ESC M, ESC g, ESC p, ESC 4,
ESC 5, ESC E, ESC F, ESC !

Font enhancement:

ESC W, DC 4, SO, DC2, SI, ESC w, ESC G, ESC H, ESC T,
ESC S, ESC -, ESC (-, ESC q

Spacing:

ESC Space, ESC c, ESC (U

Character handling:

ESC t, ESC (t, ESC R, ESC %, ESC &, ESC :, ESC 6, ESC 7, ESC (^

Bit image:

ESC *

Barcode:

ESC (B

Production:

ESC |

Color:

ESC r

IBM PPDS Emulation Control Codes

This printer emulates the IBM Proprinter with the following commands.

General operation:

NUL, DC3, ESC j, BEL, CAN, DC1, ESC Q, ESC [K, ESC U,
ESC [F

Paper feeding:

FF, LF, ESC 5, ESC A, ESC A (AGM*), ESC 0, ESC 1, ESC 2,
ESC 3, ESC 3 (AGM*), CR, ESC]

Page format:

ESC C, ESC C0, ESC X, ESC N, ESC O, ESC 4

Print position motion:

ESC d, ESC R, ESC D, HT, ESC B, VT, ESC J, ESC J (AGM*)

Font selection:

DC2, ESC P, ESC :, ESC E, ESC F, ESC I, ESC [d, ESC [I

Font enhancement:

DC4, SO, ESC SO, ESC W, ESC [@, SI, ESC SI, ESC G, ESC H,
ESC T, ESC S, ESC -, ESC _ ESC [-

Spacing:

BS, SP, ESC [\

Character handling:

ESC 6, ESC 7, ESC [T, ESC ^, ESC \

Bit image:

ESC K, ESC L, ESC Y, ESC Z, ESC [g, ESC * (AGM*)

Barcode:

ESC [f, ESC [p

* Alternate Graphics Mode (A.G.M.)

* Effective when the A.G.M. is turned on in the default-setting mode.

Cleaning the Printer

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

Follow these steps to clean the printer:

1. Turn off the printer and remove any paper loaded in the printer as well as the paper guide. If the optional cut-sheet feeder is installed, remove it.
2. Use a soft brush to carefully brush away all dust and dirt from the outer case and the paper guide.
3. If the outer case and the paper guide are still dirty or dusty, clean them with a soft, clean cloth dampened with mild detergent dissolved in water. Keep the printer cover closed to prevent water from getting inside the printer.



Caution:

- ☐ *Never use alcohol 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 oils can damage the printer mechanism. Contact your 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.

Follow these steps to repack the printer in its original packing materials:



Warning:

If you have just used the printer, the print head may be hot; let it cool for a few minutes before removing the ribbon cartridge.

1. Turn off the printer and remove any paper loaded in the printer.
2. Unplug the power cord from the electrical outlet; then disconnect the interface cable from the printer. If an optional cut-sheet feeder is installed, remove it.
3. Remove the paper guide. Remove the ribbon cartridge as described in steps 3 through 4 of “Replacing the ribbon cartridge” on page 5-1. Then close the printer cover.
4. Repack the printer, ribbon cartridge, paper guide, and power cord in the original packing materials and place them in the printer’s original box.

Glossary

ASCII

American Standard Code for Information Interchange. A standardized coding system for assigning numerical codes to letters and symbols.

auto line feed

When this feature is selected in the default-setting mode, each carriage-return (CR) code is automatically followed by a line-feed (LF) code.

bidirectional printing

Printing in which the print head prints in both directions (bidirectionally). This increases the print speed but may reduce precise vertical alignment. Bidirectional printing is this printer's standard printing mode. See also *unidirectional printing*.

buffer

The portion of the printer's memory used to store data before it is printed.

character table

A collection of letters, numbers, and symbols that constitute the set of characters used in a particular language.

characters per inch (cpi)

A measurement of the size of text characters.

continuous paper

Paper that has sprocket-feed holes on both sides, is perforated between pages, and is supplied in a folded stack. Also called fanfold paper.

continuous forms with labels

A kind of continuous paper that has one label on each page. This is different from label paper, which consists entirely of labels. When printing on continuous forms with labels, the printer must adjust the height of the print heads for the extra thickness of the labels. Before printing on this kind of paper, set the paper-thickness lever to AUTO.

control code

A special code used to control a printer function such as performing a carriage return or line feed.

cpi

See *characters per inch (cpi)*.

cut-sheet feeder

An optional, detachable device that automatically feeds single sheets of paper into the printer.

data dump

See *hex dump*.

default

A value that takes effect when the equipment is turned on, reset, or initialized.

dithering

A way of arranging dots on a page to simulate a shade or tone.

dot matrix

A method of printing in which each letter or symbol is formed by a pattern (matrix) of individual dots.

draft

The print mode used by your printer when you select Draft as the font. The Draft font uses less dots per character for faster printing. See also *high speed draft*.

driver

See *printer driver*.

ESC/P

Abbreviation for EPSON Standard Code for Printers. This is the system of commands your computer uses to control your printer. It is standard for all EPSON printers and supported by most application software for personal computers.

ESC/P 2

The enhanced version of the ESC/P printer command language. Commands in this language produce laser-like results, such as scalable fonts and enhanced graphics.

fanfold paper

See *continuous paper*.

font

A style of type designated by a name such as Roman or Sans Serif.

form feed (FF)

A control code and control panel button that advances the paper to the next top-of-form position.

hex dump

A troubleshooting method that helps identify the cause of communication problems between the printer and the computer. When the printer is in hex dump mode, it prints each code that it receives in hexadecimal notation and ASCII characters. Also called data dump.

high speed draft

A mode of draft printing you can select using the default-setting mode. High speed draft uses a minimum number of dots per character to produce extremely high-speed printing. See also *draft* and *letter quality (LQ)*.

interface

The connection between the computer and the printer over which print data is transmitted to the printer.

letter quality (LQ)

The print mode used by your printer when a font other than Draft is selected. Printing with letter-quality fonts provides better readability and appearance at a reduced print speed. See also *draft* and *high speed draft*.

line feed (LF)

A control code and control panel button that advances the paper one line space.

loading position

The position to which the paper is automatically loaded.

overlapping multipart forms

A kind of continuous paper that provides you with multipart forms. The page length of the multipart forms is longer than that of the backing continuous paper. So when extended, one page's multipart forms overlap the next page's multipart forms. This overlapping area is thicker than the printable area.

overlapping multipart forms with labels

This kind of continuous paper is a combination of overlapping multipart forms and continuous forms with labels. Be sure to follow any special instructions intended for either type.

platen

The black roller that provides a backing for the paper during printing.

printable area

The area of a page on which the printer can print. It is smaller than the physical size of the page due to margins.

printer driver

A software program that sends commands from the computer for using the functions of a particular printer.

reset

To return a printer to its default settings.

resolution

A measure of the amount of detail that can be represented. Resolution of printed images is measured in number of dots per inch (dpi).

self test

A method for checking the operation of the printer. When you run the self test, the printer prints the characters stored in its ROM (Read Only Memory).

tear off

A control panel button that feeds the perforation of continuous paper to the tear-off position and then feeds the paper back to the top-of-form position.

tear-off position

The position the printer feeds the paper to when you press the Tear Off button or when auto tear-off mode is on. Using the Micro Adjust function, you can adjust the position so that the paper's perforation meets the printer's tear-off edge.

top-of-form position

The position on the paper that the printer recognizes as the first printable line. This is the default top-margin position.

unidirectional printing

Printing in which the print head prints in one direction only. Unidirectional printing is useful for printing graphics because it allows precise vertical alignment. You can select unidirectional printing in the printer's default-setting mode. See also *bidirectional printing*.