

TM-U300C/U300D TM-U300PC/U300PD

User's Manual

400204507

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EMC and Safety Standards Applied

Product Name: TM-U300C/D, TM-U300PC/PD

Model Name: M51JC/D, M51PC/PD

The following standards are applied only to the printers that are so labeled. (EMC is tested using the Epson power supplies.)

Europe: CE marking

North America: EMI: FCC/ICES-003 Class A

Japan: EMI: VCCI Class A

Oceania: EMC: AS/NZS CSIPR22 Class B

Taiwan: BSMI: EMC: CNS13438

Safety: CNS14236

WARNING

The connection of a non-shielded printer interface cable to this printer will invalidate the EMC standards of this device.

You are cautioned that changes or modifications not expressly approved by SEIKO EPSON Corporation could void your authority to operate the equipment.

CE Marking

The printer conforms to the following Directives and Norms:

Directive 89/336/EEC EN 55022 Class B

EN 55024

IEC 61000-4-2

IEC 61000-4-3

IEC 61000-4-4

IEC 61000-4-5

IEC 61000-4-6

IEC 61000-4-11

FCC Compliance Statement For American Users

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

For Canadian Users

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

INTRODUCTION

The TM-U300C-U300D and TM-U300PC/U300PD are compact, light-weight printers, designed to provide the highest possible performance to cost ratio.

The main features of the printers are as follows:

- Compact size and light weight
- High-speed printing using logic seeking
- High reliability and long life through the use of stepping motors for both carriage return and paper feeding
- Two print colors (black or red)
- Selectable paper feeding increments for various print formats
- Command protocol based on the ESC/POS® standard
- Internal drawer interface that can control two drawers
- Two character fonts (7 X 9 or 9 X 9)
- Semi-automatic paper loading
- Compact AC adapter
- 1 line validation printing
- Roll paper take-up device (for the TM-U300C and the TM-U300PC)

The table below describes the differences between the TM-U300C/U300D and TM-U300PC/U300PD printers.

	Take-up device	Interface
TM-U300C	Installed	Serial
TM-U300D	-----	Serial
TM-U300PC	Installed	Parallel
TM-U300PD	-----	Parallel

Please be sure to read the instructions in this manual carefully before using your new Epson printer.

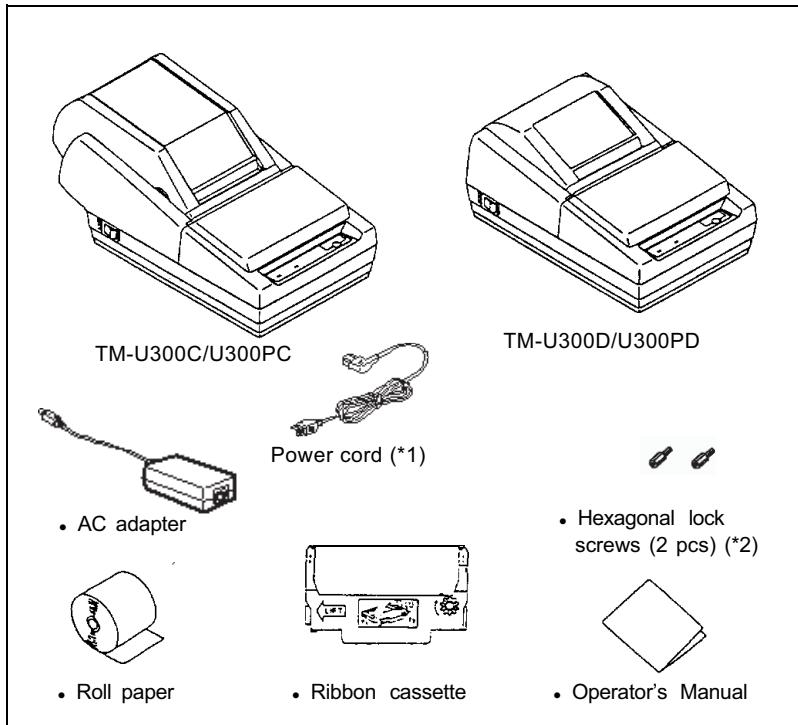
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Chapter 1 Unpacking the Printer

1-1 Checking the Contents of the Printer Box

The illustration below shows the items included for the standard specification printer.



(*1) Power cord may not be provided in the package. If it is not, make sure to use a power cord that complies with the safety standards applied.

(*2) Hexagonal lock screws are provided only if the printer has a serial interface. See note on page 7 for more information about these screws.

Make sure you have all the items shown above. If any items are damaged or missing, please contact your dealer for assistance.

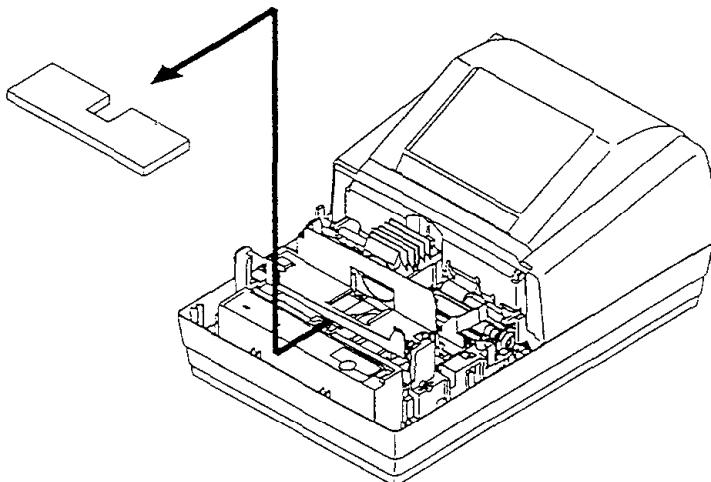
Keep the original box and packing materials in case you need to transport or store the printer later.

1-2 Choosing a Place for the Printer

- Avoid locations in direct sunlight or subject to excessive heat (such as near heaters).
- Avoid using or storing the printer in places subject to excessive moisture.
- Do not use or store the printer in a dusty or dirty area.
- Choose a stable, horizontal surface for the printer. Avoid places subject to intense vibration or shock.
- Make sure there is enough space around the printer so that it can be used easily.

1-3 Removing the Transportation Damper

The transportation damper must be removed before turning on the printer.
Open the printer cover and remove the damper as shown below.

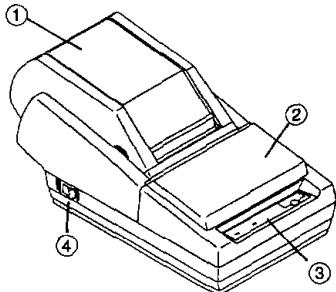


1-4 Part Names and Functions

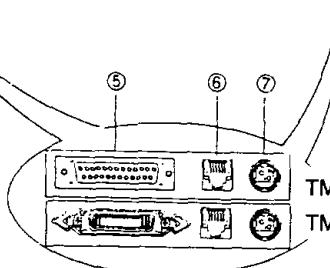
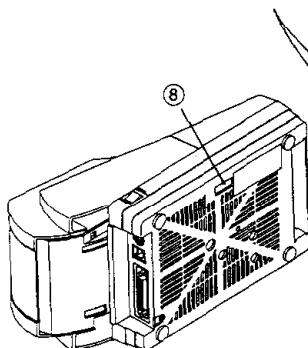
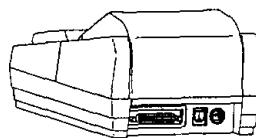
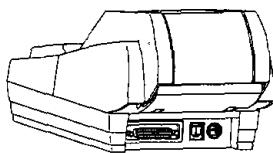
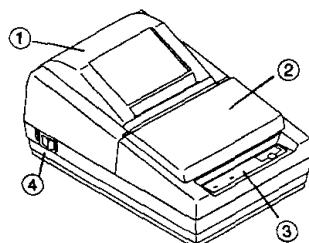
■ Part names

- | | |
|--|-----------------------------|
| ① Take-up device cover (TM-U300C/U300PC) | ⑤ Interface connector |
| Roll paper cover (TM-U300D/U300PD) | ⑥ Drawer kick-out connector |
| ② Printer cover | ⑦ Power connector |
| ③ Control panel | ⑧ DIP switches |
| ④ Power switch | |

TM-U300C/U300PC

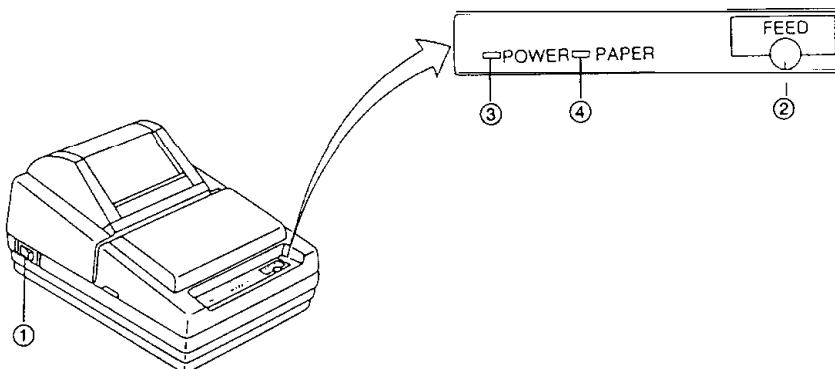


TM-U300D/U300PD



TM-U300C/U300D
TM-U300PC/U300PD

■ Functions



Switches and Buttons

① POWER Switch

The POWER switch is used to turn the printer on and off.

② FEED Button

The FEED button is used to feed roll paper. The line feed amount is set by the printer commands **ESC 2** and **ESC 3**.

Control Panel Lights (LEDs)

③ POWER LED (green)

The POWER LED is on when the printer is turned on and off when the printer is turned off.

④ PAPER LED (red)

Normally the PAPER LED is off.

The PAPER LED is on when the paper roll is nearly finished or completely finished or the paper roll is not installed.

The PAPER LED flashes when an error occurs, when validation paper must be inserted or removed, when the self test enters the printing standby state, or when printing has stopped due to exceeding the allowable print duty cycle.

Chapter 2 Connecting the Cables

2-1 Connecting the AC Adapter to the Printer

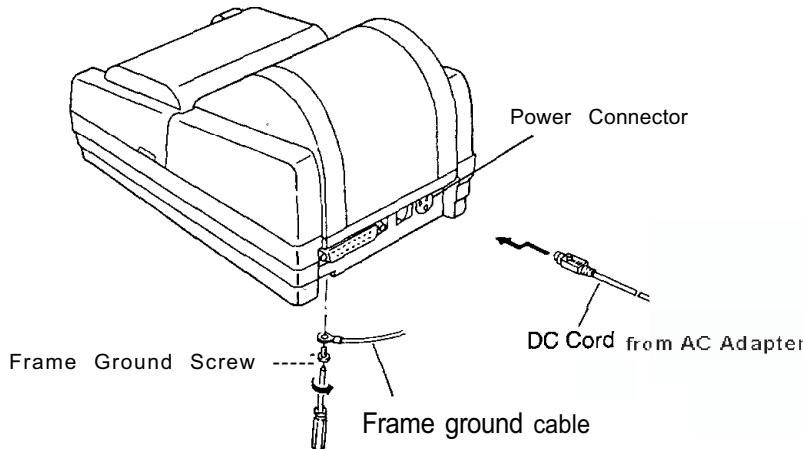
Follow these steps to connect the AC adapter to the printer:

- ① Make sure the printer is turned off. It is off when the O side of the switch is pressed down.
- ② Check the label on the AC adapter to make sure the voltage required by the AC adapter matches that of your electrical outlet.

CAUTIONS:

- To avoid damage to the AC adapter and the printer, or to avoid an incorrect operation of the printer, do not plug in the power cord, if the rated voltage of the AC adapter and your outlet voltage do not match.

- ③ Plug the DC cord connector into the printer's power connector with the arrow mark facing upward. (You can remove the DC cord by grasping the connector firmly at the arrow mark and pulling it straight out.)



- ④ Ground the printer by connecting a frame ground cable (*1) to the printer with the frame ground screw located on the bottom of the printer.

(*1) This cable is not enclosed. Please obtain the appropriate cable for your system.

- ⑤ Plug the AC adapter power cord into the wall outlet.

2-2 Connecting the Host Computer to the Printer

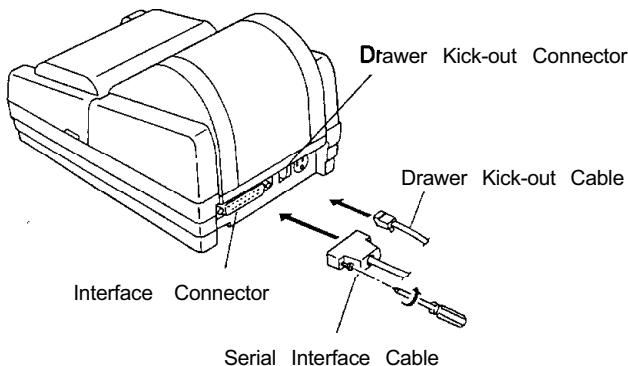
Connect the host ECR (host computer) to the printer using an interface cable that matches the specifications of the printer and the host ECR (host computer).

Be sure to use a drawer that matches the printer's specifications.

■ Connecting the host computer to the TM-U300C/U300D

Connect the interface cable as follows:

- ① Turn off the printer and the host ECR (host computer).
- ② Plug the serial interface cable connector into the printer's interface connector; then tighten the screws on both sides of the connector.
- ③ Plug the drawer kick-out cable connector into the printer's drawer kick-out connector. (You can remove the drawer kick-out cable by pressing in the connector's clip and pulling out the connector.)



NOTE:

- Your printer comes with inch-type hexagonal lock screws installed. If you plan to use an interface cable that requires millimeter-type lock screws, replace the inch-type screws with the enclosed millimeter-type screws using a hex screwdriver (5 mm). To distinguish the two types of screws, see the figure below.

Notch (one or more line)



Inch-type

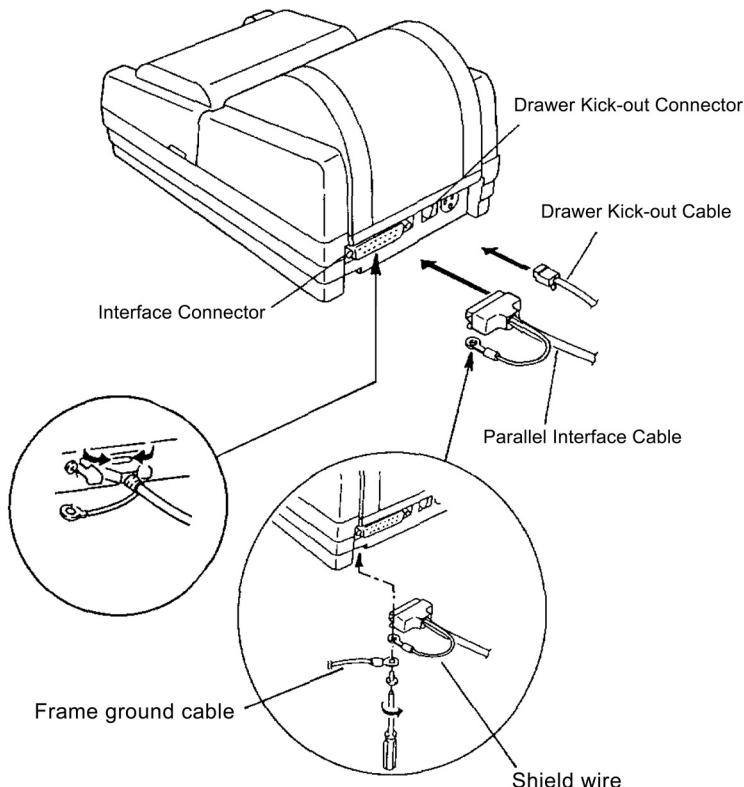


Millimeter-type

■ Connecting the host computer to the TM-U300PC/U300PD

Connect the interface cable as follows:

- ① Turn off the printer and the host ECR (host computer).
- ② Plug the parallel interface cable connector into the printer's interface connector.
- ③ Squeeze the wire clips together until they lock in place on both sides of the connector.
- ④ Secure the frame ground cable and the shield wire of the parallel interface cable with the frame ground screw on the bottom of the printer.
- ⑤ Plug the drawer kick-out cable connector into the printer's drawer kick-out connector. (You can remove the drawer kick-out cable by pressing in the connector's clip and pulling out the connector.)



Chapter 3 Installing the Printer Parts

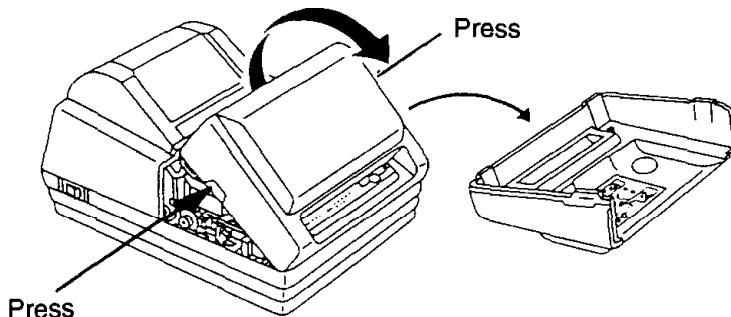
3-1 Installing the Ribbon Cassette

■ Installing the ribbon cassette

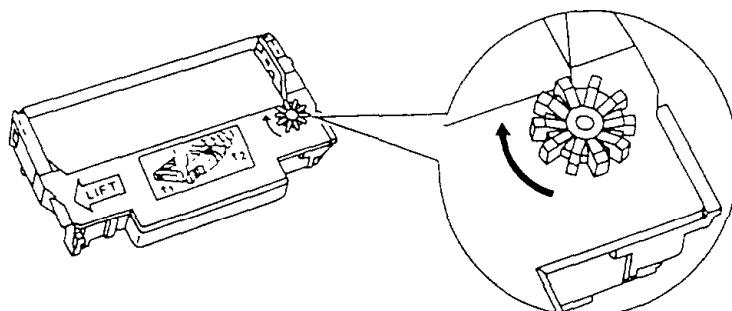
Use Epson ribbon cassette ERC-34 (B/R).

Follow these steps to install the ribbon cassette:

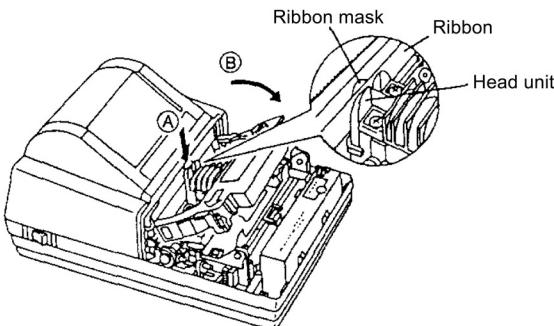
- ① Open the printer cover while lightly pressing the printer cover as shown below.



- ② Turn the ribbon-tightening knob in the direction of the arrow to take up any slack in the ribbon.



- ③ Fit the ribbon between the print head unit and the ribbon mask. Then push the cassette firmly into position.

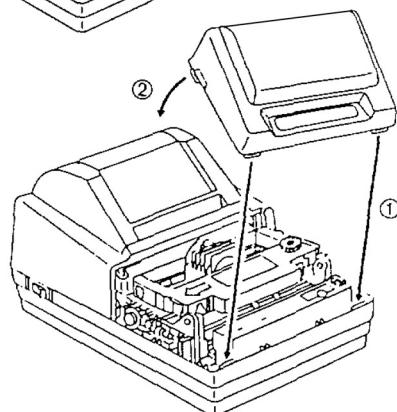


- ④ Turn the ribbon-tightening knob five or six times in the direction of the arrow to feed the ribbon smoothly into place between the print head unit and the ribbon mask.
- Check that the ribbon is not twisted or creased.

CAUTION:

- Do not turn the ribbon-tightening knob in the reverse direction.

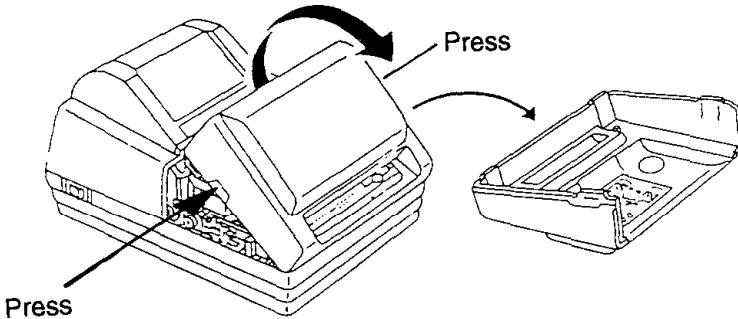
- ⑤ Close the printer cover.



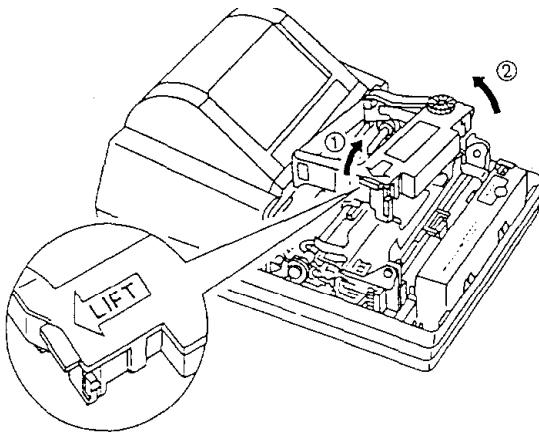
■ Replacing the ribbon cassette

Use Epson ribbon cassette ERC-34 (B/R).

- ① Open the printer cover while lightly pressing the printer cover as shown below.



- ② To remove the ribbon cassette, grasp the tab on the left side and lift the left side out first.



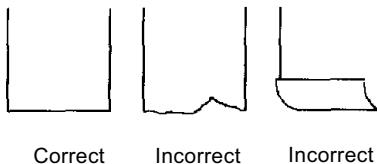
- ③ To install a new ribbon cassette, follow steps ② through ⑤ in the previous section, *Installing the ribbon cassette*.

3-2 Installing the Paper Roll

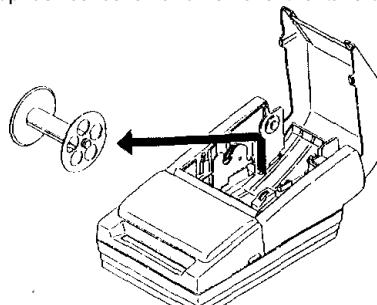
■ Installing the paper roll in the TM-U300C/U300PC

Be sure to use roll paper that matches the printer's specifications. See Appendix A, Specifications.

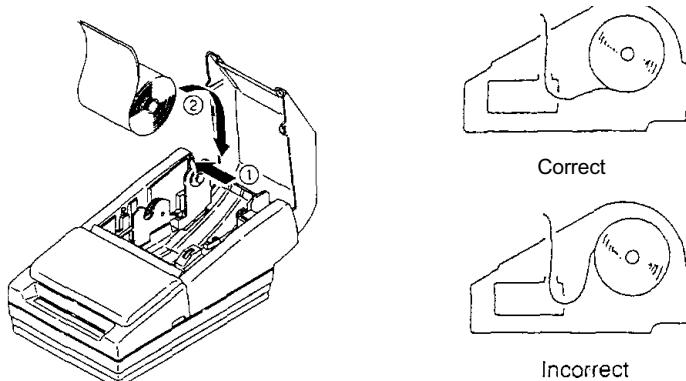
- ① Using scissors, cut the leading edge of the roll paper so that it is perpendicular to the paper feed direction.



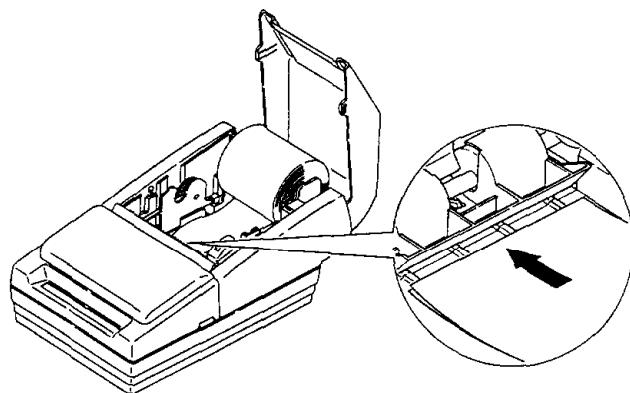
- ② Open the take-up device cover and remove the take-up spool from the printer.



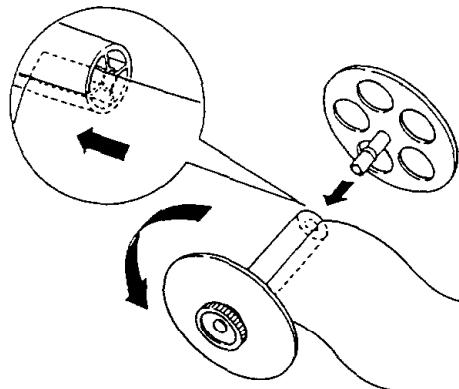
- ③ Load the paper roll while lightly pressing the left paper roll holder outward. Release the holder after fitting the roll paper core onto the holder. Make sure the paper roll turns freely and be sure to load the paper roll so that it rotates in the correct direction.



- ④ Turn on the printer. The POWER LED goes on.
- ⑤ While leaving some slack in the paper roll, insert the end of the roll paper straight into the paper inlet. The printer automatically feeds the roll paper into the printer (semi-automatic loading).



- ⑥ Press the FEED button to continue feeding the paper until it extends about 20 cm (8 inches) beyond tear-off edge.
- ⑦ Remove the side board of the take-up spool and insert the end of the roll paper (or journal paper when using 2- or 3-ply paper) into the groove on the take-up spool. Wrap the paper around the spool two or three times and then replace the side board of the take-up spool.



- ⑧ Install the take-up spool in the printer. Make sure that the gear on the take-up spool aligns with the gear on the printer.



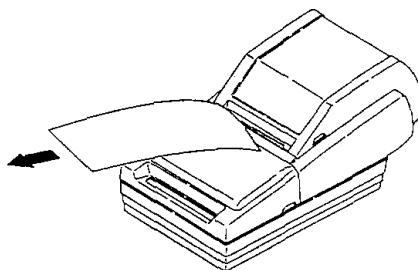
- ⑨ Close the take-up device cover.



- ⑩ Tear off any extra paper at the tear-off edge by pulling the paper toward you.

CAUTION:

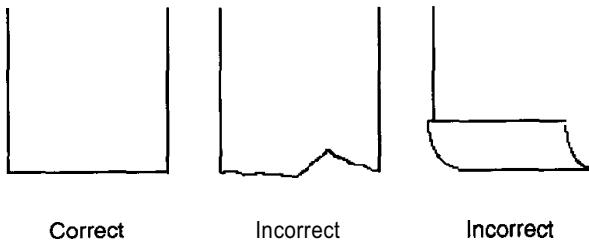
- The extra paper must be torn off after closing the take-up device cover so that roll paper comes out correctly from the paper exit.



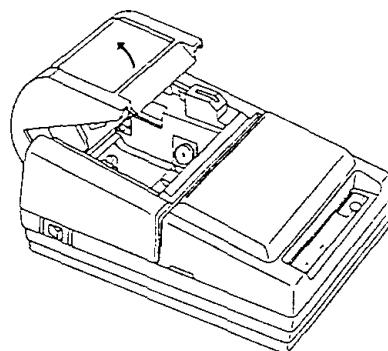
■ Installing the paper roll in the TM-U300D/U300PD

Be sure to use roll paper that matches the printer's specifications. See Appendix A, Specifications.

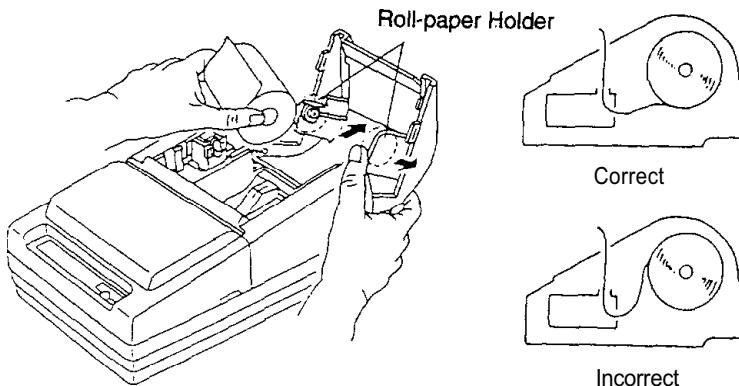
- ① Using scissors, cut the leading edge of the roll paper so that it is perpendicular to the paper feed direction.



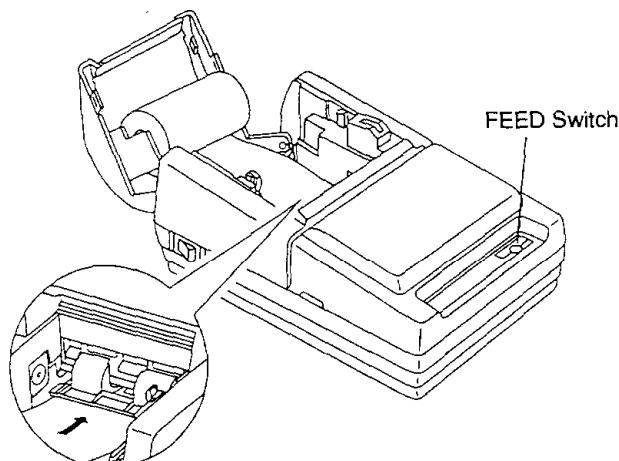
- ② Open the roll paper cover.



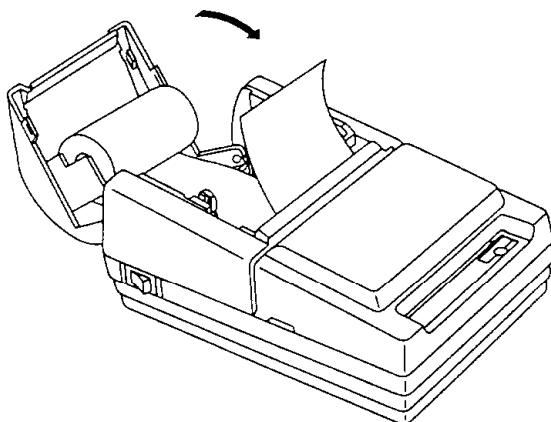
- ③ Load the roll paper while lightly pressing the paper roll holder outward. Release the holder after fitting the paper core onto the holder. Make sure the paper roll turns freely and be sure to load the paper roll so it rotates in the correct direction.



- ④ Turn on the printer. The POWER LED goes on.
⑤ While leaving some slack in the paper roll, Insert the end of the roll paper straight into the paper inlet. The printer automatically feeds the roll paper into the printer (semi-automatic loading).
Press the FEED button to continue feeding the paper if insufficient paper is fed by the semi-automatic loading.



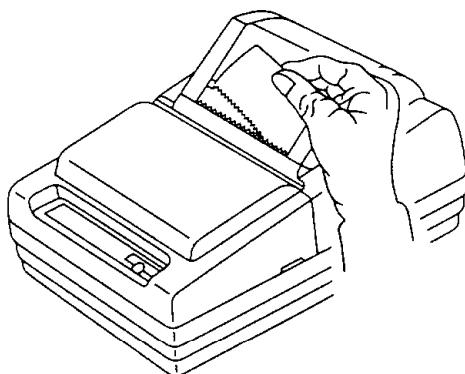
⑥ Close the roll paper cover.



⑦ Tear off any extra paper at the tear-off edge by pulling the paper toward you.

CAUTION:

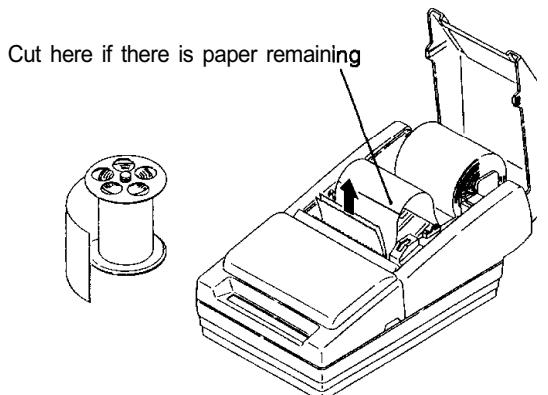
- The extra paper must be torn off after closing the roll paper cover so that roll paper comes out correctly from the paper exit.



■ Replacing the roll paper for TM-U300C/U300PC

Be sure to use roll paper that matches the printer's specifications. See Appendix A, Specifications.

- ① Open the take-up device cover.
- ② Remove the take-up spool from the printer. (If it is necessary, cut the paper going to the take-up spool, using the tear-off edge.) Then remove the roll paper core.
- ③ If there is roll paper remaining, cut the paper straight across using scissors at the place shown in illustration below.
- ④ While pressing the FEED switch, remove the remaining roll paper in the printer by pulling the paper lightly out in the direction of the arrow.

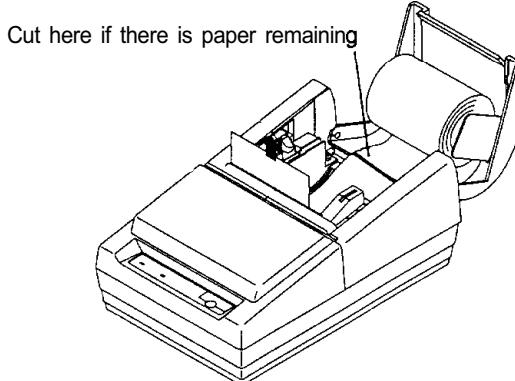


- ④ To install a new paper roll, see *Installing the paper roll* in the TM-U300C/U300PC, on page 11.

■ Replacing the paper roll in the TM-U300D/U300PD

Be sure to use roll paper that matches the printer's specifications. See Appendix A, *Specifications*.

- ① Open the roll paper cover.
- ② Remove the roll paper core. If there is roll paper remaining, cut the paper straight across using scissors at the place shown in illustration below.
- ③ While pressing the FEED button, remove the remaining roll paper in the printer by pulling the paper lightly out in the direction of the arrow.



- ④ To install a new paper roll, see *Installing the paper roll* in the TM-U300D/U300PD, on page 14.

3-3 Adjusting the Paper Near-End Detector Location

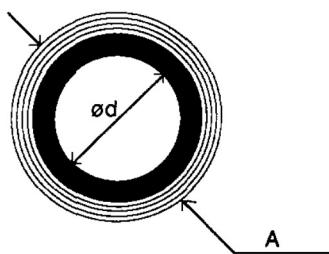
■ The paper near-end detector

When the paper near-end detector senses that the paper is almost out, the printer turns on the PAPER LED. The PAPER LED also turns on when the paper is completely out or paper roll is not installed.

■ Adjusting the paper near-end detector

Because the paper roll core size differs depending on the paper roll, you may need to adjust the paper near-end detector location.

- ① Make sure the paper core inside diameter is 10.5 to 12.5 mm (0.41 to 0.49")
- ② Determine the paper near-end detecting point on your roll paper and measure diameter A as shown below.

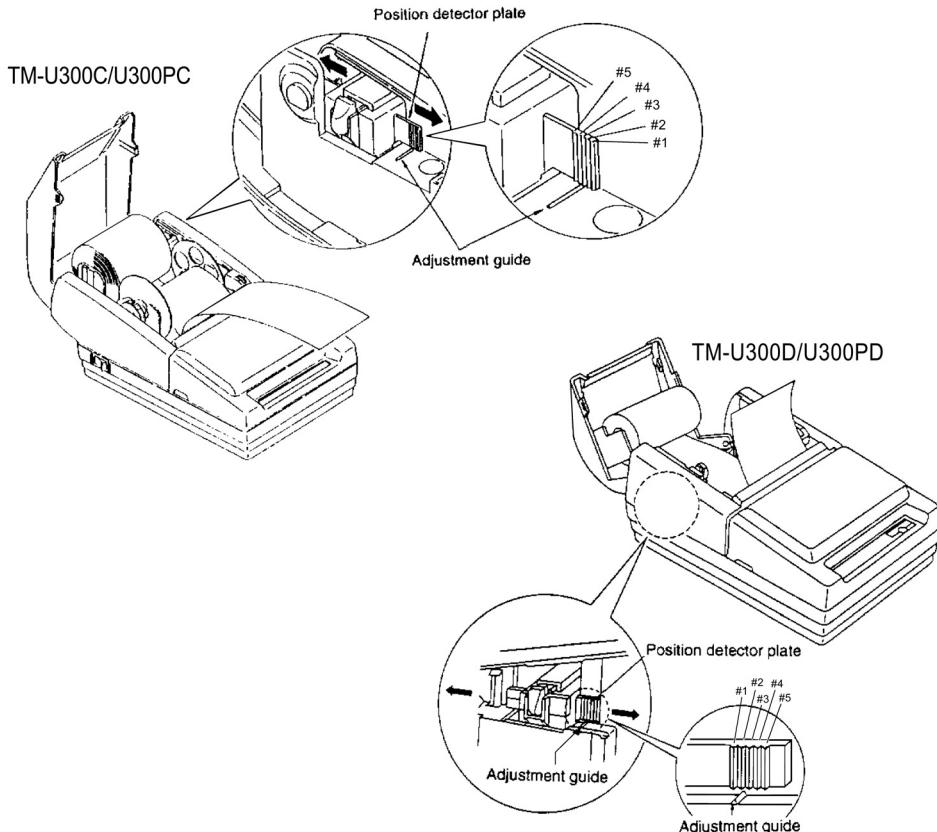


- ③ Find the corresponding adjustment position number from the table below.

Table 3-1. Adjustment Position Number

Diameter A	Adjustment position number
18 mm (0.71")	# 1
20 mm (0.79")	# 2
22 mm (0.87")	# 3
24 mm (0.94")	# 4
26 mm (1.02")	# 5

- ④ Referring to the illustration below, set the position detector plate to the appropriate position according to the adjustment position number from the table above.



NOTES:

1. Since the adjustment values in the Table 3-1 are calculated value, there may be some variations depending on the printer.
2. If roll paper with a red end mark at the paper end is used, this mark may cause the paper to stick together. If this occurs, the paper near-end detector may operate incorrectly.
3. Be sure that the detecting lever operates smoothly after you finish the adjustment.
4. If the roll paper becomes loose due to the paper quality, the paper near-end detector may operate incorrectly.

3-4 Inserting a Cut Sheet (Validation Paper)

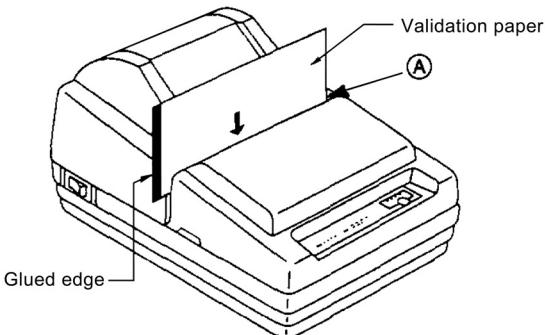
Be sure to use a validation paper that matches the printer's specifications. Refer to Appendix A, *Specifications*.

- ① Check that the paper is not wrinkled. Using creased or wrinkled paper may cause a paper jam.
- ② Check that the paper roll is already installed. If not, install it first.

CAUTION:

- Printing with no roll paper installed in the printer may cause damage to the print head pin.

- ③ After checking that no validation paper is inserted, turn on the power switch. The POWER LED light goes on.
- ④ Using printer control command, select validation paper mode. The PAPER LED begins flashing.
- ⑤ Insert the paper straight into the printer using the guide marked with an A in the following illustration.



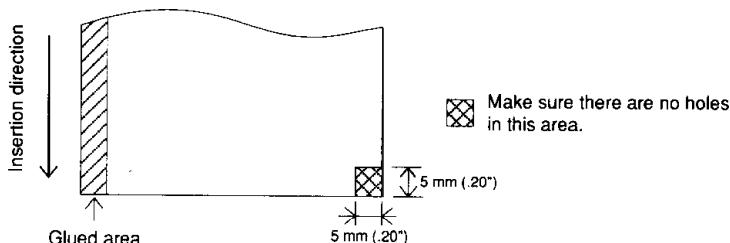
CAUTIONS:

- When printing on copy sheets, make sure the glued (fixed) edge is positioned as shown in the illustration above.
- After you insert validation paper, do not move the paper. Moving the paper may cause the paper to slip.

■ Notes on printing on validation paper

- The printer can print only one line on validation paper. Printing is performed by the print commands, but the paper is not fed. Therefore, double-height printing cannot be performed on validation paper.
- Printing on the validation paper must be performed when roll paper is loaded. However, printing is affected by the total thickness of the paper.
- The validation paper should be flat, with no curls, folds (especially no curls or folds at the edges), wrinkles, or warps. Otherwise, the paper may rub against the ribbon and become dirty or the paper could catch on the ribbon.
- Select multi-ply paper carefully because the gluing conditions (glue quality, gluing method, glued length etc.) and the position of the glued area affect paper insertion; insert the validation paper so that the glued position is on the left or top edge of the paper as seen from the front.
- Insert paper from the top as shown in the following figure.
- When the optional validation detector is installed, do not use validation paper with holes (e.g., sprocket holes) in the area shown below or the paper detector does not work correctly.

Validation paper



Chapter 4 Setting the DIP Switches

■ Finding the DIP switches

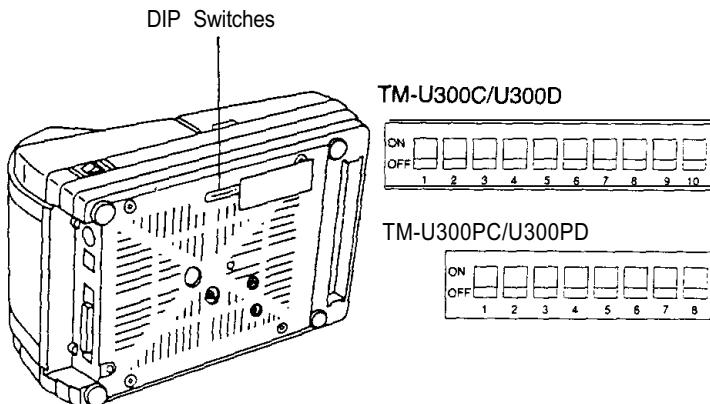
As shown in the illustration below, the DIP switches are located on the bottom of the printer. The DIP switches are used to set the printer to perform various functions.

- The TM-U300C/U300D DIP switches are numbered SW-1 to SW-10 and the TM-U300PC/U300PD DIP switches are numbered SW-1 to SW-8, from left to right as shown in figure below.
- The tables on the following pages describes the DIP switch functions.

■ Setting the DIP switches

Follow these steps when changing DIP switch settings:

- ① Turn the printer power switch off.
- ② Flip the DIP switches using tweezers or another narrow-ended tool.
Switches are on when up and off when down in the figure below.



- ③ The new setting takes effect when you turn on the printer.

NOTES:

- Always change DIP switch settings when the printer is turned off.
- Changes made with the power on have no effect until you turn the printer off and then on again.

■ TM-U300C/U300D DIP Switch Functions

Table 4-1. TM-U300C/U300D DIP Switch Functions

Switch No.	Function	ON	OFF
SW-1	Data receive error	Ignored	Prints "?"
SW-2	Receive buffer capacity	40 bytes	Approx. 1 Kbyte
SW-3	Handshaking	XON/XOFF	DTR/DSR
SW-4	Word length	7 bits	8 bits
SW-5	Parity check	On	Off
SW-6	Parity selection	Even	Odd
SW-7	Baud rate selection	Refer to Table 4-2.	
SW-8			
SW-9	Internal use	(*)	
SW-10	Internal use	(*)	

(*) Do not change the settings of DIP switches 9 and 10 on the TM-U300C/U300D

Table 4-2. Baud Rate Selection

Transmission Speed (BPS)	SW-7	SW-8
1200	ON	ON
2400	OFF	ON
4800	ON	OFF
9600	OFF	OFF

■ TM-U300PC/U300PD DIP Switch Functions

Table 4-3. TM-U300PC/U300PD DIP Switch Functions

Switch No.	Function	ON	OFF
SW-1	Auto feed	Always enabled	Depends on AUTO FEED XT
SW-2	Receive buffer capacity	0 byte	Approx. 1 Kbyte
SW-3	Internal use	(*) Fixed to OFF	
SW-4	Internal use	(*) Fixed to ON	
SW-5	Internal use	(*) Fixed to ON	
SW-6	Internal use	(*) Fixed to OFF	
SW-7	Internal use	(*)	
SW-8	Internal use	(*)	

(*) Do not change the settings of DIP switches 3 through 6 on the TM-U300PC/U300PD.

Chapter 5 The Self Test

■ The purpose of the self test

The self test checks whether the printer has any problems. If the printer does not function properly, contact your dealer. The self test checks the following:

- Control circuit functions
 - Printer mechanism
 - Print quality
 - Control ROM version
 - DIP switch settings
 - Presence or absence of a validation detector

■ Running the self test

- ① Make sure the ribbon cassette and paper roll have been installed properly.
Make sure the printer cover and the take-up device cover or the roll paper cover are closed properly.

② Turn on the power while holding down the FEED button. The self test begins.

③ First the self test prints the current printer status, which provides the following information:

 - Control ROM version
 - DIP switch settings

<p>Version 1.2 ESC/POS</p> <p>Serial Interface</p> <ul style="list-style-type: none"> ▪ baud rate : 7680 bps ▪ data bits : 8 bits ▪ parity : none ▪ stop bit : 1 bit or more ▪ Handshaking : DTR/DSR ▪ Receive errors? prints "?" <p>Buffer Capacity 1K bytes</p> <p>Validation Detector mounted</p> <p>Self-test printing. Please press FEED switch.</p> <hr/> <pre>*****1#(*#,*-/8123456789;*>78ABCDEF5 *****2#(*#,*-/8123456789;*>78ABCDEFH *****3#(*#,*-/8123456789;*>78ABCDEF9 *****4#(*#,*-/8123456789;*>78ABCDEFJ *****5#(*#,*-/8123456789;*>78ABCDEFHJKL *****6#(*#,*-/8123456789;*>78ABCDEFHJKL</pre> <hr/> <pre>*****1#(*#,*-/8123456789;*>78ABCDEF5 *****2#(*#,*-/8123456789;*>78ABCDEFH *****3#(*#,*-/8123456789;*>78ABCDEF9 *****4#(*#,*-/8123456789;*>78ABCDEFJ *****5#(*#,*-/8123456789;*>78ABCDEFHJKL *****6#(*#,*-/8123456789;*>78ABCDEFHJKL</pre>	<p>Version 1.3 ESC/POS</p> <p>Parallel Interface</p> <p>Buffer Capacity 1K bytes</p> <p>Validation Detector mounted</p> <p>Self-test printing. Please press FEED switch.</p> <hr/> <pre>*****1#(*#,*-/8123456789;*>78ABCDEF5 *****2#(*#,*-/8123456789;*>78ABCDEFH *****3#(*#,*-/8123456789;*>78ABCDEF9 *****4#(*#,*-/8123456789;*>78ABCDEFJ *****5#(*#,*-/8123456789;*>78ABCDEFHJKL *****6#(*#,*-/8123456789;*>78ABCDEFHJKL</pre> <hr/> <pre>*****1#(*#,*-/8123456789;*>78ABCDEF5 *****2#(*#,*-/8123456789;*>78ABCDEFH *****3#(*#,*-/8123456789;*>78ABCDEF9 *****4#(*#,*-/8123456789;*>78ABCDEFJ *****5#(*#,*-/8123456789;*>78ABCDEFHJKL *****6#(*#,*-/8123456789;*>78ABCDEFHJKL</pre>
--	---

④ After printing the current printer status, it prints "Self-test printing. Please press FEED switch". The PAPER LED flashes and the printer enters the test printing standby state. Press the FEED button to restart test printing.

⑤ After the printer completes a certain number of lines, it prints "**** completed ****", and stops printing automatically.

* The printer goes off-line during and after self-test printing. Turn the power off and on again to put the printer on-line before transmitting data from the host computer.

TM-U300C/U300D

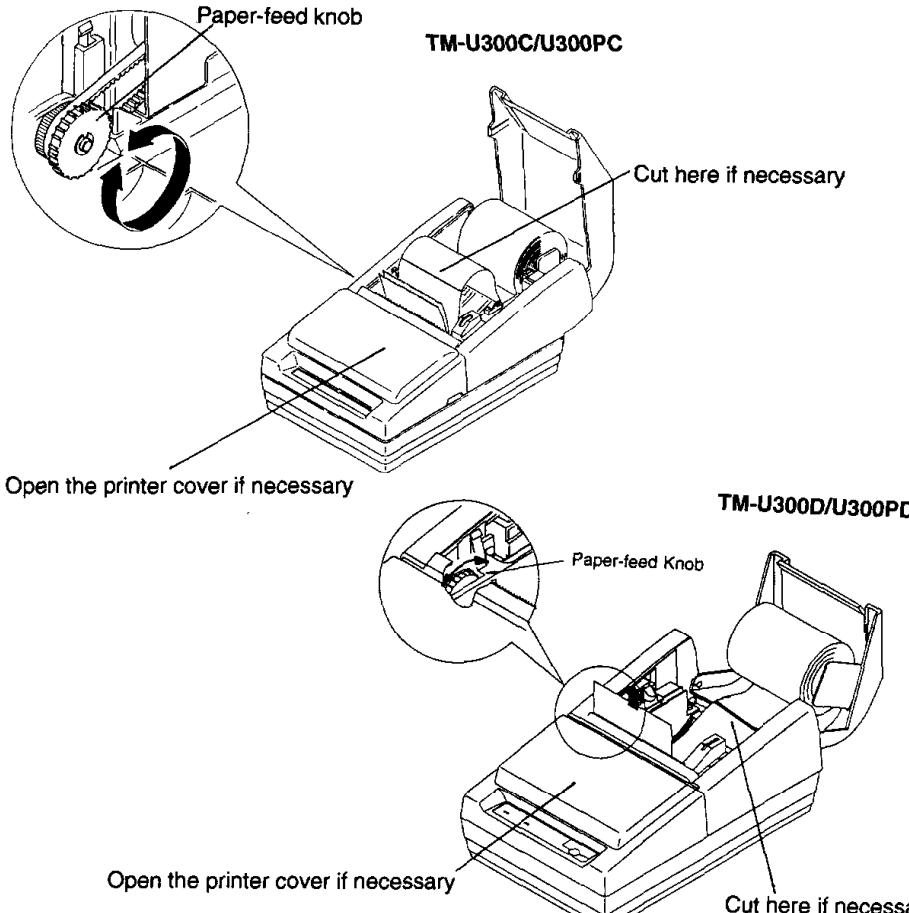
TM-U300PC/U300PD

Self-test Printing Sample

Chapter 6 Removing Jammed Paper

6-1 Removing Jammed Paper

Turn the paper-feed knob as shown below, and remove any jammed paper.
It may be easier if you cut the roll paper or remove the printer cover.



CAUTION:

Be careful not to touch the tear-off edge.

Do not use aerosol sprayers containing flammable gas inside or around this product. Doing so may cause fire.

Appendix

Appendix A. Specifications

1. Printing Specifications

Printing method:	Serial impact dot matrix
Head wire arrangement:	Serial-type, 9-pin
Printing directions:	Bi-directional (logic seeking)
Lines per second:	Approx. 3.5 LPS (40 columns, 16 CPI, single color, continuous printing)
	Approx. 5.8 LPS (20 columns, 16 CPI, single color, continuous printing)

- NOTES:**
- When printing exceeds the allowable duty cycle, the actual printing speed may be slower than that listed above.
 - Because switching operations are required for red printing or black/red printing, their printing speeds are slower than the black printing speed.

(LPS: Lines Per Second) (CPI: Characters Per Inch)

Characters per line:	Refer to Table A-1.
Characters per inch:	Refer to Table A-1.
Print color switching:	Selectable black or red printing

2. Character Specifications

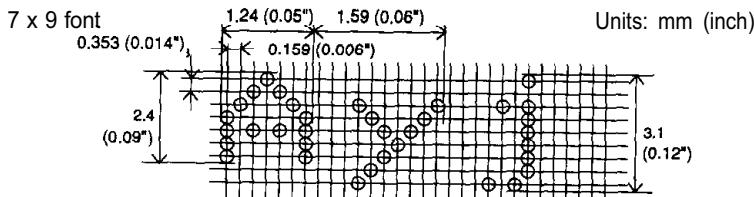
Number of characters:	Alphanumeric:	95
	Graphics:	128 X 7 tables
	International characters:	32
Character structure:	7 x 9 (total number of dots in the horizontal direction: 400 half dots)	
	9 x 9 (total number of dots in the horizontal direction: 400 half dots)	
Character size:	Refer to Table A-1.	

Table A-1. Character Size, Characters Per Inch, Characters Per Line

Character Structure		Character Size W × H (mm)	Character Dot Spacing	Characters Per Line (CPL)	Characters Per Inch (CPI)
Horizontal × Vertical	Characters				
7 × 9 (*1)	ANK and International	1.24 × 3.1 (0.05" × 0.12")	3 half dots	40	16
	Graphic	1.59 × 3.1 (0.06" × 0.12")	0	40	16
9 × 9	ANK and International	1.56 × 3.1 (0.06" × 0.12")	3 half dots	33	13.3
	Graphic	1.91 × 3.1 (0.08" × 0.12")	0	33	13.3

(*1) The 7 × 9 font is the default.

Example



3. Ribbon

Ribbon cassette type: Exclusive ribbon cassette ERC-38
 Color: Black and Red, Black, Red
 Single-color ribbon [Part No.: ERC-34 (B) (black)] and P-color ribbon [Part No.: ERC-34 (B/R) (black and red)] are also available. When using these ribbons, the print color selection command (ESC r) must not be used.

Ribbon life:
 (In case of using 2-color type)
 Black: Approx. 1,500,000 characters
 Red: Approx. 750,000 characters

[Conditions]

- Character font: 7 X 9 font (with descenders)
- Printing pattern: 96 ASCII character rolling pattern, continuous printing
- Temperature: 25°C (77°F)

Ribbon cassette overall dimensions:

Refer to Figure A-1

[Units: mm]

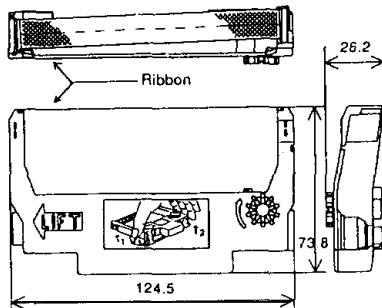


Figure A-1. ERC-38 Overall Dimensions

4. Roll Paper Supply Device

Supply method:	Paper roll holding shaft
Near-end detector:	Provided inside the printer case The paper near-end detector location should be adjusted by the user. Refer to section 3-3, <i>Adjusting the Paper Near-End Detector Location</i> .
• Roll paper core	
inside diameter:	ø 10.5 to 12.5 mm (0.41" to 0.49")
• Near-end adjustment:	Adjustable slider

5. Roll Paper Take-up Device

The TM-U300C and TM-U300PC are equipped with a take-up device. The paper is automatically taken up by the paper feed motor.

6. Paper

Paper feed method:	Friction feed
Paper feed pitch:	Default 1/6 inch Can be set in 1/144 inch units by software command.
Paper feed speed:	Approx. 4.17 IPS (25 LPS) (continuous feeding) (IPS: Inches Per Second) (LPS: Lines Per Second)

Paper size:

- Roll paper

Paper width: 76 mm \pm 0.5 mm (2.99" \pm 0.02")

Maximum diameter: Ø 83 mm (3.27") (when 2-ply or 3-ply paper is used)

Ø 60 mm (2.36") (when 1 -ply paper is used)

Paper core inside diameter: Ø 10.5 to 12.5 mm (0.41" to 0.49")

① Normal paper

Paper thickness: 0.06 to 0.085 mm (0.002" to 0.003")
(single-ply sheet)

Weight: 52.3 g/m² to 64 g/m²
(45 to 55 kg/1000 sheets/1091 mm x 788 mm)

② Pressure sensitive paper

Maximum 1 original + 2 copies

Copy capability is greatly influenced by the ambient temperature. Refer to the table below.

Number of copies	Ambient temperature
Original + 2 copies	Approx. 25°C (77°F)
Original + 1 copy	5° to 40 °C (41° to 104°F)

- Validation paper

Paper type: Normal paper, pressure-sensitive paper, carbon copy paper

Paper width and paper length:

	Width	Length
Validation paper	135 mm to 210 mm (5.32" to 8.27")	70 mm to 297 mm (2.76" to 11.69")

Paper thickness: 0.07 mm to 0.14 mm (0.003" to 0.006")
(Weight: 56.2 g/m² to 128 g/m²)

Total thickness including roll paper:
0.2 mm (0.008") or less

7. Receive Buffer

Either 40 bytes or approx. 1 Kbyte, selectable using DIP switch.
(TM-U300C/U300D)

Either 0 bytes or approx. 1 Kbyte. selectable using DIP switch.
(TM-U300PC/U300PD) (Refer to Chapter 4, Setting the DIP switch.)

8. Power Supply

The supported power supply is AC adapter, C.

9. Reliability

Life: Mechanism:7,500,000 lines

Print head: 100 million characters (when printing an average of two dots/wire/character)

- End of Life is defined as the point at which the printer reaches the beginning of the Wearout Period.

MTBF: 180,000 hours

- Failure is defined as Random Failure occurring at the time of the Random Failure Period.

MCFB: 18,000,000 lines

- This is an average failure interval based on failures relating to wearout and random failure up to the life of 7.5 million lines.

10. Environmental Conditions

Temperature:

Operating: 5° to 40°C (41° to 104°F)
For the TM-U300C/U300PC, when the temperature is 30°C (86°F) or more, the operating humidity is limited.

Storage: -10° to 50°C (14 to 122°F) (excluding paper and ribbon)

Humidity:

Operating: TM-U300C/U300PC: 20% to 80% (non-condensing)
TM-U300D/U300PD: 30% to 85% (non-condensing)

Storage: TM-U300C/U300PC: 20% to 90%
(non-condensing, excluding paper and ribbon)
TM-U300D/U300PD: 30% to 90%
(non-condensing, excluding paper and ribbon)

WEEE (Waste Electrical and Electronic Equipment) Directive

This information only applies to customers in the European Union, according to Directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 27 January 2003 on waste electrical and electronic equipment (WEEE) and legislation transposing and implementing it into the various national legal systems.

For other countries, please contact your local government to investigate the possibility of recycling your product.



English

The crossed out wheeled bin label that can be found on your product indicates that this product should not be disposed of via the normal household waste stream. To prevent possible harm to the environment or human health please separate this product from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more details on available collection facilities please contact your local government office or the retailer where you purchased this product.

Deutsch

Der Aufkleber mit durchgekreuzter Mülltonne an diesem Produkt weist darauf hin, dass dieses Produkt nicht im normalen Hausmüll entsorgt werden darf. Zur Vermeidung einer möglichen Beeinträchtigung der Umwelt oder der menschlichen Gesundheit und um zu gewährleisten, dass es in einer umweltverträglichen Weise recycelt wird, darf dieses Produkt nicht in den Hausmüll gegeben werden. Informationen zu Entsorgungseinrichtungen erhalten Sie bei der zuständigen Behörde oder dem Geschäft, in dem Sie dieses Produkt erworben haben.

Français

L'étiquette apposée sur ce produit et représentant une poubelle barrée indique que le produit ne peut être mis au rebut avec les déchets domestiques normaux. Afin d'éviter d'éventuels dommages au niveau de l'environnement ou sur la santé, veuillez séparer ce produit des autres déchets de manière à garantir qu'il soit recyclé de manière sûre au niveau environnemental. Pour plus de détails sur les sites de collecte existants, veuillez contacter l'administration locale ou le détaillant auprès duquel vous avez acheté ce produit.

Italiano

L'etichetta con il contenitore barrato applicata sull'imballo indica che il prodotto non deve essere smaltito tramite la procedura normale di smaltimento dei rifiuti domestici. Per evitare eventuali danni all'ambiente e alla salute umana, separare questo prodotto da altri rifiuti domestici in modo che possa essere riciclati in base alle procedure di rispetto dell'ambiente. Per maggiori dettagli sulle strutture di raccolta disponibili, contattare l'ufficio competente del proprio comune o il rivenditore del prodotto.

Español

La etiqueta de un contenedor tachado que hallará en su producto indica que este producto no se puede tirar con la basura doméstica normal. Para impedir posibles daños medioambientales o para la salud, separe este producto de otros canales de desecho para garantizar que se recicle de una forma segura para el medio ambiente. Para más información sobre las instalaciones de recolección disponibles, diríjase a las autoridades locales o al punto de venta donde adquirió este producto.

Português

A etiqueta com o símbolo de um contentor de lixo traçado com uma cruz que aparece no produto indica que este produto não deve ser deitado fora juntamente com o lixo doméstico. Para evitar possíveis danos no ambiente ou na saúde pública, por favor separe este produto de outros lixos; desta forma, terá a certeza de que pode ser reciclado através de métodos não prejudiciais ao ambiente. Para obter mais informações sobre os locais de recolha de lixo disponíveis, contacte a sua junta de freguesia, câmara municipal ou local onde comprou este produto.

Nederlands

Op uw product is een label van een rolcontainer met een kruis erdoor aangebracht. Dit label wil zeggen dat dit product niet bij het normale huishoudelijk afval mag worden ingezameld. Om eventuele schade aan het milieu of de gezondheid van de mens te voorkomen moet dit product gescheiden van al het ander afval worden ingezameld, zodat het op een verantwoorde wijze kan worden verwerkt. Voor meer informatie over uw lokale afvalinzameling wendt u zich tot uw gemeente of de leverancier bij wie u dit product hebt gekocht.

Dansk

Etiketten med et kryds over skraldespanden på hjul, der sidder på produktet, angiver, at dette produkt ikke må bortskaffes sammen med almindeligt husholdningsaffald. For at beskytte miljø og helbred skal dette produkt bortskaffes separat, så det kan genbruges på en måde, der er god for miljøet. Kontakt de lokale myndigheder eller den forhandler, hos hvem du har købt produktet, vedrørende steder, hvor du kan aflevere produktet.

Suomi

Laite on merkityy jäteastia-symbolilla, jonka yli on vedetty rasti. Tämä tarkoittaa, ettei laitetta saa hävittää normaalilla talousjätteen mukana. Älä hävitä laitetta normaalina jäteen seassa vaan varmista, että laite kierrätetään ympäristöstavallisella tavalla, jottei ympäristölle tai ihmisiille aiheudu vahinkoa. Lisätietoja kierrätyksestä ja keräyspisteistä saa ottamalla yhteyttä paikallisiin viranomaisiin tai jälleenmyyjään, joilta laite ostettiin.

Svenska

Symbolen med en överkorsad soputunna innebär att denna produkt inte får kastas i vanligt hushållsavfall. För att skydda miljön ska denna produkt inte kastas tillsammans med vanligt hushållsavfall utan lämnas för återvinning på tillbörligt sätt. För mer information om uppsamlingsplatser kontakta din lokala myndighet eller den återförsäljare där du har köpt produkten.

Norsk

Det er krysset over merket av beholderen på hjul som vises på produktet, som angir at dette produktet ikke skal kastes sammen med vanlig husholdningsavfall. Hold dette produktet atskilt fra annet avfall slik at det kan resirkuleres på en miljømessig forsvarlig måte og dermed forhindre eventuell skade på miljø eller helse. Hvis du vil ha mer informasjon om hvor produktet kan leveres inn, kontakter du kommunale myndigheter eller forhandleren der du kjøpte dette produktet.

Česky

Štítek s přeškrnutým odpadkovým košem na kolečkách, který lze nalézt na výrobku, označuje, že tento produkt se nemá likvidovat s běžným domovním odpadem. V zájmu ochrany životního prostředí a lidského zdraví zlikvidujte tento výrobek jako tříděný odpad, který se recykluje způsobem šetrným k životnímu prostředí. Podrobnější informace o sběrných dvorech pro tříděný odpad získáte na obecním úřadě nebo u prodejce, u kterého jste příslušný výrobek zakoupili.

Magyar

A terméken található, áthúzott szemetest ábrázoló címke azt jelzi, hogy ezt a terméket nem szabad a rendes háztartási szemettel együtt kidobni. Az esetleges környezeti- vagy egészségkárosodást megelőzendő, kérjük, hogy ezt a termékét a többi szeméttől elkülönítve helyezze el, és biztositsa, hogy azt környezetbarát módon újrahasznosítsák. A rendelkezésére álló begyűjtő létesítményekről kérjük tájékozódjon a megfelelő helyi állami szerveknél vagy a vizsgelődőnél, ahol a terméket vásárolta.

Polski

Symbol przekreślonego kosza znajdujący się na produkcie oznacza, że nie może on być utylizowany razem z normalnymi odpadami z gospodarstwa domowego. Aby zapobiec potencjalnemu zagrożeniu dla środowiska lub zdrowia ludzkiego, produkt ten należy odseparować od reszty odpadów z gospodarstwa domowego i utylizować w ekologicznie właściwy sposób. Szczegółowe informacje na temat punktów zbiórki odpadów można uzyskać w lokalnych urzędach lub u sprzedawcy danego produktu.

Slovensky

Štítek s preškrnutým odpadkovým košom na kolieskach, ktorý je možné nájsť na výrobku, označuje, že tento produkt sa nemá likvidovať s bežným komunálnym odpadom. V záujme ochrany životného prostredia a ľudského zdravia zlikvidujte tento výrobok ako třídený odpad, ktorý sa recykluje spôsobom šetrným k životnému prostrediu. Podrobnejšie informácie o zberňajúcich dvorcích pre třídený odpad získate na obecnom úrade alebo u predajcu, u ktorého ste príslušný výrobok zakúpili.

Slovenski

Prečitan koš za smeti na etiketi, katero lahko najdete na vašem izdelku, pomeni, da tega izdelka ne smete odvreči podobno kot vse ostale smeti. Da bi preprečili morebitne škodljive vplive na okolje ali zdravje, ločite izdelek od vseh ostalih in poskrbite, da bo recikliran na okolju prijazen način. Natančne informacije o tem, kje se nahajajo primerna odlagališča, pridobite v vašem krajevнем uradu ali pri prodajalcu.

Eesti

Teie tootele kleebitud tähis, mis kujutab ratastega prügikonteinerit, millele on rist peale tömmatud, keelab toote kõrvaldamise majapidamisjäätmeteaga sarnasel viisil. Keskkonnale või inimeste tervisele tekitatava võimaliku kahju vältimiseks eraldage toode teistest jäätmetest, et tagada selle korduvkasutamine keskkonnasäästlikul viisil. Kui soovite saada rohkem teavet võimalike kogumispunktide kohta, võtke ühendust kohaliku omavalituse ametnikuga või teile toote müünud jaemüüjaga.

Lietuviškai

Užbraukta ratuota šiuksliadėžs etiketė, kuria rasite ant jūsų produkto, reiškia, kad šis produktas neturėtų būti išmestas kartu su iprastinėmis buitinėmis šiuksliemis. Siekiant išvengti galiamos žalos aplinkai bei žmonių sveikatai, prasome atskirti šį produktą nuo kitų atliekų, ir išsitikinti, kad jis būtų perdirbtas aplinkai nepavojingu būdu. Jei reikia išsamesnės informacijos apie atliekų surinkimo ypatumus, prašome kreiptis į savo vienos valdžios įstaigas arba į mažmeninį pardavėjā, iš kurio jūs įsigijote šį produkta.

Latviski

Markējums ar pārsvītu rotu atkritumu tvertni uz ritenīšiem, kas redzams uz izstrādājuma, norāda, ka šo izstrādājumu nedrīkst likvidēt kopā ar parastajiem sadzīves atkritumiem. Lai novērstu veselībai, lūdzu, atdaliet šo izstrādājumu no citiem atkritumiem, tādējādi nodrošinot tā otretejējo pārstrādi videi drošā veidā. Papildinformāciju par pieejamajām atkritumu savākšanas iespējām, lūdzu, sazinieties ar vietējo pašvaldību vai mazumtorgotāju, no kura jūs iegādājāties šo izstrādājumu.

Ελληνικά

Η διαγραμμένη ετικέτα του τροχοφόρου κάδου απορριμμάτων που θα βρείτε πάνω στο προϊόν σας υποδεικνύει ότι αυτό το προϊόν δεν πρέπει να απορρίπτεται μέσω του κανονικού δικτύου αποκομιδής οικιακών απορριμμάτων. Για να αποτρέψετε πιθανές επιπτώσεις στο περιβάλλον ή την ατομική υγεία, παρακαλούμε να διαχωρίσετε αυτό το προϊόν από όλα δίκτυα αποκομιδής ώστε να διασφαλίσετε ότι είναι δυνατή η ανακύκλωσή του με έναν περιβαλλοντικά θεμιτό τρόπο. Για περισσότερες πληροφορίες σχετικά με τις διαθέσιμες δυνατότητες συλλογής απορριμμάτων, παρακαλούμε να επικοινωνήσετε με την τοπική κυβερνητική αρχή ή το κατάστημα λιανικής από οποιου αγοράσατε αυτό το προϊόν.

Türkçe

Ürününüzün üzerinde bulunan çarpı işaretli tekerlekli kutu etiketi, bu ürünün normal ev atık sistemi vasıtasisıyla elden çıkarılmaması gerektiğini gösterir. Çevreye ve insan sağlığına zarar vermeyecek şekilde geri dönüşümne tabi tutulmak üzere diğer atıklardan ayıran. Mevcut toplama tesisleri ile ilgili ayrıntılı bilgi edinmek için, yerel devlet makamlarıyla veya bu ürünü satın aldığıınız satıcıyla irtibata geçin.

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