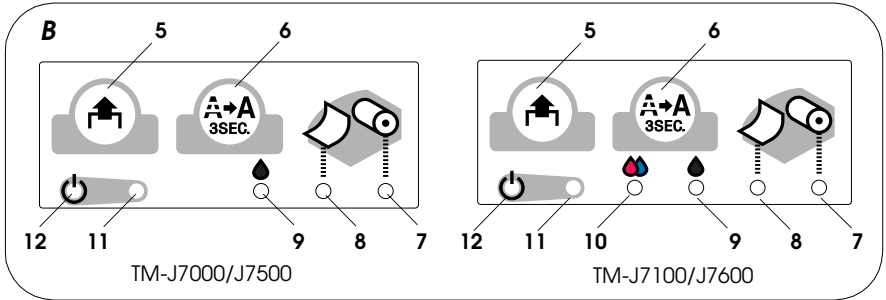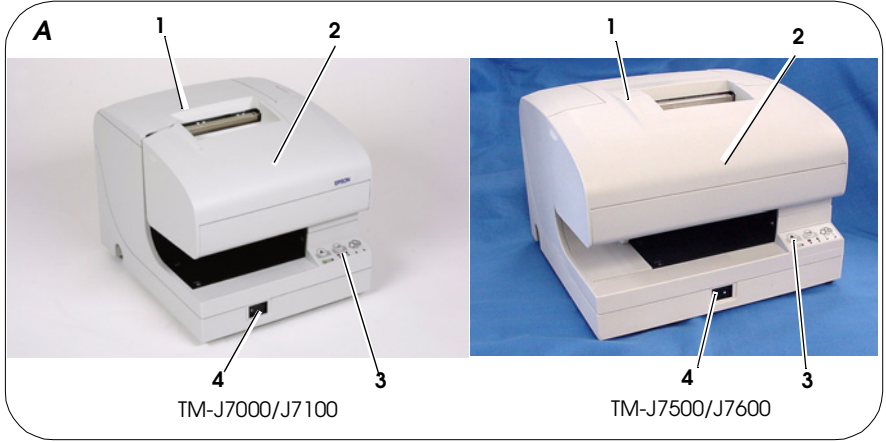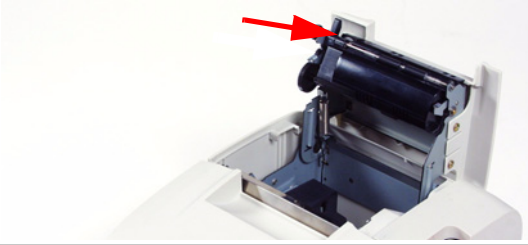# TM-J7000/J7100
TM-J7500/J7600

**User's Manual / Bedienungsanleitung
Gebruikershandleiding / Manuel d'utilisation
Manual do utilizador / Manual del usuario
Manuale dell'utente**

A

TM-J7000/J7100

TM-J7500/J7600

B

TM-J7000/J7500

TM-J7100/J7600

C

TM-J7000/J7100

TM-J7500/J7600

D

E

F

G

TM-J7000/J7100
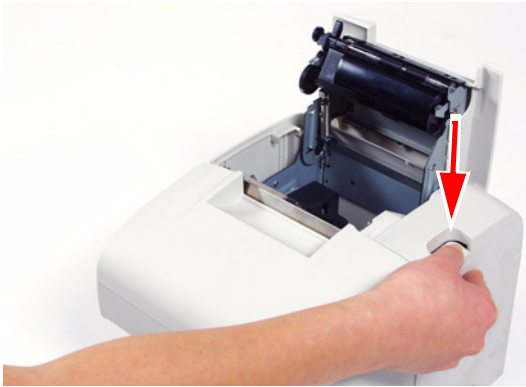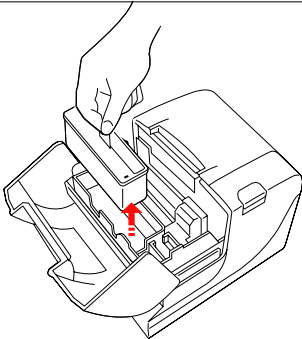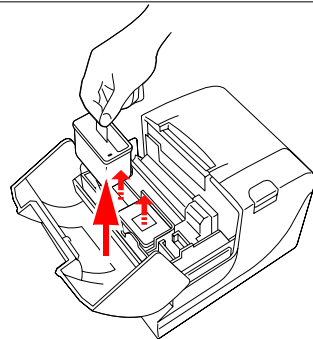
TM-J7500/J7600

H

TM-J7000/J7100

TM-J7500/J7600

I

TM-J7000/J7500

TM-J7100/J7600

J

PULL

K

TM-J7000/J7500   TM-J7100/J7600

L

TM-J7000/J7100

M

TM-J7500/J7600

300 mm {12"}   200 mm {8"}

150 mm {6"}

13

14   15
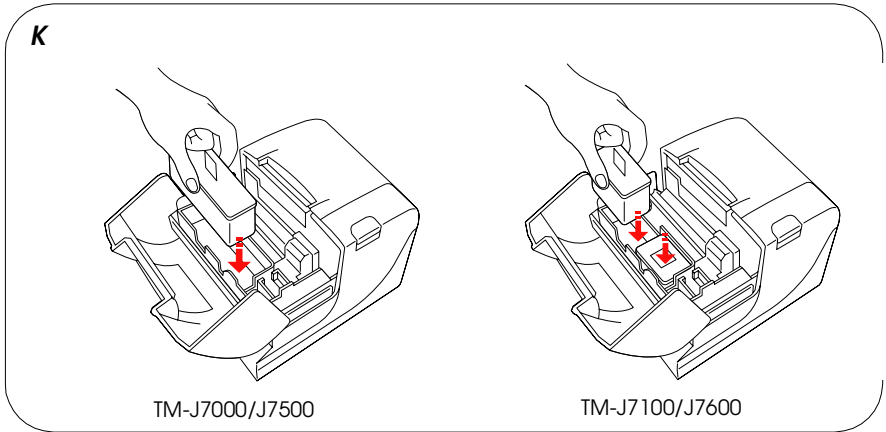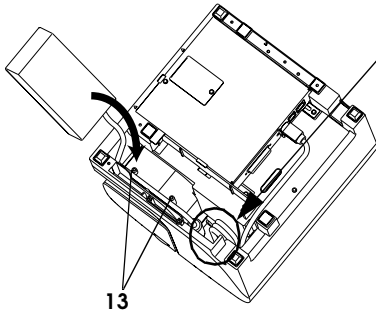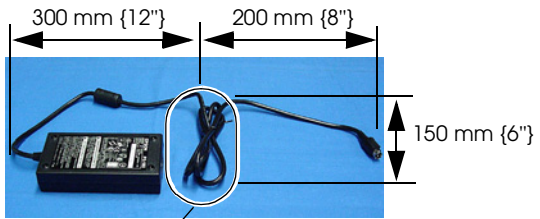
DIP Switch Tables

Serial

SW	Function	On	Off
1	Reserved	—	Fixed to Off
2	Interface condition selection	By the DIP switch	By the memory switch
3	Handshaking	XON/XOFF	DTR/DSR
4	Word length	7 bits	8 bits
5	Parity check	Yes	No
6	Parity selection	Even	Odd
7 8	Transmission speed selection (See Serial transmission speed table.)		

Serial transmission speed

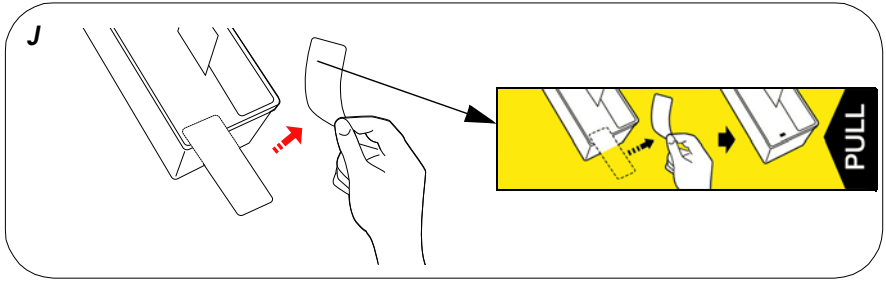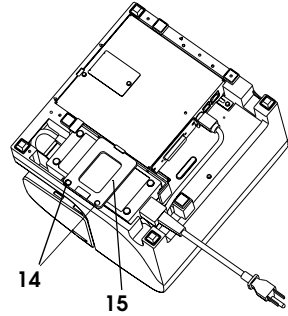| 1-7	1-8	Transmission speed
On	On	9600 bps
Off	On	19200 bps
On	Off	38400 bps
Off	Off	115200 bps

Parallel

SW	Function	On	Off
1-8	Reserved	Fixed to Off.	

TM-J7000/J7100, TM-J7500/J7600 Specifications

		Receipt	Slip	Endorsement (TM-J7000/J7100)
Print method		Serial inkjet Dot Matrix Method		
Print density		180 × 180 dpi		
Print font	Font (standard)	Font A: 12 × 24, Font B: 9 × 17		
	Column capacity (columns)	82.5 mm: 42/56 76 mm: 40/53 69.5 mm: 36/48 57.5 mm: 30/40	TM-J7000/J7100: 48/64 TM-J7500/J7600: 80/106	46/61
	Character size (W × H) (standard)	1.41 × 3.38 mm/0.99 × 2.40 mm (not including horizontal spacing)		
	Character set	95 Alphanumeric, 37 International, 128 × 11 Graphic		
	Characters per inch (standard)	Font A (12 × 24): 15 cpi, Font B (9 × 17): 20 cpi		
Paper	Dimensions (mm)	57.5 ± 0.5, 69.5 ± 0.5, 76 ± 0.5, 82.5 ± 0.5 Maximum outside diameter: 83 mm	68~230 (W) × 68~297 (L) (min. 68 ×152)	68~101.6 (W) × 150~223 (L)
	Thickness (mm)	0.06~0.09	0.09~0.2	0.09~0.13
Print speed (Economy, High speed mode)	Character (font B)	Paper width 76 mm: 14.3 lps	TM-J7000/J7100: 13.7 lps *	
			TM-J7500/J7600: 9.9 lps *	
	Graphic	Paper width 76 mm: 43 mm/s	TM-J7000/J7100: 40 mm/s *	
			TM-J7500/J7600: 29.1 mm/s *	
Bar code, Two-dimentional code		UPC-A, UPC-E, JAN13(EAN13), JAN8(EAN8), CODE39, CODE93, CODE128, ITF, CODABAR(NW7), PDF417		

*Full-column printing

		TM-J7000/J7100	TM-J7500/J7600
Interface		RS-232 or IEEE 1284 Dealer option: RS-485, USB, 10Base-T I/F	
Data buffer	Receive buffer	4 KB	
	User defined buffer	12 KB	
	User NV memory	384 KB (Max.)	
Ink cartridge	Color	Single color: Black SJIC8(K) (for TM-J7000 or TM-J7500 only) Two color: Black SJIC6(K) (for TM-J7100 or TM-J7600 only), Red SJIC7(R), Blue SJIC7(B), Green SJIC7(G)	
	Life	Single color: Approx. 20 million characters Two color: Approx. 15 million characters	
Power		24 VDC ± 10%	
Power consumption	Operating	Mean: Approx. 0.5 A	
	Stand-by	Approx. 70 mA	Approx. 80 mA
D.K.D. function		2 drives	
Reliability Life	Mechanism	Receipt: 15,000,000 lines, Slip: 5,000,000 lines	
	Print head	1600 million shots/nozzle	
	Autocutter	1,500,000 cuts	
Temperature /humidity	Printing	10~35°C {50~95°F} 20~80% RH Must be no condensation	
	Operating	5~40°C {41~104°F} 20~80% RH Must be no condensation	
	Storage	Ink installed: –20~40°C {–4~104°F} 20~85% RH Ink not installed: –20~60°C {–4~140°F} 5~85% RH Must be no condensation	
Overall dimensions (mm)		195 × 237 × 188 (W × D × H)	251 × 237 × 188 (W × D × H)
Mass (approx.)		4.4 kg (including the ink cartridge)	4.9 kg (including the ink cartridge)

dpi: dots per 25.4 mm (dots per inch)
lps: lines per second
cpi: characters per 25.4 mm (dots per inch)

TM-J7000/J7100
TM-J7500/J7600

User's Manual

DIP Switches and Specifications

The technical specifications and the information about the DIP switches are at the beginning of this manual.

Illustrations

All of the illustrations are at the beginning of this manual. They are identified by letters (A, B, C . . .). In the text the illustrations are referred to by these letters. ("See illustration *A*," for example.) Some of these illustrations have numbered arrows or lines pointing to parts of the illustration. See the list below for the meaning of the numbers.

Illustration *A*	Illustration *B*		Illustration *M*
1. Roll paper cover	**5.** PAPER FEED	**9.** INK OUT (Black)	**13.** Projections
2. Ink cartridge cover	**6.** CLEANING	**10.** INK OUT (Color)	**14.** Screws
3. Control panel	**7.** PAPER OUT	**11.** ERROR	**15.** Fixing plate
4. Power supply switch	**8.** CUT SHEET	**12.** POWER	

EMC and Safety Standards Applied

Product Name: TM-J7000/TM-J7100,
TM-J7500/TM-J7600
Model Name: M184A, M184B

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

Europe: CE marking
Safety: TÜV (EN 60950)

North America: EMI: FCC/ICES-003 Class A
Safety: UL 60950/CSA C22.2
No. 60950

Japan: EMI: VCCI Class A

Oceania: EMC: AS/NZS 3548 Class B

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

Only for TM-J7000/J7100 IEC 61000-4-8
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.

Important Safety Information

This section presents important information intended to ensure safe and effective use of this product. Read this section carefully and store it in an accessible location.

Key to Symbols

The symbols in this manual are identified by their level of importance, as defined below. Read the following carefully before handling the product.

⚠ WARNING:

Warnings must be followed carefully to avoid serious bodily injury.

⚠ CAUTION:

Cautions must be observed to avoid minor injury to yourself or damage to your equipment.

Safety Precautions

⚠ WARNING:

Shut down your equipment immediately if it produces smoke, a strange odor, or unusual noise. Continued use may lead to fire. Immediately unplug the equipment and contact your dealer or a Seiko Epson service center for advice.

Never attempt to repair this product yourself. Improper repair work can be dangerous.

Never disassemble or modify this product. Tampering with this product may result in injury or fire.

Be sure to use the specified power source. Connection to an improper power source may cause fire.

Do not allow foreign matter to fall into the equipment. Penetration by foreign objects may lead to fire.

If water or other liquid spills into this equipment, do not continue to use it. Continued use may lead to fire. Unplug the power cord immediately and contact your dealer or a Seiko Epson service center for advice.

⚠ CAUTION:

Do not connect cables in ways other than those mentioned in this manual. Different connections may cause equipment damage and burning.

Be sure to set this equipment on a firm, stable, horizontal surface. Product may break or cause injury if it falls.

Do not use in locations subject to high humidity or dust levels. Excessive humidity and dust may cause equipment damage or fire.

Do not place heavy objects on top of this product. Never stand or lean on this product. Equipment may fall or collapse, causing breakage and possible injury.

To ensure safety, unplug this product before leaving it unused for an extended period.

Before moving the product, unplug it and unplug all cables connected to it.

If ink leaks out of the printer, wipe up the ink with a cloth or similar material immediately and contact your dealer or a Seiko Epson service center for advice.

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

Safety Label

⚠ WARNING:

Do not connect a telephone line to the drawer kick out connector or to the display module connector; otherwise, the printer and the telephone line may be damaged.

Notes on Usage

❏ When using the printer, be sure that the printer is installed horizontally.
❏ Do not install the printer in a dusty place.
❏ Protect the printer from impact.
❏ Cords or other foreign objects must not be caught on the printer.
❏ Do not apply excessive force to the printer case.
❏ Do not place food or beverages such as coffee on the case of the printer.

Purpose of This Manual

This manual provides information to operators of the TM-J7000/J7100 and TM-J7500/J7600 printers to describe basic operations to enable safe and correct use of the printer.

Transporting

To transport this printer, follow these steps:
1. Remove the roll paper and ink cartridge.
2. Turn off the power supply.
3. Check that the POWER LED is off.
4. Remove the power supply connector and other connectors.

Keep the printer upright and horizontal while you pack it and during transporting.

Be sure not to ship the ink cartridge that has been removed from the packing.

Unpacking

The following items are included for the standard specification printer. If any item is damaged, contact your dealer.
❏ Printer
❏ Roll paper
❏ Ink cartridge
❏ Power switch cover
❏ Fixing plate for AC adapter and screws (only for the TM-J7500/J7600)
❏ Instruction sheet

Peel away the 3 pieces of tape on the printer and remove the spacer from the slip paper path after unpacking.

Downloading Drivers, Utilities, and Manuals

Drivers, utilities, and manuals can be downloaded from one of the following URLs.

For customers in North America, go to the following web site: http://www.epsonexpert.com/ and follow the on-screen instructions.

For customers in other countries, go to the following web site: http://www.epson-pos.com/

Select the product name from the "Select any product" pulldown menu.

Control Panel (LEDs and Buttons)

See illustration *B*.

LEDs
POWER

Lights when the power is on and is off when the power is off; flashes during cleaning and other operations such as power-on and power-off.

Note:
Never open the printer cover or turn off the printer when the POWER *LED is flashing.*

ERROR

Lights when the printer is offline (when the ink cartridge is removed because the ink is out, the roll paper is at the end, or the printer cover is open.) Off when the printer is online. Flashes when an error occurs. (See the Troubleshooting section.)

INK OUT

Lights when the ink cartridge is not installed or ink is out. The ink cartridge needs to be replaced. Off when the ink cartridge is installed and ink is adequate. Flashes when the ink is nearly out. The TM-J7100 and TM-J7600 have two INK OUT LEDs, one for the color cartridge and one for the black cartridge.

CUT SHEET

Lights when cut sheet (slip, check) is selected as print sheet. Off when roll paper is selected as print sheet. Flashes when the printer is in the cut sheet insertion or removal waiting state.

PAPER OUT

Lights when roll paper is out or nearly out.

Buttons
PAPER FEED

PAPER FEED feeds the roll paper or the cut sheet.

Note:
Paper cannot be fed using this button in the following cases:

- *The printer cover is open.*
- *Printer is in the cut sheet insertion or removal state.*
- *When head cleaning is being performed or an error has occurred with any sheet selected.*
- *When check is selected as print sheet.*

CLEANING

If printing becomes faint or uneven and the INK OUT LED is not on or flashing, use this button to clean the print head. Press the button more than 3 seconds. When the cleaning stops, the printer is ready for normal printing.

Note:
Do not use the CLEANING *button unless there is a problem with print quality. Unnecessary cleaning will waste ink.*

Power Switch and Power Switch Cover

The power switch is on the front of the printer. Press the power switch to turn on the printer.

To maintain print quality (by capping the print head), be sure to follow these instructions for turning off the power: Wait at least 8 seconds after printing on roll paper or after removing a cut sheet; then turn off the power switch.

Note:
Never open the printer cover or turn off the printer when the POWER *LED is flashing.*

Power Switch Cover

You can use the enclosed power switch cover to make sure that the power switch is not accidentally pressed. Just press the cover into place to install it. If you need to turn the power switch on or off with the cover attached, you can insert a thin tool into one of the holes in the cover to operate the switch. See illustration *C*.

⚠ WARNING:

If an accident occurs when the power switch cover is attached, immediately unplug the power supply cable to avoid fire.

If you are going to store the printer or leave it unused for a long time, turn it off using the power switch on the printer.

Installing or Replacing Roll Paper

⚠ CAUTION:

Be careful not to insert your fingers into the paper exit. The cutter blade is installed inside the paper exit and you might be injured.

See illustration *D*.

⚠ CAUTION:

Be sure to use roll paper that meets the specifications.

Follow these steps to install or replace paper:
1. Make sure the printer is on.
2. Open the roll paper cover by pressing the cover open button. See illustration *E*.
3. Remove the used roll paper core if there is one.
4. Put the roll paper inside the printer in the correct direction, as shown in illustration *F*.
5. Pull out the leading edge of the roll paper; then close the roll paper cover until it is firmly locked by pushing the top of the cover.
6. The printer will automatically feed the roll paper to remove any slack in the paper.

Note:
Do not open the roll paper cover during printing or paper feeding.

Inserting Slip Paper

Note:

Be sure the paper is flat, without curls, folds, or wrinkles.

Use only single sheet paper. Do not insert any multiple sheet paper, as this may cause a paper jam.

Because the printer is an inkjet printer, pressure sensitive copy paper cannot be used.

To prevent jams, roll paper must be installed even for printing on slip paper.

Be sure to insert a slip with the right side of the paper against the right side of the paper guide as far as it will go, as shown in illustration *G*. See the label instructions attached to the printer as a guide.

Installing or Replacing an Ink Cartridge

⚠ CAUTION:

Usage:

Do not disassemble the cartridge. The ink can permanently stain clothing.

Do not refill ink cartridges. Spills can result, causing damage to the printer.

Do not remove the cartridge except to replace it or to prepare the printer for shipment. Otherwise, ink may be wasted and the life of the ink cartridge may be reduced.

For good printing quality, do not remove the ink cartridge from its packing until immediately before installing it.

Use up the ink cartridge within 6 months after unpacking it.

The expiration date is indicated on the cartridge box or the ink cartridge itself.

Print quality problems may occur if an ink cartridge that is almost empty (the INK OUT LED flashes) is removed and reinstalled.

A used cartridge may have some ink on the convex part of the bottom of the cartridge. Avoid touching that part to keep your hands clean.

Do not puncture the convex part of the bottom of the ink cartridge or remove the transparent film on the bottom of the ink cartridge; otherwise the ink might leak.

Once the ink cartridge is used, the ink supply needle (plastic projection) in the ink cartridge holder that supplies ink to the printer is covered with ink. Avoid touching the cartridge holder to keep your hands clean.

Use Seiko Epson specified ink cartridges. Performance of the printer when other ink cartridges are used is not guaranteed.

Do not open or close the ink cartridge cover during printing. Misalignment of the print position will occur.

Storage:

Keep the ink cartridge out of the reach of children. Do not drink the ink.

Do not store the ink cartridge where it will be subject to high temperatures or freezing.

When the INK OUT LED flashes, it is almost time to change the ink cartridge. Change the cartridge as soon as it is convenient. When the INK OUT LED is on, printing stops and you must change the cartridge.

The TM-J7100 and TM-J7600 have two separate cartridges, one each for black and colored ink (either red, green, or blue). Therefore, the TM-J7100 and TM-J7600 have two INK OUT LEDs, one for the black and one for the color.

Follow these steps to install an ink cartridge for the first time or to replace an empty ink cartridge.

1. Make sure the printer is on. If it is not on, plug in the power supply cable and turn on the power using the switch on the front of the printer.
2. Make sure an INK OUT LED is on or flashing. When using two colors, notice which ink cartridge INK OUT LED is on or flashing; this indicates which cartridge is empty.
3. Be sure that roll paper is installed.
4. Open the ink cartridge cover using the tabs on the sides of the cover. See illustration *H*.
5. Lift up the empty ink cartridge by using the tab. See illustration *I*.

⚠ *CAUTION:*

Do not put your fingers inside the ink cartridge compartment or you may be injured by a plastic projection.

Once the ink cartridge is used, the ink supply needle (plastic projection) in the ink cartridge holder that supplies ink to the printer is covered with ink. Avoid touching the cartridge holder to keep your hands clean.

6. Take a new ink cartridge out of its packing and remove the yellow tape. See illustration *J*.

⚠ *CAUTION:*

You must not remove any tape on which the EPSON logo is printed.

7. Carefully insert a new ink cartridge from the top and push it firmly but gently until it clicks into place. Be sure the inserting direction is correct, as shown in illustration *K*.
8. Close the ink cartridge cover completely.

Note:
The INK OUT *LED will now be off.*

The POWER LED flashes for approximately 1 minute as the ink delivery system is charged. To save ink, this sequence will not be executed every time you replace an ink cartridge. The time to execute the sequence is controlled by the printer.

Note:
Do not turn off the power while the POWER *LED is flashing. This will waste ink because the printer has to re-start the ink charging process. Be sure not to open the printer cover while the* POWER *LED is flashing.*

When the POWER LED quits flashing and stays on, the printer is ready for printing.

Disposal of Used Cartridges

Dispose of used ink cartridges as industrial waste products. Observe the laws and regulations of your country and district.

Ink Cartridge Life

To make your ink cartridges last as long as possible, follow these simple rules:

❏ Do not turn off the power supply switch immediately after printing is completed.
❏ Do not remove an ink cartridge unless you are replacing the cartridge.
❏ Do not turn the printer on and off unnecessarily.
❏ Do not press the CLEANING button unless the print is faint or uneven.

Troubleshooting

ERROR LED is flashing or lit

❏ The print head temperature may be high or low. Wait until the print head cools or warms and the printer resumes printing automatically.
❏ Make sure that the printer cover is properly closed.
❏ If a paper jam has occurred, open the roll paper cover or the ink cartridge cover and remove the jammed paper. Do not pull the jammed paper by force or use tools. Be sure to remove it manually.
❏ Turn off the power, wait several seconds, and then turn it on again. If the error remains, contact your supervisor or a qualified service person.

Cleaning

If printing becomes faint or uneven and the INK OUT LED is not on or flashing, press the CLEANING button until the printer mechanism begins to clean the print head (more than 3 seconds). The POWER LED flashes during cleaning. When the cleaning stops, the printer is ready for normal printing.

Note:
Do not use the CLEANING *button unless there is a problem with print quality. Unnecessary cleaning will waste ink.*

Do not turn off the power or open any covers while the POWER *LED is flashing. If you turn off the power during cleaning and turn on the printer again, a noise will occur due to a carriage movement, but this is not a problem with the mechanism. Please be sure to wait until the cleaning is complete (the* POWER *LED is off.)*

Message for Replacing Mechanical Unit

The following message will be printed every time the printer is turned on when the pump unit is near the end of its life. Please follow the instructions in the message.

```
Caution: The pump unit must be replaced.
Contact a qualified service person.
```

MICR Reading (Factory installed option only for the TM-J7000/J7100)

⚠ CAUTION:

Do not insert checks with staples in them. This may cause paper jams, MICR reading errors, and damage to the MICR head.

Never open the roll paper cover while the MICR reader is being used.

Be sure the checks are flat, without curls, folds, or wrinkles.

Do not use multipart checks.

1. Wait until the CUT SHEET LED flashes. Then insert the check *face up* with the right side of the check against the right side of the paper guide as far as it will go. Be sure that the MICR characters are on the right, as shown by the arrow in illustration *L*.
2. The printer will detect the check and start drawing it in. When the printer starts drawing it in, let go of the check immediately. When the printer ejects the check and the CUT SHEET LED starts flashing again; remove the check by pulling it straight up; do not pull it at an angle.

Cleaning the MICR Mechanism

Approximately every 12 months clean the MICR head with a moistened cleaning sheet.

Use the following or an equivalent commercially available cleaning sheet:

PRESAT brand (KIC) "CHECK READER CLEANING CARD."

Note:
Be sure not to use an adhesive cleaning sheet.

Follow the steps below:

1. Load roll paper in the printer; turn off the power; then open the roll paper cover and turn the power back on while holding down the CLEANING button.
2. Press the CLEANING button 7 times; then close the paper roll cover. The printer prints the following message on the roll paper and the CUT SHEET LED flashes.

```
****    RECOGNITION MODE    ****
          Please set check.
```

3. Insert the cleaning sheet like a standard check.

⚠ CAUTION:

Be sure that the sheet is inserted with the correct side up and that it is inserted in the correct direction.

Use a cleaning sheet only one time; then discard it.

Notes on using the MICR reader

Do not install the printer near any magnetic fields. Be especially careful where you install your display device and be sure to check the recognition rate of the MICR reader with the display device in place.

Make sure that the printer is not subjected to any impact or vibration when it is performing a MICR reading.

Attaching the Fixing Plate for AC Adapter (only for the TM-J7500/J7600)

Refer to illustration *M* as you follow these steps. The bold numbers refer to the numbers in the illustration.

1. Loop the middle of the power cord as shown in the illustration. (The measurements are only approximate; use them as a guide.)
2. Put the looped part of the power cord inside the printer in the location indicated by the circle.
3. Arrange the power cord beside the two projections (**13**) on the bottom of the printer to hold it in place; then place the power supply into the printer with the label side face up.
4. Attach the fixing plate (**15**) and tighten the screws (**14**).

Notes:
When integrating the AC adapter in the printer, be sure to carry out the following.

- *Be sure to use AC adapter PS-180 (Model name: M159A).*
- *Use a straight plug for the AC inlet side of the power cable, if possible. If you do use an L-shaped plug, install the printer near the power outlet and be sure that the plug can be easily disconnected.*
- *Be sure to read the information on the label of the AC adapter (rating, Warning/ Cautions) thoroughly and understand it well before you integrate the AC adapter into the printer unit.*

EPSON Ecology Label

This product is in compliance with the EPSON ecology label requirements. Please see the following link for detailed information on label criteria. (http:// www.epson.co.jp/e/)