

# Safety precautions

This chapter describes safety measures in using the printer.

Please read carefully before using the printer.

## ▲About the pictograms

This instruction manual uses various pictograms so that you can operate the printer safely, and prevent damage or injury. The indications and meanings are as follows. Please understand the description before reading the instruction.



### Warning

It indicates a case where neglecting this indication and erroneous use may lead to death or serious injuries.



### Caution

It indicates a case where neglecting this indication and erroneous use may lead to injuries or only to property damage.

## Examples of the indications



The △ sign means “what to be careful about.” Specific point to be careful about is described in the sign (the sign on the left cautions for electric shock).



This ⊘ sign means “what must not be done.” The specific prohibited point is described in or near the sign (the sign on the left prohibits disassembly).



The ● sign means “what must be done.” The specific point to heed is described in the sign (the sign on the left tells you to pull out the plug from the outlet).

## ⚠ Warning

### ■ Do not put it in an unstable place



- Do not put it in unstable places such as shaky table, slanting or vibrating place. It may cause the equipment to drop or fall, leading to injuries.

### ■ Do not put containers holding water, etc.



- Do not put containers such as a vase or glass, holding water or chemicals, or small metals around the printer. In case water should be spilled or a metal should fall inside, immediately turn off the power, pull out the plug of the power cable from the outlet, and contact a sales outlet, dealer, or service center. In this case, continued use of the printer may cause a fire or electric shocks..



### ■ Do not put foreign objects inside



- Do not insert or drop anything metallic or flammable into the openings of the printer (the cable outlet or mounting hole of the memory cartridge). In case a foreign object should get inside, immediately turn off the power, pull out the plug of the power cable from the outlet, and contact a sales outlet, dealer, or service center. In this case, continued use of the printer may cause a fire or electric shocks.



### ■ Use it only in the specified voltage



- Do not use any other voltage but the specified power voltage (AC240V). Otherwise, it may cause a fire or electric shocks.

## ⚠ Warning

### ■ Be sure to ground



- Be sure to connect the ground cable to the ground of the printer. If the ground cable is not connected, the printer may cause electric shocks.



### ■ How to handle the power cable



- Do not damage, break, or process the power cable. Also, putting heavy objects on it, heating or pulling it may damage the power cable and cause a fire or electric shocks.



- When the power cable is damaged (exposure of cable conductors, disconnection, etc.), contact a sales outlet, dealer, or service center. In this case, continued use of the printer may cause a fire or electric shocks.



- Do not process, forcibly bend, twist, or pull the power cable. If you keep using it, it may cause a fire or electric shocks.

### ■ When it is dropped or damaged



- When the printer is dropped or damaged, immediately turn off the power, pull out the plug of the power cable from the outlet, and contact a sales outlet, dealer, or service center. In this case, continued use of the printer may cause a fire or electric shocks.



### ■ Do not use the printer when it is in trouble



- If abnormality such as smoke or peculiar smell from the printer should occur, continued use of the printer may cause a fire or electric shocks. Immediately turn off the power, pull out the plug of the power cable from the outlet, and seek service from a sales outlet, dealer or service center. Customers should never try to fix it on their own, because it is dangerous.



### ■ Do not disassemble it



- Do not disassemble or alter the printer. It may cause a fire or electric shocks. Ask a sales outlet, dealer, or service center for checking, adjusting, or repairing the inside of the printer.



### ■ Cutter



- Do not insert a hand or objects to the cutter. It may cause injuries.

### ■ Handling head cleaning liquid



- The head cleaning liquid is flammable. Never heat it or throw it in fire.

- Keep it out of children's reach to avoid accidental consumption. Should this occur, consult a doctor immediately.



## ⚠ Caution

### ■ Avoid humid storage areas



- Do not put the printer in a humid or condensing place. If condensation forms, immediately turn off the power, and do not use it until the condensation disappears. If you use it with condensation, it may cause electric shocks.

### ■ When moving the printer



- When moving the printer, be sure to pull out the plug of the power cable from the outlet, and check that the external cable has been disconnected. Moving the printer with the cable connected may damage the cables, and cause a fire or electric shocks.



- Do not move the printer with the paper set. The paper may fall, leading to injuries.
- When putting the printer on the floor or a table, be careful not to catch your foot or fingers under the printer.



## ⚠ Caution

### ■ Power supply



- Do not operate the power switch or handle the power cable with a wet hand. Operating or handling with a wet hand may cause electric shocks.

### ■ Power cable



- Do not put heating equipment close to the power cable. Otherwise, the coating of the power cable may melt and cause a fire or electric shocks.



- When pulling out the power cable from the outlet, be sure to hold the plug. Pulling it out by holding the power cable may result in exposure of the cable conductor or disconnection, and cause a fire or electric shocks.

### ■ Cover



- When opening/closing the cover, beware of getting your fingers caught. Also, hold the opening/closing cover well so that it may not slip and fall.

### ■ Printer head



- After printing, the printer head is hot. When replacing paper or cleaning immediately after printing, be careful not to burn yourself.
- Touching the edge of the printer head may cause injuries. When replacing paper or cleaning, be careful not to hurt yourself.
- Beware of injuries, burn injuries, or electric shocks when replacing the printer head.



### ■ Opening/closing the printer head



- When opening/closing the printer head, be careful not to catch any other foreign objects but paper. It may cause injuries or damage to the printer.

### ■ Setting the paper



- When setting the roll paper, be careful not to catch your fingers between the paper and the feed.



- Be careful not to hurt yourself when detaching the back cover of the fanfold through hole and attaching it.

### ■ Simplified cutter



- Simplified cutter is structured as a blade. Be careful not to cut yourself.

### ■ During extended periods of non usage



- If the printer is not used for extended periods of time, disconnect the power cable for safety.

### ■ Maintaining/cleaning



- When maintaining or cleaning the printer, first disconnect the power cable for safety.

## Caution

Reproduction of a part or the whole of this manual without permission is prohibited.

- (1) The content of this manual may be changed without prior notice.
- (2) The content of this manual has been prepared with utmost care, but if you find any suspicious points, errors, or omissions, please contact the sales outlet or dealer from which you bought the product.
- (3) This equipment is a Class B information technology equipment based on the standards of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). Although this equipment is for use in home environment, if it is used close to a radio or television set, it may cause poor reception.
- (4) Handle it properly in accordance with the content from the instruction manual.

# Notes on installation and handling

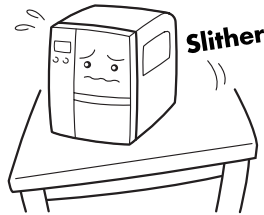
When installing and handling the printer, note the following points.

## ▲Installation Tips

When installing this product, note the following points.

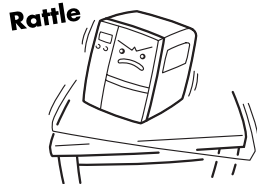
### Place the printer in a level place

If installed in a rough or slanting place, quality printing will not be available. It may cause malfunction and shorten the life of the printer.



### Use a stable platform

Use a stable platform. Also, do not carry the printer with the roll paper set, and do not rock the printer.



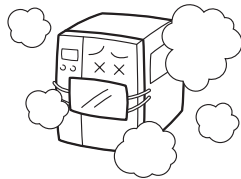
### Avoid high heat and humidity

Do not install it in a place where it is high in temperature and humidity. High temperature and humidity may cause malfunction.



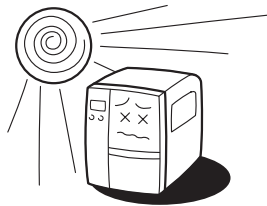
### Avoid dust

Dust may deteriorate the quality of printing. It may not only cause malfunction but shorten the life of the printer.



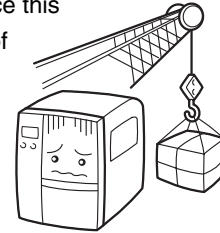
### Avoid direct sunlight

Since this product is installed with optical sensors, direct sunlight may cause erroneous operation. Ensure that the cover is closed when printing.



## Do not place it near cranes or compressors

Equipment using large capacity of electricity, such as cranes and pressing machines, may cause electric noise or undervoltage. Since it may cause malfunction, do not place this product near that kind of equipment.



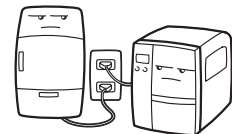
## ▲Power supply

This product requires the alternator of AC240V.



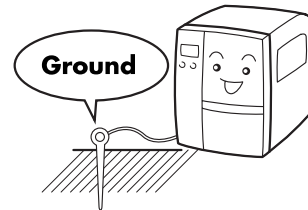
## Supply electricity from the source

Do not supply electricity from the same power source as electric appliances, which consume a lot of power, such as a heater or refrigerator, or a power source nearby. It may cause malfunction due to undervoltage of the power supply.



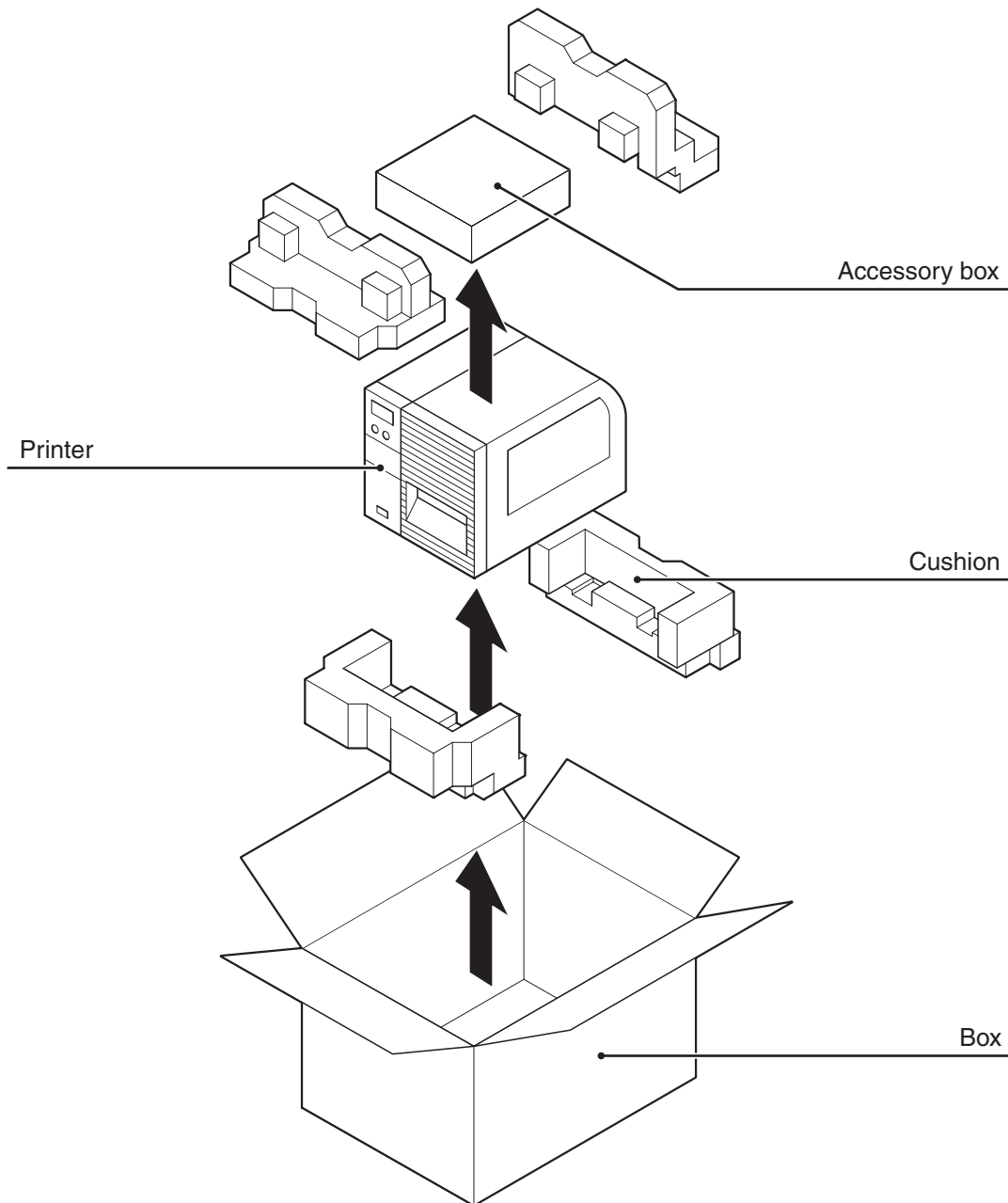
## Always connect the ground cable

If there is not a grounding facility, please have it installed.



# Unpacking the printer

This section describes the contents of the product.  
First, unpack the printer and check the contents.

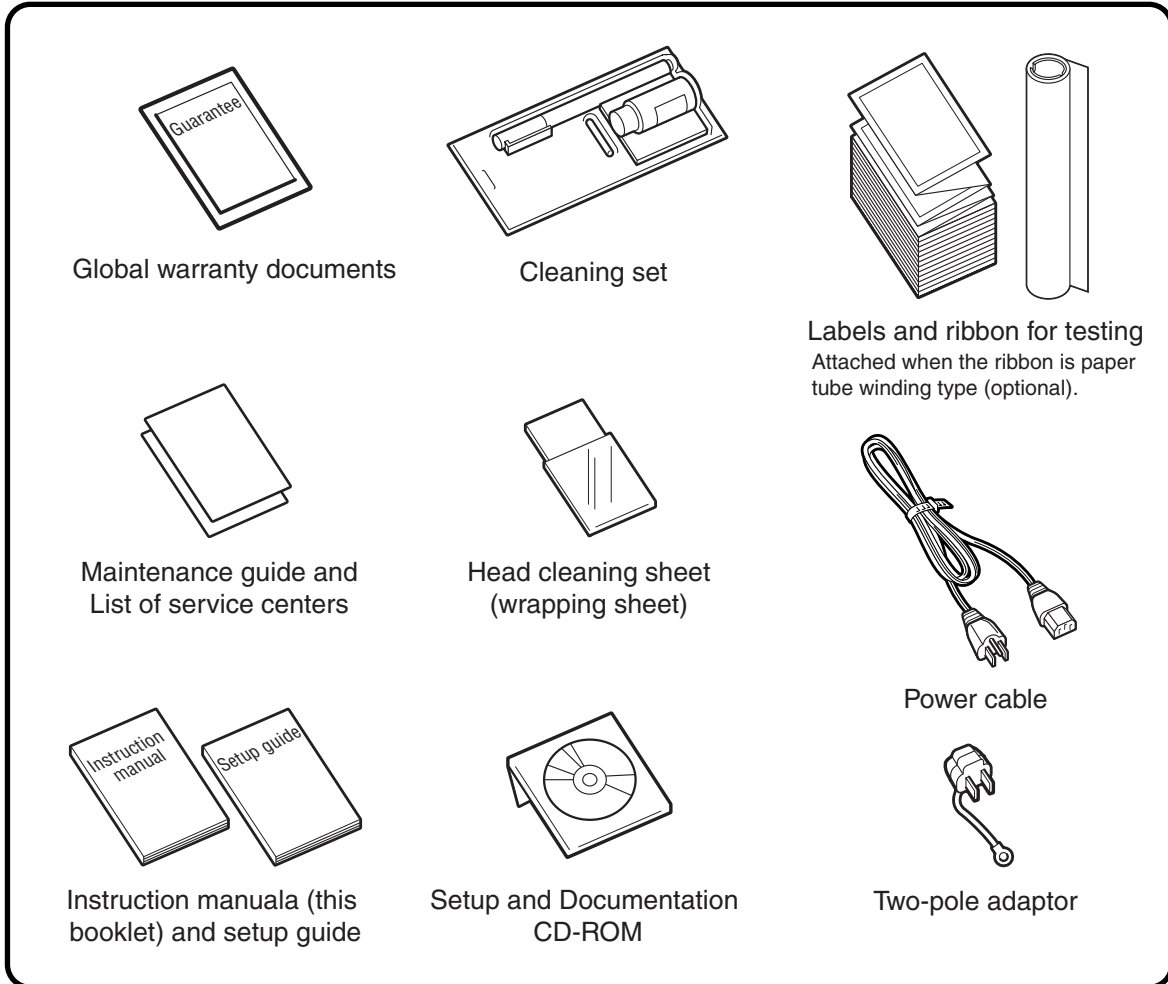


\* The shape of cushioning material (cushion holding the printer) may be different.

## Included Accessories

When opening the box, check if the following accessories are complete.

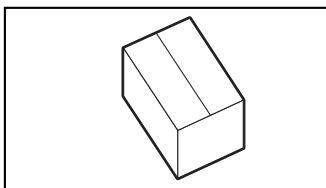
If there is anything lacking, please inquire the sales outlet or dealer you bought the product from.



### ▲ Keep the warranty and the box



For malfunction under normal use, this product will be repaired free of charge for six months from the date of delivery. When requesting repairs, user registration by the attached warranty is required. Keep the warranty carefully. Please note that we will charge for repairs, if lost.



Additionally, please retain the printer packing box and cushioning material. You will be required to package this product in this box when you ask us for a repair.

# Names of various parts

## ▲Printer main body

### Operation panel

There are a display to show messages, two buttons for operation, and five LEDs showing the condition of the printer.

### Power switch

Used to turn on/off the power. Pushing the I side turns on the power, and pushing the O side turns off the power.



Main cover

### Operation panel cover

There are various operation buttons, adjusting volumes, etc. inside.

Front cover

Main cover

Ribbon take-up reel

Head pressure adjustment knob

Front cover

Ribbon feeder

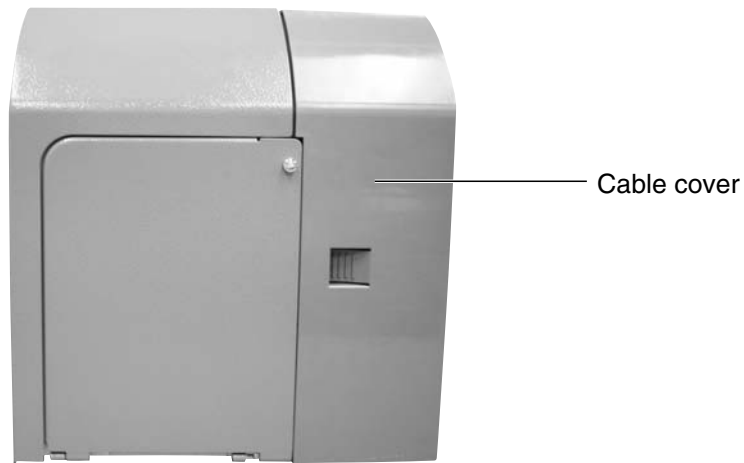
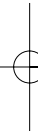
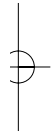
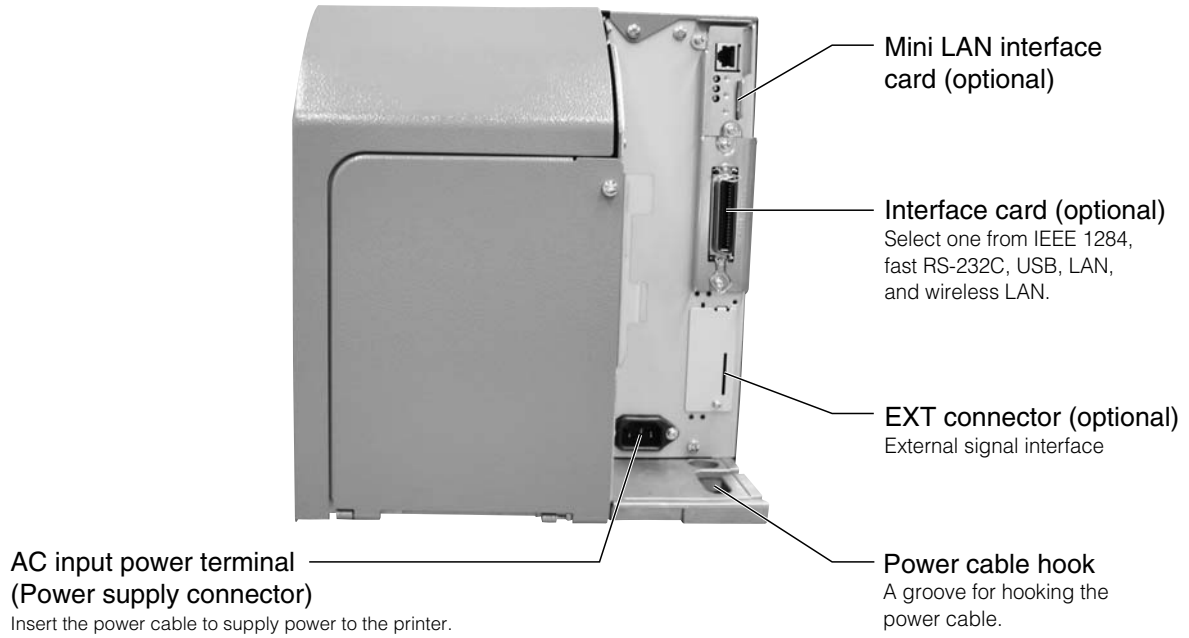
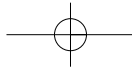
Roll paper feeder

Roll guide lever

Roll guide

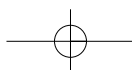
Head close lever

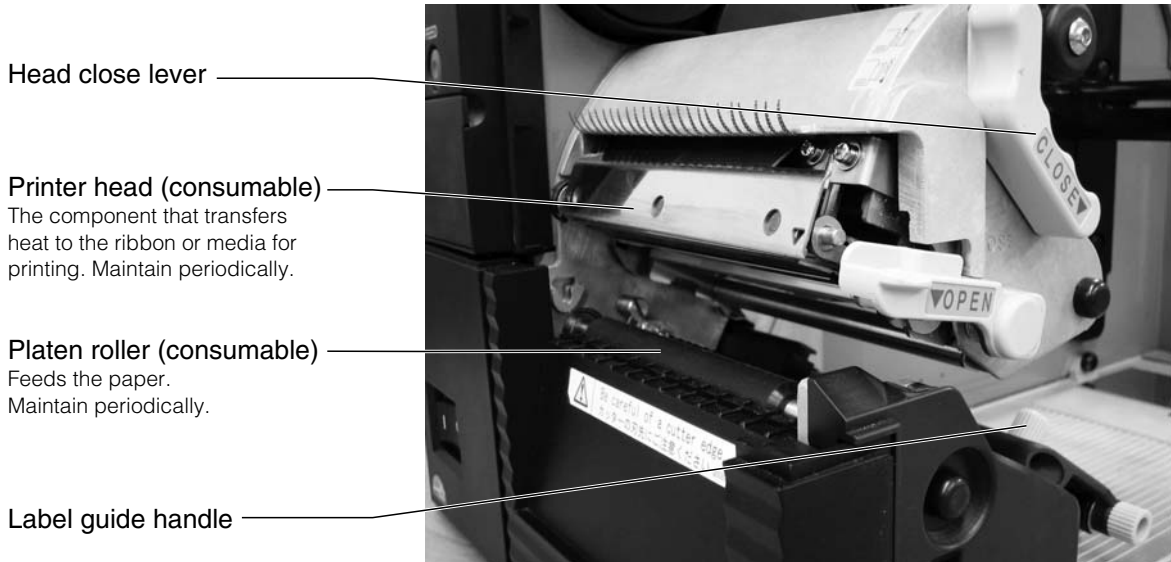
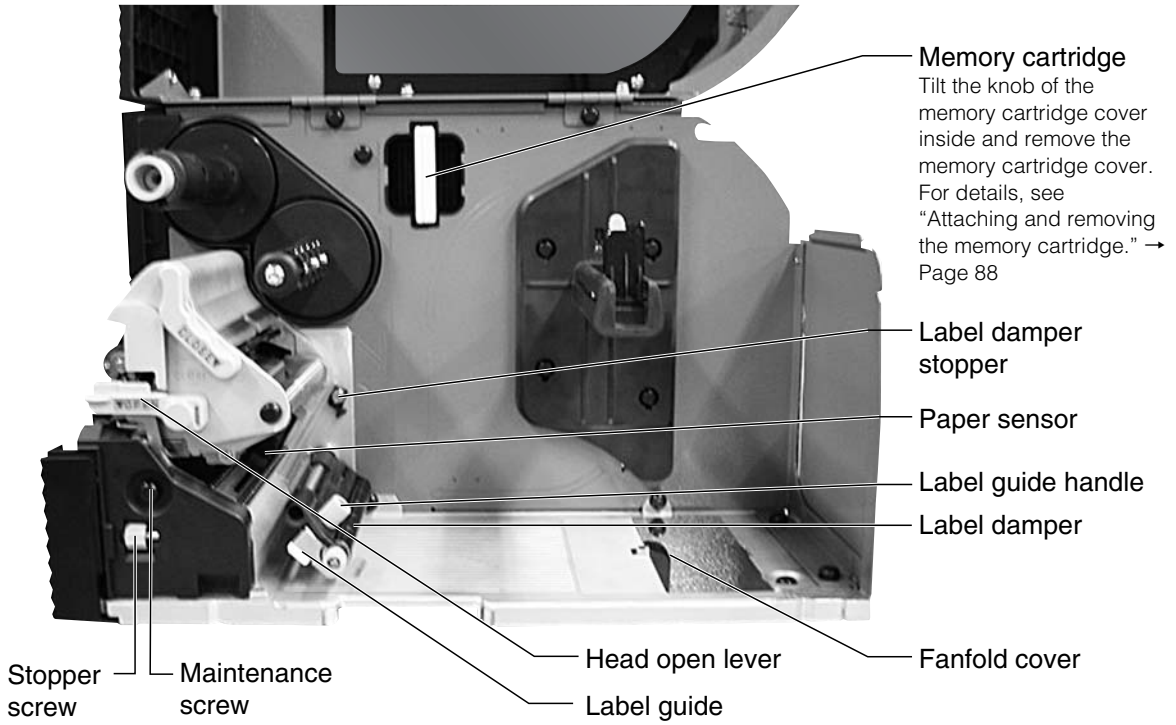
Head open lever

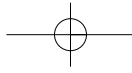


**How to remove the cable cover**

Press the catch of the cable cover, slide it sideways, and remove.

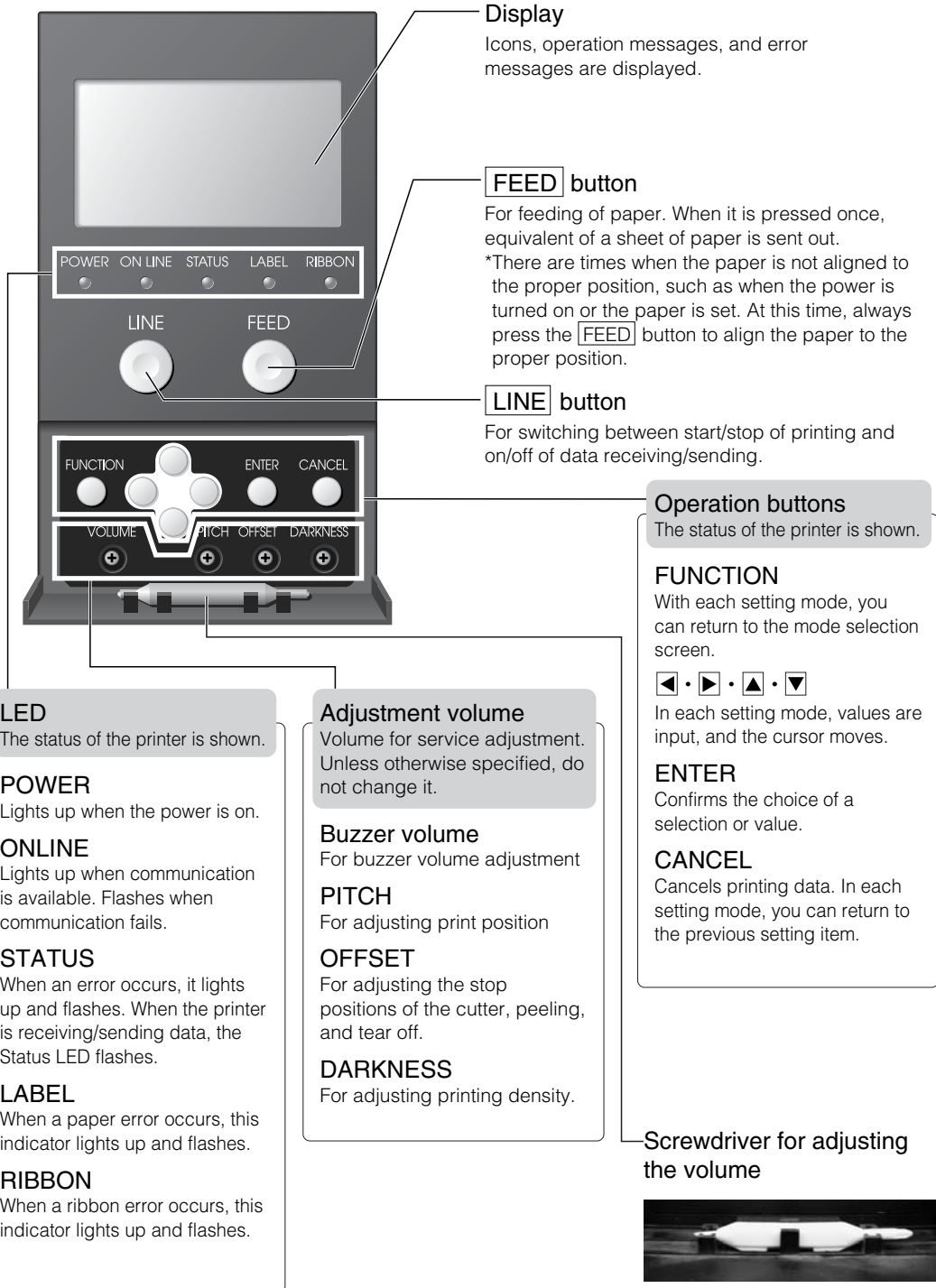


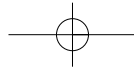




## ▲Operation panel

Icons, operation messages, and error messages are displayed.





# Setting the paper

This printer can print on roll paper and fanfold paper.

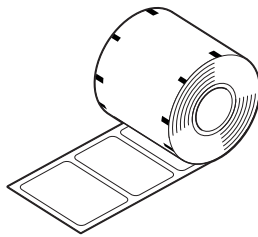
The method of setting paper is different with roll paper and fanfold paper.

This printer provides appropriate printing by detecting the I-mark.

For printing with this printer, please use our products.

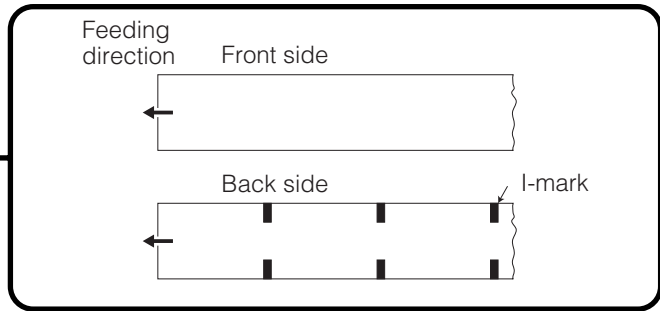
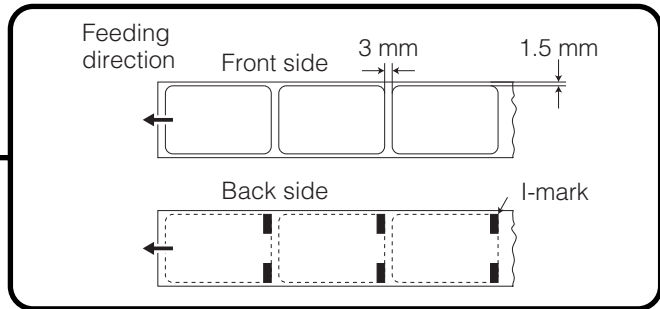
Do not use other paper than the international standards.

## Roll paper

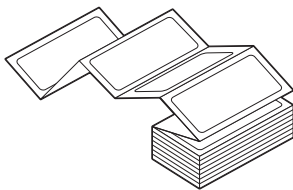


Label

Cardboard

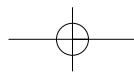
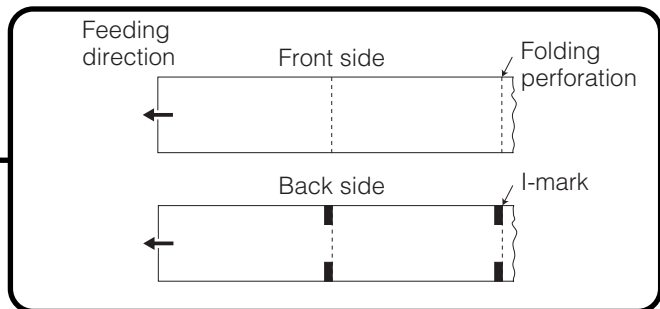
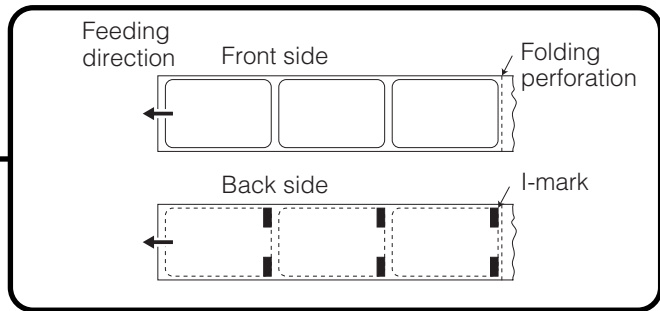


## Fanfold paper



Label

Cardboard



## Setting roll paper

**1**

Lift up the main cover.



Main cover



### Caution

When opening the main cover, open it fully to the top so that it will not close after it is opened half way.

**2**

Lower the head-open lever (purple)(▼).  
The printer head will open.

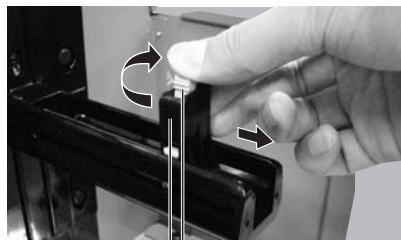


Printer head

Head-open lever (purple)

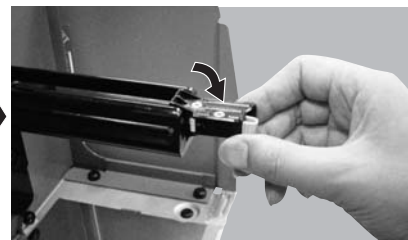
**3**

As you pull down the roll guide lever, move the roll guide to the edge, and tilt it. Set the paper to the roll paper feeder. Raise the roll guide and adjust it so that the roll will not move.



Roll guide

Roll guide lever

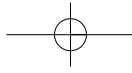


Roll paper feeder

Roll guide



Roll guide lever



**4** Loosen the label guide knob and set it forward.  
Pull up the label damper.

Labels: Label guide knob, Label damper

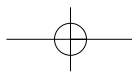
Labels: Label damper

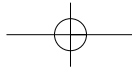
**5** Pass the paper under the label guide and paper sensor.  
When the knob of the label damper is pulled forward, the label damper will return to the original position.

Labels: Paper sensor, Label guide, Label damper

**Caution**

- Immediately after printing, the printer head and the surrounding area are hot. When you replace the paper immediately after printing, be careful not to burn yourself.
- If you touch the edge of the printer head with bare hands, you may be injured.





**6** Loosen the label guide knob, and adjust the slide guide so that it lightly touches the edge of the paper, and fasten the label guide knob tightly.

Label guide knob      Label guide

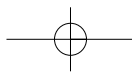
**7** Turn the head close lever (purple / CLOSE ▼) in the direction of the arrow, and close the printer head. Close the printer head tightly until it locks.

Printer head      Head close lever

**8** Close the main cover.

**!** **Caution**

- When closing the main cover, be careful not to have your fingers caught.



### ▲Adjusting for the paper width

Basically, this printer is adjusted so that quality printing is obtained with no adjustment, but depending on the width of the paper to use, there may be cases where quality printing is not obtained.

#### How to adjust for the paper width

Adjust by turning the head pressure knob to the scale marks of the head pressure balance for the paper width.

Scale marks of the head pressure balance	Paper width
1	25~42mm
2	42~59mm
3	59~78mm
4	78~95mm
5	95~131mm

The scale marks of the head pressure balance for paper widths are just guides. If quality printing is obtained, do not adjust the pressure.



Head pressure knob

## Setting fanfold paper

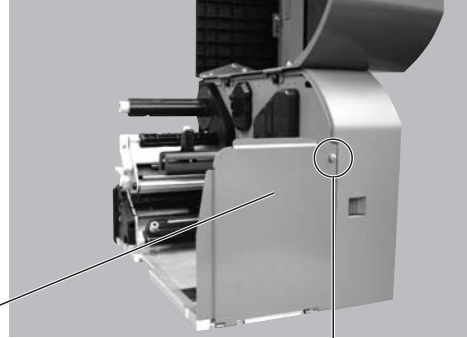
### When placing the fanfold paper behind the printer

**1**

Lift up the main cover.  
Do as described in Step 1 of "Setting roll paper."

**2**

Remove the screw to the back cover.  
Keep the screw so that it will not be lost.

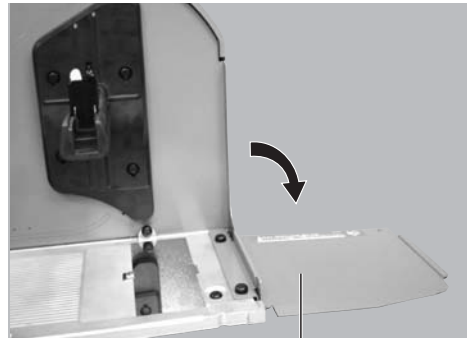


Back cover

Back cover screw

**3**

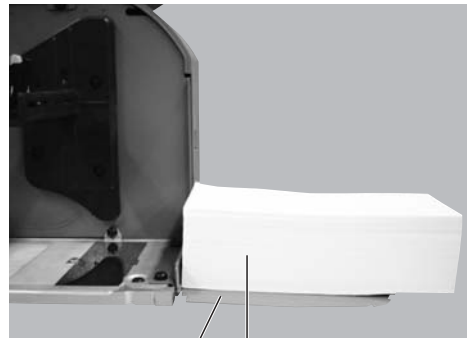
Tilt the back cover as shown in the figure.  
Load the fanfold paper up to 20 cm or less.



Back cover

**4**

Align the stack of fanfold paper to the factory-imprinted line that is visible when the back cover is laid down flat.




Back cover

Fanfold paper

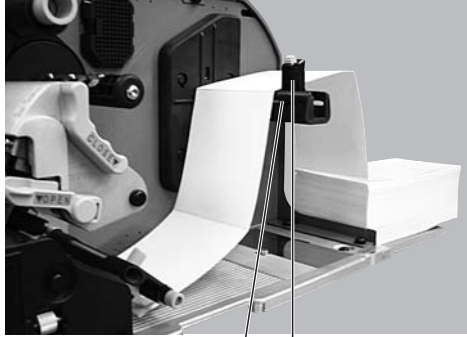


**5** Lower the head open lever (purple / ▼OPEN). The printer head will open.



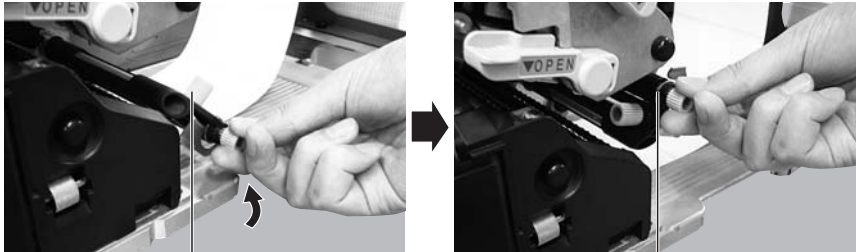
Printer head      Head open lever (purple)

**6** Pass the paper from behind to the roll paper feeder. Adjust the roll guide so that it slightly touches the side of the paper and that the paper will not move.

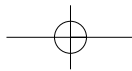


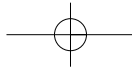
Roll paper feeder      Roll guide

**7** Loosen the label guide knob and set it forward. Pull up the label damper.



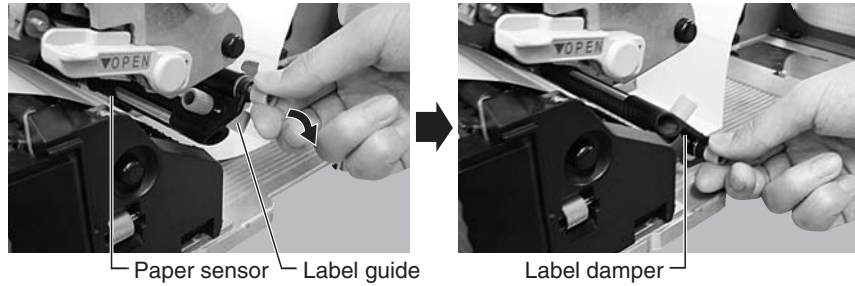
Label guide knob      Label damper





**8**

Pass the paper under the label guide and paper sensor.  
When the knob of the label damper is pulled forward, the label damper will return to the original position.

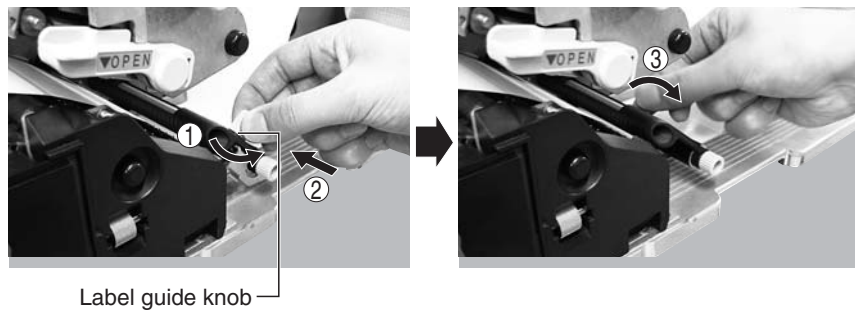


**Caution**

- Immediately after printing, the printer head and the surrounding area are hot. When you replace the paper immediately after printing, be careful not to burn yourself.
- If you touch the edge of the printer head with bare hands, you may be injured.

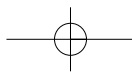
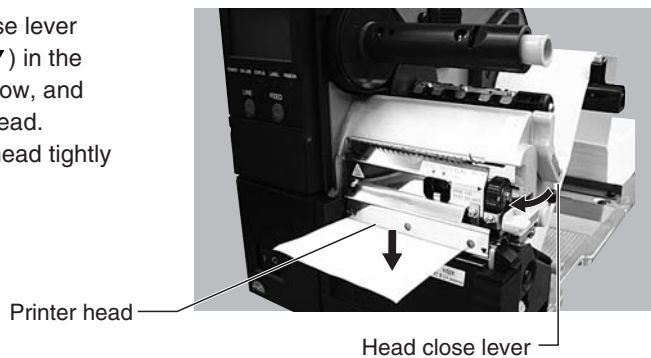
**9**

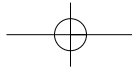
Loosen the label guide knob, and adjust the slide guide so that it lightly touches the edge of the paper, and fasten the label guide knob tightly.



**10**

Turn the head close lever (purple / CLOSE ▼) in the direction of the arrow, and close the printer head. Close the printer head tightly until it locks.





**11**

Close the main cover.  
Do as described in Step 8 of “Setting roll paper.”



**Caution**

When closing the main cover, be careful not to have your fingers caught.

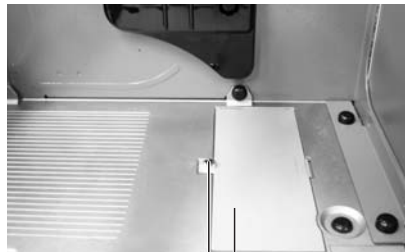
**When placing the fanfold paper under the printer**

**1**

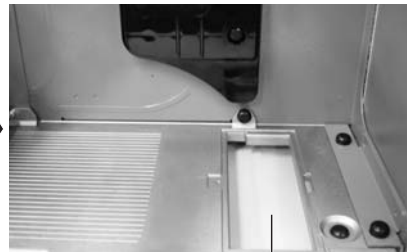
Lift up the main cover.  
Do as described in Step 1 of “Setting roll paper.”

**2**

Remove the screw to the fanfold cover.  
Keep the removed fanfold cover and the screw so that they will not be lost.



Fanfold cover screw



Fanfold cover loading slot

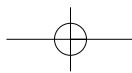
**3**

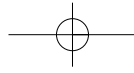
Lower the head open lever (purple / ▼OPEN).  
The printer head will open.



Printer head

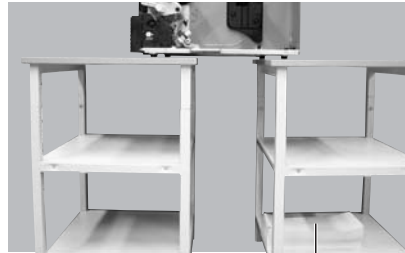
Head open lever





**4**

Set the stack of fanfold paper straight to the fanfold loading slot.



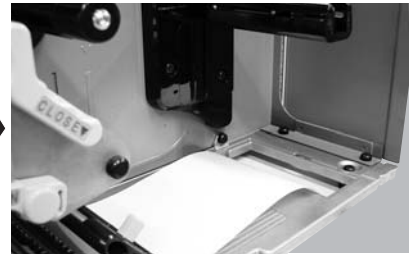
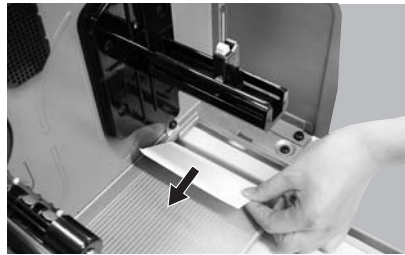
Fanfold paper



Fanfold paper

**5**

Pass the paper through the fanfold loading slot.



**6**

Loosen the label guide knob and set it forward.  
Pull up the label damper.



Label guide knob



Label damper

**7**

Pass the paper under the label guide and paper sensor.  
Pull the label damper knob, and the label damper will return to its original position.



Label guide



Label damper

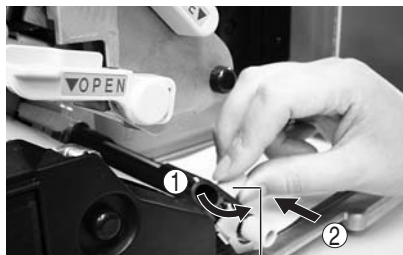


**Caution**

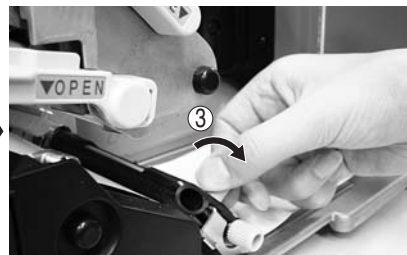
- Immediately after printing, the printer head and the surrounding area are hot. When you replace the paper immediately after printing, be careful not to burn yourself.
- If you touch the edge of the printer head with bare hands, you may be injured.

**8**

Loosen the label guide knob, and adjust the slide guide so that it lightly touches the edge of the paper, and fasten the label guide knob tightly.

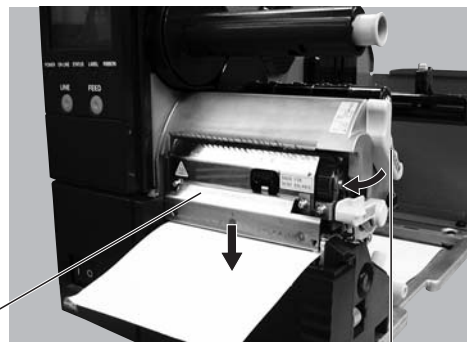


Label guide knob



**9**

Turn the head close lever (purple / CLOSE▼) in the direction of the arrow, and close the printer head securely until it is locked.



Printer head

Head close lever

**10**

Close the main cover.  
Do as described in Step 8 of “Setting roll paper.”



**Caution**

When closing the main cover, be careful not to have your fingers caught.

**Setting carbon ribbon**

For the carbon ribbon for this printer, please use our genuine products.  
Do not use other carbon ribbons than the international standards.

**Direct winding**

**1**

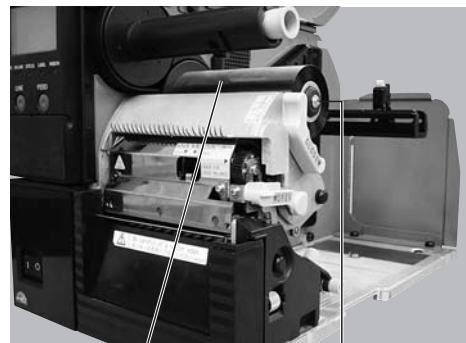
Lift up the main cover.  
Do as described in Step 1 of “Setting roll paper.”

**2**

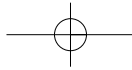
Lower the head open lever (purple / CLOSE ▼). The printer head will open.  
Do as described in Step 2 of “Setting roll paper.”

**3**

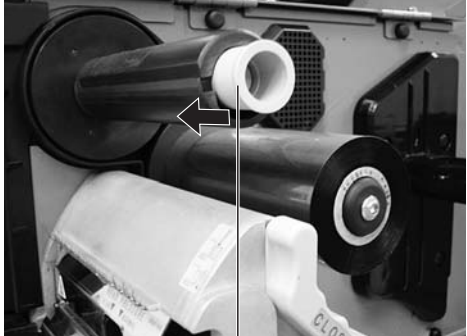
Put in a carbon ribbon in the ribbon feeder.  
Push it inwards all the way.  
(Ensure that the roll is in the right direction.)



Carbon ribbon — Ribbon feeder

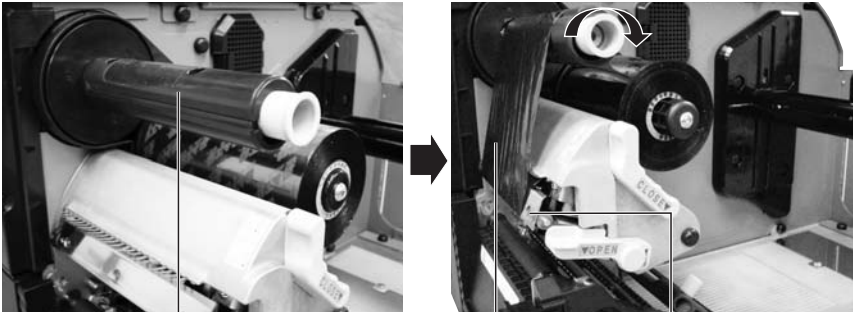


**4** Check that the knob of the ribbon winding unit is pushed to the back.



Knob

**5** Pass the carbon ribbon from the ribbon feeder under the printer head to the ribbon winding unit. Affix the carbon ribbon directly to the grip sheet that is on the ribbon winding unit, and wind it several times in the direction of the arrow. Check from sideways that the carbon ribbon is set according to the figure below.



Grip sheet

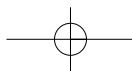
Carbon ribbon

Printer head

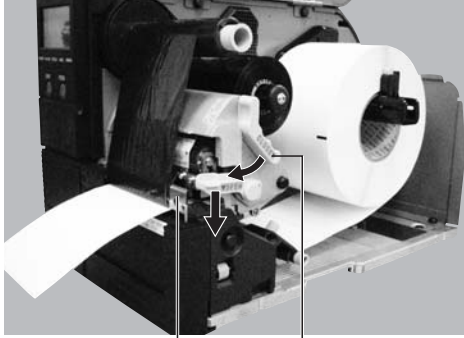
**⚠ Caution**

- Immediately after printing, the printer head and the surrounding area are hot. When you replace the paper immediately after printing, be careful not to burn yourself.
- If you touch the edge of the printer head with bare hands, you may be injured.

**6** Set the paper.  
Do as described in 3 to 6 of “Setting roll paper.”



**7** Turn the head close lever (purple / CLOSE▼) in the direction of the arrow, and close the printer head. Close the printer head tightly until it locks.



Printer head      Head close lever

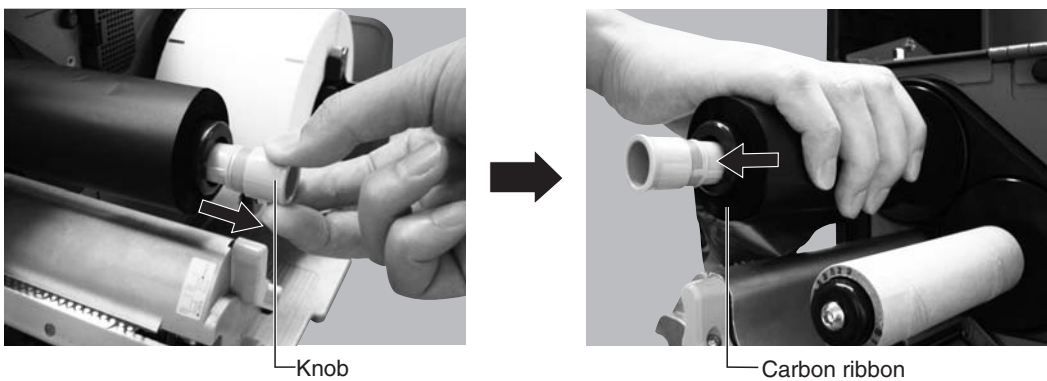
**8** Close the main cover.  
Do as described in 8 of “Setting roll paper.”

**⚠ Caution**

When closing the main cover, be careful not to have your fingers caught.

**▲How to remove the carbon ribbon**

Pull the knob of the ribbon winding unit forward, hold the wound carbon ribbon, and pull it out. For each carbon ribbon used, ensure that the wound carbon ribbon is removed. When removing the carbon ribbon, the ink may adhere to the hand.



### Paper tube winding (factory option)

For paper tube winding, the ribbon-winding shaft must be replaced (charged).

- 1** Lift up the main cover.  
Do as described in Step 1 of “Setting roll paper.”

- 2** Lower the head open lever (purple / CLOSE▼). The printer head will open.  
Do as described in Step 2 of “Setting roll paper.”

- 3** Put in a carbon ribbon in the ribbon feeder.  
Push it inwards all the way.  
(Ensure that the roll is in the right direction.)



Carbon ribbon — Ribbon feeder

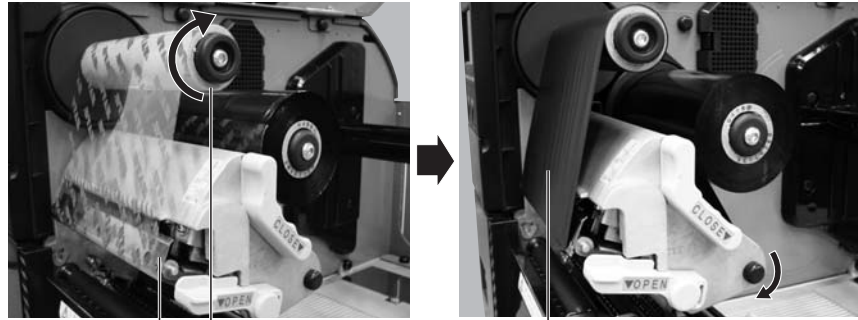
- 4** Set the ribbon core to the ribbon winding unit.



Ribbon winding unit — Ribbon core

**5**

Pass the carbon ribbon from the ribbon feeder under the printer head to the ribbon winding unit. Affix the carbon ribbon to the ribbon core with tape, wind it several times in the direction of the arrow. Check from sideways that the carbon ribbon is set according to the figure below.



Printer head

Ribbon core

Carbon ribbon



**Caution**

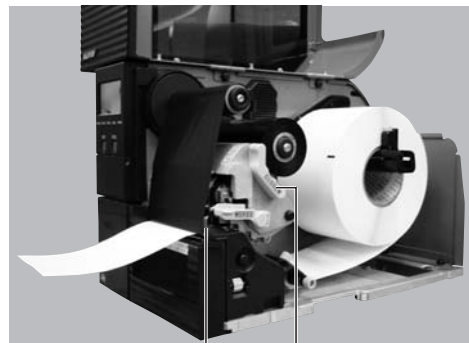
- Immediately after printing, the printer head and the surrounding area are hot. When you replace the paper immediately after printing, be careful not to burn yourself.
- If you touch the edge of the printer head with bare hands, you may be injured.

**6**

Set the paper.  
Do as described in Steps 3 to 6 of “Setting roll paper.”

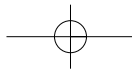
**7**

Turn the head close lever (purple / CLOSE ▼) in the direction of the arrow, and close the printer head. Close the printer head tightly until it locks.



Printer head

Head close lever



**8**

Close the main cover.  
Do as described in Step 8 of "Setting roll paper."



**Caution**

When closing the main cover, be careful not to have your fingers caught.

## Adjusting paper sensor

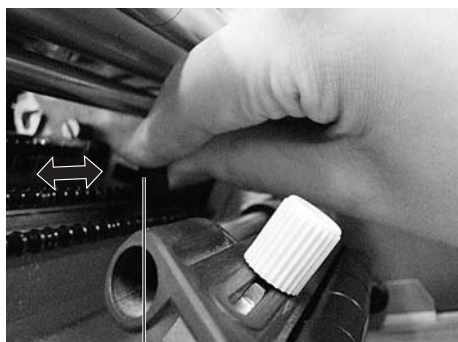
Basically, adjustment is not necessary.

**1**

Open the main cover.  
Do as described in 1 of "Setting roll paper."

**2**

Slide the sensor unit and adjust the position of the paper sensor.



Paper sensor

**3**

Close the main cover.  
Do as described in 8 of "Setting roll paper."



**Caution**

When closing the main cover, be careful not to have your fingers caught.

