Maintenance and Specifications

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Replaceable Components

■ Supplies

When print is faded or indicators show the following status, the replacement of a supply is needed.

Printer components	Indicators		Message of printer status display	Average life
	ERROR	**TONER/ DRUM UNIT**		
Toner cartridge For U.S.A : KX-PDP7 For other countries: KX-PDP8	▭	☼ (blinking)	Low Toner Change the toner cartridge soon.	—
	☀ (blinking)	▬	Toner Empty Replace the toner cartridge now.	4,000 pages [1], [2]
Drum unit For all countries: KX-PDM7	▭	☼ (blinking)	Change Drum Unit Change the drum unit soon.	—
	☀ (blinking)	▬	Drum Unit Worn out Replace the drum unit now.	20,000 pages
			Drum Unit Worn out and Toner Empty Replace the drum unit and toner cartridge now.	

▭ : Indicator is turned off.

▬ : Indicator is lit.

☀ , ☼ : Indicator is blinking (with an interval of 1 second).

[1] Refer to the next page.

[2] The toner cartridge provided with the printer is a starter kit toner cartridge, which has less toner. (The page life expectancy is 2,000 pages.)

Replaceable Components

[1]Average life is based on an average of 5% coverage of the printable area and standard density when the recommended media is used (refer to Example: 5% coverage). The life of a toner cartridge is varied depending on the coverage, temperature, humidity or media etc. So the average life cannot be assured. Continuously printing 10% coverage of the printable area will reduce the life of the toner to about half as compared to printing 5% coverage.

Example (5% coverage)

Personal Image Editing System
Model No. XX-XXXX

Feature:

Congratulations on your purchase of the XX-XXXX, the three-in-one solution to today's office needs. This amasing little desktop unit can be used as a : Printer, Scanner, Copier.

Printer Specification

Printing Method:	Semiconductor Laser Electro-Photography
Print Speed:	X ppm maximum (A4 size paper, text mode, 5 % image area)
Resolution:	600 dpi X 600 dpi
Paper Feed:	1 Multi-purpose manual feed up to 250 sheets of paper [75 g/m^2 (20 lbs.)]
Paper Outout:	Face-down paper ejection (up to 150 sheets) [75 g/m^2 (20 lbs.)]
Software Emulation:	GDI + Soft XXXX
Paper Size/Weight:	Letter, Legal, A4, Envelope, Executive, OHP, Label
Memory Capacity:	2 MB
Dimensions:	399 (W) X 390 (D) X 254 (H) mm (15.7" X 15.4" X 10")
Mass {Weight}:	Approx. 10 Kg {22 lbs.}
Consumables:	Starter toner cartridge : 20,000 pages average
	Toner cartridge: 4,000 pages average
	Drum unit: 20,000 pages average
Noise Level:	Printing: 48 dBA
	Stadby: 27 dBA
CPU:	Intel 80C51 compatible

Other Specification

Operating Environment:	10 to 32.5˚C [50 to 90.5˚F]	20 to 80% RH
Storing Environment:	0 to 35˚C [32 to 95˚F]	20 to 80% RH

Feature:

Congratulations on your purchase of the XX-XXXX, the three-in-one solution to today's office needs. This amasing little desktop unit can be used as a : Printer, Scanner, Copier.

❀ Application Soft : Text Bridge, Card Scan

Cleaning the Printer

Periodic cleaning of the printer is recommended. The frequency of cleaning is dependent upon the environment in which the printer is used.

You should clean the printer:
• at least once a month.
• when you replace the toner cartridge.
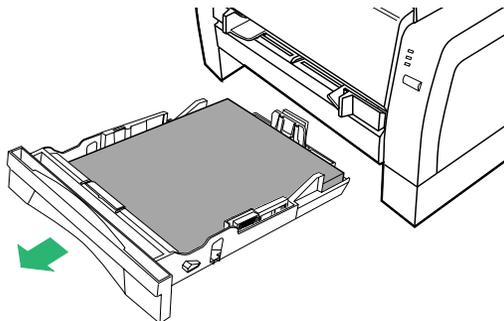• when print quality has deteriorated.

CAUTION
• Do not use benzene, thinner, aerosol cleaners, or any abrasive powder.

External

1   Turn the power OFF.

2   Clean all the covers with a soft cloth. Use any mild commercial cleaner.

Internal

1   Turn the power off and remove the power cord for your safety.

2   Remove the media tray out of the printer.

3 While rotating the pick up roller, wipe it with a soft cloth that has been moistened with a mild commercial cleaner.
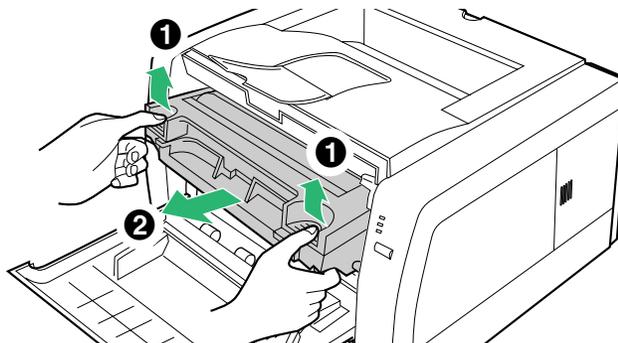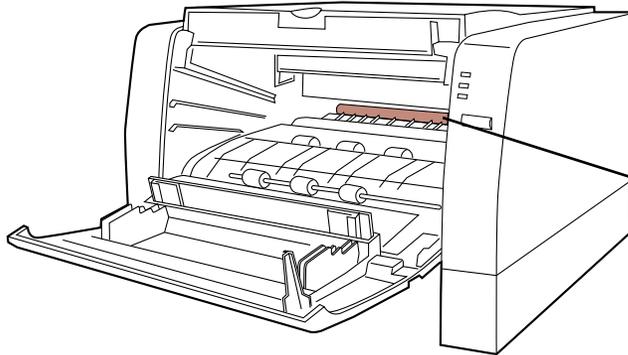
Pick up roller
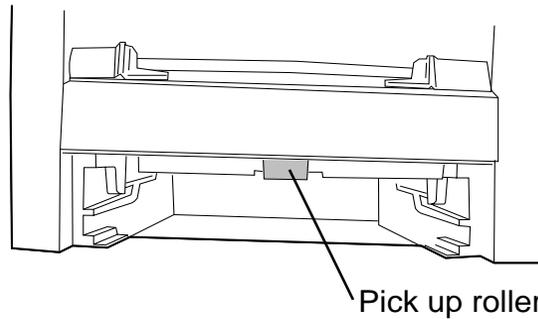
4 Open the front cover.
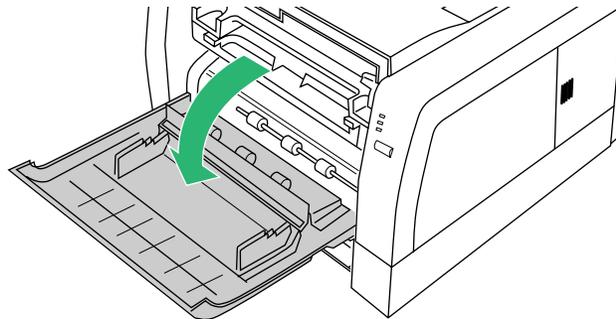
5 Lift the drum unit up (❶) and slide it out of the printer (❷).
 • To avoid possible toner spillage, it is recommended to place the drum unit on a newspaper or drop cloth.

⚠ **SAFETY CAUTION**

- It is very hot inside the printer; to avoid personal injury, do not touch the components illustrated below.


CAUTION:
HOT SURFACE

CAUTION

- To prevent any damage to the drum unit, observe the following precautions.
  - — Do not touch the black drum surface illustrated below.
  - — Do not expose the drum unit to light for more than 5 minutes.
  - — Do not expose the drum unit to direct sunlight.
  - — Do not keep the drum unit near dust or dirt.
  - — Do not place the drum unit in a high humid area.
- Do not touch electrodes illustrated below to prevent static electricity damage to the printer.
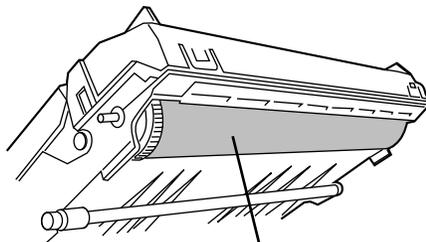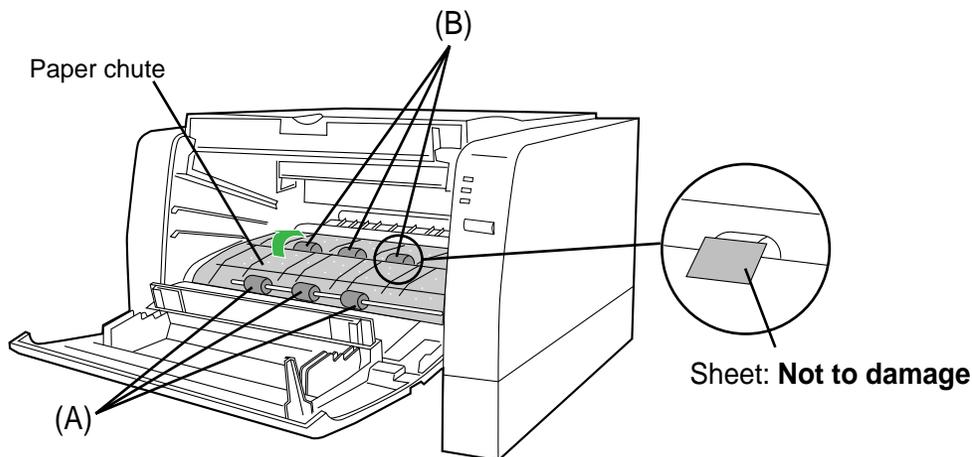

Black drum
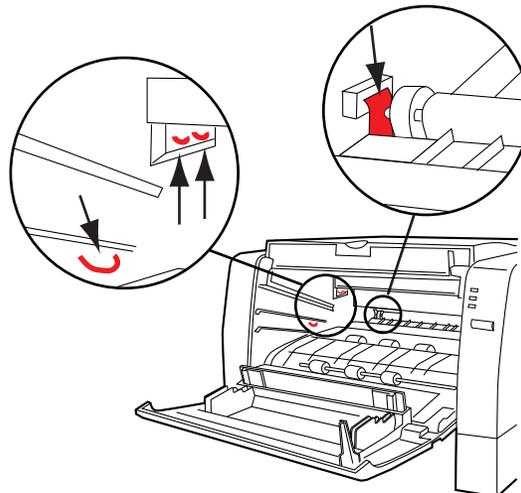
Electrodes (shown in red)

6   Wipe rollers (A) and (B), and paper chute with a soft cloth that has been moistened with a mild commercial cleaner.
• Be sure to remove the paper dust.

NOTE
• Front rollers (A) can be rotated half. Inner rollers (B) can be rotated to the direction of the arrow. Be sure not to damage the sheets in front of the inner rollers (B).

7   Turn the sponge up and carefully wipe the laser unit cover glass with a dry lint-free cloth.
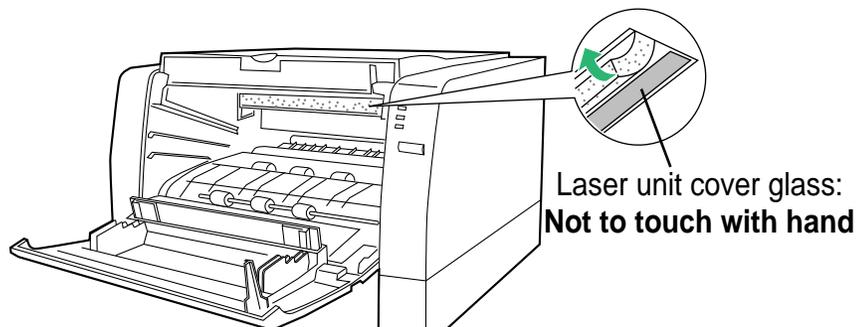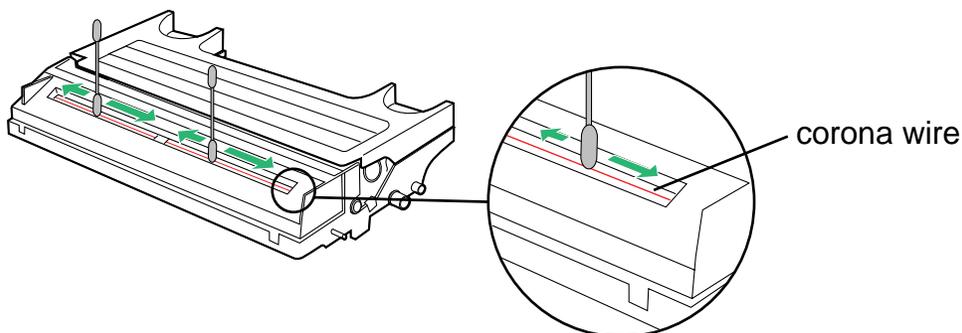

CAUTION
To avoid a damage to the printer,
• Do not use rubbing alcohol to wipe the laser unit cover glass.
• Do not touch the laser unit cover glass by hand.

8 Carefully wipe the corona wire of the drum unit by sliding a dry cotton swab from end to end a few times.

corona wire

9 Firmly insert the drum unit in the slot of the printer (❶) [insert the side pins of the drum unit into the groove (label ➡)]. Push down (❷).
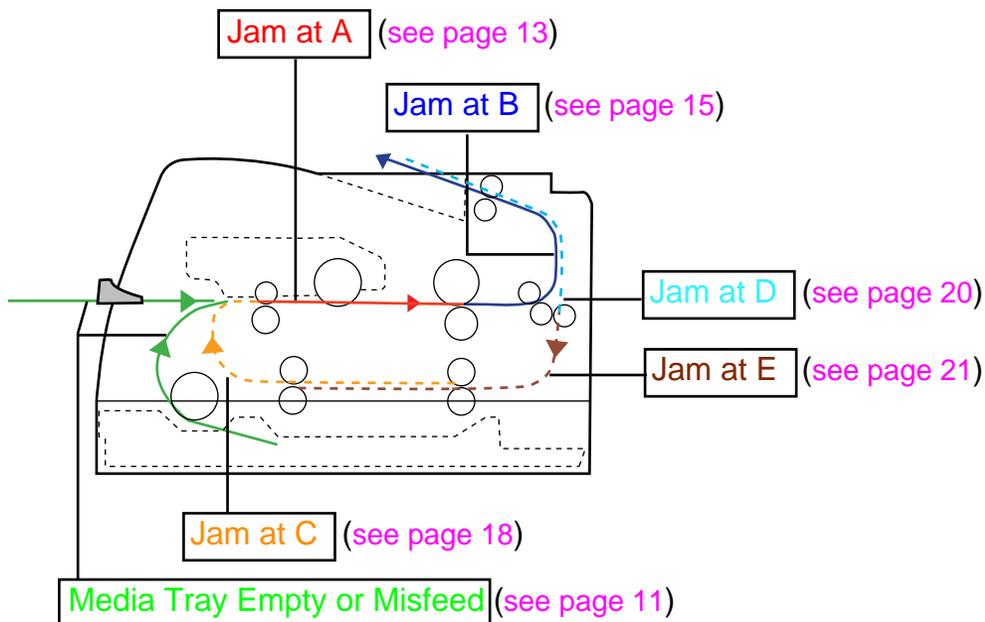

Side pin
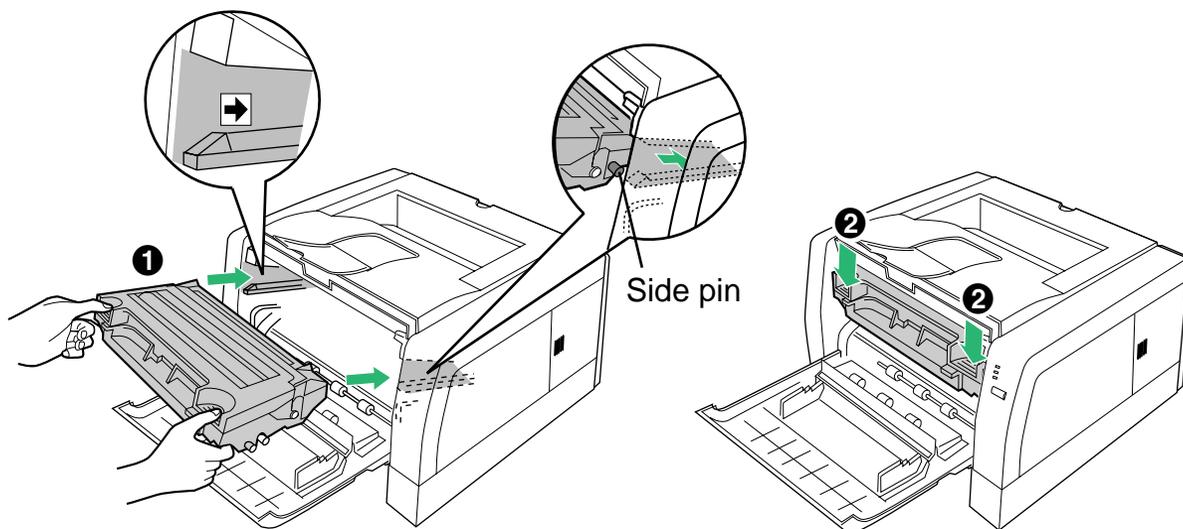
10 Close the front cover and replace the media tray into the printer.

Clearing a Jam

If the printer has frequent media jams, make sure that you follow these guidelines:
- Always use high-quality paper and transparencies. see "Media" on page 43.
- Make sure that you load thick paper [106 – 165 g/m^2 (29 – 44 lbs.)] or labels only in the manual feed.

If a media jam occurs, the printer status display reports "Media Tray Empty or Misfeed" or "Jam at <Location>". The <Locations> are the various sensors throughout the paper path, listed as A through E.

Jam at A (see page 13)

Jam at B (see page 15)

Jam at D (see page 20)

Jam at E (see page 21)

Jam at C (see page 18)

Media Tray Empty or Misfeed (see page 11)

Media Tray Empty or Misfeed

When media is not in the media tray or media feed error has occurred, load the media in the media tray or clear the media feed error as follows:

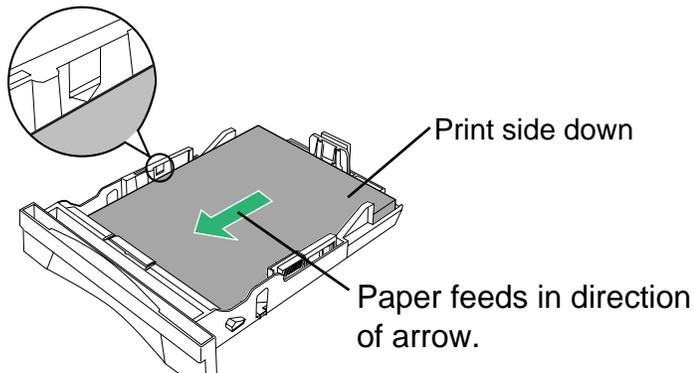*1* Pull the media tray out of the printer.
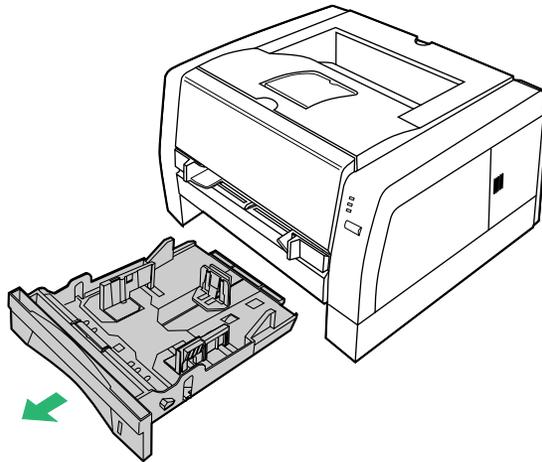
2 Tap the media stack on a level surface to avoid media jams or skewed printing.
• If a media feed error has occurred, remove the media stack from the media tray and tap it.
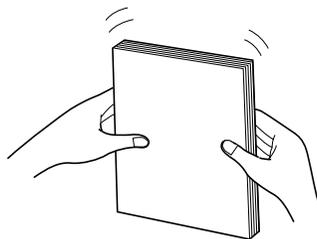
3 Place the media with the print side down.
- Be sure that the media does not exceed the limit mark.

Print side down

Paper feeds in direction of arrow.

NOTE
- If the metal plate is in the up position by accident, the media tray cannot be inserted into the printer. Before loading the media, push down the metal plate until it clicks, locking it in place.
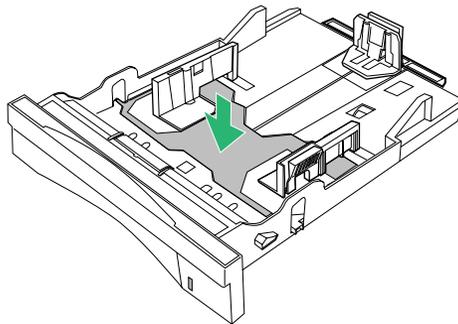
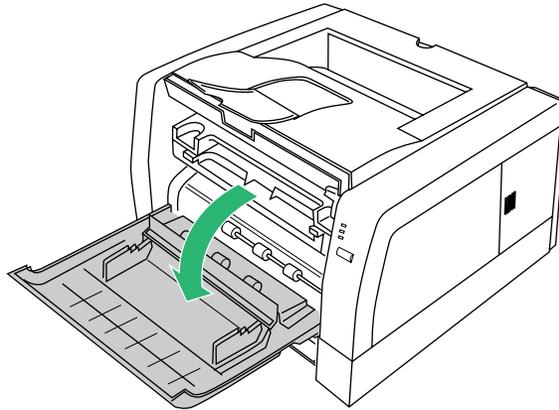**4** Replace the media tray into the printer.

CAUTION
Be sure to hold the media tray with both hands so you do not drop it especially when it is fully loaded.

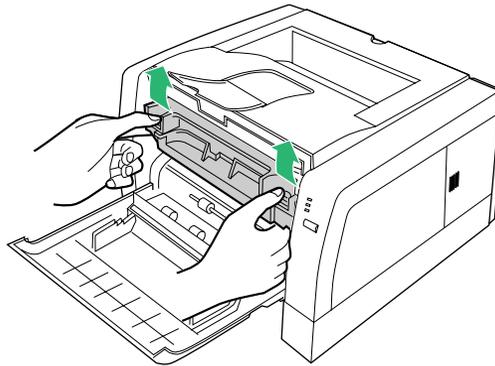**5** Press the **CONTINUE** button for less than 5 seconds on the printer panel or click **Resume** on the printer status display to clear the error status, and continue/start printing.

Jam at A

1 Open the front cover.

2 Lift the drum unit up.

3 Grasp both sides of the jammed media and **slowly** pull it out of the printer.
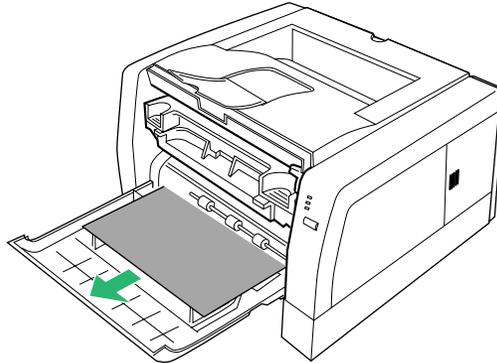
4 Push the drum unit down.
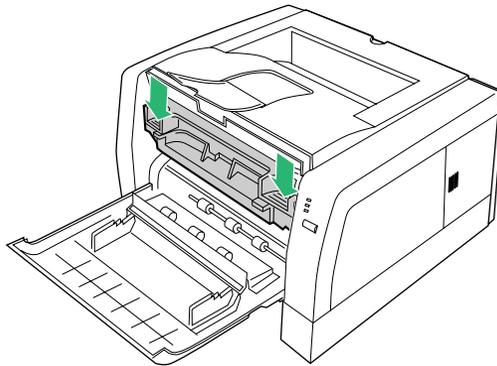
5 Close the front cover.

Jam at B

1 Open the front cover.
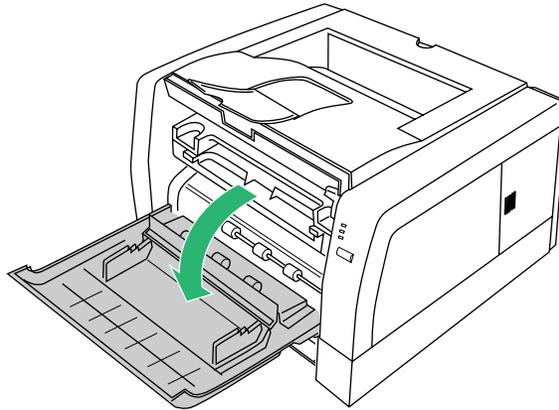
2 Lift the drum unit up.
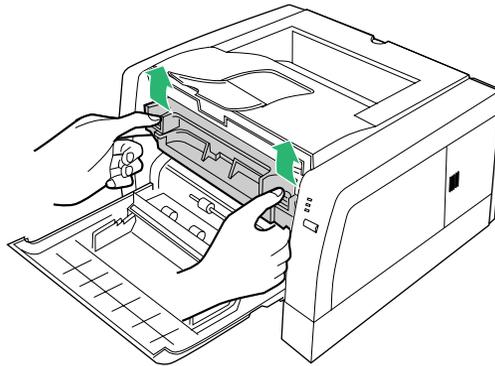
3 Remove the jammed media from the output tray.
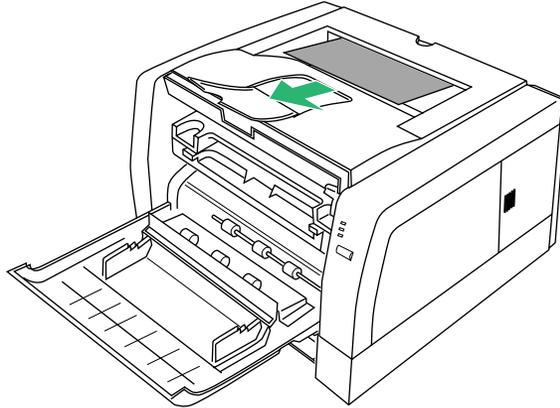
- Or -

Open the rear cover of the printer (❶) and remove the jammed media (❷).

CAUTION HOT SURFACE
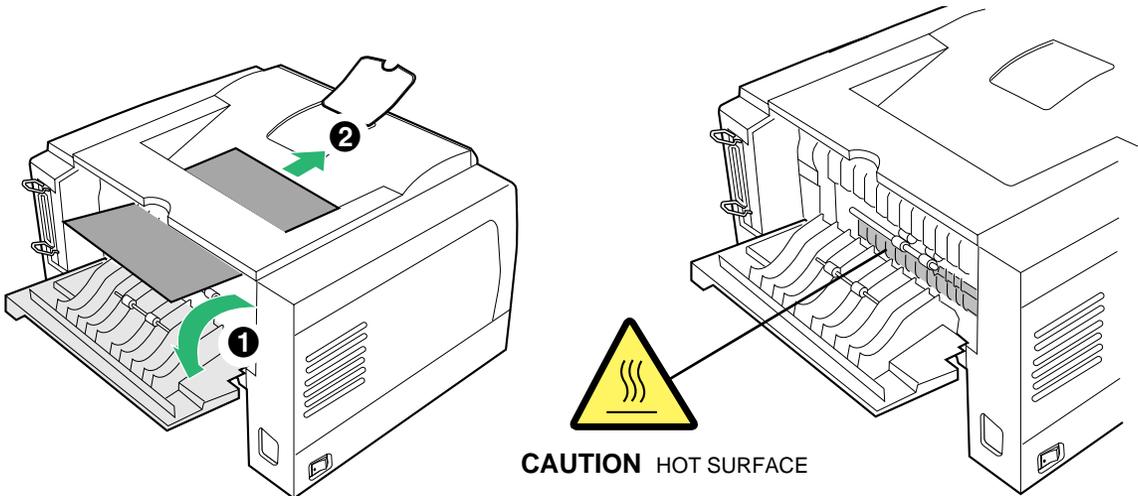
4 Push the drum unit down.
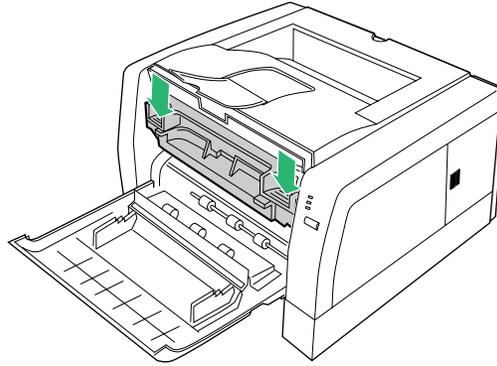
5 Close the front cover.

Jam at C

1 Perform the jam recovery steps for Jam at A ().
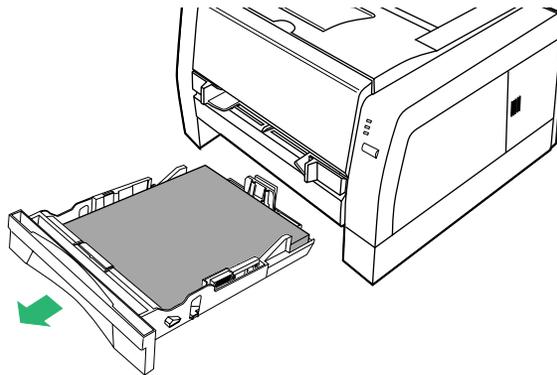
- Or -

1 Pull the media tray out of the printer.

2 **Slowly** pull the jammed media (**❷**) out of the printer while pushing the center tab (**❶**) of the jam release pan down.

Rear side of Printer
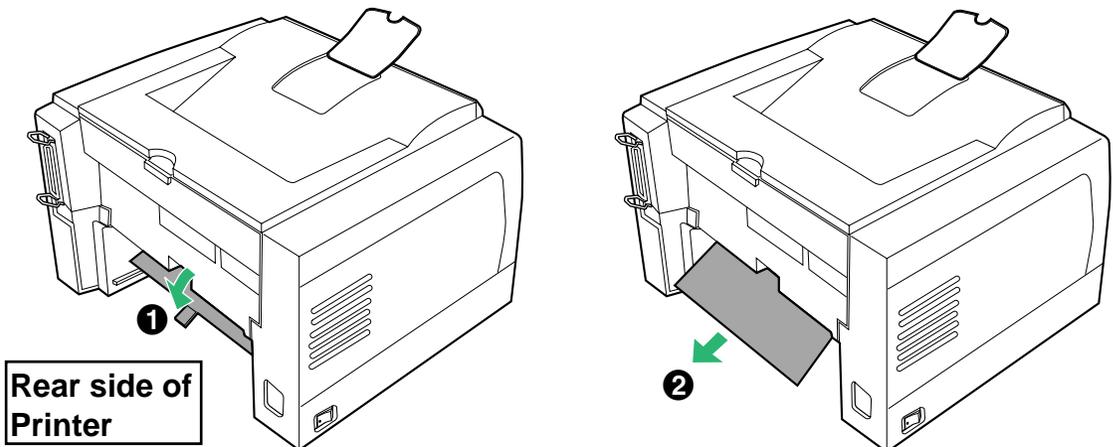
3 Replace the media tray into the printer.

4 Open and close the front cover to clear the error indication.
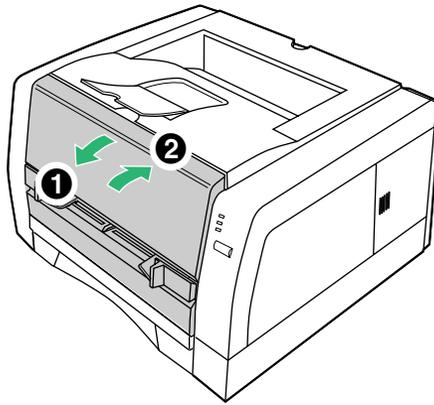
Jam at D

1   Open the rear cover of the printer (❶) and grasp both sides of the jammed media and **slowly** pull it out of the printer (❷).

CAUTION HOT SURFACE
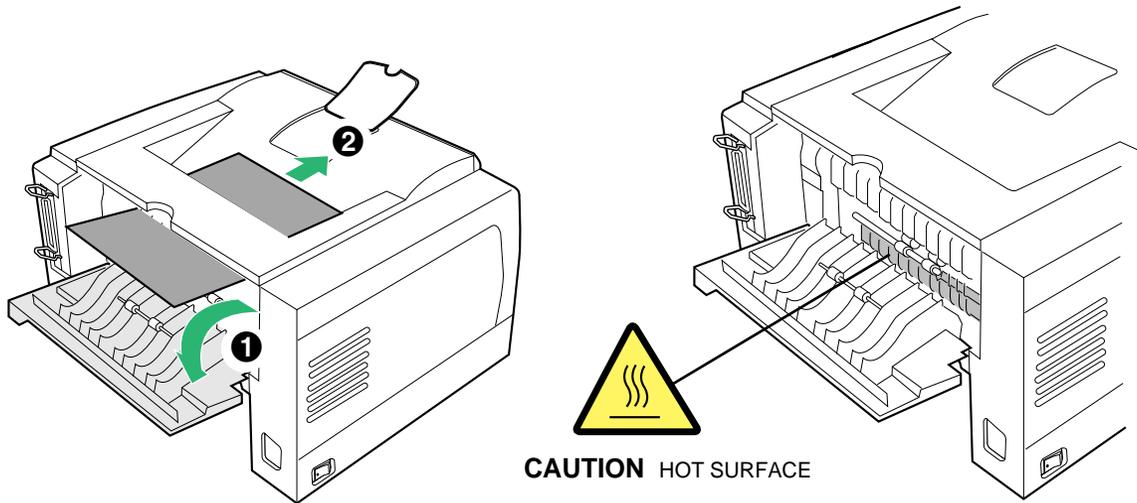
2   Open and close the front cover to clear the error indication.
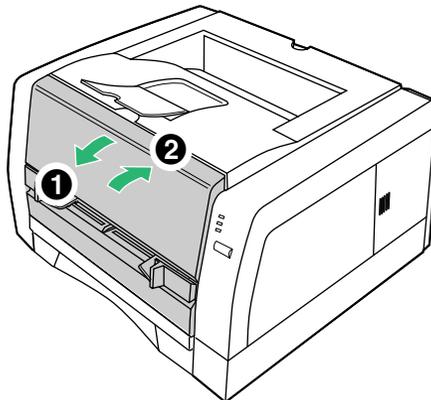
Jam at E

1 Perform the jam recovery steps for Jam at D ().
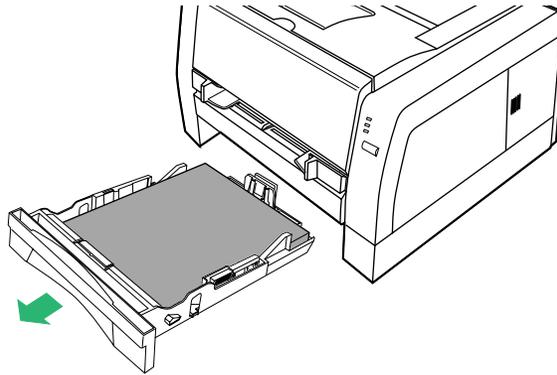
- Or -

1 Pull the media tray out of the printer.

2 **Slowly** pull the jammed media (❷) out of the printer while pushing the center tab (❶) of the jam release pan down.

Rear side of Printer
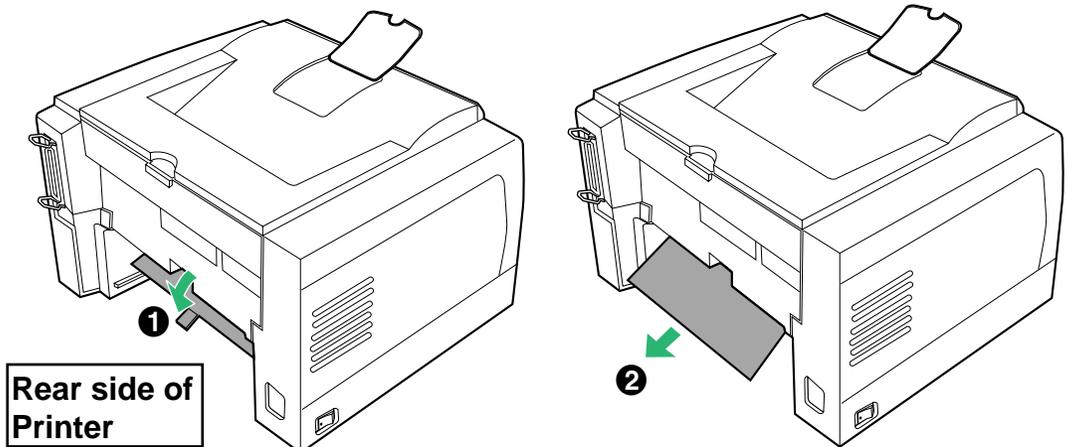
3 Replace the media tray into the printer.

4 Open and close the front cover to clear the error indication.

Troubleshooting

| Trouble	Possible Cause	Corrective Action
The background of the images is printed in gray. ABCD-------- ----------------- --------	The toner cartridge has reached the end of useful life.	Replace the toner cartridge.
	The drum unit has reached the end of useful life.	Replace the drum unit.
	Incorrect type of media is used.	Check the media usable or not (see "Media" on page 43).
	Your printer is in extremely high humidity.	Check the environment (see "Specifications" on page 41).
Faded image is printed at the different position from the original. ABCD-------- ----------------- -------- ABCD-------- ----------------- --------	Printer driver is not set correctly for paper.	Set the media type setting of the printer driver correctly (see page 22 in "Settings and Printing").
	The toner cartridge has reached the end of useful life.	Replace the toner cartridge.
	Your printer is in extremely high or low humidity.	Check the environment (see "Specifications" on page 41)
	Print density is high.	Display the Printer Console window and set the density (🟢) to the lighter level (see "Using the Printer Console Window" on page 41 in "Settings and Printing").
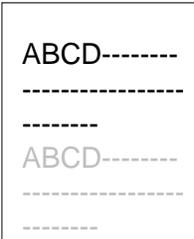
Trouble	Possible Cause	Corrective Action
Toner spots appear on the page. ABCD-------- ------------------ --------	Toner spots put on the photosensitive drum.	Clean the toner spots with soft cloth (refer to "Cleaning the Photosensitive Drum" on page 31).
	The drum unit is damaged.	Replace the drum unit.
	The corona wire in the drum unit is dirty.	Clean the corona wire in the drum unit (see "Cleaning the Printer" on page 5).
The entire page prints in black.	The drum unit is damaged.	Replace the drum unit.
A white or black spots appear in intervals of 94 mm. 94 mm 94 mm	Paste/Glue of a label or dust is attached to the photosensitive drum of the drum unit.	Wipe the photosensitive drum of the drum unit (see "Cleaning the Photosensitive Drum" on page 31).
	The photosensitive drum of the drum unit is dirty or scratched.	Replace the drum unit.
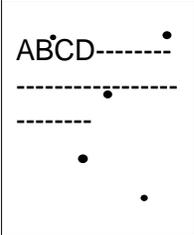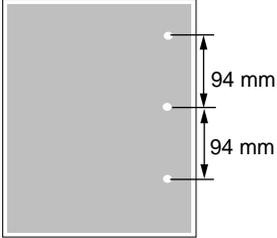
Trouble	Possible Cause	Corrective Action
Horizontal lines appear in intervals of 94 mm.	A small dust is bitten in the gear of the photosensitive drum. Dust	Remove the dust from the gear (see "Cleaning the Photosensitive Drum" on page 31).
White and horizontal lines appear on the page.	The drum unit is damaged.	Replace the drum unit.
	The toner cartridge is damaged.	Replace the toner cartridge.
	The toner cartridge is stored for a long period. (Try shaking to loosen toner.)	Print several blank pages until the lines disappear.
		Try shaking to loosen toner.
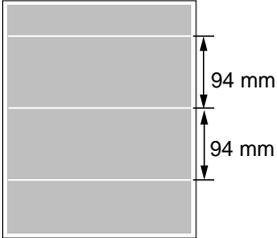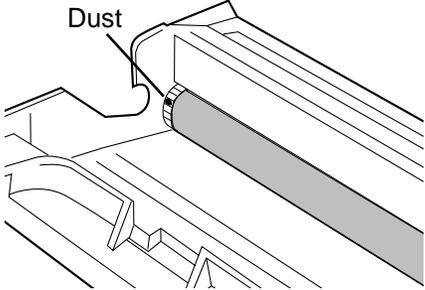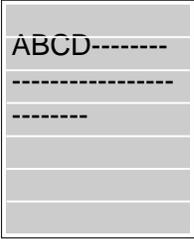
Trouble	Possible Cause	Corrective Action
A black and vertical line appears on the page. ABCD-------- ----------------- --------	Corona wire of the drum unit is dirty.	Clean the corona wire in the drum unit (see "Cleaning the Printer" on page 5).
	The toner cartridge is damaged.	Replace the toner cartridge.
	The drum unit is damaged.	Replace the drum unit.
	The fuser unit is damaged.	Display the Printer Console window and click icon (🖨 Clean) to print a cleaning data (see "Using the Printer Console Window" on page 41 in "Settings and Printing"). If it is not recovered, call for service to replace the fuser unit.
A white vertical line appears on the page. ABCD-------- ----------------- --------	The laser unit cover is dirty.	Clean the laser unit cover (see "Cleaning the Printer" on page 5).
	A small matter is mixed with the roller of the toner cartridge.	Replace the toner cartridge.
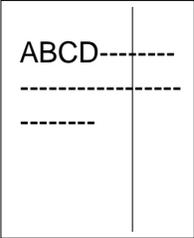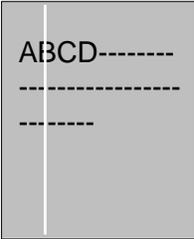
Troubleshooting

Trouble	Possible Cause	Corrective Action
The printer prints aslant.	The media is not installed correctly.	Install media correctly in the media tray. Adjust media guides correctly.
	Too much media is loaded in the media tray.	Decrease the media stack so that the height of media does not exceed the limit mark.
	Incorrect type of media is used.	Check the media usable or not (see "About Media" on page 8 in "Settings and Printing"), (see "Media" on page 43).
The print out media is wrinkled.	The media is not installed correctly.	Install media correctly in the media tray. Adjust media guides correctly.
	The media is moist.	Use fresh paper.
	Incorrect type of media is used.	Check the media usable or not (see "About Media" on page 8 in "Settings and Printing"), (see "Media" on page 43).
The back of the printed page appears dirty.	The transfer roller or fuser unit is contaminated after clearing a jam.	Display the Printer Console window and click icon (🧹 Clean) to print a cleaning data (see "Using the Printer Console Window" on page 41 in "Settings and Printing").
	The toner cartridge has reached the end of useful life.	Replace the toner cartridge.
	Incorrect type of media is used.	Use a correct media (see "About Media" on page 8 in "Settings and Printing"), (see "Media" on page 43).
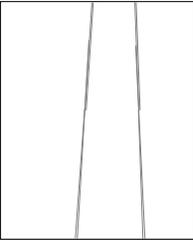
Trouble	Possible Cause	Corrective Action
Frequent media-picking errors occur.	The length media guide of the media tray is not set correctly.	Check the length media guide is set to the groove indicating the media size.
		Check the loaded media is not curled.
	The media is not set correctly in the media tray.	Check the media is not set on the media height stopper (A) of the length media guide.
	Pick up roller is dirty.	Clean the pick up roller (see "Cleaning the Printer" on page 5).
Image is cut.	Image size is bigger than print area.	Adjust the image within the print area. 4.2 mm (0.17″) is required for the top, bottom and sides margins.
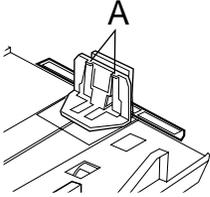
■ If you can't make a print

Trouble	Possible	Corrective Action
Printer not operating.	The printer may not be plugged into an AC outlet or turned on.	Make sure that you plugged in the printer and turned it on.
	The interface cable(s) may not be connected properly.	Make sure that you connected the interface cable(s) properly (see "Bi-directional Parallel Interface" on page 49), [see "USB (Universal Serial Bus) Interface" on page 51].
	The printer driver is not set correctly.	Ensure the correct printer port is selected in the printer driver for cable used (see "Setting the Printer Driver" on page 22 in "Settings and Printing").
The printer does not print correctly.	Appropriate driver may not be installed or correct printer may not be selected.	If the communication link between your computer and the printer is working but the printer ejects a blank page when printing from your application or through Windows, make sure that the appropriate driver is installed and that you have selected the printer correctly.
The setting for printing is not effective.	Some applications may not allow you to change the settings through the printer driver's setting window.	Change the application's settings.

■ If the print out is ragged

If the print out is ragged because of the curl of paper as illustrated below, slide the media tray out of the printer and turn over the paper stack, then insert the media tray.
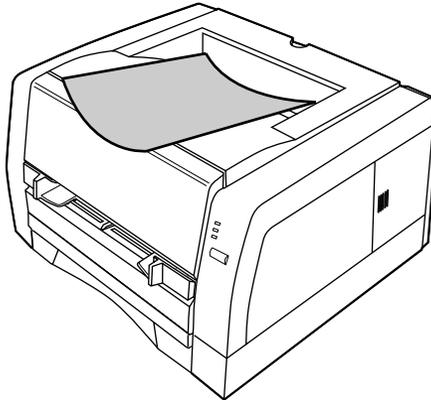
■ If you cannot install the printer driver in Microsoft® Windows NT® operating system Version 4.0

The printer driver cannot be installed with Add Printer Wizard in Windows NT 4.0. Install the printer driver with **Setup.exe** (see "Installing the Printer Software" in the Setup Guide).

■ Number of lines are changed in 2up or 4up printing using Microsoft® Excell spreadsheet

Adjust the height of the cell size of the spreadsheet.

■ Printer Status Display alerts when printing many files

When printing many files, "Power Off or Cable Problem or Printer Busy" may be displayed on the Printer Status Display. Wait for a while. The printing will be automatically resumed.

Cleaning the Photosensitive Drum

If the paste or glue of a label is attached to the photosensitive drum of the drum unit, clean it following the steps below.

1 Open the front cover of the printer.

2 Lift the drum unit up (❶) and slide it out of the printer (❷).
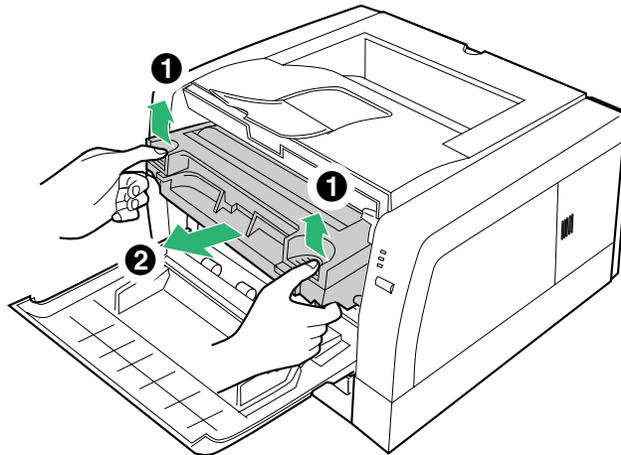
3 While pushing the drum unit as illustrated below (❶), lift the toner cartridge up (❷).
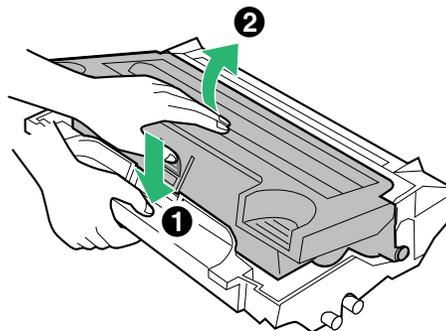
4   Remove the toner cartridge from the drum unit.

5   If a paste/glue of a label is attached, find the portion that it is attached while rotating the gear of the photosensitive drum in the direction of the arrow.

   •The paste will be attached the portion that white or black spots of the print appear.

Paste

Gear
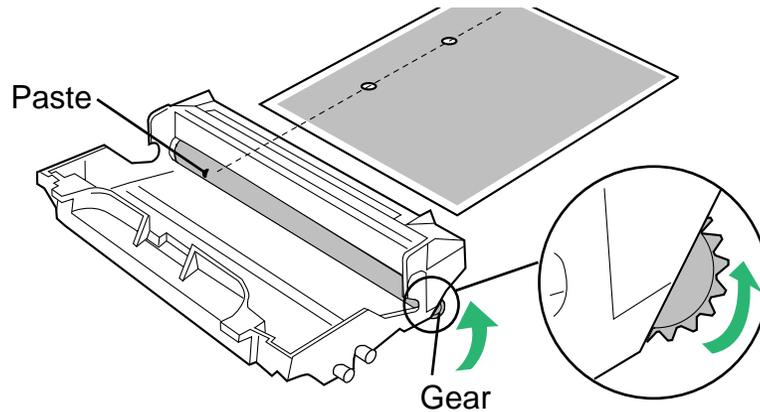
CAUTION
To prevent any damage to the drum unit, observe the following precautions.

•Do not rotate the photosensitive drum in the opposite direction of the above illustration, otherwise the drum unit may be damaged.
•Do not touch the black drum surface.
•Do not expose the drum unit to light for more than 5 minutes.
•Do not expose the drum unit to direct sunlight.
•Do not keep the drum unit near dust or dirt.
•Do not place the drum unit in a high humidity area.

6 Wipe the photosensitive drum with a dry cotton swab or remove the small dust in the gears of the photosensitive drum.

Dust
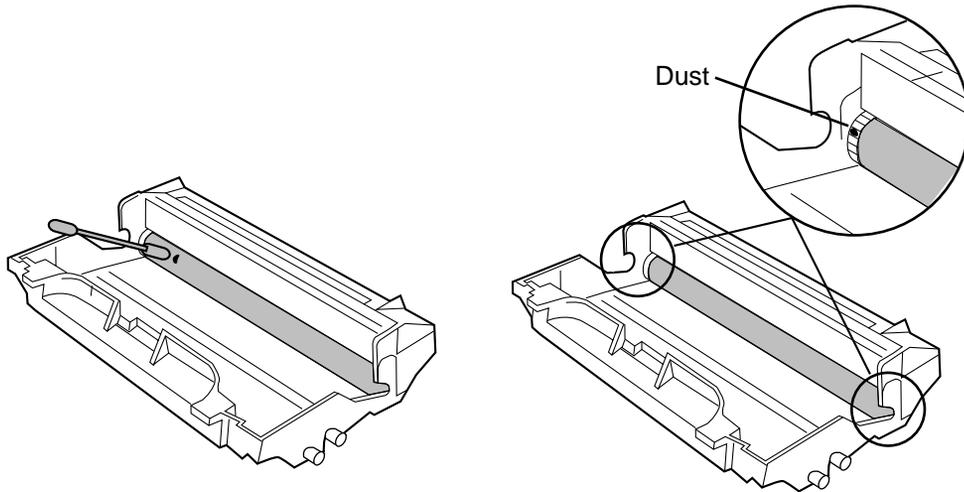
CAUTION
• Do not use a sharp-pointed something like a ball-point pen to prevent the damage to the drum unit when removing the paste.

7 Insert the side pins of the toner cartridge into the slots of the drum unit (❶). Push the toner cartridge in the drum unit (❷).

❷

❶

Side pin

❷

❷
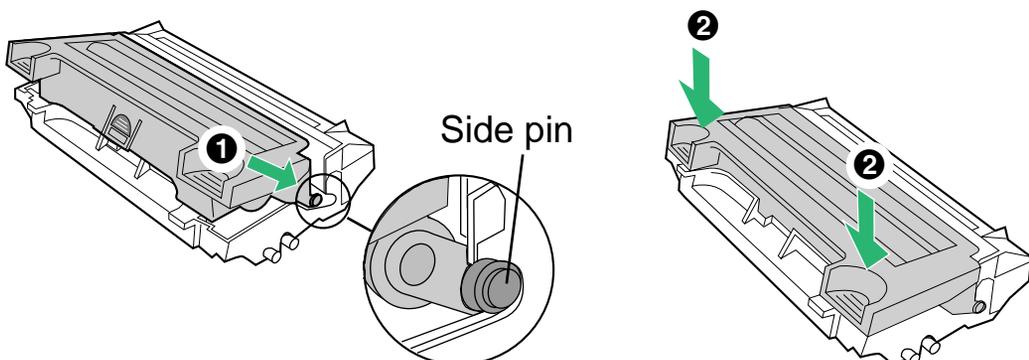
8   Firmly insert the drum unit in the slot of the printer (❶) [insert the side pins of the drum unit into the groove (label ➡)]. Push down (❷).

Side pin
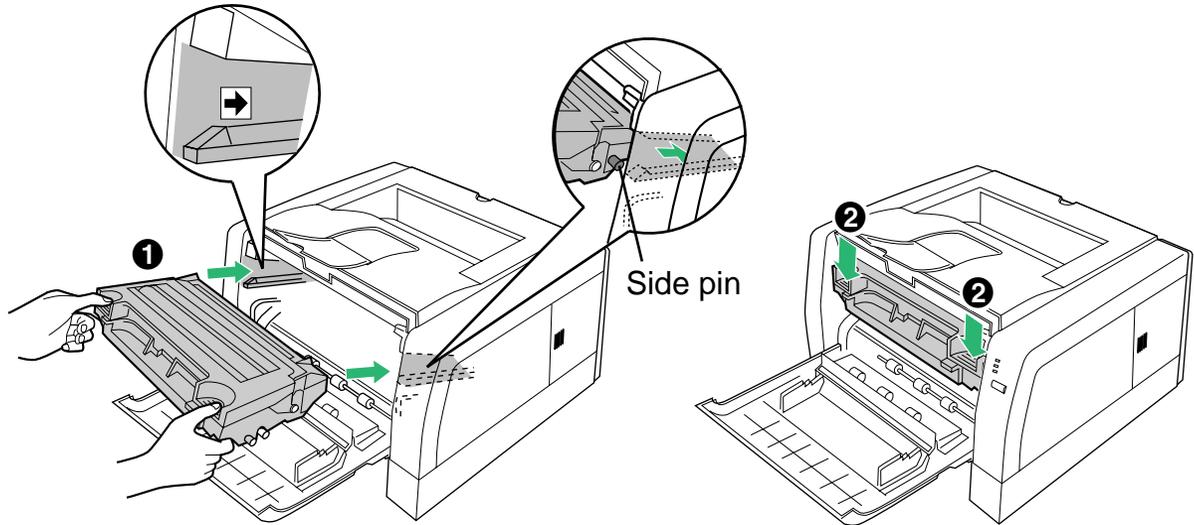
9   Close the front cover.

Error Indication

Indicators		Possible Cause	Recovery
◻	◯ READY	Front cover is open.	Close the front cover.
🔴(blinking)	⌐ ERROR	Media tray is empty.	Load media in the media tray and press the **CONTINUE** button (less than 5 seconds).
		Printer failed to feed a media from media tray.	
◻	TONER/ DRUM UNIT	Media jam has occurred.	Remove the jammed media, then open the front cover and close it.
		RAM overflow or overrun has occurred.	Press the **CONTINUE** button (less than 5 seconds).
◻	◯ READY	Internal error has occurred.	Turn the power off for a few secondes then on again. If the error continues, call for service.
🔴(lit)	⌐ ERROR		
◻	TONER/ DRUM UNIT		
◻ *1	◯ READY	Toner is low.	Replace the toner cartridge soon.
◻	⌐ ERROR	Drum unit is wearing out.	Replace the drum unit soon.
🟡(blinking)	TONER/ DRUM UNIT		
◻	◯ READY	Drum unit is not installed.	Install the drum unit.
🔴(blinking)	⌐ ERROR	Toner is empty.	Replace the toner cartridge now.
		Drum unit is worn out.	Replace the drum unit now.
🟡(lit)	TONER/ DRUM UNIT	Drum unit is worn out and toner is empty.	Replace the toner cartridge and drum unit now.

🔴 , 🟡 : Indicator is lit.   🔴 , 🟡 : Indicator is blinking fast (with an interval of 1 second).

◻ : Indicator is turned off.

*1 The indication varies depending on the printer status.

Repacking Instructions

Repacking

It is highly recommended that you **keep the original carton** and ALL packing materials. Should you need to transport or ship your printer, please follow these instructions.

SAFETY CAUTION
The printer weighs about 10 kg {22 lbs.}.

NOTE
• Should you need to send your printer for service, consult your reseller first or Panasonic.
• Please use the original carton and all of the original packing materials.
• Do not ship printer with drum unit installed.
• Improper repacking of the printer may result in a service charge to remove spilled toner.
• Since the printer uses dry toner, extreme care must be taken when handling. The printer should be handled in the upright (vertical) position.

Material required:
• Original cartons and packing materials
• Newspaper or drop cloth
• Shipping tape and scissors

1　Turn off the printer; remove the power cord and all interface cables.

2　Open the front cover.

3   Lift the drum unit up (❶) and slide it out of the printer (❷).

- To avoid possible toner spillage, it is recommended to place the drum unit on a newspaper, drop cloth or best to place back in original (Black) shipping bag.

CAUTION

- To prevent any damage to the drum unit, observe the following precautions.
  — Do not touch the black drum surface illustrated below.
  — Do not expose the drum unit to light for more than 5 minutes.
  — Do not expose the drum unit to direct sunlight.
  — Do not keep the drum unit near dust or dirt.
  — Do not place the drum unit in a high humid area.

Black drum

4 While pushing the drum unit as illustrated below (❶), lift the toner cartridge up (❷).

5 Replace the shipping cover on the toner cartridge.

6 Insert the toner cartridge into a plastic bag and certainly seal the end of the bag tightly.
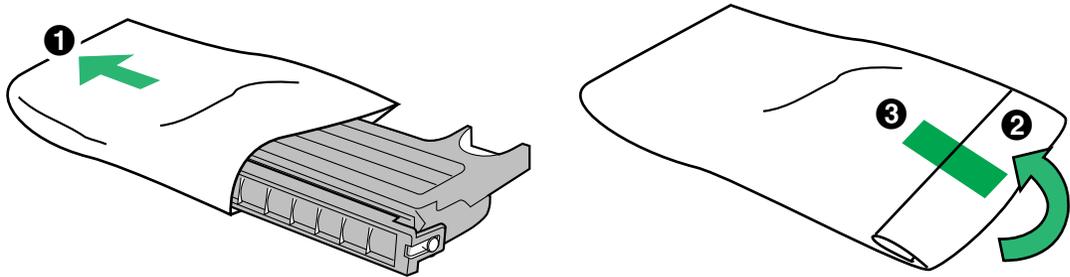
7 Wrap the drum unit with the protective sheet to protect the drum surface.
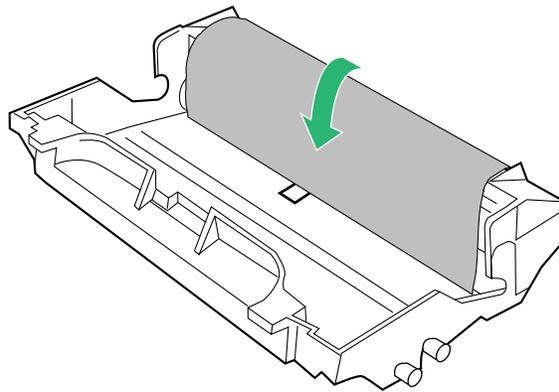
8 Insert the drum unit into a plastic bag and seal the end of the bag tightly.

9 Close the front cover.

10　Wipe off any loose toner in and around the printer.

NOTE
- If a toner vacuum is available, it is the best tool for cleaning spilled toner. Do not use a standard office vacuum; the toner will not be retained by typical vacuum dust collectors.

11　Repack the printer.

Drum unit

Toner cartridge

AC cord
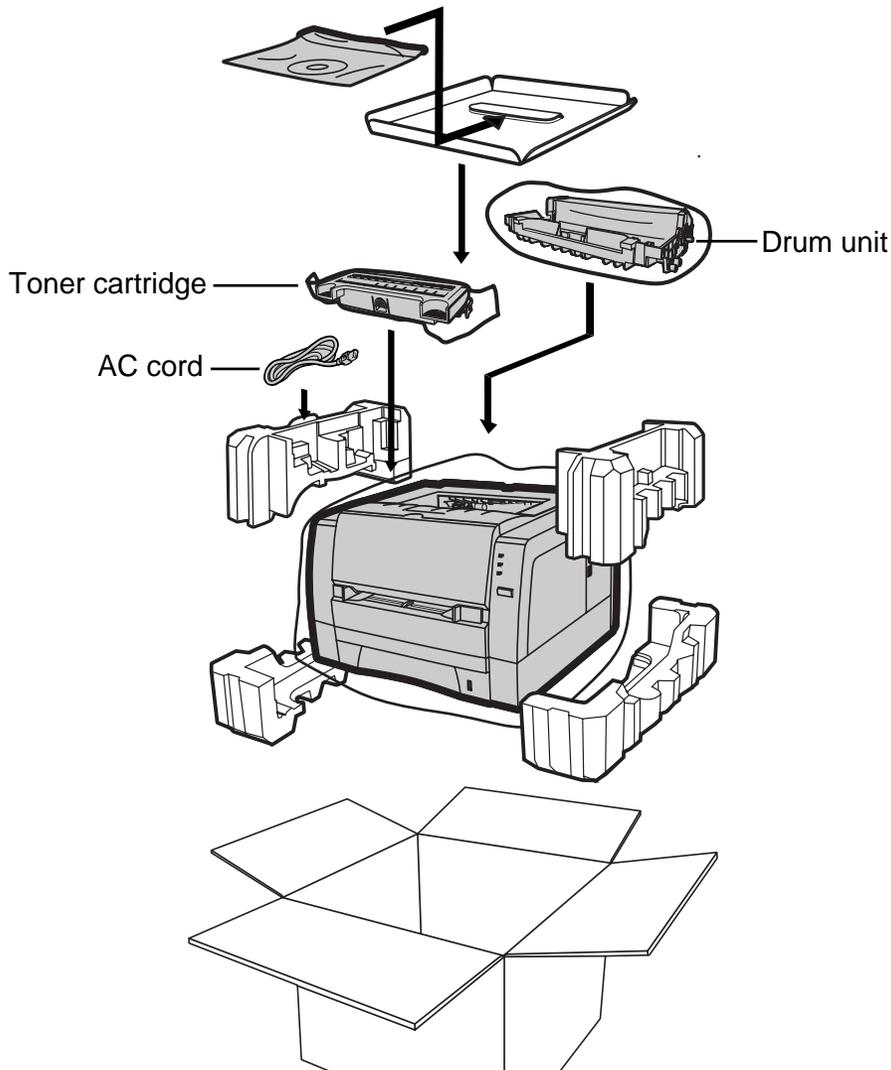
Specifications

Printer

Printing Method:
Semiconductor Laser

Print Speed:
14 ppm (pages per minute) maximum (A4 size plain paper, simplex printing, 5% image area)
15[*1] ppm maximum (Letter size plain paper, simplex printing, 5% image area)

[*1] Maximum print speed is 14.6 ppm.

First Print:
15 seconds

Resolution:
600 x 600 dpi (dots per inch)

Paper Feed:
Media tray (universal cassette): up to 250 sheets of paper [75 g/m^2 (20 lbs.)]
Manual feed: 1 sheet

Paper Output:
Up to 150 sheets of paper [75 g/m^2 (20 lbs.)]

Power Source:
Refer to the nameplate on the rear of the unit

Memory:
2 MB

Interface:
Bi-directional parallel, USB

Warm Up Time
Less than 25 seconds [at 22°C (71.6°F), 50% RH]

Operating Environment:
10 to 32.5°C (50 to 90.5°F), 20 to 80% RH

Storage Environment:
0 to 35°C (32 to 95°F), 10 to 80% RH

Dimensions:
399 (W) X 390.5 (D) X 254 (H) mm (15.7″ X 15.4″ X 10″)

Mass {Weight}:
Approx. 10 kg {22 lbs.}

Consumables / Life:

Starter toner cartridge (provided with printer); 2,000 pages average[1]

Toner cartridge; 4,000 pages average[1]

Drum unit; 20,000 pages average[1]

[1] Average life at 5 % image area with repetitive printing of 10 pages (Letter / A4 size, single-sided printing, default density).

5% image area means that the black area within the printing area is 5%. Printing 10% image area continuously will reduce the life of the toner to about half as compared to printing 5% image area. The Toner Saving mode allows you to save toner (see "Quality Tab" on page 31 in "Settings and Printing").

Power Consumption:

Printing[2] (average):	310 W or less
Standby (average):	70 W or less
Power saving (When the fan stops.):	5.5 W or less

Meets ENERGY STAR® power conservation requirements.

[2]Maximum print speed, duplex printing

Noise Level:
Printing: 49 dBA
Standby: 37dBA

CPU:
Intel 80C51 compatible

Media

■ Paper Specifications

This printer is designed to work well with most types of paper. However, differences in paper may have significant effects on the quality of the print or the reliability of paper handling. It is strongly recommended that you always test paper before purchasing it to make sure it provides desirable performance. The following guidelines will be helpful.

Basic Weight:

60 to 105 g/m^2 (16 to 28 lbs.)

Thickness:
3.7 to 7.5 mils (1 mil=1/1000″)

Moisture Content:
4% to 6%

Smoothness:
100 to 300 Sheffield

Acid Content:
5.5 PH minimum

Fusing Compatibility:
Must not scorch, melt, offset material, or release hazardous emissions when heated to 200°C (392°F) for 0.1 second

Cutting Dimensions:
±0.0313 inch of nominal, corners 90°±4°

Grain:
Long grain

Cut Edge Conditions:
Cut with sharp blades, no paper dust

Ash Content:
Not to exceed 10%

Curl:
No allowable curl toward the side to be printed

Packing:
Polylaminated moisture proof ream wrap

NOTE
• Please store your paper according to the recommendations of the manufacturer.

■ Paper and Envelope Sizes

The following paper and envelope sizes are supported by the printer.

Medium	Name	Dimension
Paper	Letter	216 x 279 mm (8.5″ x 11″)
	A4	210 x 297 mm (8.27″ x 11.7″)
	Legal	216 x 356 mm (8.5″ x 14″)
	B5	176 x 250 mm (6.92″ x 9.84″)
	Executive	184 x 267 mm (7.25″ X 10.5″)
	A5[*1]	148.5 x 210 mm (5.85″ x 8.27″)
	A6[*1]	105 x 148.5 mm (4.13″ x 5.85″)
Envelope[*1]	Envelope #9	98 x 225 mm (3.87″ x 8.87″)
	Envelope #10	105 x 241 mm (4.12″ x 9.5″)
	International DL	110 x 220 mm (4.33″ x 8.66″)
	International C5	162 x 229 mm (6.38″ x 9.01″)
	Monarch	98 x 191 mm (3.87″ x 7.5″)

[*1] Duplex printing cannot be performed with A5, A6 size paper or envelope.

■ Types of Paper to Avoid

- Extremely smooth or shiny paper or paper that is highly textured
- Coated papers
- Acid paper
- Letterhead imprinted with low temperature or thermography. These materials may transfer onto the fusing roller and cause damage. Any pre-printed paper should use inks compatible with 200°C (392°F) for 0.1 second.
- Damaged or wrinkled paper, or paper with irregularities such as tabs, staples, etc.
- Multipart forms or carbonless paper
- Paper with a cotton and/or fiber content over 25%
- **Ink jet media** (paper, transparency, etc.) (It may transfer onto the fuser unit's roller and cause damage.)

■ Transparencies and Labels

You may also print on labels and transparencies that are made for the printer. Panasonic has tested and found that the following work satisfactorily.

OHP transparencies	3M CG3300
Labels	AVERY 5160, AVERY 5161, AVERY 5162, AVERY 5163, AVERY 5660, AVERY 5661, AVERY 5662, AVERY 5663 Avery L7159, Avery L7160, Avery L7161, Avery L7162, Avery L7163, Avery L7164

- To avoid damaging the printer, do not use ink jet transparency.
- Transparencies and adhesive material of labels should be stable at 205°C (400°F), the printer's maximum temperature.
- Re-using transparencies that have been fed through the printer once (for example, after jams or if the transparency is ejected without being printed) can reduce the life of the consumables and paper path components.
- When using transparencies, if the print quality is poor, print on the other side.

NOTE
- With any label stock, the labels must completely cover the backing material (see figure below).

YES	NO
Labels cover the entire backing material	The backing material is exposed.
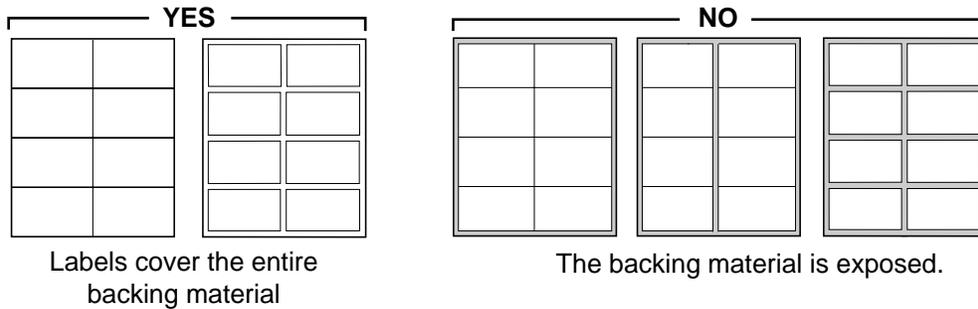
■ Envelope Specifications

It is recommended that you purchase only high quality envelopes with diagonal seams, as shown in the diagram below:
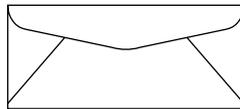
High quality envelopes have the following characteristics:
- A thin, sharply creased leading edge
- Paper weight of 90 g/m^2 (24 lbs.)
- Flat, free of curls, wrinkles, nicks, etc.

NOTE
- Wrinkle may occur in some case, even if high quality envelopes are used.

It is not recommended that you use envelopes with any of the following characteristics (using these may result in paper jams):

- Irregularly shaped envelopes
- Envelopes with curls, wrinkles, nicks, twists, dog-ears or other damage
- Envelopes with side seam construction
- Highly textured envelopes, or with extremely shiny surfaces
- Envelopes that seal by removing a peel-off strip
- Envelopes with more than one flap to be sealed
- Self-adhesive envelopes
- Envelopes that are baggy or not sharply creased
- Embossed envelopes
- Envelopes that have previously been printed with a laser printer
- Envelopes that have been previously printed inside

| Curl | Twist | Dog-ears | Wave | Bent-edge |

| Side seam construction | Peel-off strip | Multiple flaps | Self adhesive |
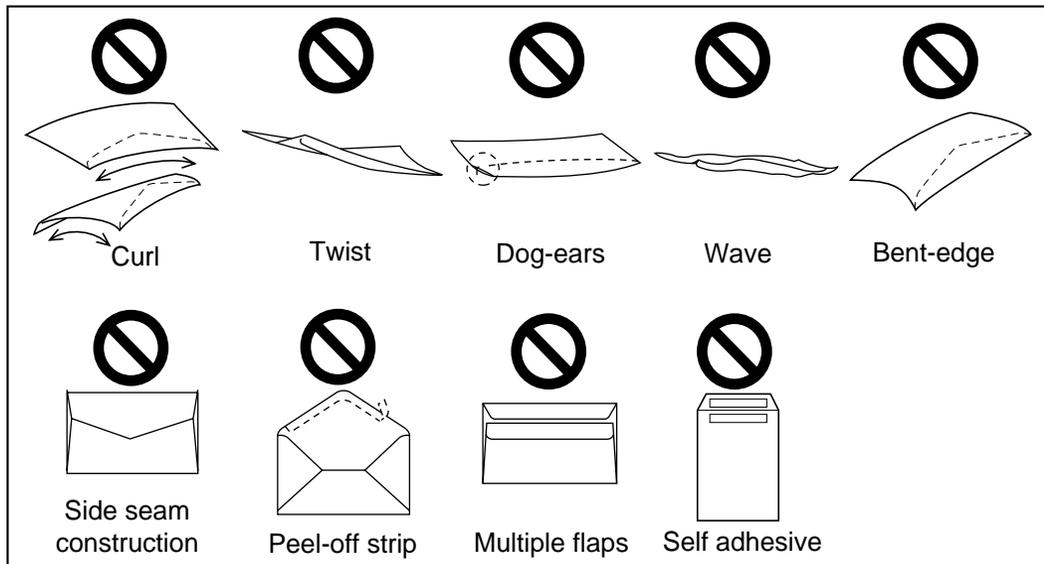
Do not attempt to print on any of the following types of envelopes. These may cause damage to your printer.
• Envelopes with clasps, snaps or tie strings (see Figure 1)
• Envelopes with transparent windows (see Figure 2)
• Envelopes that will melt, discolour, scorch, offset or release hazardous emissions when exposed to 200°C (392°F) for 0.1 second
• Envelopes that use encapsulated types of adhesive that do not require moistening but rely on pressure to seal them

Figure 1   Figure 2
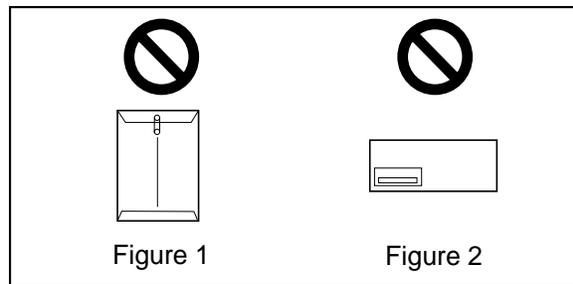
Always test a sample of the envelopes you are thinking of buying. Confirm that the envelope performs acceptably.

For best printing results
• Avoid printing in high humidity i.e., above 70%.
  High humidity may cause the envelope to curl and pick up excess toner.
  High humidity may also cause the envelope to seal.
• Envelope storage is very important. Store them away from moisture and humid air, where they can lay flat and their edges won't be bent or damaged. The humidity should not exceed 70% RH.

Bi-directional Parallel Interface

Connector type: 36PIN Anphenole connector
Cable: use a shielded cable 2 meters (6.6 feet) or less in length

Pin configuration

Pin	Signal
1	nStrobe
2	Data 1
3	Data 2
4	Data 3
5	Data 4
6	Data 5
7	Data 6
8	Data 7
9	Data 8
10	nAck
11	Busy
12	PError
13	Select
14	nAutoFd
15	NC
16	GND
17	FG
18	Vcc

Pin	Signal
19	GND
20	GND
21	GND
22	GND
23	GND
24	GND
25	GND
26	GND
27	GND
28	GND
29	GND
30	GND
31	ninit
32	nFault
33	GND
34	NC
35	NC
36	nSelectIn

Parallel Interface connector (printer side)
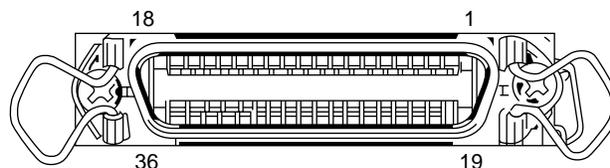
CAUTION
- If the cable is connected to PC via printer buffer or selector, the printer may not print.
- A print server cannot be used for printing.

NOTE
- Be sure to use only a shielded cable. The printer will not operate properly if any of the pins are not connected.
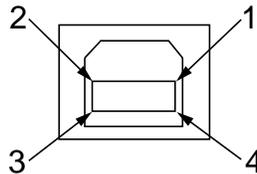
USB (Universal Serial Bus) Interface

Cable: use a shielded cable 5 m (16.4 feet) or less in length.

Pin configuration

Signal pin	Signal
1	VBUS
2	-Data
3	+ Data
4	Ground

USB Interface connector (printer side)

NOTE
- Be sure to use a full-speed shielded cable which the Data + and Data – cables are the twisted pair.
- When using KX-P7100 printer and other USB devices simultaneously, we cannot guarantee normal printing.