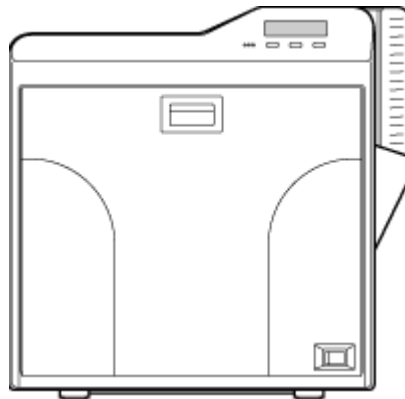


## Card Printer

---

# CX-D80

## Electronic Manual



Thank you for purchasing this product. Please read through this “Electronic Manual” carefully in advance to ensure proper use of the product. Also, to make sure that the product is used safely, please read through the “Read Me First” booklet. Please store the manuals properly after reading so that they can be referred to whenever necessary.

**Contents**

**Contents**

**Before Use**

About this Manual ..... 3  
 Precautions ..... 3  
 Disclaimer ..... 6  
 Name and functions of parts ..... 6  
 Specifications ..... 9  
 Accessories/separately sold items ..... 10  
 Options ..... 11

**Operation**

Operation Panel ..... 11  
 Setting Mode ..... 13  
     Setting Mode Flow ..... 14  
 Setting using the operation panel ..... 17  
 Security ..... 25  
 Setting Using the Status Monitor ..... 27  
 Printing a Card ..... 27

**Replacement**

Precautions on cards ..... 28  
 Ink Ribbon ..... 29  
 Retransfer Film ..... 31

**Maintenance**

Servicing of Parts ..... 34  
 Servicing Based on Print Output ..... 42

**Troubleshooting**

When an Error Message is Displayed ..... 42  
 Precautions on cards ..... 44  
 Ink Ribbon ..... 49  
 Retransfer Film ..... 50  
 Unable to produce desired printing results ..... 50  
 Printer not operating as desired ..... 51  
 Before sending printer for repair ..... 51

**Setup**

Installation and Connection ..... 52  
 Printing Media ..... 53  
 Printer and Computer Connection ..... 57  
 Computer Settings ..... 58  
     Software ..... 58  
         Install ..... 58  
         Uninstall ..... 69  
     IP Sec ..... 72  
     Printer Driver Settings ..... 74  
     Port Monitor Settings ..... 80  
     Status Monitor Settings ..... 80  
     Inline Encoding ..... 86  
     List of Error Codes ..... 87  
     Frequently Asked Questions ..... 89  
 Printer Setting ..... 90  
     Operation Panel ..... 90  
     Setting using the operation panel ..... 90

**About this Manual**

"Contents of this manual" ..... page 3  
 "How to read this manual" ..... page 3

**Precautions**

"Safety precautions" ..... page 3  
 "Precautions during use" ..... page 4

**Disclaimer**

"Disclaimer" ..... page 6

**Name and Functions of Parts**

"Internal mechanism diagram" ..... page 6  
 "Front" ..... page 7  
 ..... page 7Rear]  
 "Right" ..... page 7  
 "Left" ..... page 7  
 "When printer door is open" ..... page 7  
 "Ink ribbon cassette" ..... page 8  
 "Retransfer film cassette" ..... page 8

**Specifications**

"Main specifications" ..... page 9  
 "Outline dimensional drawing" ..... page 9

**Accessories/Separately Sold Items**

"Accessories" ..... page 10  
 "Sold separately" ..... page 10

**Options**

"Functions" ..... page 11  
 "Options" ..... page 11

## About this Manual

### Contents of this manual

The copyright of this manual belongs to DNP. Reprint and duplicate of this manual in part or full without the prior consent of DNP is strictly prohibited.

Windows is the registered trademark of Microsoft Corporation in the United States.

Product names of other companies described in the manual are the trademarks or registered trademarks of the respective companies. Symbols such as ®, and © are omitted in this manual.

Designs, specifications, or other details described in this manual may be modified for improvement without prior notice.

### How to read this manual



Information in this frame is for reference purposes, such as information on functions and usage restrictions.



Precautions are described in this frame.



Click this frame to display the details page.



Click this icon to return to the top page.



Click this icon to open the PDF file for printing.

The 「Adobe Reader」 application is needed to browse the PDF file.

## Precautions

### Safety precautions

Please read through all the following items before using the printer.

### Graphical symbols

A number of graphical symbols are used in this manual as well as on the printer. They are intended to ensure the safe use of this product, protect users against safety hazards, as well as prevent damage of property. Make sure that you read through this manual after gaining a proper understanding of their meanings.

#### WARNING

■ If you ignore the warning with this mark, and handle the unit in a wrong way, death or serious injuries may occur.

#### CAUTION

■ If you ignore the caution with this mark, and handle the unit in a wrong way, injuries or damages to properties may occur.

### Warnings

#### WARNING

■ If the abnormal phenomena as listed below are seen, immediately stop operating the unit. Continuing operation may cause a fire or electric shock.

- Smoke or odd smell comes out from the machine.
- Water or metal went into the machine.
- The unit fell to the floor, or the cabinet was broken.
- The power cable is damaged (exposed lead, broken cable, etc.)

If you see these phenomena, turn off the power, pull out the power plug, and contact your dealer as soon as possible. Do not try to repair it by yourself. It is dangerous.

■ Do not remove the screws, or disassemble or alter the machine.

- High-voltage components are contained in the unit. Touching these areas may result in an electric shock.
- Ask your dealer if you want your printer inspected or repaired.

• Do not remove the external covers of the machine. You may get an electric shock.

■ Do not work on the power cable, or give excessive force on it. Do not put heavy objects such as furniture on the cable.

- The cable may be damaged, causing a fire or electric shock.
- When you find a defect on the power cable, such as exposed lead, stop using the unit, and consult your dealer.

■ Do not use the machine with the power plug inserted incompletely.

- The machine generates heat due to incomplete contact, causing a fire or electric shock.
- Do not put many cords on a single plug socket. The power cords also heats up.

■ Do not use the machine with dusts piled on the power plug. Do not put a metallic material adjacent to the power plug.

- Dusts and metal are conductive, causing a fire or electric shock.
- Pull out the power plug from the outlet every six months, and clean the dusts piled on the legs and body of the plug.

■ Do not use a line voltage other than instructed.

- Using a line voltage or power supply which is not specified may cause a fire or electric shock.

■ **Do not put foreign materials from the openings of the machine (e.g., vents, card slots, cassette inlet, etc.)**

- Metals, flammable things, and other foreign materials may cause a fire or electric shock if entering into the machine.
- If these things went into the machine, immediately turn off the power, pull out the power plug, and ask your dealer to repair. Do not try to repair it by yourself. It is dangerous.

■ **Do not put a container with liquid in it, or small metal ornaments and the like on the machine.**

- The liquid or metal entering into the machine acts as a conductor, causing a fire or electric shock.
- If liquid or metal went into the machine, immediately turn off the power, pull out the power plug, and ask your dealer to repair. Do not try to repair it by yourself. It is dangerous.

■ **Do not place the machine on a rickety table or slanting places.**

- The machine may fall out of the table or fall over, which may damage the machine or injure you.
- If the machine is damaged by falling or turnover, immediately turn off the power, pull out the power plug, and ask your dealer to repair. Do not try to repair it by yourself. It is dangerous.

■ **Do not wet the machine with water.**

- Using the machine at a place where water splashes on the machine, or wetting the machine with water (applying, throwing, or spilling water over the machine) may cause a fire or electric shock.
- If water entered into the machine, immediately turn off the power, pull out the power plug, and ask your dealer to repair. Do not try to repair it by yourself. It is dangerous.

■ **Do not touch the machine with wet hands.**

- Touching the machine with wet hands may cause an electric shock.

■ **Do not use the printer when cards are jammed inside.**

- Cards may not be discharged correctly such as when the retransfer setting for the card is inappropriate. Stop using and remove the jammed cards immediately. Otherwise, you may have problems removing the cards, and fire or electric shock may also occur as a result.

■ **Do not touch the power plug during electrical storms.**

- Lightning may cause an electric shock.

■ **Ground the machine with the attached electric cord when connecting it to the utility outlet.**

- Using a cord other than the one supplied for grounding may cause an electric shock when the machine fails.

■ **Do not put your head or yourself into the packaging bag.**

- Do not play with the packaging bag. You may suffocate yourself.
- Give close attention to small children who may want to play with the packaging bag.

■ **Do not use the machine while it has a fault.**

- Do not use the machine while it has a fault, as this may cause a fire or electric shock.
- Immediately turn off the power, pull out the power plug, and ask your dealer to repair. Do not try to repair it by yourself. It is dangerous.

■ **For users of artificial cardiac pacemakers, keep a distance of at least 22 cm between the printer and the attached pacemaker.**

- Radio waves used by the RF-ID function inside the printer system may affect the operation of the cardiac pacemaker.

 **CAUTION**

■ **Pull out the power plug before cleaning the machine.**

- This is for preventing electric shocks.

■ **Pull out the power plug when you won't use the machine for a prolonged period of time to assure safety.**

- Remove the power plug from the outlet for safety when you won't use the machine for a long time.

■ **Do not move the machine with the power cable and other electric cables connected.**

- The cables may be damaged while being moved, which may cause a fire or electric shock.
- You may stumble over the cable and get injured.

■ **Do not move the machine with objects placed on it.**

- They may fall on you and hurt you.

■ **Do not put heavy objects on the machine.**

- They may fall on you and hurt you.

■ **Do not block the vents.**

- Heat generated inside the machine cannot escape, which may cause a fire.

■ **Do not rest your body on the machine, or leave it suspended above the ground.**

- The machine may drop, causing damage or injury. Pay particular attention when there are young children around.

■ **Be sure to work with two persons when you unpack, move or lift the machine.**

- If you work alone, you may be injured by the fallen machine or hurt your back by lifting a heavy machine by yourself.

■ **Inspection**

- Ask your dealer or a qualified person to inspect the machine, typically once every two to three years. Operating the machine with dusts piling on the components for a prolonged period of time may cause a fire or a malfunction of the machine. It will be particularly effective to inspect the machine before wet rainy season. Consult your dealer on the costs of inspection.

■ **Do not place the machine in the following locations.**

Doing so may cause fire or electric shock.

- Places that are highly humid or dusty.
- Places that are exposed to oily smoke or steam, such as near a cooking table or humidifier.
- Places near a heating equipment.
- Places that are subject to water droplet condensation, such as beside a window.

Also, placing it at a place that is exposed to direct sunlight may result in deterioration of the cabinet.

■ **Hold the body of the power plug when pulling it out.**

- Do not pull out the plug by holding the cable. The cable may be broken or damaged which may in turn cause a fire or electric shock.

■ **Do not touch the power plug with a wet hand**

- You may get an electric shock.

■ **Do not lay the power cable near the heating equipment.**

- The covering of the cable will melt due to heat from such equipment, which may cause a fire or electric shock.

■ **The heat rollers and adjacent areas become hot during operation.**

- Be careful not to touch the heat rollers and adjacent areas when replacing the ink ribbon or retransfer film, or remove jammed cards.
- Wait until the heat rollers get cooled down to prevent burns.

■ **Be careful of jamming your hand or fingers in the card bracket of the hopper or printer door.**

- Remove cards from the card tray, or jammed cards and ink ribbon/retransfer film cassette with care not to jam your hand or fingers in the mechanism to prevent any injury.

■ **Do not use a power cable other than the specified cable for connection.**

- If you use an unspecified power cable for connection or extension, heat may accumulate in the cable, causing a fire.

**Caution**

**Precautions during use**

Please read through all the following items before using the printer.

**Handling instructions**

Pay careful attention of the following when handling a printing media (retansfer film or ink ribbon) or card.

**Using a deformed or scratched card may cause card feed errors.**

Touching the printing surface of the printing media or card directly with your hand may cause the print to turn out uneven. Foreign particles attached to the printed areas may result in printing voids. Attach the printing media in a clean environment.

Use of electrically-charged printing media or cards may cause printing errors. Do not allow static to occur, such as due to cards rubbing against each other.

When replacing or replenishing a printing media or card that is stored under a low temperature, use after leaving the media or card at the operating ambient temperature of the printer for at least one hour.

Otherwise, condensation may occur, causing printing errors or malfunction of the printer.

## Storage

### Storage instructions

The storage conditions of the printing media (retransfer film or ink ribbon) and card have a significant effect on the printing quality. Store the printing media or card in one of the following locations.

### Storage environment

Temperature: 5°C to 25°C

Relative humidity: 40 % to 60 %

### Storage location

Do not store the printing media or card in the following locations. Doing so may cause the media or card to deteriorate.

Places exposed to direct sunlight.

Places with a high humidity.

Places near organic solvents or diazo copiers.

### Storage period

Use the printing media (retransfer film or ink ribbon) within half a year after purchase. For details on the cards, please consult our authorized dealers.

## Printer Installation

When the printer is not in use, it is recommended that you turn off the power, and cover it with a plastic sheet.

Do not place the printer unit in the following locations. Doing so may have adverse effects on the printer.

**Carpeted room.**

Places with a busy flow of people.

Places where paper (corrugated boards, etc.) is handled or stored.

Places near photocopiers.

Places exposed to direct sunlight or near a heating equipment (such as a stove).

Inclined or unstable surfaces.

Places exposed directly to cold air, such as near an air-conditioner outlet, or places subject to high temperatures.

## Precautions on retransfer films/ink ribbons

Put on the supplied gloves when handling the retransfer film/ink ribbon. Direct contact of your hand with the printing surface may result in printing errors.

### When retransfer film/ink ribbon is dismantled

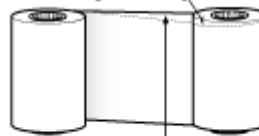
Winding misalignment may occur. If an improperly wound retransfer film/ink ribbon is installed, the resulting color may vary, or errors may occur.

## When attaching the retransfer film/ink ribbon

Use your hands to adjust the media at the supply and take-up sides so that they are parallel to each other. When doing so, make sure you do not touch the printing surface.

Refer to the label adhered to the cassette for alignment of the screen position. Printing errors may occur if the position is not properly aligned.

Winding misalignment



Adjust the position with your hands so that the media position is parallel at the take-up and supply sides

## During transport or moving

Make sure to set to the transport mode.

"Transport mode setting" (☞ page 24)

## Precautions on Cards

### Handling and storage of cards after printing

Avoid storing cards at places that are exposed to direct sunlight or subject to high temperatures and humidity.

Discoloration or fading may occur if a card comes into contact with the following chemicals or stationery.

Organic solvents, including alcohol, film cleaner, or diazo copiers.

Files, document cases, pass holders, or erasers made of flexible polyvinyl chloride.

Hair wax or cosmetic products.

### Card types

Thin cards and certain card materials may not be suitable for printing using this printer. For details on the card material to use and other specifications, please consult our authorized dealers in advance.

**Note:**

If the card thickness is not properly adjusted, printing error or printer malfunction may occur.

"Adjusting Card Thickness" (☞ page 56)

### When a card is jammed inside the printer

Cards may not be discharged correctly such as when the retransfer setting for the card is inappropriate.

Stop using and remove the jammed cards immediately. Otherwise, you may have problems removing the cards, and fire or electric shock may also occur as a result.

When a card jam occurs, make use of the jog dial to remove the jam.

If the card cannot be removed, consult a servicing personnel or our authorized dealers.

## Disclaimer

Escape Clause

■ We do not provide compensation for any malfunction during card printing caused by breakdown of the machine, ink ribbon defects or card characteristics. In addition, we also do not provide compensation for insufficient print quality as a general rule. Please evaluate carefully beforehand.

## ■ Card Material

Some card material may not be suitable for printing. Using a contact-type IC card other than those specified by the dealer, may cause damage to the thermal head. No compensation is made for the life reduction and failures that were caused by unsuitable card material. Warp of card or uneven thickness of IC cards, even though they are within the tolerance of JIS or ISO standards, may not be suitable for printing or feeding. For details on the specifications about card material or others, consult the dealer in advance

## ■ Version upgrade

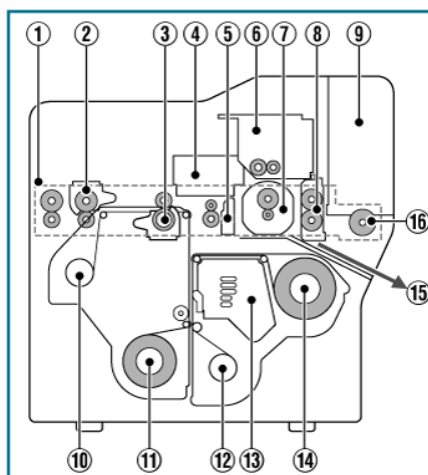
The following defects may occur as a result of the version upgrade for the firmware of the printer or for the printer driver.

- Card printing is disabled for the application software that has been used.
- The operation of the printer or application software becomes unstable.
- Defects in print result occurs.
- Print color or shade differs.
- The performance of reproducing fine letters, changes.
- Others

Be sure to retain a copy of the current version when performing version upgrade. Reinstall the previous version immediately if these problems occur. We are not liable for any damage such as defective cards or interruptions during printing as a result of the version upgrade.

## Name and functions of parts

## Internal mechanism diagram



## Card feeder unit

This is the roller for feeding cards. Each of the feed rollers needs to be cleaned daily.

## Warpage correction heating roller

Some types of cards may warp. Adjust accordingly until warpage is eliminated. Set using the host computer.

## Retransfer heating roller

You can adjust the temperature and retransfer time for some retransfer films and cards. Set using the host computer.

## Non-contact IC encoder

You can adjust the position to stop the card when a non-contact IC card is used. Set using the host computer.

## Contact IC

You can adjust the position to stop the card when a contact IC card is used. Set using the host computer.

## Magnetic encoder

You can select the coercivity when writing data to the magnetic stripe card. Set using the host computer.

## Card turnover unit

Inverts the card.

## Cleaning roller

Removes any dust or dirt attached to the card. The cleaning roller needs to be cleaned daily.

## Card hopper

For loading cards.

## Retransfer film (take-up side)

For attaching the take-up side of the retransfer film.

## Retransfer film (supply side)

For attaching the unused side of the retransfer film.

## Ink ribbon (take-up side)

For attaching the take-up side of the ink ribbon.

## Thermal head

The thermal head is a consumable part. For details on its replacement, please consult our authorized dealers.

## Ink ribbon (supply side)

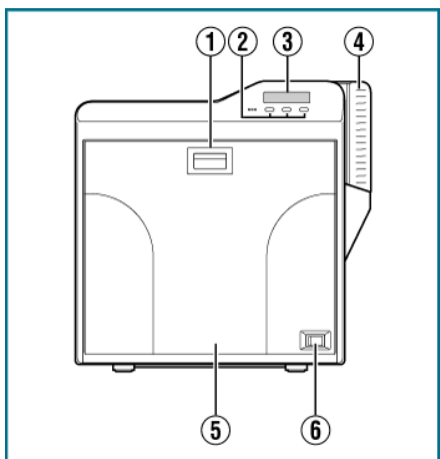
For attaching the unused side of the ink ribbon.

## NG card outlet

Discharges NG cards, such as during card jams.

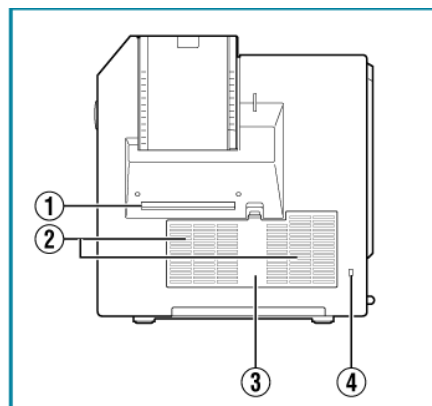


Front



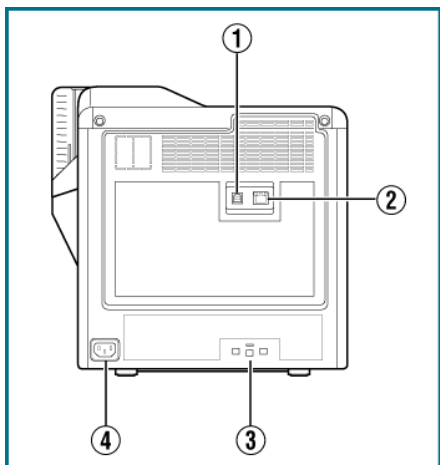
- Sliding knob  
Opens/Closes the printer door.
- Slide it upward, and pull toward you to open the printer door.
- Operation buttons  
For selecting and confirming information on the operation panel.
- Operation panel  
Displays menus and error messages.
- Card hopper  
For loading cards.
- Printer door
- Power switch  
Turns the power On/Off.

Right



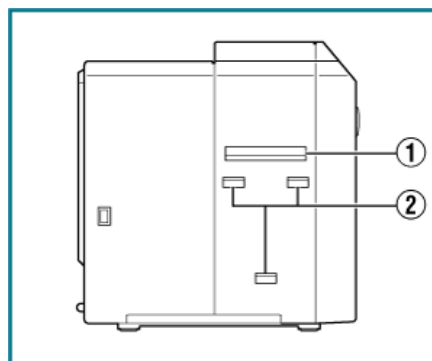
- NG card outlet  
If a card is left inside the printer when the power is turned on or re-set, the card will be automatically discharged.
- Cards in the printer are discharged when an error occurs on the magnetic card or IC card.
- Air suction fan opening  
Air inlet of the internal cooling fan.
- Filter cover  
This is the cover of the fan filter.
- Security slot  
For attaching the Kensington lock.

Rear



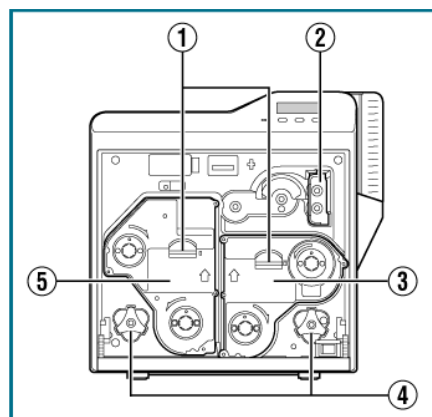
- USB cable connection terminal  
For connecting a USB 2.0 interface cable.
- LAN cable connection terminal  
For connecting an Ethernet interface cable.
- Cable clamp  
For securing the supplied USB cable.
- "Connection" (page 57)
- [ AC INLET ] power supply terminal  
For connecting the power cord.

Left



- Card outlet  
Outlet for discharging the cards.
- Card stacker (supplied) attachment slot  
For attaching the supplied card stacker.

When printer door is open



- Cassette buttons  
Press these buttons in order to pull out the ink ribbon cassette or re-transfer film cassette.
- Cleaning unit  
Removes any dust or dirt attached to the card.
- Ink ribbon cassette

## Before Use

---

For attaching the ink ribbon.

Jog dials

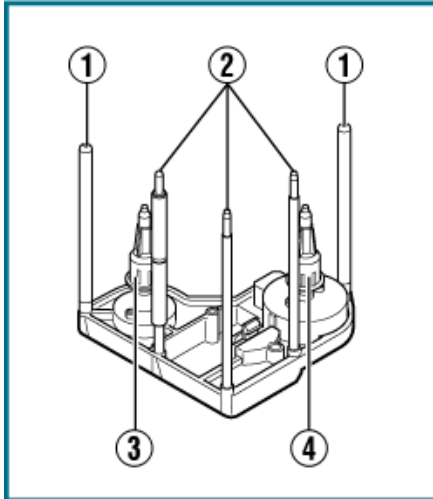
When there is card jam in the cleaning unit, turnover unit, or retransfer unit, detach the jog dial from the printer body, and attach it accordingly to turn the rollers of the corresponding parts.

Retransfer film cassette

For attaching the retransfer film.

---

### Ink ribbon cassette



Guide shaft

Provides guide to the position for attaching the cassette.

Shafts

When attaching an ink ribbon, unwind it along the shafts.

Bobbin holder (black)

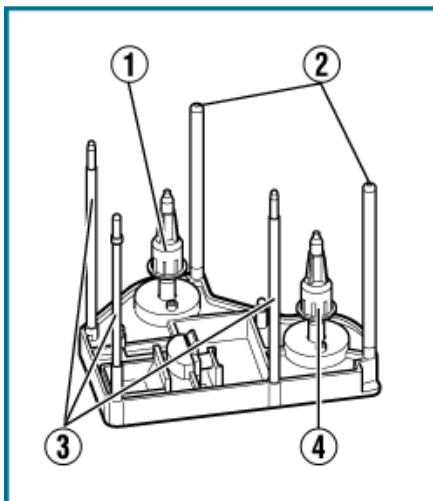
For securing the take-up side of the ink ribbon.

Bobbin holder (yellow)

For securing the unused side of the ink ribbon.

---

### Retransfer film cassette



Bobbin holder (black)

For securing the take-up side of the retransfer film.

Guide shaft

Provides guide to the position for attaching the cassette.

Shafts

When attaching a retransfer film, unwind it along the shafts.

Bobbin holder (green)

For securing the unused side of the retransfer film.

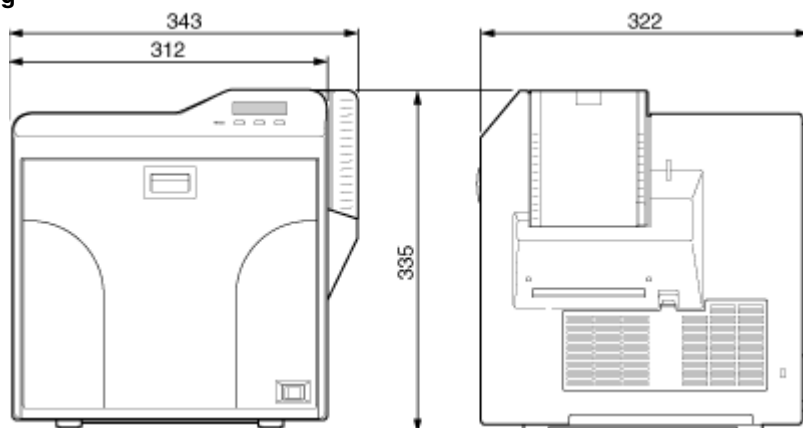


## Specifications

### Main specifications

Item	Description
Recording system	Dye sublimation retransfer
Paper feed mode	Automatic
Recording density	300 dpi
Reproduction gradation	256 levels each for Y, M and C; C and 2 for Bk
Interface	USB 2.0 (Hi-Speed/Full-Speed)
Interface	Ethernet(100BASE-TX/10BASE-T)
Operating environment conditions	Temperature between 15 ° and 30 °C
Operating environment conditions	Humidity between 35 % and 70 % (no condensation)
Storage environment conditions	Temperature between -15 °C and 55 °C
Storage environment conditions	Humidity between 20 % and 80 %
Power supply	AC 100 V - 120 V/AC 220 V - 240 V(tolerance: $\pm 10\%$ ) 50 Hz/60 Hz(tolerance: $\pm 5\%$ )
Current consumption	3.5 A (100 V system)
Power consumption	310 W (max.)
Mass	(Standard) approx. 12.5 kg (excluding optional built-in items)
Dimensions (cm)	343 mm x 335 mm x 322 mm (W x H x D)

### Outline dimensional drawing



## Accessories/separately sold items

### Accessories

Please check to ensure that the printer accessories are in place when unpacking the product package.

CD-ROM x 1

Instruction Manual x 1

“Read Me First ” ( LST1004 ) x 1 booklet

Power Cord (2 m) x 2

Cleaning Card x 1

Card Stacker x 1

USB 2.0 Cable (2 m) x 1

Gloves x 1 Pair

### Products sold separately

To purchase these items, please consult our authorized dealers.

YMCK (1000 Images) Set

Model: CY-P340A

Ink Model: CY-340-100

Retransfer Film Model: CY-3RA-100

Ink Ribbon (YMCKK), 750 frames/roll Model: CY-35K-75D

Ink Ribbon (YMCKU), 750 frames/roll Model: CY-35U-75D

Retransfer Film (YMCKK), 1000 Images/Model: CY-3RA-100

Cleaning Kit:

Magnetic Head Cleaning Card (x 5), Cotton Swab (5 Large and 5 Small), Cleaning Wipes (1 Box, Model: CX210-CKIT1)

Cleaning Card:

10 Cards/Set (Model: CX210-CC1)

## Options







### Functions

- Double-sided printer  
Printer that supports double-sided printing.
- Single-sided printer  
Printer that supports single-sided printing.

### Options

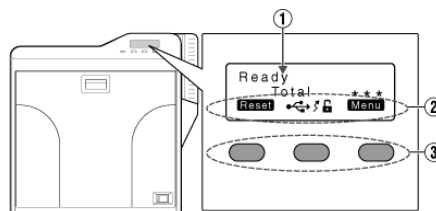
- Warpage correction  
Device for correcting card warpage after printing.
- Magnetic encoder  
Device for writing data to a magnetic stripe card.  
Supports only installation of a double-sided printer.
- Contact IC encoder  
Device for writing data to a contact IC card.
- Non-contact IC encoder  
Device for writing data to a non-contact IC card.

## Operation Panel

- "Operation Panel"  page 11
- "Setting Using the Operation Panel"  page 13
- "Setting using the operation panel"  page 17
- "Security"  page 25
- "Setting using the status monitor"  page 80
- "Printing a Card"  page 27

## Operation Panel

### Name and functions of parts




- Operation panel  
Displays the mode settings, operating status, and error messages.
- Status icon/operation button display  
Displays the status icon or the function of the operation button during mode setting.
- Operation buttons  
For selecting a button displayed on the operation panel.

### Operation buttons

#### Resets the printer.



After clearing an error, press in the order of [ Reset ] → .

#### Displays the user mode.



Exits setting.  
Pressing it each time brings you to the next higher setting mode level.



#### Displays the setting mode in the next lower level.



Confirms or executes a setting.  
It is also used to save a new setting.




The display does not change if an item cannot be altered using the operation panel.  
Pressing it each time displays the next setting item.

#### Pressing it each time displays the next setting value.



#### Displays the settings change mode.



If [ Change ] is not displayed for an item, you can adjust the settings on the status monitor of a PC.  
"Status monitor setting" (  page 80 )

## Operation

Displays the scroll mode for the displayed characters.

Scroll

Scrolls to the next displayed character on the left.



Scrolls to the next displayed character on the right.



### Operation panel status display

#### USB connection

Printer information can be viewed through the network. However, printing is performed through USB connection.

IP address established



IP address not established



#### Network connection

IP address established



IP address not established



#### Security status

Locked



Unlocked

【定義なし】



## Operation Panel Display

### Starting up

Boot Up..

### Initializing

Initializing..

### Preheating

Preheating  
XXXXX\* \* \*

### Ready

Ready  
XXXXX\* \* \*

### Printing

Printing..  
XXXXX\* \* \*

### Loading

Loading..  
XXXXX\* \* \*

### Encoding

Encoding..  
XXXXX\* \* \*

### Adjusting heat roller to the preset temperature

Heating..  
XXXXX\* \* \*

### Retransferring

Retransfer..  
XXXXX\* \* \*

### Cleaning

Cleaning..

### Heater OFF

Sleeping..

## Setting Mode

Settings can be viewed on the printer's operation panel.  
Settings can be changed on the status monitor of the computer.  
"Setting Using the Operation Panel" (page 17)  
"Setting Mode Flow" (page 14)

## Cleaning

For setting during cleaning of the card feed roller or magnetic head.

### Setting values

#### Rollers

Select this value when cleaning the card feed roller.

#### MG

Select this value when cleaning the magnetic head.

## Counter Reset

Resets the free counter and error counter.

## Test Print

Prints the printer's built-in test pattern, or the different setting values.  
When system troubles occur, printing can be performed using settings on the printer or computer by operating only the printer.

### Setting values

Test Print: Test Pattern, Printer Setting, Network, Lami Setting

## Down load

Updates the firmware.

## Transport Mode

For setting the transport mode.

## Media

Displays the settings of the printing media.

### Setting values

**Ink Type:** YMCK, YMCKPO, K, YMCKK, YMCKUV

Set according to the type of ink ribbon.

**Film Type:** 1000, 750

Set according to the type of retransfer film.

**Card Thickness:** Standard, Thin

Set according to the thickness of the card.

**Standard:** Supports card thickness of 0.76 mm

**Thin:** Supports card thickness of 0.25 mm

## Print

Displays the printing settings.

### Setting values

**YMC Level:** -3, -2, -1, 0, 1, 2, 3

For setting the YMC (color) density level.

Selecting a larger value increases the density level.

**Black Level:** -3, -2, -1, 0, 1, 2, 3

For setting the K (black) density level.

Selecting a larger value increases the density level.

**Black Mode:** Standard, Fine

For setting the printing mode for the K (black) component.

If the characters still appear faded after raising the [ Black Level ], set to [ Fine ].

However, printing time required will be longer than the [ Standard ] setting.

**UV Level:** -3, -2, -1, 0, 1, 2, 3

For setting the UV ink density level.

Selecting a larger value increases the density level.

During UV printing, card warpage may increase if the card has a low heat resistance or under an environment with high temperature.

**PO Level:** -3, -2, -1, 0, 1, 2, 3

For setting the density level of the peel-off ink.

Selecting a larger value increases the density level.

## Retransfer

Displays the retransfer mode settings.

### Setting values

**Temp Level:** -2, -1, 0, 1, 2

For setting the retransfer roller temperature.

Selecting a larger value increases the temperature.

Retransfer may fail depending on the card used. If retransfer fails, raise the setting to the next higher value.

A higher retransfer roller temperature helps to enhance card retransfer, but the stronger heat may also cause the card to deform. If the printer is not initialized after changing the temperature setting, temperature is adjusted after the printing operation starts.

**Speed (Front):** -3, -2, -1, 0, 1, 2

For setting the surface retransfer speed.

Selecting a larger value increases the speed.

Retransfer may not be successful for some parts of the card depending on the card used. Lowering the setting value helps to enhance retransfer, but the stronger heat may also cause the card to deform.

**Speed (Back):** -3, -2, -1, 0, 1, 2

For setting the rear surface retransfer speed.

Selecting a larger value increases the speed.

Some types of cards may warp during double-sided printing. If card warpage occurs, raise the setting to the next higher value.

**MG Peel Mode:** Standard, MG Stripe

For setting the method for peeling the retransfer film.

**Standby Mode:** Front wait, Back wait

For setting the laminator standby position.

Select whether to standby at the front or rear surface during double-sided printing.

## Bend Remedy

Displays the warpage correction mode settings.

### Setting values

**Temp Level:** -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, off

For setting the warpage correction roller temperature.

Selecting a larger value increases the temperature.

If the printer is not initialized after changing the temperature setting, temperature is adjusted after the printing operation starts.

**Speed:** -2, -1, 0, 1, 2

For setting the warpage correction mode speed.

Selecting a larger value increases the speed.

## Heat Roller

Displays the settings of the power save mode or low temperature standby mode.

### Setting values

**Power Saving:** 5 mins, 10 mins, 15 mins, 20 mins, 25 mins, 30 mins, 45 mins, 60 mins, off

For setting the time of the power save mode.

While in the [Ready] mode, if the printer is not operated during a specific time interval, the retransfer roller, warpage correction roller, and backlight of the operation panel are turned off to save power.

## Operation

### HR Control: Off, On

For setting whether to standby the printer by lowering the retransfer heat roller temperature if cards are not issued for 30 minutes or longer.

The printer will automatically be restored to the original mode during the next card issuance, but it may take a longer time before the first card is printed.

Set this to On during normal use.

## Setting

Displays the printer settings.

### Setting values

#### Display:

Mode: Counter

Counter: Total Cnt, Head Cnt, Free Cnt, Cleaning Cnt, Error Cnt

Contrast: -3, -2, -1, 0, 1, 2, 3

For setting the display status the operation panel.

Buzzer: On, Off

For setting whether to sound the buzzer when an error occurs or when settings are changed.

Unit No: No.1 ~ No.10

For setting the printer's unit number according to the USB environment.

## Option

Displays the optional settings.

### Setting values

MG: None, ISO, JIS

Displays the availability of a magnetic encoder or the type of encoder used.

IC Antenna: None, Installed

Displays the availability of a non-contact IC encoder.

IC Contact: None, ISO Type, JIS Type

Displays the availability of a contact IC encoder or the type of encoder used.

Contact IC R/W: None, Installed

Displays the availability of an IC contact.

Bend Remedy HR: None, Installed

Displays the availability of a warpage correction heat roller.

Turn Over: None, Installed

Displays the availability of retransfer unit.

## MG

Displays the coercivity settings.

### Setting values

JIS Type: Loco, Hico

For setting the coercivity when writing data to a JIS magnetic stripe card.

Retry Count: 0, 1, 2, 3

For setting the number of retries during data writing.

## Network

Displays the network settings.

### Setting values

Printer Name: ASCII character strings (10 characters)

For setting the printer name.

Host IF: LAN, USB

For setting the interface.

If the printer is connected via USB interface, the setting switches automatically to the USB setting even if it is set to LAN during initialization.

#### IPv4:

DHCP: On, Off

Setting: IP Address, Subnet Mask, Gateway

Effective IP: IP Address

For setting IPv4.

#### IPv6:

Adrs Config: Auto, Manual

Setting : IP Address, Prefix Len, Gateway

Effective IP: IP Address1, IP Address2, IP Address3

For setting IPv6.

Session Time Out: Off, 10 mins, 20 mins, 30 mins, 60 mins

For setting the session timeout interval.

MAC Address: Hexadecimal character strings

Displays the MAC address.

IP Sec Mode: Off, On

For setting the availability of IP Sec.

IP Sec Type: not Setting, Preshard, Certificate

Displays the method for IP Sec verification.

## Setting Mode Flow

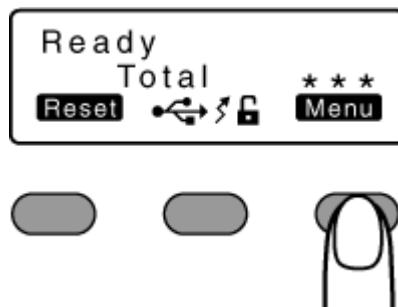
Settings can be viewed on the printer's operation panel.

Settings can be changed on the status monitor of the computer.

"Setting Mode" (page 13)

1 Press [ Menu ]

A setting item appears.



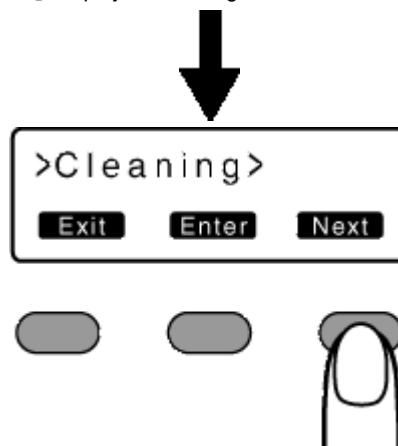
2 Press [ Next ]

Pressing it each time displays the next setting item.

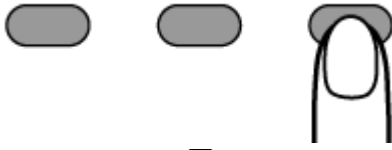
Pressing [ Enter ] or [ Change ] displays the setting value.

Pressing [ Next ] or [ Right Arrow ] displays the next setting value.

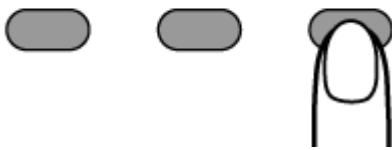
Pressing [ Exit ] displays the setting mode of the next higher level.



>Counter Reset  
OK?  
Exit ← Next



>Test Print  
Test Pattern  
Exit Change Next



>Download>  
Exit Enter Next



>Transport Mode  
OK?  
Exit ← Next



>Media>  
Exit Enter Next



>Print>  
Exit Enter Next



>Retransfer>  
Exit Enter Next



>Bend Remedy>  
Exit Enter Next





>Heat Roller>  
Exit Enter Next



>Setting>  
Exit Enter Next



>Option>  
Exit Enter Next



>MG>  
Exit Enter Next



>Network>  
Exit Enter Next



>Cleaning>  
Exit Enter Next



## Setting using the operation panel

### Initialization

Whenever the power is turned on, cue (initialization) is performed automatically on the ink ribbon and retransfer film. You can also perform initialization using the operation button on the operation panel.

- 1 Press [ Reset ]  
A [Initialize] message appears.



- 2 Press [ Enter ]  
An [Initializing] message appears, and initialization of the printer starts.



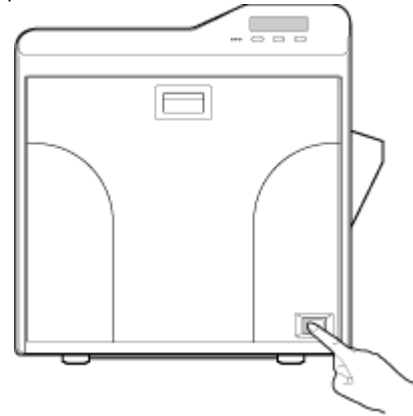
### Initializing printer when attaching the cassette

#### Memo:

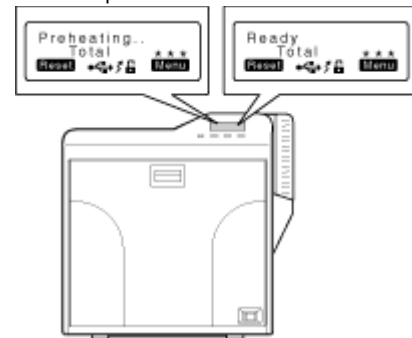
When detaching the ink ribbon cassette or retransfer film cassette from the printer body, dust may adhere to the ink ribbon or retransfer film. Printing errors such as discoloring and retransfer error may occur depending on the size of the dust particles. To prevent printing errors from occurring, initialize the printer when you attach the cassette.

When attaching a new retransfer film, it is recommended that you forward the film by one or two images before printing.

- 1 Turn on the power.



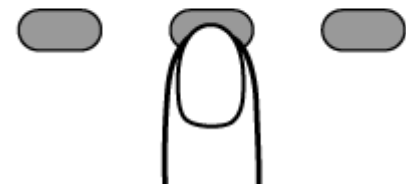
- 2 Check to ensure that [ Ready ] or [ Preheating ] is displayed on the operation panel of the printer.



- 3 Press [ Reset ]  
A [ Initialize ] message appears.

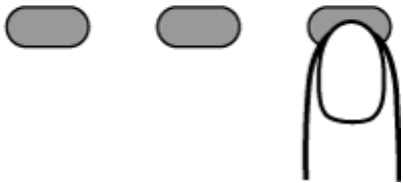
#### Initializing printer without feeding the image

Press [ Enter ]  
An [Initializing] message appears, and initialization of the printer starts.



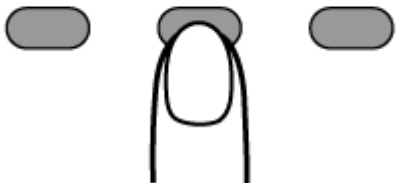
#### Initializing printer after feeding by one image

Press [ Next ]  
A [ Next Panel, OK? ] message appears.



Press **←**

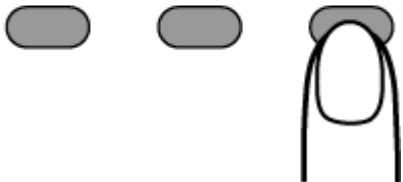
An [Initializing] message appears, and the printer is initialized after feeding the ink ribbon and retransfer film by one image.



**Initializing printer after feeding by two images**

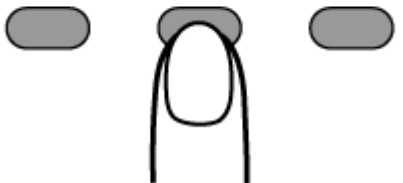
Press [Next]

A [2'nd Panel, OK?] message appears.



Press **←**

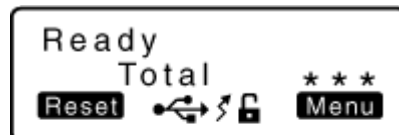
An [Initializing] message appears, and the printer is initialized after feeding the ink ribbon and retransfer film by two images.



**Firmware update**

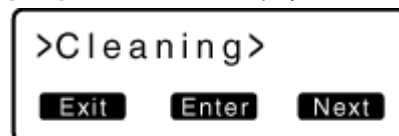
1 Press [Menu]

A [Cleaning] message appears.



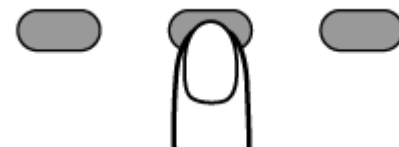
2 Press [Next] to set to [Down load]

Pressing the [Next] button each time displays the next screen.



3 Press [Enter]

Data download from the host computer starts.



A [Downloading] message during data download from the host computer.



**Note:**

Do not turn off the power during data download from the host computer. Doing so may damage the printer firmware and cause malfunction.

A [Please Power Off] message when data download from the host computer is complete.



- 4 Turn off the power.  
The firmware is updated.

### Counter setting

This is used for setting the type of counter displayed on the operation panel.

#### Counter types

**Total: total counter**

Displays the total number of cards that are correctly printed.

**Head: Head counter**

Displays the total number of printed sides for the same head.

**Free: free counter**

Displays the number of cards that are correctly printed. This number can be reset.

**Cleaning Cun: Cleaning counter**

Displays the number of cards that are correctly printed after the last cleaning.

**Error Cnt: Error counter**

Displays the number of cards that are not correctly printed. This number can be reset.

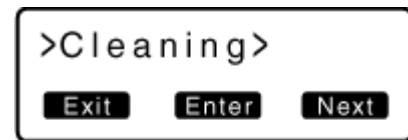
- 1 Press [ Menu ]

A [Cleaning] message appears.



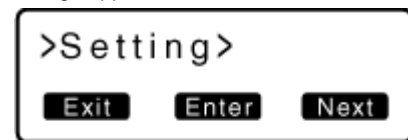
- 2 Press [ Next ] to display [Setting]

Pressing the [Next] button each time displays the next screen.



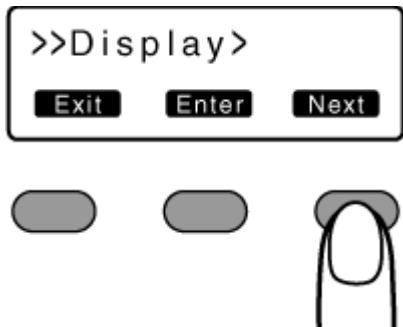
- 3 Press [ Enter ]

A [Display] message appears.

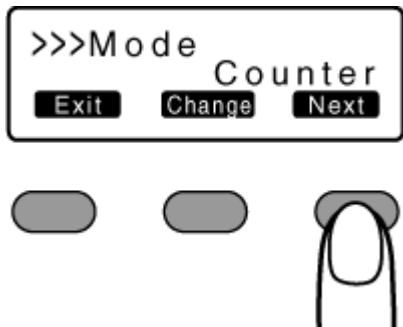


- 4 Press [ Enter ]

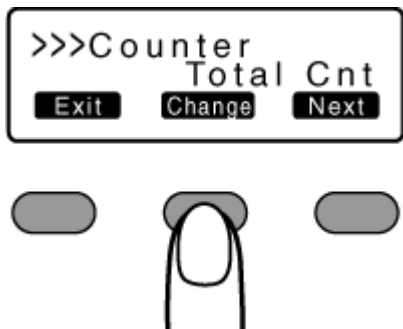
A [Mode] message appears.



- 5 Press [ Next ]  
A [ Counter ] message appears.



- 6 Press [ Change ]  
A setting change screen appears.

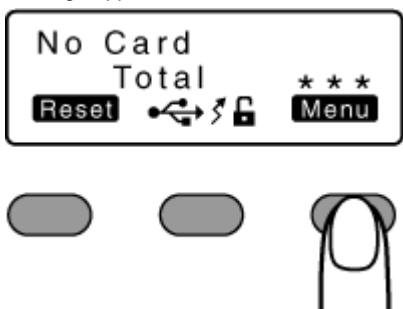


- 7 Press [ ] and select a setting value.  
8 Press [ ] to confirm the setting value.  
Pressing [ ] confirms the setting and returns you to the previous screen.  
9 Press [ Exit ]  
Pressing [Exit] each time returns you to the previous screen.

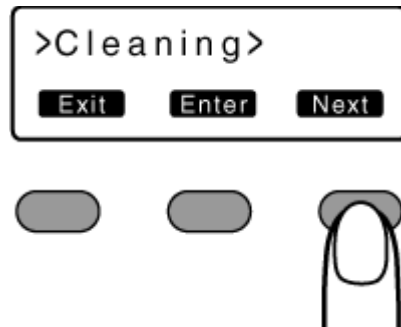
### Resetting the counter

Resets the free counter and error counter.

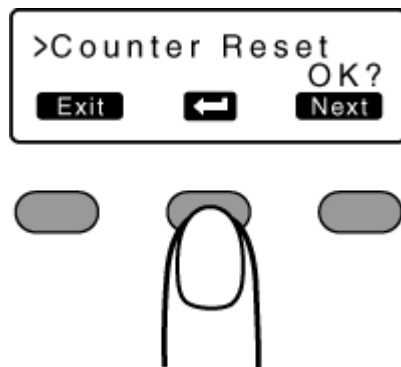
- 1 Press [ Menu ]  
A [Cleaning] message appears.



- 2 Press [ Next ] to set to [Counter Reset]



- 3 Press [ ]  
Resets the free counter and error counter.



### Checking reset

Select [Free Cnt] or [Error Cnt] under [Counter setting].

### Test print

Prints the printer's built-in test pattern, or the different setting values.  
When system troubles occur, printing can be performed using settings on the printer or computer by operating only the printer.

### Test types

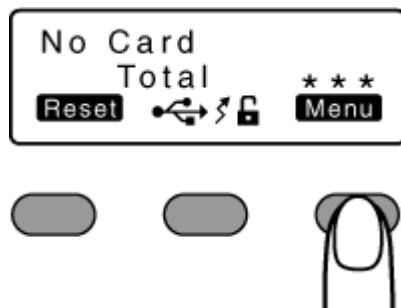
#### Printer Setting:

Prints according to the values preset in the printer's user mode.

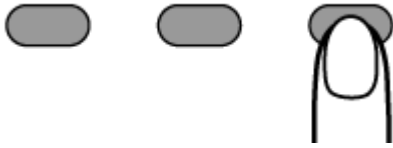
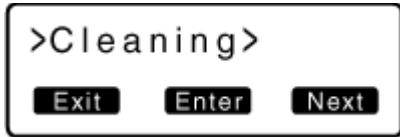
#### Network:

Prints according to the values preset through the network.

- 1 Press [ Menu ]  
A [Cleaning] message appears.

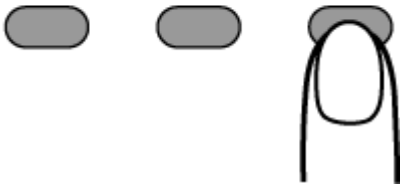


- 2 Press [ Next ] to display [Test Print]



- 3 Press [Change].  
A [Test Pattern] message appears.

- 4 Press [Down] and select a test type.



- 5 Press [Enter].  
Test print starts.

### Contrast setting

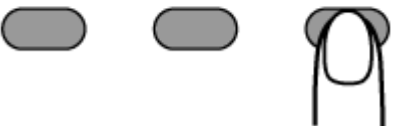
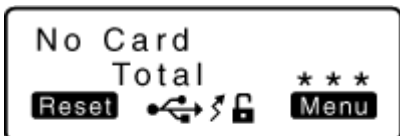
This is used for setting the contrast of the operation panel display.

#### Setting values

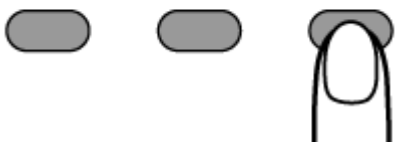
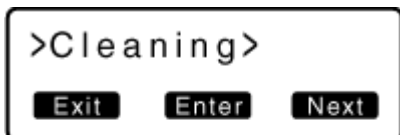
-3, -2, -1, 0, 1, 2, 3

Selecting a larger value increases the contrast.

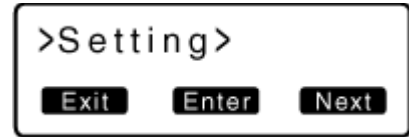
- 1 Press [Menu].  
A [Cleaning] message appears.



- 2 Press [Next] to set to [Setting].  
Pressing the [Next] button each time displays the next screen.



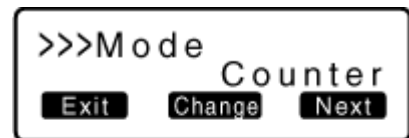
- 3 Press [Enter].  
A [Display] message appears.



- 4 Press [Enter].  
A [Mode] message appears.



- 5 Press [Next].  
A [Contrast] message appears.



- 6 Press [Change].  
A setting selection screen appears.



- 7 Press [Down] and select a setting value.
- 8 Press [Enter] to confirm the setting value.  
Pressing [Enter] confirms the setting and returns you to the previous screen.
- 9 Press [Exit].  
Pressing [Exit] each time returns you to the previous screen.

## Operation

### Buzzer sound setting

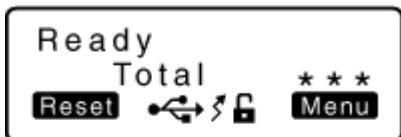
This is used for setting the buzzer sound when an error occurs.

#### Setting values

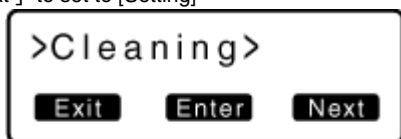
On: turns on buzzer sound, Off: turns off buzzer sound

1 Press [ Menu ]

A [Cleaning] message appears.

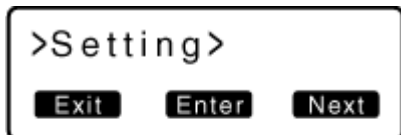


2 Press [ Next ] to set to [Setting]



3 Press [ Enter ]

A [Display] message appears.

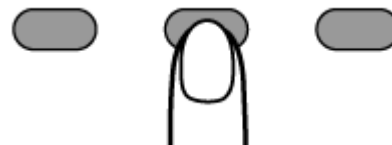


4 Press [ Next ] to set to [Buzzer]



5 Press [ Change ]

A setting selection screen appears.



6 Press [ Change ] and select a setting value.

7 Press [ Enter ] to confirm the setting value.

Pressing [ Enter ] confirms the setting and returns you to the previous screen.

To display the next setting value, press [ Change ].

8 Press [ Exit ]

Pressing [Exit] each time returns you to the previous screen.

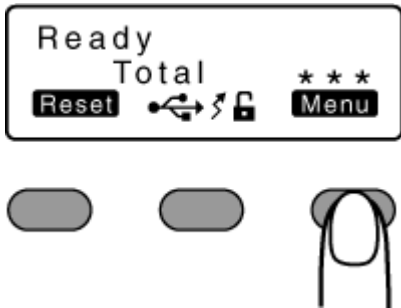


### Unit number setting

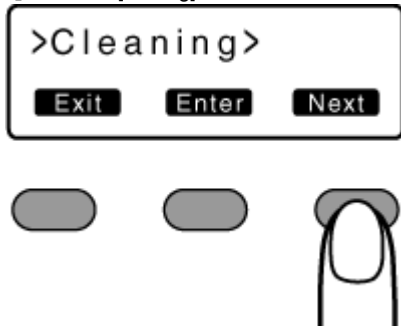
For setting the printer's unit number according to the USB environment.

**Setting values**  
No.1 ~ No.10

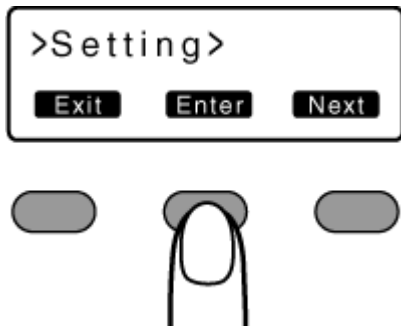
- 1 Press [ Menu ]  
A [Cleaning] message appears.



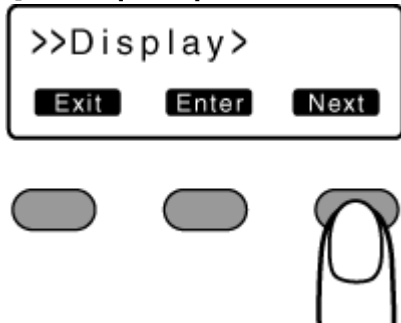
- 2 Press [ Next ] to set to [Setting]



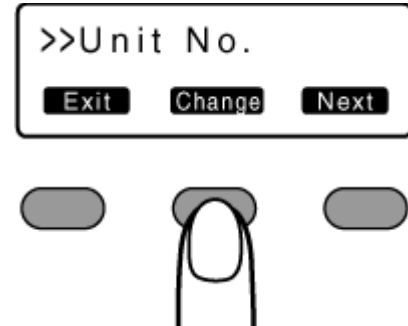
- 3 Press [ Enter ]  
A [Display] message appears.



- 4 Press [ Next ] to set to [Unit No]



- 5 Press [ Change ]  
A setting selection screen appears.



- 6 Press [ Change ] and select a setting value.
- 7 Press [ Enter ] to confirm the setting value.  
Pressing [ Enter ] confirms the setting and returns you to the previous screen.
- 8 Press [ Exit ]  
Pressing [Exit] each time returns you to the previous screen.

## Transport mode setting

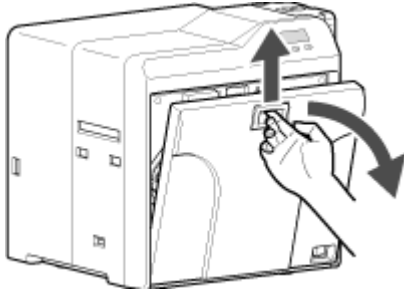
### Note:

Make sure that you set to the transport mode when transporting or moving the printer.

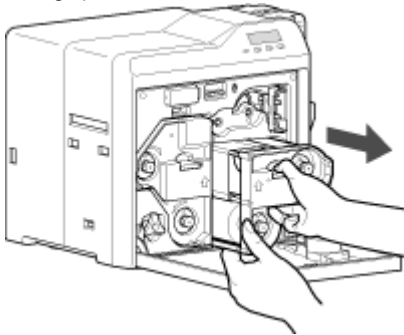
Failure to do so may result in malfunction of the printer.

When transporting or moving the printer, ensure that the heat roller is secured to a safe position.

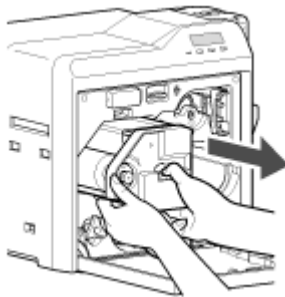
1 Open the printer door.



2 Press and hold down the cassette button, and remove the ink ribbon cassette (on the right) to remove the ink ribbon.

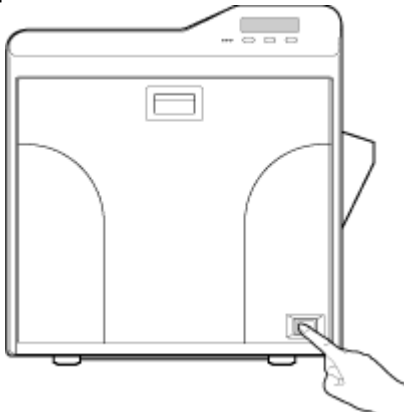


3 Press and hold down the cassette button, and remove the retransfer film cassette (on the left) to remove the retransfer film.



4 Close the printer door.

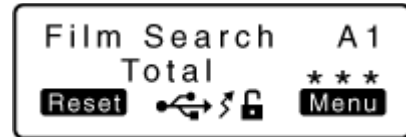
5 Turn on the power.



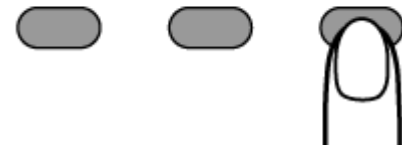
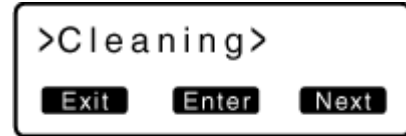
6 Check to ensure that [ Film Search ] is displayed on the operation panel of the printer.

7 Press [ Menu ]

A [Cleaning] message appears.



8 Press [ Next ] to set to [ Transport Mode ]



9 Press [ Left Arrow ]



After setting to the transport mode, a [ Please Power Off ] message appears.

10 Turn off the power, and attach the cassette.

### Note:

When in the transport mode, the retransfer film cassette cannot be installed to the printer with the retransfer film attached.

## Canceling the transport mode

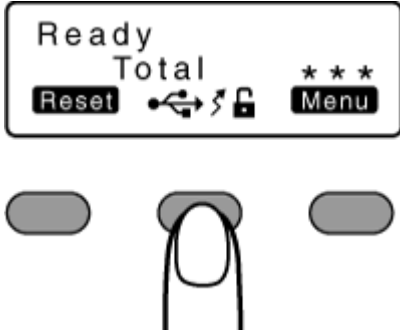
With the printer door closed, turn on the power, and cancel the transport mode.

## Security

### Security setting

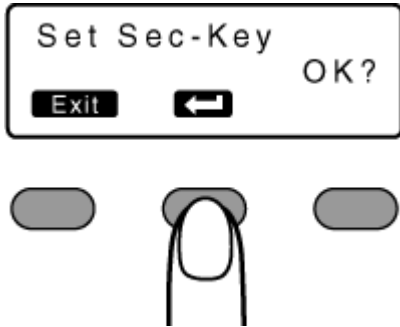
When a security number is set, opening/closing of the printer door and detachment of the card hopper are disabled.  
To change the security number, you have to delete it and register a new number again.

- 1 Press the operation button (center) for at least 3 seconds.  
A [Set Sec-Key OK?] message appears.

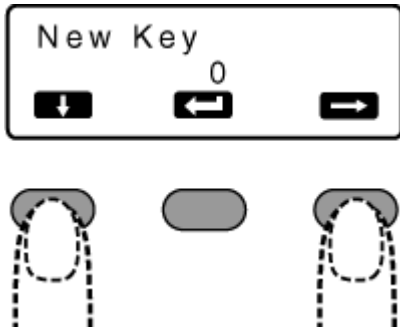


- 2 Press

A [New Key] message appears.



- 3 Enter a number.



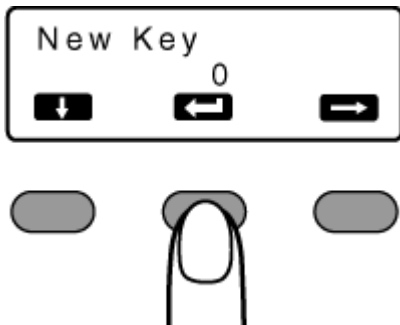
You can enter up to 8 digits.

Pressing each time advances to the next number.

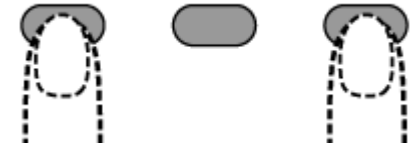
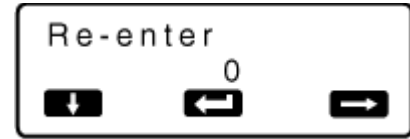
Pressing each time advances to the next digit.

- 4 Press

A [Re-enter] message appears.



- 5 Input the number you have entered in [New Key] again.



- 6 Press



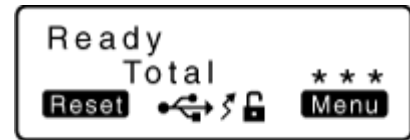
If this number is consistent with the number entered in [New Key], the display returns to [Ready], and the new password is registered.

If this number is not consistent with the number entered in [New Key], the display returns to [Set Sec-Key]. Enter a number again.

### Turning off the security function

You can deactivate the locked security as follows.

- 1 Press the operation button (center) for at least 3 seconds.  
A [Unlock Sec-Key OK?] message appears.

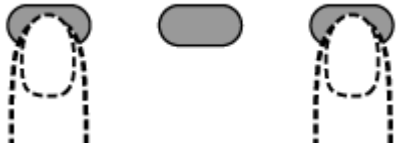
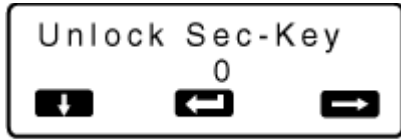


- 2 Press

A [Unlock Sec-Key] message appears.

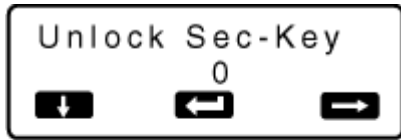


- 3 Enter the security number registered for [New Key].



Pressing each time advances to the next number.  
Pressing each time advances to the next digit.

4 Press .

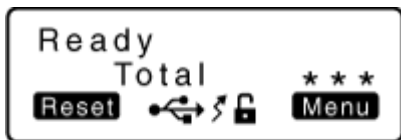


If this number is consistent with the number entered in [New Key], the display returns to [Ready], and the lock is deactivated.  
If this number is not consistent with the number entered in [New Key], the display returns to [Unlock Sec-Key OK?]. Enter a number again.

### Deleting security number

You can delete a registered security number as follows.  
To change the security number, you have to delete it and register a new number again.

1 Press the operation button (center) for at least 3 seconds.  
A [Unlock Sec-Key OK?] message appears.



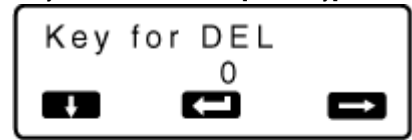
2 Press [Next]  
A [Delete Sec-Key OK?] message appears.



3 Press   
A [Key for DEL] message appears.



4 Enter the security number entered in [New Key].



Pressing each time advances to the next digit.  
Pressing each time advances to the next number.

5 Press .



If this number is consistent with the number entered in [New Key], the display returns to [Ready], and the lock is deactivated.  
If this number is not consistent with the number entered in [New Key], the display returns to [Unlock Sec-Key OK?]. Enter a number again.

## Setting Using the Status Monitor

"Status Monitor Settings" (☞ page 80)

## Printing a Card

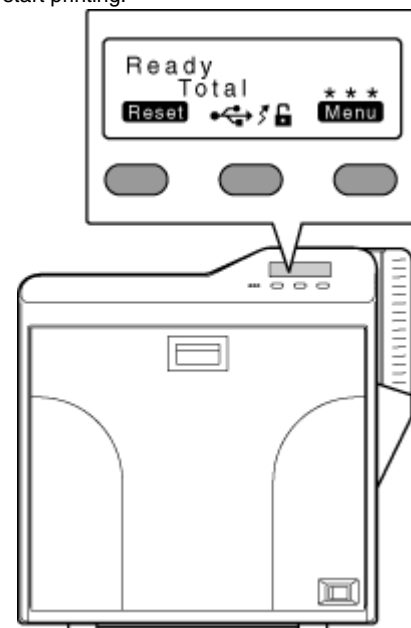
### Note:

If you see an [Initializing...] or [Preheating..] message on the LCD panel of the printer, this means the printer is not ready yet. Printing cannot be performed in this case.

Printing the card on the side with the magnetic stripe may cause printing errors or damage to the card's functions. If you want to do so, consult our authorized dealers in advance.

### Printing a Card

- 1 Turn on the power.
- 2 Check to ensure that cards are inserted into the card hopper.
- 3 Open the print settings screen of the application.
- 4 Select this printer from [ Name ] .  
If there are multiple printers, select the name of the printer that you want to perform printing on.
- 5 After ensuring that a [ Ready ] message appears on the LCD panel of the printer, start printing.



### "Precautions on cards" ☞ page 28

"Card has run out" ☞ page 28

### "Ink Ribbon" ☞ page 29

"Ink ribbon has run out" ☞ page 29

"Ink ribbon is broken" ☞ page 30

### "Retransfer Film" ☞ page 31

"Retransfer film has run out" ☞ page 31

"Retransfer film is broken" ☞ page 32

### Precautions on cards

#### Card has run out

Replenish the cards.

#### Print this page

##### Note:

If the security lock is on, deactivate it. After work is complete, activate the security lock again.

Do not touch the printing surface of the card. Touching it may cause printing errors. Put on the supplied gloves when handling the cards.

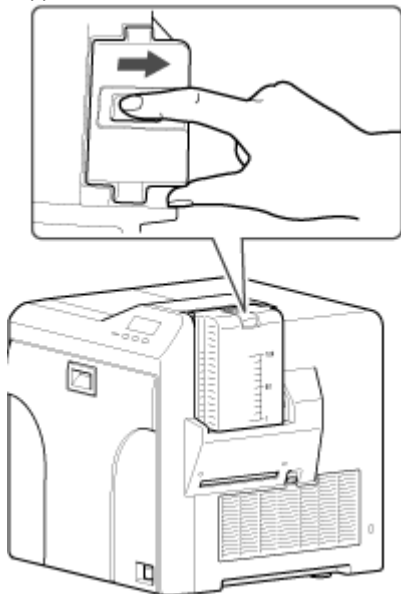
When using new cards, separate them one by one before setting them in the printer. Cards may be adhered to each other due to static, thus causing card jams.

Align the cards before setting them in the printer. Otherwise, the card hopper cover may not close properly, and this may damage the printer.

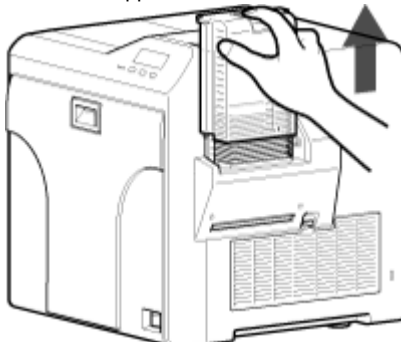
Printing the card on the side with the magnetic stripe may cause printing errors or damage to the card's functions. If you want to do so, consult our authorized dealers in advance.

To set cards with both functions (magnetic stripe and contact IC), follow the procedure for setting the contact IC card.

- 1 Set the card hopper knob to [ OPEN ] .



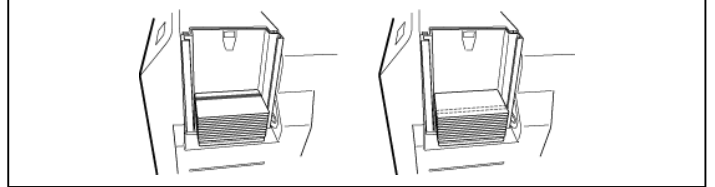
- 2 Lift to remove the card hopper cover.



- 3 Align the orientation of the cards, and set them in the printer.

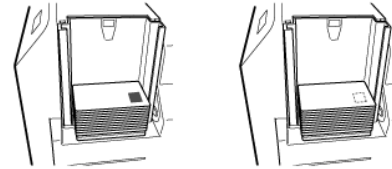
#### Magnetic cards

Set the card with the magnetic stripe facing upward and toward the printer, or facing downward and toward you.

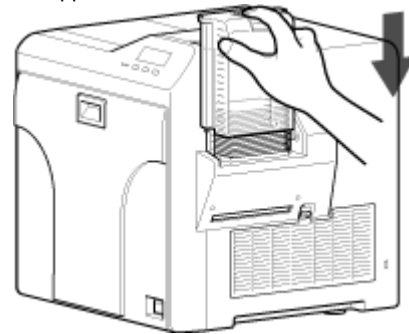


#### ISO contact IC cards

Set the card with the Contact IC terminal facing upward and toward the rear of the printer, or downward and toward the front of the printer.



- 4 Install the card hopper cover.



## Ink Ribbon

### Ink ribbon has run out

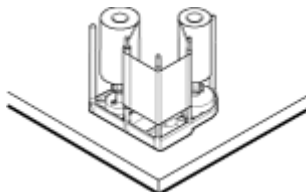
Replace with a new ink ribbon.

### Print this page

#### Note:

If the security lock is on, deactivate it. After work is complete, activate the security lock again.

Stand the cassette on a flat surface as illustrated in the diagram. Avoid doing so on a floor as dust attached to the retransfer film may cause printing errors.



Do not touch the inked surface (the side that faces outward when installed) with your hand. Touching it may cause printing errors. Put on the supplied gloves when handling the ink ribbon.

When installing a used ink ribbon, align the yellow side of the unused ribbon with the arrow indicated on the label of the cassette. If the position of the yellow side is not properly aligned, the print may turn out light.

When handling the cassette, hold it with both hands. Accidentally dropping the cassette may damage it or result in injuries.

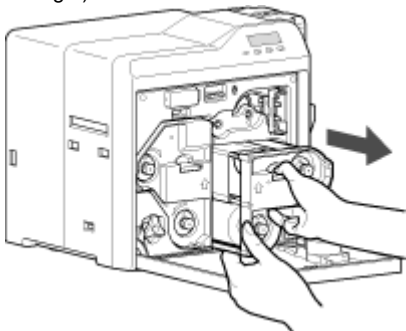
Do not perform work on the printer door. Do not place heavy objects or apply load on the printer. Doing so may damage it.

During replacement, clean the four bobbin holders on the printer. Burrs generated by friction between the bobbins and bobbin holders may be adhered to the ink ribbon or retransfer film, causing printing errors.

#### 1 Open the printer door.

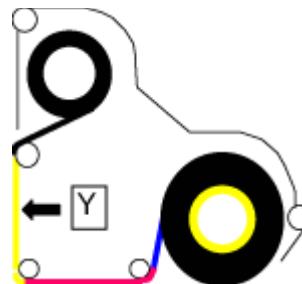


#### 2 Press and hold down the cassette button, and pull out the ink ribbon cassette (on the right) to remove the ink ribbon.



#### 3 Install a new ink ribbon.

Install while referring to the indication on the label of the cassette.

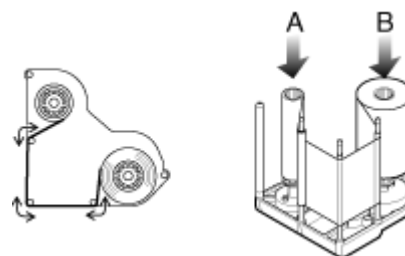


With the inked surface facing outward, align the yellow side of the unused ribbon with the arrow on the cassette, and unwind it along the three shafts.

Insert the ink ribbon firmly into the bobbin holders with the ribbon set to the far end of the guides.

A: take-up side (black)

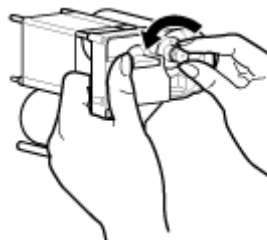
B: unused side (yellow)



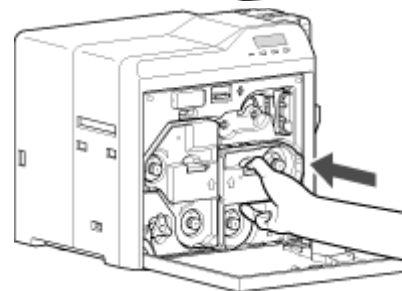
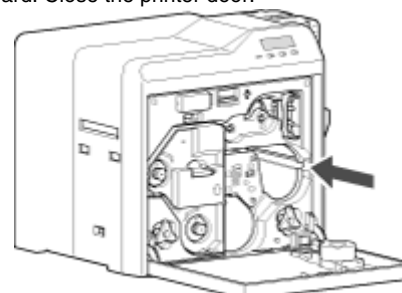
#### 4 Remove any slack in the ink ribbon.

Hold the cassette.

Turn the knob in the direction indicated by the arrow.

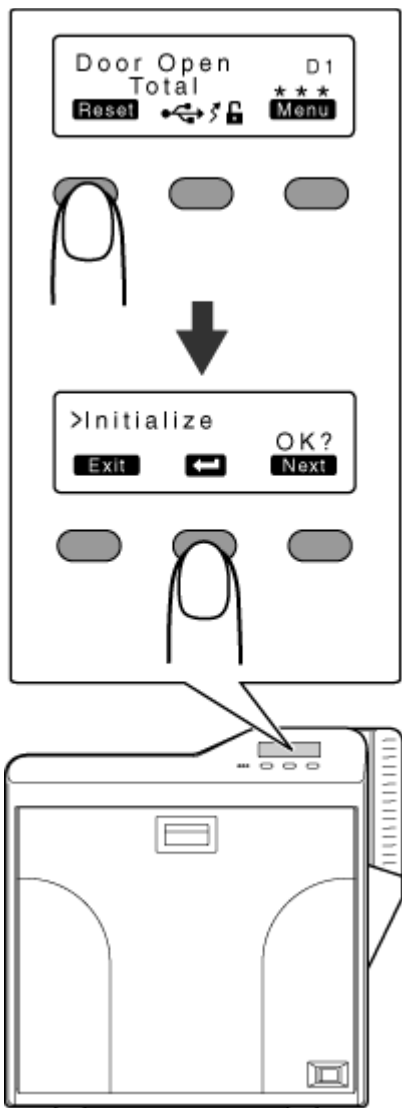


#### 5 Insert the cassette all the way in along the guide rail until a "click" sound is heard. Close the printer door.



#### 6 Press [ Reset ] → [ ] to reset the printer.





"Initializing printer when attaching the cassette" ( page 17 )

**Ink ribbon is broken**

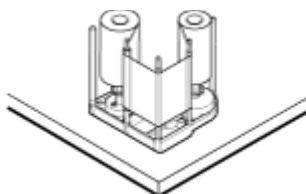
Repair the ink ribbon.

**Print this page**

**Note:**

If the security lock is on, deactivate it. After work is complete, activate the security lock again.

Stand the cassette on a flat surface as illustrated in the diagram. Avoid doing so on a floor as dust attached to the retransfer film may cause printing errors.



Do not touch the inked surface (the side that faces outward when installed) with your hand. Touching it may cause printing errors. Put on the supplied gloves when handling the ink ribbon.

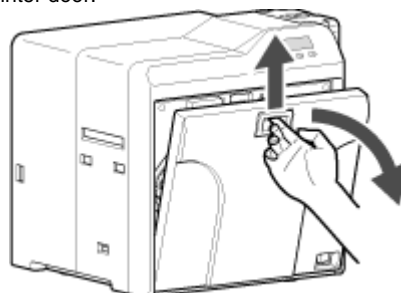
When handling the cassette, hold it with both hands. Accidentally dropping the cassette may damage it or result in injuries.

When installing a used ink ribbon, align the yellow side of the unused ribbon with the arrow indicated on the label of the cassette. If the position of the yellow side is not properly aligned, the print may turn out light.

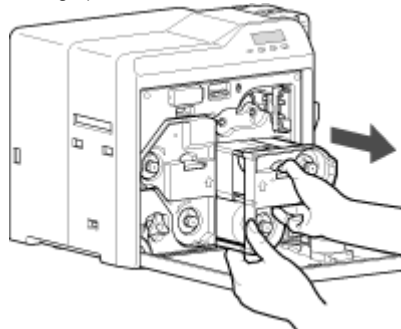
Do not perform work on the printer door. Do not place heavy objects or apply load on the printer. Doing so may damage it.

During replacement, clean the four bobbin holders on the printer. Burrs generated by friction between the bobbins and bobbin holders may be adhered to the ink ribbon or retransfer film, causing printing errors.

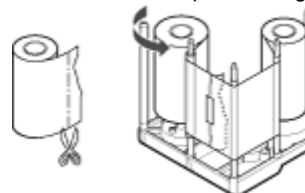
1 Open the printer door.



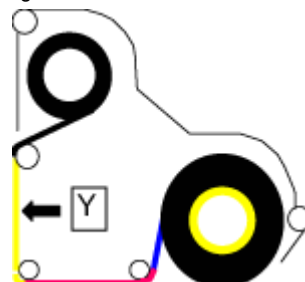
2 Press and hold down the cassette button, and pull out the ink ribbon cassette (on the right) to remove the ink ribbon.



3 Cut away the broken portion, and attach the unused portion at the supply side to the other end at the take-up side using an adhesive tape.



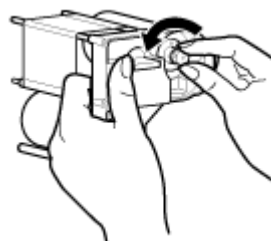
4 Attach the ink ribbon, and turn the take-up side until the cut section is out of sight. Install while referring to the indication on the label of the cassette.



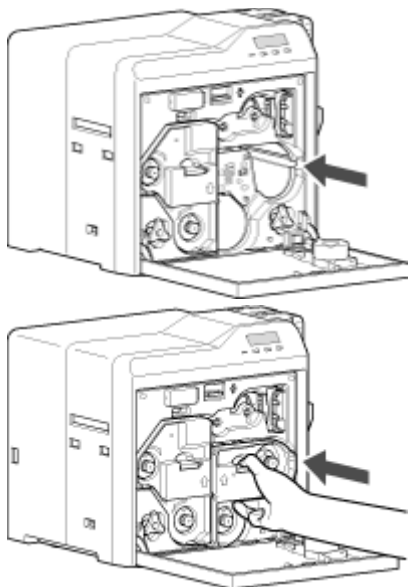
With the inked surface facing outward, align the yellow side of the unused ribbon with the arrow on the cassette, and unwind it along the three shafts.

Turn the knob in the direction of the arrow to remove any slack.

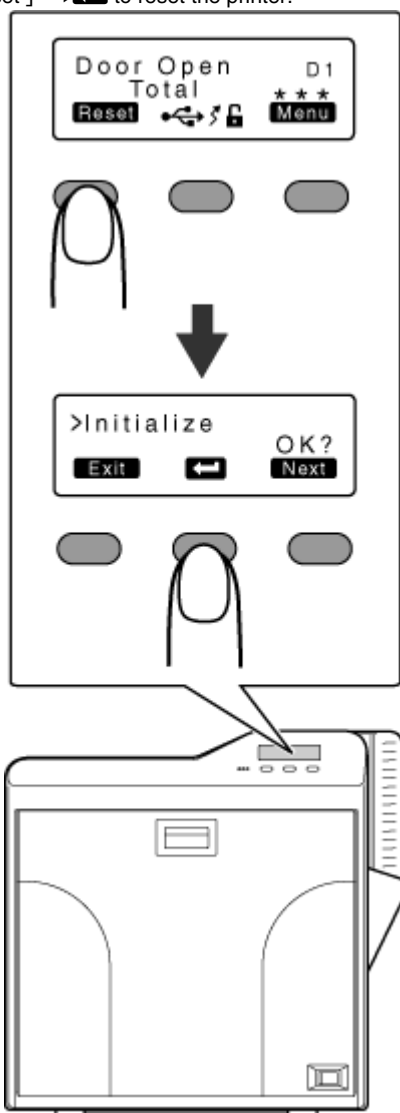
Insert the ink ribbon firmly into the bobbin holders with the ribbon set to the far end of the guides.




5 Insert the cassette all the way in along the guide rail until a "click" sound is heard. Close the printer door.



6 Press [ Reset ] →  to reset the printer.



"Initializing printer when attaching the cassette" (  page 17 )

## Retransfer Film

### Retransfer film has run out

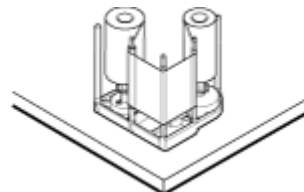
Replace with a new retransfer film.

### Print this page

#### Note:

If the security lock is on, deactivate it. After work is complete, activate the security lock again.

Stand the cassette on a flat surface as illustrated in the diagram. Avoid doing so on a floor as dust attached to the retransfer film may cause printing errors.

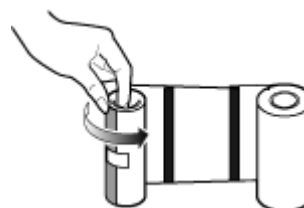


Do not touch the retransfer face (the side that faces outward when installed) with your hand. Touching it may cause printing errors. Put on the supplied gloves when handling the retransfer film.

When handling the cassette, hold it with both hands. Accidentally dropping the cassette may damage it or result in injuries.

When installing a new retransfer film, align the unused side of the film with the arrow indicated on the label of the cassette. Failure to do so may result in errors, or the print may turn out light.

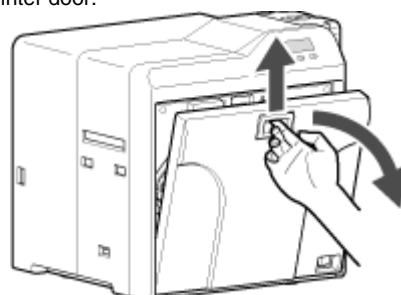
When installing a new film, make sure that at least three black lines are wound onto the take-up side. Insufficient winding may cause the printer to malfunction.



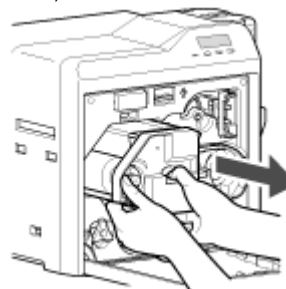
Do not perform work on the printer door. Do not place heavy objects or apply load on the printer. Doing so may damage it.

During replacement, clean the four bobbin holders on the printer. Burrs generated by friction between the bobbins and bobbin holders may be adhered to the ink ribbon or retransfer film, causing printing errors.

1 Open the printer door.



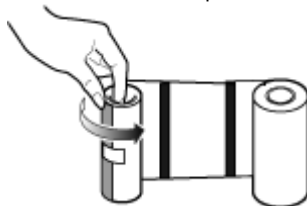
2 Press and hold down the cassette button, and pull out the retransfer film cassette (on the left) to remove the retransfer film.



3 Install a new retransfer film.  
Install while referring to the indication on the label of the cassette.

## Replacement

When installing the retransfer film, make sure that at least three black lines are wound onto the take-up side.

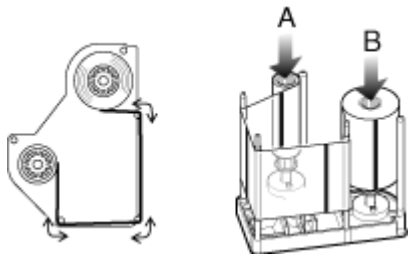


With the retransfer face facing outward, align the unused side of the film with the arrow on the cassette, and unwind it along the three shafts.

Insert the retransfer film firmly into the bobbin holders with the film set to the far end of the guides.

A: take-up side (black)

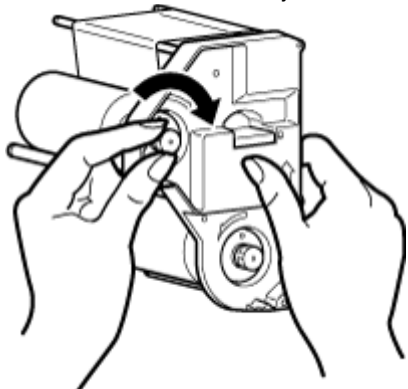
B: unused side (green)



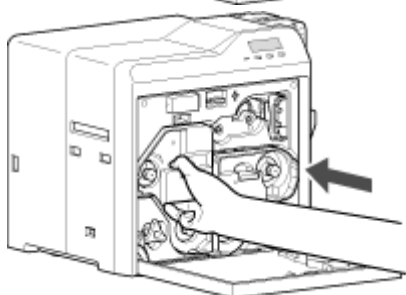
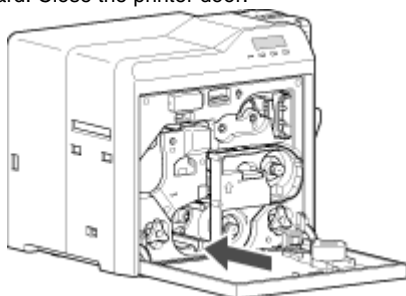
### 4 Remove any slack in the film.

Hold the retransfer film cassette.

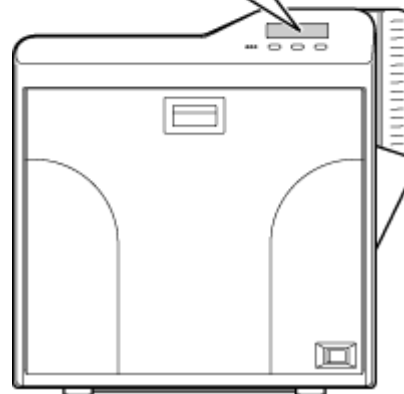
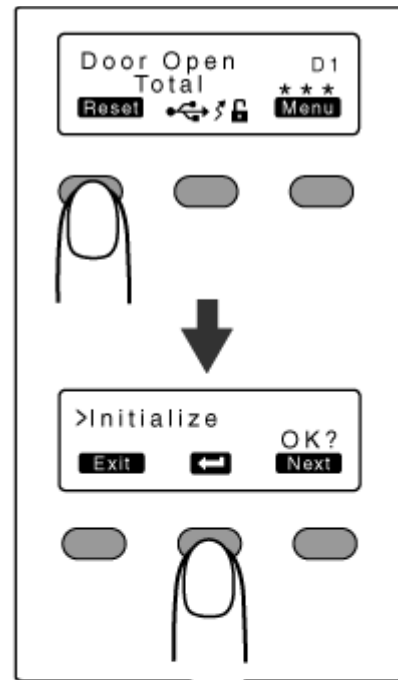
Turn the knob in the direction indicated by the arrow.



### 5 Insert the cassette all the way in along the guide rail until a "click" sound is heard. Close the printer door.



### 6 Press [ Reset ] → [ OK ] to reset the printer.



### Memo:

When attaching a new retransfer film, it is recommended that you forward the film by one or two images before printing.

"Initializing printer when attaching the cassette" (page 17)

### Retransfer film is broken

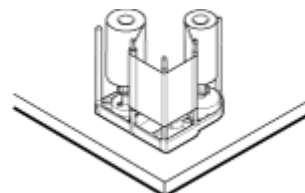
Repair the retransfer film.

### Print this page

### Note:

If the security lock is on, deactivate it. After work is complete, activate the security lock again.

Stand the cassette on a flat surface as illustrated in the diagram. Avoid doing so on a floor as dust attached to the retransfer film may cause printing errors.



Do not touch the retransfer face (the side that faces outward when installed) with your hand. Touching it may cause printing errors. Put on the supplied gloves when handling the retransfer film.

When handling the cassette, hold it with both hands. Accidentally dropping the cassette may damage it or result in injuries.

When installing a used retransfer film, align the unused side of the film with the arrow indicated on the label of the cassette. Failure to do so may result in errors, or the print may turn out light.

Do not perform work on the printer door. Do not place heavy objects or apply load on the printer. Doing so may damage it.

During replacement, clean the four bobbin holders on the printer. Burrs generated by friction between the bobbins and bobbin holders may be adhered to the ink ribbon or retransfer film, causing printing errors.

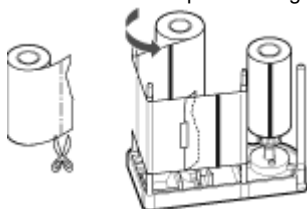
1 Open the printer door.



2 Press and hold down the cassette button, and pull out the retransfer film cassette (on the left) to remove the retransfer film.



3 Cut away the broken portion, and attach the unused portion at the supply side to the other end at the take-up side using an adhesive tape.

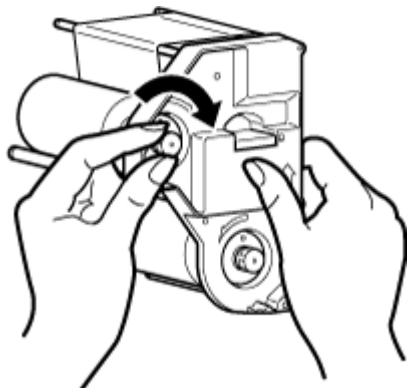


4 Attach the retransfer film, and turn the take-up side until the cut section is out of sight.

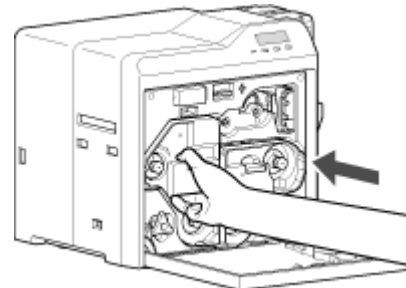
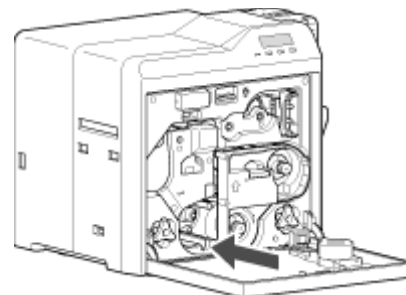
With the retransfer face facing outward, align the unused side of the film with the arrow on the cassette, and unwind it along the three shafts.


Insert the retransfer film firmly into the bobbin holders with the film set to the far end of the guides.

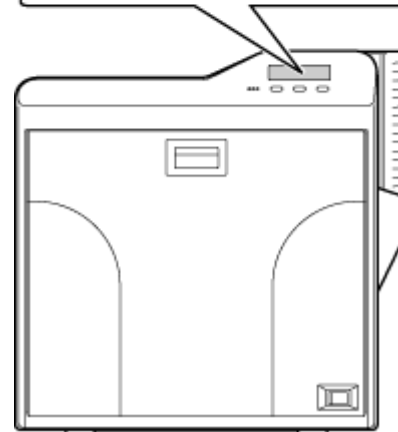
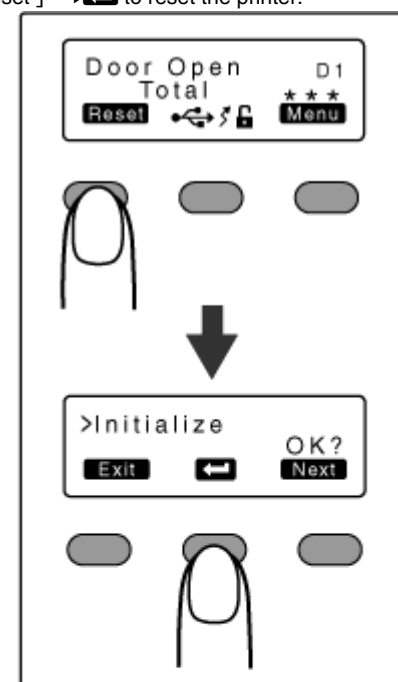
Turn the knob in the direction of the arrow to remove any slack.



5 Insert the cassette all the way in along the guide rail until a "click" sound is heard. Close the printer door.



6 Press [ Reset ] →  to reset the printer.



"Initializing printer when attaching the cassette" (  page 17 )

### Servicing of Parts

- "Cleaning roller" ☞ page 34
- "Fan filter" ☞ page 35
- "Card feed roller/heating roller" ☞ page 36
- "Magnetic head" ☞ page 40
- "Bobbin holders" ☞ page 38
- "Thermal head" ☞ page 41

### Servicing Based on Print Output

- "Colors appear faded or dirt is conspicuous" ☞ page 42
- "Card jams" ☞ page 42
- "Error during writing/reading" ☞ page 42
- "Lines appear on card after printing" ☞ page 42

**Note:**

After servicing or cleaning is complete, check to ensure that all dismantled parts are restored to their original positions. Failure to restore the parts may result in malfunction of the printer.

### Request for Routine Servicing

**In order to prevent printing errors and malfunctions from occurring in advance, please request for routine servicing by the servicing personnel. For details on servicing, please consult our authorized dealers.**

### Servicing of Parts

#### Cleaning roller

The function of the cleaning roller is to remove any dirt or dust attached to the card.  
Card jams may occur if the cleaning roller is dirty.  
The color of the printed card may appear faded or dirt may appear conspicuous if the cleaning roller is dirty.

#### Print this page

**Note:**

If the security lock is on, deactivate it. After work is complete, activate the security lock again.

If the printer is used everyday, make sure to clean the cleaning roller daily at the end of the operation.

Do not perform work on the printer door. Do not place heavy objects or apply load on the printer. Doing so may damage it.

After washing, allow the cleaning roller to dry completely before installing it to the printer.

Do not wash the cleaning roller with anything other than water (e.g., alcohol).

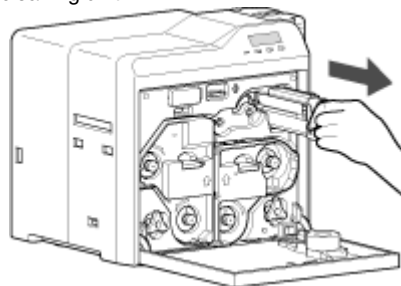
Replace the cleaning unit with a new one after using it for about one year. For details on its replacement, please consult our authorized dealers.

After cleaning is complete, check to ensure that all dismantled parts are restored to their original positions. Failure to restore the parts may result in malfunction of the printer.

**1** Open the printer door.

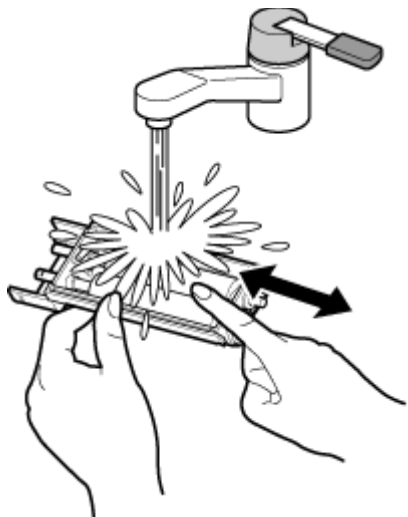


**2** Pull out the cleaning unit.

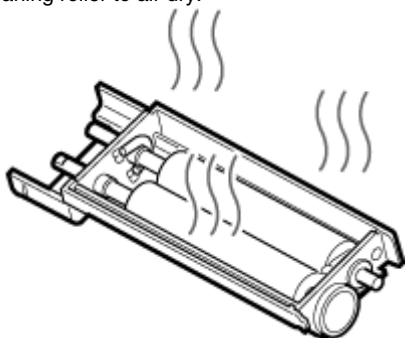


**3** Wash the cleaning roller with water.

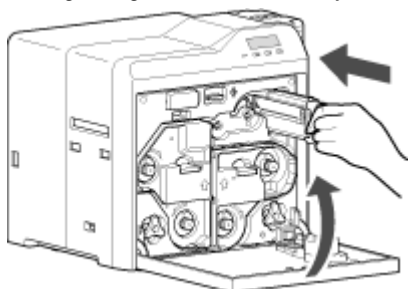
Wash the roller with water, and remove any dirt from the surface of the cleaning roller with your finger.



4 Allow the cleaning roller to air dry.



5 Set the cleaning unit, and close the printer door. With the roller facing the right, insert it all the way in.



**Fan filter**

The color of the printed card may appear faded or dirt may appear conspicuous if the fan filter is dirty.

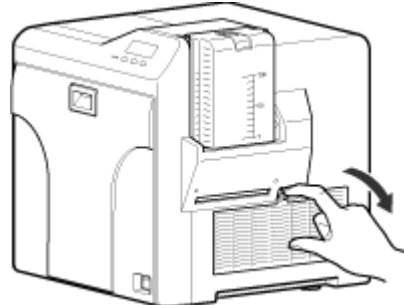
Perform cleaning after printing about 10,000 cards.

**Print this page**

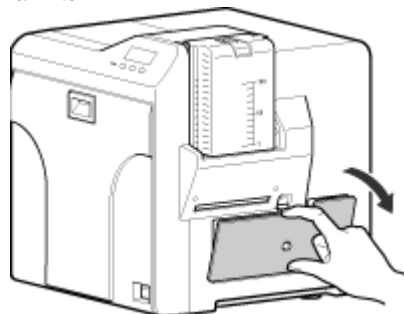
**Note:**

After cleaning is complete, check to ensure that all dismantled parts are restored to their original positions. Failure to restore the parts may result in malfunction of the printer.

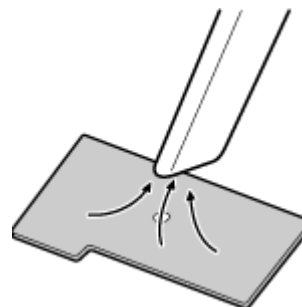
1 Remove the filter cover located on the side of the printer.



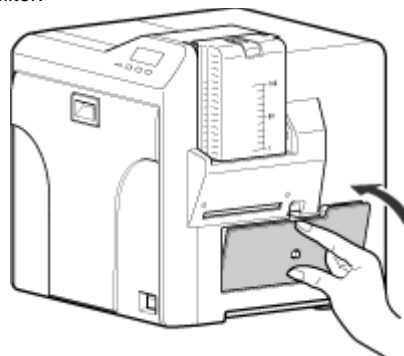
2 Remove the fan filter.



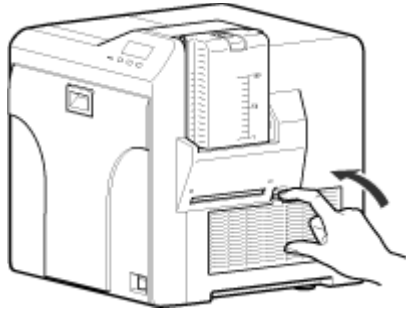
3 Remove any dirt that is attached to the fan filter using a vacuum cleaner.



4 Set the fan filter.



5 Set the filter cover.



### Card feed roller/heating roller

The color of the printed card may appear faded or dirt may appear conspicuous if the card feed roller/heating roller is dirty. Perform cleaning after printing about 1,000 cards.

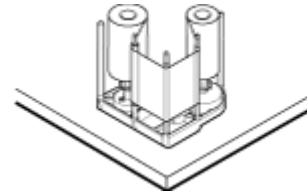
### Print this page

#### Note:

If the security lock is on, deactivate it. After work is complete, activate the security lock again.

Before cleaning the card feed roller/heating roller, make sure that you clean the cleaning roller. Otherwise, dirt on the cleaning roller may be attached to the cleaning card, causing its cleaning capability to deteriorate.

Stand the cassette on a flat surface as illustrated in the diagram. Avoid doing so on a floor as dust attached to the retransfer film may cause printing errors.



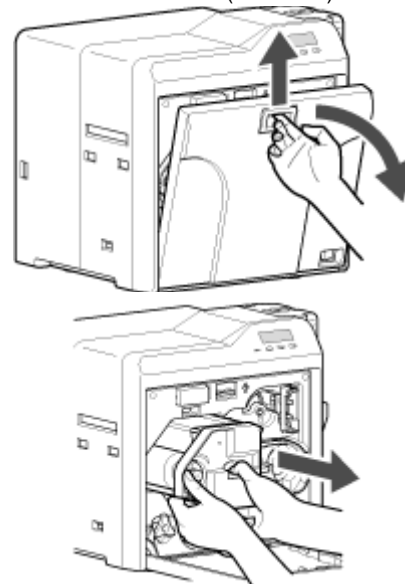
If card jam occurs when the cleaning card is inserted, turn off and on the power of the printer. Doing so automatically discharges the card. Do not perform work on the printer door. Do not place heavy objects or apply load on the printer. Doing so may damage it.

Each cleaning card can only be used once. Reusing a dirty card may dirty the roller or cause the printer to malfunction. For details on the cleaning card, please consult our authorized dealers.

After cleaning is complete, check to ensure that all dismantled parts are restored to their original positions. Failure to restore the parts may result in malfunction of the printer.

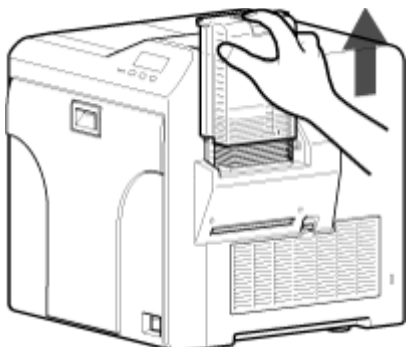
For details on separately sold items, please consult our authorized dealers.

- 1 Open the printer door. Press and hold down the cassette button, and remove the retransfer film cassette (on the left).

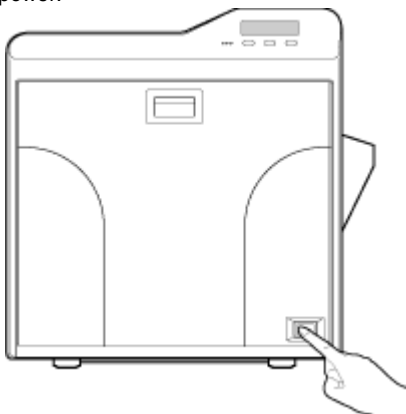


- 2 Close the printer door, and remove the card hopper.

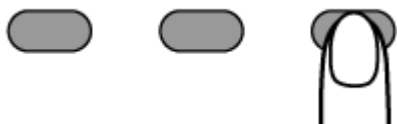
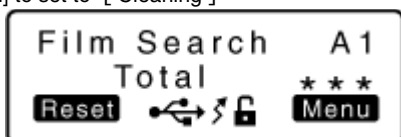




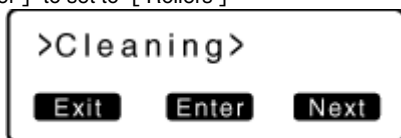
3 Turn on the power.



4 Press [Menu] to set to [Cleaning]



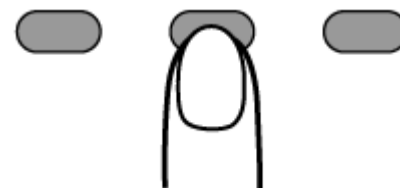
5 Press [Enter] to set to [Rollers]



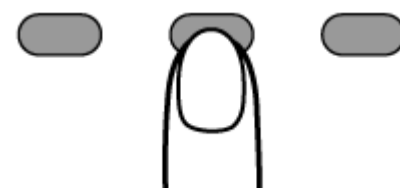
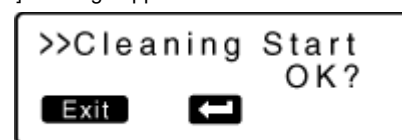
6 Peel off the backing paper from the cleaning card (sold separately).



7 Press .  
A [Cleaning Start OK?] message appears.

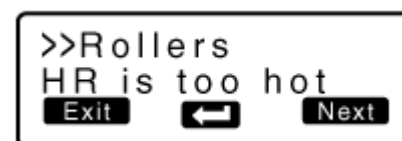


8 Press .  
A [Cleaning...] message appears.

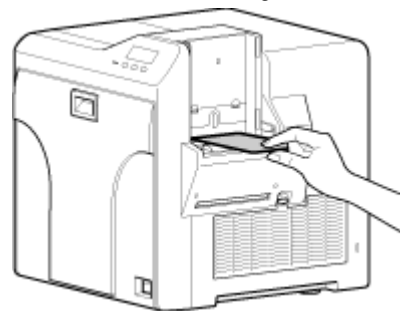


**Note:**

If the retransfer heating roller is hot, a [HR is too hot] message will be displayed. Turn off the power, and perform cleaning after the retransfer heating roller has cooled down completely.



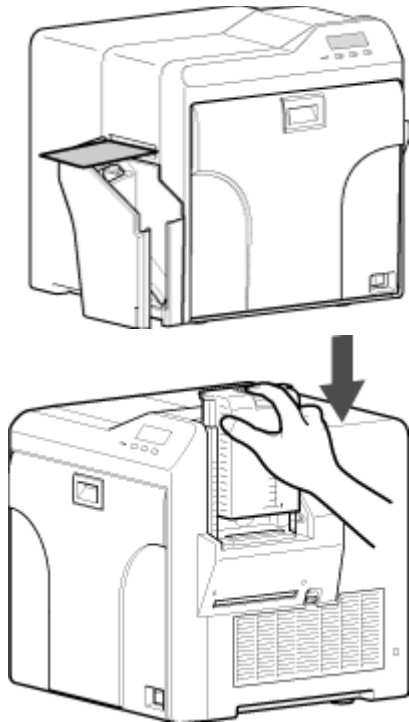
9 Insert the cleaning card (sold separately) within 20 seconds.  
The roller draws in the card, and cleaning starts automatically. Reverse the adhesive face, and insert the card again.



**Note:**

Insert the card within 20 seconds after pressing .  
After pressing , the buzzer sounds upon a lapse of 20 seconds, and a [Jam (Hopper)] error message appears 10 seconds later.  
Press [Reset] to cancel the error.  
When a standard-sized card is inserted, the card is automatically discharged from the NG card outlet, and the printer returns to the [Cleaning Start OK?] screen.

10 After the cleaning card is discharged, turn off the power, and install the retransfer film cassette and card hopper.



To turn on the power again, do so after an interval of at least 10 seconds.

---

### Magnetic head

Writing/Reading errors may occur if the magnetic head is dirty. Perform cleaning after printing about 1,000 cards.

---

### Print this page

#### Note:

If the security lock is on, deactivate it. After work is complete, activate the security lock again.

Before cleaning the magnetic head, make sure that you clean the cleaning roller. Otherwise, dirt on the cleaning roller may be attached to the cleaning card, causing its cleaning capability to deteriorate.

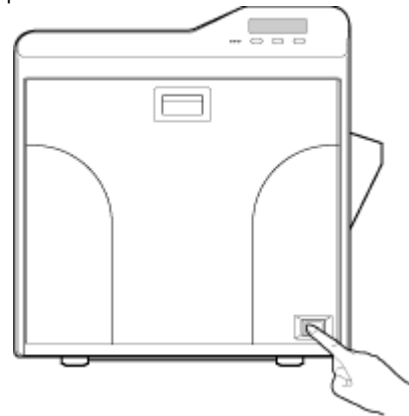
After cleaning is complete, check to ensure that all dismantled parts are restored to their original positions. Failure to restore the parts may result in malfunction of the printer.

Do not perform work on the printer door. Do not place heavy objects or apply load on the printer. Doing so may damage it.

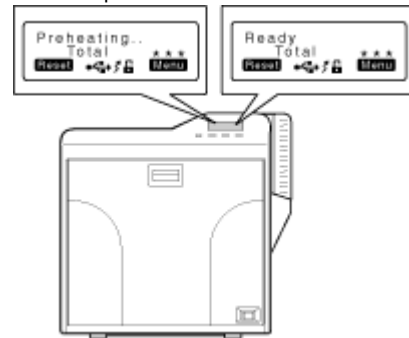
For details on separately sold items, please consult our authorized dealers.

---

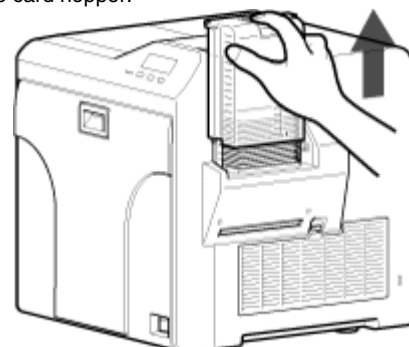
1 Turn on the power.



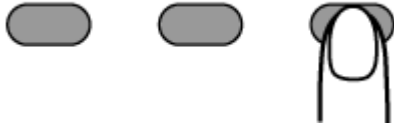
2 Check to ensure that [ Ready ] or [ Preheating ] is displayed on the operation panel of the printer.



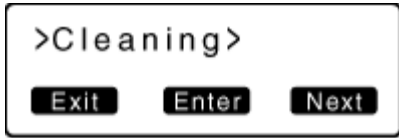
3 Remove the card hopper.



4 Press [Menu] to set to [ Cleaning ]



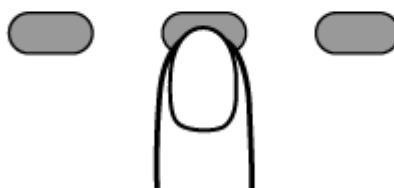
5 [ Enter ] → Press [ Next ] to set to [ MG ]



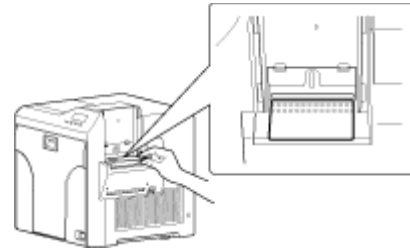
6 Apply alcohol on the magnetic head cleaning card (sold separately).  
Apply about three to four drops of alcohol on the magnetic stripe.



7 Press [ Enter ]



8 Insert the magnetic head cleaning card within 20 seconds.



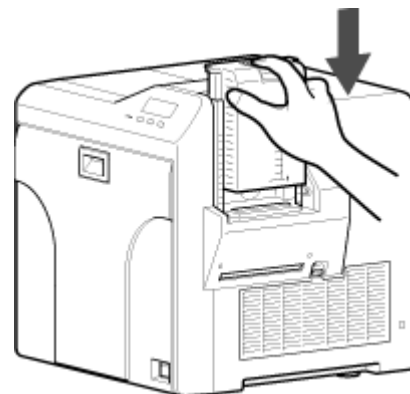
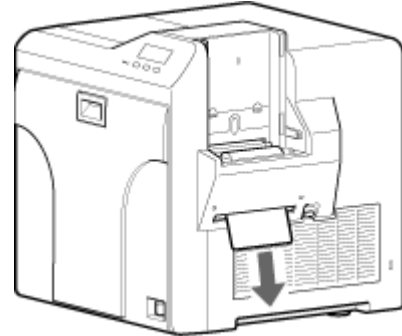
**Note:**

Insert the card within 20 seconds after pressing [ Enter ].

After pressing [ Enter ], the buzzer sounds upon a lapse of 20 seconds, and a [Jam (Hopper)] error message appears 10 seconds later.

Press [ Reset ] → [ Enter ] to cancel the error.

9 After the cleaning card is discharged, turn off the power, and install the card hopper.



To turn on the power again, do so after an interval of at least 10 seconds.

## Bobbin holders

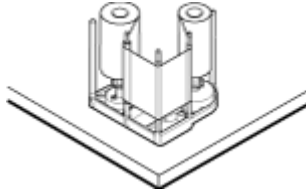
The color of the printed card may appear faded or dirt may appear conspicuous if burrs are attached to the bobbin holders.

## Print this page

### Note:

If the security lock is on, deactivate it. After work is complete, activate the security lock again.

Stand the cassette on a flat surface as illustrated in the diagram. Avoid doing so on a floor as dust attached to the retransfer film may cause printing errors.



Do not perform work on the printer door. Do not place heavy objects or apply load on the printer. Doing so may damage it.

Perform cleaning each time you replace the ink ribbon or retransfer film.

Otherwise, burrs attached to the bobbin holders may fall onto the card, ink ribbon, or retransfer film, causing printing errors.

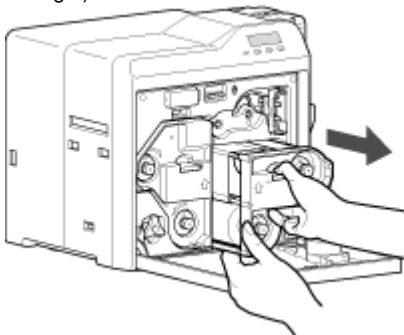
After cleaning is complete, check to ensure that all dismantled parts are restored to their original positions. Failure to restore the parts may result in malfunction of the printer.

For details on separately sold items, please consult our authorized dealers.

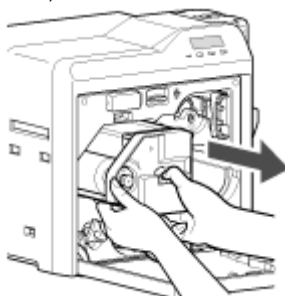
### 1 Open the printer door.



### 2 Press and hold down the cassette button, and remove the ink ribbon cassette (on the right).

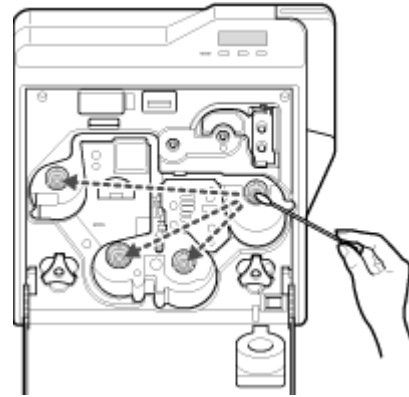


### 3 Press and hold down the cassette button, and remove the retransfer film cassette (on the left).

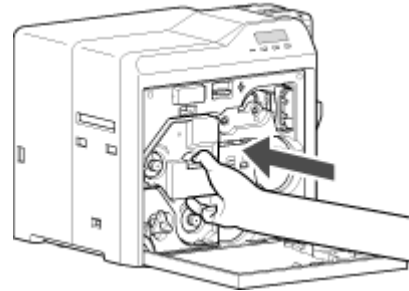
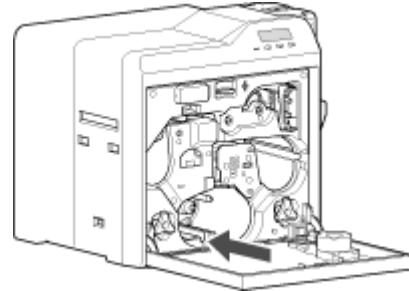


### 4 Apply alcohol to a cotton swab (large), and use it to wipe the four bobbin holders.

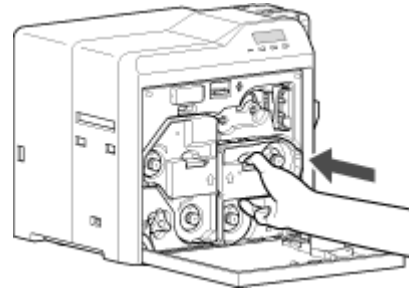
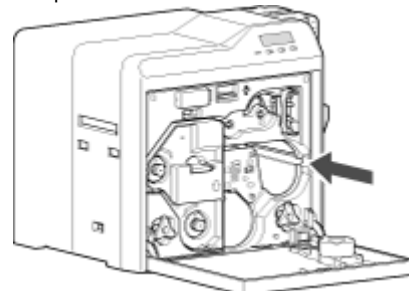
(Cotton swab and alcohol: sold separately)



### 5 Insert the retransfer film cassette along the guide rail until a "click" sound is heard.



### 6 Insert the ink ribbon cassette along the guide rail until a "click" sound is heard. Close the printer door.



## Thermal head

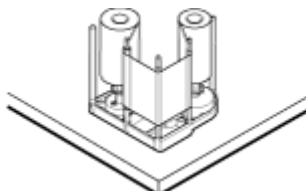
Lines may appear on the card after printing if the thermal head is dirty.

## Print this page

### Note:

If the security lock is on, deactivate it. After work is complete, activate the security lock again.

Stand the cassette on a flat surface as illustrated in the diagram. Avoid doing so on a floor as dust attached to the retransfer film may cause printing errors.



Do not perform work on the printer door. Do not place heavy objects or apply load on the printer. Doing so may damage it.

Touching the thermal head with your body electrostatically charged may cause damage to the head. Make sure that you touch the metallic part of the printer before commencing work.

Pay attention to prevent metallic objects from knocking against the thermal head. Doing so may damage it.

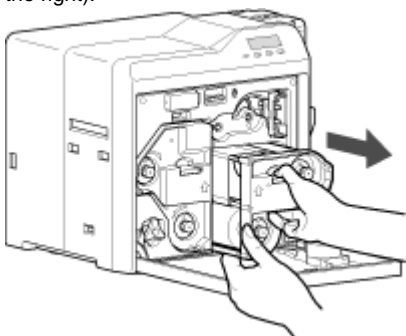
After cleaning is complete, check to ensure that all dismantled parts are restored to their original positions. Failure to restore the parts may result in malfunction of the printer.

For details on separately sold items, please consult our authorized dealers.

### 1 Open the printer door.



### 2 Press and hold down the cassette button, and remove the ink ribbon cassette (on the right).

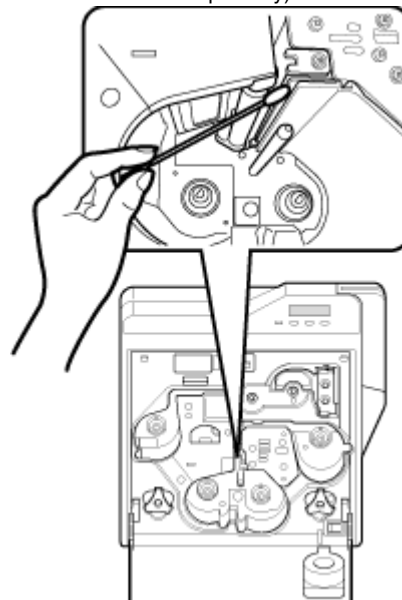


### 3 Press and hold down the cassette button, and remove the retransfer film cassette (on the left).



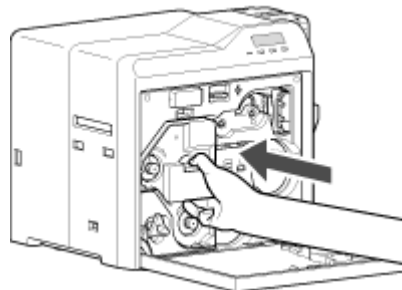
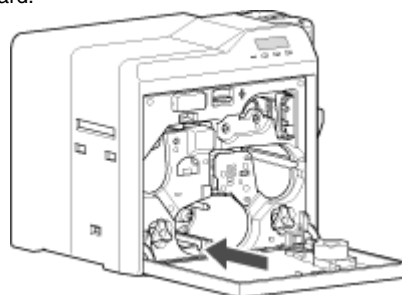
### 4 Apply alcohol to a cotton swab (large), and use it to wipe the thermal head.

(Cotton swab and alcohol: sold separately)

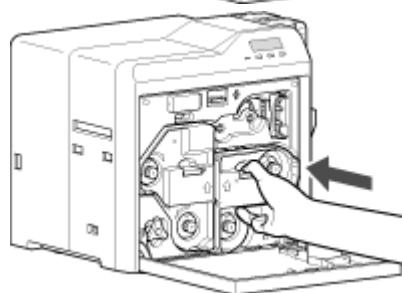
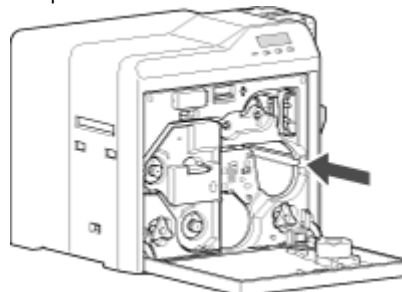


Wipe the thermal head with care in the horizontal direction.

### 5 Insert the retransfer film cassette along the guide rail until a "click" sound is heard.



### 6 Insert the ink ribbon cassette along the guide rail until a "click" sound is heard. Close the printer door.



## Servicing Based on Print Output

### Colors appear faded or dirt is conspicuous

- "Clean the cleaning roller." [page 34](#)
- "Clean the fan filter." [page 35](#)
- "Clean the card feed roller/heating roller." [page 36](#)
- "Clean the bobbin holders." [page 40](#)

### Card jams

- "Clean the cleaning roller." [page 34](#)

### Error during writing/reading

- "Clean the magnetic head." [page 38](#)

### Lines appear on card after printing

- "Clean the thermal head." [page 41](#)

## When an Error Message is Displayed

- "Identifying errors using the error code" [page 42](#)

## Precautions on Cards

- "Card jams" [page 44](#)
- "Card has run out" [page 49](#)

## Ink Ribbon

- "Ink ribbon has run out" [page 29](#)
- "Ink ribbon is broken" [page 30](#)

## Retransfer Film

- "Retransfer film has run out" [page 31](#)
- "Retransfer film is broken" [page 32](#)
- "Unable to fit retransfer film cassette into printer" [page 50](#)

## Unable to produce desired printing results

- "Lines appear on card after printing" [page 50](#)
- "Colors on card appear faded after printing" [page 50](#)
- "Peeling occurs on card after printing" [page 50](#)
- "Overall printing quality is poor" [page 50](#)
- "Card is printed in a single color" [page 50](#)
- "Strange characters or images are printed" [page 50](#)
- "Retransfer cannot be performed successfully" [page 50](#)

## Printer not operating as desired

- "Card is not fed into the printer" [page 51](#)
- "Power does not turn on" [page 51](#)
- "Printing does not start or stops halfway" [page 51](#)

## When an Error Message is Displayed

### Identifying errors using the error code

#### List of Error Codes

Click on an error code below to jump to the page with the corresponding error descriptions.

"44" [page 43](#) "90" [page 42](#) "91" [page 42](#) "92" [page 42](#) "93" [page 42](#) "94" [page 42](#)  
 "A1" [page 42](#) "A2" [page 43](#) "A8" [page 43](#) "AB" [page 43](#) "AC" [page 43](#)  
 "B0" [page 43](#) "B1" [page 43](#) "B2" [page 43](#)  
 "C1" [page 43](#) "C2" [page 43](#) "C3" [page 44](#)  
 "D1" [page 43](#) "D8" [page 43](#)  
 "F0" [page 43](#) "F1" [page 43](#) "F2" [page 43](#) "F3" [page 43](#) "F4" [page 43](#) "F5" [page 43](#) "F6" [page 44](#)  
 "F8" [page 44](#)

### No Card



"Cards have run out. Replenish the cards." [page 49](#) Or, "The card hopper is not attached. Attach the card hopper."

### Jam(Hopper) 90



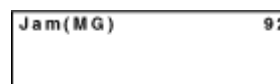
"Card jam in the card hopper unit. Remove the jammed card." [page 44](#)

### Jam(TurnOver) 91



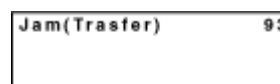
"Card jam in the turnover unit. Remove the jammed card." [page 45](#)

### Jam(MG) 92



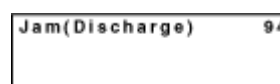
"Card jam in the magnetic encoder unit. Remove the jammed card." [page 46](#)

### Jam(Transfer) 93



"Card jam in the retransfer unit. Remove the jammed card." [page 47](#)

### Jam(Discharge) 94



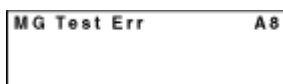
"Card jam in the discharge unit. Remove the jammed card." [page 48](#)

### Film Search A1



"Retransfer film is broken. Repair it." [page 32](#)

**MG Test Err A8**



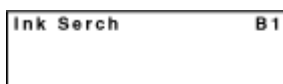
MG writing error occurred during MG self-diagnosis. Reset the printer.

**Ink Error B0**



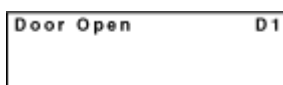
An incorrect printer ink is installed. Attach a correct ink.

**Ink Search B1**



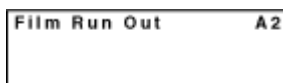
"Ink ribbon is broken. Repair it." page 30

**Door Open D1**



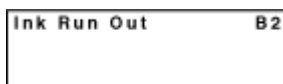
Printer door is open. Close the door. Or, "The cleaning roller is not attached. Attach the cleaning roller."

**Film Run Out A2**



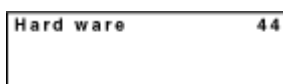
"Retransfer film has run out. Replace with a new one." page 31

**Ink Run Out B2**



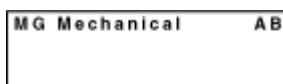
"Ink ribbon has run out. Replace with a new one." page 29

**Hard ware 44**



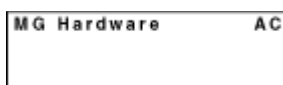
A hardware failure has occurred on the printer. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**MG Mechanical AB**



An error has occurred in the mechanical component of the MG unit. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**MG Hardware AC**



A hardware failure has occurred on the MG unit. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**Cam Error C1**



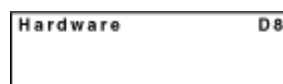
Heating roller operation failure. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**HR Overheat C2**



The temperature of the warpage correction heating roller or retransfer heating roller is too high. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**Hardware D8**



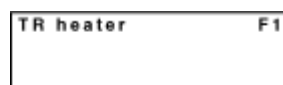
A hardware error has occurred during initialization. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**TR Overheat F0**



The temperature of the retransfer roller is too high. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**TR Heater F1**



Retransfer roller failure. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**TR Thermister F2**



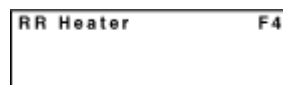
Retransfer roller thermister failure. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**RR Overheat F3**



The temperature of the warpage correction roller is too high. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**RR Heater F4**



Warpage correction roller failure. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

**RR Thermister F5**





## Troubleshooting

Warping correction roller thermister failure. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

### Overcool F6



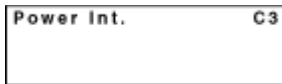
The operating ambient temperature of the printer is too low. Check the temperature. If the same problem recurs at the same operating ambient temperature, turn off the power and consult our authorized dealers.

### Head Overheat F8



The temperature of the thermal head is too high. Turn off and on the power. If the same problem recurs, turn off the power and consult our authorized dealers.

### Power Int. C3



A 24 V interruption is detected.  
Turn off and on the power again.

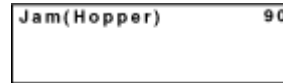
## Precautions on cards

### Card jams

Check the error code on the operation panel.

### Error code 90

Card jam in the card hopper unit.

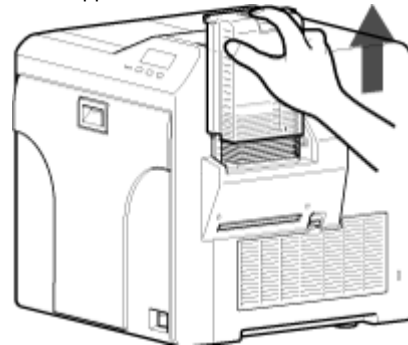


### Note:

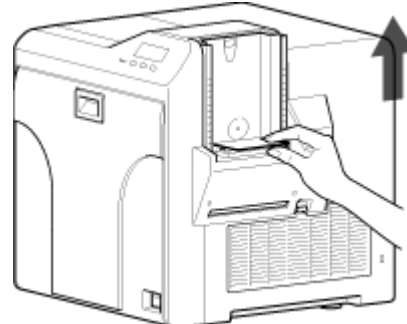
Do not apply excessive force on the card hopper. Doing so may damage it.

Do not touch the printing surface of the card. Touching it may cause printing errors. Put on the supplied gloves when handling the cards.

### 1 Remove the card hopper cover.



### 2 Remove the loaded cards, and pull out the jammed card with a hand.



### 3 Install the card hopper cover.

### If the card cannot be pulled out by hand

Open the printer door.



Use the jog dial to turn the retransfer unit and cleaning unit in the clockwise direction.