

Card Laminator

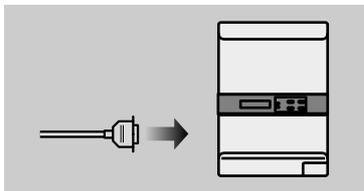
Model

Name

# CL-500

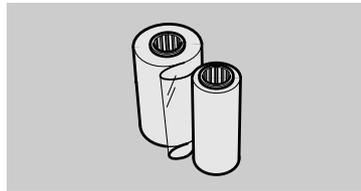


## Installation



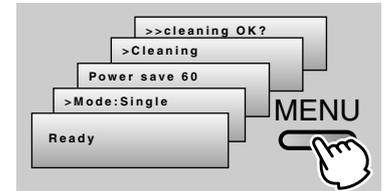
See pages 8 - 10

## Setting Film



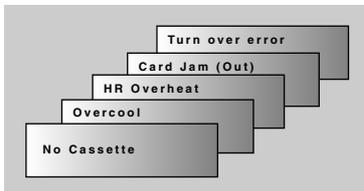
See pages 11 - 12

## Operation and Settings



See pages 13 - 14

## Error Messages



See page 17

## Maintenance



See pages 19 - 20

- Thank you for purchasing our product.
- Before operating this unit, **please read the instructions carefully** to ensure the best possible performance. **Be sure to read "Notes for safe operation"** and use the unit safely. Keep the instruction manual in a safe place and read it when necessary.
- The manufacturing number is important for quality control. Please check whether the manufacturing number on the back of this unit is correct during the purchase.

### Notes regarding this manual

- (1) The contents of this manual shall not be reprinted or redistributed in any form without prior consent.
- (2) The contents of this manual or the specifications and external appearance of this unit may be altered without prior notice.
- (3) Illustrations used in this manual may differ slightly from the actual shape of this unit.

## Declaration of Conformity

Model Number: CL-500yyyyy(y=A-Z,0-9 or blank)

Product name: Card Printer

We herewith declare that the above mentioned product complies with the following council directives and harmonized standards.

Council Directives: 89/336/EEC relating to electromagnetic compatibility.  
73/23/EEC relating to electrical equipment designed for use within certain voltage limits.

Harmonized Standards: EN55022:1994+A1:1995+A2:1997: Class B  
EN55024:1998+A1:2001+A2:2003  
EN61000-3-2:2000  
EN61000-3-3:1995+A1:2001  
EN60950-1:2001

Importer and distributor:

*DAI NIPPON PRINTING CO.,LTD.*

*1-1 Ichigaya-kagocho, 1-chome Shinjuku-ku, Tokyo 162-8001 Japan*

*Phone: +81-3-3266-3344 Facsimile: +81-3-3266-2732*

*Manufacture*

*Victor Data Systems Co.,Ltd.*

*2969-2, Ishikawa-cho, Hachioji-shi, Tokyo 192-8620 Japan*

Year to begin affixing CE Marking: 2004

Hachioji-shi, Dec.21.2004

Place, Date



Tateki Hisanaga General Manager-Quality Control

Victor Data Systems Co., Ltd.

## Information for USA

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**Caution:** Changes or modifications not approved by party responsible for compliance could void user's authority to operate the equipment.

### **Machine noise**

Sound power level: less than 70dB(A) according to DIN45635 part 19 (EN27779).

The measurements are to be made according to DIN45635 part 2019 or EN27779, respectively.

# Introduction

## Characteristics of this Unit

- This is a laminating machine connected to a card printer, whereby it adheres a protective layer over the surface of a card printed by the printer.
- A hologram can be created on the adhesive protective layer, thus increasing the security level of the card.
- It is not necessary to control this unit via the printer as it receives and laminates the card automatically according to settings.
- Connecting a communication cable between this unit and the printer permits communication with the printer.

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# Notes for safe operation

## Before you use

Read these notes on safety thoroughly before operating your printer in order to use the unit properly. Once you start using the unit, this manual should be put aside the unit, or at a convenient place where you can look up the manual any time as you need.



### 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.



### 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 the unit 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 touch the power plug during electrical storms.**

- Lightning may cause an electric shock.

# Notes for safe operation (continued)

## ■ 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.



## 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.

## ■ 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 put the machine at a place where it will be wet with steam (e.g., from a humidifier), or at a excessively humid or dusty place.

- The oil, water and dusts act as conductors, which may cause a fire or electric shock.

## ■ Do not put the machine at a place where it becomes excessively hot.

- The surface and internal components may deteriorate. Also there is a danger of a fire. Special care should be taken for exposure to direct sunlight or a heater adjacent to the machine.

## ■ 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 film cassette, 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 stacker, or front door.

- Replace the film cassette, or remove jammed cards with care not to jam your hand or fingers in the mechanism, which may cause an injury.

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

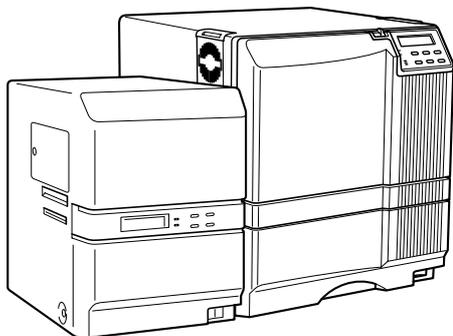
- If you use an unspecified power cable for connection or extension, heat may accumulate in the cable, causing a fire.

# Before Using

## Checking accessories

Check the accessories that come with this unit when unpacking.

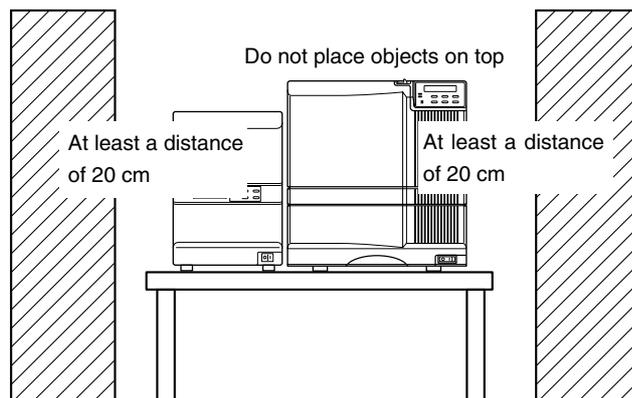
Refer to page 21 "Specification" for the contents of accessories.



## Location for installation

There are ventilation holes for cooling fans at the rear of this unit and the sides and rear of the printer. Place the unit such that the sides are away from the surrounding walls as shown in the diagram. The rear should be at least 20 cm away from the surrounding walls.

Do not place any objects above this unit.



## Handling the film

- Be careful not to touch the surface of the film directly with your hands as this will result in adhesion failure.
- If foreign particles are stuck onto the film surface, these will be absorbed into the adhesive layer and become impurities. Install the film under a clean environment.
- When replacing old film with a new one that was stored under low temperature, leave the new film for more than one hour in an environmental temperature where it is to be used. Using a new film directly will result in condensation and cause adhesion failure and jams.

### ● Storage method

Storage environment : In a packed condition

Temperature 5 °C - 25 °C

Relative humidity less than

50 %

Avoid locations with direct sunlight or highly humid locations.

Storage period : Use it as soon as possible after opening.

## Cards that can be used

### ● External dimensions:

85.4 mm (L) x 54.0 mm (W) x 0.76 mm (D)

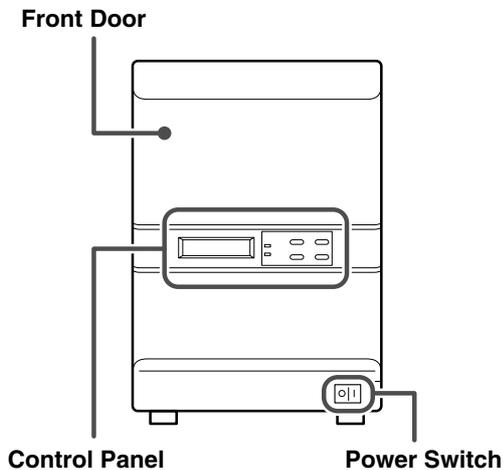
ISO 7810 compliant card

Refer to the printer manual for the material of the card and other handling methods.

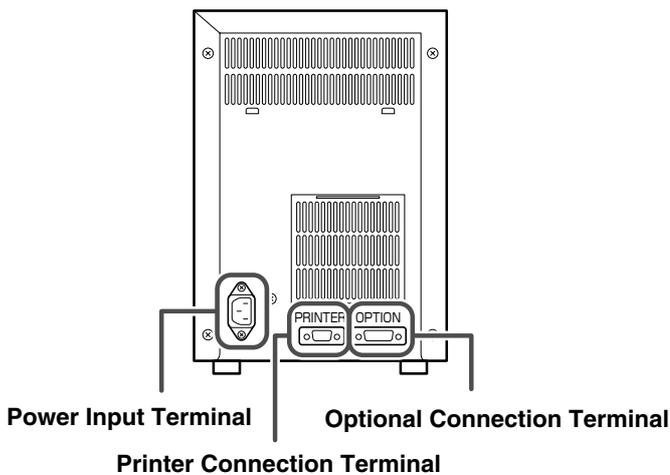
# Installation

## Part Names

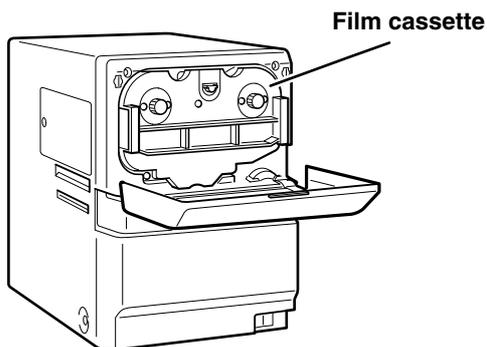
### Front



### Rear



### When the printer door is open



### Front Door

- Mounting the Film → See page 11
- Removing Jammed Card → See page 18

### Control Panel

- Control Panel Display and Operation → See page 13

### Power Switch

- Power On → See page 12

### Power Input Terminal

#### (switch for Europe model only)

- Connecting the Power Cord → See page 9

### External Connection Terminal

- Installing a cable between units → See page 10

### Film Cassette

- Mounting the film → See page 11

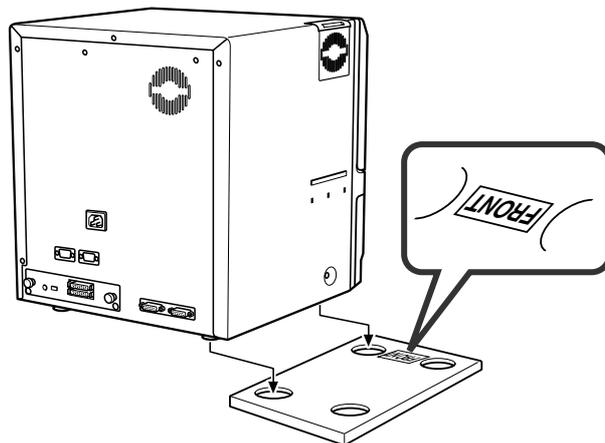
## How to install



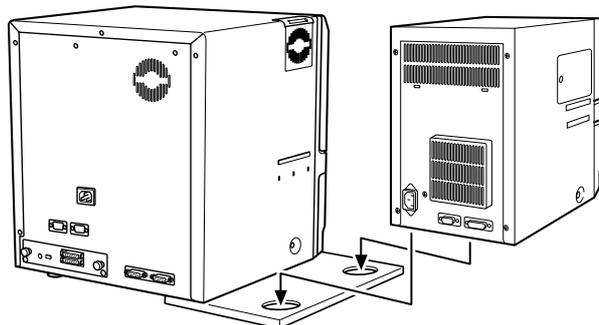
### Caution

Be careful not to pinch your fingers when installing.

1. Mount the printer onto the attached unit joining plate



2. Install the laminator



**Caution**

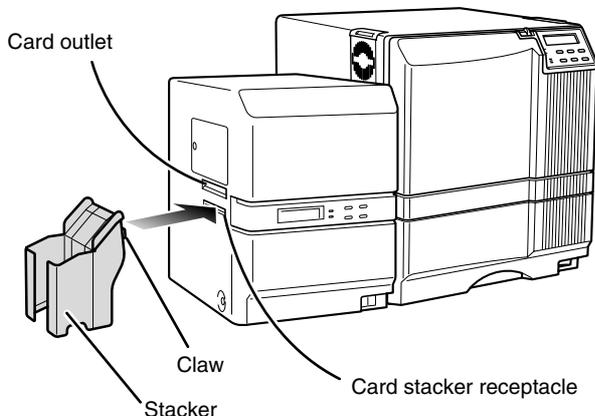
Turn the power off before connecting the cable between the printer and laminator. Otherwise some malfunction may be caused.

**Note**

If the mounting is uneven, the card would not be transported smoothly. Be sure to fit the units right in. Always install the unit at a horizontal and hard surface location.

### Mounting the Stacker

Mount the card stacker that comes with the printer.

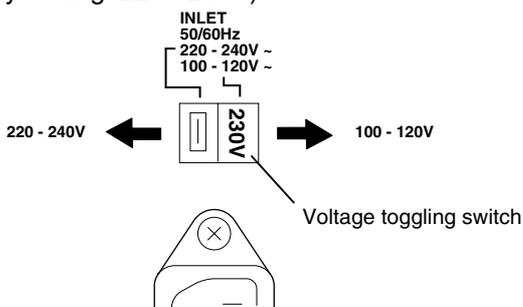


**Caution**

Be sure to hang the card stacker claw on the card stacker receptacle, not the card outlet. If you mount the card stacker at a wrong place, cards are not ejected, resulting in a card jam.

### Setting the Voltage toggling switch

(For Europe model)  
Switch the voltage toggling switch above the power input terminal according to the power voltage to be used.  
(Factory setting: 220 - 240V)



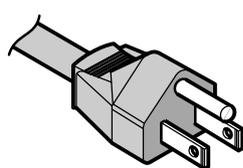
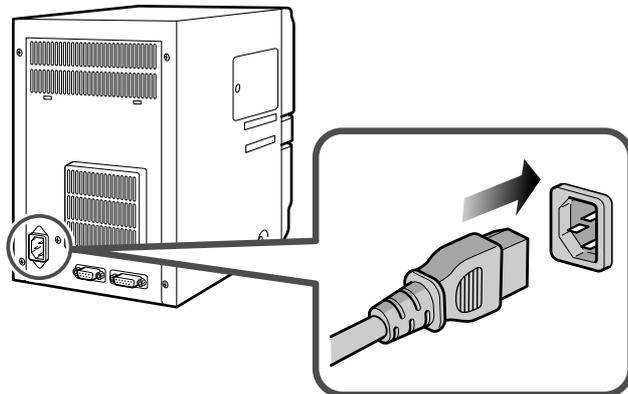
**Caution**

It is extremely hazardous if voltage is set incorrectly. Although there is a protection feature, pay attention when setting the voltage as a precaution.

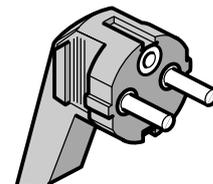
### Connecting the Power Cord

Connect the attached power cable to the power input terminal.

The supplied power cable varies depending on the shipment destination and model. Use the power cable in accordance with each area.



For AC120V (North America)



For AC220V - 240V (Europe)

**Note**

Always use a dedicated power supply with earth terminal for the power socket. Do not share the power socket with other electrical power equipments.

Use AVR (Automatic Voltage Regulator) when there is possibility of voltage variation. Use of an uninterruptible power source instead of AVR is recommended when there is possibility of momentary power interruption.

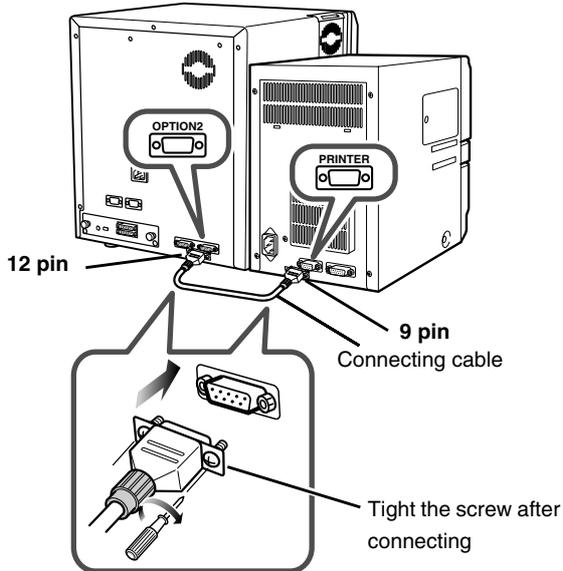
# Installation (continued)

## Installing a cable between units

The unit connecting cable is an optional accessory.

### 1. Connecting with CX210

As shown in the diagram, connect the cable to the [OPTION2] external connection terminal of the printer and the [PRINTER] external connection terminal of the unit.

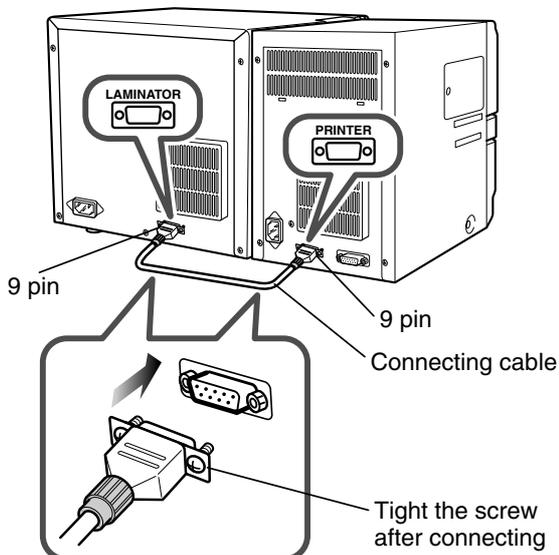


#### Caution

Turn the power off before connecting the cable between the printer and card laminator. Otherwise some malfunction may be caused.

### 2. Connecting with CX-120

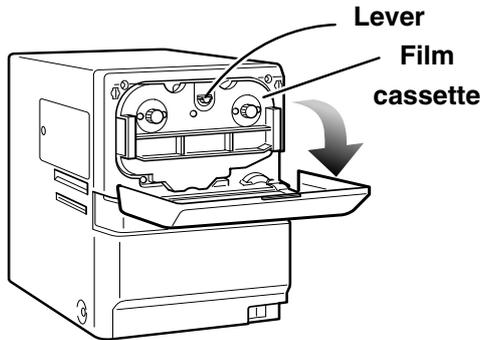
Insert the cable into the "LAMINATOR" external connection terminal at the printer and the "PRINTER" external connection terminal at the laminator, followed by fastening the cable with the screws provided.



## Mounting the Film

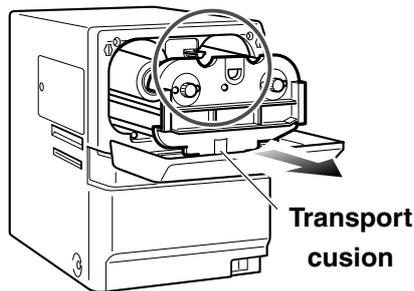
### 1. Open the front door

Grasp the protrusion at the top of the door and pull it open. Hold the corner of the door to open it more easily.



### 2. Remove the film cassette

Push the lever to eject the cassette. Remove the cassette while supporting it with both hands.



#### Note

Replace the transport cushion putting under the cassette, and keep it for transporting the laminator next time.

### 3. Place the end of the film

Stand the film and winding bobbin side by side on a clean table without dust, place the beginning of the film to the winding bobbin.



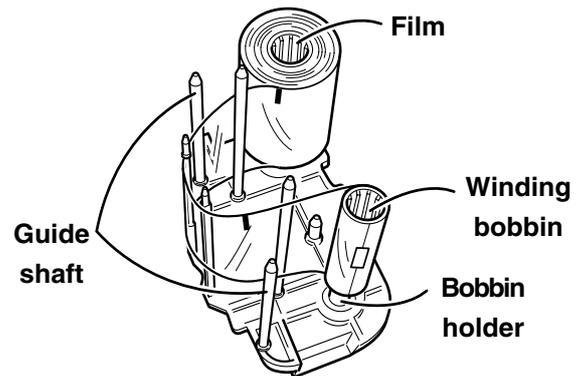
Remove the label of the lamination film and place on it to the surface of the winding bobbin.

#### Caution

Ensure that the film is parallel when placing it on the winding bobbin. If the film is placed in a slanted direction, sticking of the laminating film will also be slanted and a film detection error may occur.

### 4. Insert the film and winding bobbin into the cassette

Insert the bobbin holder all the way in while paying attention to the direction of the film as indicated by the seal instructions on the cassette.



#### Note

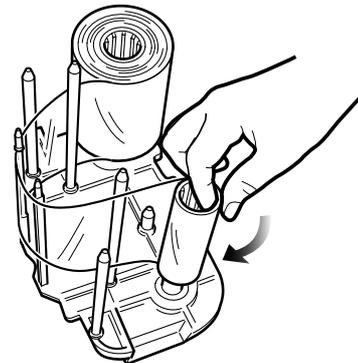
When removing the cassette for cleaning purposes, always stand it as shown in the figure. Allowing the film surface to touch the ground will dirty the film and result in adhesion failure or jams

#### Note

When the film is mounted, ensure that loose film do not sag to the inner section when pulling out the cassette.

### 5. Wind the film once around the winding bobbin

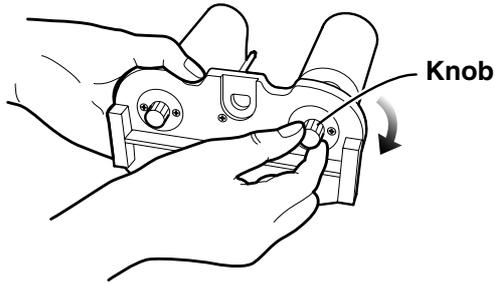
Turn the winding bobbin with film more than once around in the arrow direction.



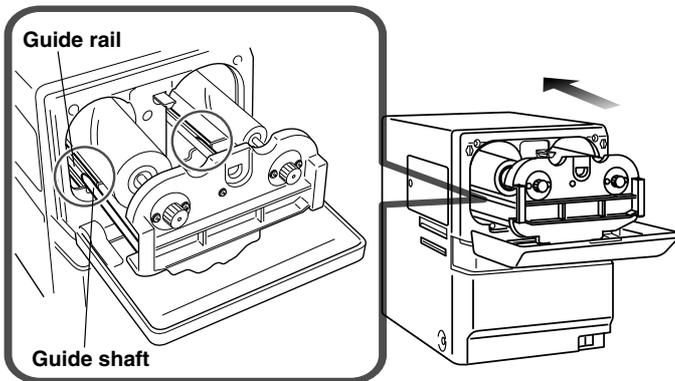
Check that the film is properly wind.

# Preparation and Starting (continued)

## 6. Insert the cassette



While holding the film so that the film does not sag, insert the cassette all the way in against the guide rail. When it is fully inserted, a click sound will be heard. And the cassette will be locked with the lever.



### Caution

Pay close attention to the position for insertion as the guide shaft is shorter than the edge of the cassette. Inserting into the wrong position by force may damage the device.

### Caution

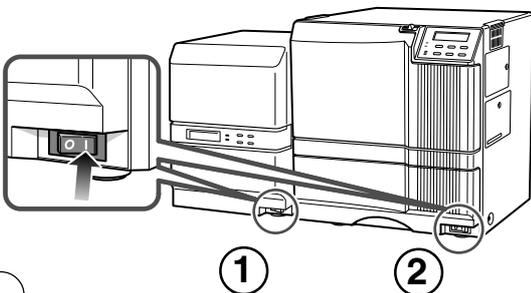
Do not put the film cassette on the back of the door for mounting. Do not rest your elbows or put any heavy object on the back of the door as it may break.

## Power On

Check that the connection between the units is correct, then switch on the power of this unit previous to the printer.

### Caution

When connected with the printer, correct information will not be displayed on the LCD until the printer is turned on.



### Note

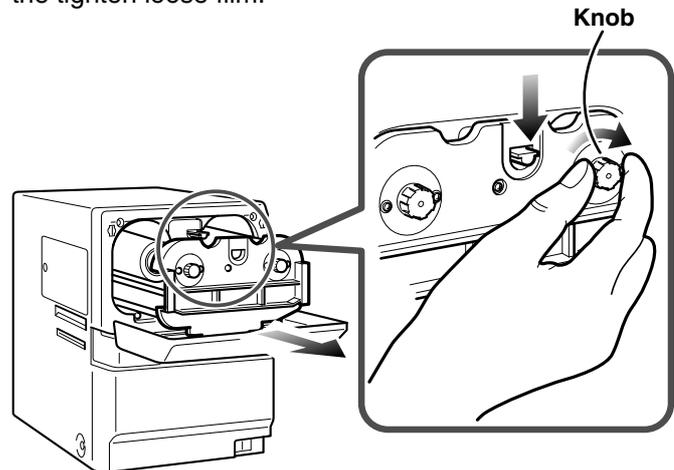
To avoid interruption to the laminating operation, observe the following items strictly.

- Do not open the front door and take off the cassette.
- Do not switch off the power.
- Do not unplug the power socket.

Stopping the device during operation will cause the card to be stuck inside the device and result in jams.

## Exchange the film

Exchange the film keeping the power on, in the same way as "Mounting film". When the film is already mounted, turn the knob of the cassette in the direction of the arrow to the tighten loose film.



Execute the reset operation, after setting the cassette.  
--> See page 13

When the film exchanged under the power off, execute the initialize operation after the power on.  
--> See page 13



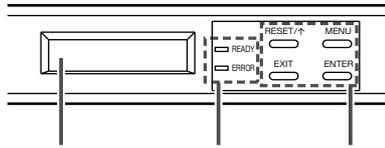
### Caution

The internal section reaches a high temperature when the power is already switched on and the heater warmed up. Be careful not to touch areas with the caution labels.

### Note

When the film is mounted, ensure that loose film do not sag to the inner section when pulling out the cassette.

## Control Panel Display and Operation



LCD display area    LED display area    Manual Operation Buttons area

### LED display

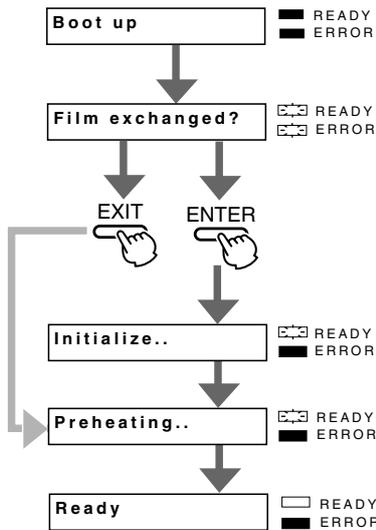
The LED displayed as below.

- Light on
- Blinking
- Light off

### Manual Operation Buttons

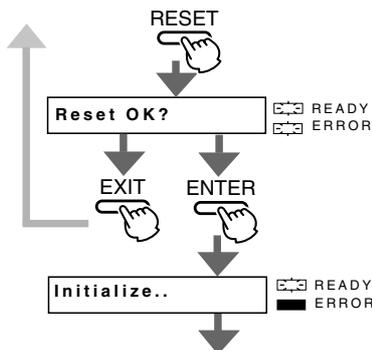
- MENU    Enter the user mode --> See page 13
- ENTER    Confirmation of the operation
- EXIT    Cancel of the operation
- RESET/↑    Reset button

### Turning on the power



1. Booting up and checking the status
2. Check whether film was exchanged or not  
Initialization of the film is required if the film has been changed. 2 LEDs will blink simultaneously and wait for input.  
Press button for initialise the film. If button is pressed, the initialization of the film will not be performed.  
If it left in no operation 20 second after power on, the initialization of the film will not be performed same as button having been pressed.
3. Displayed during the Initializing process  
If button is pressed, the initialization of the film will be performed.
4. Displayed during preheating  
After the power is switched on, the unit remains in preheating state for about 3 to 4 minutes.
5. Ready status after preparation is complete.

### Reset operation



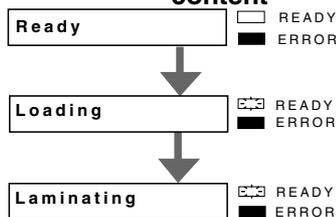
1. Press the reset button.
2. Confirm that the reset to be performed or not.  
Press button to perform the initialization.  
If it was mistake, disengage by pressing button.
3. Displayed during the Initializing process

See the following for other display

- Mode setting screen    --> See page 14
- Error Notification screen    --> See page 17
- Maintenance    --> See page 19

### LCD operation display

#### content



1. Ready status
2. Displayed during feeding
3. Displayed during laminating  
(The Lamination is done up on the surface on the card )  
It will change to Ready status after the laminating operation has done.  
When select pass through mode, LCD shows still Ready and Ready LED blinks.

### Turn off the power

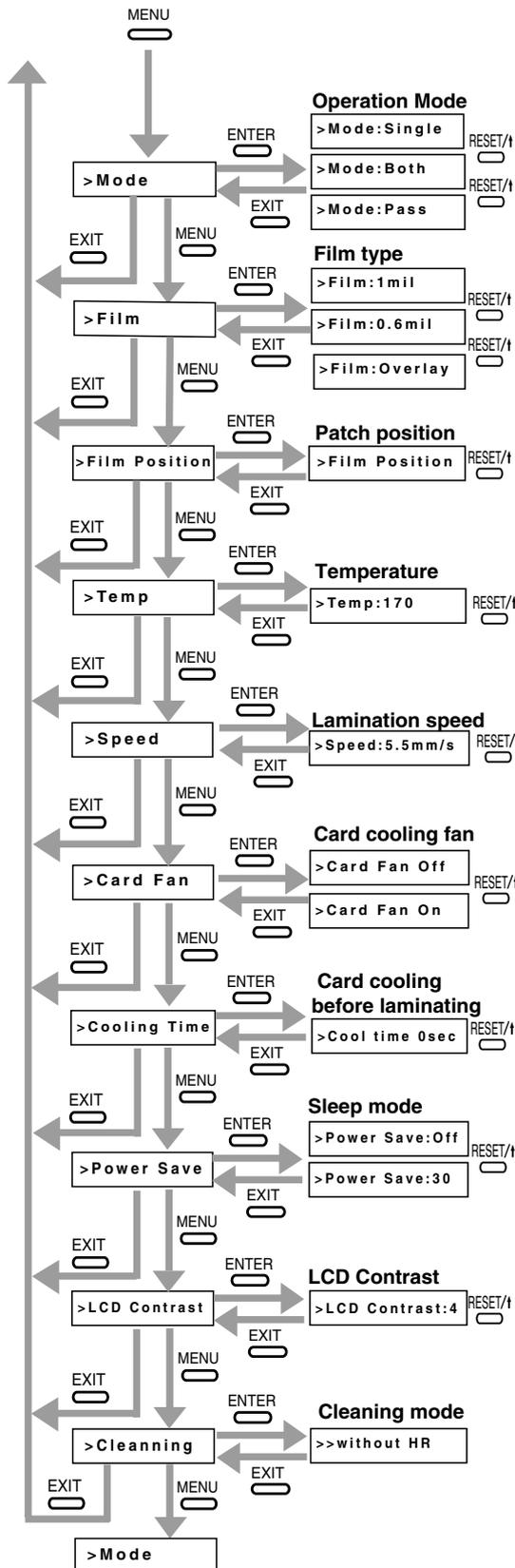
Turn off the power with confermation that laminatiing operation has been completed.

# Operation and Settings (continued)

## User Mode Settings

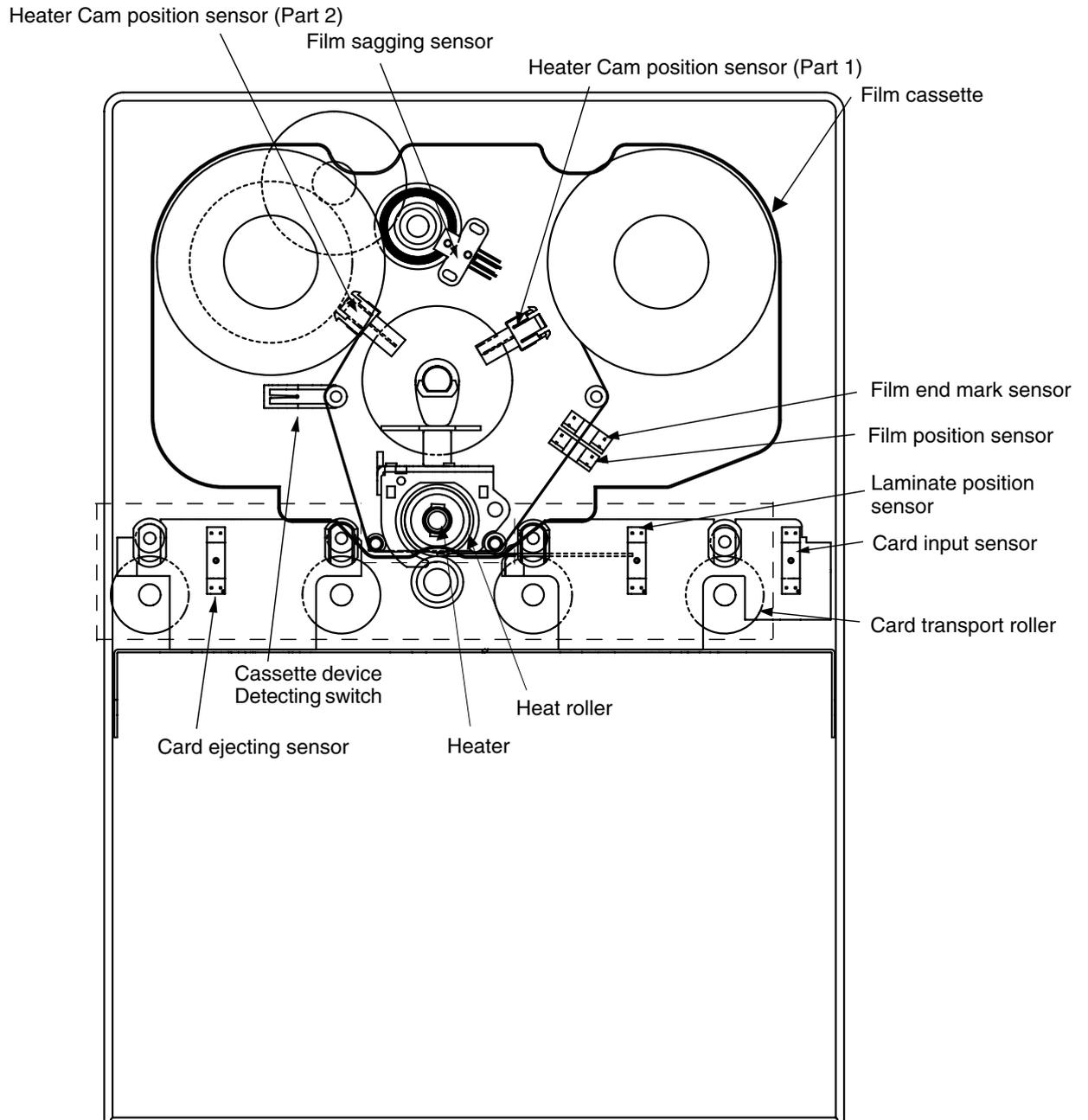
Press the **MENU** button to enter User Mode when the machine has stopped operating such as when it is in a ready or error state.

Select the operation by **MENU** button, and confirm with **ENTER** button. The parameter will be changed by pushing **RESET/↑** button in cyclic. Push **ENTER** button to confirm the parameter, and make a confirmation that the LCD display shows the message such as **Data Saving..** push **EXIT** button to return the previous situation.



Setting	Factory settings
<b>Operation Mode</b>	
>Mode:Single	Laminates on single side. <b>single</b>
>Mode:Both	Laminates on duplex (Indicate when printer setting on CX-120).
>Mode:Pass	Allows the card to pass through without laminating.
<b>Film type</b>	
>Film:1mil	When using patch film of 1 mil thickness. <b>1mil</b>
>Film:0.6mil	When using patch film of 0.6 mil thickness.
>Film:Overlay	When using overlay film with no positioning marks.
<b>Patch position</b>	
>Film Position	Adjusts the patch transfer position -7 to +7 Larger the value the patch moves to right <b>0</b>
<b>Temperature</b>	
>Temp:170	Increases the temperature in steps of 5 °C between 120 °C and 180 °C <b>170</b>
<b>Lamination speed</b>	
>Speed:5.5mm/s	Increases the speed in units of 0.5 mm/s between 4 mm/sec and 10 mm/1sec. The value that can be set may be limited by the combination with temperature. <b>5.5mm/sec</b>
<b>Card cooling fan</b>	
>Card Fan Off	Select the strength of card cooling fan required when laminating. 5 gradation can be set. [Off,Low,Half,High,Full] <b>Half</b>
>Card Fan On	
<b>Card cooling before laminating</b>	
>Cool time 0sec	Select the card cooling time before laminating as 0, 5, 7, 10 seconds. <b>0 sec</b>
<b>Sleep mode</b>	
>Power Save:Off	Power saving mode does not function. <b>30</b>
>Power Save:30	Lowers the heater temperature when there is no operation within a 10,20, 30 or 60 minute interval. Sleep Mode is automatically cancelled and the unit returns to preheating state when card loading begins.
<b>LCD Contrast</b>	
>LCD Contrast:4	Adjusts the contrast of the LCD panel. Setting values are 1 - 5. <b>4</b>
<b>Cleanning mode</b>	
>>without HR	Enter the cleaning mode As for the detail of cleaning mode -->see page 19
>Mode	Return to the Operation Mode

## Internal Structure



# Troubleshooting (continued)

## Settings for Laminate Condition

Cards bend by influence of heat roller when laminate on such as PVC cards.

Default setting for each film is decided due to the performance of PVC cards printed by CX210, and set automatically as to selection the film type.

When the card bends is heavily. Or connecting with CX-120 that the printing method is different, please change the following settings after consults with your dealer.

### Example of Settings

The recommendation setting values when connects with CX210 and CX-120, and performing single side printing of a PVC card is shown below.

Notes: The PVC card has various kinds and optimal conditions differ, respectively. In order to pull out the performance of the Laminator to its maximum, please set it up after finding the best setting values.

### Connect with CX210

In case of CX210, the cards are heated in the printer previous to lamination, so it is important to adjust the setting of the printer in the optimum condition.

Film		1mil		0.6mil	overlay	
Surrounding temperature		15°C – 25°C	26°C – 30°C	15°C – 30°C	15°C – 30°C	
CL-500	Temp	170°C		155°C	130°C	
	Speed	5.5mm/s		8.5mm/s	8.5mm/s	
	Card fan	Half	High	Off	Off	
	Cool Time	0sec		0sec	5sec	
CX210	Retransfer	Temp	+1			
		Speed	+2			
	Bend Remedy	Temp	OFF	OFF	-2	-2
		Speed	+2	+2	-2	0
		Cool	0sec	0sec	0sec	0sec

### Connect with CX-120

There is no Bend Remedy function in CX-120. Therefore, the optimum conditions are set up in the combination of the setting item of Laminator. The example of a setup where adhesiveness was thought as important is shown in the following.

Film		1mil		0.6mil	overlay
Surrounding temperature		15°C – 25°C	26°C – 30°C	15°C – 30°C	15°C – 30°C
CL-500	Temp	175°C		150°C	130°C
	Speed	7.0mm/s		7.5mm/s	8.5mm/s
	Card fan	Half	High	Off	Off
	Cool Time	0sec		0sec	5sec

### When the laminated card surface warps concave

The card surface tends to warp concave by laminating after printed single side by CX210. In that case, the Bend Remedy function of CX210 is effective. See the instruction manual of CX210 to set the bend remedy mode, after consults with your dealer.

When laminating after printed by CX-120, also the card surface tends to warp concave. Please set the best setting values in the combinations of set items of Laminator, because CX-120 has no bend remedy function.

### When the laminated card surface warps convex

The card surface tends to warp convex by the case of the cards are hot, for example laminating after printed both side by CX210 or the environmental temperature is high, and especially using 1mil patch. In that case, set the Card Fan mode of CL-500 up to more strengthen, after consults with your dealer. When print both side of the card by CX210, the Bend Remedy mode of CX210 should be set to OFF.

When laminating after printed by CX-120, also set the Card Fan mode of CL-500 up to more strengthen.

### Note

Inferior quality of laminated cards such as bad transfer or bending are out of guarantee. Make a enough test before deciding and using your cards on the consultation of your dealer.

About the RESET → ENTER button in the table  
 After pressing the RESET button, press the ENTER button to initialize.  
 If the condition does not recover even after the following actions, record the error message and call the service center.

## Error Code List

Error Code	Contents of the Error	Action
<b>Please Power Off</b>	To initialize this unit, the power supply must be switched off once.	Switch off and on the power.
<b>Please Reset..</b>	Displayed when Reset is necessary after changing the settings in User Mode.	Press the Reset → Enter button to initialize.
<b>Please Check inside</b>	Displayed alternately when switch off and on the power on forcibly during lamination.	Remove the cassette and check inside of the machine. If there is a card in the machine, remove it and push the RESET → ENTER button to initialize the machine.
<b>Card Jam(In)</b>	Card Jam (Entrance area)	Check whether the unit is properly joined to the printer. → See page 18 'Removing Jammed Card'
<b>Card Jam(Middle)</b>	Card Jam (Center area)	The transfer temperature is too high or the speed is too slow. Consult your dealer for the most suitable setting method. → See page 18 'Removing Jammed Card'
<b>Card Jam(Out)</b>	Card Jam (Exit)	The transfer temperature is too high or the speed is too slow. Consult your dealer for the most suitable setting method. → See page 18 'Removing Jammed Card'
<b>Film Search</b>	Film Detection Error	Check whether the laminating film is correctly loaded. Press the Reset → Enter button to initialize.
<b>Film Run Out</b>	Film has run out	Replace the laminating film → See page 12 Press the Reset → Enter button to initialize.
<b>No Cassette</b>	No cassette	Mount the film cassette correctly. → See page 12 Press the Reset → Enter button to initialize.
<b>Overcool</b>	Overcool	The environmental temperature for usage is too low. When activating the unit in a low temperature environment, the internal area of the device may be cold even though the surrounding has warmed up.
<b>HR is too hot!</b>	Cannot enter Cleaning Mode as the heat roller is too hot.	→ See page 19 'Cleaning the Transport Roller'
<b>HR Cam</b>	Heater Cam error.	There is an abnormality with the operation of the cam that controls the up and down movement of the heat roller. Switch off and on the power.
<b>Heater Err</b>	The heater temperature does not rise.	The heater is out of order. Or, check that there is no error in the voltage setting for models that come with voltage toggling switches. (For Europe model)
<b>HR Overheat</b>	Heater overheat	Switch off the power immediately and call service center.
<b>Overheat</b>	Abnormal rising of internal temperature	Switch off the power immediately and call service center.
<b>Temp Sensor</b>	Abnormality in the heater roller temperature sensor	Switch off the power immediately and call service center.
<b>Memory Err</b>	Internal Memory Error	Switch off the power immediately and call service center.
<b>Set Temp Err</b>	Abnormality in the heater roller temperature control	Switch off the power immediately and call service center.
<b>R.Encorder Err</b>	Film Encoder Failure	Switch off the power immediately and call service center.
<b>PRT.Communicate</b>	Communication error with the printer	Check the unit connecting cable and connect the cable certainly.

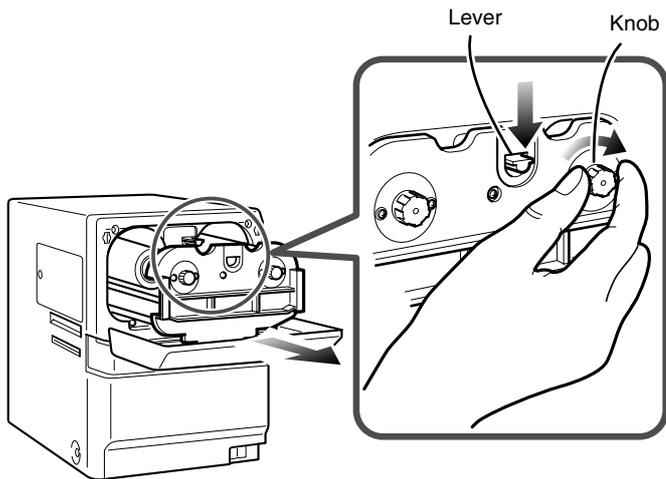
# Troubleshooting (continued)

## Removing Jammed Card

### 1. Open the front door and pull out the cassette

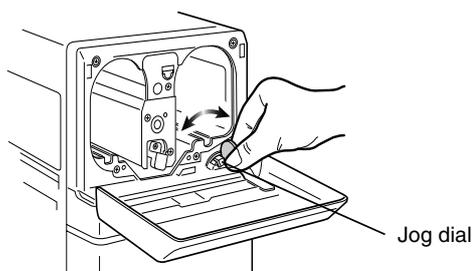
Turn the knob of the cassette in the direction of the arrow to tighten loose film before pulling out the cassette.

Press the lever and remove the cassette while supporting it with both hands.



### 2. Turn the JOG dial to eject the card

As shown in the diagram, insert a coin into the groove of the JOG dial and turn the dial to the desired side for ejection.



### 3. Arrange the film neatly and insert the cassette into the unit

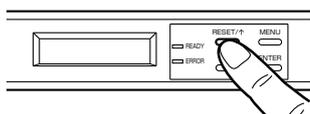
See 'Improper winding of film'

Ensure that the film does not sag when inserting.

→ See page 12

### 4. Reset operation

After the jammed card is removed, return the cassette to its original position and press the RESET button to cancel the error state.



#### Caution

When the card is stuck to the film, it may not be easy to pull out the cassette. In this case, pay special attention to the loose film and slowly remove the cassette such that the loose film does not sag from the cassette.

#### Caution



The area around the heat roller is very hot. Be careful not to touch areas with the caution labels.

#### Caution

When the cassette cannot be removed successfully, do not force it as this may damage the device. Contact your dealer.

## Improper winding of film

When the film is in disarray due to accidents where the film is disengaged when a card is jammed or when pulling out the cassette, arrange the film neatly as shown in the following steps.

### 1. When there is no damage to the film

Check that there is no damage to the film and with the film is still mounted on the cassette, wind the used-up film around the coiling bobbin. Install the cassette while the film is still tight.

→ See pages 11,12

### 2. When there is damage to the film

Cut off part of the film with the damage and join the film with sticking tapes such that it becomes parallel. Install it in the same way as with a new roll of film.

→ See page 11

## Film discoloration

If the "Ready" mode continues for a long time, the film may discolor by the heat of the heater. So it is recommended that when the laminator is not used the power is turned off or the Sleep mode is set. As a factory setting the 30 minutes Sleep mode is set.

## Cleaning the Transport Roller (Cleaning Card)

Most of the reasons for card jams is due to dirty rollers.

It is recommended to clean the laminating machine at the same time when cleaning the printer roller.

### 1. Enter Cleaning Mode

Select **>Cleaning** in User Mode.

→ See page 14 'User Mode Settings'

### 2. Operation Mode Settings

- (1) Cleaning only the transport roller (normal setting)

Press the **ENTER** button at the **>>Without HR** display.

When **>Cleaning OK?** is displayed, press the **ENTER** button again.

- (2) Cleaning also the heat roller

Remove the film cassette and pull the film and bobbin of the cassette.

And insert the vacant cassette back.

If the film is not removed **>>Remove the film** is displayed and no cleaning starts.

Press the **RESET/+** button at the **>>Without HR** display.

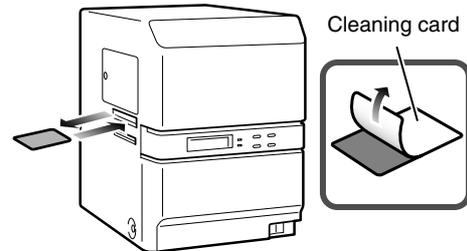
Select **>>With HR** and press the **ENTER** button.

Press the **ENTER** button again to complete the preparation.

When the heat roller is warmed up, **HR is too hot!** is displayed and cleaning cannot be performed.

Switch off the power and wait for about 30 minutes for the heat roller to cool down before starting the operation.

3. Peel off the protective paper of the cleaning card and insert it into the card discharge slot. The card will be drawn into the unit by the rollers and cleaning will then be carried out. Insert the card with its adhesive face upside down to repeat the cleaning procedure once more.



#### Note

The cleaning card can only be used once. Using a dirty card over and over again will dirty the roller and result in jams. Consult your dealer for any queries regarding the cleaning card.

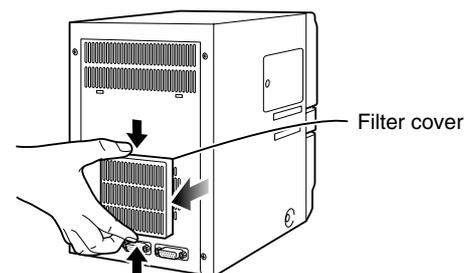
#### Caution

If the proper cleaning card is not used, the error message "Card Jam (Out)" is displayed

## Cleaning the Filter

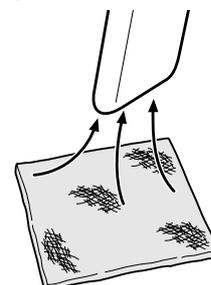
### 1. Remove the filter cover

Hold the upper and lower ends of the filter cover and pull forward to remove the filter cover.



### 2. Clean the filter

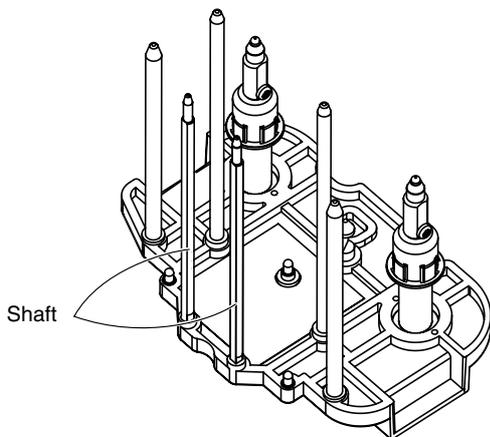
Remove dirt attached to the filter with a vacuum cleaner. While cleaning, press down the sponge to avoid it being sucked into the vacuum cleaner.



## Maintenance (continued)

### Cleaning the cassette

If the cassette is ejected and inserted repeatedly, the shaft of the cassette might rub against the front door causing dregs to adhere. This is not a malfunction. However, this may cause contact problem if the dregs adhere to the contact surface. When changing the film, make sure that no dregs adhere to the shaft. If dregs adhere to the shaft, wipe it with a dry cloth. At the same time, perform similar checking and cleaning on the insertion opening of the cassette.



#### Caution

Clean by cloth of thread dust free soak with dehydrated ethanol in such a distant place that no dust affects the laminator. When cleaning put the cassette on a flat table as when mounting the film, to avoid dropping the cassette or deformation of the shaft.

### Once laminator servicing and cleaning have been completed

Once servicing and cleaning of the printer have been completed, check to make sure that all parts have been replaced properly.

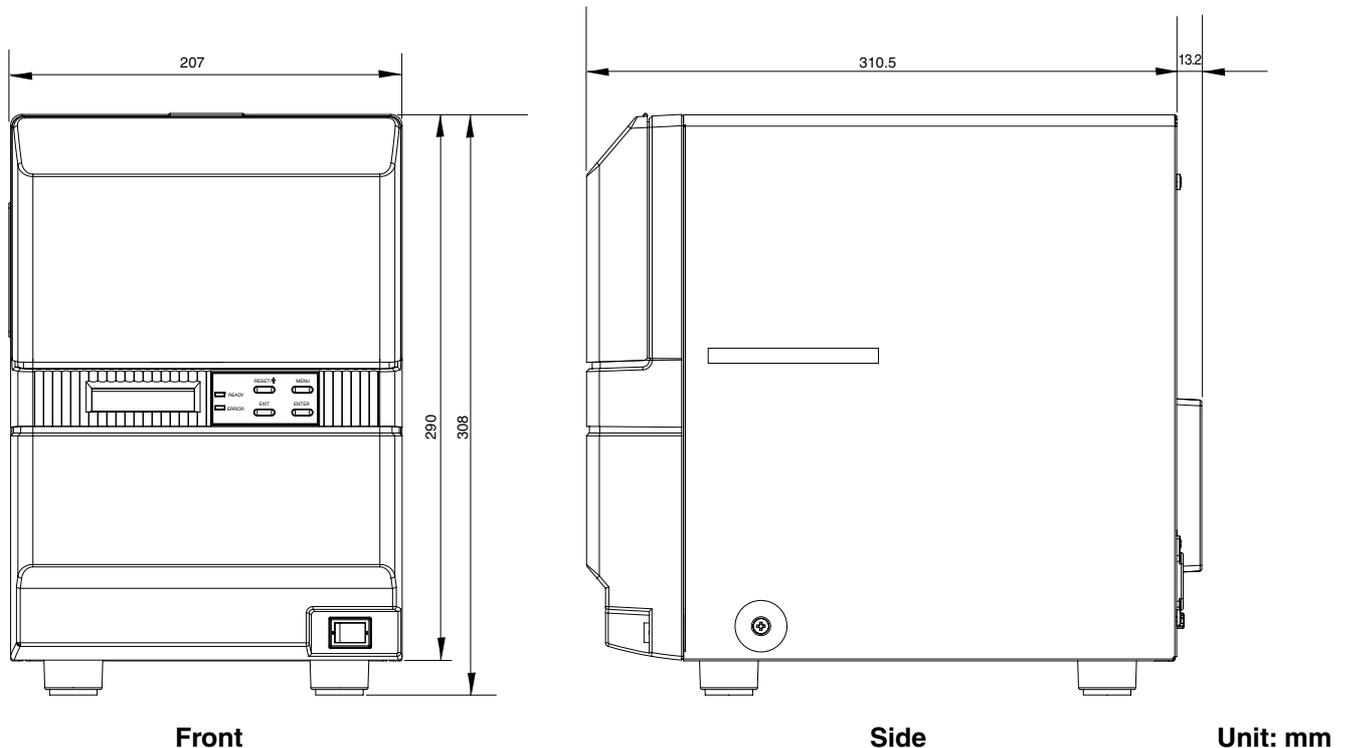
Improper replacement of parts may result in the power not turning on or operating errors.

# Specifications

## Specifications

<b>Transfer method</b>	: Halogen lamp built-in heat roller method
<b>Transfer time</b>	: Approx. 20 seconds The time varies according to settings.
<b>Usage environment</b>	: Temperature 15 °C - 30 °C Humidity 30 % - 70 % (without condensation)
<b>Storage environment</b>	: Temperature -15 °C - 55 °C Humidity 20 % - 80 %
<b>Power supply</b>	: AC 100 - 120 V (tolerance $\pm 10$ %) for CL-500**U: North America model or : AC 220 - 240 V/100 - 120 V selectable (tolerance $\pm 10$ %) for CL-500**E: Europe model
<b>Power consumption</b>	: Approx. 200 W
<b>Unit mass</b>	: Approx. 8 kg
<b>Accessories</b>	: Power cord x 1 (for North America) for CL-500**U: North America model Power cord x 2 (for North America, Europe) for CL-500**E: Europe model Instruction manual Unit joining plate Cleaning card

## External dimensions diagram



\* Design and specifications are subject to change without notice.





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