

Advantage M8

Card Printer & Embosser

Operation Manual

MANUAL NO. Advantage M8-UM-152



NBS Technologies Inc.

Essential Safety Precautions

This operating manual provides the safety precautions and the handling methods required to use the product. Before using this machine, be sure to read this operating manual for safe and proper operation. After reading, keep it in a safe place for later reference.

For any questions, contact your distributor.

- This product is designed to emboss/encode/print specified plastic cards. Do not use this for any other application purposes.
- In this operating manual, items to be especially observed are marked with signs or symbols for safe and proper use of the product. As they are important contents, be sure to observe and follow them.



Warning

improper handling may cause death or severe injury.



Caution

Improper handling may cause injury or property damage.



Never do this.



Be sure to follow instructions.

Product Handling

Warning



Do not overload one electrical outlet by using a power strip and multi-outlet adapter.
It may cause electric shock or fire.



Do not disassemble or modify. It may cause an electric shock or fire.
If it is necessary to remove a cover for maintenance, inspection, cleaning, or repair, contact your distributor.



Only use with rated voltage and the rated frequency.
Failure to do so may cause an electric shock or fire.



Do not use a damaged power cord or loose outlet.
It may cause an electric shock or fire.



Check that the power plug does not have dust before inserting it into the outlet. Every six months to one year, pull the power plug out of the outlet and inspect the plug for cleanliness. Dust may cause an electric shock or fire.



Used only at altitudes not more than 2000m above sea level.



Used only in non-tropical conditions. (Operating environment Temperature 10 to 32 degrees Celsius/ Humidity 20 to 65% R.H (non-condensing))

Continued from Product Handling

⚠ Warning



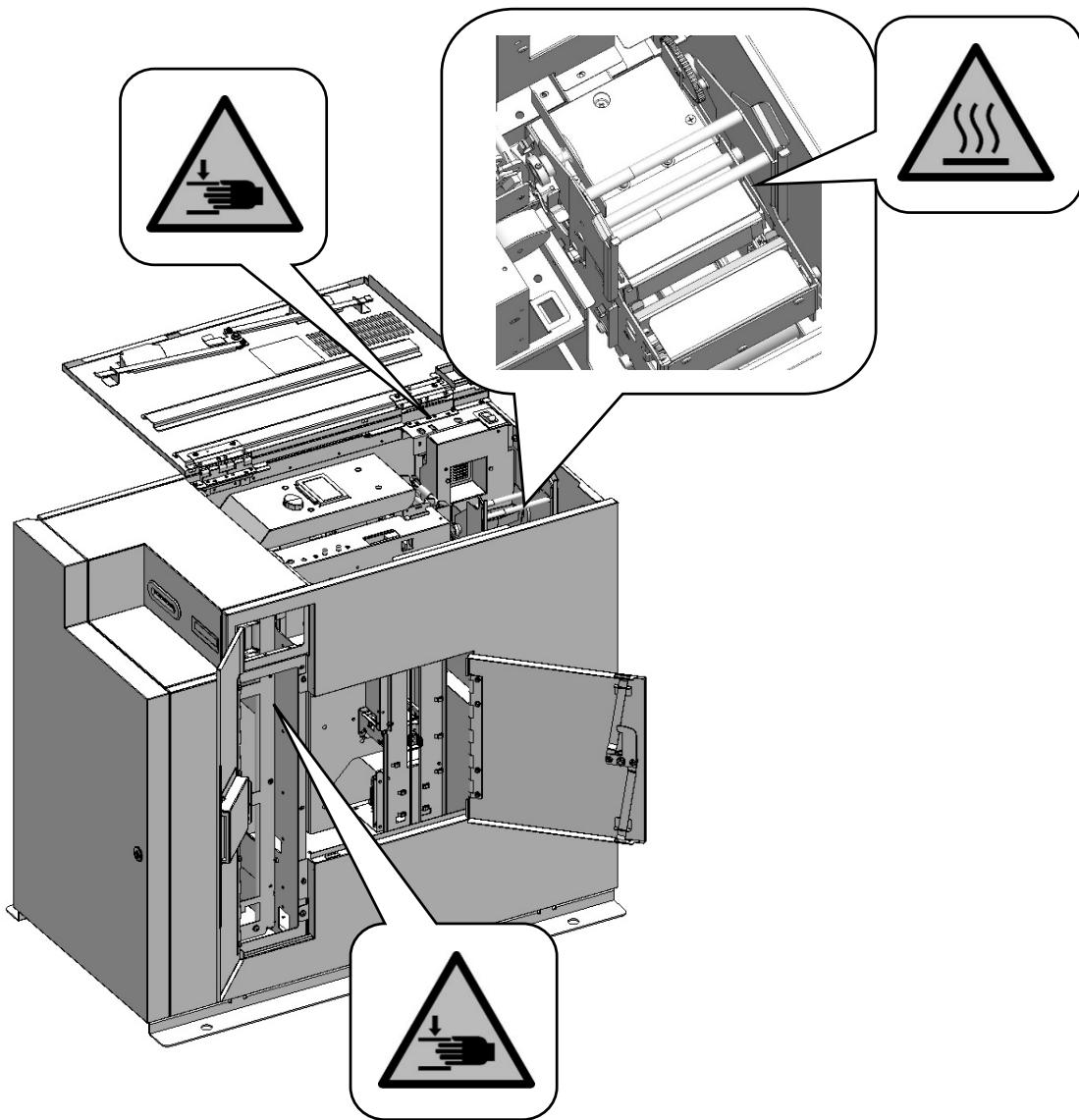
The Tipper Unit might be hot. To reduce the risk of injury from the heat, allow the Tipper Unit to cool before touching.



Please take care not to get your hand or finger caught, when you open and close the upper



Please take care not to get your hand or finger caught in the moving units, when you take out remaining card or conduct maintenance work. It may cause an injury.



Continued from Product Handling

⚠ Caution

- 🚫 Do not use a card contaminated with dirt or flaws.
It may cause a breakdown.
- 🚫 Do not wipe with benzene, solvents or thinner. It may cause discoloration or deformation of this machine. For heavy contaminants, apply dilute mild detergent to a cloth, wring it thoroughly, then wipe off the contaminants with it, finally wipe with a dry, soft cloth.
- 🚫 Never open the covers of this machine during operation.
It may cause injury.
- ❗ When not using for a long period, be sure to pull the power plug out of the outlet.
Failure to do so may cause a fire.
- ❗ When pulling out the power plug, hold the tip of the power plug.
Failure to do so may cause an electric shock.

Product Installation

⚠ Caution

- 🚫 Avoid installing in direct sunlight or near to a bright light source or a window.
It may interfere with proper operation.
- 🚫 Avoid installing in a place with extremely high temperatures/humidity or a place with rapid humidity changes. It may cause condensation, resulting in a breakdown or improper operation.
- 🚫 Avoid installing in a dusty place.
It may cause a breakdown.
- 🚫 Avoid installing in a place with heavy vibration.
It may interfere with proper operation.
- 🚫 Avoid installing in a place with an unstable base or a where the surface is not flat place.
It may interfere with proper operation or fall, resulting in injury.
- ❗ Power supply connection of this product should be done by a technician with necessary knowledge and qualification. It may cause electric shock or fire.
- ❗ Ensure a good electrical ground is established.
Failure to do so may cause an electric shock.
- 🚫 Do not insert the power plug into the outlet until the connection is completed.
- 🚫 Only connect cables when the host computer and this machine are turned off.
- 🚫 LAN connector and USB connector are sensitive to ESD.
Connect these communication cables when the machine is powered off.

Continued from Product Installation

⚠ Caution



When connecting a cable, be sure to insert it as far as it will go and lock if a lock function is equipped.



Install in a place more than 10 cm away from the side wall.



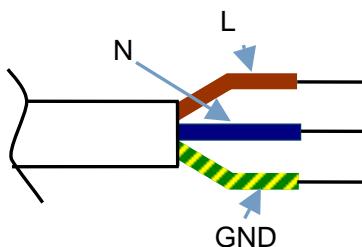
Use the supplied power cord only for this machine.

Power supply connection of this product should be done by a technician with necessary knowledge and qualification. It may cause electric shock or fire.

Connect the supplied power cord to the inlet on the back.

Connect the end of the power cord to the switchboard and use it, or use an appropriate plug to install it.

Plug is not included. Please prepare separately the plug which satisfies the laws and regulations of the country/region where this product is installed.



	L	N	GND
1	Brown	Blue	Green/Yellow
2	Black	White	Green

The wire covering color is either 1 or 2.

Card Handling

⚠ Caution



When you are touching the cards, it is recommendable for you to wear gloves. If finger prints contaminate the surface of the card, it may cause bad print quality. To carry a card it is recommended that it is held by its edges.



Do not put or store cards in a dusty place, a place with high temperatures or near electric appliances that may emit a strong magnetic field (such as a mobile phone and monitor). It may cause deformation of cards or deletion of magnetic data.



Do not bend the cards or damage the magnetic strip. It may interfere with proper reading of magnetic information.

Federal Communications Commission (FCC) Statement

Attention

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Table of contents

Essential Safety Precautions

Product Handling

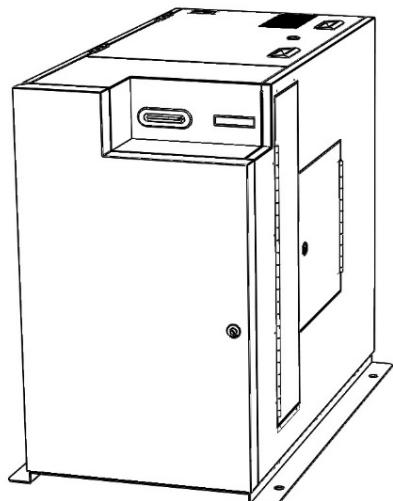
Product Installation

Card Handling

Contents of the package	1
Name of Each Part	2
Front	2
Back	2
Inside of Front Cover	3
Inside of Top Cover	3
Inside of Right side door	4
Preparation before Use	5
Installation and connection of Main Body	5
Card setting	6
How to use the machine	10
Setting and Checking the IP Address	10
Card Issuing	11
Exchange of Thermal Transfer Ribbon	12
Exchange of Tipper Foil	14
Exchange of Indent Film	18
Pick up cards from Out Stacker	22
Pick up cards from Reject Unit	23
Eco mode	24
Error Message	25
Error during waiting	25
Consumable error	26
Error during operation	27
Error Reset	29
Remove remaining card from In Hopper	29
Remove remaining card from Main Transfer Unit	31
Remove remaining card from Print /Encode Unit	34
Remove remaining card from Vertical Rotation Unit	38
Remove remaining card from Carriage Unit	39
Remove remaining card from Emboss Unit	40
Remove remaining card from Card Insertion/Exit Slot	43
Cleaning	44
Cleaning Thermal Print Head	44
Washing Cleaning Roller	47
Cleaning Card transfer rollers	50
Specifications	51
General Specifications	51
Embosser Specifications	52
Encoder Specifications	52
Printer Specifications	52
Use Card Restriction	52
User environment	53

Contents of the package

The package contains the following items.
(Please contact your dealer if you cannot find anything)



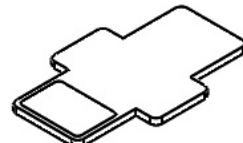
Main Body



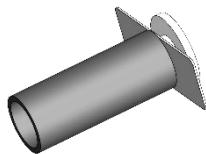
Cover key (2 pieces x 3)



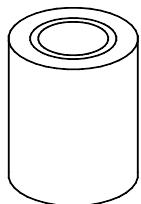
Cassette key (2 pieces x 2)



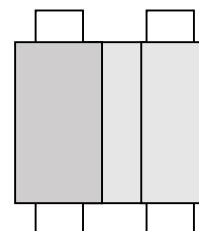
Weight (15 pieces)



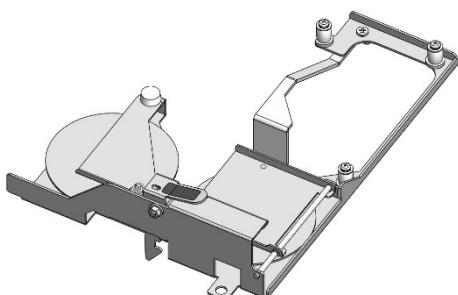
Reel hardware for tipper
(with paper core)



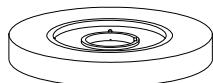
Tipper Foil



Thermal Transfer Ribbon



Indent Cassette



Indent film



Indent film empty core



Cleaning Roller



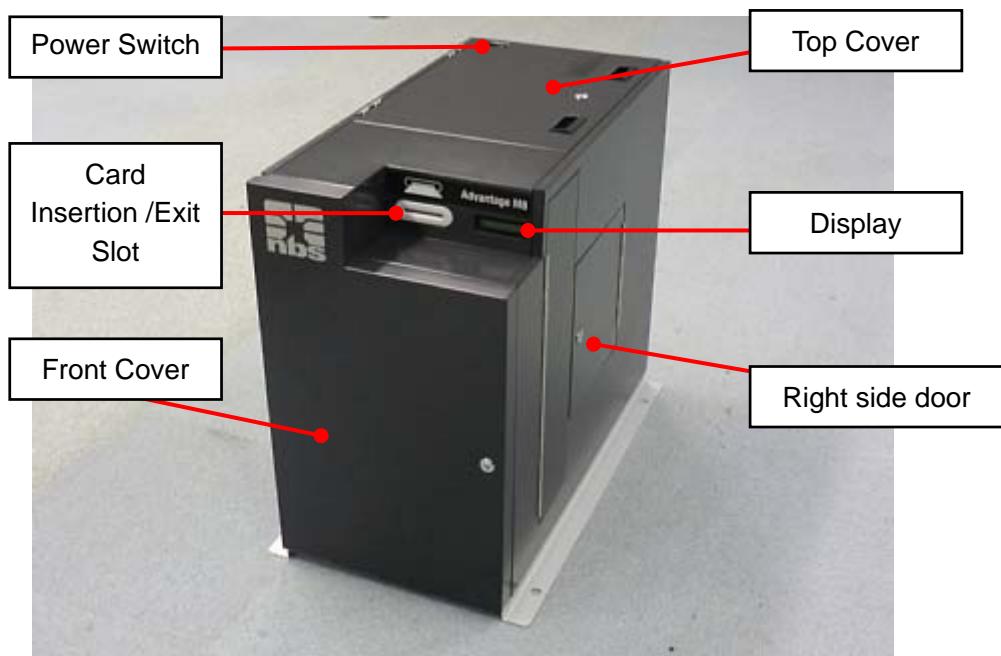
Power cable



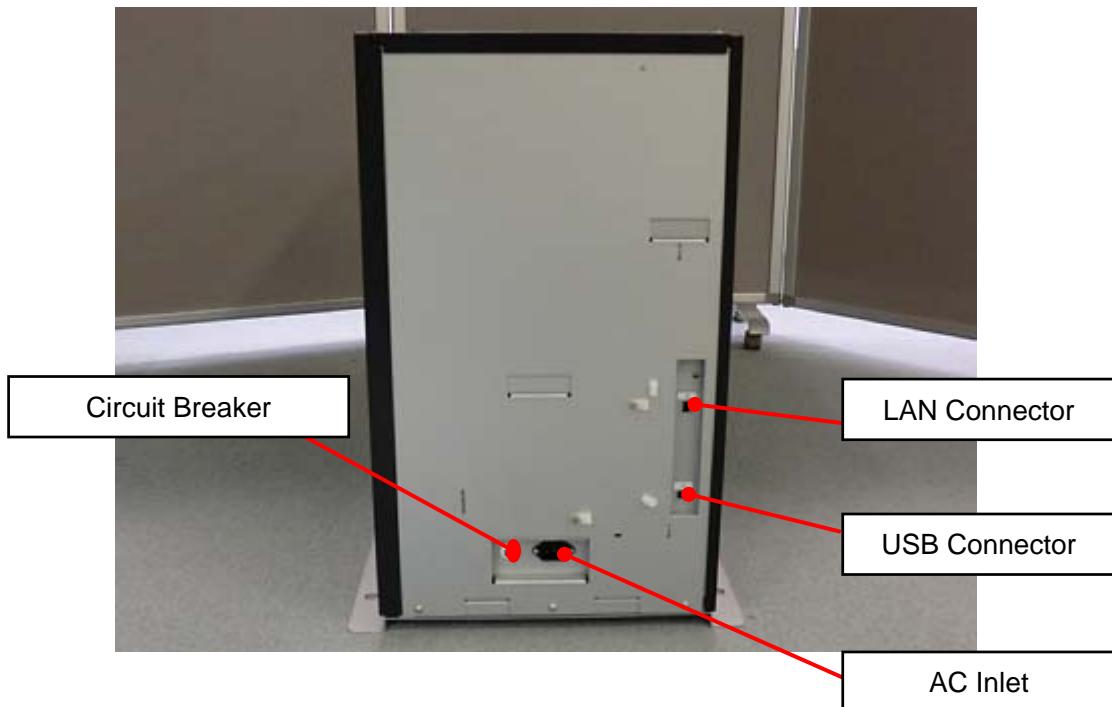
CD (Operation Manual (pdf))

Name of Each Part

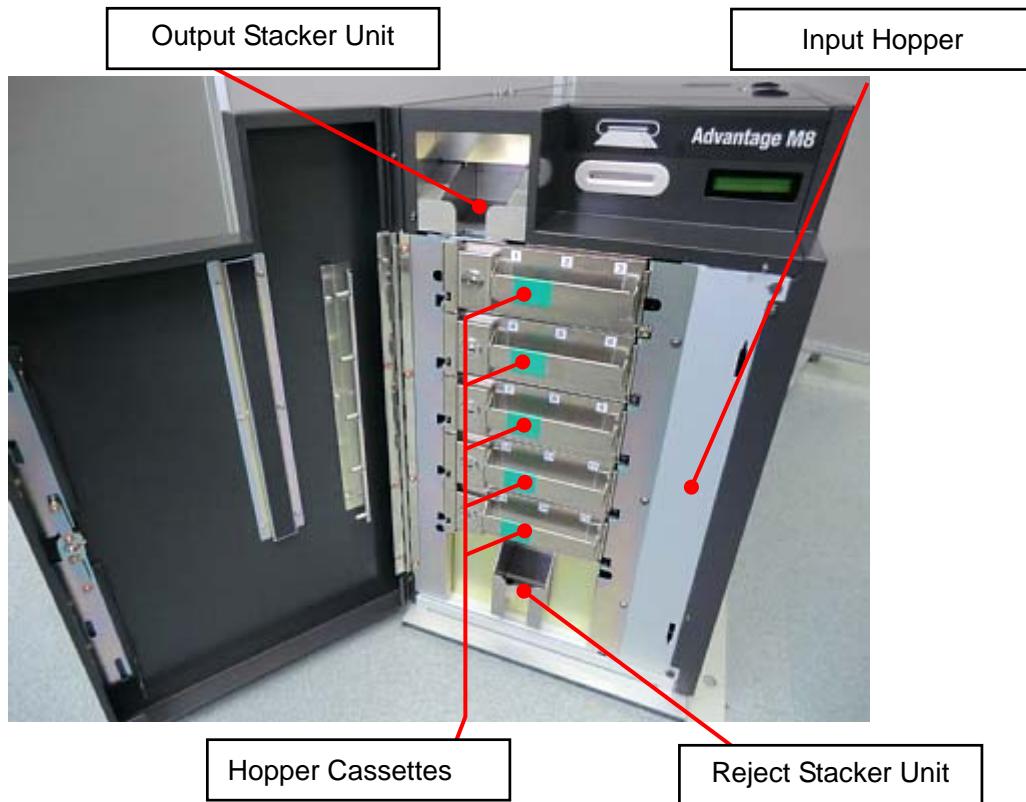
Front



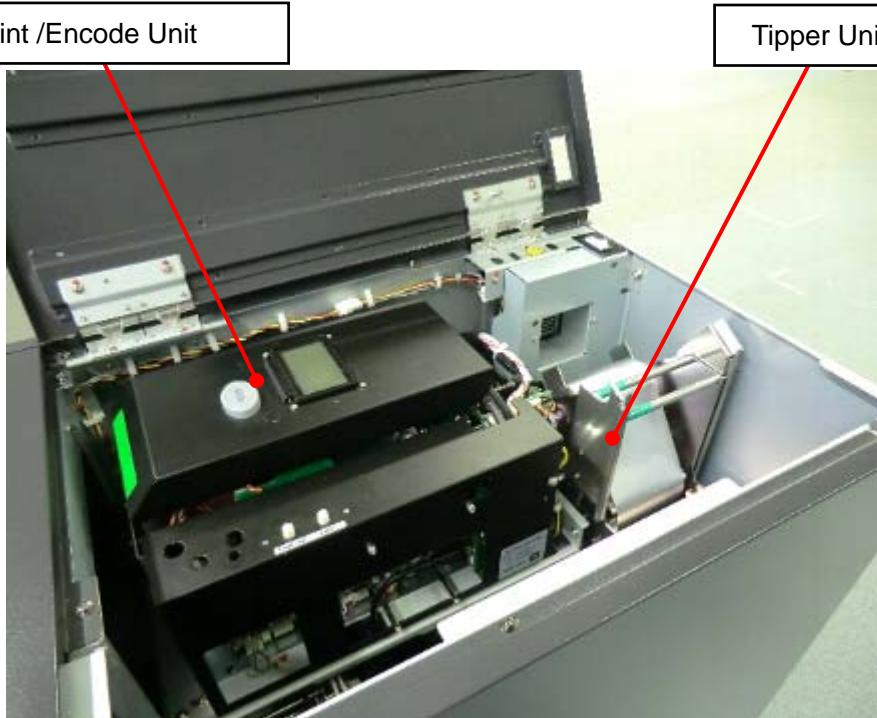
Back



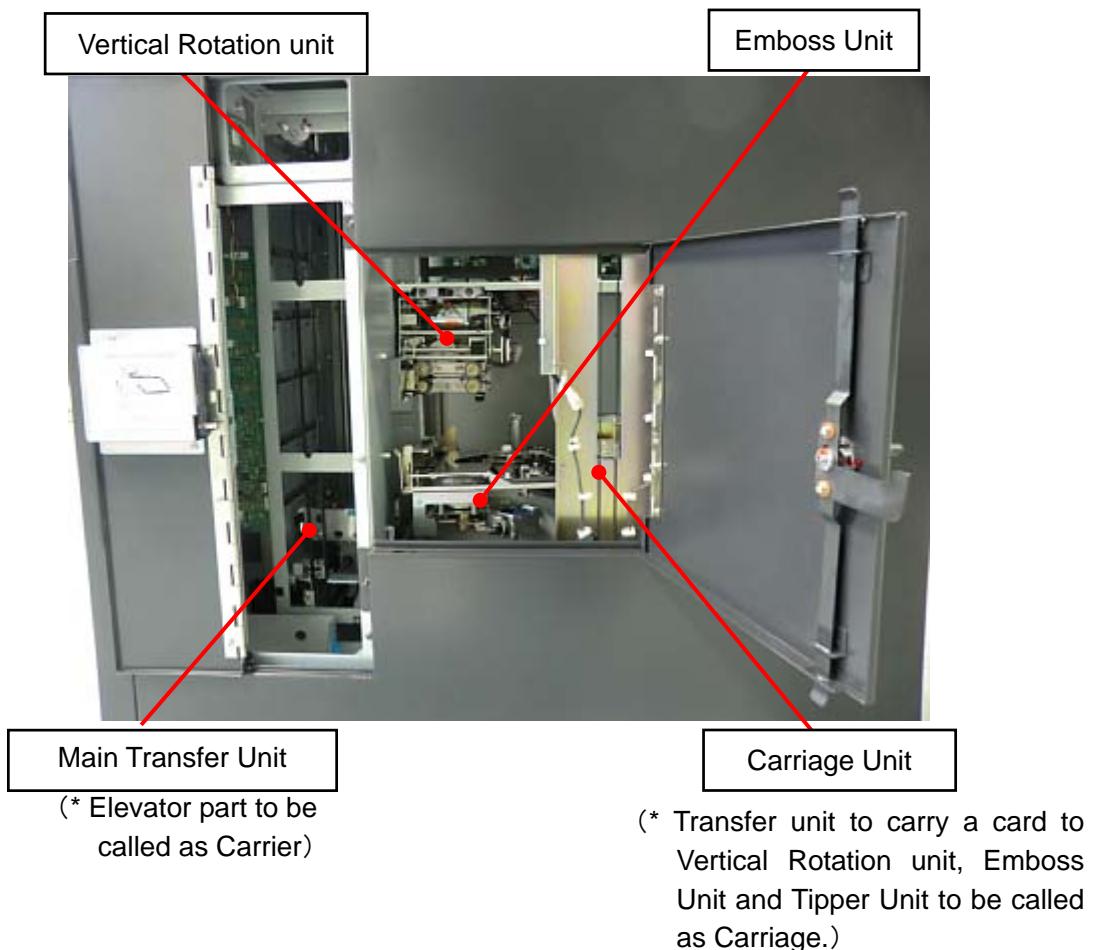
Inside of Front Cover



Inside of Top Cover



Inside of Right side door

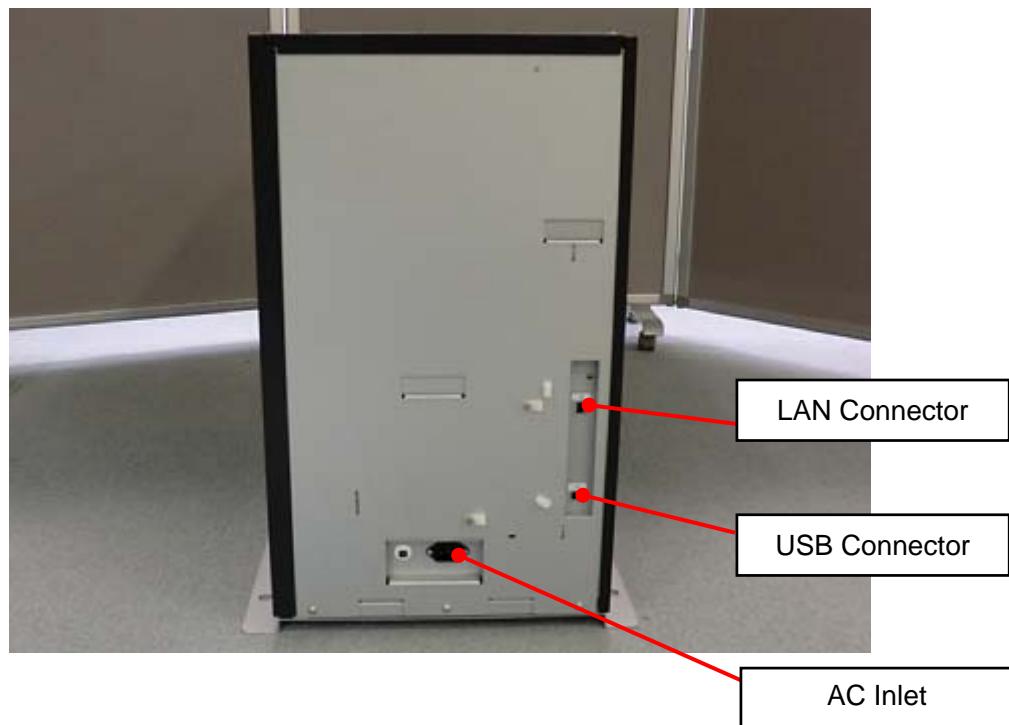


Preparation before Use

For installation please read “Product Installation” in this document in advance.

Installation and connection of Main Body

1. Place the machine on installation space.
2. With reference to “Exchange of Tipper Foil” on page 14, install the tipper foil.
3. Connect the host computer and main body with connection cable



4. Connect the power cord to the AC inlet and AC outlet.

Caution

- Communication connectors (LAN, USB) are very sensitive for ESD.
Fixing and removal of connectors should be done when all power is OFF. Be careful so not to cause damage by ESD.

5. With reference to “Exchange of Thermal Transfer Ribbon” on page 12, install the ribbon.

Card setting

⚠ Caution

- Front Cover of main body can only be opened by unlocking both the physical cover key and electrical lock.
- For unlocking the electrical lock you need to connect a LAN cable and run application software.

1. First turn the main power ON, unlock with the application software and with the key provided turning clockwise. When the Front Cover is opened, the buzzer will beep and the following error message be displayed.

CV401 Front



⚠ Caution

- After unlocking the electrical lock the Front Cover must be opened promptly.
If Front Cover is left closed for a while, it will be locked by the electrical lock automatically.

2. Pull Hopper Cassette out and away from the machine for addition of plastic cards.



3. Open Hopper cover by turning Hopper cassette key clockwise.



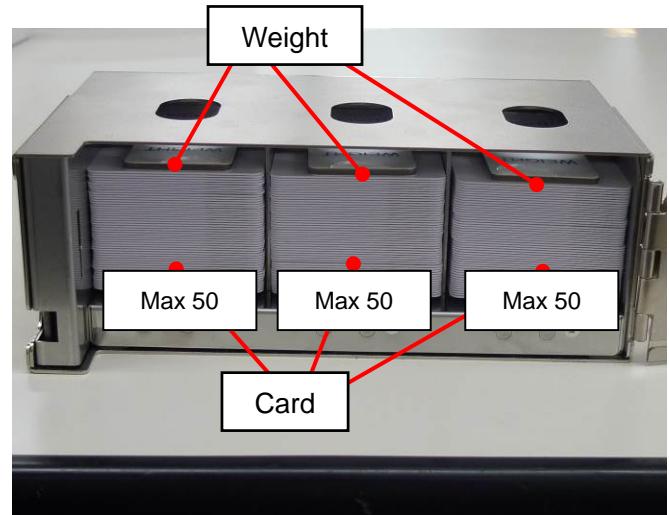
Turn hopper cassette key clockwise.



Open Hopper Cover.

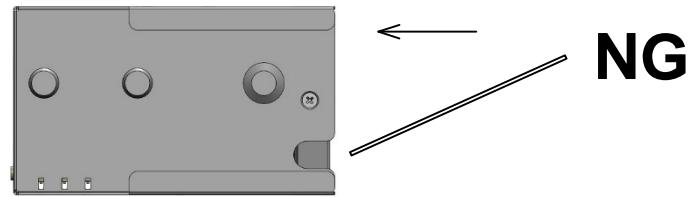
4. Before putting cards into the hopper, they must be separated to prevent them from sticking to each other. After separation place the cards into the desired Hoppers. Place a weight on top of the cards. Close the Hopper cover and lock by turning the cassette key counterclockwise.

Each Hopper can hold a maximum of 50 cards.

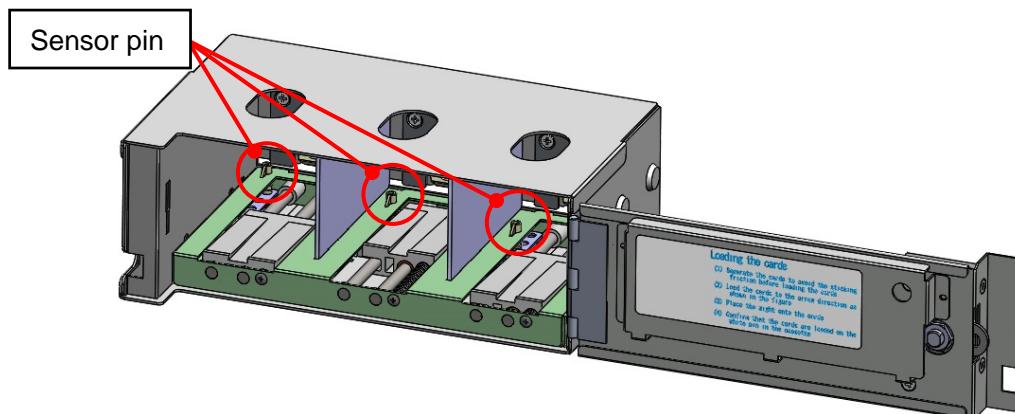
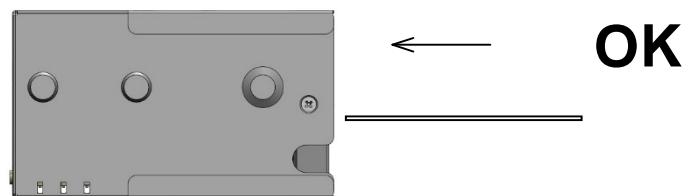


Please refer to Illustration on inside of cassette to find card setting direction.

Placement of cards in an extremely skew or acute angle may interfere with proper card seating and cause card jams.



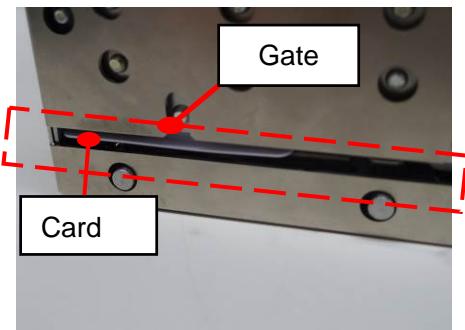
Keep the cards horizontal and set on sensor pin softly.



If the edge of a card can be seen at the Gate, it may cause card jams. If you observe such a case, please remove all cards from the cassette and reseat the cards as above 4.

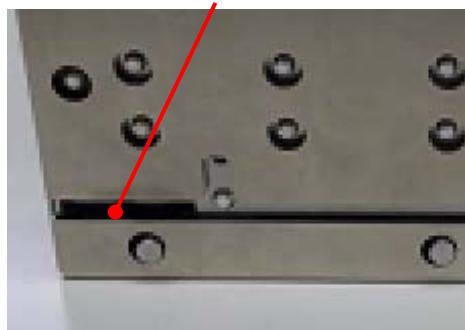
Bad setting example

NG Card edge can be seen



Good setting example

OK No card edges can be seen.



5. Insert the cassette into the main body of the machine until it clicks, close the Front Cover, and lock with the key.

⚠ Caution

- After handling cards to prevent them from sticking to each other, check that there are no foreign objects in the input hopper, then place the cards into the cassette.
- If you can see a card edge at the gate, all cards must be taken out from the cassette and reseated again.

How to use the machine

Setting and Checking the IP Address

For issuing of Cards, the Advantage M8 requires to be connected to a host computer by LAN and USB. In order to connect to a LAN, you need to set up an IP address.

How to check the existing IP address is described as follows.

1. Turn Power Off, open Right side door by turning Key clockwise.
2. While pushing down on the Indent Cassette, turn Power On.
3. When a Buzzer is audible and beeping, release the Indent Cassette by removing your finger so it returns to its upright position.
4. The IP address, Subnet mask, Gateway, will now be displayed on the display scrolling every two seconds repeatedly.



Ixxx.xxx.xxx.xxx

Display IP address

Sxxx.xxx.xxx.xxx

Display Subnet mask

Gxxx.xxx.xxx.xxx

Display Gateway

When it is getting IP address from DHCP server, the display shows (not advisable)

Please wait...

After received IP address, the address is displayed.

5. Close Right side door and lock by Key, then turn Power OFF.

Card Issuing

1. After connection of power cable and communication cables, turn Power On.
2. The following message will be displayed.

TP Warm-up xx%

(Using Tipper, before warming up is not completed.)

Not initialized

(Using Tipper and warming up is complete or not using Tipper.)

3. Initialization triggered by host computer.

Initializing...

(Display during initialization)

4. When initialization is completed, display changed to the message.

Issuing Mode

5. When received Issuing Data from host Computer, Issuing operation is started.

Card Issuing

6. Issued card will be delivered to Card Stacker and held there or ejected to Card Insertion/Exit Slot.

7. Error card will be transferred to and hold in Reject Box.

Reference

- If any error is detected during initialization, an error message is displayed.
Please refer to error message of this manual about error description and recovery way.

Caution

- Do not insert a card or cover the Card Insertion/Exit Slot during the operation.
- If you open the Front cover, Side door, or the Top cover during the operation, it will stop issuing the card. Do not reuse the canceled card because the data was not be processed correctly. You can restart the machine by turning off and on.
- In the case when the machine got turned off because of power failure or other reasons, open the Front cover to remove the Hopper cassette. Make sure that the card does not come out from the rear side of the Hopper cassette, and then turn on the machine again.

Exchange of Thermal Transfer Ribbon

1. Unlock the Top Cover by turning the key clockwise during the power on, and then open the Top Cover. .

Turn this key clockwise.



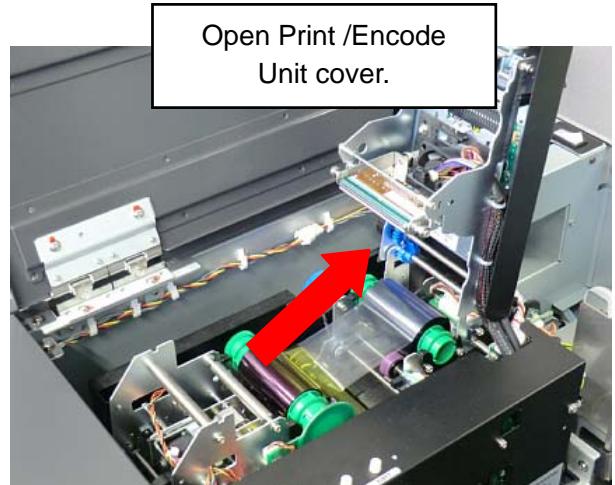
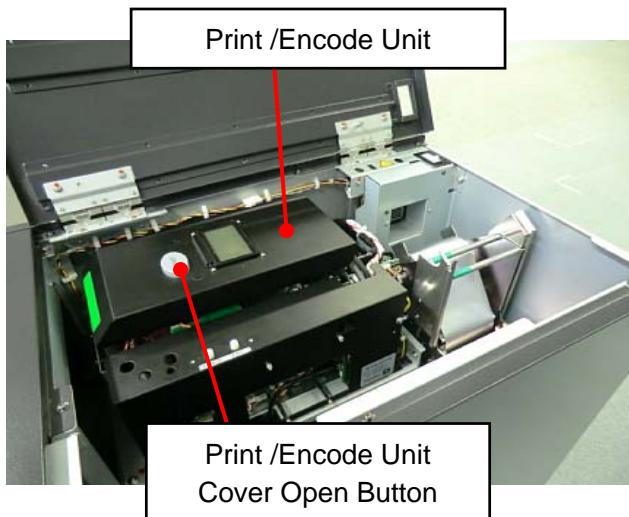
Open Top Cover.



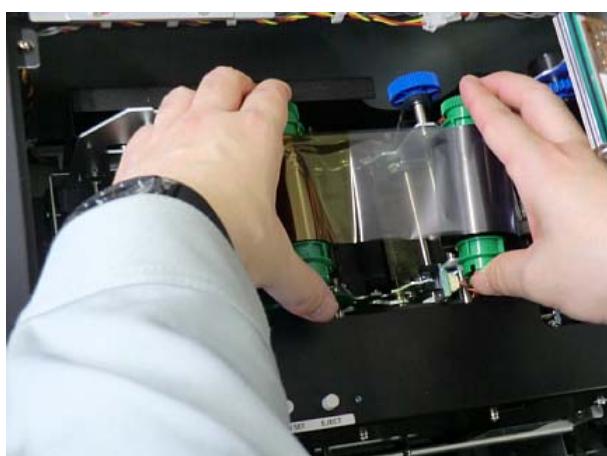
The buzzer will beep and the following error message be displayed.

CV402 Top / Side

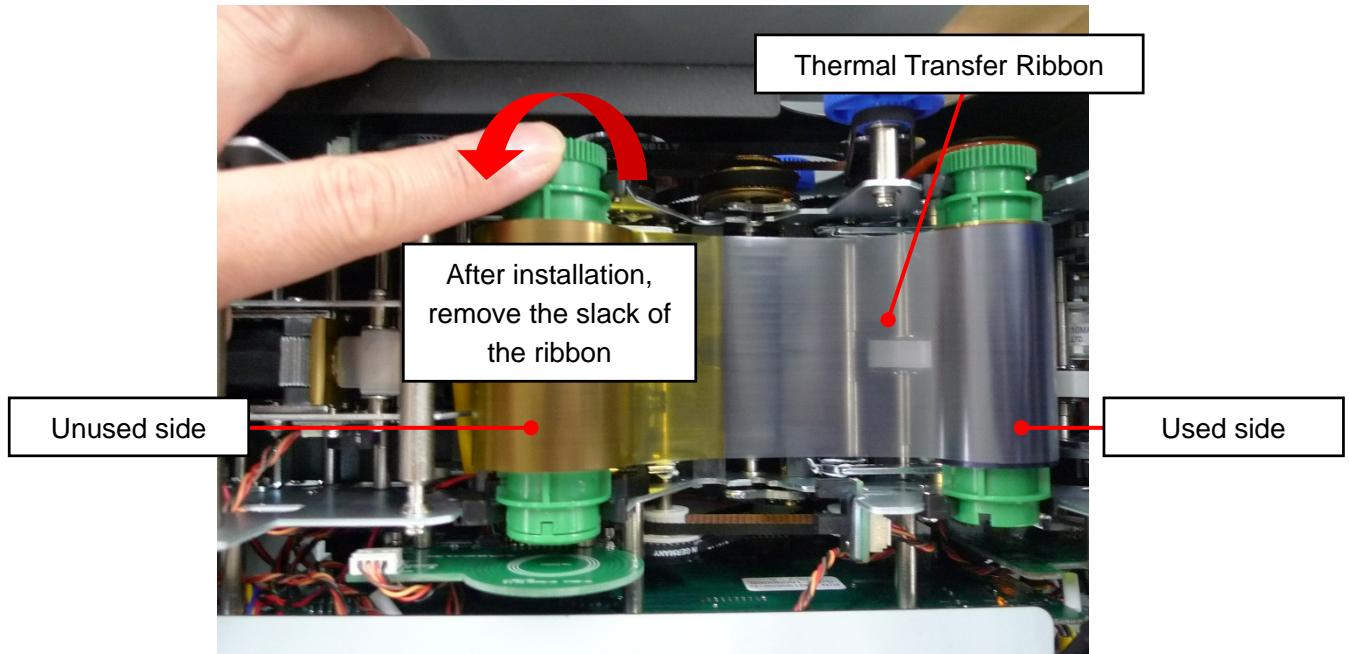
2. Push the Print/Encode Unit Cover Open Button to open the cover.



3. Detach the Thermal Transfer Ribbon from the printer.

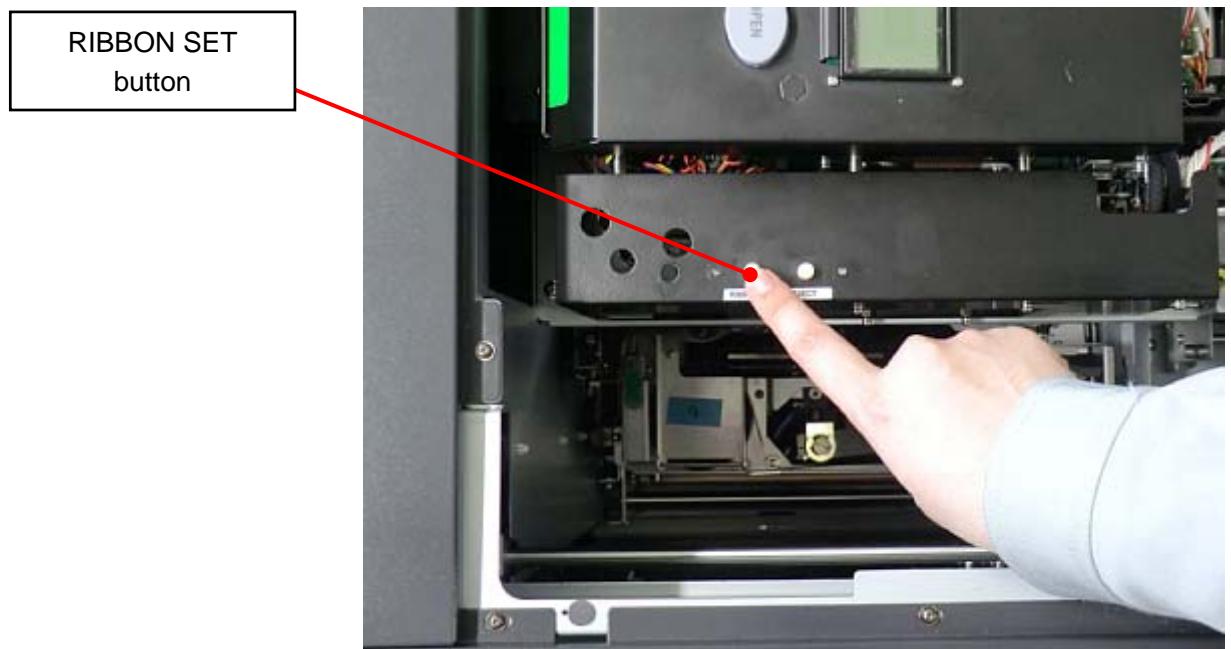


4. Install new Thermal Transfer Ribbon as shown in the picture below, and remove the slack of the ribbon.



5. Close the Print/Encode Unit cover until it clicks.

6. Push the RIBBON SET button.



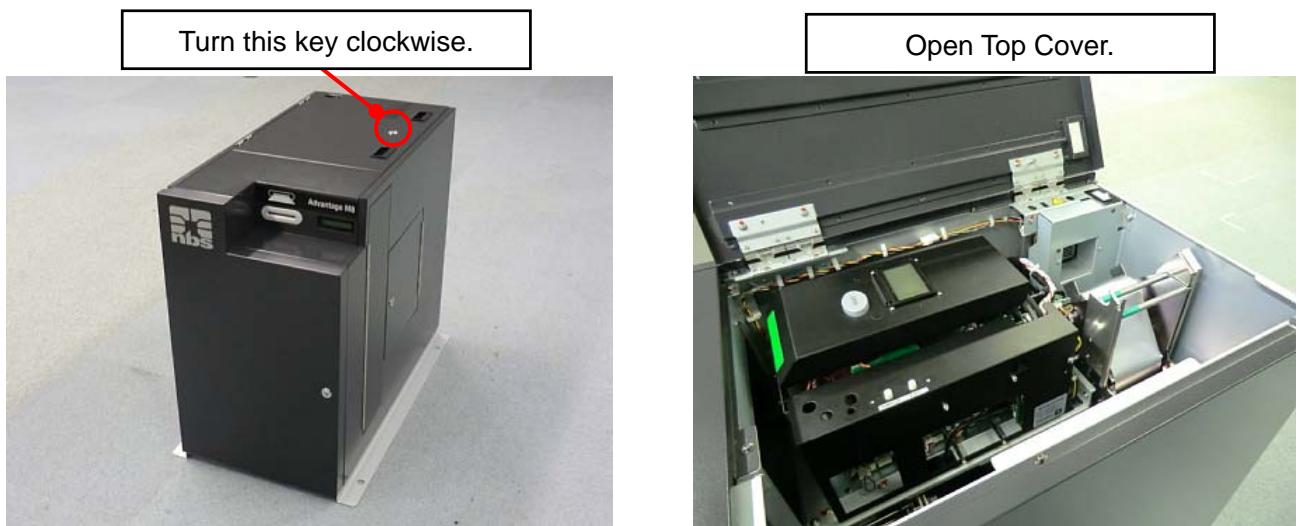
7. Close the top cover, and then lock the top cover key.

Caution

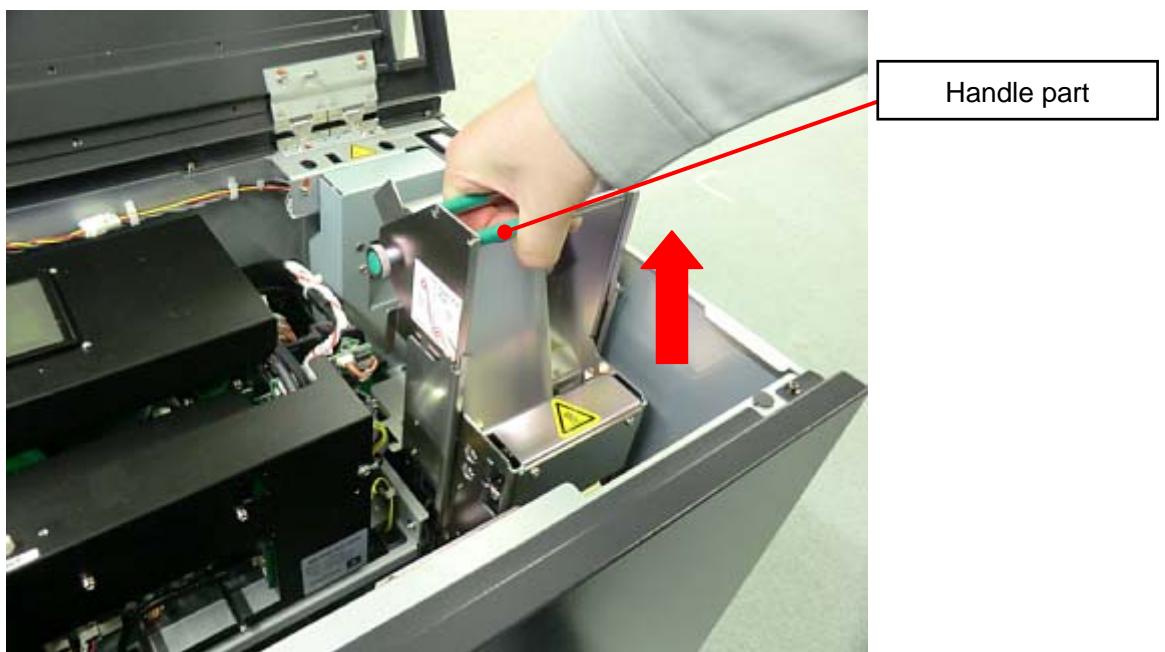
- Do not forget to push "RIBBON SET" button after installing a new ribbon. Otherwise, a print failure will occur.
- Be sure to remove the slack of the Thermal Transfer Ribbon before closing the cover. The slack will adversely affect the print quality.

Exchange of Tipper Foil

1. Turn off the power, turn the key clockwise, and then open the Top Cover.



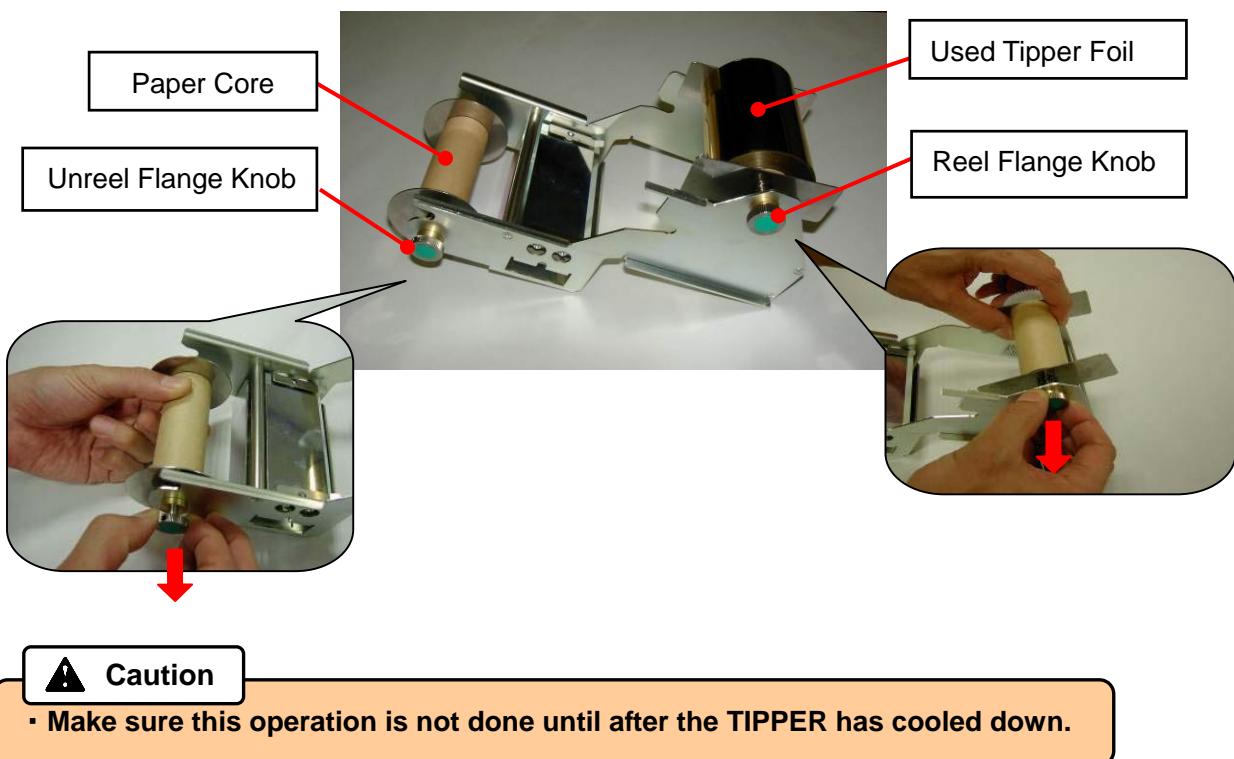
2. Pull out the tipper cassette whose tipper foil you want to exchange by pulling upward.



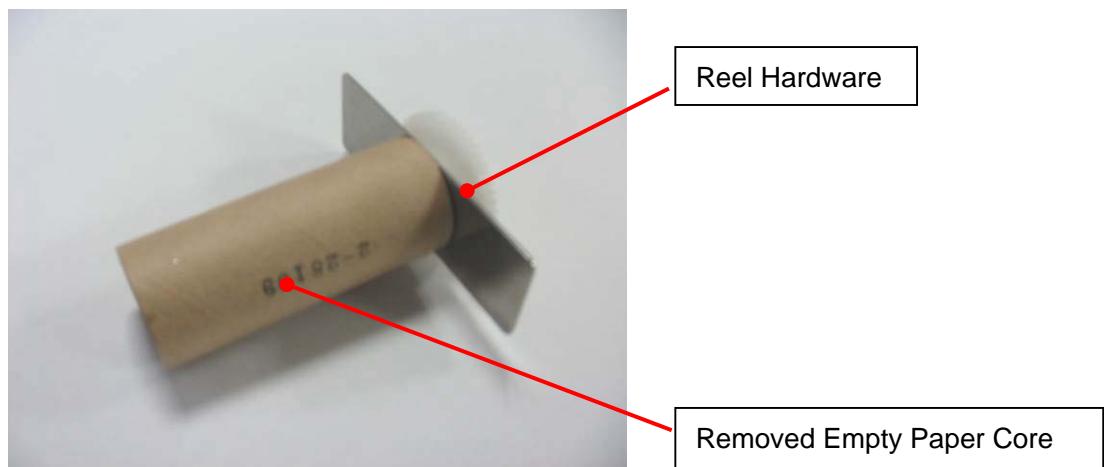
⚠ Caution

- There is a very high temperature part in the TIPPER cassette. By the heat TIPPER itself may be very hot. Make sure to hold only handle part when you pull up the TIPPER cassette.

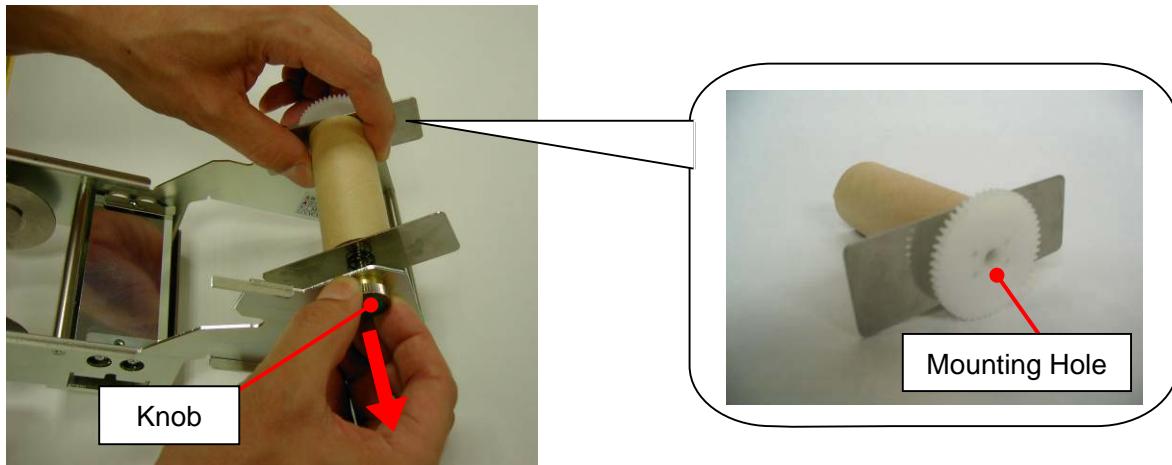
3. Remove the used tipper foil and paper core from the tipper cassette. Spread each knob of the reel flange/unreel flange in the direction of the arrow with both hands to remove.



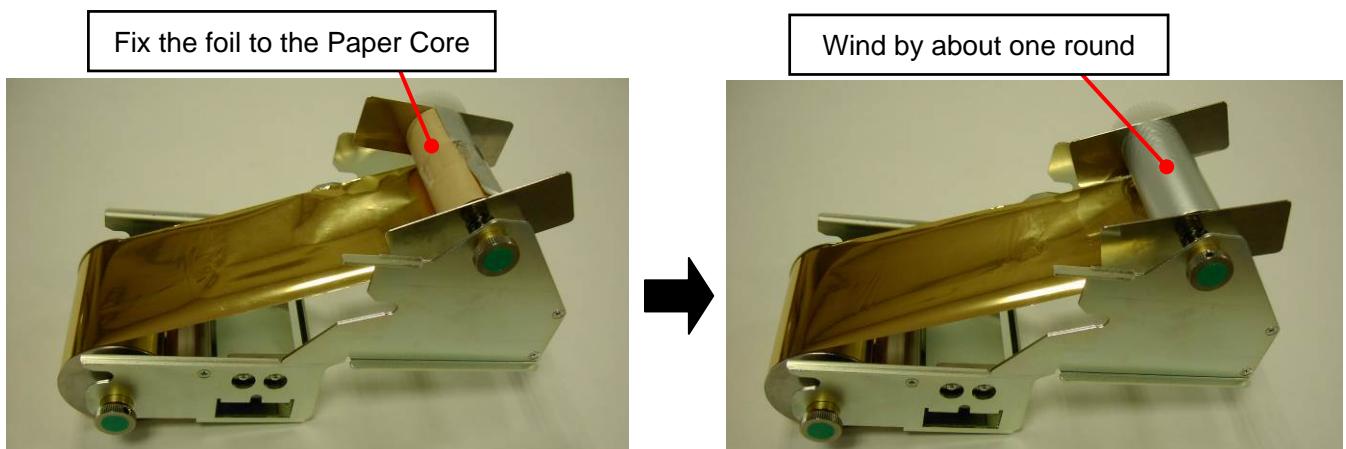
4. Remove the used tipper foil from the reel hardware and set the empty paper core removed in 3 to the reel hardware. Be sure to insert the paper core until it reaches the flange.



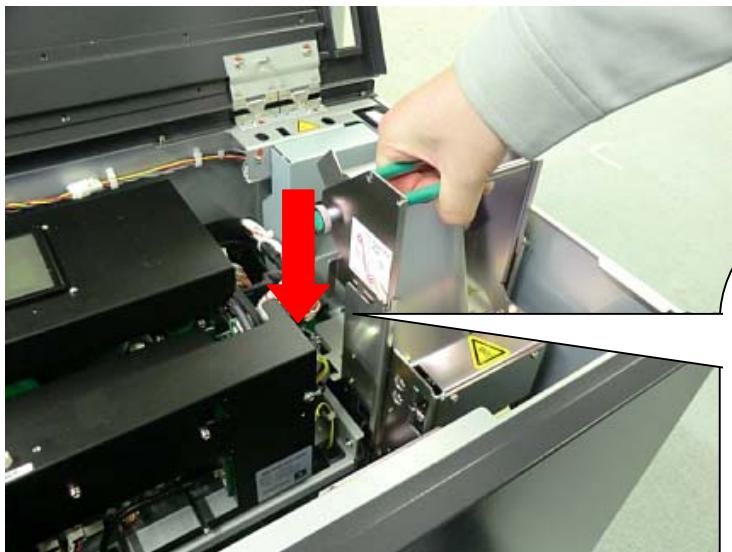
5. Pull the knob in the direction of the arrow and attach the reel hardware to the tipper cassette. At this time, fit a mounting hole of the reel hardware into a pin on the cassette. Regarding the unreel flange, pull the knob in the direction of the arrow in the same way, and set the new tipper foil.



6. Fix the end of the foil to the paper core with an adhesive cellophane tape and wind the foil around the core by about one round.

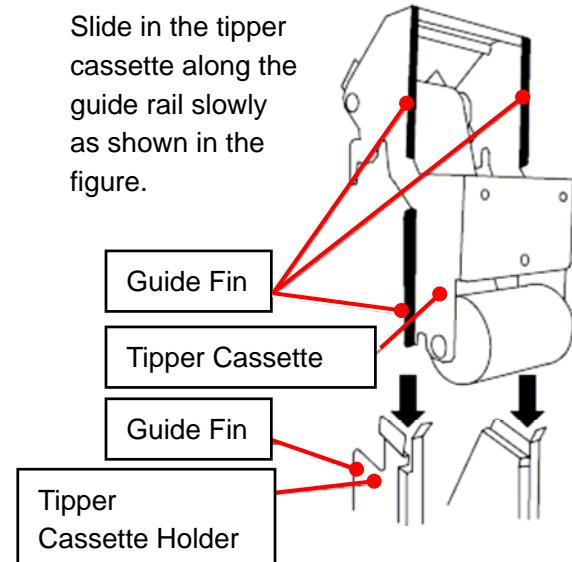


7. Lower the set part of the tipper cassette slowly to the original position following the guide of the main body. (Check that both right and left guides are properly set.)



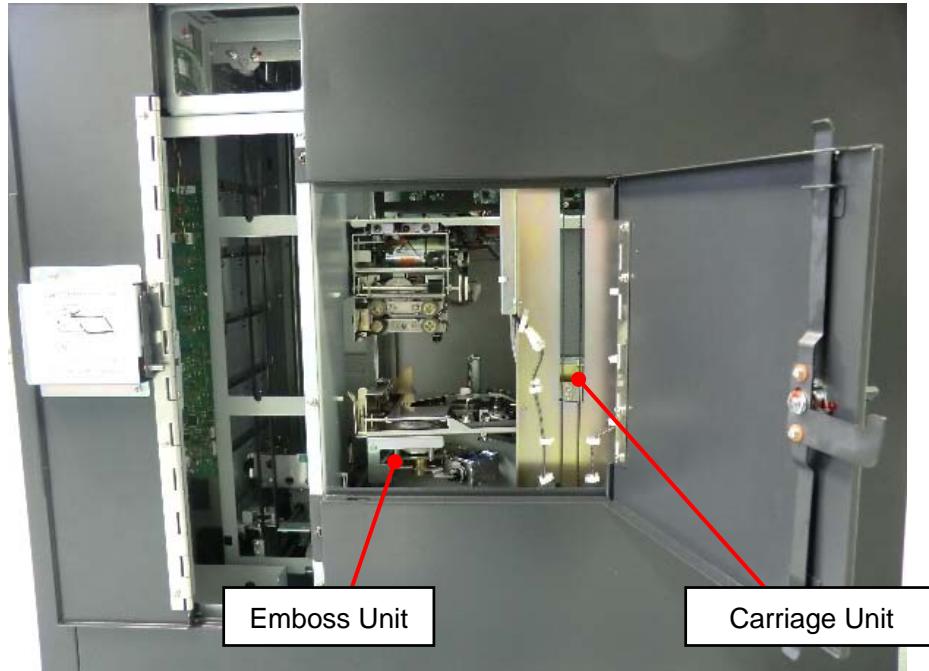
8. Close the Top Cover and lock the key.

Slide in the tipper cassette along the guide rail slowly as shown in the figure.

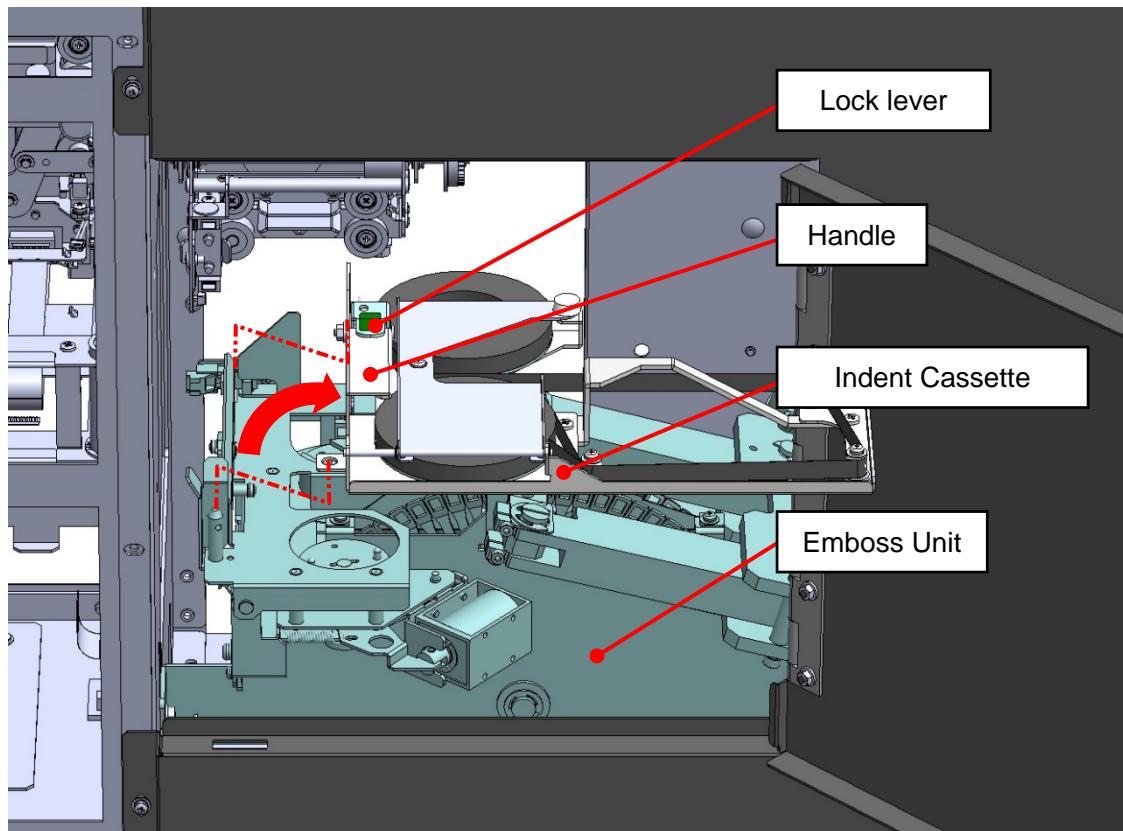


Exchange of Indent Film

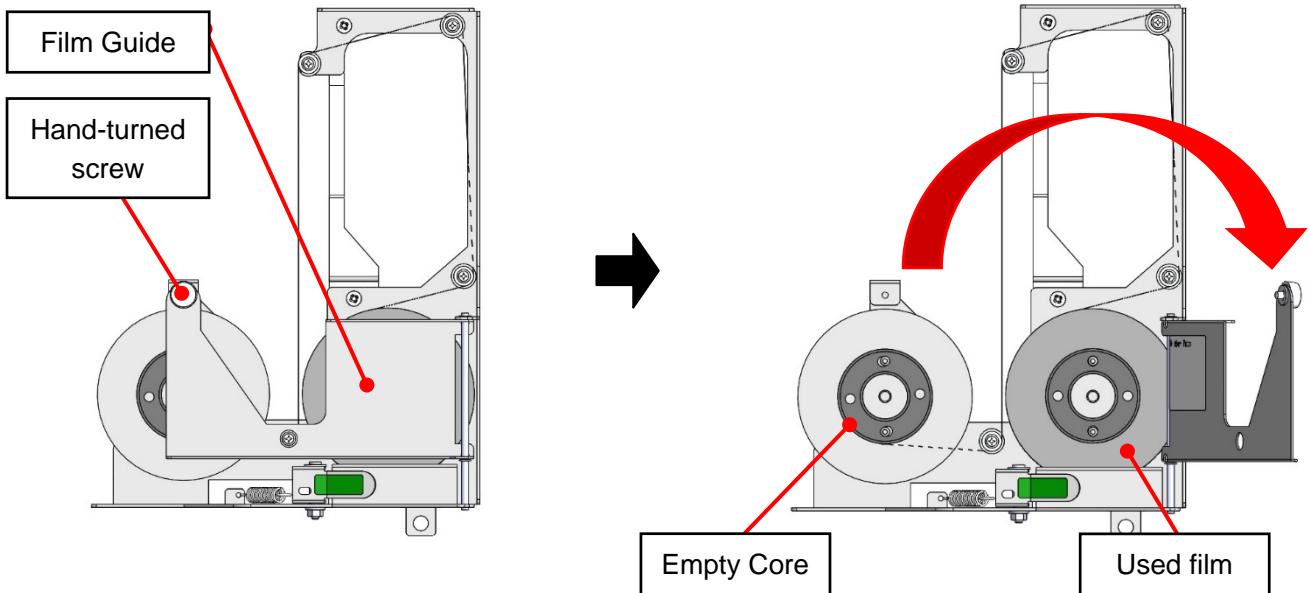
1. Turn off the power, turn the Right side door key clockwise, and pull to open. If carriage disturbs your access, push it to the right side.



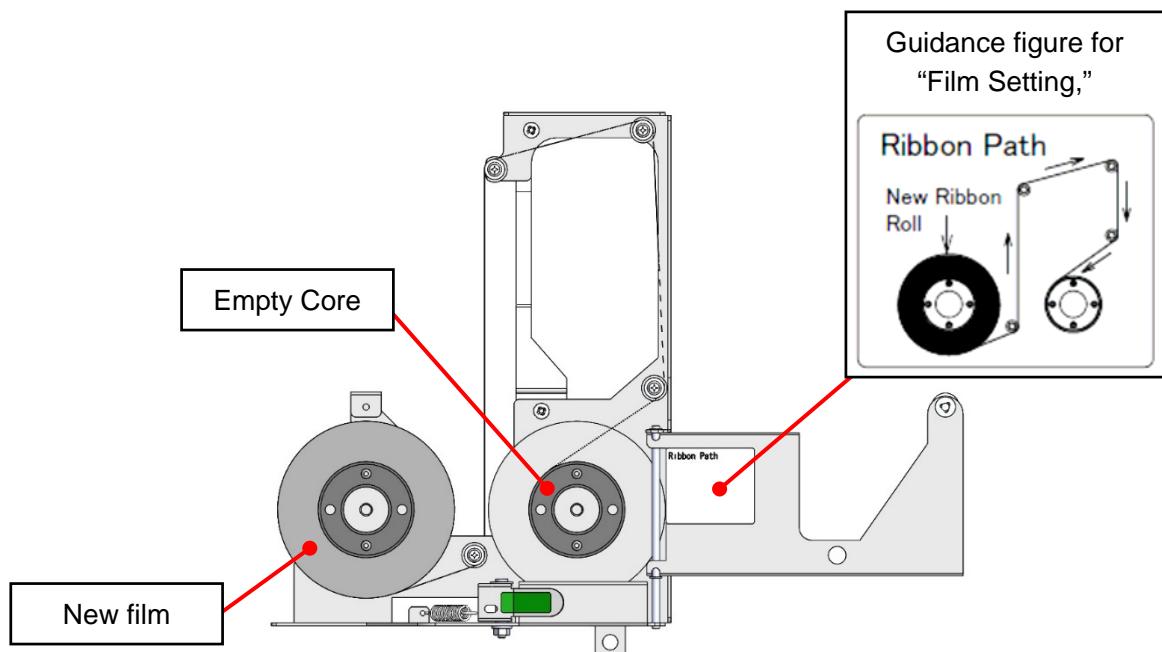
2. Keep holding Indent Cassette Holder, release lock of Lock lever by pushing the lever and remove Indent Cassette.



3. Loosen a hand-turned screw and raise the Film Guide.

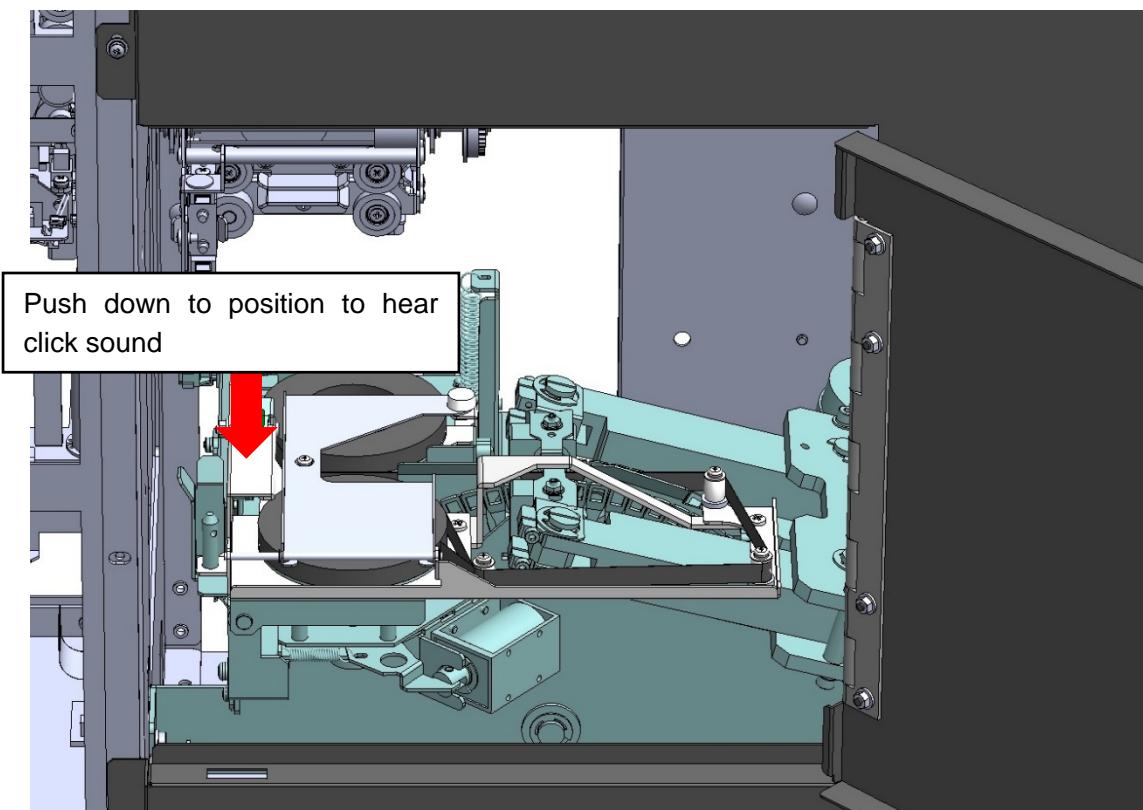
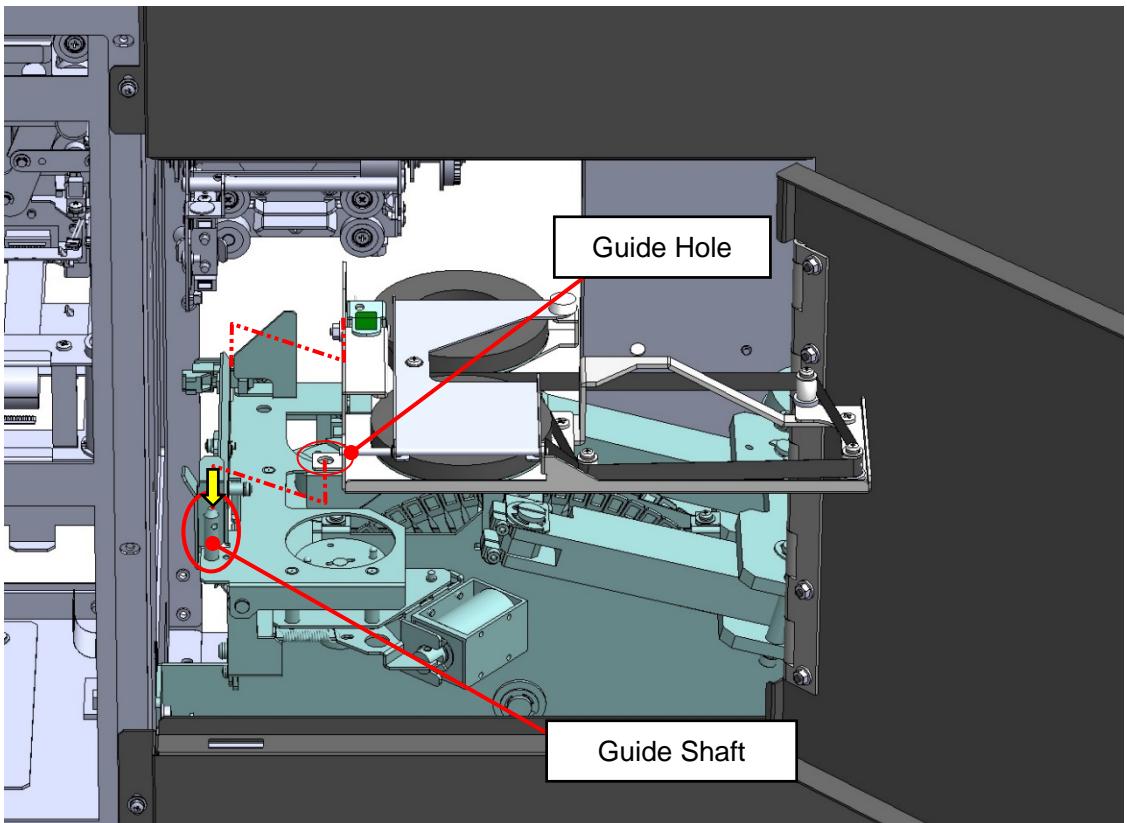


4. Remove both the Empty Core and used film and set the new film at the left and the Empty Core to the right. Peel off the tape on the end of the new film, set the film following the guidance figure for "Film Setting," and fix the end of the film to the Empty Core with an adhesive cellophane tape.
(You may use the tape of the film end without change.)
At this time, the film should not lie off the core largely.



5. Wind the film around the Empty Core by about three rounds, take up the slack in the film, close the Film Guide, and fix the hand-turned screw.

- Set the Indent Cassette to the main body. Fit a hole of the cassette guide into the Guide Shaft in front of the main body and lower and set the cassette until it clicks and is locked.
(Refer to the guidance figure for “Indent Cassette Setting” on the Right side door.)



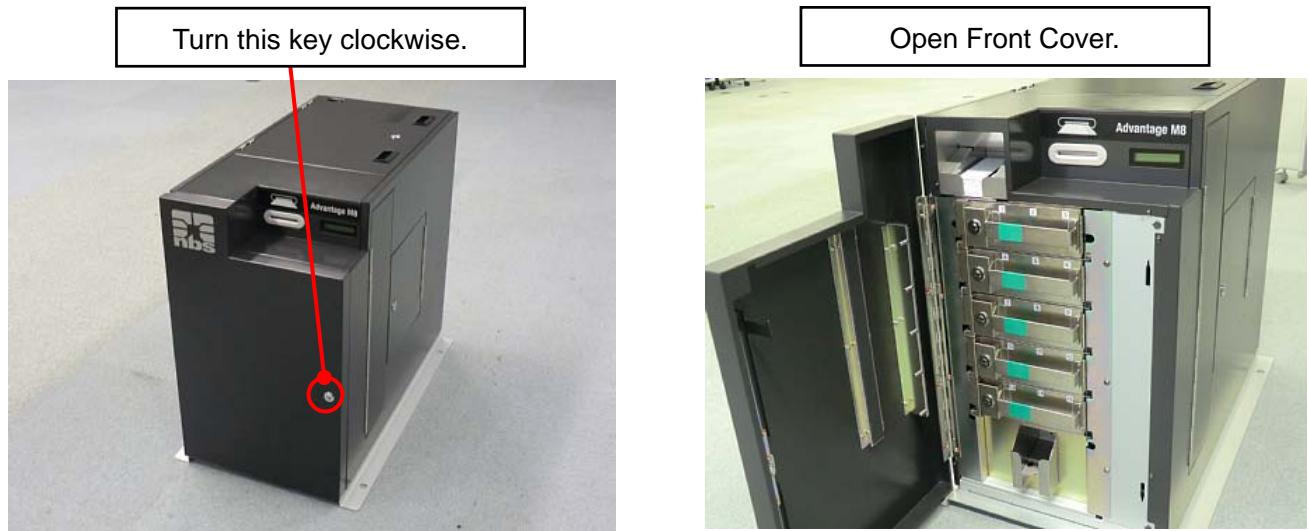
7. After attaching the cassette, check that the film has no slack, close the Right side door, and lock the key.

 **Caution**

- Be sure to remove the slack of the Thermal Transfer Ribbon before setting. The slack will adversely affect the print quality.
- Before setting the halfway used film again, be sure to wind the used part completely.

Pick up cards from Out Stacker

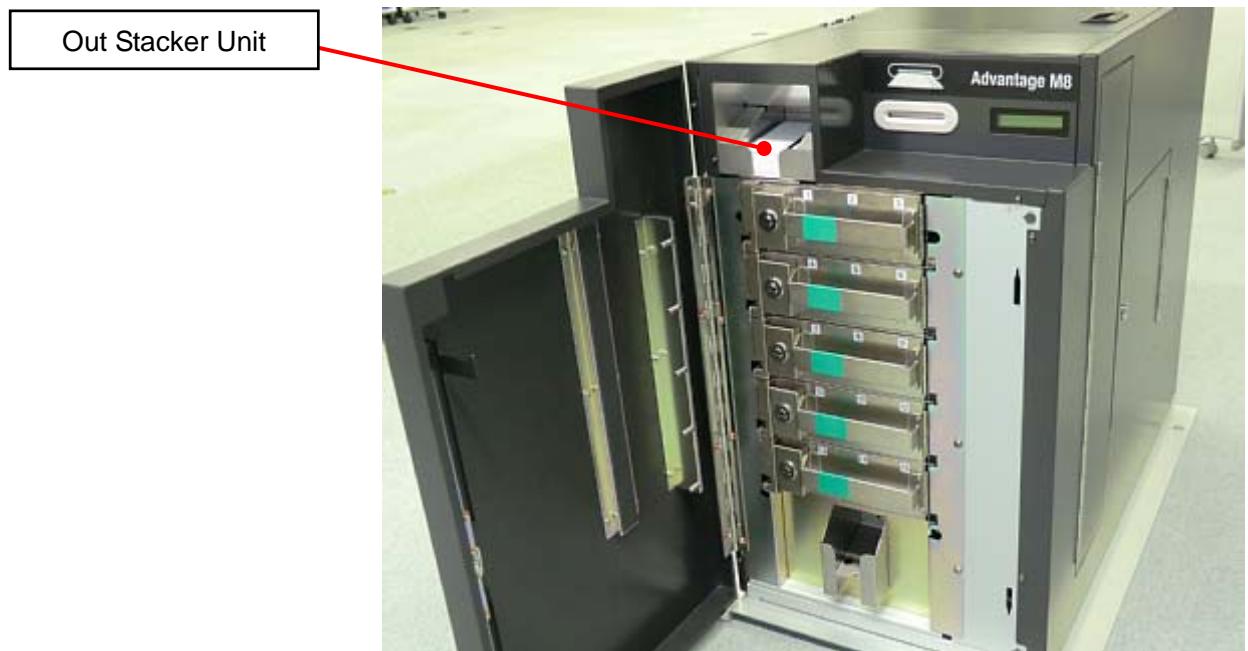
1. Turn Power ON, unlock by application software, and then open Front Cover by turning key clockwise.



When the Front Cover is opened, the buzzer will beep and the following error message be displayed.

CV401 Front

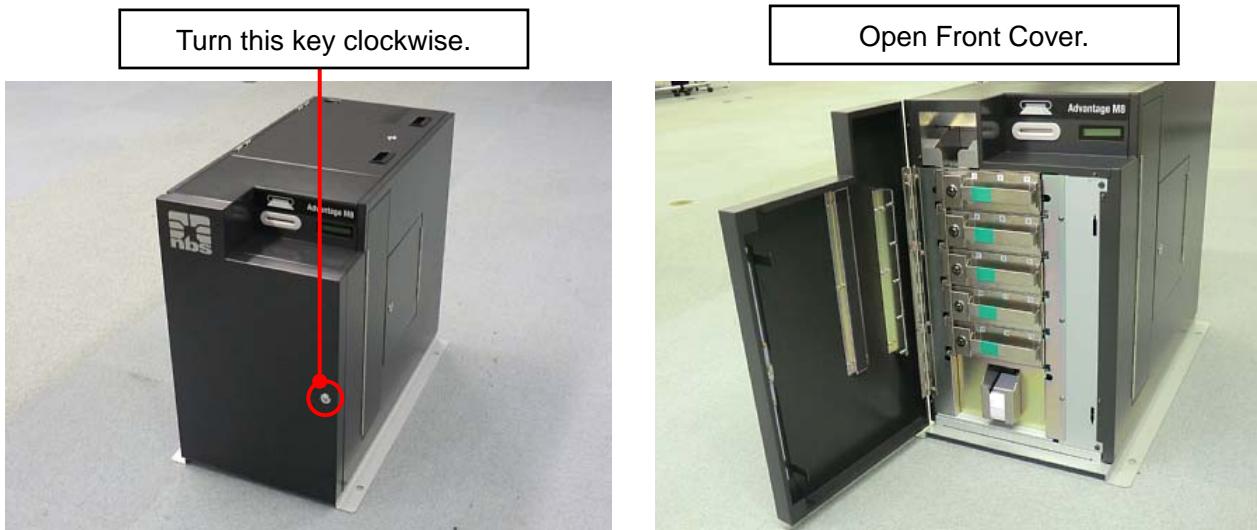
2. Pick up Cards from Out Stacker.



3. Close Front Cover, and then lock the Front Cover key.

Pick up cards from Reject Unit

1. Turn Power ON, unlock by application software, and then open Front Cover by turning key clockwise.



When the Front Cover is opened, the buzzer will beep and the following error message be displayed.

CV401 Front

2. Pick up Cards from Reject Unit.



3. Close Front Cover, and then lock the Front Cover key.

Eco mode

1. Advantage M8 can be set the following 2 different type Eco (Economy Energy) mode. Each mode can be set independently.
 - Tipper Heater OFF
 - Cut motor standby electricity consumption
2. Setting to Eco mode for Heater or Motor
 - i. No (not change to Eco Mode)
 - ii. 10 minutes (After 10 minutes waiting time has passed , to change into Eco mode)
 - iii. 30 minutes (After 30 minutes waiting time has passed, to change into Eco mode)
 - iv. 60 minutes (After 60 minutes waiting time has passed, to change into Eco mode)
(Factory default setting is “No” for both of Hopper and Motor)
3. During Eco mode, the following message will be displayed.

Eco mode Tipper

Tipper is in Eco mode.

Eco mode Motor

Motor is in Eco mode.

Eco mode Both

Both Tipper and Motor are in Eco mode.

4. Eco mode to be cleared by receiving “Clear Eco Mode” command from host computer.

Error Message

When errors such as operation failure and a breakdown of the machine occur, the buzzer will beep and an error message be displayed. If the same error occurs at each power-on, contact your distributor.

Error during waiting

It is displayed when sensors are broken down at waiting or the machine is not ready for starting operation.
Please check error messages displayed on PC screen during Operation.

Message on DISPLAY (Japanese)	Message on DISPLAY (English)	Error Description and Countermeasure
CV301 ロック イジョウ	CV301 Lock error	Detect electric lock abnormality on Front Cover
CV302 アンロックイジョウ	CV302 Unlock err	Detect electric unlock abnormality on Front Cover
CV401 フロント	CV401 Front	Detect Front Cover is open(during waiting). <Close cover to reset the error>
CV402 トップ/ サイド	CV402 Top / Side	Detect Top / Right side door is open(during waiting). <Close cover to reset the error>
CV512 センサー エラー	CV512 Sensor err	Detect cover sensor abnormality. <Power OFF and ON>
EJ101 アウトスタッカ フル	EJ101 Card full	Out Stacker is full. <Open Front Cover and pick up the cards.>
IH512 センサー エラー	IH512 Sensor err	Detect In Hopper sensor error. <Power OFF and ON>
RJ101 カード フル	RJ101 Card full	Reject unit is full by Cards. <Open Front Cover and pick up the cards.>
SY221 ファン1 イジョウ	SY221 Fan1 error	Detect abnormality of Cooling Fan <Power OFF and ON>

Consumable error

When you try to issue a card with any consumables that are run out or not set properly, following message will be displayed. Please set proper consumables according to those messages.

Message on DISPLAY (Japanese)	Message on DISPLAY (English)	Error Description
ID101 フィルム キレ	ID101 No film	No Indent film.
ID121 カセット ナシ	ID121 No cst	Indent film cassette has not set
IH101 カード ナシ 1	IH101 No card 1	No card in Hopper 1
IH102 カード ナシ 2	IH102 No card 2	No card in Hopper 2
IH103 カード ナシ 3	IH103 No card 3	No card in Hopper 3
IH104 カード ナシ 4	IH104 No card 4	No card in Hopper 4
IH105 カード ナシ 5	IH105 No card 5	No card in Hopper 5
IH106 カード ナシ 6	IH106 No card 6	No card in Hopper 6
IH107 カード ナシ 7	IH107 No card 7	No card in Hopper 7
IH108 カード ナシ 8	IH108 No card 8	No card in Hopper 8
IH109 カード ナシ 9	IH109 No card 9	No card in Hopper 9
IH110 カード ナシ 10	IH110 No card 10	No card in Hopper 10
IH111 カード ナシ 11	IH111 No card 11	No card in Hopper 11
IH112 カード ナシ 12	IH112 No card 12	No card in Hopper 12
IH113 カード ナシ 13	IH113 No card 13	No card in Hopper 13
IH114 カード ナシ 14	IH114 No card 14	No card in Hopper 14
IH115 カード ナシ 15	IH115 No card 15	No card in Hopper 15
IH121 カセット ナシ 1	IH121 No cst 1	Hopper cassette 1 is not set
IH122 カセット ナシ 2	IH122 No cst 2	Hopper cassette 2 is not set
IH123 カセット ナシ 3	IH123 No cst 3	Hopper cassette 3 is not set
IH124 カセット ナシ 4	IH124 No cst 4	Hopper cassette 4 is not set
IH125 カセット ナシ 5	IH125 No cst 5	Hopper cassette 5 is not set
TP101 ホイル キレ	TP101 No foil	No Tipper foil
TP121 カセット ナシ	TP121 No cst	Tipper cassette is not set

Error during operation

When the machine does not run properly during operation or initial operation at power-on, an error message is displayed. If the same error is displayed repeatedly, please contact your distributor.

Message on DISPLAY (Japanese)	Message on DISPLAY (English)	Error Description and Countermeasure
CA201 カード ジャム	CA201 Card jam	Card Jam. (caused by malfunction of motor or sensor) <Power OFF, remove the card>
CA221 プッシャー エラー	CA221 Pusher err	Pusher motor error detected. <Power OFF, and ON>
CA303 ホーム エラー(Y)	CA303 Home err Y	Home detection error.(Carrier vertical direction) <Power OFF, and ON>
CA304 ホーム エラー(Z)	CA304 Home err Z	Home detection error.(Carrier horizontal direction) <Power OFF, and ON>
CA421 カード アリ	CA421 Card exist	Detect a card remaining on Carrier. < Power OFF, remove the card>
CG302 ホームエラー(X)	CG302 Home err X	Home detection error. (horizontal direction) <Power OFF, and ON>
CG303 ホームエラー(Y)	CG303 Home err Y	Home detection error.(vertical direction) <Power OFF, and ON>
CG421 カード アリ	CG421 Card exist	Detect a card remaining on carriage. < Power OFF, remove the card>
CM501 ミテイキ エラー	CM501 Unknown	Receive unknown command. <Make sure host PC and this product are connected correctly by LAN or USB.>
CM502 シーケンス エラー	CM502 Sequence	Detect sequence error. <Make sure host PC and this product are connected correctly by LAN or USB.>
CM503 パラメータ エラー	CM503 Parameter	Detect parameter error. <Make sure host PC and this product are connected correctly by LAN or USB.>
CM513 ジュシン エラー	CM513 Receive	Detect receiving error. <Make sure host PC and this product are connected correctly by LAN or USB.>
CM514 ソウシン エラー	CM514 Send	Detect sending error. <Make sure host PC and this product are connected correctly by LAN or USB.>
CV411 フロント	CV411 Front	Detect Front Cover open during card issuance operation. <Close Front Cover, initialize from host PC.>
CV412 トップ/ サイド	CV412 Top / Side	Detect Top /Right side door open during Card issuance operation. <Close Top/Right side door, initialize from host PC.>
DR307 D カイシイチ エラー	DR307 D Pos err	Detect an error during searching home position. <Power OFF, and ON >
DR401 カイテン イジョウ	DR401 D Rota err	Detect an error during drum rotation. <Power OFF, and ON >
EM211 プレス イジョウ	EM211 Press err	Detect an error during embossing operation. < Power OFF, remove the card>

Message on DISPLAY (Japanese)	Message on DISPLAY (English)	Error Description and Countermeasure
EM501 ハンイ エラー	EM501 Area err	Send data that try to emboss outside of emboss available area. <Make sure if emboss data is inside of emboss available area.>
ID401 Cst ダウンエラー	ID401 Cst down	Cassette not moved down position. <Power OFF, and ON >
ID402 Cst アップエラー	ID402 Cst up	Cassette not moved up position. <Power OFF, and ON >
ID403 カイテン シナイ	ID403 Feed err	Error detected during film rotate operation. <Power OFF, and ON >
ID501 ハンイ エラー	ID501 Area err	Send data that try to emboss outside of indent .available area. <Make sure if emboss data is inside of indent available area.>
IN201 カード ジャム	IN201 Card jam	Card Jam. (caused by malfunction of motor or sensor) < Power OFF, remove the card>
IN401 カードハイシュッ	IN401 Card eject	The issued card was not pulled out even after a certain period of time.<Open Front Cover,remove the card from reject unit>
IN403 タイムアウト	IN403 Timeout	Insert waiting time out.<Insert card within 30 seconds after starting card issue by application software.>
IN421 カード アリ	IN421 Card exist	Detect a card remaining on insert slot. < Remove the card>
SY101 カードナシ エラー	SY101 No Card	Not find a card. <Make sure if a card does not fall inside the machine>
SY501 ショキカ ミジッシ	SY501 Not init	Send issuance command before initialization. <Initialize from host PC>
SY904 FRAM イジョウ	SY904 FRAM error	Detect FRAM (for data storage) error. <Power OFF, and ON >
TP211 プレス エラー	TP211 Press err	Detect an error during pressing operation. <Power OFF, and ON >
TP301 ホームイチ エラー	TP301 HP err	Detect an error during searching home position. <Power OFF, and ON >
TP401 ウォームアップ	TP401 Wup err	Heater is still on warming up. <Power OFF, and ON >
TP901 ヒーター エラー	TP901 Temp err	Heater did not reach tipping temperature after passing warming up time. <Power OFF, and ON >
VR201 カード ジャム	VR201 Card jam	Card Jam.(caused by malfunction of motor or sensor) < Power OFF, remove the card>
VR221 タテ カイテン	VR221 V Rota err	Detect an error during rotating operation. <Power OFF, and ON >
VR421 カード アリ	VR421 Card exist	Detect a card remaining on Vertical Rotation Unit. < Power OFF, remove the card>

⚠ Caution

- When above listed serious errors has occurred, you must shut down all power before check and make any countermeasure action.
- Be careful! There are very hot parts in the Tipper Unit area. Before checking Tipper Unit, you should shut down all Power and wait more than 1 hour. Touch the Tipper Unit after cooling down.

Error Reset

Remove remaining card from In Hopper

1. Turn the main power ON, unlock by application software, and then use physical key to turn the key clockwise.

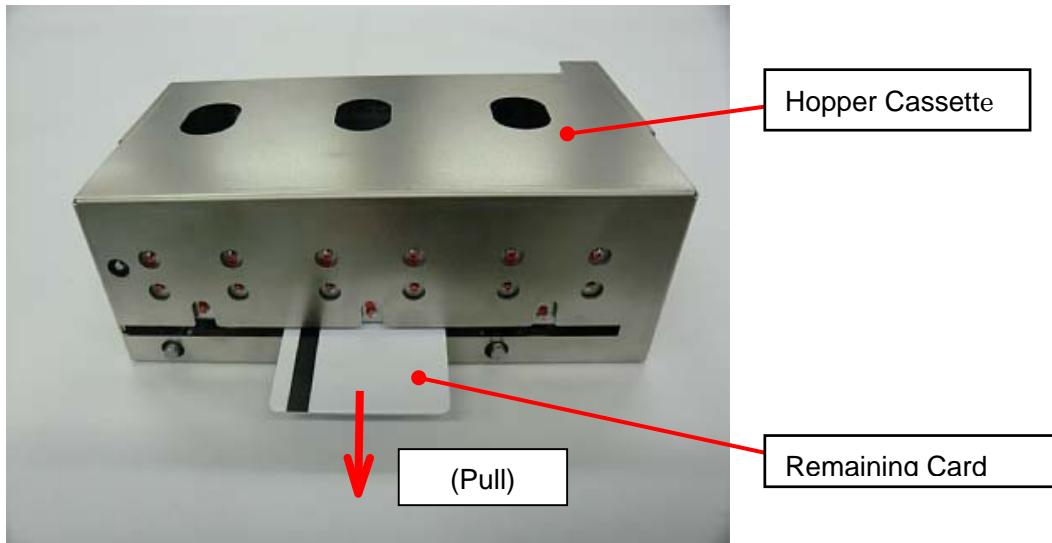
Turn this key clockwise.



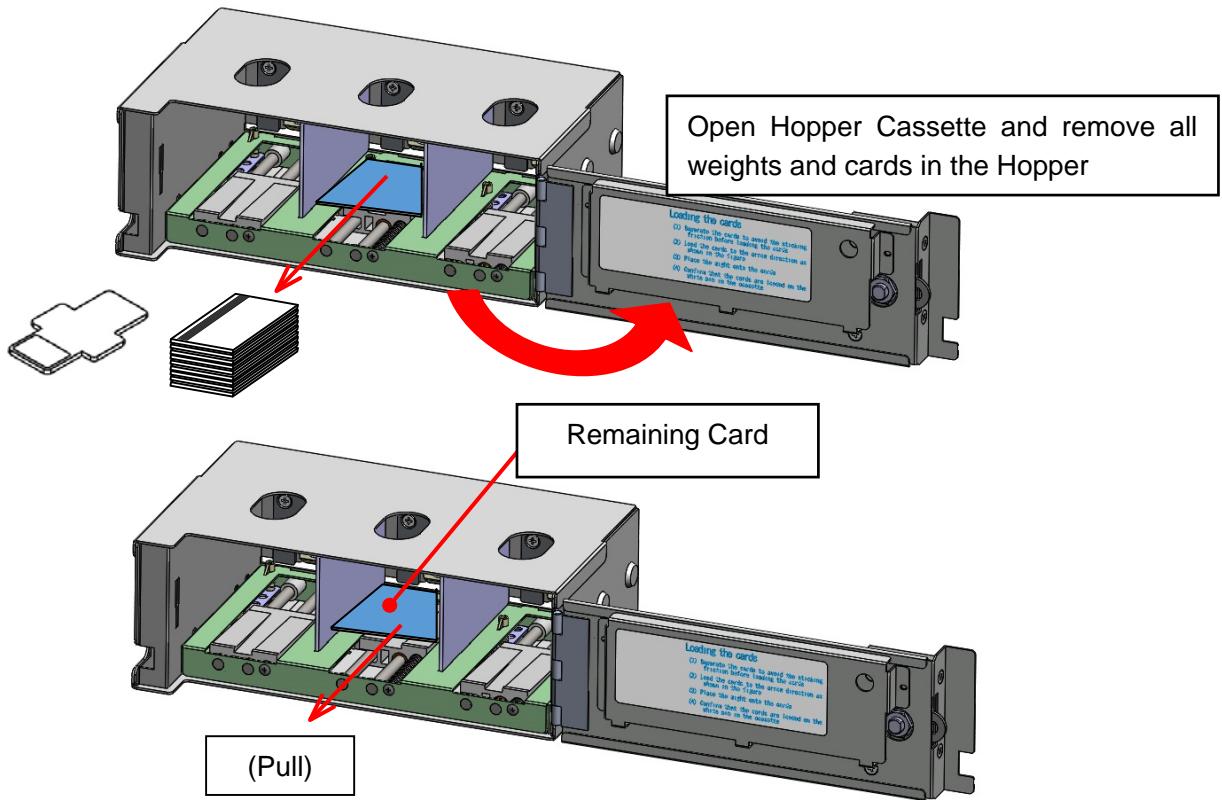
Open Front Cover.



2. Remove Hopper Cassette that has the remaining card.
3. Grip the Card and pull toward front, and remove the card.



* In case the card cannot be pulled out, open Hopper Cassette by turning clockwise the key and remove all weight and cards in the Hopper, and pull out the remaining card.



4. Close Hopper Cover and set the Hopper Cassette to the machine, and then close Front Cover and lock the Key by turning counterclockwise.

Remove remaining card from Main Transfer Unit.

1. Turn Power OFF, and open Right side door by turning the key clockwise.

Turn this key clockwise

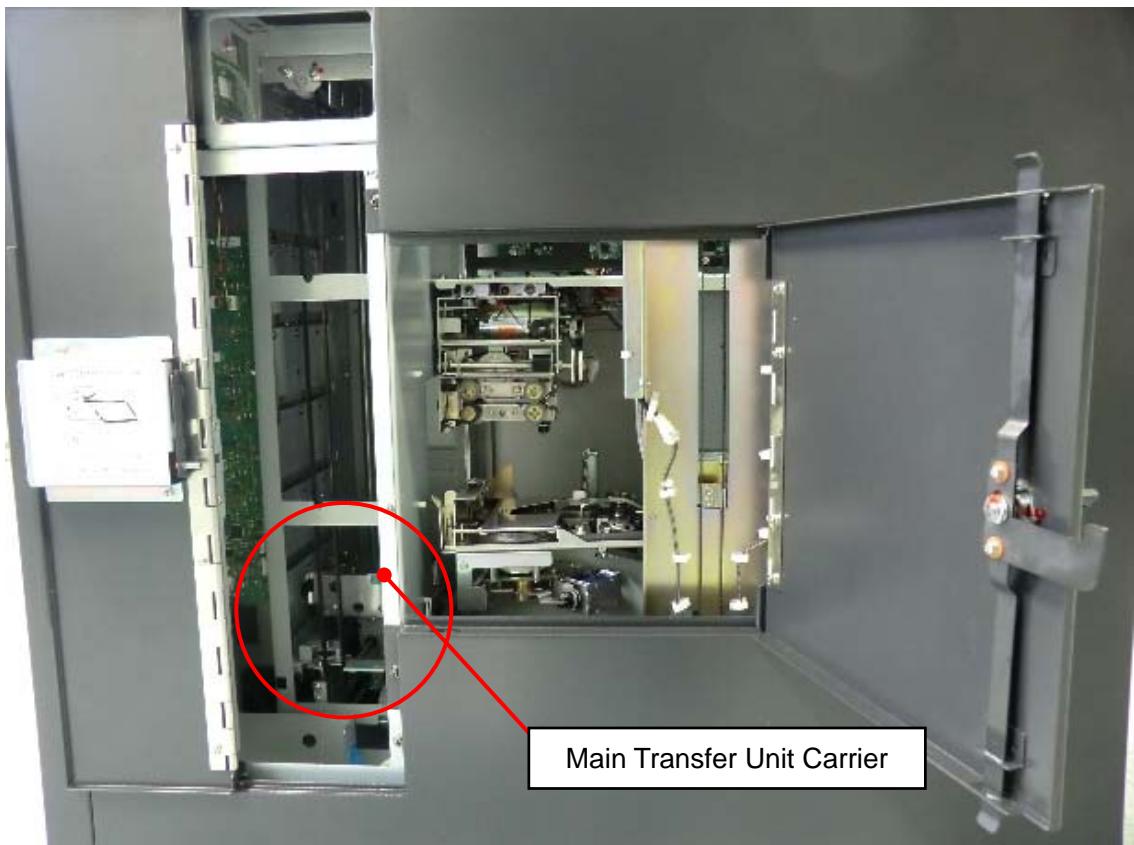


Open Right side door

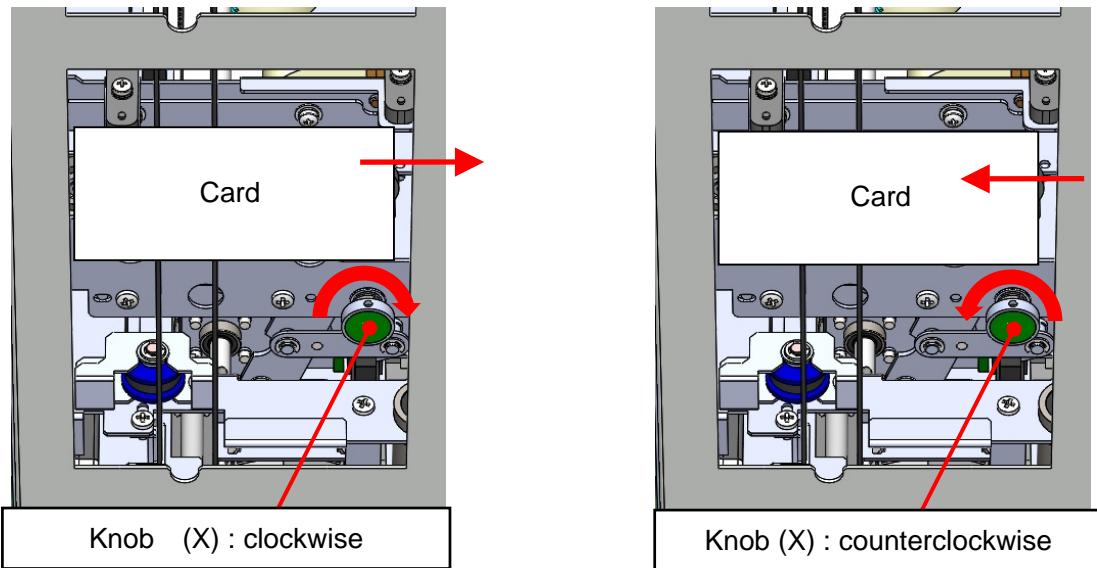


2. Check if any Cards remain in Carrier of Main Transfer Unit.

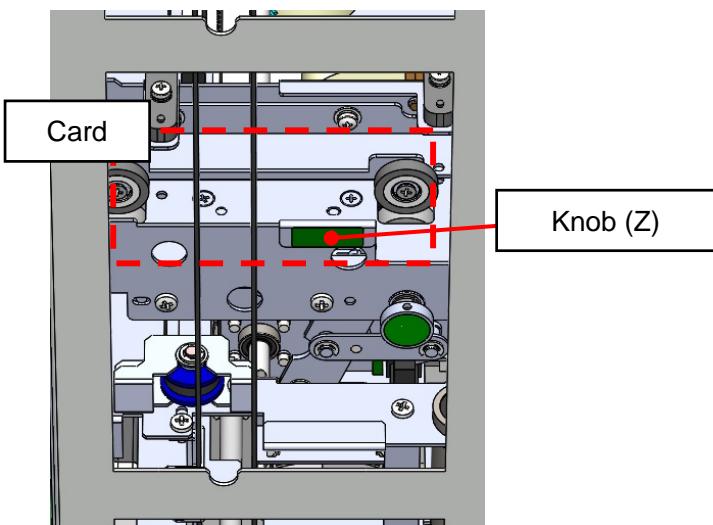
Main Transfer Unit Carrier



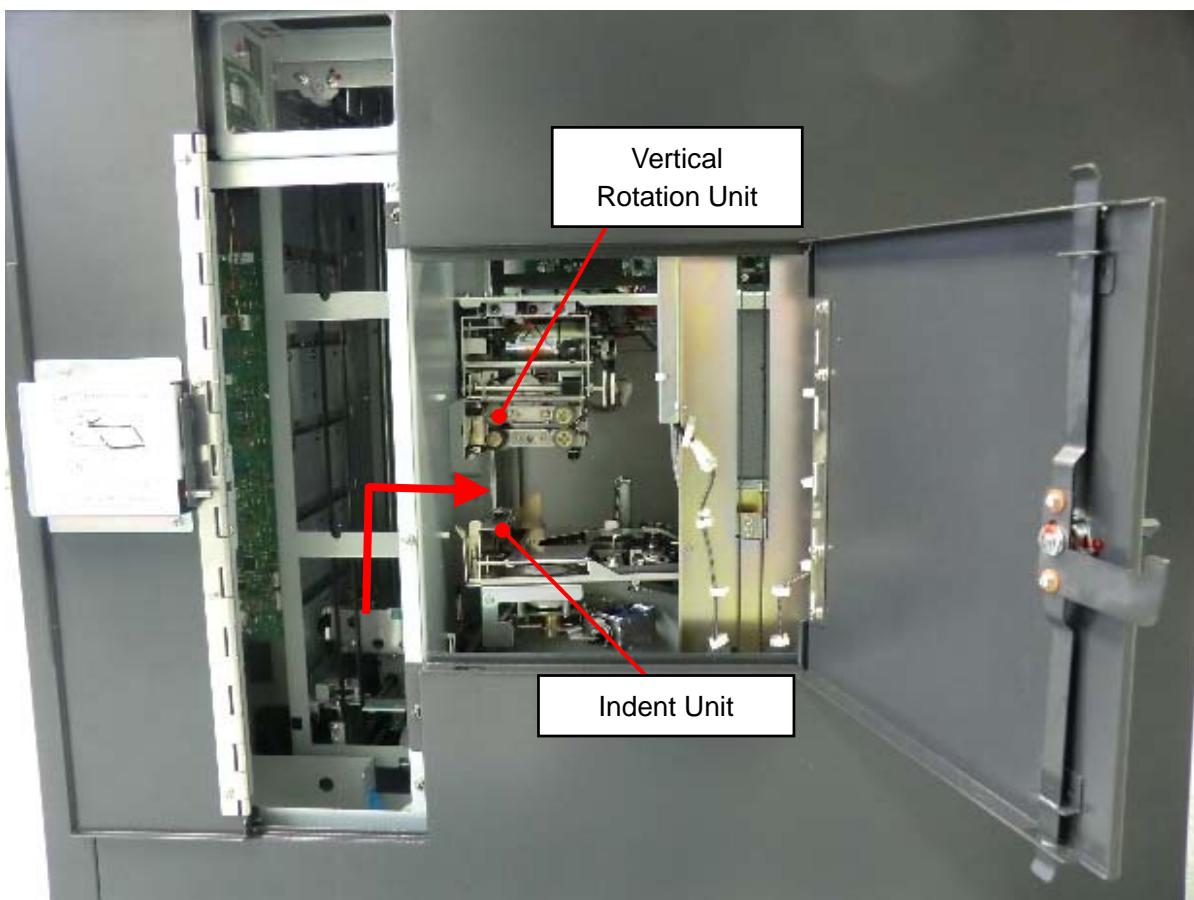
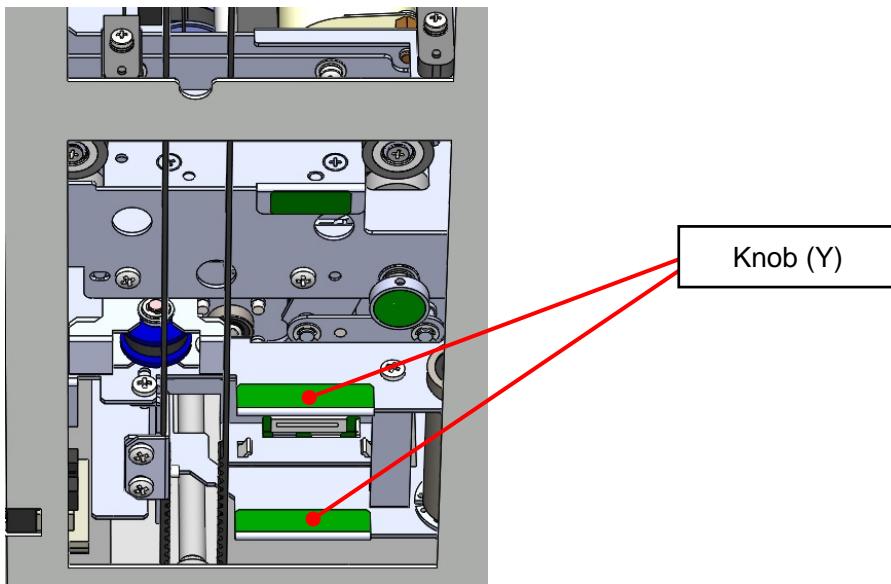
In case the remaining card was not put on the Carrier, transfer the Card toward on the Carrier by turning Knob (X)



In case you cannot access the Carrier, grip Knob (Z) and transfer the Carrier toward front.



3. Grip Knob (Y), and transfer the Carrier to the position between Vertical Rotation Unit and Indent Unit. Turn Knob (X) clockwise and grip the card and pull it out.



4. Close Right side door and lock by Key.

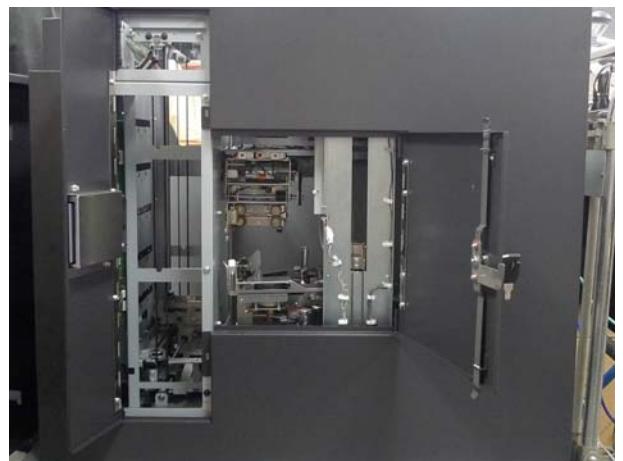
Remove remaining card from Print /Encode Unit.

1. Turn Power OFF, open Right side door by turning the Key clockwise and Open Top Cover by turning the key clockwise.

Turn this key clockwise



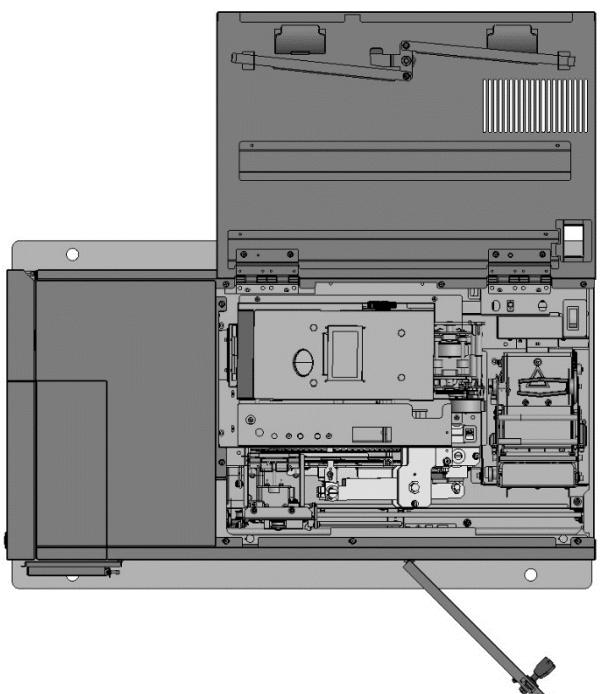
Open Right side door



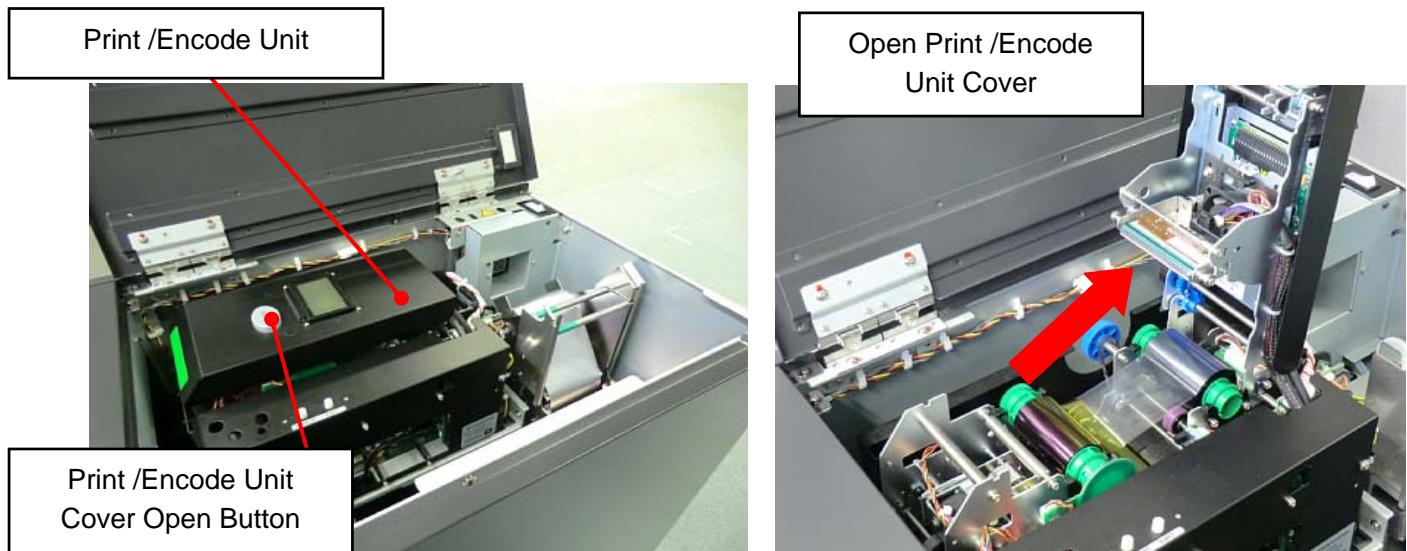
Turn this key clockwise



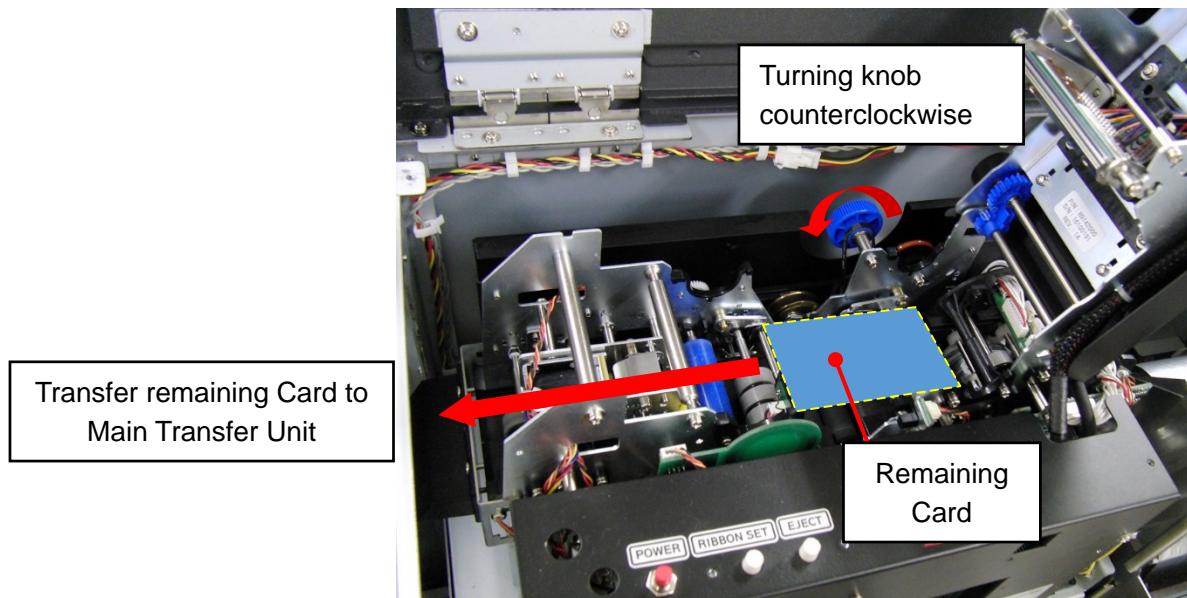
Open Top Cover



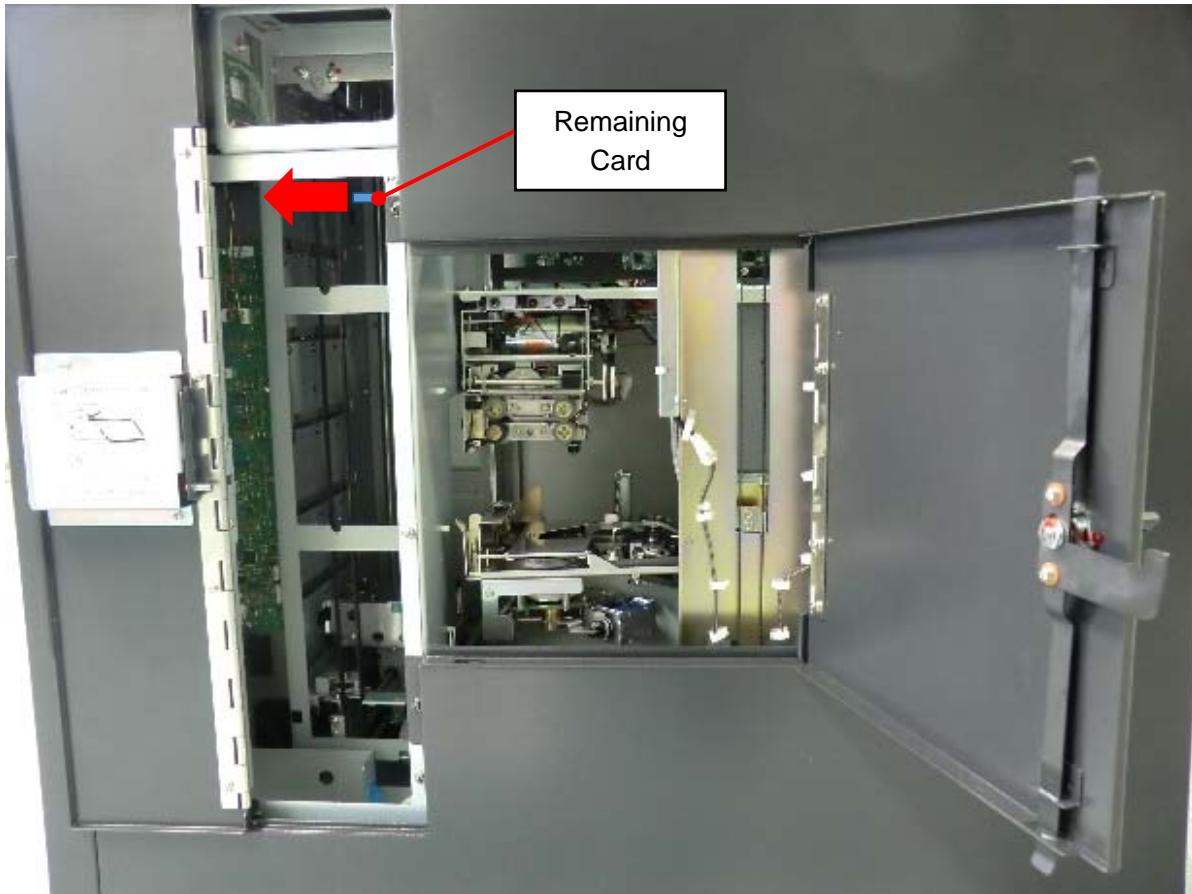
2. Push down the button firmly, and open Print /Encode Unit cover.



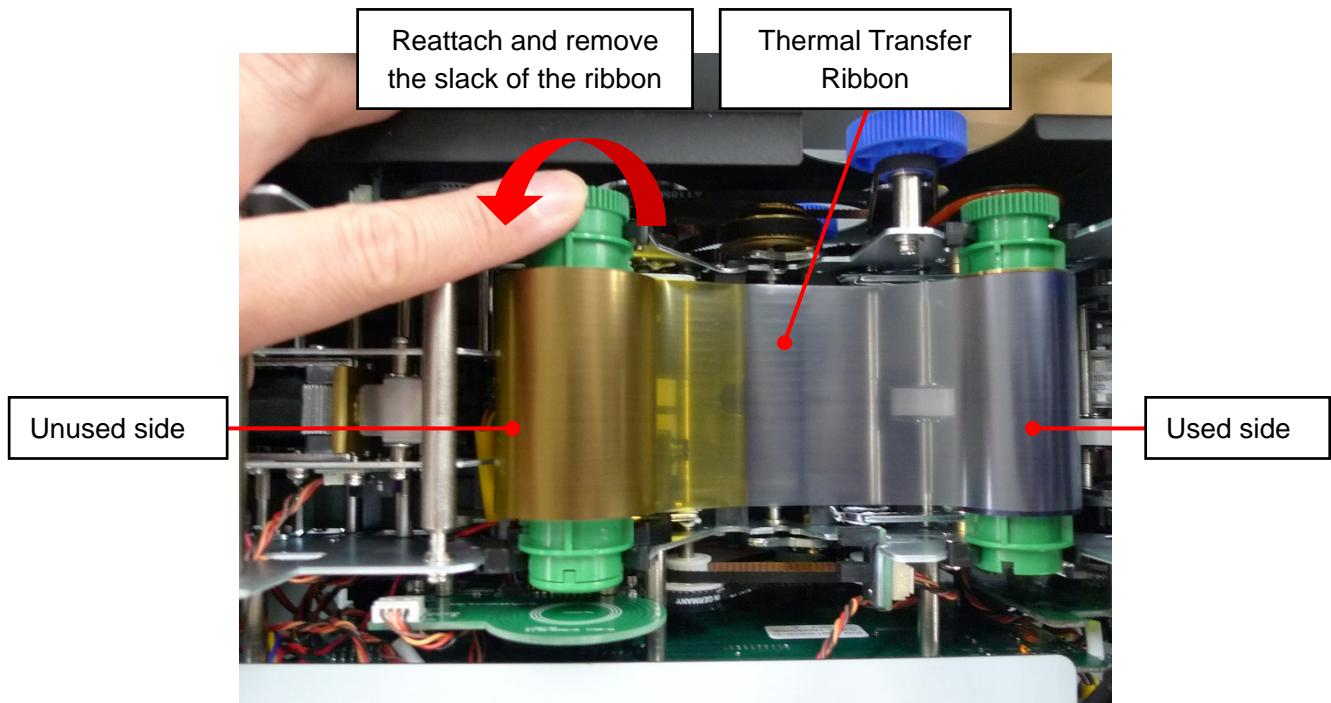
3. Remove Thermal Transfer Ribbon, transfer the Card toward Main Transfer Unit by turning Knob counterclockwise.



4. Pull out the card toward side direction.



5. Reattach the Thermal Transfer Ribbon as shown in the picture below and remove the slack of the ribbon.



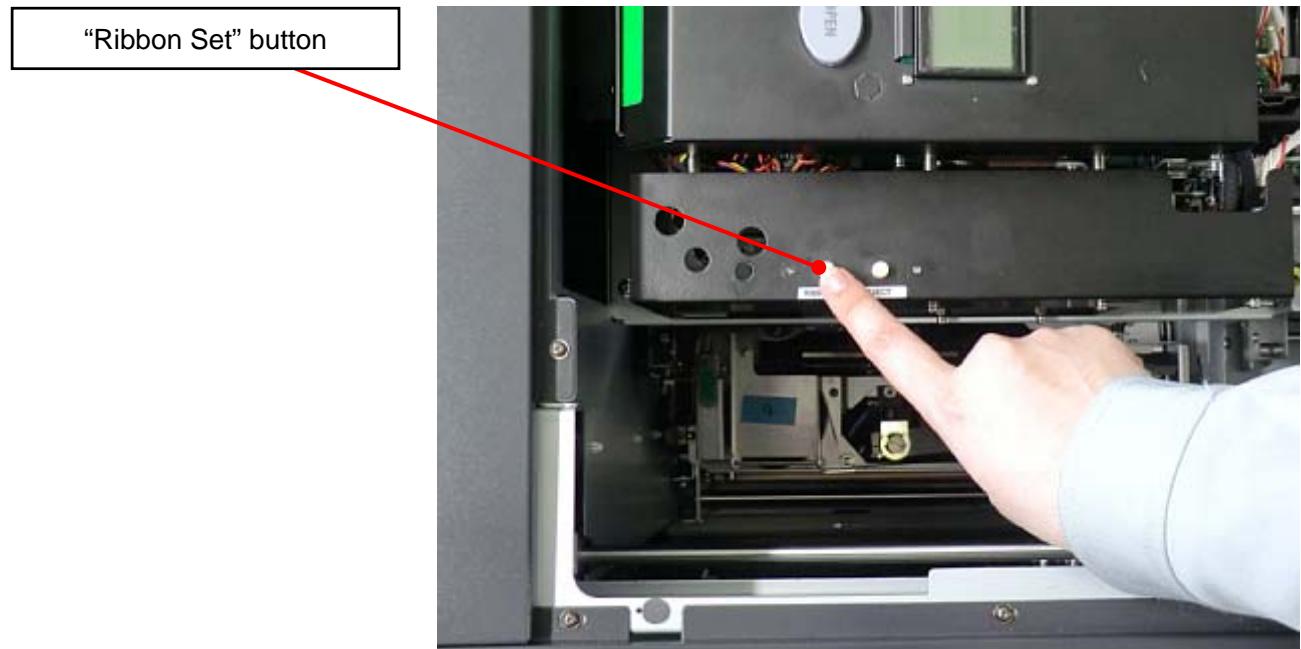
6. Close the Print/Encode Unit cover until it clicks.
7. Close the Top Cover, and then lock the Top Cover Key.

8. Close Right side door, and then lock the Right side door Key.
9. Turn Power ON, and initialize the machine
10. Keep the power ON, and open Top Cover by turning the key clockwise.

* Ignore buzzer sound and the following error message, and proceed next step.

CV402 Top / Side

11. Push the RIBBON SET button.



12. Close the Top Cover, and then lock the Top Cover Key.

Caution

- Do not forget to push "RIBBON SET" button after installing a new ribbon. Otherwise, a print failure will occur.
- Be sure to remove the slack of the Thermal Transfer Ribbon before closing the cover. The slack will adversely affect the print quality.

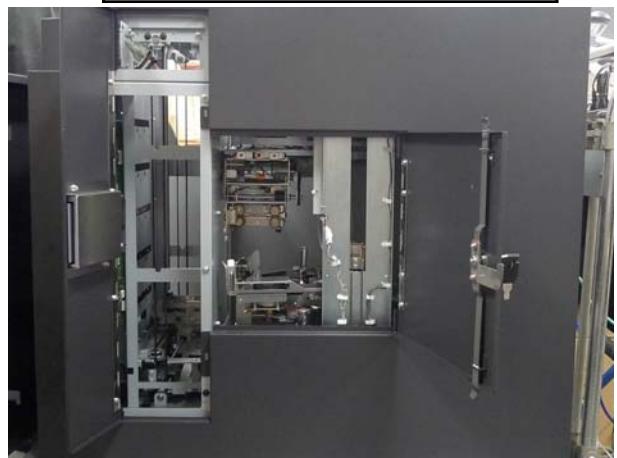
Remove remaining card from Vertical Rotation Unit

1. Turn Power Off, open Right side door by turning Key clockwise.

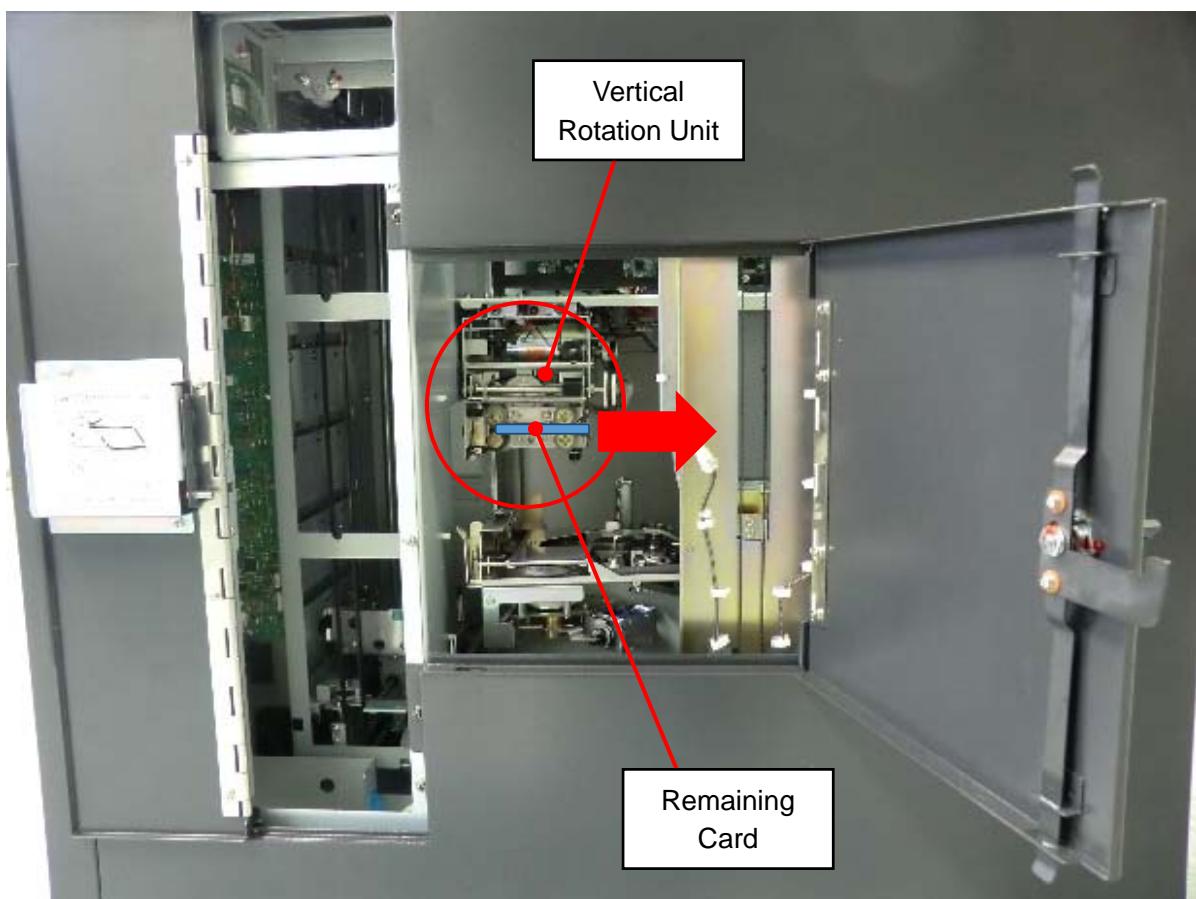
Turn this key clockwise



Open Right side door



2. Remove remaining card by pulling toward upper direction.



3. Close Right side door, and then lock the Right side door Key.

Remove remaining card from Carriage Unit

1. Turn Power OFF, open Top Cover by turning key clockwise.

Turn this key clockwise

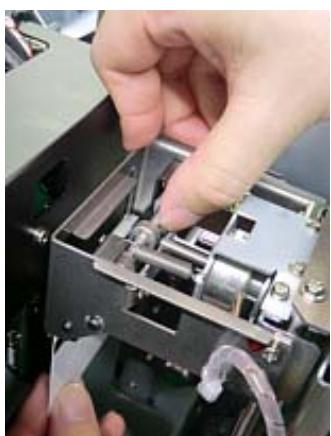
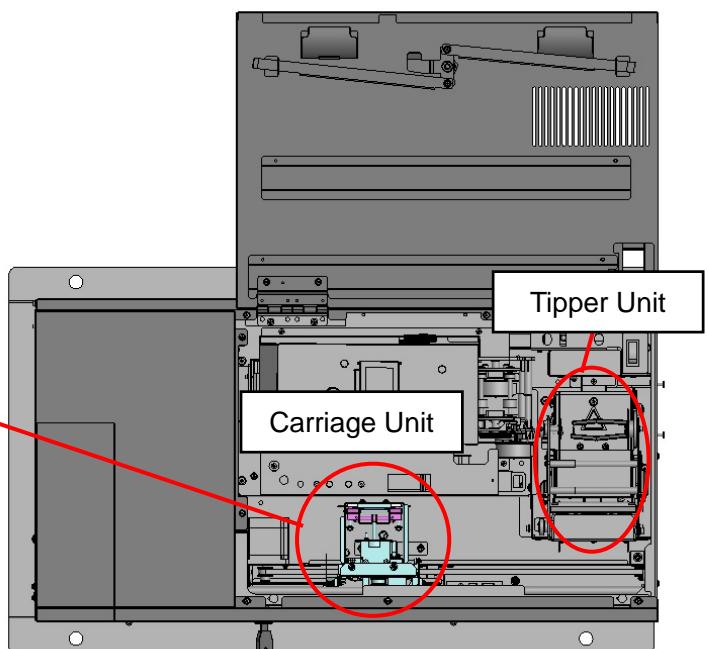
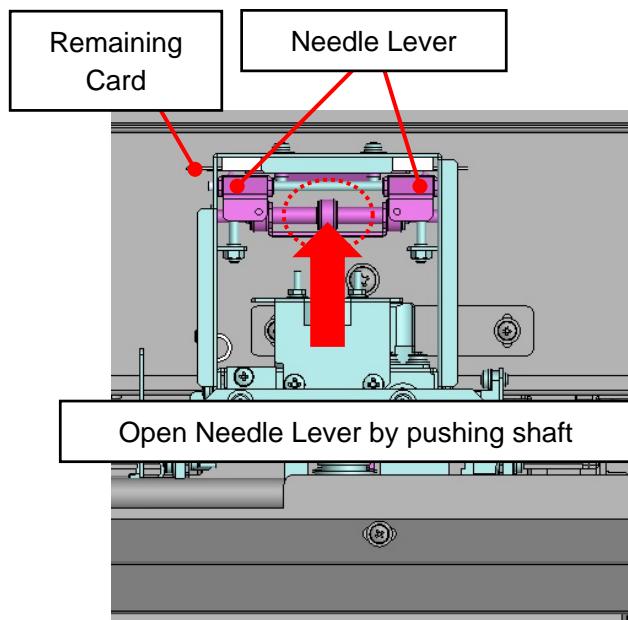


Open Top Cover



2. Keep holding remaining Card, open needle lever by pushing shaft as described below. And remove the card.

* Be careful not to drop the Card inside the machine (Unless holding the card, it will drop into the machine when needle lever will be opened).



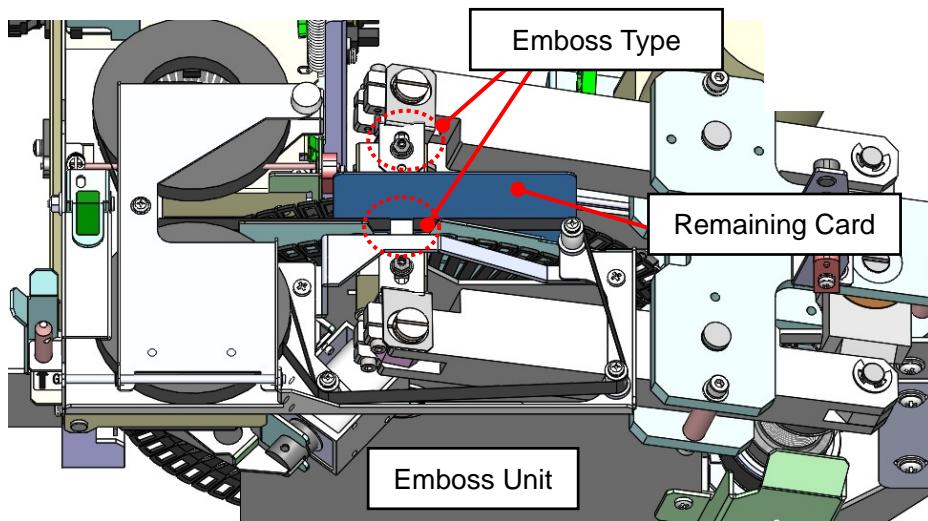
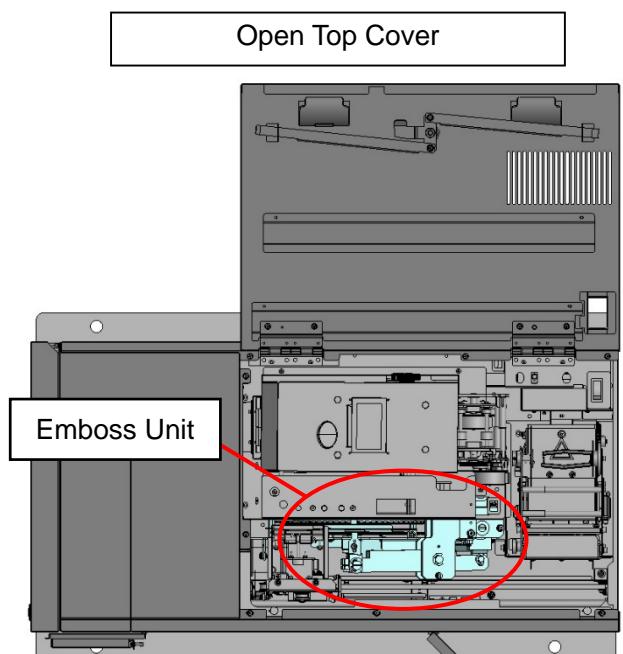
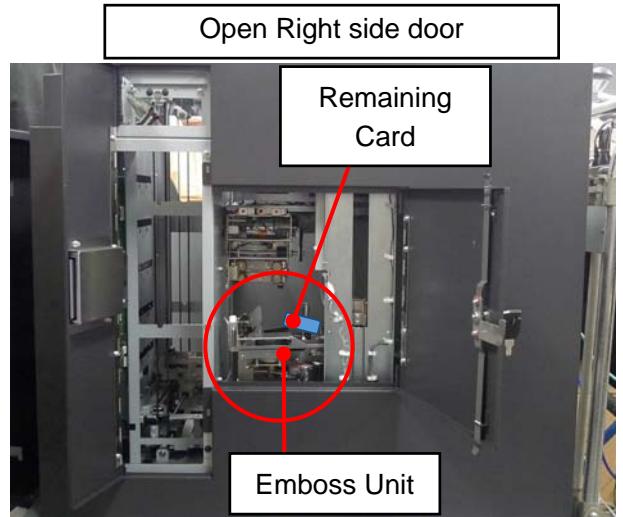
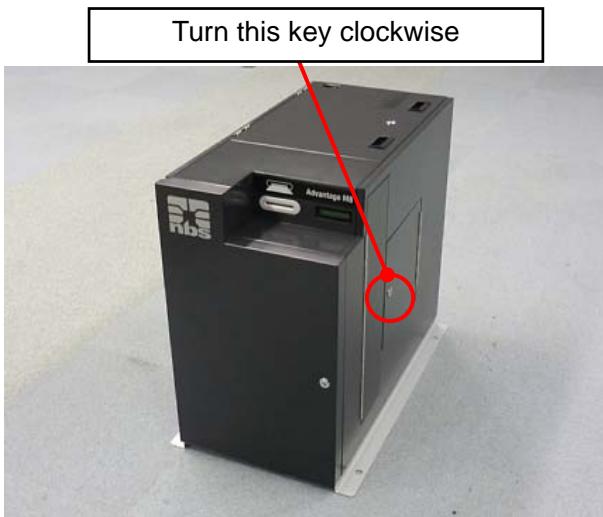
Caution

- Tipper is very high temperature part.
If you make the above process, turn Power OFF and wait at least 1 hour until the Unit has been completely cooled down to prevent your arms or hands from getting burned by touching high temperature part.

3. Close Top Cover and lock by key.

Remove remaining card from Emboss Unit.

1. Turn Power OFF, open Right side door by turning key clockwise. Open Top Cover by turning key clockwise.

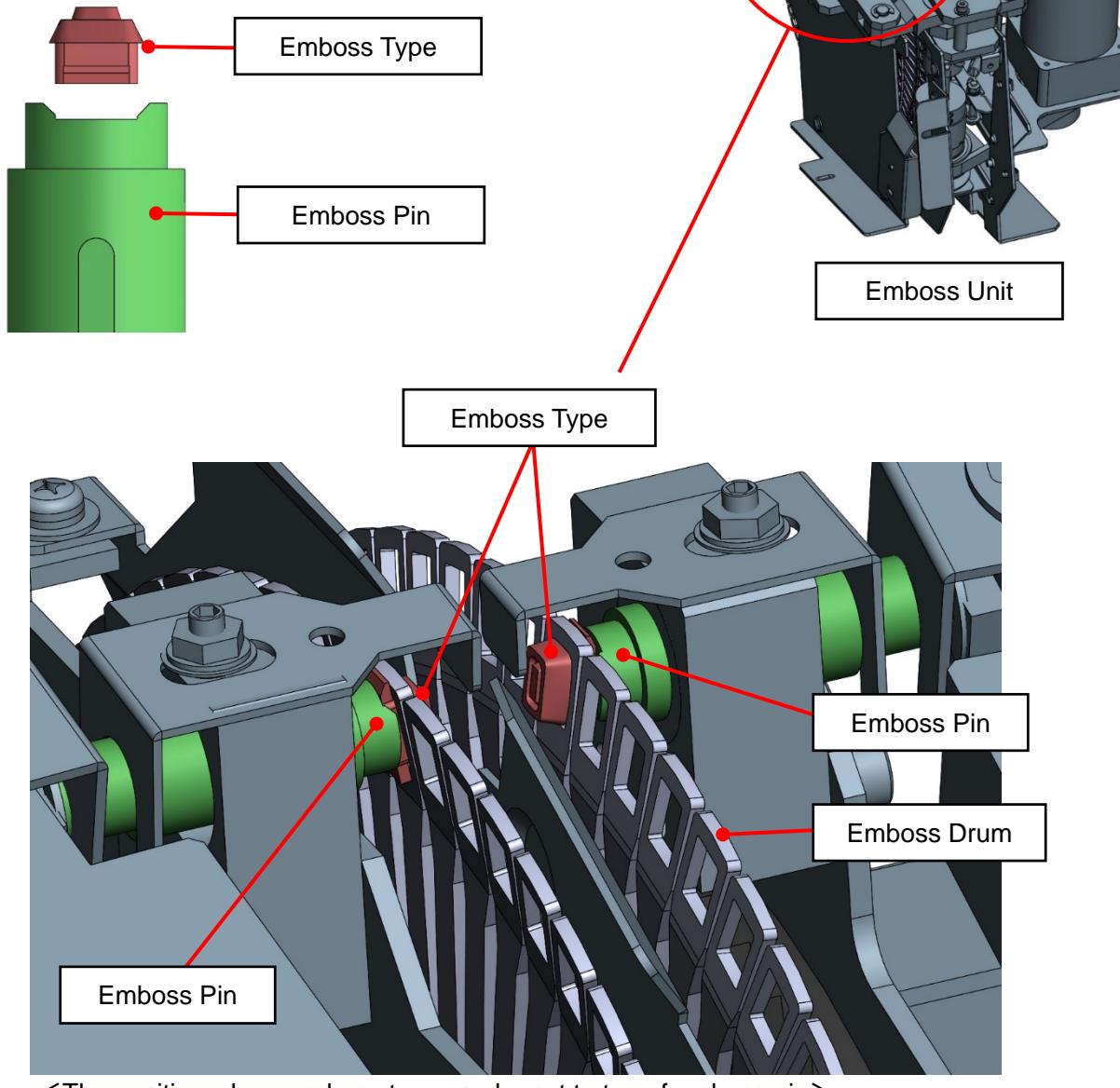


(Card is remaining between emboss type in Emboss Unit.)

* In case the card is remaining in Emboss Unit and held by needle lever of Carriage Unit, remove the card from the Carriage by open needle lever as written on previous page of this manual.

2. Ensure an Emboss type is in the position that emboss pin can hit it.

- There is a groove on the top of emboss pin to where emboss type can be set.

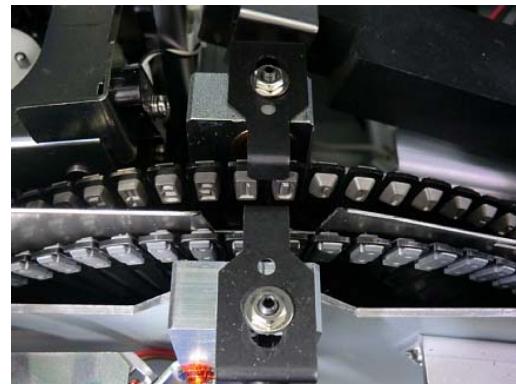


<The position where emboss type can be set to top of emboss pin>

- In case emboss pin is not on right position, rotate Emboss Drum to set the proper position.



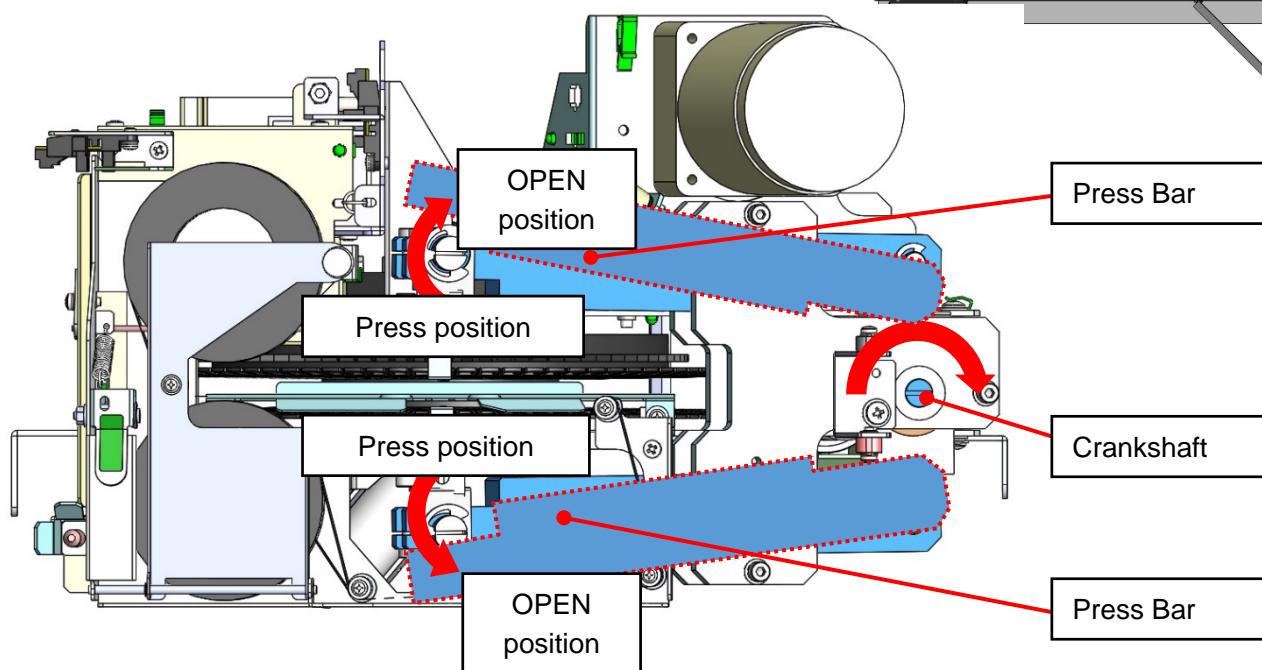
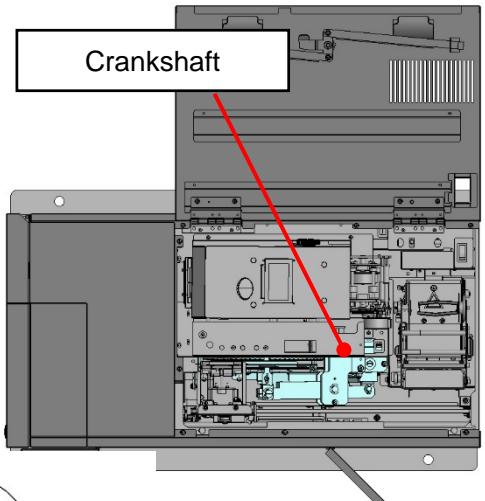
Proper position



Not on right position

- Keep holding remaining card, turn Crankshaft clockwise by Flat-head screwdriver and move press bar to OPEN position as Described below. Then remove the card.

- Too much turn of Crankshaft move Press Bar to Press Position again. If the Crankshaft moves to Press Position, turn screwdriver reverse direction.



Caution

- Tipper is HOT.**

To perform the above process, turn Power OFF and wait at least 1 hour until the Unit has been completely cooled down to prevent your arms or hands from getting burned by touching high temperature part.

- When turning the Crankshaft, make sure the emboss type is located to the position where it can set to top of emboss pin. (In a case when the emboss type is on wrong position, the type may be broken.)
- After complete the above process, make sure the following.

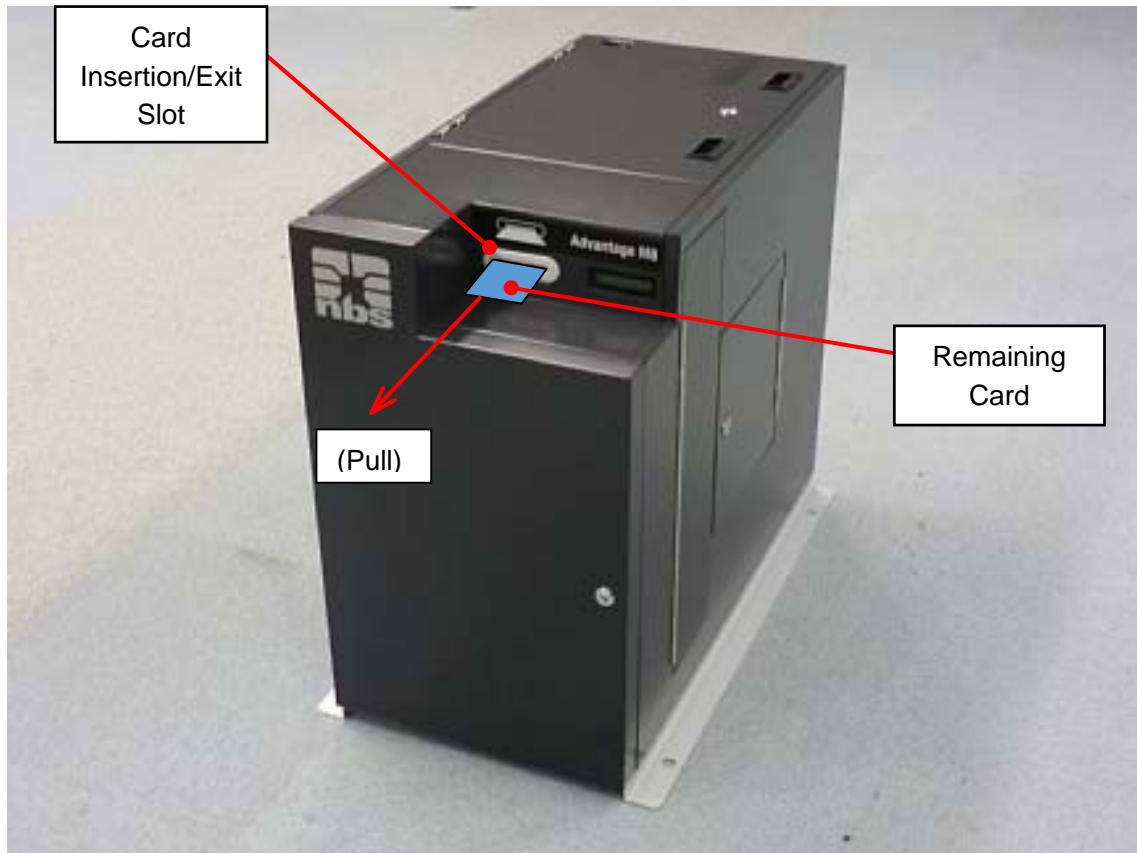
“Emboss type is located to the position it can be set to top of emboss pin”

“Press Bar is on OPEN position”

- Close Right side door, and then lock the Right side door Key.

Remove remaining card from Card Insertion/Exit Slot

1. If a card was not ejected completely from Card Insertion/Exit Slot, pull the card by hand.



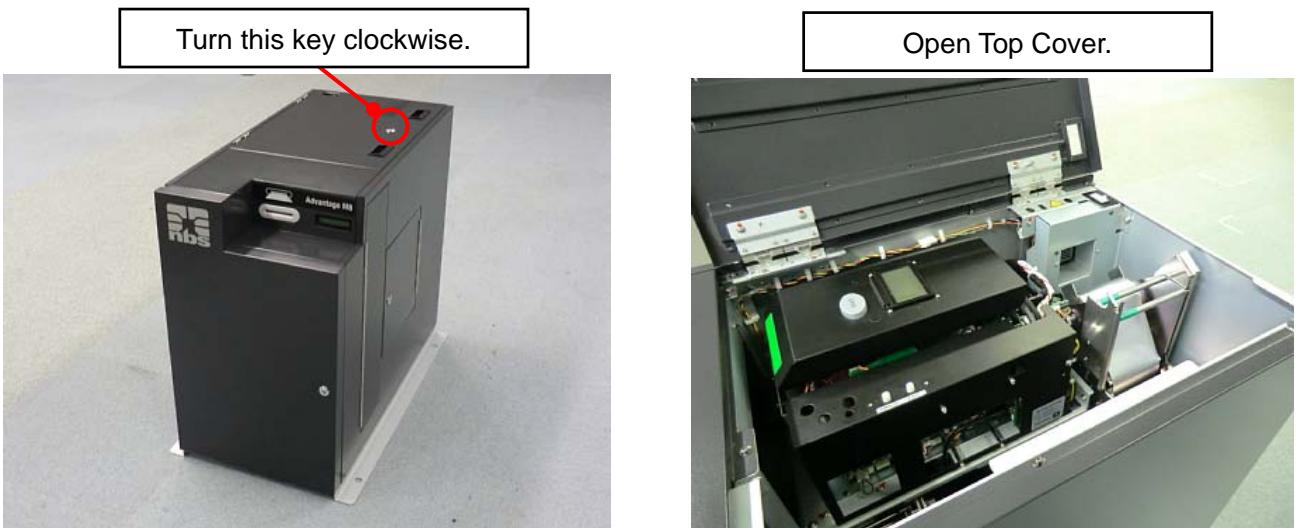
2. If you cannot pull the card out by hand, follow "Remove remaining card from Main Transfer Unit".

Cleaning

Cleaning Thermal Print Head

If you find stain or contamination on the issued cards, clean the Thermal Print Head with a Cleaning pen (sold separately).

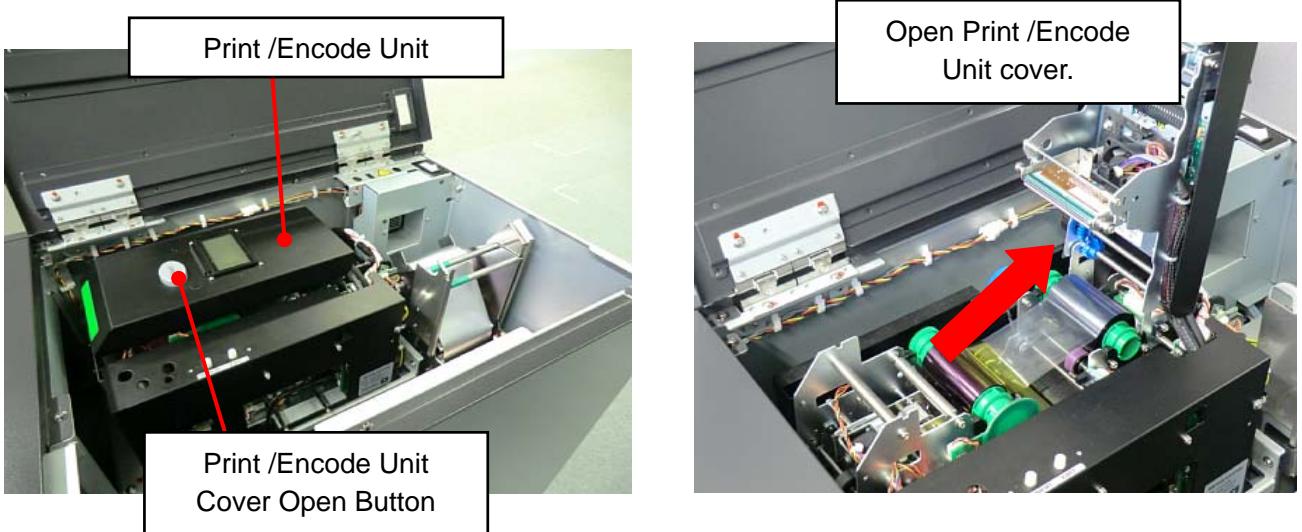
1. Unlock the Top Cover by turning the key clockwise during the power on, and then open the Top Cover.



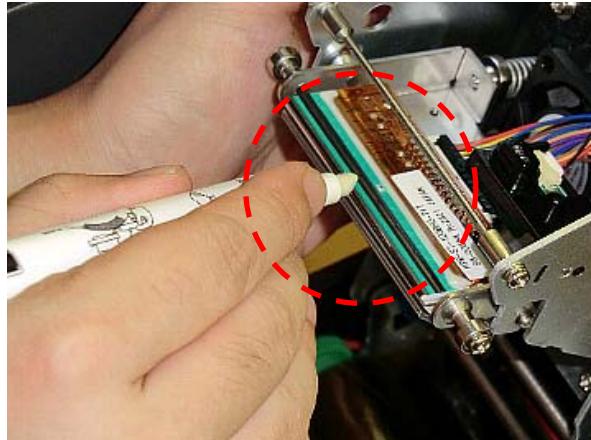
The buzzer will beep and the following error message be displayed.

CV402 Top / Side

2. Push the Print/Encode Unit Cover Open Button to open the cover.



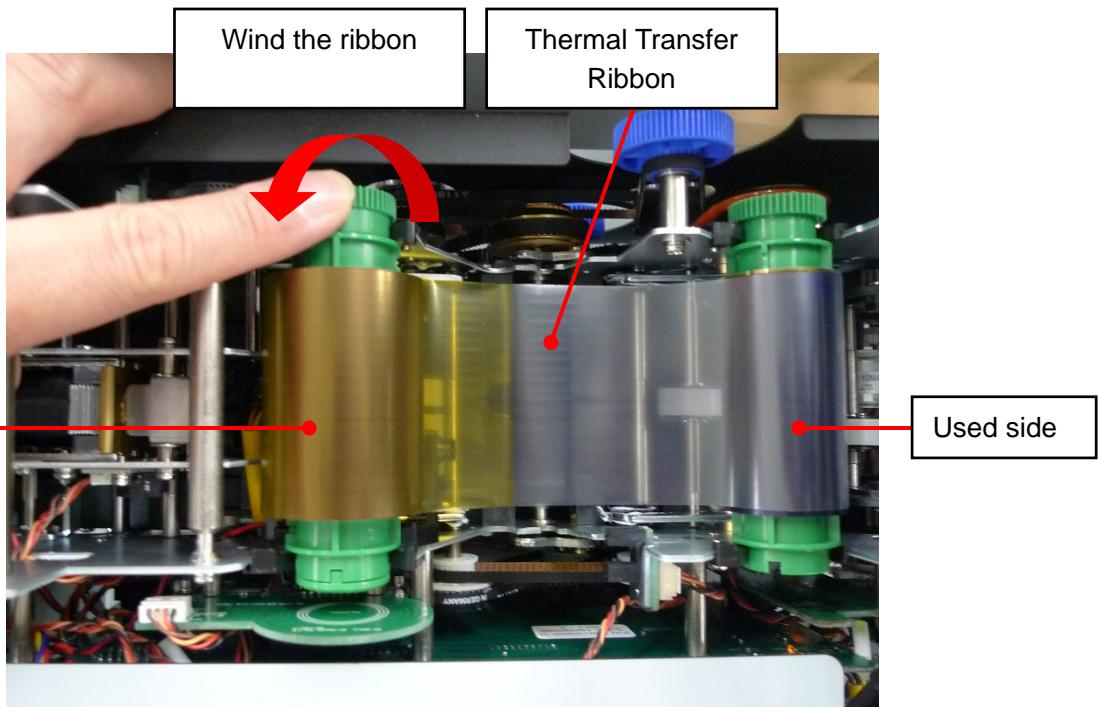
3. Clean the Thermal Print Head by using a Cleaning pen.



⚠ Caution

- Recap the Cleaning pen for reuse.
- Do not touch the Thermal Print Head with your fingers.

4. Wind the unused side of the Thermal Transfer Ribbon to remove the slack as shown in the picture below.

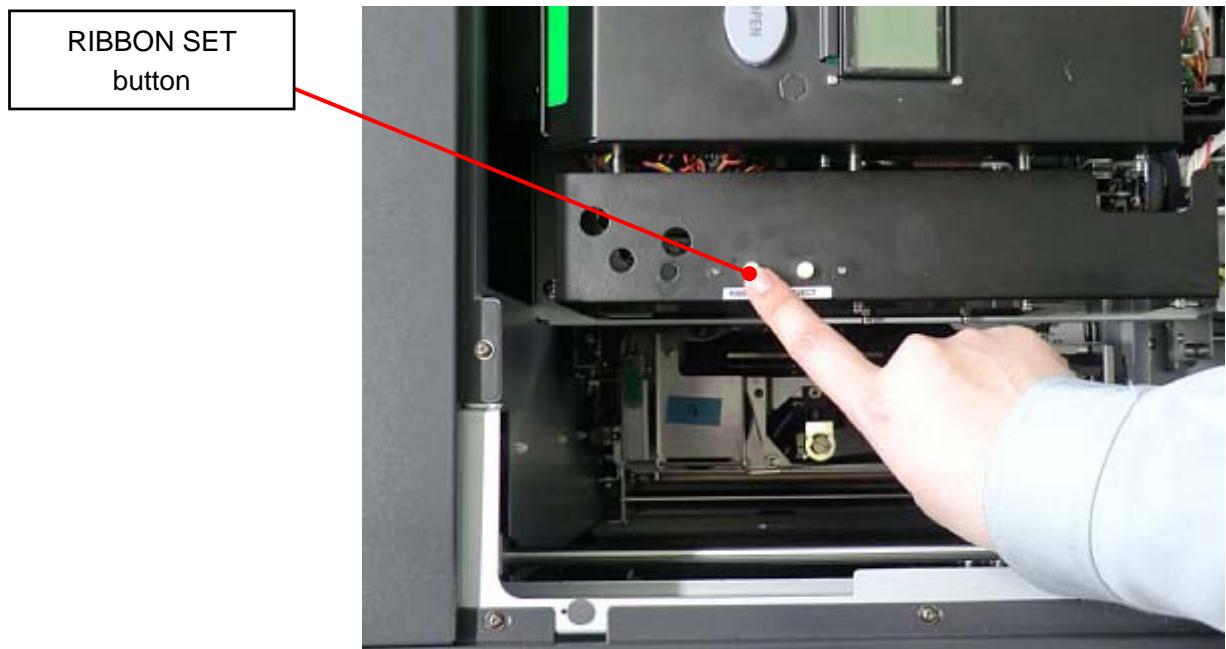


5. Close the Print/Encode Unit cover until it clicks.

⚠ Caution

- Before closing Print /Encode Unit cover, make sure the alcohol on the Thermal Print Head has evaporated.

6. Push the RIBBON SET button.



8. Close the top cover, and then lock the top cover key.

Caution

- Do not forget to push "RIBBON SET" button after installing a new ribbon. Otherwise, a print failure will occur.
- Be sure to remove the slack of the Thermal Transfer Ribbon before closing the cover. The slack will adversely affect the print quality.

Washing Cleaning Roller

Cleaning roller will remove stain or contamination on cards and will get dirty gradually. If you find stain or contamination on the issued cards, wash the Cleaning roller. We recommend washing the Cleaning roller when replacing the Thermal Transfer Ribbon.

1. Unlock the Top Cover by turning the key clockwise during the power on, and then open the Top Cover.

Turn this key clockwise.



Open Top Cover.

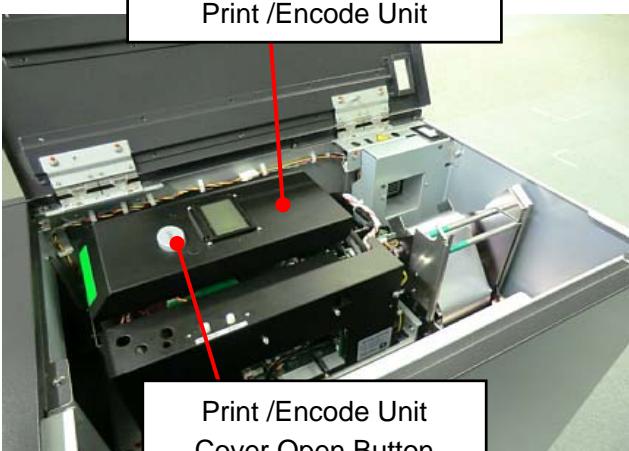


The buzzer will beep and the following error message be displayed.

CV402 Top / Side

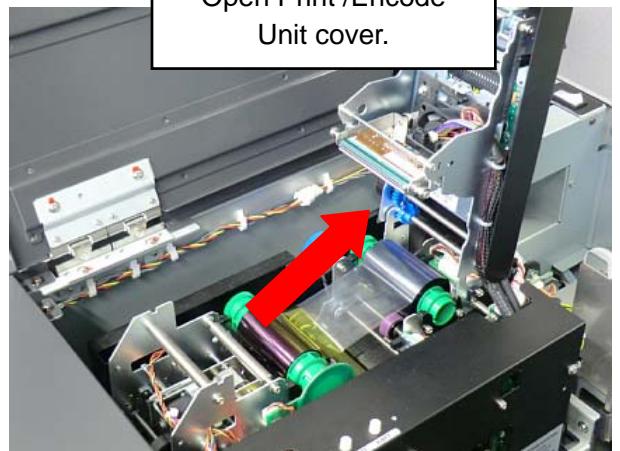
2. Push the Print/Encode Unit Cover Open Button to open the cover.

Print /Encode Unit



Print /Encode Unit
Cover Open Button

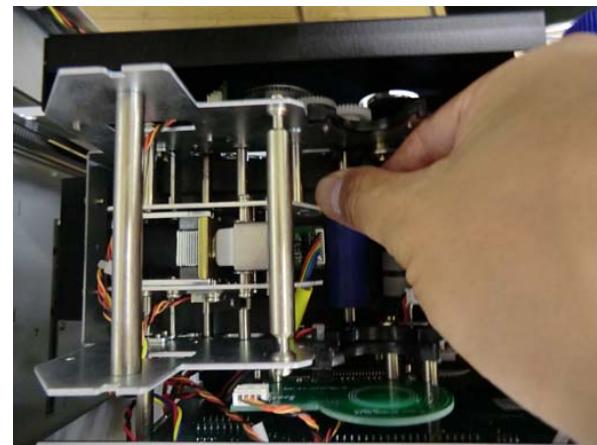
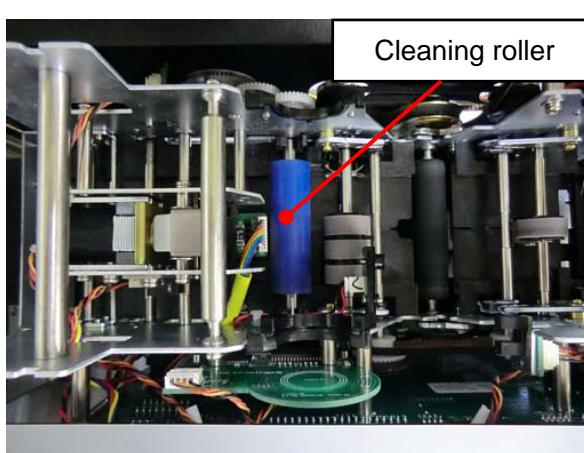
Open Print /Encode
Unit cover.



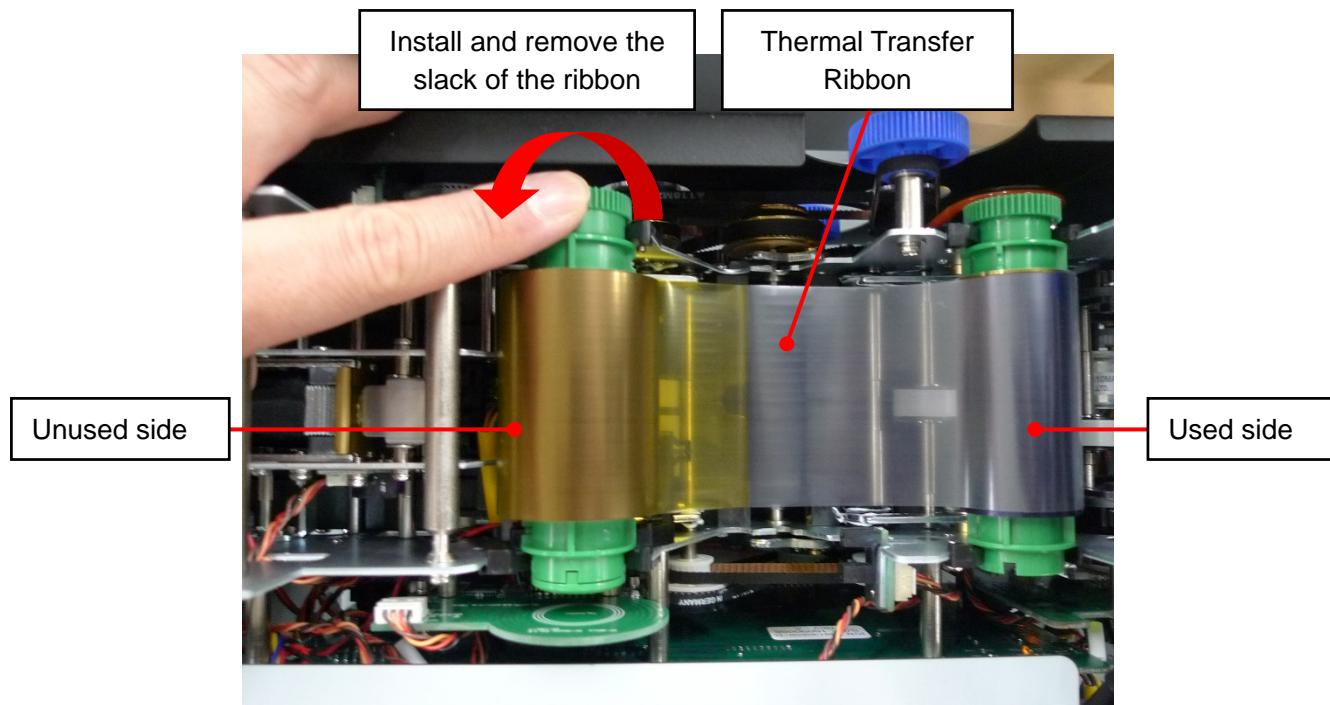
3. Detach the Thermal Transfer Ribbon from the printer.



4. Remove the Cleaning roller from the printer.

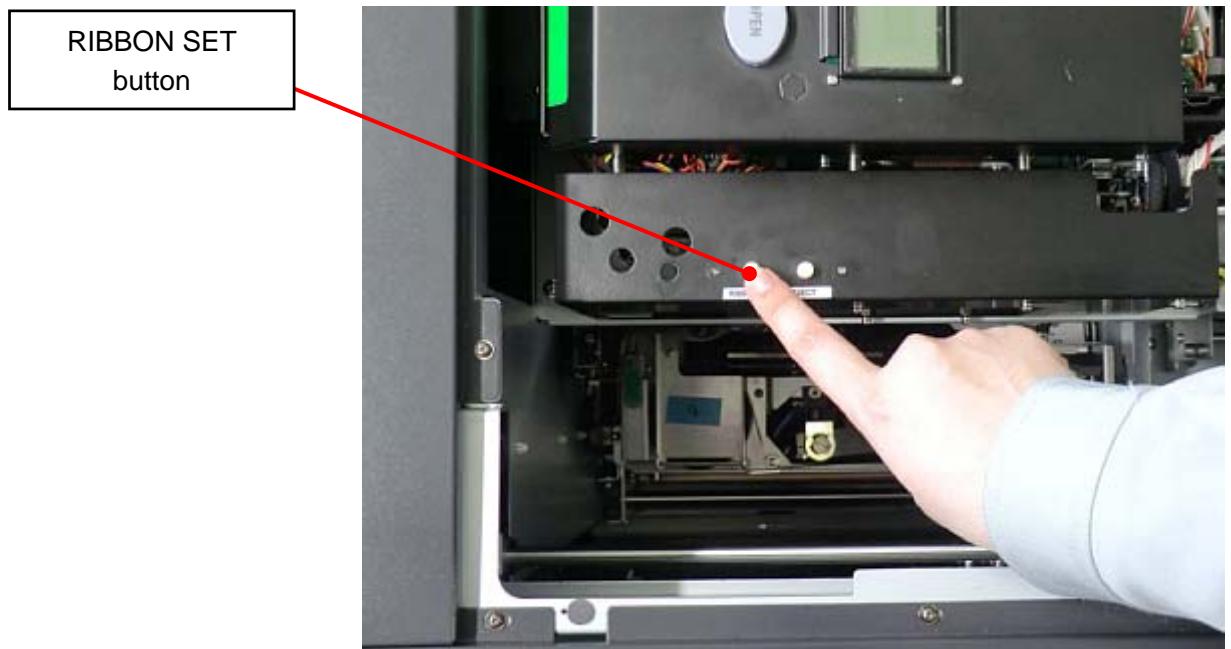


5. Wash the Cleaning roller with running water.
6. After drying, install the Cleaning roller to the printer.
7. Reattach the Thermal Transfer Ribbon as shown in the picture below and remove the slack of the ribbon.



8. Close Print /Encode Unit cover, by pushing the button until the position to hear click sound.

9. Push RIBBON SET button.

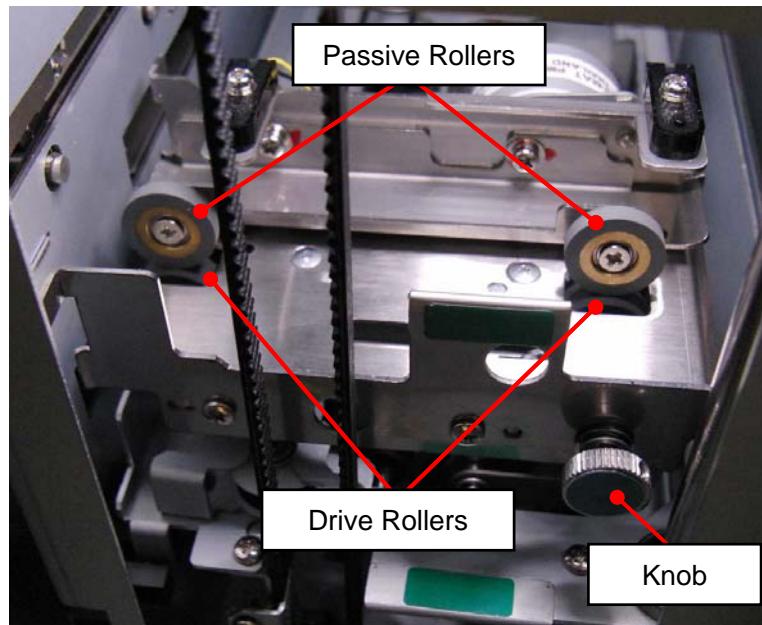


10. Close the top cover, and then lock the top cover key..

Cleaning Card transfer rollers

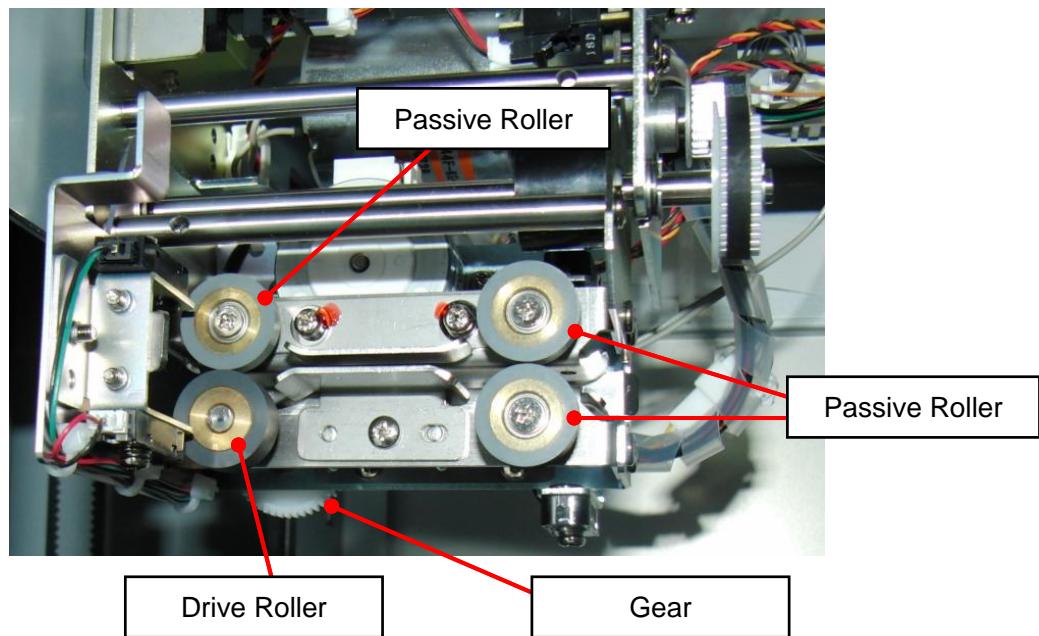
1. Cleaning Card transfer rollers in Main Transfer Unit.

Clean all outer part of Drive Rollers (2 rollers in lower position) and Passive Rollers (2 rollers in upper) by waste or swab with Ethanol. Clean Drive Rollers by turning Knob as described below.



2. Cleaning Card transfer rollers (Vertical Rotation Unit)

Clean all outer part of Drive Rollers (one) and Passive Rollers (three) by Waste or Swab with Ethanol. Clean Drive Rollers by turning Gear as described below.



Specifications

The following specifications may be changed without notice

General Specifications

Name	Card Printer & Embosser	
Model	Advantage M8	
Usable card (Allocable PVC Card)	Magnetic stripe / IC : ISO 7810 ID-1 * Height of warped card must be less than 1mm including thickness of the card.	
Connection Interface	USB2.0(Full Speed) (cable 3m in length or less) LAN 10BASE-T/100BASE-TX	
Display	Liquid Crystal Display (16 digits ×1 line) Character back light	
Input Hopper	Number of cassettes	2 (*Option total 5 cassettes are available.)
	Number of hoppers	6 (3 hoppers per cassette) (*When setting optional cassettes: 3 cassettes are set : 9 4 cassettes are set : 12 5 cassettes are set : 15)
	Input Hopper Capacity	300 cards (50 cards per hopper) (*When setting optional cassettes: 3 cassettes are set : 450 cards 4 cassettes are set : 600 cards 5 cassettes are set : 750 cards.)
	Card Presence Detection	Out of Card detection
	Manual insert mode	Available
Out Stacker	Output Stacker Capacity	Approximately 20 cards
	Card presence detection	Card-full detection
Rejected Cards	Reject stacker capacity	Approximately 25 cards
	Card presence detection	Card-full detection
Card Counter	Resettable	Software counter
	Non resettable	Mechanical counter
Dimensions	456mm (W) x 658mm (H) x 771mm (D)	
Weight	81kg (including 2 Hopper cassettes) * excluding card weight	
Power voltage	AC220 - 230V 3.0A 50Hz/60Hz	AC100 - 120V 4.5A 50Hz/60Hz
User environment	Operating environment Temperature 10 to 32 degrees Celsius Humidity 20 to 65% R.H (non-condensing) Guaranteed accuracy environment Temperature 18 to 28 degrees Celsius Humidity 40 to 65% R.H. (non-condensing)	
Security	Key lock for Front Cover, Right side door and Top Cover (Same for all key rocks) Software rock (Front) Key lock for Hopper cassette (Same for all key rocks)	
Applicable Standard	Safety : CE marking (Low Voltage), EMC : CE marking(EMC), FCC Class A	

* About option, please contact your distributor.

Embosser Specifications

Emboss	ISO 7811-1
Emboss printing type capacity	54 characters (standard) 80 characters at maximum (Including indent printing types.)
Emboss printing character type	Alphabet (10 CPI) 26 characters "A to Z" Number (10 CPI) 10 characters "0 to 9" Number (7 CPI) 10 characters "0 to 9" (OCR-7B) Symbol (10 CPI) 8 characters "— / . ' , () &"
Possible emboss area	Lower limit : (5.1 mm from lower end of the card to character center line) Upper limit : (21.4 mm from lower end of the card to character center line) Left limit : (7.7 mm from left end of the card to character center line) Right limit : (75.5 mm from left end of the card to character center line)
Emboss cross-feed pitch	1/7inch (Up to 19 digits can be embossed) 1/10inch (Up to 27 digits can be embossed)
Indent printing character type	10 characters "0 to 9" (OCR-B (14CPI)) (*Option Reverse italic)
Indent Film Detection	Film-end detection
Possible Indent area	Lower limit : (15.2 mm from lower end of the card to character center line) Upper limit : (37.8 mm from lower end of the card to character center line) Left limit : (3.7 mm from left end of the card to character center line) Right limit : (81.3 mm from left end of the card to character center line)
Tipper foil color	Silver, (Gold)
Tipping Foil Detection	Foil-end detection
Tipper heater warm up time	Within 6 minutes

Encoder Specifications

Magnetic Stripe Encode	ISO 7811-2/-6(Track 1, 2, 3: Hi-Co &Lo-Co)
IC Encode	ISO 7816 , EMV Level 1 and PBOC 3.0

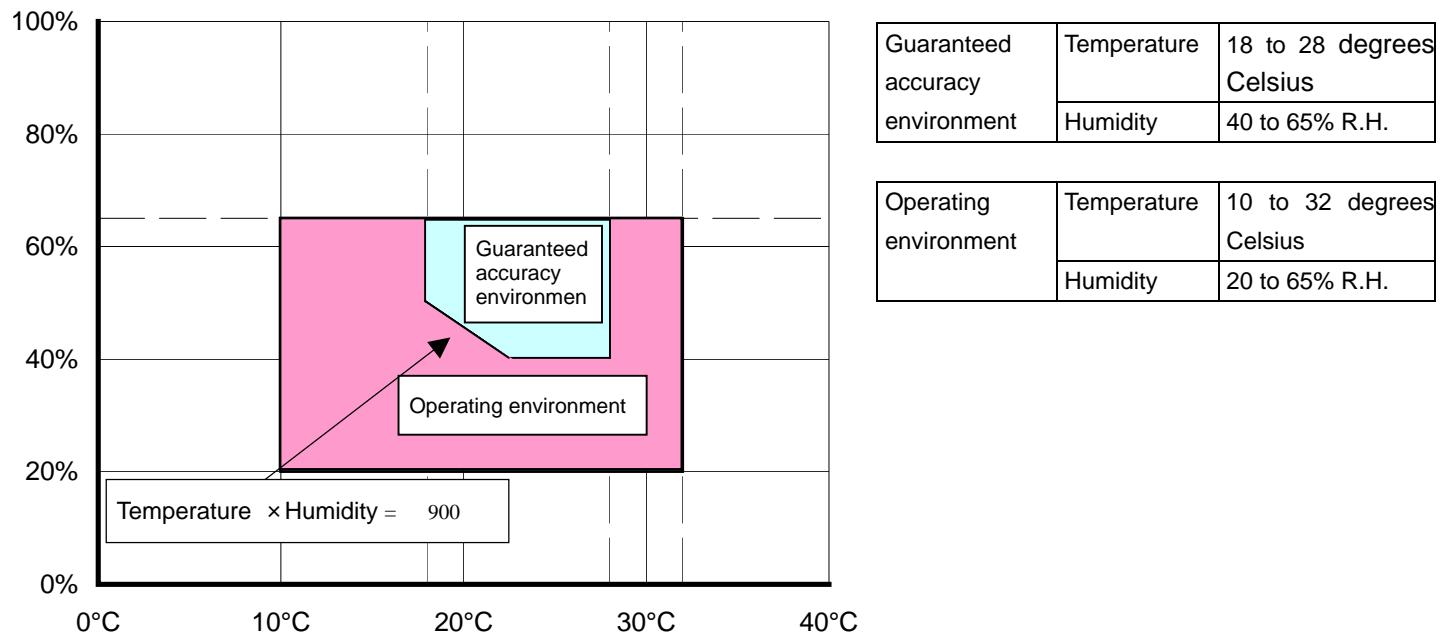
Printer Specifications

Print Mode	Color (Dye-sublimation) , Mono (Thermal transfer)
Print Side	Dual side
Print resolution	300dpi

Use Card Restriction

- Cannot print on not flat area such as signature panel or hologram sheet.

User environment



Specifications are subject to change without notice.

Advantage M8 Operation Manual

Advantage M8-UM-152

July 7 2017 2nd edition

Sales origin : NBS Technologies Inc.

Manufacturer : NBS Card Corporation