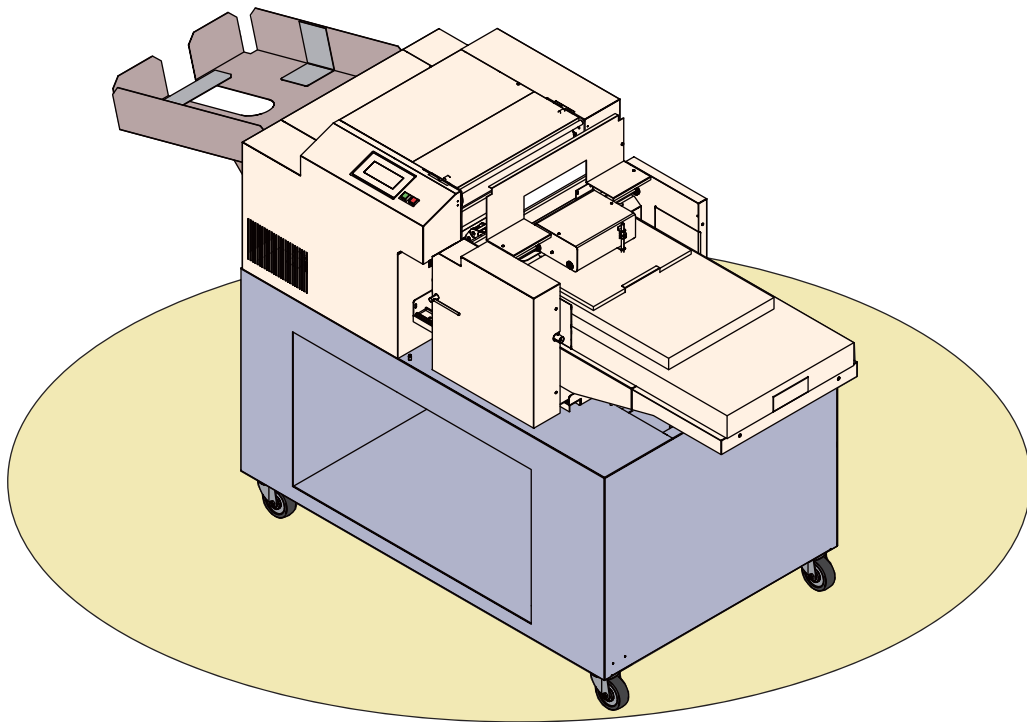


# Operation Manual

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## Coat/Foil/Laminate DFL-700



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Information in this documents is subject to change without notice.

The external appearance may differ from the illustration depending on the manufacturing lot.  
Be sure NOT convert this machine.

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# Introduction

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We sincerely thank you for choosing our coater.  
Please carefully read this Operation Manual to use this coater properly.  
Before use, be especially sure to read Chapter 1: Safe and Proper Use of This Coater.  
Keep this Operation Manual readily available for reference.

## Trademark right

Machine name and company name are company trademark or registered trademark.

This equipment system is "Class A Information Technology Equipment".  
Radio interference may occur when using the product in a residential environment.  
At that time, users of this system may be required to take appropriate measures.

Applicable product for High frequency current standard "JIS C61000-3-2"

## Power supply

- The power supply that always use under stable conditions is as follows.  
Rated Voltage : 200V 50/60Hz for Japan market, 230V 60Hz for US market  
230V 50Hz for Europe market
- Make sure that the power capacity is not exceeded when using other electric products in the same outlet,

Rated Power: 2500W (200V or 230V condition)

Rated Current: 15A (200V condition) / 8A (230V condition)








## WARNING

- Do not use with unspecified power supply  
It causes a danger of fire or electric shock.
- Use that the total current value of the equipment to be plugged in does not exceed the rating of the outlet  
If it exceeds the ratings, branch outlets and extension cords will overheat causing fear of fire.
- Make sure to use the ground earth cord, and make a ground connection.  
Detail is on "Note for Safe Use" page, refer "Notes regarding Electrical Shock".

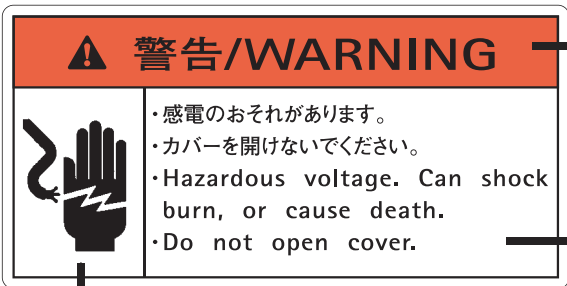
# Safe and Proper Use of Equipment (Be sure to observe each item)

## 0-1. Explanation of Warnings (Signal Words)

- The signal word is a warning indication which shows a message on the basic safe behaviour, classified by the level of impact (Injury) on a human body.
- The warning indication is classified by the level of danger by signal words of "Danger", "Warning", and "Caution".
- The warning indications are an important part of safety. If the equipment is mishandled, serious accidents may occur resulting in death or serious injury, or damage to the equipment. Be sure to observe the contents indicated in this manual and the warning labels.
- The signal word, types of danger, level of danger and avoidance of danger are indicated in the warning labels.
- Be sure to read the warning indications indicated in this manual and in the warning labels, and sufficiently understand the contents before starting work.

 <b>DANGER</b>	Danger indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.
 <b>WARNING</b>	Warning indicates a potentially hazardous situation that, if not avoided, may result in death or serious injury.
 <b>CAUTION</b>	Caution indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. Caution is also used to indicate a potentially hazardous situation, where property damage only can be expected.
	This symbol indicates high temperature.
	This symbol indicates sharp edge.

### Examples of Warning Label Indications



WARNING (Signal Word)

Contents of WARNING (Warning indications)

Symbol Mark (Warning indications)

## 0-2. Note for Safe Use

### General Notes



#### WARNING

- Do not modify the equipment, remove components, or attach components not specified by our company without permission.  
There is a possibility of injury, or damage to the equipment. We will not guarantee the quality of the equipment if any of the above items are performed.
- Do not remove the safety devices intentionally, or deactivate the functions to use the equipment.  
There is a possibility of the human body being exposed to danger, or damage of the equipment caused by a malfunction.



#### CAUTION

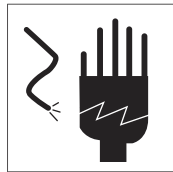
- Immediately stop the use of the equipment if smoke comes out of the equipment, or equipment becomes abnormally hot during operation.  
Contact your sales representative after removing the power cable from the outlet.

### Notes regarding Electrical Shock



#### WARNING

- There is a possibility of receiving an electrical shock, if the cover is removed while the power cable of the equipment is plugged in.  
There is a possibility of a major accident occurring from an electrical shock, resulting in death or serious injury, or damage of the equipment.
- Do not remove unspecified covers.
- When connecting an additional ground wire, please request an electrical specialist.

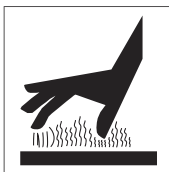


### Notes regarding Heating area



#### WARNING

- The heater and the motor get high temperature.  
There is a possibility of burn injury if you touch around them during operating and right after operation.  
Make sure that the temperature is reduced enough when replace and maintenance the parts.  
If you have a burn, run cold water over the burn immediately and submit to medical treatment.



### 0-3 . Power Supply

- Make sure to use the ground earth cord, and make a ground connection.
- Range of power supply for stable operation is;  
AC100V (+6%~ 10%) 50/60Hz
- Power cable should be connected to directly to an outlet on the wall.  
Rated Power: 750W

### 0-4 . Environmental and strage conditions

It is suggested to operate and store this product at the following places.

- Avoiding direct sunlight
- Avoiding dust
- Avoiding vibrating
- Avoiding salted
- Avoiding chemical specialities
- 5~35 degree C/ 20~85RH (Non condensing)
- Up to 1,000 meter height above sea level

### 0-5 . Others

- Do not place a flower vase or glass containing water on the equipment.  
If water should enter into the equipment, it may cause failure. Do not place heavy items on the equipment.
- There are some air holes in the equipment covers.  
The purpose of these air holes is to allow air to flow in and out of the equipment.  
Do not place items near the air holes, or paper that will block the air holes.
- If a strong impact is given to the quipment, there is possibility of having an adverse effect.  
Do not give a strong impact to the equipment at any time while working.
- Do not use any voltages other than the specified power supply voltage. Do not plug the equipment into outlets which have multiple plugs in use.  
This may cause a fire or an electrical shock.
- Avoid the use of extension cords.
- Do not cut, damage, bundle, or modify the power cord.  
Do not place heavy items on the power cord, pull or sharply bend, as it may cause a fire or electrical shock.
- If metal or etc. contacts the prongs of the power plug, it may cause a fire or electrical shock.
- Install the equipment in a position as close to the power receptacle as possible,  
so that the power plug can be easily removed when any abnormality occurs.
- If there is damage to the power cord, exposure or wire breakage of the core wire is found,  
contact a service contractor to replace the power cord.
- If a foreign substance, such as metal, water or other liquids accidentally get into the equipment,  
disconnect the power cord from the outlet, and contact a service contractor.  
If the power cord is used as it is, it may cause a fire or an electrical shock.
- When moving the equipment, be sure to disconnect the power cord from the outlet before moving. If not, the cord will be damaged and may cause a fire or an electrical shock.
- Be sure to disconnect the power plug from the outlet for safety before performing any service.
- Be sure to grab the plug when disconnecting the power plug.  
Do not pull on the power cord. The cord will be damaged, and may cause a fire or an electrical shock.
- Do not use the accessories (power cable, etc.) included with this equipment, for other products.



# 1

## Before operation

### 1-2. Interlock



#### Do not disable safety mechanisms

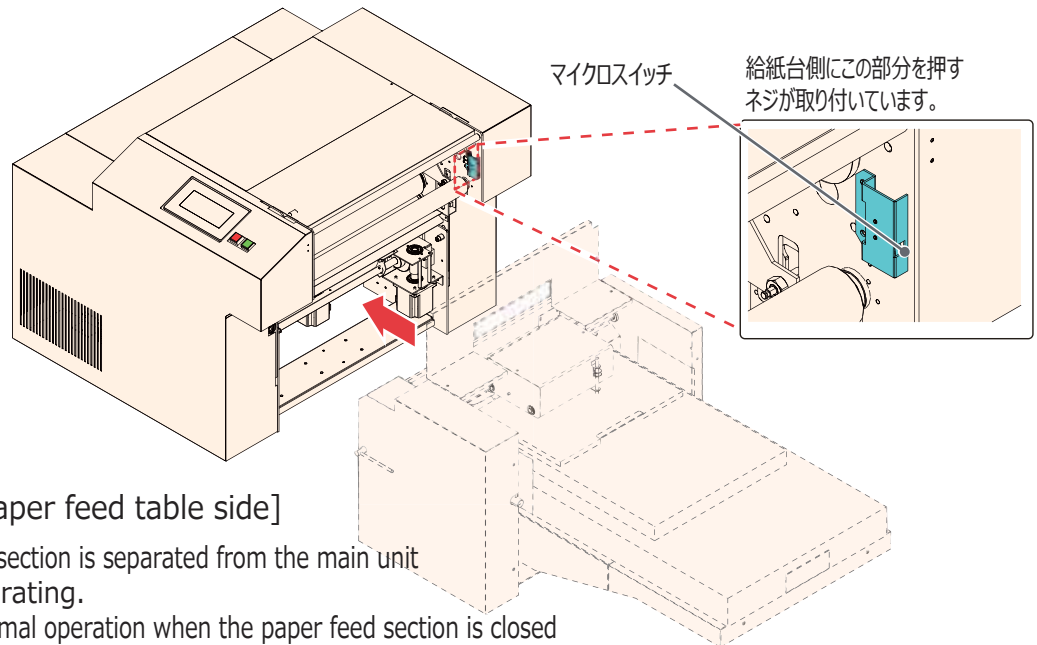
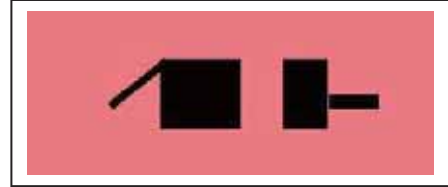
Never perform any action that does not activate the safety mechanisms described here.

Failure to activate the interlock could result in serious injury.

警告

[Terminology] Interlock is a safety device. Safety covers, protective nets, etc., are used on machines to prevent workers from being injured. If any of these are open or disconnected The machine stops operation when it detects this.

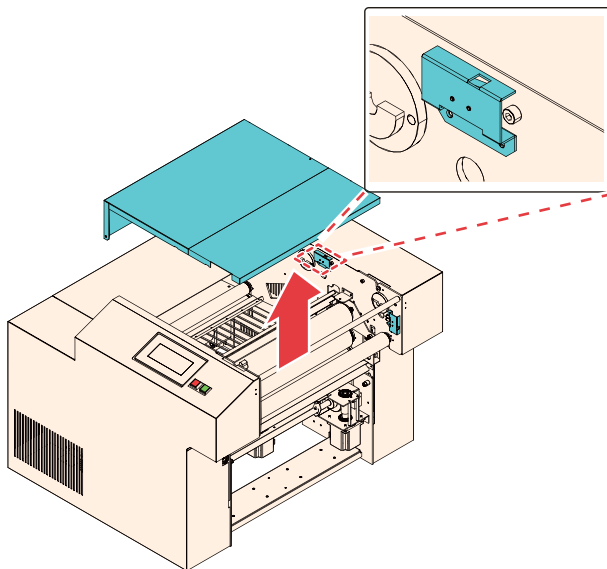
When the interlock is activated, the touch panel changes to the display shown at right. All operations are disabled. The locations of the interlocks on the unit are shown in the figure below.



#### 1. Interlock on the paper feed table side]

When the paper feed table section is separated from the main unit The machine stops operating.

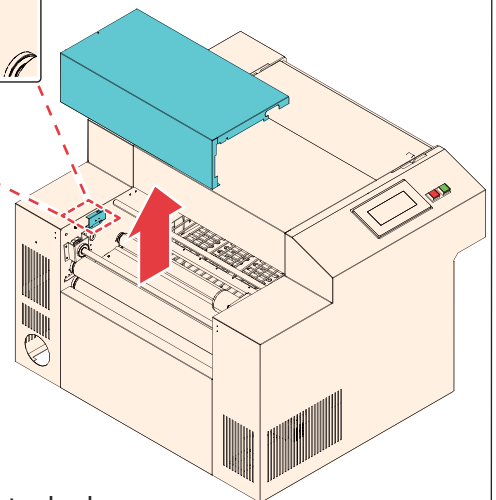
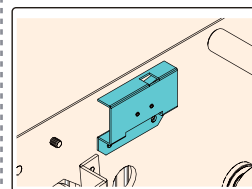
The machine returns to normal operation when the paper feed section is closed



#### 2. Upper cover interlock

Opening the top cover activates this interlock and The machine stops operating.

The machine returns to normal operation when the top cover is closed.



#### 3. Exit cover interlock

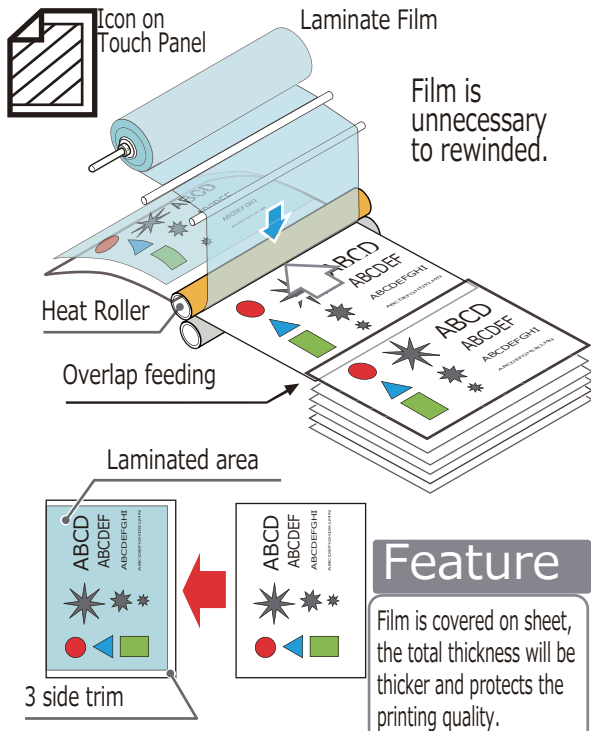
When the exit cover is removed, this interlock is activated and The machine stops operating.

The machine will return to normal operation when the exit cover is installed.



Laminate Film

Detail is "7-1"



Transfer side (glue side)

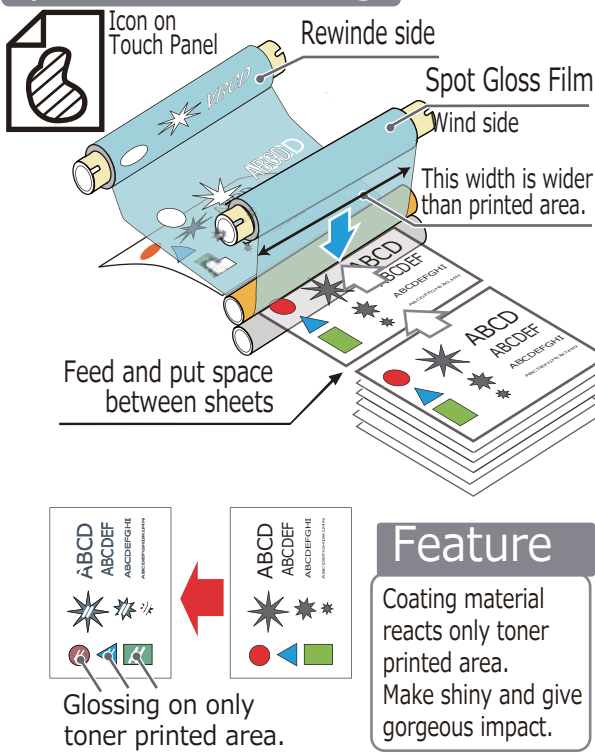
- Laminate Film= Face-down side
- Spot Gloss Film= Face-up side
- Foil Film= Face-down side

**POINT** The glue side (transfer side) of the film looks like the above.

**CAUTION** If you process the film with the wrong film set If the film is set incorrectly, it may cause serious problems. Please pay attention to the transfer surface when setting the film. when setting the film.

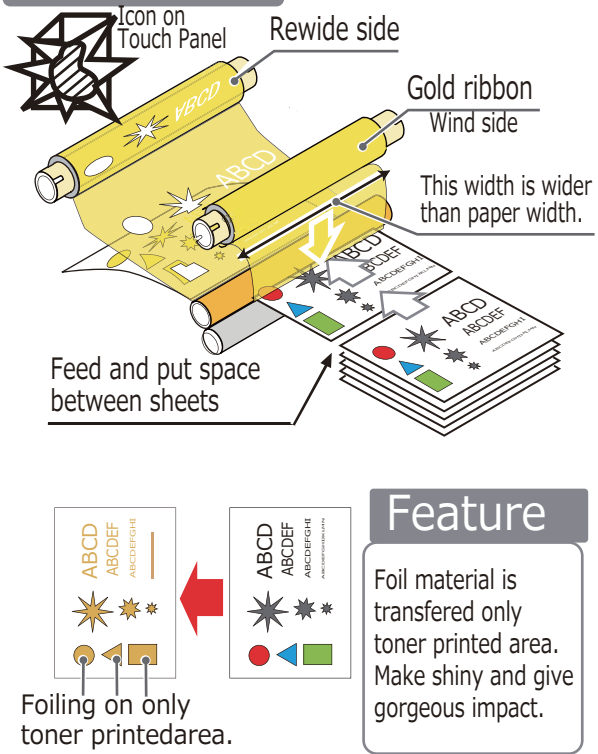
Spot Gloss Coating

Detail is "7-2"



Foiling

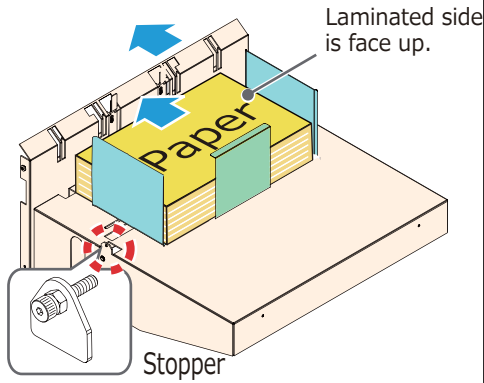
Detail is "7-3"




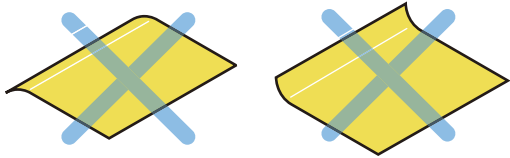

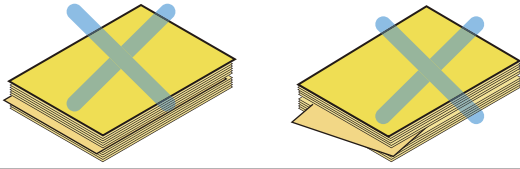

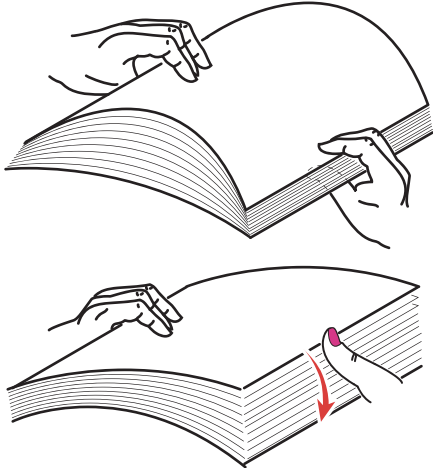
# 1 Before operation

## 1-4: Paper type and size

### Available paper

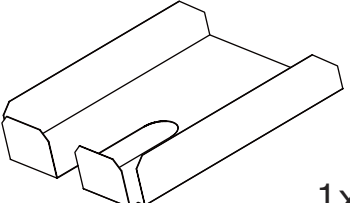
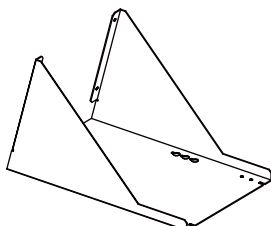
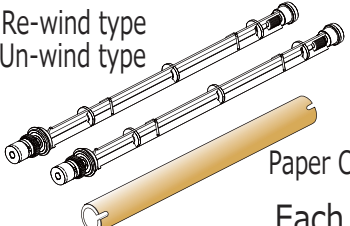
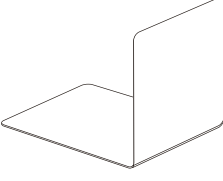
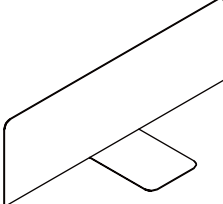
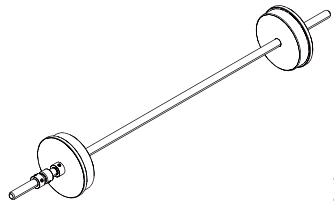
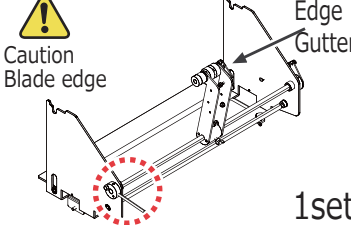
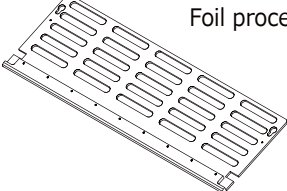
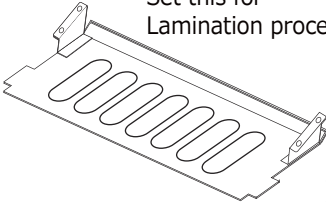
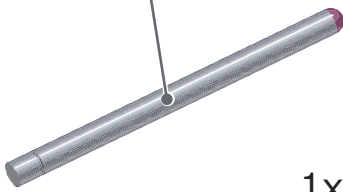
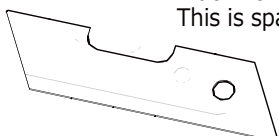
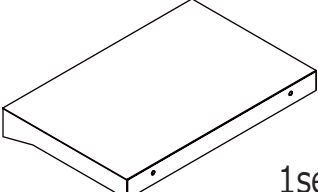
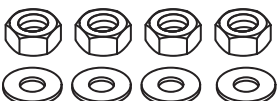


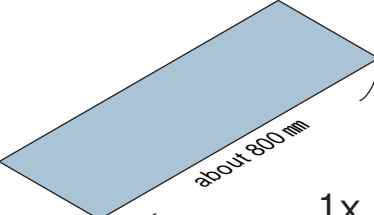

Type	Art Paper or Coated Paper	
Size	Max= 320 x 660mm	
	Min= 210×297mm (Laminate) (Can be oriented horizontally when cut, or vertically or horizontally when uncut) 148×210mm (Foil / Spot Gloss / UV varnish) (Horizontal placement only, not vertical)	
Thickness	110~450gsm (t= 0.12 ~ 0.5mm)	
Loading direction and Position		<b>【Loading direction】</b> Load as landscape for A4 size as the left picture. Vartical loading wastes supplies.
		<b>【Loading position】 Laminate</b> Operator side base= Front Side Guide needs to hit the Stopper.
		<b>【Loading position】 Other supplies</b> Center base= Load on the center position.

### Notes for papers

 <b>Caution1</b> No Curl		Paper curl (upward and downward) cases jam issue especially for Heat Roller.
 <b>Caution2</b> Well organized		Messy paper loading causes mis-feeding.
 <b>Caution3</b> Well separated		Double feeding problem happens often, if the papers stick together because of static, especially art paper and coated paper. Please refer the left picture to separate papers well before paper loading.

# 1 Before operation

## 1-5:Accessories

<p><b>Work Tray</b></p>  <p>1x</p>	<p><b>Tray Base</b></p>  <p>1x</p>	<p><b>Multipul Shafts/Paper Core</b></p> <p>Re-wind type Un-wind type</p>  <p>Paper Core Each 1x</p>
<p><b>Work End Plate2</b></p>  <p>1x</p>	<p><b>Work End Plate</b></p>  <p>1x</p>	<p><b>Laminate Film Holder</b></p>  <p>1x</p>
<p><b>Laminate Rack</b> Ref. [1-9]</p>  <p>Caution Blade edge</p> <p>Edge Gutter</p> <p>1set</p>	<p><b>Separation Plate</b></p> <p>Set this for Foil process</p>  <p>1x</p>	<p><b>Hold Plate</b></p> <p>Set this for Lamination process</p>  <p>1x</p>
<p><b>Lever</b></p>  <p>1x</p>	<p><b>Cutter (Spare)</b></p>  <p>Caution Blade edge</p> <p>1 piece is already attached on the machine. This is spare parts.</p> <p>1x</p>	<p><b>Extension Table</b></p>  <p>1set</p>
<p><b>Nut &amp; Washer for Work Tray</b></p> <p>Ref. [1-6]</p> <p>These parts are on the Work Tray already. These are for fixing parts for Work Tray.</p>  <p>1x</p>	<p><b>Screw for Tray Base</b></p> <p>Ref. [1-6]</p> <p>These parts are on the Tray Base already. These are for fixing parts for Tray Base.</p>  <p>1x</p>	<p><b>Screw for Extesion Table</b></p> <p>Ref. [1-6]</p> <p>These parts are on the Feeder Table already. These are for fixing parts for Extension Table.</p>  <p>1x</p>
<p><b>Set Plate</b></p>  <p>about 800 mm</p> <p>1x</p>	<p><b>Operation Manual</b></p>  <p>1x</p>	

# 1

## Before operation

### 1-6:Tray and Extension Table

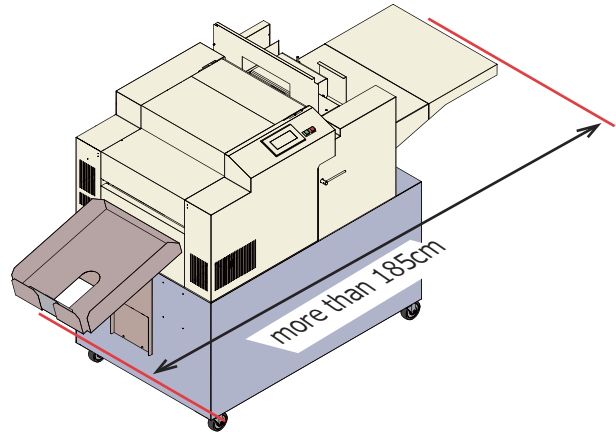


Caution

The following installation work should be performed without the power supply connected.

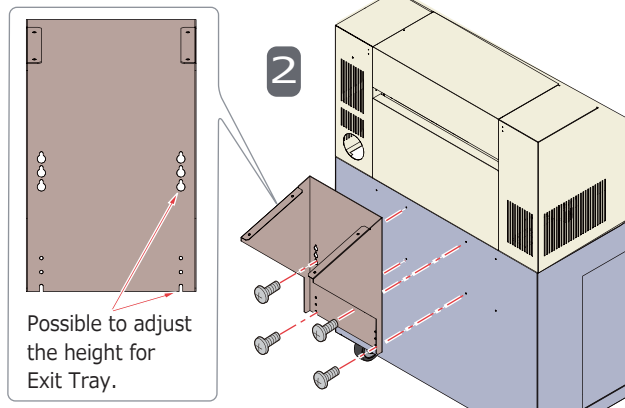
#### 1 Prepare a location for installation

Total machine weight is about 170 kg.  
The machine dimension including the extension table is;  
1850mm(W) x 700mm(D).  
The installation place should be tough enough floor for this weight and the enough room around the machine for smoothly



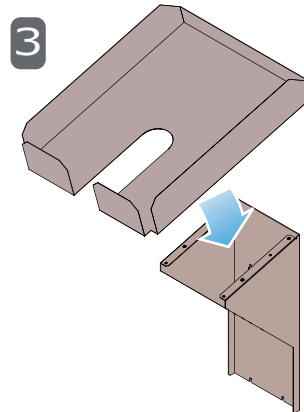
#### 2 Fix the Tray Base

Remove the attached screws and attach the Tray Base to the main frame. Attach the Tray Base to the frame of the main unit. The height of the tray base can be adjusted on the tray base side. Set the height as you like and fix the screws.



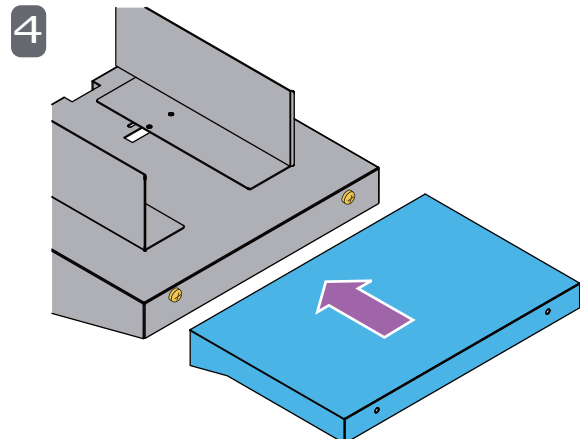
#### 3 Fix the Work Tray

The Work Tray has a stud bolt (threaded rod) welded to the underside. Remove the nut and washer attached to the stud bolt and insert the Work Tray into the hole on the upper side of the Tray Base. After inserting the Work Tray, fix it with the nut/washer that was removed.



#### 4 Fix the Extension Table

Loosen the screws at the back of the Feeder Table and install the Extension Table by hooking it onto the screws. After installation, insert a screwdriver from the back of the extension table to secure it in place.



#### NOTE

This extension table does not necessarily need to be installed under normal circumstances. It should be installed when using large sheets of paper that would overflow from the paper feed table.



## Warning

## Film Edge Cutter Notes

The Film Edge Cutter attached to the Laminate Rack device of this machine is sharp. Carelessly touching it may cause serious injury. Please read this page carefully and use caution when handling the ribbon device.

When handling the Laminate Film device, be sure to check and observe the following items before starting work.

**【Always wear gloves when handling film equipment】**

- When placing the Laminate Film Rack on the machine body
- When unloading the Laminate Film Rack from the machine body
- When film is set

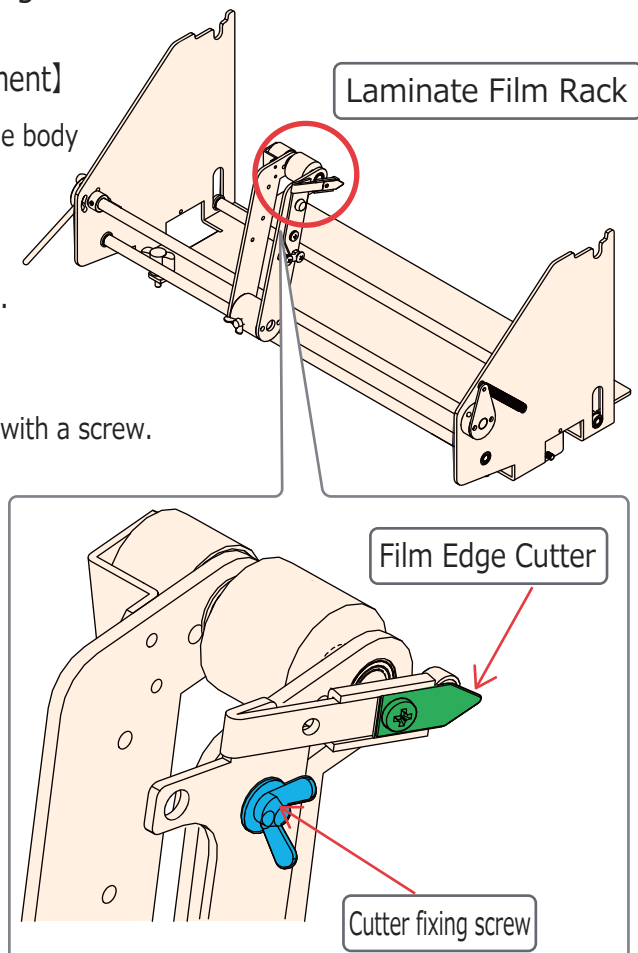
Be sure to wear it, especially in the above cases.

**【Cutter section must be fixed.】**

When the blade is inserted into the film, it is secured with a screw. Pull the cutter toward you when not in use. Be sure to secure the cutter in place at this time as well. It is very dangerous if the cutter is loose.

**【Do not touch the cutter area unnecessarily.】**

Even a slight hit may cause injury. Do not touch the cutter area unless necessary.



### 【Edge Cutter Cover of the Laminate Film Roll】

The cutter section of the Laminate Film Roll device has a cover to prevent injury from the blade. Please read the following instructions carefully before use to avoid injury.



caution

Never touch the cutter with bare hands.

The cutter blades described in this item are extremely sharp. Touching them with bare hands may cause serious injury. Be sure to wear gloves when touching the cutter section.

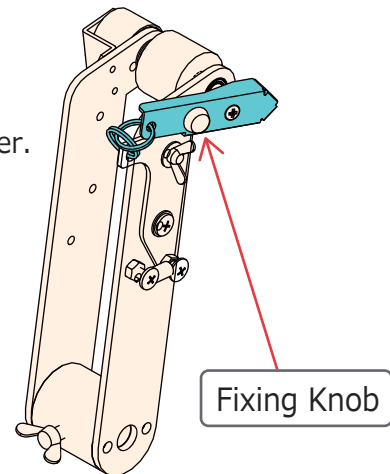
### 【When use the Cutter】

Remove the cover.

Loosen the Fixing Knob of Edge Cutter Cover to remove the cover.

Leave the cover hanging down out of the way after removing it.

※The knob has a detent on the back to prevent it from coming off the cover.

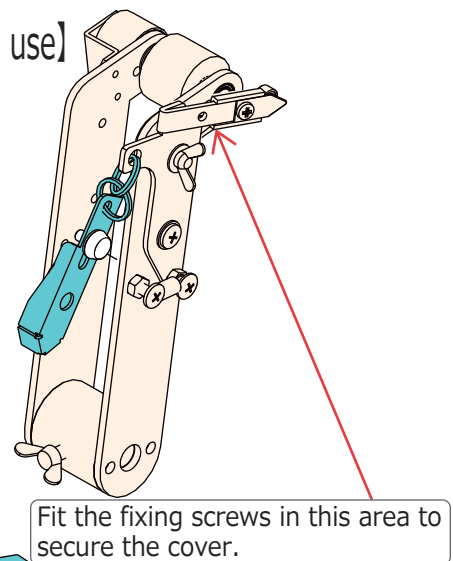


### 【 When the cutter is not in use or when the machine is not in use】

Be sure to set the cover.

Set the knob in the fixing screw holes to secure the position.

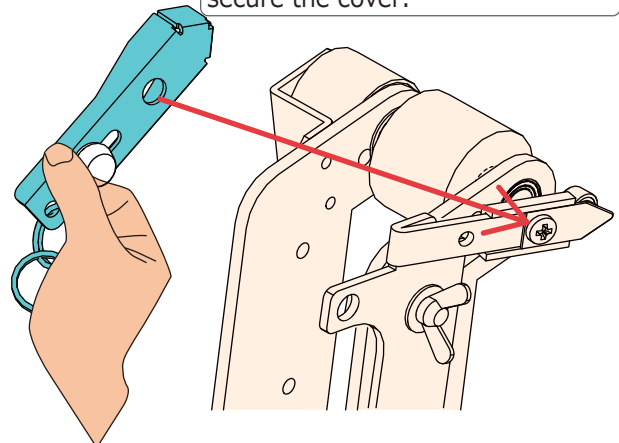
If the cover cannot be installed because the blank film which cut by Edge Cutter is in the way, remove it and install the cover.



### 【How to install the cover】

To avoid injury when installing the cover, hold the cover by the bottom side as much as possible as shown in the figure on the right.

The fixing screw of the cutter (arrowhead) fits into the hole (arrowhead) of the cover.

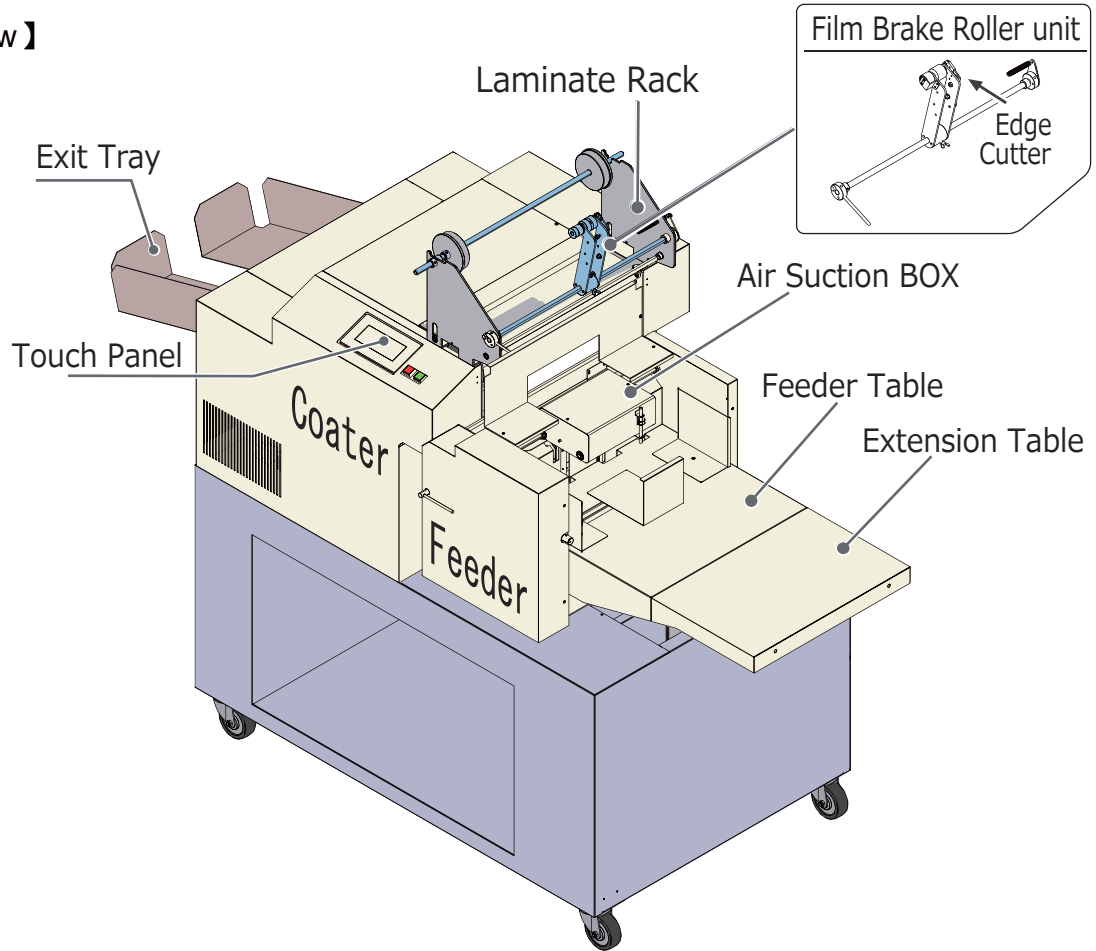


# 1

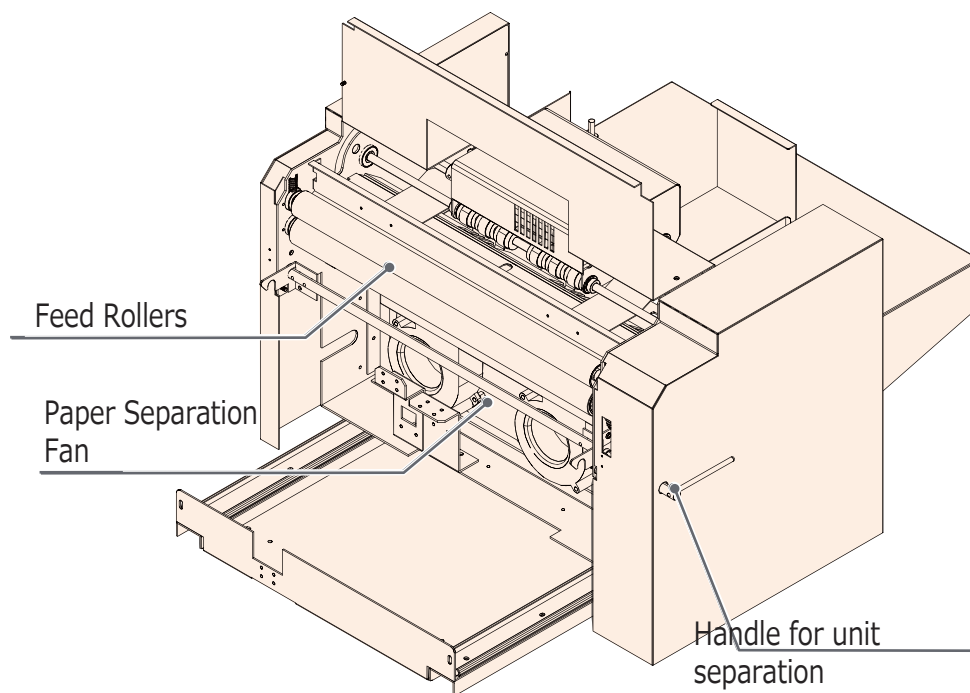
## Before operation

### 1-9-1:Laminate Rack Set

#### 【Overall view】



#### 【Feeder Unit】

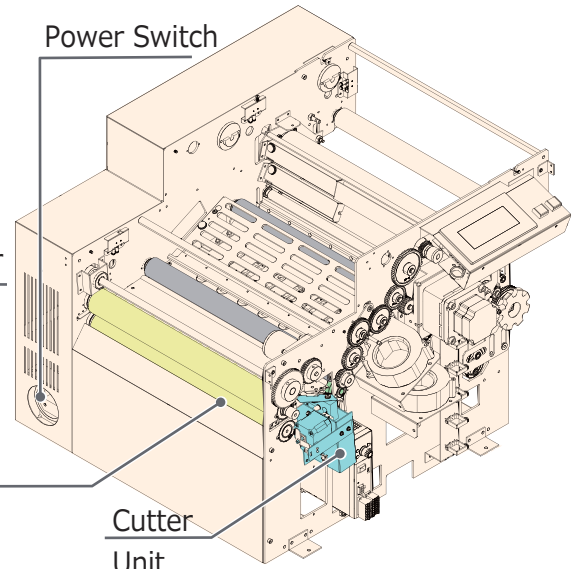
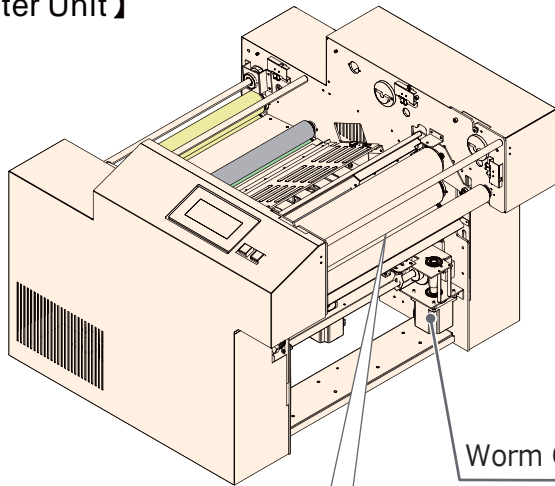


# 1

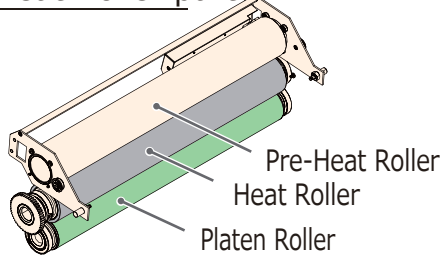
## Before operation

1-9-2:Parts Name

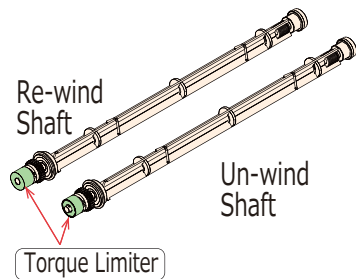
### 【Coater Unit】



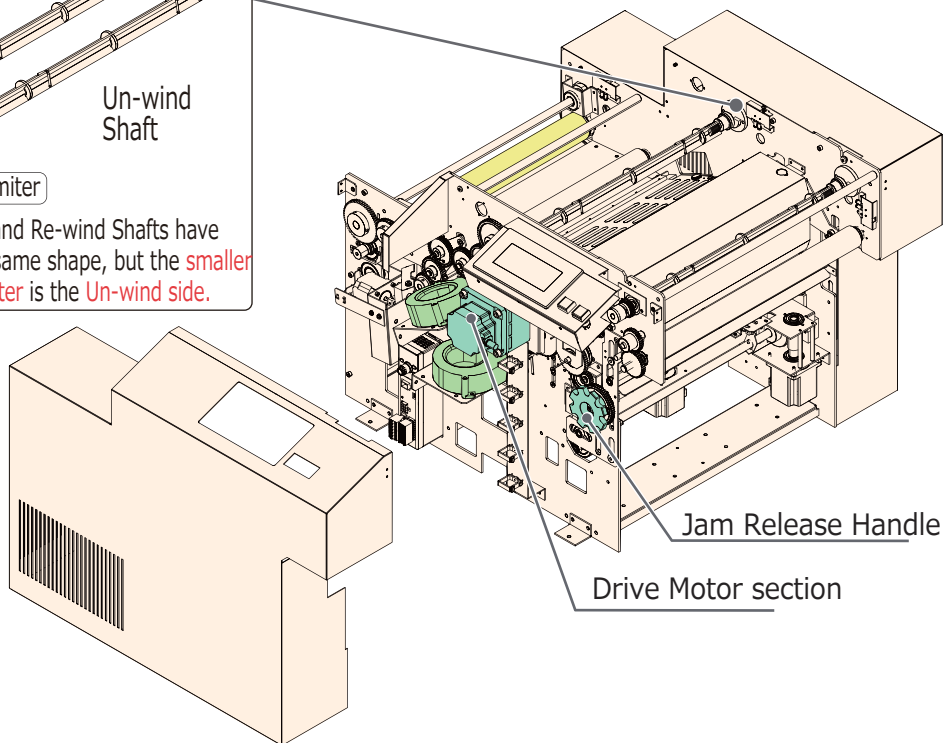
#### Heat Roller part



#### Multipu Shafts



※Un-wind and Re-wind Shafts have almost the same shape, but the **smaller Torque Limiter** is the **Un-wind side**.





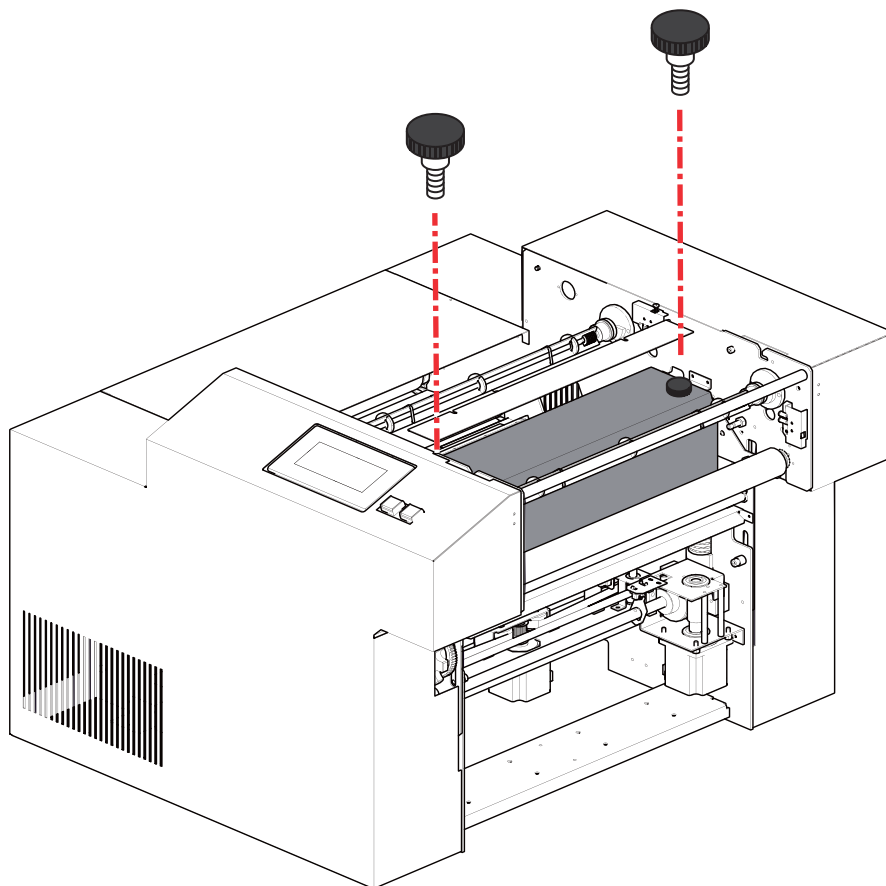
**【Water vapor emitted from the heat roller section】**

At the very beginning of operation, a white smoke-like substance may appear around the Heat Roller area. This is not abnormal, as it is just moisture inside the Heat Rollers evaporating.

A slight odor may also accompany the smoke, but this is not abnormal either.

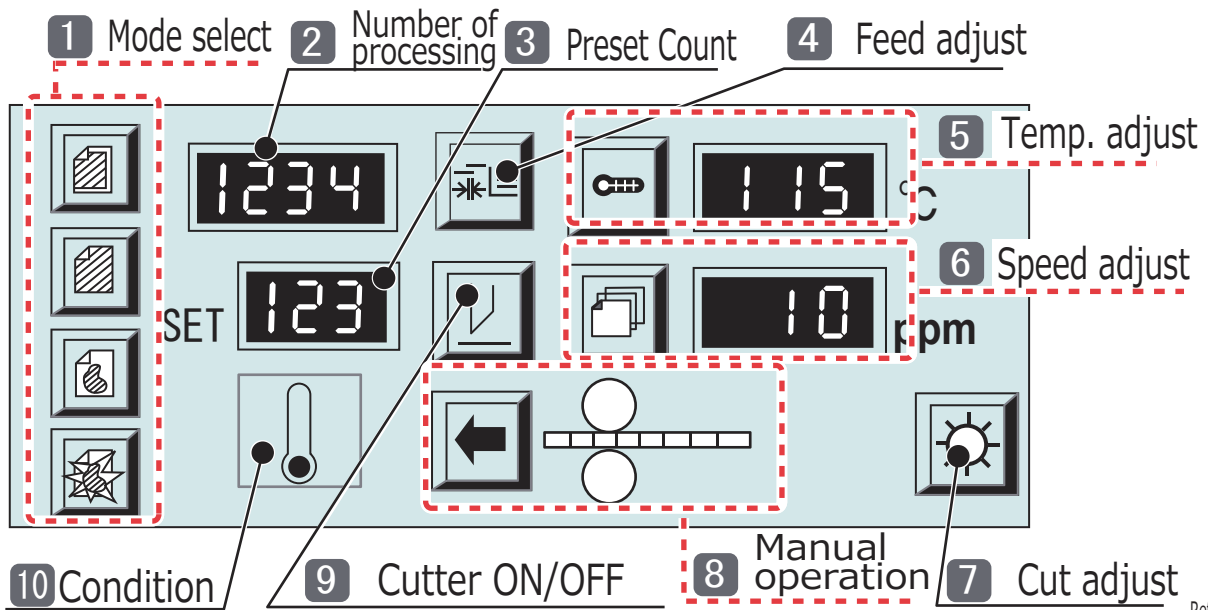
**【Regarding the knobs of the Heat Resistant Cover】**

The Knobs on the Heater Cover may loosen during transportation. Check for looseness during installation, and if loose, tighten the screws to ensure that the cover is securely fastened.



# 2 Touch Panel

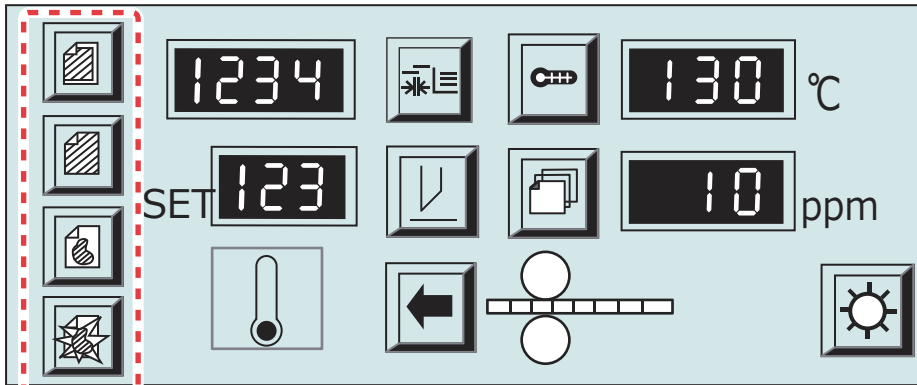
## 2-1:Home screen



Refer...

1		Mode select	4 types: 1) Laminate, 2) UV Varnish, 3) Spot Gloss, 4) Foil. Push the button and the selected mode icon turn gray. ※The second mode from the top is not normally used	2-2
2		Number of processing	Shows the number of processed until now. Possible to reset the number if push the number icon and push "CLR" icon.	2-1
3		Preset count	Push this number icon and open the "Preset screen". Set the preset count number. Machine stops automatically after processed the number you set.	2-1
4		Feed adjust to set mode	This button is available only when laminate operation. Feed Adjust screen is opened and possible to set paper width, paper thickness and overlap volume.	2-3
5		Temp. adjust to set mode	Temperature is auto set as default for each mode (for manufacturer supplies). Set temp. is displayed on the black box next to this icon. Presented temp. can be shown when push the temp. display. Push this button when change the temp.	2-4
6		Speed adjust to set mode	Speed is auto set as default for each mode (for manufacturer supplies) Set speed is displayed on the black box next to this icon. Display is "sheets per min as A4 size". Push this button when change the speed.	2-5
7		Cutter adjust to set mode	This button is available only when laminate operation. Cutter adjust screen is opened and possible to set Cut timing and adjustment for all cutter's.	2-6
8		Manual operation	Push this button and the machine operates until next push. Manual operation stops when push this one more time. Possible to use this function even during the heating up mode.	—
9		Cutter ON/OFF	Possible to select "cutting" ON/OFF for laminated sheets separation. This button turns gray color when you select "OFF".	—
10		Display	Condition is shown by these 3x icons. Heating up: Heat Roller is warming up (not ready). Start: Reached set temp. Possible to start by pushing it. Operating: Now operating, stop by pushing this icon.	2-7

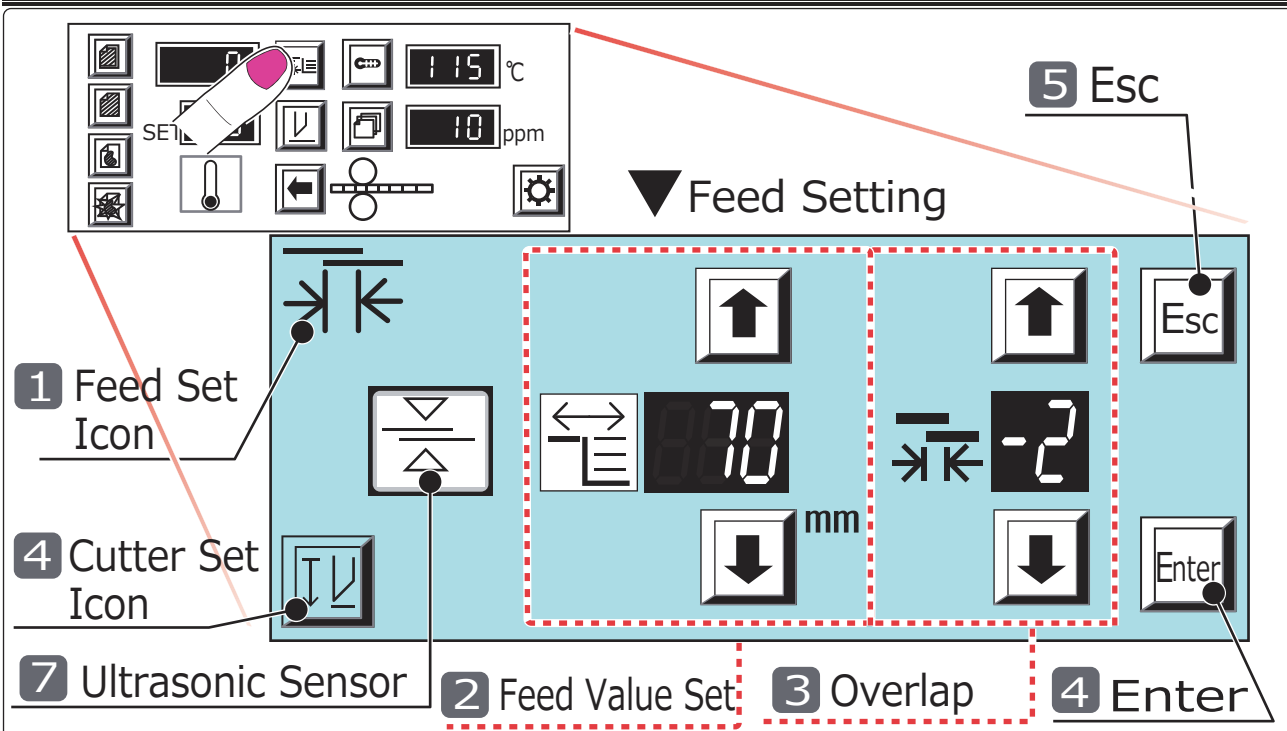
▼ Home screen



Mode select (Change to be gray color which you select)

	Mode Type	After ← Before	Feature	Film Type
				Basic Temp. increasing pressure
1	<p>Laminate</p> <p>Whole laminate except front side</p>	<p>Cut the film by Flying Knife</p>	<p>Cover the film on whole paper except 3 sides. Make strong layer on the paper and protect the printing image.</p>	<p>Laminate Film</p> <p>100~120°C</p> <p>1~2</p>
2	<p>Raised Foil</p> <p>Foiling on UV varnished area</p>	<p>Foiling only on UV varnished area.</p>	<p>Foil on the sport UV varnished area by special Gold and Silver Foil UV to make fancy finish.</p>	<p>Foil</p> <p>130~145°C</p> <p>4~5</p>
3	<p>Spot Gloss</p> <p>Coating only toner printed area</p>	<p>Only on toner printed area is coated by gloss layer.</p>	<p>Make gloss effect only on toner printed area. Put the gloss coat material and make gloss and luxury effect on the paper.</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p><b>Caution</b> No more 130°C, or film may be melted. Set up to 130°C</p> </div>	<p>Spot Gloss Film</p> <p>110~130°C</p> <p>2~3</p>
4	<p>Foiling</p> <p>Foiling only toner printed area</p>	<p>Only on toner printed area is coated by foil</p>	<p>Put Gold, Silver and other color foils material only on toner printed area. Make luxury effect.</p>	<p>Foil</p> <p>130~145°C</p> <p>2~5</p>

※The setting values listed are only a guide.  
They vary depending on the speed and type (thickness) of the paper.

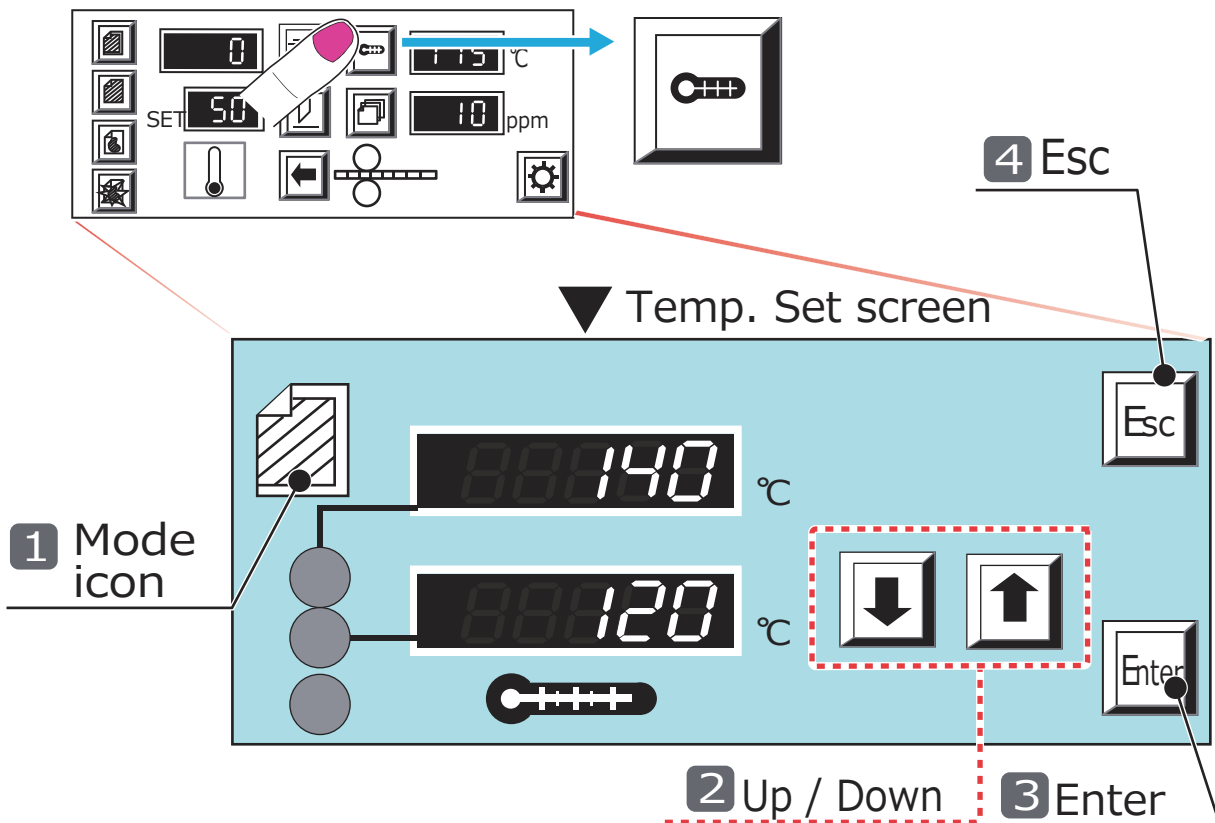







Icon	Set	Explanation
1		Pressing this icon on the Home screen, display the "Paper Feed Setup Screen" shown above. Set the stroke/paper overlap amount from this screen.
2	Feeding length set	Set the paper feeding length. Normally, there is no need to change this setting since the appropriate value has been entered. However, thick or long paper may cause slippage during feeding. In such cases, increasing this value slightly may improve the problem.
3	Overlap value set	Change the value for overlap width (change the feed timing). 14 steps from "5"~"-8". (Number is not as "mm", just as steps) "0" is no gap, "5" is max gap between sheets and "-8" is max overlap value between sheets. Change depending on the job conditions. * Laminate: negative value set is recommended. * Foil: Plus set is recommended.
4	Cutter Movement	Pressing this button operates the laminate film cutter. Normally, not necessary to touch it, but if you move it during cleaning, press the button once to return it to the normal standby position.
5	Enter (Confirm)	Pressing this icon after set the value when need to record. The number is recored and go back to "Home screen".
6	Esc (Cancel)	Pressing this icon when cancel the value setting. The pressed number is canceled and go back to "Home screen".
7	Ultrasonic Sensor ON/OFF	Detect the double feeding error. Depending on the type of paper used (special type), the sensor may detect even if no double feeding. In such a case, press this button to turn off this function. When the detection is not working, an X mark will appear above the icon.

## 2 Touch Panel

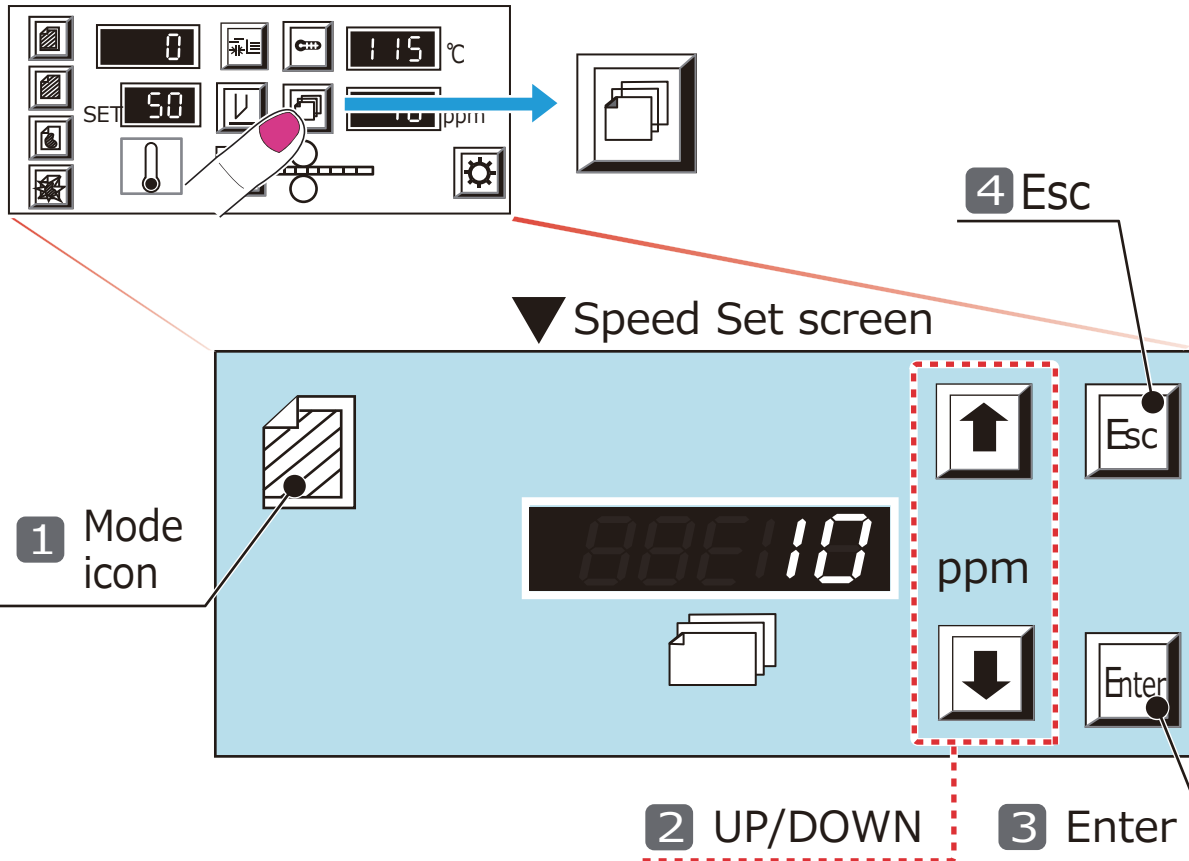
### 2-4: Temp. Set






The machine changes the temperature and speed to standard value automatically for each operations when an operator selects the mode icon. Normally, proceed with original setting. However, please change the temperature on this screen if necessary depending on the paper type and film.

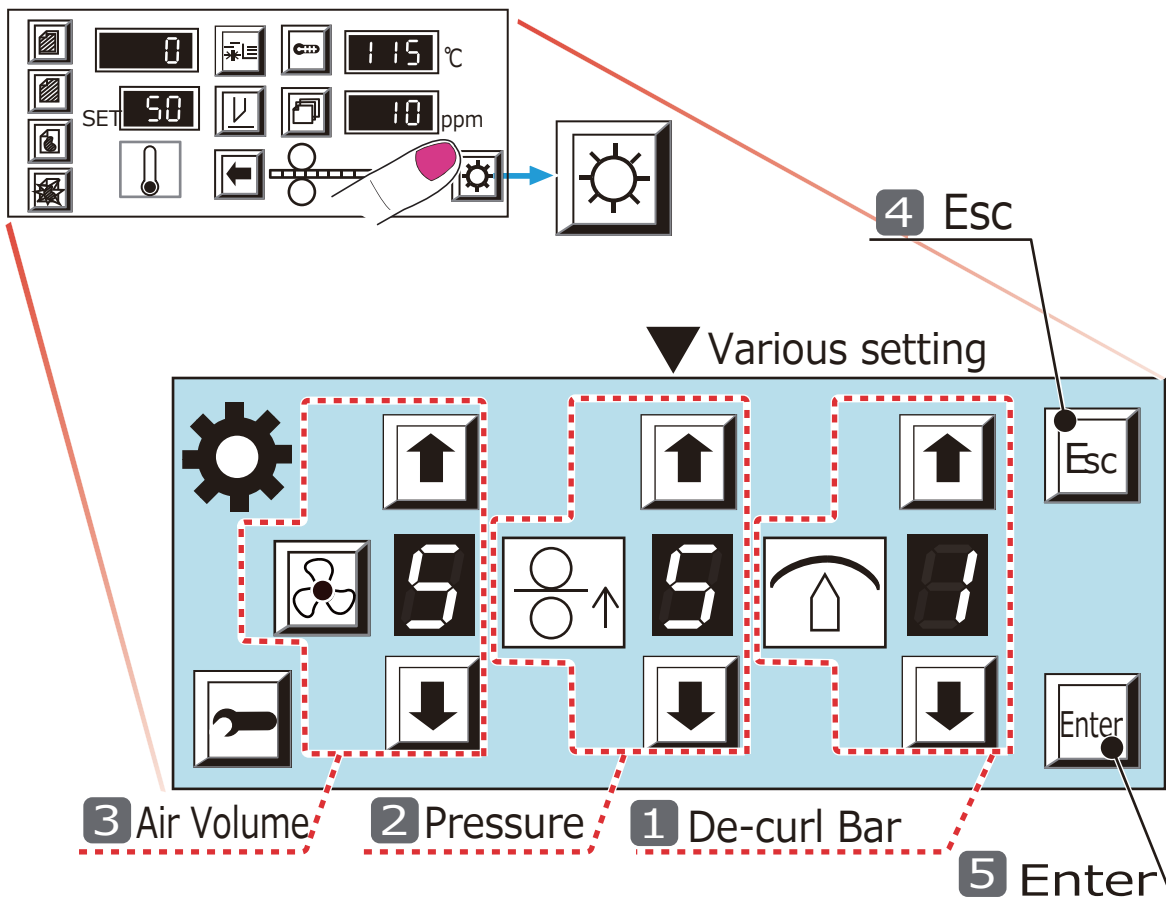


Icon	Set	Explanation
<b>1</b> 	This icon shows Laminates use	Selected Mode icon from 4 types of operations shows here. This page shows "Laminates use" as example.
<b>2</b>  	Temperature adjust icons	One push of ↑/↓ changes 5°C up/down. The screen shows two temperatures, the lower one for the "Heat Roller" and the upper one for the "Pre-Heat Roller." (If the heat roller is set to 120°C, the temperature will rise to 140°C automatically.) Initially, the temperature is set to rise by 20 degrees, but this can be changed in the service man mode.
<b>3</b> 	Enter (Confirm)	Pressing this icon after set the value when need to record. The number is recorded and go back to "Home screen".
<b>4</b> 	Esc (Cancel)	Pressing this icon when cancel the value setting. The pressed number is canceled and go back to "Home screen".

The machine changes the temperature and speed to standard value automatically for each operations when an operator selects the mode icon. Normally, proceed with original setting. However, please change the speed on this screen if necessary depending on the paper type and film.

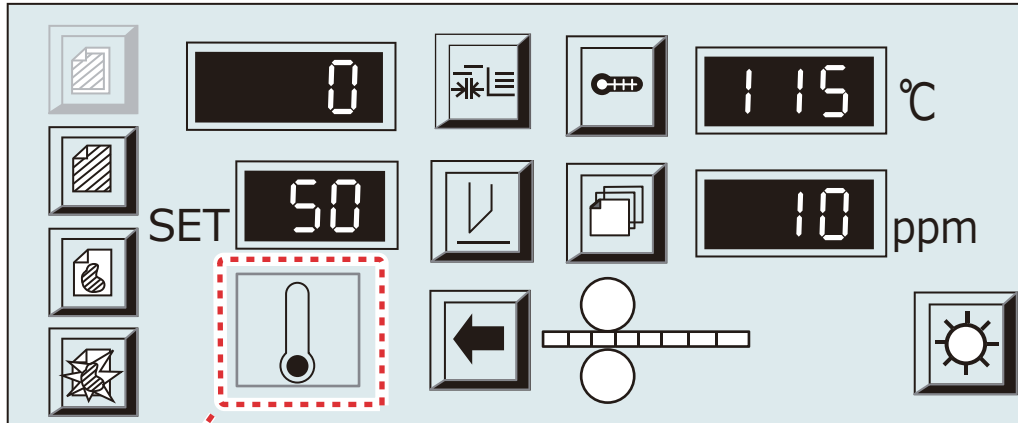


Icon	Set	Explanation
<b>1</b> 	This icon shows Laminate use	Selected Mode icon from 4 types of operations shows here. This page shows "Laminate use" as example.
<b>2</b>  	Speed adjust icons	ppm= paper per minute as A4 1 push for 1 paper more /less. Adjustable value is 10~50. Beep sounds when exceeding this range.
<b>3</b> 	Enter (Confirm)	Push this icon after set the value when need to record. The number is recored and go back to "Home screen".
<b>4</b> 	Esc (Cancel)	Push this icon when cancel the value setting. The pushed number is canceled and go back to "Home screen".



	Icon	Set	Explanation
1		De-curl Bar adjust	Use this function when the paper curl happens. There are 1 to 5 steps, with 1 being no bar and 5 being the maximum bar rise.
2		Heat Pressure adjust	Adjust the force with which the Platen Roller contacts the Heat Roller. 1 is the lowest and 5 is the highest. Increase the pressure when transfer defects occur in foil processing (not all problems can be solved by applying pressure) or when processing embossed paper and etc,. (Not all papers can be processed.)
3		Air volume adjust	Adjusts the air volume of the paper handling on the Feeding Table. It can be adjusted in 5 steps from 1 to 5. Adjust the air volume while observing the paper handling condition, for example, reduce the air volume when the paper is thin and increase it for thick papers.
4		Enter (Confirm)	Pressing this icon after set the value when need to record. The number is recored and go back to "Home screen".
5		Esc (Cancel)	Pressing this icon when cancel the value setting. The pressed number is canceled and go back to "Home screen".

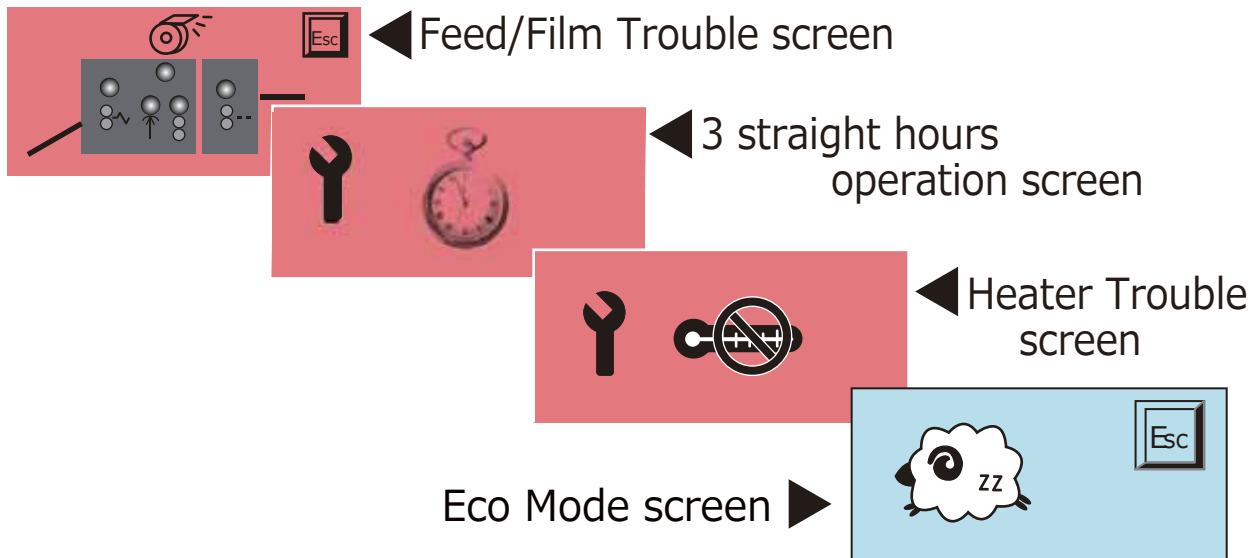
▼ Home screen



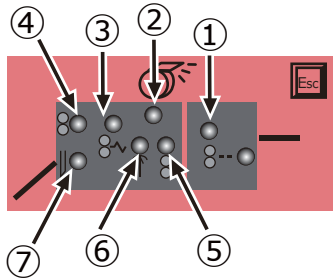

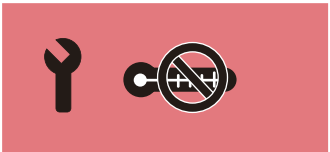

Check to see if the paper feeding section is securely connected to the main unit or if any cover is open.

Icon	Status	Explanation
	Cover open Connection error	The paper feed section is not securely connected or the cover is open. Check to see if the paper feeding section is securely connected to the main unit or if any cover is open.
	Heating Up	Indicates that the heater temperature of the Heat Roller is rising. When the set temperature is reached, a buzzer sounds and the icon changes to the "Start Available" icon shown below.
	Ready To Start	The temperature of the Heat Roller has risen to the set value, indicating that the machine is ready to start operation. Pressing the start button once in this state will raise the paper feeder and start the paper handling by sending out air. When the button is pressed again, the operation starts, the paper is fed, and the screen changes to the "automatic operation screen" shown below.
<p>▼ Auto Operation screen</p>		<p>This icon shows "During automatic operation". When this icon is pressed, the Coater will stop. Stop timing depends on process mode.</p> <p>•Laminate use: Machine stops operation when the tail edge of the last paper Roller section. (paper stays in the machine) This protect the Heat Roller from the film error (glue issue).</p> <p>•Spot Gloss/Foil use: Machine stops operation when the last fed sheet is processed and discharged. (No paper in the machine)</p>
	Auto Operation / Stop button	<p><b>Push this button 2 consecutive times for Emergency Stop</b></p> <p>Pressing the red button twice in succession instantly stops the machine regardless of the mode.</p> <p>[Caution]If thicker paper is processed in the UV varnish/Spot Gloss/Foiling, the emergency stop may exert an undue tensile force on the film, causing a tear at the edge of the film. Please make sure there is no damage after using emergency stop.</p>





cover is open.

Screen	Explanation
 <p>Feed/Film Trouble screen</p>	<p>Turns black color when the below situation.</p> <ul style="list-style-type: none"> <li>① Feeding error, double feeding error happens.</li> <li>② Film error, film empty happens.</li> <li>③ N/A</li> <li>④ If the burst roller does not go to the upper or lower dead center in a certain time.</li> <li>⑤ When the platen roller could not detect the origin</li> <li>⑥ If the De-curl Bar does not return to the home position.</li> <li>⑦ Film Cutter does not return to the home position.</li> </ul>
 <p>3 straight hours operation screen</p>	<p>This screen comes up and machine stops when operated 3 straight hours. Heat Roller area gets hot by long operation, and it cause of some troubles. Turn off the power and take interval for a while until all parts cool down enough.</p>
 <p>Heater Trouble screen</p>	<p>This screen comes up when the Heat Roller temperature cannot get as set temp. in 7 mins. Turn off and on the power to clear this error. Or when there is more than 20 degree C difference between 2 Thermistors B03 and B04 (Heat Roller section). Make sure these parts are set correctly or if there is dirt between Thermistor and Heat Roller.</p>
 <p>Eco Mode screen</p>	<p>This screen comes up when no operation more than 20 mins after Heat Roller temp. reached as set temp. (After start button comes up). Heat Roller temp. turn down to 100 degree C. Push "Esc" button on upper right and clear the eco mode, then the Heat Roller turns up to the set temp. If 40 mins more from then without any operation, machine gets OFF mode from sleep mode and cut off the heating circuit. Turn off the power and put 10 sec interval to clear this mode. Turn on the power and possible to operate again when Heater Roller turns up the temp. as set.</p>

This Laminate device is used to attach 3-inch laminating film to the top of the machine.

### 1 Ready the Laminate Rack

Unpack the Laminate Rack to set the machine.

### 2 Fix the Lever

Refer to the figure on the right to attach the lever to the Laminate Rack. The lever itself is threaded, so it must be tightened by hand.

### 3 Remove Top Cover (a)(b)

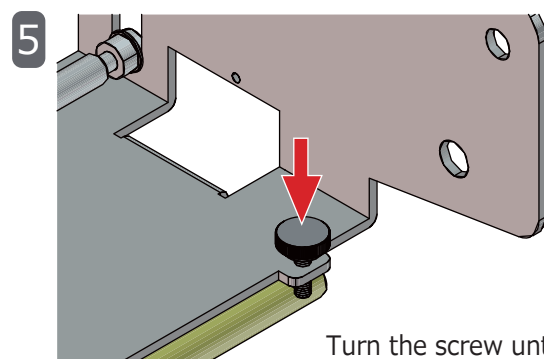
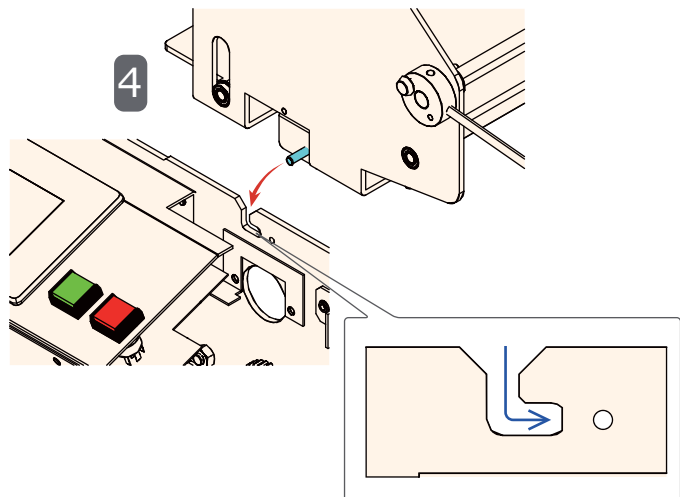
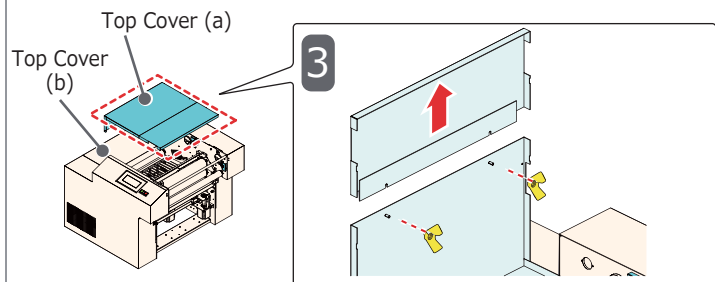
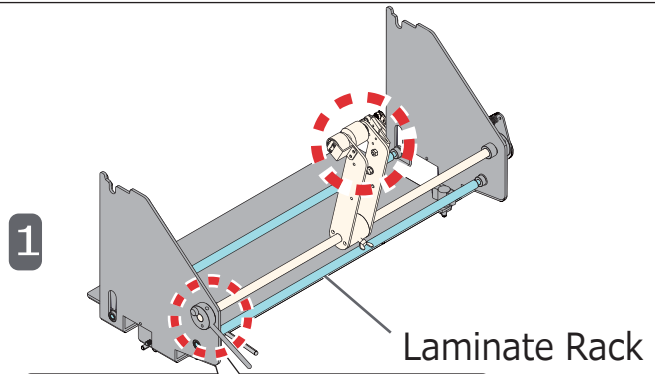
Remove the Top Cover (a) and loosen the wing nut. Then one side of the Top Cover (a) (the smaller one) will come off. **Keep the smaller cover as it will not be used during lamination.** The Top Cover (b) can be removed by pulling it up at a slight angle.

### 4 Install the Laminate Rack

Insert the part with the protruding screw at the bottom of the Laminate Rack into the ribbon device fixing part of the machine body.

### 5 Fix the Laminate Rack

Insert the part with the protruding screw at the bottom of the Laminate Rack into the Laminate Rack fixing part of the machine body.



Turn the screw until it hits this shaft and fix it in place.

# 3

# Laminate

## 3-1-2: Film set

6

### Ready Laminate Holder

Regular core size is 3inch for original laminate film.

7

### Remove Back Flange

Loosen Tumb Screw on Flange on back side, and remove the Back Flange.



Do Not change the position of Front Flange. Front side is base position.

8

### Set Laminate Film

Insert the Laminate Film tube into the shaft from the side where the part has been removed. Insert the film until it hits against the stopper on the other side.



Film set is defferent depending on the glue side of the Laminte film. Refer the right figure.

This manual explain as when use the Laminate film which has glue on back face.

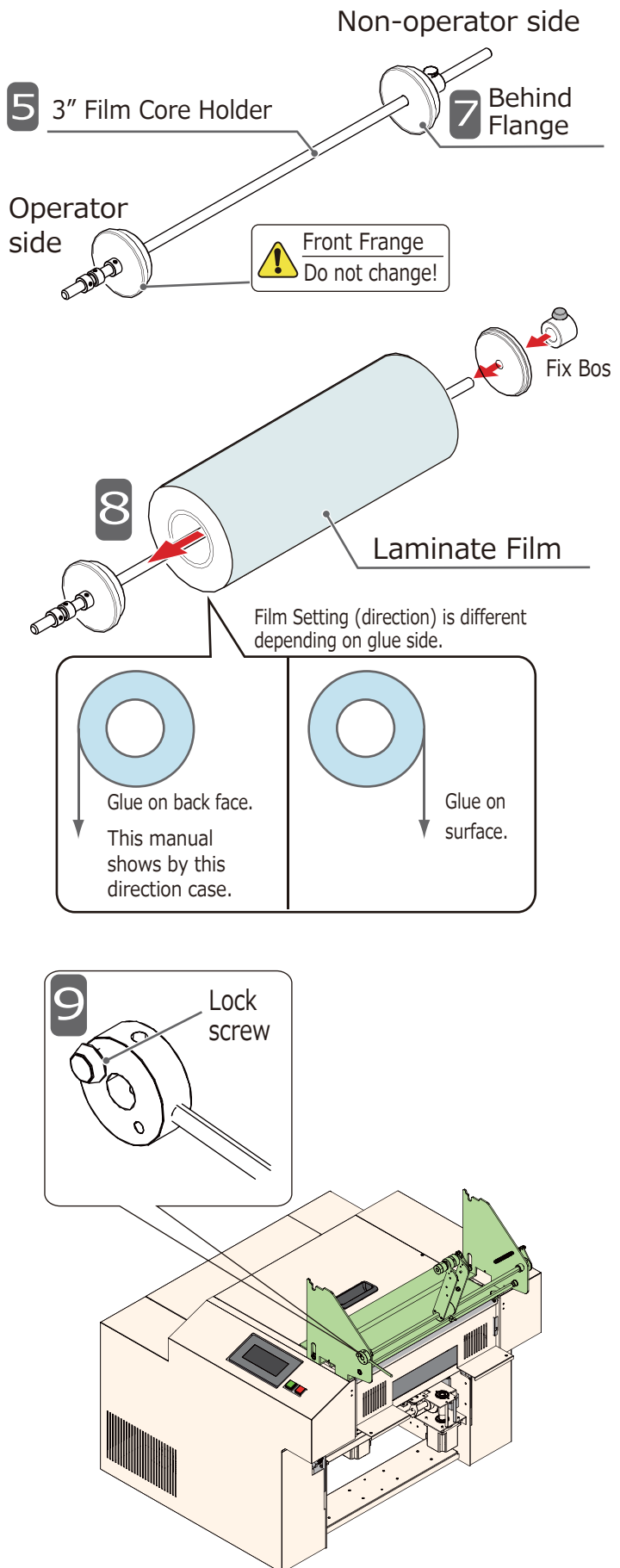


New laminating film is very heavy. Please work with two people as much as possible.

9

### Unlock The Brake Roller

Loosen the locking screw on the brake roller section so that the brake roller section can move freely.

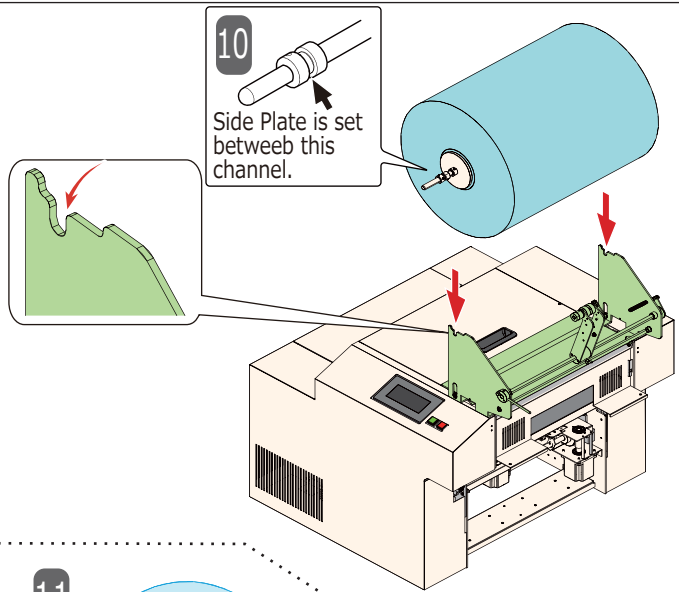


# 3

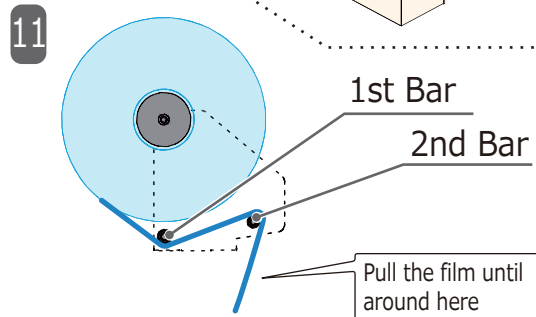
## Laminate

### 3-1-3: Film set

**10 Put the Laminate Film**  
Channel between 2 Callors on the Laminate film shaft fits to the Side Plate of main body while pulling the lever toward you to make room for the laminate to be placed on the Film Rack. When the lever is released, tension is applied to the film.

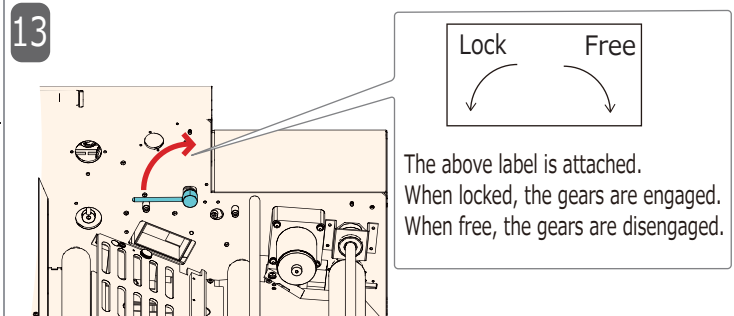


**11 Unwind the film**  
Pass the film under the first bar and over the second bar, as shown in the figure. In addition, let the film out about 120 mm from the second bar.

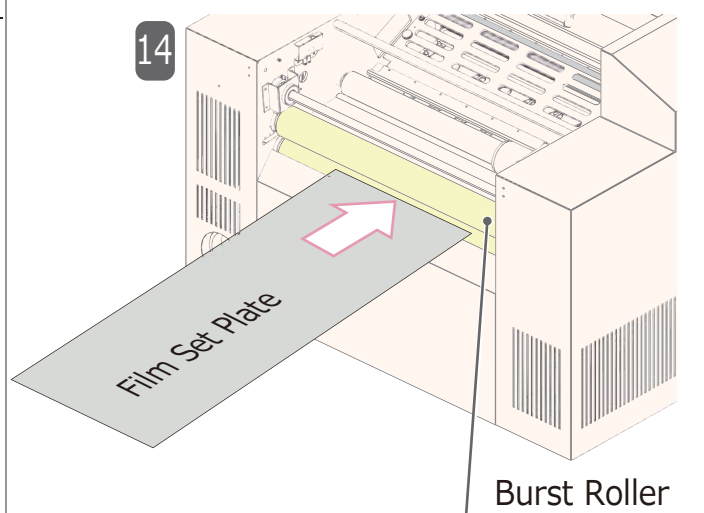


**12 Lift down Feed Table**  
Lift down the Feed Table by Knob until the bottom position that can see the Heat Roller.

**13 Keep the gear-operated cam turned to the free side**  
Turn the lever inside the machine on the operation panel side toward the free side. (\*This operation is to make it easier to set the next item.)



**14 Insert Film Set Plate**  
Pass the accessory Film Set Plate from the paper exit side to the paper supply side. Push it through between each roller until it comes out from the paper feed side.



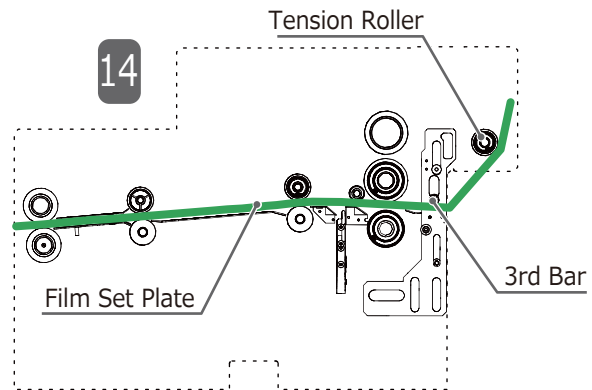
※ As shown in the figure on the right, first insert the Film Set Plate between the burst rollers and push it toward the paper feed side. If it is difficult to feed the Film Set Plate through the rollers, turn the rollers by hand and feed the Film Set Plate.

# 3

## Laminate

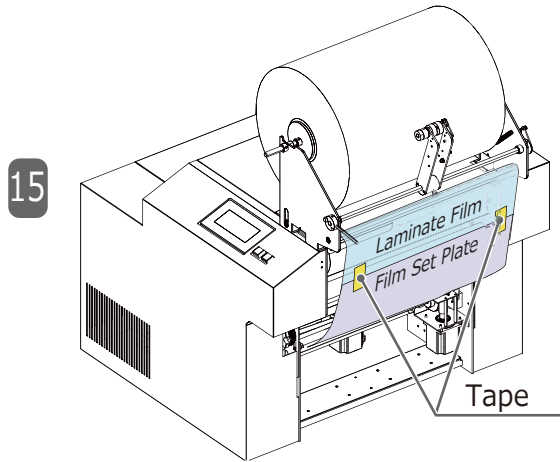
### 3-1-4: Film set

※The figure on the right shows the Film Set Plate inserted to the paper feed side of the main unit.  
(the green line is the Film Set Plate)  
Refer to the figure on the right to set the Film Set Plate.



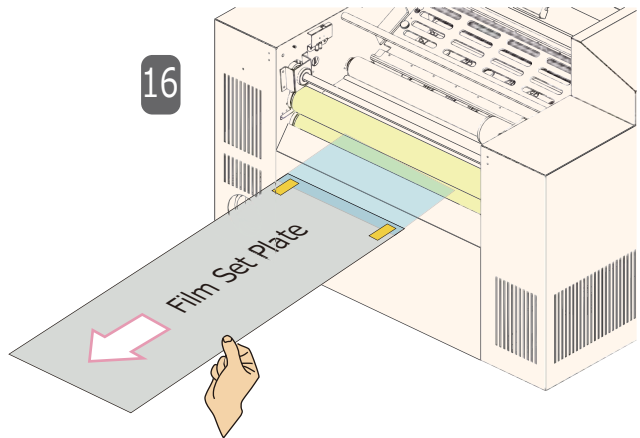
#### 15 Tape the film to the Film Set Plate

Attach the film to the Film Set Plate from the paper feed side of the main unit with tapes.  
(If you use only one piece of tape, the film may curl and get caught.)



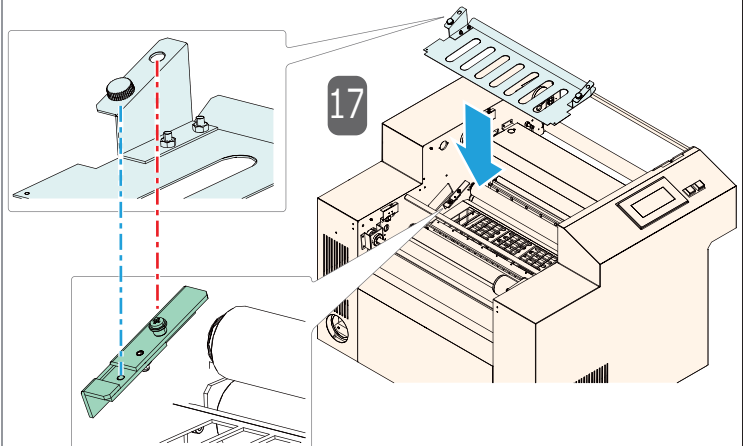
#### 16 Pull out the Set Plate from exit side

Pull slowly because vigorous pulling may cause the tape to come off inside the machine.  
Remove the tape when the film part comes out of the Burst Roller.



#### 17 Set Hold Plate

Set the Hold Plate as shown in the figure to the right.  
After mounting, secure it with knob screws.



#### 18 Set the Covers

Put on the Covers removed in step 3.

# 3 Laminate

## 3-2-1: Touch Panel Set

**1 Power On**  
 Plug in a power cord and power on the machine.  
 "During reading" screen shows up and home screen comes up for a while.

**2 Push= Chose "Laminate mode"**  
 There are 4 icons on the left side of Home screen. The top icon is "Laminate mode". push the icon button.  
 The icon turns gray color when you chose and

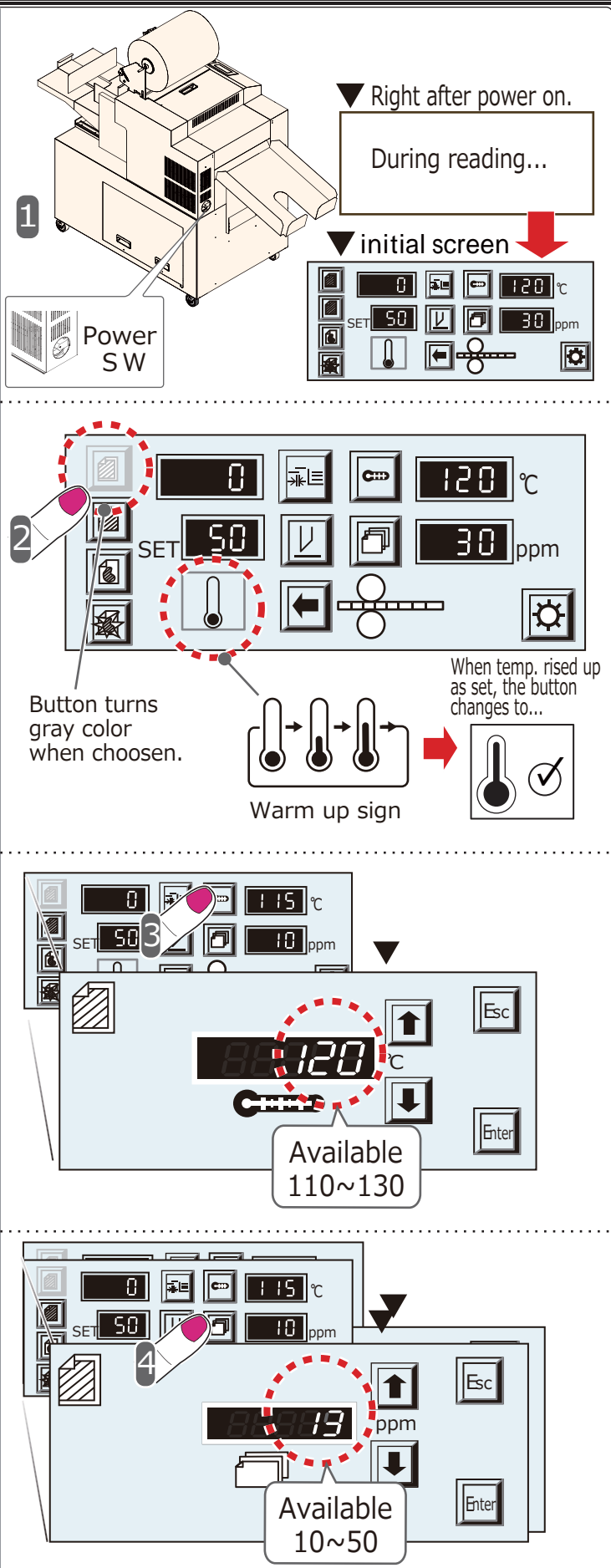
**Note** Initial set temperature of laminate function is set to "120". If this set temp. is fine with your laminate film, skip the next step 3 and go to step 4.

**3 Push= Set Temp.**  
 "Temp Set" screen comes up. Change the temp as suitable by up-down arrows buttons, and push "Enter" button when set. Then the set temp. is recorded and Home screen comes up. Possible set temp.= 110~130 degreeC for laminate use.

**Note** Initial set speed of laminate function is set to "20". If this set speed is fine with your laminate film, skip the next step 4 and go to step 5.

**4 Push= Set Speed**  
 "Speed Set" screen comes up. Change the speed by up-down arrows buttons, and push "Enter" button when set. Then the set speed is recorded and Home screen comes up.  
 Available set speed= 10~50 ppm.

**Note** The range of speed that can be entered is 10 to 50, but if the cutter (separation) is turned on, use a setting of up to **40 PPM** for processing. (50PPM should be used without the cutter.)



# 3 Laminate

## 3-2-2: Touch Panel Set

### 5 Overlap

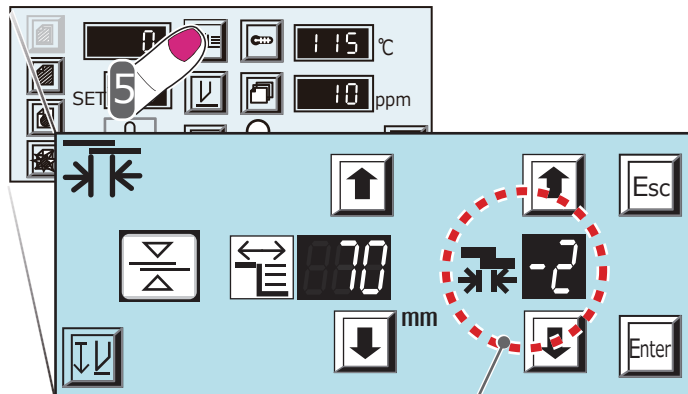
"Feed Set" screen comes up. Change the "Overlap value" by up-down arrows buttons, and push "Enter" button when set. Then the set value is recorded and Home screen comes up.

Available set value= -8~5

0= No gap between sheets.  
 5= Gap between sheets is maximum.  
 -8= Overlap value is maximum.  
 Adjust to fit the paper

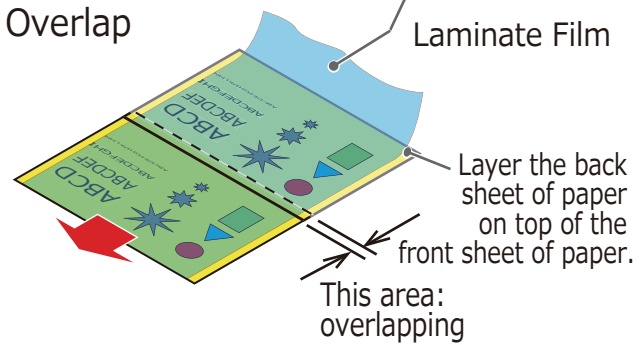


Flying Knife slides at the overlapped position between sheets and cut the film. Impossible to separate the sheets without overlap



### Overlap

Laminate Film

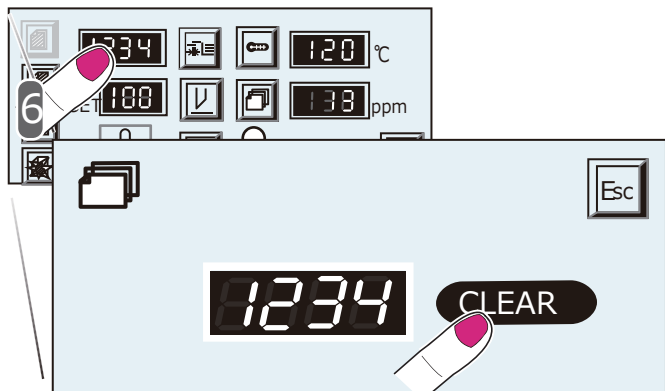


### 6 1234 Push= Clear counter number

"Clear Set" screen comes up.  
 Push **CLEAR** button, then the number will be "0".  
 Push "Esc" button and Home screen comes up.  
 There is no problem even if it is not cleared.



Preset number on Home screen is previous set value. The next step is unnecessary when the set value is okay. Go next page.



### 7 100 Push= Set Preset number

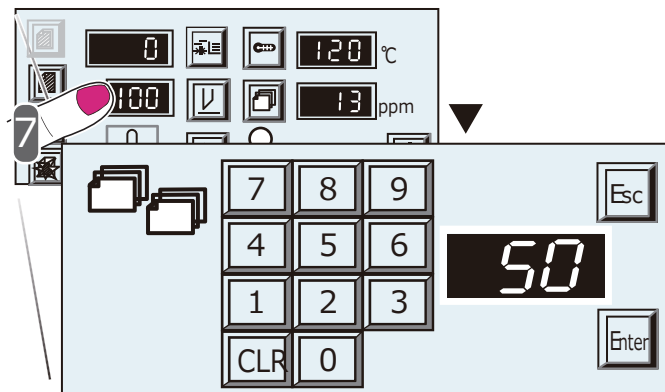
"Preset Set" screen comes up. Change the number by number buttons, and push "Enter" button when set. Then the set value is recorded and Home screen comes up.

[Preset]

Sheets are operated as preset value and pause when set value is done. Start again when push "Start" button (repeat).



If the number of presets is not set (0 is displayed), all the paper on the feed table will be processed. After that, the machine stops as a paper feeding error.

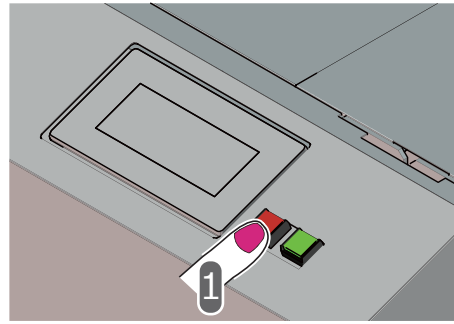


# 3

## Laminate

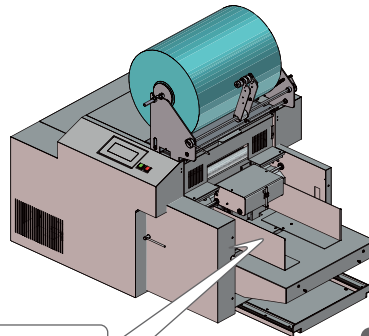
### 3-3-1: Set Paper and operate

- 1** Feed Tray at lowest position  
Turn the Handle and make the Feed Tray at the lowest position for paper loading.

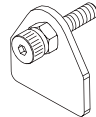


- 2** Front Side Guide hits the "Stopper"  
Side Guide on operator side needs to hit the Stopper (top of the screw).

[Note] "Stopper"  
Top of this screw position is very important for laminating. This parts is Stopper.



Stopper



Paper Side Guide hit this Stopper.



Caution

Do not change Stopper position

This Stopper is front standard position. Therefore do not change this original standard position.

- 3** Load the papers

- ① Separate well the papers.
- ② Load the paper as face up.
- ③ Set as right picture (shows as A4 size)
- ④ Papers touch the Side Guide at operator side.
- ⑤ Papers hit the front plate.

[Note] Separate well the papers and insert the air between sheets. This prevent the double feeding issue. (Ref. 「1-3」) UCOS air jogger helps to remove static between papers.

- 4** Set the Guides

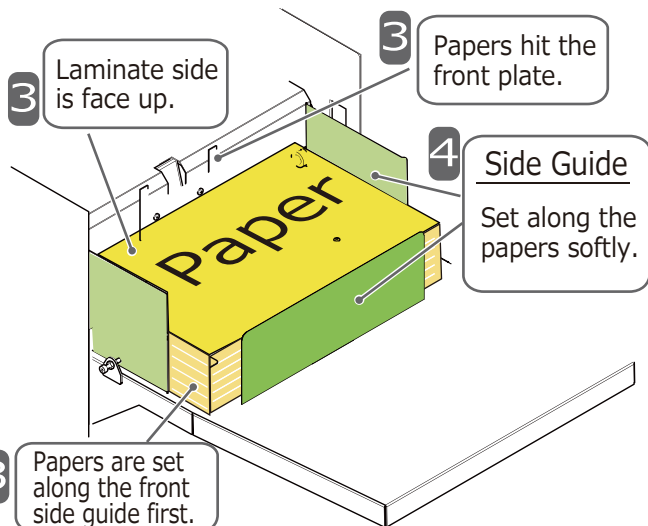
Set the Side Guide on non-operator side and Eng Guide softly.



Caution

Do not push strongly.

Do not push the papers by guides strongly or paper feeding cannot be operated smoothly.





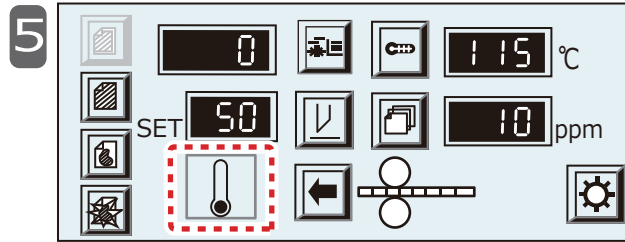
# 3 Laminate

## 3-3-2: Set Paper and operate

### 5 Check the Temperature

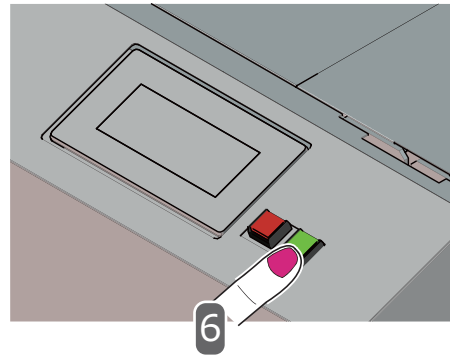
! icon on Home screen changed to ! icon.

This shows the heater temp. reaches the set temp. Please wait until the start button comes up for a while.



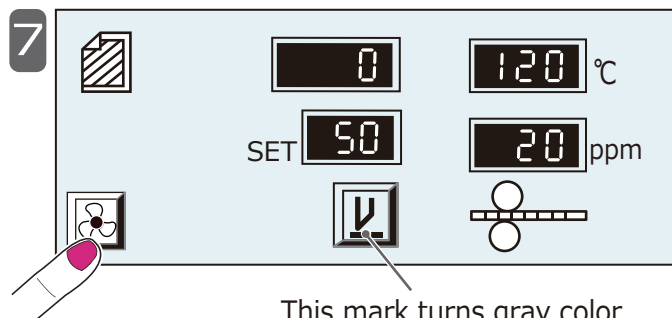
### 6 Push Start button

Push Start button, then the Feed Tray is lifted up and the air blows to separate the papers from front. Paper is not fed yet at the time.



### 7 Air volume adjust

Normally, the air volume adjustment screen is used to check the processing status for the paper to be used, but the air volume can be adjusted by pressing the feather symbol in the lower left corner of the screen even when the start button is pressed and processing air is flowing out. If necessary, adjust the air volume. If not necessary, skip this step and go to 8.

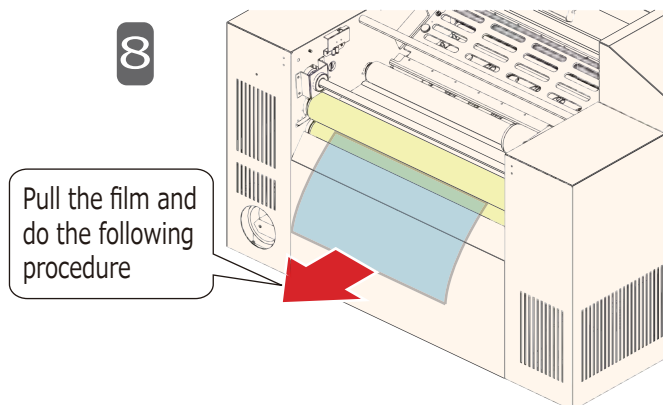


This mark turns gray color when the Cutter function is OFF

### 8 Pull Film

Laminate film is drooped at the exit section since "Film Insert" step.

**Make preparations to keep holding the film for next step.** At the next step, the film is discharged and going to rewind around Heat Roller when push start button. Prevent it. Leave your hand when the film is discharged correctly at the next step.



### 9 Push Start button again

Push Start button one more time, then the paper is sucked up to the Air Suction BOX and start feeding.

When use the preset function, the machine stops automatically by set quantity. Feeding starts again when push Start button again. When the number of sheets is not preset, the machine does not stop until the paper runs out or the stop button is pressed.

# 3

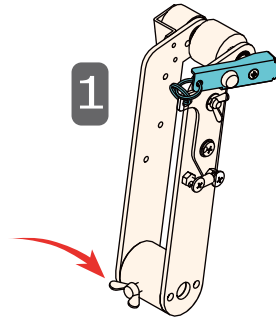
## Laminate

### 3-4-1: Film Set (with Edge Cutter)

This explanation is only for when use Edge Cutter. Please skip this step when not use the Edge Cutter.

#### 1 Adjust the Brake Roller position

Loosen the arrow knob screw and move the lamination brake section to the desired location. (so that it is about 5 mm inside the paper)



#### 2 Remove Cutter Cover

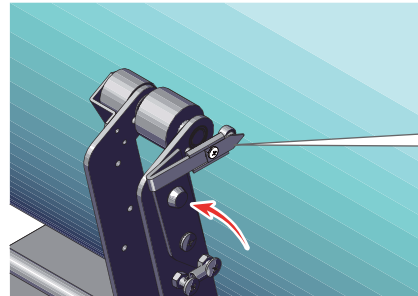
Remove the cover so that the cutter is visible.



**Beware of Blade**

The cutter blade is extremely sharp. Handle with care to avoid serious injury.

2  
3



Insert the Cutter into the film.

#### 3 Insert the Cutter into the film

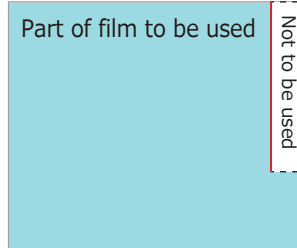
Loosen the knob screw shown in the figure to the right to allow the cutter section to move.

Insert the cutter into the film in this state. (The tip of the blade should enter the film about 1 mm.)

After inserting the cutter, fix the knob screw.

4

The area where the cutter is inserted and the cut is made.



Part of film to be used

Not to be used

Cut margins are out of the way and should be attached to the film itself.

#### 4 Pull out the film

When the film is pulled out with the cutter in place, the film will come out separated from the unused part. Please cut the film of the unused part and keep it attached to the film.

**\*When you are ready to this point, return to step "12 of 3-1-3" .**

The procedures for the three coating operations of UV varnish/spot gloss/foil other than lamination work are almost the same, so the explanation here is based on the case of "foil processing. Please change the set film, temperature setting, and speed depending on the type of work.

**Friction Gear**

There is a small Knob inside the machine (above the black roller near the entrance). This is for adjustment for film tension (Frictional force on the film). Unnecessary to adjust normally. Lower position is initial set.

**Adjustment**

If the transfer is not good, such as when processing fabric paper, loosening the Knob and raising it to the upper position may improve the transfer quality. (This does not guarantee perfect transfer.)



When the Knob is adjusted to the upper position, Film error may often occur, but this is not abnormal. This is due to the fact that the film tension is loosened, causing the film to sag. Normally, always use the film tensioned (lowered).

**1 Remove Top Cover (a)(b)**

The film cannot be loaded unless the cover is removed. **Unlike laminating, the smaller cover does not need to be removed.**

**2 Multipul Shaft: Un-wind Shaft**

Remove the Un-wind Multipul Shaft from the machine.

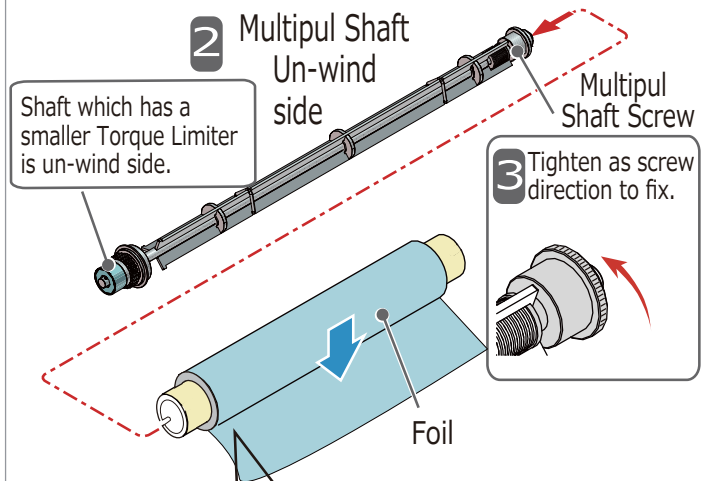
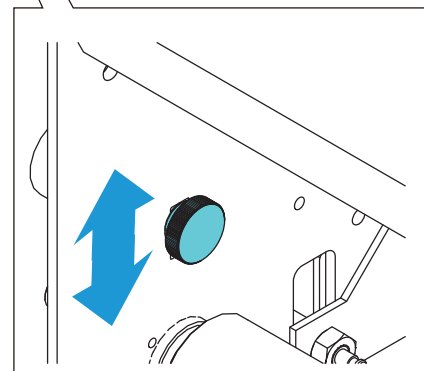
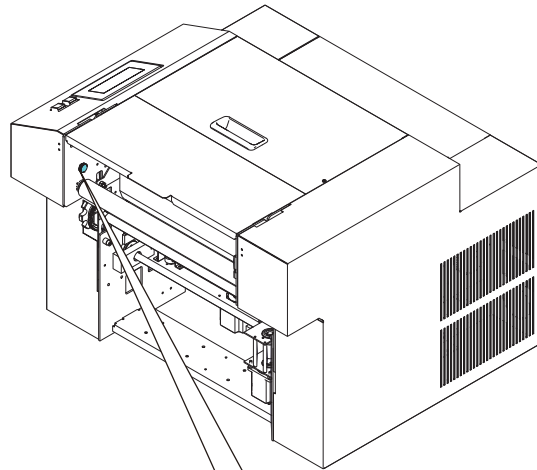
**3 Set the film on Un-wind Shaft**

- ① Loosen the Multipul Shaft Screw.
- ② Set the film roll on the center of shaft (\*).
- ③ Tighten the Multipul Shaft Screw and fix the paper core of film roll.

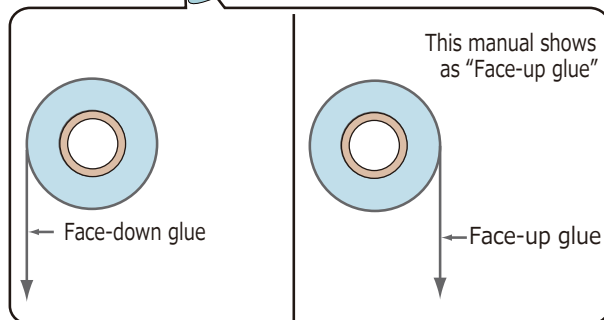
\* Set direction is different depending on the glue side, face-up or face-down. Ref. right picture.

This manual shows as the glue side is as face-down. Do not use the face-down roll by this explanation.

**The set direction is different.**



**3** Tighten as screw direction to fix.



**NOTE** There are number labels on the Multipul Shafts and on the machine itself where the shafts fit. Check the number on the Multipul Shafts and insert the shaft in the same number place on the machine.

#### 4 Set the Un-wind Shaft on the machine

2 holes on Unwinder Shaft fit to the 2 screws on the main body. Another side of Unwinder Shaft is set on the U shape channel on non-operator side.

#### 5 Multipul Shaft: **Re-wind Shaft**

Prepare a paper core for re-winding. The Shaft which has a bigger Torque Limiter is Re-wind side for paper core.

#### 6 Set the Paper Core on Re-wind Shaft

Set the Paper Core (rewind the used ribbon) on the center of Rewinder Shaft. Tighten by Multipul Shaft Screw and fix.

#### 7 Set the Re-wind Shaft on the machine

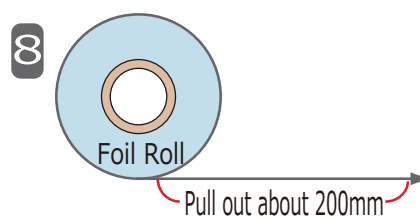
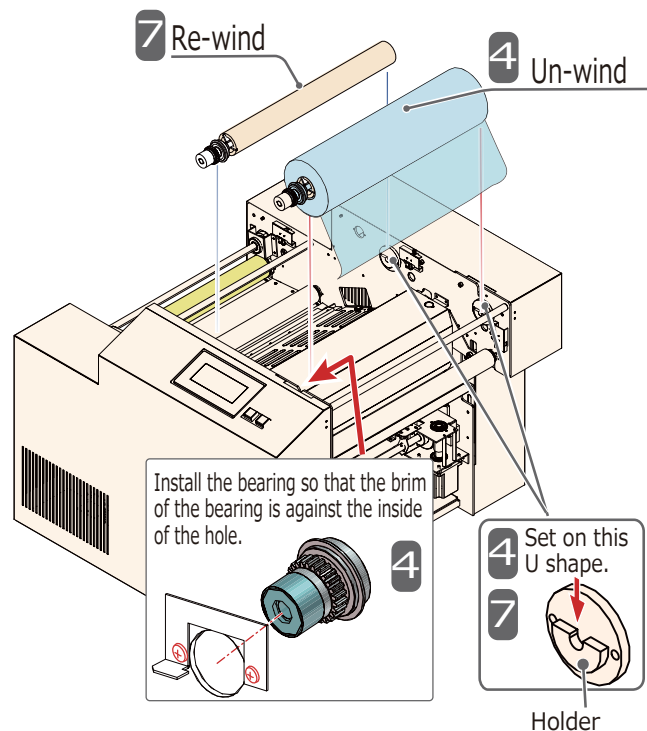
Insert the gear side of shaft into the hole on the plate on operator side. Set as the gears engage together. Another side of Re-wind Shaft is set on the U shape channel on non-operator side.

#### 8 Pull out the Film

Pull out the set foil film about 200 mm from the film roll.

#### 9 Open the Feeder section

Open the Feeder section from the main body to see the Heat Roller well.



## 10 Insert Film Set Plate

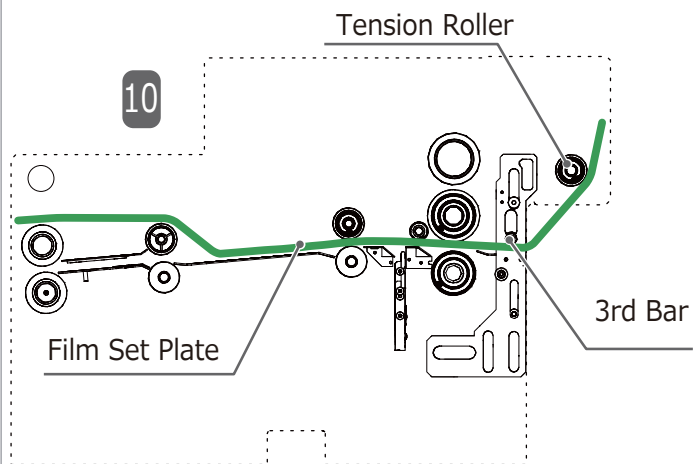
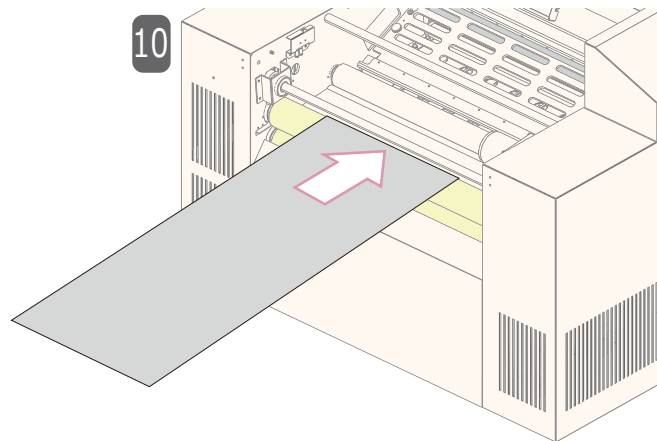
Insert the Film Set Plate from the paper exit side to the feeder side.

\*This is slightly different from the lamination process.

※Insert it between the **Burst Roller and the Shaft above it**, as shown in the figure to the right.

※The figure on the right shows the Film Set Plate inserted to the paper feed side of the main unit (the green line is the set workpiece).

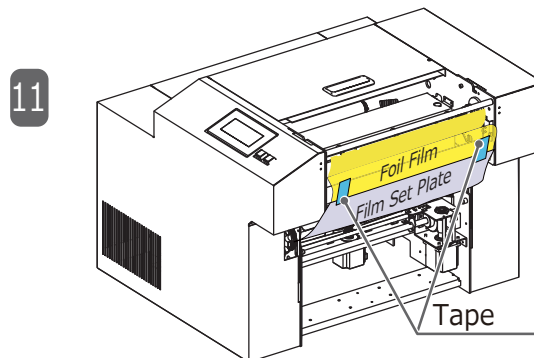
Refer to the figure on the right to set the Film Set Plate.



## 11 Tape the foil on Film Set Plate

Attach the film to the Film Set Plate from the paper feed side of the main unit with tapes.

(Please tape on 2 locations like as the figure in right. If you use only one piece of cellophane tape, the film may curl and get caught.)



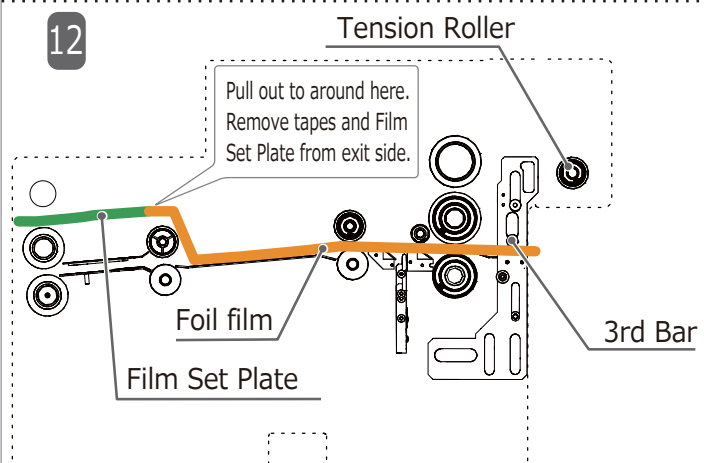
## 12 Pull out the Film Set Plate

Pull out the Film Set Plate from the exit side. Pull slowly because vigorous pulling may cause the tape to come off inside the machine.

When the film section reaches the point shown in the figure on the right, remove the tape and separate the set workpiece from the film.

The set workpiece should be removed from the paper exit side.

The film will be placed near the roller.



## 13 Set the Release Plate

Insert the release plate from the top. After inserting the peeling plate into the guide screw as shown in the figure on the right Push up the Release Plate in the direction of the arrow. Then the Release Plate is fixed.

## NOTE

The surface of the Separation Plate which the screws are **not visible is faceup** to set. Please note that the opposite face can be also installed. If they are installed backward, there is no mechanical problem, but the finished quality may be affected.

## 14 Set the Covers

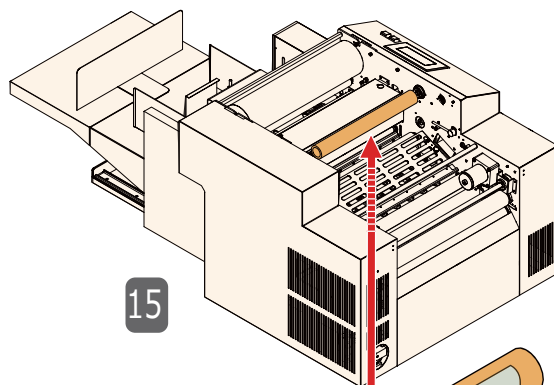
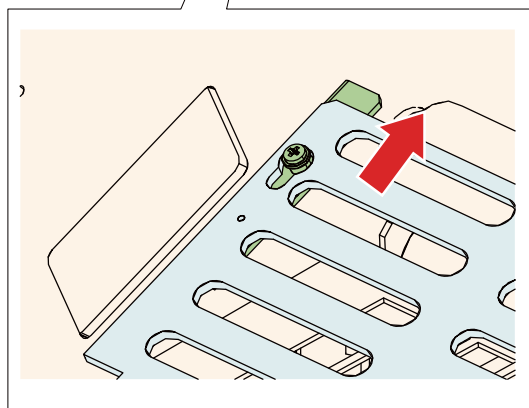
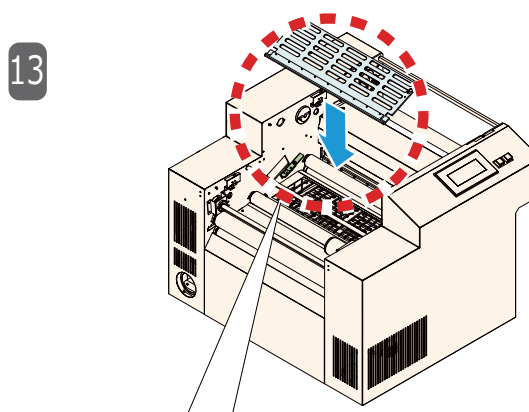
Put on the Covers removed in step 1.

## 15 Tip of film to Re-wind Shaft

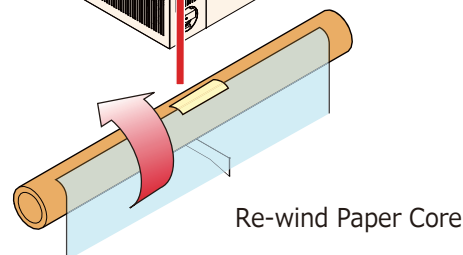
Attach the leading edge of the film to a Re-wind Paper Core with tape, and turn the Paper Core at least one full turn to wind the film around the core tube.

## 16 Set Covers

Put on the Covers removed in step 1.



15

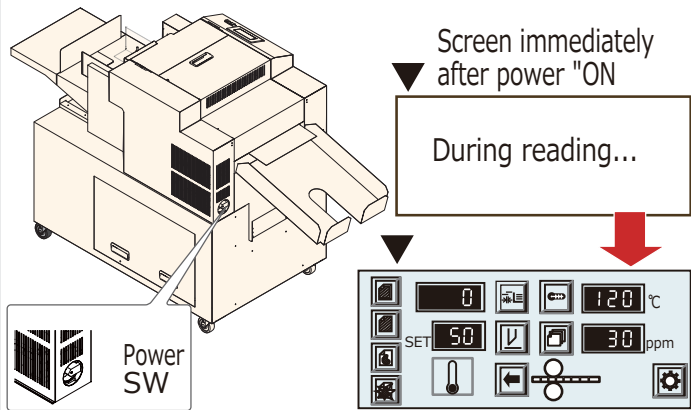


Re-wind Paper Core

Same process for all 3 types of coating, UV Varnish/Spot Gloss/Foil. Please adjust the temperature and speed depending on the ribbon and paper kinds.

## 1 Power On

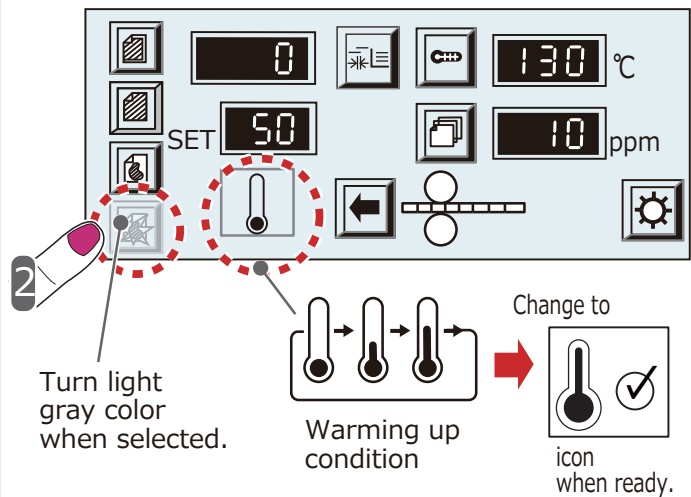
Connect the paper feed unit to the main unit. Plug in a power cord and power on the machine. "During reading" screen shows up and home screen comes up for a while.



## 2

- Go Ch2 when laminate use.
- = UV Varnish
- = Spot Gloss
- = Foil → Push= Chose

There are 4 icons on the left side of Home screen. Chose from dot circled icons (3). The icon turns gray color when you chose and push the icon button.



**Note**

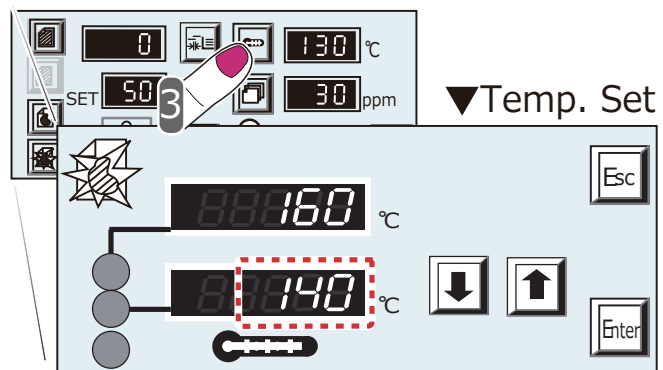
Initially, when you select a process, the suitable temperature for that process is set. If this temperature is fine with your film, skip this step 3 and go to the next step 4.

## 3

Push= Set Temp.

"Temp Set" screen comes up. Change the temp as suitable by up-down arrows buttons, and push "Enter" button when set. Then the set temp. is recorded and Home screen comes up. Possible set temp.= 140~160 degreeC.

※The temperature may be higher or lower than the above.



**Note**

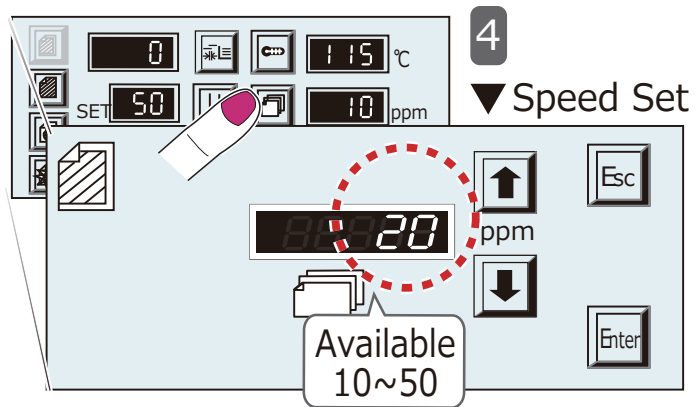
The temperature to be set is the temperature of the heat roller indicated on the lower side. The temperature of the upper auxiliary thermal roller cannot be input. When the temperature of the heat roller is changed, the temperature of the auxiliary heat roller is automatically changed as well. For details, refer to section 2-4 "Temperature Setting."

## 4 Push= Set Speed

"Speed Set" screen comes up. Change the speed by up-down arrows buttons, and push "Enter" button when set. Then the set speed is recorded and Home screen comes up.  
Available set speed= 10~50 ppm.

**Note**

Initially set is "20 PPM".  
If you are satisfied with that speed, skip this step 4 and proceed to the next step 5.



## 5 Overlap

"Feed Set" screen comes up. Change the "Overlap value" by up-down arrows buttons, and push "Enter" button when set. Then the set value is recorded and Home screen comes up.  
Available set value= -8~5

0= No gap between sheets.

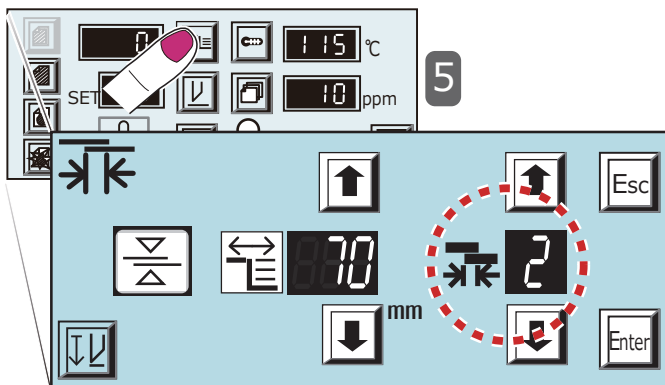
5= Gap between sheets is maximum.

-8= Overlap value is maximum.

Adjust to fit the paper

**Note**

Foil will not be transferred in areas where the paper overlaps.  
Please adjust in the positive direction to leave a gap.

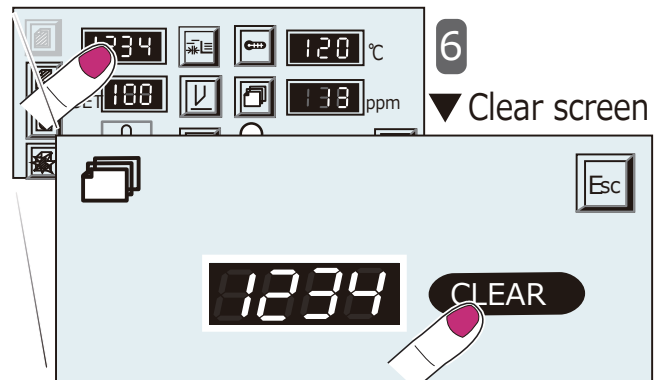


## 6 1234 Push= Clear counter number

"Clear Set" screen comes up.  
Push **CLEAR** button, then the number will be "0".  
Push "Esc" button and Home screen comes up.  
**There is no problem even if it is not cleared.**

**Note**

Preset number on Home screen is previous set value. The next step is unnecessary when the set value is okay. Go next page.



## 7 100 Push= Set Preset number

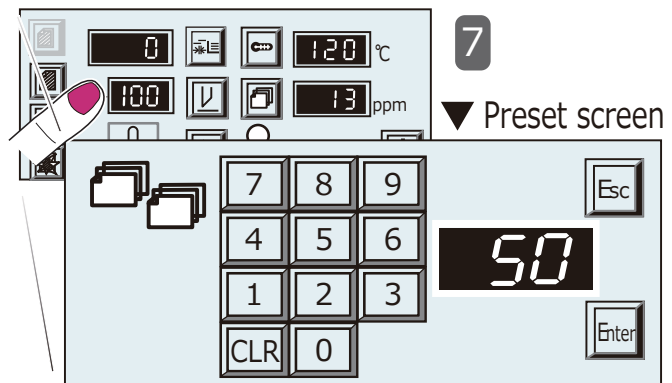
"Preset Set" screen comes up. Change the number by number buttons, and push "Enter" button when set. Then the set value is recorded and Home screen comes up.

[Preset]

Sheets are operated as preset value and pause when set value is done. Start again when push "Start" button (repeat).

**Note**

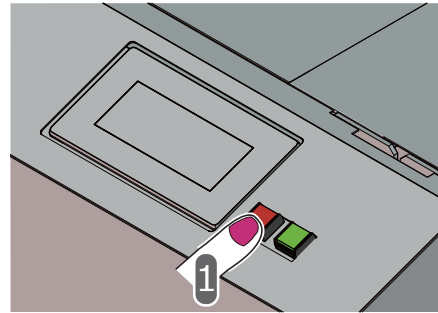
If the number of presets is not set (0 is displayed), all the paper on the feed table will be processed.  
After that, the machine stops as a paper feeding error.



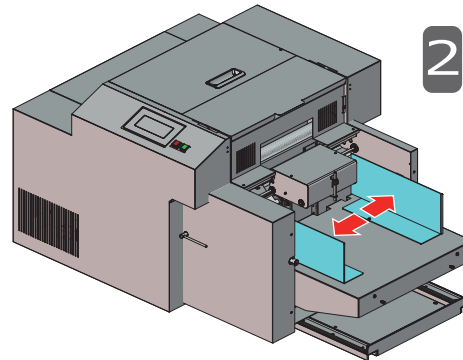


**1** Feed Tray at lowest position

Turn the Handle and make the Feed Tray at the lowest position for paper loading.

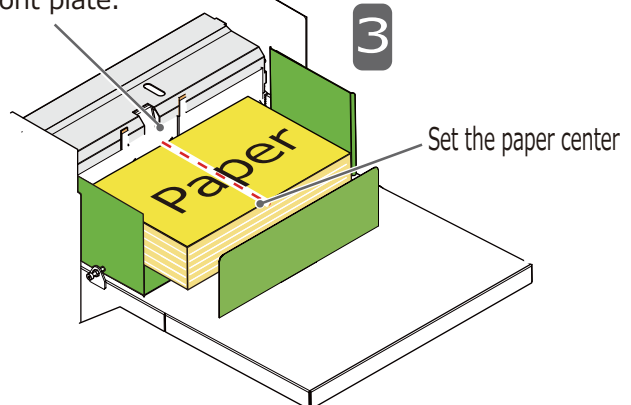
**2** Open the Side Guides

Open the Side Guides and End Guide for paper loading on next step.

**3** Load the papers

- ① Separate well the papers.
- ② Load the paper as face up.
- ③ Set as right picture (shows as A4 size)
- ④ Set the papers as center position.
- ⑤ Papers hit the front plate.

Papers hit  
front plate.

**4** Set the Guides

Set the Side Guides and End Guide along the paper sides softly.

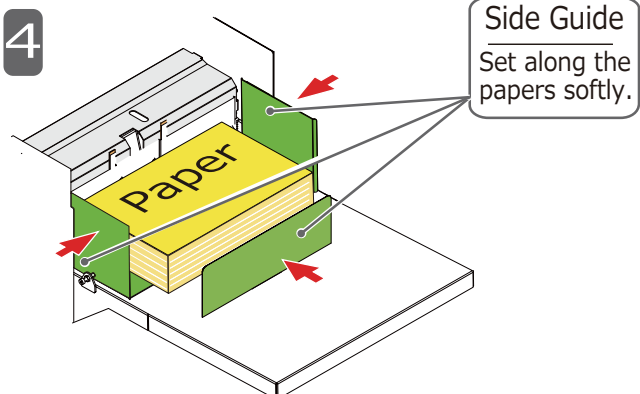


Caution



Do not push strongly.

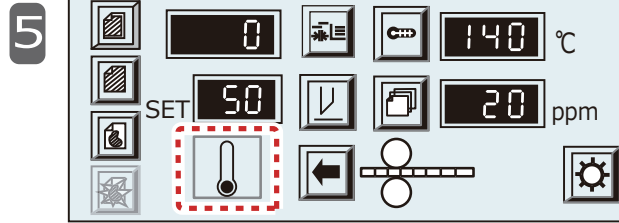
Do not push the papers by guides strongly or paper feeding cannot be operated smoothly.

**4**



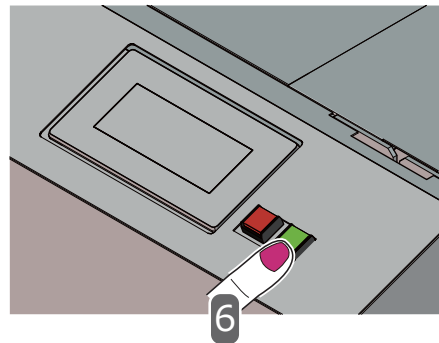
## 5 Check the Temperature

- 5  icon on Home screen changed to  icon.  
This shows the heater temp. reaches the set temp. Please wait until the start button comes up for a while.



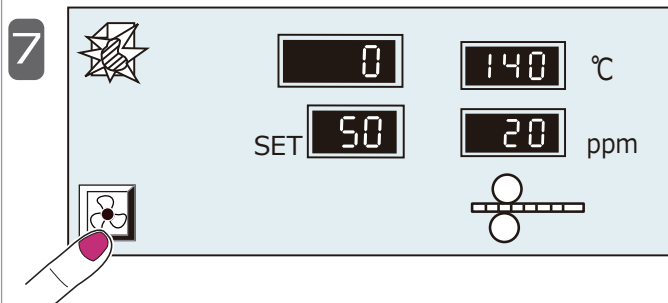
## 6 Push Start button

- 6 Push Start button, then the Feed Tray is lifted up and the air blows to separate the papers from front.  
Paper is not fed yet at the time.



## 7 Air Volume adjust

- 7 Normally, the air volume adjustment screen is used to check the processing status for the paper to be used, but the air volume can be adjusted by pressing the feather symbol in the lower left corner of the screen even when the start button is pressed and processing air is flowing out. If necessary, adjust the air volume.  
If not necessary, skip this item and go to 8.



## 8 Push Start button again

- 8 Pressing the "Start" button again causes the suction unit to suck up the paper and feed it out to start the operation.  
The machine automatically stops feeding the preset number of sheets. Press "Start" to resume feeding.  
When the number of sheets is not preset, the machine does not stop until the paper runs out or the stop button is pressed.

# 5

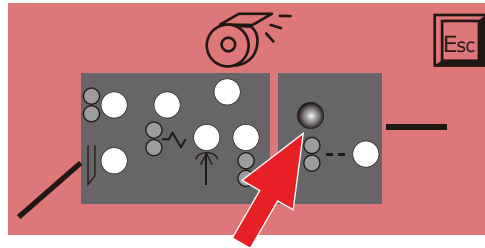
## Troubleshooting

### 5-1-1: Paper is not fed

**[Situation]**

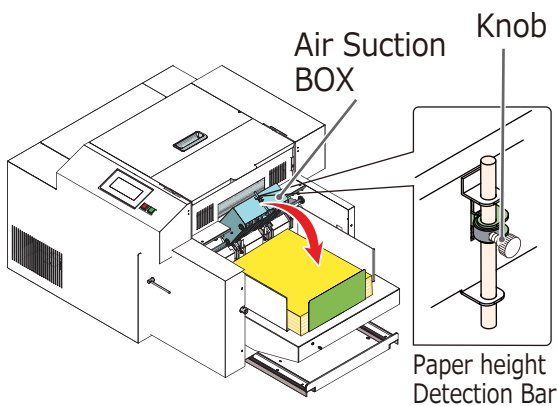
Loaded paper cannot be fed at all even if push the Start button. The error screen (on right picture) shows up.

Check the below steps and remove the issues for feeding error. The error screen can be closed when push 「Esc」 button.



Error screen shows up and this circle turns black color.

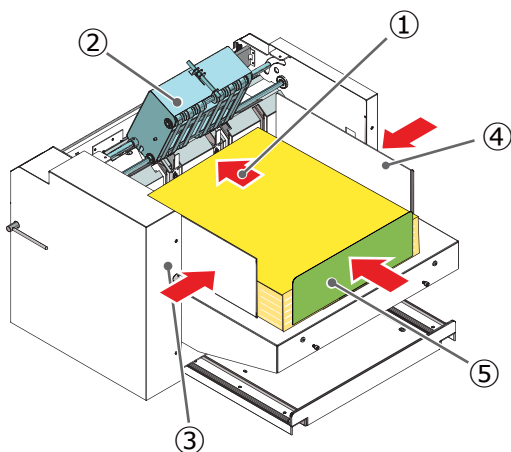
**Did you flip down the Air Suction BOX?**



**Refer the left picture and check the following points.**

- Is the Air Suction BOX is at the lowest position?  
→ Air Suction BOX must be parallel position with paper surface or paper cannot be fed correctly. Set at lowest position.
- Is the paper caught by the Height Detection Bar on the way?  
→ Paper cannot be sucked if the Height Sensing Bar doesn't touch the paper surface correctly. Check the bar if it can be lifted up and down smoothly by fingers.
- Double feeding happens?  
→ Make sure that the loading papers are well separated. Also check that the papers are separated well by air before start process.
- Is the height detection bar positioned too low?  
→ Normally, adjustment is not necessary, but if the height detection bar is too low (the space between the paper and the suction unit is too wide), it may not be possible to feed thick paper, etc. In this case, loosen the knob and raise the detection position (Narrow the space between the suction unit and the paper).

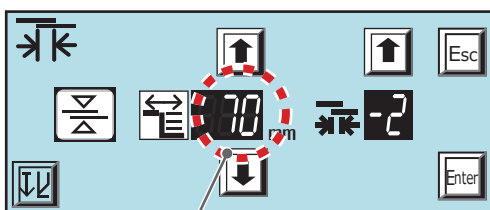
**Is the paper loading corect?**



**Refer the left picture and check the following points.**

- ① Do the loaded papers touch the front plate softly? (no gap)
- ② Is the Air Suction BOX is at the lowest position?
- ③ **【Laminate use】** : Side Guide on operator side hits this Stopper?  
**【Other supplies】** : Papers are set on the center position?
- ④ Doesn't the Side Guide on non-operator side hit the loaded papers too strong?
- ⑤ Doesn't the End Guide hit the loaded papers too strong?  
 Don't the papers curl too bad?  
 Did you separate the paper well before operation?

**Is the paper feeding value correct?**



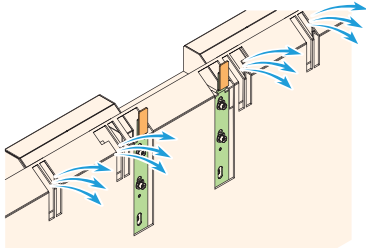
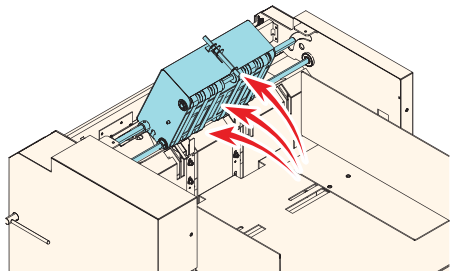
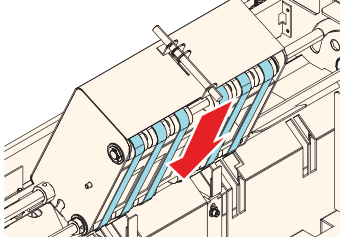
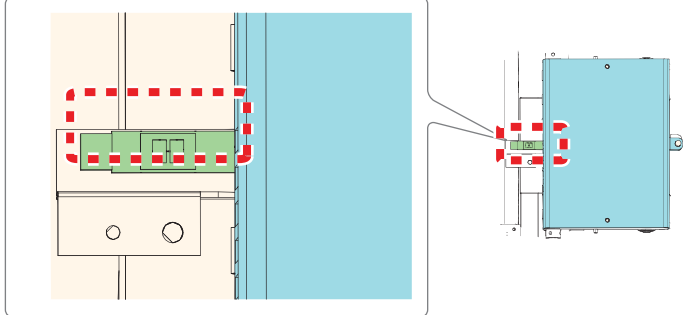
Paper feeding value set

**Refer the left picture and check the following points.**

- What is the setting value for the paper feed value?  
→ Normally, unnecessary to change. However, depending on the type, thickness, and length of the paper, slippage may occur during feeding, and the paper may not feed properly. In such cases, try increasing the paper feed rate setting.

# 5 Troubleshooting

## 5-1-2: Paper is not fed

Is the following paper feeding system normal?	■ If any of the following checks are abnormal, please contact the dealer
<input type="checkbox"/> Does the air blast from front come out?	<p>Check to see if air blust is emitted during the feeding operation and the leading edge of the paper bundle is blown up. (Air comes out from the area shown in the figure below)</p> 
<input type="checkbox"/> Does the Air Suction BOX vacuume?	<p>Check if air is sucked in from the bottom of the suction area during the paper feeding operation.</p> 
<input type="checkbox"/> Do the Feed Belts turn?	<p>Check if the 6x Feeding Belts turns during paper feeding operation.</p> 
<input type="checkbox"/> Is the paper left in the machine? (around sensor)	<p>Is there any paper left in the machine when a problem occurs and the paper is processed?            There is a sensor just behind the suction unit as shown in the figure below. If paper is on the sensor, the machine judges it as an error and does not feed paper.</p> 

# 5

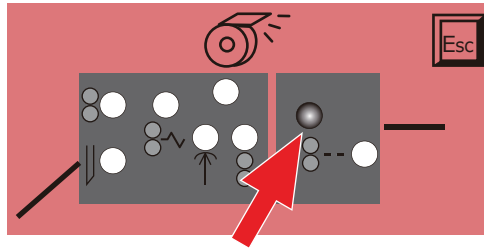
## Troubleshooting

### 5-2: Miss feed happens

[Situation]

Possible to feed, but the feeding error happens often.

Check the below steps and remove the issues for miss feeding error. The error screen can be closed when push [Esc] button.



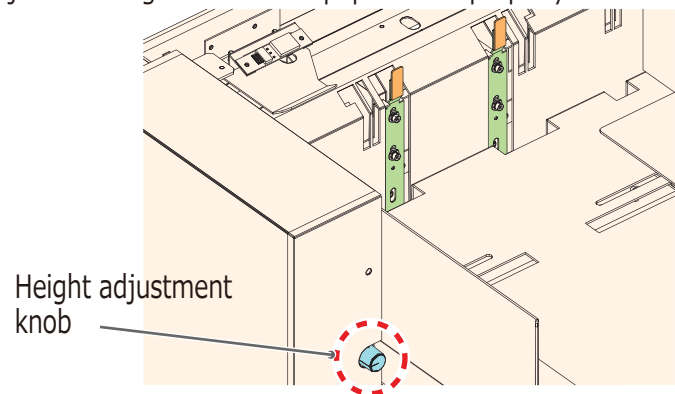
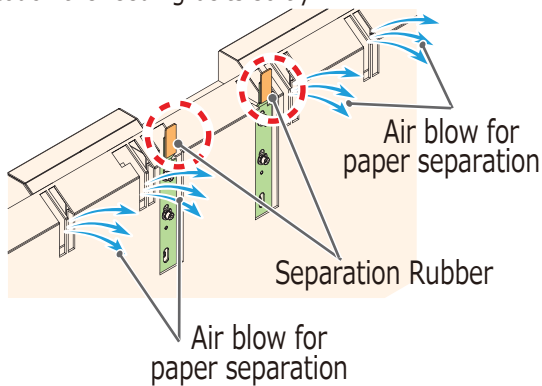
Error screen shows up and this circle turns black color.

**Is the Separation Rubber at correct position?**

**Check below figure to adjust the height.**

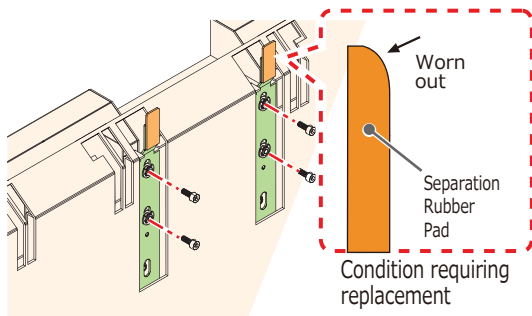
Separation Rubber position is too high  
→ miss feeding happens.  
Separation Rubber position is too low  
→ double feeding happens.  
Correct position: Top of Separation Rubber need to touch the feeding belts softly.

There is a knob on the cover on the left side of the paper feed table when viewed from the front. This knob allows you to adjust the height of the rubber pad to prevent double feeding. Adjust the height so that the paper is fed properly.



**Is the Pad worn out?**

**Refer the left picture and check the following points.**



- The top of the Separation Rubber pad worn out  
→ Double feeding happens.
- Separation Rubber is consumable parts. Please replace if the top of rubbers worn out like as right picture.
- Separation Rubber Pad is bonded on the metal plate. Impossible to replace only rubber part.

## [Situation]

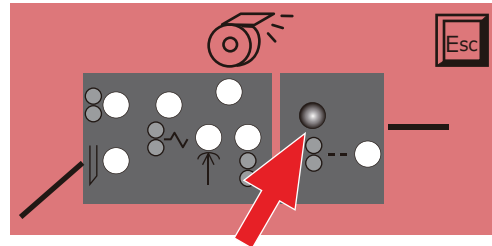
Paper cannot pass through the Heat section (between Heat Roller and Platen Roller) correctly.

Check the below steps and remove the issues. The error screen can be closed when push 「Esc」 button.

**Do not pull the film strongly**

Warning

Do not pull the film strongly from exit side even if the paper jams around Heat Roller, or winded film around Heat Roller may hit and break the thermistors on Heat Roller.

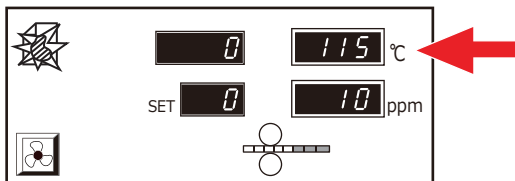


Error screen shows up and this circle turns black color.

Is the set temperature too high?

■ Check Heat Roller temperature.

## ▼ Auto operation screen

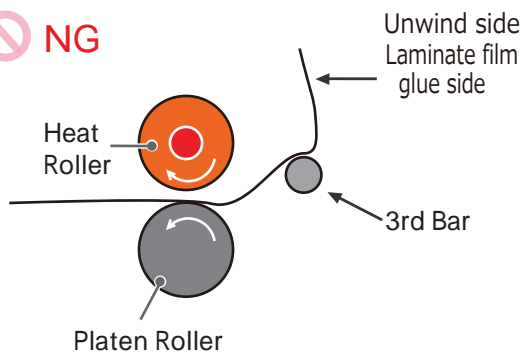


Suitable heater temperature is depending on the paper thickness, paper type, film thickness, feeding speed, tonner type and other reasons.

However if the setting temperature is too high, the hot melt glue attaches around rollers and work guides easily. Turn down 5~10 degreeC and try.

[Laminate use] Is the film set correct?

■ Check the notes before set the film.



- Film is not hooked to the 3rd Bar during film loading. If the film is not hooked to the 3rd Bar (film is above the 3rd Bar), the machine will detect a Film error and stop when feeding paper. Make sure that the film is passing under the 3rd Bar.

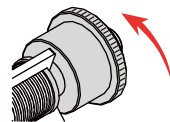
- Do not wait as long as possible after setting the film. If the film is left in place for a long time after it is loaded, the adhesive on the film near the Heat Roller will melt. The melted adhesive will adhere to the Platen Roller and paper guide when the next operation is started, making it impossible to feed the paper correctly.

[Other supply] Is the Multipul Shaft set correct?

■ Check the set of Multipul Shaft.

## Multipul Shaft Screw

Tighten the screw as arrow direction to fix the roll core.



If the Paper Core is not firmly secured in the Re-wind Shaft, the Paper Core will slip and the film cannot be rolled out and wound up reliably.

Try turning the Paper Core by hand. (both Un-wind and Re-wind sides). If the Paper Core is slipping, turn the rewind screw shown at left to fix it securely.

Also, check to see if the black rubber of the Multipul Shaft is broken.

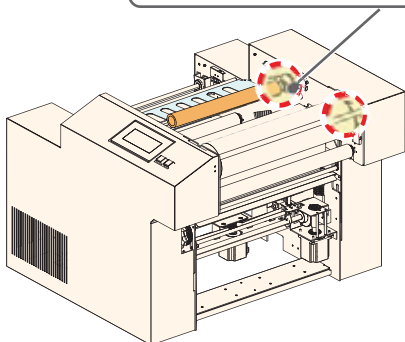
If the rubber on the Multipul Shaft is broken, the Paper Core will not be able to be held in place and will slip as well.

## Point



If the black rubber band is broken, a rubber band can be used as a first aid kit. Depending on the size of the rubber band, attach two or three layers of rubber bands to the place where the black rubber band used to be.

(It is a good condition if the rubber band is a little tight and wraps around the rubber band.)



# 5 Troubleshooting

## 5-4: Unable to cut/ Jam at Feed Roller

This section describes problems with paper not be cut by the cutter during the lamination process and paper jamming in the feed roller section.

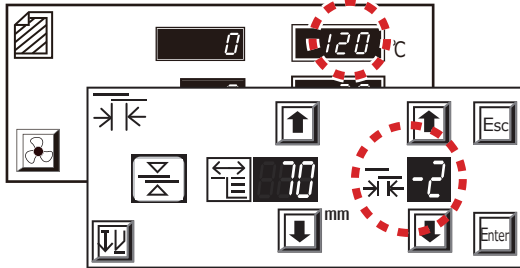
**Point**

If trouble occurs in the cutter or feed roller section, do not remove the paper immediately, but carefully check the positional relationship between the paper, film, and cutter.

Is Temp./ Overlap set correct?

■ Check the Temp. / Overlap setting

▼ Auto operation screen



If the temperature setting of the Heat Roller is low, the film may not stick to the paper sufficiently. If the cutter enters in such a state, the film may "sag", which may cause it to fail to separate properly.

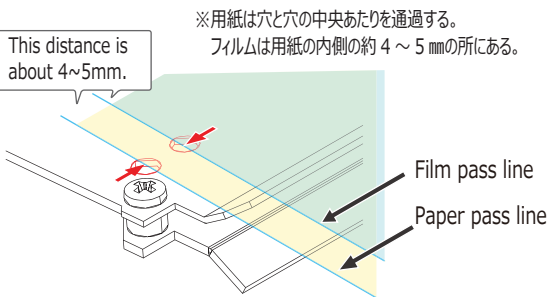
**Point**

The set temp. of Heat Roller is depending on the paper thickness, film thickness, feeding speed and room temperature. Please set with suitable for each condition.

Even if the overlap amount is set to "-2", it may not overlap depending on the paper thickness, type, feed speed, and other conditions. In such cases, change the value.

Is the position of paper/film correct?

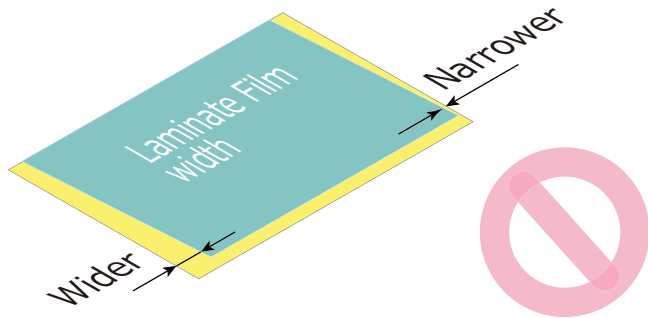
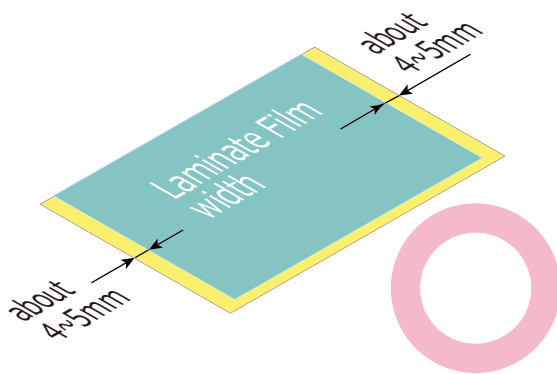
■ Check the position of the paper and film.



There are 2 holes in the Cutter Table to check the approximate passing position of the paper and film. When trouble occurs, do not remove the paper immediately, but check the positional relationship using the enlarged figure on the left.

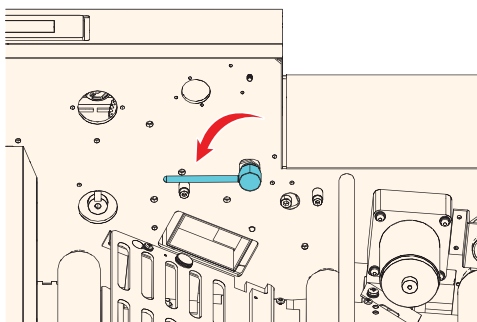
Is the film running at an angle?

If the film is at an angle when first set, the cutter will not be able to insert it in the correct position. Please separate the film and re-set it again.



Does the lever on the Gear-operated Cam face the **Paper Feeder side**?

■ Check the Lever position (ref. left figure)



If the lever of the gear operation cam has turned toward the **Paper Exit side**, it means that the gear is disconnected and the rollers are not clamping the paper.

If paper is stuck or jammed in the feed roller section, check the position of the lever by referring to the figure on the left.

# 5 Troubleshooting

## 5-5: Unable to transfer well

ここではラミネートフィルムが用紙全体にきれいに貼り付いていない。または各種フィルムが用紙にきれいに転写（接着）されていないなどの品質上のトラブルについて説明しています。



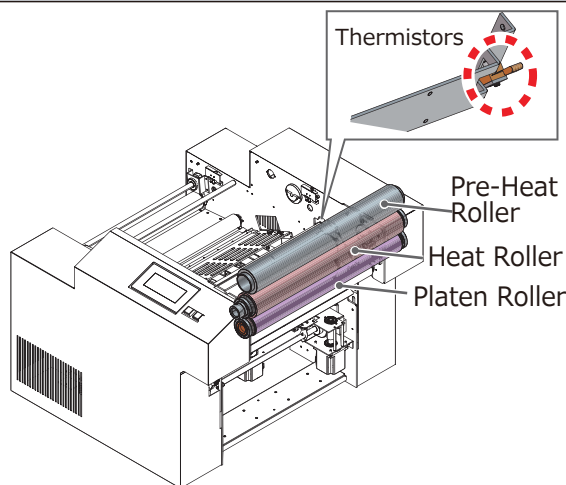
Warning

### No knife allowed during cleaning

Dust and other debris adhering to the rollers are melted by the heat and are difficult to peel off. Do not use a blade to remove them. The rollers will be scratched or/and damaged and will need to be replaced.

Is Heat Rollers and/or Platen Roller dirty?

Refer to the figure to check the following items.



Caution

### Do not reverse the roller.

Thermistors are mounted on top of the Heat Roller and Pre-heat Roller, so that its tip is pressed against the roller. Reversing the Heat Roller may damage this thermistor. This is not a problem when turning it slowly.

The Heat Roller/Platen Roller is where film adhesive tends to stick. Especially in the case of Foil processing, if a small piece of foil sticks to the roller, it will not be transferred. Also, lint-like chips generated when cutting excess portions of laminate film with an edge cutter may adhere to the rollers.

Check the below points.

Not all paper can be handled by this machine. Please try the following conditions.

**Machine set: about 140°C / 10ppm**

Is the paper used plain paper or out-of-specification paper?



1. Ready the test papers (10-20 sheets).  
Paper thickness: 0.12mm (**Coated paper only**)  
Solid black tonner printing on all surface (100% darkness)
2. Be sure to use **genuine foil made by UCOS**
3. Process the prepared paper.

※If the above settings process cleanly, it is not a problem with the machine or film. Use a different paper.

Is the paper thickness within the standard range?



Spec is 110~400g/ m<sup>2</sup> (0.12~0.50mm)

Is the temperature setting of the Heat Roller appropriate?



The film sticking/transfer condition varies depending on the paper thickness, film type, paper feeding speed, toner type, etc., in addition to the temperature of the Heat Roller.

Using a film that is not genuine?



The machine has been thoroughly tested by genuine film before shipping.  
**Do not use non-genuine film.**  
We cannot guarantee the quality of the product if non-genuine film is used.



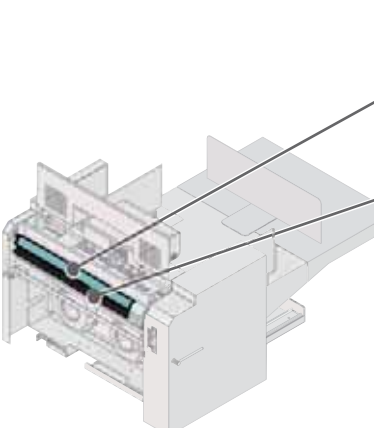
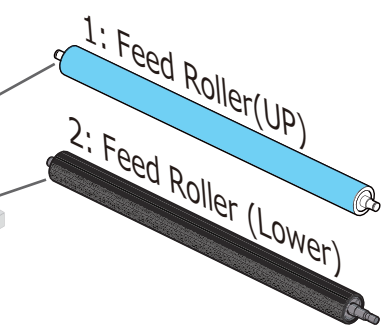
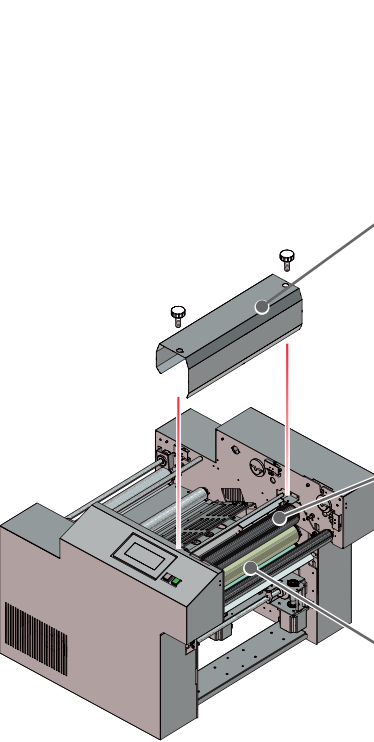
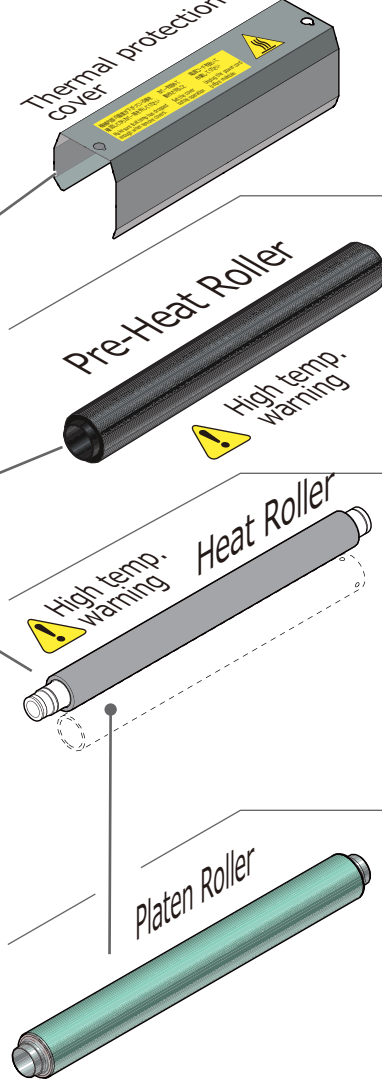
# 6

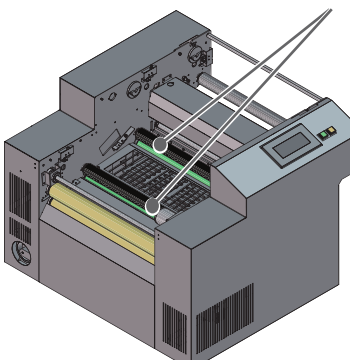
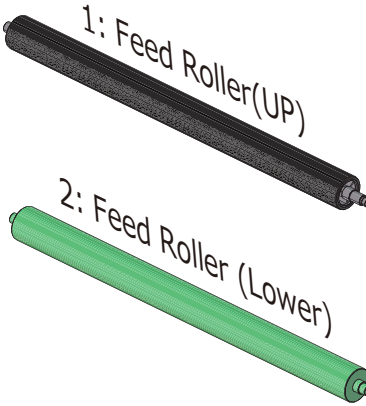
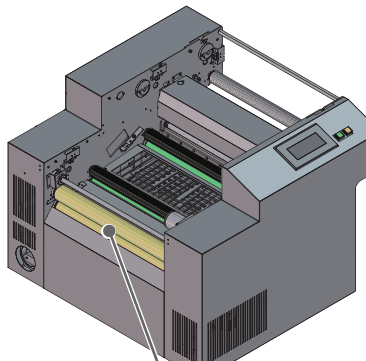
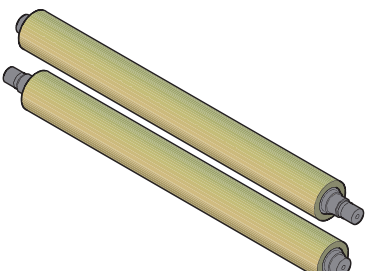
# Maintenance

## 6-1: Daily Maintenance

Maintenance of this machine is mainly the removal of dust stuck on the rollers. Daily cleaning greatly affects the transfer quality. The cleaning time depends on the time of use, but frequent daily cleaning is important.

**CAUTION** Dust adhering to the rollers is melted by the heat and is difficult to peel off. Do not use a knife or similar tool to remove it. If scratches occur, the rollers will need to be replaced.

Location	Cleaning parts	Cleaning points
 <p>Feed Roller (Feeder section)</p>	 <p>1: Feed Roller(UP) 2: Feed Roller (Lower)</p>	<p>If the feed roller (UP) is made of aluminum, cleaning is rarely necessary. If dust or other debris adheres to it, wipe it clean lightly with a rag.</p> <p>If the feed roller (UP) is rubber, dust and other debris will adhere to it more frequently than with aluminum, so clean it frequently.</p> <p>The feed roller (lower) is made of rubber, so it should be cleaned frequently as in the case of the (UP) rubber.</p> <p>Soak a cloth with water or alcohol and wipe it clean.</p>
 <p>Heat Roller section</p> <p>Please remove covers, Multipul shafts, etc. for ease of cleaning.</p>	 <p>Thermal protection cover</p> <p>Pre-Heat Roller</p> <p>Heat Roller</p> <p>Platen Roller</p>	<p>Lint-like chips that occur when cutting excess portions with an edge cutter during the laminating process may fall on this cover.</p> <p><b>! Very hot right after operation</b> Soak a cloth with water and wipe it off.</p> <p>The Halogen Lamp inside this roller heats this roller directly. The roller is made of aluminum, so it will not be scratched easily, but be careful not to wipe the roller strongly with hard objects on the roller surface, as it may scratch the roller.</p> <p><b>! Very hot right after operation</b> Soak a cloth with water or alcohol and wipe it off.</p> <p>A Halogen Lamp inside this roller heats this roller directly. If too much time is spent on this operation, such as when the film is passed through the machine at the beginning of the operation, the film itself will melt. The outside of this roller is made of rubber. It is easily scratched, so please clean it with care.</p> <p><b>! Very hot right after operation</b> Soak a cloth with water or alcohol and wipe it off.</p> <p>This roller has a steel core with a highly peelable coating. Films and other materials do not adhere easily, but films that are hotter than necessary will adhere.</p> <p><b>! Very hot right after operation</b> Soak a cloth with water or alcohol and wipe off. Since transparent debris is difficult to see, run your fingertip across the surface of the roller to confirm that it has been removed.</p>

Location	Cleaning parts	Cleaning points
 <p>Feed Roller (Coater section)</p>		<p>The feed roller (top) is made of rubber. There is a possibility that paper dust may stick to it. Please clean it frequently.</p> <p>Soak a cloth with water or alcohol and wipe it clean.</p> <p>The feed roller (bottom) is made of aluminum. The surface is coated with a highly removable coating, so it is virtually dirt-free. The narrow gap between the feed rollers makes cleaning difficult. If dirt or other contaminants do adhere to the feed roller, please clean it through the gap.</p> <p>Soak a cloth with water or alcohol and wipe it clean.</p> <p>The two locations shown in the left figure use exactly the same parts, so the cleaning method is the same.</p>
 <p>Bursting Roller</p> <p>Please remove covers, etc. for ease of cleaning.</p>	 <p>There are two rollers, they are oriented in different directions, but both the upper and lower rollers are the same.</p>	<p>This roller works as a burst roller to separate paper during lamination and as an ejection roller during foil processing. Clean this roller frequently, especially during lamination bursting, as it is prone to paper dust, etc. The outside of this roller is made of rubber.</p> <p>Soak a cloth with water or alcohol and wipe it clean.</p>
<p>Points to note when cleaning</p>	<p>Clean rollers, etc. as often as possible. If dirt and other contaminants are left unattended, they will permeate into the interior and cannot be removed even after cleaning.</p> <p>Do not rub the rubber surface of the Heat Roller too hard. Scrubbing too hard will cause the rubber to be scraped off. In particular, if the rubber of the Heat Roller is scraped off, processing will be affected and transfer quality has an issue. In the worst case, the parts will need to be replaced. (See also the separate manual for cleaning the Heat Rroller.)</p>	

Machine/Model		Coat / Foil / Laminate DFL-700 (DC-395PRO)	
Machine size		Main body	1,060(W)×680(D)×1,080mm(H)
		Tray+Table+Laminate Lack	1,850(W)×680(D)×1,285mm(H)
Weight		about 170kg (With paper exit tray, extension table, and ribbon device installed)	
Rated voltage		AC200V ±10% 50/60Hz	
		AC230VAC 220 ~ 240V ±10% 50/60Hz	
Wattage		AC 200V 2500W 15A	
		AC 230V 2500W 8A	
Applicable Paper	Type	Art Paper Coater Paper Fabric Paper	It may not be possible to use depending on the type of paper, warping, or environment. <b>*Not all embossed paper can be used.</b>
	Size	MAX 380×660mm MIN 210×297mm (Laminate) MIN 148×210mm (Foil, Spot Gloss, Spot UV)	
	Thickness	110 ~ 450g/ m <sup>2</sup> (t= 0.12 ~ 0.5mm)	
Method		Heat Roller system (Laminating, Spot Gloss Coating, Foiling)	
Speed		MAX 50ppm (40ppm with Laminate separation) <b>*Not all processing is possible at 50ppm.</b> MIN 10ppm	
Feed system		Auto Air Suction Feeding (Belt)	
Warm up time		about 6 ~ 7 mins (room temp. condition: 20~30°C)	
Eco mode		Turns "Eco mode" after 20 mins from last operation. Heating system turns off and temp. control system stops if no operation more than 40 mins after eco mode (total 60 mins).	
		How to Reset	Eco mode → Press 「Esc」 on Touch Panel Heater off mode→ Power SW 「OFF」→「ON」
		To prevent the machine from overheating, if the machine has been operated continuously for more than 3 hours, the machine will be stopped, the heater will be powered OFF, and the temp. control will be suspended. The Machine will be reset when the power is turned ON. Restart will be resumed after turning off the power for about 30 minutes.	

Supplies	<ul style="list-style-type: none"> <li>• Max Roll size: about 285φ (only genuine film)</li> <li>* Laminate Film</li> <li>• Genuine Supplies</li> <li>Spot Gloss Film , Foils, Laminate Film (2000m)</li> </ul>
Discharge Method	Output Tray
Usage Environment	<p>IPX0(zero) [Non protected for water: Non use at the place near the water.]</p> <p>At an altitude below 1,000 meters</p> <p>Non use at the place in dust.</p> <p>5 degrees C ~ 35 degrees C</p> <p>20%RH ~ 80%RH</p>
Storage Environment	<p>-10 degrees C ~ 50 degrees C</p> <p>10%RH ~ 90%RH</p>
3 hours rating	Max continuously operation time is 3 hours

# Warranty

Product Name	Coat / Foil / Laminate
Model Name	DFL-700 (DC395PRO)
Warranty period	6 months after purchase.
Installed date	/ /
Dealer	TEL:

## Warranty Determination

Warranty period is 6 months after purchase.

However, the troubles that used with sperical materials and/or works and/or supplies are excepted.

The followings are charge condition even if in the warranty period.

- (1) Breakdown and/or damaged attributable disregarding the Operation Manual.
- (2) Breakdown and/or damaged attributable customized or responsibility of use.
- (3) Breakdown and/or damaged attributable shipping trouble and falling when moving.
- (4) Fire, earthquake, natural disaster by wind and flood damage, pollution and abnormal voltage.
- (5) Wrapping, covers, Feed Table, Output Unit and other accessories.
- (6) Consumables such as the Heat Roller, rubber materials, blades and the parts which is damaged.
- (7) Not initial failure.
- (8) Packaging, exterior, covers, Feed Table, Output Tray.
- (9) The machine which is peeled o the security lable.

Serial Number Security lable  
101-0000000 Do not remove at any time!

This security label is attached to the unit.  
Never remove this label.

User s Manual

Manufacturer **UCOS** Co., Ltd