Qomolangma Brand Full-auto Wide Format Hot Laminator

User's Manual

FMJ-1600-WA-PLUS-H

CONTENT

THE IDEAL PARTNER FOR PHOTOGRAPHERS, PRINTERS, AND SIGN-MAKERS!

Thank you very much for choosing our Qomolangma brand series laminator, Please read the manual carefully, including the installation, operation and maintenance to ensure the best output and the lifetime of the machine.

Smarter and people-oriented innovation in the design concept and details will give you simple and relax lamination experience.

Lamination gives your materials a finished, professional look of quality that can really drive business. By giving your materials a higher quality look, in gloss, satin or matte finish, lamination services will improve your business image and help bring in more sales leads.

Remarks: Low temperature cold laminating, mainly used to solve the issue that cold laminated images are hazy. Driven by electric, including floor stand and foot pedal switch.

Applications:

Sign & display, window graphics, banner, poster, PoP, vehicle wrapping, wallpaper, cutting sheet sticker, labels & decals, proof, POS display, package, sign board, flyer, document fi nishing, floor graphics, rigid and fl exible indoor displays, board and many more.

Advantages:

> QOMOlANGMA: USA registered
> Cost - eff ective: very good quality, price and performance.
> Excellent results without air bubbles and defects.
> Hand crank and automatic motorized lifting of the upper roller. These two systems are more stable, meets the high - end needs , and has less issues versus pneumatic lift using air pressure.
> Rubber roller: High quality rubber roller are more elastic and durable.
> High precision design: Cut by highly precise laser, the frame and bars ensure the unwind / rewind shaft is parallel and prevents wrinkle and air-bubble when laminating.
> User friendly Control panel, it is easy to understand and operate.
> Mount images on panel, apply double-sided adhesive fi lms, application tape and protective films.
> Versatility in the materials used.
> Load and unload of rolls of materials in seconds.
> Photosensitive cells with automatic self-control of safety devices and emergency buttons.

I. Technical Parameter

Specification / Item Code	FMJ-1400-WA-PLUS	FMJ-1600-WA-PLUS	FMJ-1600-WA-PLUS-H
Picture			
Name	Qomolangma Full-auto Wide Format Cold Laminator, with Heat Assisted		
Lift Up System	By hand		
Functions	Cold laminating, mounting, with heat assited		Hot / cold laminating, mounting
Max. Working Width	1400mm (55in)	1600mm (63in)	1600mm (63in)
Max. Working Speed	6m (19.685ft) / min		
Max. Nip Opening	35mm (1.38in)		
Roller Diameter	102mm (4in)		
Top and Bottom Roller Material	Silicon rubber		
Max. Heating Temperature	40°C (104°F)		120°C (248°F)
Drive Motor	90W		
Power Consumption	1400W		2300W
Power Supply Options	AC110V / 50-60Hz, 16A AC230V / 50-60Hz, 8A		AC110V / 50-60Hz, 21A AC230V / 50-60Hz, 11A
Forward / Reverse	Yes		
Foot Pedal	Yes		
Safety Sensor	Yes		
Auto Rewind Liner Pickup	Yes		
After Laminating Pickup	Yes		

Machine Size	1820 x 550 x1250mm (71.65in x 21.65in x 49.2in)	2020 x 550 x 1250mm (79.5in x 21.65in x 49.2in)
Net Weight	150kg (330lbs)	204kg (448.8lbs)

II. Installation

2.1 installation precautions.

1. Before unpacking, carefully check if there is damage for the packing and machine during transportation.

2. After unpacking, check if the service parts are correct as the packing list.

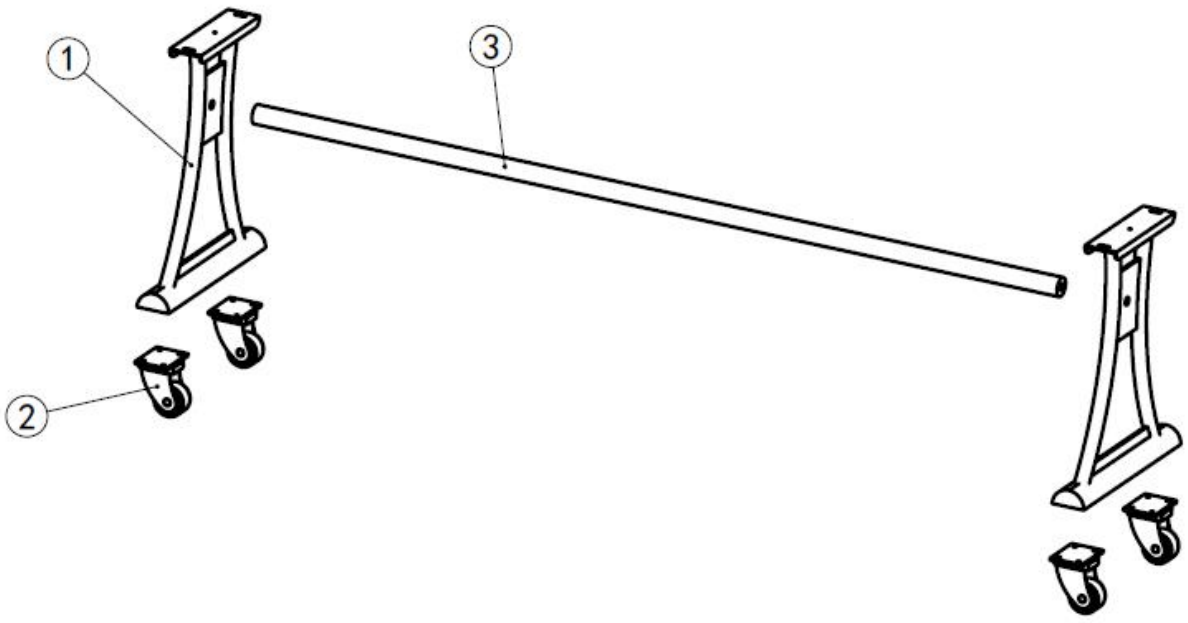
3. The installing place should be provided enough space for operating and free of dust, no vapor, no corrosive gas, no combustible or explosive substance around. Keep the machine away from wind blowing place, otherwise will affect the roller temperature which might bring the laminating quality.

4. After installation, adjust each caster to reach level ground. The casters only be used on even ground for short distance movement.

Notice: Please move carefully since it is heavy equipment.

2.2 The stand floor rack assembly

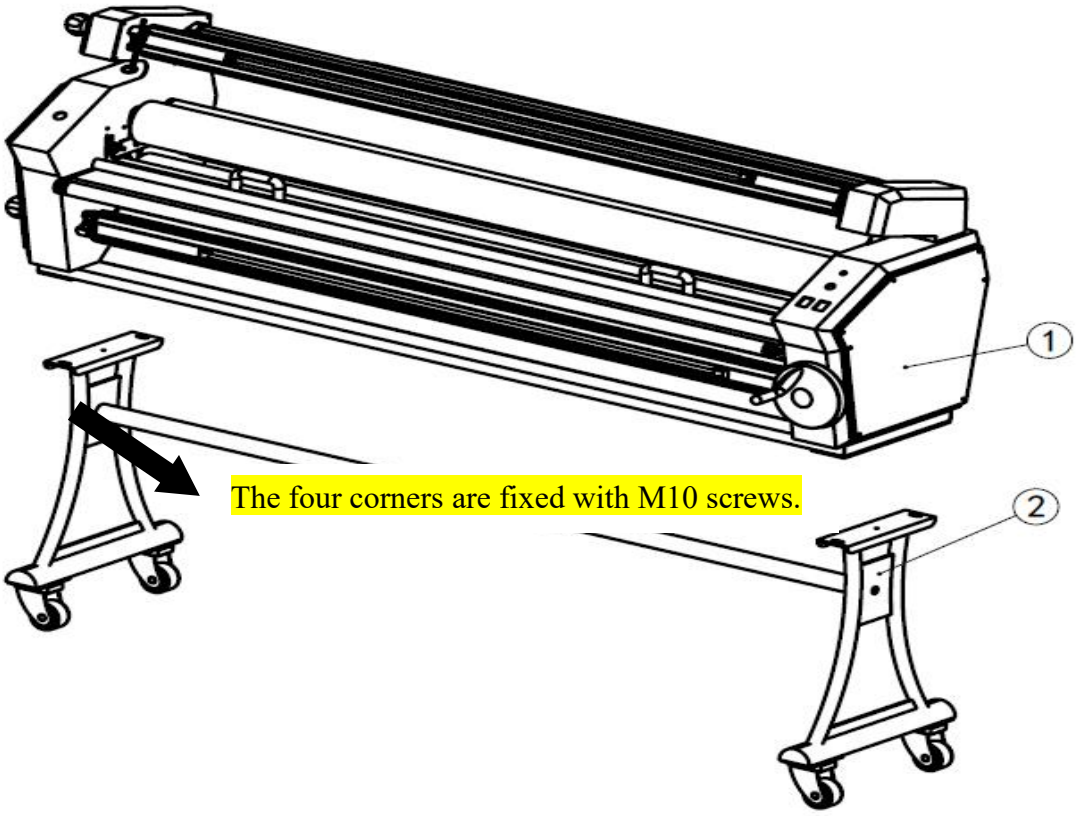
1) Take out the parts from the packing.
2) Assembling two legs and all shafts according to the picture.
3) Install the casters to the left and right leg. (wo caster w/ brake and two w/o brake were installed in a diagonal).



1. Left and right leg 2. Two caster w/ brake, two w/o brake. 3. Top shaft.

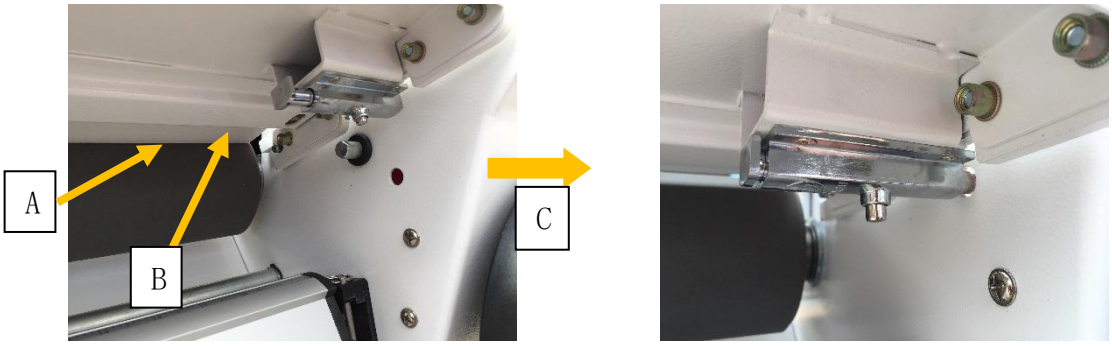
2.3 Machine assembly

1) Take out the machine from crate, use 4 of M10 screw to connect the machine and shaft followed the picture, be attention the shaft direction.



Notice: When moving, touch the bottom plate, don't move the hand wheel, friction wheel and other week position.

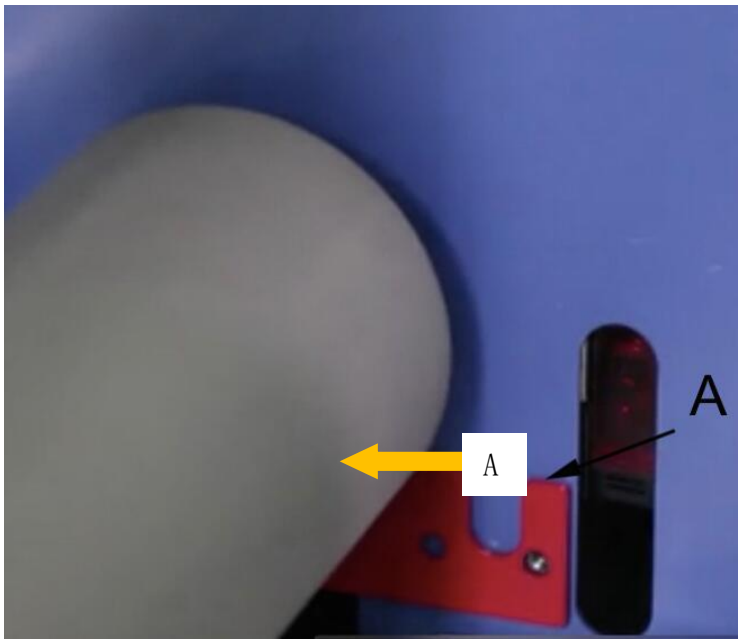
2) Working Table Installation (Refer to Pic).



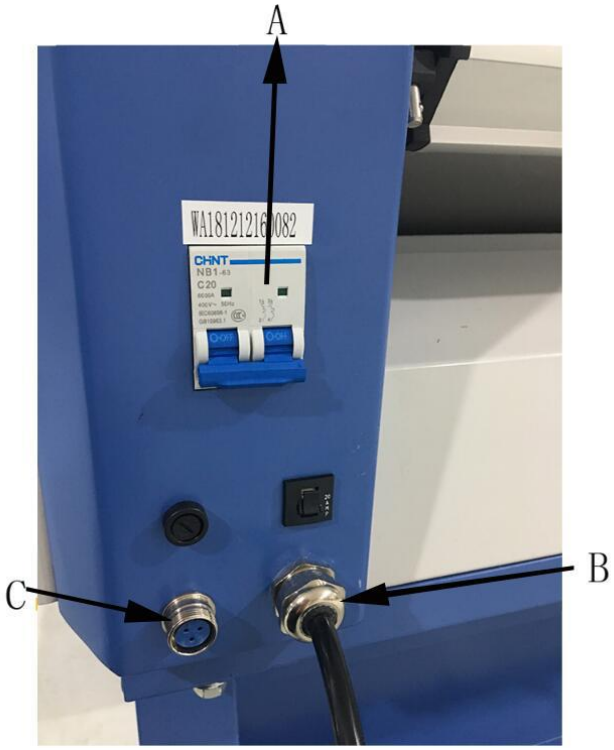
A) Hold the middle part of the front table and place the front table in a diagonal position, with the front opening corresponding to the screw in front.
B) Place the front table gently down, and the gap behind it corresponds to the screw behind.
C) Push an embolus of a bolt and lock the bolt of the front table.

3) Shaft assembly (Refer to 4.3).

4) Take off the red supporting parts on both end of roller (Refer to A).



5) Connect the foot pedal and wiring as following illustration.



A: Air switch
B: Power code
C: Connection of foot pedal

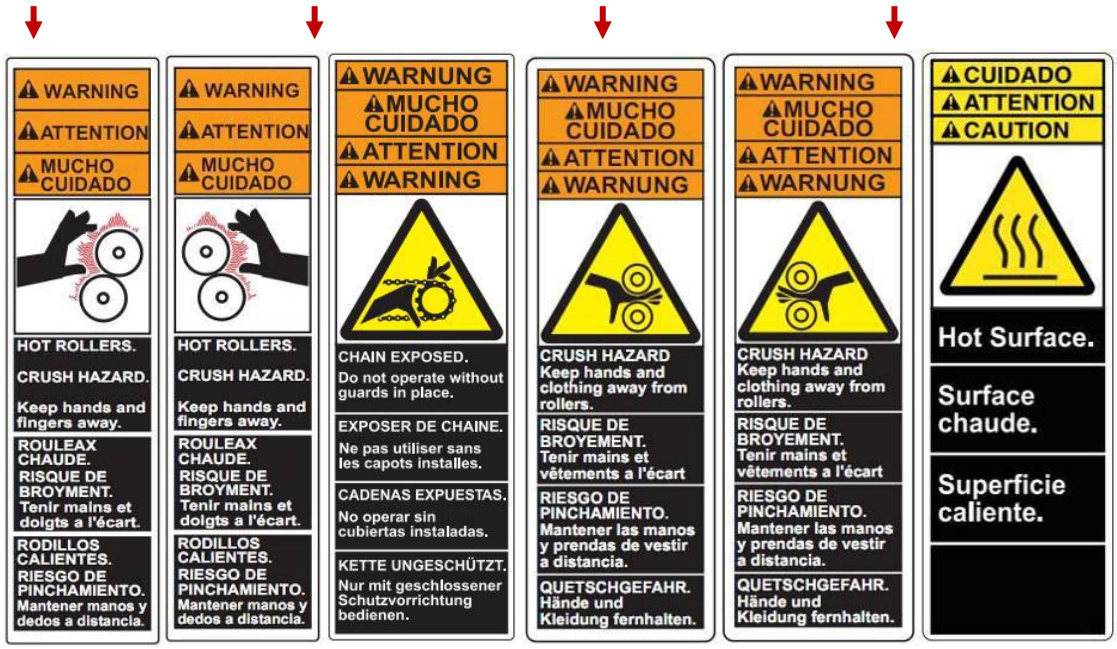
6) Turn on the machine, roller is rotating. Make trial laminating if everything is well and check the lamination result.

III. Safety Instructions

Read the safety instructions and familiarize yourself with the main structure, performance and operation measures before starting the machine. Training and examination is recommended when condition requires. In the operation and maintenance, please be aware of the warning symbols on the machine and proceed with caution to prevent hazards and ensure safety.

3.1. Warning Symbols

Please be aware of the warning symbols below to prevent possible hazards!



A.Hand Anti-hot：The surface of roller could scald your hand or finger, keep away from heating roller.

B.Anti-chain Prick: Keep your hand away from chain and gear. Your long hair and clothing would be caught in the rollers.

C.Anti-hand trapped: this safety notice means that your fingers and hands could be trapped and crushed in the rollers, clothing and long hair could be caught in the rollers and pull you into them.

D.Warming: Be attention of high temperature.

E.Anti-electric shock: This safety notice means it is high voltage, should be turned off before adjustment.

F.EMERGENCY SWITCH: In case of emergency, press the red button to shut off the electric

3.2. Safety Parts

Emergency Stop Switch

	The machine has one Emergency stop button. When activated the power supply will be cut off immediately. When turned clockwise, the button will disengage automatically and the machine will be restarted. The motor controller will be restarted after turn on the power button on the control panel. Press the Emergency button immediately when the needed. Caution: Emergency button is one of the essential safety parts. Please check its performance regularly.

Note: Please press the switch immediately when you encounter an emergency in the operation.

Photocell Safety Switch

	The machine has an optical safety device at the input side of the nip at the main rollers on the right cabinet. When the signal is interrupted (e.g. by foreign object or hand), the device will be activated and the motor will stop so as to prevent hazards caused by interruption of foreign objects. When the motor controller is disabled by the optical safety device, it will not be activated even the interrupted objects are removed, unless the motor-on button on the control panel is pressed.

Caution: The optical device is inactivated when the pedal switch is pressed.

Optical safety device is one of the essential safety parts. Please check its optical sensitivity to ensure safe operation.

3.3. CAUTION:

1) The mains supply must match the type indicated on the machine identification label (use three-pole plug device. The earth pole may not be altered randomly).

2) Cut the power supply before opening the cabinet in maintenance to prevent electricity shock or injury. Turn off the power supply after the operation.

3) Make sure the power supply cable and/or the extension cable is not blocking your way around the machine, placing under any stuff or driven across by any vehicles.

4) Install the the machine in a dry and well ventilated environment. Make sure the ground is free of water or moisture. Keep the machine from any inflammable and
explosive objects.

5) Do not place any tool or other stuff on the in-feed and out-feed table, such as: screwdriver, screw, nail, nut, ect. They may fall into the rolling rollers and cause damage to the machine.

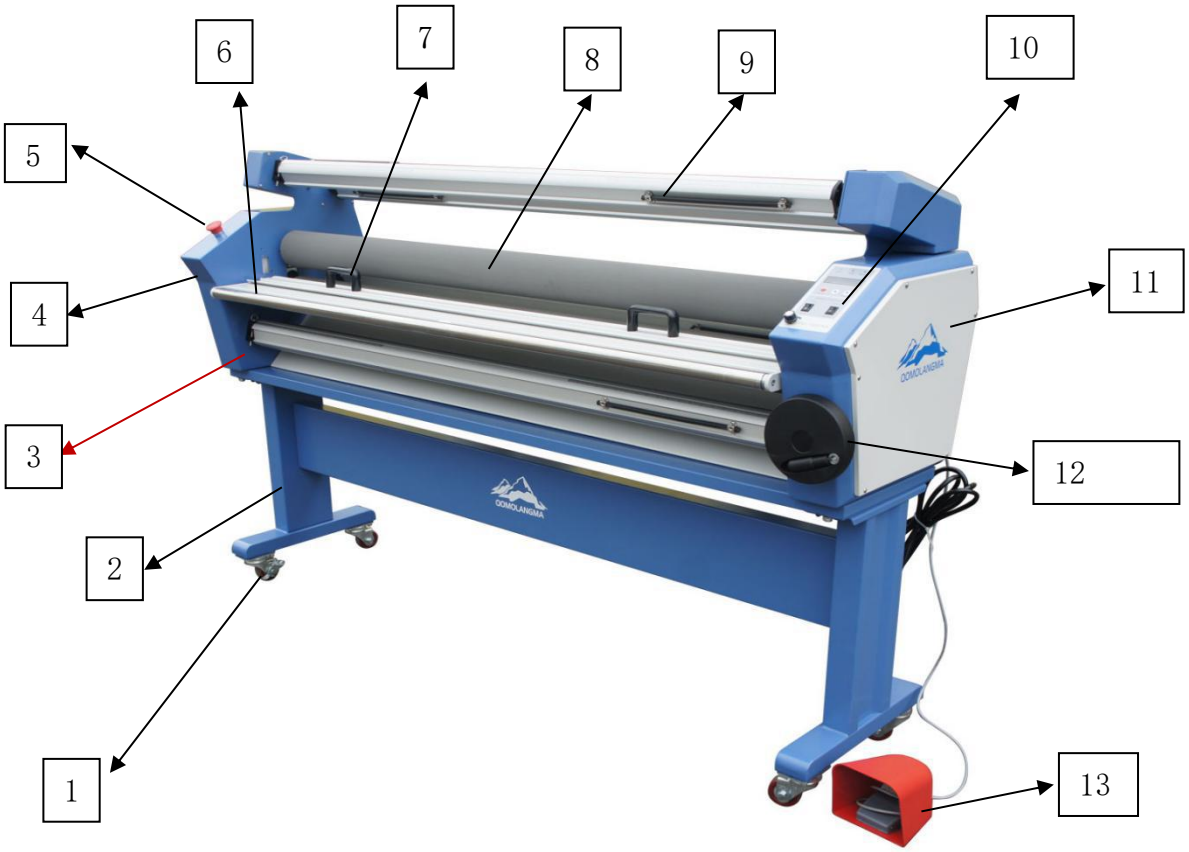
6) Do not wash the machine with water. This can damage the electrical circuits, cause electrical shock or corrosion.

7) Cleaning by rotating the roller. To prevent from partial damage for the roller, don't clean at single point.

8) Check to see if the power supply cable and the foot pedal connection cable are broken on a regular basis to avoid electric shock

IV. Parts Identification

4.1 Front Views



1. Foot wheel 2. Stand 3. Print Rolls 4. Left cabinet
5. Emergency Stop Switch 6.In-feed table 7. Panel for covering the picture 8.Top roller
9. Liner paper roller 10. Control panel 11. Right cabinet
12. Lift handle wheel 13. Safety pedal switch

4.2 Back Views

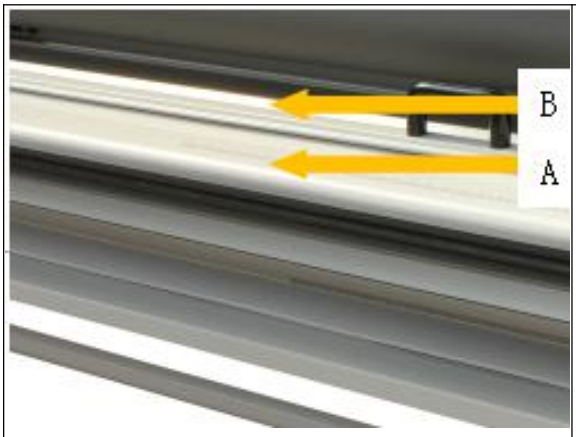
1. Connection 2. Media take up roller 3. Film unwind
4. Friction wheel 5. Electrical parts cabinet

4.3 Annotation

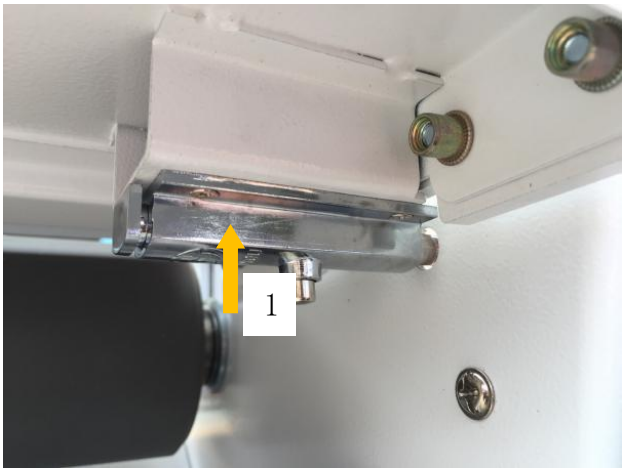
■ **Safety foot pedal switch**

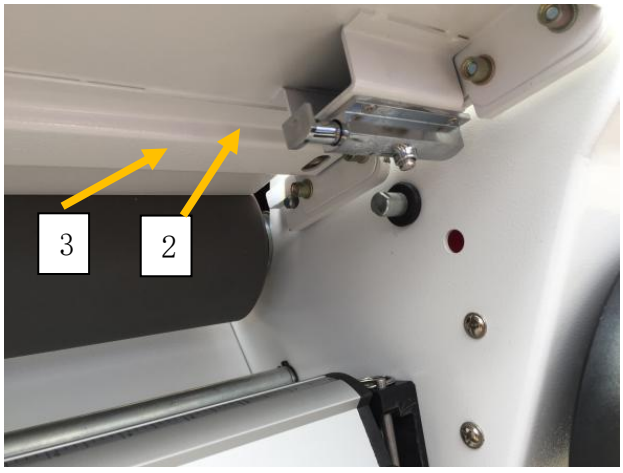
	Foot pedal is another way to control the start and stop roller rotating.Step on the foot pedal, press the direction button to adjust the speed, then the roller runs, roller stops when loose. NOTE: The protect sensor can't be used with foot pedal together. Please pay more attention to protect your hand during foot pedal operation

■ **Working table and Pressure board**

	Working table (A) and pressure board (B) are used to put tension on media and parallel with film edge. A and B are moveable. Take off the working table when install/uninstall the media or clean the roller. Take off pressure board when preparing the laminating, put it back when preparation is ready.

■ **Take down working table**





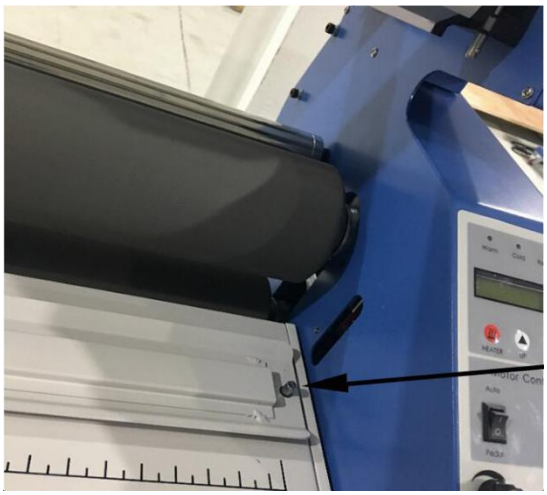
1. Press the button to open the plug.

2. Hold the middle and lift.

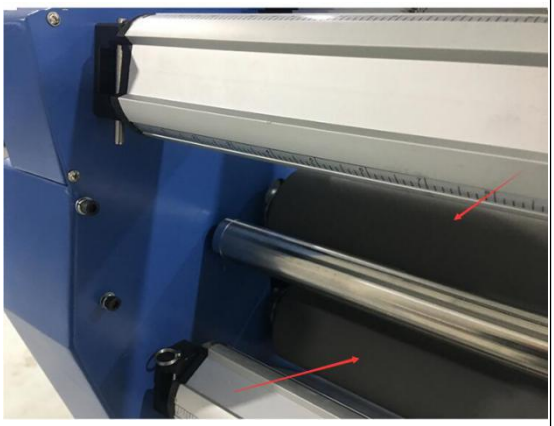
3. Hold the middle and pull out.

Assemble the front turntable (Refer to 1.3 section)

■ **Pressure board**

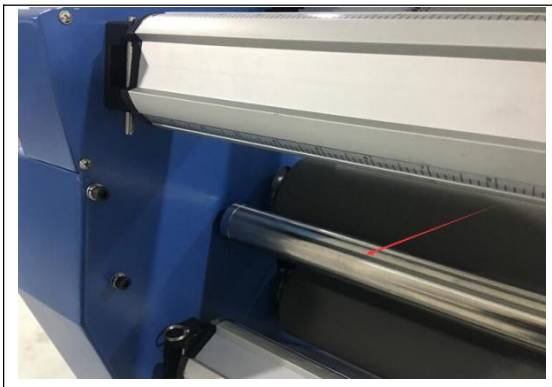
	Lift and take off the pressure board. Insert screw in the holes of pressure board to put on back.

■ **Top and Bottom Roller**

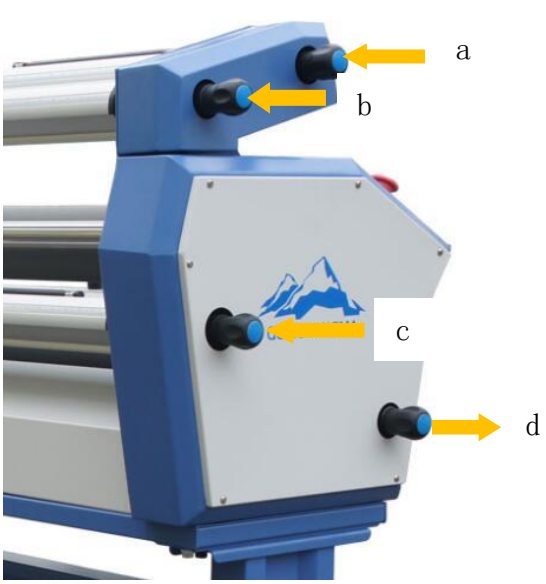
	Top and bottom rollers are the key component of the laminator and they directly affects the quality of laminating and titled image. Both top and bottom is silicon roller for this machine. The advantage is good heating and acid and alkali resistance, prevent adhesion from cold laminating film. The bottom roller is controlled by motor, the top roller rotated by friction

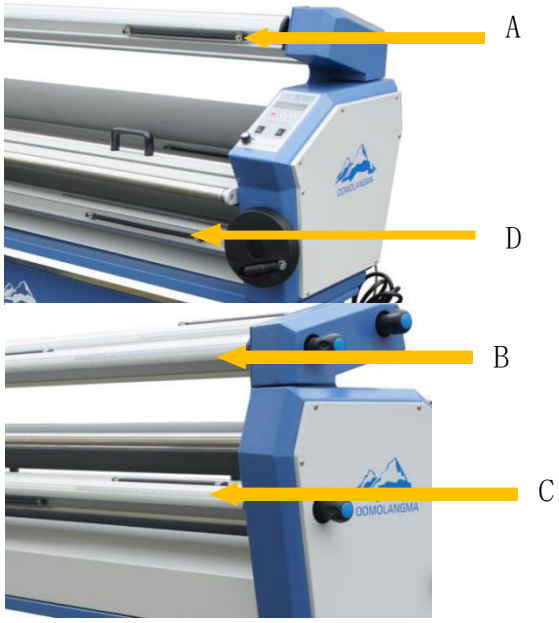
Notice: Don’t put your hand or finger between top and bottom roller, in case, press E-stop.

■ **The Idler bar**

	The idler bar is used to smooth the film when go through in ‘S’ direction, so the film is as flat as possible between the rollers.

■ Unwind/rewind shafts

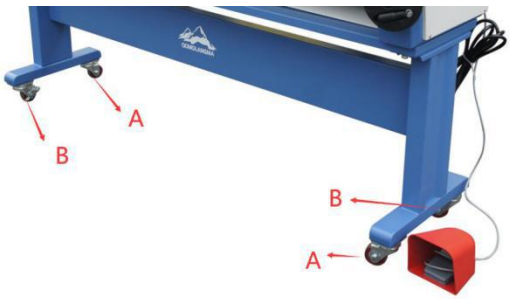




Four shafts for this machine, they are film liner rewinder (A), film unwind shaft (B), media rewinder (C), media unwind shaft (D), they are changeable to each other. It is motorized shaft for film liner rewinder and media rewinder, non-power for film unwind shaft and media unwind shaft. Take off the key from saddles then move out one side of shaft. For assembly, left side first, the driven end of each shaft is slotted to engage a key. Three rubber strips on the shaft to hold the paper tube.

The friction wheel is A, B,C D. Clockwise rotating to increase the friction, anti-clockwise rotating to decrease the friction. Adjust the speed by friction wheel to get good laminating result.

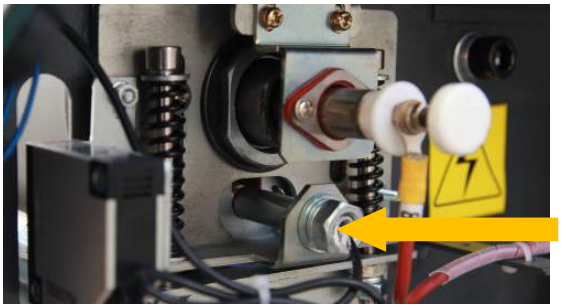
■ Casters



Total four casters for this machine.

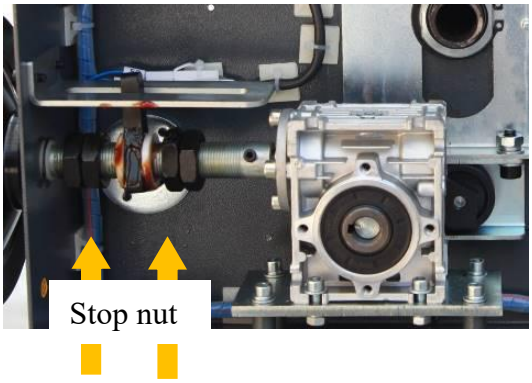
Two of casters (A) can be locked to prevent movement, two casters (B) without brakes.

■ **Temperature-measuring for Warm series only**



The contact temperature detection only for Warm series. The contact material is brass. It is sensitive, small and durable.

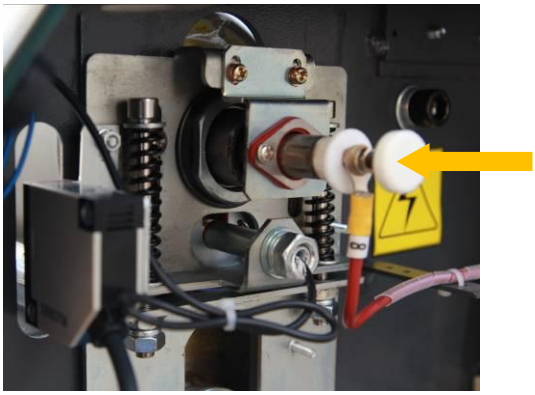
■ **Pressure limit**



This device limits the space of pressure plate. In order to protect speed controller, the hand crank is not able to use when reach the limit space which means max roller pressure.

Note: It is a default position, do not adjust

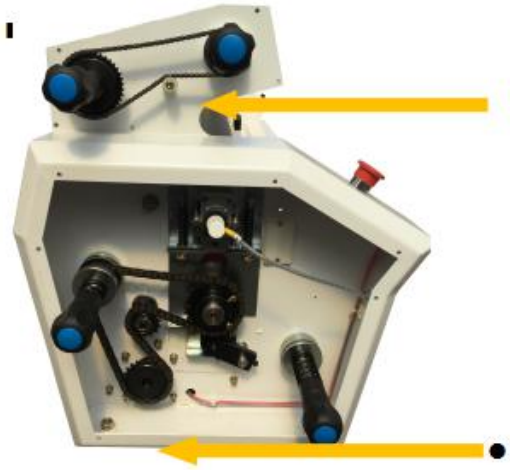
■ **Heater for Warm series only**



One 1300W stainless heater inside the roller, don't touch the connection end in case of electric shock.

NOTICE: Check the nuts periodically, if it is loose, fasten it in time to avoid the components broken. Power off when changing the heater.

■ **Drive system**

	Film unwind drive liner take up through the sprocket wheel. The running speed is different because the number of teeth of the two sprockets is different, you can adjust the two-brake tension knob to change the speed ratio. Motor drive roller and media take up through the sprocket wheel.

■ Control Panel

	**A-Indicator Light:** Used to set the temperature value of the heating Hot laminating: "Warm" light on Cold laminating: "Cold" light on Temperature reaches the set temperature: "Ready" light on B-**Display Screen:** Indicate the current temperature and setting temperature. C-**Up and Down Tab**: Used to adjust the setting temperature. D-**Direction Switching Button:** Control the rotation direction of the motor. **E-Start or stop the heating function.** **F-Auto and Pedal conversion switch:** G-**Speed Control Button:** Control the speed of the roller.

● TEMPERATURE SET

Specifications setting: Press and hold："♨" for 3 second to enter in the specification setting. Press ♨ to show D-1, D-2, D-3, D-4 in order. Press up and down button to regulate the value of specification, If the buttons are not pressed in 1 minute, the specification setting state will be automatically ended.

Mode	Description	Range	Default
D-1	Temp Unit	0-℃, 1-℉	0-℃
D-2	Temp Adjustment	-100---100℃ (-148℉ --- 212℉)	0
D-3	Temp Alarm	10-170℃ (50℉ - 338℉)	150℃ (302℉)
D-4	Temp max	10-150℃ (50℉ - 302℉)	120℃ (248℉)
	Set End Exit		

Notes:

- The specifications are set when shipped from the factory. Do not change the specifications at random.
- It normally takes 20 minutes for the top roller to reach the temperature of 50℃ (122℉).
- It is normal that the temperature display differs the room temperature when start heating.

v. USAGE OF MACHINE

■ Power Connection

- **Power cable**: It was installed the standard power supply plug, before plug in, please check your power supply voltage is same as the machine's rated operating voltage, also should verify the access to the socket is in requirements, and have a good grounding, and the capacity is large enough.

- **Main switch:** It is installed in the rear of machine (Cold series is the rocker switch, and Warm series is the air brake switch), the switch has two positions, up to open, down to close.

■ Foot pedal

Foot pedal is another way to control the start and stop roller rotating. Step on the foot pedal, press the direction button to adjust the speed, then the roller runs, roller stops when loose. Plug in and lock the screw before using

Note: The protect sensor can't be used with foot pedal together

■ Emergency button

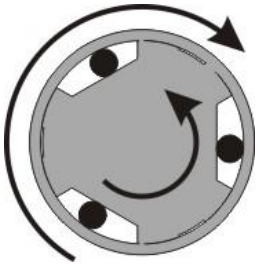
In case of emergency, press the red button to shut off the electric, roller stopped. Turn the button clockwise, the button will rise up automatically. Press "on" from control panel, the roller can start to rotate. The emergency stop button is an important safety features, check its function periodically.

■ OPERATION OF ROLLER

Open the handle on the hand wheel (pic #1), rotate clockwise to lift up the roller, anticlockwise to put down the roller. At the moment that up roller against the bottom roller, the hand wheel feel loss. Continue rotating anticlockwise to enlarge the press between rollers. The pressure controlled by operator based on different material and specification.

Note: Take off the hand crank before flipping up. Don't flip directly.

■ Function shaft Installation and using



Easy install and dismantle shaft by aligning the "I" bracket (see 4.3). Three rubber straps on each shaft used to fasten the paper tube. Put 3" tube on the shaft, then rotate the paper tube to fix it on the shaft.

■ Friction pad checking and replacement

Check and replace the friction pad in period, it is consumable parts.

- **Friction system for media unwind:** it is combined by bracket, metal friction pad, fiber friction pad, spring, spring bracket and black handle. Adjust pressure on spring by rotating the handle. When the shaft rotating, the key connects fiber friction pad and bracket to create friction, the shaft rotating controlled by friction. The friction pad create friction, the friction pad will be wear and tear during using. Replace the friction pad when friction disappeared.

✧ **Ways to replace:** take off the handle, spring, fiber friction pad, metal friction pad, then change a new metal friction pad.

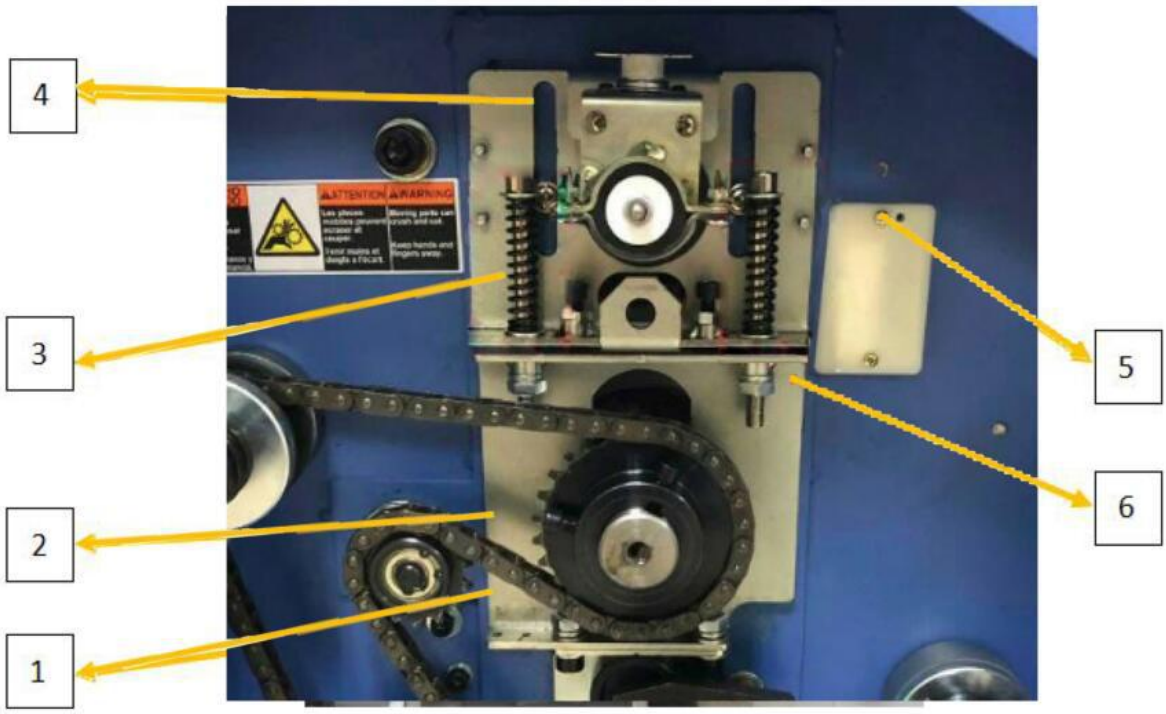
- **Friction system of media rewind:** it is combined by bracket, metal friction pad, fiber friction pad, spring, spring bracket and black handle. Adjust pressure on spring by rotating the handle. When the shaft rotating, the key connects fiber friction pad and bracket to create friction, the shaft rotating controlled by friction. The rewind shaft controlled by motor, at the same time, rewind sprocket driven by friction rotation. When the shaft rotating, the key connects fiber friction pad and bracket to create friction, the shaft rotating controlled by friction. The friction

pad create friction, the friction pad will be wear and tear during using. Replace the friction pad when friction disappeared.

- ✧ Ways to replace: take off the handle, spring, fiber friction pad, metal friction pad, then change a new metal friction pad.
- ✧ Friction system for film unwind: it is combined by bracket, metal friction pad, fiber friction pad, spring, spring bracket and black handle. Adjust pressure on spring by rotating the handle. When the shaft rotating, the key connects fiber friction pad and bracket to create friction, the shaft rotating controlled by friction. The friction pad create friction, the friction pad will be wear and tear during using. Replace the friction pad when friction disappeared.
- ✧ Ways to replace: take off the handle, spring, fiber friction pad, metal friction pad, then change a new metal friction pad.

- Friction system for liner rewind: it is combined by bracket, metal friction pad, fiber friction pad, spring, spring bracket and black handle. Adjust pressure on spring by rotating the handle. When the shaft rotating, the key connects fiber friction pad and bracket to create friction, the shaft rotating controlled by friction. The friction pad create friction, the friction pad will be wear and tear during using. Replace the friction pad when friction disappeared.
- Ways to replace: take off the handle, spring, fiber friction pad, metal friction pad, then change a new metal friction pad.

➢ ADJUST ROLLER PARALLELISM AND PREESURE



1.left pressure bracket 2. left cabinet 3. Spring 4. top pressure bracket

5. pressure bolt 6. Screw

Top and bottom rollers are the key component of the laminator and they directly affect the quality

of laminating and titled image. The rollers are parallel before shipment. The roller will be unparalleled due to the shaking in transportation. Following below step to adjust the roller parallelism.

- **Adjusting the pressure of the roller**

The unbalance pressure for top and bottom roller may cause the tilted and wrinkling problem, The method of adjusting:

1) Take a record for the tilted side. Turn off the machine and take off the side cover.

   NOTES: The quantity of components in left side cover is less than right side cover. To avoid components damage by inappropriate operation, check the left side cover in priority.

   The bolts connect the left bracket and top bracket with spring and nuts on the top. The top nut is welded with top bracket, the bottom nuts can be adjustable.

2) When the image is tilted on left side, the left side pressure must be bigger than right side. Adjust the bolts to reduce the pressure. It should be possible to keep same adjustment for bolts on both side.

   NOTES：Measure the length for two springs and keep the same height.

3) When the image is tilted on right side, the left side pressure must be smaller than right side. Adjust the bolts to increase the pressure.

   NOTES：Check the spring changes when put max pressure on the machine after adjustment. If no change, it will cause the spring damage during laminating. If no extra space to adjust on left side spring, please try to adjust on right side.

4) After adjustment, fasten the nuts.

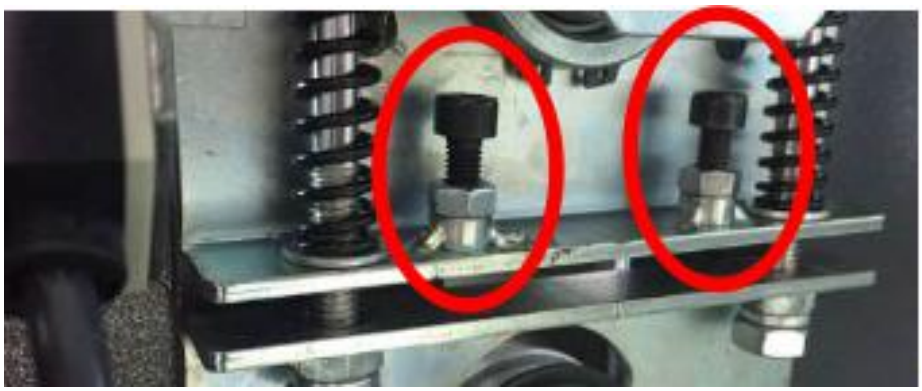
5) Put on the left side cover.

Adjustment principle: if the image is off-tracking to the left side, the pressure of the left side is higher than the right side. Loosen the spring on the left side to reduce its deflection.

- **ROLLER PARALLELISM ADJUSTMENT**

  The gap is 1-2mm between bottom and top roller, if the gap isn't the same, take a record for the smaller gap side. Make the hand wheel feel loose, turn off the machine, open the left(right) side cover. Loosen the nuts, adjust the location of the bolts until the roller is parallel. At last, put on the left side cover.

  NOTE: The roller is parallel before shipment. The roller parallel can't be changed. Pressure should be adjusted first when have the tilted problem. Only adjust the bolt when the roller isn't parallel. Roller pressure should be adjusted accordingly after change the bolt.



Tools: 5mm inner hexagon spanner, 8mm wrench.

VI. Laminating Process

6.1 Hot Laminating

Preparation

1) Raise the upper roller.

2) Turn off the roller direction switch and the heating switch; turn the emergency switch clockwise to the highest position and turn the speed-adjusting knob to '0';

3) Turn on the main power switch and the power switch on the control panel.

4) Turn on the heating switch and set the heating temperature for the roller. It takes approximately 30-40 minutes for the roller to reach its working temperature.

5) Take a roll of hot laminating material, fix it on the laminating-supporting roller and place the front edge of the material on the upper roller through the guiding roller.

6) Wrap the picture to be laminated around the paper roll and fix the paper roll on the picture - supporting roller.

When the upper roller reaches the set temperature:

1) Remove the panel covering the picture.

2) Draw out the laminating material and fix it on the roller through the guiding roller (picture 6). The side with glue should be placed upward.

3) Lower the roller by turning the hand wheel counter-clockwise.

4) Place the guiding paper between the upper and bottom roller and take it through the roller by turning the speed-adjusting knob (Exhibit 6 1、2); and then turn the speed-adjusting knob to zero.

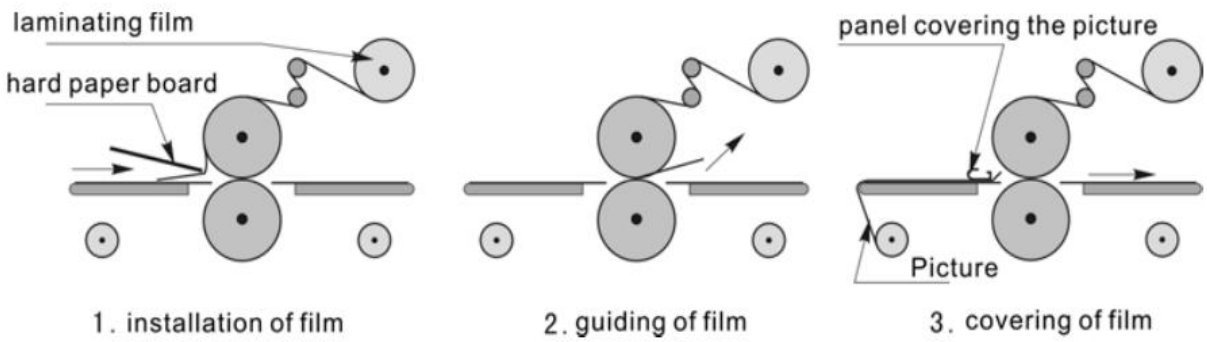
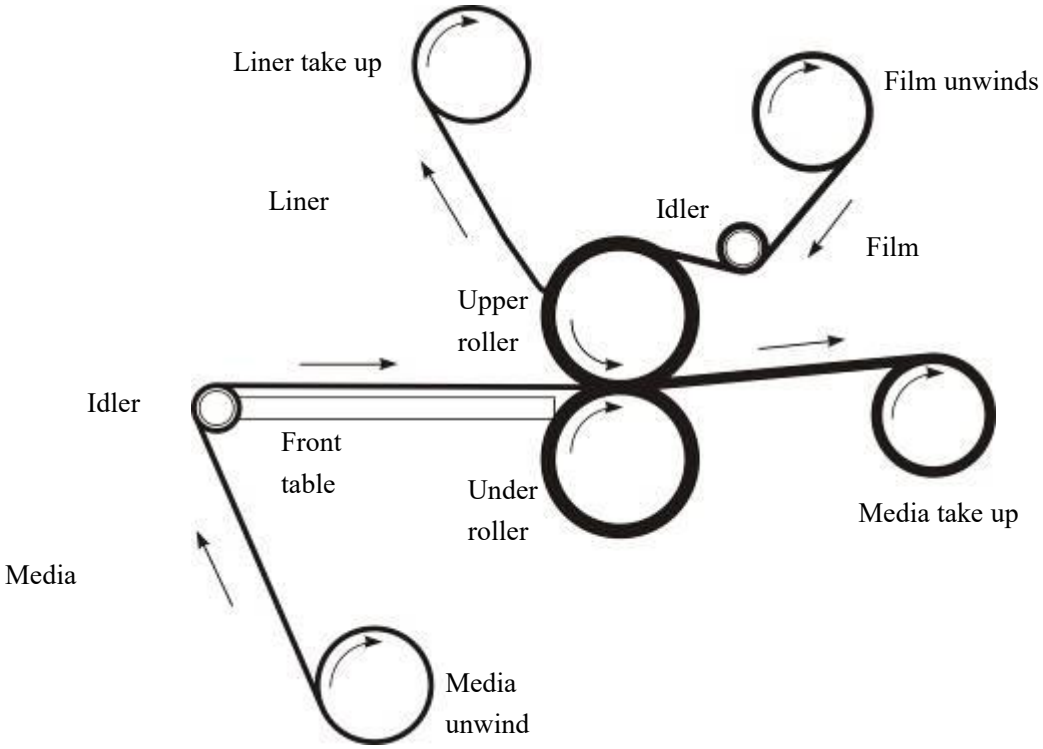


Exhibit 6

5) Put down the picture board and place the picture under the picture board and the roller (exhibit 6 3). Turn on the power switch and speed up the machine by turning the speed-adjusting knob to start the laminating operation.
6) Adjust the damp of the rollers.
7) The collection roller can be used when laminating long material.

6.2 Cold Lamination Principles

In most cases, cold laminating doesn't require the roller to be heated; yet the quality of the laminating could be enhanced if the upper roller is heated to 40-50℃.



The procedures of cold laminating are shown in Exhibit 7

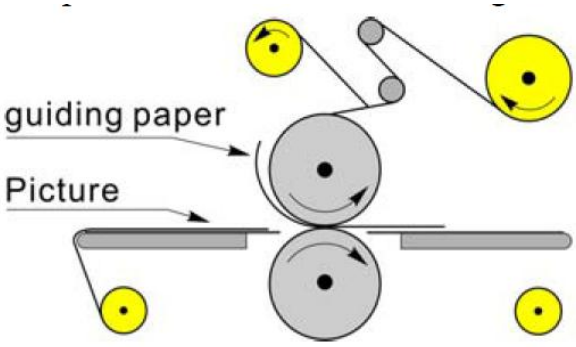


Exhibit 7 1

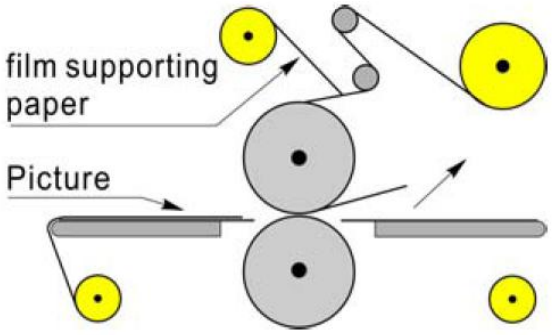


Exhibit 7 2

1) Fix a paper roll on the back cover collecting roller; prepare a guiding paper with width identical to that of the cold laminating material and length of 30-40 mm.

2) Fix a roll of cold laminating material on the material-supporting roller, take one edge of the material through the guiding roller and peel off the back cover; stick the cover paper to the paper roll on the picture collecting roller and stick the guiding paper to the material; lower the roller, adjust the speed-adjusting knob to “2” and use the pedal switch to roll the guiding paper around the roller. Then pay attention to the movement of the rollers and adjust the damp adjusting hand wheel if necessary.

3) Put down the picture board and place the picture under the picture board and the roller. Turn on the power switch and speed up the machine by turning the speed-adjusting knob to start the laminating operation.

4) The collection roller can be used when laminating long material.

6.3 Operation

Lamination is an experienced and more technical work. Starters should be under guidance of an experienced technician. Following is laminating instruction.

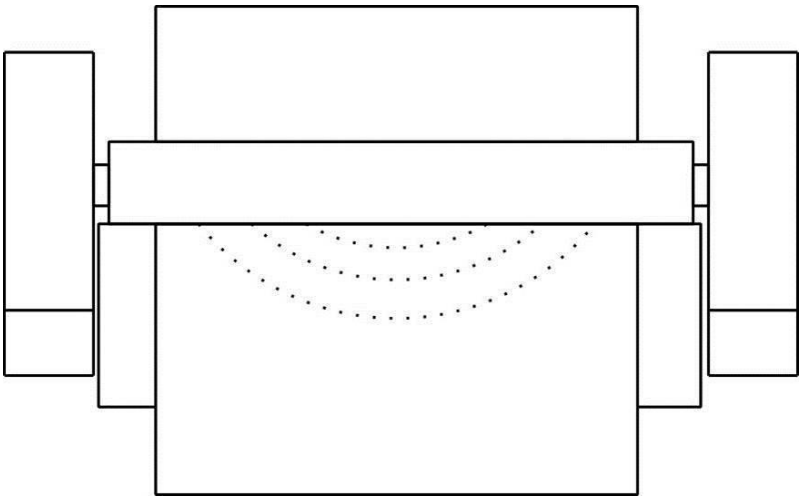
- **Pre-heating**

1. Rise the top roller and take off the pressure board.
2. Turn on the machine, press running switch, speed at 1.
3. Turn on heating, the set up temperature is 40℃ for cold lamination film. Turn off the roller rotating when reach the temperature.
4. Put the film roll on the shaft, insert the shaft to side bracket. Pull out several meters by hand and make sure some tension on the shaft. Adjust the friction by side wheel if needed.
5. Wrap the film around roller and idler bar according to the diagram. Be careful that the film should be with tension on and even.
6. Slit the film to separate with liner at suitable place, and reveal the liner to put it on the film rewind shaft.
7. put the media on the shaft and adjust the friction. Insert the media in space between rollers. Be noted that the media should be even on the working table, media edge align with film edge to avoid walking deviation. (always operated by foot pedal).
8. Put the pressure plate in stable laminating process, put on the switch, put the laminated media on the shaft, adjust the friction to make automatically take up.

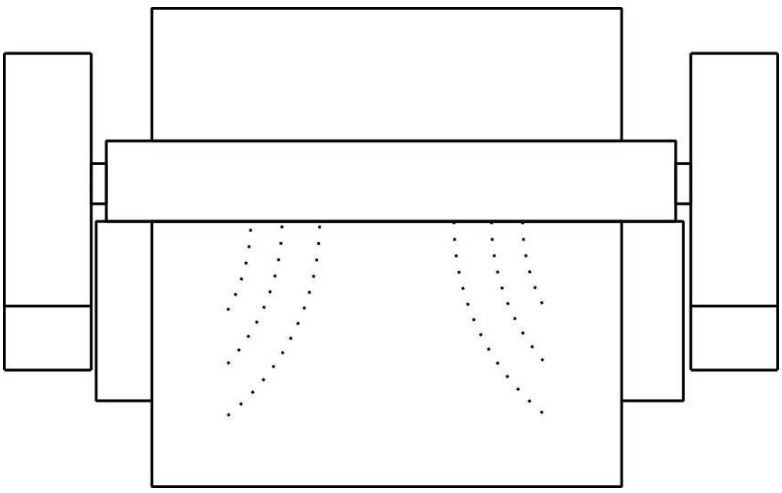
Note: the laminating performance is related to the friction adjustment of all shaft.

6.4 Notes for Operation

1. Place the laminator on a stable flat surface with good ventilation. Don't put much staff around the machine to avoid the necessary problem.
2. The power cord not allow to put on ground nor with object on top.
3. Make sure suitable friction on all shafts. Adjust the friction of liner rewinder to separate the film.
4. Keep the edge flat of media and film roll.
5. don't run so fast at the beginning. Increase the speed when everything is running well.
6. make sure the media is dry to guarantee the laminating result.
7. The "U" shape reflects normal pressure, if the "U" is too big, decrease the pressure to get good laminating result.



8. For the issue in above picture indicates the pressure is too small, please increase pressure to improve



9. If the image is off-tracking on the left right of the machine, it indicates the pressure on the left side is higher than that on the right side, please decrease the pressure (see chapter 4).
10. No need heating for cold lamination film. If your working condition is lower than 10℃ (50℉), please heat to 40℃ (122℉) to get satisfied performance.

VII. Problems and Solutions

First of all, please check if any destroy parts on your machine, if so, repair the broken part then run the machine.

Trouble	Reason	Solution
Although the main is plugged in and the power-on button is pressed, the LED does not light up.	The power plug is not well-connected.	Check the plug to ensure connection.
	The voltage of the main does not adaptable to the required voltage.	Check the voltage of the main to ensure its adaption to the machine.
	Emergency stop is not switched on.	Turn on the emergency stop.
	The fuse link beside the power cable is un-installed or damaged.	Check the fuse to ensure it is not damage.
The power is connected; air break is turned on but trip.	The heater in the top roller is damaged which leads to short circuit.	Check and replace a heater.
The motor can not be started.	The speed controller fails.	Replace a speed controller.
The motor runs fast and its speed can not be controlled.	Potentiometer fails.	Replace a potentiometer.
The rotation of the rollers stops from time to time.	The chains are too loose.	Tighten the chains.
The film peeling-off separation point is too high.	The damping of the liner paper roll is too much.	Reduce its damping by turning its tension control knob.
The film peeling-off separation point is too low.	The damping of the liner paper roll is too less.	Increase its damping by turning its tension control knob.
The cold lamination film separated from its liner paper has diagonal lines.	The pressure on the two sides of the film is imbalanced.	Smooth the film by hand.
The image on the in-feed table has U-shape lines.	The pressure between the rollers is too much.	Reduce the pressure and use top plate to press it.
The image on the in-feed table has splay lines.	The pressure between the rollers is too less.	Increase its pressure.
The image is off-tracking.	The pressure on the left and right side is imbalanced.	Refer to the Section of Align the main rollers.

VIII. Maintenance

1. Only experienced operator could open the cabinet, be noted following measures;
2. Don’t use abrasive cleaner to clean the machine surface.
3. Check the rotation parts regularly and fill high-temperature grease to lubricate the two bearings of heating rollers.
4. Do not wash the machine with water. This can damage the electrical circuits, cause electrical shock or corrosion.
5. During maintenance, don’t run the machine
6. During maintenance, don't change, move and dismantle the safety parts. Make sure the safety parts before using.
7. Cut the power supply before dismantling and assembly.

8.1 Maintenance of rollers

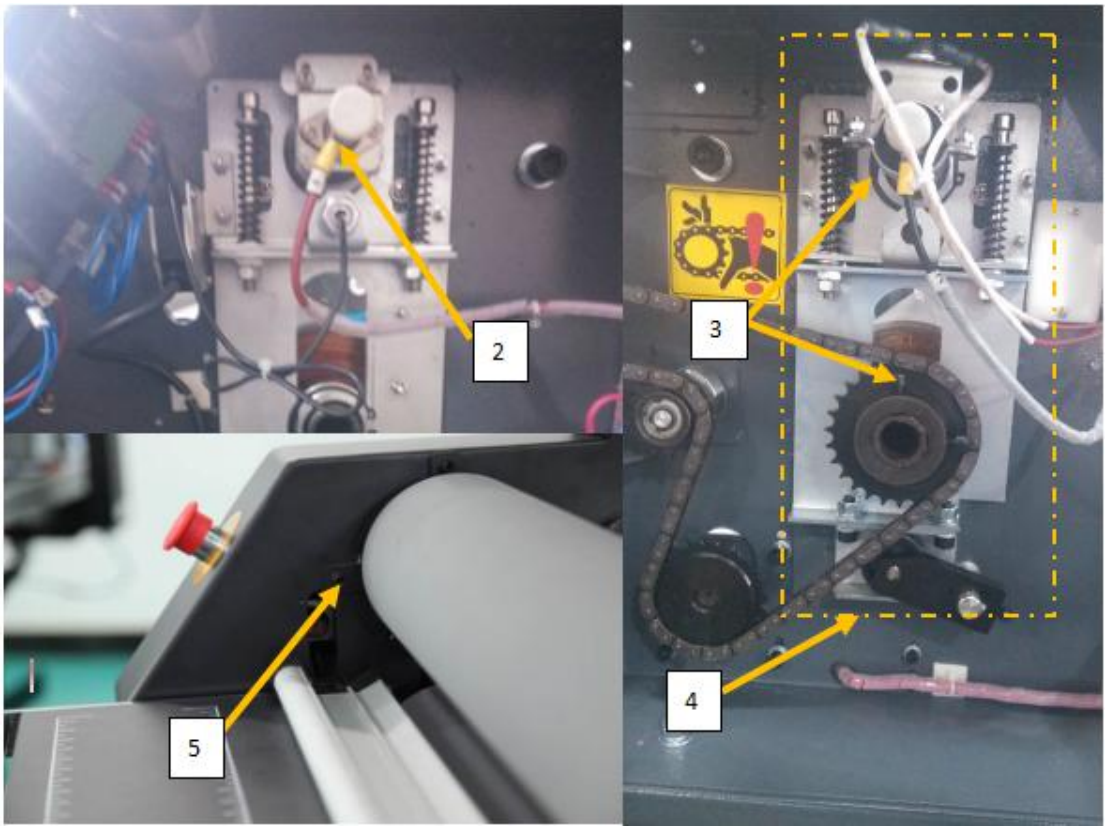
The main rollers are the crucial parts of the machine. They directly relate to the output quality of lamination. Please make maintenance regularly.

1. Lift the upper rollers after work to prevent deformation of rollers.
2. Make sure the knife or sharp items will not scratch the rollers. Lift the
3. To extend the lifetime of the rollers, please ensure the rollers are clean. please remove the adhesive residue by a piece of flannelette with alcohol, detergent or eraser.
4. Please remove the adhesive residue by a piece of flannelette with alcohol, detergent or eraser.
   - Stop heating when wiping rollers and be sure that temperature is less than 40 degrees Celsius (104℉).
   - Gently wipe the rotating rollers, and avoid concentration of wiping one point to prevent partial damage roller surface.
   - Clean up the residual glue on the rollers, otherwise, it will affect the effect of laminating.

➢ **Roller replacement**

1. Open cabinet on both sides;
2. Remove the heater wiring, the machine should be power off first;

3. Remove the gear;
4. Remove the entire block bearing set and heater;
5. Remove the collars on left cabinet;
6. Take off the roller;
7. Install new roller;
8. Repeat the previous step to install machine.



8.2 Cleaning

1. To extend the lifetime of the machines, please ensure the machine are clean.
2. Make sure environment clean and keep away from obstacles.

8.3 Checking

In order to ensure your safety, please check the safety of the machine regularly. If you find failures in the check, please refer to the section of Trouble shooting and solution. If you need to reset the pressure, please refer to the section of Pressure setting.

8.3.1 Visual Checking

Visual checking prior to maintenance.

1. power supple cable undamaged.
2. Caster is stable.
3. Any damage on machine

8.3.2 Safety Parts Checking

- **Emergency switch**

1. Turn on machine
2. press the emergency switch, machine stop or not
3. Turn on machine when emergency switch is on
4. Release the emergency switch, turn on and start to run machine.

- **photocell checking**

1. turn on the machine
2. roller rotating
3. hide the photocell, check roller rotating or not
4. move the obstacle, check roller rotating or not.

Caution: When use the pedal switch, the optical switch does not work.

Attention!

Through poor conditions of the electrical MAINS, shortly voltage drops can appear when starting the EQUIPMENT. This can influence other equipment (eg. Blinking of a lamp). If the MAINS-IMPEDANCE Zmax<0.300 OHM, such disturbances are not expected. (In case of need, you may contact you local supply authority for further information.)

Warranty Card

MODEL		LOT #	
BUYER		DATE	
SELLER		TEL	

Notes

i. The warranty card should be filled by seller and kept by buyer. Alterations are prohibited.

ii. The guarantee period is two years. The repair is free of charge within 6 months and will be charged with material and labor cost after 6 months.

iii. No free repair is available for any damages caused by the improper use.