

# **Ving 63" Entry Level Full Auto Wide Format Heat Assisted Cold Laminator**



**User's Manual  
FMJ-1600E-WARM**

## I. Description

FMJ-1600-E-WARM is a new type of laminator with auto-peeling of liner paper and print take-up function based on the FMJ-1600-II-Warm. It is simple in structure, rational, user-friendly and low in cost. The top and bottom rollers are driven by the motor while the film mandrel and liner paper roll are driven by its own material, that is the straight internal force motion of the printed picture between the main rollers. It saves labor power and easy to operate. Due to its innovated structure, it is popular among users since its launch.

The machine has film mandrel, S bar and prints roller to support consecutive laminating or long picture laminating. And the auto-peeling of liner paper and print take-up are achieved by the rolling force of the main rollers. It is easy to use, efficient, energy-saving and easy to regulate the velocity.

It has two types of mains values, 220-240VAC or 110VAC. Please make sure that the power indication in the machine ID label conforms to your power supply when you buy or install the machine.

The machine has pedal switch. You can use either hand switch or pedal switch to operate.

## II. Specifications

Maximum Laminating Width: 1600mm (63")

Maximum Laminating Thickness: 35mm (1.4")

Laminating Speed: 0 - 6m (236") / min

Forward / Reverse: Yes

Foot Pedal: Yes

Roller's Diameter: 120mm (4.7")

Maximum heating temperature: 60 degree, 140F

Heating Mode: Upper roller heating

Motor power: 90W

Heating Power: 1300W

Rated Power: 1400W

Auto rewind liner pickup: Yes

After Laminating Pickup: Yes

Emergency Stops: Yes

Safety Photocell: Yes

Media Core Size: 3"

power supply: AC 110V - 240V, 50Hz or 60Hz

1N/PE 220V 7A; 1N/PE 110V 13A

III. Parts identifications



Figure 1

- 1. Left cabinet
- 2. Emergent stop
- 3. Left bracket plate
- 4. Liner paper roll
- 5. Film mandrel
- 6. roller
- 7. Right bracket plate
- 8. Right cabinet
- 9. In-feed table
- 10. Lift knob
- 11. prints roll
- 12. Base plate
- 13. Pedal switch
- 14. castor
- 15. Underframe
- 16. Damping knob



- 1. Circuit breaker
- 2. Power wire
- 3. Pedal switch plug-in

**Control Panel:**

 **Power on/off:** Press the button to turn on or turn off the machine. When the machine is turned off, the motor and electricity heating will shut down automatically, the roller will be lifted automatically.

**F/R-Direction Switching Button:**

Control the rotation direction of the roller.

 **Motor on/off:** Start or stop the motor

 **Heating Button:** Start or stop the heating function.

- 1) Temperature setting: Press the up or down button to set the temperature of the roller. 6 seconds after setting the actual temperature will be displayed.



Figure 2

**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, D-5 in order.;

END to indicate the end of setting;

Press up and down button to regulate the value of specification;

If the buttons are not pressed in minute, the specification setting state will be automatically ended.

Spec. No.	Spec. Content	Temp. Range	Default Temp.
D-1	Temp. Correction	-100---100	0 °C
D-2	High temp. alarm point	10-170C	150 °C
D-3	Max. temp.	10-150	120°C
D-4	Temp. unit	0-°C, 1-°F	0-°C
END	Setting completed		

**Installation Warnings:**

- 1) Pressure transducer debugging: When the upper roller touches the down roller, observe the temperature increase display, regulate the position of the transducer to reach the value of the lifting height to (). Then fix the position of the transducer.

- 2) When install the upper and down limit, do not confuse the wire number.
- 3) Fix the film panel first and then test the button, or else the bulb and cable lines may be damaged.

#### V. Installation and operating

1. Move the machine to its final location, make sure it is free of any damage and ready of all the parts and accessories.
2. Connect the machine to the mains. Check the mains values before connecting.
3. Install the film mandrel and left and right cabinet of print roll (fasten the screws). Make sure the ends are symmetrical. Press the start button and the rollers are rotating. Make sure the machine run normally. Then try lamination and check the effect and quality of lamination.
4. Film mandrel and liner paper roller can be installed or removed quickly. three rubber strips which can be rolled are mounted on the aluminum mandrel to lock the core of the film roll. A Bakelite knob on one end of the liner paper roller can regulate friction to ensure the same speech of main rollers and liner paper roller to ensure the laminating quality. Turn the knob clockwise, damping increases. While turn the knob counterclockwise, the damping decreases.
5. The knob on the right cabinet is for lift or drop the roller. Turn it clockwise and the roller is lifted. Turn it counterclockwise and the roller is dropped. When turn it counterclockwise and the top roller reaches the bottom roller, the turning force is significantly reduced. This phenomenon is called *idle stroke*. When the weight of the top roller is well-distributed on the bottom roller, the laminating can be started. If you continue to turn the knob counterclockwise, the pressure can be increased.

#### **Adjust the parallelism and pressure of the main rollers::**

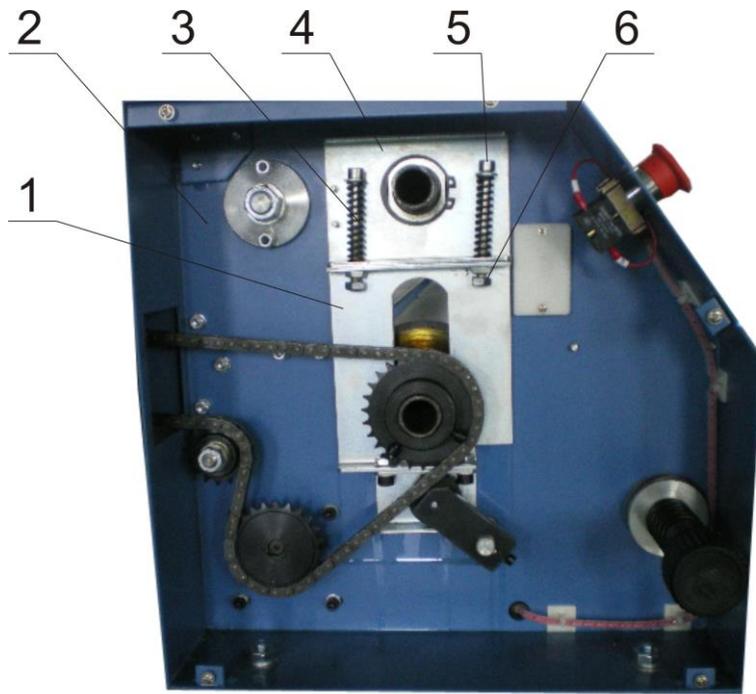


Figure 3

1. Middle bracket of compression on the left
2. Left cabinet
3. Compression spring
4. Upper compression bracket
5. Compression bolt
6. Compression nut

The alignment of the main rollers is the crucial factor to ensure the balance of pressure and further affect the quality of lamination and the off-tracking of image. The main rollers are well-aligned before the shipment from factory. While violent vibration in transportation or long-time operation may lead to the misalignment of the main rollers. You can readjust the rollers with the following measures.

1. Reset the pressure of the main rollers

When the pressure of the main rollers is imbalanced, the image may be mounted off track or show up wrinkles. Adjust the pressure with the following steps.

- 1) Observe and record the off-tracking direction of the image, turn off the power of the machine and remove the board of the wheel cabinet.

Caution: compared with the right cabinet, the parts in the left cabinet is

fewer. Please remove the left cabinet first to avoid excessive work or damage of other parts.

As the figure shown above, the middle bracket of the left compression and the upper compression bracket are connected by two bolts. Each bolt has a spring and two screws (see the figure above). One screw is welded with the compression plate and the other below is movable clamp nut.

2) 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. Adjust the screw bolt to reduce the deflection of the spring on it. The range of adjustment of both bolts shall be as the same as possible.

Note: You can use a ruler to measure the height of the two bolts and make sure they are at the same level in the adjustment.

3) If the image is off-tracking on the right side, it indicates that the pressure on the level side is lower than that on the right side. Increase the deflection of the spring on the two bolts then. The range of adjustment depends on the range of off-track of image.

Caution: When the deflection of spring is adjusted, please turn the pressure of the machine to its maximum level to ensure there is margin for the deflection. Or else the spring may be damaged. When the left side does not have margin, remove the right-side board to adjust the screw bolt on this side.

4) Tighten the nuts after adjustment.

5) Install the left side board on the machine.

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.

## 1. Align the main rollers

Set the space between the main rollers to 1-2mm. Observe the evenness of space

by eyes (or measured by a feeler). If it is not even, record the side with small space. Then set the main rollers to idle stroke, cut the main power, open the side board of the wheel carbine, as the figure shows below, screw out the bolt, increase or reduce the number of the insert plates between the lifting plate and the compression plate (the insert plates are supplied as the accessory of the machine) to align the main rollers and then re-install the side board.

Caution: The main rollers are aligned and fixed before the shipment from the factory. When the image is off-tracking or other problems occur in lamination, please check the pressure balance of the main rollers first. Only after confirming the problems are caused by the misalignment of the main rollers, the insert plates can be increased or reduced. Reset the pressure of the main rollers after the adjustment.

6. Lamination process:

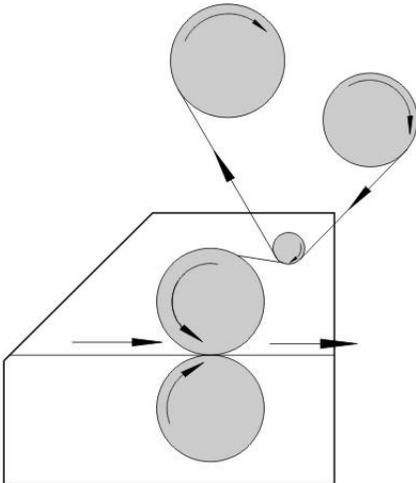


Figure 4

## VI. Safety Cautions:

1. Read this manual carefully before starting the machine. Familiarize yourself thoroughly with the structure, functioning and operation of this machine. Observe all the warning symbols on the machine to prevent accidents.
2. The mains supply must match the type indicated on the machine identification label. And reliable ground connection shall be ensured.
3. This machine does not have optical safety device. Do not approach the rolling rollers to prevent injury.
4. Lift the roller after operation to prevent deformation after long-time pressure and cut the power supply.
5. Keep distance with the rollers when cut the films or images to prevent damage to the rollers by the edge tools. You can swipe the glue on the rollers by cotton cloth with alcohol. You may not use organic solvent to swipe the roller or wash the roller by water, which may lead to damage of the rubber or short-circuit.
6. Install 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 to prevent fire accident.
7. Check the electricity leaky of the machine and power lines regularly. If there is any abnormal phenomena in operation, please check and eliminate problem in time to prevent further damage.

### Warranty Card

Model		Production No.	
Buyer		Purchase time	
Dealer		Tel	

### Notes

1. The above card shall be filled by the dealer and kept by the buyer. Any alternation will invalid the card.
2. The standard warranty period of this machine is one year. You can get free repair service with the warranty card within half a year. Material and service fee will be charged after this period.
3. Any machine damaged by improper usage may not enjoy free repair service.