

1600-X2

Single-side Low heating Cold Laminator

Manual

Please read this specification carefully before operating the machine

The picture just for reference, subject to the article

Contents

1.Specifications & features.....	3
2.Installation.....	3
3.Parts of the machine.....	6
4.Control panel.....	7
5. General function.....	8
6.lamination process.....	12
7.Safety rules and notices.....	14
8.General problems and methods.....	15

Preface

This laminator 1600X2 is low heated cold laminator with liner and without liner, a wide range of application. It can be used both cold laminating and hot laminating with low temperature, to strip coil backing paper, to roll picture automatically. Especially when work in hot laminating conditions, it will improve the coating effect by heating the roller. It's multiple-function, easy operation and high efficiency. In order to make full advantage of the laminator, please read this manual carefully.

1. Specifications & features

laminating width: 1520 mm(60")

speed: 0—20 m/min

roller diameter: 130 mm

laminating thickness: 25 mm

Temperature: when hot laminating, the temperature is 50~60 degree, the highest temperature is 60 degree.

Power voltage: AC220-240V 50Hz (Customized for 110V)

Power: 2200W

Current: 10A

Motor power: 250W

machine size: 2150×750×750mm

machine weight: 160kg

2. Installation

Notice:

1. Carefully check wooden box before opening it, in case of damage during the delivery.
2. Check the accessories are complete or not.
3. You should have enough tidy and clean space for installation.
4. The wheels on the machine are just for the short moving.
5. This machine load use the single 220-240V AC voltage (or 110V need to order). Before connect the electric power should check the power source whether

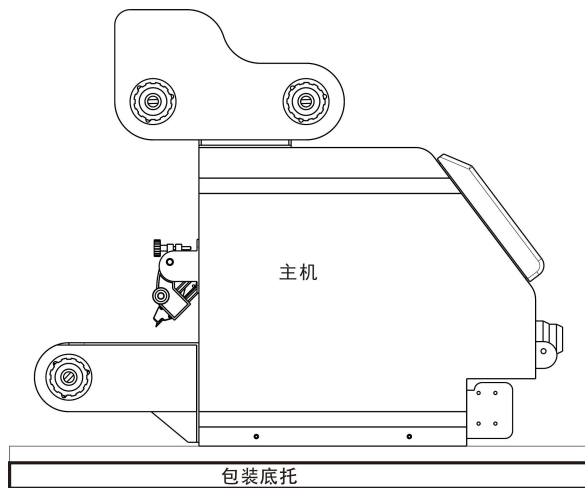
compliance with requirements and capacity is big enough. Power position should set level 1 single 110-240V,20A take over current protection of the breaker and have good grounding ,in case cause personal injury.

6. In order not to damage the work table and the screw, please do not put heavy stuff on the work table.

7. When moving the laminator by forklift, please take some protective measures under the machine and hold by workers of both sides.

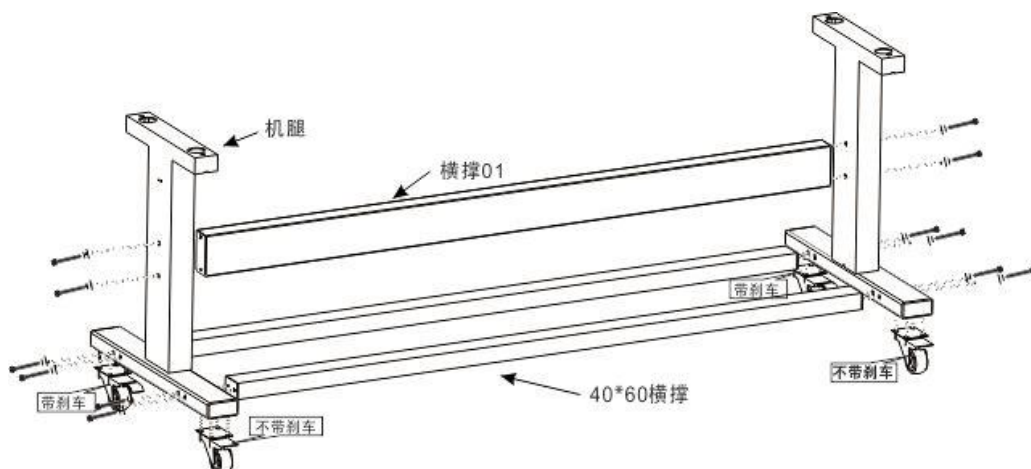


Machine is heavy! Please be careful, when moving.




Steel stand installation

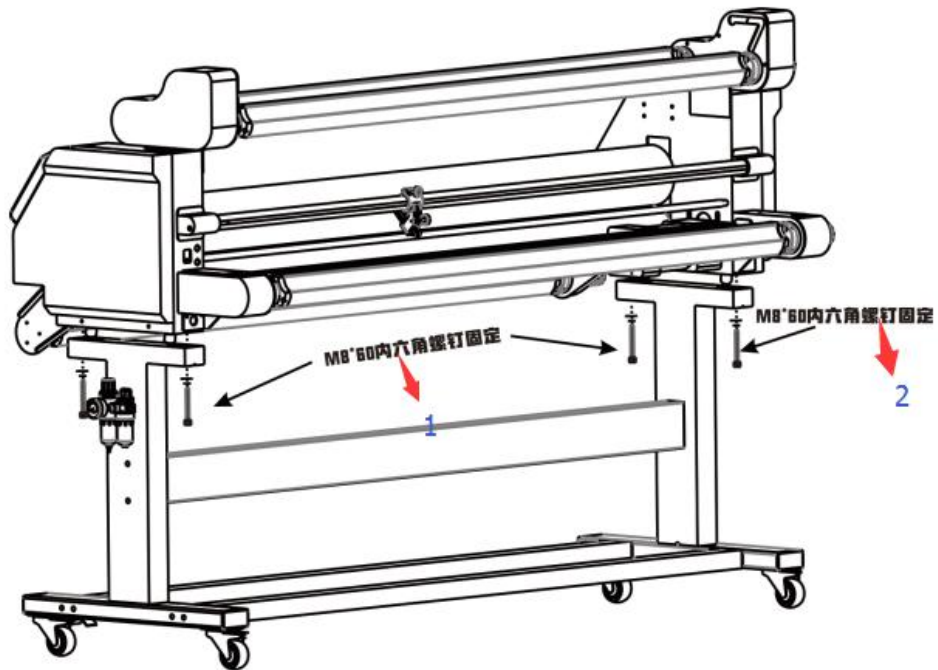
1. Take all the parts from the package.
2. As shown below



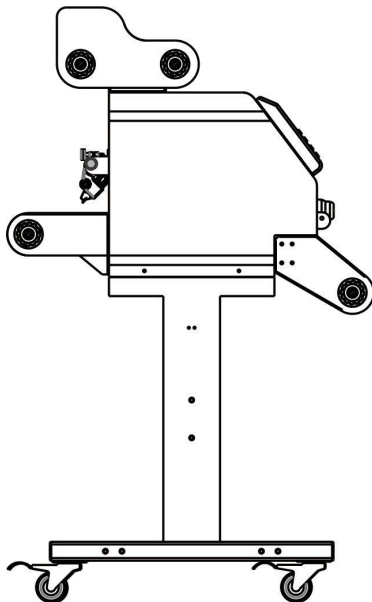
1. Put the machine on steel stand.
2. As shown in the picture, please use M8*60 bolt to fasten the machine body.

Machine body installation

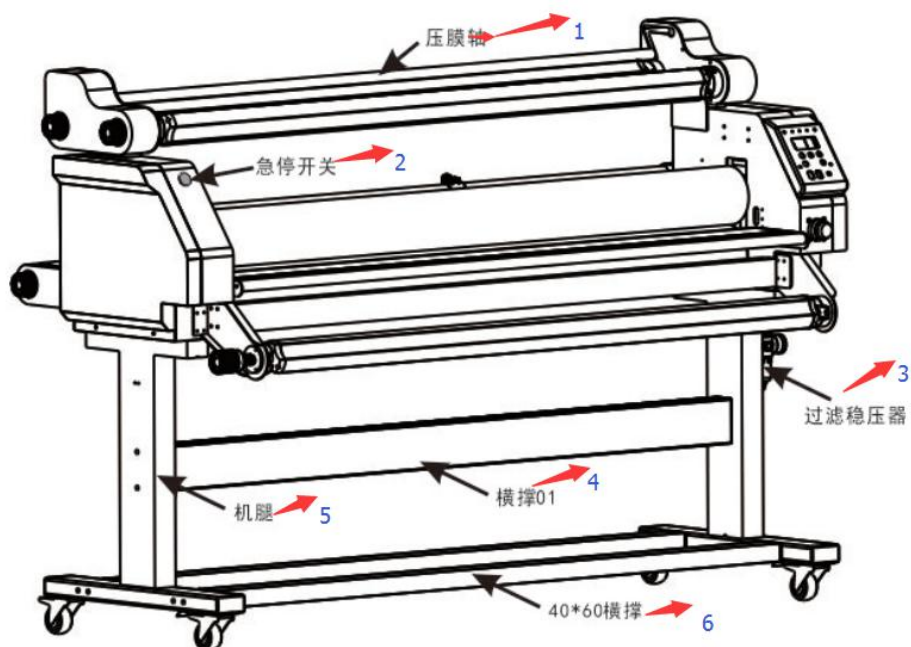
 Warning: When carry or move should focus on before and after support beam position, but don't to move and raise pressure regulating the handwheel and weak position



1. Hexagon socket screws fix it
 2. Hexagon socket screws fix it
- The right side or the left side of machine



3. Spare parts of the machine



1. Press-film roller
2. The emergency “stop” button
3. Filter regulator
4. Cross brace 01
5. Machine leg
6. 40*60 Cross brace

4.Control Panel



1. Cold lamination
2. Hot lamination
3. Keep the temperature
4. Setting
5. Increasing heat
6. Decreasing heat
7. Cold lamination
8. Hot lamination
9. Point switch
10. Forward switch
11. Continuous switch
12. reverse switch

Instruction:

Preset temperature: Find out hot/cold framed switch, choose the "hot ", temperature display screen will light up, the left number is preset temperature, the right number is roller temperature, press “■ SET” key and then through “▲ UP” and “▼ DOWN” adjust preset temperature, after adjust it and press “■ SET” key confirm

it. when cold film, the preset temperature is 50 °C ,the max temperature is 50 °C.According to the viscosity of the glue, and adjust preset temperature.

Turn: This machine don't have continuous reverse function;

In the "continuous" state it only can " turning";

In the "point move" state, through the pedal switch can "turning" or "reverse".

Governor knob: clockwise to grow speed, counter-clockwise to slow down; Please select the appropriate speed to ensure the laminating effect, when stop coated please select "point move".

5.General Using method

1. Power

Power wire: Use standard power plug, please pay attention to your use power supply voltage if it is compliance with the rated voltage machine before connect power, and should verify whether compliance with requirements access socket, and have good grounding, cut capacity is big enough.

Main swatch: Behind of the machine stall the main power switch, main power switch has two gears position, up by for open, indicator is light; down by for shut, indicator is light out.

Insurance tube: this machine is equipped with two insurance tube 2A and 15A, 2A tube control the whole machine components insurance circuit, 15A insurance tube heating tube control alone.

2. Emergency-stop switch: In an emergency, press the red button and it can immediately cut off power, the indicator light out and rubber roller stop turning; Clockwise, red button will automatically rises, the power will open again and indicator light, rubber roller back in operation again.

3. Roller fluctuation: Open the plastic roller lift the handwheel handle, clockwise rotation handwheel for plastic roller ascension, counter-clockwise handwheel for plastic roller decline.

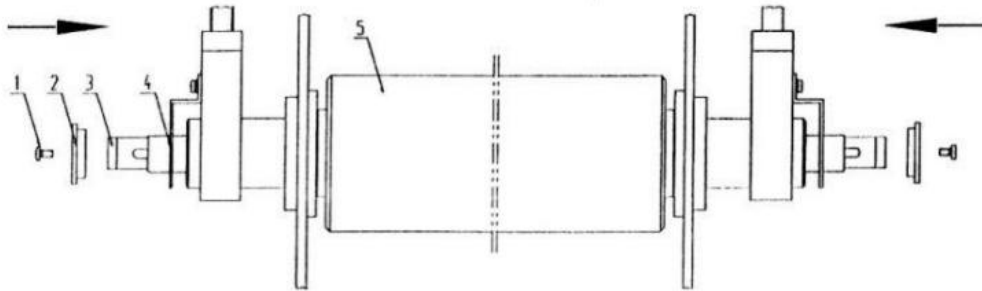
Counter clockwise rotation handwheel, when two plastic roller contact, the handwheel turn feel relaxed called empty position. Continues to rotate handwheel between the two rubber roller pressure increase gradually, operator should according to different material pictures and different specifications of membranae tectoria asked to choose the proper pressure. (Generaliy rubber roller place in empty position

is best)

⚠️ Note: when you open or fold the handwheel grip, please handle pull out a little before you turn over or fold, don't direct fold and lest cause the damage.

4.Quartz tube installation

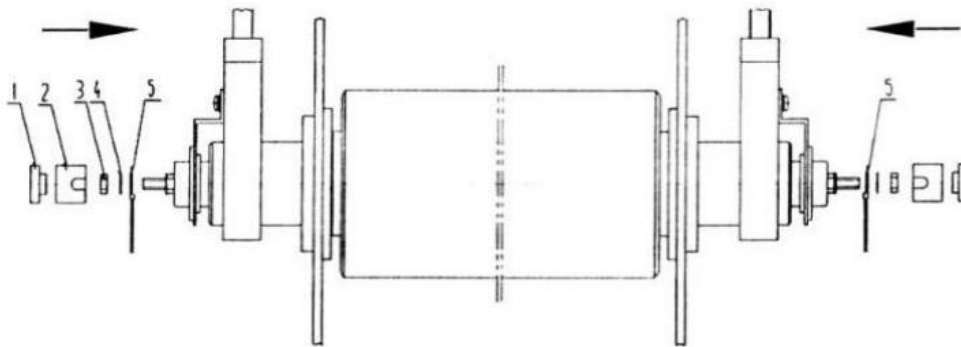
⚠️ Note: Pull out power plug before install quartz tube!



1. screw 2. rubber mat 3. quartz tube 4. quartz tube support 5. roller

Step one: Quartz tube installation(such as above)

1. Tear down left and right box cover;
2. Tear down both ends of the rubber mat from quartz tube stents
3. Let quartz tube wear into roller and set plastic mat on quartz tube, tighten it and the support with screws.



1、瓷帽； 2、瓷管； 3、六角螺母； 4、平垫； 5、导线

1.Porcelain cap 2. Porcelain pipe 3. Hex nuts 4. Flat mat 5. Wire

Step two:Wire installation(such as above)

- 1.After quartz tube install well and let quartz tube on both ends of the porcelain cap,porcelain pipe, hex nut, flat mat to tear down.
- 2.Set wires at the both ends of the quartz tube.
3. Let the unloaded flat mat, hex nuts, porcelain pipe, porcelain cap pack to return quartz tube.



Note : The hex nuts must be tighten! If loose will appear heating power electric spark change,and broken wire and other components

6、 Picture roller 、 film roller 、 back paper roller ,Drawing roller installation and adjustment

Picture roller ,film roller,back paper roller,Drawing roller have three pieces Rubber strip ,to support film, prevent paper tube skid, The standard inner diameter is 3 Inch.



1、 Plug ; 2、 Aluminum; 3、 rubber strip; 4、 A key word plug

Picutre roller : the picture roller is in the front of host, it is unpowered roller , , when you put the picture roller put 3inch roller , then you can adjust the dumping , clockwise increasing damping, counterclockwise rotation decrease damping; By adjusting the friction force to control the picture's flatness。

Film roller and back paper roller : Film roller and back paper roller above on the silicon roller , they are unpowered roller , they will run along with roller, beside the roller , there have linkage chain box,There have black handle out of the chain box ,it is damping handle,clockwise increasing damping, counterclockwise rotation decrease damping; By adjusting the friction force to control the paint roller linear speed , then can unsure the quality of laminating

Drawing roller : the roller install in the back of host,when can take up picture in time when film long picture ,Avoiding the picture damaged ,so we suggest , when film , using the take up roller .Drawing roller is a power roller and through the chain of motivation, there have linkage chain box,There have black handle out of the chain box ,it is damping handle,clockwise increasing damping, counterclockwise rotation decrease damping; By adjusting the friction force to control the paint roller linear speed , then can unsure the quality of laminating



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⚠️ Note: Should regularly check the status of damping and clean up the iron filings in time to prevent iron damping lock, rubber damping needs to change in time

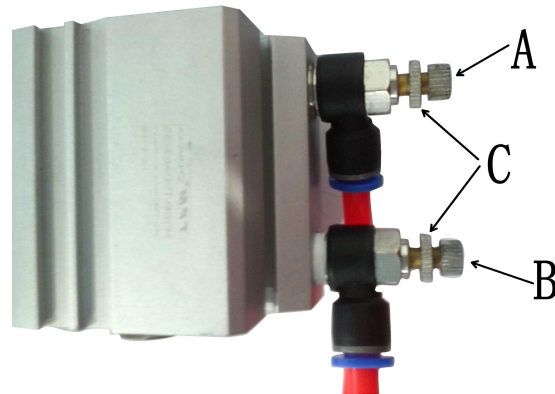
7,Air Pressure Adjustment:

There is a Filter Voltage Stabilizer at the right back of the machine, as the picture; Pull the knob of the filter voltage stabilizer up softly, air pressure increases when rotating at clockwise direction. Air pressure decreases when rotating at the counterclockwise direction. Normal air pressure is 0.2Mpa.



8, Parallelism and gap regulation of the rollers

The parallelism of the rollers will affect quality and folds of laminating.We will fix the parallelism well before delivery,you should adjust it after a period of use.



A-Pressure adjusting valve B-Pressure adjusting valve C-locking screw nut

1. When the parallelism gap of the rollers is slight, it can be adjusted by the following method:

a. Moving screw A to adjust the balance of the roller while it's rising. Find out which side of the roller rises slower, then move the screw outward (Or find out which side rises faster, then move the screw inward). Then raise and lower the roller until the roller is balanced.

b. Move screw B to adjust the balance of roller while it's falling. Find out which side of the roller falls slower, then move the screw outward (Or find out which side falls faster, then move the screw inward). Then raise and lower the roller until the roller is balanced.

(Adjust the air pressure to 0.1MPa, the movement of the roller is slower than normal. It's convenient to observe.)

⚠Attention: after the adjustment, the lock screw nut must be fixed.

2. When the parallelism gap is big, it can be adjusted by the following method:

a. Loosen the lock screw nut on both sides and move outward completely;

b. Move 4 pressure adjusting valve softly inward completely, please keep the power used same at 4 times.

c. Move 4 pressure adjusting valves same laps outward, 5 and half laps is the best normally. But the laps can be adjusted according to the real situation. But the laps moved outward must be same, which is good for adjustment.

d. Now, the parallelism is slight, Method 1 can be used to adjust then

⚠Attention: While adjusting parallelism gap, only one side of the roller should be referred, then adjust the pressure adjusting valve on the other side to make the roller reach balance. Don't adjust 2 pressure adjusting valve together.

6.Film laminating

Laminating work is an extremely fine, technical stronger work, for beginners should have experience in the technicians under guidance of Membranae tectoria work, the below only show the general operation.

Preheating ready to work:

1. Fall down the upper nip roller;

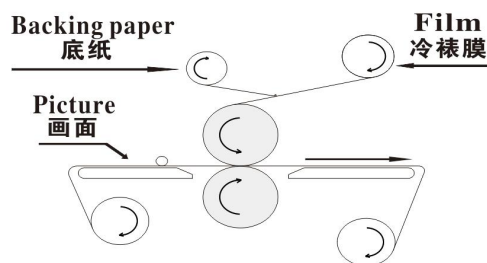
2. Press the "continuous" and "turning" switch, governor rotate to the "1";
3. Open the main switch;
4. Open the "hot" switch and set the heat temperature which we required, then nip roller began to heating. Hot laminating, the preset temperature is 90 °C , when low temperature/cold laminating, the preset temperature set to 45 °C (to working temperature need about 10-20 minutes)
5. Take out a roll of film and install into material roller, then let roll into material feeding roller scaffold and pulling the film with the hand, shall ensure the appropriate resistance,through the next to the damping handwheel adjust it.
6. Let framed chart scroll in carton, then packed in rewinding stent and fixed them.

When the up roller reach a set temperature:

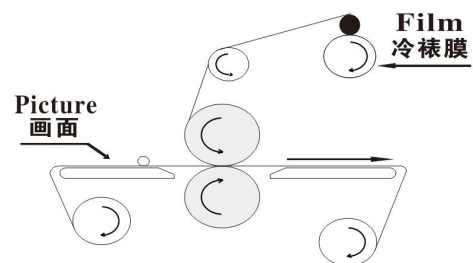
1. Press the "point move" switch and then nip roller will stop turning.
2. Let remove pressure paper stem and lift the above roller.
- 3.(hot film installation)
4. (cold film installation) Generally do not need to heat, when cold framed film used for cold framed, but if the above nip roller heating to 40-50 °C , cold Membranae tectoria effect will be better. The Membranae tectoria put out and from between two nip roller through winding (paste) on the picture roll (just apply to beginning not skilled);Or someone pulled, after laminating starting, and then flat longer fast around (paste) in the picture roll. In proper position with paper cutting knives let membrane and back paper apart, then stir up a paper upper the back and make it apart from film, with adhesive tape to fixe at the back of paper roll by level. Note: When the back paper after separation film should be no paper folding and film tightly with nip roller surface to keep level.
5. Put the needed laminating paper on the front working table, insert the blank of paper in between rollers , then put press-paper roller.
6. Put down the upper roller (the handwheel is very relaxed, left and right don't force).

Note: the two sides of the picture with edge roller vertical, lestthe laminating process go partial.

有底纸膜覆膜



无底纸膜覆膜



7. Press the "continuous" switch and began to laminating.

⚠ Note: if the hot film without drying, clockwise rotation handwheel increase friction damping and improve the swelling force.

8. Clockwise governor knob and adjust to the appropriate speed.

⚠ Note: the faster speed the faster cooling roller, please choose the appropriate membranae tectoria temperature and speed.

If the plastic film show the wrinkles and need to stop, cutting film and stall into the film again.

When film laminating should pay the below five attention:

1. The film should be wrapped around the picture roll.
2. Scroll to framed chart in carton, after stalled in rewinding stent around the film and alignment and then fixed.
3. The pictures inserted between rubber roller, pictures must tighten, tile in front of countertop, pictures with table on both sides of the length direction must be show 90° angle state and guarantee membranae tectoria didn't skewed coated.
4. When membranae tectoria if done correctly and the picture is still running deviation, with the hand press run folk prescription pictures,artificially increase pressure and adjust it slowly.
5. When membranae tectoria should pay attention to adjust roller coated materials,rewinding bracket, the paper roll back, and get the picture roll damping and in order to keep the reasonable friction, which relate to plastic roller effect.

7.Safety operation procedures and notes

1. The machine operation personnel, must be carefully read the instruction for use the machine, the machine full understanding of the main structure, performance, operation method, the conditions to a random training, upon passing the examination before operating.And keep equipment paste all warning marks, improve safety consciousness, prevent the happening of the accident, in order to ensure the safety of operators.

7 Safety operation procedures and notes

1. The operator first must learn carefully the machine structure, function and instruction, and obey the notes and warning marks on the machine, improve safety consciousness, prevent the happening of the accident, in order to ensure safety.
2. The power must be the same as the required power, grounding line must be accurate and reliable.
3. When examine and repair machine, must first cut off power. After finish laminating, also need power off.
4. Not put the power line on the pedestrian path or put something on it, prevent the vehicle to press.
5. The working place should be dry and ventilated, should not be close to the place wet or damp, and place with inflammable and explosive items.
6. If More than two staff to operate machine, should be mutually coordinate, if in an emergency, need to press the “Emergency” button in time to stop the machine.
7. The upper roller is the roller for heating, the surface temperature is more than 50°C,When heat, do not touch the roller, at any time, not put hand and other parts of the body touch the between parts of the rollers, in case crushed or burned.
Note: when machine in heating,need staff nearby, in order to avoid fire or damage the roller due to overheat.
8. Not put the tools or others on the front and back working-table and other machine parts.
9. Not clean the machine with water, in case cause a short circuit, electric shock

accidents and rust.

10. In order to prolong the life of the rubber roller, must make rollers clean, after finish laminating, please use swab and 80% alcohol to clean.

Note:

(1)When clean the roller, must stop heating and clean when temperature below 40 °C.

(2)Clean by moving the roller slowly, avoid to clean them on fixed point, in case to damage one part of the rollers.

(3)Need to clean the glue and attachments on the roller in order not to affect the laminating quality.

11. Regularly inspect whether the machine rotating parts are flexible and put some lubricating oils in the gears.

12. Regularly check whether the power supply line and pedal switch line damaged, in case the leakage accident happen.

13. The upper and lower rubber roller are main parts, if rubber roller damaged, it will affect the laminating quality, so not scratch rollers, after laminating, need to raise rollers, in case the roller press long time to not in shape ; Always keep the rollers clean, no dust, when the rubber rollers with glue, need to clean them with swab and alcohol.

8.The general questions and methods

Problem	Reasons	Methods
Control panel have no electricity	Power is off or “emergency”button down	Check the power and emergency button
	Fuse tube broken	Check and replace insurance pipe
Don’t turn	Force between rollers too large	Lift a little the upper roller
	Friction is too large	Adjust friction
	Motor key loosen or fall off	Tighten sprocket key
	Motor or speed knob get problem	Contact with motor or governor
Laminated paper isn't clear and have white point	Roller temperature is not enough	Increase roller temperature
	Dust on the paper	Clean the dust
	Film quality not good	Contact suppliers to replace film
laminated paper have pleated bubbles	Roller’s force is not uniform or too much	Adjust roller force
	Paper not flat	Put paper in 90 angle into rubber roller
	Speed slow and temperature too high	Increase speed and reduce temperature

	Press-paper roller not in the right position	Press-paper roller fully touch paper
Laminated paper continuous running aslant	Roller force is not evenly on both sides	Adjust the roller force
	Paper at first not straight	Make the paper straight
Film fold	Film tension is too small	Adjust material-roller's resistance
	The upper roller's temperature too low	Adjust to the required temperature
laminated paper curly seriously	Film's tension is excessive	Adjust to suitable tension
	The winding tension is too large	Adjust to suitable tension