

OPERATION MANUAL

FOR
SEMI-AUTOMATIC
VACUUM SKIN PACKAGING MACHINE
MODEL NO: PV-5540

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1. INTRODUCTION

We appreciate your selection of Promivision® Semi-automatic Vacuum Skin Packaging Machine. This manual will assist you in making the best use of the machine and includes information on installation, operation, material and maintenance of your unit.

Special Features

Promivision® Semi-automatic Vacuum Skin Packaging Machine is designed and engineered with all necessary features for maximum performance.

- 1) No need to pipe air to the unit and all unit is self contained, requiring only electrical hook-up.
- 2) Vacuum packaging for visual identification and protection, consumer product is bonded to a printed board by sparkling, clear strong plastic.
- 3) Delicate, fragile product is locked under tough plastic to a corrugated board, air bubble sheet, or a fold-up, self-shipper.

2. APPLICATION & PROCESS

Automatic Packaging is the process of heating a plastic film until pliable, then draping the film over the product and substrate where it cools, adhering to the substrate and conforming to the contour of the products. During draping, the heating oven remains on to maintain film temperature, and vacuum is applied below the product and substrate to pull the film tightly around the product and insure proper film to substrate adhesion.

A. Display of Carded Protective Packages

- 1) Substrate: Laminated hard paperboard with/without printing, perforated film or sheet, etc.
- 2) Suitable for packaging stationers, small hardware, auto parts, household items, gifts, etc.
- 3) Products can be packed in between a transparent film and the above substrate in an instance to increase the value of your products with protection.

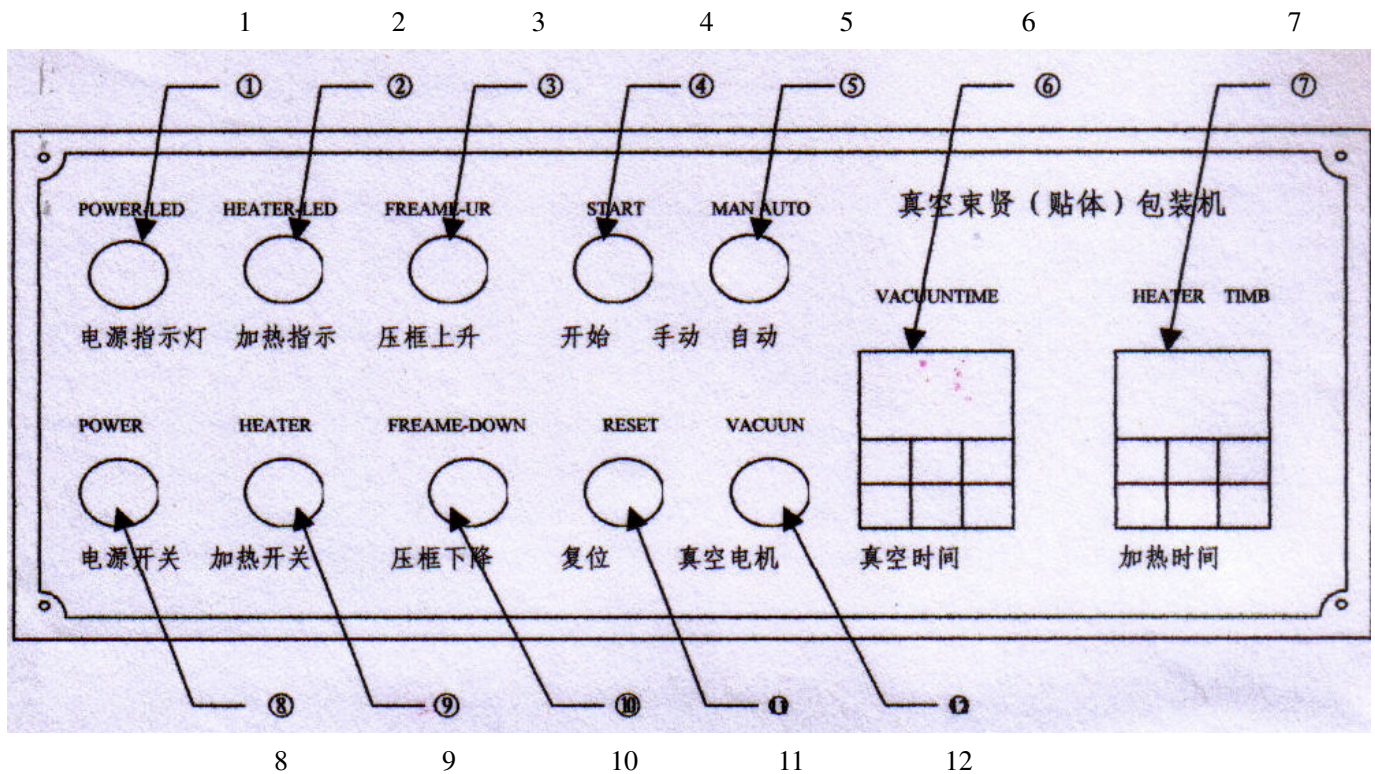
B. Industrial Protective Packages

- 1) Substrate: corrugated paper board, shipmate cartons, corrugated or perforated EPE (Expanded polyethylene), etc.
- 2) Suitable for packaging PCB in stack, small motors, lamps, fine crystal and china, porcelain art pieces, electric & electronic parts, tool or repair kits, etc.
- 3) After being packed in between film and substrate, product is immobilized for greatest protection & can be fully suspended for greatest shipping protection.

C. Vacuum Protective Packages

- 1) Substrate: Groove EPE film/sheet, air bubble cell PE sheet, groove or bubble PE sheet, etc.
- 2) Suitable for Packaging PCB in stacks, small motors, tool or repair kits, cakes, cup cakes, moon cake (Chinese), bread, frozen food, frozen meat, etc.
- 3) Product is kept clean, vacuum protected with longer shelf-life, and fully visible.
- 4) Product is immobilized for greatest protection with most rugged, scratch and dusty proof vacuum protection.

3. OPERATION PANEL DEMONSTRATION



- (1) Power Lamp : To indicate the on and off status of the power.
- (2) Heater Lamp: To indicate the on and off status of the heaters.
- (3) Frame Up: To press this button in the manual mode, the frame will go upward.
- (4) Start: To press this button in the auto mode, the machine will be ready for automatic packaging, while in manual mode, it will has no function.
- (5) Manual-Auto Mode Selection: Turn this switch to Manual, the machine will be in manual mode, while turn it to Auto mode, the machine will be in auto mode. In manual mode, you can press the Frame Up button, Frame Down button, Vacuum button to test the related functioning of the machine, or to carry out the maintenance work, or to thread and clamp the skin pack film. In auto mode, the Frame Up , Frame Down, Vacuum buttons will be invalid.
- (6) Vacuum Time: To pre-set the time for vacuum suction.
- (7) Heating Time: To pre-set the time to heat the film.
- (8) Power : To control the power source of the whole machine.
- (9) Heater: To control the power of the heaters.
- (10)Frame Down: To press this button in the manual mode, the frame will go downward.
- (11)Emergency: In case of urgent situation, press this button, the control circuit will be cut off. To resume the normal operation, release it to reset.
- (12)Vacuum: In manual mode, to press this button , the vacuum pump will rotate, using this method to ascertain the normal operation of the vacuum pump.

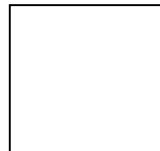
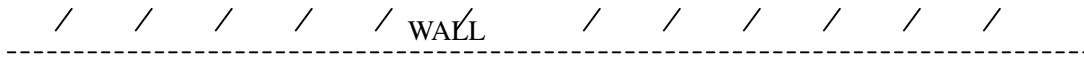
4. PRELIMINARY CAUTIONS

- 1) After receiving your Vacuum Skin Packaging Machine, Please check if the specifications are as what you requested.
- 2) Please check to see if it is damaged during delivery.
- 3) If there is anything wrong with your machine, please contact your representative or any local agent near you immediately.

- 4) If any damage is noted, contact the delivering carrier immediately and file a claim.
- 5) Peruse the operational manual before installation and operation.

5. INSTALLATION

- 1) Remove the machine from shipping container and remove all packing material.
- 2) Install your Automatic Vacuum Protective Packaging Machine at a well lit, dry and clean place, and keep away from the rear wall, if any.



(Depending on heat resisting quality of wall, the minimum spacing is 45cm or 18" on normal condition, and we recommend to be 1M as standard.)

- 3) Make sure to install the machine on a water-level floor.
- 4) Use quality wire with ground wire and plugs. (Note: Green color wire is for earth connection only.)
- 5) Check electricity capacity for safety in accordance with the instruction on the quality control tag attached to your machine.
- 6) Install film roll on the film holder on rear of the machine .
- 7) We adopt strong vacuum pumps which are free of oil-adding.
- 8) This machine adopts power supply of 220 voltage, single phase, 50 HZ.

6. PRELIMINARY CAUTIONS.

- 1) The heater oven adopts tubular stainless steel heaters, which are placed and mounted in the oven in special arrangement as in demonstrated Appendix 2. When the heater replacement is needed, the position of the heater in the oven should be specified.
- 2) When vacuum suction is being applied, the heater oven can stay above the vacuum platen to have a better packaging result, then push the heater oven to the back of the machine.
- 3) The heating method is constant heating. Warm up the heater oven before operation for about 15 minutes. Then after using the machine for about 30 minutes, the heating time can be reduced by 3-5 seconds due to the accumulated temperature in oven while operating. In this way, time and energy can be saved. However, you only need to adjust the time for once for the whole packaging process.
- 4) When the machine is waiting for the second packaging cycle, the film frames with film clamped can not stay at the upper position for too long, otherwise the heat from the heater oven will over-heat the film on the rollers and will cause the film to stick to the rollers, and as a result the film can not be pulled forward. The correct way is that when you finished the first packing cycle, let the film frames rest on the vacuum platen. When your second working plated is loaded with boards and products, then press the Start button to raise the film frame to the upper position. And then push the second loaded working plate into the vacuum plated to do the second packing cycle. (**This point is very important**).
- 5) When operating or carrying out the maintenance, pay attention to the screws and tighten them if any one is loosened.

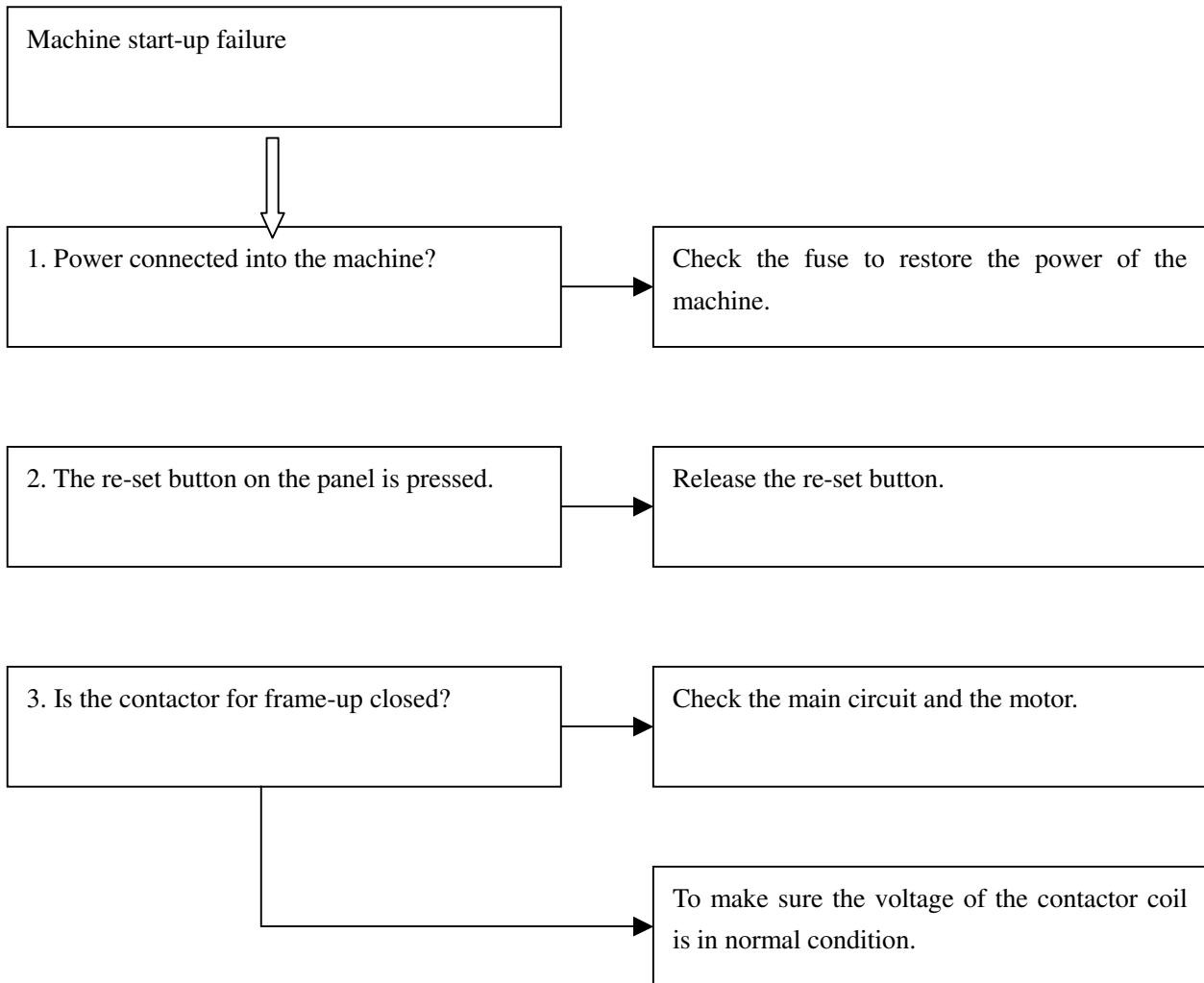
- 6) The heating time will be affected by the environment and the climate. The Vacuum time needs to be particularly adjusted depending on the product shape, size, the porosity condition of the backing card board.
- 7) Do not place any miscellaneous items on the vacuum platen, otherwise the items will be likely inhaled in to the vacuum system, which poses great damage to the vacuum pump.
- 8) When operating in the automatic mode, do not switch the Auto- Manuel select button to Manuel mode, to avoid any possible malfunction of the machine.
- 9) There is a safety bar below the film frame. When the frame goes down and something(hand) blocks its way down and touches it, the buzz button will ring to alarm. Press the Re-set button, the ringing will stop. To proceed with the automatic operation, you have to press the button Start first to resume the Auto Mode.
- 10) Before shut down the machine after the day's work, turn the machine into manual mode to bring down the film frame to settle upon the vacuum platen, so as to prolong the lifespan of the film frame.

7. WORK FLOW AND PACKAGING PROCESS.

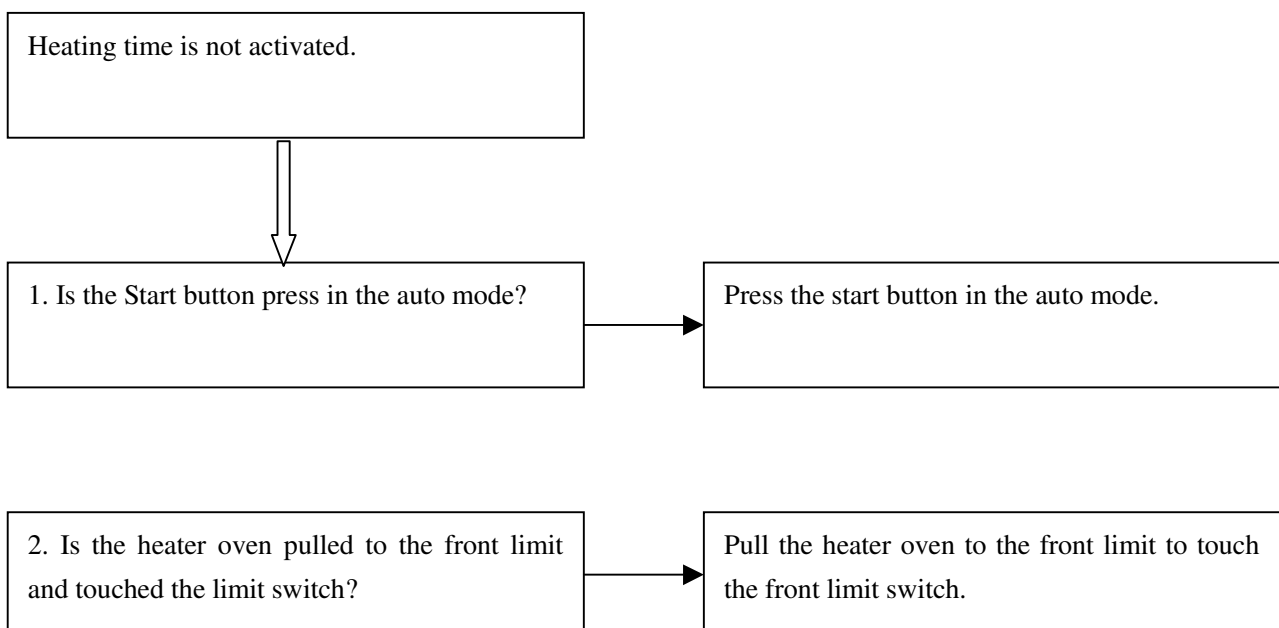
- 1) The film frame rests upon the vacuum platen.
- 2) Switch the Auto-Manual select button to manual mode.
- 3) Preset the heating and vacuum time.
- 4) Mount the film rolls on the film holder at the rear of the machine. Make sure the glue-coated inner surface side of the film will be placed facedown. Thread the film through the film guide rollers in the right direction. And then thread the film in-between the upper and lower frame and clamp the frame, and pull the film end to the front of the film frames, then close the upper film frame to clamp the film in frames tightly.
- 5) Switch the Auto-Manual select button to auto mode.
- 6) Press the Start button, the film frame will go upward automatically to get ready before heating.
- 7) Place skin pack boards and products on the working plate.
- 8) Push the loaded working plate to the vacuum platen.
- 9) Pull the heater oven to above the vacuum platen to heat the film
- 10) When the heating time is over, the film frame will go downward and the vacuum suction starts.
- 11) The film frame settles upon the vacuum platen.
- 12) Vacuum timer flashes until the vacuum time is over.
- 13) Open the upper frame by hand and pull out the packaged working plate on the transport rollers until the working plate is completely discharged out of the vacuum platen.
- 14) Lay down the upper film frame to clamp the film in middle of the film frames.
- 15) Trim the film alongside the front side of the film frame and take the skin packed boards from the working plate.
- 16) Repeat step 7) –15) to do the next cycle.

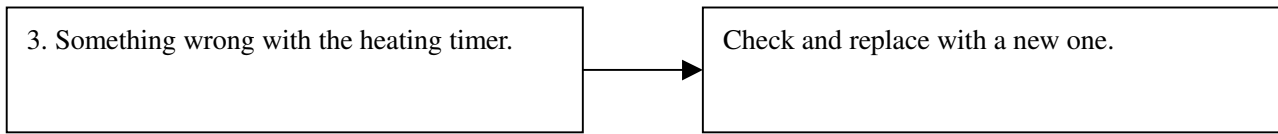
8. TROUBLE SHOOTING

Malfunction 1:

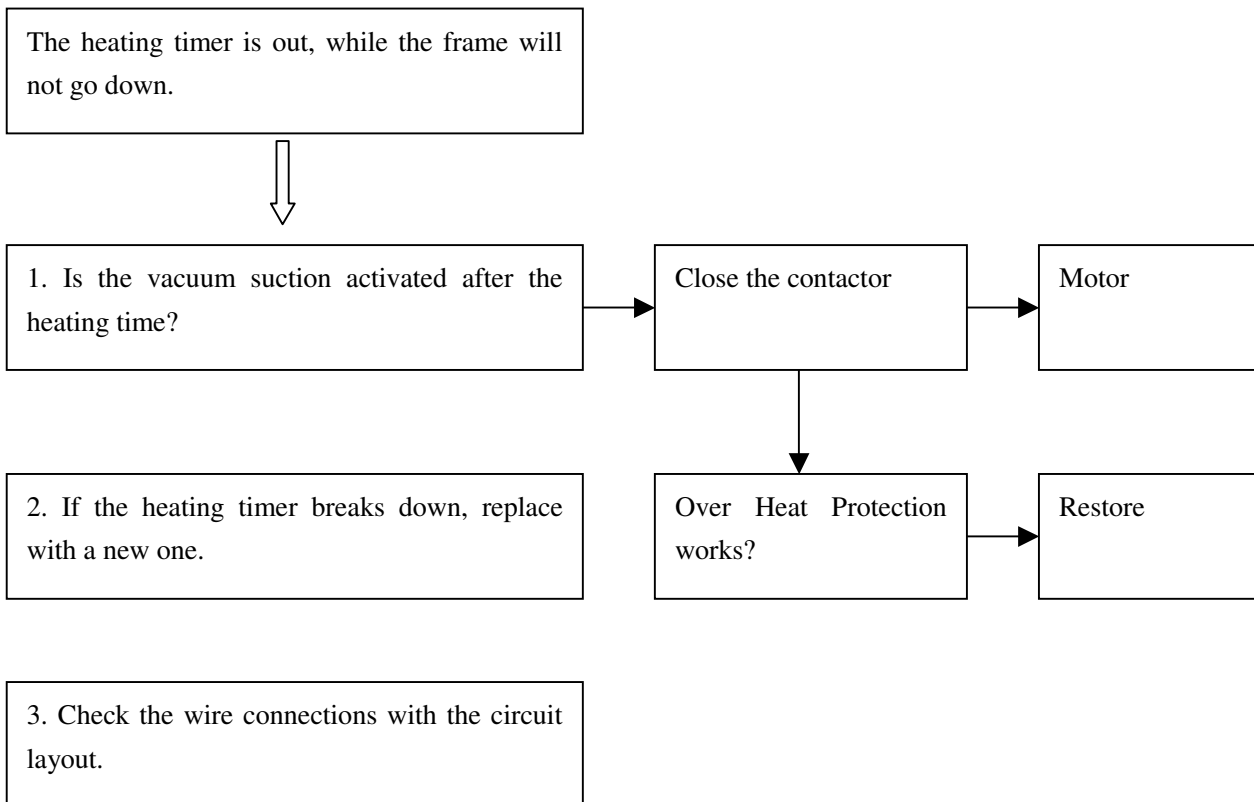


Malfunction 2:

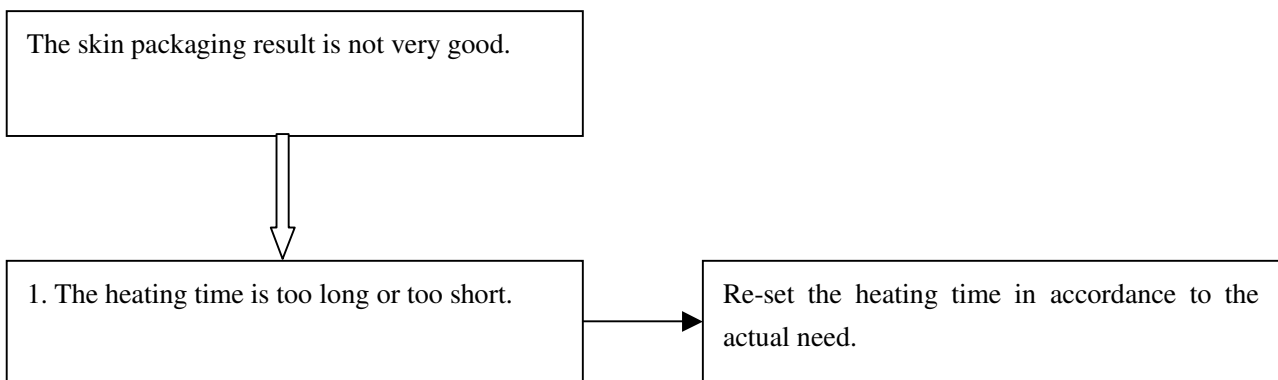


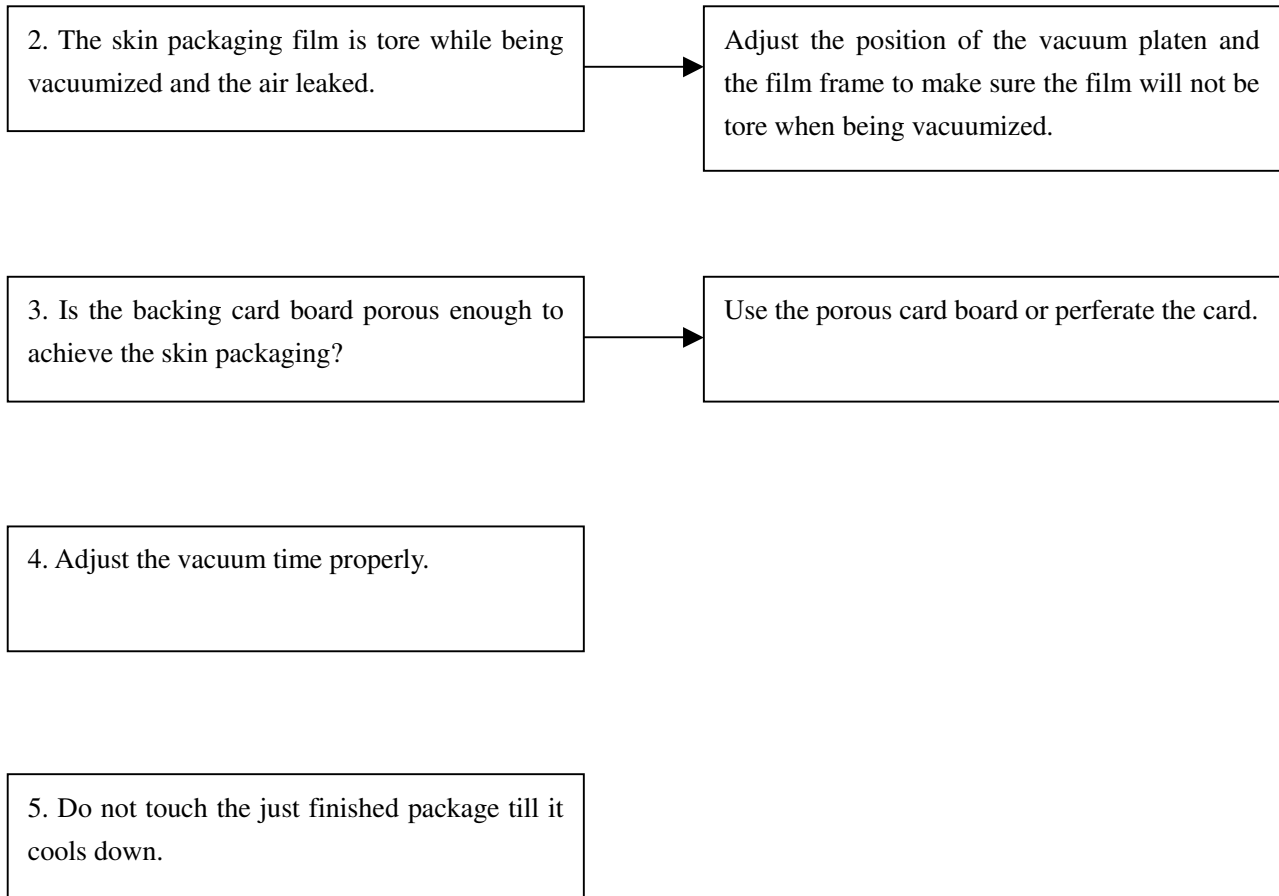


Malfunction 3:



Malfunction 4:

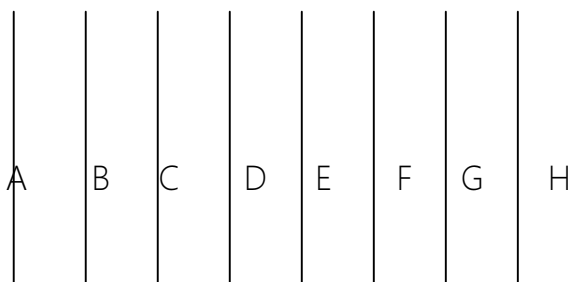
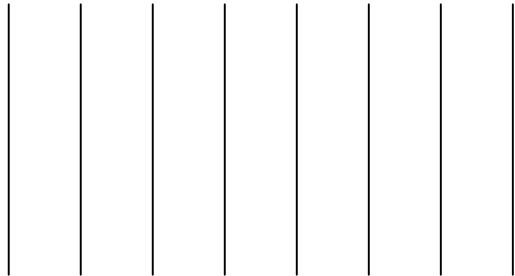




9. TECHNICAL DATA

Model	PV-5540
Power Voltage	220V, 1PH, 50 HZ
Packaging area	W 550 X L 400 mm
Dimensions	1000 X 700 X 1220 mm
Applicable film width	610 mm
Packaging material applied	Skin packaging film
Heaters	4.5 KW
Vacuum pump motor	2.6 KW
Other power	0.25 KW
Weight	220 KG

10. HEATER OVEN ARRANGEMENT



A=H : 650 W

B=G : 600 W

C=D=E=f : 500 W

Heater Specification: L410mm, Tubular Heater.

11. PACKING LIST

No.	Name	Specification	Quantity	Remark
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1	Skin packaging machine	pv-5540	1 set	
2	User's manual		1 copy	
3	Working plate		1 piece	
4	Heating tube		3 pieces	
5	Trimming Knife & tools		1 set	