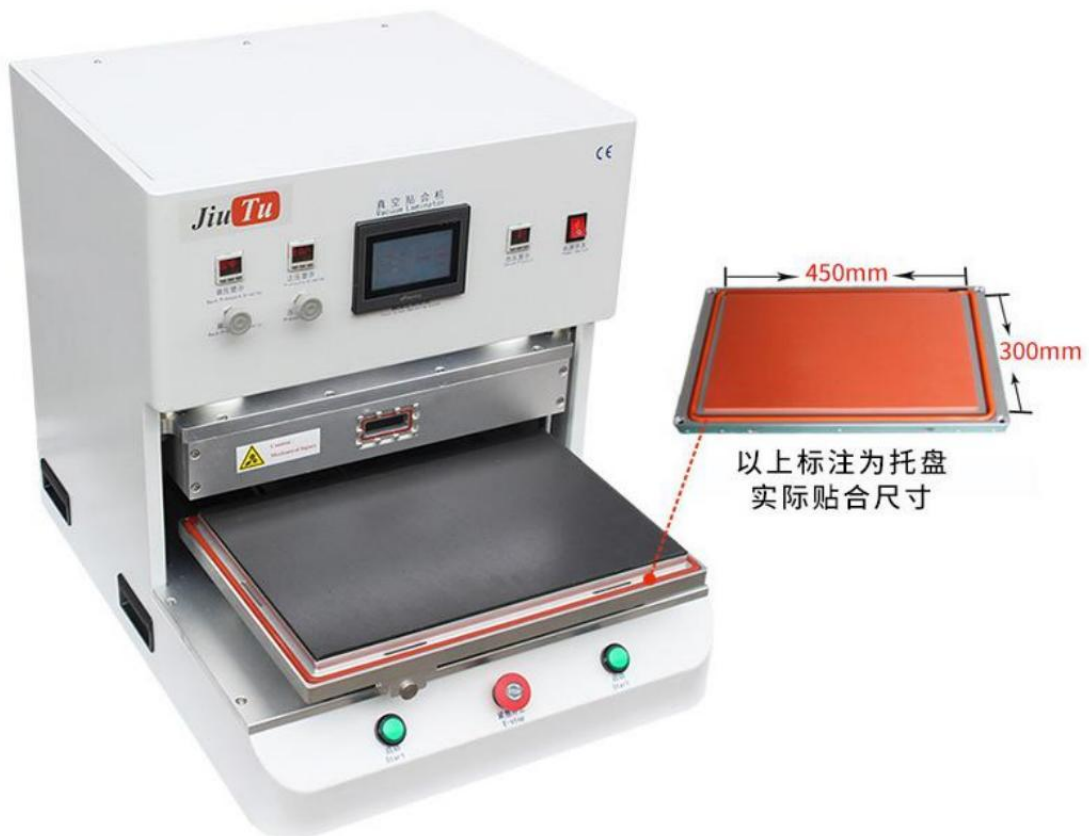


USER'S MANUAL

OCA Vacuum laminating machine 9TU-D030

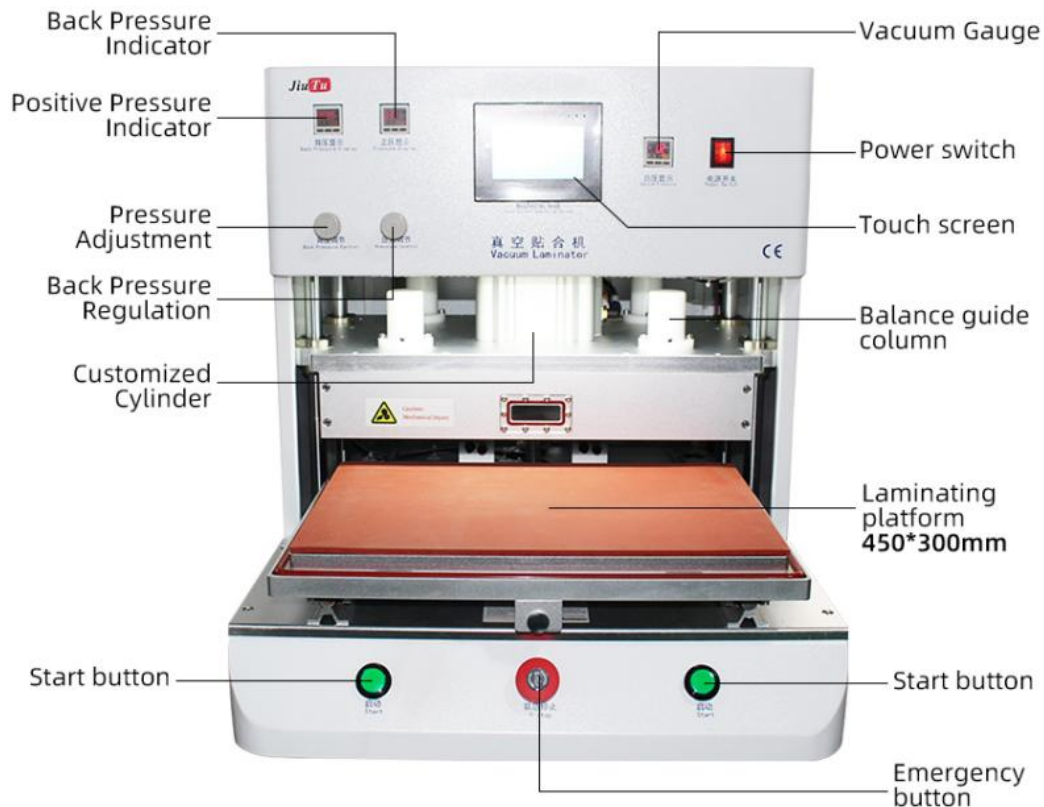


Dear Customer:

Thank you for purchasing our 9TU-D030 vacuum laminator. Please read the user manual carefully before use. Improper use or insufficient understanding of the equipment may result in unnecessary losses or unpleasant incidents.

During use, please adhere to safety precautions and strictly follow the specified technical parameters. If any quality problems arise, please contact our company promptly, and we will assist you in resolving the issue as soon as possible.

I. Equipment Structure Overview



The 9TU-D030 vacuum laminator is used for bonding touchscreens and glass covers, as well as between touchscreens and displays, in mobile phones and tablets. The bonding principle involves placing the mobile phone's LCD screen and glass cover within a sealed frame in a vacuum environment. The machine's cylinder pressure presses down the inner membrane of the vacuum cylinder, completely bonding the glass cover and LCD screen, which are placed in the lower mold of the vacuum cylinder, together.

This equipment utilizes a control system independently developed by our company. It features a touchscreen display input with selectable Chinese/English menu pages, and all parameter settings are easily and intuitively viewed. It can be freely controlled in both manual and automatic modes, offering simple, easy-to-understand operation and stable reliability.

II. Specifications

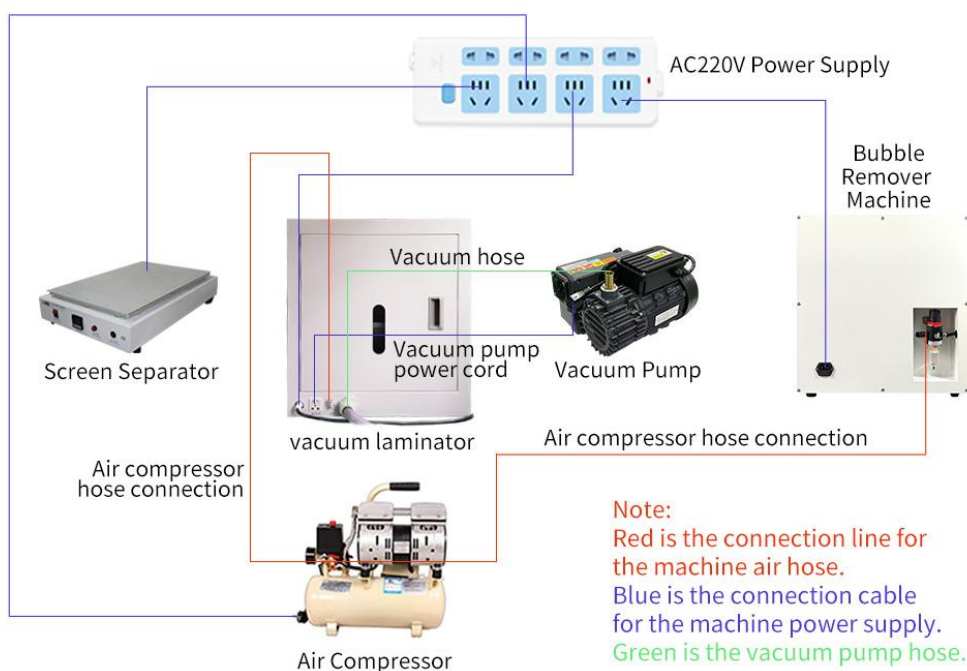
Brand and Model	9TU-D030
Equipment Name	OCA Vacuum Laminating Machine
Equipment Application	LCD Assembly Lamination, Cover Plate Lamination
Power Supply Specifications	AC220V 50HZ/60HZ
Equipment Power	1500W (with 900W vacuum pump)
Working Air Source	0.5MPa—0.6MPa (dry air source), maximum pressure up to 0.7MPa
Supply Air Pressure	4-6Kgf/cm ² , air compressor requires 8 bar pressure
Control System	PLC Control System
Operating Interface	4.3-inch Touchscreen with Chinese/English interface
Drive Method	Cylinder Drive
Pressure Adjustment	Positive and Back Pressure Precision Regulating Valve
Pressure Display	SMC Digital Pressure Gauge
Heating Method	Built-in Temperature Control with Top Heating

Equipment Safety	Emergency Stop Button, Dual-Button Start
Maximum Fitting Size	450mm*300mm (below 21 inches)
Production Efficiency	10—15 seconds/PCS (adjustable)
Working Environment	10—60℃
Working Humidity	40%—95%RH
Equipment Dimensions	L76cm*W58cm*H60cm
Equipment weight	100Kg
Vacuum level	-100kPa limit
Temperature	100 degrees Celsius maximum, top heating
Bonding height	30mm

III. Operating Instructions

1. Install the machine as shown in the diagram

Installation and Wiring Diagram for Five-Piece Laminator



2. Pull out the red button on the air compressor pressure switch and open the air outlet valve; turn on the vacuum pump power switch. Adjust the positive pressure display to 2-3 kgf/cm².

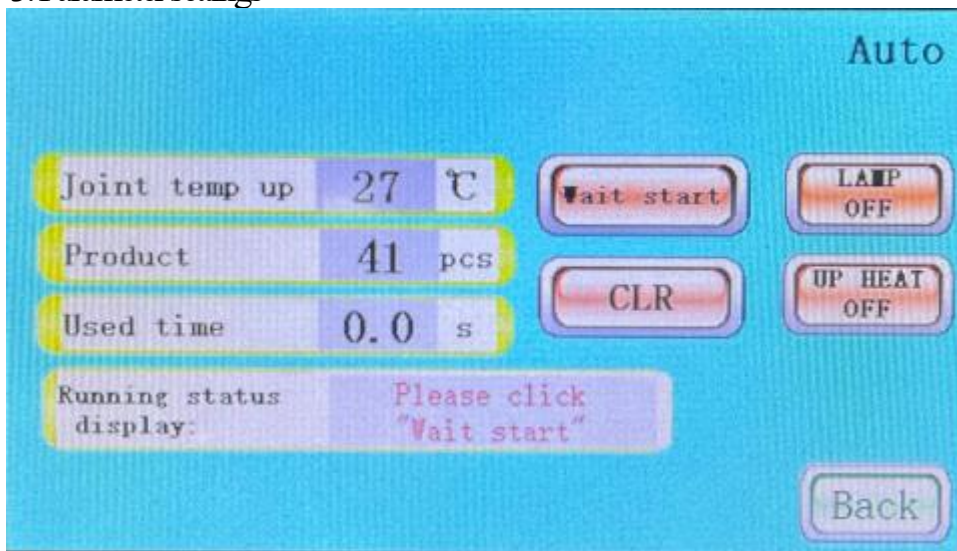


Laminating air pressure 2Kgf/cm²

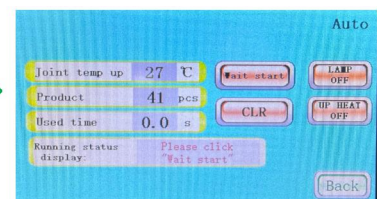
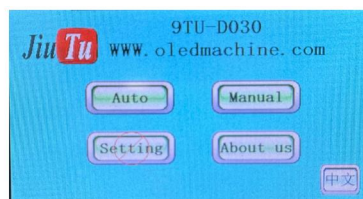
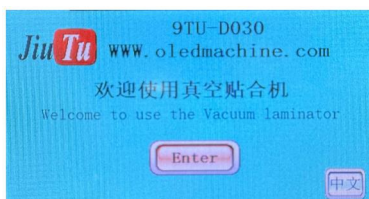
Turn clockwise to adjust atmospheric pressure; turn counterclockwise to adjust depressurization.

The device has dual pressure gauges, adding a backup pressure function

3. Parameter settings



4. Turn on the power switch, power on and enter the touch screen main interface, select the language to enter automatic mode, click "Wait for startup" and the bonding platform will pop up automatically.



5. Perform automatic laminating

Laminating operation process demonstration

Lamination process



1. Gently peel off the OCA adhesive protective film.



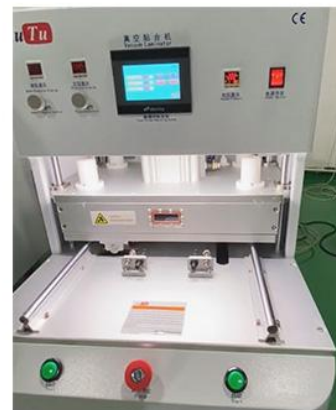
2. Gently tap the center of the glass cover to



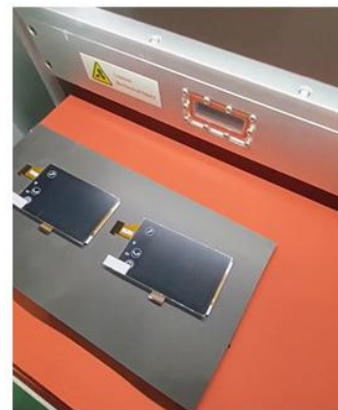
3. Place the aligned components on the bonding platform.



4. Simultaneously press both green "Start"



5. Begin bonding.



6. Bonding is complete.

IV. Common Faults and Troubleshooting Methods

Fault	Troubleshooting and solutions
Power off when turned on	1. Check if the machine's power cord is properly connected.
	2. Check if the fuse at the machine's power socket is blown.
	3. If the power switch is on, check if the internal 24V power supply has power or if the touchscreen power connector is loose.
Power off when vacuum pump is running	1. Check if the fuse at the machine's power socket is blown.
	2. If the vacuum pump is faulty, replace the vacuum pump.
	3. If the solid-state relay is faulty, replace the solid-state relay.
Low negative pressure when machine is running	1. If the vacuum pump itself is faulty, replace the vacuum pump.
	2. Check if the vacuum tube is properly connected to the vacuum pump.
	3. Check if the sealing ring on the tray has come off.
	4. Check if the silicone gasket on the tray is misaligned.
	5. Check if the negative pressure gauge itself is faulty, replace the negative pressure gauge.
	6. Local atmospheric pressure issues (related to altitude and weather).
Cannot depressurize during automatic operation	1. Check if the decompression time is set correctly in the parameter settings.
	2. If the decompression solenoid valve is faulty, replace the solenoid valve.

V. Daily Maintenance and Care

1. The machine must be operated strictly according to the specifications. Before use, check all parts for damage or debris, especially the vacuum cylinder.
2. If any abnormal phenomena are found during use, stop using the machine immediately and troubleshoot the problem. Do not force it to operate while it is malfunctioning, as this may damage the machine.
3. Regularly lubricate all bearings and guide rails.
4. The vacuum pump should always have sufficient oil to prevent it from drawing air and causing noise. Clean the oil tank and change the oil every 6 months.
5. Drain the water from the air compressor once a month.



SHEN ZHEN JIUTU TECHNOLOGY CO.,LIMITED

深圳玖途科技有限公司

VI. Precautions

1. Do not frequently turn the machine on and off. In case of emergency during operation, press the emergency stop button immediately.
2. During the screen lamination process, never press the screen with your hands during positioning, otherwise air bubbles will be generated.