



VL-450X Lami Press

User Manual

Please read this manual before you use this equipment be carefully

Anhui William CNC Technology Co., Ltd

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Chapter 1 System introduction

1.1 Introduction

Our company is a set of design,manufacturing,installation, commissioning, maintenance one-stop service professional post-press equipment manufacturing innovative technology enterprises, the company focuses on the field of digital post-press equipment. The new fully automatic laminating machine can reach a speed of 5 m/min. Its unique blowing and suction function can help you quickly and automatically separate and feed paper, saving time and effort. Automatic digital edging function is adopted to make it more intelligent and convenient for users to adjust edging distance. The machine is suitable for the Minimum 148x210mm, maximum 330x480mm, fully meet your common specifications of laminating business requirements.

Thank you for choosing our products! If you encounter any problems during operation, please contact your vendor in time.

Do not operate the machine before carefully reading the operation manual. Please keep this operation manual in an appropriate place for reference when needed.

1.2 Parameter

Model	Laminating and Foiling Machine VL-450X
Min. Paper sheets	130X200mm
Max. Paper sheets	340X1200mm
Working mode	single-sided hot film, cold film, foiling.
Heating method	electric tube heating
Warm-up time	5-10 minutes
Foiling speed	1m/min--5m/min
Coating temperature	10---130°C
Paper thickness	125gsm--400gsm
Mirror roller diameter	105mm
Film Core diameter	3in
Film diameter	280mm
Maxi. film width	340mm
Display control	Resistive LCD touch screen panel
Control mode	electronic temperature control
Pressure mode	hydraulic control
Paper feeding mode	Automatic suction paper feeding
Paper collecting	adjustable paper collecting tray
Automatic pull-off	electric CAM control
Perforation	yes
Anti-curl technology	yes
Breaking function	Automatic breaking
Electric power	1600W
Working Voltage	220-240V/50-60HZ
Humidity	20%-80%
Net weight	190kgs
Gross weight	Package1: 252kgs; Package2: 38kgs
Machine floor size	1870*635*1264mm
Packing size	Package134x80x159cm; Package2: 66x57x62cm.

Note: This model is being continuously upgraded, and the information and parameters in this manual may be updated with time without informing the user.

Charter 2 Safety

2.1 Environment

Temperature: 10°C to 35°C

Humidity: 30% to 70%

Elevation : 1000m below

There is no flammable, corrosive gas or oil mist around.

2.2 Attentions

Be sure to read this manual thoroughly before operation.

Make sure that the power supply voltage and frequency are consistent with the requirements in this manual.

Make sure that all safety enclosures are closed, otherwise the switches associated with them are disconnected and the machine cannot operate.

Be sure to disconnect all power supplies before cleaning the machine.

In the long heating standby state, be sure to separate the upper and lower laminating sticks.

When the machine is not in use for a long time, the power cable must be removed.

Do not install the machine in an unstable place.

Do not operate the machine with wet hands, especially inserting and removing the power cord.

Operators should not have long hair, wear loose clothing, or touch internal parts with their fingers.

No container containing any liquid shall be placed on the surface of the machine.

Do not place any small items on the machine.

Do not alter or disassemble the machine unless it is done by our certified engineers.

Do not touch any operating parts.

The power should not be cut off suddenly while the machine is running.

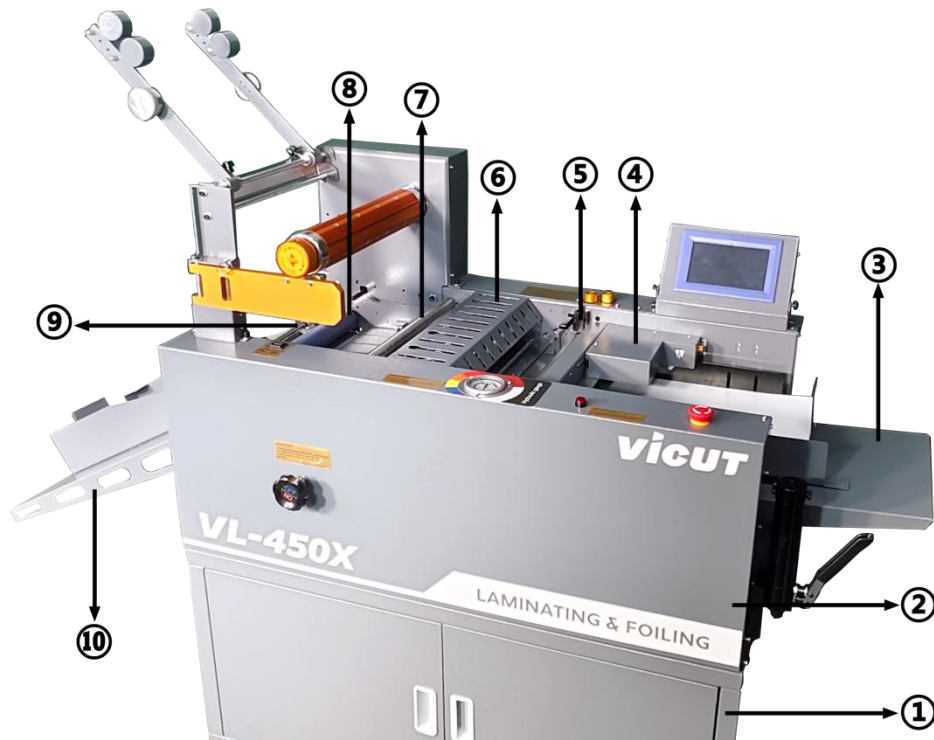
No heavy objects should be placed on the surface of the machine.

Do not allow any metal or combustible objects into the machine, or there is a risk of fire or electric shock risk. If this happens, be sure to first turn off the power, unplug the power cord, and then contact the technology personnel.

Note: If the machine appears unknown abnormal situation. Please turn off the power immediately, unplug the power cord, and then contact the technician member

Charter 3 Main parts

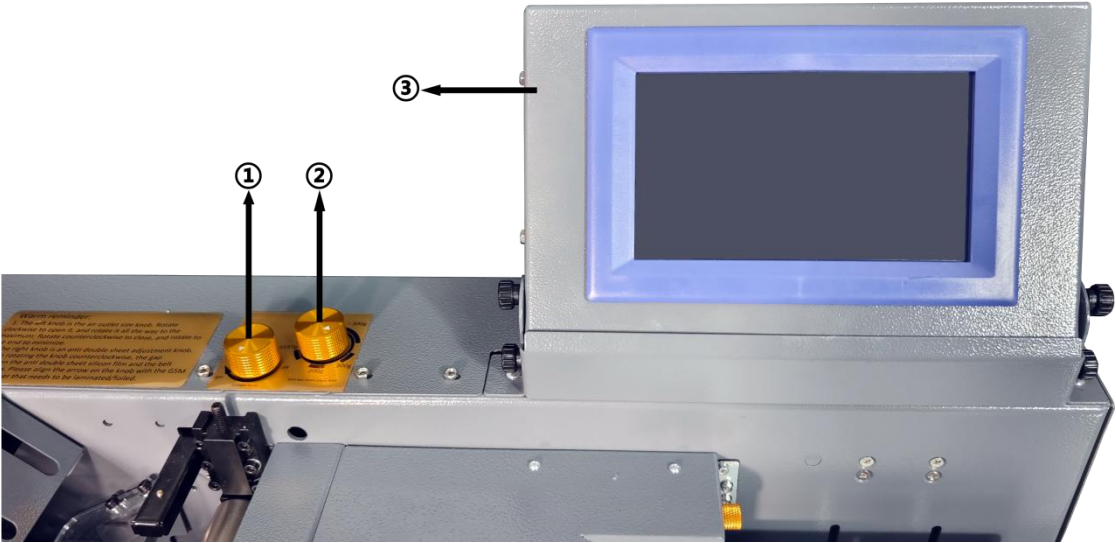
3.1 Whole machine figures



Picture

No.	Name	Description
1	Laminating machine	Main body
2	Stand	Move , support main body
3	Feeding extend plate	Extend using paper length
4	Suction paper feed system	The lifting table paper is brought into the machine by blowing and sucking air
5	Edging system	Through the internal calculation of the machine, to control the amount of the edge.
6	Film coating system	The film is applied to the surface of the paper by hydraulic pressure and temperature
7	Smoothing system	The upper and lower rollers close and press the paper
8	Breaking system	Separate the front and back sheets
9	Paper delivery system	Feed the paper out of the machine
10	Paper stack	After breaking collecting paper

3.2 Partial figures

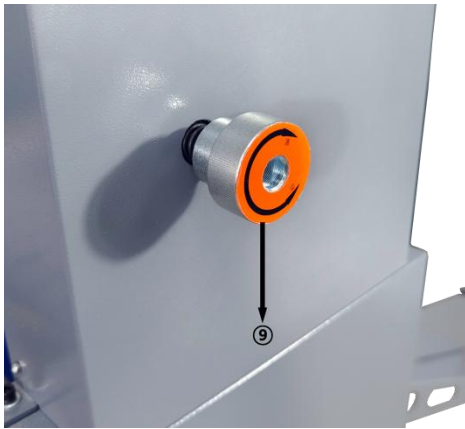




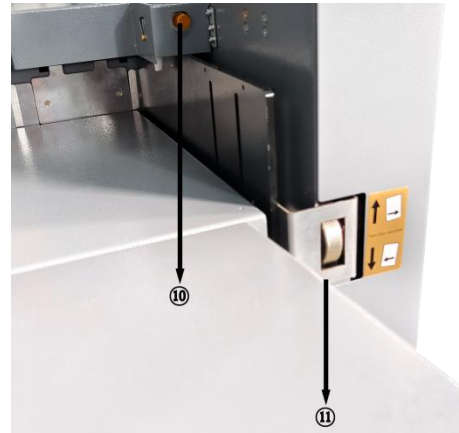
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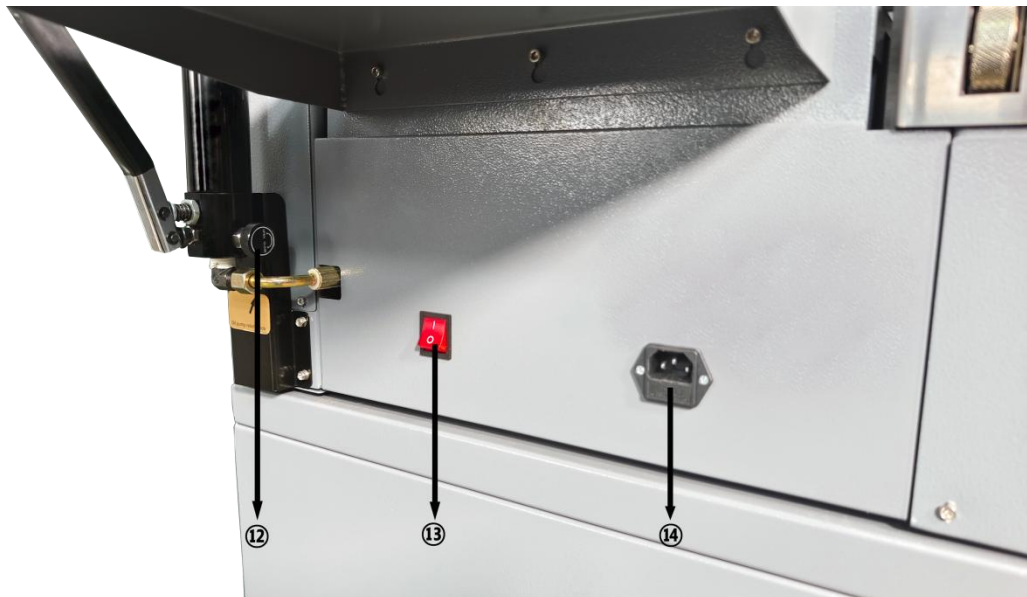


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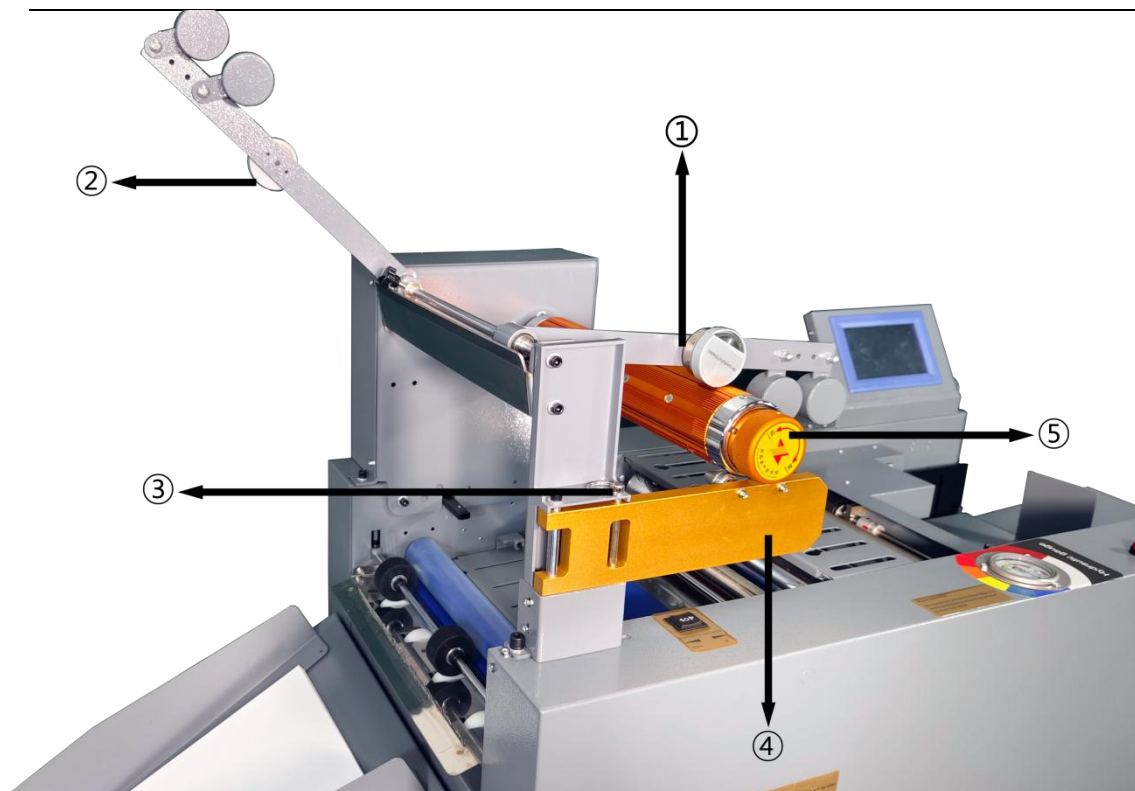
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No.	name	Description
1	Blow damper knob	Physically control the size of the blower
2	Anti-double tension knob	Control the size of the anti-double-tensioning gap
3	7 inch display	Machine operation panel
4	Hydraulic oil gauge	Shows oil pressure
5	Pressure relief button	Pressure relief button
6	Scram switch	Make an emergency power outage fast
7	Electric anti-roll button	Control anti-curl Angle
8	Smooth the knob	Release the closing flattening roller
9	Expansion cylinder damping knob	Increase and decrease the resistance of the expansion film cylinder when rotating
10	Sensor knob on lifting platform	Adjust the limit distance of the lifting platform, adjust the clearance between the suction belt and the lifting platform surface when the lifting platform is in place
11	Skew adjustment knob	Adjust the perpendicularity of the side of the lifting platform against the cardboard
12	Booster knob	It is necessary to tighten the knob before the pressure to increase the pressure, and it is necessary to loosen the knob to reduce the pressure when the pressure is relieved
13	Machine master switch	Control the machine's total power supply
14	Machine socket	Power input, including fuse

3.3 Film Bracket

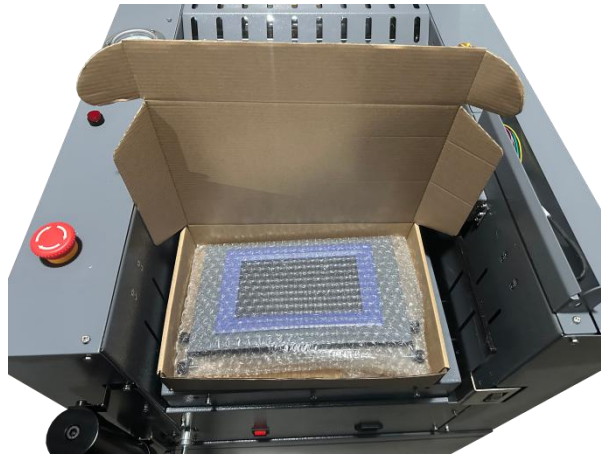


No.	name	Description
1	Film cutter shaft	Connect the two film brackets supports and place the film cutter
2	Cutting membrane knife	Remove unwanted membranes
3	Expansion film drum swing rod bolt	The pendulum rod of the expansion film cylinder is fixed through the positioning hole, so that the pendulum rod will not deviate in the working state, and the pendulum rod can rotate 180° around the fulcrum after pulling out
4	Membrane cylinder right support	Support the expansion film cartridge
5	Expansion film cylinder tightening knob	Expand or shrink the film cartridge

Charter 4 Machine installing

4.1 Display Installation

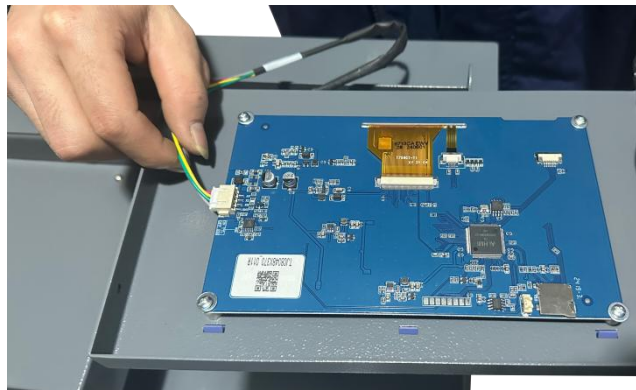
Step 1: Open the display box and take out the display



Step 2: Use a screwdriver to remove the four M4 cross hexagonal screws securing the rear cover of the display, and remove the four M4 hand knobs on the display.



Step 3: Insert the display signal cable in the display base into the signal port of the display PCB board.

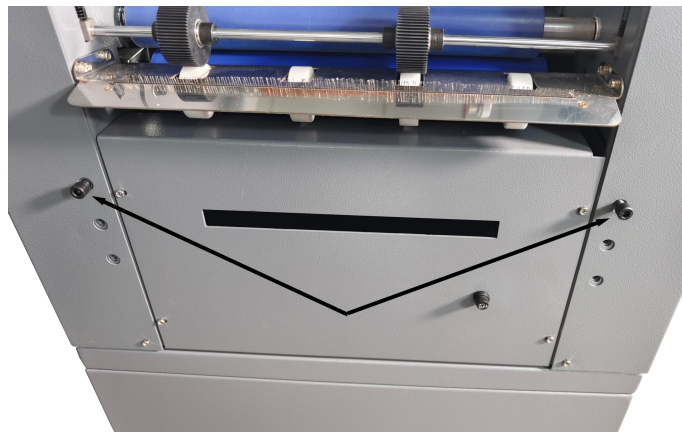


Step 4: Cover the rear cover of the display, use a screwdriver and the four M4 screws that have just been removed, and insert the rear cover into the base of the display, smooth the signal cable, align the holes, and tighten the four 4-hand knobs.



4.2 Film Bracket installing

Step 1: Install the two M8X15mm bolts symmetrically on the rack, leaving about 3mm gap. (There are three stalls to choose from, the picture is high-grade.)

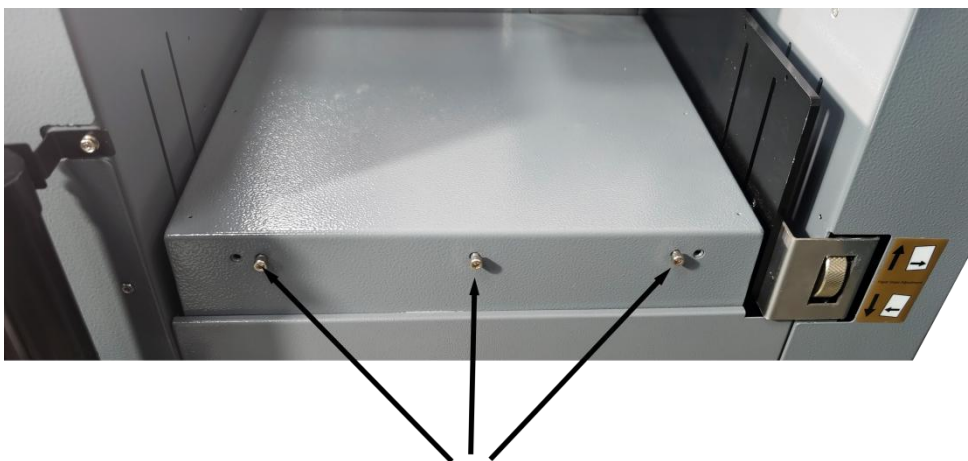


Step2: Align the mounting hole of the simple paper receiving table with the bolt and insert it to complete the installation.
(Note: Check whether the platform is stable before the machine runs.)

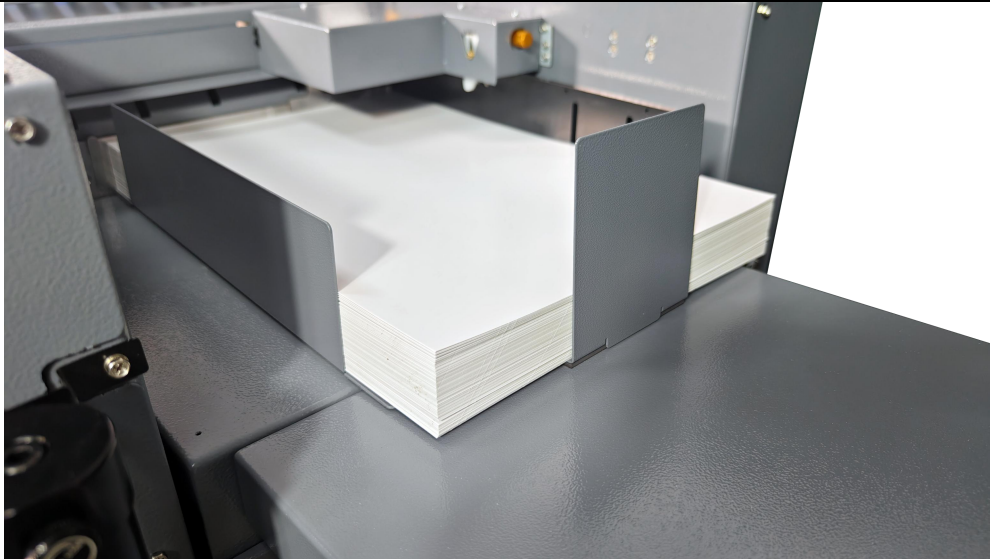


4.3 Extend rise & descend platform installing

Step1: Install the three M5X10mm bolts on the lifting platform, leaving about 3mm gap.

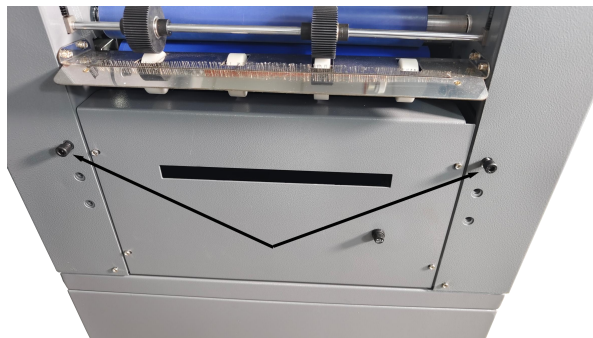


Step2: Align the mounting holes of the lengthened platform with the bolts and insert them to complete the installation. (Note: Check whether the platform is stable before the machine runs.)



4.4 The winder is installed (for foiling)

Step 1: Install the two M8X15mm bolts symmetrically at the black arrow position as shown, leaving a gap of about 3mm. (Note: There are three stalls to choose from, the picture is high-grade)



Step 2: Align the mounting hole of the winder with the bolt and insert it to complete the installation.
(Note: Check whether the platform is stable before the machine runs)



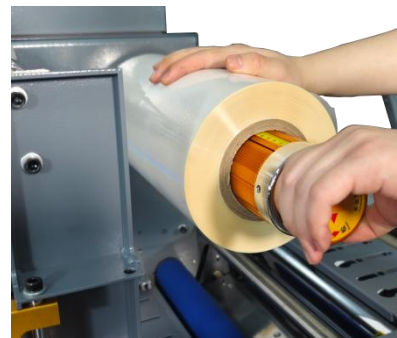
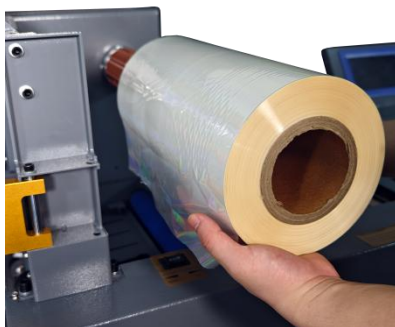
4.5 Removal of the membrane cartridge

Step 1: After one cartridge of film is used up, remove the line knife and hang it on the knife shaft. Pull out the positioning pin and pull apart the aluminum plate of the supporting film cylinder.



Step2: Loosen the expansion film cylinder tightening knob and pull out the film cylinder core.

Step3: Insert the cylinder into the shaft of the cylinder, and insert the parts in turn according to the drawing (both sides are symmetrical).



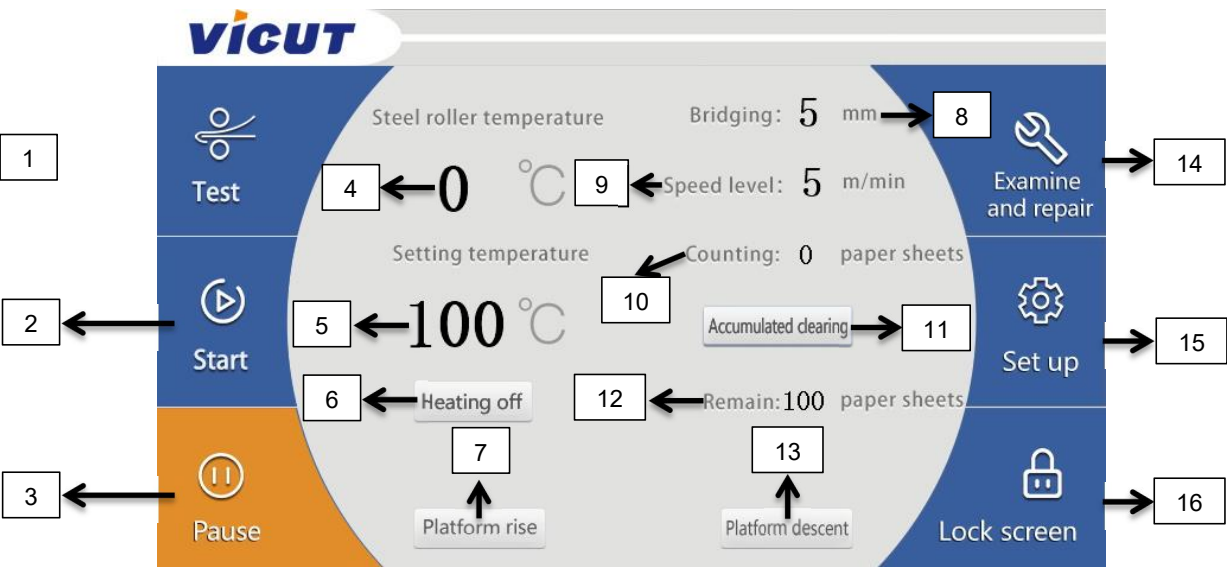
Step 4: Close the aluminum plate, plug in the positioning pin, and hang up the wire cutter.



Charter V Operation

5.1 Operation menu

The control panel of this product adopts 64-color true color LCD touch screen. As shown below:

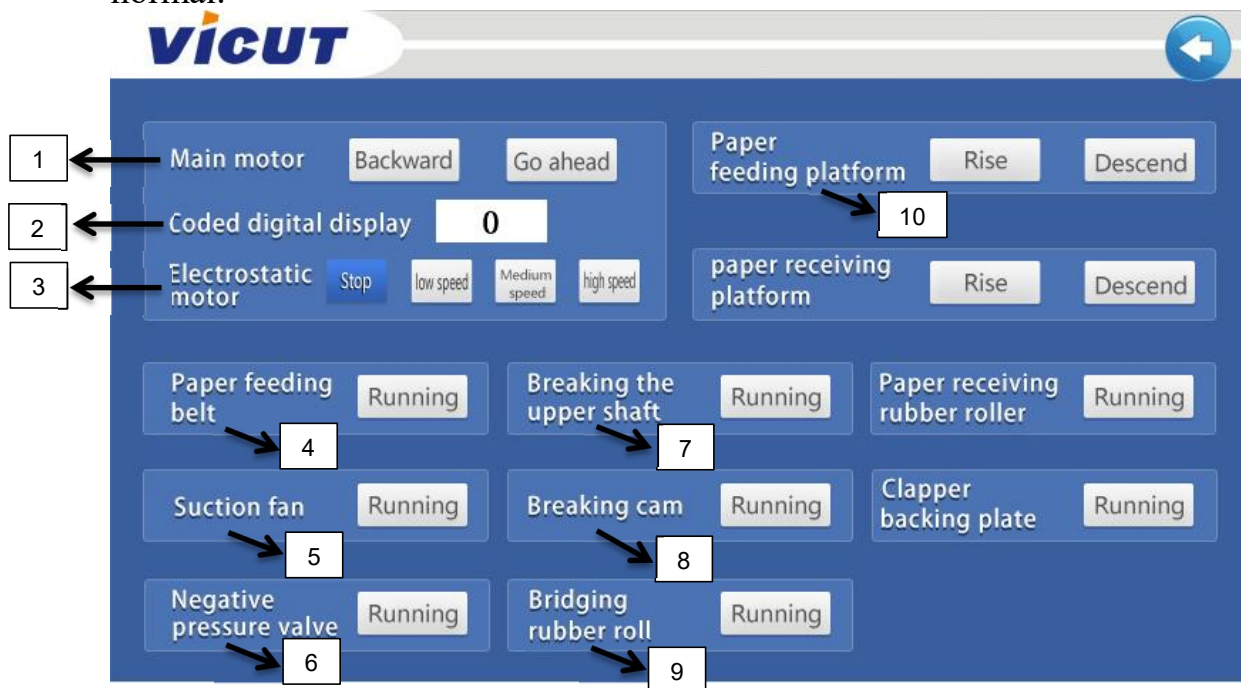


No	Name	Description
1	Feeding film	Auto feeding one media
2	Start button	From stop status to Run
3	Pause	Under suspend status
4	Heating roller actual temperature	Red color as heating , black color as stopped heating .
5	Temperature setting	Input target temperature just ok

6	Heating off	The lamp starts to heat up according to the set temperature
7	Platform rise	Click to lift the platform to the highest position
8	Bridging	enter the distance of the edge you want
9	Speed level	enter the speed gear you need (1-5)
10	Counting	See how much paper the machine has processed in real time
11	Accumulated clearing	Clear positive counting numbers
12	Remain	input the backward count number you think of, and when the number reaches 0, the machine stops running
13	Platform decent	Click to lift the platform to the lowest position
14	Examine and repair	Click to enter the maintenance screen
15	Set up	Click to enter the maintenance screen
16	Lock screen	After clicking, except for the lock screen key, other keys cannot be used

5.2 Repair interface

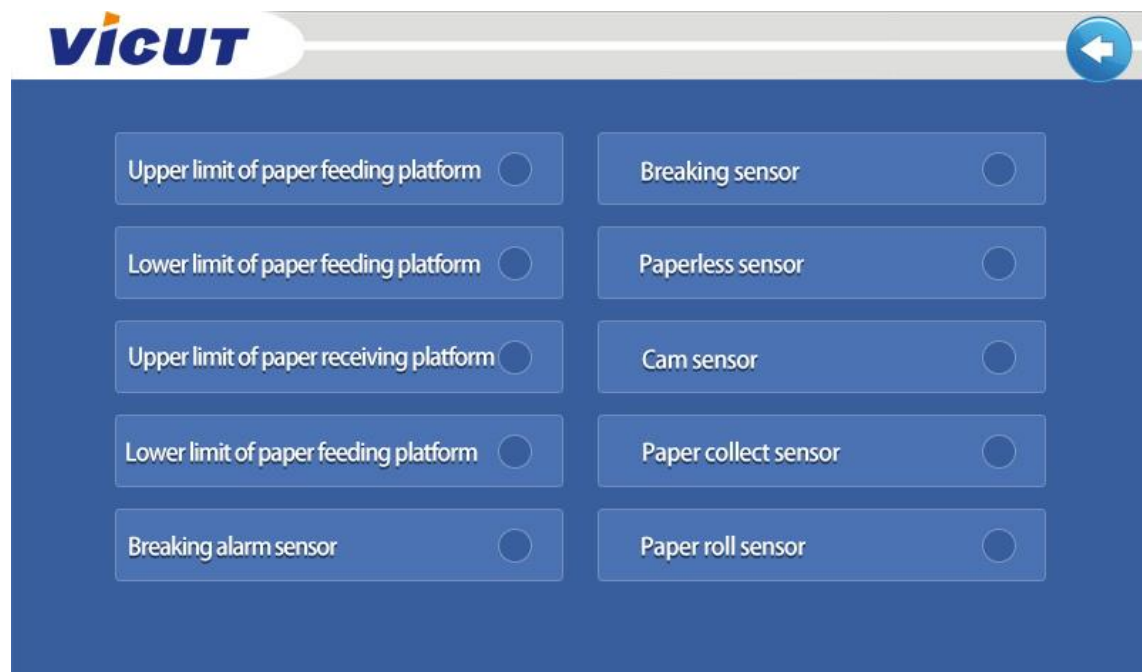
This interface is used to test whether each function of the machine is normal.



No	Name	Description
1	Main Motor	Point test spindle forward and backward .
2	Coded Digital Display	Check whether the encoder signal is correct
3	Electrostatic Motor	Check whether the blower is working properly
4	Paper feeding belt	Check whether the suction belt is working normally
5	Suction fan	Check whether the suction fan is working normally
6	Negative pressure value	Test whether the wind power magnet is working normally
7	Breaking the upper shaft	Test whether the upper shaft is working normally
8	Breaking cam	Test whether the auto pull out roller is working normally
9	Bridging rubber roll	Check whether the edge motor is in normal operation
10	Paper feeding platform	Check whether the motor of the lifting platform is in normal operation

5.3 Single interface

The interface is to monitor whether each sensor is normal.

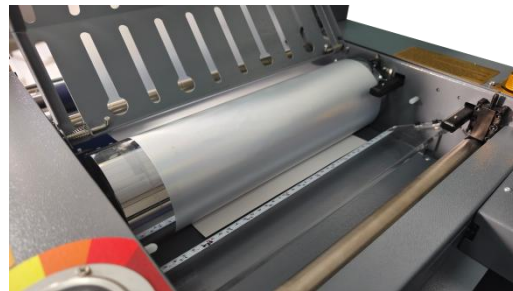


5.4 Wearing film

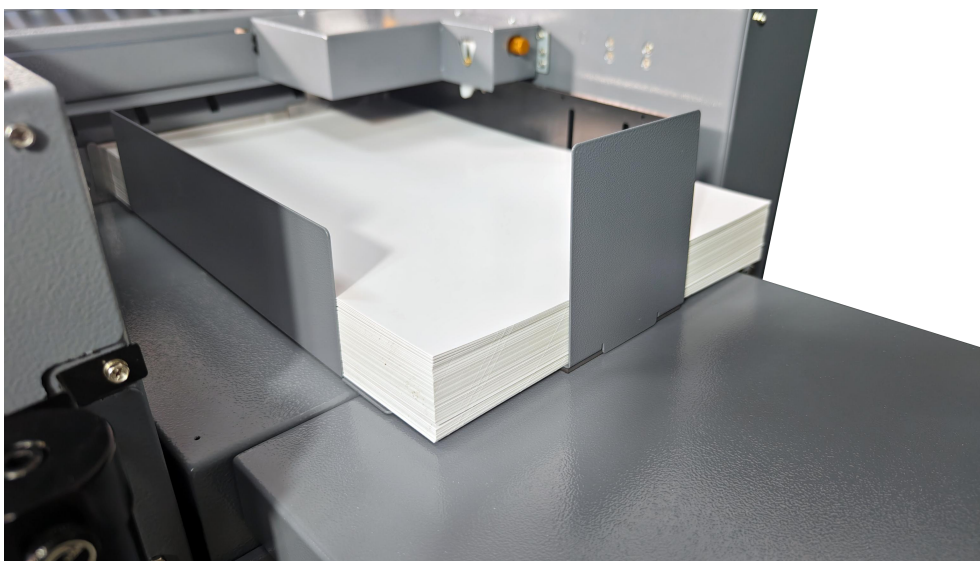
Step1: Install the film bucket on the support of the film bucket, adjust the position of the film bucket, press the point knife, and then the film along the film guide roller and the steel roller into the lower part of the press strip.



Step 2: Select a piece of paper of more than 250g, bring the film together under the steel roll and pass the smoothing roll as shown in the figure, and finally press the pressure to close the smoothing roll.



Step 3: Put the lifting table on the paper, plug in the power supply, click the film key to complete the film.



Charter VI Common questions and solution

Note: Before trouble shooting, unplug the power cord of the machine before performing the following operations.

6.1 Coating film status

1. If the film is covered with bubbles or large area with some snow dots, first check whether the set temperature reaches the preset temperature or not, if the temperature not reached, film effect will not be good. And then detect the pressure setting, no pressure or not enough pressure will lead to this result.

2. When the film is wrinkled after coating, first check whether the pre-coated film passes through the film guide rod. The function of the film guide rod is to smooth the pre-coated film and attach it to the steel roller. Then check whether the membrane barrel shaft is installed in place. If the membrane barrel shaft is installed on the membrane barrel support incorrectly, the membrane barrel height will also appear wrinkled film phenomenon.

6.2 Curing paper solution

1. When the paper is rolled to the steel roller, open the pressure knob of the film coated roller and pull out the rolled paper.

2. When the paper is involved in the laminating roller, the paper can be withdrawn by pressing the forward or backward key of the spindle at the maintenance interface, and checking whether the upper and lower laminating roller has glue attachment. Please disassemble the dam board and do the clean of the roller in time.

6.3 Double feeding or non feeding

1. Not feeding the paper, try to finish the paper flat, and adjust the wind to the appropriate size, so that the paper evenly blown. If it is still difficult to feed paper, lower the anti-double clearance, ensure that the gap can be a piece of paper in and out of convenience.

2. If the double sheet is entered, the gap between the double sheet can be adjusted: the 128-200g paper double sheet silicone sheet can be slightly in contact with the black transmission belt. The gap between the double sheet of silica gel and the black belt should be kept at half the thickness of the paper.

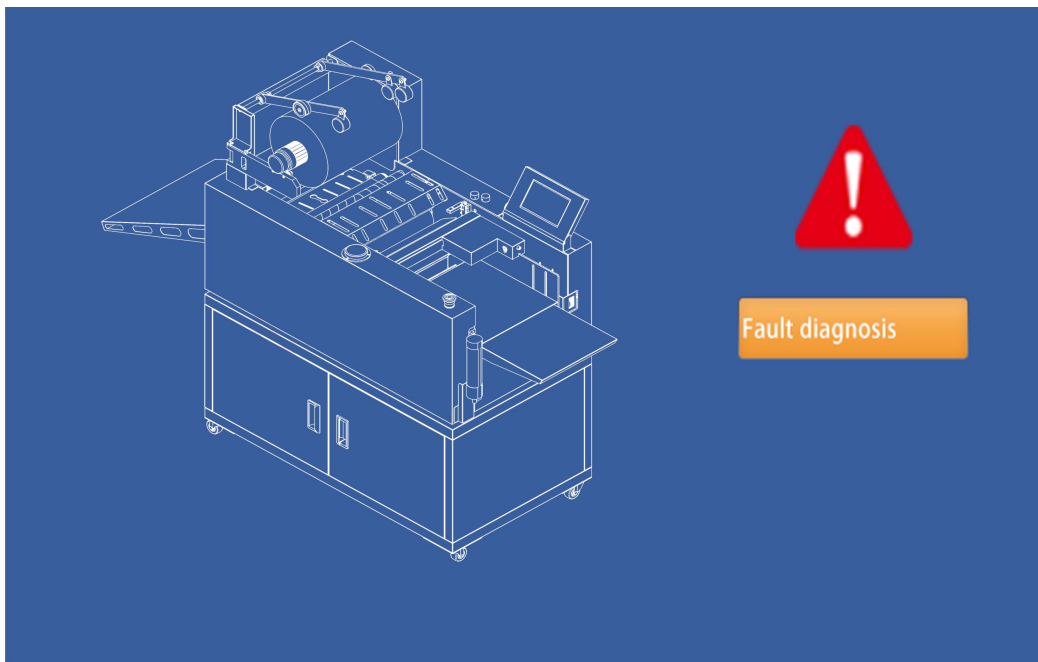
6.4 Membrane tube tension adjustment

When using glossy film, it is found that the film wrinkled paper does not wrinkle, which may be that the tension of the film cylinder is too large, and the tension knob on both sides can be sent to the appropriate position.

Charter 7 Common error and solution

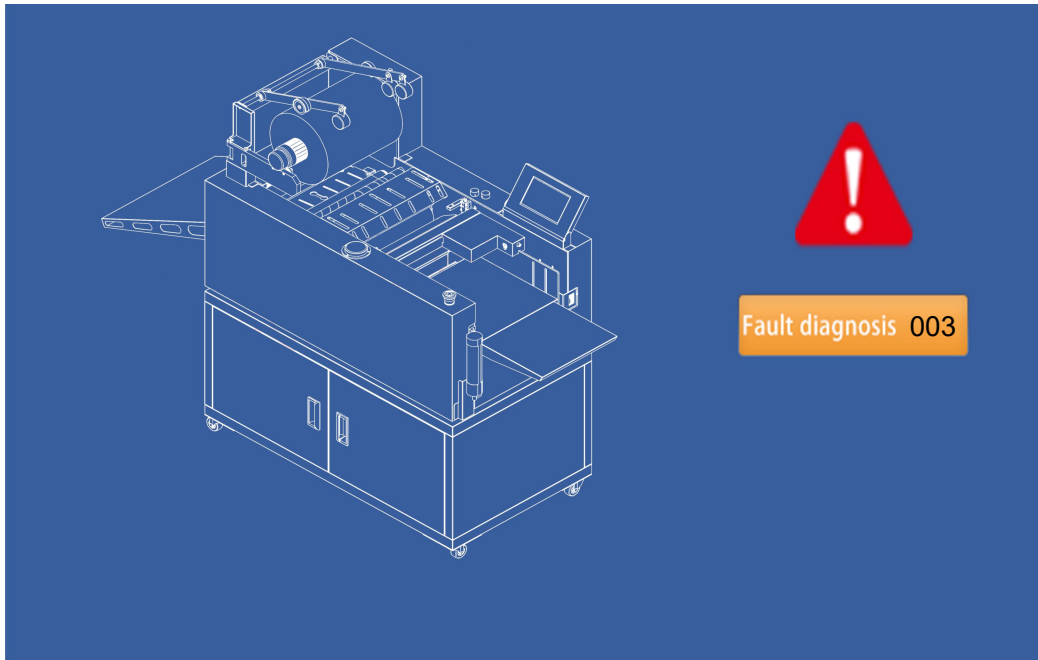
7.1 Error 1 is reported on the main board

Abnormal display communication 001: Startup handshake failed (the current version of the display does not display the error code, the buzzer is ringing at startup)



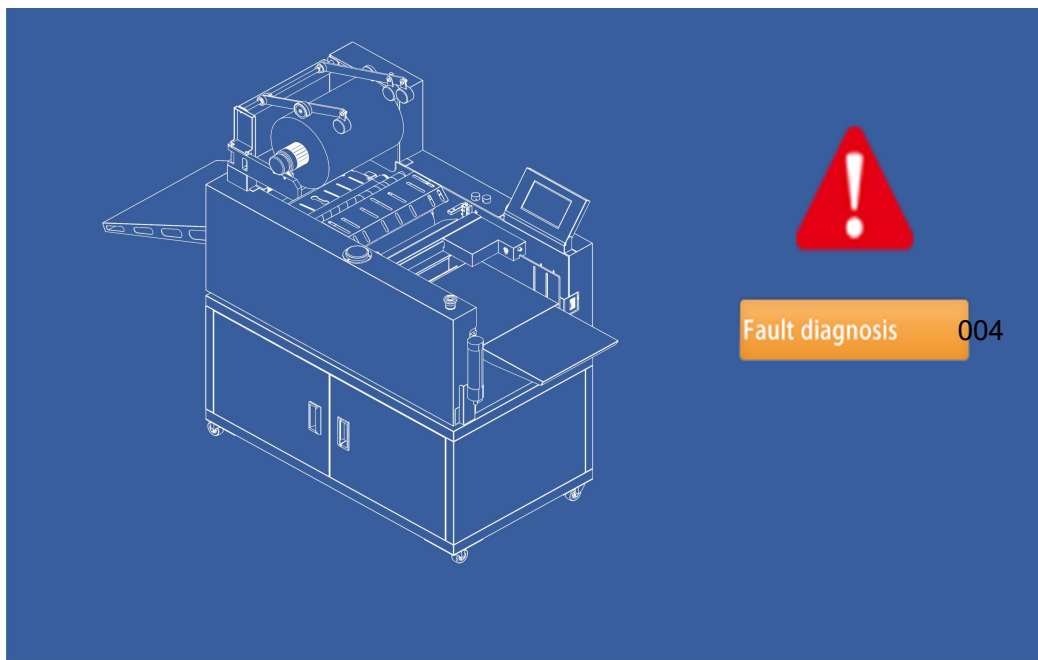
7.2 Error 2 is reported on the main board

Data storage verification error 003: Data storage verification error



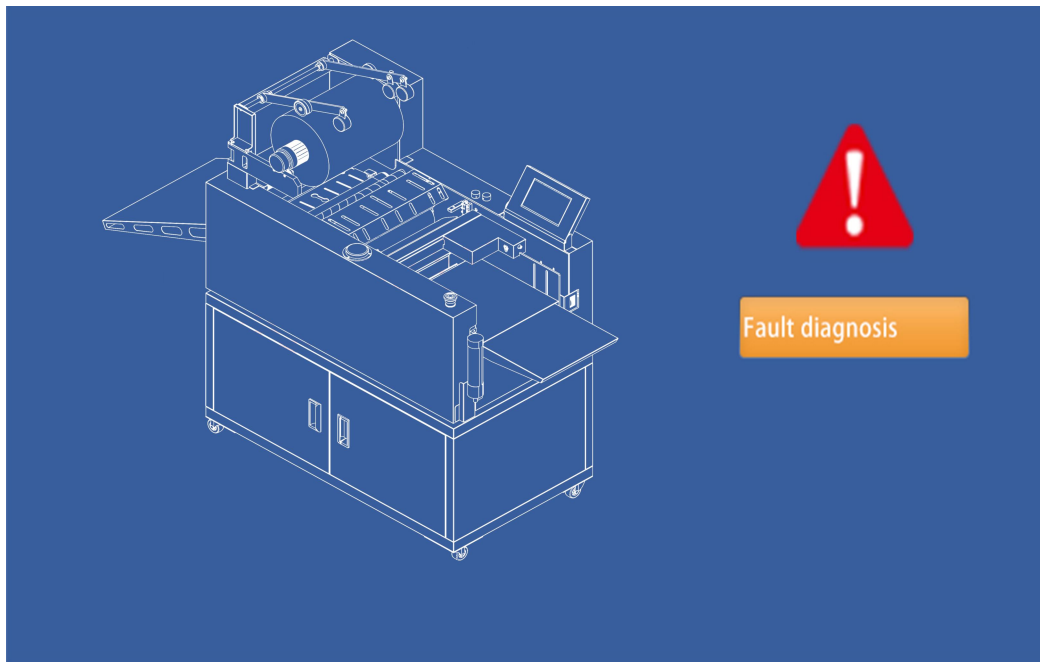
7.3 Error 3 is reported on the main board

The key is broken 004:10 seconds to detect the key has been pressed



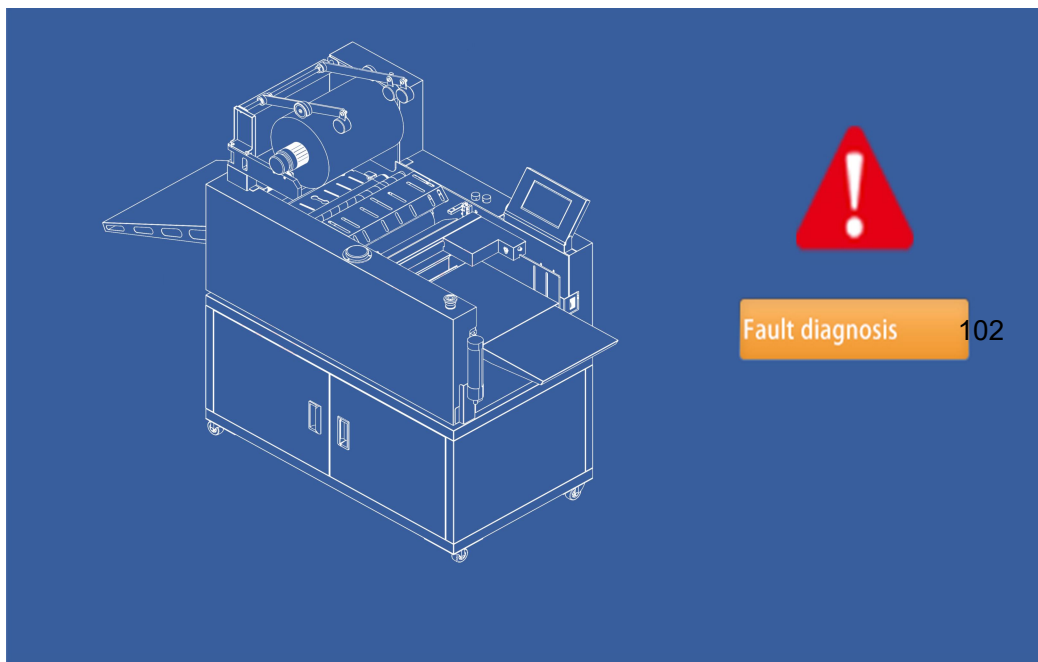
7.4 The temperature control system reported error 1

Temperature sensor fault 101: The temperature value has a large jump or is always at the maximum (open circuit) or minimum (short circuit).



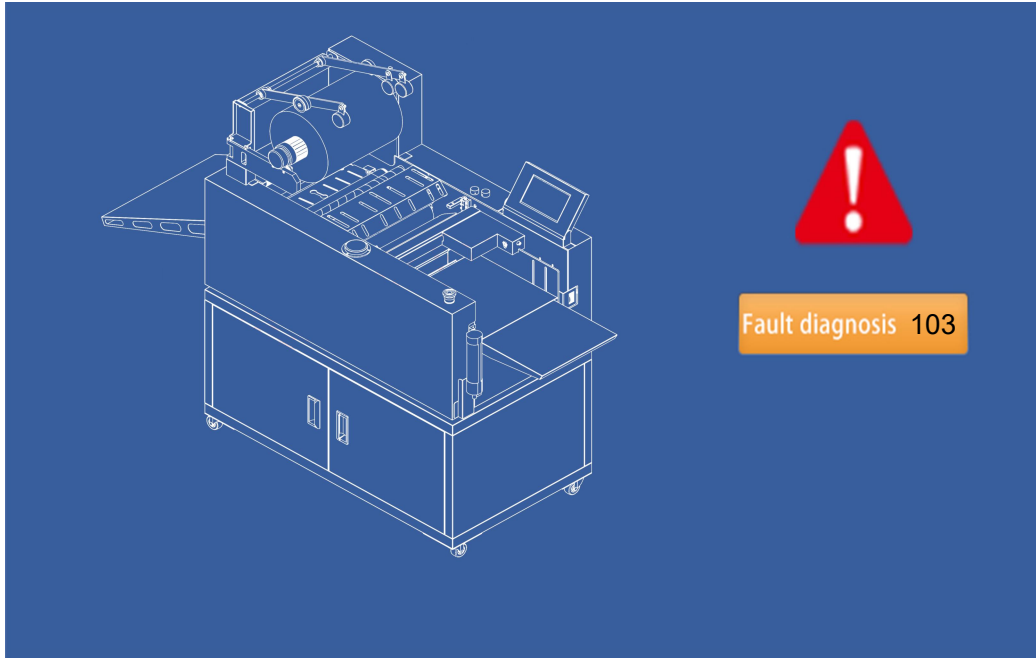
7.5 The temperature control system reported error 2

Over temperature 102: indicates that the temperature exceeds the maximum value.



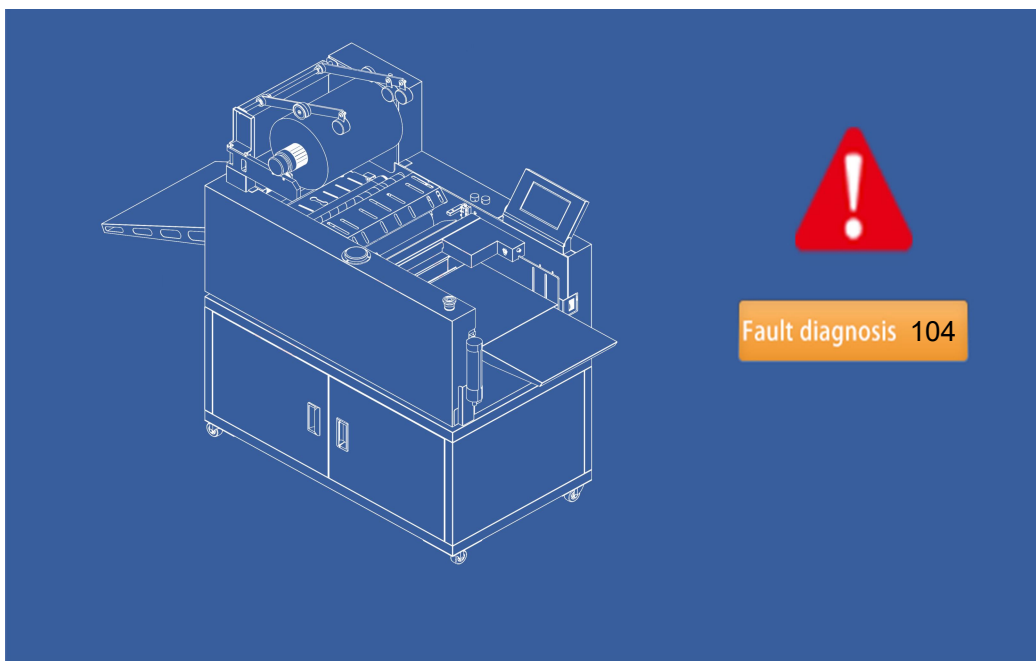
7.6 The temperature control system reported error 3

103: There is no temperature change or small change in temperature within 2 minutes of heating, which may be that the sensor and the roller are not in contact, or the heating tube is open.



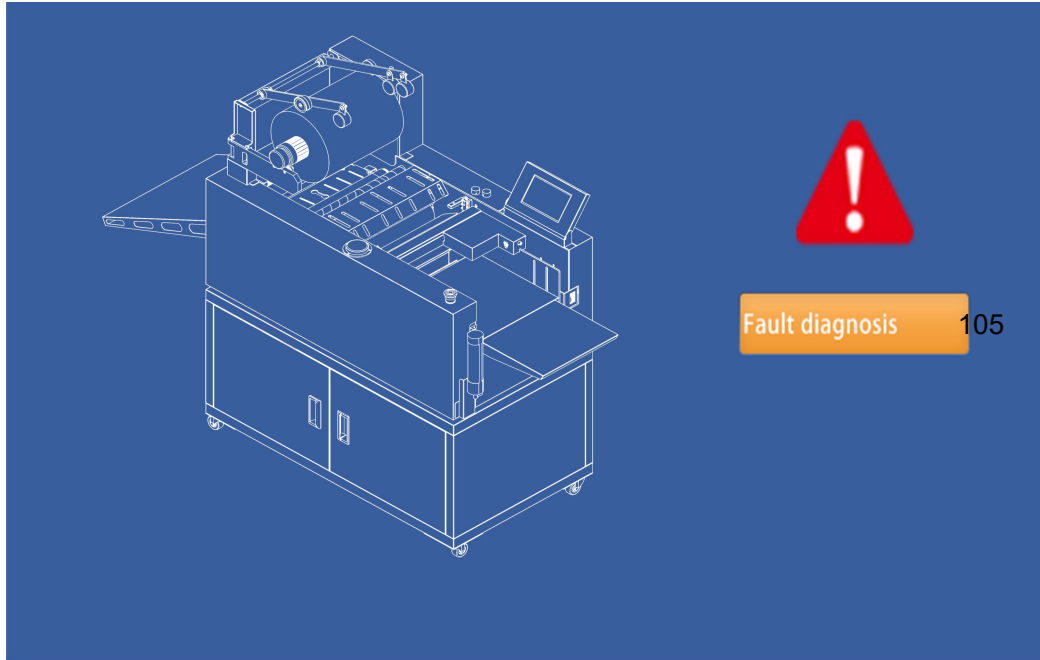
7.7 The temperature control system reported error 4

Temperature rise anomaly 104: there is temperature rise, but the temperature rise coefficient is less than the set value (the first temperature parameter), which may be bad contact between the sensor and the roller, or the heating tube is broken



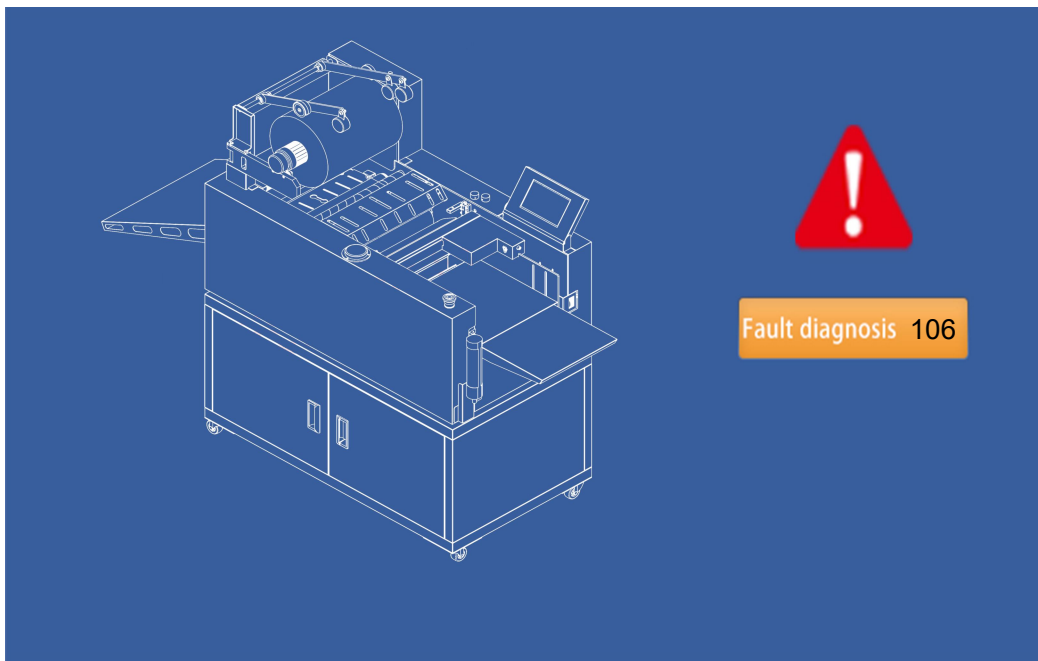
7.8 The temperature control system reported error 5

Abnormal constant temperature 105: The temperature continues to drop during constant temperature, which may be due to poor contact between the sensor and the roller, or the heat compensation coefficient is not high enough.



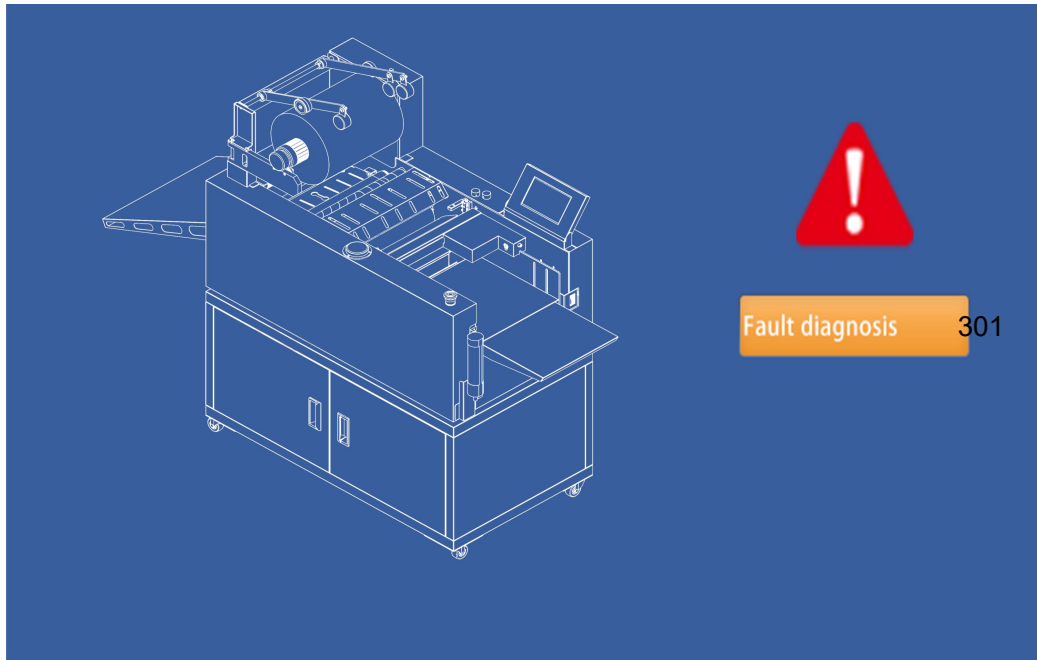
7.9 The temperature control system reported error 6

Temperature below the set value 106: The startup temperature is lower than the set value.



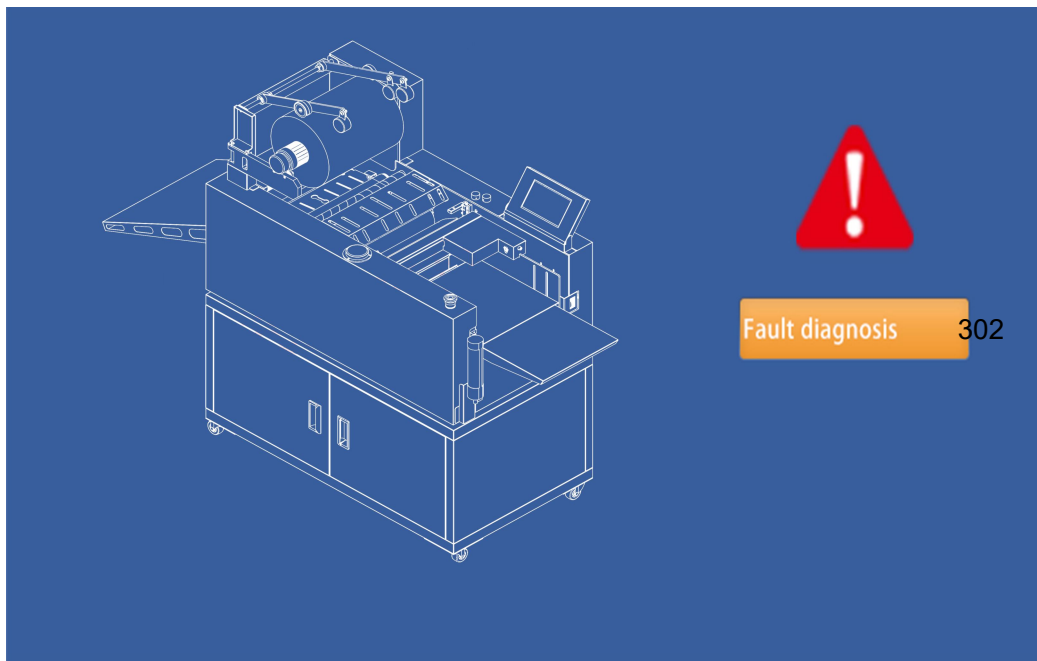
7.10 The paper feed system reported error 1

Upper limit sensor fault 301: The platform is falling, the sensor has been blocked, it may be that the motor does not turn, the micro switch is broken or normal.



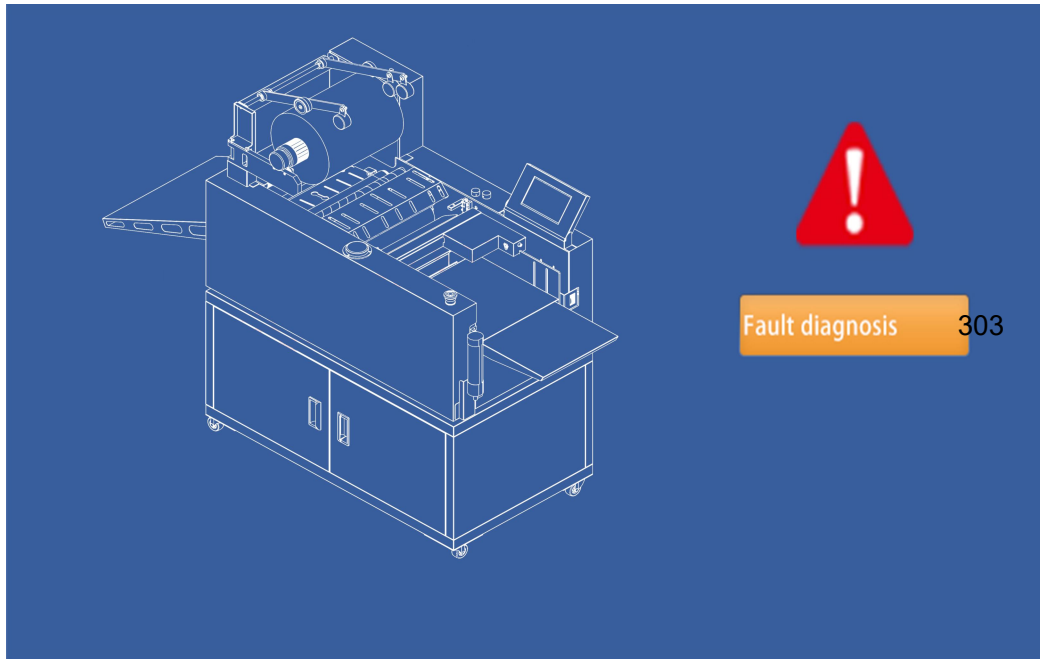
7.11 The paper feed system reported error 2

Lower limit sensor failure 302: The platform is rising, the sensor has been blocked, it may be that the motor does not turn, the micro switch is broken or normal.



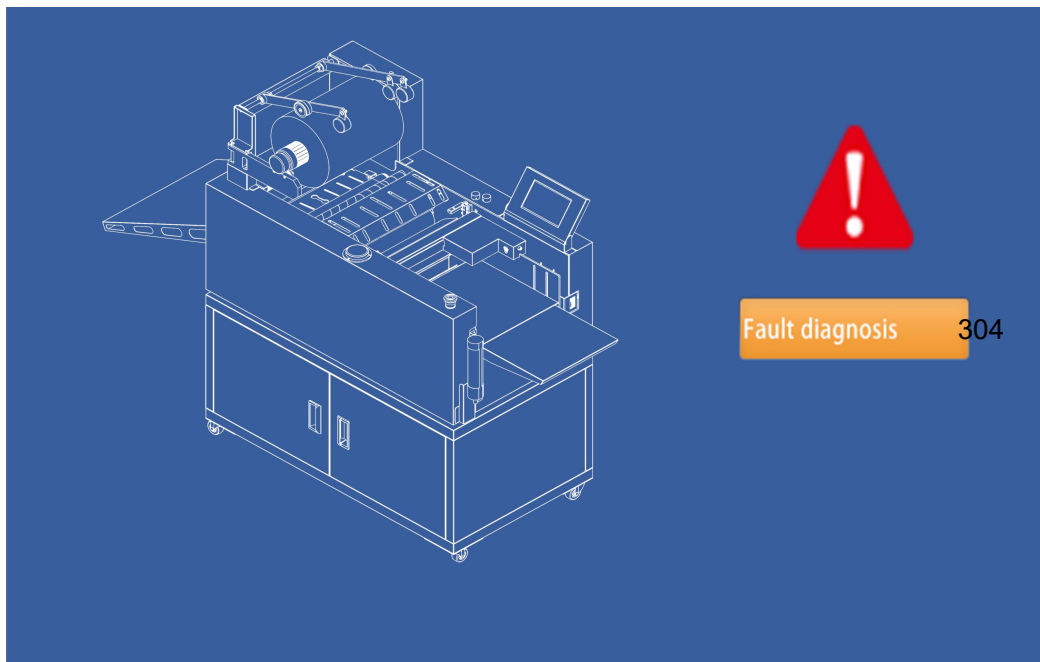
7.12 The paper feed system reported error 3

Lift motor fault 303: same as above or the platform does not rise in place within one minute.



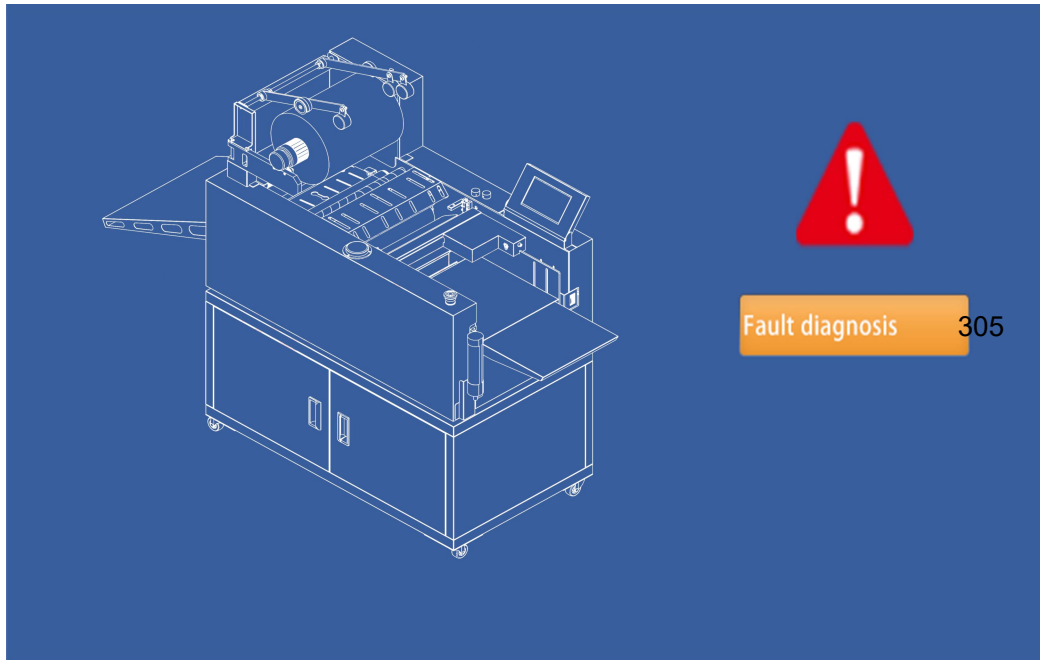
7.13 The paper feed system reported error 4

The pre-feed sensor is faulty (or jammed). 304: The sensor is blocked.



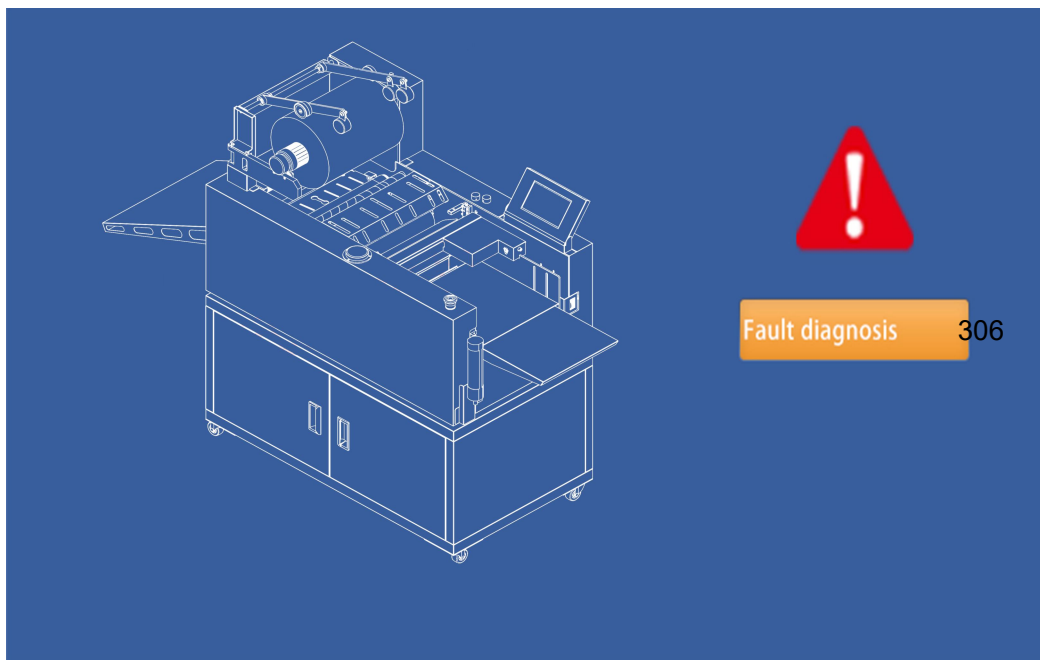
7.14 The paper feed system reported error 5

Edge sensor failure (or paper jam) 305: The sensor has been blocked.



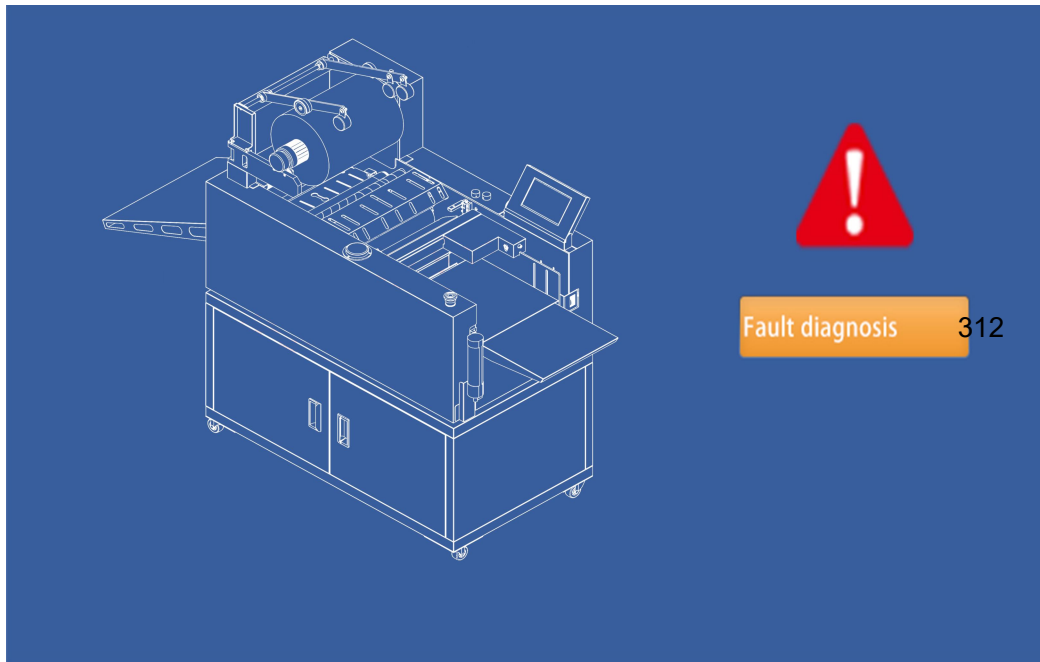
7.15 The paper feed system reported error 6

Paperless sensor fault (or paper jam) 306: The sensor has been blocked.



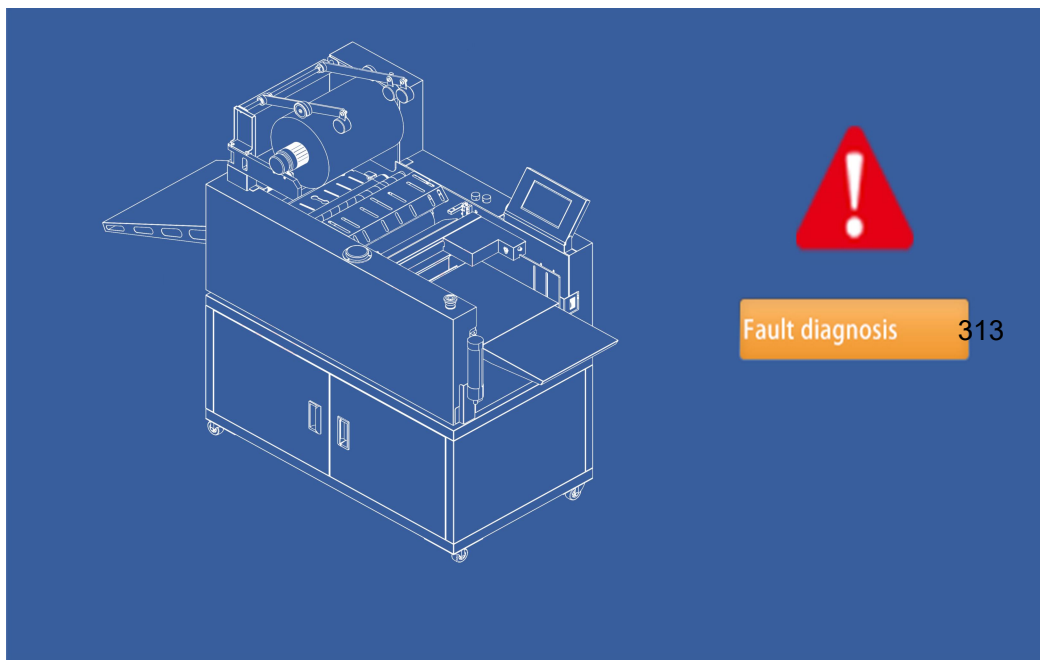
7.16 The paper feed system reported error 7

Double sheet 312: The paper length is longer than the first paper +20mm.



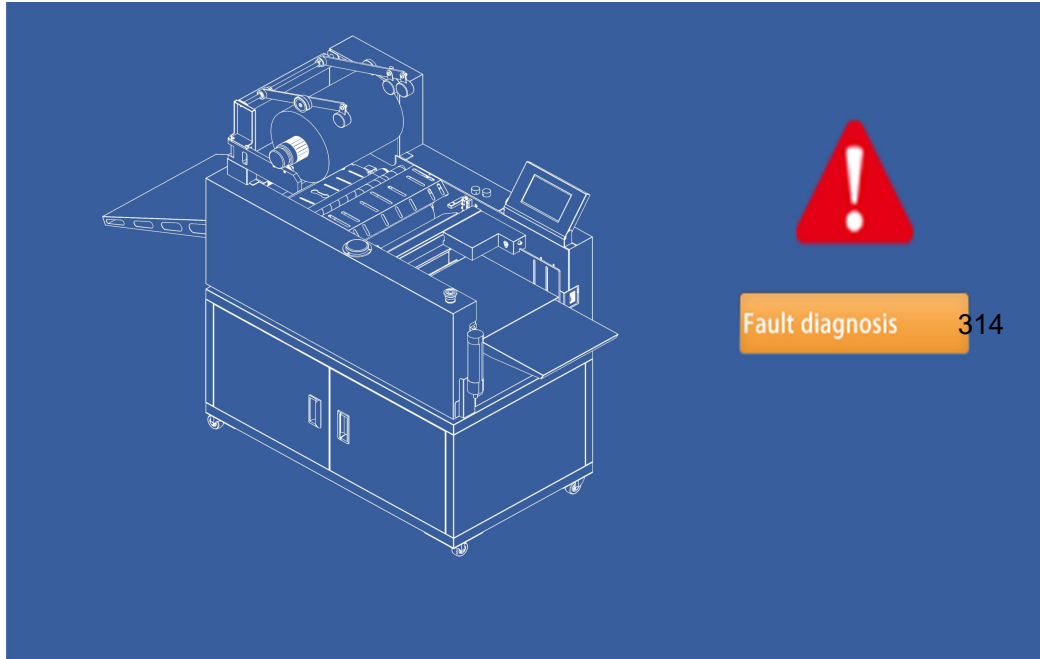
7.17 The paper feed system reported error 8

Paper length 313: Paper length greater than 1200mm.



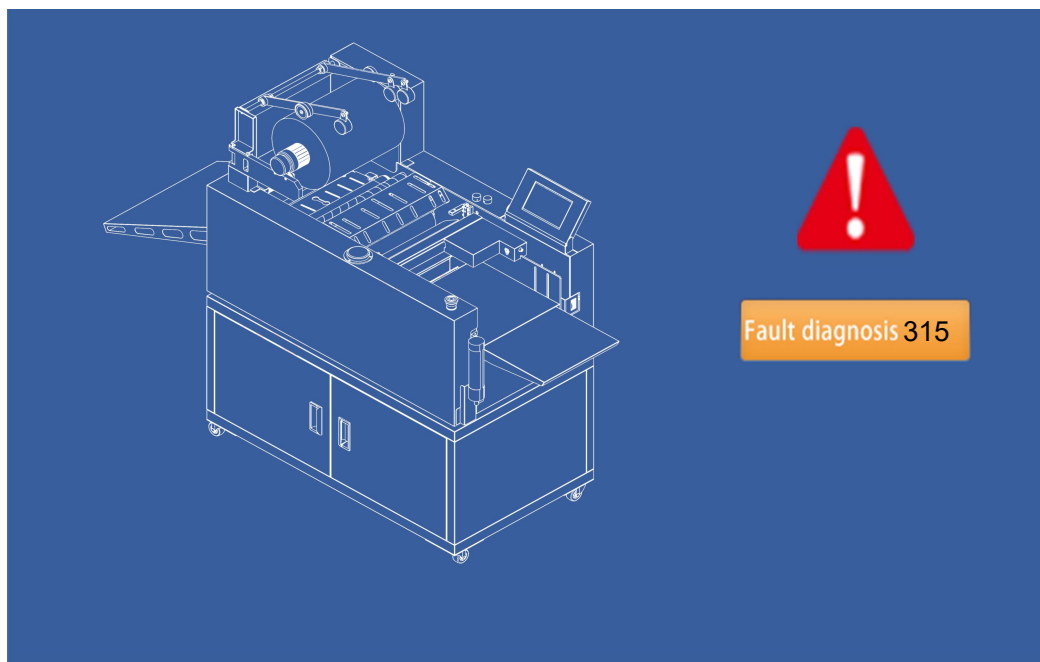
7.18 The paper feed system reported error 9

Ultra-short paper 314: Paper length less than 180mm.



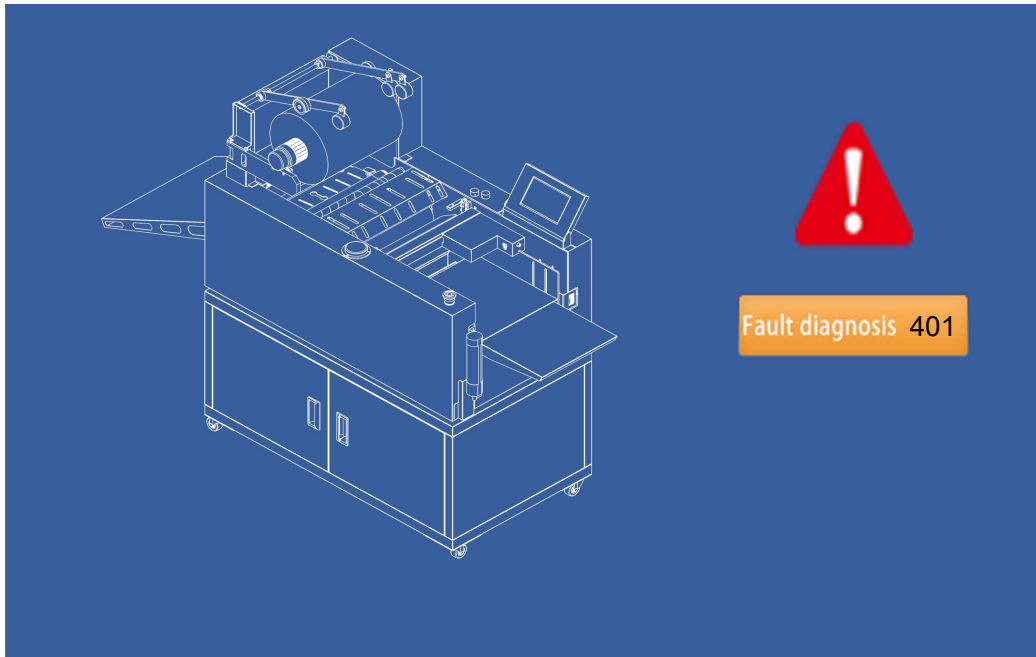
7.19 The paper feed system reported error 10

Lap axis roll paper 315: The paper length has exceeded 150mm, but the paperless sensor has not detected the paper signal.



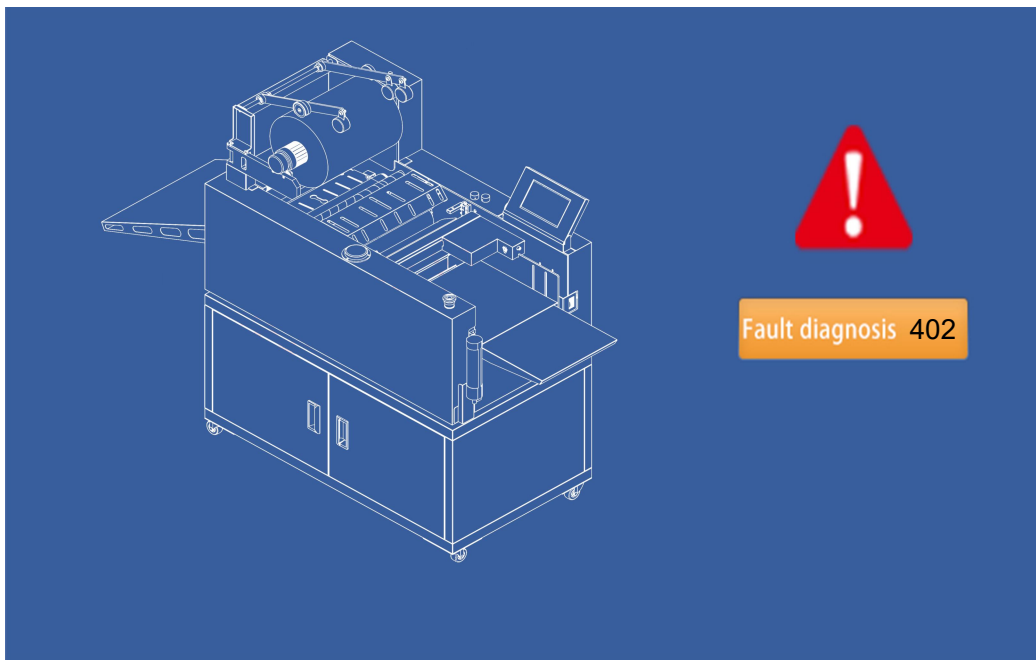
7.20 Heating roll coating system reported error 1

Heater roller cover open 401: cover limit switch open



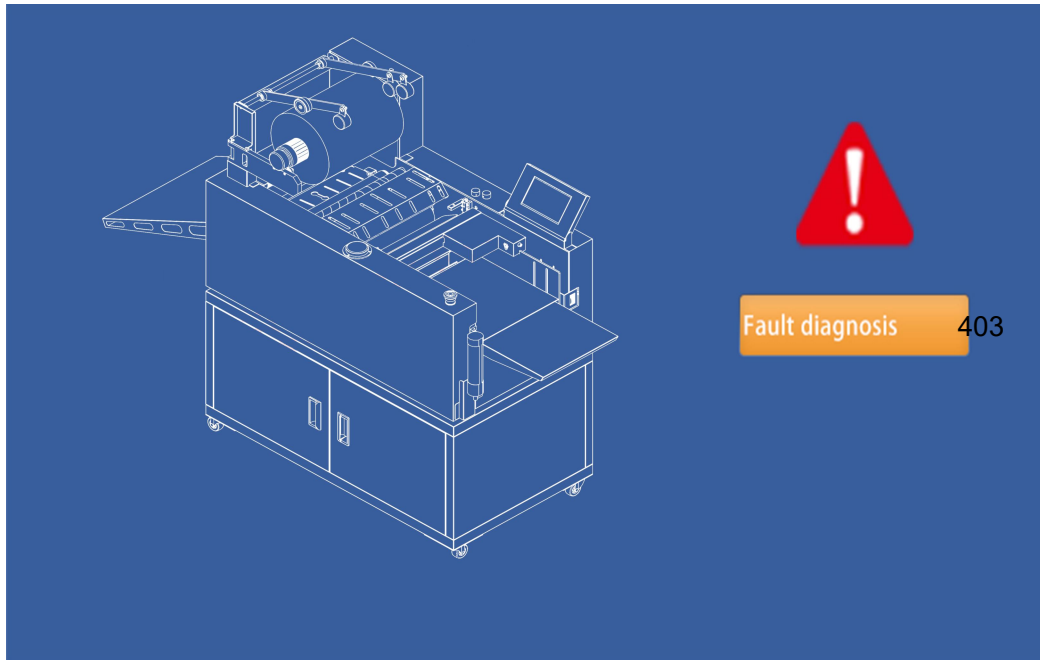
7.21 Heating roll coating system reported error 2

Spindle motor (or encoder) failure 402: No encoder signal within 0.5 seconds of spindle start.



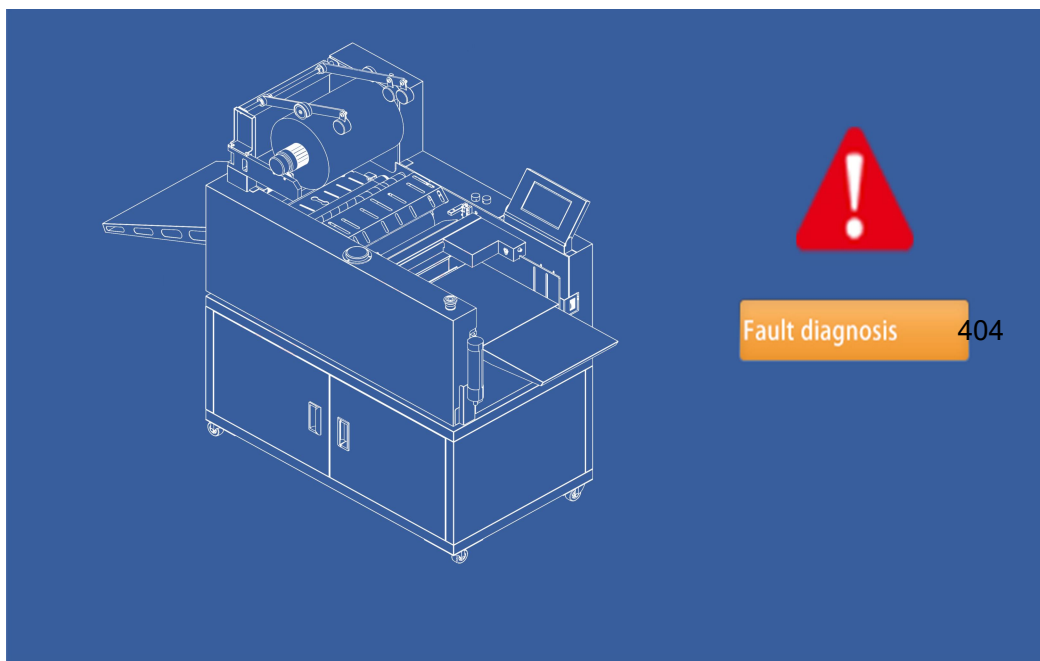
7.22 Heating roll coating system reported error 3

Heating roller paper 403: smoothing sensor detects that the paperless length is greater than 50mm.



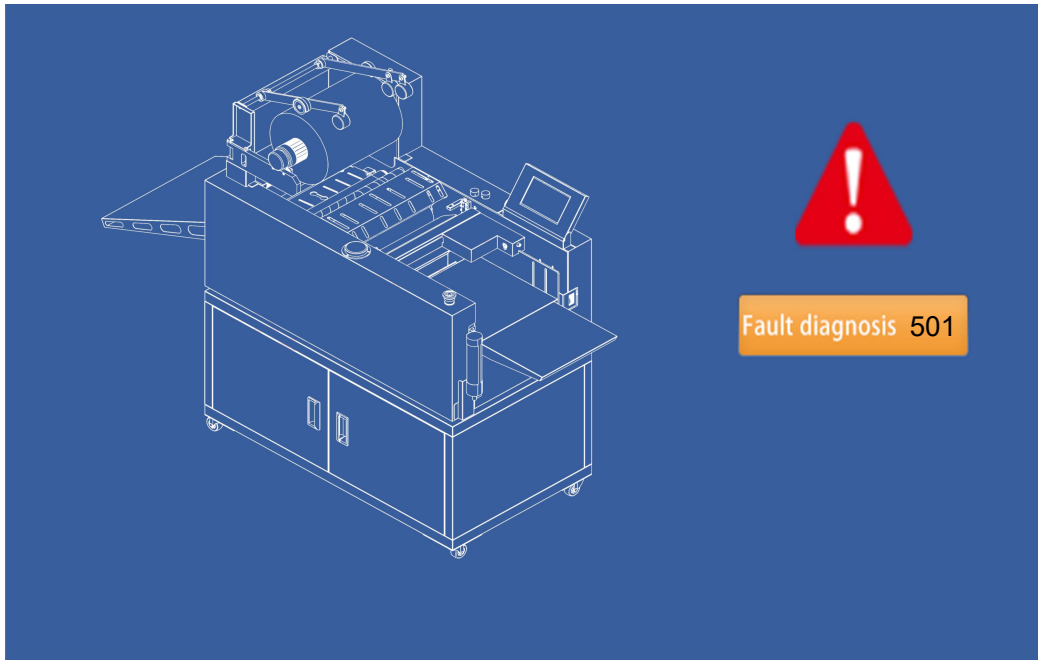
7.23 Heating roll coating system reported error 4

Broken film sensor failure, broken film 404: No sensor signal when the film is coated.



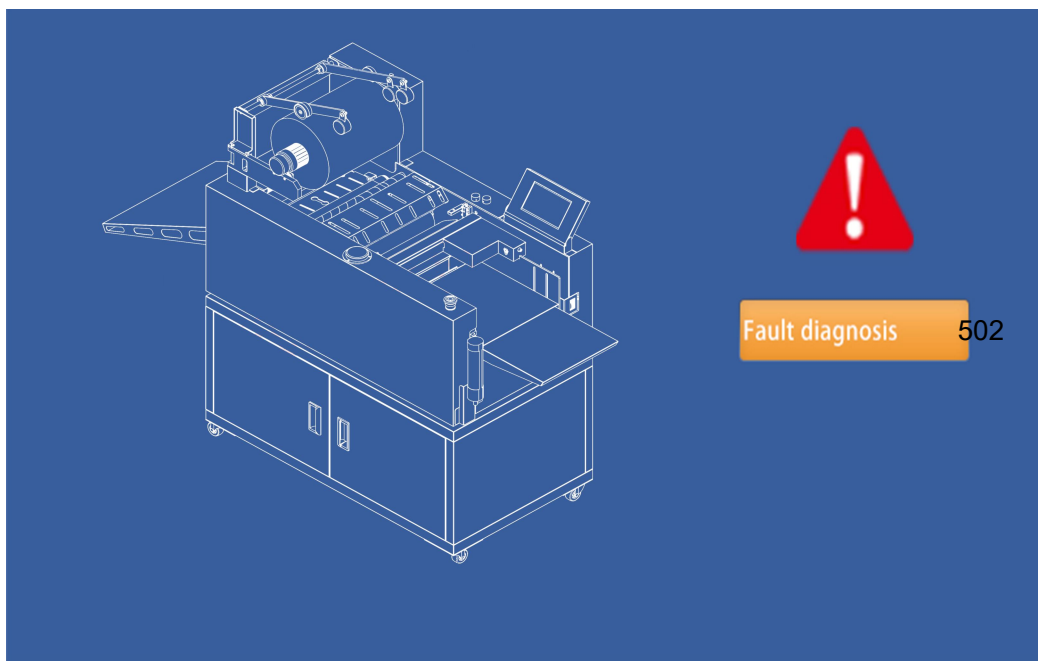
7.24 The pull off system reported error 1

Pull off sensor fault 501: The sensor has been blocked, the phenomenon is not pulled off.



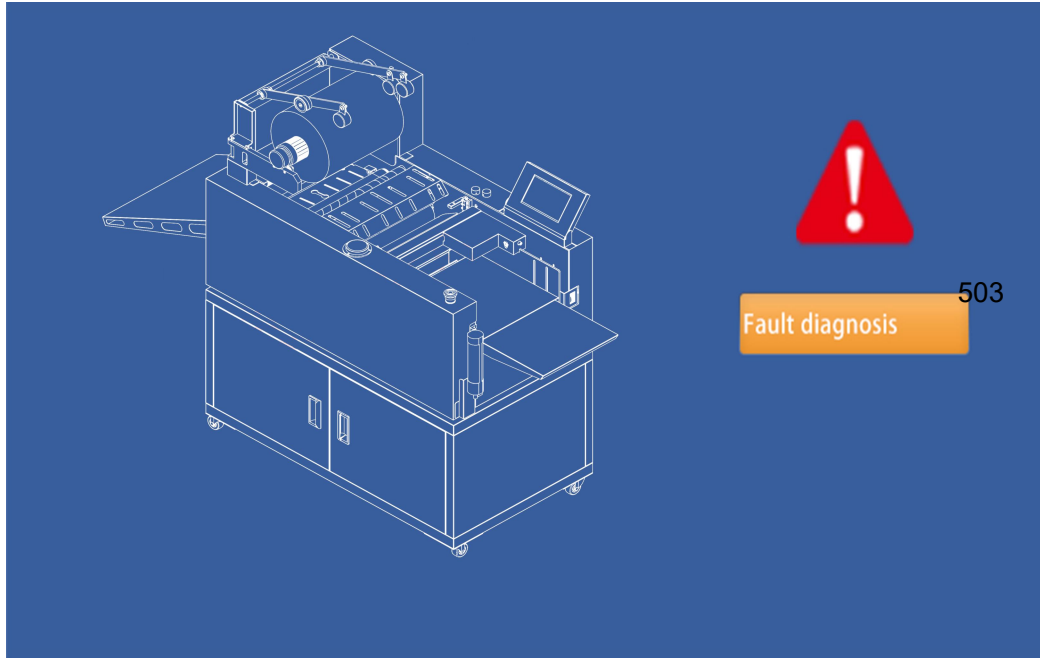
7.25 The pull off system reported error 2

CAM sensor failure, CAM motor failure 502: No sensor signal change is detected within 1 second after starting the motor, the CAM motor failure.



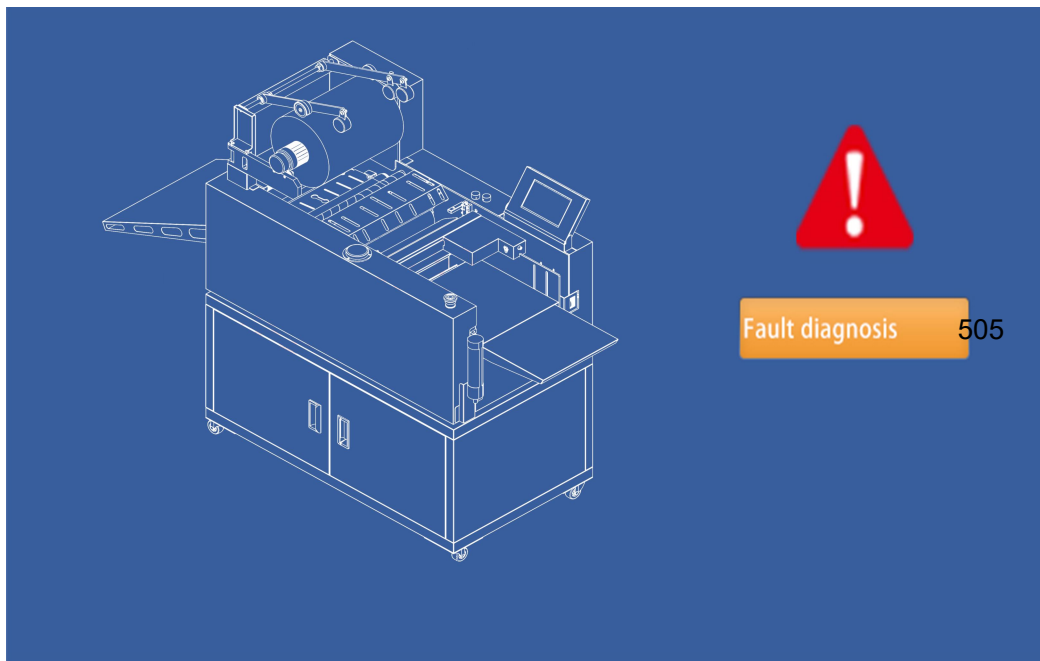
7.26 The pull off system reported error 3

Pull off the upper roller motor fault 503: pull off the upper shaft motor current exceeds 6A duration 0.5 seconds.



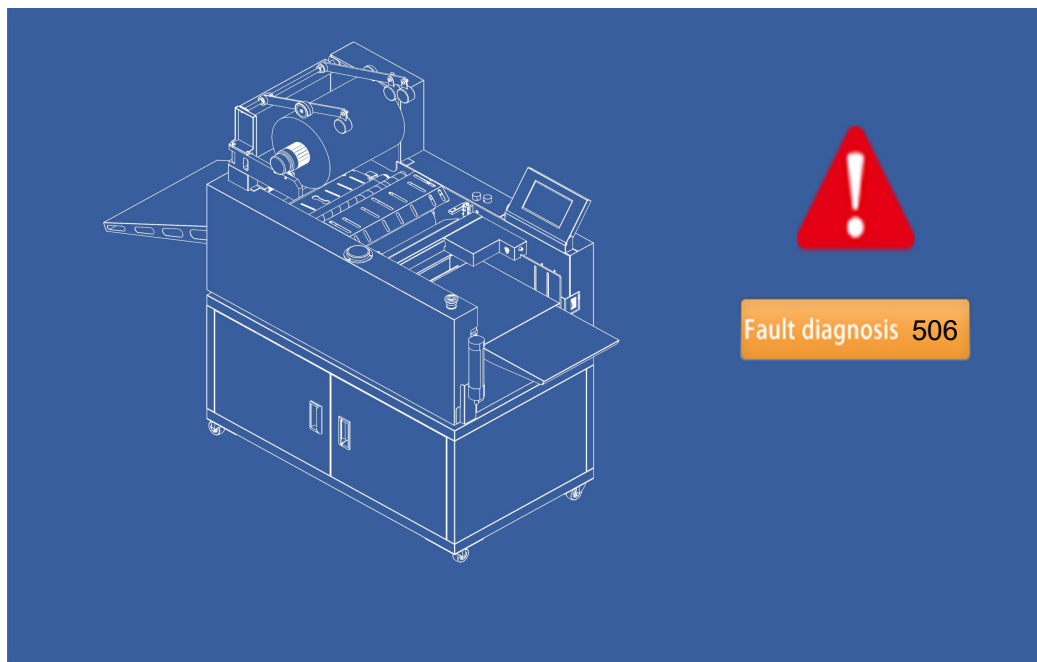
7.27 The pull off system reported error 4

Smoothing Roller roll 505: Pull sensor without paper when triggering pull break signal (except first pull break).



7.28 The pull off system reported error 5

No break 506: There is paper within 3 seconds of the end of the break.



Charter 8 Daily maintenance

8.1 In the process of film coating, there will always be a small amount of adhesive deposited on the heating roller. The correct installation of the film cylinder will reduce the accumulation phenomenon, but it is still necessary to clean the roller regularly according to the situation to ensure the quality of film coating.

8.2 When cleaning the heated steel roller, if the steel roller needs to be turned, in the case of pressure, enter the maintenance background and click the spindle motor to back off, then the upper steel roller can be cleaned.

8.3 When the machine is not used for a long time, the upper rubber roller can be lifted, otherwise it will cause deformation of the rubber roller, affecting the quality of film coating and the service life of the machine.

8.4 When the rubber roller is overheated to melt and stick the pre-coating film on the surface of the rubber roller, turn off the emergency stop switch immediately, and remove the coating film stuck to the rubber roller by hand after the rubber roller is cooled, and clean the remaining pre-coating film and adhesive with alcohol. It is forbidden to clean liquids (such as gasoline) that may react with rubber, so as not to cause damage to the surface of the rubber roller. It is forbidden to scrape the rubber roller with hard objects with diamond Angle, so as not to cause damage to the surface of the rubber roller and affect the use.