IMB®
AUTO SEWING MACHINE

(MB4006A)

Changzhou Wisdom & Valley Electrical Technology Co., Ltd.

Please read this manual carefully before using the equipment..
Please read the operation manual of the touch
screen interface before using the device
p this manual in a convenient place for future reference.
Please keep this operation manual of touch screen
interface in convenient place for referenc

Version
2026.06.11

Thank you for purchasing an IMB industrial sewing machine.

Before using this machine, please read the following instructions carefully. They will help you understand how to operate it.
These instructions set out the correct working methods in accordance with current regulations.

understand how the machine operates.

No part of this manual may beIMB copied or transcribed without prior written authorisation from IMB.
The contents of this manual are subject to change without prior notice.

We welcome any suggestions or comments for improving this manual.

This machine is documented in three parts. Please refer to MB4006AAutomatic Heat Transfer Marking Machine- Instruction Manual》 and 《MB4006A Operation Manual》MB4006AAutomatic Heat Transfer Marking Machine- Parts Manual》 and MB4006AAutomatic Heat Transfer Marking Machine- Touch Screen Operation Instructions》.

The introduction of this machine is divided into three parts. For details, please refer to 《MB4006A Operation manual》 and 《MB4006A Parts Manual》 《MB4006A Touch screen interface operation instructions》

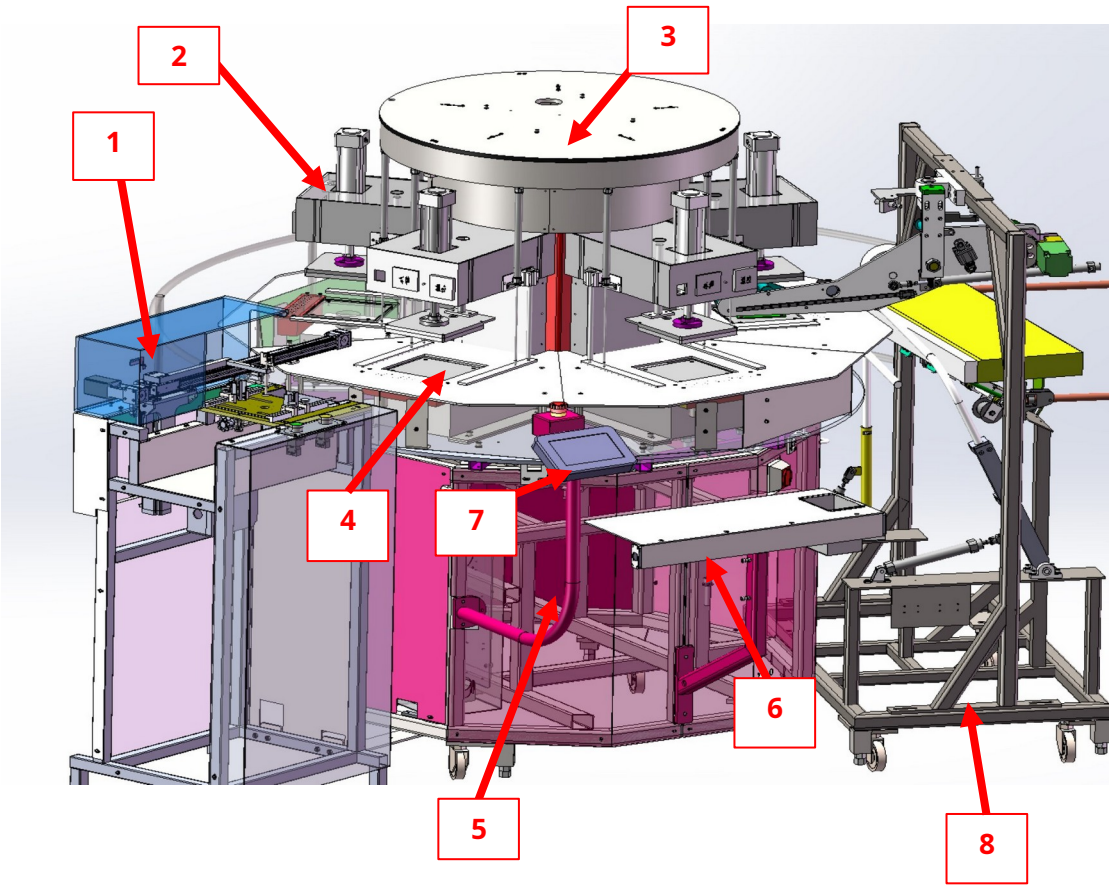
IMB®
AUTO SEWING MACHINE

English

Contents

1. Basic Machine Information.....
2. Technical Specifications.....
3. Safety Precautions.....
4. Button Functions.....
    4.1Button Functions.....
5. Operating Instructions.....
    5.1Preparations Before Operation.....
    5.2Operating Procedure.....
        5.2.1Starting the Machine.....
        5.2.2Label Alignment.....
        5.2.3 Heat Pressing.....
        5.2.4Shutting Down.....
6. Adjustment.....
    6.1Label Placement.....
    6.2Suction Cup Origin Adjustment.....
    6.3Fan Filter Cleaning.....
    6.4Heating Unit Temperature Setting.....
7. Electrical Wiring.....
    7.1Electrical Control.....
    7.2Pneumatic Control.....
8. Optional Devices.....
    8.1Material Stacker(Large Fabric).....
    8.2Material Stacker(Small Fabric).....
9 Troubleshooting.....
10. Daily Maintenance Requirements.....
101. Intellectual Property Statement.....

1. Basic Machine Infor



1: Label Pick-up Mechanism;2: Heating Unit;3: Lighting;
4: Work Surface;5: Rotary Frame;6: Material Rack
7: Touch Screen 8: Label Peeling Mechanism

2. Technical Specifications

MB4006AAutomatic Heat Transfer Marking Machine

1	Press Configuration	HP-16P-XT
2	Label Size Range/mm	Max. 160*160
3	Operating Voltage/V	220
4	Operating Air Pressure/Mpa	0.3-0.6
5	Power/kw	Machine Power: 1.8
		Heating Element Power:1.1
6	Heating Unit Temperature/℃	0-195
7	Noise/ dB	<80
8	Protection Class	IP44
9	Machine Dimensions/mm	2500L×1850W×1650H

3. Safety Precautions

Precautions for Safe Use of the Machine

 危险	**1. To prevent electric shock, do not open the motor electrical box cover or touch any parts inside it while the power is on.**

⚠ 注意	**1. To prevent personal injury, do not operate the machine with safety devices such as the belt guard or finger guards removed.** **2. To prevent being caught in the machine, keep fingers, hair and clothing away from the pulley, V belt and motor while the machine is running, and do not place objects on them.** **3. To prevent personal injury, do not put your fingers near the needle when the power is switched on or while the machine is running.** **4. To prevent personal injury, do not put your fingers inside the thread take-up lever guard while the machine is running.** **5. The machine runs at high speed. To avoid hand injuries, never bring your hands near the fabric cutter while it is running. Always switch off the power before replacing the thread.** **6. To prevent personal injury, take care not to catch your fingers when the machine moves up and down or returns to its original position.** **7. Do not cut off the power supply or the air supply while the machine is running.** **8. To prevent accidents caused by sudden starting, remove the fabric guide once preparation is complete and the machine is ready for sewing.** **9. To prevent electric shock, do not operate the machine with the power earth wire disconnected.** **10. To prevent electric shock and damage to electrical parts, always switch off the power before inserting or removing the power plug.** **11. To prevent damage to electrical parts, stop work and unplug the power cord during thunderstorms.** **12. To prevent damage to electrical parts, condensation may form when the machine is moved suddenly from a cold place to a warm one. Wait until it is completely dry before switching on the power.** **13. This is a precision instrument. Handle it with care: do not splash water or oil onto it, and do not drop it or subject it to impact.** **14. This machine is a Class A industrial machine. If it is used in a residential environment, radio interference may occur. In that case, the user must take appropriate measures to resolve the interference.** **15. The stacker bar moves after the power switch is turned off while the stacker is operating. Be careful not to catch your fingers.** **16. The fabric presser foot moves after the power switch is turned off while it is operating. Be careful not to catch your fingers.** **17. When putting your fingers into the hemming device while it is operating, be careful not to let the cylinder catch them.**

**Important Safety Information:

√Improper operation may cause personal injury. Read this manual carefully before operating the machine and operate it correctly.

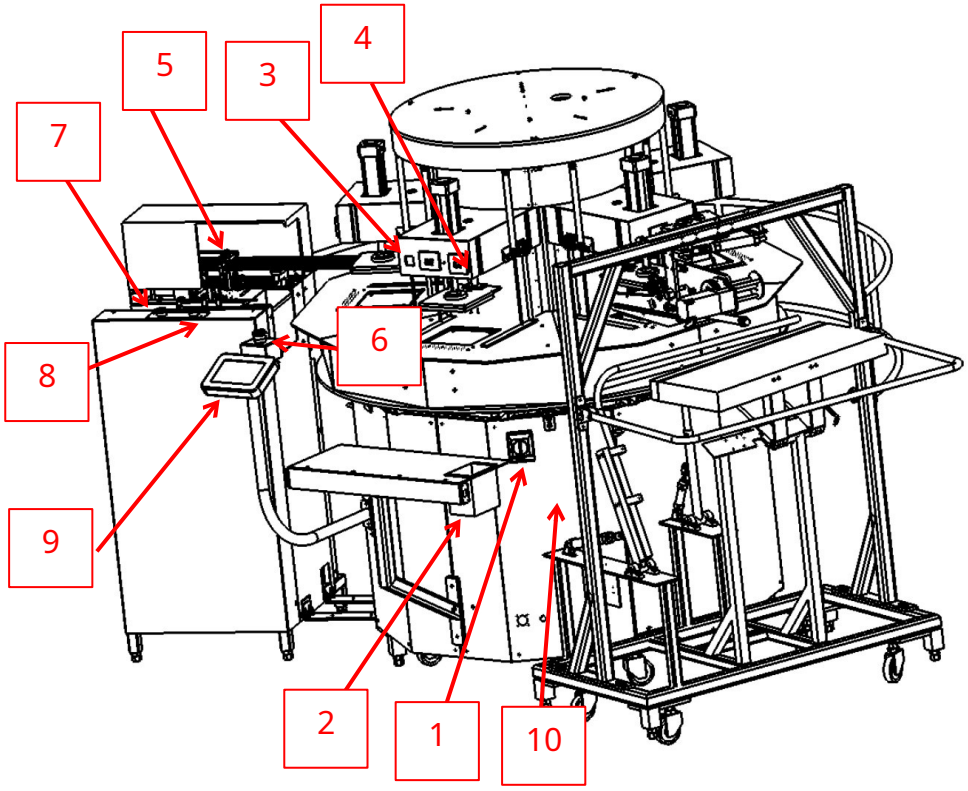
√Supply air before switching on the power for normal operation.

√Never open the electrical control box or the internal parts of the touch screen while the power is on.

√This machine must be used only after training or under the guidance of qualified personnel, to ensure the safety of the operator.

4. Button Functions

4.1Button Functions



（1): Power Switch ---90°Turn the power switch 90° to ON. The machine is then powered and supplied with air.

（2): Manual Switch ---Press both buttons simultaneously to run the machine through one station.

（3): Pressure Reducing Valve---Adjusts the cylinder pressure of the heating unit.

(4): Temperature Control Panel ---Adjusts the temperature of the heating unit

(5): Photoelectric Sensor Adjustment Knob ---Fine-tunes the suction cup origin position

(6): Emergency Stop Switch ---Stops the machine immediately

(7): Manual Label Alignment 

---The machine picks up a label and transfers it under the

press, same as the touch screen 

button

(8): Label Placement 

--- Moves the label under the press down to the work surface, same as the touch screen same as the touch screen 

button

(9): Touch Screen 

（10）：Air Supply 

5. Operating Instructions

5.1Preparations Before Operation

√ The machine head must be stopped when the operator carries out the inspection
√ Check that the sewing thread is correctly threaded
√ Check that the needle is correctly installed
√ Clear any objects from the machine table so that nothing obstructs operation
√ Check that the eye guard is correctly installed

5.2Operating Procedure

5.2.1Starting the Machine

90°Turn the power switch 至 ON, the machine powers up. Select the language on the start-up screen to enter the main screen.

5.2.2Label Alignment

Manually place the label on the label platform (see 6.1 Label Placement). On the main screen, tap “Label Pick-up Settings” to enter the alignment screen.



Tap “Pick & Place Label”. The machine automatically picks up one label and moves it under the heating unit. Tap Tap “Pick & Place Label” again and the label drops. Check whether the label position meets the process requirements. If there is any deviation, fine-tune the label position according to step 6.1.



5.2.3 Heat Pressing

a) Process parameter setting: on the main screen, set the heat pressing parameters. (See 《 MB4006A Automatic Heat Transfer Marking Machine - MB4006AAutomatic Heat Transfer Marking Machine-Touch Screen Operation Instructions》.)





b) Enable the required functions

c) Set the temperature as described in step 6.4 and wait for it to heat up.

d) Select the label pick-up mode according to how the labels are stacked

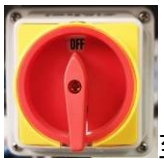
Labels without interleaving paper



Labels with interleaving paper 

e) Once the press reaches the required temperature, place the cut piece in the designated area and press both  manual buttons together. The cut piece moves to the label placement position and the pick-up mechanism places the label. Place the second cut piece at the same time, and so on.

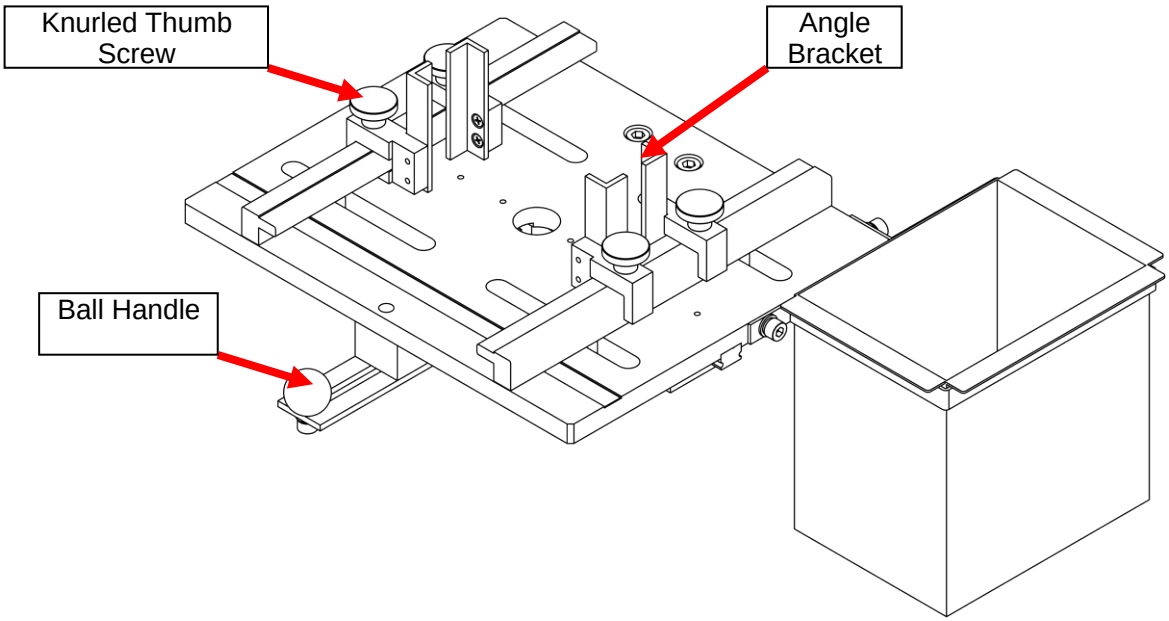
5.2.4Shutting Down

90°Turn the power switch 

至 OFF. The machine is shut down.

6. Adjustment

6.1Label Placement

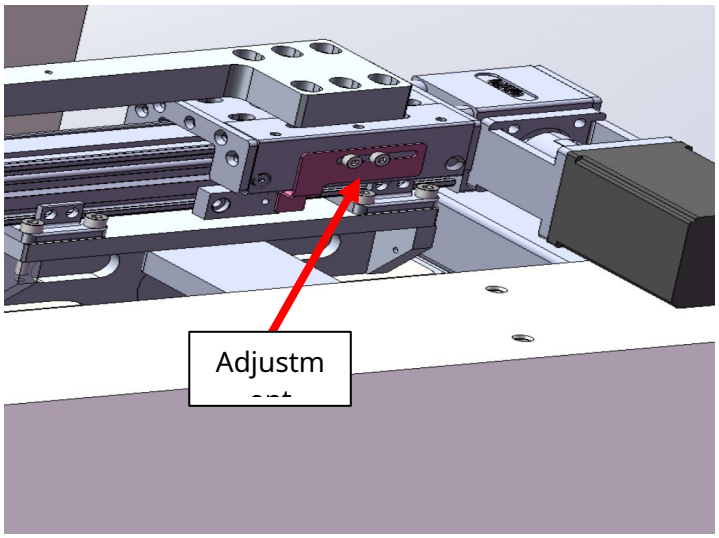


Lateral size adjustment: move the ball handle forward to increase the left-right spacing, or backward to reduce it.

Longitudinal size adjustment: loosen the knurled thumb screws to move the angle bracket forwards or backwards.

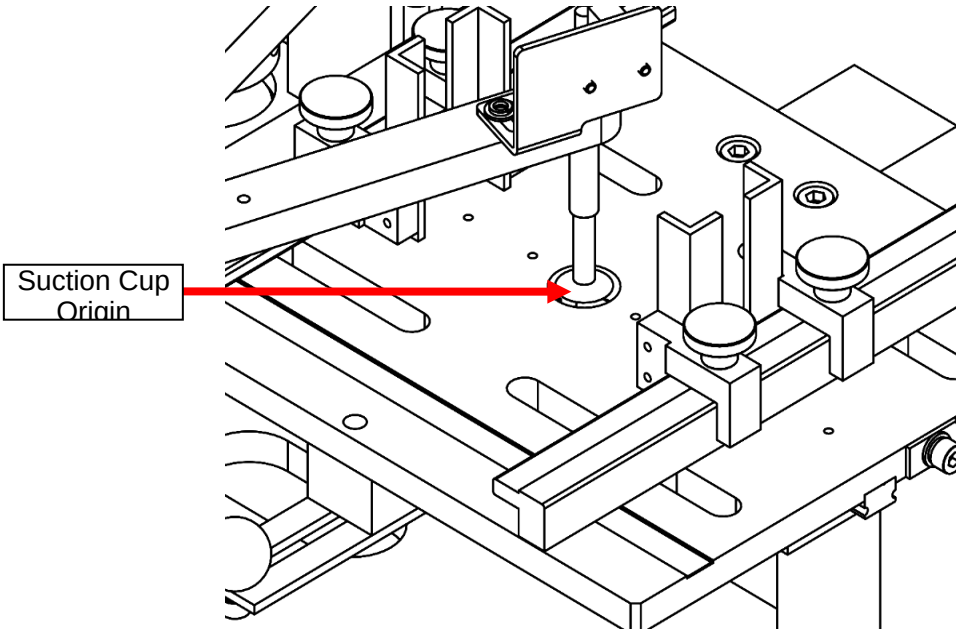
First set the lateral size to match the label. Loosen the four knurled thumb screws and set the angle bracket spacing slightly larger than the label size. Place the label on the platform, aligning it with the centre origin, push the angle brackets against the label, then tighten the knurled thumb screws.

6.2Suction Cup Origin Adjustment

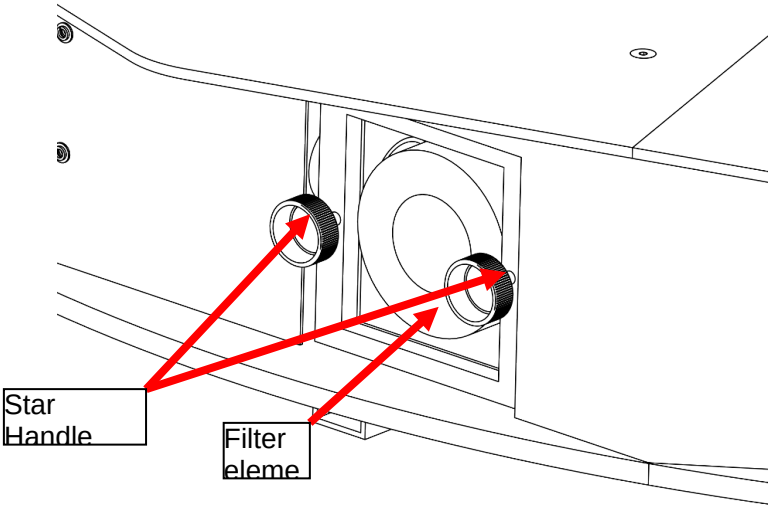


Turn the adjustment screw clockwise to move the proximity switch to the left, or anticlockwise to move it to the right. After each adjustment, tap “Pick & Place Label” so the linkage swings once. The final result is shown below.





6.3Fan Filter Cleaning



When the fan goes into overheat protection, or when cleaning at the specified interval:
Manually remove the two star handles, take out the filter element and clean it, then reassemble. If overheat protection has been triggered, wait until the fan cools down before the machine can run normally again.

6.4Heating Unit Temperature Setting



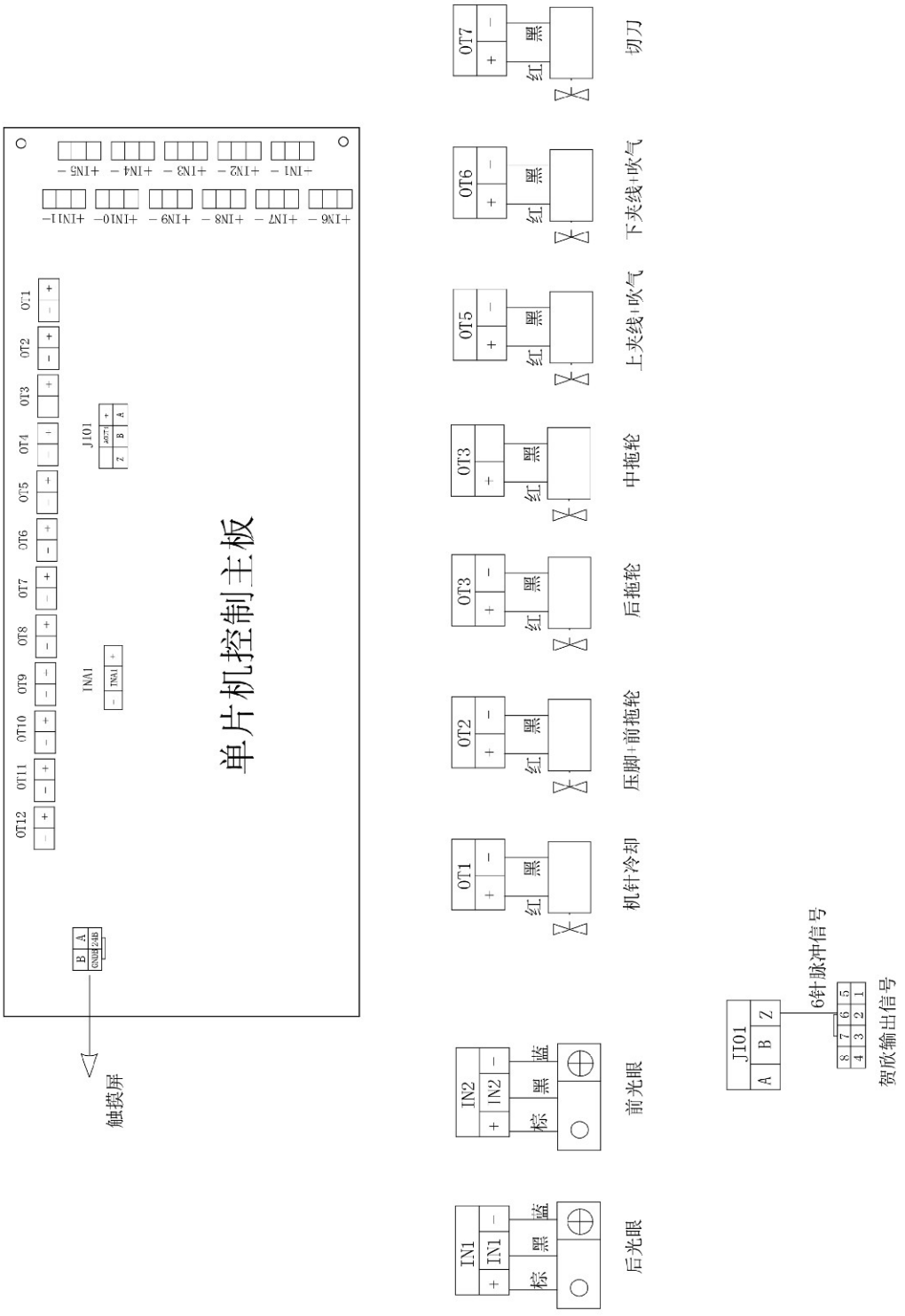
On the main 中 Tap “Press OFF” to open the press control screen. The green figure is the set temperature and the red figure is the actual temperature.

Temperature adjustment: On the temperature control panel, tap the ▽ button to decrease the set temperature, or the △ button to increase it.

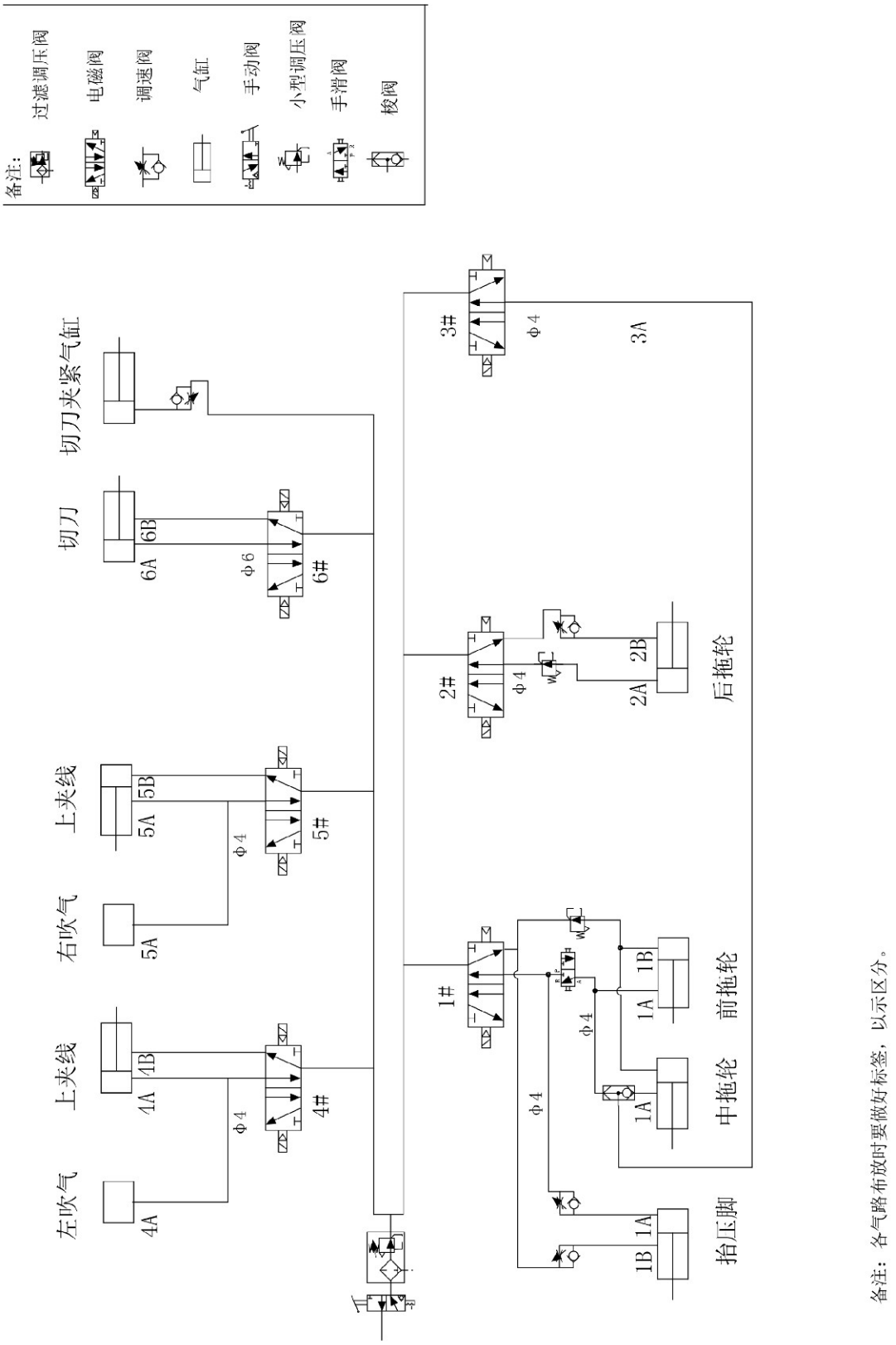


7. Electrical Wiring

7.1Electrical Control



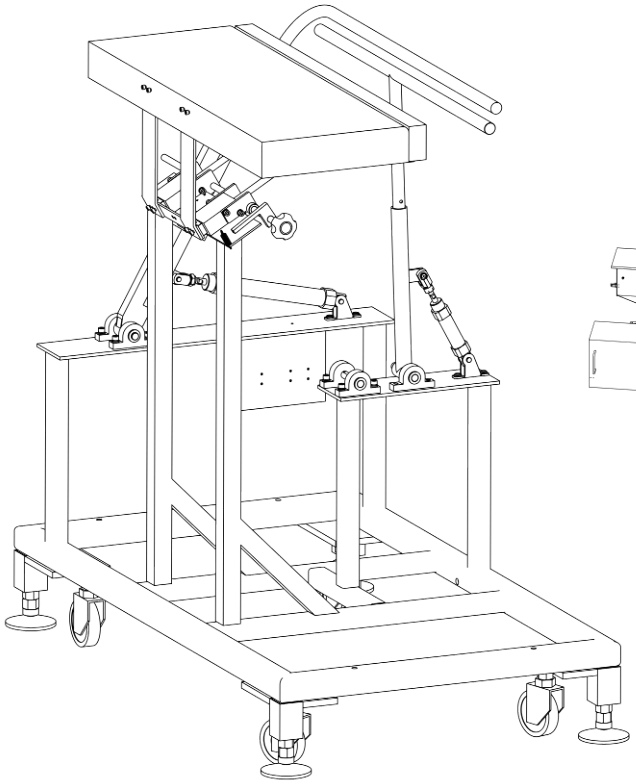
7.2Pneumatic Control

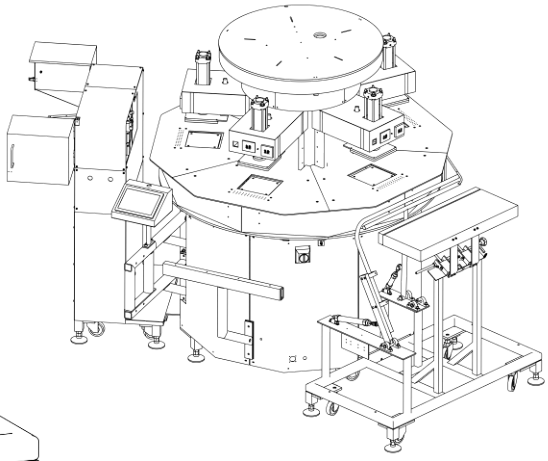


备注：各气路布放时要做好标签，以示区分。

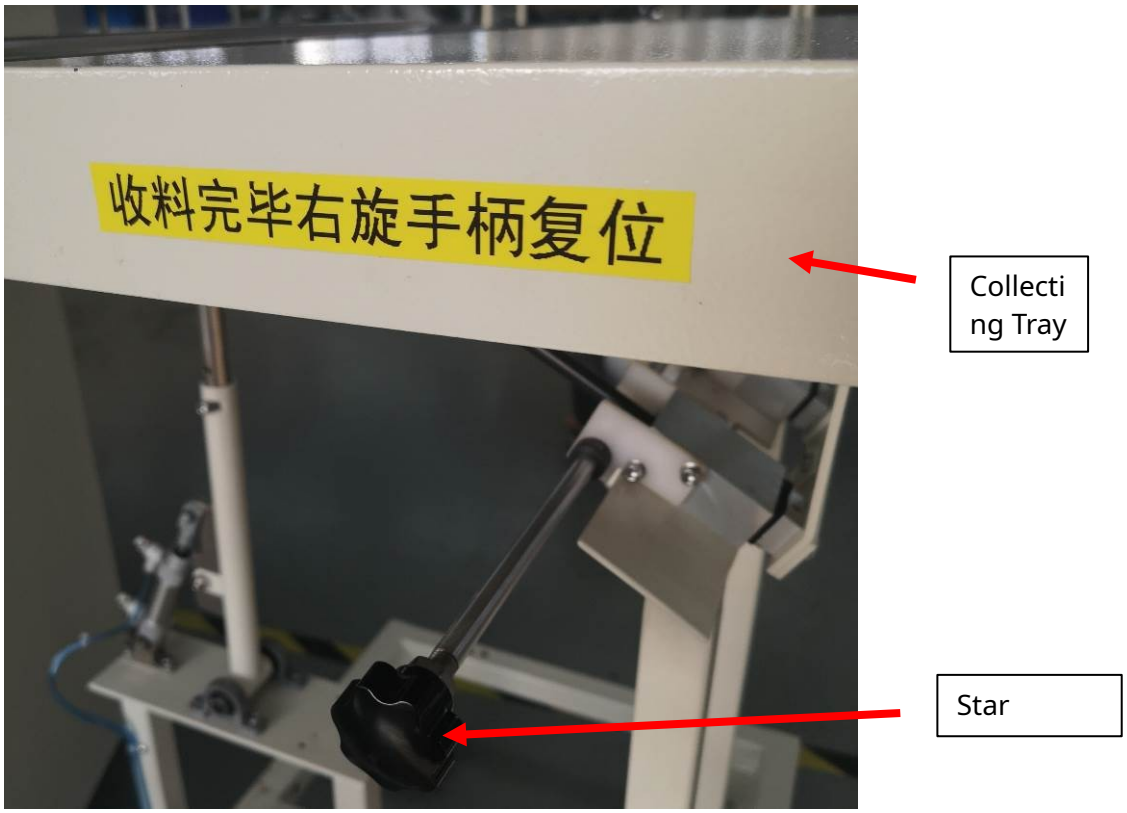
8. Optional Devices

8.1Material Stacker(Large Fabric)

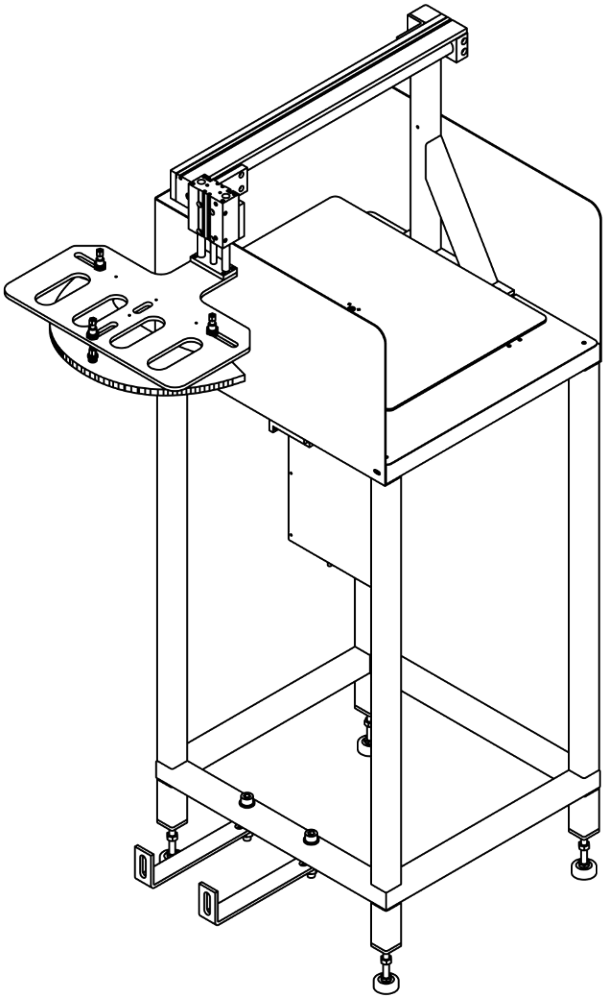


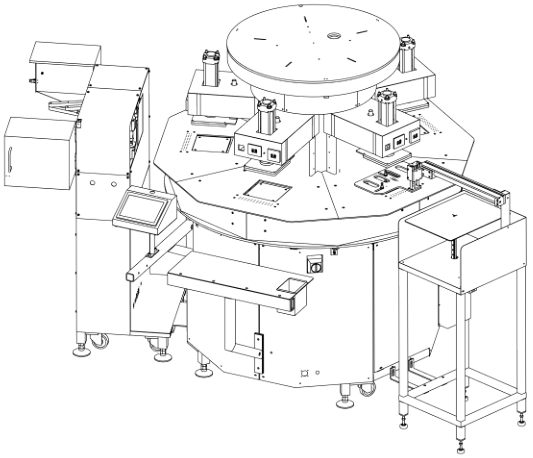


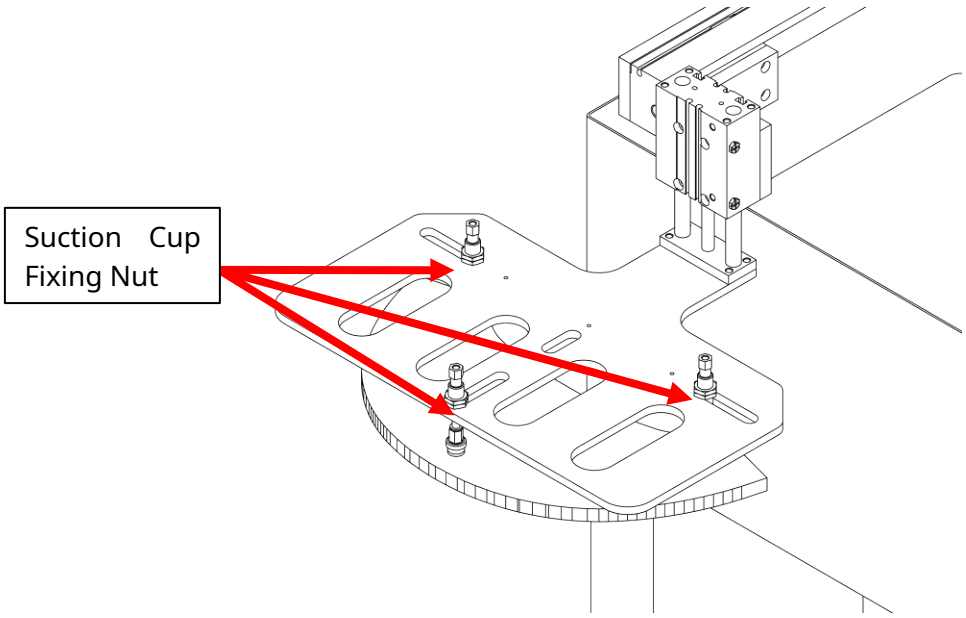
The stacker has a built-in lowering function. After automatically collecting a certain number of cut pieces, they must be removed manually. Once collection is complete, turn the star handle clockwise by hand to reset the collecting tray.



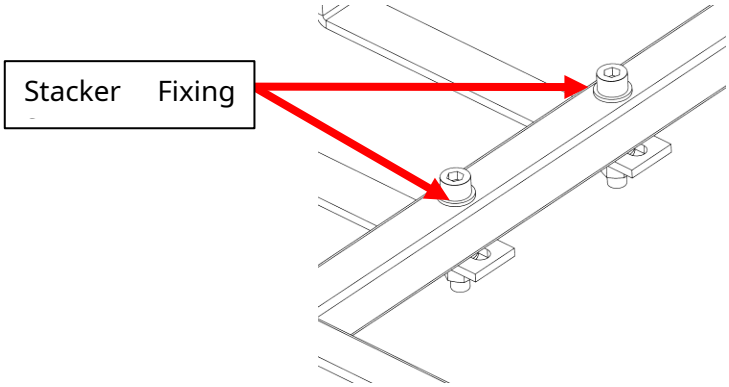
8.2Material Stacker(Small Fabric)







Because cut pieces vary in size, the position of the collecting suction cups is adjustable: Loosen the three suction cup fixing nuts, move the cups along the slotted holes so that all three rest on the cut piece, then retighten the nuts.



Adjusting the stacker position relative to the press:

If the overall suction cup position deviates from the cut piece, loosen the two stacker fixing screws to adjust the distance between the stacker and the main body.

9. Troubleshooting

Symptom	Cause Analysis	Solution
Machine goes into overheat protection	Fan blocked	As described in 6.3 step to clean the fan filter element
Machine goes into low pressure protection	Air pressure below the set pressure	Increase the pressure
Label pick-up failure	Slow exhaust or insufficient make-up pressure	1. Check the quick exhaust valve 2. Check the vacuum generator 3. Check the under-voltage protection and refer to the manual for parameter settings

10. Daily Maintenance Requirements

10.1.The maintenance checklist and requirements are shown in the table below.

No.	Item	Frequency				Description
		Daily	Weekly	Monthly	Half-yearly	
1	Clean dust	√				Remove dust from the machine surface and components
2	Clean oil stains		√			Clean oil from the table, needle plate and bobbin
3	Filter element			√		Replace at regular intervals
4	Sensor				√	Check that sensitivity is accurate

						and the position has not shifted
5	Sliding parts				√	Check the lubrication of sliding parts and add lubricant if necessary
6	Electrical control box				√	Check that the cooling fan runs normally and clean off dust promptly

101. Intellectual Property Statement

MB4006AThe MB4006A Automatic Heat Transfer Marking Machine is the independently developed design of Changzhou Wisdom & Valley Electrical Technology Co., Ltd. The intellectual property rights in this design belong to Changzhou Wisdom & Valley Electrical Technology Co., Ltd. and are protected by the relevant national intellectual property laws and regulations. Without the written permission of the rights holder, no one may implement the patented technology of this design, nor copy, sell or disseminate information relating to it through information networks. Changzhou Wisdom & Valley Electrical Technology Co., Ltd. will pursue legal liability for any infringing act in accordance with the law.