

单层拷边机

Panel serging unit

(MB3003B-PS-MX5204)

使用说明书

Instruction Manual

常州智谷机电科技有限公司

CHANGZHOU WISDOM & VALLEY ELECTRICAL TECHNOLOGY CO., LTD

在使用本设备之前请先阅读本使用说明书。

Please read the operation manual of the touch screen interface before using the device

请将本使用说明书放在便于查阅的地方保管

Please keep this operation manual of touch screen interface in convenient place for reference

版本信息/Version

2022.04.03

感谢购买 IMB 工业用缝纫机。

在使用此机器之前，请仔细阅读以下的说明，这样可以更好地帮到您了解此机器的相关操作。

这些说明是根据现行的条例明确阐述了正确的工作方法。

Thank you for purchasing this industrial sewing machine from IMB

Before using this automatic unit, please read the following instructions, which will help you to

understand how the machine operates.

These instructions illustrate the correct working methods to comply with current regulations.

在没有得到IMB授权许可的前提下，此说明书的任何部分是不可以被复制或转录的。说明书的内容可能被修改，而不需预先通知。

No part of this manual may be copied or transcribed without requesting prior authorization from IMB

The contents of this manual may be subject to change without advance notification.

我们将欣然接受各位提出的改进此说明书的任何建议和指示

We are happy to receive suggestions and/or indications on ways we could improve this manual.

本机介绍说明分为两部分，具体请参照《MB3003B-使用说明书》、《MB3003B-零件手册》。

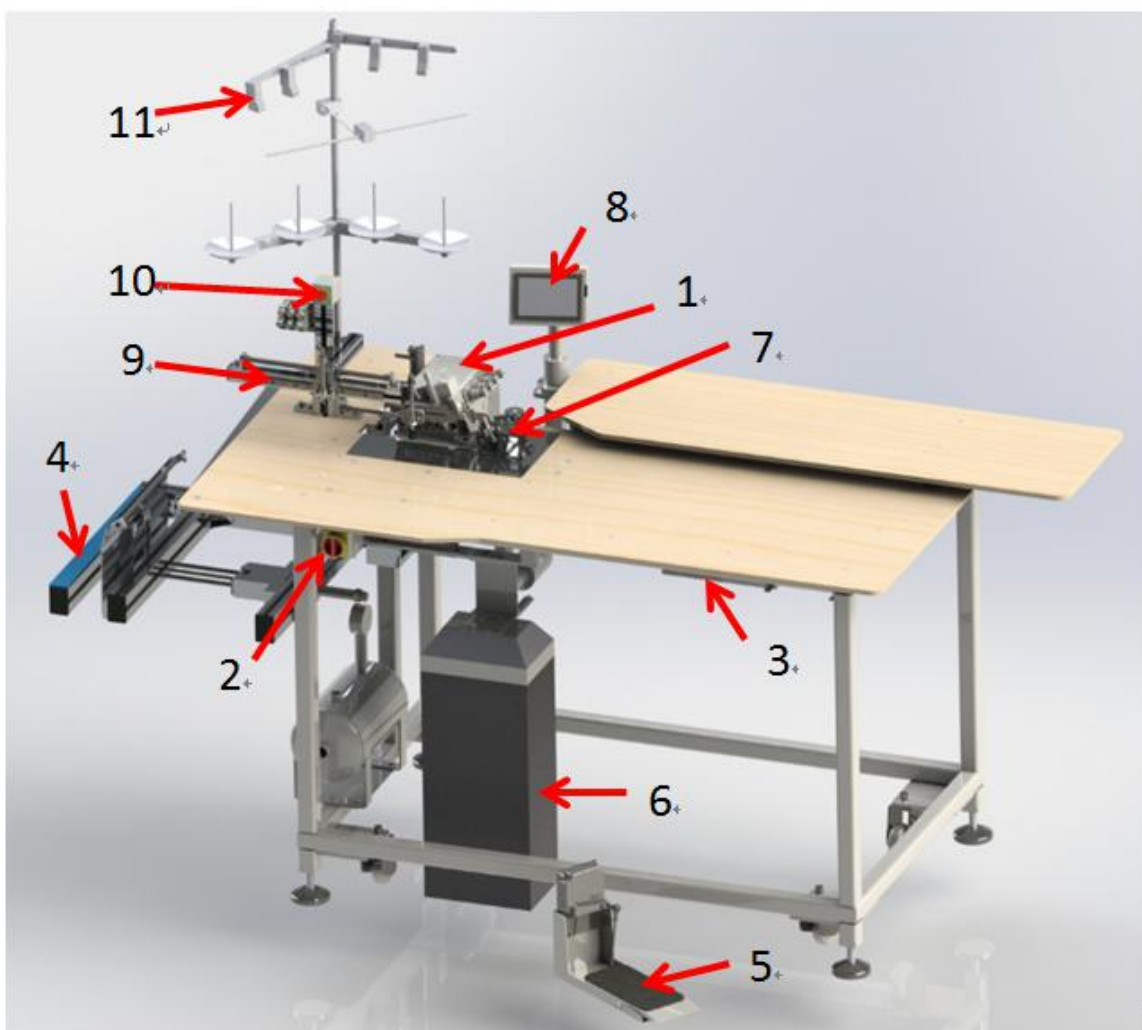
The introduction of this machine is divided into two parts. For details, please refer to 《MB3003B Operation manual》 and 《MB3003B Parts Manual》.

ENGLISH

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1、 Basic information of equipment



A



1: EX5214-M03 sewing head; 2: Switch; 3: Control box; 4: Stacker; 5: Pedal;
6: Suction; 7: Feeding guide mechanism; 8: Screen; 9: Drag cloth assembly; 10:
Emergency stop switch. 11. Breakage detection device

2、 Technical parameters of equipment

MB3003B Serging unit		
1	Machine head	EX5214-M03
2	Maximum speed (sti/min)	7500
3	Working voltage (V)	220
4	Working pressure (Mpa)	0.5
5	Fabric thickness	Medium to thick
6	Needle	2
7	Thread	4
8	Stitch length (mm)	2
9	Stitch width (mm)	3, 4, 5
10	Size (mm)	2055Lx870Wx1220H
11	Weigth (kg)	110

3、Safety precautions

Considerations for safe use of automata

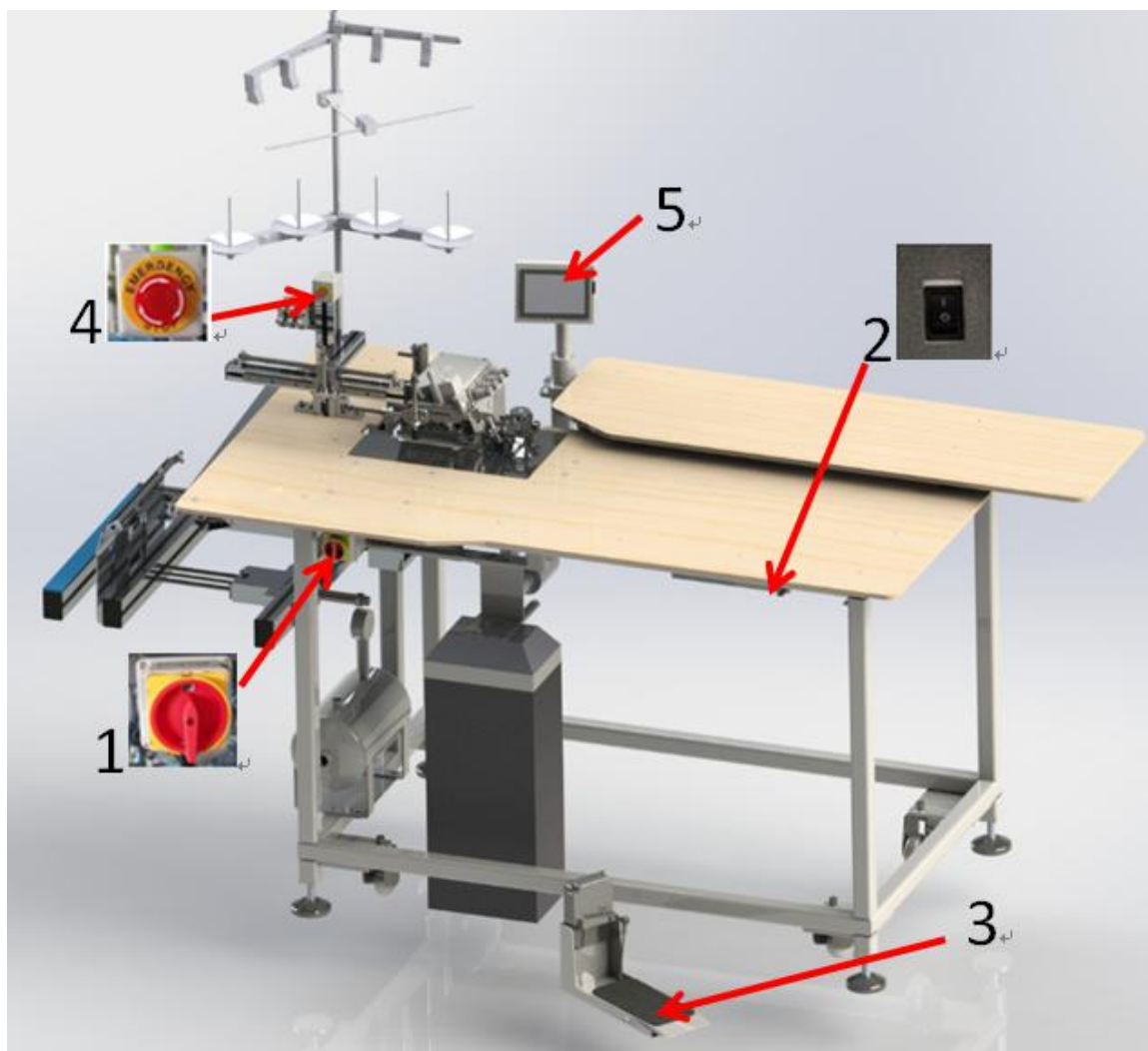
 危険	<ol style="list-style-type: none"> 1. In order to prevent accidents caused by electric shock, please do not open the cover of the electrical box of the motor or touch the parts in the electrical box when the power is connected.
 注意	<ol style="list-style-type: none"> 1. In order to prevent personal injury, please do not operate the machine in the state of removing the belt guard, finger protector and other safety devices. 2. In order to avoid being involved in the machine's personal accident, please do not let your fingers, hair, clothes near the pulley, v-belt, motor, and do not put items on it during the operation of the sewing machine. 3. To prevent personal injury, please do not put your finger near the needle when turning on the power or running the machine. 4. In order to prevent personal injury, please do not put your fingers in the wire pole guard during the operation of the sewing machine. 5. When the machine is running, it turns at a high speed. To prevent damage to the hand, never let the hand near the cutter during operation. In addition, when changing the cable, please be sure to turn off the power. 6. In order to prevent personal injury, please be careful not to pinch your fingers when the machine moves up and down or when you return to the original position. 7. Please do not cut off the power or air supply while the machine is running. 8. In order to prevent accidents caused by sudden starting, please remove the cloth guide when the preparation work is finished and the sewing state is reached. 9. In order to prevent accidents caused by electric shock, please do not operate the sewing machine when the ground wire of the power supply is removed. 10. In order to prevent accidents caused by electric shock and damage to electrical parts, be sure to turn off the power switch before inserting or unplugging the power plug. 11. In order to prevent accidents caused by damage of electrical parts, please stop the operation for safety when it thunders and pull the power plug. 12. In order to prevent accidents caused by damage to electrical parts, condensation will occur when moving from a cold place to a warm place immediately, so please wait until the water drops dry before switching on the power. 13. As this product is a precision machine, please pay full attention to it during operation, do not splash water or oil on the machine, and do not let the machine fall and give the machine impact. <p>This machine is A class A industrial machine. The use of this machine in the home environment may cause the phenomenon of radio interference. At this point, please take appropriate measures to solve the problem of radio interference.</p> <ol style="list-style-type: none"> 15. After the power switch is turned off when the accumulator moves, the accumulator lever moves, so please be careful not to clip your finger, etc. 16. When the power switch is turned off during the foot press action, please be careful not to pinch your fingers. 17. During folding operation, please be careful not to clip the cylinder to your finger when putting your finger into the folding machine.

**** important safety information:**

- ✓ improper operation of the machine may cause personal injury. Please read this instruction carefully and operate correctly before operation.
- ✓ Please ventilate the machine before it is officially powered on.
- ✓ do not turn on the internal parts of the electric cabinet or touch screen while the power is on.
- ✓ this machine should be used after receiving training or under special instruction to ensure the safety of the user.

4、Key function

4.1 button function description



B

(1) : Power switch -- rotate the power switch to on at 90 ° to power on and ventilate the equipment

(2) : Switch of electric control box: when the switch is pressed, the control box is powered on.

(3) : Foot switch --- manual mode and semi-automatic mode, control the start and stop of sewing.

(4) : Emergency stop switch: when pressed, the equipment stops running.

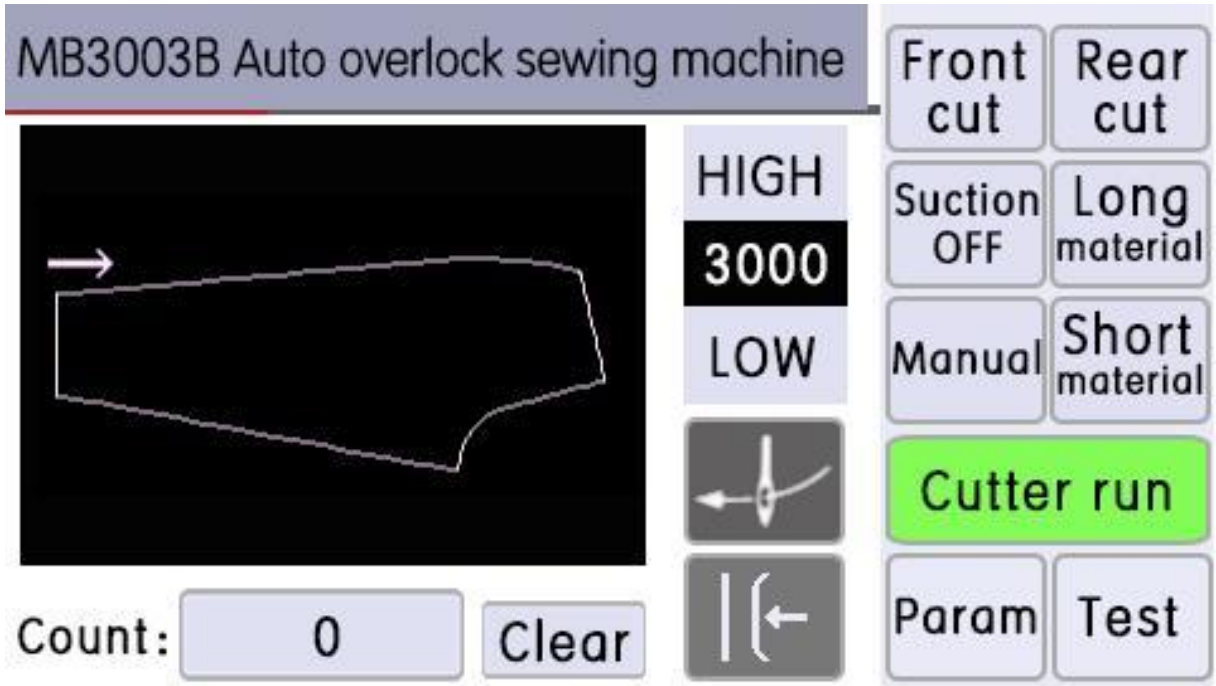
(5) : Touch screen

a: Boot interface



C

b: main interface



D

5、Operating instructions

5.1. Preparation before operation

- ✓ The machine head should be stopped for inspection
- ✓ Check that the stitches have been correctly fitted
- ✓ Check whether the needle has been installed
- ✓ Clean up the sundries on the machine table to ensure that there are no sundries hindering the operation of the machine
- ✓ Check the pressure of the barometer to make it meet the requirements of the machine

5.2. Description of operation process

5.2.1 Start the device

Rotate the power switch to the on position at 90 ° and the equipment will be powered on. Turn on the switch on the control box.



E

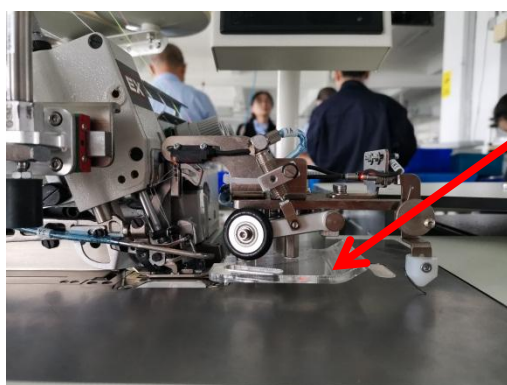


F

5.2.2 Reset state

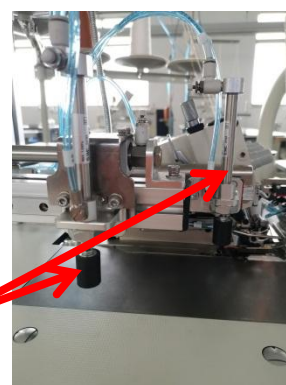
After the device is turned on, the machine will reset automatically. Check the status after reset as follows:

- ① The pressing plate of feeding mechanism is raised.
- ② The cylinders of the stacker are in contraction state and reset to the right side.



G

plate



H

cylinder



I

Home position

5.2.3 Feeding material placement

There are two kinds of feeding modes: from the bottom of trousers and from the waist, In the main interface, press the cloth graph to switch.

- ① In automatic mode: Push the fabric towards the needle along the sewing direction, and the machine will start sewing automatically when the sensor detects the cloth.
- ② In semi-automatic mode: Place the sewing edge of the cloth against the guide base, and the feeding edge is close to the needle. Step on the foot and the machine will start sewing.



J

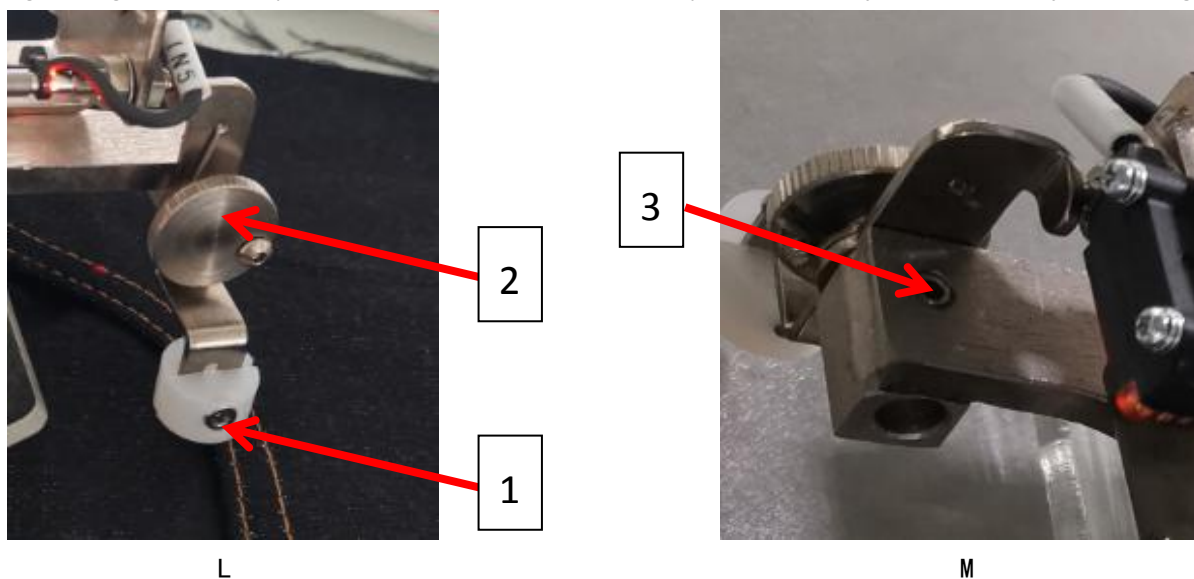
5.2.4 Shut down

After operation, turn the power switch to off position 90 ° and the equipment will be shut down

6、 Debugging method

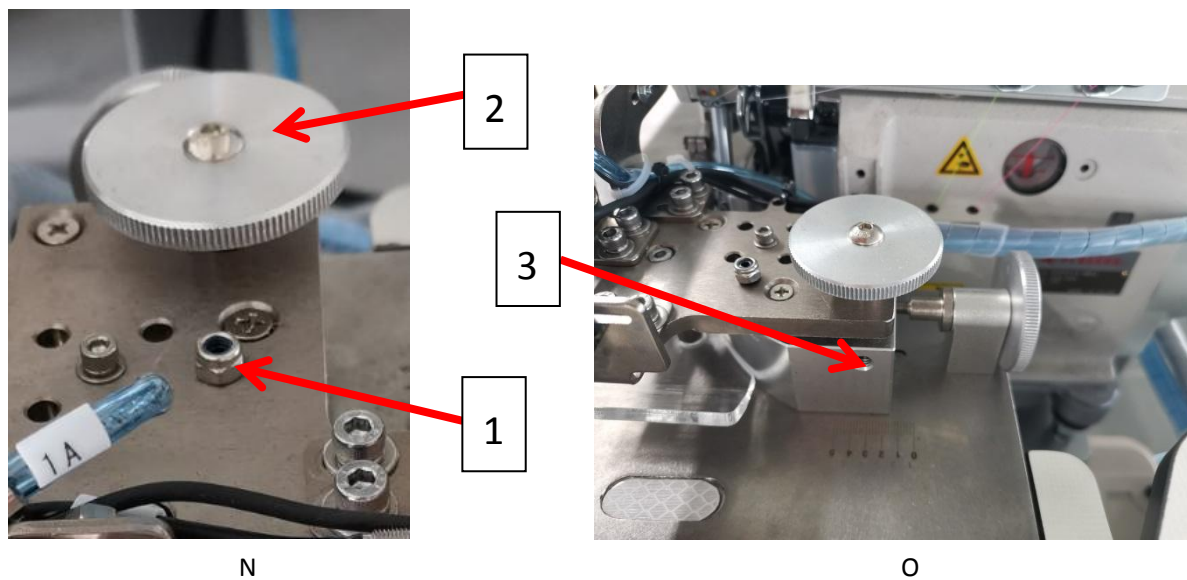
6.1. Height adjustment

Adjust the height of the hammer through the screw at position 1 to adapt to different jam height. By tightening the screw at position 3, rotate the hand wheel at position 2 to adjust the force of jam crossing.



6.2. Plate adjustment

Adjust the upper limit of pressing plate travel by nut at position 1. Adjust the 2 hand wheel after tightening the 3 position screw to adjust the lower stroke limit of the pressboard. Make the feeding smooth, flat and no overlap.



6.3. Front and rear adjustment of feeding guide device

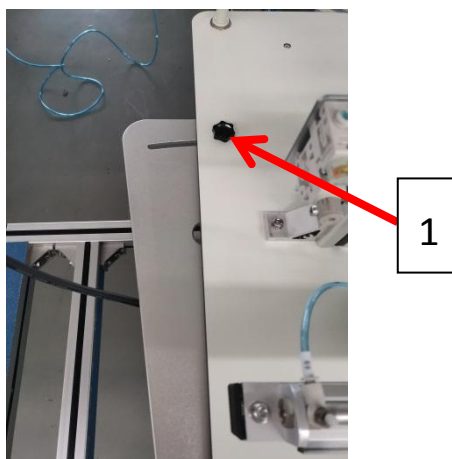
Adjust the front and rear of the feeding guide device by adjusting the hand wheel at position 1 to make the feeding direction of cloth piece consistent with the sewing direction.



P

6.4. Stacker adjustment

The extended length of the staker is adjusted by the handle of position 1 to adjust the fixed position of the cloth after stacking.

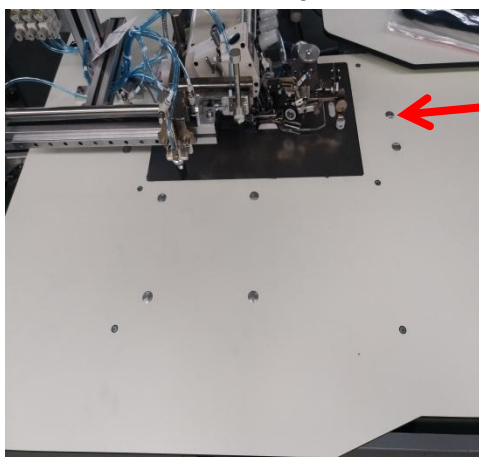


Q

6.5. Blowing direction adjustment

Use a slotted knife to adjust the direction of the blowing screw, so as to adjust the blowing effect of the screw in the R diagram.

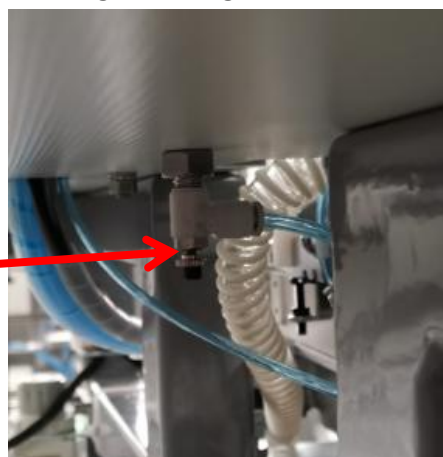
Each screw can adjust the size of blowing force through the tightness of air valve.



R

screw

valve

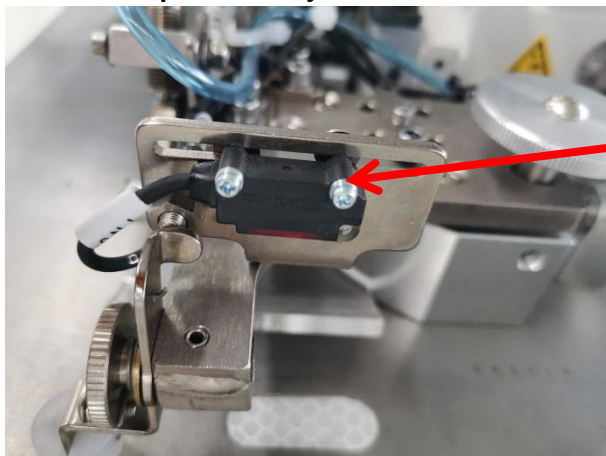


S

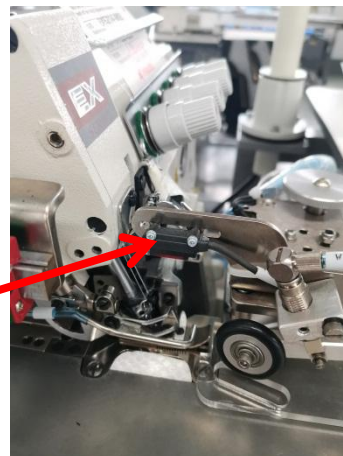
As shown in the figure T. By adjusting the front and back position of the sensor 1, the response position of the sensor is adjusted.

As shown in the figure U. By adjusting the left and right position of the sensor 2, the response position of the signal is adjusted.

6.6. Sensor position adjustment



Sens
or 1

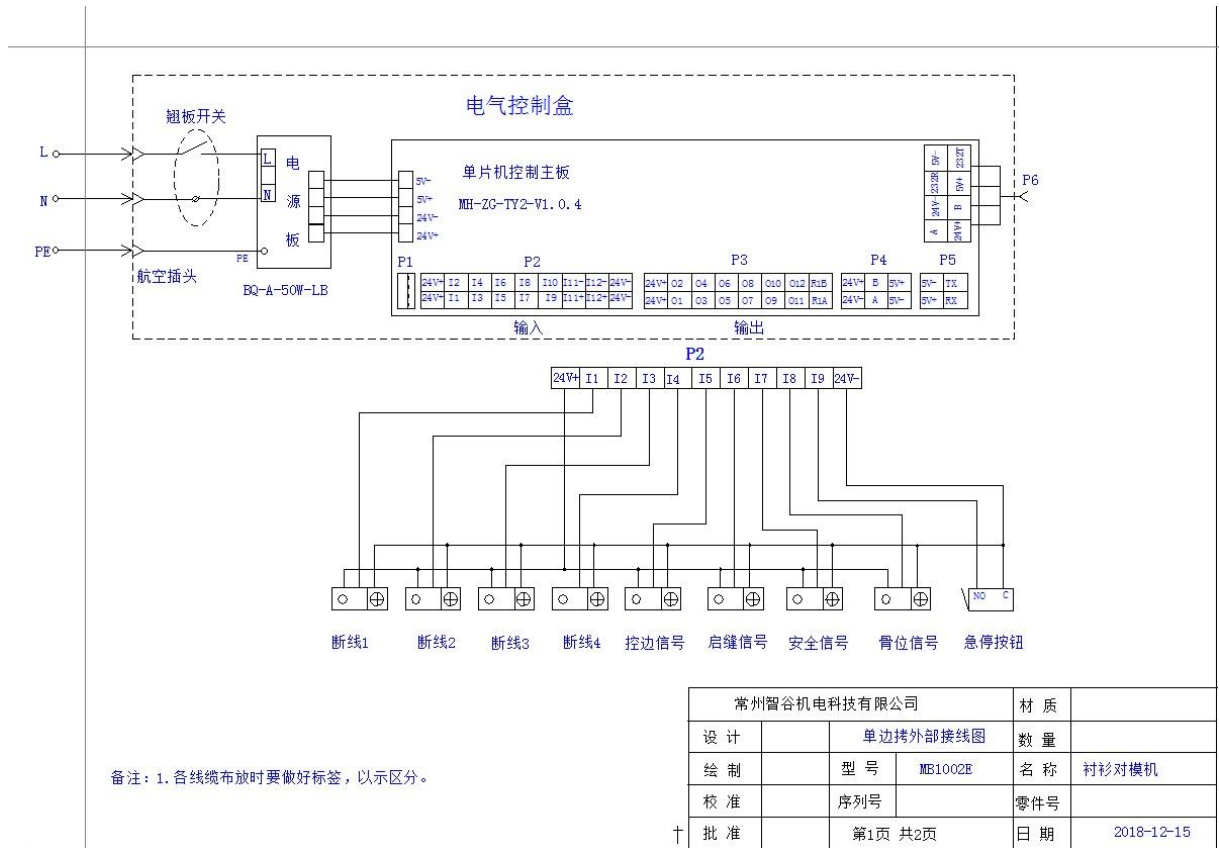


Sens
or 2

T

U

7、Wiring diagram



8、 Common problems and Solutions

phenomenon		analysis	Solution
Hammer sticking		1. Low hammer height 2. Incorrect hammer tension position	Adjust according to 6.1
The feeding plate is jammed		Lower limit of pressing plate is too low	Adjust according to 6.2
Poor stack		Bad blowing The position of the stacker is incorrect	Adjust the direction and size of the blowing screw Adjust the fixed position of the stack
The machine works but does not feed		The position of the sensor is incorrect	Adjust the left and right position of the sensor
Feeding skew or fabric over cutting		The position of the sensor is not correct	Adjust the front and back position of the sensor

9、Daily maintenance requirements

No	Project	Frequency				Requirement
		Daily	Weekly	Monthly	Half year	
1	Clean up the dust	√				Remove dust on equipment surface and parts
2	Clean up the oil		√			Clean the oil stains on the table board, needle plate and shuttle core
3	Trachea interface			√		The air pipe interface is tight without air leakage
4	Head oil quantity			√		The oil level of the machine head is not lower than the warning line
5	Bobbin			√		Check whether the spindle of the machine head is scratched
6	Eye protection			√		Check the screw tightening
7	sensor				√	Check whether the sensitivity is accurate and whether the position changes
8	Sliding parts				√	Check lubrication of sliding parts and add lubricant if necessary
9	Control box				√	The cooling fan runs normally and the dust should be cleaned up in time

10、 Knowledge product protection statemen

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