

衬衫缝后复司机

Automatic back yolk pleat sewing machine

(MB3008A)

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.

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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.

本机介绍说明分为三部分，具体请参照《MB3008A 衬衫缝后复司机-使用说明书》、《MB3008A 衬衫缝后复司机-零件手册》、《MB3008A 衬衫缝后复司机-触摸屏界面操作说明》。

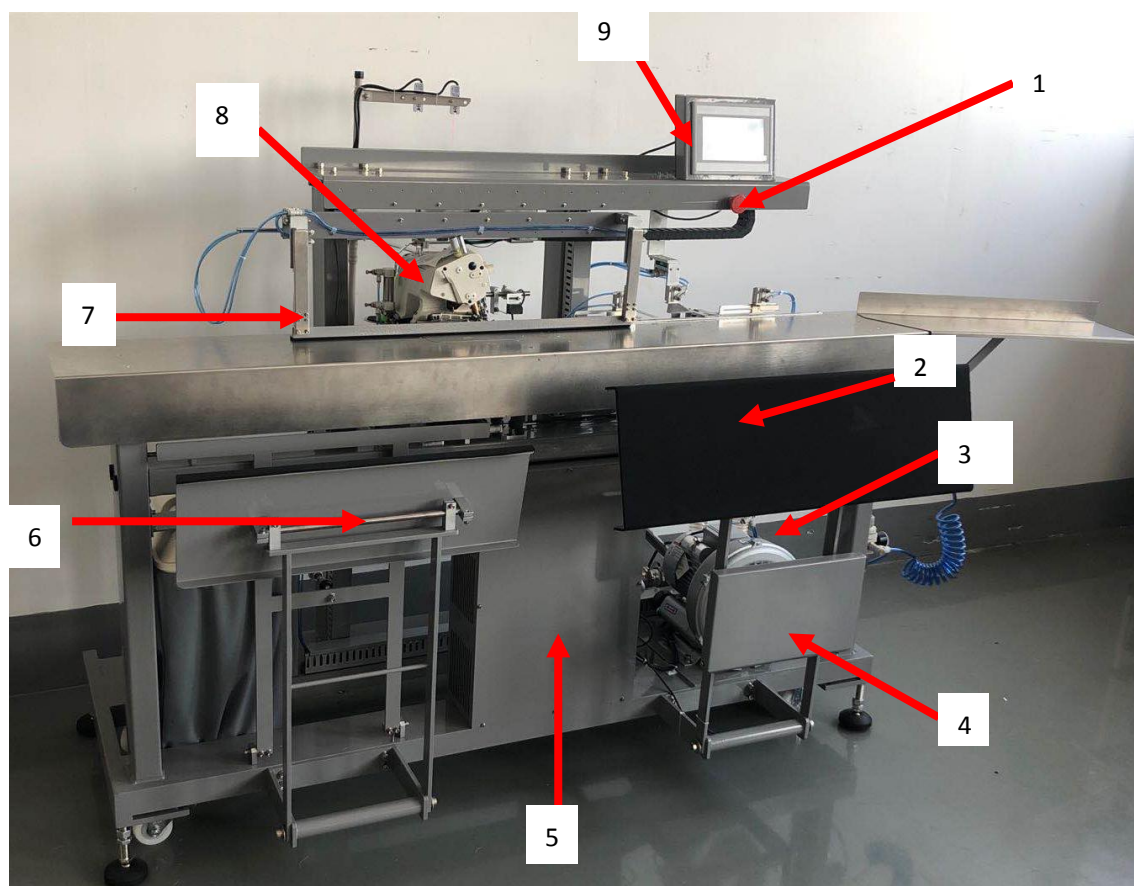
The introduction of this machine is divided into three parts. For details, please refer to 《MB3008A Operation manual》 and 《MB3008A Parts Manual》《MB3008A Touch screen interface operation instructions》

ENGLISH

Catalog

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1、 Basic information of the equipment





1: Emergency stop button; 2: Loader; 3: Suction system; 4: Knee switch; 5: Control box; 6: Stacker; 7: convey system; 8: Machine head; 9: Touch screen;

2、Technical parameters of the equipment

| MB3008A Automatic back york pleat sewing machine | | |
|--|---------------------------|------------------------|
| 1 | Machine head | JUKI MO-6716DA-DE4-40H |
| 2 | Maximum sewing speed /rpm | 5000 |
| 3 | Working voltage /V | 220 |
| 4 | Working pressure /Mpa | 0.5 |
| 5 | Motor | Step Motor |
| 6 | Stitch length /mm | 1--4 |
| 7 | Size/mm | 2400*1100*1400 |
| 8 | Weight /kg | |
| 9 | Needle type | DC*27 |
| 10 | Fold spacing | 10~200mm |

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. |

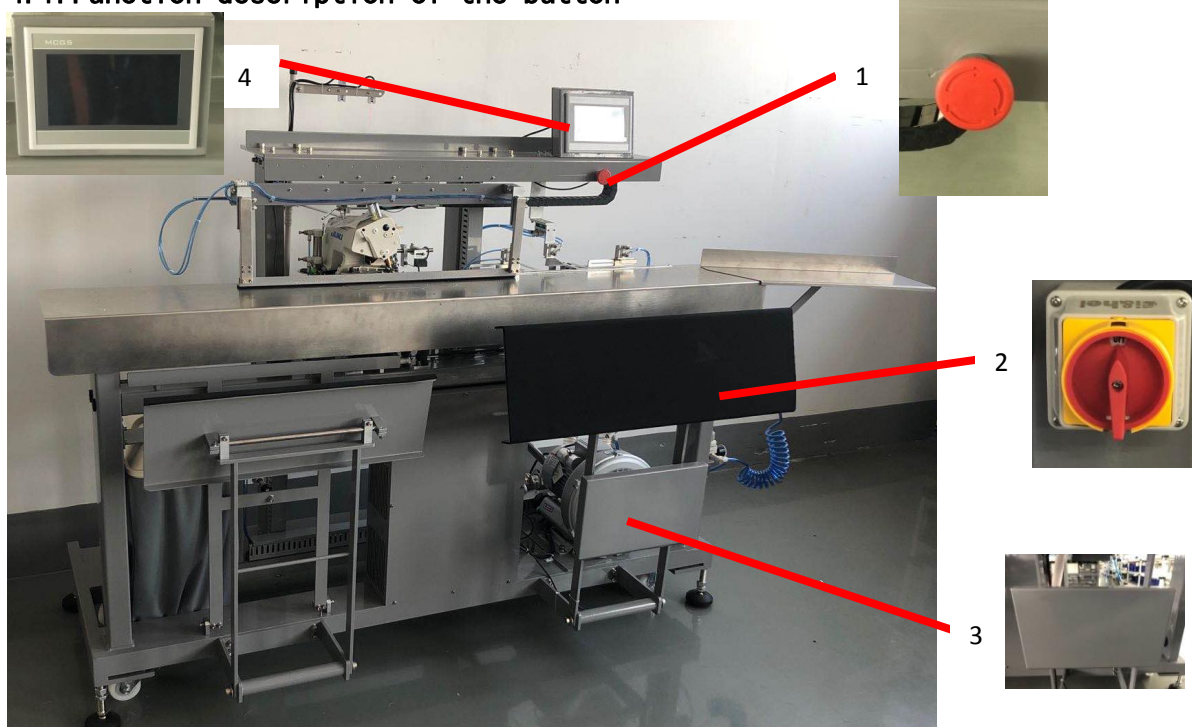
| | |
|--|---|
| | <p>16. When the power switch is turned off during the foot press action, please be careful not to pinch your fingers.</p> <p>17. During folding operation, please be careful not to clip the cylinder to your finger when putting your finger into the folding machine.</p> |
|--|---|

*** 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 description

4.1.Function description of the button



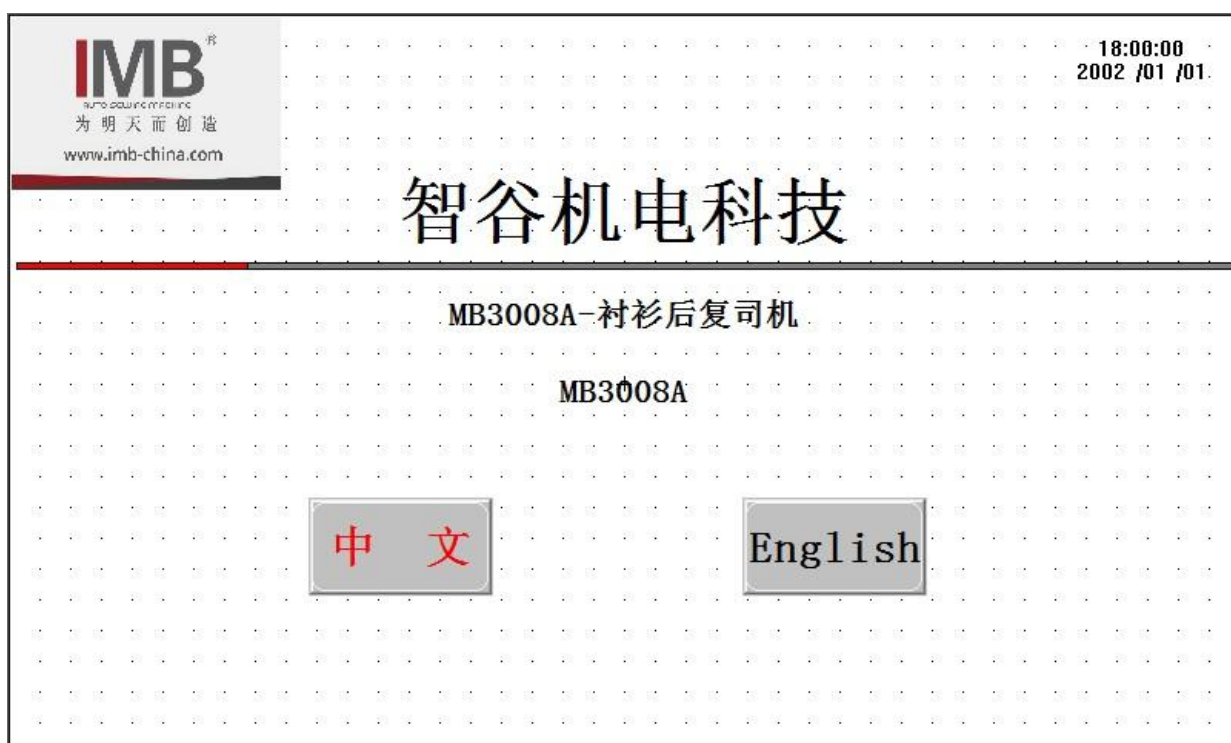
(1): Emergency stop button – equipment emergency stop

(2): Power switch -- rotate the power switch to ON by -90° to energize and ventilate the equipment.

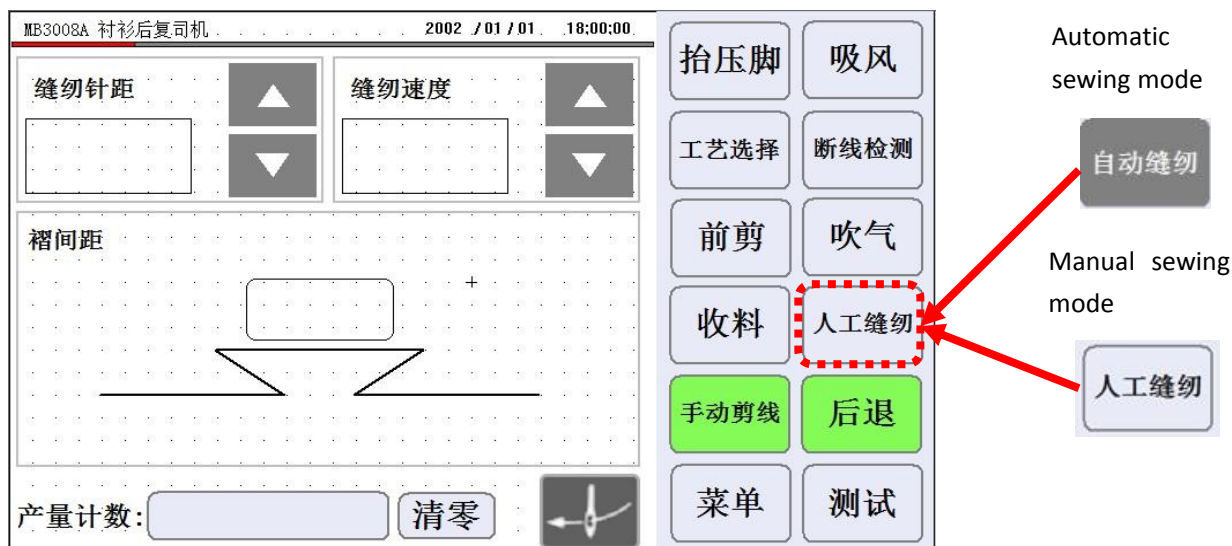
(3): Knee touch switch: after knee touch, the sewing step of the equipment is one step forward

(4): Touch screen---See 《MB3008A interface description》。

a: Main interface



b: Sewing interface



4.2. Reset operation instructions

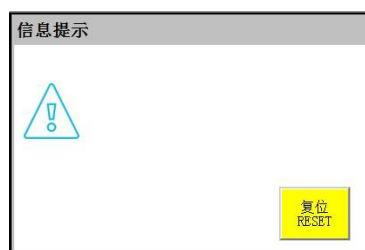
4.2.1 Boot operation

| Steps | Instructions | The key way to |
|-------|--------------------|------------------|
| 1 | Boot | 4.1 (2) |
| 2 | Switch sewing mode | 4.1 (4) --a --b |

4.2.2 Emergency stop reset operation

Case 1: emergency stop in the pleating step stage, reset step: turn the emergency stop switch clockwise to reset, click “” (in the 4.1 (4) alarm screen of the touch screen (as shown in the figure below), and the fabric is placed again.

Case two: sewing emergency stop, reset steps: the emergency stop switch rotates clockwise to reset, click “” in the alarm screen of touch screen 4.1 (4) (as shown below), Click “” again, Switch device to “”, Start manual sewing by leaning on the knee touch switch 4.1 (3), and after sewing, click “”, Remove fabric.



Alarm screen

五、Operating instructions

5.1. Preparation before operation

- ✓ The machine head shall be in the stop state when the operator checks it
- ✓ Check whether the pressing plate sponge is intact
- ✓ Check whether the sewing thread has been put on correctly
- ✓ Check whether the needle has been installed
- ✓ Clean the sundries on the machine table to ensure that there are no sundries hindering the operation of the machine
- ✓ Check the pressure of the air pressure gauge to make it meet the use requirements of the machine

5.2. Operation process description

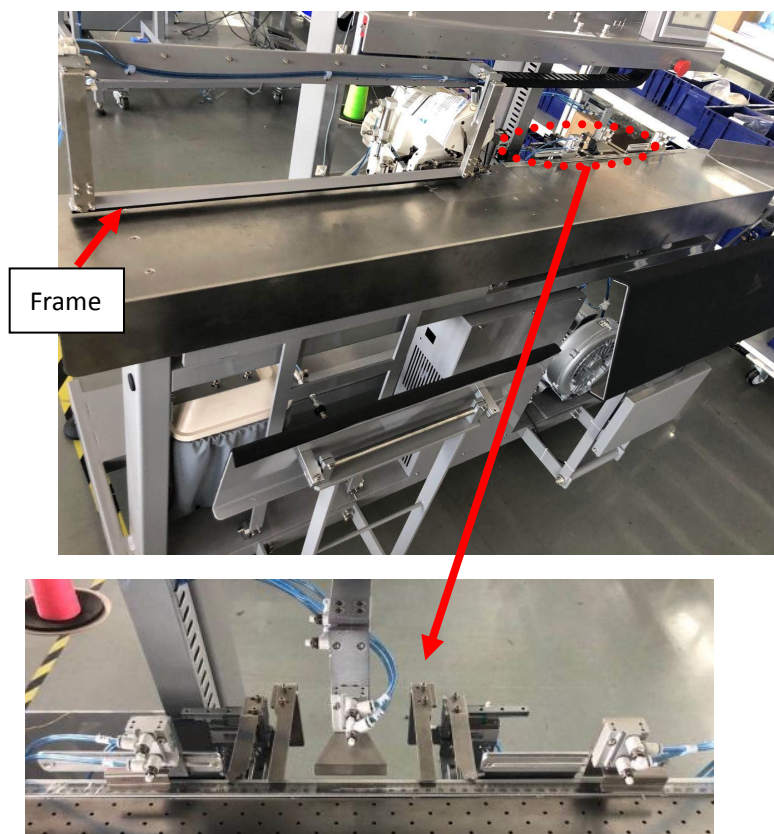
5.2.1 Boot device

Rotate the power switch at 90° to the ON position, and the equipment will be powered ON.



5.2.2 Reset operation

The device automatically resets after power on. The following figure shows the status of the device after the reset.



5.2.3 Start sewing

1. First confirm that the system is in automatic sewing state as shown in the figure “自动缝纫”,

自动缝纫

Click “吸风” Fan opening;

吸风

2. Place the fabric 1 at the designated position, as shown in figure (a), touch the knee touch switch once, and the inserting piece extends, as shown in figure (b).

3. Place the fabric 2 at the designated position, as shown in figure (c) below. Touch the knee touch switch once, and the left and right folding pieces will stretch out and fold automatically, as shown in figure (d) below.

4. Place the fabric 3 at the designated position, as shown in figure (E), touch the knee touch switch, press the left pressing piece down, as shown in figure (f), touch the knee touch switch, and press the right pressing piece down, as shown in figure (g).

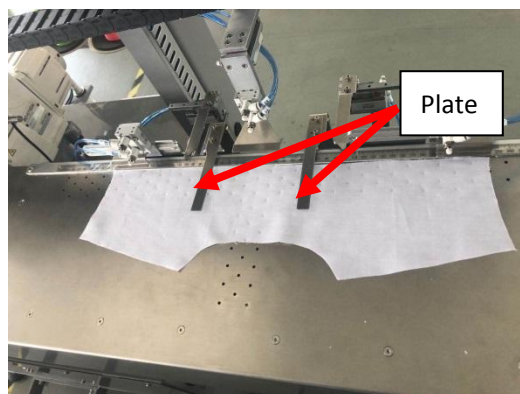
5. When touching the knee touch switch, the medium pressure plate extends and presses down, the pressing frame moves to the right, and the inserting plate and the left and right folding plates withdraw to their original positions. When pressing the frame, the left and right pressing plates and the medium pressure plates withdraw to their original positions, as shown in the following figure (H).

6. Press the frame to move left and sew automatically. After sewing, the material will be collected automatically, as shown in the following figure (H)

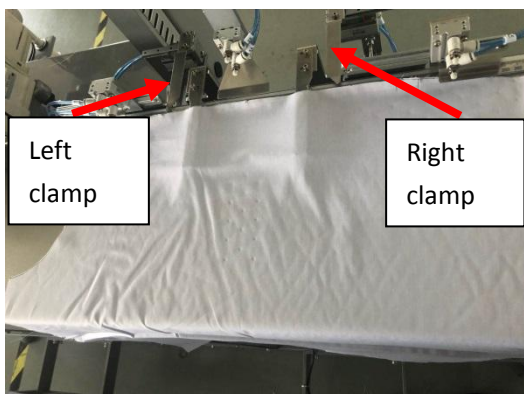
Cycle 2-6 operation steps in sequence.



a



b



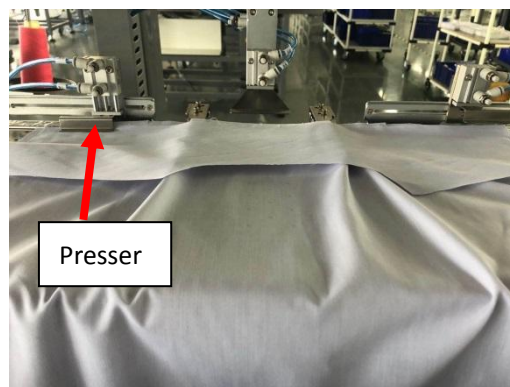
c



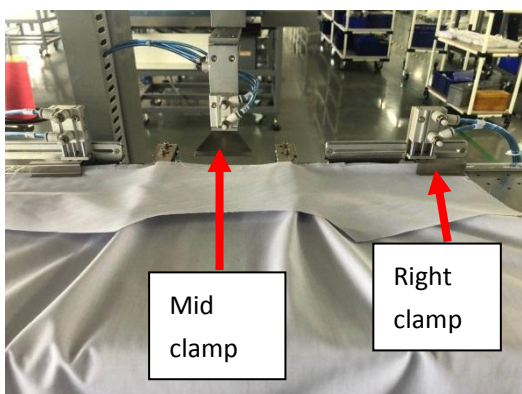
d



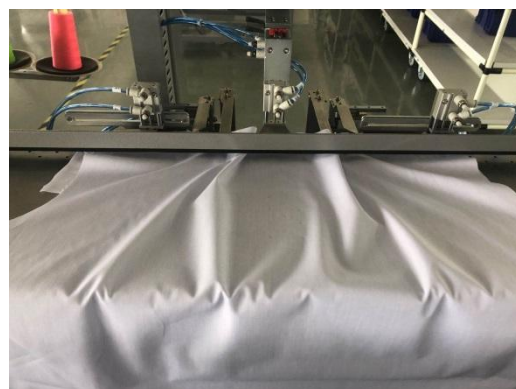
e



f



g



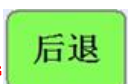
h



g



缝纫成品



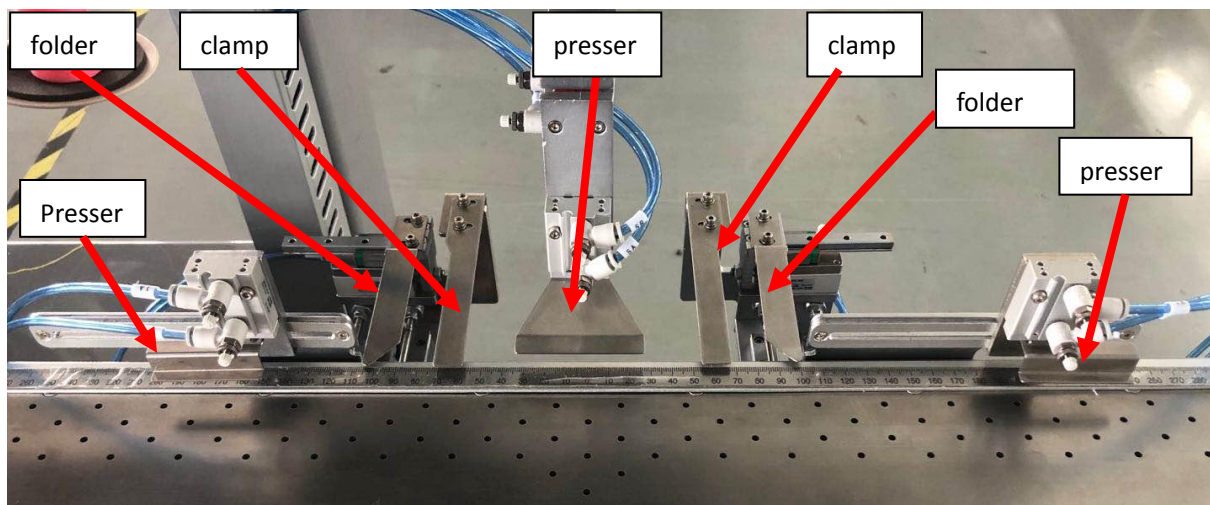
*Click “后退”, Step back for pleating step, click continuously until the desired step is reached, and place the cloth again.

5.2.4 Shutdown


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

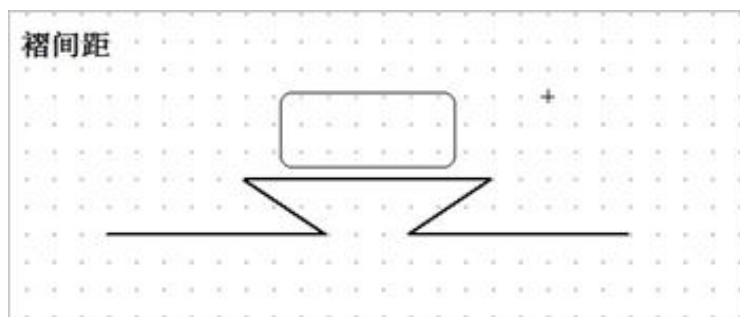
6、Debugging method


6.1 Clamp position

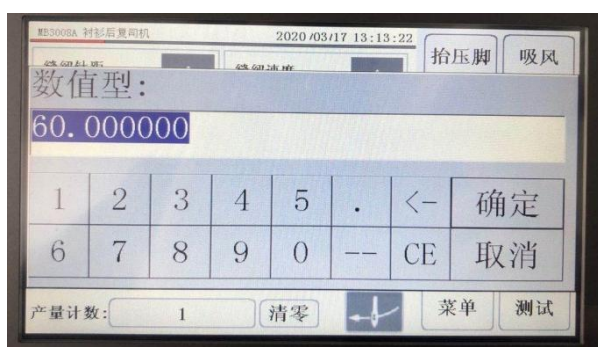


6.2 Clamp adjustment

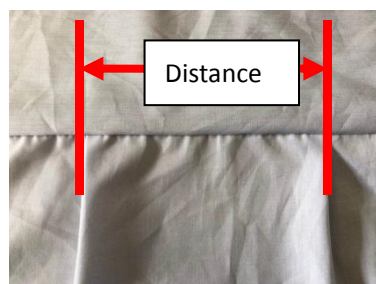
Touch screen 4.1 (4) --Main interface a  English b The space between pleats is as follows:



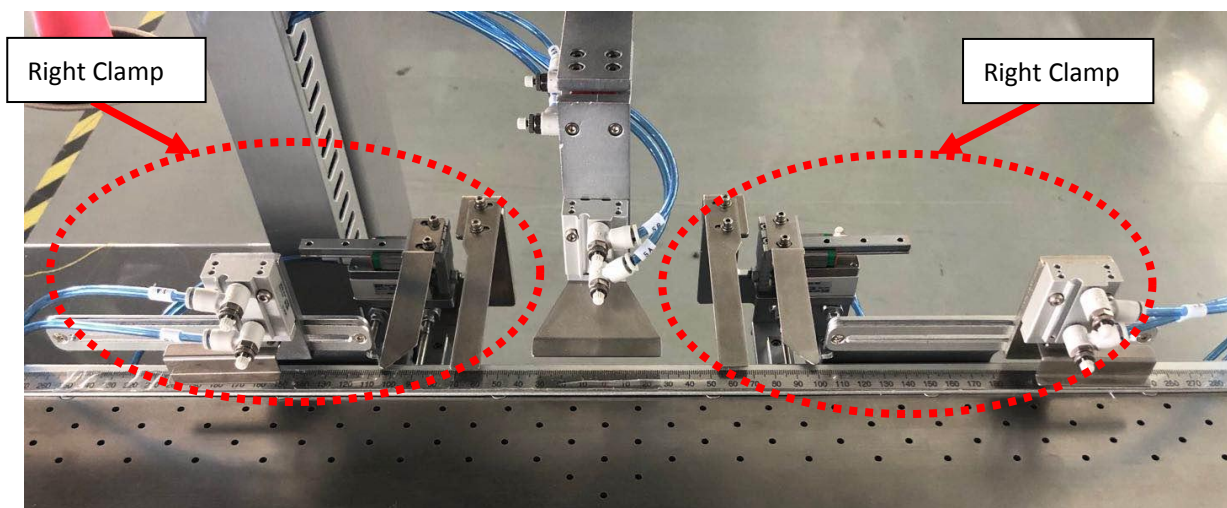
Click , The outgoing keyboard is as shown in figure a below. Input the desired pleat spacing (the minimum value is 10 and the maximum value is 200). The finished pleat spacing position size is as shown in Figure B below. Adjust the spacing position of the left and right edge folding devices as shown in Figure C below



a

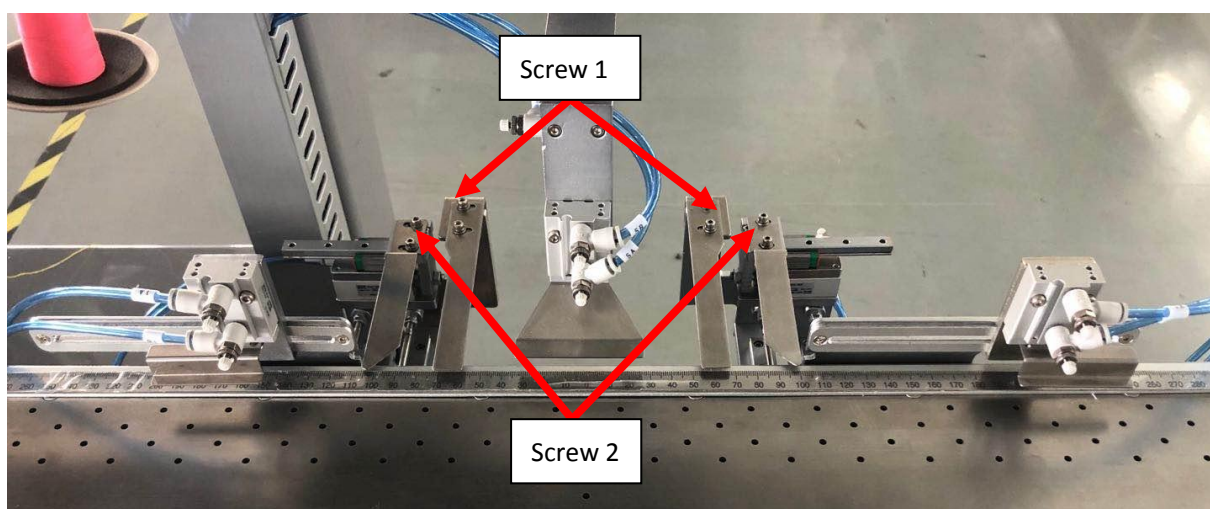


b

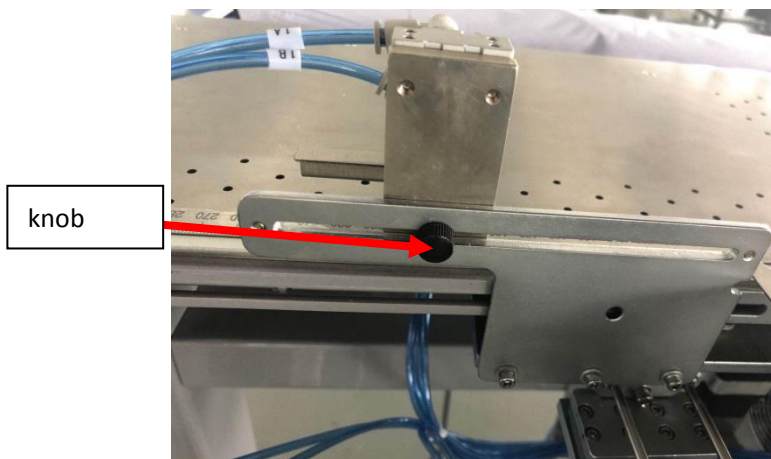


c

Fine adjustment can be carried out by screw 1 and screw 2 in the position of folding piece and inserting piece;



Left and right edge pressing can be realized by unscrewing the figure embossing knob, adjusting the position to the right and left, and then tightening the embossing knob.



7、Electrical wiring

7.1. Signal board

| MB3008A | Port | | Sensor status to zero | Remark |
|-------------------|------|----|-----------------------|--------|
| Emergency button | IN9 | 3P | 1 | |
| Knee switch | IN10 | 3P | 0 | |
| A motor origin | IN11 | 3P | 0 | |
| B motor origin | IN12 | 3P | 1 | |
| Laser | IN13 | 3P | 1 | |
| Break detection A | IN14 | 3P | 1 | |
| Break detection B | IN15 | 3P | 1 | |

7.2 Solenoid valve / expansion board

| MB3008A | Port | | | Switch to zero | Remark |
|------------------|------|----------------|----|----------------|--------|
| Cylinder A right | 01 | electromagnet | 2P | OFF | |
| Cylinder A left | 02 | Solenoid valve | 2P | OFF | |
| Cylinder | 03 | Solenoid valve | 2P | OFF | |
| Cylinder A | 04 | Solenoid valve | 2P | OFF | |
| Cylinder B | 05 | Solenoid valve | 2P | OFF | |
| Cylinder B | 06 | electromagnet | 2P | OFF | |
| Cylinder C | 07 | Solenoid valve | 2P | OFF | |
| Cylinder | 08 | Solenoid valve | 2P | OFF | |
| Cylinder | 09 | Solenoid valve | 2P | OFF | |
| Cylinder C | 010 | electromagnet | 2P | OFF | |
| Cylinder | 011 | Solenoid valve | 2P | ON | |
| Cylinder | 012 | Solenoid valve | 2P | OFF | |
| Blower | 013 | Solenoid valve | 2P | OFF | |
| Knife blower | 015 | Solenoid valve | 2P | OFF | |
| Cylinder 2 | 016 | Solenoid valve | 2P | OFF | |
| Pedal | 020 | Simulation | 3P | OFF | |

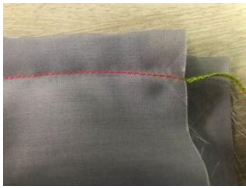
8、Accessories box details

| NO | ITEM | | QYT |
|----|---|--|-----|
| 1 | 《Instruction manual》 | | 1 |
| 2 | 《Parts Manual》 | | 1 |
| 3 | 《Touch screen interface operation instructions》 | | 1 |
| 4 | Thread stand | | 1 |
| 5 | Bushing | | 1 |
| 6 | Sponge mats | | |
| 7 | Slotted screwdriver | | 1 |
| 8 | Wrench | | 1 |

9、Common problems and Solutions

10.1. See the table below for common problems and Solutions

10.2. More questions, See 《MB3008A Touch screen interface operation instructions》

| Phenomenon | Image | Cause Analysis | Solutions |
|-------------------------------|---|--|--|
| Fabric wrinkle | / | The pressure of the press frame is too small to press the fabric | Adjust the pressure and position of pressing frame |
| The tail of the trace is bent |  | Frame feeding speed mismatch | Adjust the feeding speed of pressing frame. |

10、Daily maintenance requirements

10.1. See the following table for the list and requirements of equipment maintenance

10.2. Please refer to the instruction of JUKI mo-6716da-de4-40h for other maintenance requirements of the machine head

| NO | Project | Frequency | | | | Requirement |
|----|---------------------------|-----------|--------|---------|-----------|---|
| | | Daily | Weekly | Monthly | Half year | |
| 1 | Clean up the dust | √ | | | | Remove dust from equipment surface and parts |
| 2 | Cleaning up oil pollution | | √ | | | Clean the greasy dirt on the table , needle plate and bobbin |
| 3 | Fan filter | | √ | | | Clean the fan filter dust |
| 4 | Clamp sponge | | √ | | | Check whether the sponge is worn and deformed and needs to be replaced if damaged |
| 5 | Folding group | | | √ | | Keep level and check screw tightening |
| 6 | Frame | | | √ | | Keep level and check screw tightening |
| 7 | Air tube interface | | | √ | | The air tube interface is tight without air leakage |
| 8 | Oil | | | √ | | Oil volume not lower than warning line |
| 9 | Sensor | | | | √ | Check if the sensitivity is accurate and if the position changes |
| 10 | Slider | | | | √ | Check slide lubrication and add lubricant if necessary |
| 11 | Electric control box | | | | √ | Cooling fan runs normally, clean up the dust in time |

11、 Knowledge product protection statement

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