

# 门襟锁眼机

Button Holing Indexer

(MB6003A)

## 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

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2023.02.16

**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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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.

**本机介绍说明分为三部分，具体请参照《MB6003A-使用说明书》、《MB6003A-零件手册》、。**

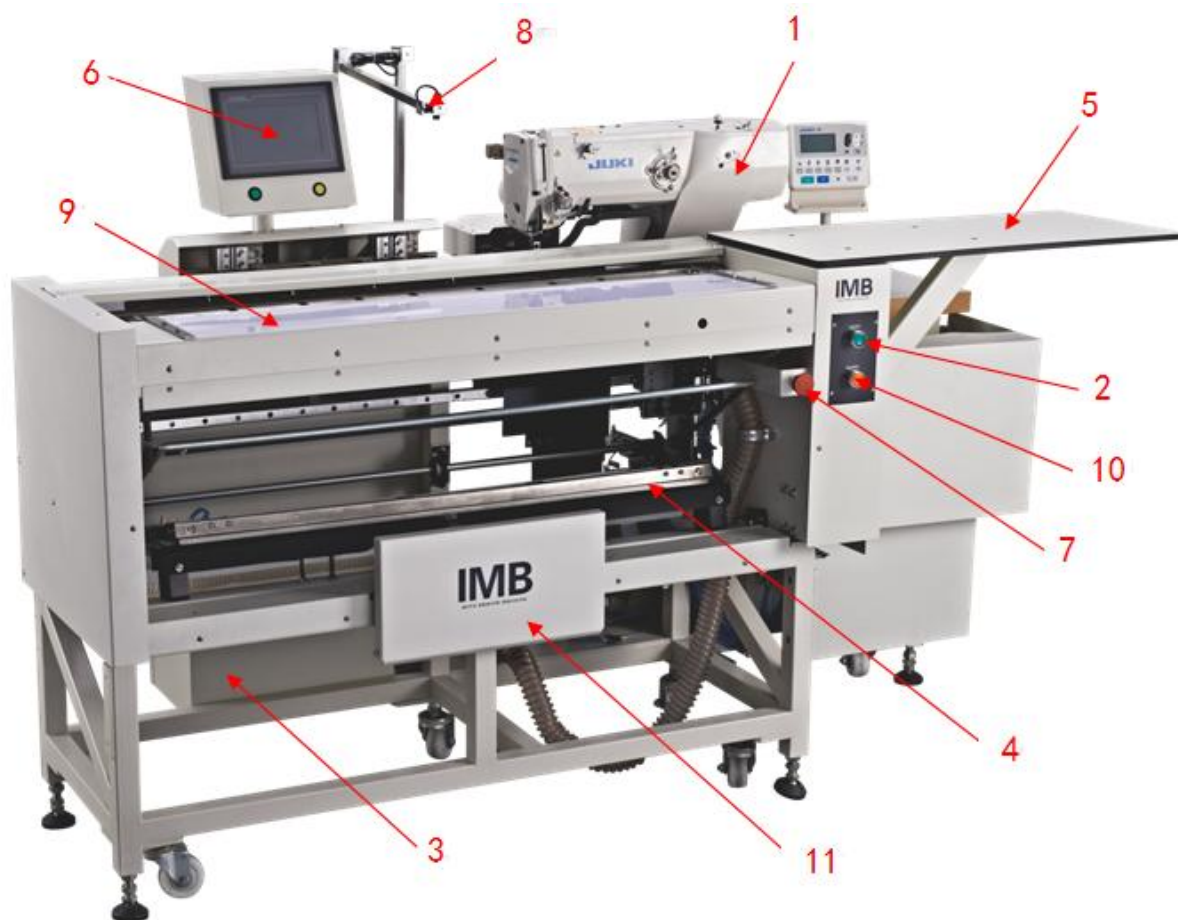
The introduction of this machine is divided into three parts. For details, please refer to 《MB6003A Operation manual》 and 《MB6003A Parts Manual》

**ENGLISH**

## catalog


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## 1、 Basic information of the equipment





- 1: Machine head; 2: Power switch; 3: Control box; 4: Stacker; 5: Loader; 6: Touch screen;  
7: Emergency stop button; 8: Laser; 9: Pre-load plate; 10: Suction button;  
11. Knee switch

## 2、Technical parameters of the equipment

| MB6003A Button holing indexer |                                |  |
|-------------------------------|--------------------------------|--|
| 1                             | Machine head                   | JUKI 1790A   |
|                               |                                | Brother 800C   |
| 2                             | Maximum sewing speed /rpm      | 1790A: 3600  |
|                               |                                | 800C: 3600   |
| 3                             | Buttonhole length /mm          | ≤25  |
| 4                             | Notch size /mm (inch)          | 6.4~19.1 (1/4~3/4)   |
| 5                             | Presser foot lifting height/mm | ≤14  |
| 6                             | Needle/mm                      | DPX5#11J-#14J  |
| 7                             | Buttonhole interval /mm        | ≤610   |
| 8                             | Maximum conveying distance /mm | ≤610   |
| 9                             | Width of fabric /mm            | 220-420  |
| 10                            | Length of fabric /mm           | 480-880  |
| 11                            | Working voltage /V             | AC220  |
| 12                            | Working pressure /Mpa          | 0.5  |
| 13                            | Style                          |  |
| 14                            | Size/mm                        | 2300*1100*1500   |
| 15                            | Weight/kg                      | 353  |

### 3、Safety precautions

#### Considerations for safe use of automata

|   |   |
|---|---|
| <br>危険 | <p>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.</p>   |
| <br>注意 | <p>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.</p> <p>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.</p> <p>3. To prevent personal injury, please do not put your finger near the needle when turning on the power or running the machine.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>7. Please do not cut off the power or air supply while the machine is running.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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> <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> <p>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.

17. During folding operation, please be careful not to clip the cylinder to your finger when putting your finger into the folding machine.

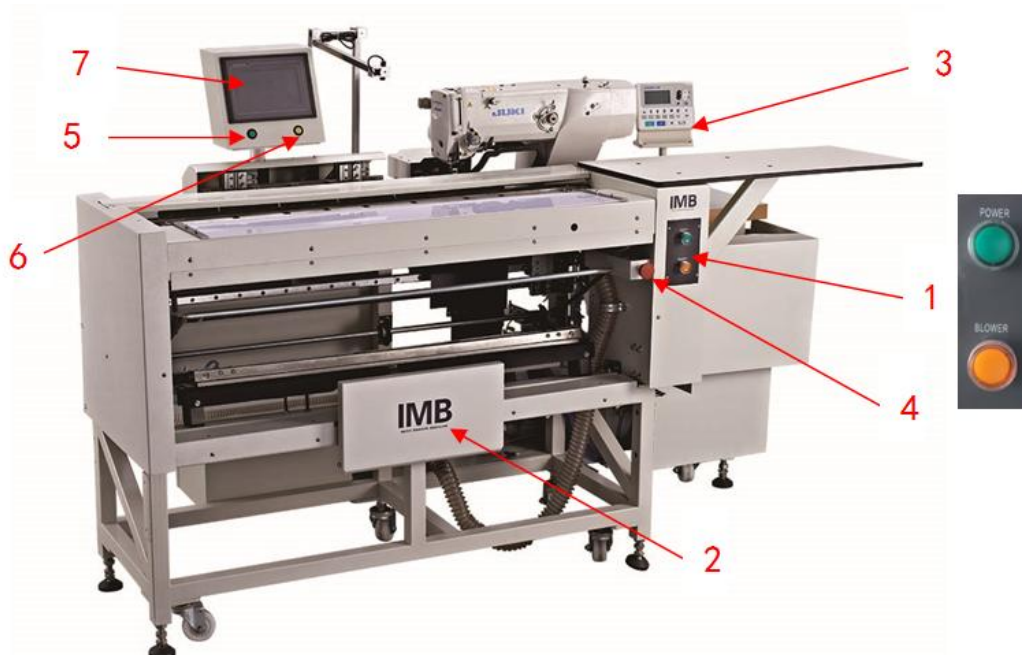
**\* important safety information:**

- ✓ 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 description

### 4.1.Function description of the button



(1): Power button: power switch, press the button, the equipment is powered on and ventilated.

Fan button: suction switch, press button, fan starts.

(2): Knee switch: In normal sewing, the knee does not loosen, start suction, adjust the fabric position; loosen the knee, start automatic sewing.

(3): Head operation screen: adjust the head related parameters.

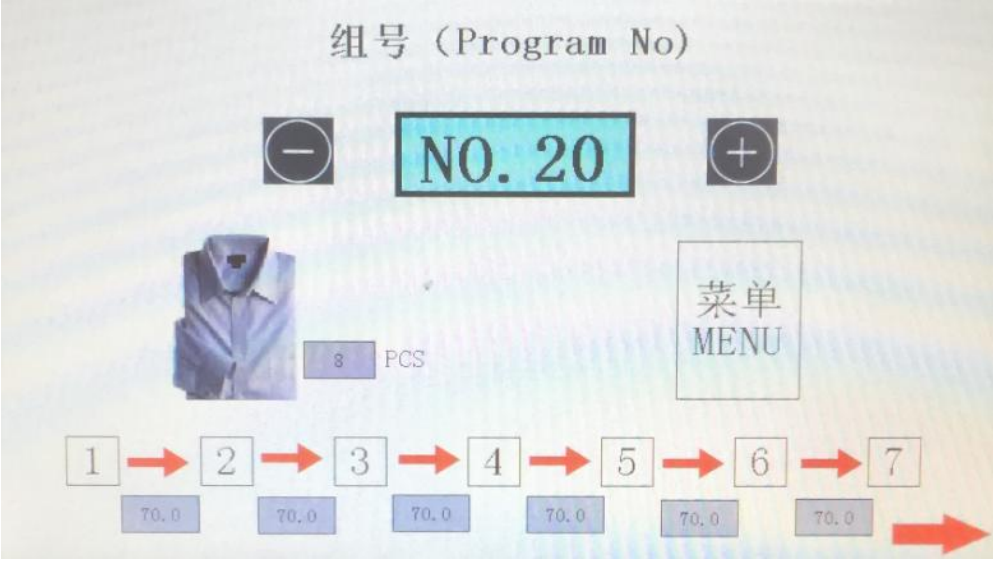
(4): Emergency stop button: in emergency state, press the button to stop the machine.

(5): Green origin reset button: Press the button, the automatic device on the left side will start to reset and enter the sewing mode.

(6): Yellow reset button: during the feeding process, the fabric is displaced. Press this button, the pre feeding board will return to its original position, and the fabric will be placed again.

(7): Touch screen--- See mb6003a interface description for details.

a: Start-up interface: display the current sewing model number and related size modification bar, and menu



buttons.

b: Menu interface: Select the relevant sub-interface to



enter.

## 5. Operating instructions

### 5.1. Preparation before operation

- ✓ Operator checks when the head is stopped
- ✓ Check to see if the stitches are properly sewn on
- ✓ Check whether the machine needle has been installed
- ✓ Clean up the sundries on the machine surface to ensure that there is no sundries hindering the operation of the machine
- ✓ Check the pressure of the barometer to make it meet the requirements of the machine
- ✓ Check if the stacker is empty

### 5.2. Operation process description

#### 5.2.1. Start the device

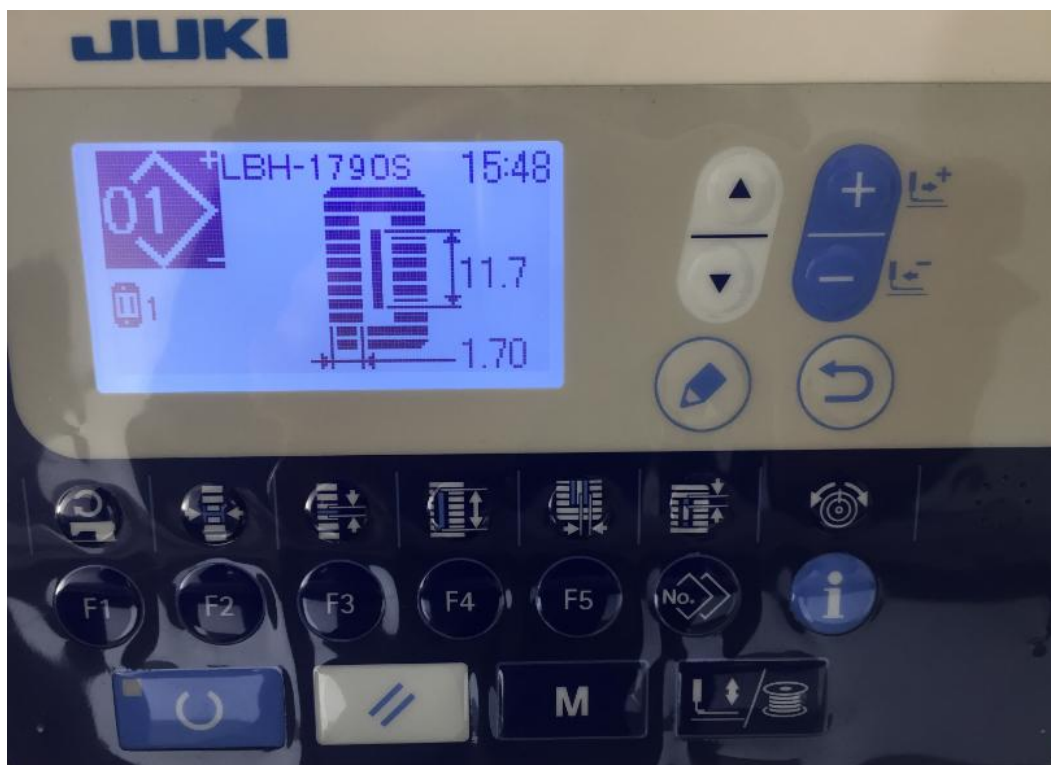
Press the power button in 4.1. (1) to power on the device




Press the fan button in 4.1. (1) and the fan will turn on



#### 5.2.2. Reset operation




Press the  below the 4.1. (3) head operation screen, and the head reset is completed.

### 5.2.3. Reset operation of automation device




After power on, the green origin reset button at the bottom of the touch screen is in flashing state. After pressing, the reset operation of the origin reset button of the automation device is completed, and the button becomes normally on, as shown in the figure above.

### 5.2.4. Program confirmation and program selection


As shown in figure 5.2.3, the current procedure  Men , style: NO.20。 To change the style, first click the green button at the bottom of the touch screen to make it blink, then click the plus minus sign on the touch screen and select the desired one. If you want to be a woman's, you need to click the touch screen to enter the 4.1. (7). B menu interface,

click  , Enter the setting interface, as shown below:



Click on the screen , The touch screen displays the women's icon, as shown in the following figure:



Click the back key on the screen , Return to the startup interface of 4.1. (7). A. the screen is as follows:



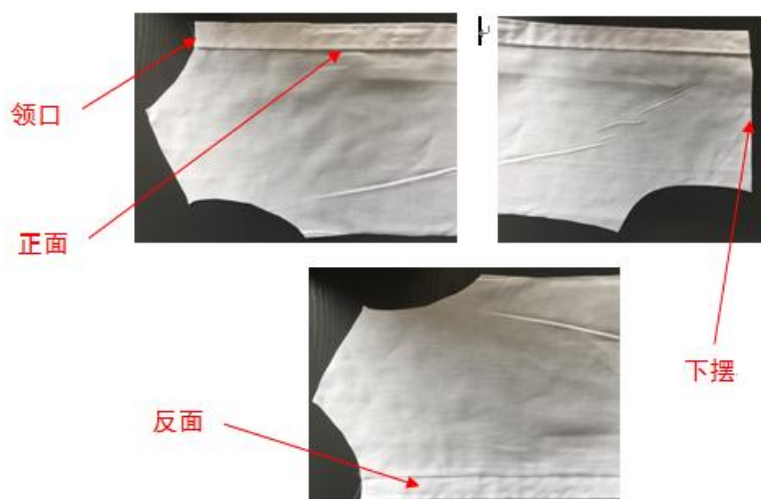
To change the style, click the plus minus sign on the touch screen and select the one you want.

### 5.2.5.Placing fabric

First, place the fabric neatly on the feeding support plate for easy access, as shown in the following figure:



Fabric description:



The fabric is evenly spread on the pre laying board, the shoulder of men's cloth piece is facing right, the front is facing up, and the neckline is aligned with the mark at the mark position, as shown in the following figure:



The neckline of the women's cloth piece is placed to the left, facing up, and the neckline is aligned with the mark of the mark position, as shown in the following

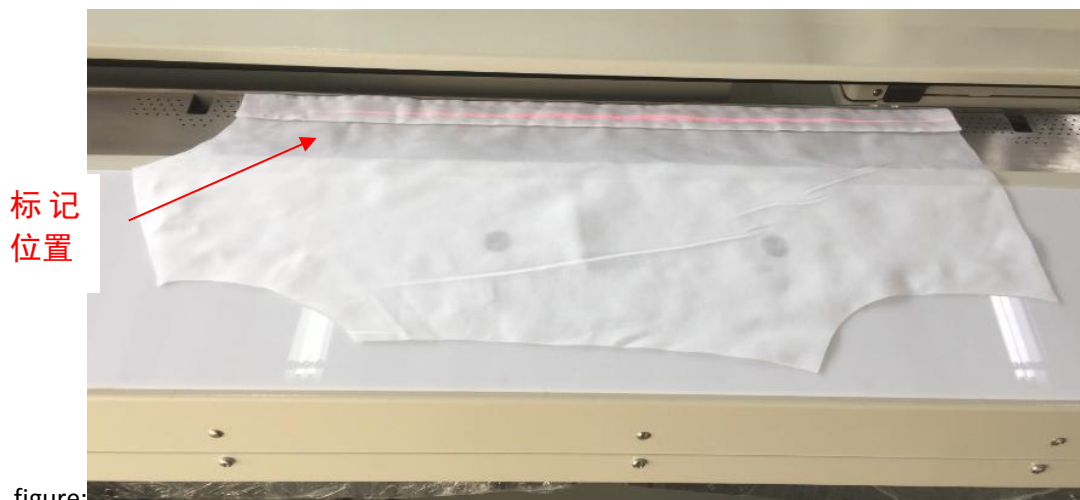
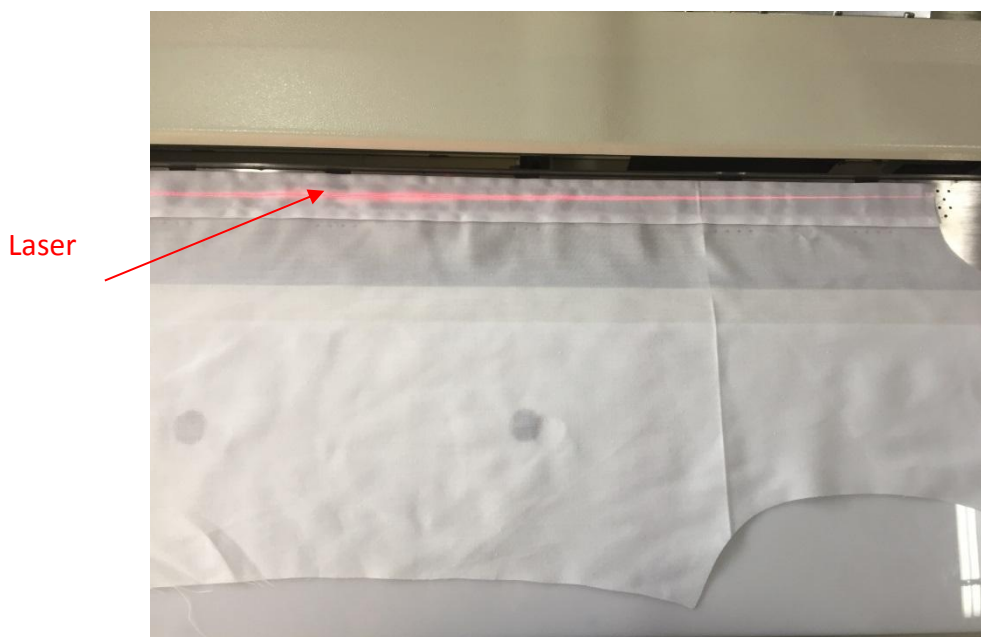


figure:

### 5.2.6. Start air absorption and adjust fabric

(1) Use the knee to lean on the knee switch 4.1. (2) panel, do not loosen it. At this time, the panel suction opens to absorb the fabric.

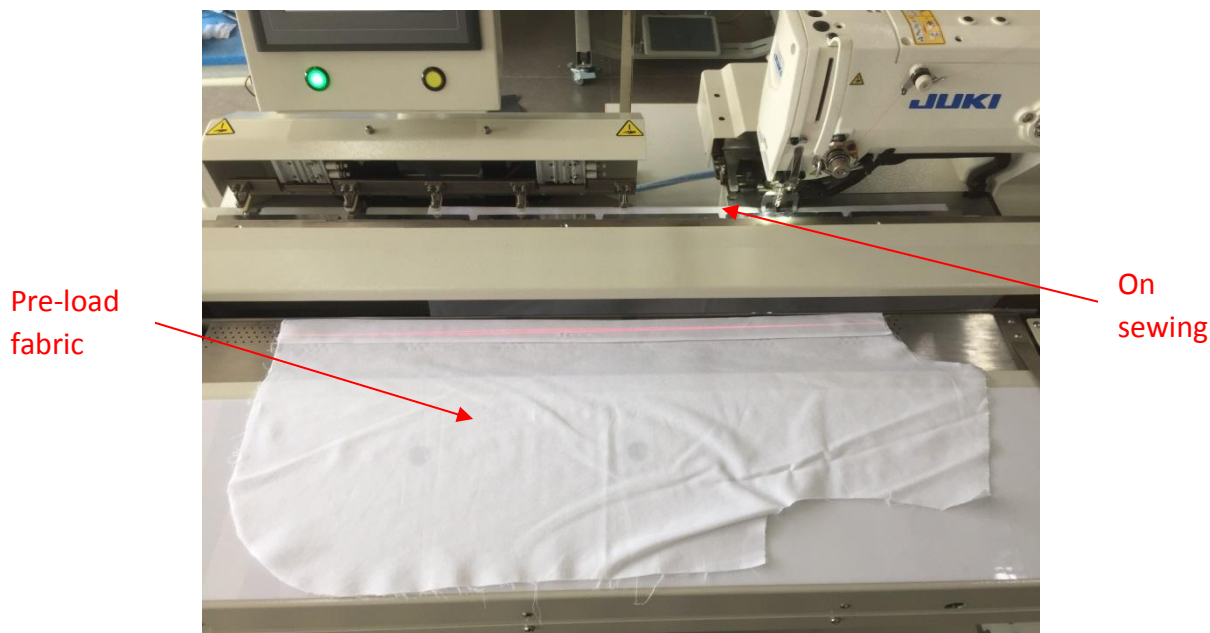
(2) The operator needs to adjust the position of the fabric to the best position. If it is necessary to align the bars, the laser spotlight needs to be adjusted, as shown in the following figure:



(3) After the fabric is adjusted, release the knee rest switch, and the program will perform automatic sewing.

**5. 2. 7. Pre-load**

When the first piece of fabric starts to sew automatically, the fabric can be placed in advance at this time, with the same action as 5. 2. 5 and 5. 2. 6. As shown in the figure below, when the fabric is placed and adjusted, the knee can be released and the pre placement is finished. At this time, the system enters the cycle sewing mode.



When the "in sewing fabric" is finished, the "pre load fabric" enters the sewing area for sewing.

Repeat in turn.



**5. 2. 8. Shutdown**

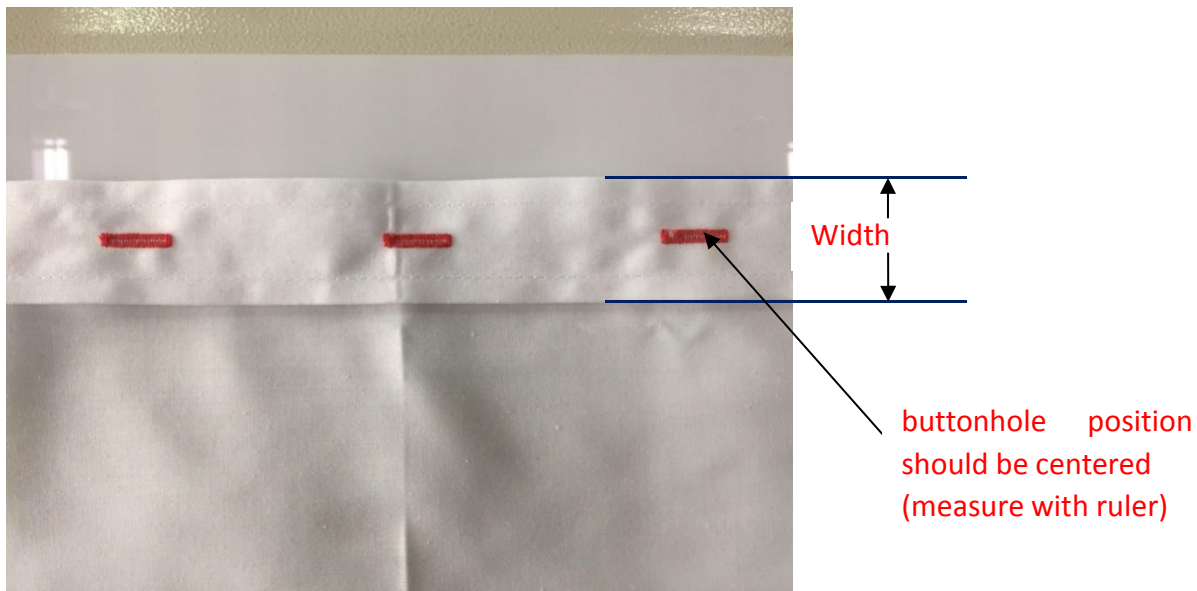
After operation, press the power button and fan button in 4. 1. (1) to turn off the machine and fan.



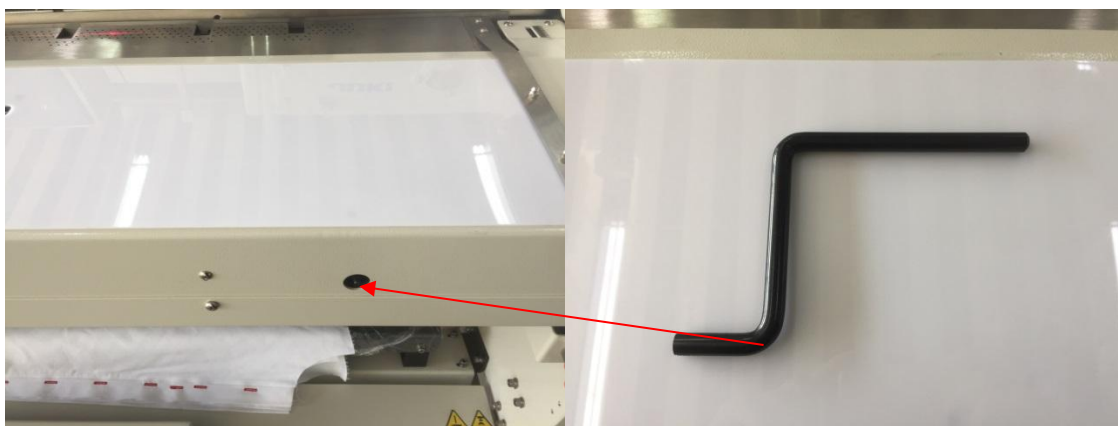
## 6、 Adjustment instructions of relevant parts

### 6.1. Adjustment of fabric guard position

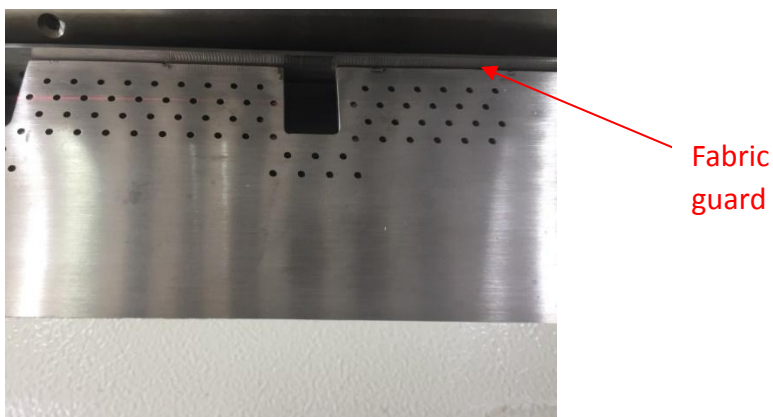
When sewing a certain style of cloth for the first time, the position of the buttonhole may deviate. At this time, it is necessary to adjust the position of the fabric guard. The figure below is the schematic description of the position of the keyhole:



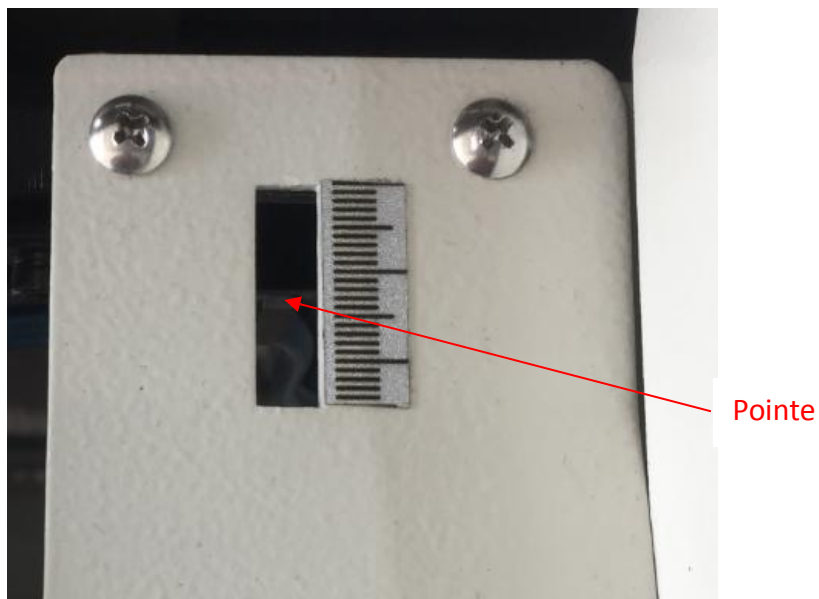
Handle:



Fabric guard:



Ruler indicate:



When the buttonhole position is upward, rotate the handle anticlockwise and move the pointer upward to lower the buttonhole position.

When the buttonhole position is lower, rotate the handle clockwise and move the pointer downward to raise the buttonhole position.

## 6.2. Adjust the cloth clamping device

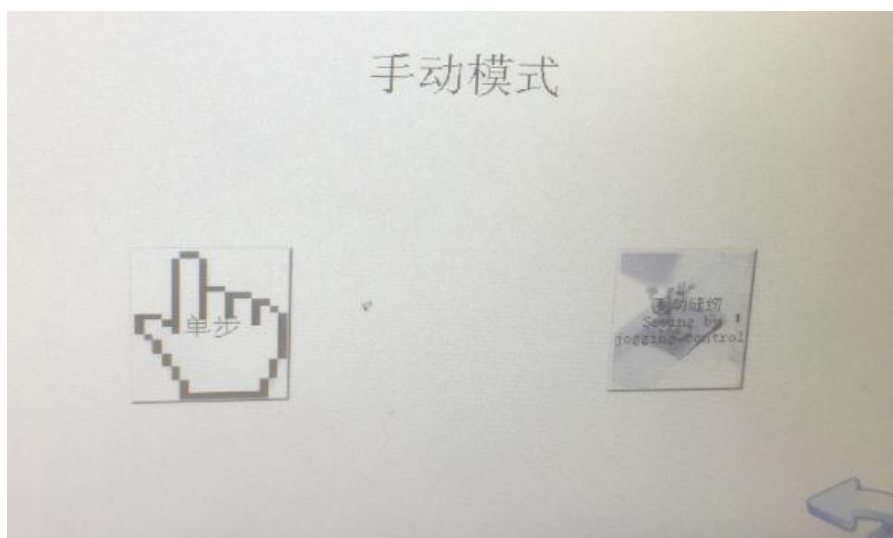
### 6.2.1. Touch screen and button operation

First, confirm whether the head is reset. If not, first perform the operation in 5.2.2 to reset the head. Then confirm whether the green origin reset button at the bottom of the touch screen is in the normally on state (reset state). If not, click the green button to change it to the normally on state.


After the reset, click the touch screen to enter the 4.1. (7). B menu interface, and click

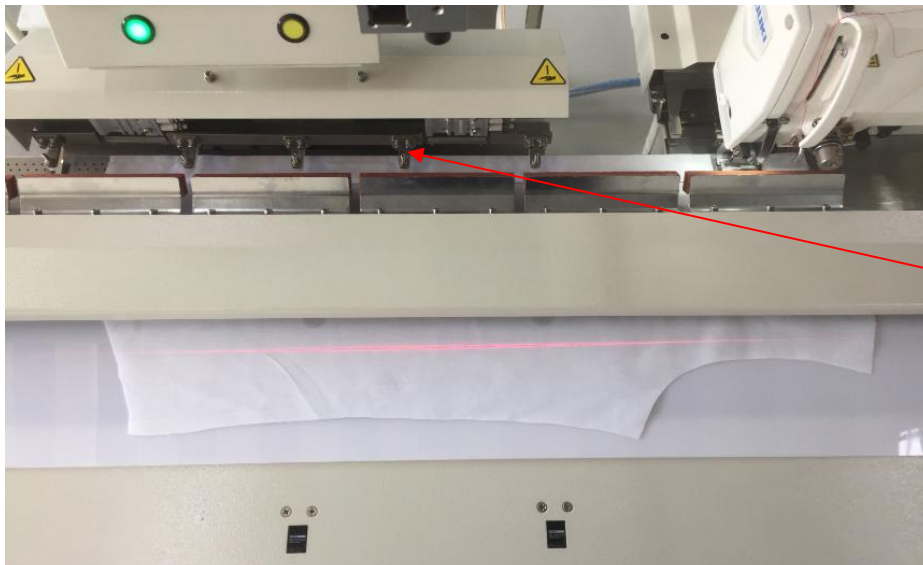


, Enter the manual operation interface, as shown in the following figure:




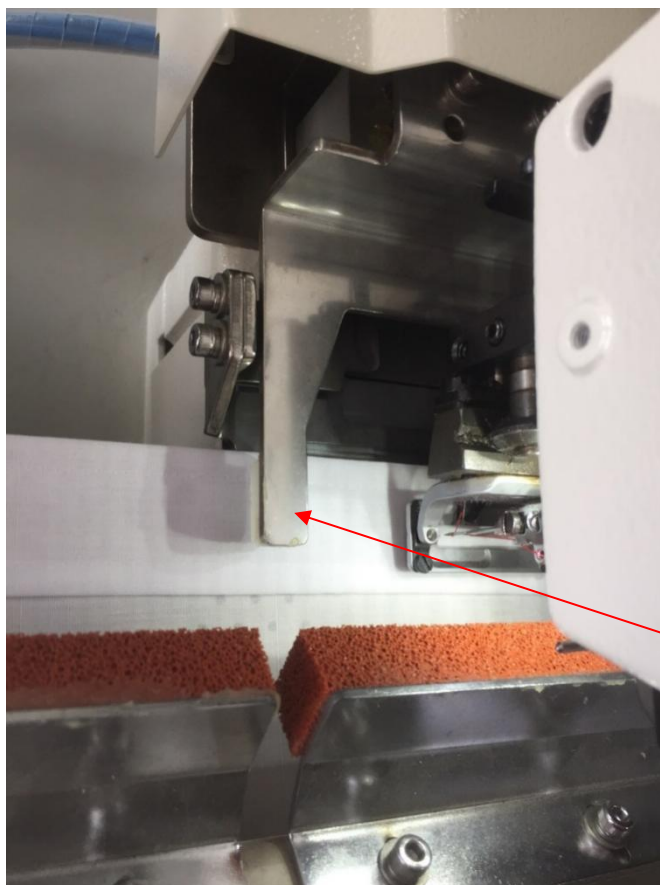
### 6.2.2. Touch screen single step operation

Place the cloth in place according to the requirements in 5.2.5, and click the , The pre feeding plate will send the cloth under the main pressing cloth assembly, as shown in the following figure:




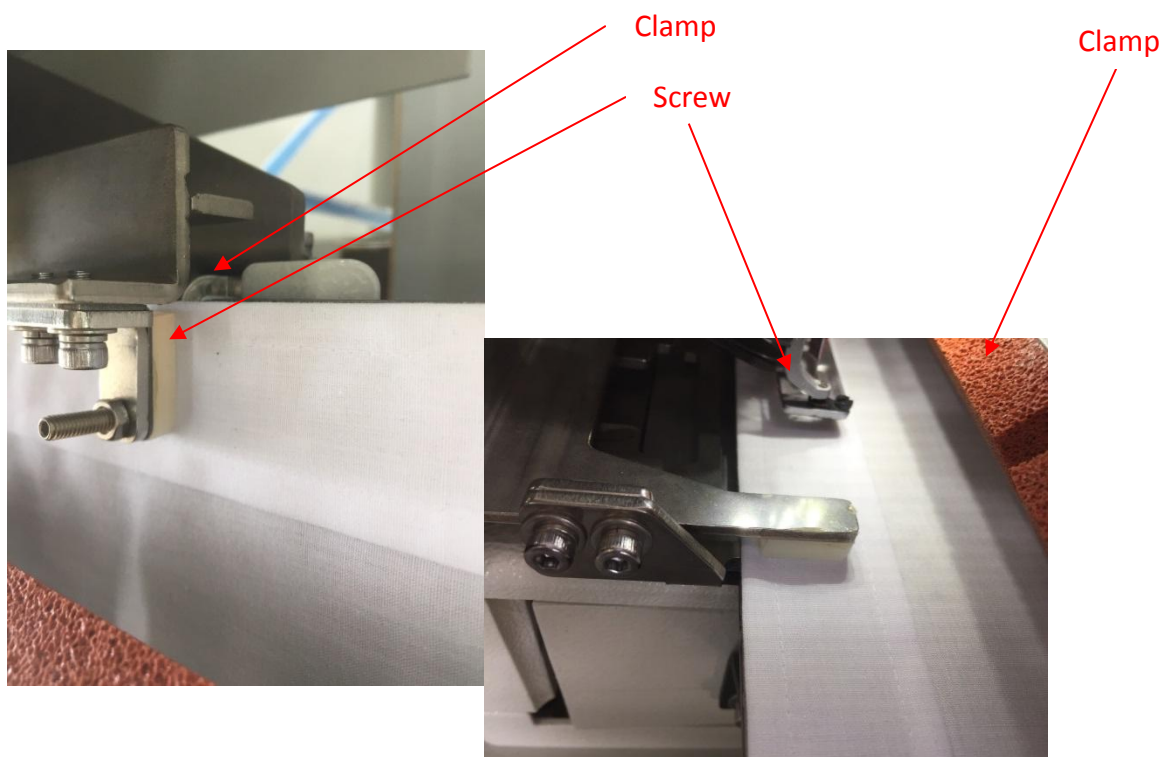
Main  
pressing  
cloth  
assembly


Click on the 6.2.1 screen , The head cloth clamping mechanism is extended, as shown in the following figure:

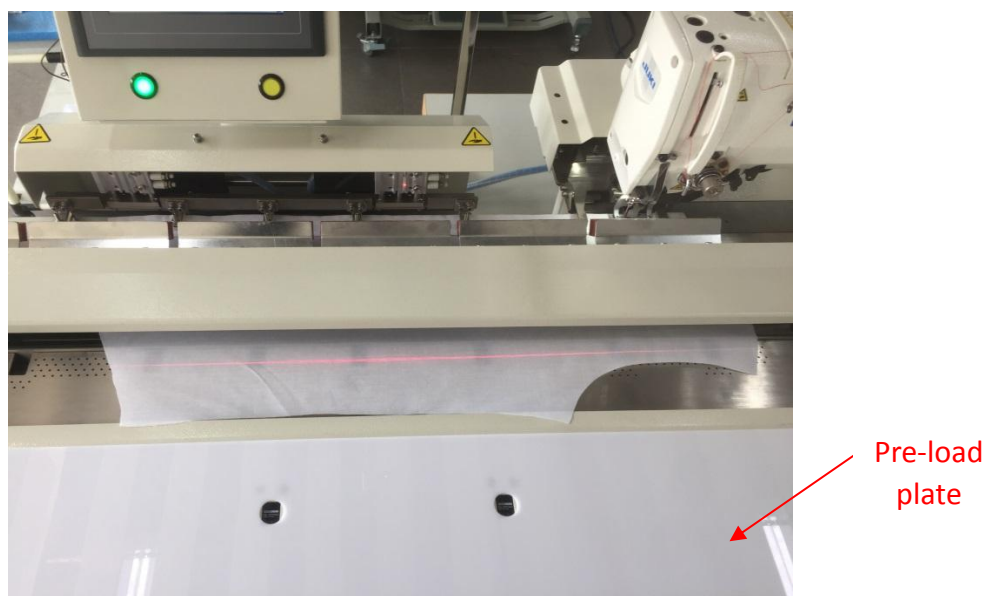



Head cloth  
clamping  
mechanism

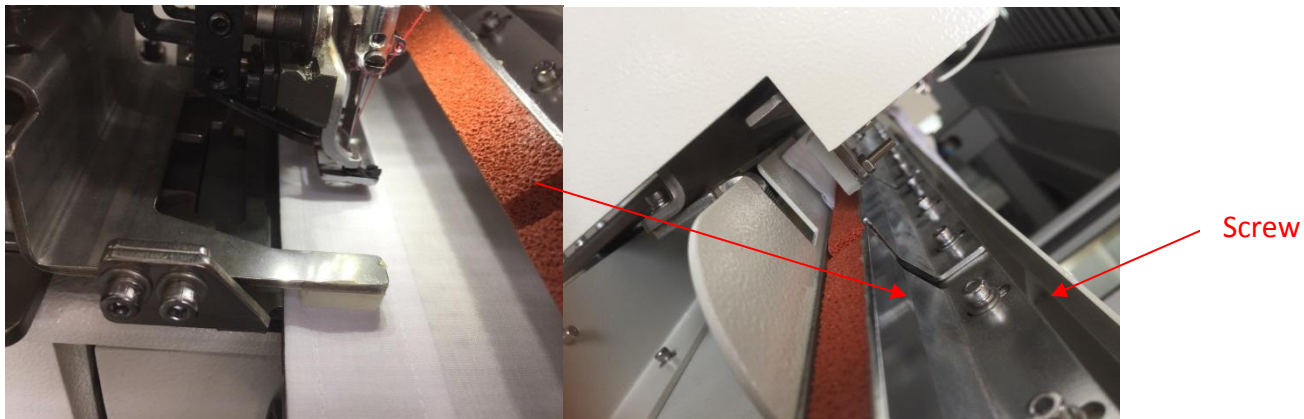
Click  on the 6.2.1 screen again, The head cloth clamping mechanism and the main pressing cloth assembly clamp down and clamp the cloth. In this case, pull the cloth flap by hand to see if it is pressed. If it is not pressed, adjust the screw until the flap is pressed, as shown in the figure below:

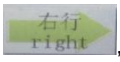


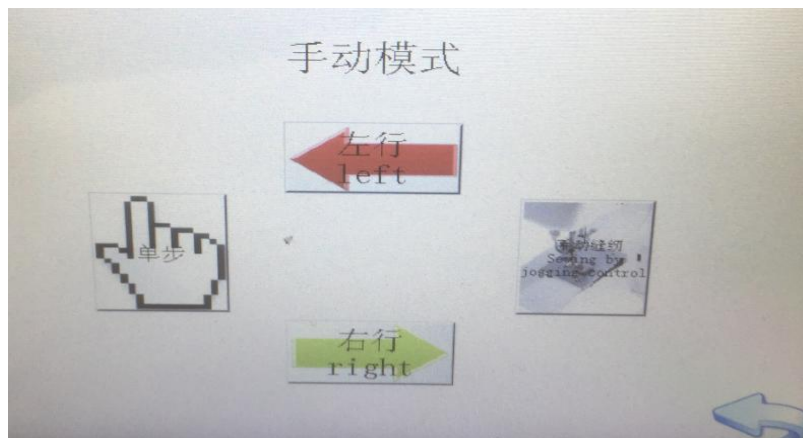
Click  on the 6.2.1 screen again, Return the pre-load plate to its original position, as shown in the following figure:



Click  on the 6.2.1 screen again, Press the cloth sponge down. At this time, pull the cloth piece by hand to see if it is pressed. If it is not pressed, adjust the screw until the flap is pressed, as shown in the figure below:



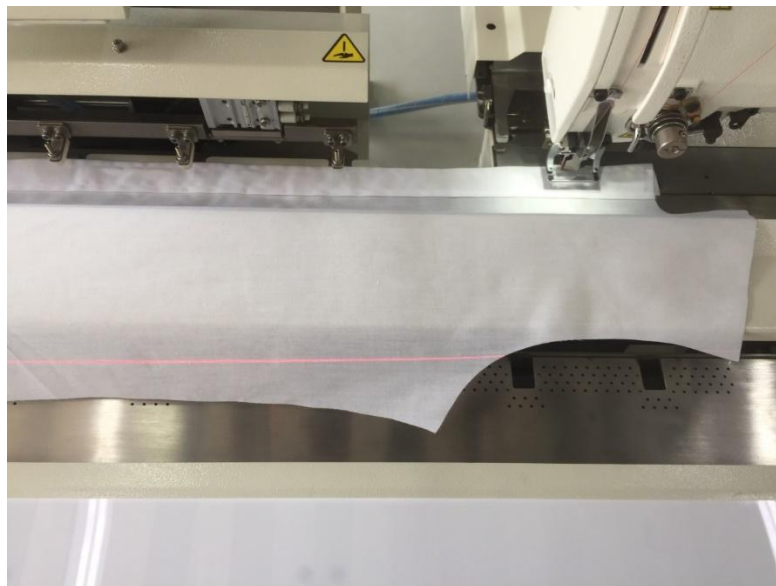
After the adjustment of sponge tightness is completed, click the , Let the machine empty feed the cloth until the material receiving is completed, as shown in the following figure:



At this time, the adjustment of the cloth clamping device is completed.

### 6.3. Manual test

When the machine head has been reset and the green origin reset button under the touch screen is flashing, place the cloth piece under the approximate position of the machine needle, as shown in the following figure:




Click the screen to enter the manual operation interface of 6.2.1, and click "manual sewing"

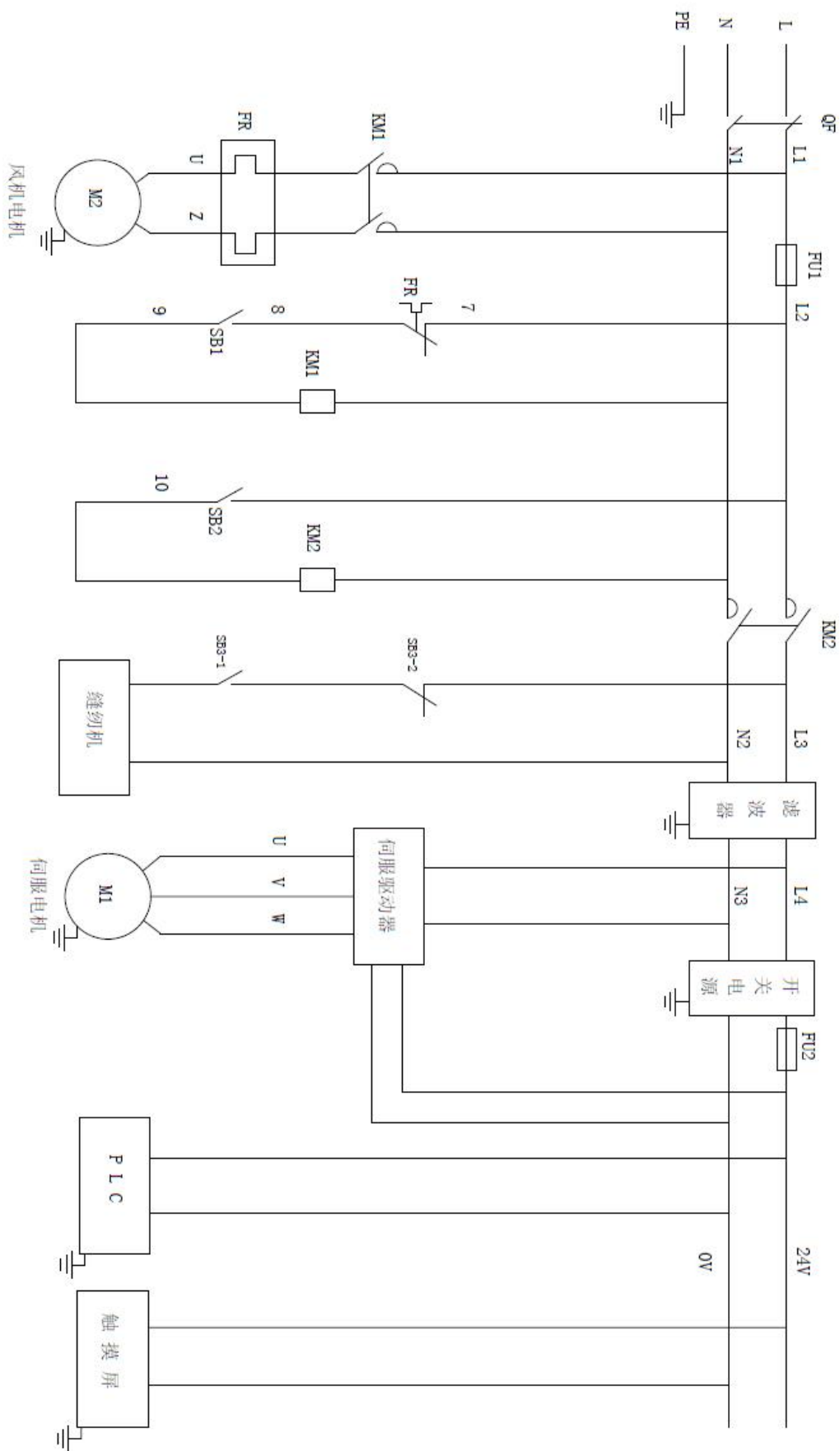


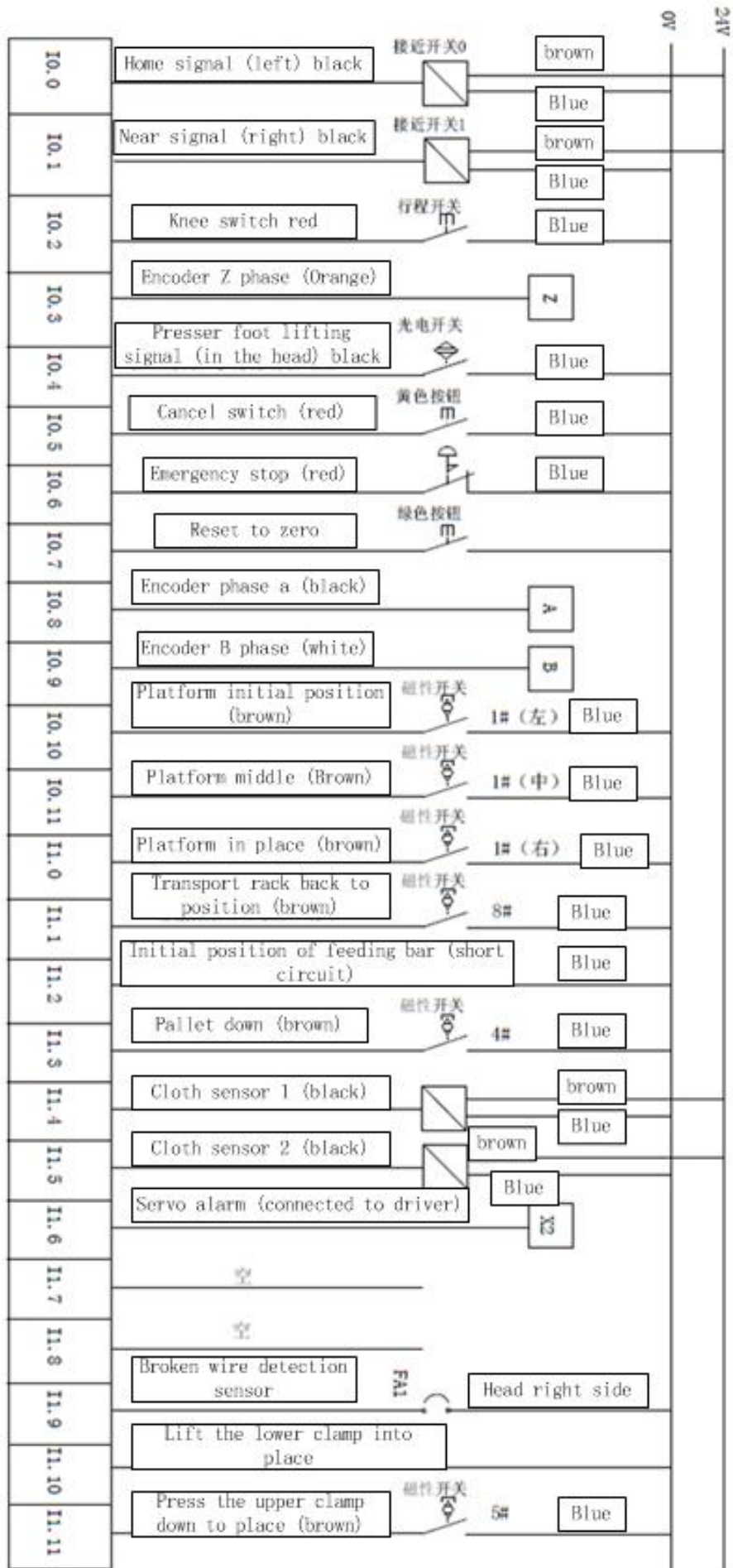
in the screen, The machine head starts to working, as shown in the figure below:



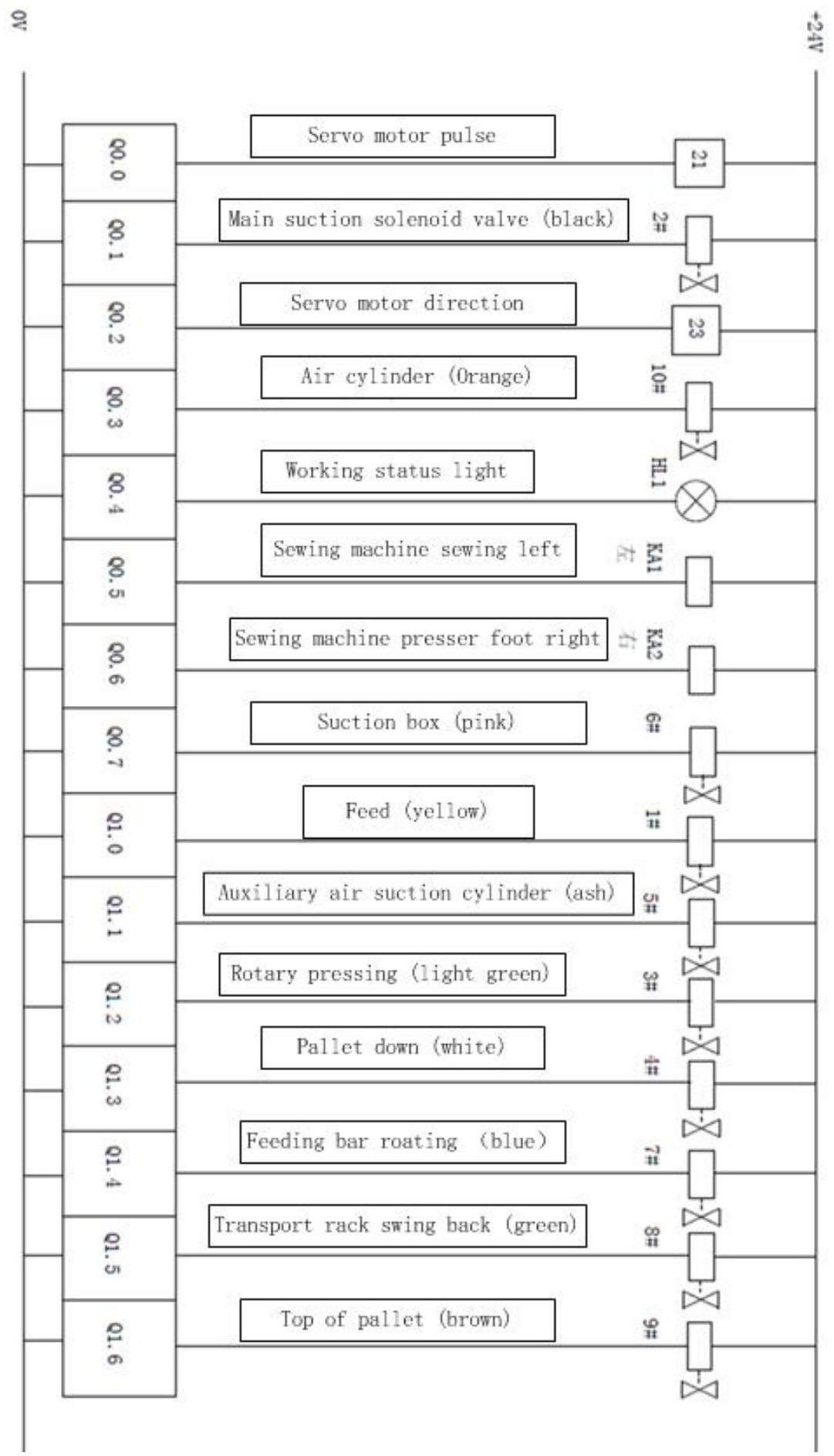
Click the back key in the screen continuously , Return to the start-up interface of 4.1. (7). A, and manually test complete

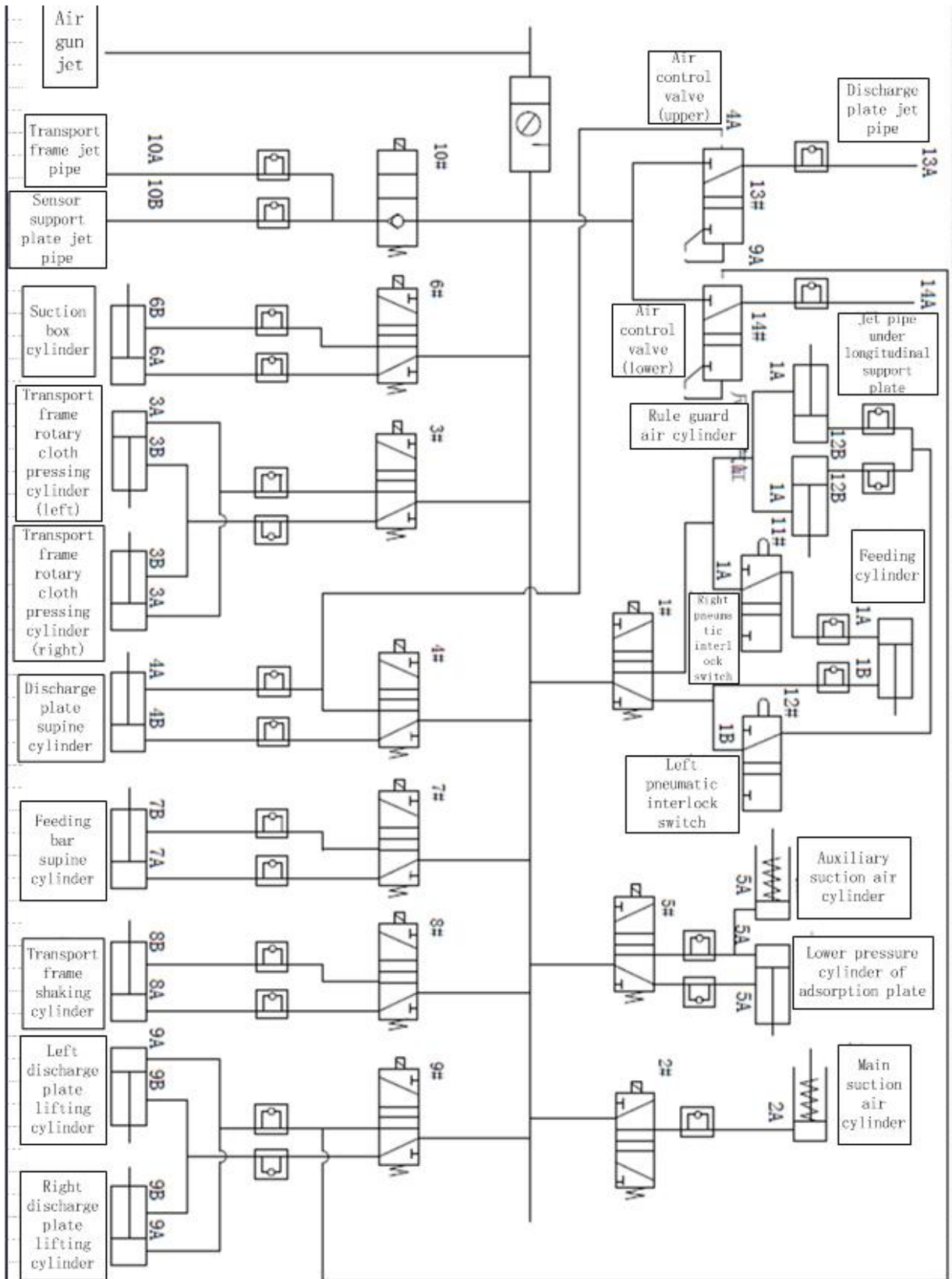
## 7、Electrical wiring











## 8、 Daily maintenance requirements

8.1. See the following table for the equipment maintenance list and requirements

8.2. Please refer to the instruction manual of Brother and Juki for other requirements on the maintenance of the 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 up oil stains on table board, needle board and shuttle core      |
| 3  | The trachea interface     |           |        | √       |           | The air pipe interface is tight and does not leak air                  |
| 4  | The head oil              |           |        | √       |           | The amount of head oil shall not be lower than the warning line        |
| 5  | The bobbin                |           |        | √       |           | Check the spindle for scratches  |
| 6  | Sensors                   |           |        |         | √         | Check whether the sensitivity is accurate and the position is changed  |
| 7  | Sliding parts             |           |        |         | √         | Check the sliding parts for lubrication and add lubricant if necessary |
| 8  | Control box               |           |        |         | √         | Cooling fan operates normally, dust is cleaned promptly                |

## 9、 Knowledge product protection declaration

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