

**自动衬衫袖叉机**  
**Sleeve Placket Setter**  
**(MB5009B-BR-S7300A-303P)**

**使用说明书**  
**Instruction Manual**

**常州智谷机电科技有限公司**

在使用本设备之前请先阅读本使用说明书。  
请将本使用说明书放在便于查阅的地方保管

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**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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**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.

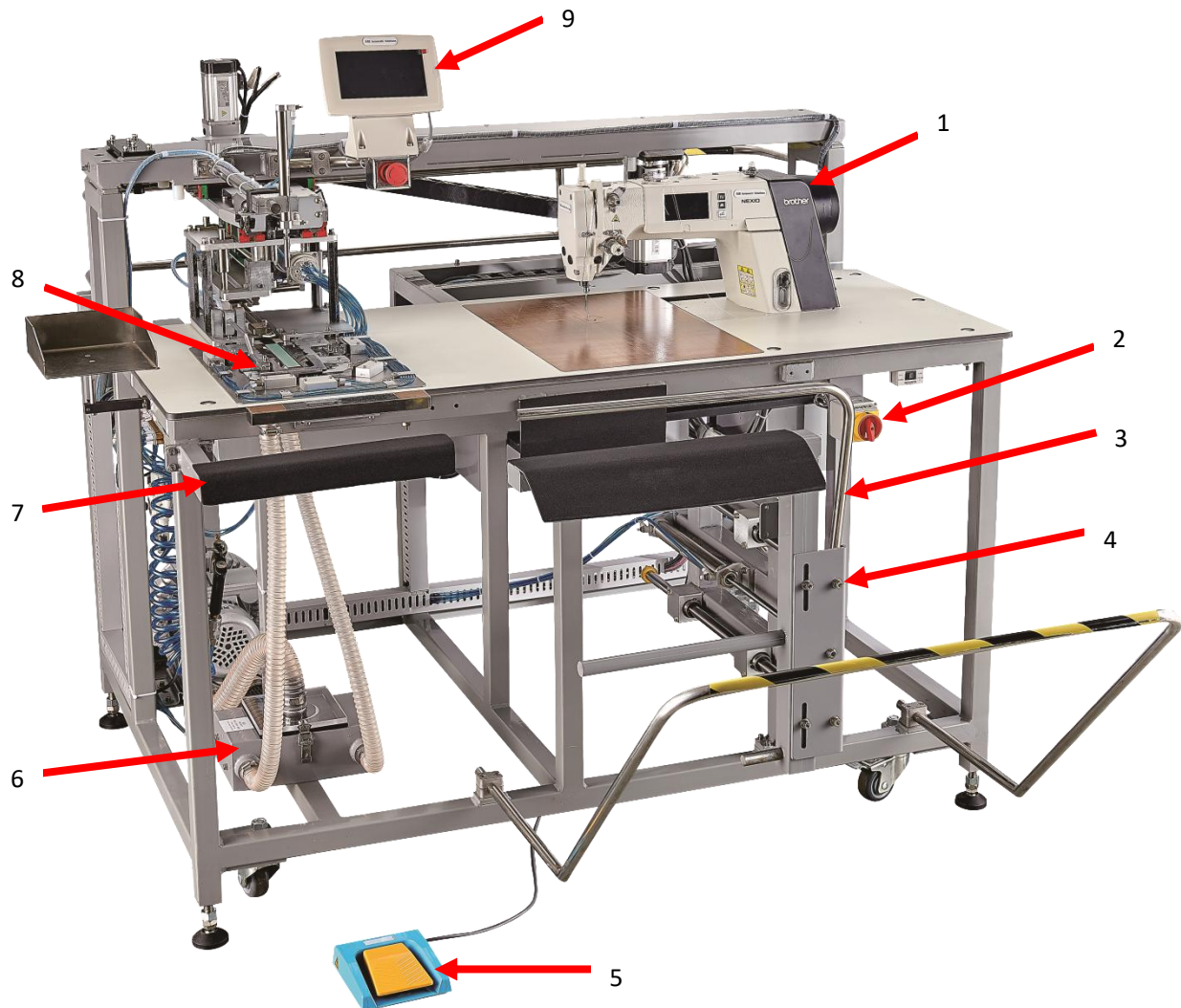
**本机介绍说明分为三部分，具体请参照《MB5009B 自动衬衫袖叉机-使用说明书》、《MB5009B 自动衬衫袖叉机-零件手册》、《MB5009B 自动衬衫袖叉机-触摸屏界面操作说明》。**

**ENGLISH**

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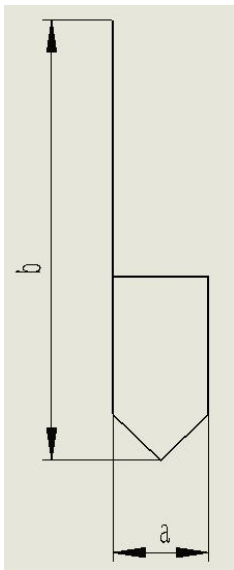
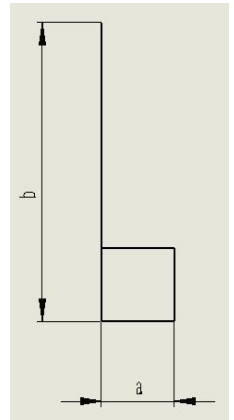
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## 1. Basic information of the equipment





1: Machine head Brother s-7300a-303p; 2: Power switch; 3: Electric control box;  
4: Stacker; 5: Pedal; 6: Suction system; 7: Loader; 8: Folding group; 9: Touch screen

## 2. Technical parameters of the equipment

MB5009B sleeve placket setter			
1	Machine head	Brother S - 7300 - a - 303 - p	
2	Maximum sewing speed/RPM	2500	
3	Working voltage /V	220	
4	Working pressure /Mpa	0.5	
5	Spindle, X/Y control	AC servomotor	
6	Stitch length /mm	1-4	
7	The work efficiency	90 pieces /h (increase or decrease according to the actual situation of fabric)	
8	Way of the mould	Fast changing mould	
9	Equipment size /mm	1450 x 1600 x 1350 w h l	
10	Equipment weight /kg	280	
11	Needle type	DP * 17	
12	linear		size  A = 3/4-1-1/4 Or a = 18-32 mm B 200 mm or less
			

### 3. Safety precautions

#### Considerations for safe use of automata

 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>
 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> <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>
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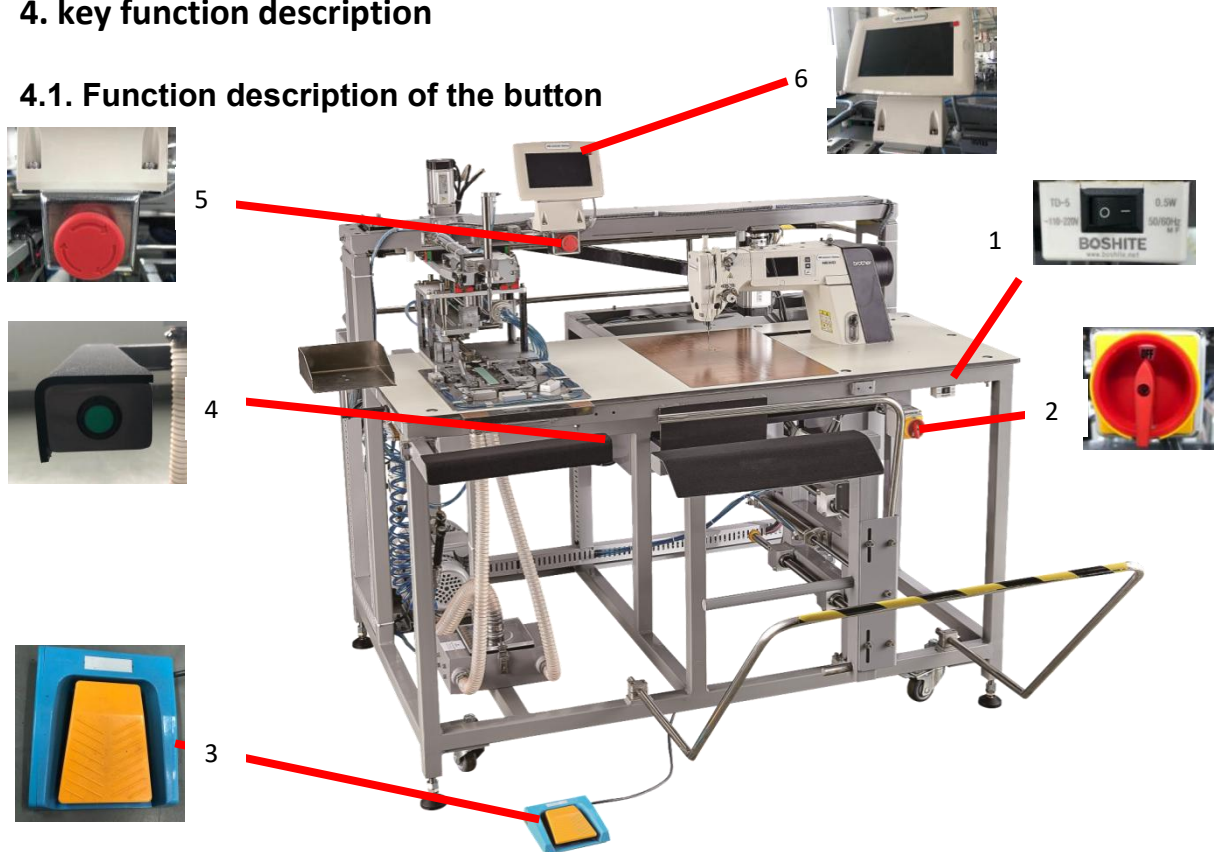
**\* important safety information:**

- ✓ 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.



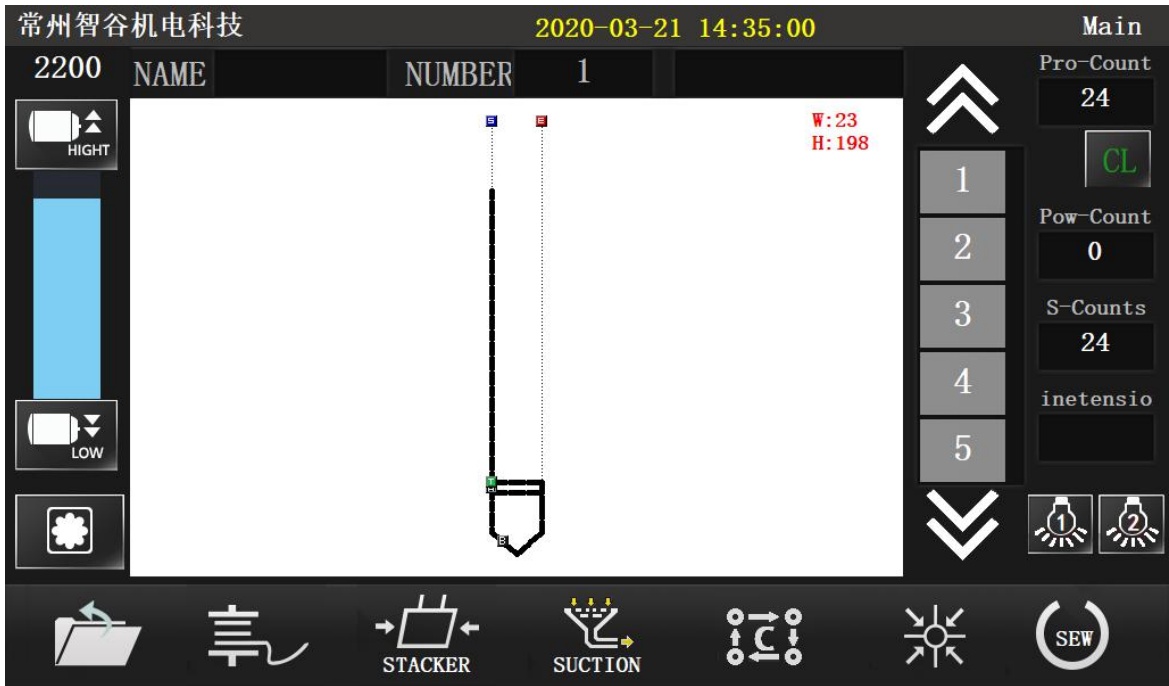
## 4. key function description

### 4.1. Function description of the button

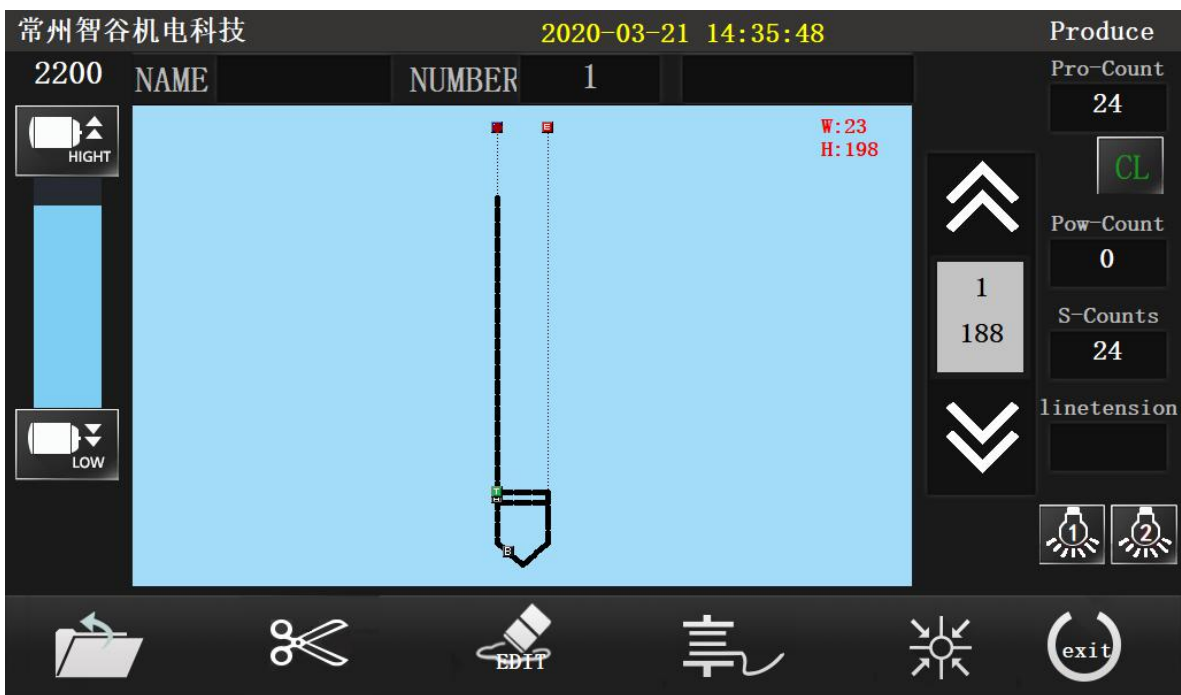


- (1) : headlight source switch -- after turning on, the headlight source is turned on.
- (2) : power switch -- rotate the power switch to ON by  $-90^{\circ}$  to energize and ventilate the equipment.
- (3) : foot switch -- step down, before the step of equipment sewing.
- (4) : back switch -- after pressing, the sewing step of the equipment goes back one step.
- (5) : emergency stop button -- equipment emergency stop.
- (6) touch screen -- see "MB5009B interface description".

A: Main interface





B: Sewing interface



## 4.2. Reset operation instructions

### 4.2.1 Boot reset operation


Steps	Instructions	The key way to
1	boot	(2)


2	reset	(6) - a 
3	Switch sewing mode	(6) - a - b 

#### 4.2.2 Emergency stop reset operation

Case 1: the folding device stops abruptly, and the reset steps are as follows: the stop switch rotates clockwise to reset, the fabric is repositioned, and after the placement is completed, step down the pedal to start the switch (3).

Case two: sewing emergency stop, reset steps: emergency stop switch clockwise rotation reset,

(1) continue sewing: 4.1(6)--b-- step back to the sewing point -- step on the foot switch 4.1(3) continue sewing; 

(2) re-sewing: 4.1 (6) --b-- reset. 

## 5. Operating instructions

### 5.1. Preparation before operation

- ✓ Operator checks when the head is stopped
- ✓ Check the press sponge is in good condition
- ✓ 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 that the eyeguard is installed correctly

### 5.2. Operation process description

#### 5.2.1 start the device

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



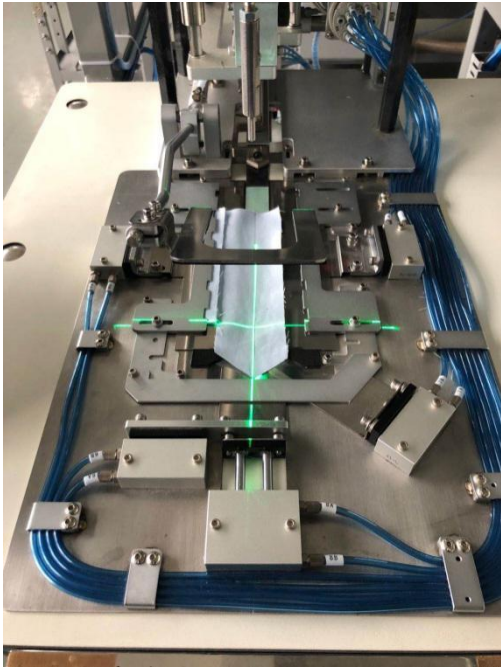
### 5.2.2 Reset operation

Perform the machine boot reset operation. Please refer to: 1. Key function description --2.1 power-on reset operation. The following figure shows the state of the device after the reset is completed.



### 5.2.3 sleeve fork placement

Put the sleeve fork in the designated area, according to the laser lamp correct alignment.

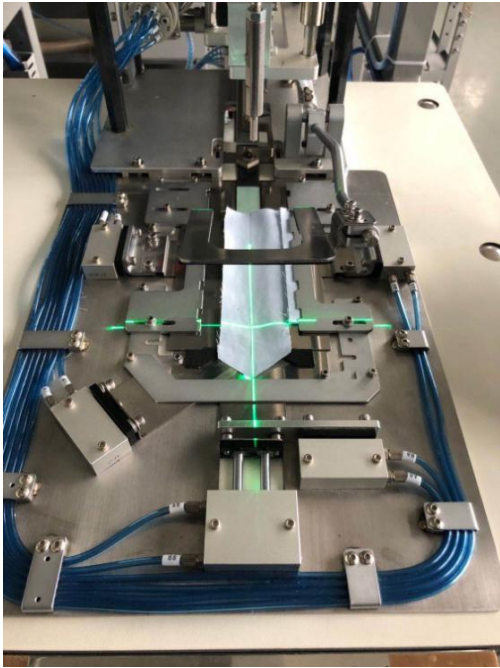


Place the sleeve splint on the sleeve splint

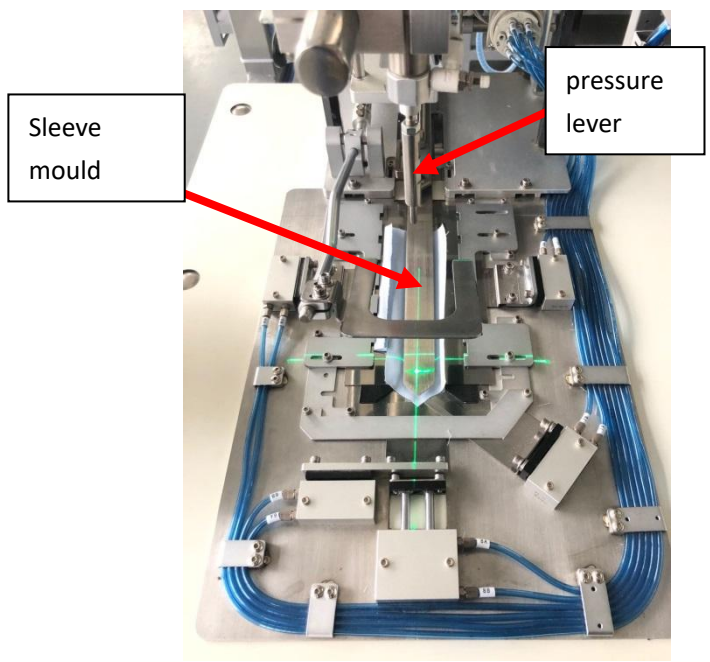
#### 5.2.4 automatic folding material opening

1. First place the sleeve fork in the specified position and step on the foot switch, as shown in (a) below.
2. The three-point bag mold is extended, as shown in figure (b), the pressure bar is pressed down, and the folding device is automatically folded, as shown in figure (c), and the pressure bar is raised, as shown in figure (d).
3. Place the sleeve piece as shown in figure (e) below.
4. Step on the foot again to start the switch, press the front and rear pressing plate out and press the frame down, and then the three-point bag mold is returned to its original position, as shown in the figure below (f).
5. Press plate right shift automatic sewing, as shown below (g)
6. Automatic material collection after sewing.

Loop through the operation in turn.



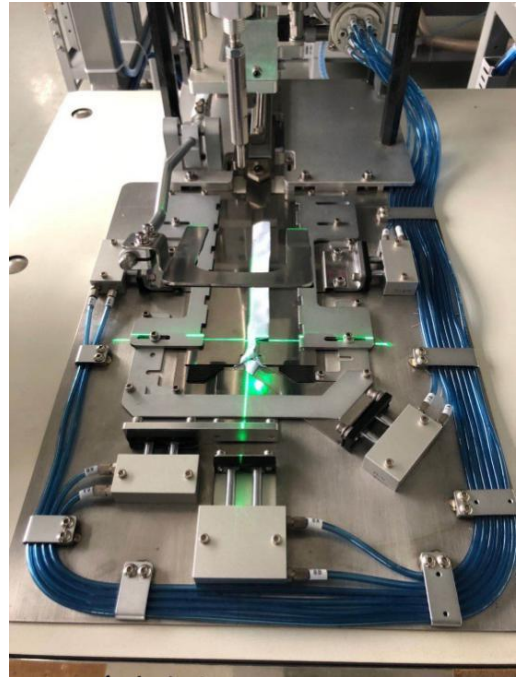
a



b



c



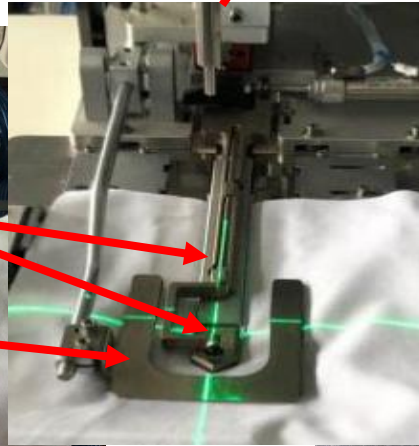
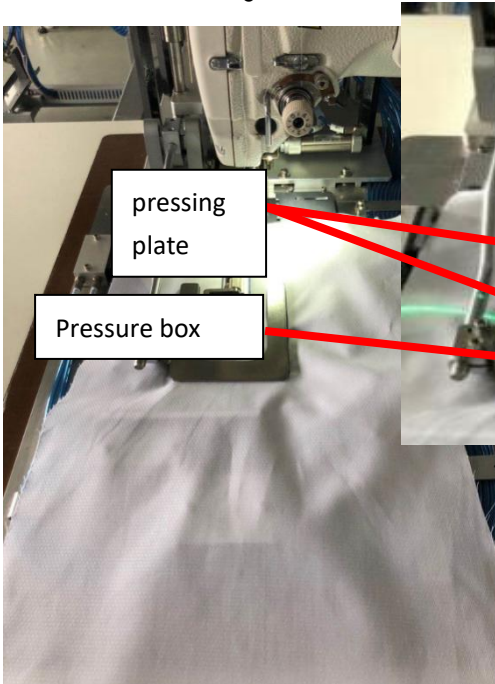
d



e



f



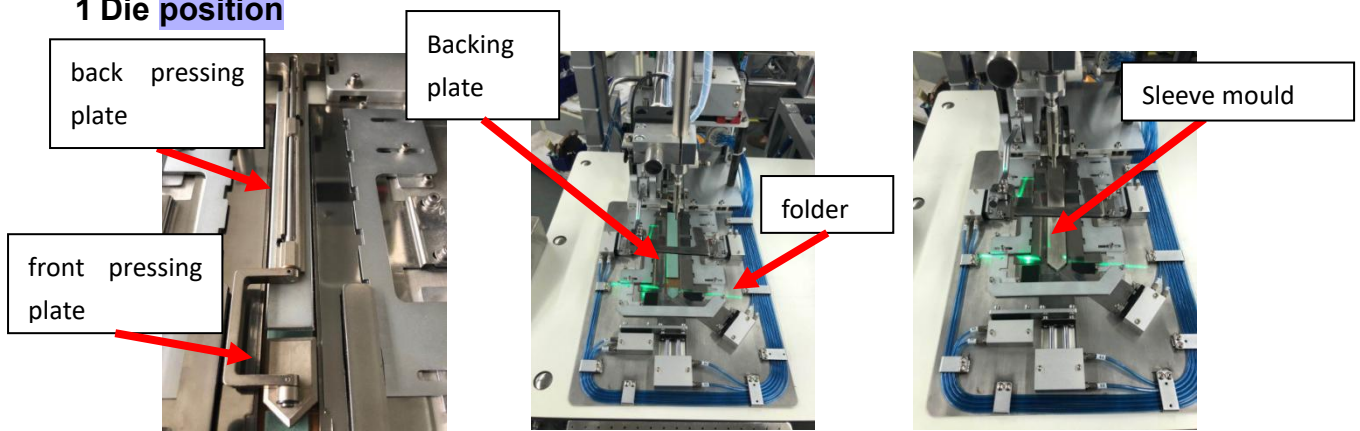
### 5.2.5 shutdown

When the operation is completed, rotate the power switch to the OFF position by 90° and the device will be shut down.

## 6. Debugging method

### 6.1 mold location

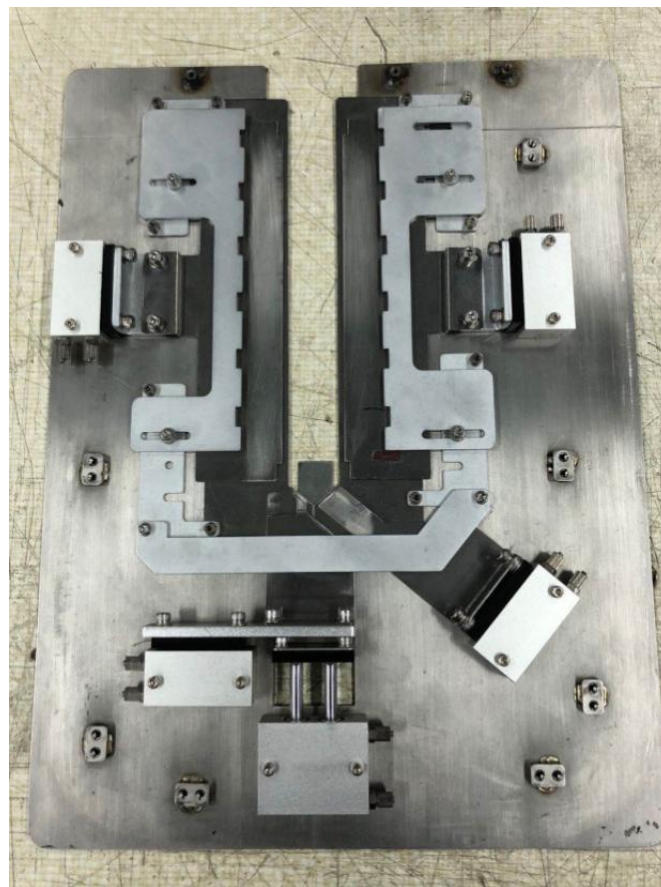
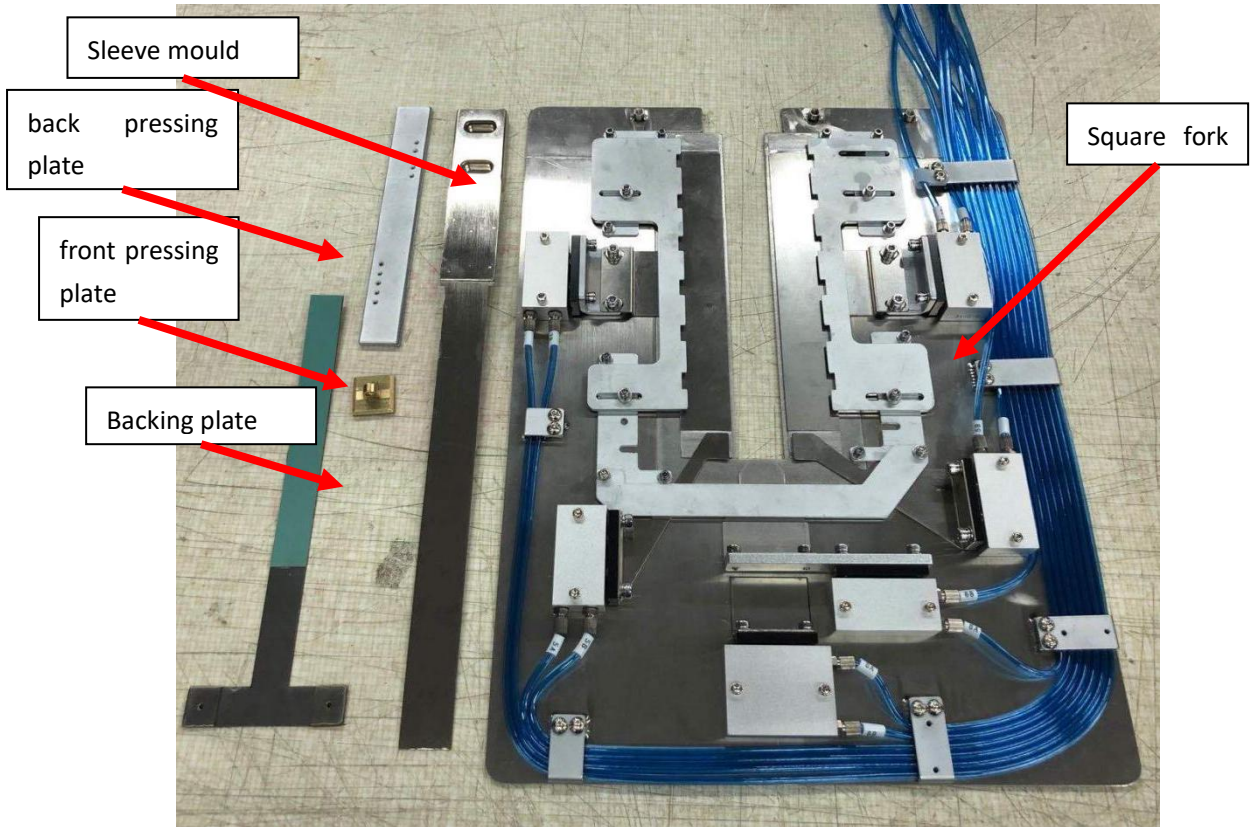
#### 1 Die position



### 6. 2 mold change steps

#### 6.2.1 all molds

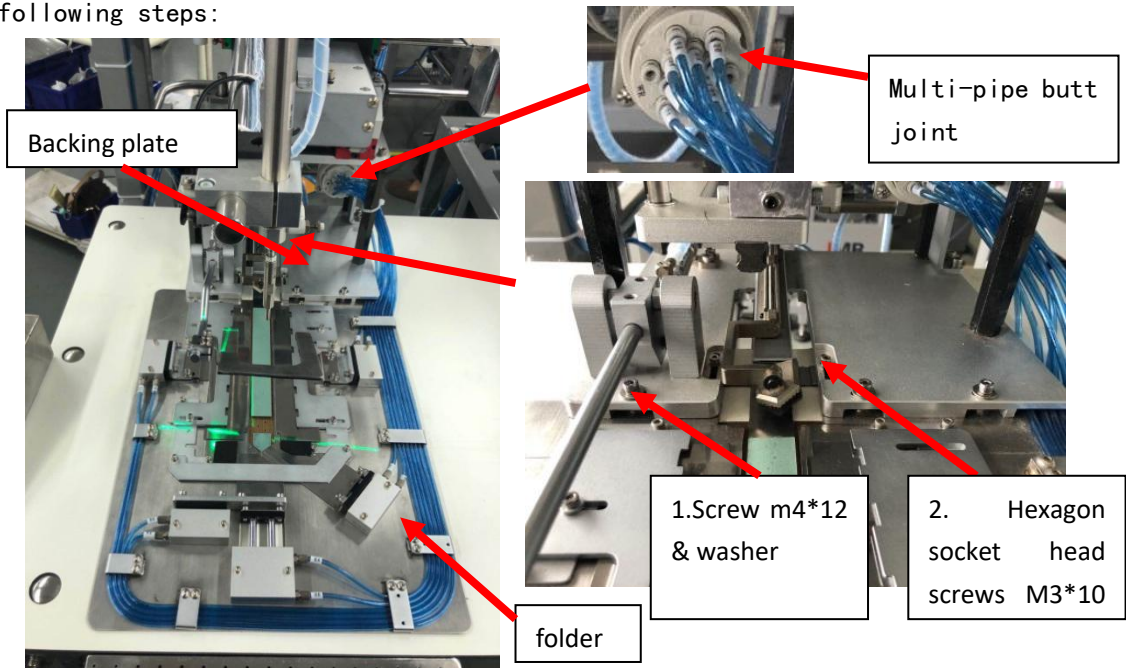




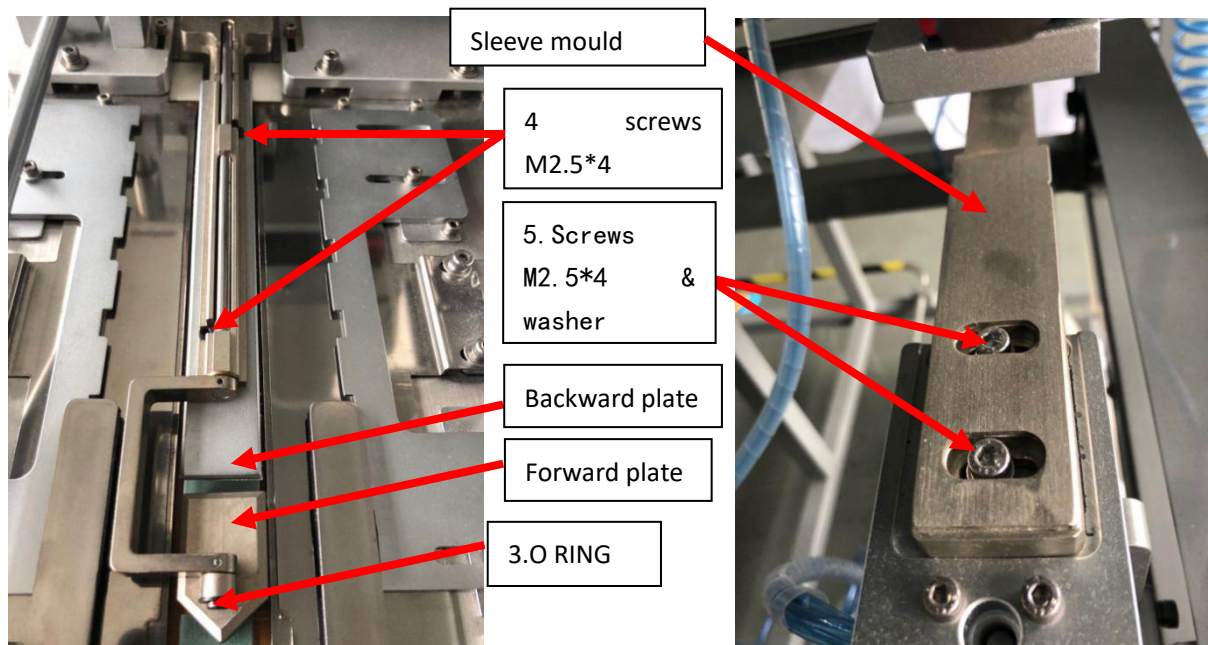
Three-point sleeve fork hem holder

### 6.2.2 disassemble and install the mold

Disassembling and assembling the flanger mold shall be carried out according to the following steps:



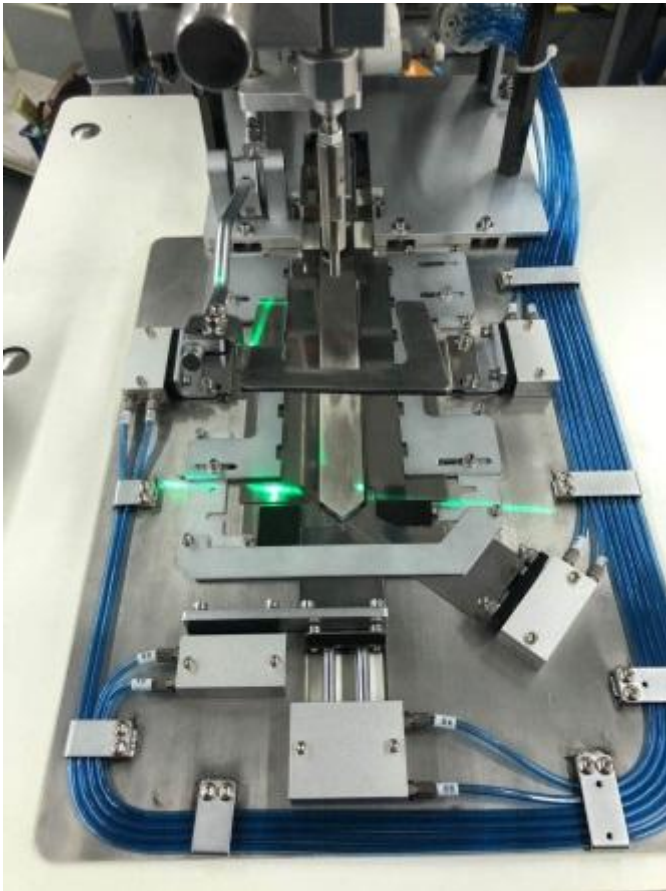
1. Disassembly and assembly of flanging device: it is necessary to pay attention to remove the hexagon socket head screw M4\*12 and the flat pad spring pad, and then remove the multi-pipe butt joint, the flanging device can be removed.
2. Disassembly of bottom die backing plate: it is necessary to pay attention to remove the hexagon socket head screw M3\*10 and the flat pad spring pad, the bottom die backing plate can be removed.



3. Disassemble and install the front pressing plate: it is necessary to remove the open check ring 4, and the front pressing plate can be removed.
4. After disassembly pressing plate: after disassembly pressing plate, pay attention to remove the hexagon socket cylindrical head screw M2.5\*4, the rear pressing plate can be

removed.

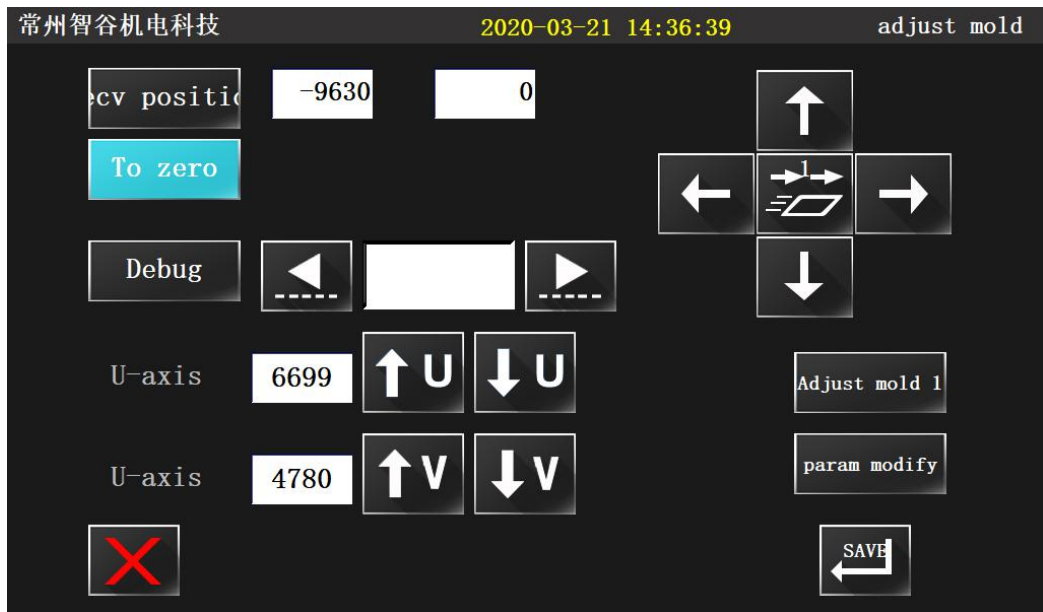
5. Disassemble and install the three-point bag mould: it is necessary to remove the hexagon socket head screw M5\*12 and the flat pad spring cushion first. The three-point bag mould can be removed.



\* note the sequence of removing the mold: 1. Remove the flanger --2. Remove the bottom die backing plate --3. Remove the front pressing plate --4. The installation order is reversed from the disassembly order.

### 6.2.3 parameter setting

Touch screen 4.1(6) -- main interface a  -- followed by the following interface:  
s



Press " **ecv positio** " to check the position of the template, and the position can be adjusted






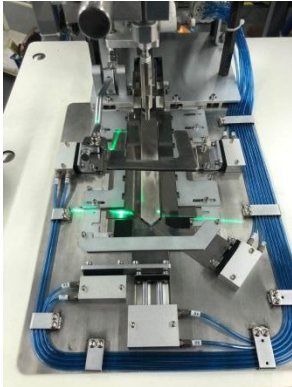
by " **Adjust mold 1** ". For details, please see "MB5009B automatic shirt-sleeve fork machine - operation instructions on the touch screen interface".



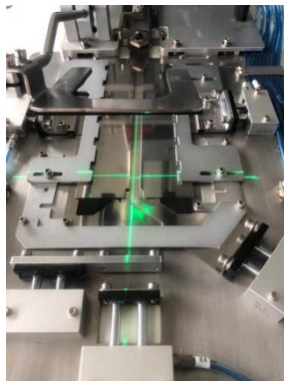
Press " **To zero** " to verify that the template returns to zero



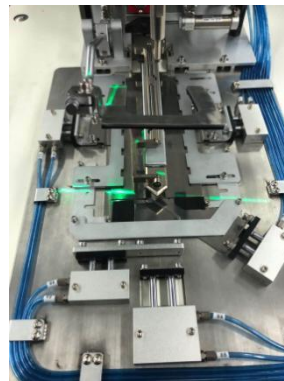
After pressing "  ", adjust the equipment steps by "  "and"  "to check the position of the template and the folding effect



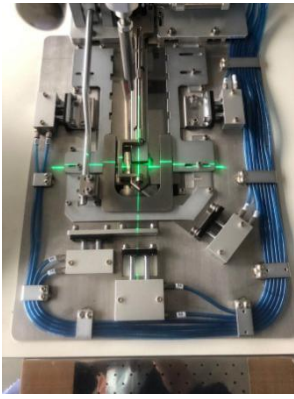
1 Step...



Step 3...



Step 4...





→ Sewing or reset



Step 5...

Step 7 Step 6



\*1 Step: press  and  and adjust the front and rear positions of the three-point bag mold.



\*4 Step: press  and , and adjust the front and rear positions of the pressing plate.

\*5 Step: pay attention to the signal of the lower magnetic switch indicator light of the cylinder after pressing the pressing plate. The light is on normally, and the position of the light is offset when it is not on.




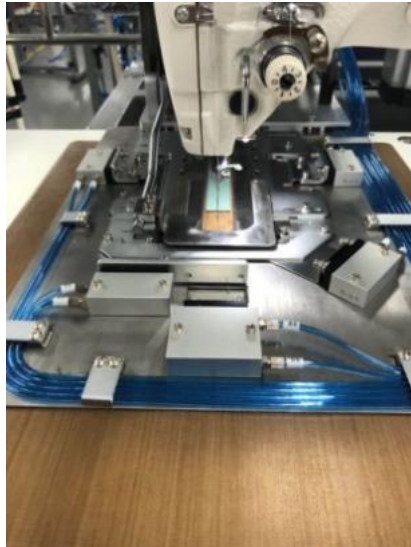
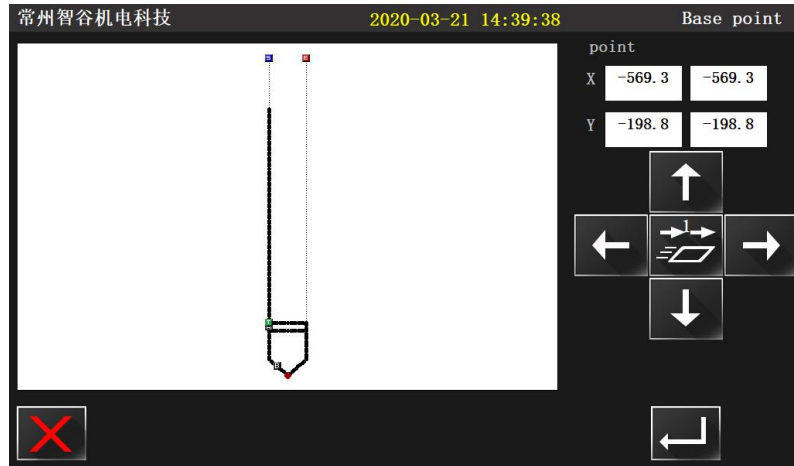
param modify

After the touch screen "param modify", please refer to the following interface. For details, please refer to "MB5009B - operation instructions for touch screen interface".

常州智谷机电科技 2020-03-21 14:38:55 Pattern Param

stitch type	
type 1	<b>type 2</b>
nforce num	nforce num
3	14
inforce tir	inforce tir
1	1
titch lengt	titch lengt
1.7	0

Press "Adjust mold 1" to check the position of the template and adjust the position by "". See "MB5009B automatic shirt and sleeve fork machine – operation instructions on the touch screen interface" for details.



## 7. Electrical wiring

### 7.1. Signal board:

MB5009B	Socket,	specifications	The I/O	Back to zero sensor	Remarks (length meter)
Origin of the X	IN1	3 p	3		
Y the origin	IN2	3 p	3		
V the origin	IN3	3 p	3		
On the platen	IN4	3 p	2		
Under the pressure plate	IN5	3 p	2		
Break line detection	IN6	3 p	3	190323 changed to motherboard socket	1 is plus 5V, 2,3 is minus 5V



				J6/ compatible with the original	
Pressure testing	IN7	3 p	2		
Sewing scram	IN8	3 p	2		
U the origin	IN9	3 p	2		
The standby	IN10	3 p			
The standby	IN11	3 p			
The standby	IN12	3 p			
The standby	IN13	3 p			
Start the pedal	IN14	3 p	2		
The standby	IN15	3 p			
The back button	IN16	3 p	2		
/	IN17				
.	.				
/	IN20				
The standby	IN21				
/	IN22				
The standby	IN23				

## 7.2 electromagnet solenoid valve/expansion plate:

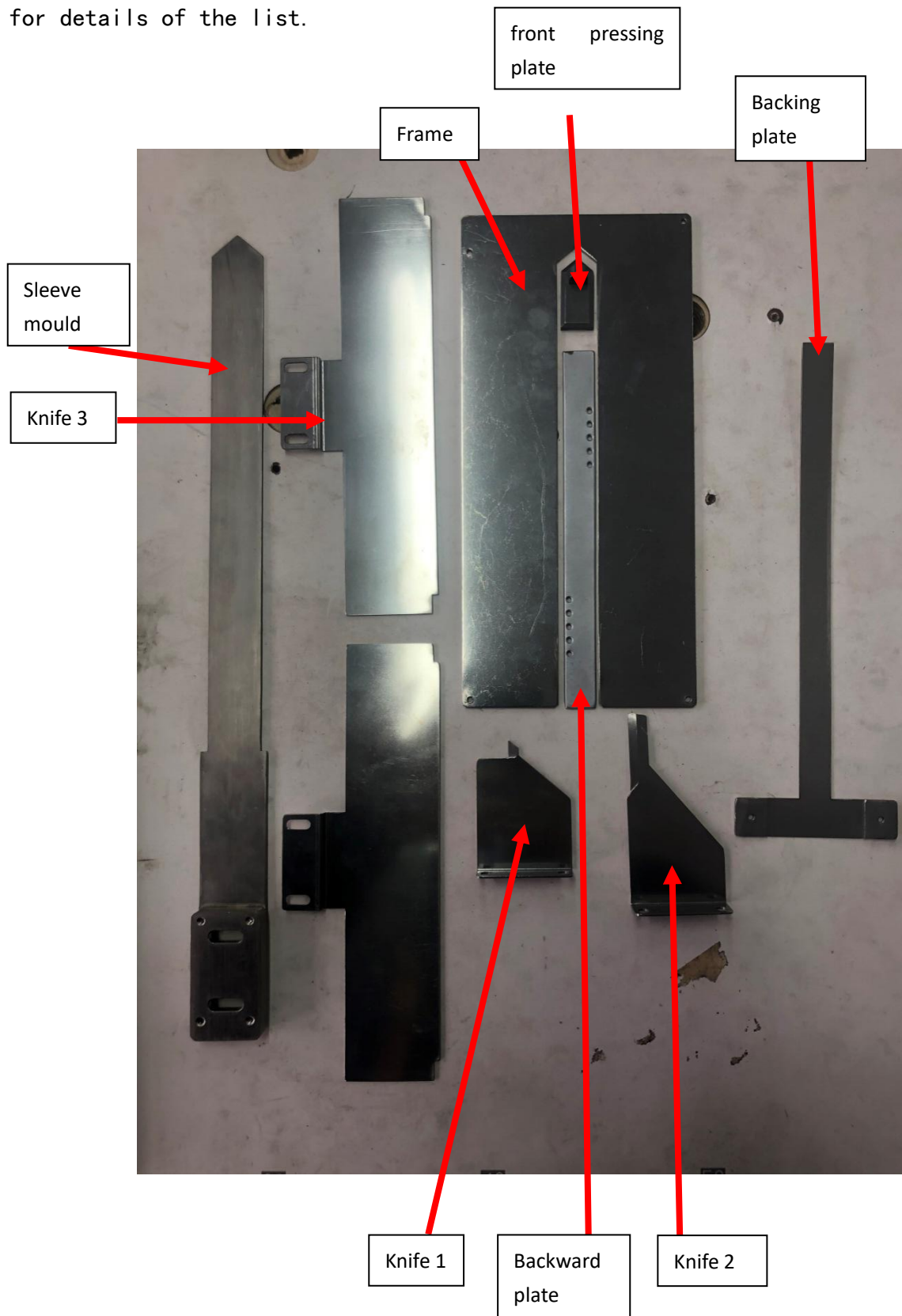
MB5009B	The port number	The nature of the	Zero back switch	Remarks (length of line)
1 bag mould	M1	Solenoid valve	guan	
Suction magnet/positioning hammer	M2	electromagnet	guan	
Cut the line	The M3	electromagnet	guan	
Clamp wire	The M4	electromagnet	guan	
2 bags of mould	The M5	Solenoid valve	guan	
76	M6	Solenoid valve	guan	

77	M7	Solenoid valve	guan	
Receiving 1	J1	Solenoid valve	guan	
Linking piece carried put	J2	Solenoid valve	guan	
plate	J3	Solenoid valve	guan	
Fold the material 1	J4	Solenoid valve	guan	
Fold the material 2	J5	Solenoid valve	guan	
Fold the material 3	J6	Solenoid valve	guan	
Clamp flip	J7	Solenoid valve	guan	
Suction 2	J8	Solenoid valve	guan	
Clamp pressure	J9	Solenoid valve	guan	
60	J10	Solenoid valve	guan	
59	J11	Solenoid valve	guan	
61	J12	Solenoid valve	guan	
Iron is expected to press	J13	Solenoid valve	guan	
Receiving 2	J14	Solenoid valve	guan	
/	J15	Solenoid valve	guan	
The standby	J16	Solenoid valve	guan	
Small screen power supply	JK_232		It can only supply 5V power	Black is GND, red is 5V
Suction 1	Y1			
/	Y2			
fan	Y3			
69	Y4			
70	Y5			
78	Y6			
Radium shoots the light 1	Y7			
Radium shoots the 2	Y8			

## 8. Optional device

**Simple mould: low cost;**Mold making is simple.

Please refer to "parts manual of MB5009B automatic shirt-sleeve and fork machine" for details of the list.






## 9. Accessory box details

The serial number	Name of the attachment	specifications	The number of
1	Instruction manual		1
2	Parts manual		1
3	"Operation instructions for touch screen interface"		1
4	Wire rack		1 set of
5	bushing		1
6	lock		1
7	Rubber cushion		
8	Prevent slippery skin		

## 10. Common problems and solutions

10.1. See the table below for common problems and solutions

10.2. For more questions on other pages, please refer to "MB5009B automatic shirt-sleeve fork machine - operation instructions on touch screen interface".

The phenomenon of	The picture	Cause analysis,	The measures
Disconnect/jumper	/	1: machine needle point hair; 2: too large or too small the distance of wiring; 3: too little tricuspid pressure.	1. Change machine needle; 2. Adjust the correct marking distance; 3. Adjust the three tips for proper pressure.
Bad front stop size		1. Pattern problem; 2: tricuspid migration.	1. To modify the pattern; 2. Follow the sponge change or adjust the tricuspid pressure.
Bad negative stop size		Left and right pressure frame distance is too large or too small	Adjust left and right frame distance
The fabric wrinkle		1: the pressure of pressing plate is too small; 2: machine needle or needle plate size specification is wrong; 3: the trace is too tight;	1. Adjust the pressure of pressing plate; 2. Suitable specifications for the needle and needle plate of the replacement machine; 3. Adjust the trace;

## 11. Daily maintenance requirements

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

11.2. Please refer to the instruction manual of Brother s-7300a-303p for other requirements on the maintenance of the nose

The serial number	project	time				The point description
		Every day,	Once a week	A month	Half a 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	Fan filter		√			Clean the dust of the fan filter element
4	Clamp the sponge		√			Check whether the sponge is worn out or deformed, loss needs to be replaced
5	Folding machine			√		Keep level and check for screw fastening
6	Three pointed bag			√		Keep level and check for screw fastening
7	Press box device			√		Keep level and check for screw fastening
8	The trachea interface			√		The air pipe interface is tight and does not leak air
9	The head oil			√		The amount of nose oil shall not be lower than the warning line
10	The bobbin			√		Check the spindle for scratches
11	Sensors				√	Check whether the sensitivity is accurate and the position is changed
12	Sliding parts				√	Check the sliding parts for lubrication and add lubricant if necessary
13	Control box				√	Cooling fan operates normally, dust is cleaned promptly

## 12. Knowledge product protection declaration

MB5009B is designed by Changzhou wisdom & valley Electric Technology Co., Ltd.。 The

intellectual property rights of this achievement belong to Changzhou wisdom & valley Electric Technology Co., Ltd. and are protected by national intellectual property laws and regulations. Without the written permission of the right holder, the patented technology of the achievement shall not be implemented, and the information related to the achievement shall not be copied, sold or disseminated through the network. For any illegal infringement, Changzhou wisdom & valley Electric Technology Co., Ltd. will pursue its legal responsibility according to law.

