

# 全自动牛仔装袋机

Automatic Denim Pocket Setter

(MB1002C-BR-1-BAS311HN-05XT)

## 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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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.

**本机介绍说明分为三部分，具体请参照《MB1002C-使用说明书》、《MB1002C-零件手册》、《MB1002C-触摸屏界面操作说明》。**

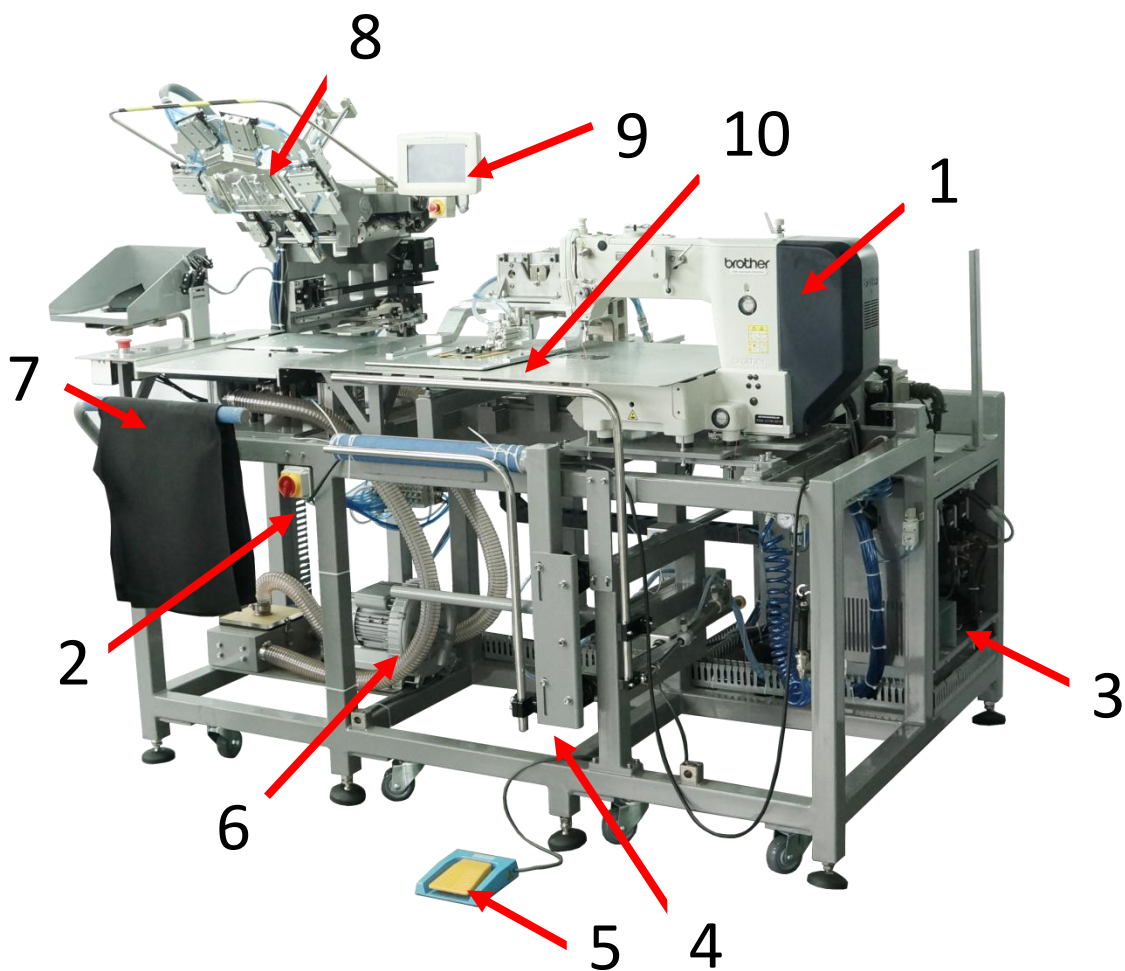
The introduction of this machine is divided into three parts. For details, please refer to 《MB1002C Operation manual》 and 《MB1002C Parts Manual》《MB1002C Touch screen interface operation instructions》

**ENGLISH**

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## 1、 ESSENTIAL INFORMATION





- 1: BAS-311HN head; 2: switch; 3: control box; 4: stacker; 5: pedal;  
6: suction system; 7: loader; 8: folding group; 9: touch screen; 10: clamp

## 2、 SPECIFICATION

MB1002C Denim pocket setter		
1	Machine head	brother-BAS-311HN
2	Maximum speed /rpm	2800
3	Working voltage /V	220
4	Working pressure/Mpa	0.5
5	Motor	AC 伺服马达
6	Stitch length /mm	0.05--12.7
7	Performance features	8s/片
8	Jig change	Normal
9	Size/mm	1600L × 1400W × 1400H
10	Weight/kg	545
11	Inner clamp size	小码：85*90-130*130； 中码：130*130-170*175； 大码：170*175-220*210；
12	Pocket shape	size S*M: 85*90-170*175; L: 170*175-220*210

### 3、SAFETY PRECAUTIONS

Precautions for safe use of automata

 危険	<ol style="list-style-type: none"> <li>1. In order to prevent accidents caused by electric shock, please do not open the cover of the motor electrical box or touch the parts in the electrical box when the power is turned on.</li> </ol>
 注意	<ol style="list-style-type: none"> <li>1. In order to prevent personal injury, please do not operate the machine with the belt guard, finger protector and other safety devices removed</li> <li>2. In order to prevent personal accidents involving the machine, please keep fingers, hair and clothes away from the belt pulley, V-belt and motor during the operation of the sewing machine, and do not put objects on it.</li> <li>3. In order to prevent personal injury, please do not put your finger near the needle when turning on the power or when the sewing machine is running.</li> <li>4. In order to prevent personal injury, please do not put your fingers in the thread take-up rod cover when the sewing machine is running.</li> <li>5. When the sewing machine is running, it turns at a high speed. In order to prevent injury to your hands, please never let your hands near the cloth cutter during operation. In addition, please turn off the power supply when changing the cable.</li> <li>6. In order to prevent personal injury, please take care not to pinch your fingers when the sewing machine moves up and down or returns to its original position.</li> <li>7. When the sewing machine is running, please do not cut off the power or air supply.</li> <li>8. In order to prevent accidents caused by sudden start-up, when the preparatory work is finished and the sewing can be carried out, please remove the cloth guide.</li> <li>9. In order to prevent accidents caused by electric shock, please do not operate the sewing machine when the power ground wire is removed.</li> <li>10. In order to prevent accidents caused by electric shock and damage of electrical parts, please turn off the power switch before plugging in and out the power plug.</li> <li>11. In order to prevent accidents caused by damage of electrical parts, please stop the operation and unplug the power plug for safety during thunder.</li> <li>12. In order to prevent accidents caused by damage to electrical parts, condensation will occur when moving from cold places to warm places, etc., so please turn on the power after the water drops are completely dry.</li> <li>13. Because this product is a precision machine, please pay full attention to the operation, do not splash water and oil on the machine, and do not let the machine drop to impact the machine.</li> <li>14. This machine is a class A industrial machine. If this machine is used in</li> </ol>

the home environment, the phenomenon of radio interference may occur. At this time, please take appropriate measures to solve the problem of radio interference.

15. After the power switch is turned off when the stacker acts, the stacker bar acts, so please take care not to pinch fingers, etc.

16. After the power switch is turned off in the presser foot action, the presser foot action, so please pay attention not to pinch fingers, etc.

17. During the folding operation, please be careful not to let the air cylinder clamp the finger when putting the finger in the folding machine.

**\*WARNING:**

√ Improper operation of the machine may cause personal injury. Please read this instruction carefully and operate it correctly before operation.

√ Please ventilate the machine before power on.

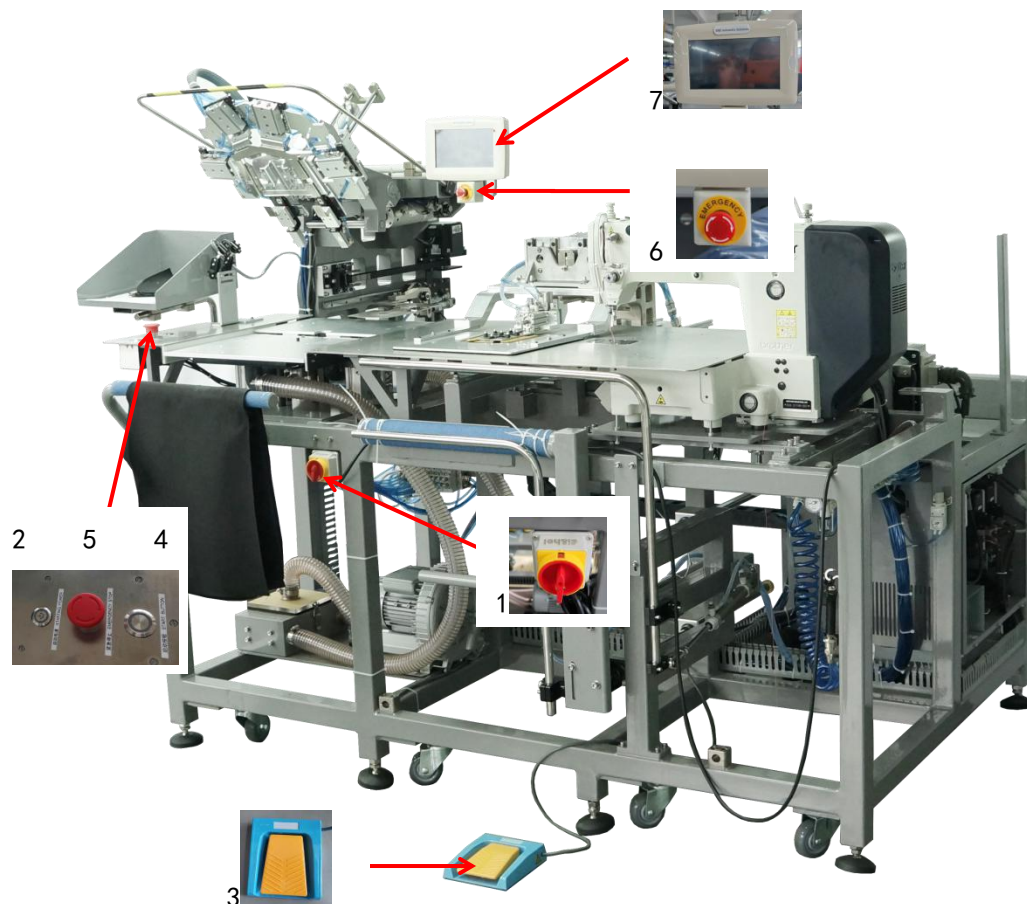
√ It is strictly prohibited to open the electric cabinet or the internal parts of the touch screen when it is powered on.

√ This machine needs to be used after being trained or under the guidance of a special person to ensure the personal safety of the user.



## 4、 BUTTON FUNCTION DESCRIPTION

### 4.1. BUTTON FUNCTION DESCRIPTION



(1) : Power switch – turn the power switch 90 ° to on, and the equipment is powered on and ventilated.

(2) : Pedal: in foot mode, the center blade extends and retracts.

(3) : Start switch – press it and the machine will sew automatically.

(4) : Pad feeding switch --- pad feeding test. Press it to control the speed of pad feeding.

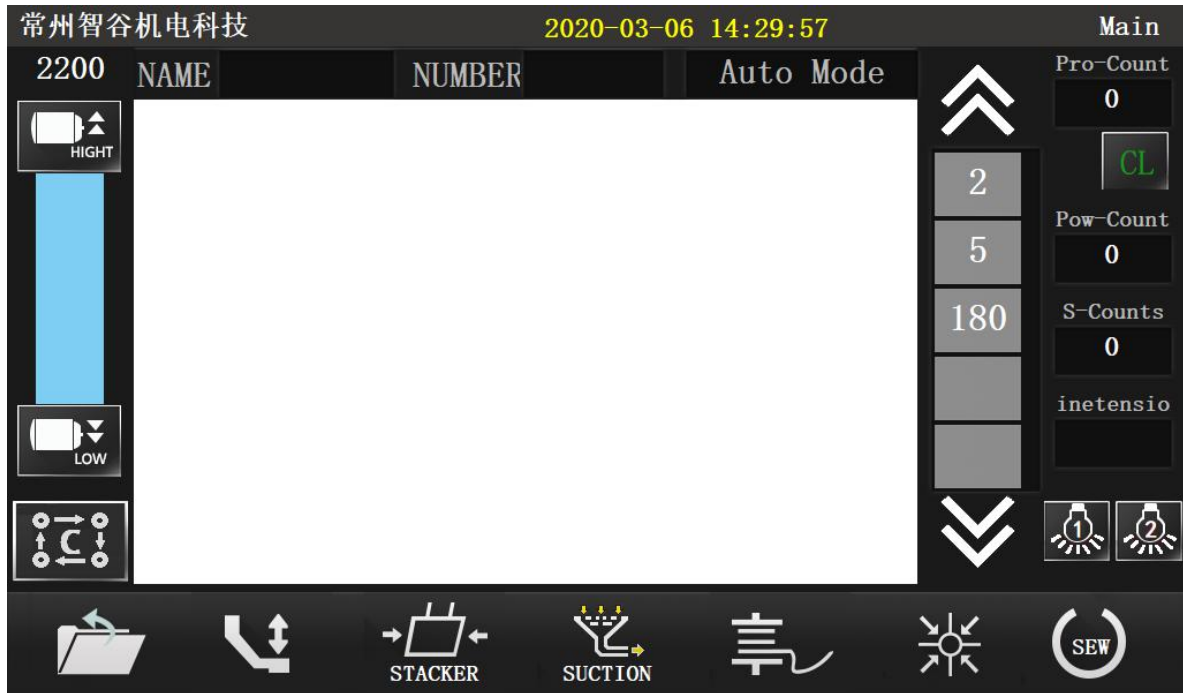
(5) : Emergency stop button (left) --- emergency stop of folding group.

Buzzer (medium) – fault alarm prompt.

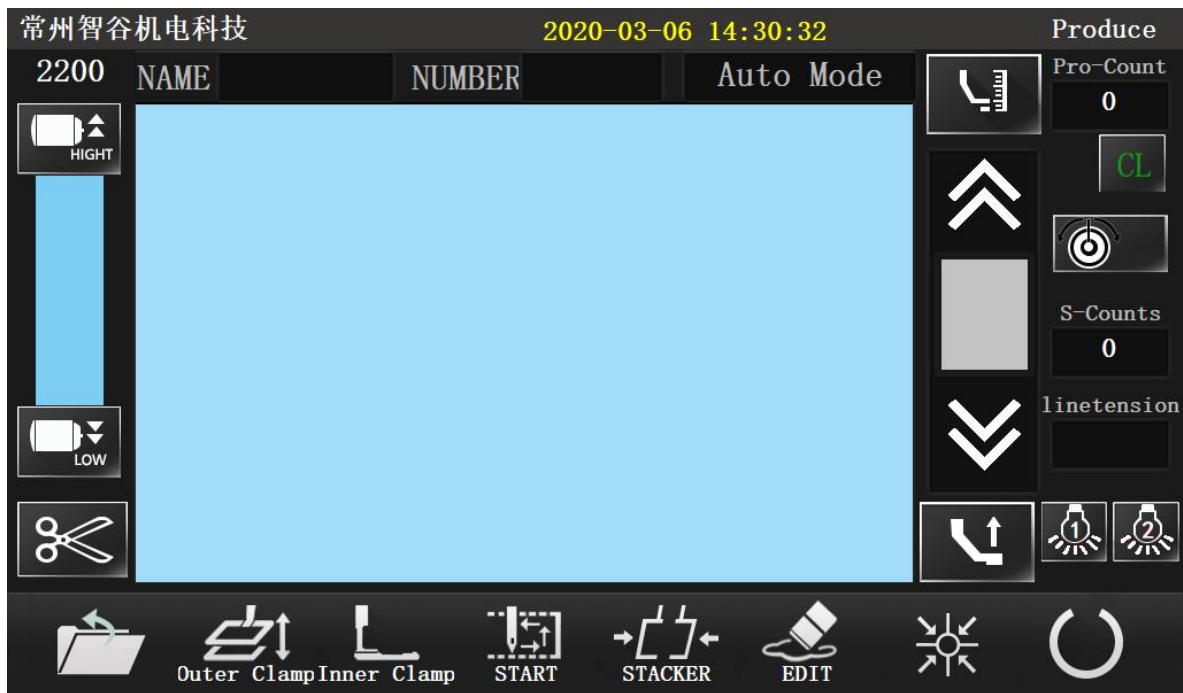
Emergency stop button (right) --- sewing emergency stop.

(6) : Touch screen – see <mb1002f full automatic denim pocket setter – interface description for details>.

a: Main interface





b: Sewing interface



## 4.2. RESET OPERATION INSTRUCTIONS

### 4.2.1 POWER ON RESET OPERATION—see 4.1

step		Key press
1	Power on	(1)
2	reset	(7) --a 
3	Switch sewing mode	(7) --a  --b

### 4.2.2 EMERGENCY STOP RESET OPERATION

Case 1: Emergency stop of the folding group, resetting steps: Turn the emergency stop switch clockwise to reset, the fabric is repositioned, and after the placement is completed, press the start switch (4).

Case 2: Sewing emergency stop, resetting steps: Turn the emergency stop switch clockwise to reset,

- (1) Continue sewing: (7) --b--  back to sewing point--  continue sewing;
- (2) Re-sew: (7) --b--  reset.

## 5、 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
  - √ Check whether the eye guard has been installed correctly

### 5.2. OPERATION PROCESS DESCRIPTION

#### 5.2.1 BOOT DEVICE

Turn the power switch 90 ° to the on position, and the equipment is powered on.

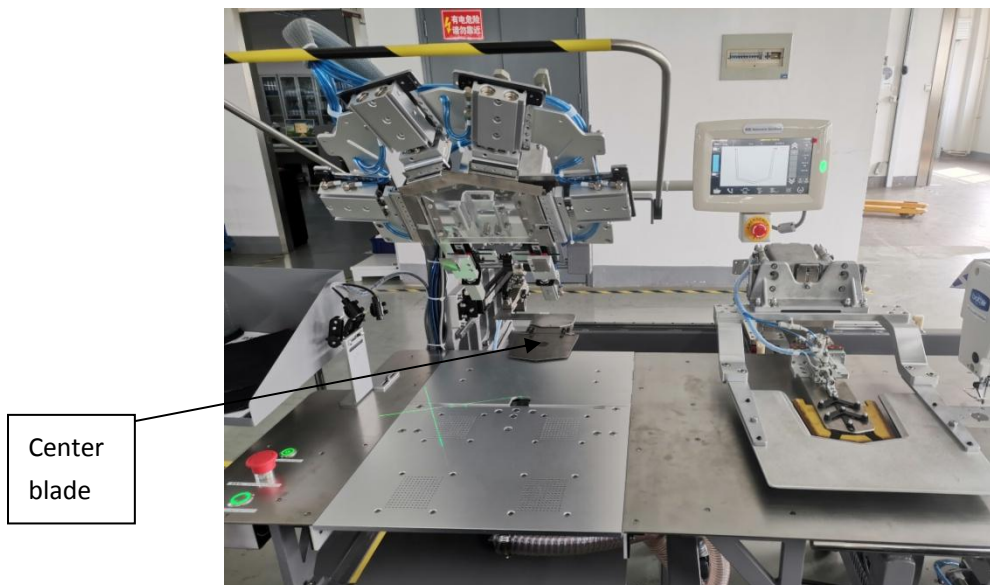


### 5.2.2 RESET OPERATION

Perform the machine power on reset operation. Please refer to:

1. Key function description -

2. Power on reset operation. The following figure shows the status of the device after the reset.



**\*NOTICE:**

**A: Pedal mode**

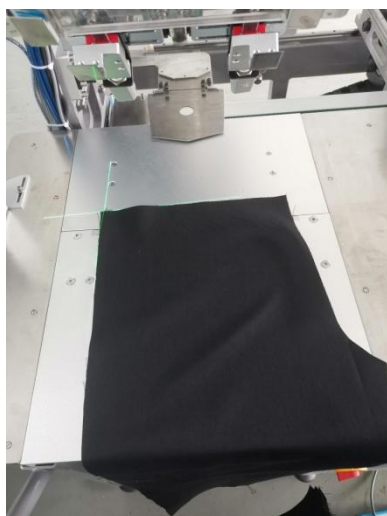
If the center blade is retracted, the machine is in pedal mode. At this time, step on the pedal continuously, extend the center blade, and open the air suction

**B: Automatic mode**

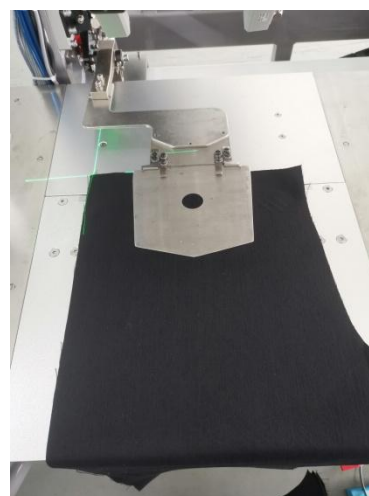
If the center blade is extended, suction is on. The machine is in automatic mode

### 5.2.3 FABRIC PLACEMENT

Place the fabric in the air suction area and align them accurately according to the laser spotlight.

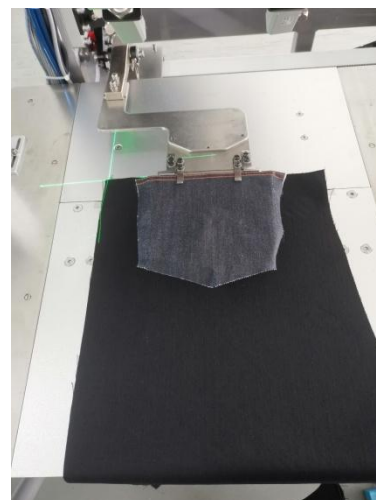
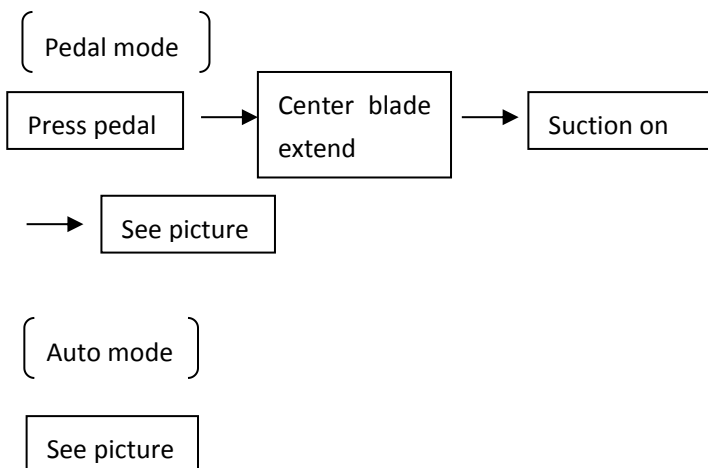


**Pedal mode**



**Automatic mode**

### 5.2.4 POCKET PLACEMENT



### 5.2.5 AUTOMATIC FOLDING AND SEWING

Press the start switch on both sides, at this time: the folding group extends and descends, the automatic folding is completed, the expansion pressing plate moves to the left to connect the material, the center blade retracts, the expansion pressing plate moves to the right to automatically sew, and the sewing is completed to automatically receive the fabric.

**\*Move the expansion pressing plate to the sewing area to the right, and then place the fabric, and operate in circle.**

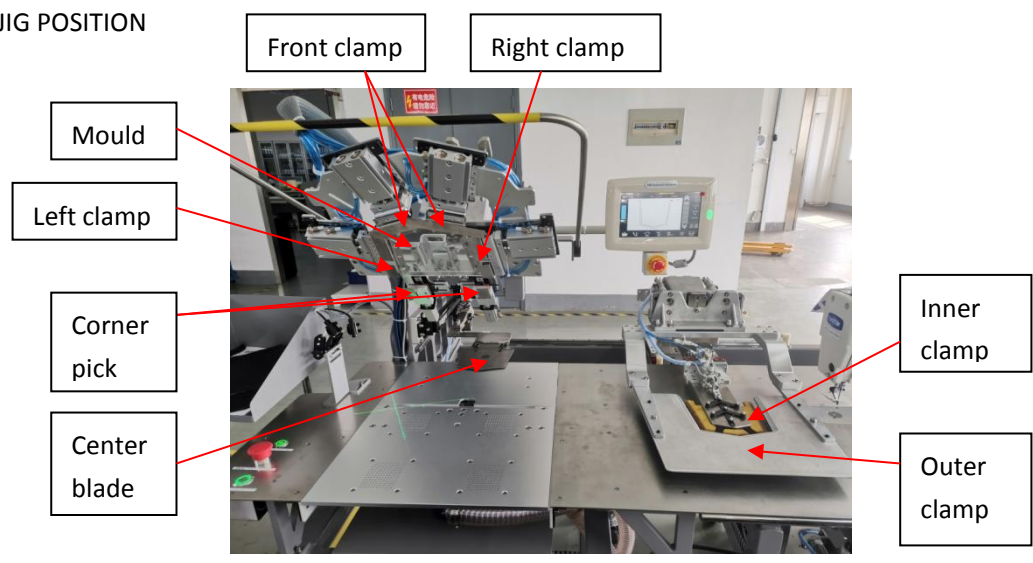
### 5.2.6 SHUTDOWN

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

## 6、DEBUGGING METHOD

### 6.1. JIG REPLACEMENT

#### 6.1.1 JIG POSITION

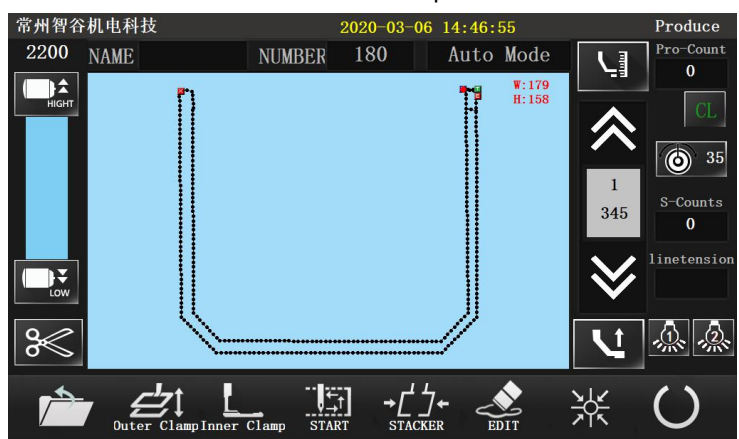


#### 6.1.2 JIG CHANGING PROCEDURE

6.1.2.1 Interface operation: Touch screen (7) --a main interface: Press to open the folder (fig 1) → Feeding (fig 2) → press to 5 Step (fig 3) . Lower the folding group onto the table to replace the mold.



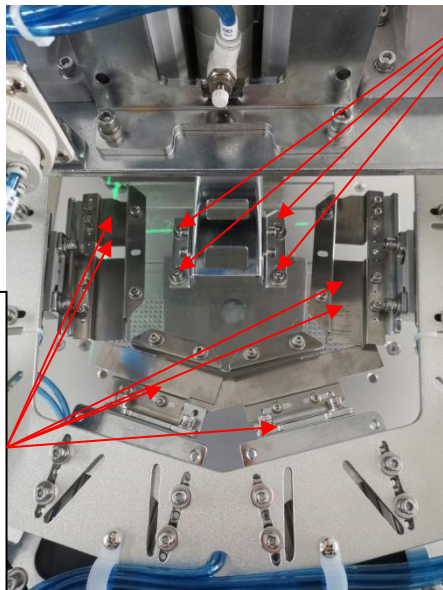
Touch screen (7) --b sewing interface: Press Outer Clamp , Lower the outer clamp onto the table to replace it. press Inner Clamp Lower the inner clamp onto the table to replace it





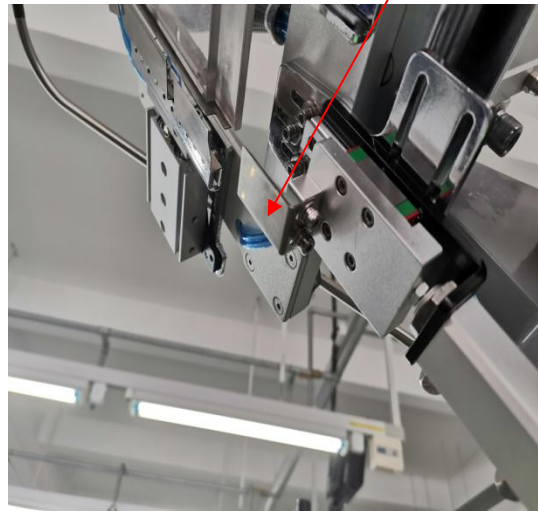
6.1.2.2 DISMANTLING MOLD

Remove the screws of the left & right and front clamps. Then replace the them



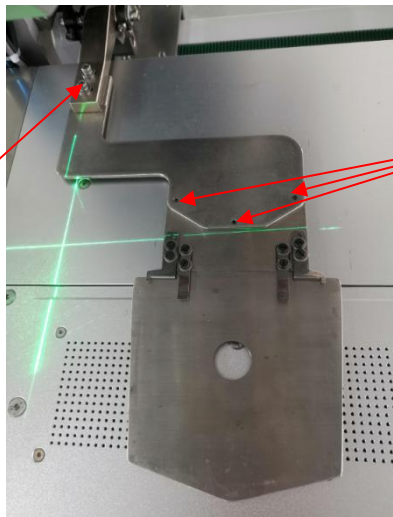
Remove the 4 mounting screws to replace the clear acrylic template

Remove the screws of the two corner picks and replace them



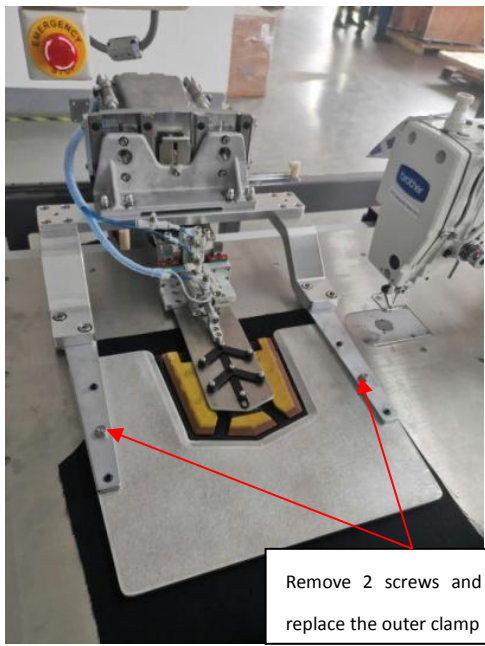
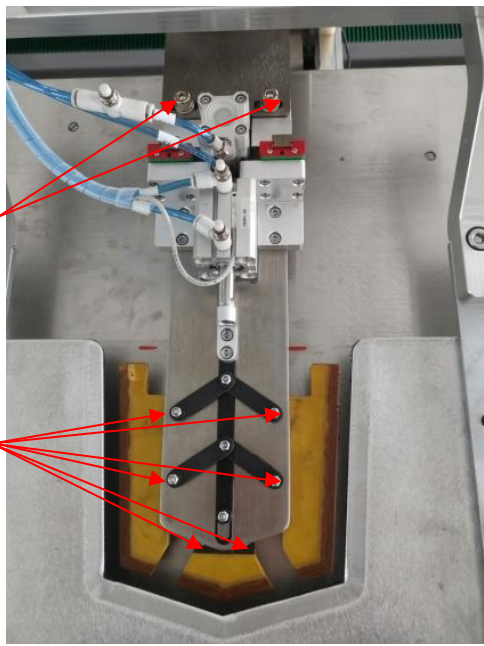
Remove 2 screws and replace the center blade base

Remove 3 screws and replace the center blade



Remove 2 screws and replace the inner clamp

Remove 6 screws and replace epoxy board

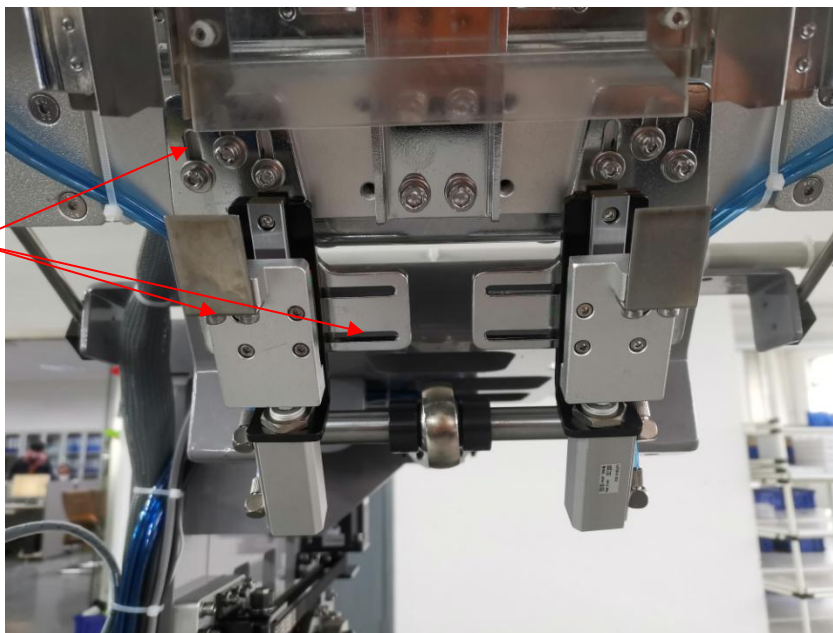


Remove 2 screws and replace the outer clamp





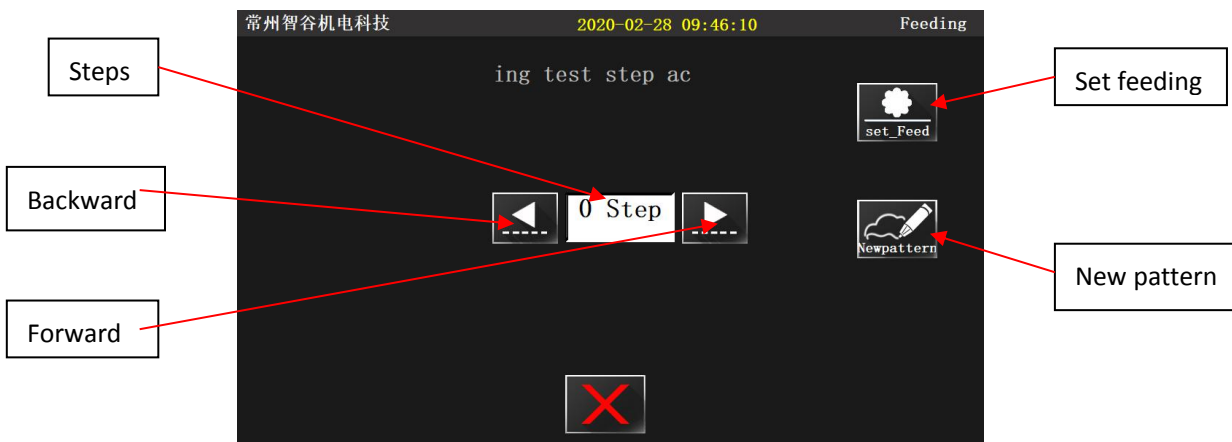
6.1.2.3 CORNER PICKS ADJUSTMENT

Adjust the position of the corner picks through 3 holes

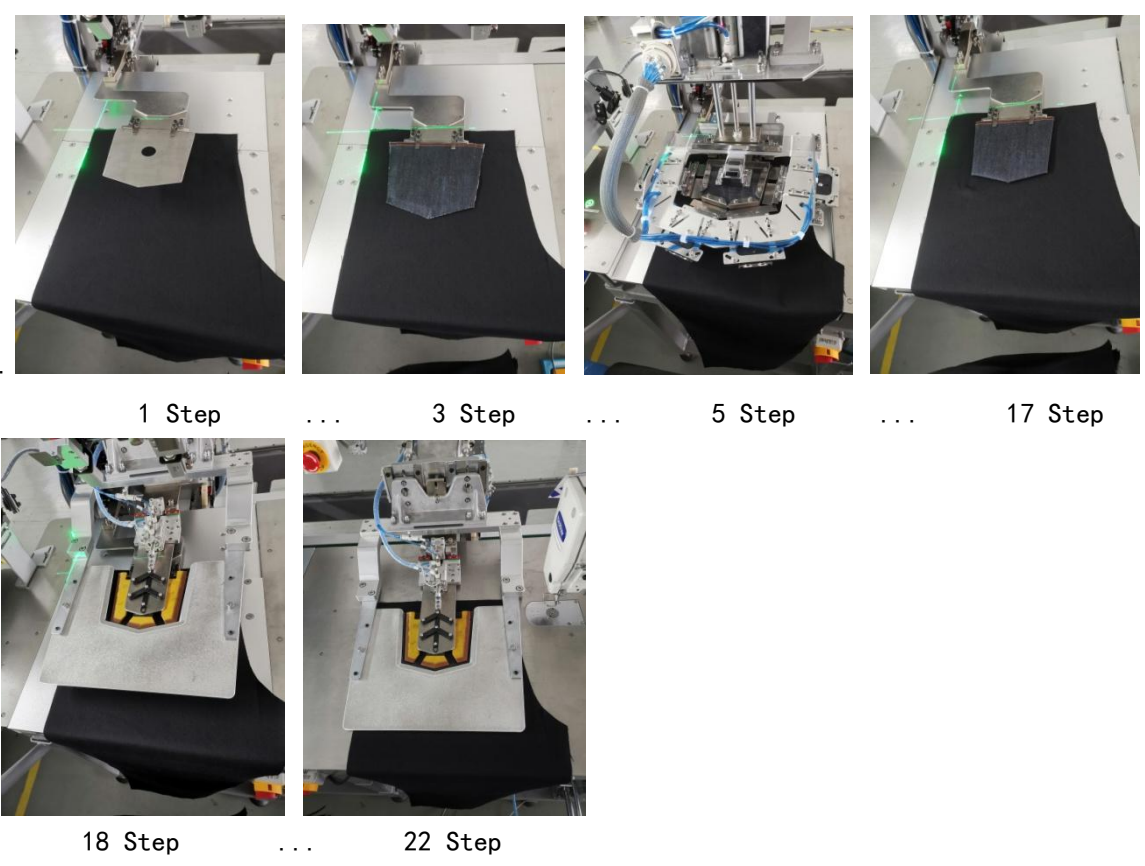


Loosen the screws, adjust the corner picks to the proper position, and tighten them.

6.1.2.4 FEEDING: Touch screen (7) --Main interface a--   Then to the following interface :



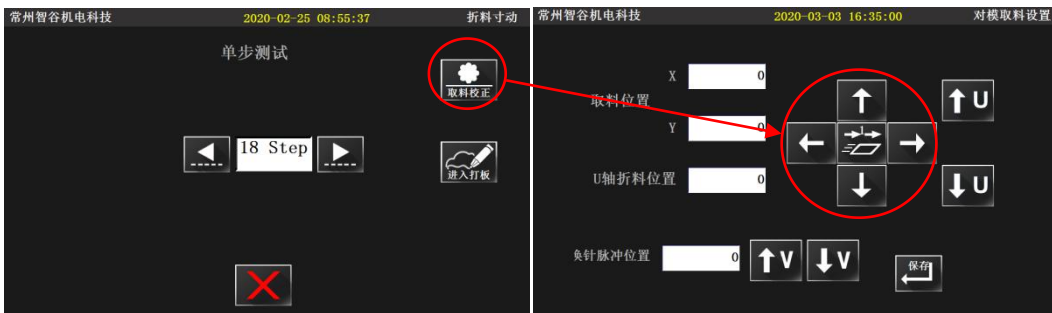
Press "Forward" and "Backward" to check the position of the jig and the effect of folding



**\*3 Step: Press “set feeding”, adjust the back and forth position of the center blade to align with the pocket.**



**\*18 Step: Press “set feed”, adjust the upper and lower left and right positions of the inner & outer plate to align with the pocket.**



**\*22 Step: Make a new pattern, For details, please refer to <mb1002C automatic denim pocket setter touch screen interface operation instructions>**



## 7、ELECTRIC WIRING

### 7.1. SIGNAL BOARD :

DESCRIPTION	PORT		WIRE QTY	STATUS		REMARK
X origin	IN1	1X3	1X3	L	OFF	
Y1 origin	IN2	1X3	1X3	H	ON	
Z origin	IN3	1X3	1X3	L	OFF	
U origin	IN4	1X3	1X3	1	OFF	
Clamp 1	IN5	1X3	1x2	1	OFF	
Twin needle 1	IN6	1X3	1X3	ON	ON	
Y2	IN7	1X3	1X3	ON	ON	
Pedal	IN8	1X3	1X3	OFF	OFF	
Twin needle 2	IN9	1X3	1X3	OFF	OFF	
Clamp 2	IN10	1X3	1x2	0	ON	
Folding group tilt down	IN11	1X3	1x2	1	OFF	
Thread break 2	IN12	1X3	1x3	0/1	OFF	
Thread break 1	IN13	1X3	1x3	0/1	ON	
Inner clamp	IN14	1X3	1x2	0	OFF	
Motor origin	IN15	1X3	1X3	1	ON	
Pressure detector	IN16	1X3	1x2	1	ON	
Spare 1	IN17	1X6		1	OFF	
Manual	IN18		1x2	1	OFF	
Stacker	IN19		1x2	1	OFF	
Spare 2	IN20	1X7		1	OFF	
Sewing stop	IN21		1x2	0	ON	
Folding stop	IN22		1x2	0	ON	
Board up	IN23	1X8	1x2	1	OFF	
Board down	IN24		1x2	0	ON	
Cycle sewing	IN25		1x2	1	OFF	
X alarm	IN26		1x2	1	OFF	
X alarm	Mainboard	JK2		1		
Y alarm	Mainboard	JK2	1X3	3		

**7.2. SOLENOID VALVE BOARD:**

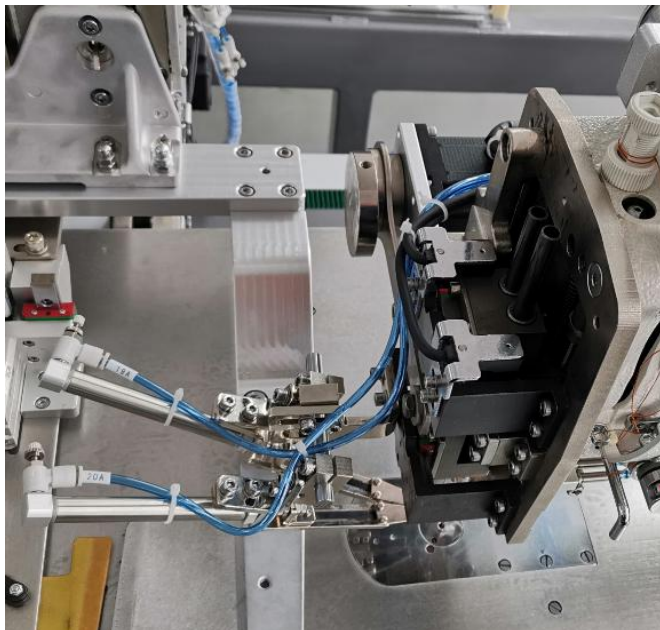
DESCRIPTION	PORT		RESET STATUS	REMARK
Stack 2	J1	Solenoid	OFF	
Pin	J2	Solenoid	OFF	
Center blade	J3	Solenoid	ON	
Folding 1	J4	Solenoid	OFF	
Folding 2	J5	Solenoid	OFF	
Folding 3	J6	Solenoid	OFF	
Folding 4	J7	Solenoid	OFF	
Inner clamp 1	J8	Solenoid	OFF	
Inner clamp 2	J9	Solenoid	OFF	
Board 1	J10	Solenoid	ON	
Board 2	J11	Solenoid	ON	
Suction 2	J12	Solenoid	ON	
Clamp 1	J13	Solenoid	ON	
Clamp 2	J14	Solenoid	OFF	
Clamp 3	J15	Solenoid	ON	
Clamp 4	J16	Solenoid	OFF	
Outer clamp	JC1	Solenoid	ON	
Stack 3	JC2	Solenoid	OFF	
Trimmer	JC3	Solenoid	OFF	
Looseness	JC4	Solenoid	OFF	
Board	JC5	Solenoid	OFF	
Stack 1	JC6	Solenoid	OFF	
Clipper	JC7	Solenoid	OFF	

### 7.3. EXPANSION BOARD ELECTROMAGNETIC VALVE

DESCRIPTION	PORT		RESET STATUS	REMARK
Suction 1	J1	Magnet		
	J2	Magnet		
Motor	J3	Magnet		
Thread clamp 1	J4	Magnet		
Thread clamp 2	J5	Magnet		
Thread wiper	J6	Magnet	OFF	
Laser 1	J7	Magnet		
Laser 2	J8	Magnet		
	J9	Solenoid		
	J10	Solenoid		
	J11	Solenoid		
	J12	Solenoid		
	J13	Solenoid		
	J14	Solenoid		
	J15	Solenoid		
	J16	Solenoid		

## 8、 Optional device

Generally, the machine is equipped with monochromatic surface sewing machine. According to the customer's requirements, it can be equipped with the two-color surface sewing switching device as shown in the figure. Note: when replacing the two color surface line switching device, the platen shall be replaced with 021002330304 double needle platen a at the same time.



**9、ACCESSORIES BOX DETAILS**


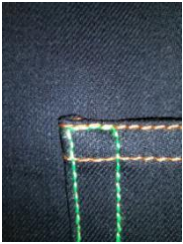

NO	ITEM	SIZE	QTY
1	《instruction manual》		1
2	《Parts Manual》		1
3	《Touch screen interface operation instructions》		1
4	Slotted screwdriver	5*300mm	1
5	Wrench	1.5--6mm	1



## 10、COMMON PROBLEMS AND SOLUTIONS

10.1. SEE THE FOLLOWING TABLE FOR COMMON PROBLEMS AND SOLUTIONS

10.2. FOR MORE QUESTIONS, SEE《MB1002C- Touch screen interface operation instructions》

Fault phenomenon	Image	Cause Analysis	Solutions
Thread break / jumper	/	1. The height of presser foot is too high; 2. Presser foot touching the clamp;	1. Adjust the height of presser foot; 2. a. Modified pattern; b. Modified clamp
Poor edge		Pattern issue	1. Modified pattern
Corner fabric exposure		Corner pick too upward	Adjust the corner pick
Fabric is not folded		Corner pick position deviation	Adjust the corner pick position

## 11、 DAILY MAINTENANCE REQUIREMENTS

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

10.2. Please refer to brother-bas-311hn for other maintenance requirements

NO.	Item	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	Center blade			√		Keep level and check screw tightening
7	Inner&outer clamp			√		Keep level and check screw tightening
8	Air tube interface			√		The air tube interface is tight without air leakage
9	Oil			√		Oil volume not lower than warning line
10	Bobbin			√		Check if the bobbin is scratched
11	Eye protector			√		Check fastening of screws
12	Sensor				√	Check if the sensitivity is accurate and if the position changes
13	Slider				√	Check slide lubrication and add lubricant if necessary
14	Electric control box				√	Cooling fan runs normally, clean up the dust in time

## 12、 KNOWLEDGE PRODUCT PROTECTION STATEMENT

MB1002F denim pocket setter was 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.