

# 全自动牛仔装袋机

Automatic High speed denim pocket setter

(MB1002F-Br-311HN)

## 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

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版本信息/ Version

2020.01

**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者转录的。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《MB1002F-使用说明书》、《MB1002F-零件手册》、《MB1002F-触摸屏界面操作说明》。**

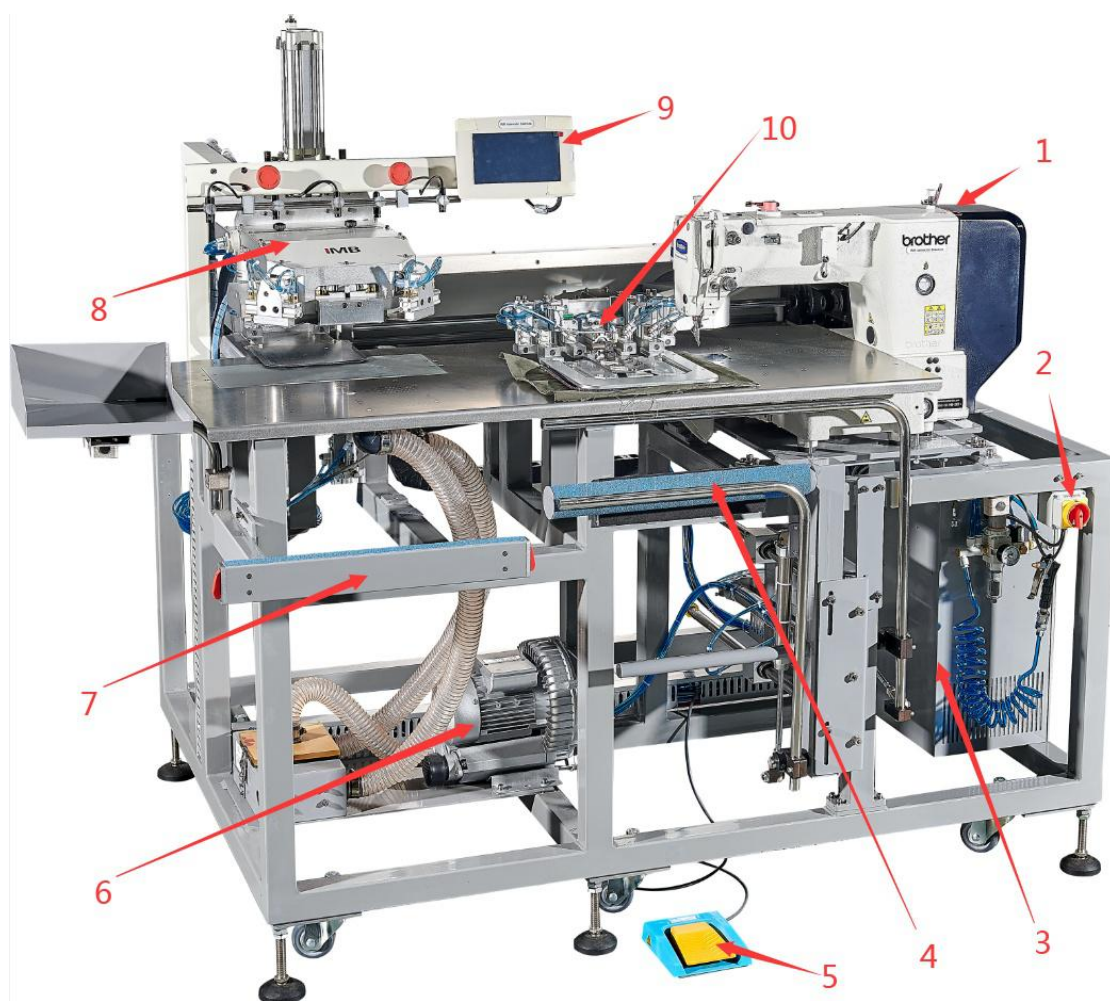
The introduction of this machine is divided into three parts. For details, please refer to 《MB1002F Operation manual》 and 《MB1002F Parts Manual》《MB1002F Touch screen interface operation instructions》

中文

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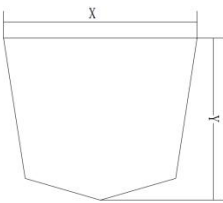
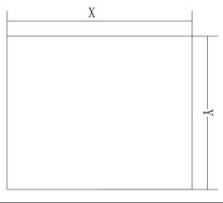
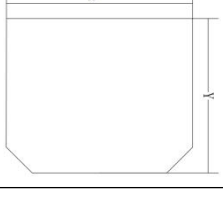
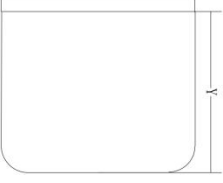
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## 一、设备基本信息



- 1: BAS-311HN 缝纫机头; 2: 电源开关; 3: 电控箱; 4: 收料装置; 5: 脚踏板;  
6: 吸风系统; 7: 放料架; 8: 折边器; 9: 触摸屏; 10: 伸缩压板

## 二、设备技术参数

| MB1002F 全自动牛仔冷折贴袋机 |            |                                                                                     |                                                                                     |
|--------------------|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1                  | 机头配置       |                                                                                     | brother-BAS-311HN                                                                   |
| 2                  | 最快缝纫速度/rpm |                                                                                     | 2800                                                                                |
| 3                  | 工作电压/V     |                                                                                     | 220                                                                                 |
| 4                  | 工作气压/Mpa   |                                                                                     | 0.5                                                                                 |
| 5                  | 主轴、X/Y 控制  |                                                                                     | AC 伺服马达                                                                             |
| 6                  | 缝制针距长度/mm  |                                                                                     | 0.05—12.7                                                                           |
| 7                  | 工作效率       |                                                                                     | 8s/片                                                                                |
| 8                  | 换模方式       |                                                                                     | 快速换模                                                                                |
| 9                  | 设备尺寸/mm    |                                                                                     | 1800L×1550W×1600H                                                                   |
| 10                 | 设备重量/kg    |                                                                                     | 477                                                                                 |
| 11                 | 伸缩模板       |                                                                                     | 小码：90-125；<br>中码：125-170；<br>大码：170-220；                                            |
| 12                 | 袋形         |  | 尺寸<br><br>小码：X:90-130；Y:90-130；<br>中码：X:130-185；Y:130-170；<br>大码：X:大于 185；Y:大于 170； |
|                    |            |  |                                                                                     |
|                    |            |  |                                                                                     |
|                    |            |  |                                                                                     |
|                    |            |                                                                                     |                                                                                     |

### 三、安全注意事项

#### 为了安全地使用自动机的注意事项

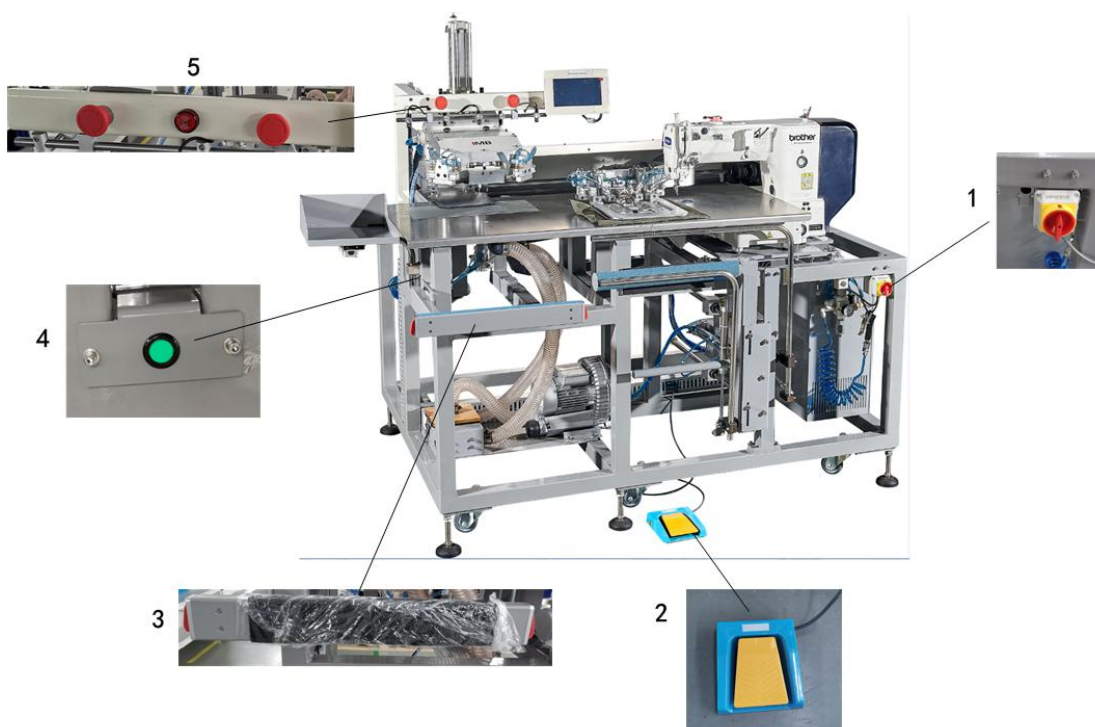
|                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>危险  | <ol style="list-style-type: none"> <li>1. 为了防止因触电造成的事故，在接通了电源的状态下，请不要打开马达电气箱的盖子，也不要触摸电气箱内的零件。</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <br>注意 | <ol style="list-style-type: none"> <li>1. 为了防止对人身伤害，请不要在卸下了皮带护罩、手指防护器等安全装置的状态下运转机器。</li> <li>2. 为了防止被卷入机器的人身事故，缝纫机运转中，请不要让手指、头发、衣服靠近皮带轮、V 型皮带、马达附近，也不要物品放到上面。</li> <li>3. 为了防止对人身伤害，打开电源时或缝纫机运转中，请不要把手指放到机针附近。</li> <li>4. 为了防止对人身伤害，缝纫机运转中，请不要把手指放到挑线杆护罩内。</li> <li>5. 缝纫机运转时，是以高速转动。为了防止伤害到手，运转中请绝对不要让手靠近切布刀。另外，更换机线时，请一定关闭电源。</li> <li>6. 为了防止对人身伤害，缝纫机上下动作时或返回原来位置时，请一定注意不要夹到手指。</li> <li>7. 缝纫机运转中，请不要切断电源或切断空气供给源。</li> <li>8. 为了防止突然的起动造成的事故，当准备工作完了，达到可以进行缝制的状态时，请卸下布料导向器。</li> <li>9. 为了防止因触电造成的事故，在卸下电源地线的状态下，请不要运转缝纫机。</li> <li>10. 为了防止因触电和电气零件损坏造成的事故，插拔电源插头时，请一定先关掉电源开关。</li> <li>11. 为了防止因电气零件损坏造成的事故，打雷时，为了安全请停止作业，并拔掉电源插头。</li> <li>12. 为了防止因电气零件损坏造成的事故，从寒冷的地方立即移动到温暖的地方等时会发生结露现象，因此请待水滴万全干燥之后再接通电源。</li> <li>13. 因为本产品属于精密机器，所以操作时请充分注意，不要把水、油溅到机器上面，也不要让机器掉落给与机器冲击。</li> <li>14. 本机器是 A 级工业用机器。在家庭环境下使用此机器的话，有可能发生电波干扰的现象。此时，请使用采取适当的措施解决电波干扰问题。</li> <li>15. 堆积器动作时关闭了电源开关之后，堆积杆动作，因此请注意不要夹到手指等。</li> <li>16. 布压脚动作中关闭了电源开关之后，布压脚动作，因此请注意不要夹到手指等。</li> <li>17. 折边机动作中，把手指放到折边机内时，请注意不要让气缸夹到手指。</li> </ol> |

#### \*重要安全信息：

- ✓ 对机器操作不当可能会导致人身伤害，请在操作前仔细阅读本说明并正确操作。
- ✓ 机器正式运行通电前，请先通气。
- ✓ 严禁在通电状态下打开电控箱或触摸屏内部零件。
- ✓ 本机器需要在接受培训后或专人指导下使用，以确保使用者的人身安全。

## 四、按键功能说明

### 4.1 .按钮功能说明



(1)：电源开关---90° 旋转电源开关至 ON，设备通电、通气。

(2)：脚踏开关---脚踏模式下，袋形板的伸出和退回。

(3)：启动开关---按下后，设备自动缝制。

(4)：送垫布开关---送垫布测试，按下后，控制垫布送量。

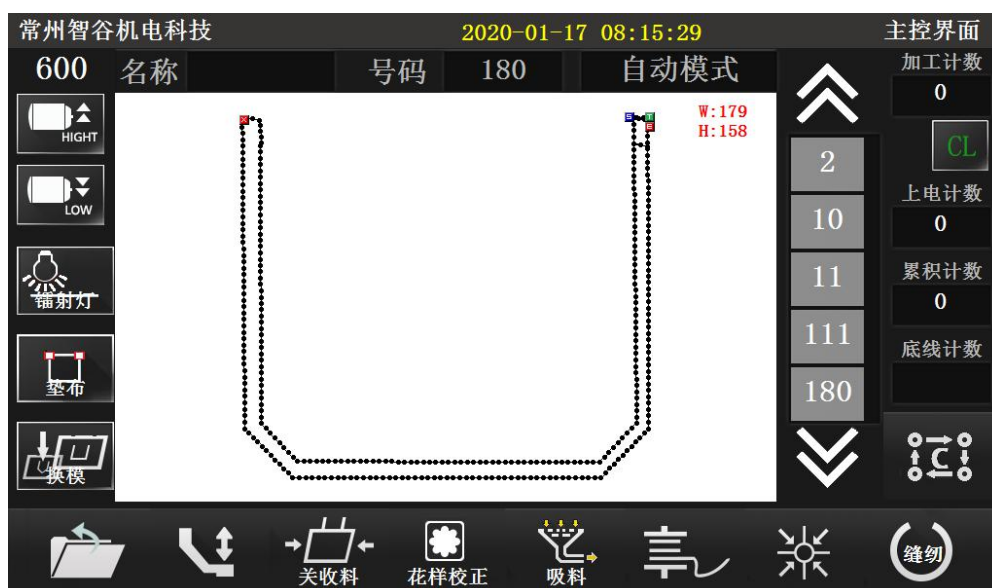
(5)：急停按钮（左）---折边器急停。

蜂鸣器（中）---故障报警提示。

急停按钮（右）---缝制急停。

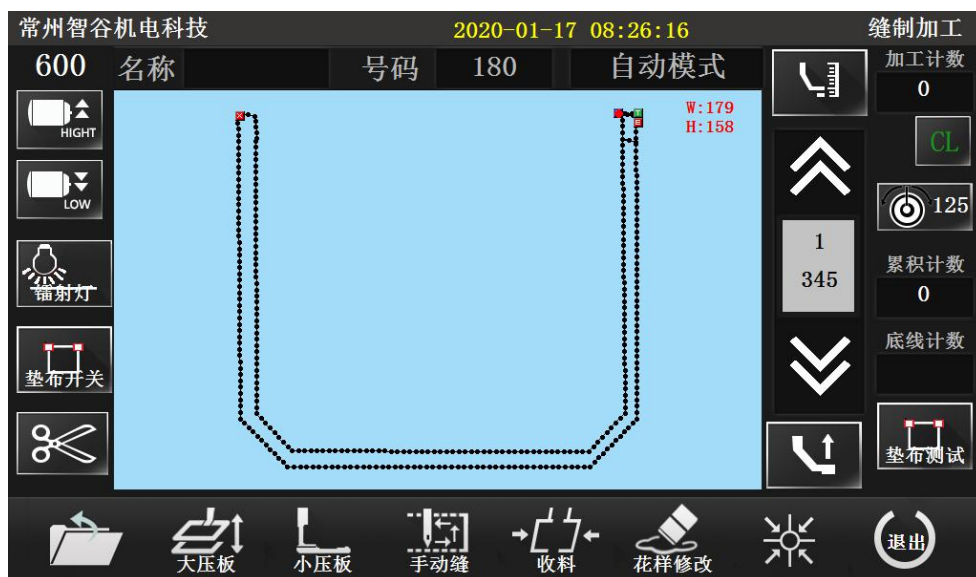
(6)：触摸屏---详见《MB1002F 全自动牛仔装袋机-界面说明》。

a: 主界面





## b: 缝制界面



## 4.2. 复位操作说明

### 4.2.1 开机复位操作

| 步骤 | 说明     | 按键方法                                                                                              |
|----|--------|---------------------------------------------------------------------------------------------------|
| 1  | 开机     | (1)                                                                                               |
| 2  | 复位     | (6) --a      |
| 3  | 切换缝纫模式 | (6) --a  --b |

### 4.2.2 急停复位操作

情况一：折边器急停，复位的步骤：急停开关顺时针旋转复位，面料重新摆放，摆放完成后按下启动开关（3）。

情况二：缝制急停，复位的步骤：急停开关顺时针旋转复位，

(1) 继续缝制：(6) --b--  后退至缝制点--  继续缝制；

(2) 重新缝制：(6) --b--  复位。

## 五、操作说明

### 5.1. 操作前准备工作

- ✓ 操作人员检查时机头需处于停止状态
- ✓ 检查压板海绵是否完好无损
- ✓ 检查车缝线是否已经正确穿好
- ✓ 检查机针是否已经安装完成
- ✓ 清理机器台面上的杂物，确保机器运行过程中不会有杂物阻碍运行
- ✓ 检查气压表压力，使其符合机器使用要求
- ✓ 检查护眼板是否已经正确安装完成

### 5.2. 操作过程说明

#### 5.2.1 启动设备

90° 旋转电源开关至 ON 位置，设备通电开机。



#### 5.2.2 复位操作

执行机器开机复位操作。请参考：1. 按键功能说明--2. 1 开机复位操作。下图为复位完成后的设备状态。



**\*模式选择：**踏板模式下，袋形板缩回状态，踩下踏板，袋形板伸出，吸风打开；  
自动模式下，袋形板伸出状态，吸风打开。

### 5.2.3 裤片摆放

将大身裤片摆放于吸风区域，按镭射灯对位准确。



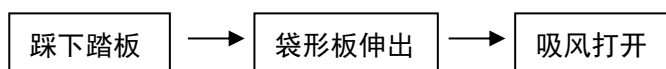
踏板模式



自动模式

### 5.2.4 口袋摆放

〔 踏板模式 〕



→ 右 图

〔 自动模式 〕

右 图



### 5.2.5 自动折料启缝

双手按下两侧启动开关，此时：折边器伸出、下降，自动折边，折边完成，伸缩压板左移接料，袋形板缩回，伸缩压板右移自动缝纫，缝纫完成自动收料。

**\*伸缩压板右移至缝制区域，即可摆放裁片，依次循环操作。**

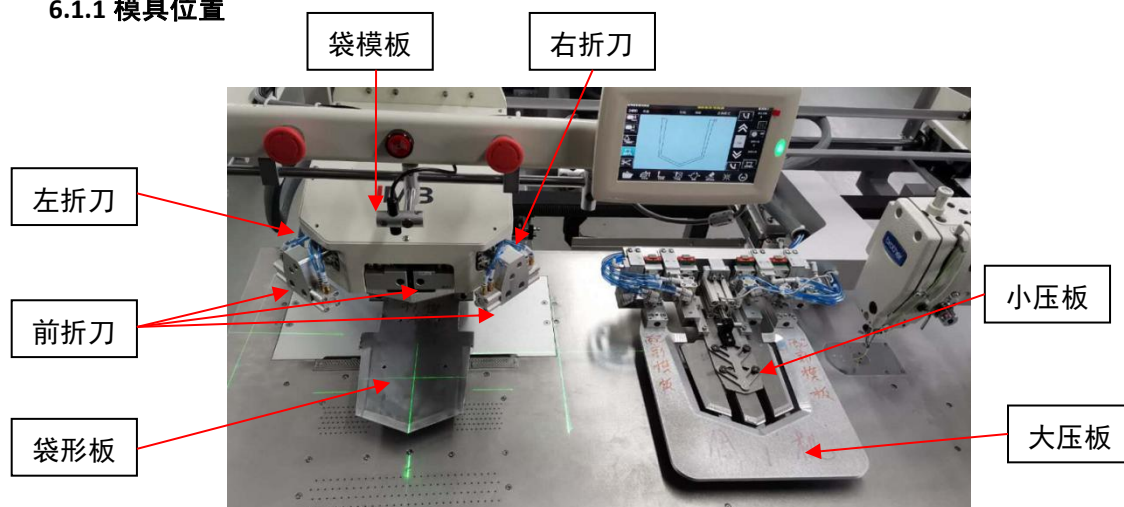
### 5.2.6 关机

操作完毕，90° 旋转电源开关至 OFF 位置，设备关机。

## 六、调试方法

### 6.1. 模具更换

#### 6.1.1 模具位置



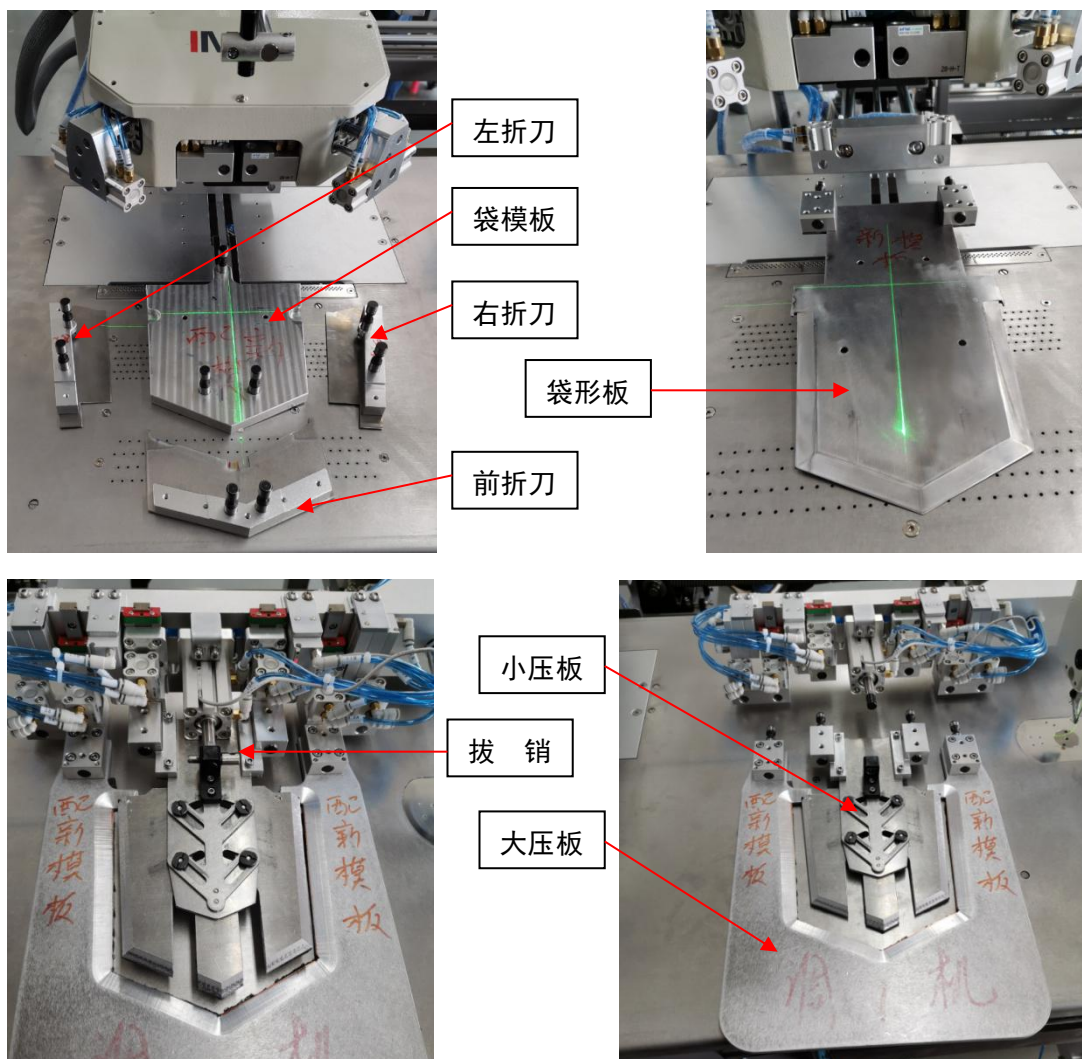
#### 6.1.2 换模步骤

6.1.2.1 界面操作：触摸屏（6）--主界面 a--后至如下界面：





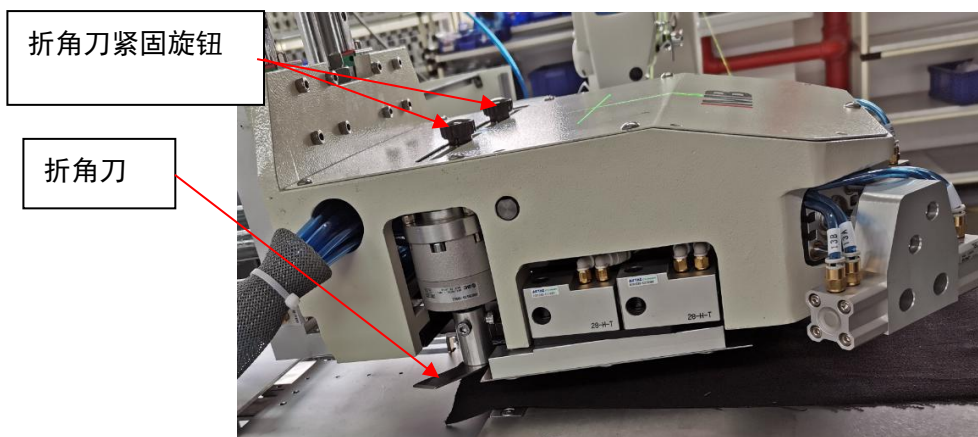
### 6.1.2.2 拆卸模具



**\*拆装折边器模具需按步骤进行：1. 拆卸前折刀—2. 拆卸左右折刀—3. 拆卸袋模板。安装顺序与拆卸顺序相反。**

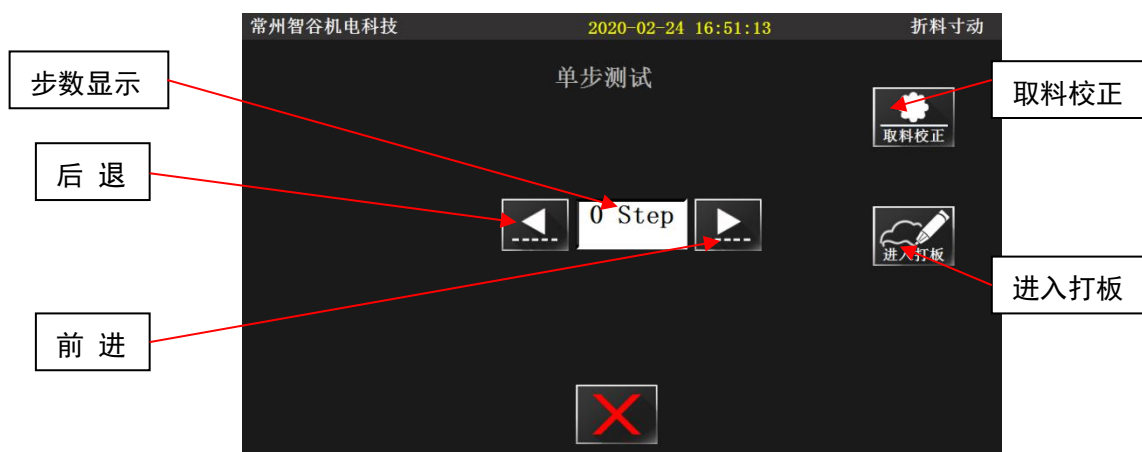
**\*拆卸小压板前，移出拔销。**

### 6.1.2.3 调整折角刀位置



松开折角刀紧固旋钮，左右调节折角刀位置至合适位置，旋紧旋钮。

6.1.2.4 取料测试：触摸屏（6）--主界面 a-- 后至如下界面：



按下“前进”、“后退”检验模板位置及折边效果



1 Step



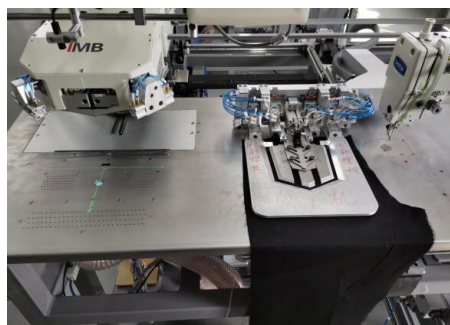
3 Step



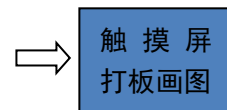
16 Step



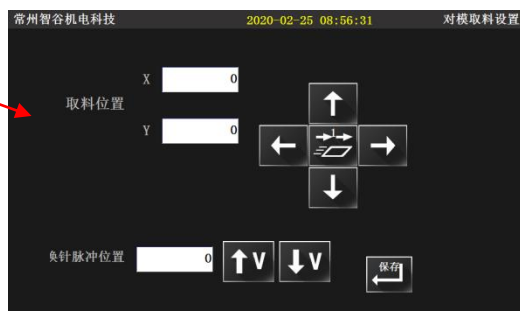
18 Step



22 Step



**\*18 Step: 按下右侧“取料校正”，调整取料压板上下左右位置与口袋对齐。**



**\*22 Step: 触摸屏打板画图, 详见《MB1002F 全自动牛仔装袋机-触摸屏界面操作说明》**



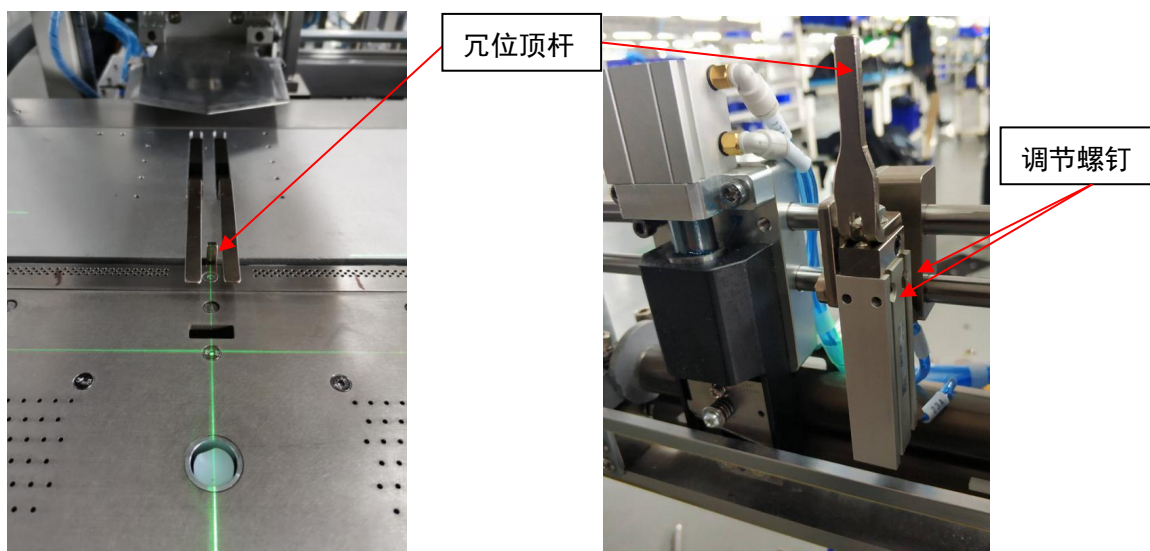
## 6.2. 冗位调整

### 6.2.1 冗位效果



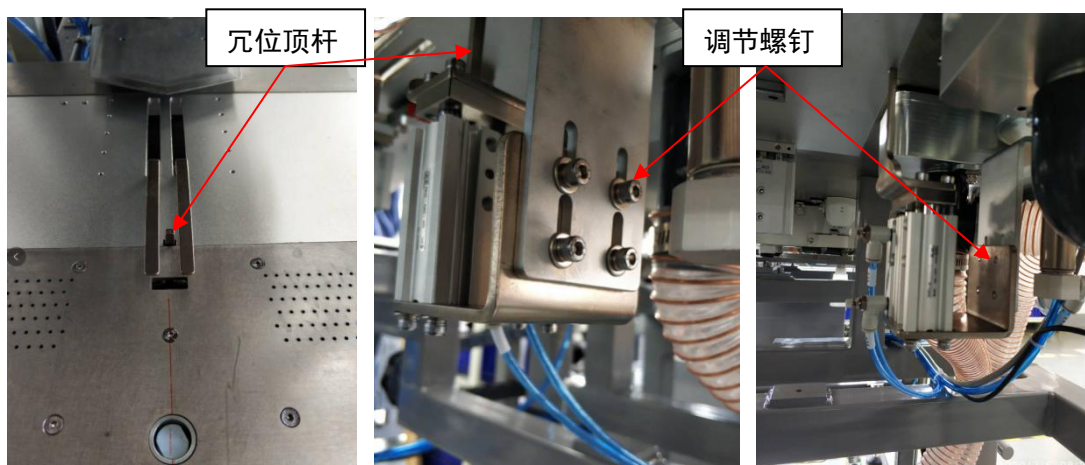
### 6.2.2 冗位大小调整: 手动调节冗位顶杆伸出高度

#### 1) 带垫布功能冗位调节



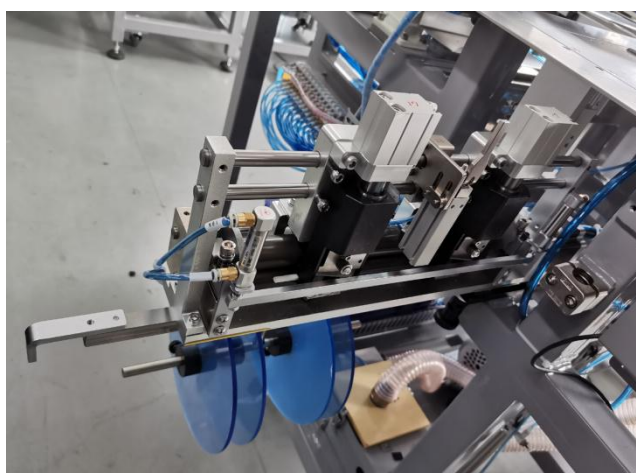
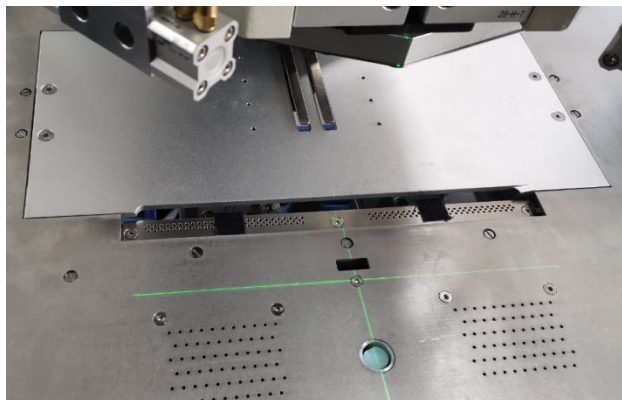


## 2) 不带垫布功能冗位调节



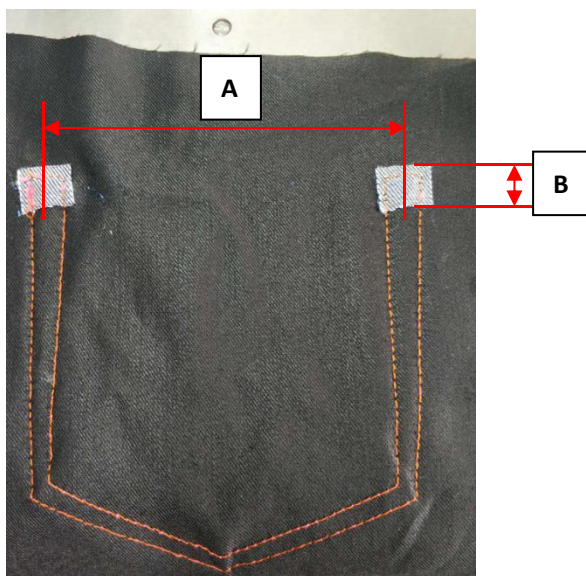
## 6.3. 送垫布调节

### 6.3.1 送垫布装置及效果



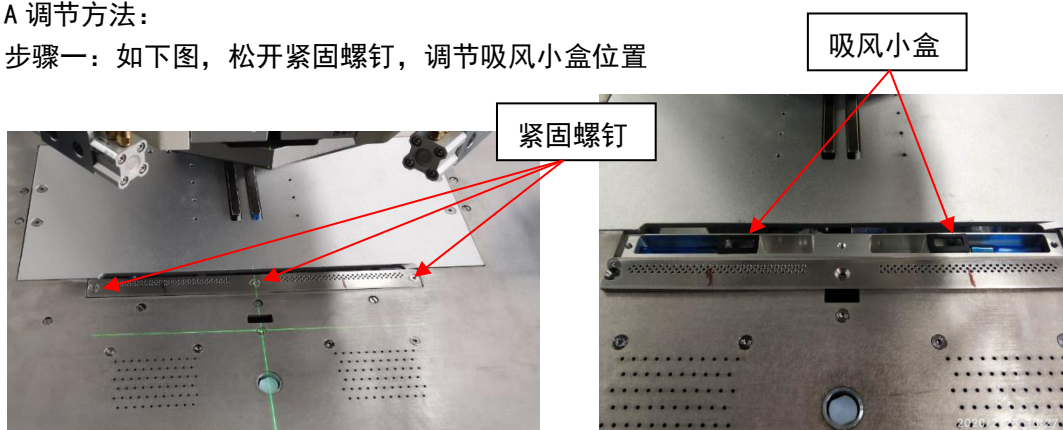


### 6.3.2 送垫布调节

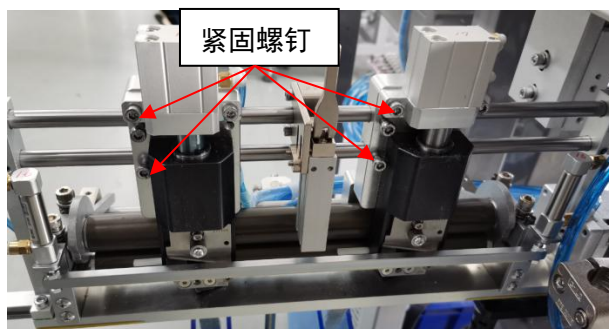


A 调节方法:

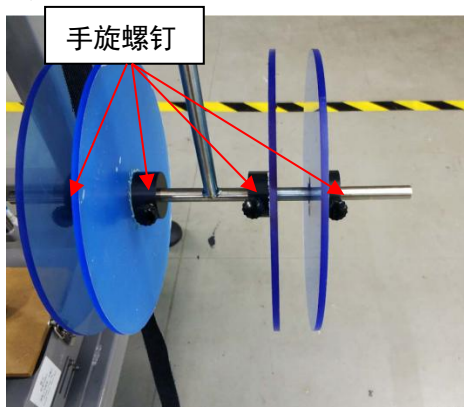
步骤一: 如下图, 松开紧固螺钉, 调节吸风小盒位置



步骤二: 如下图, 松开紧固螺钉, 调节切刀座位置



步骤三: 如下图, 松开手旋螺钉, 调节垫布盘位置

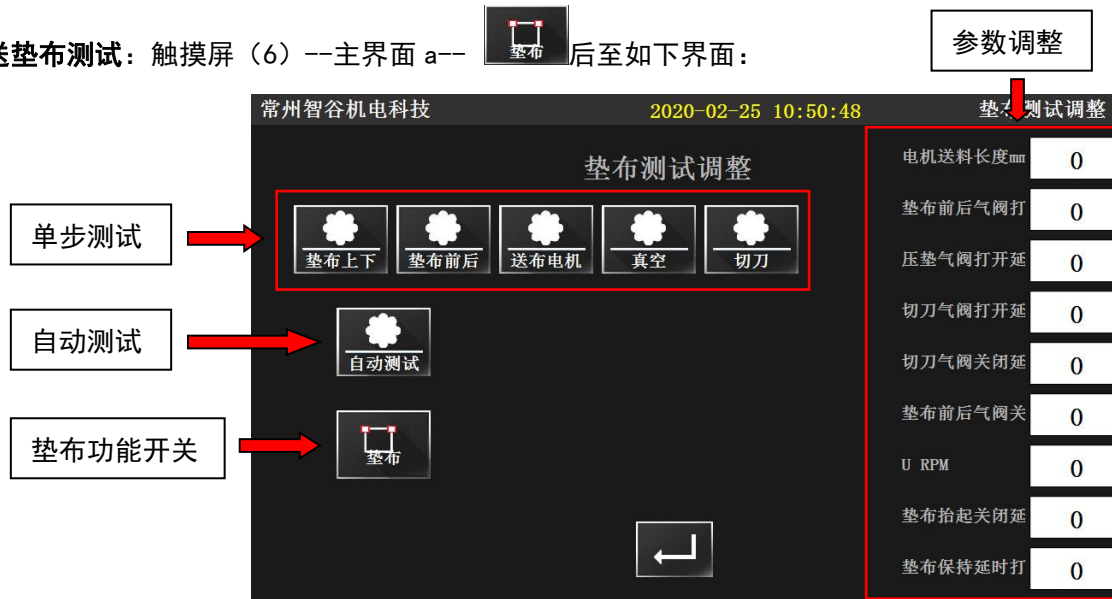


B 调节方法：触摸屏（6）--主界面 a--  后至如下界面：



点击右侧“电机送料长度”，调整 B 的数值。

6.3.3 送垫布测试：触摸屏（6）--主界面 a--  后至如下界面：



**\*单步测试：**开始时，需从左往右依次按下操作，即“垫布上下”→“垫布前后”→“送布电机”→“真空”→“切刀”；退出时，从右往左依次按下操作，其中“送布电机”、“真空”、“切刀”不执行动作，即“垫布前后”→“垫布上下”。

## 七、电气配线

### 7.1. 信号板：

| 1002F   | 插座号  | I/O  | 规格  | 回零后   | 备注  |
|---------|------|------|-----|-------|-----|
| X 原点    | IN1  | 3    | 3P  | L 灭   |     |
| Y1      | IN2  | 4    | 3P  | H 亮   |     |
| Z 原点    | IN3  | 10   | 3P  | L 灭   |     |
| 袋形板里    | IN4  | 11   | 3P  | 1 灭   |     |
| 折边器下    | IN5  | 0    | 3P  | 1 灭   |     |
| 双针后     | IN6  | 8    | 3P  | ON 亮  |     |
| Y2      | IN7  | 14   | 3P  | ON 亮  |     |
| 踏板      | IN8  | 13   | 3P  | OFF 灭 |     |
| 双针前     | IN9  | 6    | 3P  | OFF 灭 |     |
| 折边器上    | IN10 | EX0  | 3P  | 0 亮   |     |
| 折边器外    | IN11 | EX2  | 3P  | 1 灭   |     |
| 折边器里    | IN12 | 5    | 3P  | 0/1 灭 |     |
| 袋形板外    | IN13 | 15   | 3P  | 0/1 亮 |     |
| 压脚到位检测  | IN14 | EX3  | 3P  | 0 灭   |     |
| V 原点    | IN15 | EX4  | 3P  | 1 亮   |     |
| 气压检测    | IN16 | 12   | 3P  | 1 亮   |     |
| 折料启动    | IN17 | AR9  | 6P  | 1 灭   |     |
| 大压板上    | IN18 | AR10 |     | 0 亮   |     |
| 大压板下    | IN19 | AR12 |     | 1 灭   |     |
| 伸缩板到位   | IN20 | AR28 | 7P  | 1 灭   |     |
| 缝制急停    | IN21 | EX1  |     | 0 亮   |     |
| 折料急停    | IN22 | EX6  |     | 0 亮   |     |
| 勿用      | IN23 | EX5  | 8P  |       |     |
| 勿用      | IN24 | EX8  |     |       |     |
| 勿用      | IN25 | EX7  |     |       |     |
| 勿用      | IN26 |      |     |       |     |
| X 轴报警   | 主板   | 7    | JK2 | 1     | 1X3 |
| Y 轴报警   | 主板   | 9    | JK2 | 3     |     |
| 断线检测 1  | 主板   | EX5  | J6  | 4     | 1*6 |
| 断线检测 2  | 主板   | EX8  | J6  | 5     | 1*6 |
| Z 轴故障报警 | 主板   | EX7  | J6  | 6     | 1*6 |
|         |      |      |     |       |     |

## 7.2. 电磁阀板：

| 1002F | 端口号 | 回零后状态 |
|-------|-----|-------|
| 收料 2  | J1  | 关     |
| 顶柱    | J2  | 关     |
| 袋形进出  | J3  | 关     |
| 折料 1  | J4  | 关     |
| 折料 2  | J5  | 关     |
| 折料 3  | J6  | 关     |
| 折料 4  | J7  | 关     |
| 小压板抬放 | J8  | 开     |
| 小压板伸缩 | J9  | 关     |
| 整体抬放  | J10 | 关     |
| 收料 3  | J11 | 关     |
| 吸风 1  | J12 | 关     |
| 辅助压料  | J13 | 关     |
| 折边器进出 | J14 | 关     |
| 备用    | J15 | 关     |
| 折边器抬放 | J16 | 关     |
| 大压板   | M1  | 开     |
| 下吸合磁铁 | M2  | 关     |
| 剪线    | M3  | 关     |
| 夹线    | M4  | 关     |
| 小平台   | M5  | 关     |
| 夹线 2  | M6  | 关     |
| 冷却机针  | M7  | 关     |

### 7.3.扩展板-电磁铁电磁阀

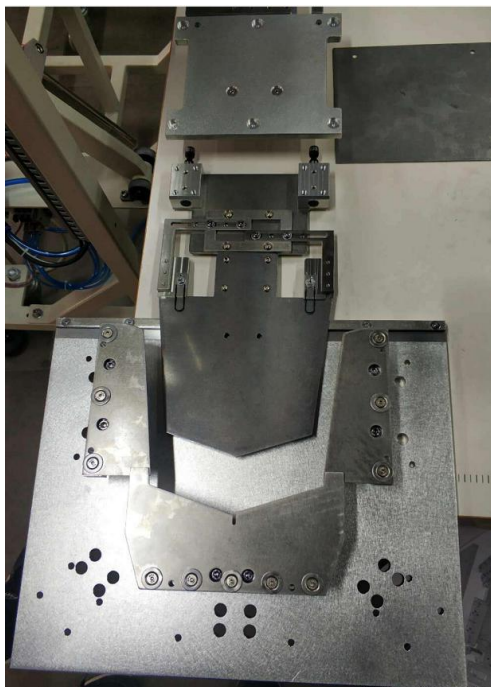
| 1002F | 端口号 | 性质  | 备注   |
|-------|-----|-----|------|
| 收料 1  | Y1  | 电磁阀 | 备用   |
| 关机    | Y2  | 电磁阀 | 备用   |
| 吸风电机  | Y3  | 电磁阀 |      |
| 止线器 1 | Y4  | 电磁阀 | 双针   |
| 止线器 2 | Y5  | 电磁阀 | 双针   |
| 扫线    | Y6  | 电磁阀 | 双针   |
| 镭射灯 1 | Y7  | 电磁阀 |      |
| 镭射灯 2 | Y8  | 电磁阀 |      |
| 换模 1  | Y9  | 电磁阀 | 折边器中 |
| 换模 2  | Y10 | 电磁阀 | 折边器左 |
| 换模 3  | Y11 | 电磁阀 | 折边器右 |
| 换模 4  | Y12 | 电磁阀 | 袋板压框 |
|       | Y13 | 电磁阀 |      |
|       | Y14 | 电磁阀 |      |
|       | Y15 | 电磁阀 |      |
|       | Y16 | 电磁阀 |      |



## 八、选配装置

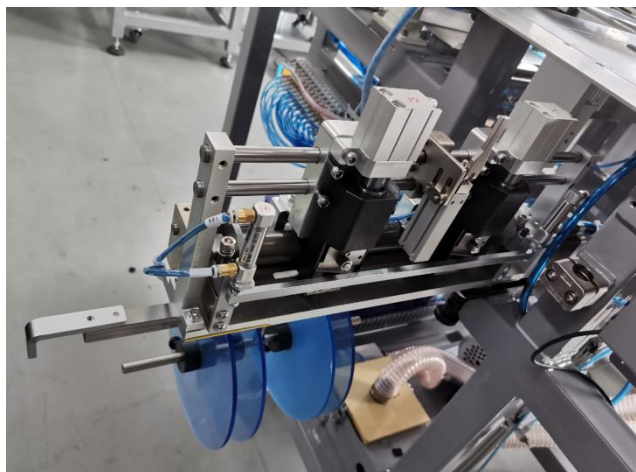
8.1. 简易模具：成本低廉；模具制作简单。

清单明细详见《MB1002F 全自动牛仔装袋机-零件手册》



8.2. 送垫布装置：口袋套结处增加垫布加固。

清单明细详见《MB1002F 全自动牛仔装袋机-零件手册》



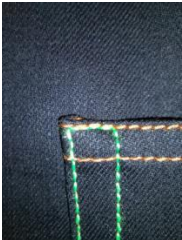
## 九、附件箱明细

| 序号<br>Serial<br>Number | 物料代码<br>Figure Number | 物料名称<br>Name | 数量<br>Number | 备注<br>Remarks |
|------------------------|-----------------------|--------------|--------------|---------------|
| 1                      |                       | 线架           | 1            | 机头原配件         |
| 2                      |                       | 机头说明书        | 1            | 机头原配件         |
| 3                      |                       | 机油           | 1            | 机头原配件         |
| 4                      |                       | 线架说明书        | 1            | 机头原配件         |
| 5                      |                       | 锁芯           | 4            | 机头原配件         |
| 6                      |                       | 机针 1 包       | 1            | 机头原配件         |
| 7                      | 02100220500300        | 线架衬套         | 1            |               |
| 8                      |                       | 大一字螺丝刀       | 1            |               |
| 9                      |                       | 小一字螺丝刀       | 1            |               |
| 10                     |                       | 扳手一套         | 1            |               |
| 11                     |                       | 小压板组件        | 2 套          |               |
|                        |                       |              |              |               |
|                        |                       |              |              |               |
|                        |                       |              |              |               |
|                        |                       |              |              |               |
|                        |                       |              |              |               |
|                        |                       |              |              |               |
|                        |                       |              |              |               |
|                        |                       |              |              |               |

## 十、常见问题及解决方法

10.1. 常见问题及解决方法详见下表

10.2. 其他更多页面问题，请见《MB1002F-触摸屏界面操作说明》

| 现象     | 图片                                                                                  | 原因分析                           | 解决措施                               |
|--------|-------------------------------------------------------------------------------------|--------------------------------|------------------------------------|
| 断线/跳线  | /                                                                                   | 1. 小压脚高度过高;<br>2. 小压脚碰到压框;     | 1. 调整小压脚高度;<br>2. a. 修改花样;b. 调整压框。 |
| 止口大小不良 |    | 花样问题                           | 1. 修改花样                            |
| 折角上露   |    | 左右折刀过上                         | 左右折刀向下适当调整                         |
| 未折角    |   | 折角刀位置偏差                        | 调整折角刀位置（上下、左右）                     |
| 垫布未送出  |  | 1. 垫布装置辊轮未送出;<br>2. 垫布装置吸风未吸住; | 1. 检查辊轮是否卡住;<br>2. 检查吸风小盒位置。       |

## 十一、日常保养要求

11.1. 设备保养清单及要求详见下表

11.2. 其他更多关于机头的保养要求请参照 Brother-BAS-311HN 说明书

| 序号 | 项目   | 时间 |    |    |    | 要点描述               |
|----|------|----|----|----|----|--------------------|
|    |      | 每天 | 每周 | 每月 | 半年 |                    |
| 1  | 清理灰尘 | √  |    |    |    | 清除设备表面及零部件灰尘       |
| 2  | 清理油污 |    | √  |    |    | 清理台板、针板、梭芯油污       |
| 3  | 风机滤芯 |    | √  |    |    | 清理风机滤芯灰尘           |
| 4  | 压板海绵 |    | √  |    |    | 检测海绵是否磨损变形，有损需更换   |
| 5  | 折边器  |    |    | √  |    | 保持水平，并检查螺钉紧固       |
| 6  | 袋形板  |    |    | √  |    | 保持水平，并检查螺钉紧固       |
| 7  | 压框装置 |    |    | √  |    | 保持水平，并检查螺钉紧固       |
| 8  | 气管接口 |    |    | √  |    | 气管接口紧密，不漏气         |
| 9  | 机头油量 |    |    | √  |    | 机头油量不低于警戒线         |
| 10 | 梭芯   |    |    | √  |    | 检查机头梭芯是否刮花         |
| 11 | 护眼罩  |    |    | √  |    | 检查螺钉紧固             |
| 12 | 感应器  |    |    |    | √  | 检查灵敏度是否准确，位置是否变化   |
| 13 | 滑动件  |    |    |    | √  | 检查滑动件润滑，如有需要则添加润滑剂 |
| 14 | 电控箱  |    |    |    | √  | 散热风扇运转正常，及时清理灰尘    |

## 十二、知识产品保护声明

MB1002F 牛仔装袋机时常州智谷机电科技有限公司独立自主完成的设计成果。该成果知识产权属于常州智谷机电科技有限公司，受国家知识产权相关法律法规的保护。未经权利人书面许可，不得实施该成果的专利技术，不得复制、销售或通过信息网络传播和该成果有关的信息。任何违法侵权行为，常州智谷机电科技有限公司将依法追究其法律责任。

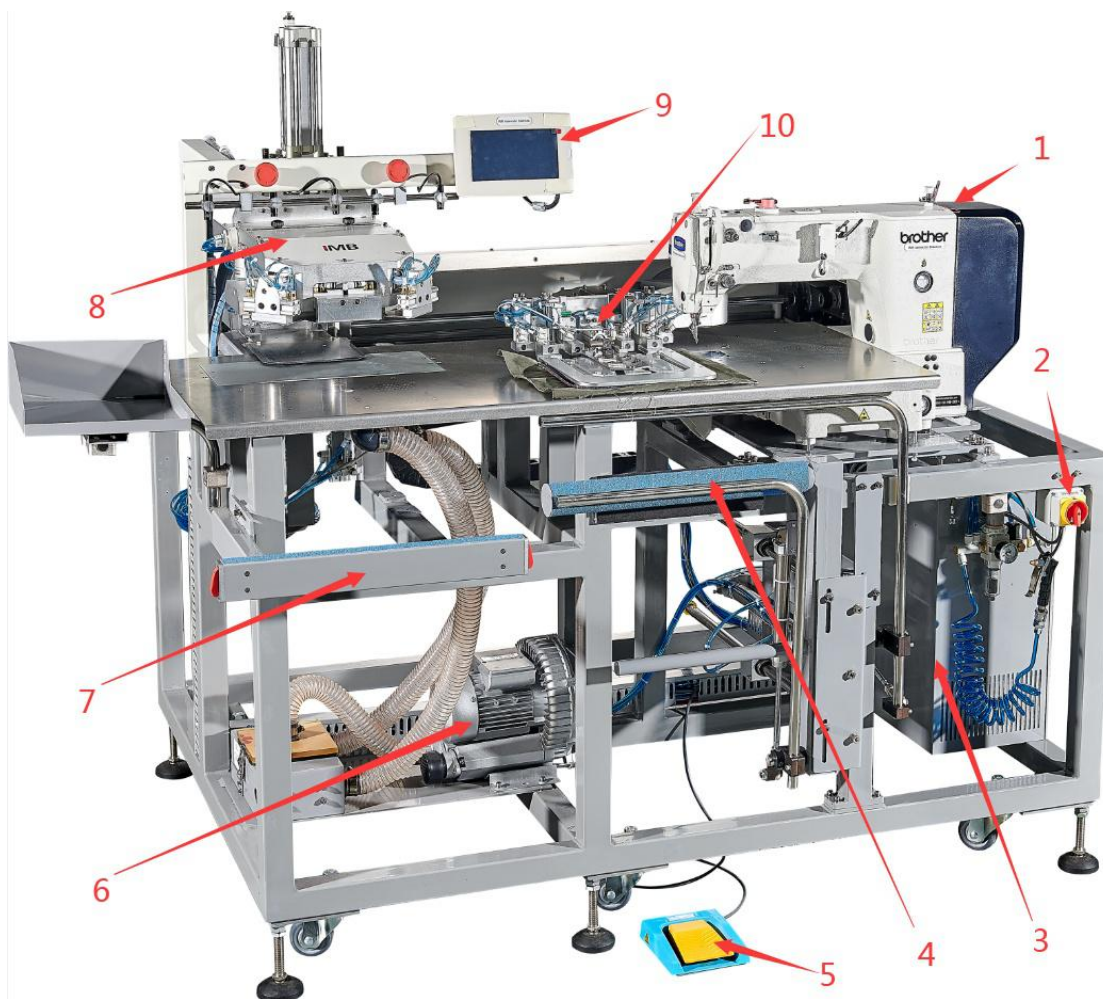


**ENGLISH**

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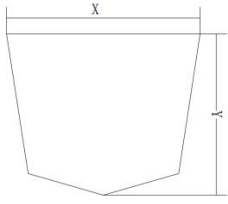
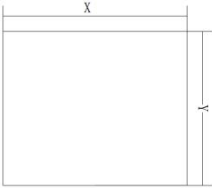
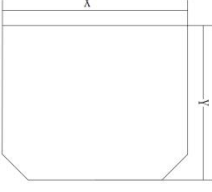
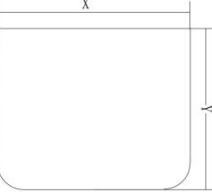
|                                                 |    |
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## 1、ESSENTIAL INFORMATION



1: BAS-311HN Sewing head; 2: Power switch; 3: Control box; 4: Stacker; 5: Pedal; 6: Suction system; 7: Loader; 8: Folding group; 9: Touch screen; 10: Inner clamp

## 2、SPECIFICATIONS

| MB1002F High speed pocket for jeans |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 servo motor                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 6                                   | Stitch length/mm     | 0.05--12.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 7                                   | Performance features | 8s/pc                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 8                                   | Size/mm              | 1800L×1550W×1600H                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 9                                   | Weight/kg            | 477                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 10                                  | Inner clamp size     | S: 90-125;<br>M: 125-170;<br>L: 170-220;                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 11                                  | Pocket shape         | <div>     </div> <div> <p>Size</p> <p>S: X:90-130; Y:90-130<br/> M:X:130-185Y:130-170;<br/> L: X:大于 185; Y:大于 170;</p> </div> |

### 3. SAFETY PRECAUTIONS

#### Precautions 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 motor electrical box or touch the parts in the electrical box when the power is turned on.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <br>注意 | <p>1. In order to prevent personal injury, please do not operate the machine with the belt guard, finger protector and other safety devices removed</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>7. When the sewing machine is running, please do not cut off the power or air supply.</p> <p>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.</p> <p>9. In order to prevent accidents caused by electric shock, please do not operate the sewing machine when the power ground wire is removed.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>14. This machine is a class A industrial machine. If this machine is used in the home environment, the phenomenon of radio interference may occur. At this</p> |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>time, please take appropriate measures to solve the problem of radio interference.</p> <p>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.</p> <p>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.</p> <p>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.</p> |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

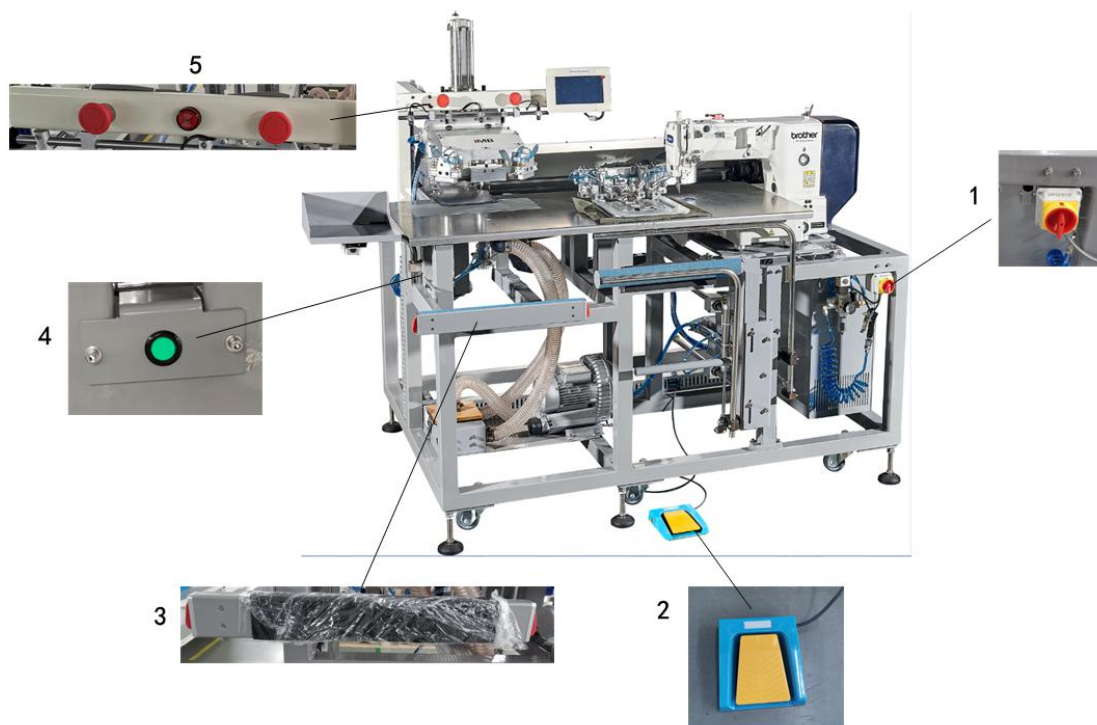
### **\*WARNING:**

- ✓ 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 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.

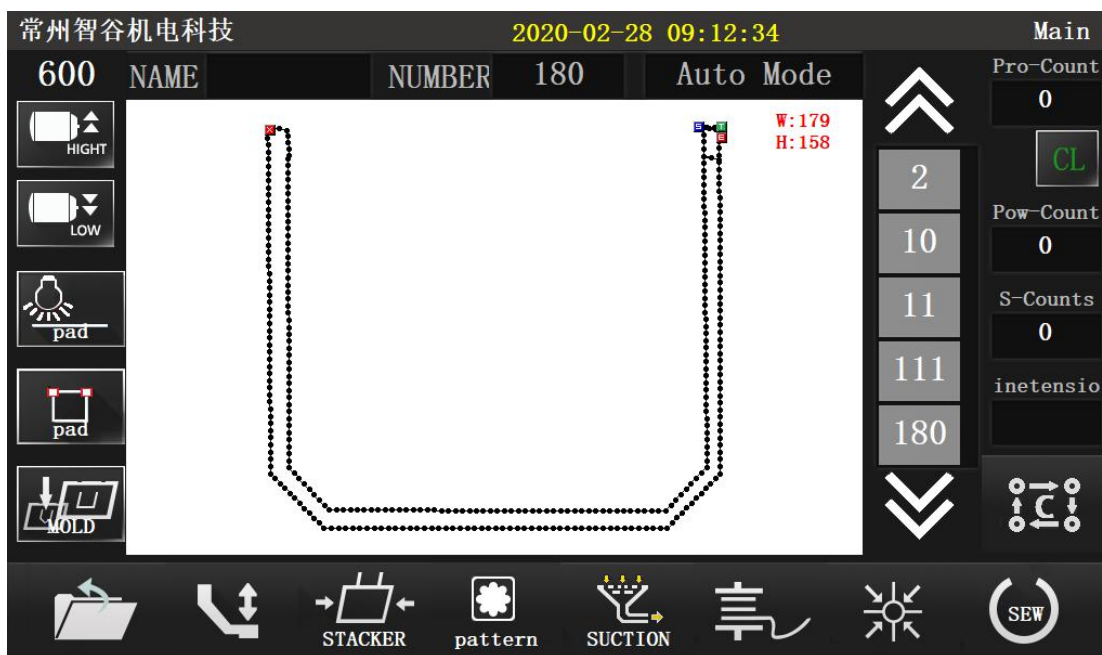
(5) : Emergency stop button (left) --- emergency stop of folding group.

Buzzer (medium) - fault alarm prompt.

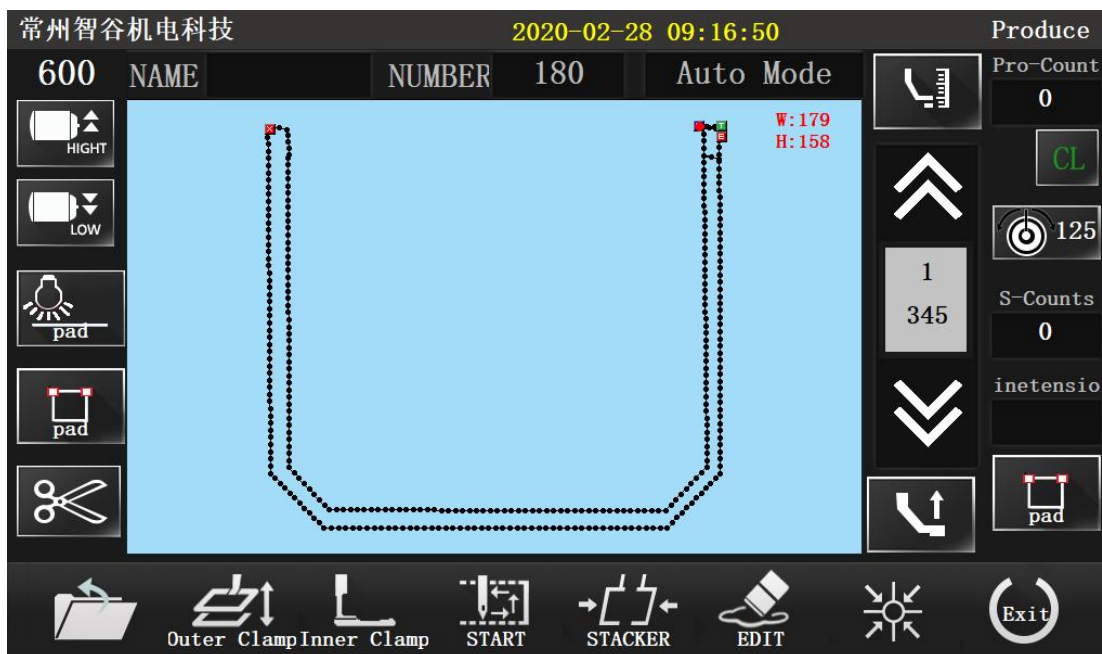
Emergency stop button (right) --- sewing emergency stop.

(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              | (6) --a      |
| 3    | Switch sewing mode | (6) --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 (3).

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

(1) Continue sewing: (6) --b--  back to sewing point--  continue sewing;

(2) Re-sew: (6) --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 -- 2.1 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.

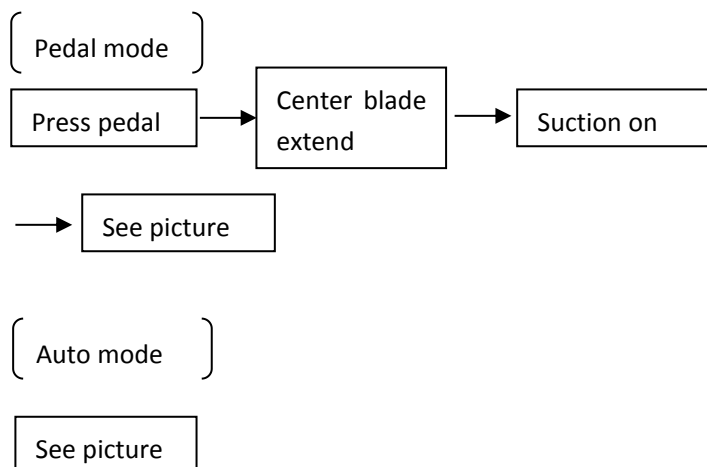


Pedal mode



Automatic mode

#### 5.2.4 Place Pocket



#### 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

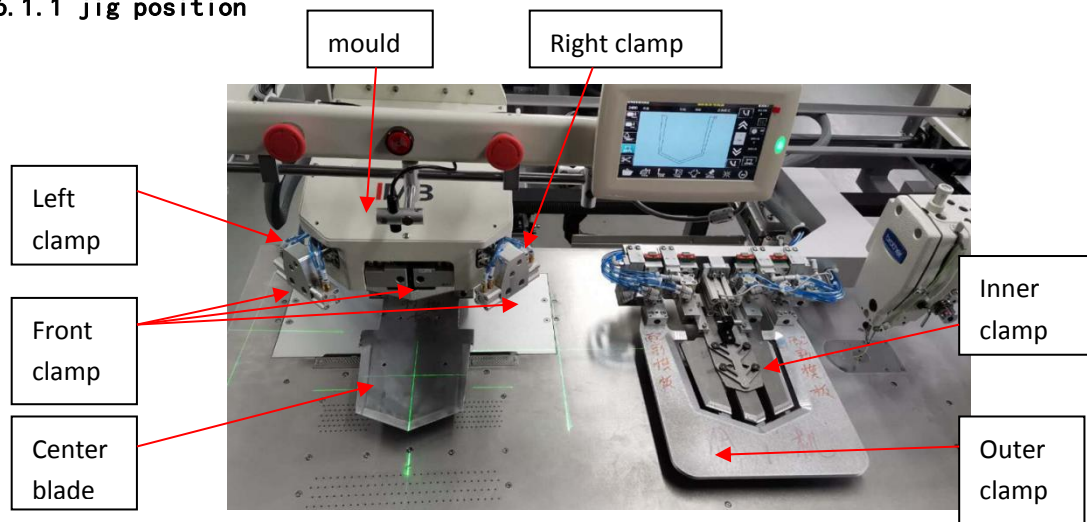
After operation, turn the power switch 90 ° to the off position, and the equipment will be shut down



## 6、Debugging method

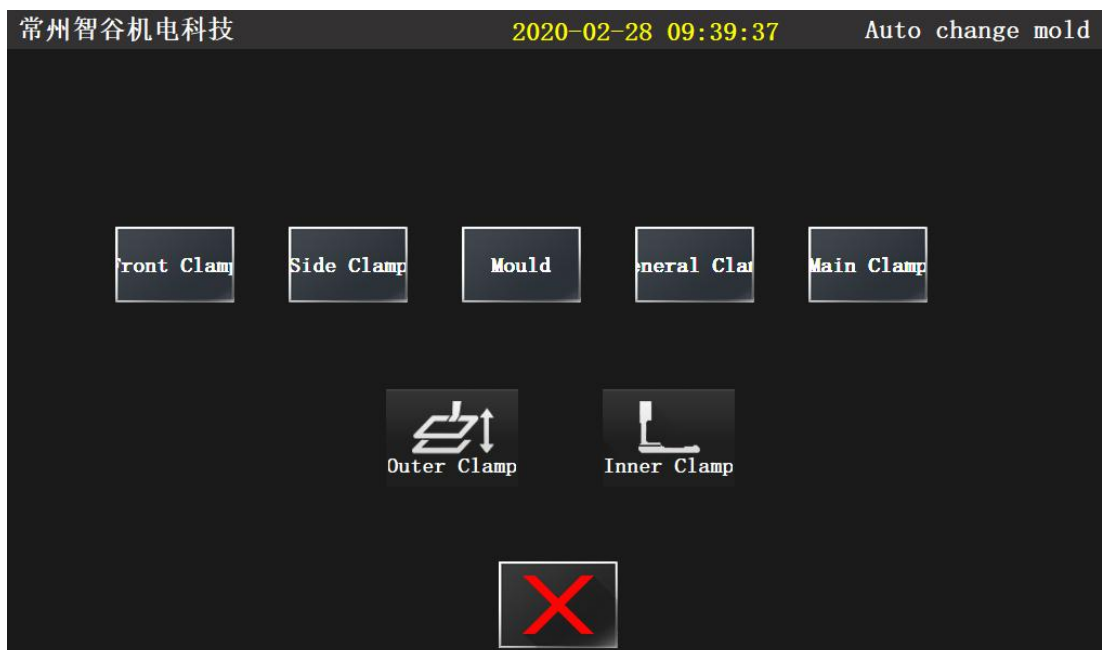
### 6.1. JIG REPLACEMENT

#### 6.1.1 jig position

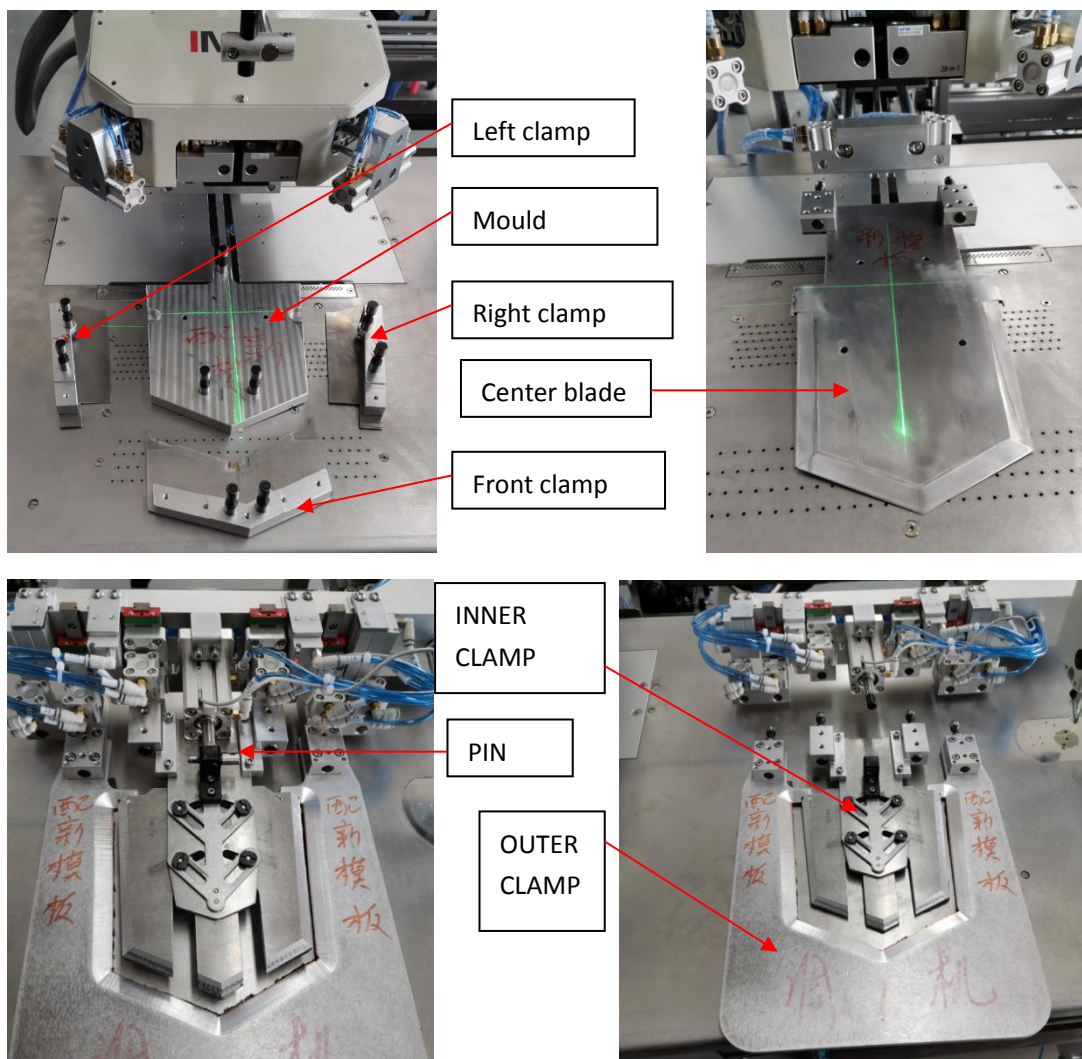


#### 6.1.2 Jig changing procedure

6.1.2.1 Interface operation: touch screen (6) -- Main interface (a) --  Then go to the following interface:

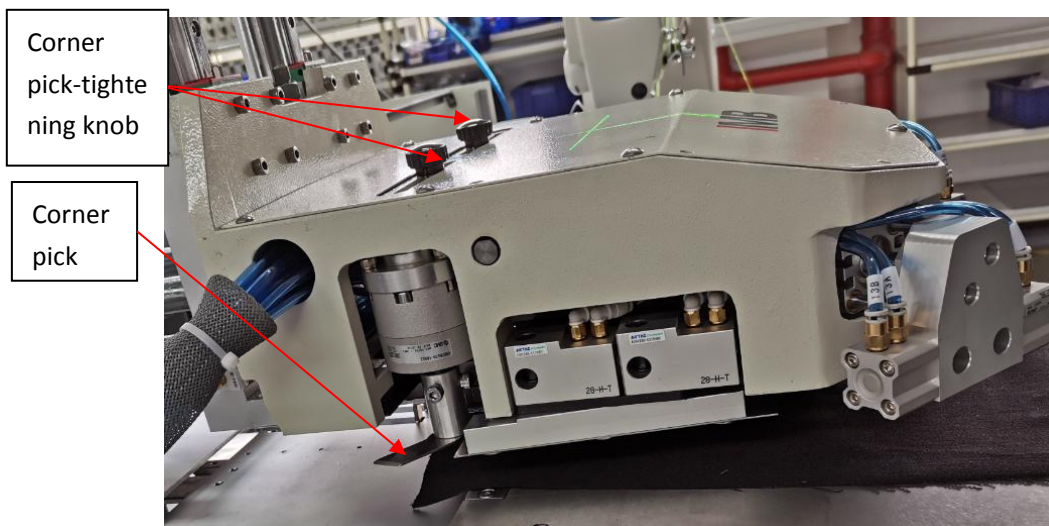


### 6.1.2.2 Dismantling jig



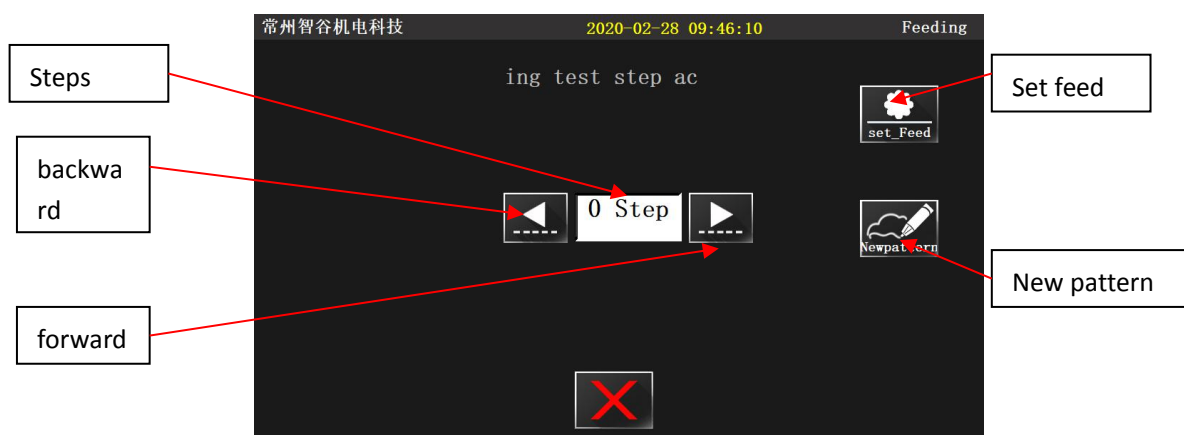
- \* Removal and installation of the folding group shall be carried out according to the steps:  
1.remove the front clamp--2.remove the left &right clamp--3.remove the mould. The installation sequence is the reverse of the removal sequence.
- \* Remove the pin before removing the inner clamp.

### 6.1.2.3 Adjust the position of corner picks



Loosen the corner pick tightening knob, adjust the corner pick position to the right and left, and tighten the knob

6.1.2.4 Feeding test: touch screen (6) --Main a-- -- Feeding Then to the following interface:



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



1 Step

...



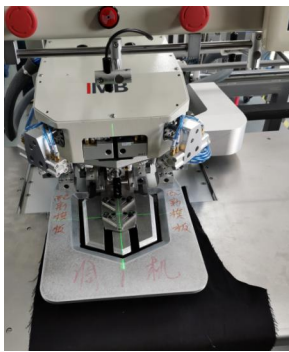
3 Step

...



16 Step

...



18 Step

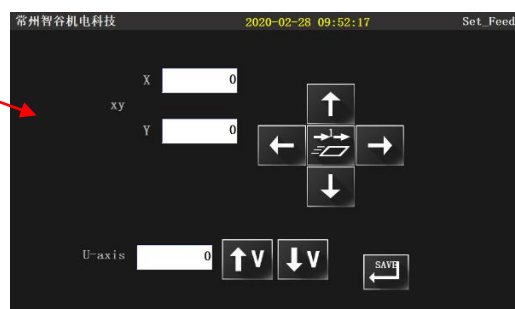
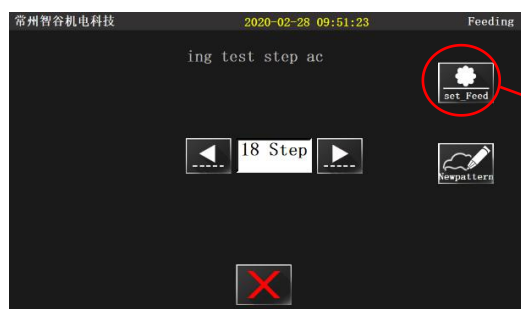


22 Step

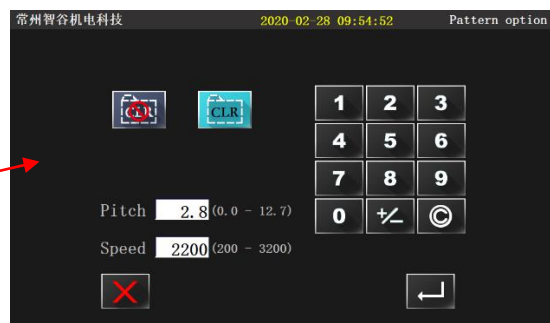
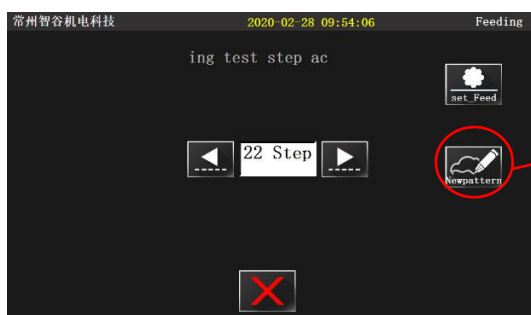
Make a New pattern

#### NOTE:

**\*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 <mb1002f full automatic denim pocket setter touch screen interface operation instructions>



## 6.2. Fullness adjustment

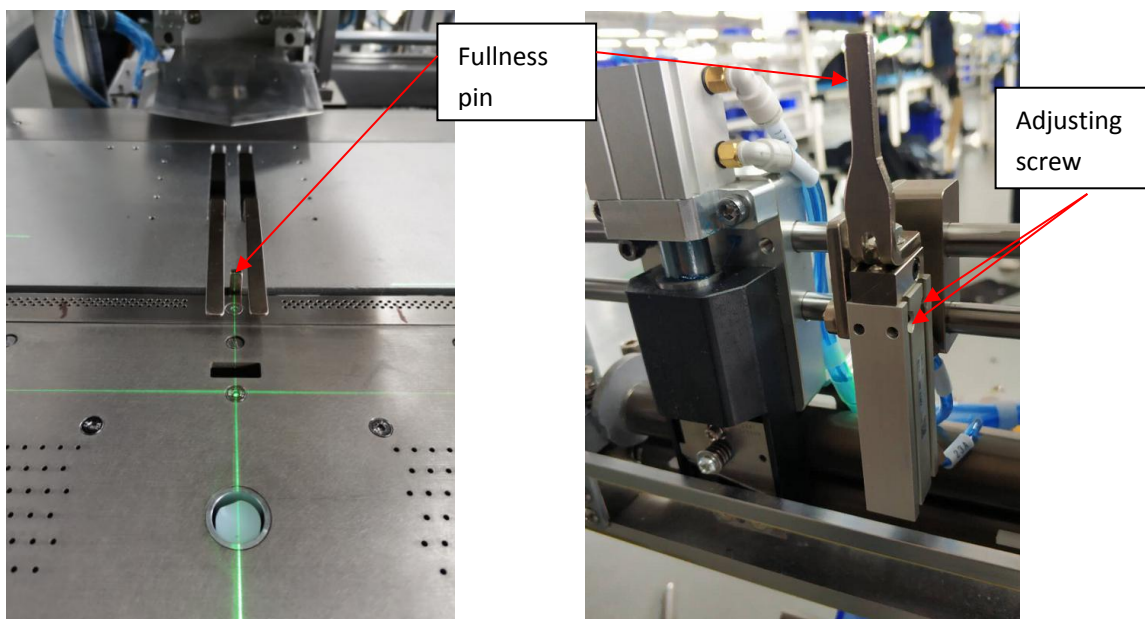
### 6.2.1 fullness result



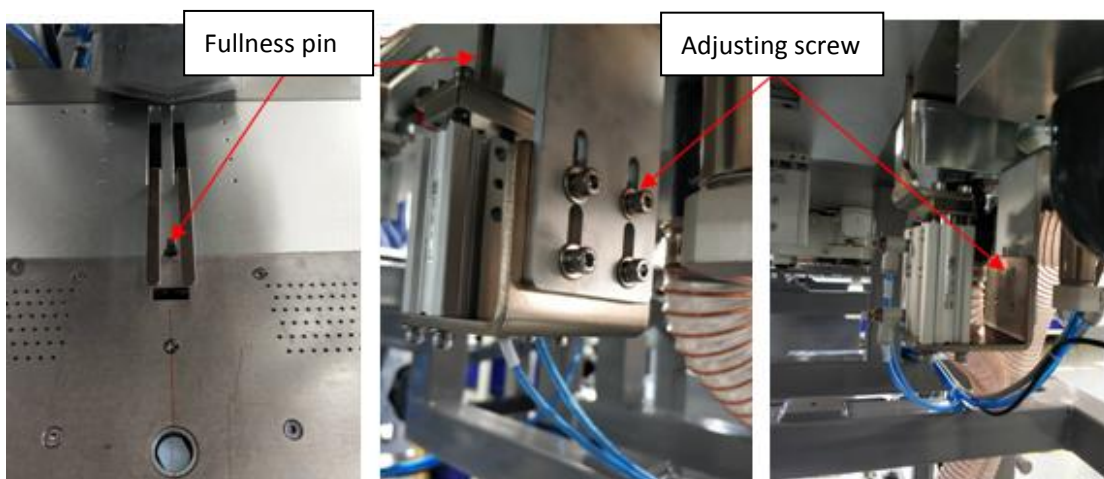


## 6.2.2 fullness adjustment: Manually adjust the extension height of fullness pin

### 1) fullness adjustment with pad feeding

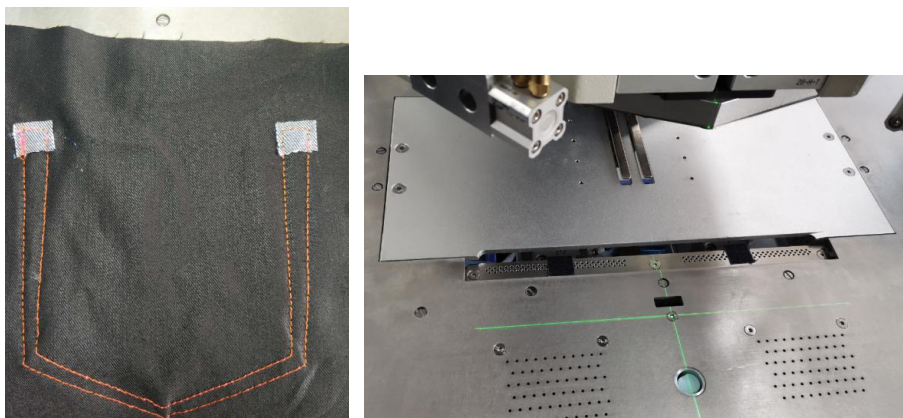


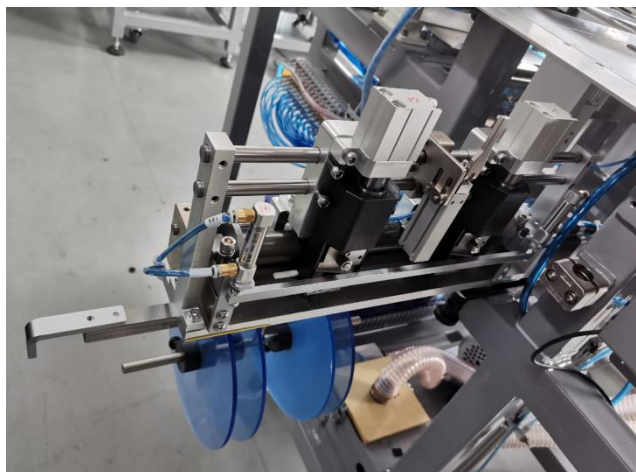
### 2) fullness adjustment without pad feeding



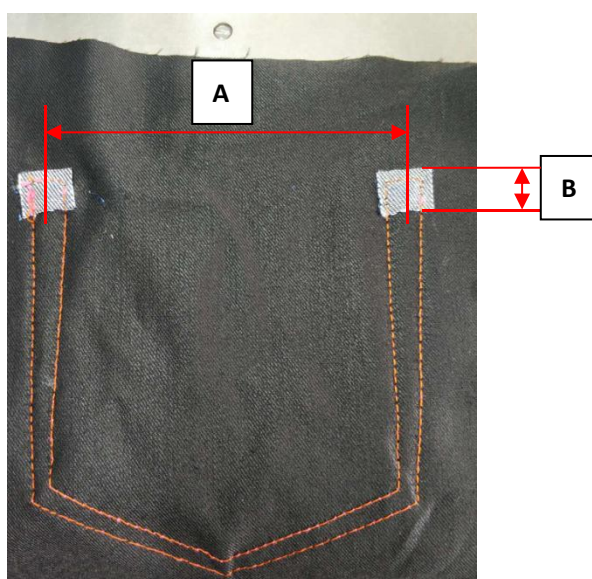
## 6.3. Pad feeding adjustment

### 6.3.1 Pad feeding device and effect



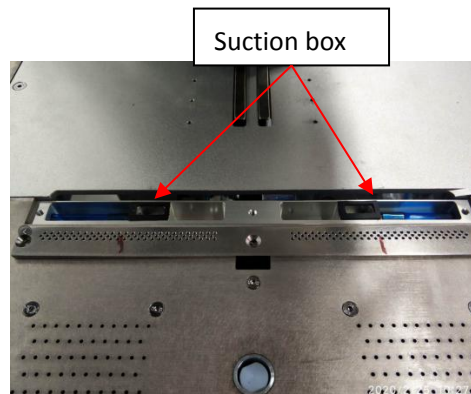
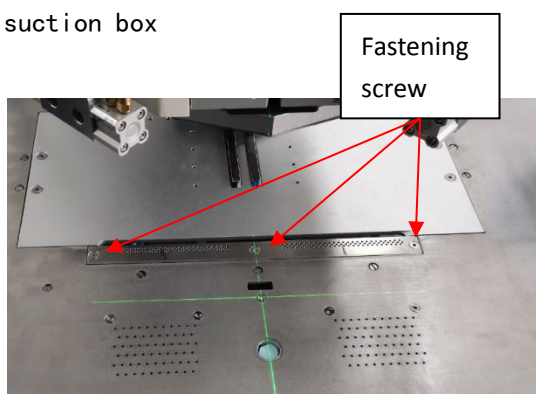


### 6.3.2 Pad feeding adjustment



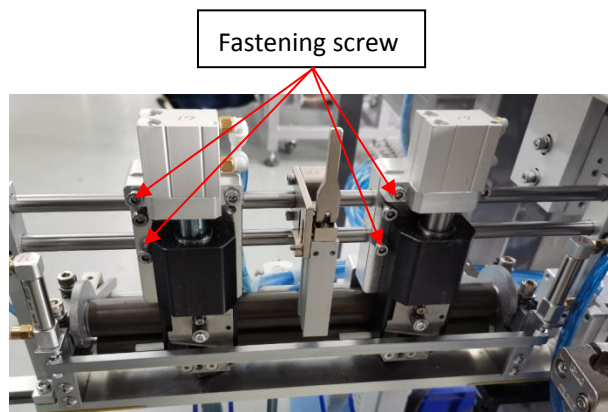
A Adjustment method:

1: As shown in the figure below, loosen the fastening screw and adjust the position of the suction box

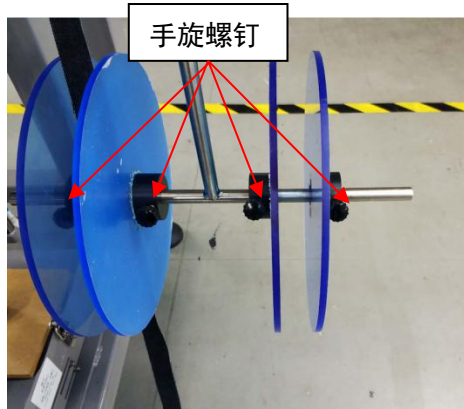


2: As shown in the figure below, loosen the fastening screw and adjust the cutter seat position

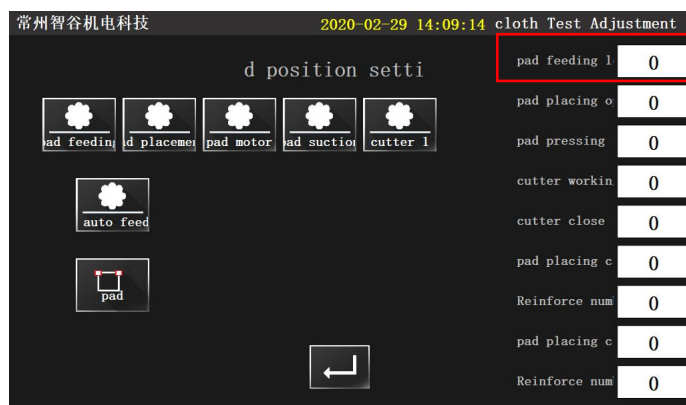




3: As shown in the figure below, Loosen the hand screw and adjust the position of the pad



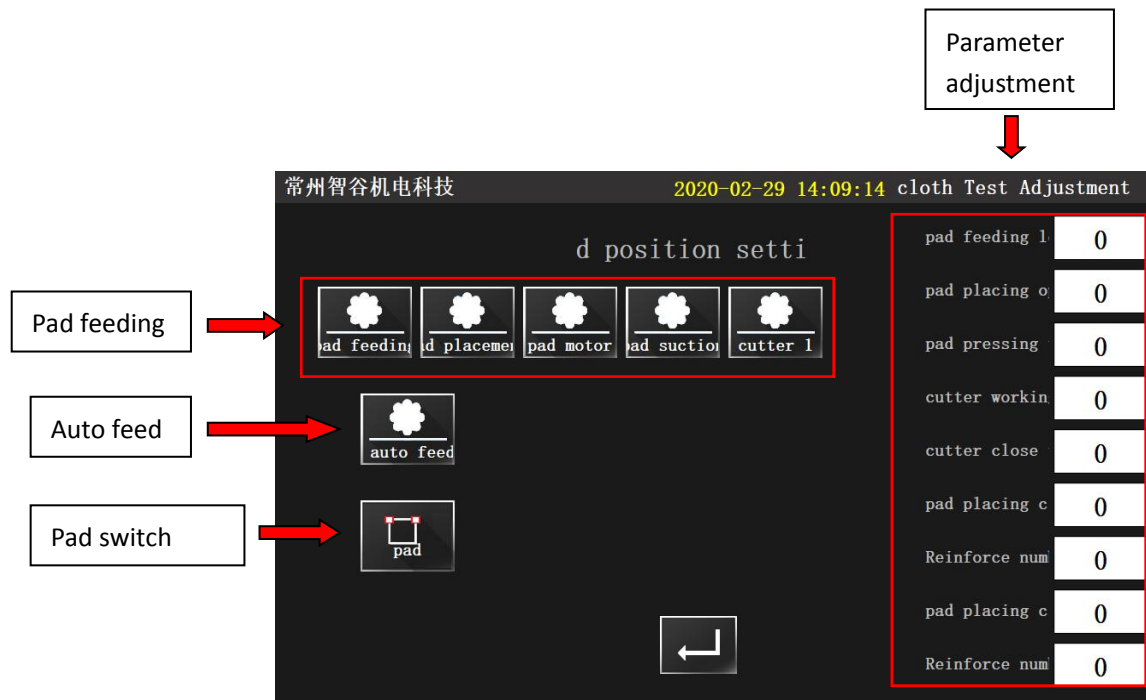
B adjustment method: touch screen (6) --main interface a--  then to the following interface:



Click "pad feeding 1" on the right side to adjust the value of B.

### 6.3.3 pad feeding testing: touch screen (6) --main interface a

--  then to the following interface:



**\*Manually testing:** At the beginning, press the operation from left to right; at the exit, press the operation from right to left,

## 7、Electrical wiring

### 7.1. Signal board:

| 1002F           | SOCKET NO. | I/O  | MODE | INDICATOR STATUS |     | REMARK |
|-----------------|------------|------|------|------------------|-----|--------|
| X origin        | IN1        | 3    | 3P   | L                | OFF |        |
| Y1              | IN2        | 4    |      | H                | ON  |        |
| Z origin        | IN3        | 10   |      | L                | OFF |        |
| Mould 1         | IN4        | 11   |      | 1                | OFF |        |
| Clamp 1         | IN5        | 0    |      | 1                | OFF |        |
| Twin needle 1   | IN6        | 8    |      | ON               | ON  |        |
| Y2              | IN7        | 14   |      | ON               | ON  |        |
| Pedal           | IN8        | 13   |      | OFF              | OFF |        |
| Twin needle 2   | IN9        | 6    |      | OFF              | OFF |        |
| Clamp 2         | IN10       | EX0  |      | 0                | ON  |        |
| Clamp 3         | IN11       | EX2  |      | 1                | OFF |        |
| Clamp 4         | IN12       | 5    |      | 0/1              | OFF |        |
| Mould 2         | IN13       | 15   |      | 0/1              | ON  |        |
| Presser foot    | IN14       | EX3  |      | 0                | OFF |        |
| V origin        | IN15       | EX4  |      | 1                | ON  |        |
| Pressure dector | IN16       | 12   |      | 1                | ON  |        |
| Folding starter | IN17       | AR9  | 6P   | 1                | OFF |        |
| Outer clamp 1   | IN18       | AR10 |      | 0                | ON  |        |
| Outer clamp 2   | IN19       | AR12 |      | 1                | OFF |        |
| Inner clamp     | IN20       | AR28 | 7P   | 1                | OFF |        |
| Sewing stop     | IN21       | EX1  |      | 0                | ON  |        |
| Folding stop    | IN22       | EX6  |      | 0                | ON  |        |
| No use          | IN23       | EX5  | 8P   |                  |     |        |
| No use          | IN24       | EX8  |      |                  |     |        |
| No use          | IN25       | EX7  |      |                  |     |        |
| No use          | IN26       |      |      |                  |     |        |
| X alarm         | Mainboard  | 7    | JK2  | 1                |     | 1*3    |
| Y alarm         |            | 9    | JK2  | 3                |     | 1*6    |
| Thread break 1  |            | EX5  | J6   | 4                |     | 1*6    |
| Thread break 2  |            | EX8  |      | 5                |     | 1*6    |
| Z alarm         |            | EX7  |      | 6                |     | 1*6    |

## 7.2. Solenoid valve board :

| 1002F            | PORT NO. | REST STATUS |
|------------------|----------|-------------|
| STACK 2          | J1       | OFF         |
| PIN              | J2       | OFF         |
| CENTER BLADE     | J3       | OFF         |
| FOLDING 1        | J4       | OFF         |
| FOLDING 2        | J5       | OFF         |
| FOLDING 3        | J6       | OFF         |
| FOLDING 4        | J7       | OFF         |
| INNER CLAMP 1    | J8       | ON          |
| INNER CLAMP 2    | J9       | OFF         |
| IN&OUT CLAMP     | J10      | OFF         |
| STACK 3          | J11      | OFF         |
| SUCTION 1        | J12      | OFF         |
| PRESURE CYLINDER | J13      | OFF         |
| FOLDER 1         | J14      | OFF         |
| SPARE            | J15      | OFF         |
| FOLDER 2         | J16      | OFF         |
| OUTER CLAMP      | M1       | ON          |
| MAGNET           | M2       | OFF         |
| TRIMMER          | M3       | OFF         |
| CLAMPER 1        | M4       | OFF         |
| PLATFORM         | M5       | OFF         |
| CLAMPER 2        | M6       | OFF         |
| NEEDLE COOLER    | M7       | OFF         |

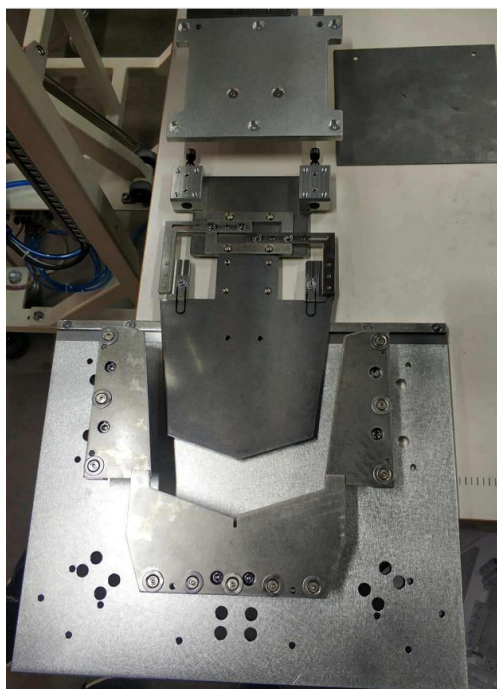
### 7.3. Expansion board electromagnetic valve

| 1002F          | PORT NO. | OBJECT         | REMARK      |
|----------------|----------|----------------|-------------|
| STACKER 1      | Y1       | SOLENOID VALVE | SPARE       |
| SHUTDOWN       | Y2       | SOLENOID VALVE | SPAER       |
| SUNCTION MOTOR | Y3       | SOLENOID VALVE |             |
| THREAD CLAMP 1 | Y4       | SOLENOID VALVE | TWIN NEEDLE |
| THREAD CLAMP 2 | Y5       | SOLENOID VALVE | TWIN NEEDLE |
| THREAD WIPER   | Y6       | SOLENOID VALVE | TWIN NEEDLE |
| LASER 1        | Y7       | SOLENOID VALVE |             |
| LASER 2        | Y8       | SOLENOID VALVE |             |
| FRONT CLAMP    | Y9       | SOLENOID VALVE |             |
| LEFT CLAMP     | Y10      | SOLENOID VALVE |             |
| RIGHT CLAMP    | Y11      | SOLENOID VALVE |             |
| IN&OUT CLAMP   | Y12      | SOLENOID VALVE |             |
|                | Y13      | SOLENOID VALVE |             |
|                | Y14      | SOLENOID VALVE |             |
|                | Y15      | SOLENOID VALVE |             |
|                | Y16      | SOLENOID VALVE |             |

## 8、Optional device

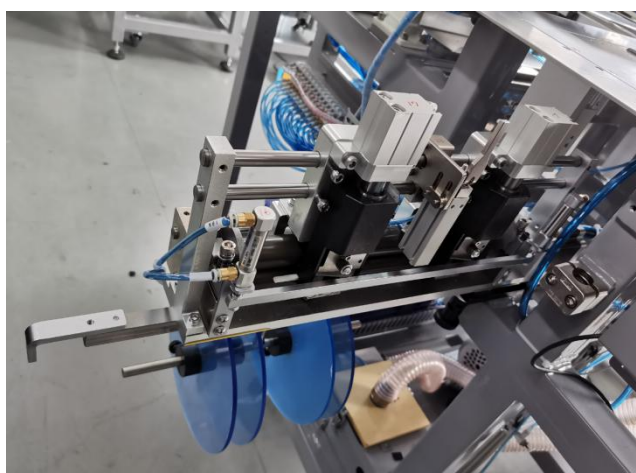
8.1. Simple mold: low cost; simple mold making.

For details, please refer to <MB1002F Automatic Jean Pocket setter Machine-Parts Manual>



8.2. Pad feeding device: Add padding to reinforce pockets.

For details, please refer to <MB1002F Automatic Jean Pocket setter Machine-Parts Manual>





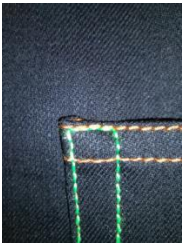
## 9、 Accessories box details

[illegible]

## 10、Common problems and Solutions

10.1. See the following table for common problems and solutions

10.2. For more questions, see 《MB1002F- Touch screen interface operation instructions》

| Fault phenomenon         | Image                                                                               | Cause Analysis                                                                                        | 解决措施                                                                                  |
|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Thread break<br>/ jumper | /                                                                                   | 1. The height of presser foot is too high;<br>2. Presser foot touching the clamp;                     | 1. Adjust the height of presser foot;<br>2. a. Modified pattern;<br>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                                                       |
| Pad feeding failure      |  | 1. the roller of pad feeding device is not work;<br>2. The suction of pad feeding device is not work; | 1. Check the roller;<br>2. Check the suction box position                             |

## 11、Daily maintenance requirements

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

11.2. 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**

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