

# 拉腰机

Waistband setter

(MB2003B)

## 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

2020.07

**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。**

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The contents of this manual may be subject to change without advance notification.

**我们将欣然接受各位提出的改进此说明书的任何建议和指示**

We are happy to receive suggestions and/or indications on ways we could improve this manual.

**本机介绍说明分为二部分，具体请参照《MB2003B 拉腰机-使用说明书》、《MB2003B 拉腰机-零件手册》。**

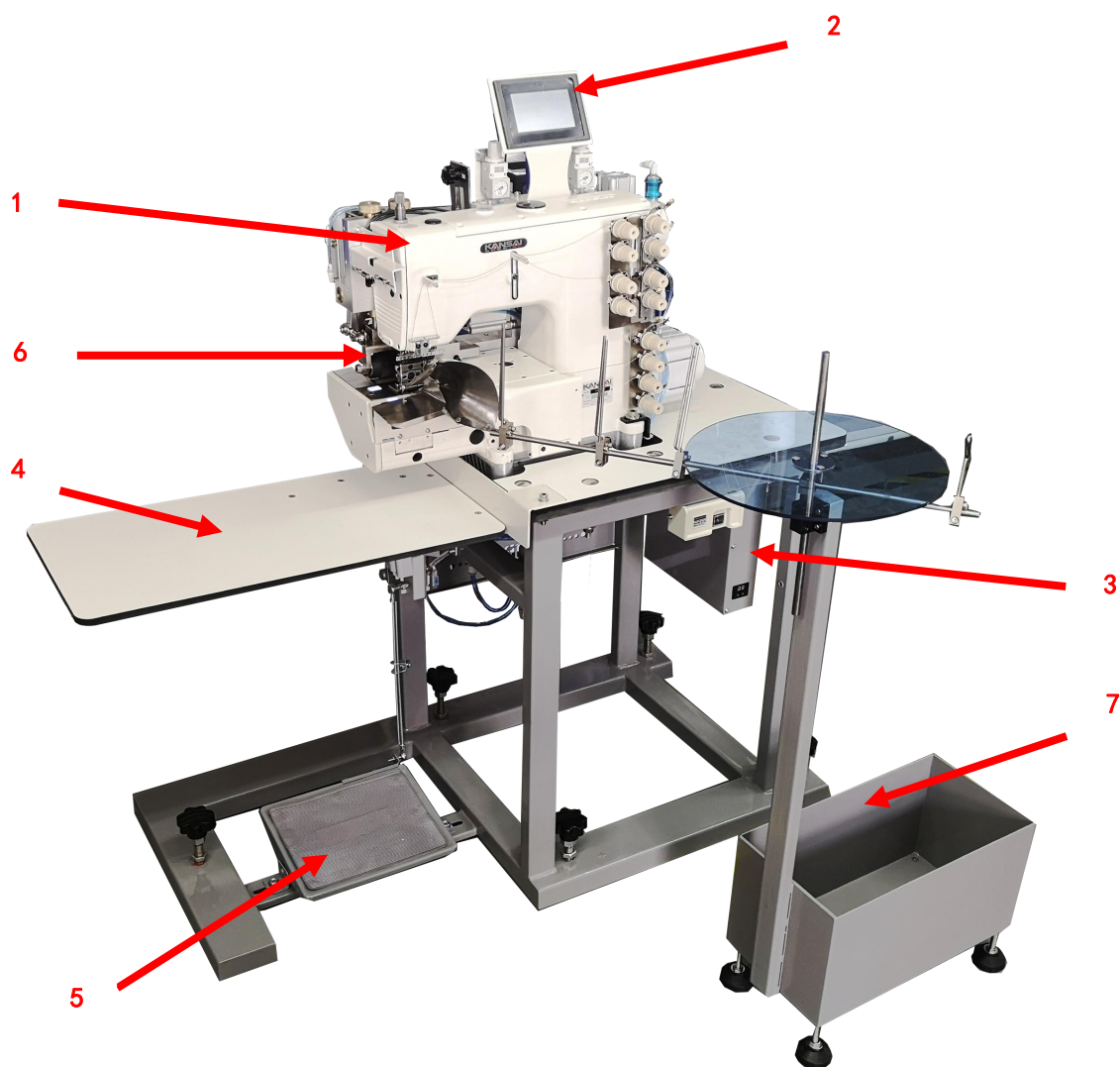
The introduction of this machine is divided into two parts. For details, please refer to 《mb2003b operation manual》 and 《mb2003b Parts Manual》

中文

## 目录

|                      |    |
|----------------------|----|
| 一、设备基本信息.....        | 1  |
| 二、设备技术参数.....        | 2  |
| 三、安全注意事项.....        | 3  |
| 四、按键功能说明.....        | 4  |
| 4.1 按钮功能说明.....      | 4  |
| 五、操作说明.....          | 6  |
| 5.1 操作前准备工作.....     | 6  |
| 5.2 操作过程说明.....      | 6  |
| 六、调试方法.....          | 8  |
| 6.1 信号检测.....        | 8  |
| 6.2 参数设置.....        | 8  |
| 6.3 前后拖轮压力.....      | 11 |
| 6.4 更换刀具.....        | 11 |
| 6.5 针距调节.....        | 12 |
| 6.6 前拖轮与下拖轮速比调节..... | 13 |
| 七、电气配线.....          | 14 |
| 7.1 电控.....          | 14 |
| 7.2 气控.....          | 15 |
| 八、附件箱明细.....         | 16 |
| 九、常见问题及解决方法.....     | 17 |
| 十、日常保养要求.....        | 18 |
| 十一、知识产品保护声明.....     | 19 |

## 一、设备基本信息



1: 缝纫机头;  
4: 辅助台板;  
7: 放料架

2: 触摸屏;  
5: 脚踏板;

3: 电控箱;  
6: 拖轮装置

## 二、设备技术参数

| MB2003B 拉腰机 |             |                    |
|-------------|-------------|--------------------|
| 1           | 机头配置        | KS-1104P/IMB-1104P |
| 2           | 最快缝纫速度/rpm  | 3500               |
| 3           | 工作电压/V      | 220                |
| 4           | 工作气压/Mpa    | 0.5                |
| 5           | 缝制针距长度/mm   | 2—5                |
| 6           | 缝制裤腰宽度范围/mm | 25.4-47.5          |
| 7           | 适用布料        | 牛仔布料               |
| 8           | 适用腰型        | 直腰/弯腰              |
| 9           | 适用腰头        | 长腰头                |
| 10          | 设备尺寸/mm     | 1300L×570W×1300H   |
| 11          | 设备重量/kg     | 110                |

### 三、安全注意事项

#### 为了安全地使用自动机的注意事项

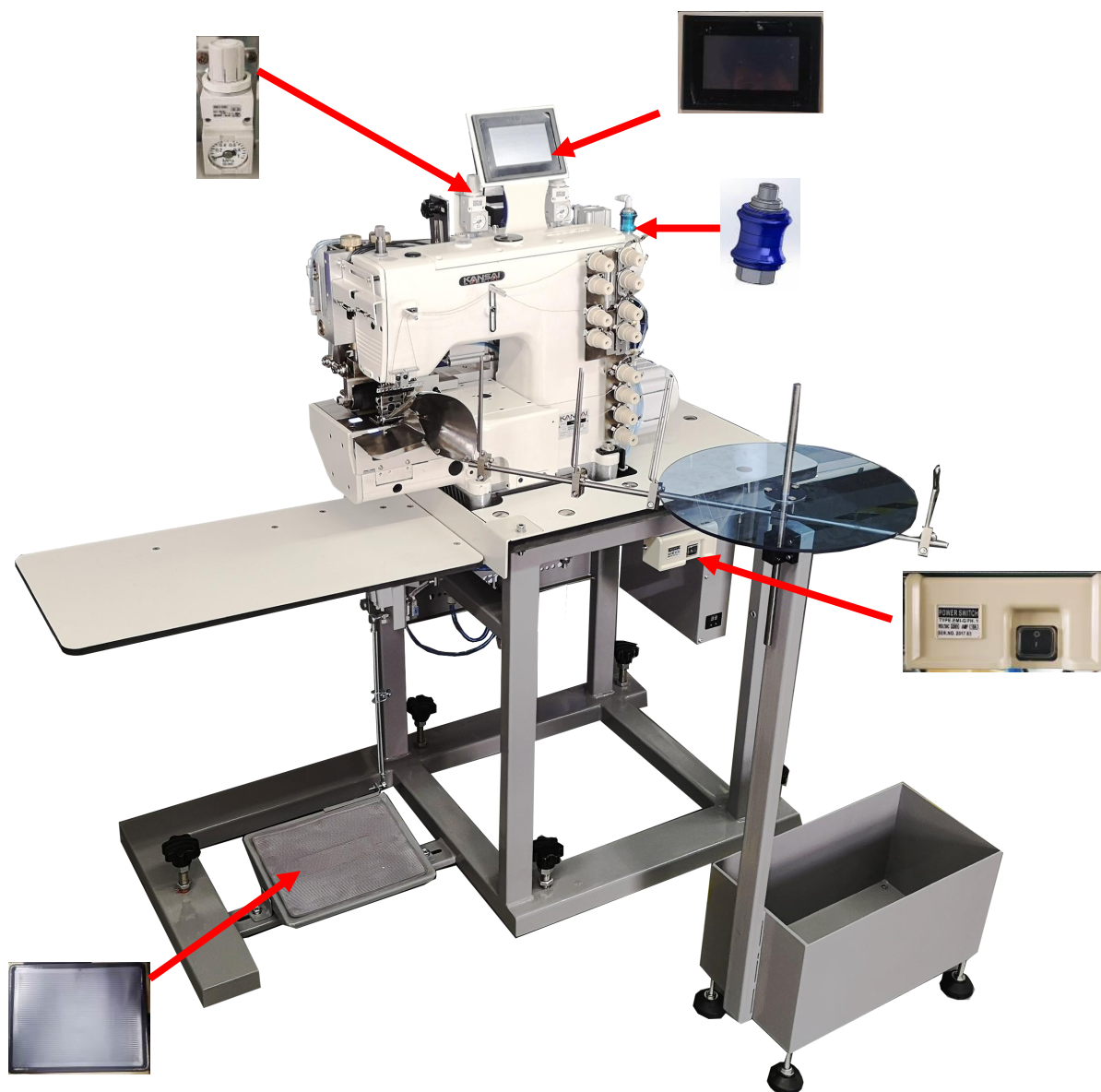
|                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>危险  | 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。                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <br>注意 | 1. 为了防止对人身的伤害，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。<br>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。<br>3. 为了防止对人身的伤害，打开电源时或缝纫机运转中，请不要把手指放到机针附近。<br>4. 为了防止对人身的伤害，缝纫机运转中，请不要把手指放到挑线杆护罩内。<br>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。<br>6. 为了防止对人身的伤害，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。<br>7. 缝纫机运转中，请不要切断电源或切断空气供给源。<br>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。<br>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。<br>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。<br>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。<br>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。<br>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。<br>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。<br>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。<br>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。<br>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。 |

#### \*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---按动电源开关至 1 位置，设备通电、通气。
- (2): 脚踏板---前踩缝制，后踩压脚、前拖轮抬起。
- (3): 减压阀---左侧调节后拖轮气缸压力大小，右侧调节前拖轮气缸压力大小。
- (4): 手滑阀---压脚抬起状态下，滑动手滑阀控制前拖轮抬起落
- (5): 触摸屏

a. 开机界面



b. 监控界面



## 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
- ✓ 检查护眼板是否已经正确安装完成

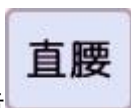
### 5.2 操作过程说明

#### 1 启动设备



按动电源开关至 1 位置，设备通电开机，在 4.1-（5）-a 开机界面中选择语言，进入 4.1-（5）-b 监控界面。

#### 2 缝制



- a. 点击 **直腰** 按钮：左右拖轮均落下（如下图所示）



手动将腰头塞进拉筒，后踩 4.1-（2）脚踏板抬起压脚，将腰头塞至送前拖轮下方（如下方左图所示），放下压脚，前踩脚踏，缝制完成。



**弯腰**

- b. 点击 **弯腰** 按钮：左拖轮落下，右拖轮抬起



手动将腰头塞进拉筒，后踩 4.1-（2）脚踏板抬起压脚，将腰头塞至送前拖轮下方，放下压脚，前踩脚踏，缝制完成。

**自动**

- c. 点击 **自动** 按钮：左拖轮落下，右拖轮由设置的初始状态决定起落，可设置右拖轮间歇性抬起，具体设置方法见 6.2 参数设置。

手动将腰头塞进拉筒，后踩 4.1-（2）脚踏板抬起压脚，将腰头塞至送前拖轮下方，放下压脚，前踩脚踏，缝制完成。

### 3 关机



按动电源开关 **0** 至 0 位置，设备关机。

## 六、调试方法

### 6.1 信号检测

测试

在 4.1-（5）-b 监控界面点击测试按钮进入如下界面

| 输入输出信号测试 |                                                                                   |                                                                                                                                                                                |
|----------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 前光眼检测    |  | 机针冷却                                                                                                                                                                           |
| 后光眼检测    |  | 机针压脚                                                                                                                                                                           |
| 踏板信号     | 797                                                                               | 后拖轮                                                                                                                                                                            |
|          |                                                                                   | 前拖轮                                                                                                                                                                            |
|          |                                                                                   | 切刀                                                                                                                                                                             |
|          |                                                                                   | 左吹线  右吹线  |

光眼：遮挡反光纸，对应按钮变绿 ，光眼正常

其余信号：点击按钮 ，变绿 ，电磁阀做出反应，电气正常

### 6.2 参数设置

菜单

1. 在 4.1-（5）-b 监控界面点击菜单按钮进入如下界面，点击即可更改对应参数。

设置菜单

 1/2 

|      |            |
|------|------------|
| P-01 | 缝纫工作速度     |
| P-02 | 切刀工作保持时间   |
| P-03 | 后拖轮下压延迟针数  |
| P-04 | 机针冷却延迟开启针数 |
| P-05 | 间歇吹线延迟开启针数 |
| P-06 | 间歇吹线延迟关闭针数 |

## 设置菜单



|      |              |
|------|--------------|
| P-07 | 右拖轮自动动作初始状态  |
| P-08 | 右拖轮第一次切换延迟针数 |
| P-09 | 右拖轮第二次切换延迟针数 |
| P-10 | 右拖轮第三次切换延迟针数 |
| P-11 | 右拖轮第四次切换延迟针数 |
| P-12 | 右拖轮第五次切换延迟针数 |

P-01 缝纫工作速度：调节电机最高转速；

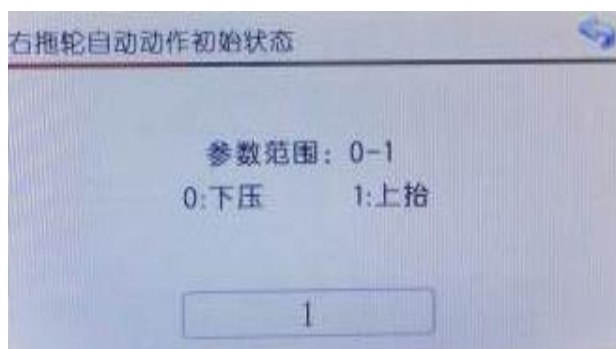
P-02 切刀工作保持时间：调节切刀气缸动作完成时间；

P-03 后拖轮下压延迟针数：调节后拖轮下压时间；

P-04 机针冷却延迟开启针数：调节上吹气开启时间。

P-05/P-06 间歇吹气延迟开启/关闭针数：缝制一段腰头中间需要一段松线，可根据距离设置开启/关闭延迟针数，不需要将参数设置为 0。

P-07 右拖轮自动动作初始状态：



P-07 到 P-12 是一个循环：

第一种形式

P-07：下压    P-08：上抬    P-09：下压    P-10：上抬    P-11：下压    P-12：上抬

第二种形式

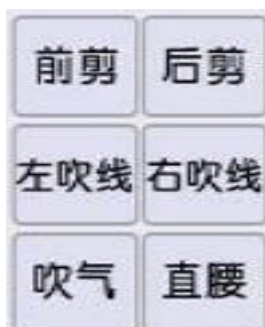
P-07：上抬    P-08：下压    P-09：上抬    P-10：下压    P-11：上抬    P-12：下压

P-08 到 P-12 每一次切换都可以设置延迟针数

2. 在 4.1- (5) -b 监控界面中



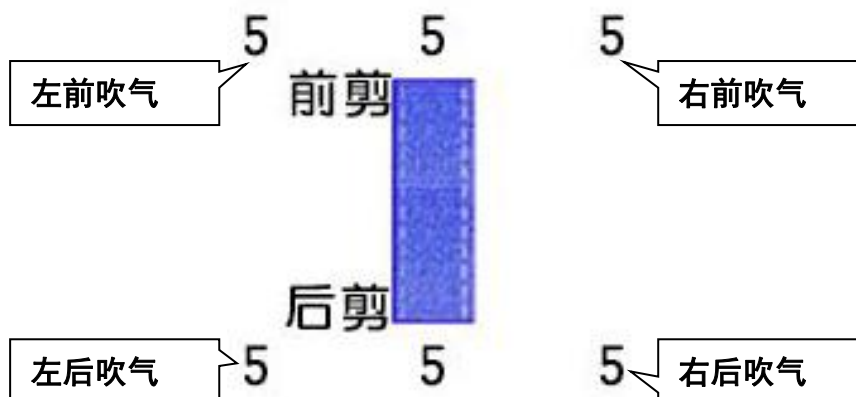
2.1 选择按钮：如下图所示状态，功能开启，点击任意功能，颜色变浅，功能关闭。



2.2 电机调速按钮（同 6.2.1 设置菜单中 P-01）。



2.3 吹气、切刀延迟针数：点击数字可以更改相应参数值。





下前吹气：吹气运行，底线脱线，当裤片遮住第一片反光纸，根据延迟针数停止吹气；  
前切：裤片遮住第二片反光纸，根据延迟针数开始剪切；  
下后吹气：吹气运行，底线脱线，当裤片离开第一片反光纸，吹气根据延迟针数开始吹气；  
后切：裤片离开第二片反光纸，根据延迟针数开始剪切。

### 6.3 前后拖轮压力

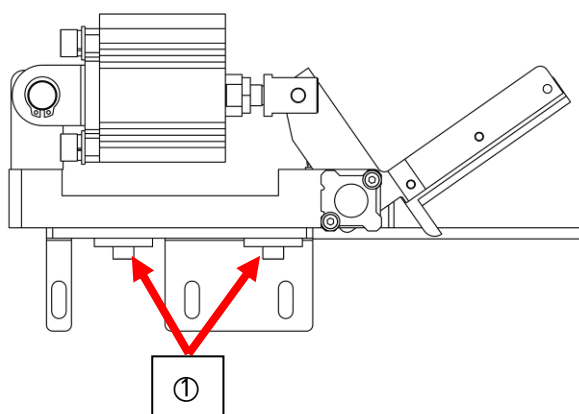
1. 前拖轮压力：手动旋转右侧减压阀调压旋钮（如下图所示），拖轮压力维持在 0.2-0.4MPa，压力过小拖轮失效，影响针距。

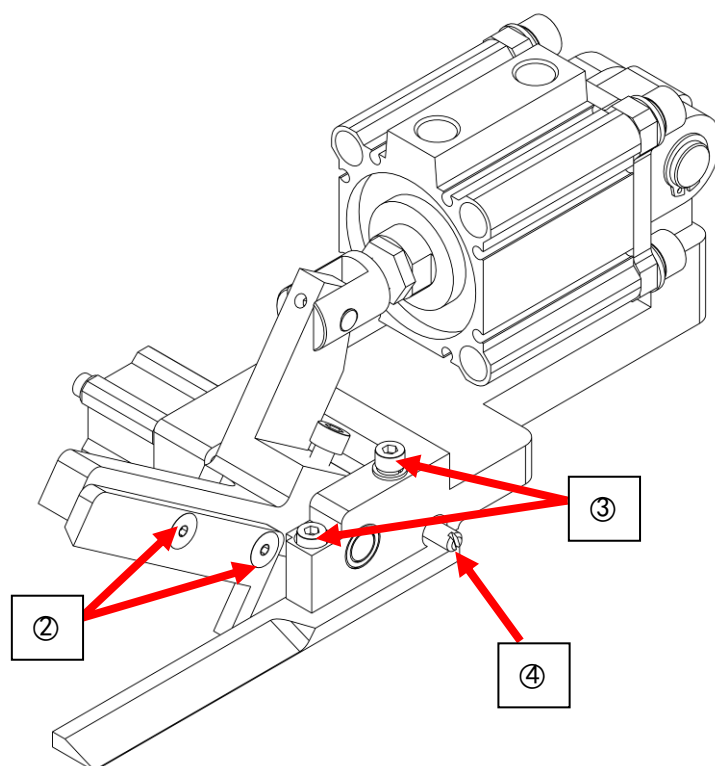


2. 后拖轮压力：手动旋转左侧减压阀调压旋钮（同上图），拖轮压力维持在 0.2-0.4MPa，过小影响剪切位置。

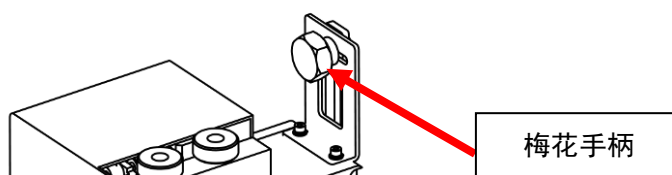
### 6.4 更换刀具

- 1) 拆卸上图两颗固定螺钉①，取出切刀装置；
- 2) 拆卸上切刀固定螺钉②，拆下上切刀，将新切刀换上，装上固定螺钉②并拧紧；
- 3) 拆卸两颗固定螺钉③，拆下下切刀，将新切刀换上，装上固定螺钉③不需要拧紧；
- 4) 调节定位螺栓④，使上下切刀处于点接触状态，再将固定螺钉③拧紧。
- 5) 把切刀装置装回机头，拧紧固定螺钉，刀具更换完成。





## 6.5 针距调节



手动拧松上图所示位置的梅花手柄，向机头方向移动针距减小，反向针距加大。

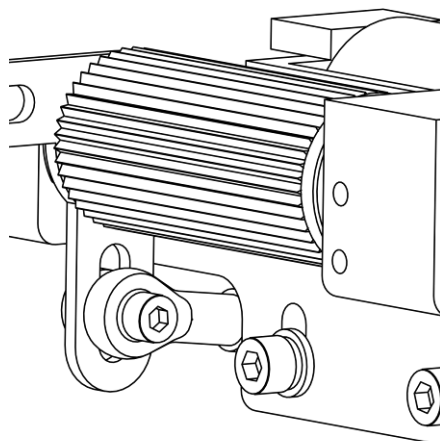
机头针杆摆幅调节：按下左下图位置按钮，转动手轮，数字保持在 P-4 之间。



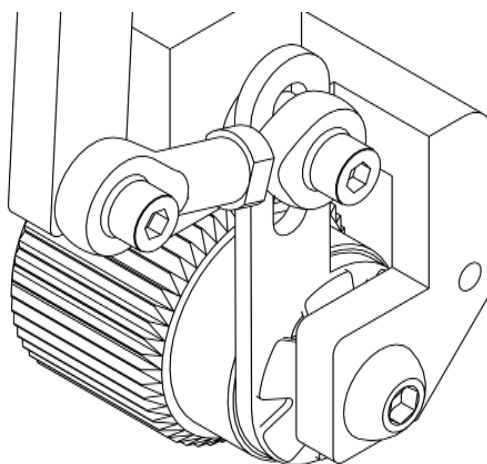
注：正常状态不需要调节针杆摆幅，摆幅过大会导致针碰针板。

## 6.6 前拖轮与下拖轮速比调节

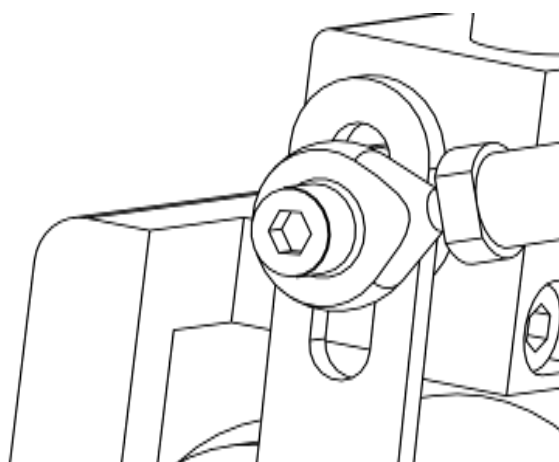
下拖轮转速调节：移动下图所示关节轴承在腰槽的位置



左拖轮转速调节：移动下图所示关节轴承在腰槽的位置

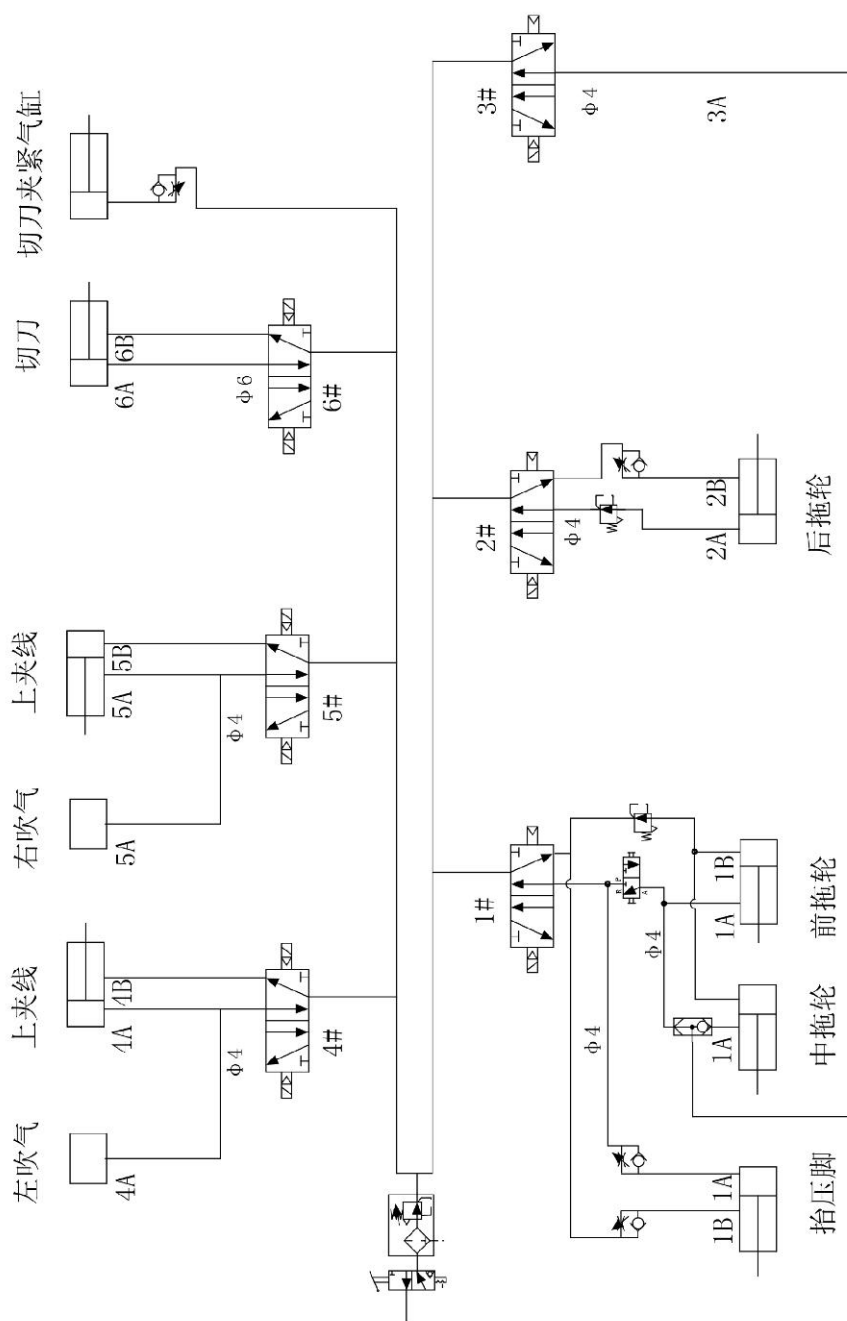
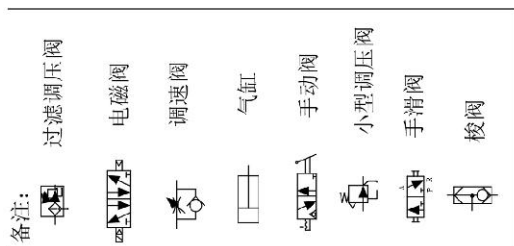


右拖轮转速调节：移动下图所示关节轴承在腰槽的位置





## 7.2 气控



备注：各气路布放时要做好标签，以示区分。

## 八、附件箱明细

| 序号 | 附件名称                | 规格 | 数量 |
|----|---------------------|----|----|
| 1  | 《MB2003B 拉腰机-使用说明书》 |    | 1  |
| 2  | 《MB2003B 拉腰机-零件手册》  |    | 1  |
| 3  | 机头附件箱               |    | 1  |
| 4  | 线架衬套                |    | 1  |

## 九、常见问题及解决方法

| 现象                 | 图片                                                                                  | 原因分析          | 解决措施                                                |
|--------------------|-------------------------------------------------------------------------------------|---------------|-----------------------------------------------------|
| 腰头剪切不断             |    | 切刀磨损          | 1. 按照 6.4-3、6.4-4 步骤调节下切刀调节螺钉<br>2. 按照 6.4 步骤更换上下切刀 |
| 腰头两端剪切长度或线迹松线位置有偏差 |    | 前后吹气或剪切延迟针数有误 | 按照 6.2 参数设置设置吹气或切刀延迟针数                              |
| 腰头缝制完成后，上下两片错位     |   | 上下拖轮不同步       | 按照 6.6 步骤调节前拖轮与下拖轮速比                                |
| 吹气或切刀失效            |  | 反光纸位置偏差或失效    | 1. 检查光眼是否正常<br>2. 移动反光纸位置或更换反光纸                     |

## 十、日常保养要求

10.1. 设备保养清单及要求详见下表

10.2. 其他更多关于机头的保养要求请参照缝纫机头说明书

| 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  | 机头油量 |    |    | √  |    | 机头油量不低于警戒线         |
| 4  | 梭芯   |    |    | √  |    | 检查机头梭芯是否刮花         |
| 5  | 感应器  |    |    |    | √  | 检查灵敏度是否准确，位置是否变化   |
| 6  | 滑动件  |    |    |    | √  | 检查滑动件润滑，如有需要则添加润滑剂 |
| 7  | 电控箱  |    |    |    | √  | 散热风扇运转正常，及时清理灰尘    |

## 十一、知识产品保护声明

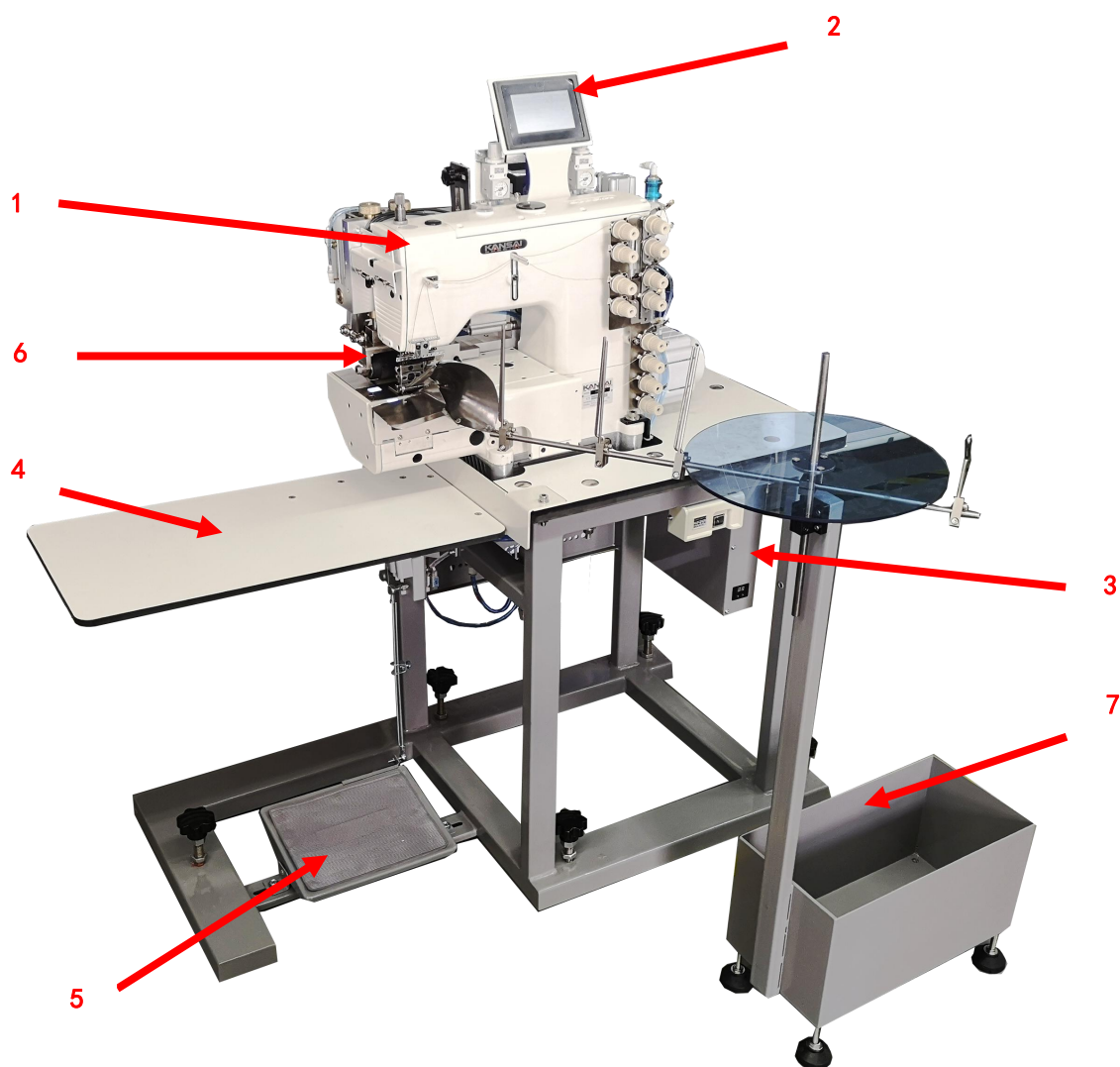
MB2003B 拉腰机是常州智谷机电科技有限公司独立自主完成的设计成果。该成果知识产权属于常州智谷机电科技有限公司，受国家知识产权相关法律法规的保护。未经权利人书面许可，不得实施该成果的专利技术，不得复制、销售或通过信息网络传播和该成果有关的信息。任何违法侵权行为，常州智谷机电科技有限公司将依法追究其法律责任。

**ENGLISH**

## Catalog

|                                                |    |
|------------------------------------------------|----|
| 1、Basic information of equipment.....          | 1  |
| 2、Technical parameters of equipment.....       | 2  |
| 3、Safety precautions.....                      | 3  |
| 4、Key function.....                            | 5  |
| 4.1 Key function description.....              | 5  |
| 5、Operating instructions.....                  | 7  |
| 5.1 Preparation before operation.....          | 7  |
| 5.2 Description of operation process.....      | 7  |
| 6、Debugging method.....                        | 9  |
| 6.1 signal detection.....                      | 9  |
| 6.2 Parameter setting.....                     | 9  |
| 6.3 Pressure of front and rear roller.....     | 12 |
| 6.4 Knife change.....                          | 13 |
| 6.5 Needle pitch adjustment.....               | 14 |
| 6.6 Speed ratio adjustment.....                | 14 |
| 7、Electrical wiring.....                       | 16 |
| 7.1 Electronic control.....                    | 16 |
| 7.2 Pneumatic control .....                    | 17 |
| 8、Common problems and Solutions.....           | 18 |
| 9、Daily maintenance requirements.....          | 19 |
| 10、Knowledge product protection statement..... | 19 |

## 1、 Basic information of equipment



1: Machine head;

4: Table;

7: Loader

2: Screen;

5: Pedal;

3: Control box;

6: Roller

## 2、Technical parameters of equipment

| MB2003B Waisterband setter |                    |                    |
|----------------------------|--------------------|--------------------|
| 1                          | Machine head       | KS-1104P/IMB-1104P |
| 2                          | Maximum speed/rpm  | 3500               |
| 3                          | Voltage/V          | 220                |
| 4                          | Pressure/Mpa       | 0.5                |
| 5                          | Stitch length/mm   | 2—5                |
| 6                          | Waistband width/mm | 25.4-47.5          |
| 7                          | Suitable fabric    | Denim              |
| 8                          | Suitable for waist | Straight /curved   |
| 9                          | Waistband head     | Long type          |
| 10                         | Size/mm            | 1300L×570W×1300H   |
| 11                         | Weight/kg          | 110                |

### 3、Safety precautions

#### Considerations for safe use of automata

|                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>危険   | <p>1. In order to prevent accidents caused by electric shock, please do not open the cover of the electrical box of the motor or touch the parts in the electrical box when the power is connected.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <br>注意 | <p>1. In order to prevent personal injury, please do not operate the machine in the state of removing the belt guard, finger protector and other safety devices.</p> <p>2. In order to avoid being involved in the machine's personal accident, please do not let your fingers, hair, clothes near the pulley, v-belt, motor, and do not put items on it during the operation of the sewing machine.</p> <p>3. To prevent personal injury, please do not put your finger near the needle when turning on the power or running the machine.</p> <p>4. In order to prevent personal injury, please do not put your fingers in the wire pole guard during the operation of the sewing machine.</p> <p>5. When the machine is running, it turns at a high speed. To prevent damage to the hand, never let the hand near the cutter during operation. In addition, when changing the cable, please be sure to turn off the power.</p> <p>6. In order to prevent personal injury, please be careful not to pinch your fingers when the machine moves up and down or when you return to the original position.</p> <p>7. Please do not cut off the power or air supply while the machine is running.</p> <p>8. In order to prevent accidents caused by sudden starting, please remove the cloth guide when the preparation work is finished and the sewing state is reached.</p> <p>9. In order to prevent accidents caused by electric shock, please do not operate the sewing machine when the ground wire of the power supply is removed.</p> <p>10. In order to prevent accidents caused by electric shock and damage to electrical parts, be sure to turn off the power switch before inserting or unplugging the power plug.</p> <p>11. In order to prevent accidents caused by damage of electrical parts, please stop the operation for safety when it thunders and pull the power plug.</p> <p>12. In order to prevent accidents caused by damage to electrical parts, condensation will occur when moving from a cold place to a warm place immediately, so please wait until the water drops dry before switching on the power.</p> <p>13. As this product is a precision machine, please pay full attention to it during operation, do not splash water or oil on the machine, and do not let the machine fall and give the machine impact.</p> <p>This machine is A class A industrial machine. The use of this machine in the home environment may cause the phenomenon of radio interference. At this point, please take appropriate measures to solve the problem of radio interference.</p> <p>15. After the power switch is turned off when the accumulator moves, the accumulator lever moves, so please be careful not to clip your finger, etc.</p> |

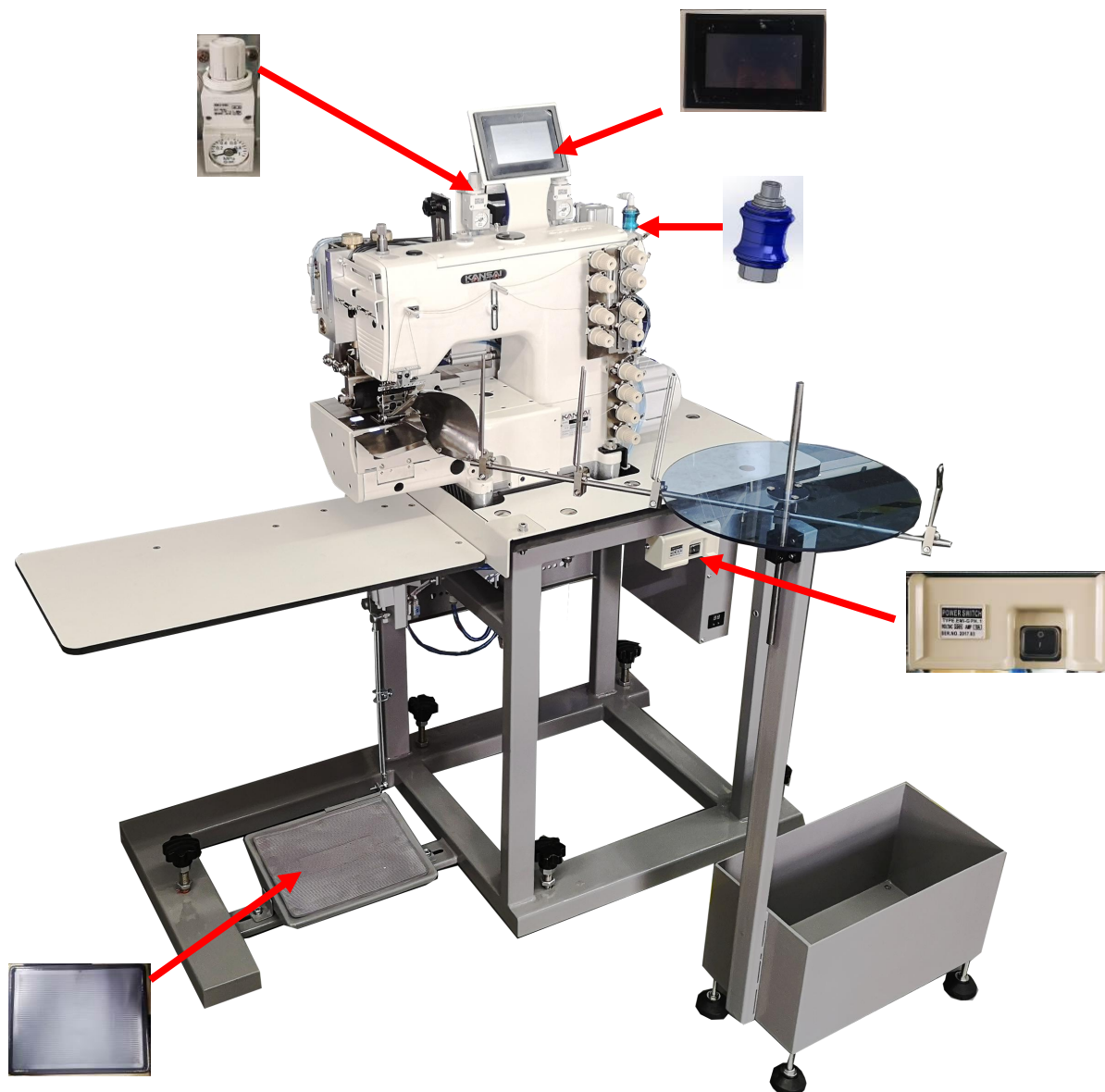
|  |                                                                                                                                                                                                                                                                             |
|--|-------------------------------------------------------------------------------------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

**\* important safety information:**

- ✓ improper operation of the machine may cause personal injury. Please read this instruction carefully and operate correctly before operation.
- ✓ Please ventilate the machine before it is officially powered on.
- ✓ do not turn on the internal parts of the electric cabinet or touch screen while the power is on.
- ✓ this machine should be used after receiving training or under special instruction to ensure the safety of the user.

## 4、Key function

### 4.1 Key function description



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

(2): Foot pedal: front step sewing, back step presser foot lift.

(3): Pressure reducing valve: adjust the cylinder pressure of the front tugboat on the left side, and adjust the cylinder pressure of the rear tugboat on the right side.

(4): Hand slide valve --- when the presser foot is raised, the sliding hand slide valve controls the lifting and landing of the front tug, and the front tug normally falls down

(5): Touch screen

c. Boot interface

# IMB 智谷机电

## MB2003B

☐ 中文

☐ English

creation for tomorrow

a. Main interface



## 5、Operating instructions

### 5.1 Preparation before operation

- ✓ When the operator checks, the machine head should be in the stop state
- ✓ Check that the stitches have been correctly fitted
- ✓ Check whether the needle has been installed
- ✓ Clean up the sundries on the machine table to ensure that there are no sundries hindering the operation of the machine
- ✓ Check that the eye guard is properly installed

### 5.2 Description of operation process

#### 1 Start the device



Press the power switch to position 1, Power on the equipment, Select the language in the 4.1 – (5) – a boot interface and enter the 4.1 – (5) – B monitoring interface.

#### 2 Sewing



- d. Click : Left and right rollers fall (as shown in the figure below)



Manually insert the waist into the folder, Step on the pedal to lift the presser foot, Put the waist under the front roller (as shown in the figure on the left below), Put down the presser foot and step forward to finish the sewing



弯腰

- e. Click : The left roller falls and the right roller rises



Manually insert the waist into the folder, Step on the pedal to lift the presser foot, Put the waist under the front roller (as shown in the figure on the left below), Put down the presser foot and step forward to finish the sewing.

自动

- f. click : Left roller down, The right roller takes off and lands according to the set initial state. The right roller can be set to lift intermittently. See 6.2 parameter setting for specific setting method.

Manually insert the waist into the folder, Step on the pedal to lift the presser foot, Put the waist under the front roller (as shown in the figure on the left below), Put down the presser foot and step forward to finish the sewing

### 3 Shut down



Press the power switch to 0。

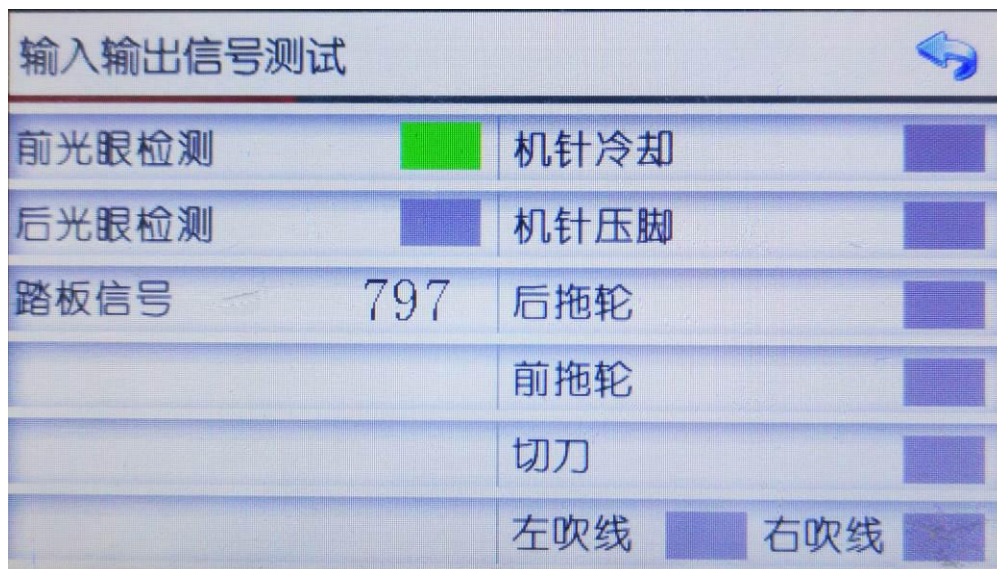
## 6、Debugging method

### 6.1 signal detection

测试

Click the test button in the monitoring interface

Enter the following interface



Sensor: Block the reflective paper, and the corresponding button turns green , sensor is normal

Other signals: click , turns , The solenoid valve reacts and the electricity is normal

### 6.2 Parameter setting

菜单

1. Click the menu button in the monitoring interface

Enter the following interface and click to change the corresponding parameters.



## 设置菜单



◀2/2▶

|      |              |
|------|--------------|
| P-07 | 右拖轮自动动作初始状态  |
| P-08 | 右拖轮第一次切换延迟针数 |
| P-09 | 右拖轮第二次切换延迟针数 |
| P-10 | 右拖轮第三次切换延迟针数 |
| P-11 | 右拖轮第四次切换延迟针数 |
| P-12 | 右拖轮第五次切换延迟针数 |

P-01 Sewing speed: adjust the maximum speed of the motor;

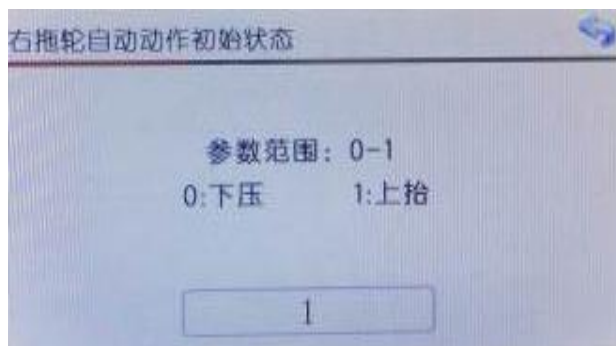
P-02 Cutter working remain time: adjust the completion time of cutter cylinder action;

P-03 Rear roller pressing stitches: Adjust the rear roller pressing time;

P-04 Needle cooler opening stitches: Adjust the up blowing time.

P-05/P-06 Intermittent Blower opening/closing stitches: A loose thread is needed in the middle of the sewing, The number of stitches can be set according to the distance, There is no need to set the parameter to 0.

P-07 Initial state of automatic operation of right roller:



P-07 to P-12 is a cycle:

The first form

P-07: press down P-08: lift up P-09: press down P-10: lift up P-11: press down P-10: lift up

The second form

P-07: lifting up P-08: pressing down P-09: lifting up P-10: pressing down P-11: lifting up P-10: pressing down

The number of delayed stitches can be set for each switch from P-08 to P-12

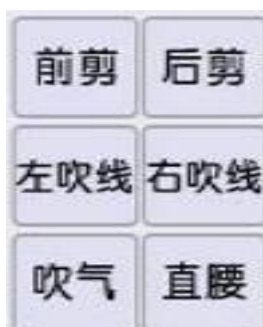
2. In the monitoring interface



2.1 Select button: as shown in the figure below, the function is on, click any function,



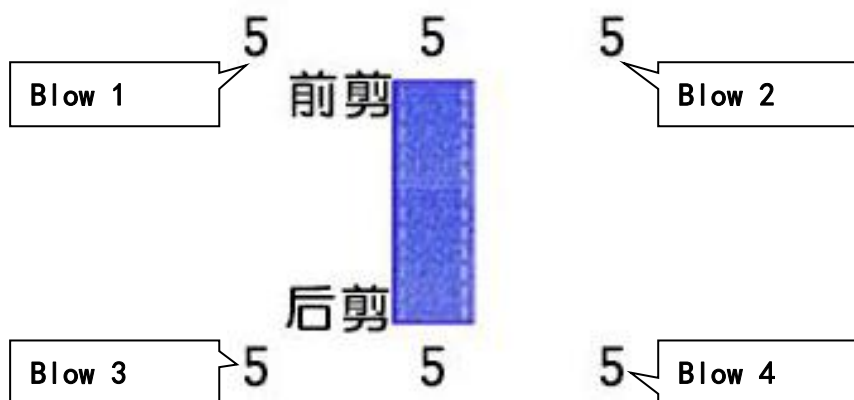
the color becomes lighter, and the function is off



2.2 Motor speed control button (The same as P-01 in 6.2.1 setting menu)。



2.3 Blowing, cutter delay number of stitches: click the number to change the corresponding parameter value。



Blow 1&2: When the pants cover the first piece of reflective paper, stop blowing according to the number of delayed stitches;

Front cut: The pants cover the second piece of reflective paper and start cutting according to the number of delayed stitches;

Blow 3&4: When the pants leave the first piece of reflective paper, the blowing starts according to the number of delayed stitches;

Rear cut: The pants leave the second piece of reflective paper and start cutting according to the number of delayed stitches.

### 6.3 Pressure of front and rear roller

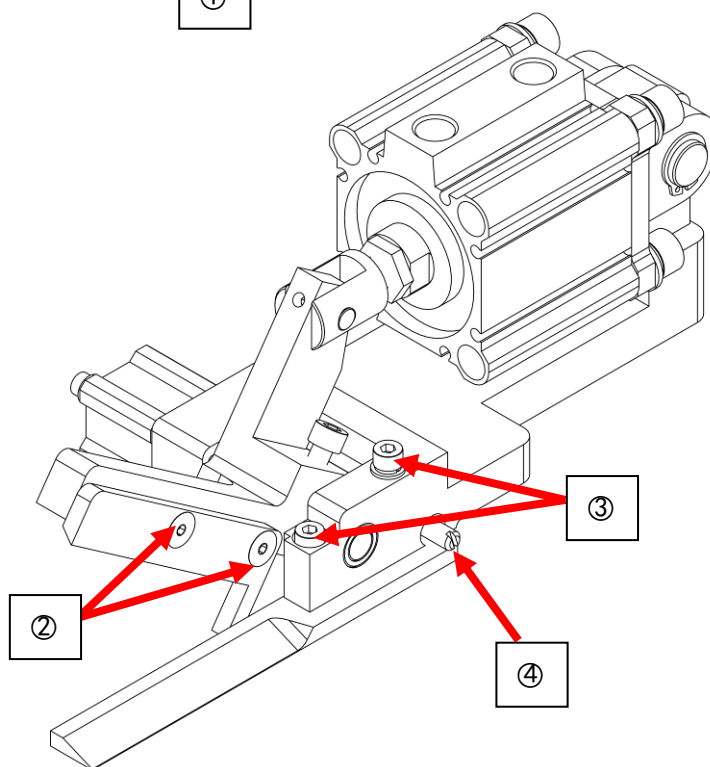
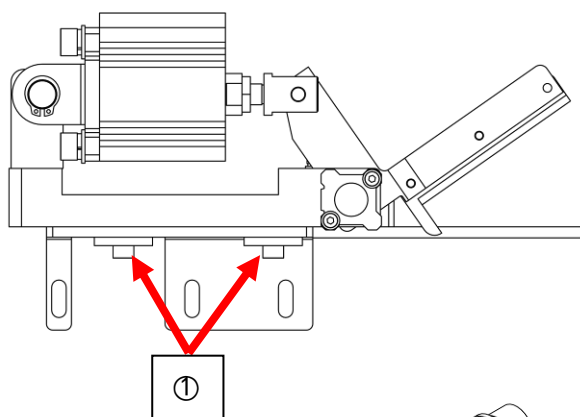
1. Front roller pressure: Manually rotate the pressure regulating knob of the right pressure reducing valve (as shown in the figure below), When the pressure of roller is maintained at 0.2–0.4mpa, the roller will fail if the pressure is too small, which will affect the needle distance.



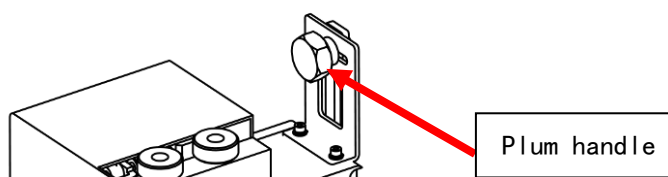
2. Rear roller pressure; Manually rotate the pressure regulating knob of the left pressure reducing valve (same as the figure above), The roller pressure is maintained at 0.2–0.4mpa, too small affects the shear position.

## 6.4 Knife change

- 6) Remove the two fixing screws (1) in the figure above and take out the cutter device;
- 7) 2) Remove the upper cutter fixing screw (2), remove the upper cutter, replace the new cutter, install the fixing screw (2) and tighten it
- 8) Remove the two retaining screws (3), Remove the lower cutter, replace the new cutter, and install the fixing screw (3) without tightening;
- 9) Adjusting set bolt (4), Make the upper and lower cutters in point contact state, and then tighten the set screw (3)
- 10) Install the cutter device back into the machine head, tighten the fixing screw, and the cutter replacement is completed.



## 6.5 Needle pitch adjustment



Manually loosen the plum blossom handle at the position shown in the figure above, move it towards the machine head, and the needle pitch decreases, while the reverse needle pitch increases.

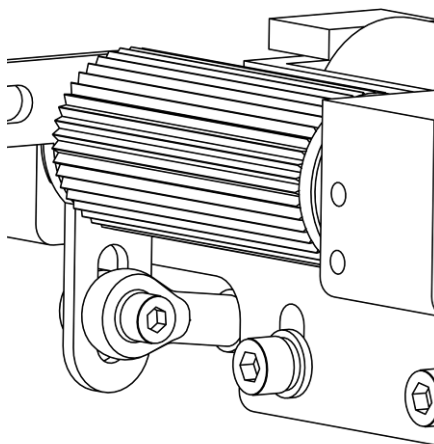
Head needle rod swing adjustment: press the position button in the left figure below, turn the hand wheel, and keep the number between P-4.



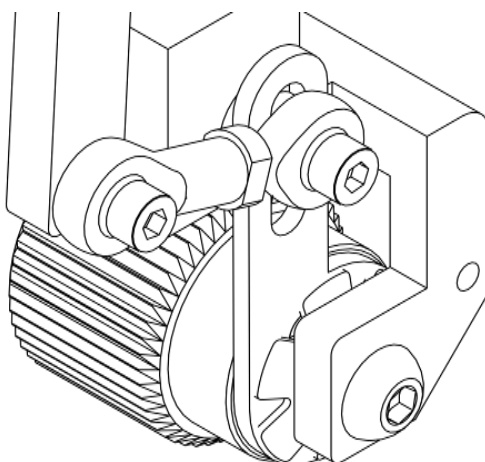
Note: it is not necessary to adjust the swing of the needle bar in normal state. Excessive swing will cause the needle to touch the needle plate.

## 6.6 Speed ratio adjustment

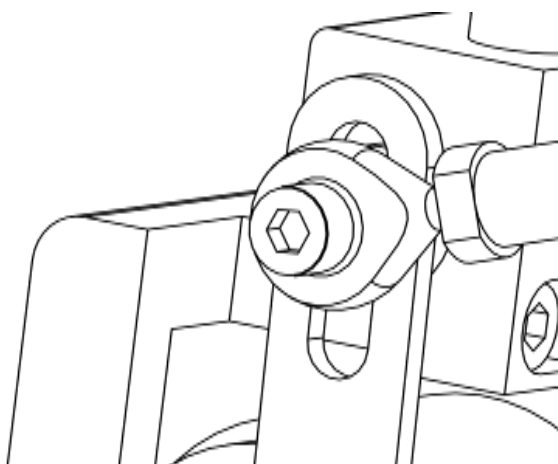
Speed adjustment of lower roller: move the position of spherical plain bearing in waist groove as shown in the figure below



Speed adjustment of left roller: move the position of spherical plain bearing in waist groove as shown in the figure below

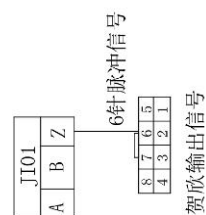
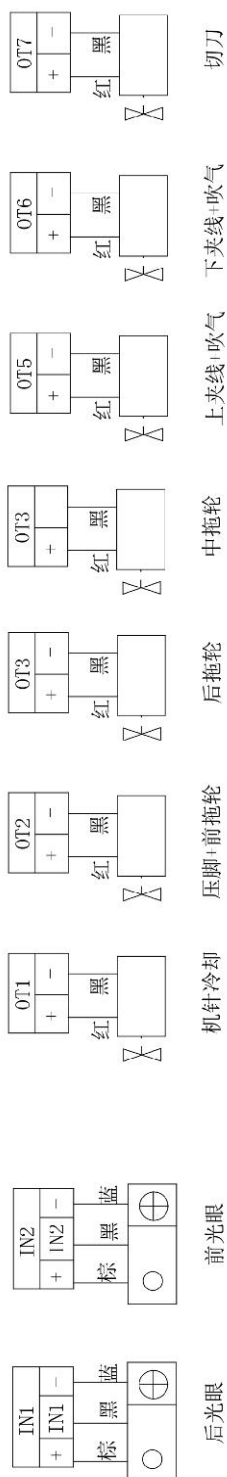
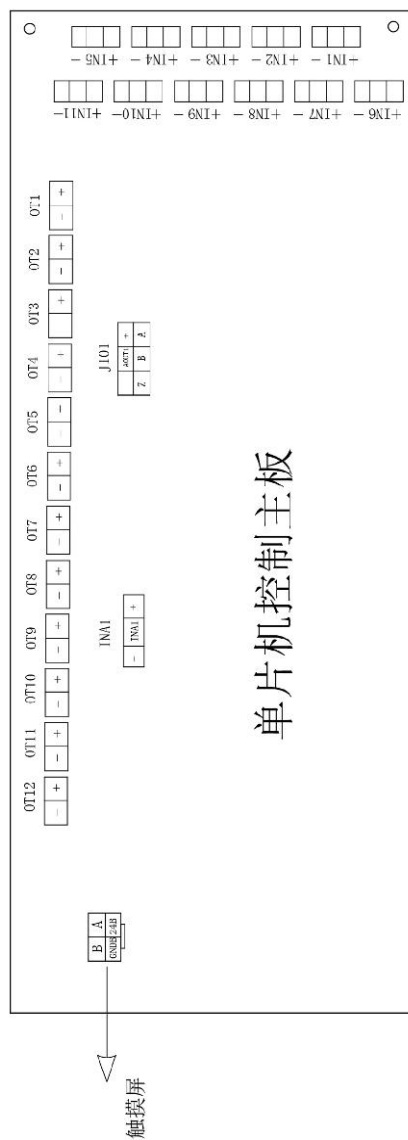


Speed adjustment of right roller: move the position of spherical plain bearing in waist groove as shown in the figure below

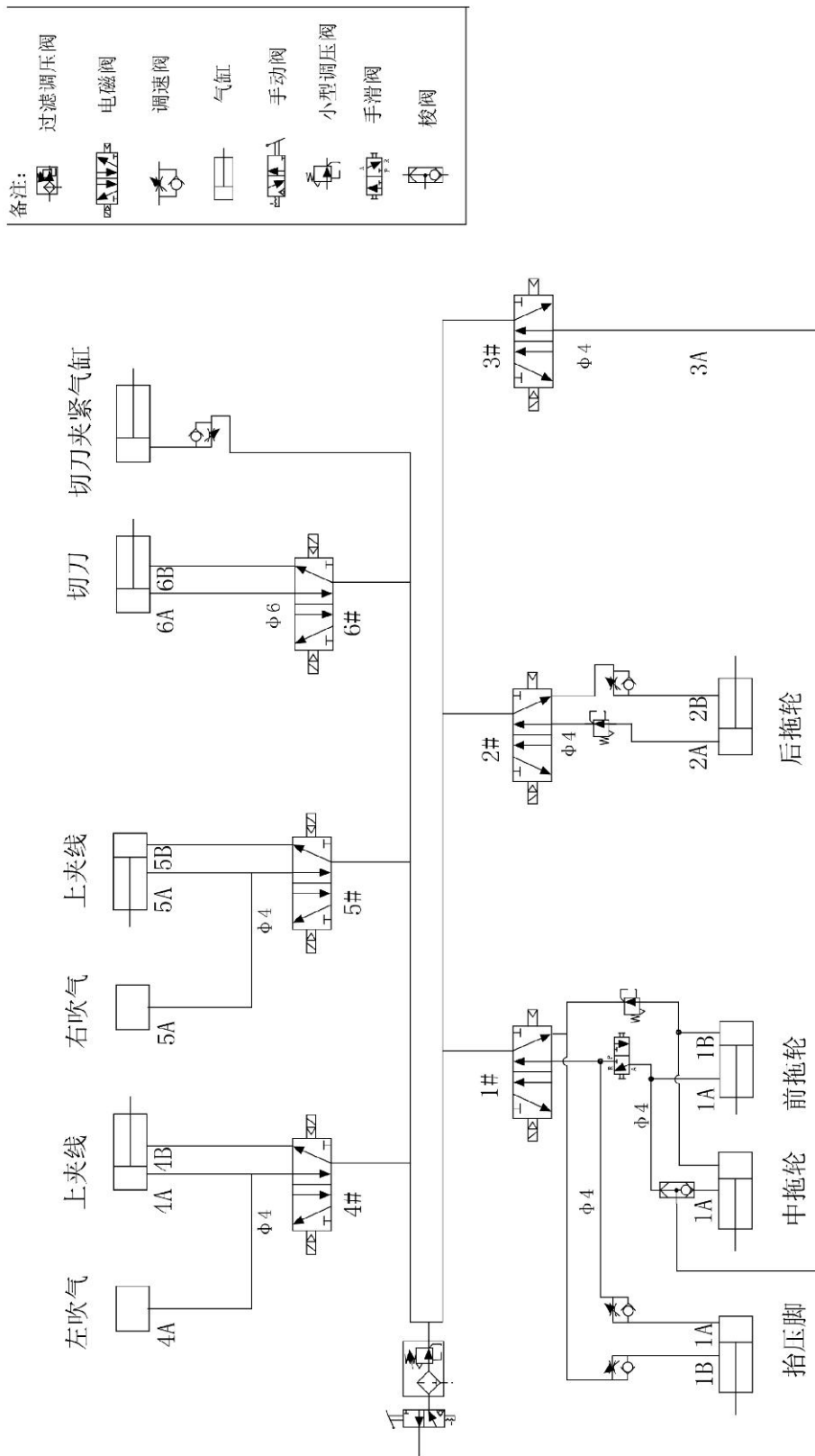


## 7、Electrical wiring

### 7.1 Electronic control

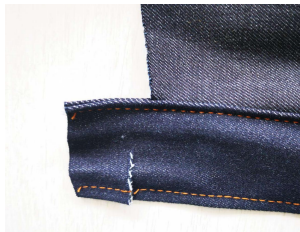
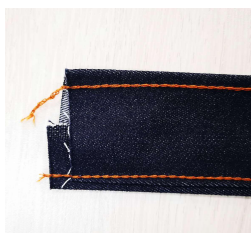


## 7.2 Pneumatic control



备注: 各气路布放时要做好标签, 以示区分。

## 8、Common problems and Solutions

| phenomenon                                                                                                    | Picture                                                                             | Cause analysis                                                       | Solutions                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waist cut constantly                                                                                          |    | Cutter wear                                                          | <ol style="list-style-type: none"> <li>1. Adjust the adjusting screw of lower cutter according to steps 6.6-3 and 6.6-4</li> <li>2. Replace the upper and lower cutters according to 6.6</li> </ol> |
| There is deviation in the shear length of both ends of the waist or the loose line position of the line trace |    | Wrong number of stitches in front and back blowing or shearing delay | Refer to "mb2003d waist pulling machine - touch screen interface operation instructions" to set the number of delayed blowing or cutting needles                                                    |
| After the waist is sewn, the upper and lower pieces are dislocated                                            |  | The upper and lower rollers and feed dog are not synchronized        | Adjust the speed ratio of the front tug and the lower tug according to the steps in 6.4                                                                                                             |
| Blowing or cutter failure                                                                                     |  | Position deviation or failure of reflector                           | <ol style="list-style-type: none"> <li>1. Check whether the laser is normal</li> <li>2. Move the reflector position or replace the reflector</li> </ol>                                             |
| Winding of front roller or lower roller                                                                       |                                                                                     | The shield is not against the roller                                 | Adjust the position of the baffle according to 6.5                                                                                                                                                  |

## 9、Daily maintenance requirements

11.1. Equipment maintenance list and requirements are shown in the table below

11.2. For other maintenance requirements of the machine head, please refer to the manual of the sewing machine head

| NO | Project           | Frequency |        |         |           | Requirement                                                                |
|----|-------------------|-----------|--------|---------|-----------|----------------------------------------------------------------------------|
|    |                   | Daily     | Weekly | Monthly | Half year |                                                                            |
| 1  | Clean up the dust | √         |        |         |           | Remove dust on equipment surface and parts                                 |
| 2  | Clean up the oil  |           | √      |         |           | Clean the oil stains on the table board, needle plate and shuttle core     |
| 3  | oil quantity      |           |        | √       |           | The oil quantity is not lower than the warning line                        |
| 4  | Bobbin            |           |        | √       |           | Check whether the bobbin is scratched                                      |
| 5  | Sensor            |           |        |         | √         | Check whether the sensitivity is accurate and whether the position changes |
| 6  | Sliding parts     |           |        |         | √         | Check lubrication of sliding parts and add lubricant if necessary          |
| 7  | Control box       |           |        |         | √         | The cooling fan runs normally and the dust should be cleaned up in time    |

## 10、Knowledge product protection statement

MB2003B waistband 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