



 **MA04G** 全自动连续锁眼机
Automatic Buttonholes Indexer
对位精确的连续锁眼机
Accurate Buttonholes Alignment

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1 概述 Introduction

1.1 特征和应用 Features and Applications

MA04G 门襟自动锁眼机（简称“MA04G”）用于衬衫门襟的连续锁眼缝制，适用于大部分面料的门襟锁眼缝制，锁眼效果好，效率高，该设备标配一个缝制相关的程序控制显示平台，操作便捷。

在缝制过程中，缝制效果可通过修改参数实现，在缝制完成一片衬衫的门襟后，可自动完成收料，减少整理布料时间。整个缝制过程简便快捷，可一人操作多台机器。

MA04G Automatic Button Machine (in short "MA04G") is designed for continuous button attaching on shirt front plackets. It can be applied to most width of front plackets with perfect button attaching work and high efficiency. A standard display board is equipped to the machine in order to operate and control the sewing program conveniently.

In the sewing process, the sewing result can be achieved by modifying the parameters, after sewing a piece of shirt front placket, the fabric can be collected automatically, that helps reduce the time cost to tidy the fabric. The whole sewing process is convenient and fast, and one operator can operate multiple machines at the same time.

1.2 使用建议 Using Recommendation

MA04G 目前仅限于衬衫门襟的连续锁眼缝制，供应商不承担由于错误使用本机而造成的人员或财产损失！

这个符号  用于说明某个场景对操作者安全健康存在风险和危险，需特别注意。MA04G 配备有带机针的缝纫机头带压布功能的移料机构及压料机构、带吸风的宽度调节机构、带摆料杆的收料机构等，工作人员在操作机器时需特别注意！

MA04G is currently limited to button attaching on shirt front placket. The supplier shall not be liable for any loss or damage of personnel or property caused by the incorrect use of the machine!

This symbol  is used to indicate that a scenario poses a risk or hazard to the operator's safety and health and requires special attention. MA04G is equipped with sewing machine head with needle, vibration plate with button feeding and clamping device, fabric transfer and pressing mechanism with pressing function, fabric collecting mechanism with fabric swing rod, etc., operators need to pay special attention when operating the machine!

机器的特定的安全符号如下：

Specific Safety Symbols of the machine are as follows:



小心危险的电压 Watch out dangerous voltage



小心上部部件压伤 Watch out injury caused by upper part pressing



注意危险和驱动移动 Watch out danger and driver movement

如果没有注意到这些符号可能导致：

- 操作者的安全出现危险；Put Operator Safety in Danger
- 失去保修；Warranty Loss
- 制造商的免责。Manufacturer's liability exemption

在任何调节、更改或维护前，需要断电和断气。

Power outages and air outages are required prior to any adjustments, modifications, or maintenance.

MA04G 不可以暴露在雨和阳光等气候条件下。

The machine should not be exposed to weather conditions such as rain and sunshine.

2 MA04G 门襟自动锁眼机介绍 Introduction of MA04G

2.1 设备规格 Machine Specifications

表 2.1 MA04G 配置简介 Sheet 2.1 Machine Specifications

整机重量 Weight	265kg
机头 Head	1790G 锁眼机
使用机针 Needle	DP×5 11” ~ 14”
使用旋梭 Hook	DP 型全旋转旋梭
使用温度 Temperature	5℃~35℃
额定电压 Power	单相电压 220V±10%，Single phase
额定气压 Air pressure	0.6MPa
锁眼的数量（个） Buttonhole quantity	2-999
锁眼间距 Distance between buttonholes	35-550 mm
门襟的宽度(mm) Front placket width	20-45mm
门襟头到第一个锁眼起缝距离 Distance from the top of front placket to the first buttonhole	≥30mm
缝制长度范围(mm) Front piece length	≤660mm
自动锁眼程序存储数 Program saving	999
设备净尺寸 Machine measurement	长*宽*高（2150mm*880mm*1600mm）
整机净重 Net weight	235kg

2.2 各部件名称 Name of Components

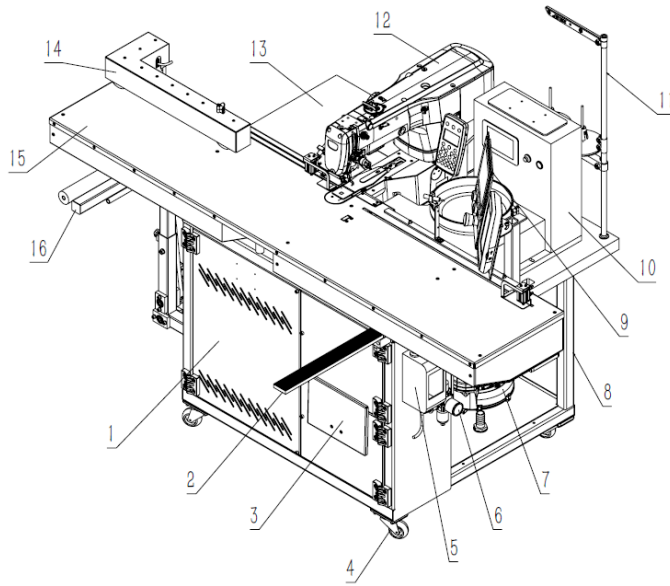


图 2.1 各部件展示图 Figure 2.1 Parts Display Drawing

1、电控箱 Electrical control box 2、物料架 Fabric shelf 3、膝靠启动开关 Knee to start switch 4、带刹活动脚轮 Brake moving casters 5、电源开关 Power switch 6、气源开关 Air switch 7、鼓风机及其气动配件 Blower and its pneumatic accessories 8、机架 Rack 9、操作屏及其安装座 Control panel and base 10、送扣装置 Button feeding device 11、线架 Thread stand 12、锁眼机机头 Sewing Head 13、台板 Platform Board 14、压料机构 Pressing Mechanism 15、移料机构 Transferring Mechanism 16、收料机构 Fabric collecting Mechanism

3 运输与拆包 Transportation and Unpacking

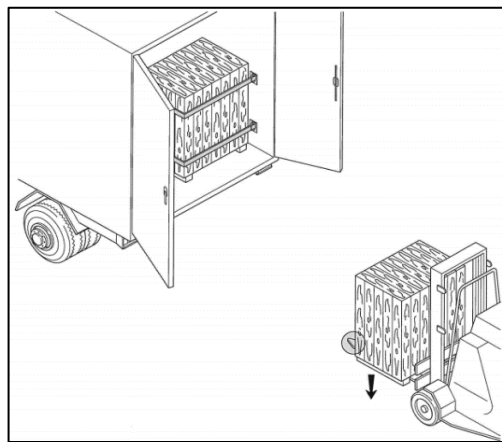


图 3.1 搬运图

- 当抬升或卸载时，叉车插架承载能力大于机器的重量。机器需打包后，用绳索或者皮带固定在卡车或箱式货车上运输。

When lifting or unloading, check whether the capacity of the forklift can bear the weight of the machine. When the machine is placed on a truck or van, it must be guaranteed that machine is fixed with a rope or belt.

- 为了运输方便，打包时可将显示屏、线架等拆分。

For a convenient transportation, control panel and thread stand can be removed and packed independently.

- 拆掉包装，检查机器是否有明显的损坏。如有损坏，请及时联系制造商。

When unpacking, examine the machine for any obvious damage in transit. If there is any damage, please do not use the machine and contact the manufacturer.



4 安装 Installation

注意：机器必须只能由专业人士安装。

Attention: Machine installation should be done only by professional person.

- 制造商不对任何没有正确安装机器造成的财产或人身损失负责。

The manufacturer shall not be liable for any property or personal damage caused by installing the machine improperly.

- 如果机器安装在一个悬挂的表面，检查表面是否能够承受机器的重量。

If the machine is placed on a suspended surface, check whether the surface can bear the weight of the machine.

- 机器所在区域应远离危险源（火源、易爆物等）。

The area where the machine is located shall not contain inflammable and explosive materials or objects.

- 必须在机器四周强制性留出如图 4.1 所示的空间，来操作和维护机器。

Required space as Figure 4.1 shows must be set aside around the machine to operate and maintain the machine.

- 机器须放置在一个坚硬和平坦的表面上，制动带刹活动脚轮固定机器。

The machine must be placed on a hard and flat surface, the moving casters should be braked to fix machine,

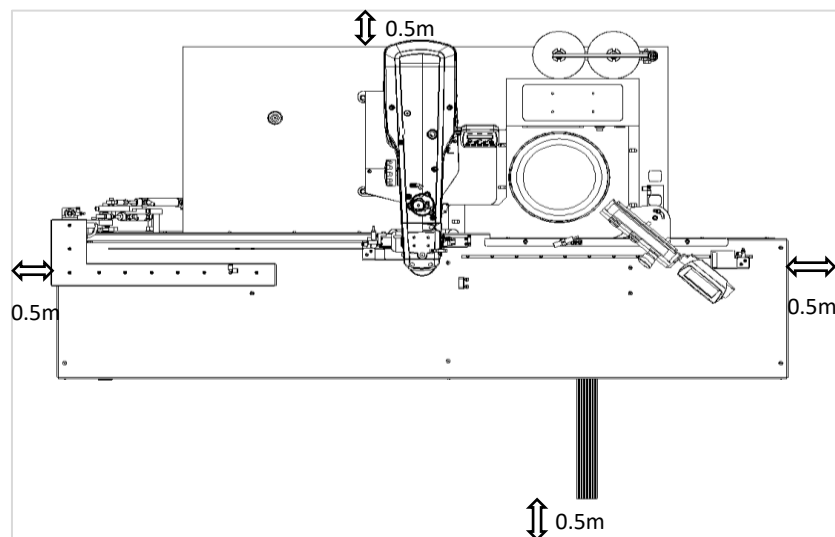


图 4.1 摆放设备周围空间要求 Figure 4.1 Space required around machine

4.1 显示屏和线架安装 Installation of Panel and Thread Stand

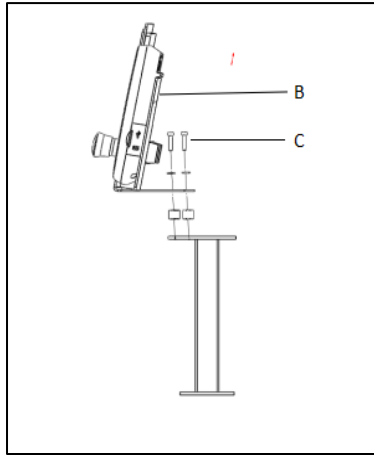


图 4.2 操作显示屏

Figure 4.2 Control Panel

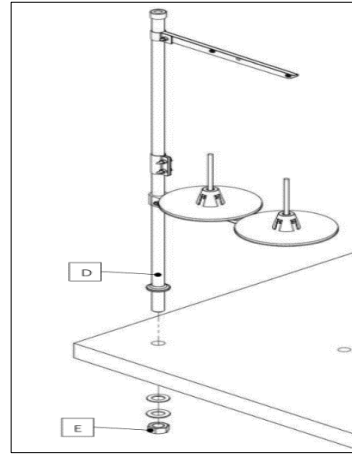


图 4.3 线架组件

Figure 4.3 Thread Stand Subassembly

- 操作显示屏“B”下方垫上两个气缸杆帽“A”，然后通过螺栓“C”固定（图 4.2）；
Insert two cylinder rod caps "A" under "B" of the operation screen, and then fix them by bolt "C" (figure 4.2);
- 线架组件“D”通过螺母“E”固定（图 4.3）；
Thread stand subassembly "D" is fixed by nut "E" (figure 4.3);

4.2 供电连接 Power Connection

- 该机器依靠电源工作。
This machine is powered by electricity supply
- 电缆连接到单相 AC 220V-50Hz 的电源插座上。
The cable is connected to the single-phase AC 220v-50hz power socket;
- 安装前，检查机器连接的接地系统是否正常。
Before installation, examine the grounding system connected to the machine is working or not.

4.3 气动系统连接 Pneumatic System Connection

- 过滤器出气一端连接到汇流板上接头上面（图 4.4、图 4.5）。机器连接外部气压出口时，确保气流充足，能够保证执行器维持恒定的 0.6MPa（6 个标准大气压）的压力，检查压力调节器调到 0.6Mpa（图 4.4）。

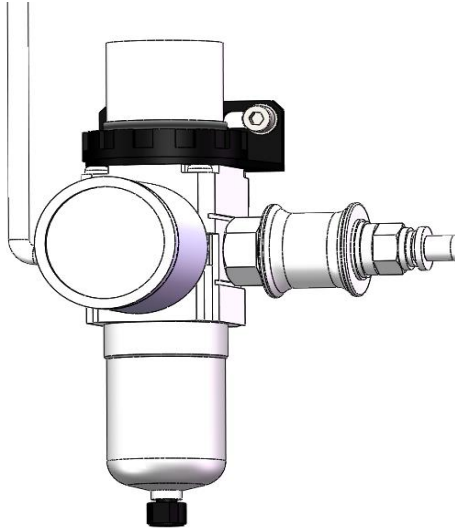


图 4.4 过滤器

Figure 4.4 Filter

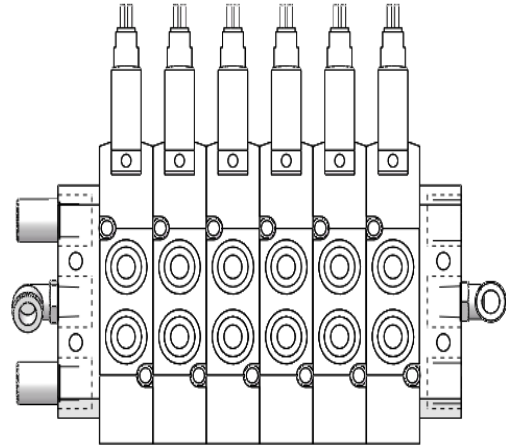


图 4.5 电磁阀汇流板

Figure 4.4 Solenoid valve bus plate

- The air outlet end of the filter is connected to the top of the junction above the bus plate (figure 4.4, figure 4.5). When the machine is connected to the external air pressure outlet, make sure that the air flow is sufficient to ensure that the actuator maintains a constant pressure of 0.6mpa (6 standard atmospheres), and check that the pressure regulator is adjusted to 0.6mpa (figure 4.4).

4.3 其他安装操作 Other Installation Opera

- 为方便生产和放置加工面料，可以按图 4.6 向外旋转物料架。

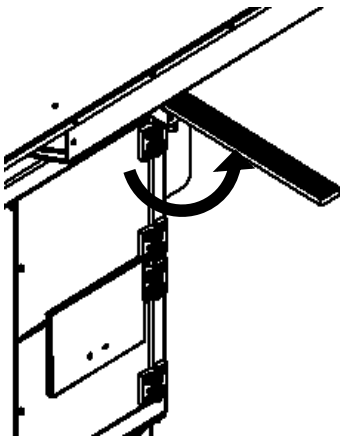


图 4.6 物料架旋转图

Figure 4.6 fabric shelf rotating diagram

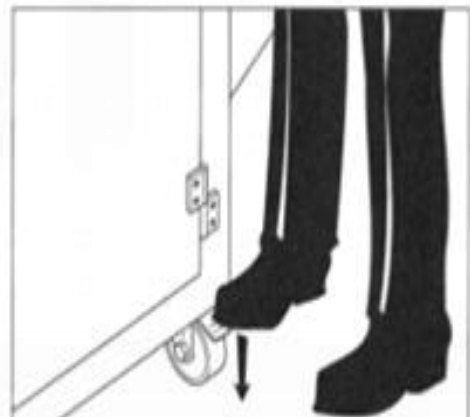


图 4.7 脚轮固定图

Figure 4.7 rolling casters fixing diagram

To facilitate the production and placement of processed fabrics, the material shelf can be rotated outward according to figure 4.6.

- 请务必将机器放置于平坦的地面上，并按图 4.7 要求，锁住脚刹。

Please be sure to place the machine on a flat floor and lock the foot brake as shown in figure 4.7.

5 操作 Operation

5.1 准备工作 Preparing Work

- 开机前，确保工作区域安全。Before starting up, make sure the work area is safe.
- 打开电源，调节气压到 0.6Mpa。Turn on the power switch, adjust the air pressure to 0.6Mpa.
- 启动完毕后，按机头复位键“F”（图 5.2），确保缝制部件无异常后，松开红色急停按钮“D”（图 5.1），按黄色复位键“C”（图 5.1），完成设备初始化。

After starting, press head reset button "F" (FIG. 5.2), make sure there is no abnormality in the sewing parts, release the red emergency stop button "D" (FIG. 5.1), and press the yellow reset button "C" (FIG. 5.1) to complete the initialization of the equipment.

- 根据缝制工艺要求，在控制显示面板“A”和“E”上设置缝制所需的各工艺参数。

According to the sewing process requirements, set the sewing process parameters on the control panel "A" and "E".

- 复位完毕的情况下，机头进入旋梭绕线模式时，按“B”进行旋梭绕线。

After the reset is completed, when the head enters the spinning shuttle winding mode, press "B" to conduct the spinning shuttle winding.

- 调节激光头“G”对准布料放置最前端位置，调节激光头“H”使激光头射线对准缝针延伸。

Adjust laser head "G" to the front of the cloth, and laser head "H" to make the laser head ray to the needle extension.

- 旋转门襟调节旋钮“I”，将门襟宽度调整完成后，拧紧旋钮。旋转“J”旋钮将螺杆顶到最前端的限位板上，然后锁紧旋钮螺母。

Adjust the front placket knob "I". After adjusting the width of the placket, tighten the knob. Turn the "J" knob to push the screw to the limit plate at the front end, then lock the knob nut.

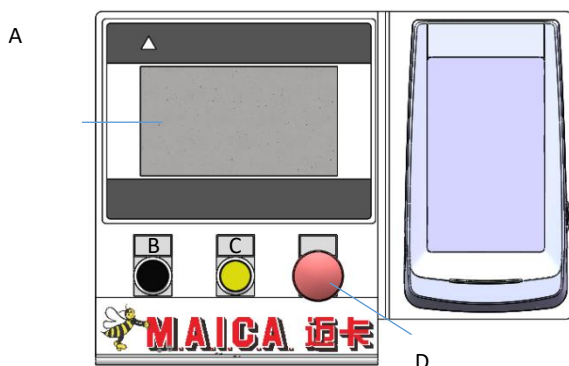


图 5.1 操作屏

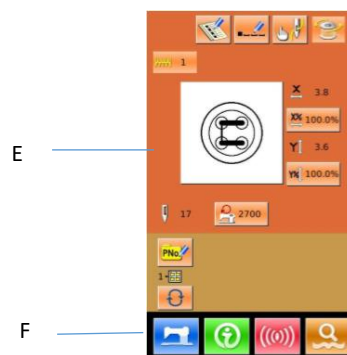


图 5.2 锁眼机启动复位

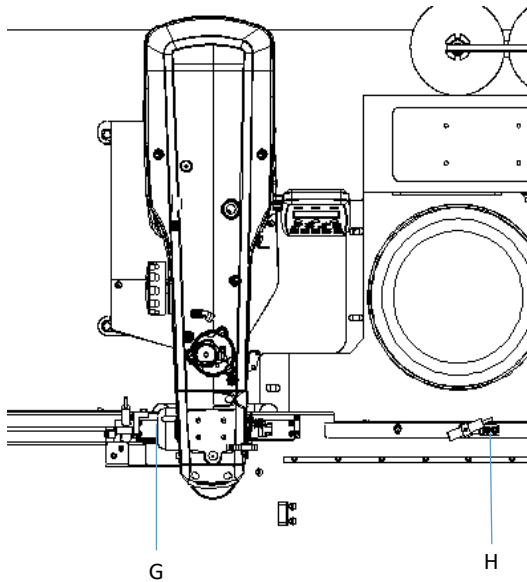


图 5.3 激光头

Figure 5.3 Laser head

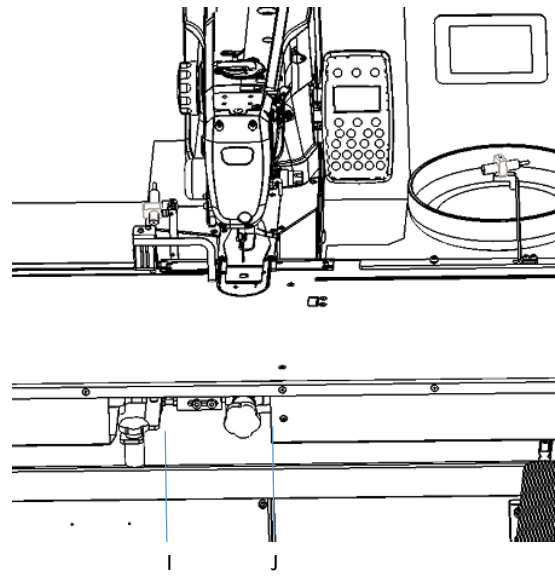


图 5.4 门襟宽度调节旋钮

Figure 5.4 Front placket width adjusting knob

5.2 操作步骤 Operation Steps

完成以上步骤之后，顶一下膝靠启动开关，鼓风机开始正常工作。

After completing the above steps, touch the knee-on switch, the blower starts to work.

将调试布片放入缝制区域，待门襟吸入吸风口处时，调整布片锁眼位置，使激光头“G”射线对准缝料边缘，按手动缝制按钮“B”。

Place the fabric piece for testing into the sewing area. When the fabric is sucked into air suction hole, adjust the position of the button attaching on the fabric, make ray of the laser head "G" pointed at the fabric edge, and press the manual sewing button "B".

第一个扣子缝制完毕之后，取出缝料，用钢尺测量锁眼边距与实际需要值是否一致，如果不一致则可按一上章节（5.1 准备工作）步骤进行调整。

After the first button is sewn, take out the fabric, get a steel ruler which is used to measure whether the margin of the button is consistent with the required value. If not, it can be adjusted according to the steps in section 1 (5.1 Preparation).

确定完扣子边距无误之后，将第一个扣子剪掉，如果此时鼓风机停止工作，可以重新顶一下膝靠启动开关，开始吸风，再根据激光头射线，将缝料放回原缝制位置，再顶一下，即可完成整个缝制和收料过程。

After determining the correct margin of the button, cut off the first button. If the blower stops working at this time, you can touch the knee-on switch again to start sucking. Then, according to the laser head ray, put the sewing material back to the original sewing position. Touch the switch again, the whole process of sewing and collecting is completed.

出现紧急情况时，直接按急停按钮“D”，设备会立即停止，如果在缝制中，则会钉完该扣子之后停止工作。因紧急情况停止机器，将不能在当前位置继续工作，排除故障后，将急停按钮“H”松开，按下复位键“C”，顶一下膝靠启动开关，启动鼓风机，如果想继续缝制这片布料，则需要使用“智

能补扣”的方式，跳过已缝扣子的位置继续缝制还未完成的扣子。

In case of emergency, press the emergency stop button "D" directly, and the machine will stop immediately. If sewing is in process, the machine will stop working after stitching the button. When an emergency stop happens due to emergency, the machine will not be able to continue to work in the current position, after debugging, release the stop button "H", press the reset button "C", touch knee-on switch, start the blower, if you want to continue to sew this piece of fabric, you will need to use function of "smart fill button": skip buttons that have been completed and to continue the button sewing that has yet to be completed.

触摸屏“F”会显示设备常见故障，可根据报警提示进行相应处理。

The touch screen "F" will display common faults of the device and can be handled accordingly according to the alarm prompt.

注：收料为分段进行，可结合电控与操作屏调节参数达到理想效果。注意不要用手去靠近收料部件运动范围，以免受伤！

Note: the collecting process is divided into sections, which can be combined with electronic control and operation screen to adjust the parameters to achieve the desired effect. Pay attention to do not use the hand to close to the collecting part movement range, so as to avoid injury!

6 操作模式 Operating Mode

6.1 主界面 The Main Interface



图 6.1 主界面图

区域 1: Area 1

显示设备当前状态是否需要复位，有文字显示表示需要复位。

Display whether the current state of the machine needs to be reset. Text display indicates that it needs to be reset.

区域 2: Area 2

缝制范围显示缝制范围超长。Sewing range shows sewing range exceeded.

区域 3: Area 3

码号显示，显示当前选择的码号。Size display, shows the size selected currently.

区域 4: Area 4

进入智能补扣界面，启动智能补扣缝制模式。Enter into smart fill button interface, start the mode.

区域 5: Area 5

锁眼计数和门襟计数显示和设置，清零按钮进行计数清零，输入窗口进行计数设置，设定值为 0 表示关闭计数提示功能。（可用于底线预估）

Display and setting of button counter and front placket counter, the reset button is used to reset the counter, the input window to set the counter, set the value to 0 to turn off the counter prompt function.(can be used for baseline estimation)

区域 6: Area 6

缝制信息显示，指示灯显示当前正在缝制的锁眼位置，数值显示锁眼数量和间距。

The sewing information is displayed. The indicator shows the current stitching position, and the value shows the number of button and distance between buttons.

区域 7: Area 7

分别进入参数界面、手动测试界面、其他界面、语言切换界面。

Enter the parameter interface, manual test interface, other interface and language switch interface respectively.

6.2 设置界面 Setting Interface



图 6.2 参数设置界面图 Figure 6.2 Setting Interface

区域 1: Area 1

码号选择设置: 直接输入花样编号 (1-999), 花样包括区域 2、3、4、6 的内容。

缝制范围超长显示, 间距超长时自动转换为弹性模式。

Size selection setting: enter the pattern number (1-999) directly. The pattern includes the contents of area 2, 3, 4 and 6.

Display of overlong sewing range, it is automatically converted to elastic mode when distance is too long.

区域 2: Area 2

固定间距: 按下为固定间距和不等间距切换, 相等间距为区域 4 的间距设定值, 不等间距为区域 8 内的设定值 (注: 当前为相等间距, 可在主界面查看间距显示值)。

常吸风方式: 按下为缝制时保持吸风和缝制时不吸风切换, 常吸气 ON 为缝制时保持吸风, 常吸气 OFF 为缝制时不吸风, 常吸气 OFF 可改善特殊布料的间距误差。

Fixed spacing: press to switch between fixed spacing and unequal spacing, equal spacing is the spacing set value in area 4, and unequal spacing is the setting value in area 8 (note: the current figure is equal spacing, the spacing value can be viewed in the main interface).

Regular suction mode: press down to switch suction when sewing or no suction when sewing, regular suction ON to maintain suction when sewing, regular suction OFF to avoid suction when sewing, regular suction OFF to improve the spacing error of special fabric.

区域 3: Area 3

间距设定: 固定间距时的间距的设定值 (10-400mm), 根据实际需要进行设定。

锁眼个数: 设定需要锁眼的个数 (2-999)。

收料距离: 滚轮收料的距离 (200-3000mm)。

收料速度: 收料时的移动速度 (10-2000)。

弹性补偿: 根据布料的弹性, 可通过弹性补偿来统一提高精准度 ($\pm 9\text{mm}$)。

收料延迟: 收料的时候收料杆回位的延迟时间 (1.0-50s), 默认 1.0s, 设定适当的值来调整收料效果。

抬起延迟: 收料的时候压料气缸回位的延迟时间 (0-20s), 默认 0s, 设定适当的值来调整收料效果。

Spacing setting: the spacing setting value (10-400mm) for fixed spacing, it shall be set according to actual needs.

Number of button: set the number of buttons (2-999).

Collecting distance: the collecting distance of the roller (200-3000mm).

Collecting speed: movement speed (10-2000) when collecting

Elastic compensation: according to the elasticity of the fabric, elastic compensation can be used to uniformly improve the accuracy ($\pm 9\text{mm}$).

Collecting delay: the delay time (1.0-50s) of collecting rod return when collecting materials, by default 1.0s, set the appropriate value to adjust the collecting effect.

Lift delay: the delay time (0-20s) of the return position of the pressing cylinder at the time of collecting the material, by default 0s, set the appropriate value to adjust the collecting effect.

区域 4: Area 4

断线检测: 打开和关闭断线检测功能。

衣长编辑: 进入衣长编辑模式。

参数恢复: 恢复当前界面所有值的出厂值。

Broken thread detection: turn on and off the broken thread detection function.

Cloth length edit: enter length edit mode.

Parameter recovery: restores all values in the current interface to factory values.

区域 5: Area 5

不同锁眼间距的设定 (35-550mm), 最多设定 7 个间距。

Setting of different button spacing (35-550mm), setting a maximum of 7 spacing.

区域 6: Area 6

分别进入主界面、手动测试界面、其他界面、语言切换界面。

Enter the parameter interface, manual test interface, other interface and language switch interface respectively.

6.3 衣长编辑模式 Cloth Length Edit Mode

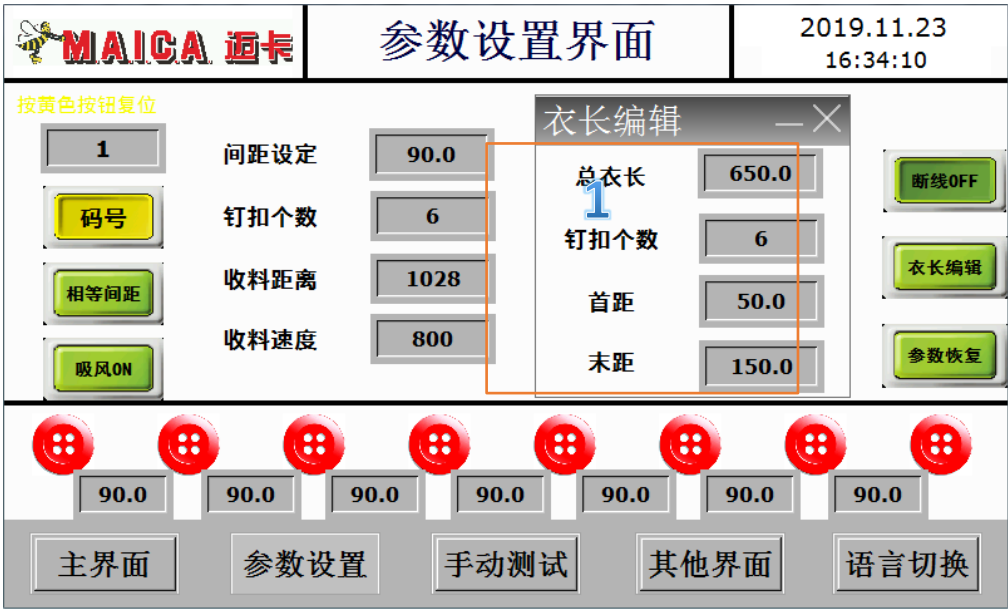


图 6.3 衣长编辑模式图 Figure 6.3 Cloth Length Edit Mode

区域 1: Area 1

总衣长: 设定裁片总长。

锁眼个数: 设定需要锁眼的个数 (2-999)。

首距: 毛边与第一个纽扣的距离。

末距: 最后一个纽扣与下摆的距离。

根据以上四个参数自动调整纽扣间距。

Total length: set the fabric length.

Number of buttons: set the number of buttons (2-999).

First distance: the distance between the raw edge and the first button.

End distance: the distance between the last button and the hem.

Automatically fill the button spacing according to the above four parameters.

6.4 IO 测试界面 IO Test Interface



图 6.4 调试界面图 Figure 6.4 Test Interface

区域 1: Area 1

输出端口监控，显示输出端口状态，可直接点击相应指示按钮来测试输出端口是否正常，启动缝制可以用于机头绕线。

收料电机：进入收料电机测试界面。

移料电机：进入移料电机测试界面。

Output port monitoring, display output port status, can directly click the corresponding indicator button to test whether the output port is normal, start sewing can be used for winding.

Fabric feeder motor: enter the feeder motor test interface.

Fabric feeder motor: enter the feeder motor test interface.

区域 2: Area 2

输入端口监控，显示输入状态，可用于输入点 测试，检测输入信号是否正常。

Input port monitoring, display input status, can be used for input point test, check whether the input signal is normal.

区域 3: Area 3

分别进入主界面、参数设置界面、其他界面、语言切换界面。

Enter the parameter interface, manual test interface, other interface and language switch interface respectively.

6.5 收料电机调试界面 Collecting Motor Debugging Interface

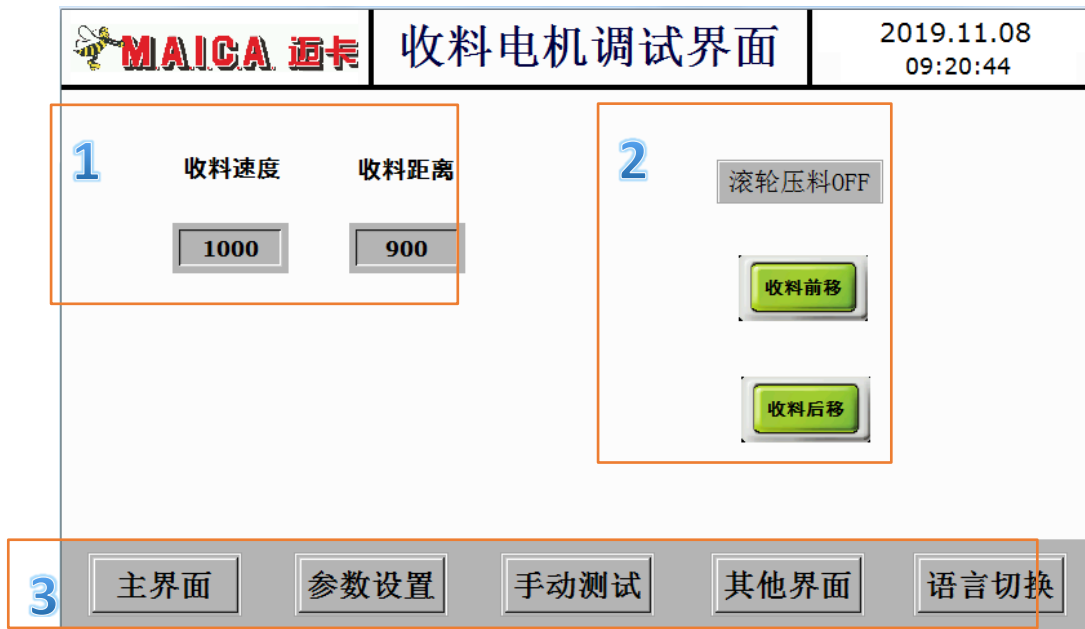


图 6.5 收料电机调试界面图 Figure 6.5 Collecting Motor Debugging Interface

区域 1: Area 1

设置当前调试界面的收料速度和收料距

Set the collecting speed and the collecting distance of the current debugging interface.

区域 2: Area 2

滚轮压料气缸的上升和下降;

收料前移: 测试收料电机按设定的收料速度和距离进行前移。

收料后移: 测试收料电机按设定的收料速度和距离进行后移。

Roller pressing cylinder up and down;

Collecting advance movement: test the collecting motor to move forward according to collecting speed and distance set.

Collecting backward movement: test the collecting motor to move backward according to collecting speed and distance set.

区域 3: Area 3

分别进入主界面、参数设置界面、手动测试界面、其他界面、语言切换界面。

Enter the parameter interface, manual test interface, other interface and language switch interface respectively.

6.6 移料电机调试界面 Fabric Feeder Motor Debugging Interface

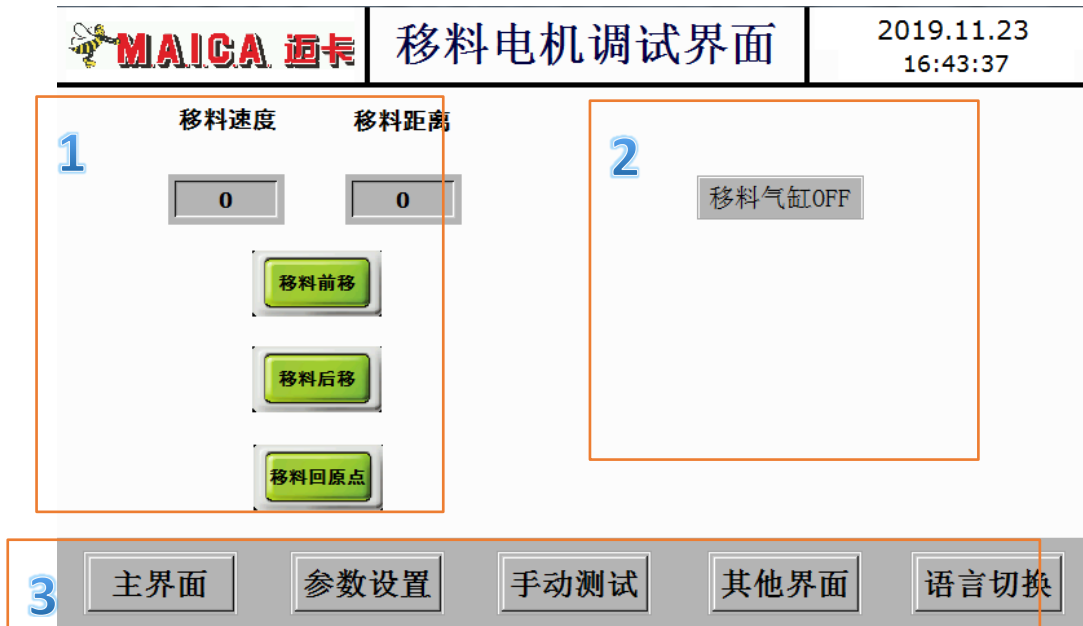


图 6.6 移料电机调试界面图 Figure 6.6 Fabric Feeder Motor Debugging Interface

区域 1: Area 1

设置当前调试界面的收料速度和收料距

移料前移: 测试移料电机按设定的移料速度和距离进行前移。

移料后移: 测试移料电机按设定的移料速度和距离进行后移。

移料回原点: 点击移料电机按设定移料速度返回原点。

Set the collecting speed and the collecting distance of the current debugging interface

Feeding forward: test the feeding motor to move forward according to the feeding speed and distance set.

Feeding backward: test the feeding motor to move backward according to the feeding speed and distance set.

Feeder moves to the original point: click then the feeding motor to return to the original point at the set speed.

区域 2: Area 2

移料气缸的上升和下降;

The rise and fall of the fabric feeder cylinder;

区域 3: Area 3

分别进入主界面、参数设置界面、手动测试界面、其他界面、语言切换界面。

Enter the parameter interface, manual test interface, other interface and language switch interface respectively.

6.7 智能补扣界面 Smart Button Fill Interface

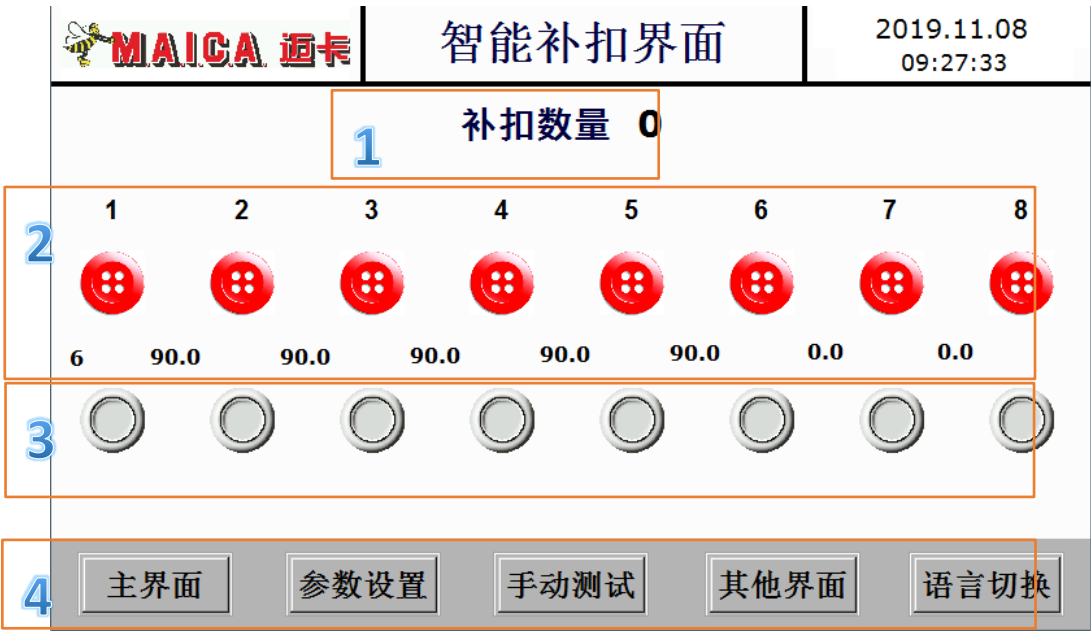


图 6.7 智能补扣界面图 Figure 6.7 Smart Button Fill Interface

区域 1: Area 1

显示智能补扣的数量（根据区域 3 的选定数，显示补扣数量）。

Displays the number of buttons are going to be filled (according to the selected number in area 3, shows the number of buttons).

区域 2: Area 2

显示当前码号的距离和锁眼数量。

Displays the spacing of the current size and the number of buttons.

区域 3: Area 3

根据补扣需要，点击需要补扣的位置。

According to the need to fill the button, click the button position that needs to be filled.

区域 4: Area 4

分别进入主界面、参数设置界面、手动测试界面、其他界面、语言切换界面。

Enter the main interface, parameter setting interface, manual test interface, other interfaces and language switching interface respectively

6.8 其他界面—应用参数界面 Other Interface—Application Parameter



图 6.8 应用参数界面图 Figure 6.8 Application Parameter Interface

区域 1：Area 1

清理件数：设置清理件数，当到达数量后弹出需要清理吸风口以及滤网的提示，便于客户及时清理吸风口。设定值为 0 表示关闭清理吸风口提示功能。

空吸时长：设定空吸时长（30-500s），时间到会自动关闭鼓风机进入待机状态。

Number of cleaning pieces: set the number of cleaning pieces. When the number is reached, the prompt of cleaning the suction opening and filter will pop up to facilitate customers to clean the suction opening timely. The setting value of 0 indicates that the prompt function of cleaning suction opening is turned off.

Air suction duration: set the air suction duration (30-500s), when the time is out, it will automatically turn off the blower into standby state.

区域 2：Area 2

总件数统计：当清理计数值到达清理件数时会弹出清理吸风口报警，点击清理计数清理可以重置清理计数，统计该设备共完成的件数。

Total number of pieces: when the cleaning count reaches the number of pieces, the cleaning suction opening alarm will pop up. Click the resetting cleaning count to reset the cleaning count, it is used to count the number of pieces completed by the machine.

区域 3：Area 3

总件数清零：清零工作总件数。

参数恢复：恢复当前界面参数的出厂值。

Total number reset: reset number of pieces.

Parameter recovery: restore current interface parameters to the factory value.

区域 4：Area 4

分别进入主界面、参数设置界面、手动测试界面、其他界面、语言切换界面。

Enter the main interface, parameter setting interface, manual test interface, other interfaces and

language switching interface respectively

6.9 报警及故障 Alarm and Fault Explanation

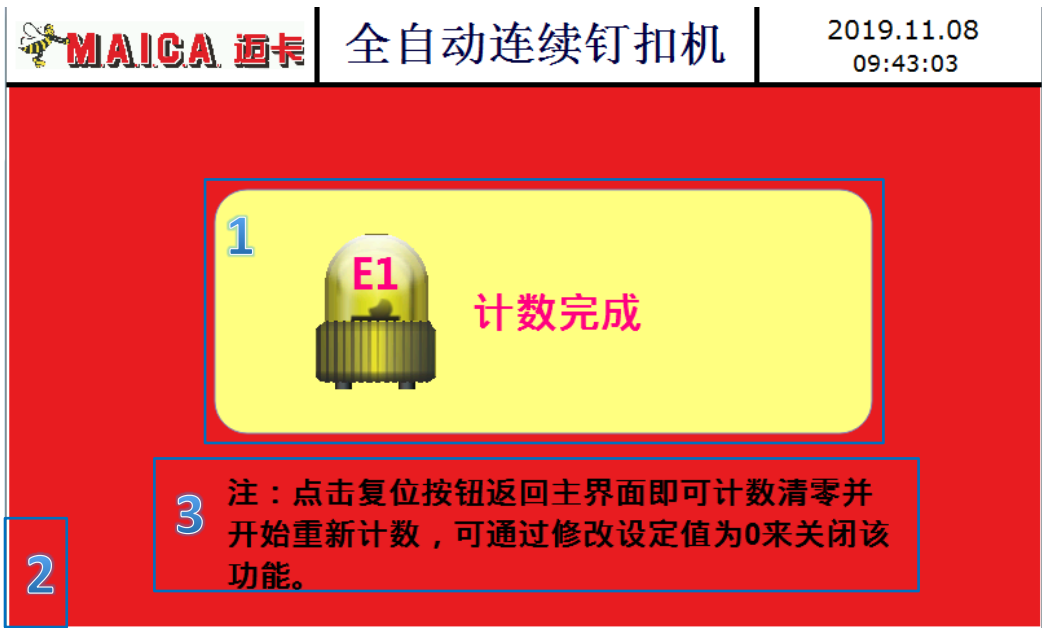


图 6.9 报警界面图 Figure 6.9 Alarm and Fault Interface

区域 1: Area 1

显示报警序号和报警名称。

Display alarm serial number and alarm name.

区域 2: Area 2

点击左下角空白处进入触摸屏系统设置界面。

Click the blank in the lower left corner to enter the system setting interface of the touch screen.

区域 3: Area 3

显示报警处理方式。

Display corresponding solution to alarm.

报警序号 Alarm Number	报警信息 Alarm Information	处理方式 Solution
E01	计数完成 Number Counting Completed	点击复位按钮返回主界面即可计数清零并开始重新计数，可通过修改设定值为 0 来关闭该功能。 Click the reset button to return to the main interface to clear the count and start counting again. This function can be turned off by changing the setting value to 0.
E02	计件完成 Pieces Counting Completed	点击复位按钮返回主界面即可计件清零并开始重新计数，可通过修改设定值为 0 来关闭该功能。 Click the reset button to return to the main interface to reset and start counting again. This function can be turned off by changing the setting value to 0.

	抬压脚异常	抬压脚传感器出现故障，或机头抬压脚未抬起，排除故障后点击复位按钮回到主界面。
E03	Pressing Foot Lifting Error	There is a fault in the pressing foot lift sensor or the pressing foot of head is not lifted. After troubleshooting, click the reset button to return to the main interface.
	移料传感器异常	移料传感器出现故障或移料电机故障，排除故障后需按复位按钮重新复位。
E04	Feeder Sensor Error	There is a fault in the feeding sensor or the feeding motor, press the reset button to reset again after troubleshooting.
	断线报警	断线报警，重新穿好线之后按下复位按钮继续缝制。
E05	Thread Broken Alarm	Broken thread alarm. Press the reset button to continue sewing after re-threading.
	急停报警	紧急停车，确认设备无其它异常后松开急停按钮复位即可重新缝制。
E06	Emergency Stop Alarm	Emergency stop, make sure there are no other abnormalities of the equipment, then release the emergency stop button to reset and then re-sew.
	气压报警	排除气源问题之后重新复位即可。
E07	Air Pressure Alarm	After eliminating the air source problem, reset again.
	限位传感器异常	限位传感器异常，调整移料轴定位位置，按复位后继续缝制。
E08	Position Limit Sensor Error	The position limit sensor is abnormal, adjust the positioning position of the feeding shaft, and continue sewing after resetting.
	未放置布料报警	检测到未放置布料，请放置布料。
E09	No Fabric Alarm	No fabric is detected, please place the fabric.
	纽扣缺失报警	重新上扣后，按复位键继续缝制。
E10	No Button Alarm	After reloading button, press the reset button to continue sewing.
	清理吸风口	清理吸风口和滤网，清理完成后点击已清理回到主界面。
E11	Clean Suction Opening	Clean the suction opening and filter net. After cleaning, click "cleaned" to return to the main interface.
	鼓风机跳闸	检查鼓风机保护器是否跳闸或鼓风机是否损坏。拨回跳闸旋钮后，按复位按钮继续缝制。
E12	Blower Trip-out	Check whether the blower protector tripping or whether the blower is damaged. After resetting the tripping knob, press the reset button to continue sewing.
	按黄色按钮复位	点击黄色复位按钮即可返回主界面并复位。此界面如按正常操作点击复位按钮后进行操作则不会出现此界面。
E13	Press Yellow Button to Reset	Click the yellow reset button to return to the main interface and reset. This interface will not appear if you press the reset button in right way.
	送扣不到位	重新上扣后，按复位键继续缝制。
E14	Button Not In Position	After reloading button, press the reset button to continue sewing.

E15	减速点传感器异常	减速点传感器出现故障，排除故障后需按复位按钮重新复位。
	Deceleration Point	There is a fault in the sensor of the deceleration point. After
	Error	troubleshooting, press the reset button to reset again

7 机器调试 Machine Debugging

⚠ 如果更换缝制布料，布料长度与上一组差别较大时，在新开始工作之前，需要重新调节机器。
注意：以下操作，必须由熟练此设备人员进行。

⚠ If the sewn fabric is changed and the length of the fabric is greatly different from that of the previous group, before the new work begins, The machine needs to be readjusted.
Note: the following operations must be performed by personnel skilled in the equipment.

7.1 移料机构长度调节 Feeding Mechanism Length Adjustment

根据布料长度，通过“5#内六角扳手”（图 7.1）将右侧压料气缸机构进行左右调整，保证左右气缸压板能够压到布料两头。

According to the length of the cloth, adjust the right side of the pressing cylinder through the "5# hexagon wrench" (FIG. 7.1) to ensure that the pressing plate of the right and left cylinders can press to both ends of the cloth.

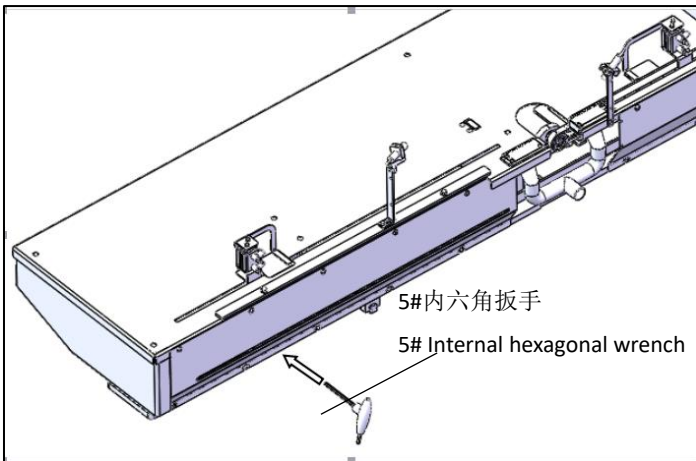


图 7.1 移料机构图 Figure 7.1 Feeding MechanismDrawing

7.2 收料机构长度与高度调节 Length and Height Adjustment of Collecting Structure

根据缝制布料的数量和收料的整齐度，可以调整收料机构的高度和长度。

- 如果布料较厚，堆积的厚度较高，摆料杆无法顺畅的摆动，需要上下调节机构。
- 如果界面参数设置的参数无法让布料平均长度的挂在收料架上，则需要左右调整机构。（A：使用 8#内六角扳手，B：用手拧松，C：使用 13#开口扳手。）

The height and length of the fabric collecting mechanism can be adjusted according to the quantity of the stitched fabric and the uniformity of the collected material.

- if the fabric is thick, the pile thickness is higher, the pendulum rod can not swing smoothly, the need for up and down adjustment mechanism.
- if the parameters set by the interface parameters can not make the average length of the cloth

hanging on the collecting rack, the need to adjust the mechanism left and right.(A: use # 8 internal hexagonal wrench, B: loosen by hand, C: use # 13 open end wrench.)

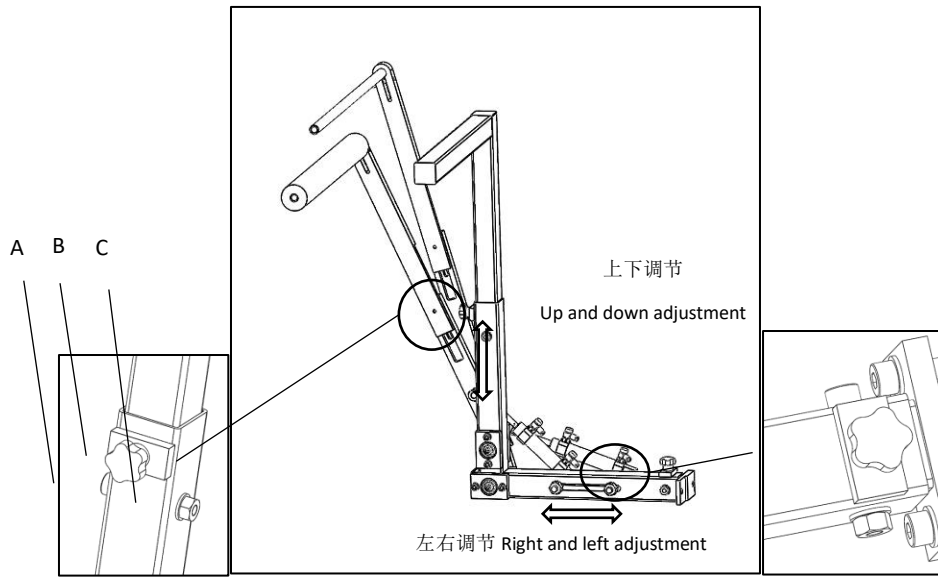


图 7.2 收料机构图 Figure 7.2 Collecting MechanismDrawing

7.3 锁眼缝制参数调节 Adjustment of Button Sewing Parameter

参考 1903 说明书“缝纫机的操作”章节里面的“标准花样”、“纽扣爪脚的位置”以及“布压脚底板的调整”。

Refer to "standard pattern", "position of button claw foot" and "adjustment of pressing foot plate" in the section "operation of sewing machine" of the 1903 instruction manual.

8 维护 Maintenance

⚠ 更换机器零件，维护或者拆卸机器时，必须断开电源和气源。只有专业人士可以进行下面的操作。

⚠ When replacing machine parts, maintaining or disassembling machines, the power supply and air supply must be disconnected. Only professionals can do the following.

8.1 吸风口清洁 Suction Opening Cleaning

吸风口处于工作状态，容易集聚周围灰尘、断线等杂物，需定期清理。

The suction opening are in the working state, which is easy to gather the surrounding dust, broken wires and other sundries, which need to be cleaned regularly.

8.2 锁眼机维护 Sewing Head Maintenance

详见 1903 锁眼机说明书“缝纫机的运转前”章节内的“加油”和“维修”章节。

See the section "refueling" and "maintenance" in the section "before operating sewing machine" of the machine manual.

8.3 鼓风机故障 Blower Failure

- 重新按复位键，顶下膝靠后，观察鼓风电机是否正常运转：
若鼓风机正常运转，但吸风口无吸气，可能是鼓风机部件的气缸损坏；
- 若鼓风机未正常运转，打开电控箱，查看维护鼓风机正常的启动保护器是否跳闸，如果跳闸，检查启动保护

器的保护电压值和鼓风通道是否堵塞，排除问题后按下黑色按钮，恢复鼓风机正常工作。

- press the reset button again and touch knee-on switch to observe blower motor:

If the blower works normally, but there is no suction effect, it may be that the cylinder of the blower component is damaged;

- if the blower does not work normally, open the electric control box to check whether the starting protector maintains blower working trips. If it trips, check the protective voltage of the starting protector and whether the blowing channel is blocked. Press the black button after troubleshooting to resume normal working of the blower.

8.4 维修翻转机头 Repair the Reverse Head

- 旋松如图（图 8.4）所示部位的塑料固定旋钮，拉动缝台将整个移料部件移到最外面。
- 使用 5#内六角扳手，将台板下方的机头固定螺钉拧出来。
- 搬动旋转锁眼机机头。

● Loosen the plastic fixing knob shown in FIG. 8.4 and pull the sewing table to move the whole material shifting part to the outermost part.

- using # 5 internal hexagonal wrench, unscrew the head fixing screw at the bottom of the table.
- move and rotate the sewing head.

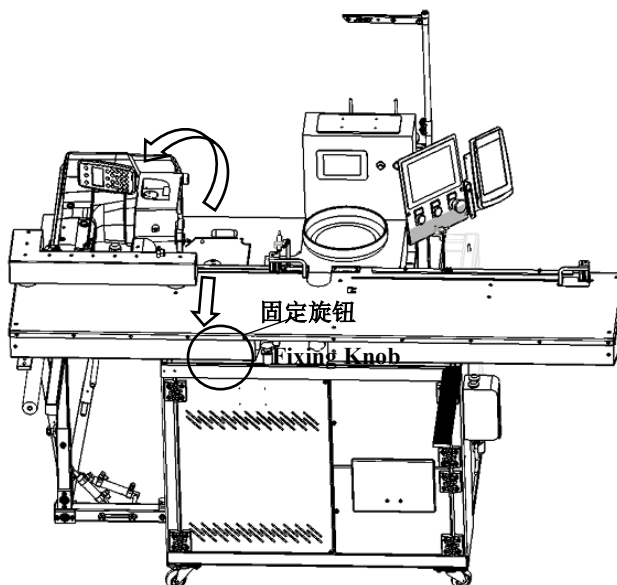


图 8.4 机头维修翻转图 Figure 8.4 Head repairing reverse drawing

9 机头组装 Sewing Head Assembly

⚠ 安装锁眼机机头时，务必按以下标准进行执行。只有专业人士可以进行下面的操作。

⚠ The following standard instructions shall be followed when install the sewing head. The following operations must be performed only by professionals.

9.1 接油壶的安装位置 Installing Position of Oil Kettle

- 第一步，将油壶接头“1”（下图 9.1）拧下，用机头附件自带的 M3 木螺钉将接油壶进行固定在台板的 U 型槽中。
- Firstly, to unscrew the oil kettle joint "1" (figure 9.1), and fix the oil kettle in the u-shaped groove of the table plate with the M3 wood screw attached to the sewing head attachment.

注意：

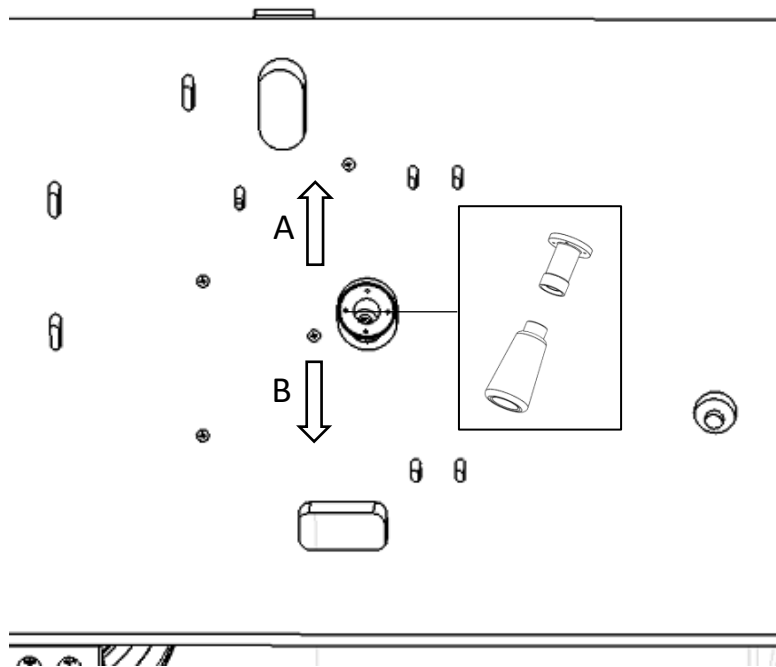
（1、如果是迈卡机头，杰克老款机头，或重机老款机头，需要将油壶接头往缝台方向（如下图 9.1 的 A 方向）靠边再进行固定。2、如果是杰克新款机控一体机 1903G，或重机新款机头，需要将油壶接头往设备正后方方向（如下图 9.1 的 B 方向）靠边再进行固定。）

Note:

(1. if it is a MAICA head, an old JACK head, or an old JUKI head, it is necessary to pull the oil pot joint to the side of the sewing table (in the direction of A in figure 9.1 below) and then fix it. 2. If it is JACK's new type of all-in-one machine 1903G, or the new type of machine head, it is necessary to pull the oil pot connector to the side directly behind the device (B direction in figure 9.1 below) and then fix it.

- 第二步，将回油油壶的下半部分“2”与油壶接头进行拧紧。

Secondly, tighten the "2" of the lower part of the return oil can with the oil can joint.



A: 油壶接头 B: 回油油壶

A: Oil kettle joint B: Return oil can

图 9.1 接油壶安装图 Figure 9.1 Oil kettle installation drawing

9.2 油盘安装位置 Installing Position of Oil Pan

- 第一步，将油盘按照（下图 9.2）中的 1/2/3/4 位置对准台板上的 U 型槽，使用机头附件中的自带两个 M6 长螺钉从 2/3 穿过油盘和台板进行预紧。
- 第二步，如果是迈卡机头，杰克老款机头，或重机老款机头，将油盘按 $A1=A2=131\text{mm}$ 的位置放置好，用机头附件中的 M4 木螺钉，对应 5/6/7/8 孔位将油盘进行固定。
- 如果是杰克新款机控一体机 1903G，或重机新款机头，将油盘按 $A1=A2=119\text{mm}$ 的位置放置好，用机头附件中的 M4 木螺钉，对应 5/6/7/8 孔位将油盘进行固定。
- 第三步，用木螺钉固定好油盘后，将 M6 内六角螺钉拆掉，准备安装机头。
- step 1. to align the oil pan to the u-shaped groove on the platen according to the position 1/2/3/4 in (figure 9.2 below), and use the two M6 long screws in the head attachment to pretighten from 2/3 through the platen and oil pan.
- step 2. If it is a MAICA head, an old JACK head, or an old JUKI head, place the oil pan at $A1=A2=131\text{mm}$ and fix the oil pan with the M4 wood screws attached to the head.
- if it is the JACK new machine control all-in-one 1903G, or the new machine head, place the oil pan at $A1=A2=119\text{mm}$, use the M4 wood screw attached to the head, and fix the oil pan at the corresponding 5/6/7/8 hole.
- step 3, after fixing the oil pan with wood screws, remove the M6 hexagon socket screws and prepare to install the head.

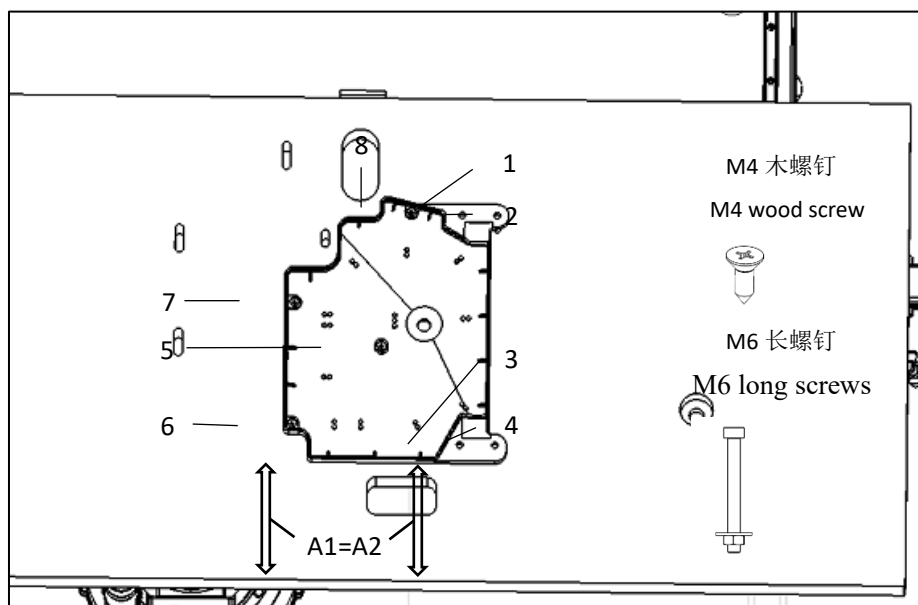


图 9.2 油盘安装图 Figure 9/2 Oil pan installing drawing

9.3 机头安装 Installation of Sewing Head

- 第一步，将机头抬起平稳地放到油盘上。
- First, place the head up on the oil pan smoothly.

注意：

1、抬起机头时，务必两个人以上进行操作，如果机头需要暂放台板上，一定要垫布料或纸板等，避免刮伤台板。

2、机头放在油盘上时，避免单边压在油盘上，易导致油盘边上破裂。

- 第二步，用铰链 C（如下图 9.3）套入机头固定轴上，两头靠边距离均等。
- 第三步，用机头附件中的 M6 内六角长螺钉 B（如下图 9.3）将铰链 C 进行固定。
- 第四步，按 A 方向（如下图 9.3）推动缝台，使缝台缺口对准机头针板，缺口两侧距离均等，且针板平面与缝台同在一个水平面上。

1、（如针板无法对准缝台缺口，需要将把台板固定在机架上的木螺钉拆掉，使用新位置重新固定。）

2、（如不水平，则需要调整机头拉紧螺钉或在铰链 B 下方垫垫片。）

- 第五步，安装机头支撑柱，位置如下图（图 9.3）所示。

Note:

1. When lifting the head, it must be operated by more than two people. If the head needs to be temporarily placed on the platform, it must be padded with materials or cardboard to avoid scratching the platform.

2. When the head is placed on the oil pan, avoid unilateral pressure on the oil pan, which may easily lead to the rupture of the edge of the oil pan.

- The second step is to insert hinge C (as shown in figure 9.3 below) into the fixed shaft of the head, with equal distance between the two sides.

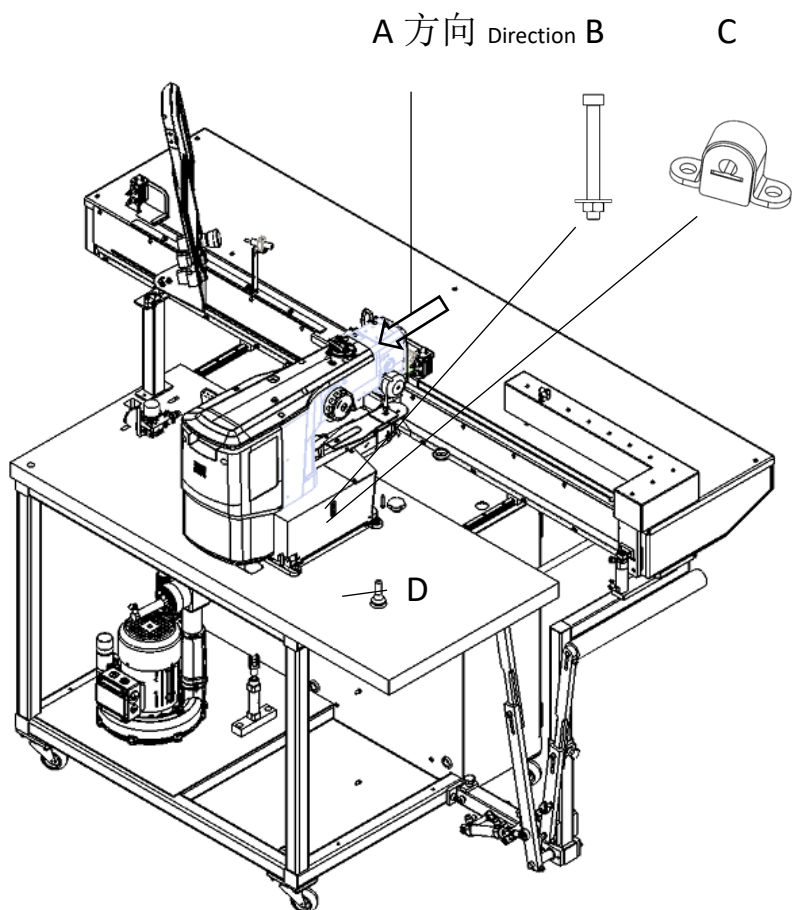
● The third step, fix the hinge C with the M6 hexagon socket long screw B (as shown in figure 9.3 below) in the head attachment.

● The fourth step, push the sewing table in the direction of A (as shown in figure 9.3 below) so that the gap of the sewing table is aligned with the needle plate of the machine head. The distance between the two sides of the gap is equal.

1. (if the needle plate cannot be aligned with the gap of the sewing table, remove the wood screw that is fixed on the frame and fix it again with a new position.)

2. (if it is not horizontal, adjust the head tension screw or place gasket under hinge B.)

- The fifth step: install the head support column, as shown in figure 9.3 below.



B: 机头附件 M6 内六角螺钉 Head attachment M6 internal hexagonal screw C: 铰链 hinge
D: 机头支撑柱图 head support column

9.3 机头安装位置 Figure 9.3 Installing position of head

9.4 机头电控箱与启缝装置安装

Installation of Control Box and Sewing Start Device

- 机头电控箱安装请参考，机头附件中的操作说明书进行。
- 确保位置 A 在位置 B (图 9.4) 的正上方；再将启缝装置通过木螺钉固定在台板上。
- Please refer to the operation instruction in the attachment of the head for the installation of the electrical control box of the head.
- Ensure that position A is directly above position B (FIG. 9.4); Then the sewing start device is fixed on the table by wood screws.

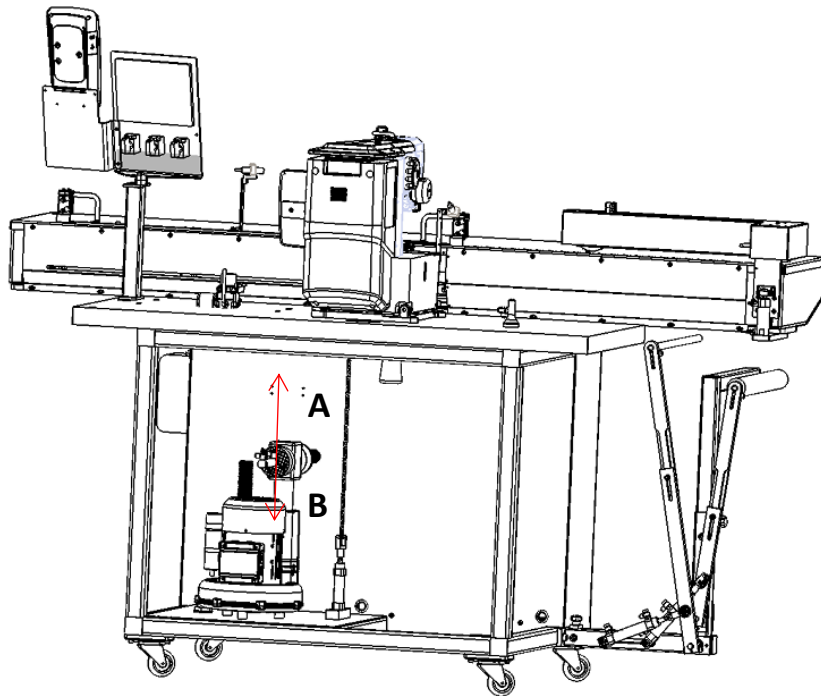


图 9.4 启缝装置安装位置

Figure 9.4 Position of installing sewing start device

9.5 送扣装置安装 Installation of Button Feeding Device

- 第一步，将送扣装置平稳地放到台板上，具体如（图 9.5）所示，送扣臂转动 90°，看送扣爪是否碰到针板。

The first step is to place the feeding device on the table plate smoothly, as shown in (figure 9.5). Turn the feeding arm 90° to see if the feeding claw touches the needle plate.

注意:

- 1、抬起送扣装置时，务必两个人以上进行操作。
- 2、送扣爪转动到机针下方，必须保证与针板上下有 5mm 的高度距离，如果不够需要在送扣装置下方垫上垫片。

Note:

1. When lifting the button feeding device, two or more people are required to operate it.
2. If the feeding claw rotates to the lower part of the machine needle, a height distance of 5mm must be

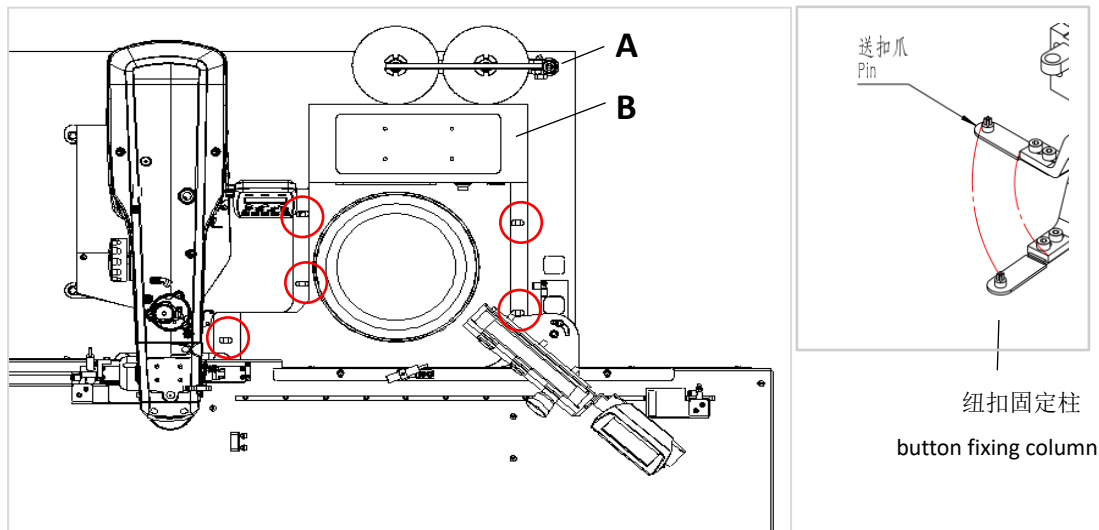
ensured between the upper and lower part of the needle plate. If it is not enough, it is necessary to pad the lower part of the feeding device with gaskets.

- 第二步，使用送扣装置附件自带 M8 长螺钉将送扣装置进行预固定，不要锁紧。

Step 2: prefix the button feeding device with M8 long screw attached. Do not lock the button feeding device.

- 第三步，将送扣夹转动 90° 到机针下方位置，转动旋钮将机针下降，然后确保纽扣固定柱中心点对准机针尖。再以对角方式逐步拧紧固定螺钉，螺钉拧紧后确保纽扣固定柱中心点还是对准机针尖，以及送扣爪下平面到针板还有 3.5mm 的高度距离。

Step 3: turn the feeding clip 90° to the lower position of the machine needle, turn the knob to lower the machine needle, and then make sure the **center point of the button fixing column is aligned with the machine needle**. Then gradually tighten the fixing screw in a diagonal manner. After tightening the screw, make sure that the **center point of the button fixing column is still aligned with the machine needle**, as well as the height distance of 3.5mm from the lower plane of the feeding claw to the needle plate.



A: 线架组件 Thread stand sub assembly

B: 送扣装置 Button feeding machine

图 9.5 送扣装置安装 Installation of button feeding device

9.6 机头感应器与送扣装置感应器的安装

Installation of Sensors of Head And Button Feeding Device

- 第一步，将电子夹线器组件拆下，然后先套入断线感应器组件保证紧线器弹簧与接触片进行接触。

Step 1: remove the electronic thread clamp assembly, and then insert the thread broken sensor assembly to ensure that the spring of the thread tightener is in contact with the contact plate.

- 第二步，在对应位置用手电钻打 M4 的安装孔，将断线感应器组件进行安装到位。

Step 2: drill the mounting hole of M4 at the corresponding position with the manual electric drill to install the thread broken sensor assembly in place.

- 第三步，将断线感应器线沿着线路入口（如图 9.6）到机头尾部，再和机头电控线一起下去，通过线槽进入电控箱，将其接到 PLC “X0” 接口。

Step 3: connect the thread broken sensor wire along the wire entrance (as shown in figure 9.6) to the tail of the sewing head, and then go down together with the electrical control wire of the sewing head, enter the electric control box through the wire slot, and connect it to the interface of PLC "X0".

- 第四步，将松线电磁铁拆开，将松线量往电子夹线器方向调整 1.5mm，确保加上短线感应器组件后，电子夹线能够正常使用。

Step 4: disassemble the loose thread electromagnet and adjust the loose thread quantity to the direction of the electronic thread clamp by 1.5mm to ensure that the electronic thread clamp can work after adding the short thread sensor component.

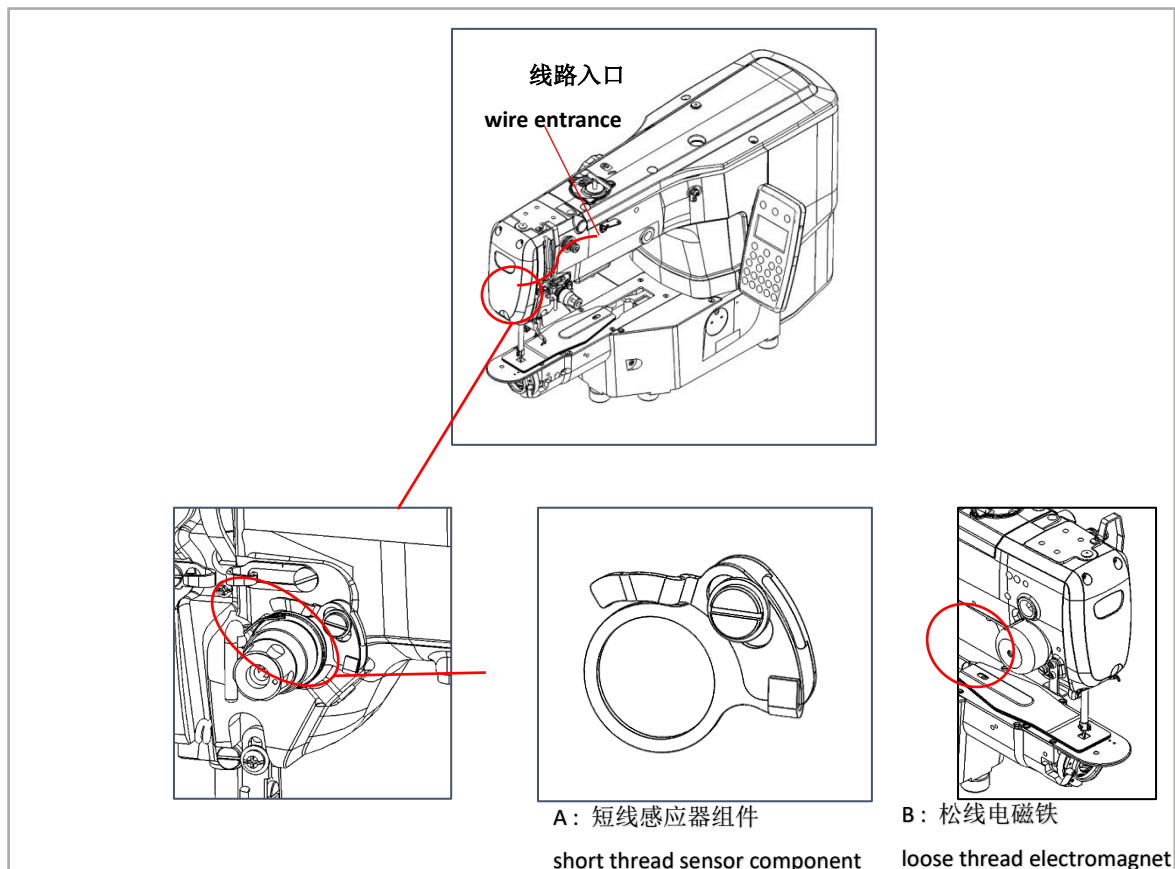


图 9.6 短线感应器安装 Figure 9.6 Installation of Short Thread Sensor

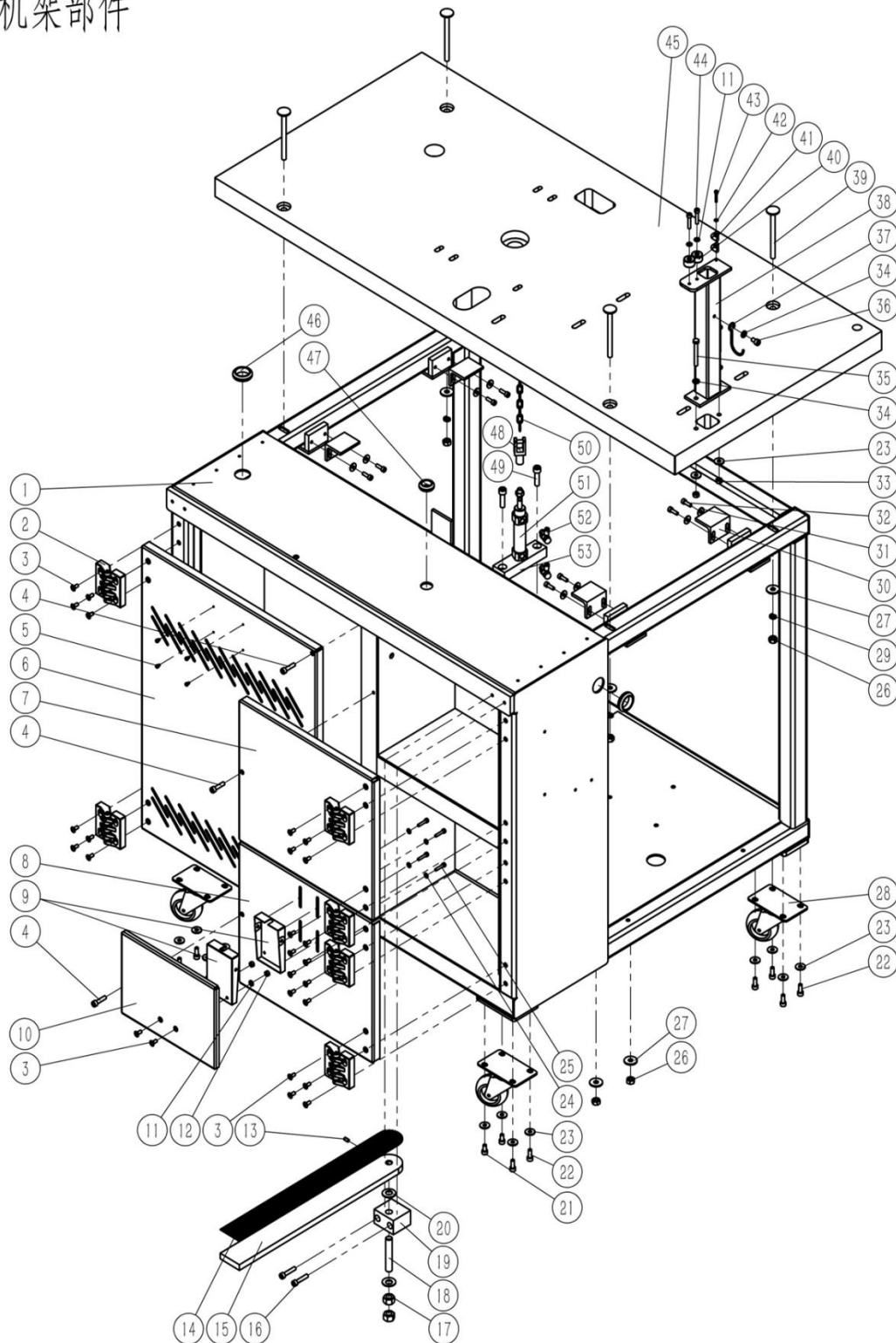
压脚感应器安装

送扣感应器安装

10 零件样本 Component Sample

1、机架部

件 机架部件

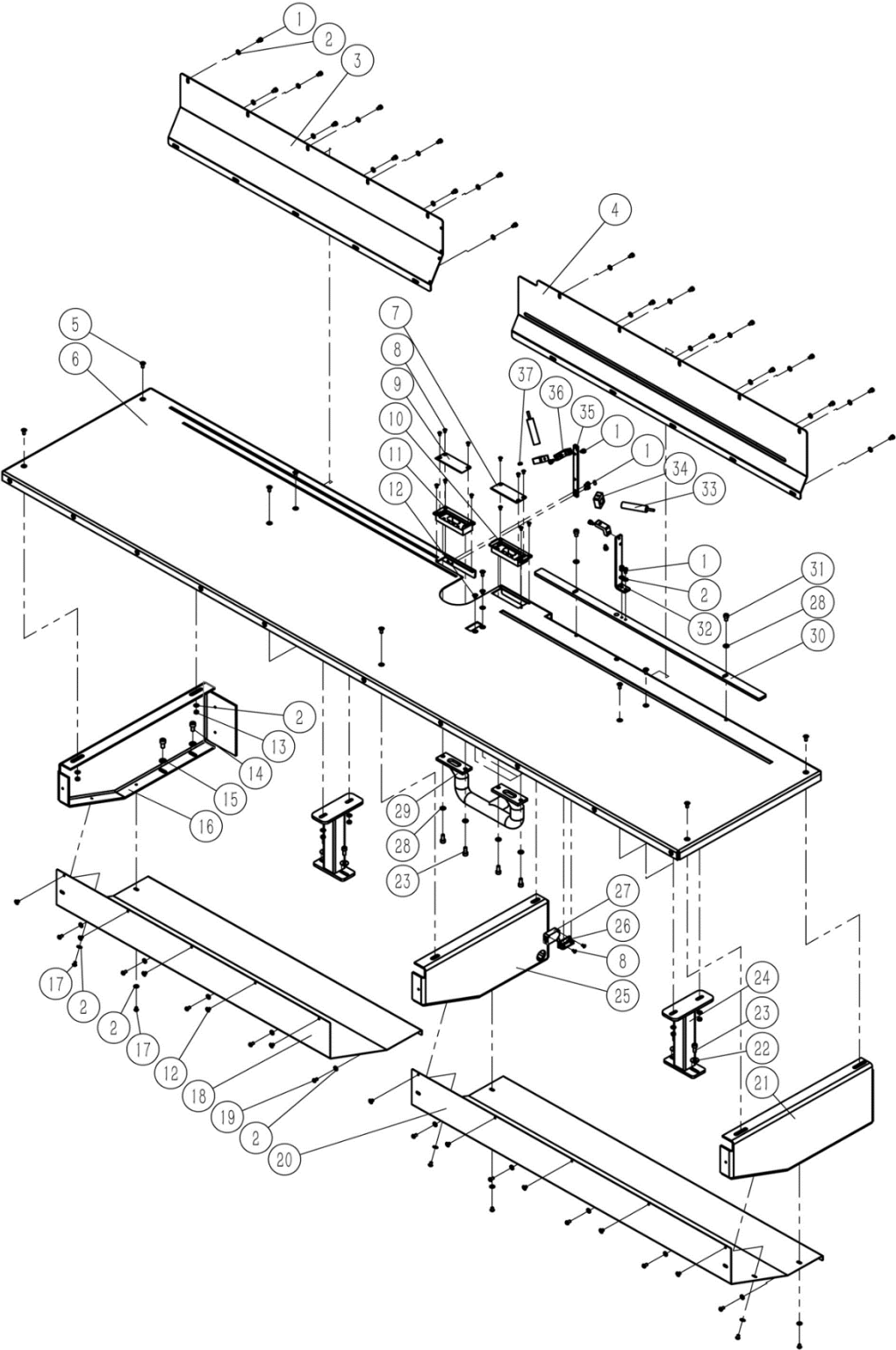


序号 NO.	公司件号 Part NO.	名称 PartName	零件描述 Description	数量 Number
1	930200209	机架	Frame	1
2	41831016	电控柜合页	Electric control cabinet hinge	6
3	S02053	内六角沉头螺钉 M5×12	Hexagon socket head screw M5x12	26
4	S05016	内六角圆柱头螺钉 M6×25	Hexagon socket head cap screw M6x25	4
5	S05021	内六角圆柱头螺钉 M3×5	Hexagon socket head cap screw M3x5	4
6	930200213	左侧电控箱门组件		1
7	930200214	右侧电控箱门组件		1
8	930200215	储物柜门组件		1
9	182530501	铁壳单踏板		1
10	930200221	脚踏板		1
11	W01004	平垫片 5	Flat washer5	4
12	701S16016	螺母 M5	Nut M5	2
13	S09009	内六角平端紧定螺钉 M5×10	Hexagon flat end set screw M5×10	1
14	182523003	物料架摩擦垫 (450x50)	Material rack friction pad (450x50)	1
15	825090006	物料架	Material frame	1
16	S05072	内六角圆柱头螺钉 M6×30	Hexagon socket head cap screw M6×30	2
17	N01010	螺母 M12	Nut M12	2
18	182526001	螺杆 M12x70	Material rack screw M12x70	1
19	825090005	物料架支撑座	Material rack support	1
20	W06007	鞍形弹性垫片 M12	M12 saddle elastic gasket	2
21	S05033	内六角圆柱头螺钉 M6×12	Hexagon socket head cap screw M6×12	4
22	S05918	内六角圆柱头螺钉 M6×16	Hexagon socket head cap screw M6×16	12
23	W04018	大垫圈 6	Large gasket 6	18
24	W01001	平垫片 4	Flat washer 4	4
25	S05970	内六角圆柱头螺钉 M4×20	Hexagon socket head cap screw M4×20	4
26	N01011	螺母 M8	Nut M8	6
27	W04019	大垫圈 8	Large gasket 8	6
28	909558	3 寸带刹车脚轮	3-inch brake casters	4
29	W02011	弹性垫圈 8		4
30	182509042	台板调节活动板		4
31	W01023	大垫圈 5	Large gasket 5	8
32	S05915	内六角圆柱头螺钉 M5×16	Hexagon socket head cap screw M5×16	8
33	701S16017	螺母 M6	Nut M6	2
34	W01003	平垫片 6	Flat washer6	3
35	L02111	六角头螺栓 全螺纹 M6×60		2
36	S05916	内六角圆柱头螺钉 M6×10	Hexagon socket head cap screw M6×10	1
37	42212620	气枪挂钩		1
38	930200216	操作屏支撑座		1
39		马车螺钉 M8×100		4
40	48102057	气缸杆帽		2
41	182530019	接管弯头 Φ4-KQ2L04-00A		2
42	W01002	平垫圈 3	Flat washer3	1
43	S05054	内六角圆柱头螺钉 M3×20	Hexagon socket head cap screw M3×20	1
44	S05860	内六角圆柱头螺钉 M5×25	Hexagon socket head cap screw M5×25	2
45	182532501	台板	Platen mounting limit plate	1
46	82122210	双面过线圈 Φ26×30	Electric box hole through the wire sleeve	5
47	82511002	双面过线圈 Φ18×22	Electric box hole through the wire sleeve	5
48	82145279	卡套式 Y 型叉 Φ16	acket Y fork Φ16	1
49	S05024	内六角圆柱头螺钉 M8×25	Hexagon socket head cap screw M8×25	2
50	182539001	启缝链条 (钩×2)	Start sewing chain(hook×2)	1
51	82145270	圆型气缸 16×40	Circular cylinder 16x40	1
52	42130032	节流阀 AS1201F-M5-04	Throttle valve AS1201F-M5-04	2
53	182501001	启缝气缸固定座	Fixed seat of cylinder	1

2、缝台

部件

缝台部件



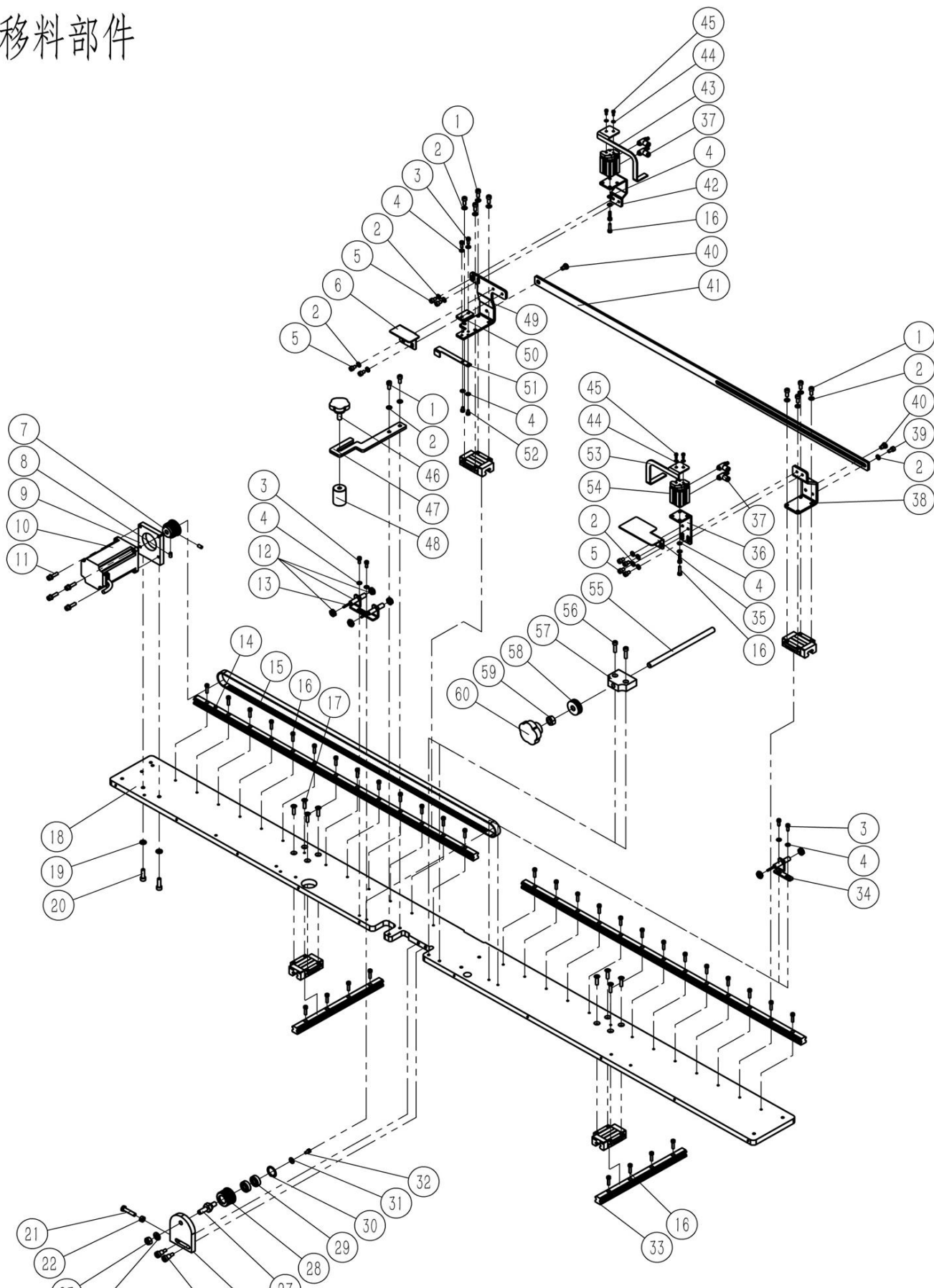
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1	S05404	内六角圆柱头螺钉 M4×6	Hexagon socket head cap screw M4x6	28
2	W01001	平垫圈 4	Flat gasket 4	48
3	930200258	移料后护罩(左)		1
4	930200259	移料后护罩(右)		1
5	S02104	内六角沉头螺钉 M4×10	Hexagon socket head screw M4x10	10
6	182512513	缝台	Sewing table	1
7	182512528	吸风口盖板(右)	Air suction cover plate(right)	1
8	S02911	内六角沉头螺钉 M3×6	Hexagon socket head screw M3x6	14
9	182512527	吸风口盖板(左)	Air suction cover plate(left)	1
10	182509516	吸风口(右)	Air inlet(right)	1
11	182509515	吸风口(左)	Air inlet(left)	1
12	S02093	内六角沉头螺钉 M4×6	Hexagon socket head screw M4x6	12
13	701S16015	螺母 M4	Nut M4	10
14	S05033	内六角圆柱头螺钉 M6×12	Hexagon socket head cap screw M6x12	6
15	W01003	平垫圈 6	Flat washer 6	6
16	930200210	左侧支撑板		1
17				6
18	930200224	移料前护罩(左)		1
19				10
20	930200257	移料前护罩(右)		1
21	930200212	右侧支撑板		1
22	W01023	大垫圈 5	Large gasket 5	4
23	S05005	内六角圆柱头螺钉	Hexagon socket head cap screw	8

		M5×12	M5x12	
24	930200222	缝台支撑座		4
25	930200211	中间支撑板		1
26	182512529	光电感应器安装板		1
27	84630001	光电感应器		1
28	W01004	平垫片 5	Flat washer 5	6
29	18250151800	吸风口组件		1
30	182512532	挡板		1
31	S05856	内六角圆柱头螺钉 M5×8	Hexagon socket head cap screw M5x8	2
32	182509540	激光头固定架(右)		1
33	82530021	一字激光器		2
34	82109324	激光灯座套环		2
35	182509537	激光头固定架（左）		1
36	82544003	激光头安装件 A		2
37	S09103	内六角平端紧定螺钉 M4×4	Hexagon socket flat end set screw M4x4	2

3、移料

部件

移料部件

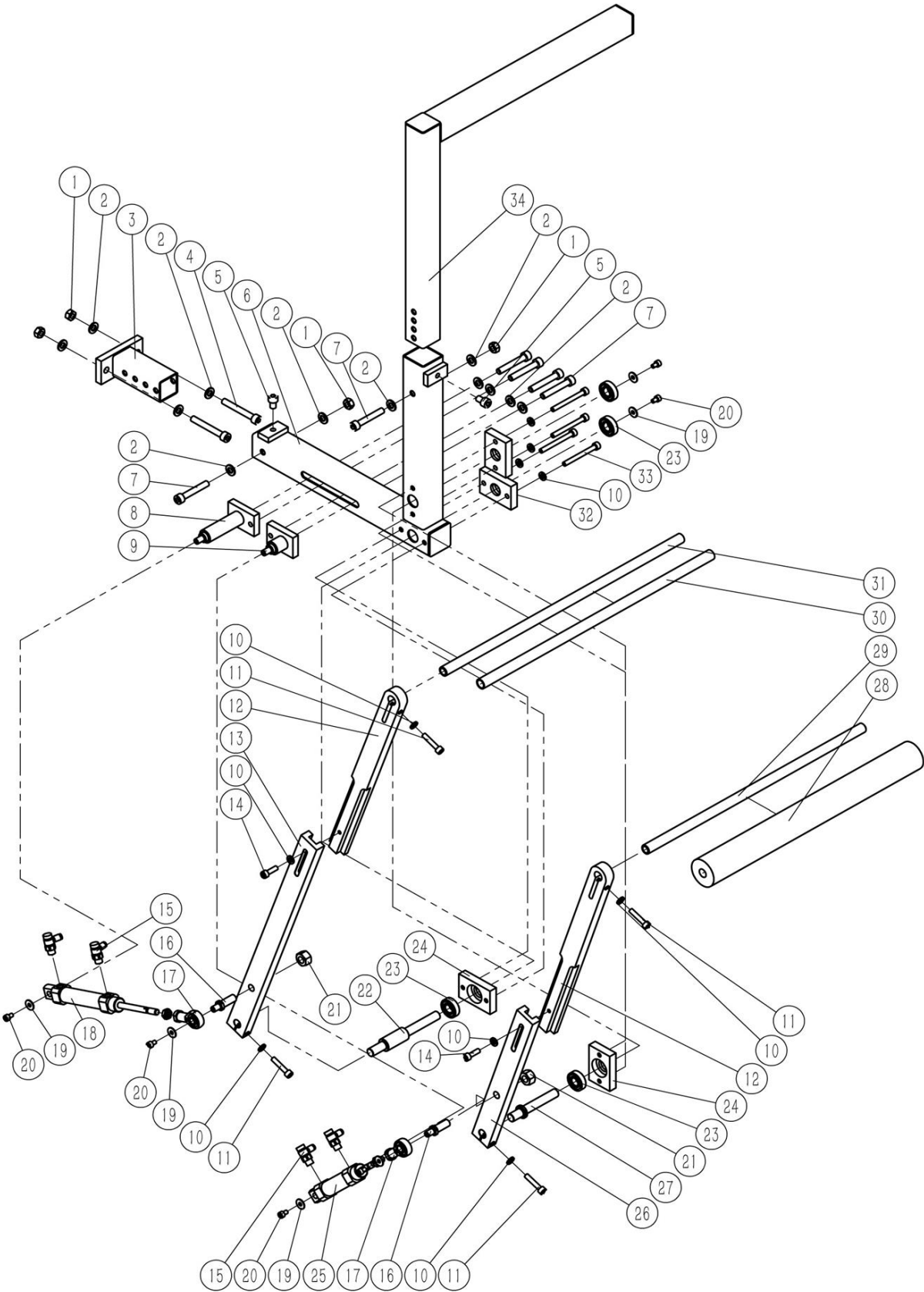


移料部件				
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1	S05005	内六角圆柱头螺钉 M5×12	Hexagon socket head cap screw M5x12	10
2	W01004	平垫片 5	Flat gasket 5	19
3	S05425	内六角圆柱头螺钉 M4×10	Hexagon socket head cap screw M4x10	6
4	W01001	平垫圈 4	Flat gasket 4	12
5	S05856	内六角圆柱头螺钉 M5×8	Hexagon socket head cap screw M5x8	8
6	182512521	布料垫板(左)		1
7	82535001	移料主动轮	Transfer drive wheel	1
8	S09009	内六角平端紧定螺钉 M5×10	Hexagon socket flat end set screw M5x10	2
9	182509509	移料电机安装板		1
10	82530029	步进电机	step motor	1
11	421S13065	螺钉带垫 M5×16	Screw pad M5x16	4
12	82530028	M8 接近开关	M8 Proximity switch	3
13	182512533	原点感应器安装板		1
14	18250151100	移料导轨滑块组件		2
15	182535504	移料同步带	Transfer timing belt	1
16	S05265	内六角圆柱头螺钉 M4×16	Hexagon socket head cap screw M4x16	38
17	S02076	内六角沉头螺钉 M5×16	Hexagon socket head screw M5x16	8
18	182509508	移料机构安装板	Transfer mechanism mounting plate	1
19	W01003	平垫片 6	Flat gasket 6	2
20	S05031	内六角圆柱头螺钉 M6×20	Hexagon socket head cap screw M6x20	2
21	L02155	六角头螺栓 全螺纹 M6×25		1
22	701S16017	螺母 M6	Nut M6	1
23	N01011	螺母 M8	Nut M8	1
24	W01010	平垫片 8	Flat gasket 8	1
25	182502505	内六角圆柱头轴位螺钉		2
26	182509510	移料从动轮安装板		1

27	182502501	从动轮固定轴	Gear fixed shaft	1
28	82535003	移料从动轮	Transfer driven wheel	1
29	B03005	轴承 608Z	Bearing 608Z	2
30	70129044	孔用弹性挡圈 22×1	Hole retaining ring 22×1	1
31	W01041	大垫片 4	Large gasket 4	1
32	S05404	内六角圆柱头螺钉 M4×6	Hexagon socket head cap screw M4x6	1
33	18250151000	门襟导轨滑块组件		2
34	182512518	感应器安装板		1
35	182512541	布料垫板(女士右)		1
36	182512524	气缸安装板(右)		1
37	42130032	节流阀 AS1201F-M5-04	Throttle valve AS1201F-M5-04	4
38	182512523	滑块连接板(右)		1
39	S05003	内六角圆柱头螺钉 M5×10	Hexagon socket head cap screw M5x10	1
40	182502506	圆柱头轴位螺钉		2
41	182509514	布料长度调节板		1
42	182512520	气缸安装板(左)		1
43	182512522	布料左压板		1
44	W01002	平垫圈 3	Flat gasket 3	4
45	S05403	内六角圆柱头螺钉 M3×8	Hexagon socket head cap screw M3x8	4
46	182544504	带螺杆五角旋钮 M8×25		1
47	182509511	勾形调节块		1
48	182502502	宽度调节固定柱		1
49	182512519	滑块连接板(左)		1
50	182509513	同步带压板		1
51	182512534	原点感应器感应板		1
52	S05404	内六角圆柱头螺钉 M4×6	Hexagon socket head cap screw M4x6	2
53	182512542	布料压板(女士右)		1
54	82545006	方型三杆 16-20 气缸	square three-bar 16-20 cylinder	2
55	182502504	螺杆 M10x180	Screw M10x180	1
56	S05092	内六角圆柱头螺钉 M5×20	Hexagon socket head cap screw M5x20	2
57	182509512	移料固定块		1
58	182503501	旋钮螺母		1
59	N01009	螺母 M10	Nut M10	1
60	182544502	无螺杆五角旋钮 M10		1

4、收料

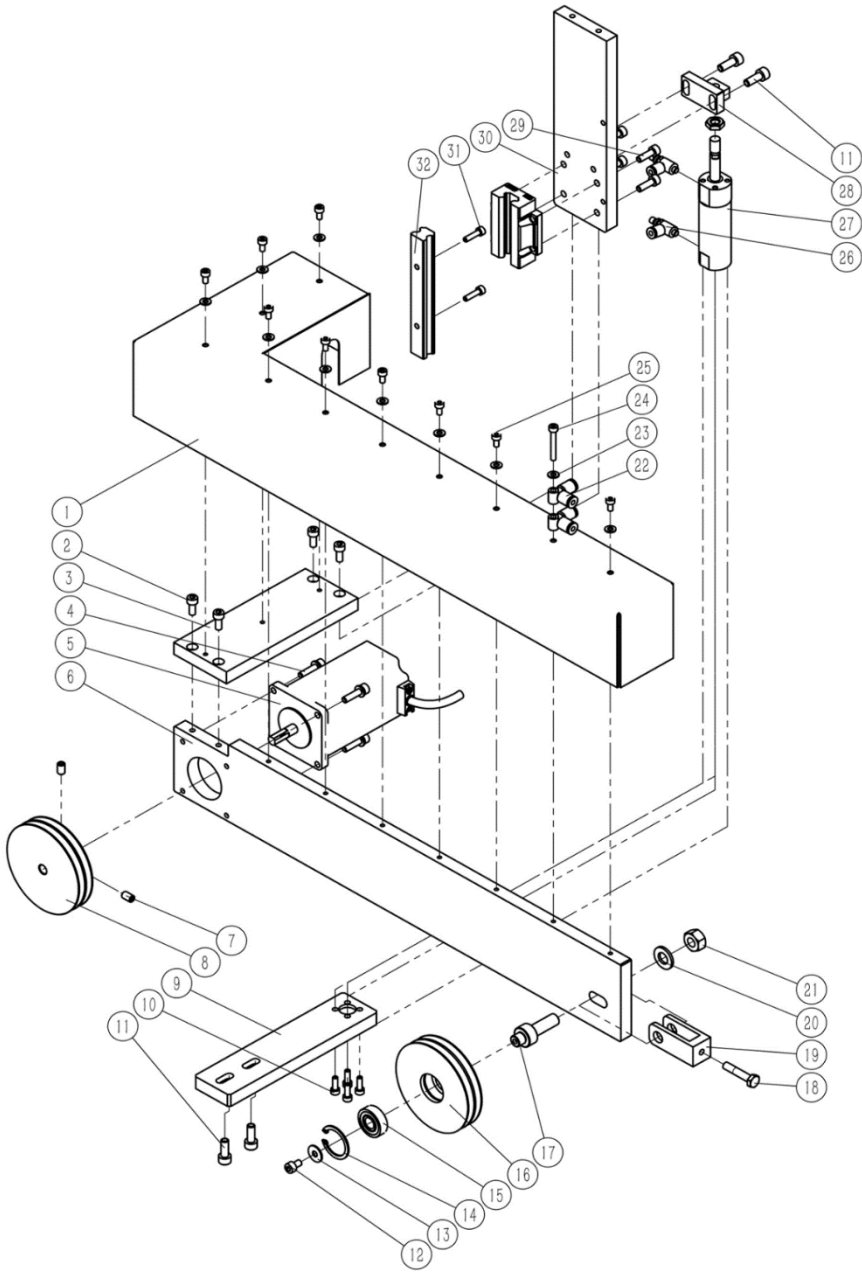
部件



收料部件				
序 号 NO.	公司件号 Part NO.	名称 PartName	零件描述 Description	数量 Number
1	N01011	螺母 M8	Nut M8	4
2	W01010	平垫圈 8	Flat washer 8	12
3	18250151700	收料架安装座		1
4	S05986	内六角圆柱头螺钉 M8×60	Hexagon socket head cap screw M8x60	2
5		内六角圆柱头螺钉 M8×12	Hexagon socket head cap screw M8x12	2
6	18250150900	收料架		1
7	S05008	内六角圆柱头螺钉 M8×50	Hexagon socket head cap screw M8x50	6
8	18250152100	摆料气缸固定座		1
9	18250152000	压料气缸固定座		1
10	W01003	平垫圈 6	Flat washer 6	10
11	S05072	内六角圆柱头螺钉 M6×30	Hexagon socket head cap screw M6x30	4
12	182509525	摆料连杆 B		2
13	182509524	摆料连杆 A		1
14	S05031	内六角圆柱头螺钉 M6×20	Hexagon socket head cap screw M6x20	2
15	42130098	节流阀 AS2201F-01-04S	Throttle valve AS2201F-01-04S	4
16	182526502	压料杆连接销		2
17	82145282	鱼眼接头 φ20-8M		2
18	182545501	圆型 20-50 气缸	round 20-50cylinder	1
19	W01023	大垫圈 5		6
20	S05856	内六角圆柱头螺钉 M5×8	Hexagon socket head cap screw M5x8	6
21	N01010	螺母 M12	Nut M10	2
22	182526503	摆料杆固定销		1
23	B02006	轴承 6001 ZZNR	Bearing6001 ZZNR	4
24	182509520	压料安装板		2
25	82545003	圆型 20-30 气缸	round 20-30cylinder	1
26	182509521	压料连杆 A		1
27	182526501	压料杆固定销		1
28	182523501	压料杆海绵套		1
29	182509523	压料杆		1

30	82222008	透明橡胶软管 Φ15		1
31	182509526	摆料杆		1
32	182509535	压料安装板（通孔）		2
33	S05156	内六角圆柱头螺钉 M6×60	Hexagon socket head cap screw M6x60	4
34	18250150500	收料升降架		1

5、压料 部件

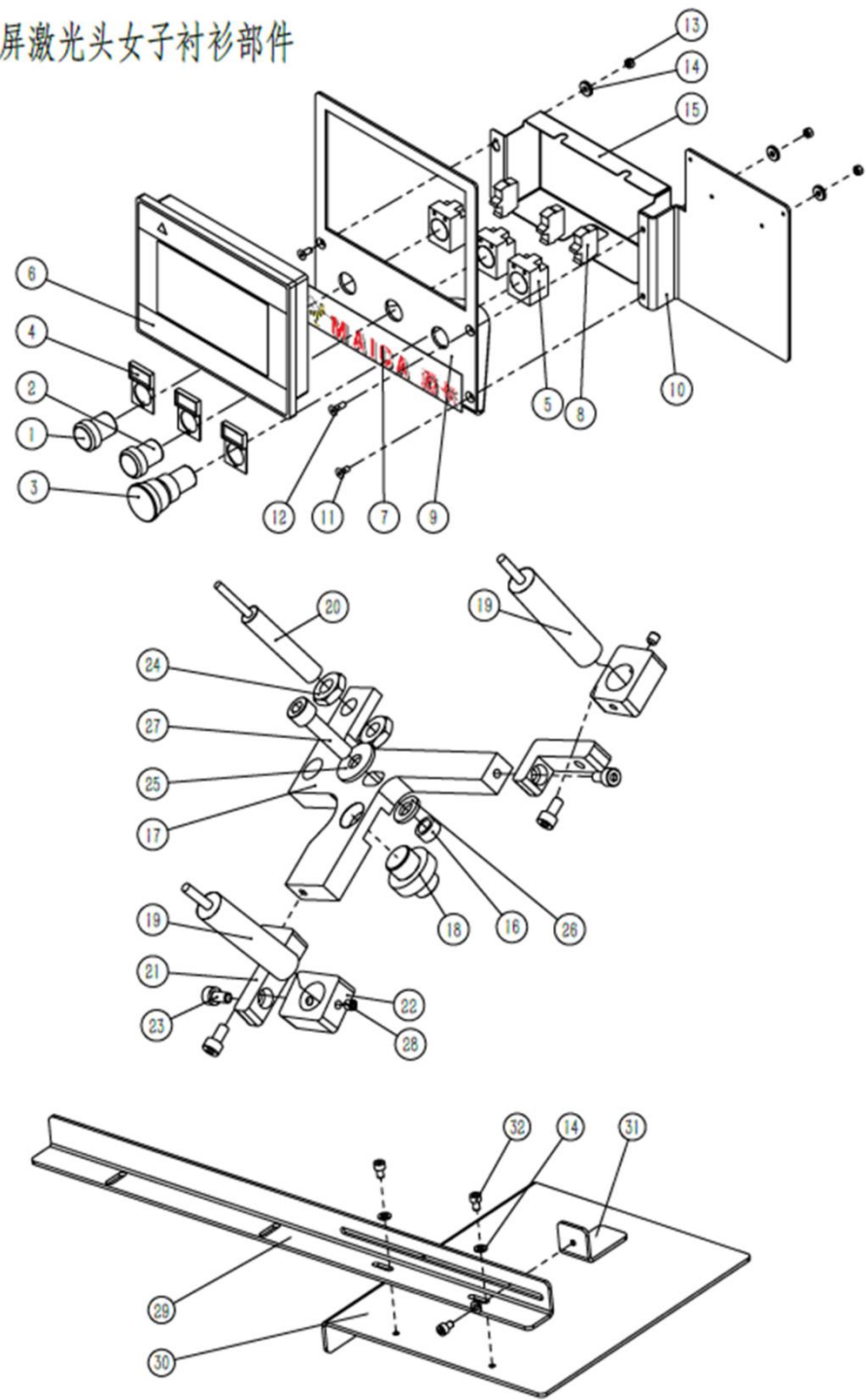


压料部件				
序 号 NO.	公司件号 Part NO.	名称 PartName	零件描述 Description	数量 Number
1	930200220	收料护罩		1
2	S05005	内六角圆柱头螺钉 M5×12	Hexagon socket head cap screw M5x12	4
3	182509532	电机安装连接板		1
4	421S13065	螺钉带垫 M5×16	Screw pad M5x16	4
5	82530029	步进电机	Step motor	1
6	182509533	压料电机安装板		1
7	S09001	内六角平端紧定螺钉 M6×10	Hexagon flat end set screw M6x10	2
8	182535501	收料主动轮		1
9	182509534	压料气缸固定板		1
10	S05266	内六角圆柱头螺钉 M4×12	Hexagon socket head cap screw M4x12	4
11	S05040	内六角圆柱头螺钉 M6×16	Hexagon socket head cap screw M6x16	4
12	S05856	内六角圆柱头螺钉 M5×8	Hexagon socket head cap screw M5x8	1
13	W01023	大垫圈 5	Large gasket 5	1
14		孔用卡簧 28		1
15	41324009	轴承 6000ZZ	Bearing6000ZZ	1
16	182535502	收料从动轮		1
17	182526504	从动轮固定销		1
18	L02155	六角头螺栓 全螺纹 M6×25		1
19	182509536	圆带张紧块		1
20	W01017	平垫圈 10	Flat washer 10	1
21	N01009	螺母 M10	Nut M10	1
22	182530019	接管弯头 Φ4-KQ2L04-00A		2
23	W01001	平垫片 4	Flat washer 4	10
24	S05093	内六角圆柱头螺钉 M4×25	Hexagon socket head cap screw M4x25	1
25	S05404	内六角圆柱头螺钉 M4×6	Hexagon socket head cap screw M4x6	9
26	42130032	节流阀 AS1201F-M5-04	Throttle valve AS1201F-M5-04	2
27	82545003	圆型 20-25 气缸	round 20-25 cylinder	1

28	182509528	气缸调节板		1
29	701S13001	内六角圆柱头螺钉 M5×16	Hexagon socket head cap screw M5x16	4
30	182509531	导轨安装板		1
31	S05265	内六角圆柱头螺钉 M4×16	Hexagon socket head cap screw M4x16	2
32	18250151200	压料导轨滑块组件		1

6、操作屏激光头

操作屏激光头女子衬衫部件

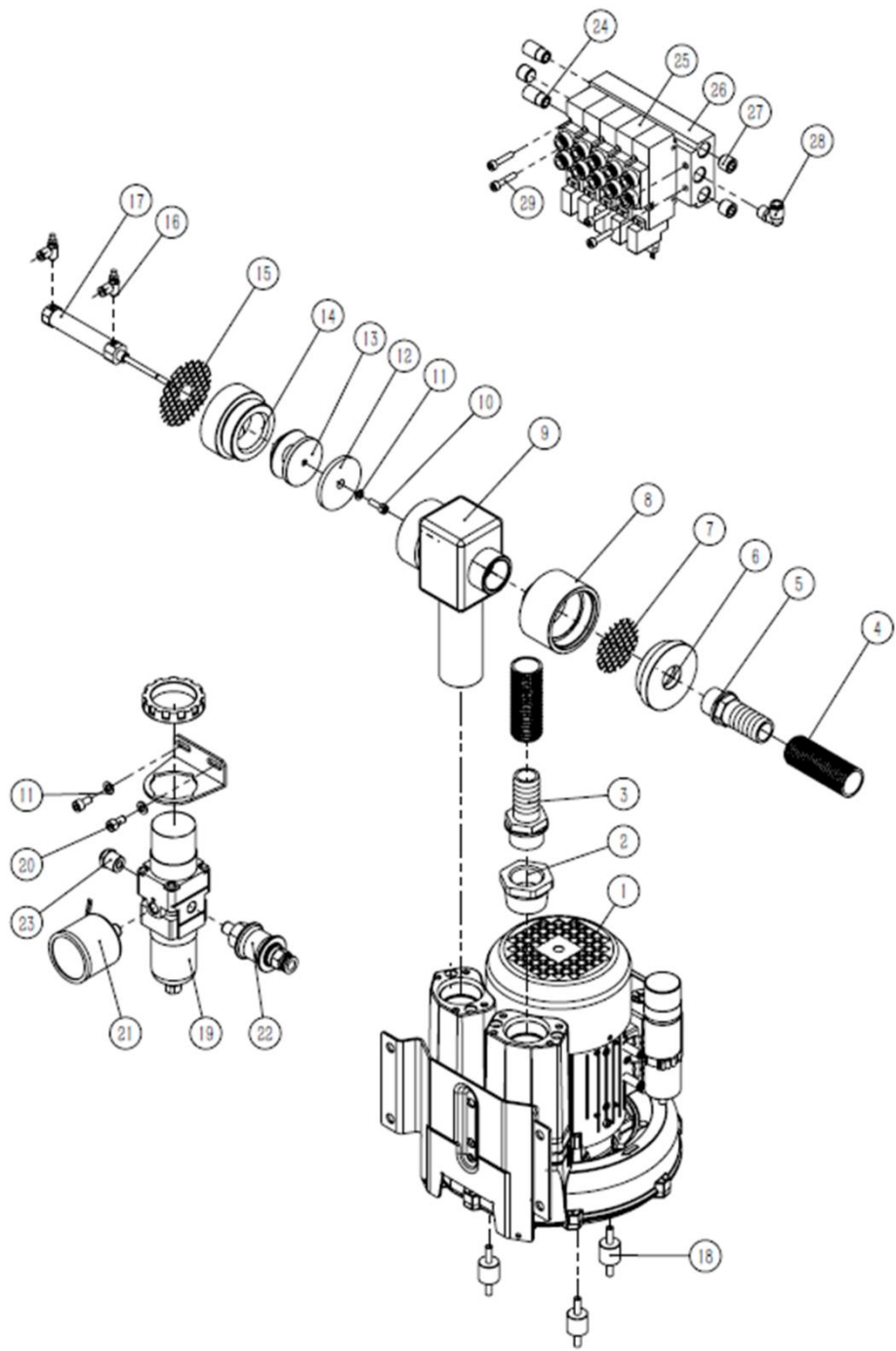


操作屏激光头				
序 号 NO.	公司件号 Part NO.	名称 PartName	零件描述 Description	数量 Number
1	82130236	UAM04-柱形带卡位黑色按钮	UAM04-column with card black button	1
2	82530015	MA04-φ 22 黄色点动按钮	MA04-φ 22 yellow jog button	1
3	82130225	UAM04-红色蘑菇头急停按钮	UAM04-red mushroom head emergency stop button	1
4	82144204	UAM04-按钮标签框	UAM04-button label box	3
5	82130226	UAM04-按钮底座	UAM04-button base	3
6	82530011	MA04-台达触摸屏 DOP_B07SS411	MA04-Delta touch screen DOP_B07SS411	1
7		MAICALOGO	MICIA LOGO	1
8	82130230	UAM04-常开开关辅助触点	UAM04-Normally open switch auxiliary contact	3
9	82512026	操作屏安装板	Operating panel mounting plate	1
10	82512037	操作屏幕安装板右侧	Operate the right side of the screen mount	1
11	S02053	内六角沉头螺钉 M5x12	Hexagon socket head screw M5x12	2
12	S02076	内六角沉头螺钉 M5x16	Hexagon socket head screw M5x16	1
13	701S16016	螺母 M5	nut M5	3
14	W01004	平垫片 5	Flat washer 5	6
15	182512001	操作屏护罩	Operating screen shield	1
16	82503004	套	set	1
17	82509039	激光头安装板	Laser head mounting plate	1
18	82501010	安装板固定座	Mounting plate holder	1
19	82530021	MA04-200-0.5 一字激光器	MA04-200-0.5 word laser	2
20	82530028	MA04-M8-1.5mm接近开关	MA04-M8-1.5mm proximity switch	1
21	82544003	激光头安装塑料件 A	Laser head mounting plastic part A	2
22	82544004	激光头安装塑料件 B	Laser head mounting plastic part B	2
23	S05859	内六角圆柱头螺钉 M4x8	Hexagon socket head cap screw M4x8	4
24		M8 螺母(接近开关配套)	M8 nut (proximity switch)	2
25	W04018	M6 大垫片	M6 Big gasket	1
26	W01003	平垫片 6	Flat washer 6	1
27	S05031	内六角圆柱头螺钉 M6x20	Hexagon socket head cap screw M6x25	1

28	S09103	内六角平端紧定螺钉 M4x4	Hexagon socket flat end set screw M4x4	2
29	82512034	长挡板	Long baffle	1
30	82512033	布料支撑板	Fabric plate	1
31	82512032	布料长度调节板	Cloth length adjustment board	1
32	S05856	内六角圆柱头螺钉 M5x8	Hexagon socket head cap screw M5x8	3

7、鼓风机等

鼓风机过滤器节流阀

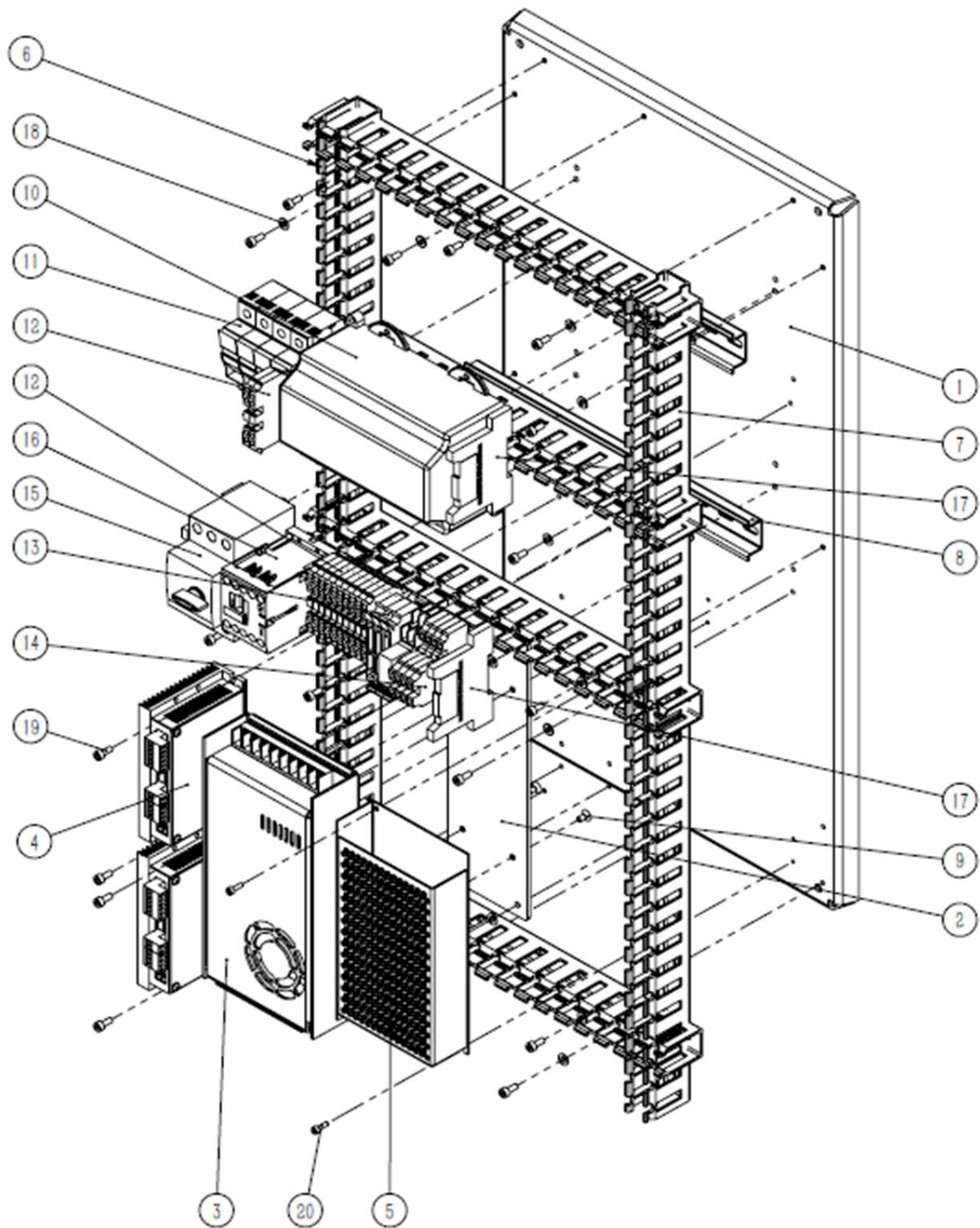


鼓风机等				
序 号 NO.	公司件号 Part NO.	名称 PartName	零件描述 Description	数量 Number
1	82530004	MA04-两相 0.37KW 鼓风机	MA04-two phase 0.37KW blower	1
2	82536004	管接头螺母(金属)	Fitting nut (metal)	1
3	82536002	排风管接头	Exhaust pipe joint	2
4	82145275	UAM04-波纹真空气管 φ 25	UAM04-corrugated vacuum pipe φ 25	2
5	82536001	吸风管接头	Suction pipe joint	1
6	82503009	吸风转接头	Suction adapter	1
7	82512022	吸风套管防尘网	Suction sleeve dustproof net	1
8	82501013	鼓风机吸风套管	Blower suction casing	1
9	8250101100	鼓风机通风管	Blower air duct	1
10	701S13001	内六角圆柱头螺钉 M5x16	Hexagon socket head cap screw M5x16	1
11	W01004	平垫片 5	Flat washer 5	3
12	182522001	密封垫(进口)	Seal(import)	1
13	82501012	活塞	piston	1
14	82503008	鼓风机排风套管	Blower exhaust casing	1
15	182512002	泄风套管防尘网(进口)	Air outlet casing dustproof net(import)	1
16	42130032	节流阀 ASI201F-M5-04(可调)	Throttle valve ASI201F-M5-04 (adjustable)	2
17	82545002	MA04-圆型 16-50 气缸	MA04-round 16-50 cylinder	1
18	82511001	橡胶减震器双头螺丝 (M6*16*20*20)	Rubber shock absorber double head screw (M6*16*20*20)	3
19	42130088	过滤器 AW20	Filter AW20	1
20	S05003	内六角圆柱头螺钉 M5x10	Hexagon socket head cap screw M5x10	2
21	42130095	压力表 GP46	Pressure gage GP46	1
22	42130096	手动开关 VHK3	Hand switch VHK3	1
23	182545002	气管接头	Gas-type fitting	1
24	42130092	消音器 AN101	Silencer AN101	2
25	48145018	GL21-2 位 5 通电磁阀 VING-LK10-M52	GL21-2 5-way solenoid valve VUVG-LK10-M52	6
26	82545001	MA04-5 联座汇流板 VUVG EA	MA04-5 joint busbar VUVG EA	1

27	407S12002	0345 汇流板密封螺钉	0345 busbar sealing screw	3
28	42136019	快换弯头 KQ2L06	Quick change elbow KQ2L06	1
29	S05267	内六角圆柱头螺钉 M4x20	Hexagon socket head cap screw M4x20	4

8、电控箱安装部件

电控箱部件



电控箱安装部件				
序 号 NO.	公司件号 Part NO.	名称 PartName	零件描述 Description	数量 Number
1	82512013	电控安装板	Electric control panel	1
2	82512039	开关电源固定板	Switching power supply fixing plate	1
3	82530030	MA04-开关电源 350W48V	MA04-Switching Power Supply 350W48V	1
4	28030002	57 步进电机驱动器	57 step motor driver	2
5	82530031	MA04-开关电源 100W24V/5V	MA04-Switching Power Supply 100W24V/5V	1
6	48130050	GL21-线槽 HVDR3050(灰色)	GL21-line slot HVDR3050 (gray)	4
7	48130050	GL21-线槽 HVDR3050(灰色)	GL21-line slot HVDR3050 (gray)	2
8	70131249	DIN 导轨 NS 35/15(单位米) (打孔)	DIN rail NS 35/15 (units) (punch)	2
9	S25008	十字沉头螺钉 M4×8	Cross countersunk head screw M4×8	4
10	82530012	MA04-台达 PLC32EC00T3	MA04-Delta PLC32EC00T3	1
11	82130256	UAM04-保险丝座 两座 32A 690v	UAM04-Fuse Holder Two 32A 690v	2
12	82130269	双层互通端子排 35×15	double-layer intercommunication terminal block 35×15	12
13	82530023	MA04-24V1C 端子式继电器	MA04-24V1C terminal relay	1
14	82130271	UAM04-保险丝端子 10×1.5	UAM04-Fuse terminal 10×1.5	3
15	82130268	UAM04-双层可短接端子排 35×15	UAM04- double layer short circuit terminal block 35×15	4
16	82530002	MA04-1.6-2.5A 启动保护器	MA04-1.6-2.5A start protector	1
17	82130252	UAM04-4KW 带 1NO 辅助触点接触器	UAM04-4KW with 1NO auxiliary contactor	1
18	82130272	UAM04-黄绿地线端子排	UAM04-yellow green ground terminal block	4
19	W01001	平垫圈 4	Flat washer 4	26
20	S05425	内六角圆柱头螺钉 M4×10	Hexagon socket head cap screw M4×10	30
21	S05421	内六角圆柱头螺钉 M3×10	Hexagon socket head cap screw M3×10	2

11 电路图 Circuit Diagram