ASK-A(HK-2903-A)

自动送扣机系列

AUTOMATIC BUTTON FEEDER

使用说明书

MANUAL BOOK

ASK-A(HK-2903-A)

一、 简述

自动送扣装置由送料识别机构，气动纽扣传输机构，纽扣旋转落位机构，测厚机构，闸板调节机构，机械臂送扣机构，松线机构，集机、电、气结合控制机构组成。可与不同品牌型号的钉扣机兼容，具有送扣速度快，送扣稳定性高，故障率小，大幅度减轻劳动强度，提高生产效率，操作简单等特点。

二、技术参数

编号	参数内容	标准范围	备注
1	电源电压	110 / 220V	
2	额定功率	260W	
3	长宽高	50X55X38CM	
4	重量	52KG	
5	额定钉扣速度	13000-15000pcs/ 8h	
6	连续送扣速度	25000-28000pcs/ 8h	
7	送扣稳定性	99.7%	
8	纽扣直径	9-24mm	
9	建议气压	0.3-0.35Mpa	

三、安全警告

1、用户在安装使用此设备前，务必仔细阅读有关安全注意事项，以确保人身安全和设备损坏。由于不遵守本说明书的操作规定而造成的人身伤害或设备损坏，本公司将不承担任何责任。

2、安装前确保钉扣机压脚在不断针不跳线的情况下已调到最高。

3、机器连接电源之前，必须由具有电工安装资质的专业人员检查电源电压，频率，功率等参数是否与机器铭牌上的表示相符。机器金属外壳必须要和缝纫机的外壳用金属导线连接后再用接地线接到专门的保护地线上。

4、维修或调整设备时，必须先切断电源、气源以保安全。

5、任何时候不要把手放在机器的运动部分，以免造成伤害。压缩空气的进气总气源应在 0.35-0.4MPa 之间。

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四、面板功能介绍

数量　显示当前数量，按下该键，数量清零。

输出入指示灯　按下该键显示各系统工作指示灯。

送扣控制　按下该键设置震动时间、震动档位、送扣速度。

手动测试　按下该键进入功能页面，选择你想要测试的功能键，按下机器运转一次。

语言　中英文切换

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复位	在系统报警时按下该键进行复位。
启动	按下该键机器开始工作
停止	按下该键机器停止工作
松线控制	如果对有绕扣要求的厂家，往往需要较长的钮柄，此时可以开启松线功能（见触摸屏松线功能开关），松线开始工作。
机臂送扣	按下该键机臂送扣为逆时针转动；再按一下机臂顺时针旋转。
机臂上下	按下该键机臂向上动作；再按一下机臂向下动作。
立轴旋转	按下该键立轴旋转。
立轴上下	按下该键立轴往下，再按一下立轴往上。
钮夹取扣	按下该键扣夹展开，再按一下纽夹收回。
挡板伸缩	按下该键挡板伸出阻挡纽扣移动，再按下挡板缩回，纽扣可自由移动。
手动关扣	按下该键机臂送扣一次。
吹气送扣	按一下该键吹气送扣一次。
返回	按下该键返回上一页。

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吹气调压阀：扣子从震动盘上送到送扣轨道时，再通过吹气把扣子送到爪臂上，建议气压在 0.3-35MPa 之间。

立轴气缸调压阀：调节立轴气缸压力，建议气压在 0.3-0.35MPa 之间。

对扣调节螺杆：松开螺帽、转动手柄进行前后调节，调节后固定螺帽。

对扣调节螺杆：松开螺帽、转动手柄进行左右调节，调节后固定螺帽。

按下该键：测厚压板抬起，取一颗要用的纽扣放上，再松开该键。

手动补扣：当扣爪无扣时按下该键进行手动补扣。

在系统报警时按下该键进行复位。

五、基本操作介绍

1.开机操作：

1、检查机器周边有无工具，异物。

2、接通总进气源，调节压力，确保压力表的数值在 0.35-0.4MPa 之间。

3、接通电源，面板上的按钮指示灯变成绿色，触摸屏显示功能界面。

4、按下复位键，机器恢复到初始状态，即待机状态。

5、按下缝纫机准备键，压脚抬起，操作屏变为绿色，进入待机状态。

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2.初始状态：（待机状态）

编号	气缸名称	状态	磁开关名称	磁开关指示灯	备注
J1	纽夹取扣气缸	合拢	J1	有扣亮	手动放一颗纽扣
J2	机臂上下气缸	处于下方	J2	灭	
J3	立轴上下气缸	处于上方	J3	灭	
J4	闸板气缸	宿回位置	J4	灭	
J5	机臂传感器		J5		
J6	送扣传感器		J6		
J7	钉扣机压脚		J7		

3.换扣操作：

1、按下测厚按键（如图 1 所示），取一颗要用的纽扣放于测厚压板下面（如图 2 所示）。

图 1

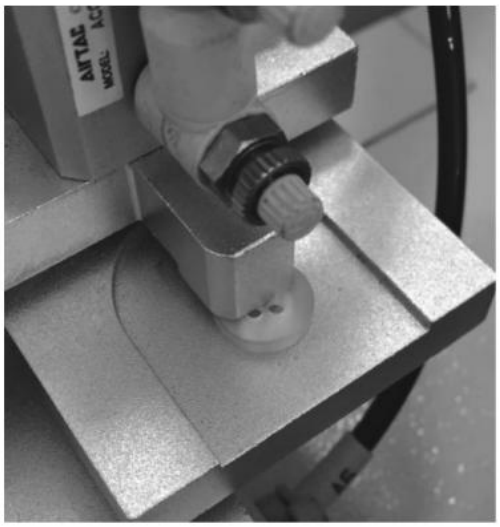

图 2

2、取一颗要用的纽扣放于传输轨道，调节其宽度大于纽扣直径约 1-2mm,以纽扣能顺畅滑入轨道为准（如图 3 所示）。

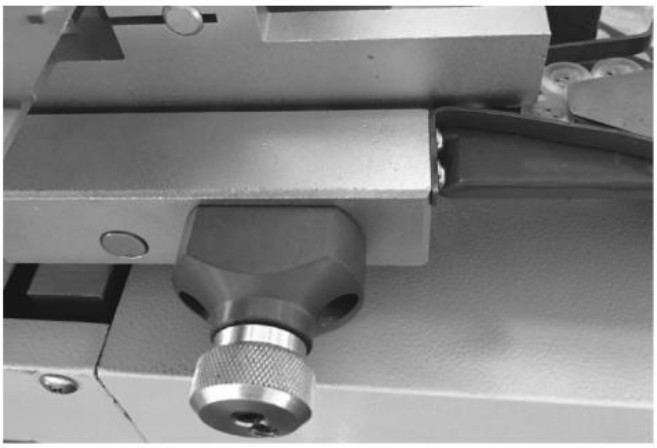

图3

3、换扣时，根据不同的纽扣直径来调整J1传感器的位置，以免误送扣（如图4所示）

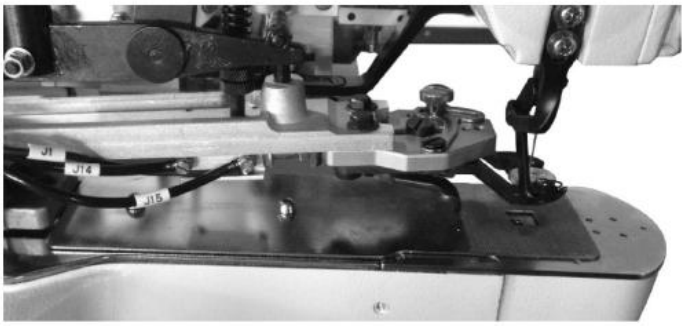

图4

4、接通总进气源，调节气压表压力在 0.35-0.4MPa 之间。（如图 5 所示）

图5

5、按下电源开关，电源指示灯亮（如图 6 所示），触摸屏显示功能页面，调节送料盘速度，以能够连续供应纽扣为准，让轨道充满扣子。

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图 6

图 7

5、抬起钉扣机压脚，按下手动补扣键（如图 7 所示）。

6、按下手动补扣键，核对纽扣爪座规格是否合适，如果不匹配就要更换扣爪座

7、按手动测试键、再按档板伸缩键。伸出闸板，调整纽扣间隙为 0.2-0.5MM 为佳。

8、按下复位键，机器恢复到初始化状态。

六、 钉扣操作：

按钉扣机说明书操作。

七、 故障排除

1、纽扣不落位

解决方法：

1.检查磁控开关位置

2.检查旋转立柱和送扣针板的中心位置

3.检查闸板位置

4.检查送扣针板上是否有余扣

5.检查主板输入端 J18,24V 电源

6.检查 24V 电源

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2、不送扣：

1.检查无扣磁控开光 **J3** 位置

2.检查自动送扣光电开关 **J6** 位置

3.检查机臂上升磁控开关 **J2** 位置

4.检查原点磁控开关位置

5.检查闸板伸缩磁控开关 **J4** 位置

6.检查主板相关输入端

7.检查 **24V** 电源

3、震动器不工作

解决办法：

1.检查电源

2.检查继电器

3.检查主板输出 J23 电源

4.检查震动器线圈

5.检查震动器控制器电路板输出

4、故障自检功能

故障报警（无扣）

解决办法：

1.检查测厚机构是否忘记放扣子，或放的扣子规格不对。

2.检查送扣轨道宽度调整是否适中。

3.检查吹气压力是否在 0.3-0.35Mpa 之间。

4.振动盘送料速度是否能跟得上钉扣速度。否则要加快送料速度。

5.检查 **J3** 输入端，磁性开关位置不正确，重新调整位置。

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J1 夹扣器气缸传感器故障

检查故障

1、检查传感器是否故障？

2、检查传感器是否安装正确？

3、检查气缸气压是否在 0.3-0.35Mpa 之间？

解决方法

1、更换新的传感器。

2、重新安装传感器到感应灯亮的位置并固定螺丝。

3、调整气缸气压到 0.3-0.35Mpa 之间。

J2 机臂下降气缸传感器故障

检查故障

1、检查传感器是否故障？

2、检查传感器是否安装正确？

3、检查气缸气压是否在 0.3-0.35Mpa 之间？

解决方法

1、更换新的传感器。

2、重新安装传感器到感应灯亮的位置并固定螺丝。

3、调整气缸气压到 0.3-0.35Mpa 之间。

J3 立轴气缸传感器故障

检查故障

1、检查传感器是否故障？

2、检查传感器是否安装正确？

3、检查气缸气压是否在 0.3-0.35Mpa 之间？

解决方法

1、更换新的传感器。

2、重新安装传感器到感应灯亮的位置并固定螺丝。

3、调整气缸气压到 0.3-0.35Mpa 之间。

J4 档扣气缸传感器故障

检查故障

1、检查传感器是否故障？

2、检查传感器是否安装正确？

3、检查气缸气压是否在 0.3-0.35Mpa 之间？

解决方法

1、更换新的传感器。

2、重新安装传感器到感应灯亮的位置并固定螺丝。

3、调整气缸气压到 0.3-0.35Mpa 之间。

J5 机臂传感器故障不在起点

检查故障

1、检查传感器是否故障？

2、检查传感器是否安装正确？

解决方法

1、更换新的传感器。

2、重新安装传感器到感应灯亮的位置并固定螺丝。

J6 送扣传感器故障

检查故障

1、检查传感器是否故障？

2、检查传感器是否安装正确？

解决方法

1、更换新的传感器。

2、重新安装传感器到感应灯亮的位置并固定螺丝。

J7 钉扣机压脚抬起传感器故障

检查故障

1、检查传感器是否故障？

2、检查传感器是否安装正确？

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解决方法

1、更换新的传感器。

2、重新安装传感器到感应灯亮的位置并固定螺丝。

机臂驱动器故障

解决方法

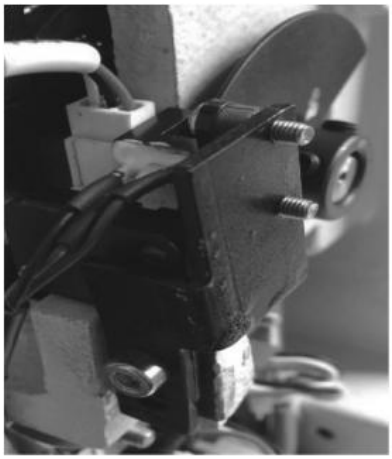
1、清除机臂障碍物。

2、关机重启。

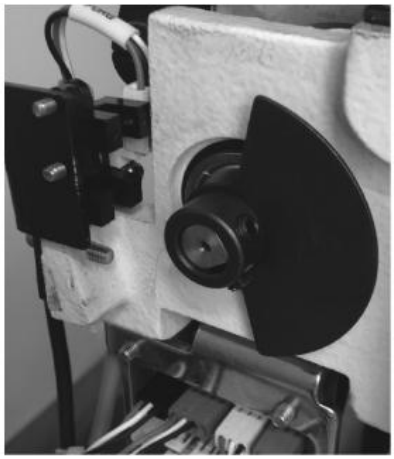
重机（JUKI)机型：1900、1903 系列

感应固定支架安装正确位置

图（1）送扣机传感器未安装前



图（2 正面）送扣机安装传感器后



图（3 侧面）送扣机安装传感器后

安装方法：把（图 1）钉扣机上的传感器螺丝卸下，再把送扣机的传感器放在钉扣机传感器的外面，对上感应槽固紧螺丝即可。见图（2）、图（3）。

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图（4）断针保护传感器未安装前

图（5正面）断针保护传感器安装后

图（6侧面）断针保护传感器安装后

装方法：把拉簧固定片上的螺丝卸下，再把断针保护的传感器放在固定片的下面（图4），对上感应槽固紧螺丝即可（大豪电控），见图（5），图（6）.

兄弟款机型：438D、438FX系列

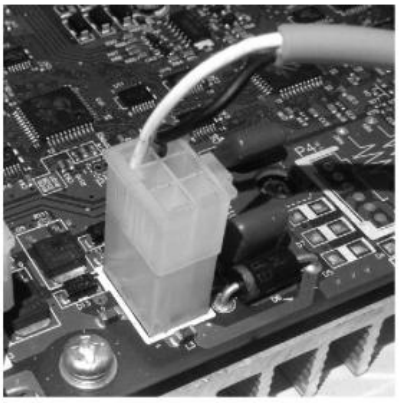

图 (1) 438D电磁铁插座位置

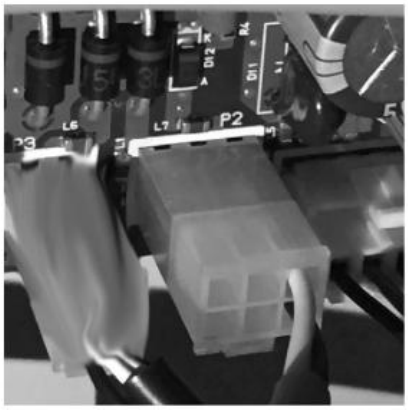

图 (2) 438FX电磁铁插座位置

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图（3）送扣传感器安装后（438D、438FX）

安装方法：安装前找出钉扣机的剪线电磁铁见图(1)(2), 然后把线拨开, 把送扣机的送扣传感器线并接在剪线电磁铁的上面见图（3）。

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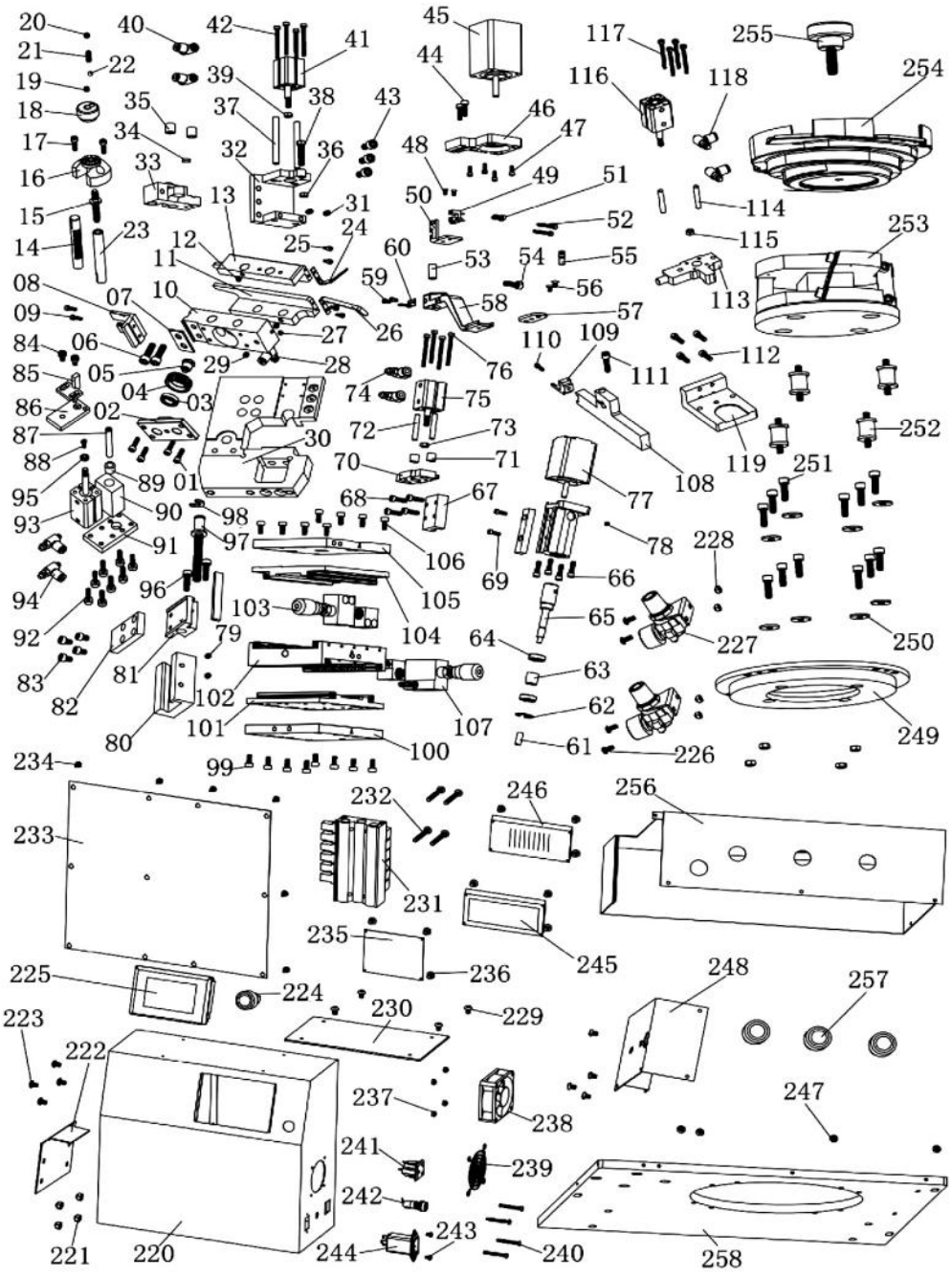
零 件 图



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零件图			
序号	名称	序号	名称
01	内六角螺丝 M4×15	41	气缸 25×10
02	固定板	42	内六角螺丝 M3×35
03	轴承 19×10×5	43	内六角螺丝 M6×12
04	齿轮	44	内六角螺丝 M4×15
05	台柱螺丝	45	电机
06	内六角螺丝 M6×20	46	电机座
07	斜垫	47	内六角螺丝 M3×8
08	钮扣托盘	48	沉头螺丝 M3×6
09	内六角螺丝 M3×10	49	光电传感器
10	钮扣导条（B）	50	传感器座
11	钮扣导边条（2）B	51	内六角螺丝 M3×10
12	固定螺丝 M5×5	52	内六角螺丝 M3×20
13	钮扣导边条（1）A	53	电机轴套
14	导向齿条（2）	54	内六角螺丝 M5×16
15	调整丝杆	55	钮扣爪
16	调整座	56	沉头螺丝 M4×6
17	内六角螺丝 M4×15	57	钮扣爪座
18	调整手柄	58	爪臂
19	固定螺丝 M5×5	59	内六角螺丝 M3×5
20	固定螺丝 M5×5	60	光电隔片
21	弹簧	61	胶嘴
22	钢珠	62	孔挡圈 17
23	导向齿条（1）	63	隔套
24	导向片（1）	64	轴承 17×7×5
25	内六角螺丝 M2.5×6	65	压轴
26	导向片（2）	66	内六角螺丝 M4×15
27	固定螺丝 M4×5	67	滑轨
28	三通接头	68	内六角螺丝 M4×15
29	固定螺丝 M5×5	69	内六角螺丝 M3×10
30	机架板	70	举升块
31	固定螺丝 M5×5	71	铜套
32	导柱座	72	导柱
33	滑块	73	M5 螺母
34	胶垫	74	气接头
35	铜导套	75	气缸 25×10
36	M5 螺母	76	内六角螺丝 M3×35
37	导柱	77	电机（35）
38	螺丝 M5×30	78	固定螺丝 M4×5
39	M5 螺母	79	固定螺丝 M5×5
40	气管接头	80	滑块座

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零件图			
序号	名称	序号	名称
81	滑块	221	螺母 M4
82	气缸固定板（2）	222	外盖
83	内六角螺丝 M5×8	223	十字螺丝 M4×6
84	内六角螺丝 M4×10	224	起动按钮
85	挡块	225	控制屏
86	导板	226	十字螺丝 M4×10
87	导柱	227	压力表
88	内六角螺丝 M3×10	228	螺母 M4
89	铜套	229	十字螺丝 M4×6
90	导杆座	230	顶板
91	立板	231	气阀总成
92	内六角螺丝 M4×20	232	十字螺丝 M4×35
93	气缸 25×20	233	后盖板
94	气接头	234	自攻螺丝 M4
95	螺母 M5	235	电子主板
96	内六角螺丝 M5×20	236	十字螺丝 M4×6
97	螺杆	237	螺母 M4
98	开口挡圈 10×1	238	风扇
99	内六角螺丝 M4×10	239	网罩
100	微调底座	240	十字螺丝 M4×35
101	滑板组合	241	电源插座
102	中板组合	242	保险丝
103	调节螺杆	243	十字螺丝 M4×6
104	滑板组合	244	主机插座
105	机架座板	245	稳压电源
106	内六角螺丝 M4×10	246	编码器
107	调节螺杆座	247	十字螺丝 M4×6
108	钮扣压条	248	侧板
109	前导向块	249	震动底座
110	内六角螺丝 M3×10	250	垫片
111	内六角螺丝 M5×20	251	内六角螺丝 M6×20
112	内六角螺丝 M4×15	252	减震垫
113	限位板	253	震动座
114	导柱	254	钮扣盘
115	螺母 M5	255	带塑螺栓
116	气缸 25×10	256	主盖
117	内六角螺丝 M3×35	257	按钮
118	气接头	258	底板
119	限位座		
220	电控箱		

ASK-A(HK-2903-A)

I. Overview

Automatic button feeding device is composed of feeding identification mechanism, pneumatic button transmission mechanism, button rotating and falling mechanism, thickness measuring mechanism, gate adjusting mechanism, mechanical arm button feeding device, thread loosening mechanism, as well as mechanical, electrical and gas parts and control mechanism. It can be compatible with different brands and models of button sewing machine, featuring quick button feeding speed, high button feeding stability, small failure rate, significant reduction of labor intensity, improvement of production efficiency, simple operation, etc.

II. Technical Parameters

No.	Parameter contents	Standard range	Remarks
1	Power supply voltage	110 / 220V	
2	Rated power	260W	
3	L×W×L	50X55X38CM	
4	Weight	52KG	
5	Rated button sewing speed	13000-15000pcs/ 8h	
6	Continuous button feeding speed	25000-28000pcs/ 8h	
7	Button feeding stability	99.7%	
8	Button diameter	9-24mm	
9	Suggested air pressure	0.3-0.35Mpa	

III. Safety Warning

1. Before installing and using this equipment, users must carefully read the relevant safety precautions, to ensure personal safety and avoid equipment damage. The company will not bear any responsibility for any personal injury or equipment damage resulting from failure to comply with the operational requirements of this instructions.

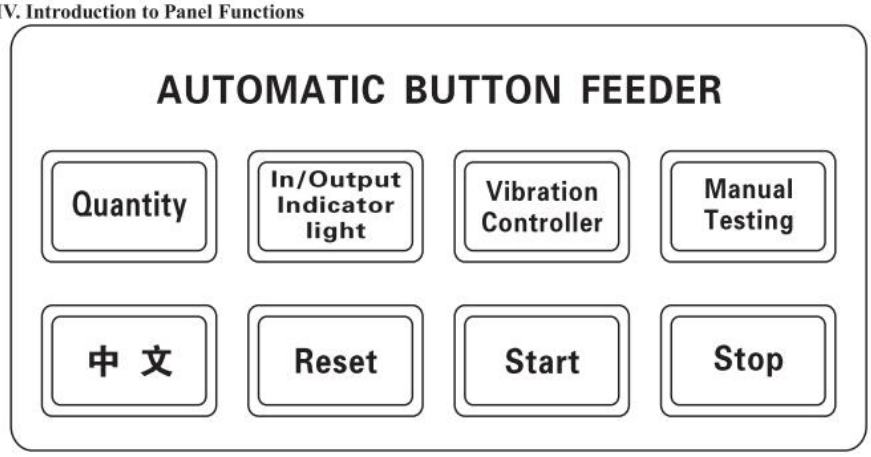
2. Before installation,be ensure the pressing foot working well at the highest area .

3. Before connecting the machine to the power supply, arrange the qualified professional electrician to check the power supply voltage, frequency, power and other parameters are in line with the identifications of machine nameplate. The metal casing of machine must be connected to the case of sewing machine using metal wire and then connected to the special protective grounding wire using grounding wire.

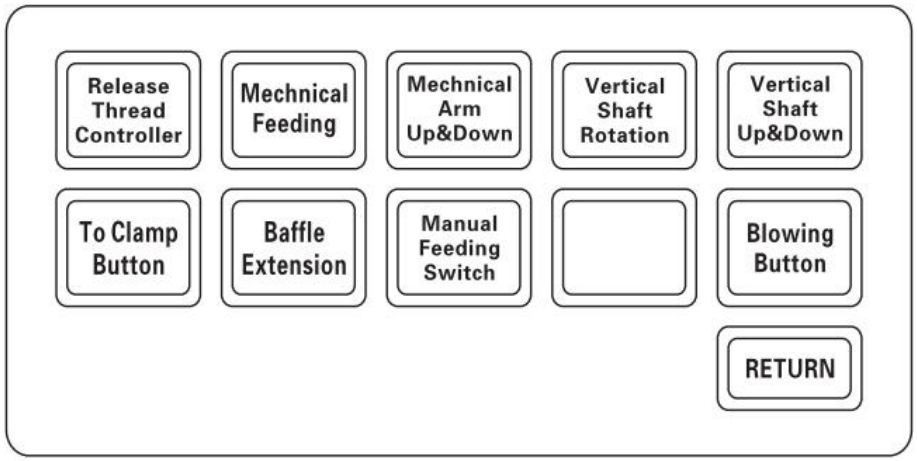
4. During the repair or adjustment of device, cut off the power supply and gas supply to ensure safety.

5. Do not put hands on the moving parts of machine to avoid injury. The total intake source of compressed air should be between 0.35 and 0.4MPa .

IV. Introduction to Panel Functions



ASK-A(HK-2903-A)



Quantity	"Quantity": It shows the current quantity; the quantity will be reset after pressing this key.
In/Output Indicator light	"Output / input indicator light": Display the working indicator lights of all systems by pressing this key.
Vibration Controller	"Button feeding control/Vibration Controller": Set the time of vibration, gear of vibration and speed of button feeding by pressing this key.
Manual Testing	"Manual testing": Enter function page by pressing this key, select the function button that you want to test, and make the machine run by pressing this key.
中 文	"Language": Chinese-English switch.
Reset	"Resetting": Pressing this key for resetting when the system is giving an alarm.
Start	"Start": The machine will start working after pressing this key.
Stop	"Stop": The machine will stop working after pressing this key.
Release Thread Controller	"Thread loosening control": The manufacturer which has requirements for winding button often needs long handle; then thread loosening control can be started (see thread loosening function switch at touch screen), and start thread loosening.

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Mechnical Feeding	"Feeding button by engine arm": Engine arm will rotate anticlockwise after pressing this key; the engine arm will rotate clockwise after pressing this key again.
Mechnical Arm Up&Down	"Moving up and down of engine arm": The engine arm will move up after pressing this key; and the engine arm will move down after pressing this key again.
Vertical Shaft Rotation	"Rotation of vertical shaft": Vertical shaft will rotate after pressing this key.
Vertical Shaft Up&Down	"Moving up and down of vertical shaft": The vertical shaft will move down after pressing this key and the vertical shaft will move up after pressing this key again.
To Clamp Button	"Taking button by operating button clamp": Button clamp will be unfolded after pressing this key and the button clamp will be folded after pressing this key again.
Baffle Extension	"Stretching out and drawing back of damper": The damper will stretch out to block the button from moving, and the damper will draw back and button can freely move after pressing this key Again.
Manual Feeding Switch	"Manually feeding button": The engine arm will feed button once after pressing this key.
Blowing Button	"Feeding button by blowing gas": Button feeding will be conducted once by blowing gas after pressing this key.
RETURN	"Back": Return to the previous page after pressing this key.

Pressure regulating valve by gas blowing: When buttons are delivered to button feeding track at the vibrating plate, feed the buttons at the gripper arm through gas blowing, and the recommended air pressure is between 0.3-35MPa.

Pressure regulating valve by vertical shaft cylinder: Adjust the pressure of vertical shaft cylinder, and the recommended air pressure is between 0.3-0.35MPa.

Buttonaligment adjusting: Loosen nut and rotate the handle for adjustment from front to back, and then fix the nut after adjustment.

Buttonaligment adjusting: Loosen nut and rotate the handle for adjustment from left to right, and then fix the nut after adjustment.

Pressing this key: Lift the pressing plate for measuring thickness, take one button to be used and place it on the plate, and then release this key.

Manually repairing button: Press this key for manually repairing button when there is no button in the gripper.

Press this button for resetting when the system is giving an alarm.

V. Introduction to Basic Operation

1. Start-up operation:

1. Check whether there are tools or foreign objects around the machine.
2. Connect to the gas source, adjust the pressure and ensure the value of pressure gauge is between 0.3-0.35MPa.
3. After turning on the power, the button indicator lights at the panel will become green and function interfaces will be displayed on the touch screen.
4. After pressing the resetting key, the machine will be restored to the original state, namely standby state.
5. After pressing the preparation key of sewing machine, the presser foot will be lifted, and the operation screen will become green and the machine will enter standby state.

2. Original state: (standby state)

NO.	Name of cylinder	State	Name of magnetic switch	Indicator light of magnetic switch	Remarks
J1	Cylinder for making gripper take button	Fold	J1	It is on when there is button	Putting on button manually
J2	Cylinder for making mechanical arm move up and down	At the lower position	J2	It is off	
J3	Cylinder for making vertical shaft move up and down	At the upper position	J3	It is off	
J4	Gate cylinder	Position of return	J4	It is off	
J5	Mechanical arm sensor	At the origin	J5		
J6	Button feeder sensor		J6		
J7	Presser foot of button sewing machine		J7		

3. Button change operation:

1. Press the thickness measuring key (as shown in Fig. 1), and then take one button to be used and put it below the pressing plate for measuring thickness (as shown in Fig. 2).

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Fig.1

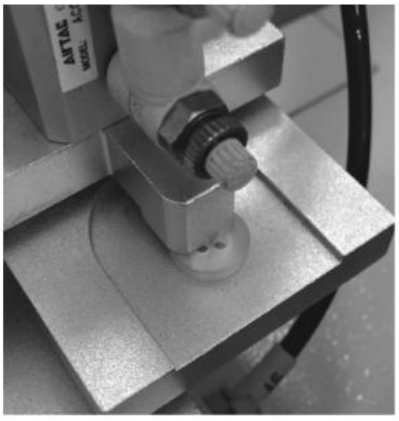

Fig. 2

2. Take one button to be used and put it at the transmission track, adjust its width and make it greater than the diameter of button by about 1-2mm, so that button can smoothly slide into the track (as shown in Fig. 3).

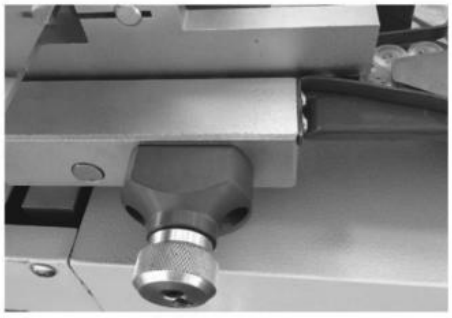

Fig. 3

3. When change buttons,in order to feeding buttons correctly,according to the different size of button's diameter to adjusting the J1 sensor position. (as shown in Fig. 4).

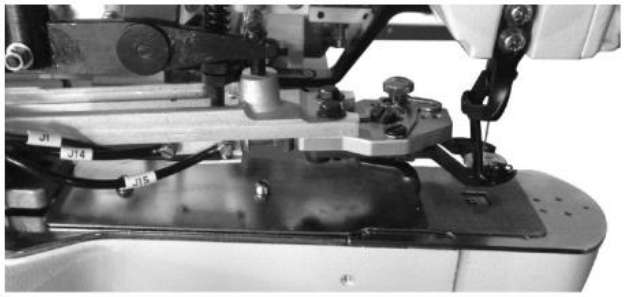

Fig. 4

4. Conntect to the total intake air supply, adjust the pressure of gas preasure meter to be between 0.35-0.4MPa (as shown in Fig. 5)

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Fig. 5

5. After pressing the power switch, the power indicator light will be on (as shown in Fig. 6), the touch screen will display function page to adjust the speed of feed tray, so as to continuously feed buttons and make track full of buttons.

Fig. 6

Fig. 7

6. Lift the presser foot of button sewing machine, press the key "Manually supplementing button" (as shown in Fig. 7).

7. Press the key "Manually supplementing button", check whether the specifications of button gripper base are appropriate, and replace it if the specifications are not appropriate.

8. Press the key "Manual testing" and then "Stretching out and drawing back of damper". Stretch out the gate, and adjust the gap between buttons to be 0.2-0.5MM.

9. Press the key "Resetting" to restore the machine to initial state.

VI. Button Sewing Operations:

Conduct Operations according to the instructions of button sewing machine.

VII. Troubleshooting

1.Buttons do not fall to the proper position

Solution:

1. Check the position of magnetic switch
2. Check the central position of rotating column and button feeding needle plate
3. Check the position of gate
4. Check whether there are excessive buttons at button feeding needle plate
5. Check J18,24V power supply at motherboard input terminal
6. Check 24V power supply

2. Do not feed buttons:

1.Check the position of magnetic switch J3 when there is no button.
2.Check the position of photoelectric switch J6 for automatically feeding buttons.
3.Check the position of magnetic switch J2 for lifting engine arm.
4.Check the position of magnetic switch at origin.
5.Check the position of gate retractable magnetic switch J4.
6.Check motherboard–related input terminal.
7.Check 24V power supply.

3. Vibrator does not work

Solution:

1. Check power supply
2. Check relay
3. Check motherboard output power supply J23
3. Check the coil of vibrator
4. Check the circuit board output of vibrator and controller

4. Fault self-inspection function Fault alarm (no button)

Solution:

1.Check whether buttons have not placed for thickness measuring mechanism,or the specifications of button are not incorrect.
2.Check whether the button feeding track width has been adjusted properly.
3.Check whether the air blowing pressure is between 0.35–0.4Mpa.
4.Check whether the feeding speed of vibration plate can keep up with the button sewing speed;otherwise,speed up The feeding rate.
5.Check J3 input terminal;if the position of magnetic switch is not correct,re–adjust it.

J1 Failure of button clamping cylinder sensor

Check failures:

1. Check whether the sensor is faulty.
2.Check whether the sensor is installed properly.
3.Check whether the cylinder pressure is between 0.3–0.35Mpa.

Solution:

1.Replace a new sensor.
2.Re–install the sensor at the position where the sensor light is on and tighten the screws.
3.Adjust the air pressure of cylinder to be between 0.3–0.35Mpa.

J2 Failure of engine arm lowering cylinder sensor

Check failures:

1. Check whether the sensor is faulty.
2.Check whether the sensor is installed properly.
3.Check whether the cylinder pressure is between 0.3–0.35Mpa.

Solution:

1.Replace a new sensor.
2.Re–install the sensor at the position where the sensor light is on and tighten the screws.
3.Adjust the air pressure of cylinder to be between 0.3–0.35Mpa.

J3 Failure of vertical shaft cylinder sensor

Check failures:

1. Check whether the sensor is faulty.
2.Check whether the sensor is installed properly.
3.Check whether the cylinder pressure is between 0.3–0.35Mpa.

Solution:

1.Replace a new sensor.
2.Re–install the sensor at the position where the sensor light is on and tighten the screws.
3.Adjust the air pressure of cylinder to be between 0.3–0.35Mpa.

J4 Failure of button blocking cylinder sensor

Check failures:

1. Check whether the sensor is faulty.
2.Check whether the sensor is installed properly.
3.Check whether the cylinder pressure is between 0.3–0.35Mpa.

Solution:

1.Replace a new sensor.
2.Re–install the sensor at the position where the sensor light is on and tighten the screws.
3.Adjust the air pressure of cylinder to be between 0.3–0.35Mpa.

J5 The failure of engine arm sensor is not at the starting point

Check failures:

1. Check whether the sensor is faulty.
2.Check whether the sensor is installed properly.

Solution:

1.Replace a new sensor.
2.Re–install the sensor at the position where the sensor light is on and tighten the screws.

J6 Failure of button feeder sensor

Check failures:

1. Check whether the sensor is faulty.
2.Check whether the sensor is installed properly.

Solution:

1.Replace a new sensor.
2.Re–install the sensor at the position where the sensor light is on and tighten the screws.

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J7 Failure of presser foot lifting sensor of button sewing machine

Check failures:

1. Check whether the sensor is faulty.

2.Check whether the sensor is installed properly.

Solution:

1.Replace a new sensor.

2.Re–install the sensor at the position where the sensor light is on and tighten the screws.

Failure of mechanical arm driver

Solution:

1.Clean mechanical arm's obstacles

2.Power off and then restart

BUTTON SEWING MACHINE (JUKI TYPE): 1900 and 1903 series

Proper position for installation of sensor fixing support

Fig. (1) Before the button feeder machine sensor is installed

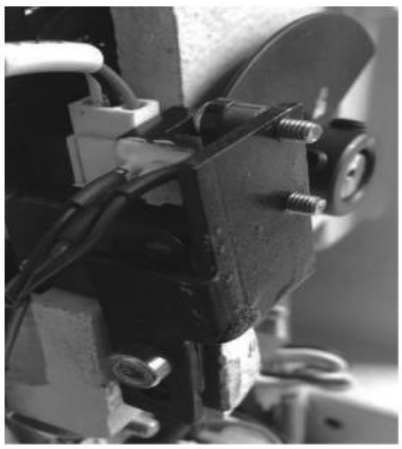

Fig. (2) After the button sending machine sensor is installed (front)

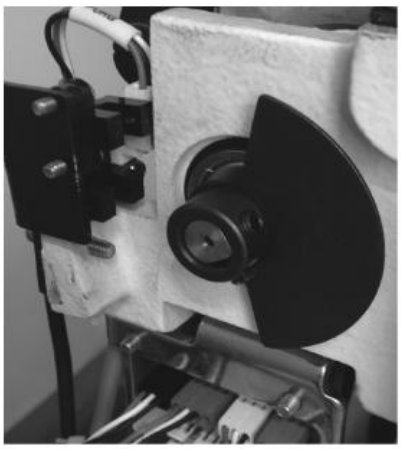

Fig. (3) After the button sending machine sensor is installed (side)

Installation method: Remove the sensor screw of button sewing machine (Fig. 1), put the sensor of button sending machine at the outside of the sensor of button sewing machine, align at the fastening screws of sensing groove, see Figs. (2) and (3).

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Fig.(4)Before the needle protection sensor is installed

Fig.(5)After the needle protection sensor is installed(front)

Fig.(6)After the needle protection sensor is installed(side)

Installation method:Remove the screw,fix the sensor with correct position（Fig.4）(pls following the pic),then tighten the screw (DAHAO CONTROLER SYSTEM),see Figs.(5) and (6).

BUTTON SEWING MACHINE BROTHER TYPE/438D SERIES 438FX SERIES

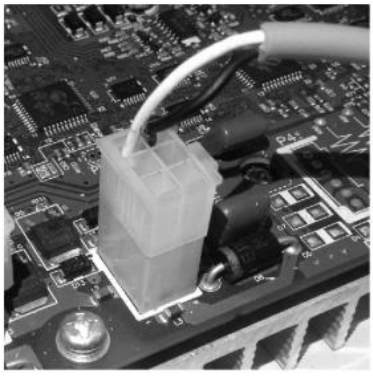

Fig.(1)Electromagnet connector position(438D)

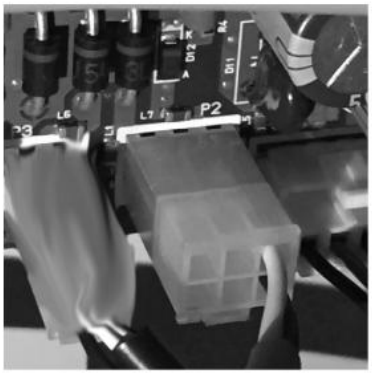

Fig.(2)Electromagnet connector position(438FX)

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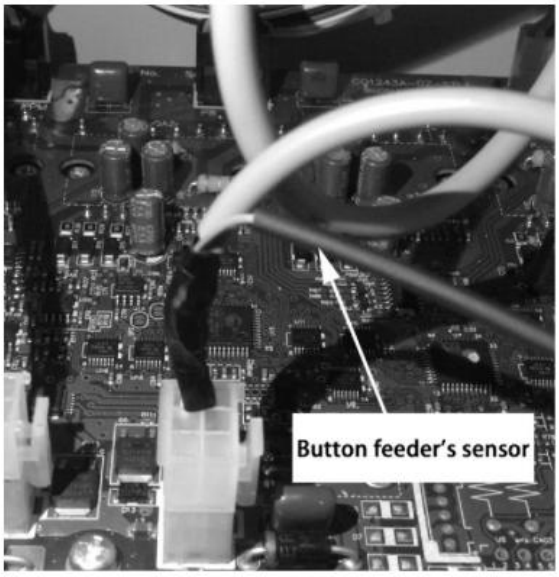

Fig.(3)After the button feeder's sensor is installed(438D、438FX)

Installation method: Before installation,pull out the electromagnet sensor wires, connect together with the automatic button feeder's sensor , then connect on the PCB.

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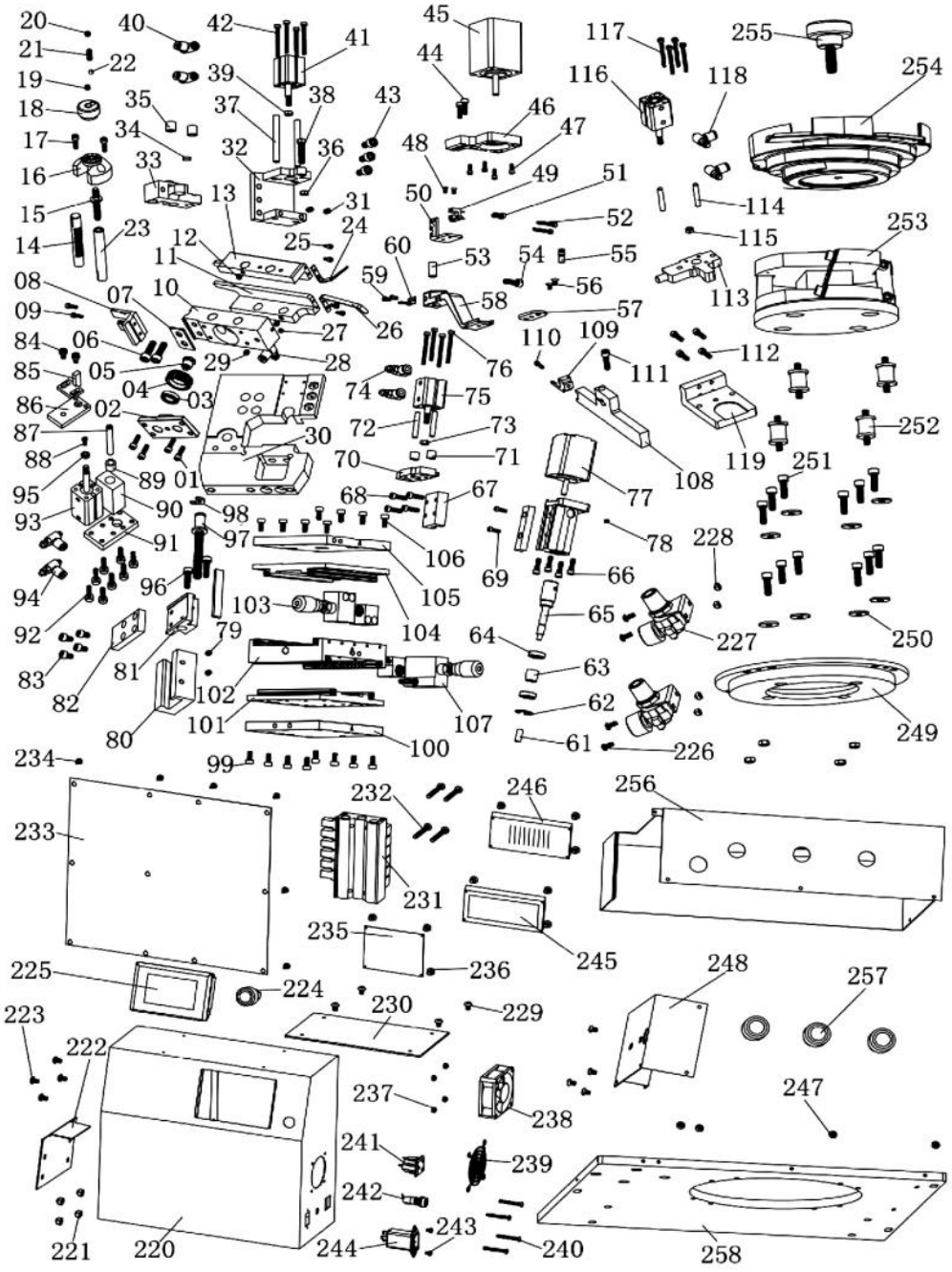
Parts Drawing



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Parts drawing			
No.	Name	No.	Name
01	Hexagon socket screw M4×15	41	气缸 25×10
02	Fixing plate	42	Hexagon socket screw M3×35
03	Bearing 19×10×5	43	Hexagon socket screw M6×12
04	Gear	44	Hexagon socket screw M4×15
05	Pillar screw	45	Motor
06	Hexagon socket screw M6×20	46	Motor base
07	Tilting pad	47	Hexagon socket screw M3×8
08	Button tray	48	Flat-head screw M3×6
09	Hexagon socket screw M3×10	49	Photoelectric sensor
10	Button guiding bar (B)	50	Sensor base
11	Button side guiding bar (2)B	51	Hexagon socket screw M3×10
12	Fixing screw M5×5	52	Hexagon socket screw M3×20
13	Button side guiding bar (1)A	53	Motor shaft sleeve
14	Guide gear rack (2)	54	Hexagon socket screw M5×16
15	Adjustment lead screw	55	Button gripper
16	Adjustment base	56	Flat-head screwM4×6
17	Hexagon socket screw M4×15	57	Button gripper base
18	Adjustment handle	58	Gripper arm
19	Fixing screw M5×5	59	Hexagon socket screw M3×5
20	Fixing screw M5×5	60	Photoelectric spacer
21	Spring	61	Rubber nozzle
22	Steel ball	62	Hole closing ring 17
23	Guide gear rack (1)	63	Spacer bush
24	Guide vane (1)	64	Bearing 17×7×5
25	Hexagon socket screw M2.5×6	65	Presssing shaft
26	Guide vane (2)	66	Hexagon socket screw M4×15
27	Fixing screw M4×5	67	Sliding track
28	Threee-way connector	68	Hexagon socket screw M4×15
29	Fixing screw M5×5	69	Hexagon socket screw M3×10
30	Frame plate	70	Lifting block
31	Fixing screw M5×5	71	Coppe bush
32	Guide post base	72	Guide pillar
33	Slider	73	M5 nut
34	Rubber gasket	74	Air connector
35	Copper bushing	75	Air cylinder 25×10
36	M5 nut	76	Hexagon socket screw M3×35
37	Guide pillar	77	Motor (35)
38	Screw M5×30	78	Fixing screw M4×5
39	M5 nut	79	Fixing screw M5×5
40	Air pipe joint	80	Sliding block base

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Parts drawing			
No.	Name	No.	Name
81	Sliding block	221	Nut M4
82	Air cylinder fixing plate (2)	222	Outer cover
83	He×agon socket screw M5×8	223	Philip's head screw M4×6
84	He×agon socket screw M4×10	224	Start button
85	Check block	225	Control panel
86	Guide plate	226	Philip's head screw M4×10
87	Guide pillar	227	Pressure gauge
88	He×agon socket screw M3×10	228	Nut M4
89	Copper bush	229	Philip's head screw M4×6
90	Guide rod base	230	Top plate
91	Vertical plate	231	Valve assembly
92	He×agon socket screw M4×20	232	Philip' s head screw M4×35
93	Air cylinder 25×20	233	Back cover plate
94	Air connector	234	Self-tapping screw M4
95	Nut M5	235	Electronic motherboard
96	He×agon socket screw M5×20	236	Philip' s head screw M4×6
97	Screw	237	Nut M4
98	Split washer 10×1	238	Fan
99	He×agon socket screw M4×10	239	Mesh enclosure
100	Fine-tuning base	240	Philip' s head screw M4×35
101	Sliding block combination	241	Power socket
102	Medium plate combination	242	Fuse
103	Adjusting screw	243	Philip' s head screw M4×6
104	Sliding plate combination	244	Host socket
105	Rack base plate	245	Stabilized voltage supply
106	He×agon socket screw M4×10	246	Encoder
107	Adjusting screw seat	247	Philip' s head screw M4×6
108	Button depression bar	248	Side plate
109	Front guide block	249	Vibration base
110	He×agon socket screw M3×10	250	Gasket
111	He×agon socket screw M5×20	251	He×agon socket screw M6×20
112	He×agon socket screw M4×15	252	Shock pad
113	Location-limited plate	253	Vibration base
114	Guide pillar	254	Button plate
115	Nut M5	255	With plastic bolt
116	Ai cylinder 25X10	256	Main cover
117	Hexagon socket screw M3X35	257	Button
118	Air connector	258	Baseplate
119	Location-limited base		
220	Electric cabinet		