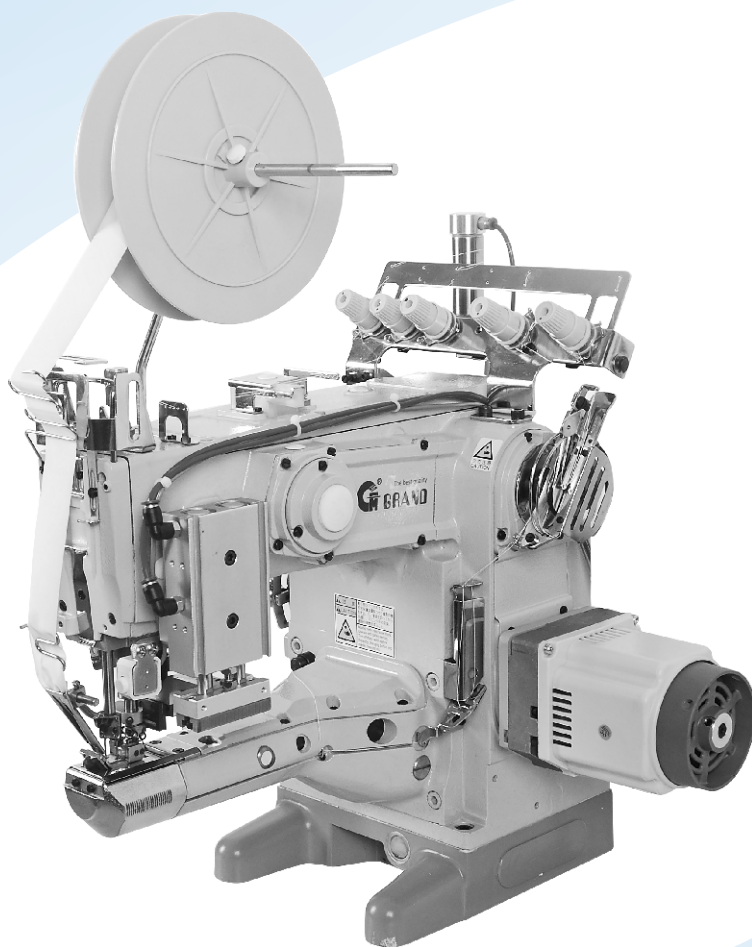




MANUAL 用户手册



MODEL & DEVICES

M3-EC-3361K-P

直驱伺服电机自动感应送带&切带装置
DD Servo Motor Auto Induction Tape Feeder & Tape Cutter Device

GRAND AUTOMATIC SEWING PRODUCTS SERIES

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1、Product introduction

产品介绍

一、产品用途：

Product use:

适用于布边缝制前后剪线切带。

It is suitable for sewing T-shirt, cuff and single seam sewing.

二、产品特点：

Product features:

- 1) 后切刀与压脚一体化设计,后切刀紧贴针板出线口位置,缝制完后最短距离剪切布带及缝线,节省物料和工作时间,提升生产效率节约成本!

Using the servo motor and the electric eye induction control system, automatic induction blowing auxiliary hem, sewing and parking, automatic cutting, open protection and other functions, stable and reliable quality, easy installation, energy saving and high efficiency, working efficiency multiplied.

- 2) 适用于各厂家同类缝纫机配套使用。

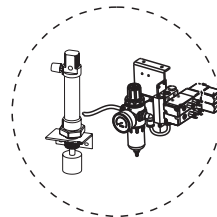
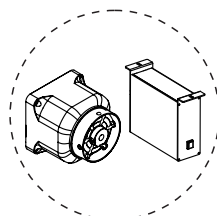
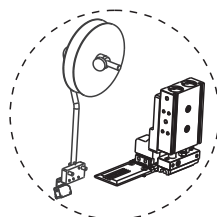
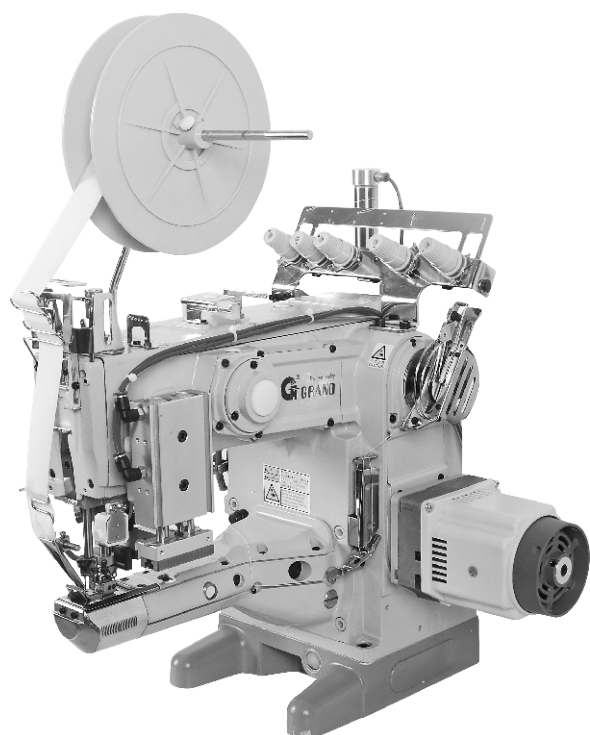
Can be applied to any kind of Zig-zag stitch machine, flat lock machine and over lock machine etc.

- 3) 主要部件 Main components:

A.送带与切带组件 Flanged feeding device

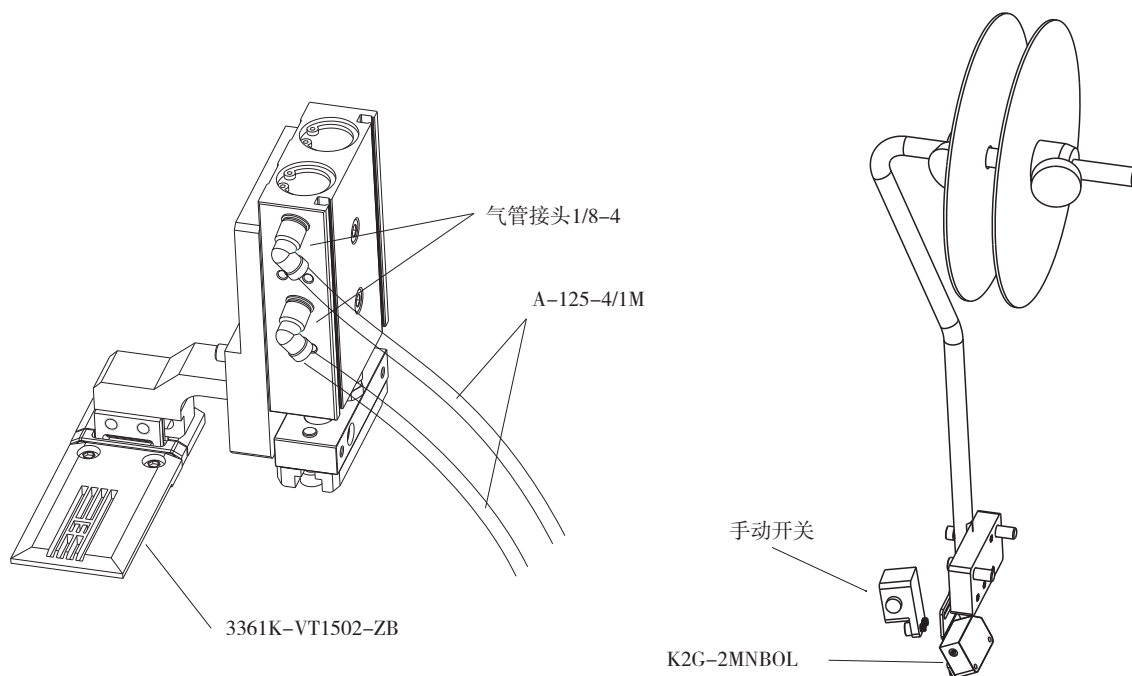
B.直驱电机及控制组件 Automatic wire cutting device (pressure foot)

C.起压脚及气阀开关组件 Servo direct drive motor

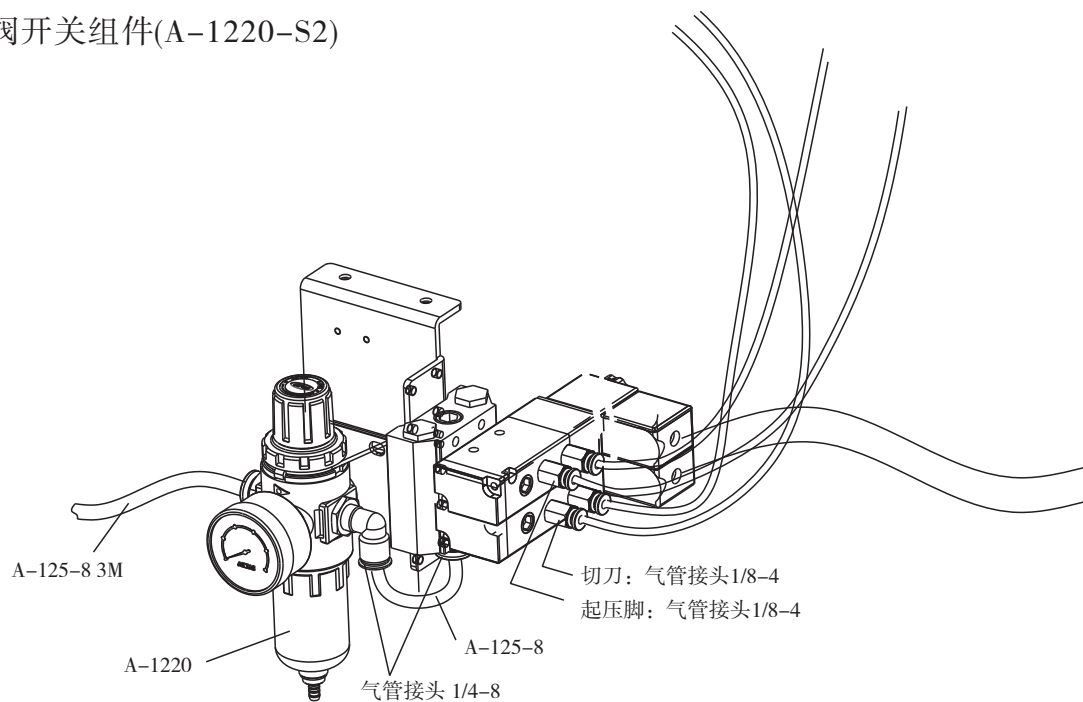


2、Components and installation instructions 组件及安装说明

1.切刀(3361K-VT1500)

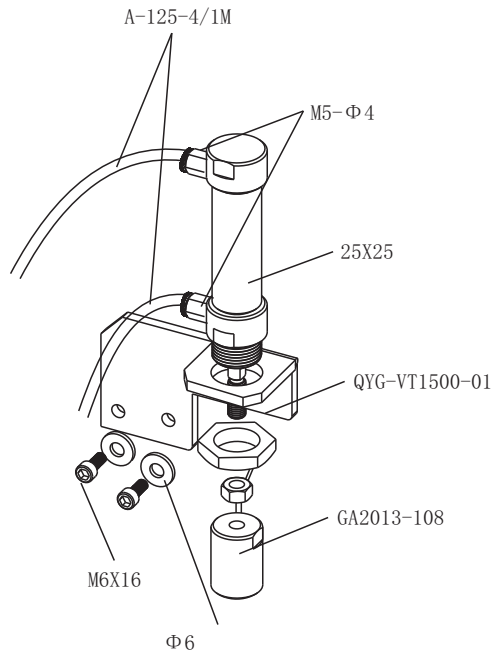


2.气阀开关组件(A-1220-S2)

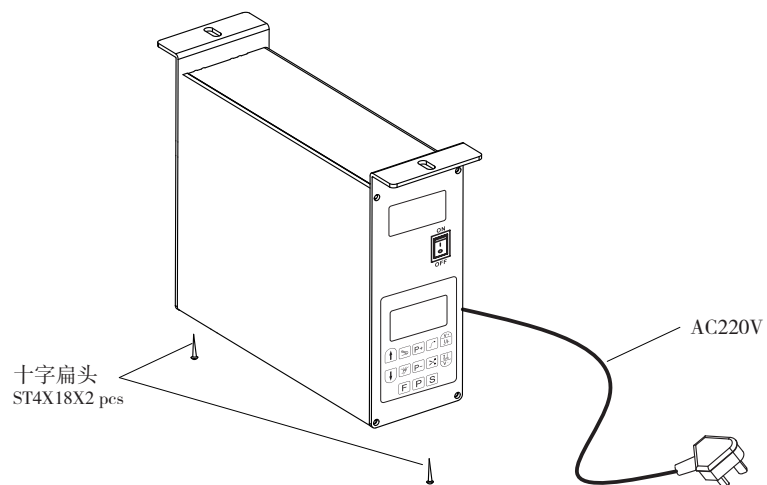


2、Components and installation instructions 组件及安装说明

3.气动起压脚组件(AP-25-25-VT1500)

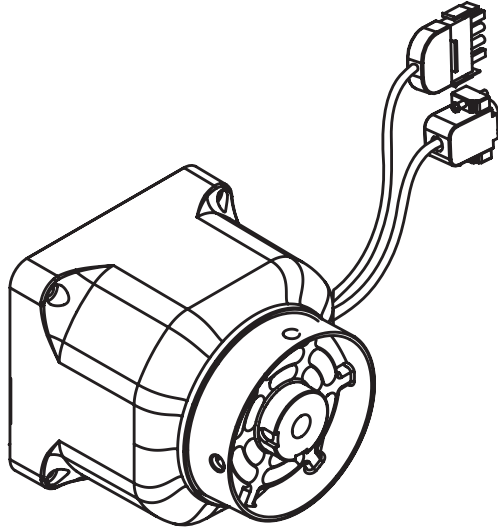


4.电控箱(S3-ECP)



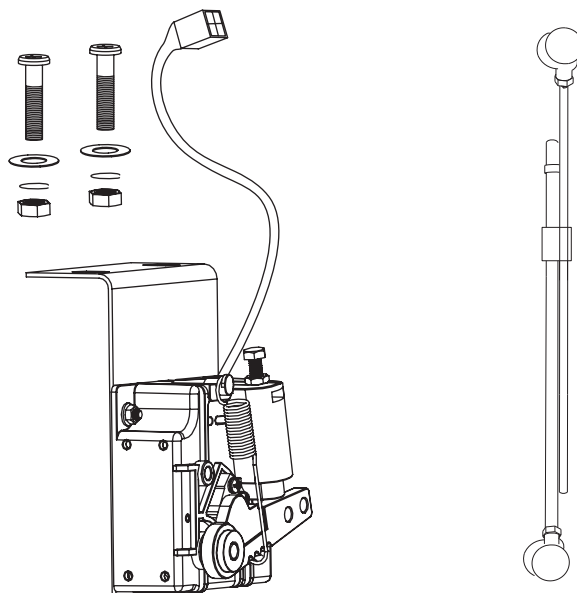
2、Components and installation instructions 组件及安装说明

5.直驱电机(M3-VT1500)

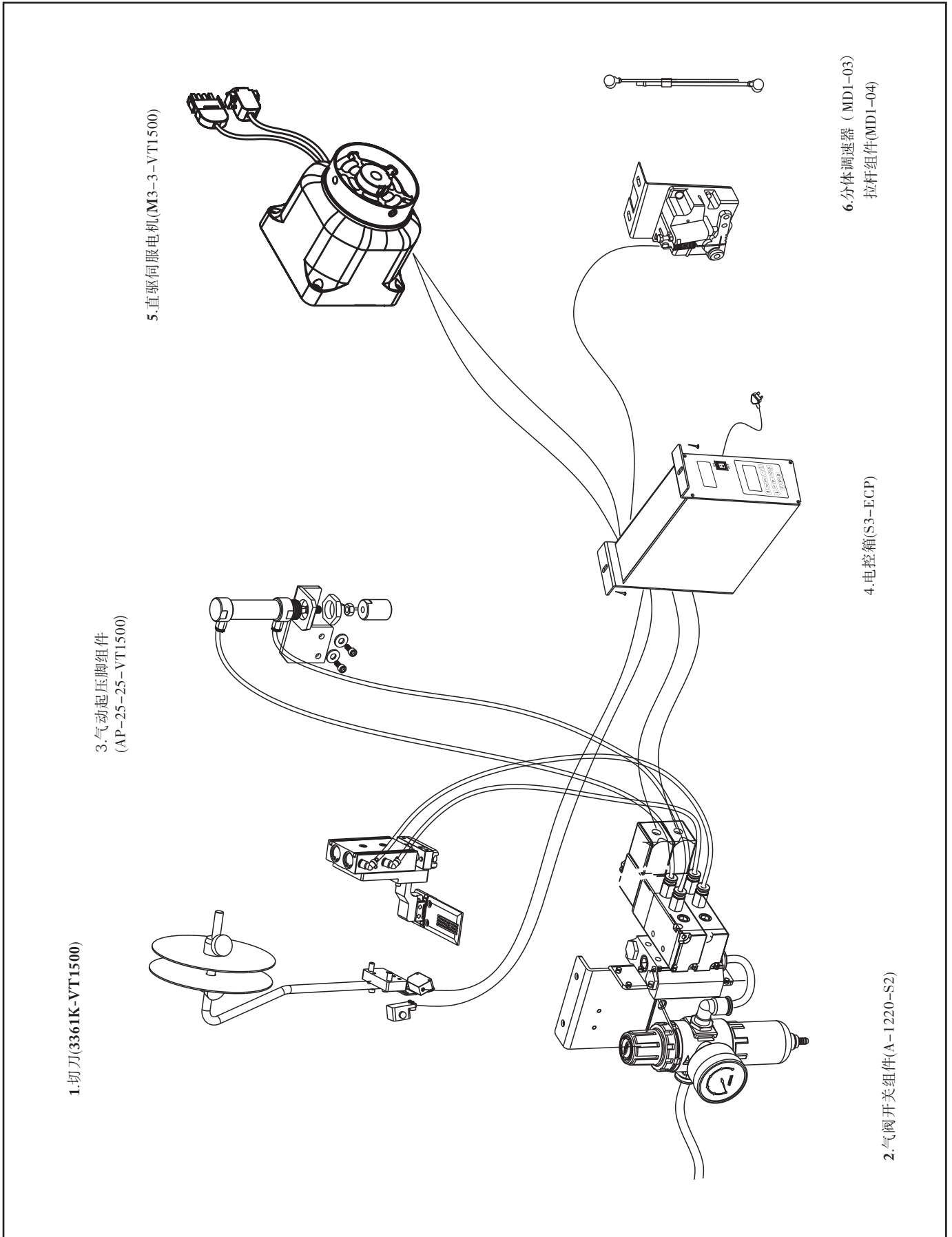


6.分体调速器 (MD1-03)

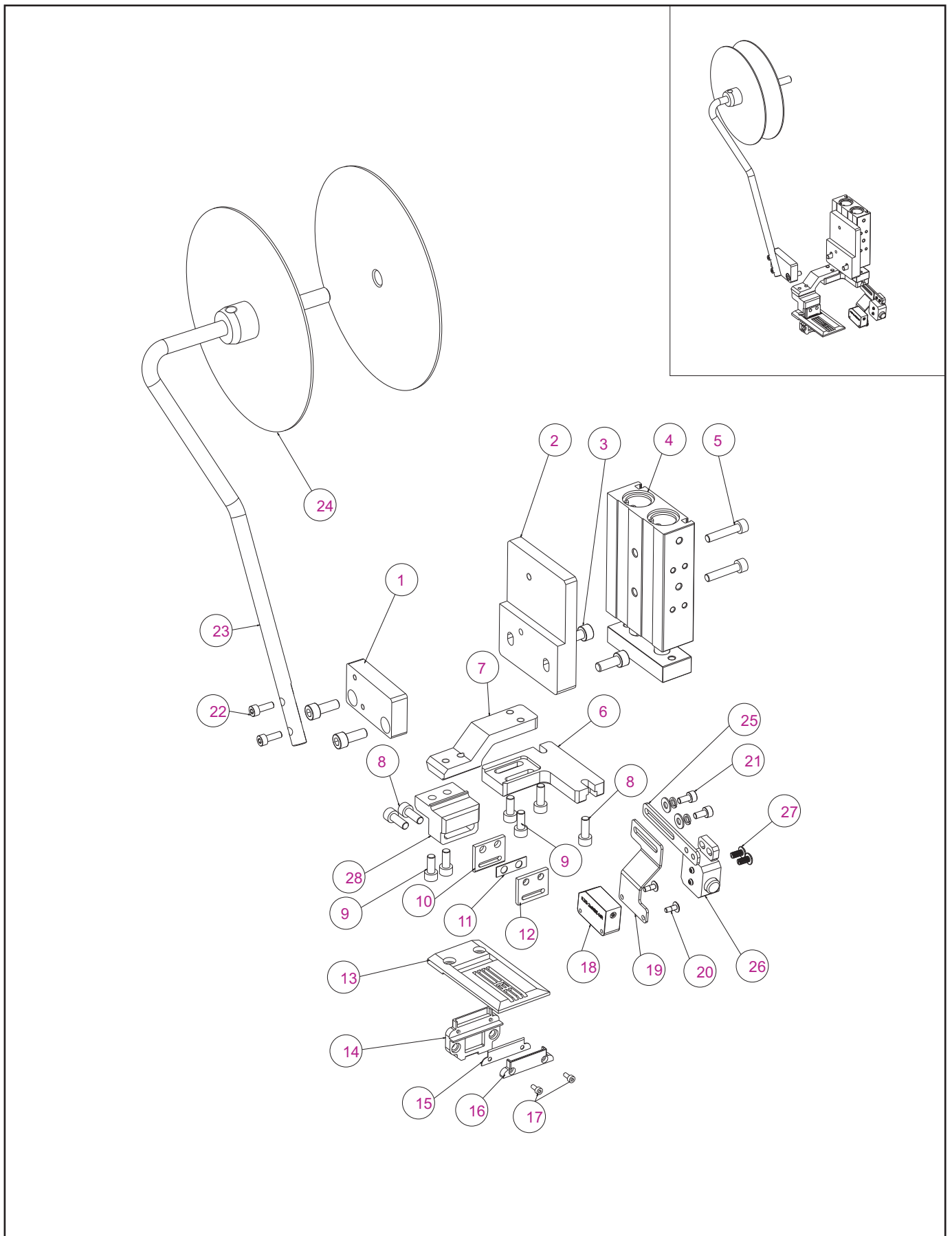
拉杆组件(MD1-04)



2、Components and installation instructions 组件及安装说明



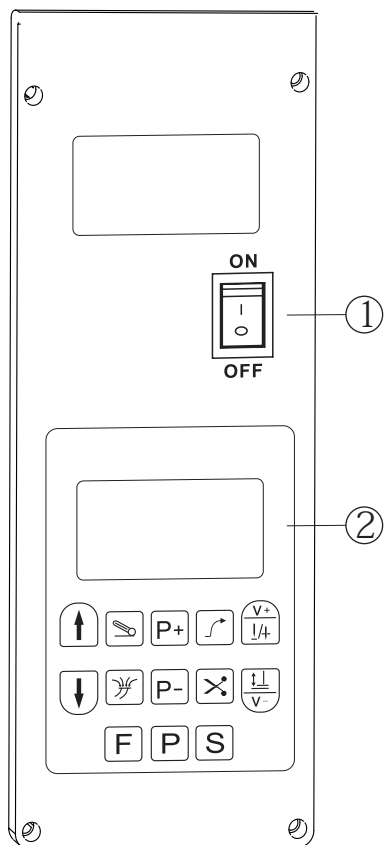
3、Tape Cutter & Tape feeder device Assembly drawings And list
3361K-VT1500-00V2 切带&送带装置组件图



3、Tape Cutter & Tape feeder device Assembly drawings And list
3361K-VT1500-00V2 切带&送带装置组件图

序号	型号	名称		数量	备注
Ref.No	Part No	Description		Qty	Remarks
1	3361K-VT1500-01-V1	垫块	Cushion block	1	
2	3361K-VT1500-02-V1	气缸固定板	Cylinder fixing plate	1	
3	M6X16	内六角圆柱头螺钉	Screw	4	
4	SNS-CXSM20X25	气缸	Cylinder	1	
5	M5X25	内六角圆柱头螺钉	Screw	2	
6	3361K-VT1500-04	气缸连接件	Cylinder connection	1	
7	3361K-VT1500-05-01	刀体连接件1	Cutter body connector 1	1	
8	M5X14	内六角圆柱头螺钉	Screw	4	
9	M5X12	内六角圆柱头螺钉	Screw	4	
10	3361K-VT1500-06	前夹板	Front splint	1	
11	3361KT-08	隔离板	Isolation board	1	
12	3361K-VT1500-07	后夹板	Rear splint	1	
13	M4X8	内六角圆头螺钉	Screw	4	
14	3361K-VT1500-15-V1	刀片安装件	Blade mount	1	
15	3361K-VT1500-17-V2	刀片	Blade	1	
16	3361K-VT1500-16-V1	刀片锁紧件	Blade lock	1	
17	M2.5X8	内六角圆柱头螺钉	Screw	2	
18	K2G-2MNRE-MR	反射电眼	Reflex electric eye	1	
19	3361K-VT1500-V2	电眼支架	Electric eye bracket	1	
20	M3X8	十字扁头螺钉	Screw	2	
21	M4X8	内六角圆柱头螺钉(带平弹垫)	Screw (with flat spring washer)	4	
22	M4X14	内六角圆柱头螺钉	Screw	2	
23	GFU-33-MS380-V1	挂带杆	Tie rod	1	
24	200X10X5	托盘	Tray	2	
25	3361K-VT1500-KVZJ	手动开关支架	Manual switch bracket	1	
26	KV-04	手动开关组件	Switch as-manual	1	
27	M4X8	十字扁头螺钉	Screw	2	
28	3361K-VT1500-05-02	刀体连接件2	Cutter body connector 2	1	

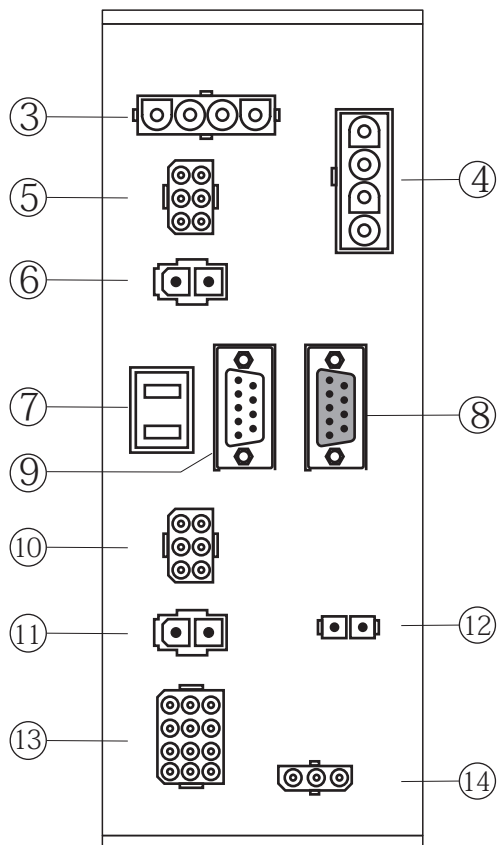
4、S3-ECP 控制盒及面板说明 Control box and panel description



Controller face version

控制器前面板

- ① Switch of system power supply
系统电源开关
- ② Display and control panel
显示器及控制面板
- ③ Input power line interface
输入电源线接口
- ④ Nterface of motor signal
电机信号接口
- ⑤ Reserved interface
预留接口
- ⑥ Manual presser foot switch
手动压脚开关 (1)
- ⑦ Two sockets
两位插座 AC220V)



The control box tail version

控制盒尾板

- ⑧ Coding interface
编码接口
- ⑨ Foot signal interface
脚踏信号接口
- ⑩ Air suction
吸风
- ⑪ Presser foot
起压脚
- ⑫ Interface of illuminating lamps
照明灯接口
- ⑬ Thread trimmer solenoid valve剪线电磁阀
Pull out switch拔线开关
Manual presser foot switch 手动压脚开关 (2)
Safety switch安全开关 (1-2)
- ⑭ Safety switch安全开关 (3)

5、S3-ECP 控制参数详细说明 Detailed description of control parameters

No.	参数说明	内容	设定范围	出厂设定
0	初始化	改为00E1, 恢复到出厂状态	0/1	0
1	电机转动方向	从手轮端看: 0逆时针, 1顺时针	0/1	0
2	上电复位开关	0关闭, 1打开	0/1	1
3	自拖动模式开关	0正常工作模式 1自拖动模式	0/1	0
4	停针位置	0下停针, 1停针	0/1	1
5	抬压脚功能总开关	0关闭, 1打开	0/1	0
6	中立抬压脚开关	0关闭, 1打开	0/1	0
7	切线后抬压脚开关	0关闭, 1打开	0/1	0
11	操作板补针选择	0上停针时无动作, 下停针时提针, 1补半针, 2补一针	0/1/2	1
14	brake_time	0-100	15	Best 22
15	安全开关	0关闭安全开关功能, 1开通安全开关功能	0/1	1
16	安全开关	0常闭有效, 1常开有效	0/1	1
17	半后踏开关	1后踩第一节时压脚工作, 0后踩时第一节压脚不工作	0/1	1
18	软启动开关	0关闭, 1打开	0/1	1
22	启动加速度	0-1加速度逐渐增大	0-1	1
26	抬压脚软着陆	0关闭, 1开启	0/1	0
29	第一针加速度	0-100	45	
30	加速度	0-100	100	
31	标定开关	0不允许标定, 1标定脚踏板位置, 2标定机头位置	0/1/2	0
32	软启动针数	0没有慢速启动功能 1-9慢速启动针数	0-9	2
34	速度基座选择	1专用于崧庆立式踏板PK-3, 0用速度基座感应	0/1	0
40	后踩第一节时压脚工作的延迟时间	0-100ms	0-100	10
41	踏板死区区间	微调	0-20	10
42	踏板低速区间	微调	0-50	5
43	踏板最高转速位置	微调	0-20	5
44	踏板切线位置	微调	0-100	5
45	抬压脚下降延时	0~1275ms(5ms)	0-255	20
46	抬压脚全力吸合时间	0~1275ms(5ms)	0-255	50
47	切线后自动抬压脚保持时间	0~200s(1s)	0-200	12
48	踏板控制抬压脚上升位置		0-200	50

5、S3-ECP 控制参数详细说明 Detailed description of control parameters

No.	Parameter description	Content	Setting Range	Factory Setting
0	Reset	00E1=Reset	0/1	0
1	Motor direction	Handwheel : 0:c-clockwise 1:clockwise	0/1	0
2	Upper reset switch	0:off, 1:on	0/1	1
3	Auto mode	0:normal, 1:auto mode	0/1	0
4	Needle position	0:down stop, 1:up	0/1	1
5	Footlifter switch	0:off, 1:on	0/1	0
6	During sewinging footlifter	0:off, 1:on	0/1	0
7	After cut footlifter	0:off , 1:on	0/1	0
11	Stitches compensation	0:up needle none, down needle needle up; 1:haft stitch; 2 : 1 stitch	0/1/2	1
14	Brake_time	0-100	15	Best 22
15	Safty switch	0: off, 1: on	0/1	1
16	Safty switch	0: off , 1: on	0/1	1
17	Pedad step backward switch	1: first section work 0: first section none	0/1	1
18	Soft start switch	0: off, 1: on	0/1	1
22	Accelerate start	0-1 accelerate	0-1	1
26	Soft footlifter down	0: off, 1: on	0/1	0
29	Accelerate first stitch	0-100	45	
30	Accelerate	0-100	100	
31	Mark switch	0: not allow; 1: (p072、 p074、 p076) mark the pedal position; 2: mark the sewing head position	0/1/2	0
32	Soft start stitch	0: none 1-9: have	0-9	2
34	Base speed	1: pk-3 for shokei pedal sp, 0: for normal 0~100ms	0/1	0
40	First section step backward footlifter delay time(*0.1s)	0-100ms	0-100	10
41	Second section step backward	Slightly adjust	0-20	10
42	Low speed area of pedal	Slightly adjust	0-50	5
43	Highest speed area of pedal	Slightly adjust	0-20	5
44	Step backward pedal section to thread cut	Slightly adjust	0-100	5
45	Footlifter down delay	0-1275ms(5ms)	0-255	20
46	Foot close time	0-1275ms(5ms)	0-255	50
47	Foot close time after thread cut	0-200s(1s)	0-200	12
48	Pedal control footlifter up position		0-200	50

5、S3-ECP 控制参数详细说明 Detailed description of control parameters

No.	参数说明	内容	设定范围	出厂设定
49	踏板控制抬压脚下降位置		0~200	30
60	踏板最低速度	单位: 转/分钟	200~1500	200
62	踏板最高速度	单位: 转/分钟	200~5000	3500
66	软启动转速	单位: 转/分钟	150~3000	400
72	脚踏板最高位置		出厂设置	900
74	脚踏板中间位置		出厂设置	313
76	脚踏板切线位置		出厂设置	40
78	下停针位置	单位: 度	49°~309°	180°
80	自拖动模式单次运行时间(秒)	单位: 秒	0~3600	5
82	自拖动模式单次停车时间(秒)	单位: 秒	0~3600	3
109	T1: 切线动作前延误的时间ms	0~500ms	0~250	15
110	T2: 切线ON时间	0~500ms	0~250	70
111	T3: 切线OFF-到沙拉时间ms	0~500ms	0~250	1
112	T4: 沙拉ON时间ms	0~500ms	0~250	1
113	T5: 沙拉OFF-到拨线的时间ms	0~500ms	0~250	1
114	T6: 拨线(或吹风)ON时间ms	0~500ms	0~250	50
115	T7: 拨线OFF-到压脚的时间ms	0~500ms	0~250	15
116	下剪开关	1: 下剪开 0: 下剪关	0/1	1
117	上电强制开启压脚	1: 电源ON时, 强制抬压脚1次 0: 电源ON时, 不抬压脚	0/1	0
118	抬压脚调制开关	1: 开启 0: 关闭	0/1	1
119	后踩二段抬压脚开关		0/1	0
120	后踩二段剪线开关	0: 第二节后踩时剪线	0/1	0
121	抬压脚保护开关	1: 第一节后踩时剪线 1: 开启 0: 关闭	0/1	1
122	抬压脚保护时间	0~60s	0~60	30
124	切刀工作时间	0~200ms		
125	软启动每次/一次	0: 软启动开启时前踩仅软启动一次 1: 软启动开启时每次前踩软启动	0/1	0
126	1: 切线中的前踩马达不运转 0: 切线中的前踩马达运转	0: 剪线中的前踩马达运转 1: 剪线中的前踩马达不运转		0
186	抬压脚保持力度	在力度不够时, 可将参数调大	0-FF	20
187	抬压脚释放力度	释放时的出力	0-FF	9
188	抬压脚释放后延时进入强制释放出力	延时进入压脚释放出力	0-FF	5

5、S3-ECP 控制参数详细说明 Detailed description of control parameters

No.	Parameter description	Content	Setting Range	Factory Setting
49	Pedal control foo down position		0~200	30
60	Lowest speed	Unit:rpm/min	200~1500	200
62	Highest speed	Unit:rpm/min	200~5000	3500
66	Soft start speed	Unit:rpm/min	150~3000	400
72	Pedal highest speed position		出厂设置	900
74	Middle position of pedal		出厂设置	313
76	Thread cut position of peadal		出厂设置	40
78	Needle down position	Unit: degree	49°~309°	180°
80	Auto mode running time	Unit:second	0~3600	5
82	Stop time of automode	Unit:second	0~3600	3
109	T1:delay time of thread cut(ms)	0-500ms	0~250	15
110	T2:cutting time	0-500ms	0~250	70
111	T3:after cutting suction time	0-500ms	0~250	1
112	T4: Suction time	0-500ms	0~250	1
113	T5:off~after suction thread trim time	0-500ms	0~250	1
114	T6:blowing/ tthead trim time	0-500ms	0~250	50
115	T7:after thread trim footlifter time	0-500ms	0~250	15
116	Under trimmer switch	1: on, 0: off	0/1	1
117	Foot positon after power on	1: foot up, 0: none	0/1	0
118	Footlifter adjust switch	1: on, 0: off	0/1	1
119	Second section for footlifter switch		0/1	0
120	Second section for thread cut switch	0: Thread Cut At Second, 1: Thread Cut At First	0/1	0
121	Protect swtich for foot lifter	1: On, 0: Off	0/1	1
122	Foot up protect time	0-60s	0-60	30
124	Cutting running time	0-200ms		
125	Soft start/time	0 : step forward after power on only ltime, 1 : evertime work	0/1	0
126	1:thread cut motor stop , 0:thread cut step motor run	1 : thread cut motor stop, 0 : thread cut step motor run		0
186	Foot up strength	Air Low Adjust More	0-FF	20
187	Foot down strength	Relrese Power	0-FF	9
188	Foot down delay	Delay Power	0-FF	5



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