

70D 系列  
SERIES

超声波缝合机  
Ultrasonic lace machine

使用说明.零件手册  
INSTRUCTIONS MANUAL & PARTS BOOK

感谢购买本公司工业用缝纫机。

在使用此机器之前，请仔细阅读以下的说明，这样可以更好地帮到您了解此机器的相关操作。这些说明是根据现行的条例明确阐述了正确的工作方法。

**Thank you for purchasing this industrial sewing machine from us.**

**Before using this automatic unit, please read the following instructions, which will help you to understand how the machine operates.**

**These instructions illustrate the correct working methods to comply with current regulations.**

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

我们将欣然接受各位提出的改进此说明书的任何建议和指示。

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



## 安全注意事项

 危险	<ol style="list-style-type: none"><li>1. 为了防止因触电造成的事故，在接通了电源的状态下，请不要打开马达电气箱的盖子，也不要触摸电气箱内的零件。</li></ol>
 注意	<ol style="list-style-type: none"><li>1. 为了防止对人身的伤害，请不要在卸下了皮带护罩、手指防护器等安全装置的状态下运转机器。</li><li>2. 为了防止被卷入机器的人身事故，缝纫机运转中，请不要让手指、头发、衣服靠近皮带轮、V型皮带、马达附近，也不要将物品放到上面。</li><li>3. 缝纫机运转时，是以高速转动。为了防止伤害到手，运转中请绝对不要让手靠近切布刀。另外，更换机线时，请一定关闭电源。</li><li>4. 为了防止对人身的伤害，缝纫机上下动作时或返回原来位置时，请一定注意不要夹到手指。</li><li>5. 缝纫机运转中，请不要切断电源或切断空气供给源。</li><li>6. 为了防止因触电造成的事故，在卸下电源地线的状态下，请不要运转缝纫机。</li><li>7. 为了防止因触电和电气零件损坏造成的事故，插拔电源插头时，请一定先关掉电源开关。</li><li>8. 为了防止因电气零件损坏造成的事故，打雷时，为了安全请停止作业，并拔掉电源插头。</li><li>9. 因为本产品属于精密机器，所以操作时请充分注意，不要把水、油溅到机器上面，也不要让机器掉落给与机器冲击。</li><li>10. 本机器是A级工业用机器。在家庭环境下使用此机器的话，有可能发生电波干扰的现象。此时，请使用者采取适当的措施解决电波干扰问题。</li></ol>

### \*重要安全信息:

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

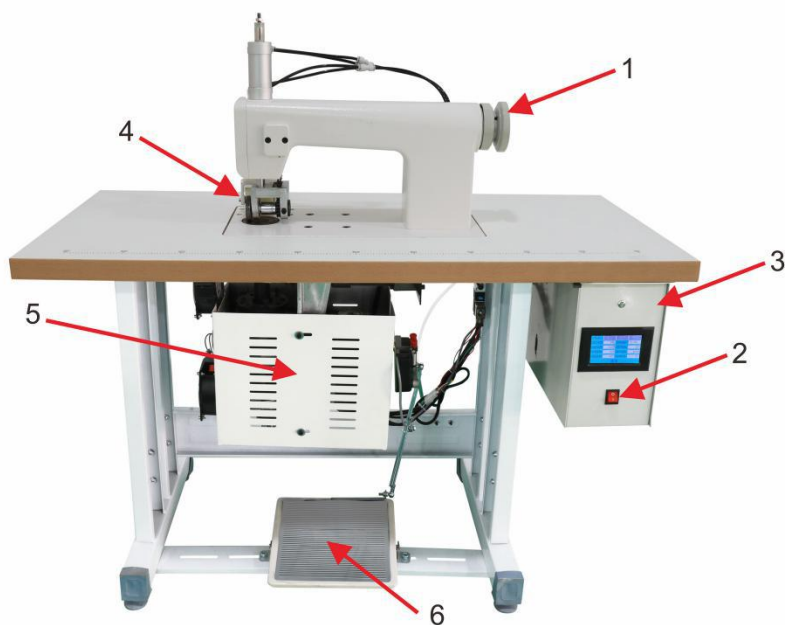
## Safety precautions

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

### \* important safety information:

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

## 一、设备基本信息



1. 机头                      2. 电源开关                      3. 电控箱                      4. 花轮组件  
5. 超声波组件                      6. 脚踏板

(1) : 电源开关——按动电源开关至**ON**，设备通电、通气。

(2) : 脚踏开关——前踩脚踏板控制机器缝合，后踩脚踏板控制压轮和花轮升降。

(3) : 触摸屏

### 1. Basic information of equipment

- 1.Machine head                      2.Power switch                      3. Control box  
4.Pattern wheel components                      5.Ultrasonic components                      6.Pedal

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

(2) : Pedal: the front foot pedal controls the sewing of the machine, and the rear foot pedal controls the lifting of the pressing wheel and the flower wheel.

(3) : Touch screen

a. Power on interface:

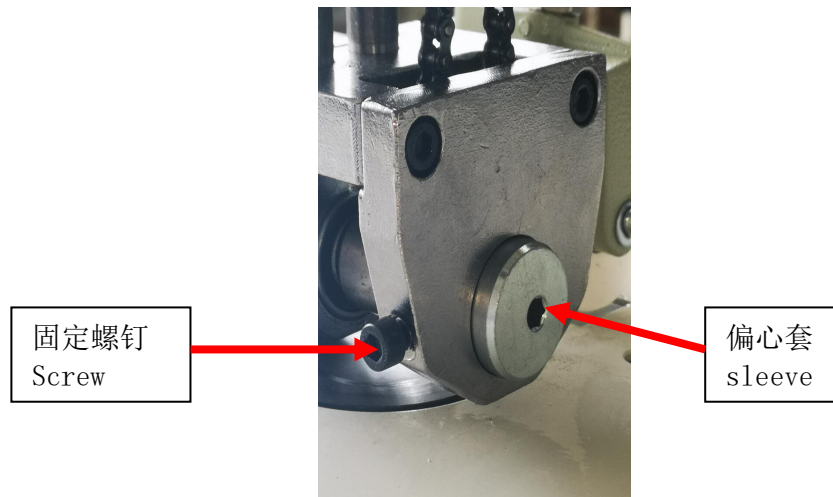
## 二、设备技术参数

超声波缝合机		
1	机头配置	机头
2	输出电压	0-2000V AC
3	输出功率	0-2500W (功率可调)
4	工作频率	20KHz
5	工作电源	AC220V 50Hz
6	空气压力	0.3MPa
7	自动追频精度	±0.5Hz
8	花轮转速	0-16m/min
9	工作环境温度	+5℃~+50℃
10	尺寸	机器尺寸1200mmX500mmX1150mm 外形尺寸:1220mmX570mmx1310mm
11	设备重量 毛、净重	130/90KG

## 2、 Technical parameters of the equipment

Ultrasonic lace machine		
1	Machine head	1
2	Voltage	0-2500V AC
3	Power	0-2000W (adjustable)
4	Frequency	20KHz
5	Power Supply	AC220V 50Hz
6	Pressure	0.3MPa
7	Frequency tracking	±0.5Hz
8	Speed	0-16m/min
9	Temperature	+5℃~+50℃
10	Size	Machine size: 1200mmX550mmX1150mm/Packing size:1220mmX570mmx1310mm
11	Weight G.W/N.W	130/90KG

### 三、花轮角度调节 Wheel angle adjustment



松开固定螺钉，旋转偏心套，可以调节花轮与焊头的角度，保证花轮的每一道压边厚度均等。  
Loosen the fixing screw and rotate the eccentric sleeve to adjust the angle between the flower wheel and the welding head, so as to ensure that the thickness of each pressing edge of the flower wheel is equal.

### 花轮压痕深度调节 Adjustment of depth of wheel



松开固定螺母，旋转限位套，调节气缸行程，改变花轮压痕深度。  
Loosen the fixing nut, rotate the limit sleeve, adjust the stroke of the cylinder, and change the indentation depth of the flower wheel.

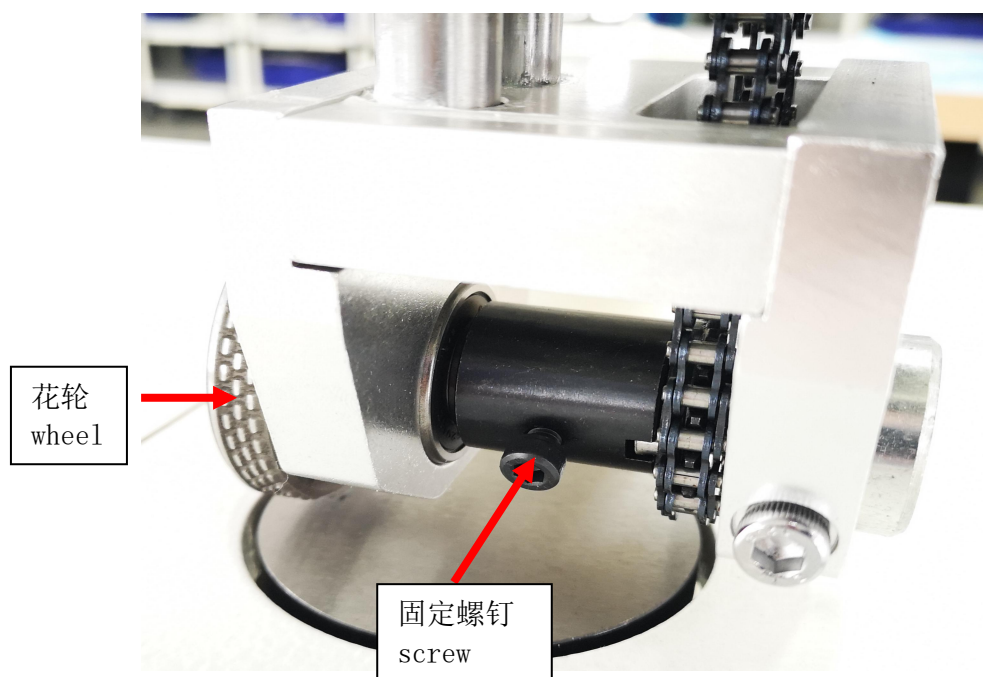
#### 四、模具更换Wheel replacement

- 1) 拆卸固定螺钉，抽出花轮；
- 2) 将要更换的新花轮穿进轴承，拧紧固定螺钉；
- 3) 根据6.5步骤调节花轮角度，模具更换完成。

1.Remove the fixing screw and take out the wheel.

2.Insert the new wheel to be replaced into the bearing and tighten the fixing screw.

3.Adjust the angle of the wheel according to step 6.5, and the mold replacement is completed.





零件样本  
PARTS BOOK

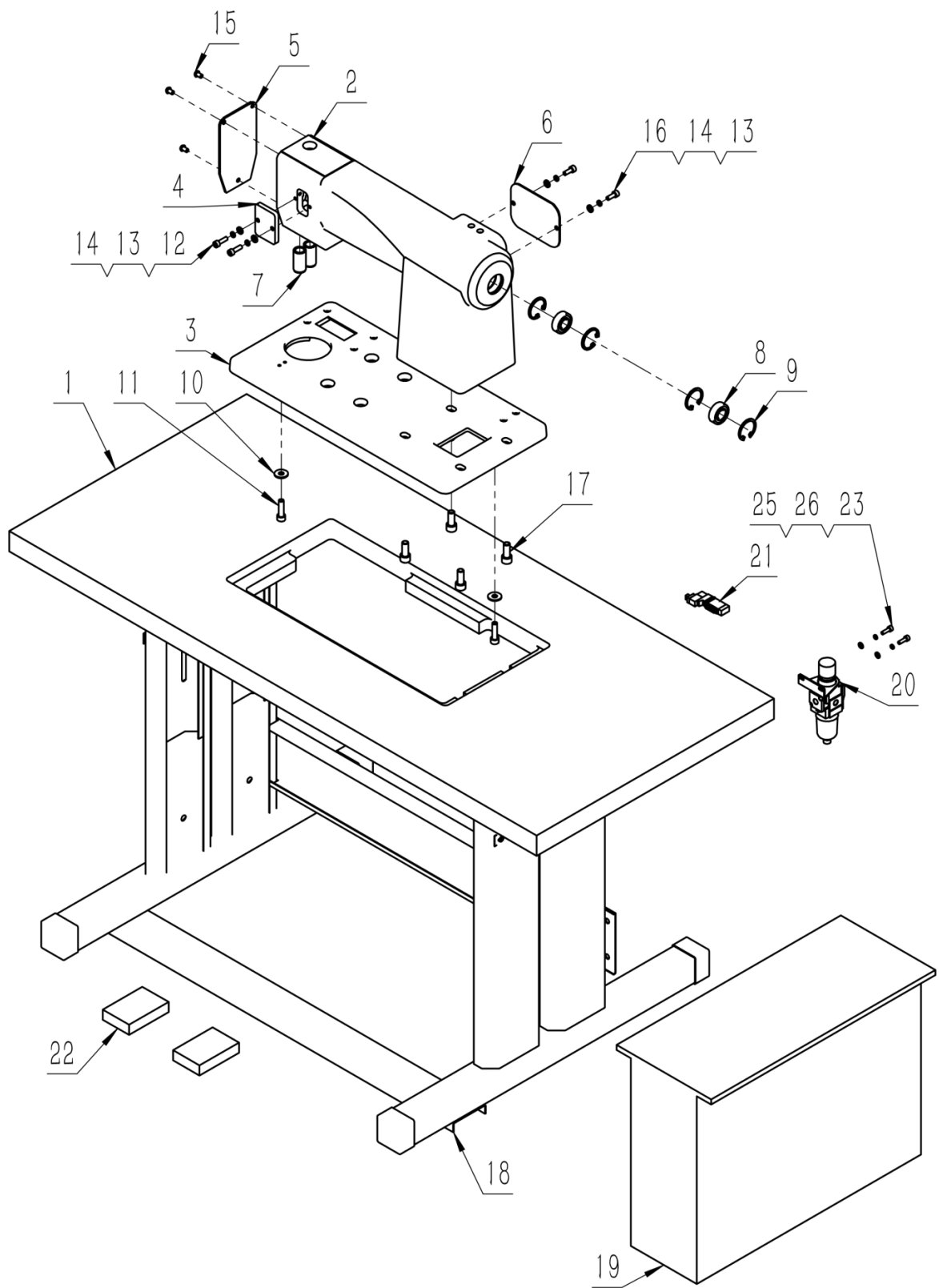
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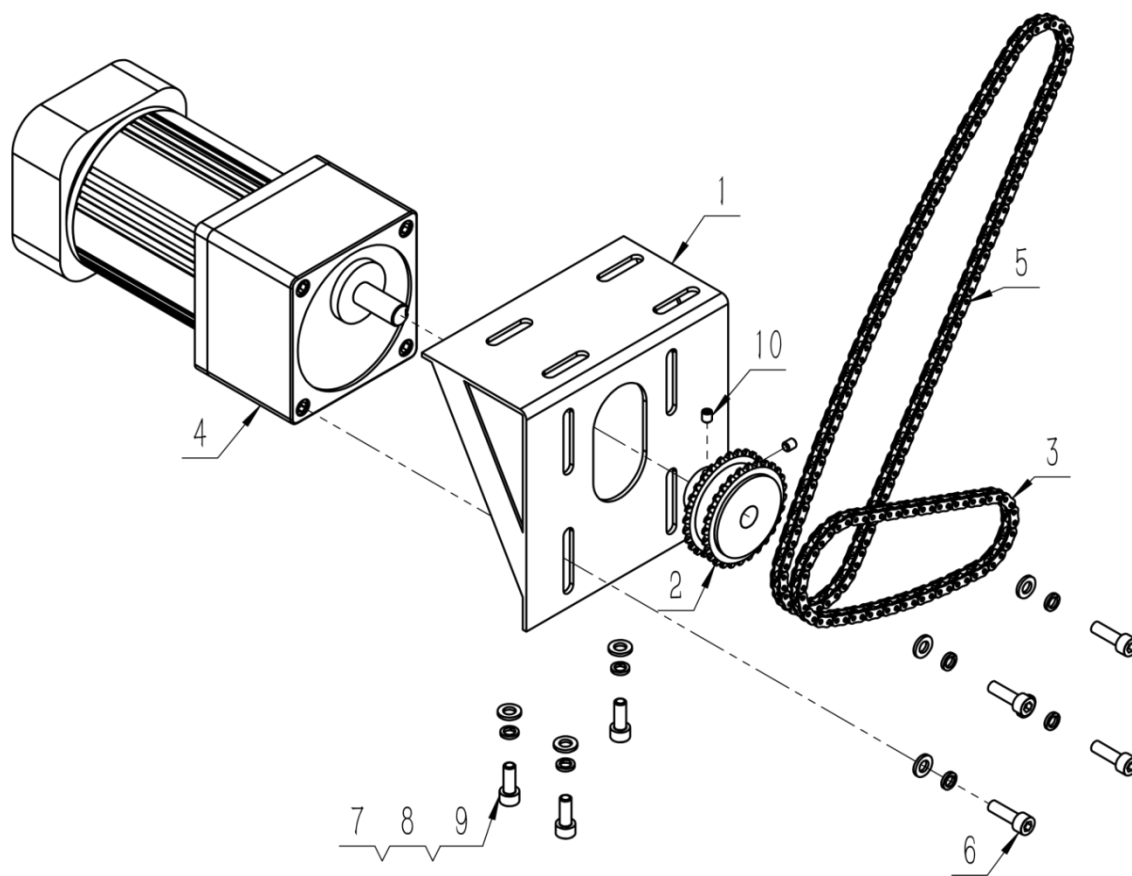
# 1、机架组件



## 1、机架组件

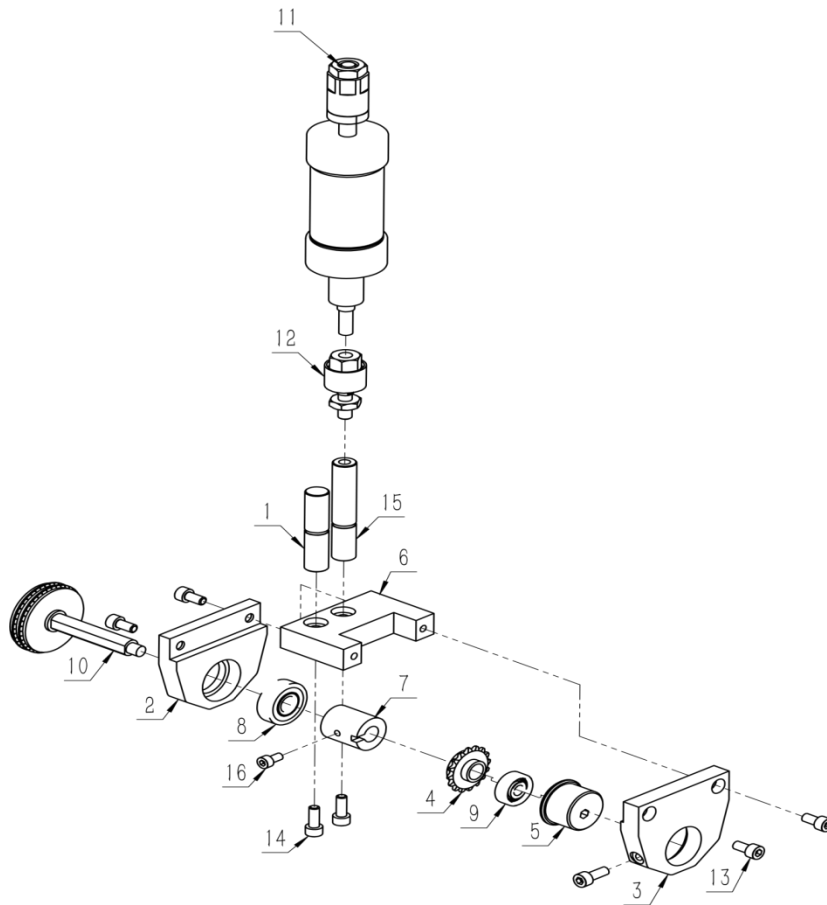
序号 /No.	图号/Parts No.	名称	Description	数量 /Qty
1	50901012	台板	Table	1
2	50901062	机壳	Machine frame	1
3	50901063	底板	Base	1
4	50901069	张紧压板	Tension clamp	1
5	50901067	前盖	Front cover	1
6	5001068	视窗盖	Window cover	1
7	50901013	导杆套	Guide bar	2
8	509B02011	深沟球轴承 6202-2Z	Ball bearing 6202-2z	2
9	A-35	孔用弹性挡圈 A 型 35	Ring type A 35	4
10	418W04037	大垫圈 8	Big washer 8	2
11	418S02094	内六角圆柱头螺钉 M8×30	Hexagon socket cylinder head screw M8 x 30	2
12	418S02104	内六角圆柱头螺钉 M6×20	Hexagon socket cylinder head screw M6 x 20	2
13	418W04017	平垫圈 C 级 6×1.6	Flat gasket Class C 6 x 1.6	4
14	418W04037	标准型弹性垫圈(装配)6×1.6	Standard elastic gasket 6× 1.6	4
15	416S03026	内六角平圆头螺钉 M6×10	Hexagon socket head flat head screw M6 x 10	3
16	418S04010	内六角圆柱头螺钉 M6×16	Hexagon socket cylinder head screw M6×16	2
17	41007031	内六角圆柱头螺钉 M10×25	Hexagon socket head screw M10×25	4
18	50901012-1	机架	Stand	1
19	50901064	超声波电控箱	Ultrasonic electric control box	1
20	50902037	过滤减压阀 AW20-01	Filter pressure reducing valve AW20-01	1
21	50703033	电磁阀	Solenoid valve	1
22	50902007	脚踏板	Pedal	2
23	418S02090	内六角圆柱头螺钉 M5×16	Hexagon socket cylinder head screw M5×16	2
24	419N06069	1 型六角螺母C 级M5	Hex nut, Model 1, Class C, M5	2
25	418W04017	平垫圈 C 级 5×1	Flat gasket Class C 5 x 1	2
26	418W04037	标准型弹性垫圈(装配)5×1.3	Standard elastic washer 5× 1.3	2

## 2、主电机组件



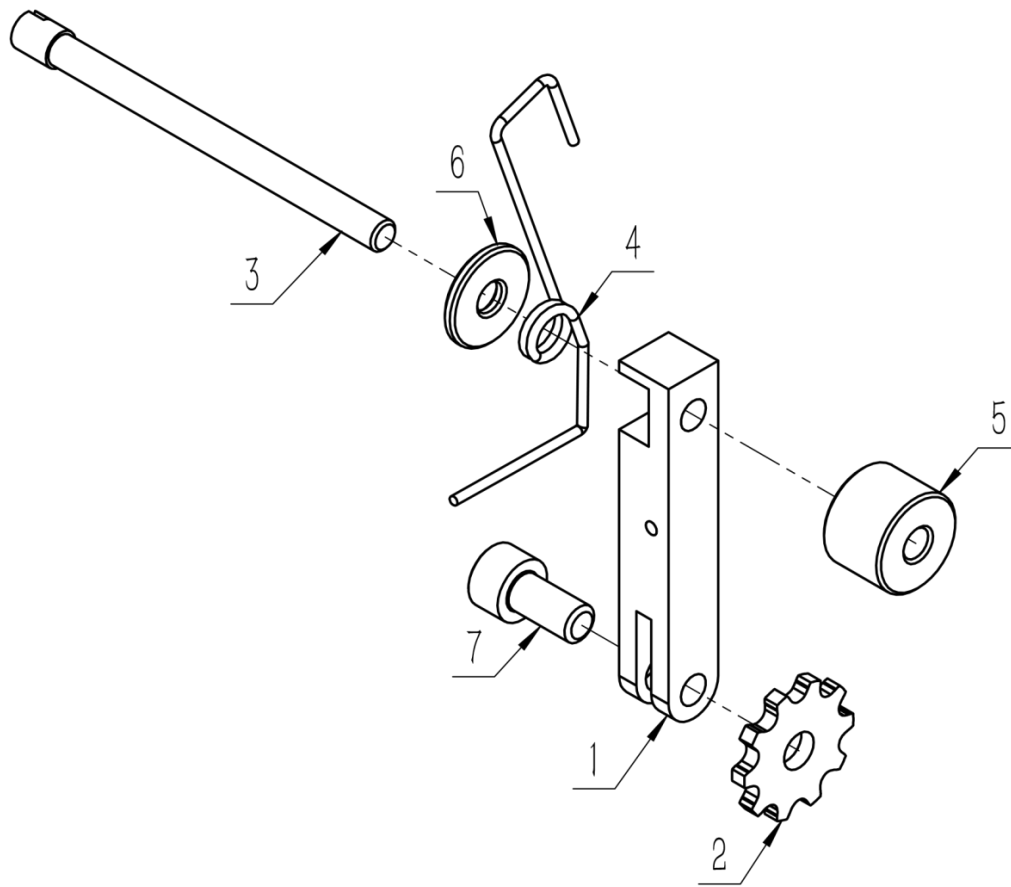
序号 /No.	图号/Parts No.	名称	Description	数量 /Qty
1	50901008	主电机座	Motor seat	1
2	50902020	单排链轮 04C-28	Single row sprocket 04C-28	1
3	50702007	链条 04C 节距 6.35 节数 58	Chain 04C pitch 6.35 pitch 58	1
4	50902043	调速电机	Speed regulating motor	1
5	50702007	主链 04C 节距 6.35 节数 112	Main chain 04C pitch 6.35 pitch 112	1
6	418S02104	内六角圆柱头螺钉 M6×20	Hexagon socket cylinder head screw M6 x 20	4
7	418W04017	平垫圈 C 级 6×1.6	Flat gasket Class C 6 x 1.6	7
8	418W04037	标准型弹性垫圈(装配)6×1.6	Standard elastic gasket 6×1.6	7
9	418S04010	内六角圆柱头螺钉 M6×16	Hexagon socket cylinder head screw M6×16	3
10	418S02090	内六角平端紧定螺钉 M5×6	Hexagon socket set screw M5×6	2

### 3、花轮组件



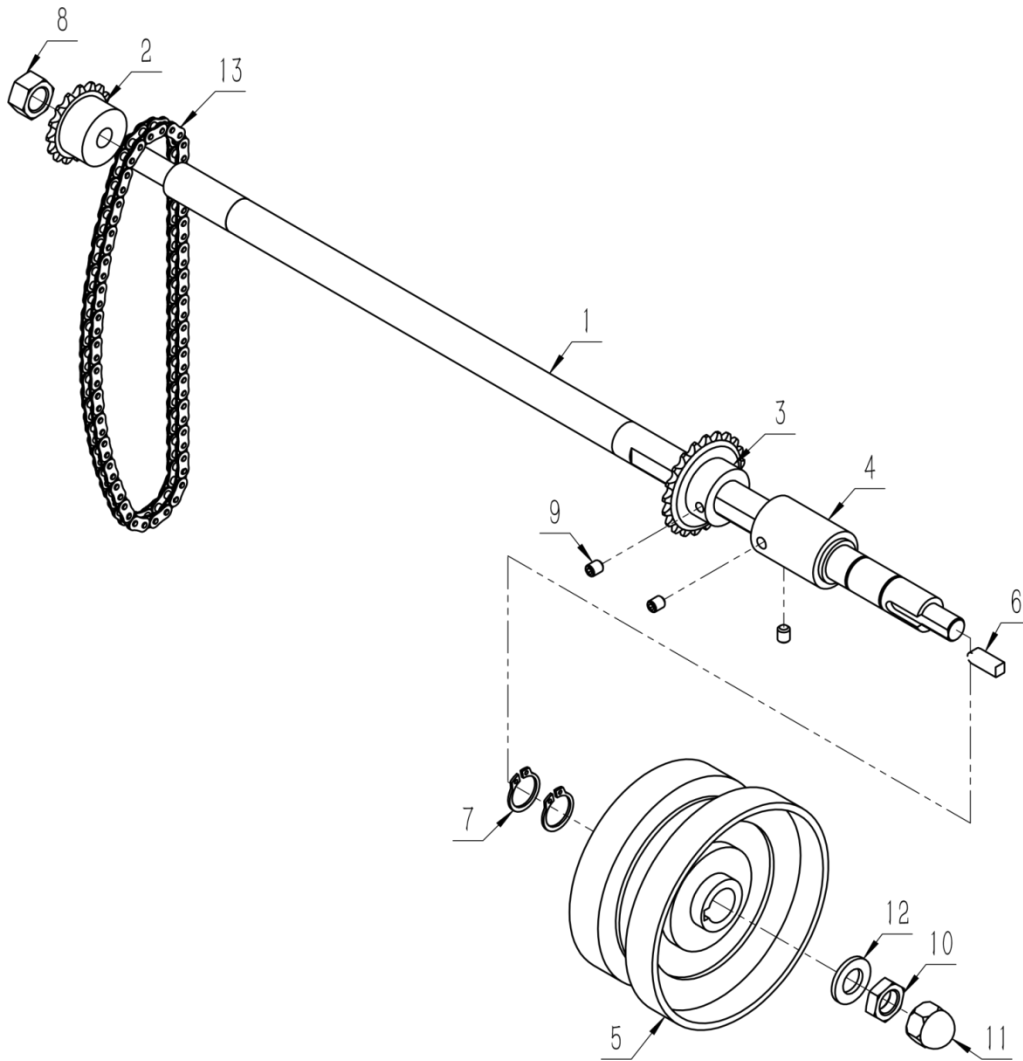
序号 /No.	图号/Parts No.	名称	Description	数量 /Qty
1	50901006	导向轴	Guide shaft	1
2	50901042	花轮固定法兰	Wheel fixing flange	1
3	50901043	花轮调节法兰	Wheel adjusting flange	1
4	50902018	花辊链轮	Roller sprocket	1
5	50901056	偏心套	Eccentric sleeve	1
6	50901041	导柱连板	Guide pin board	1
7	50901053	隔套	Spacer	1
8	509B02025	深沟球轴承 6201-2Z	Ball bearing 6201-2z	1
9	509B02014	深沟球轴承 628-2Z	Ball bearing 628-2z	1
10	50902001	花轮	Wheel	1
11	50902036	压脚气缸 MALJ40X15-15	Pin cylinder MALJ40x15-15	1
12	50901005	浮动接头 F-1008-FJ	Floating connector F-1008-FJ	1
13	416S03026	内六角圆柱头螺钉 M6×12	hexagon socket cylinder head screw M6 ×12	4
14	418S04010	内六角圆柱头螺钉 M6×16	Hexagon socket cylinder head screw M6 ×16	3
15	50901007	导向连接轴 2	Guide connection shaft 2	1
16	418S02090	内六角圆柱头螺钉 M5×10	Hexagon socket cylinder head screw M5 x 10	1

#### 4、张紧组件



序号 /No.	图号 /Parts No.	名称	Description	数量 /Qty
1	50902003	张紧杆	Tension rod	1
2	50902002	从动链轮	Driven sprocket	1
3	50901014	涨紧销	Tight pin	1
4	50901044	弹簧	Spring	1
5	50902002-1	尼龙短隔套	Nylon short spacer	1
6	50902002-2	尼龙长隔套	Nylon long spacer	1
7	416S03026	内六角圆柱头螺钉 M6×12	Hexagon socket cylinder head screw M6×12	1

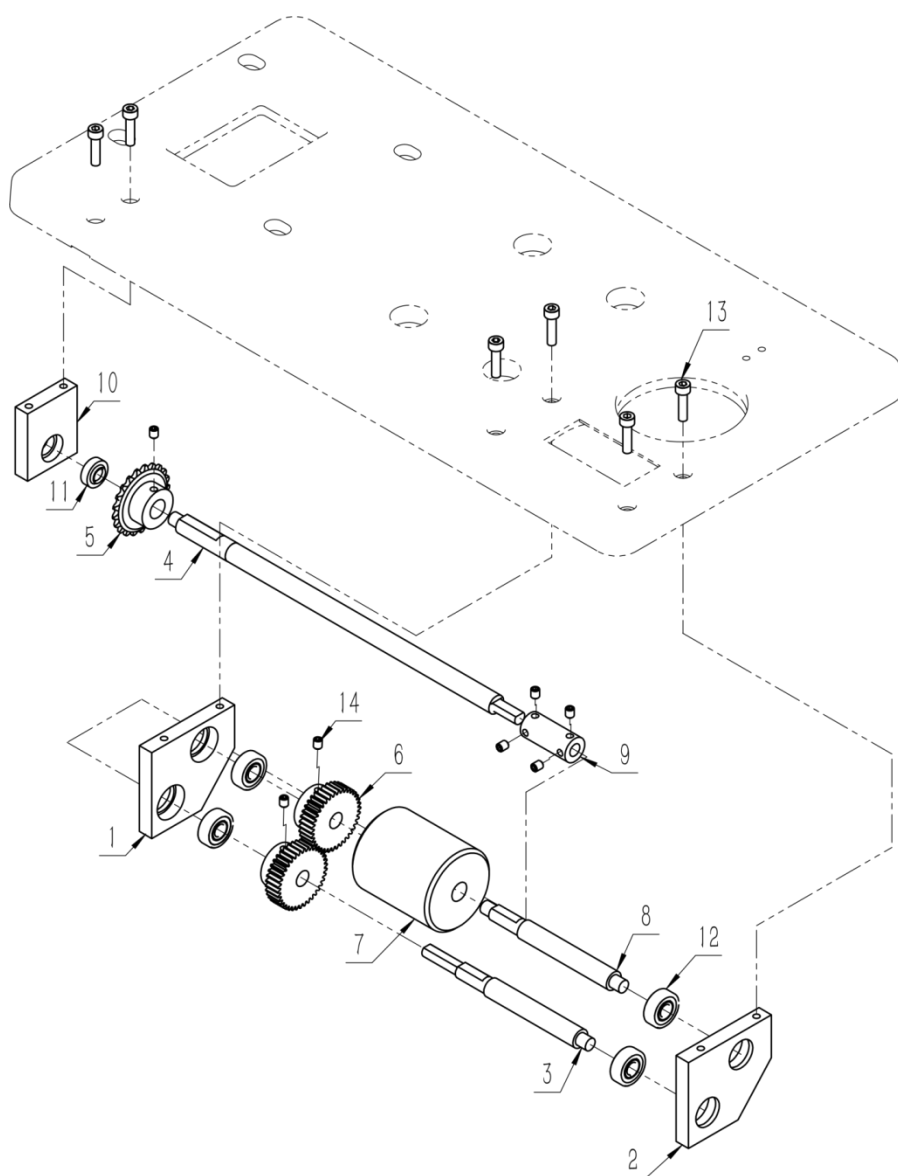
## 5、主传动组件



序号 /No.	图号 /Part s No.	名称	Description	数量 /Qty
1	50901020	芯轴	spindle	1
2	50902018	芯轴头链轮	Mandrel head sprocket	1
3	50902020	芯轴传动链轮	Mandrel drive sprocket	1
4	50901020-1	主轴限位套	Spindle limit sleeve	1
5	301718002	手轮	Hand wheel	1
6	C-5516	普通平键 C 型键 C5×5×16]	Ordinary flat bond C type bond C5×5 ×16]	1
7	A-15	轴用弹性挡圈 A 型 φ15	Ring Type A 15	2
8	41012006	反牙螺母 M10	Reverse nut M10	1
9	419S10005	内六角平端紧定螺钉 M5×6	Hexagon socket set screw M5×6	3
10	41012066	六角薄螺母 M10	Hexagon thin nut M10	1
11	41012066	盖形螺母 M10	Cap nut M10	1
12	41002023	平垫圈 C 级 10×2	Flat gasket Class C 10 x 2	1
13	50702007	链条 04C 节距 6.35 节数 70	Chain 04C pitch 6.35 pitch number 70	1

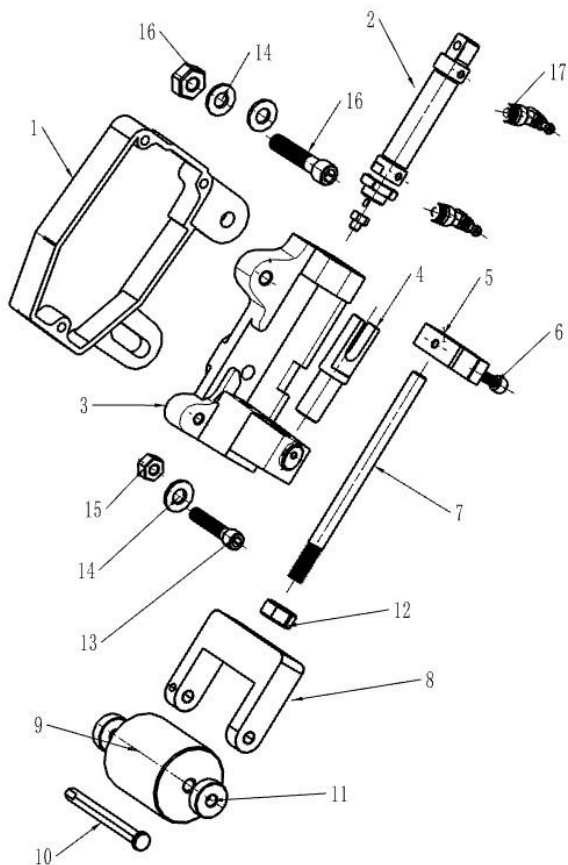


## 6、输送辊组件



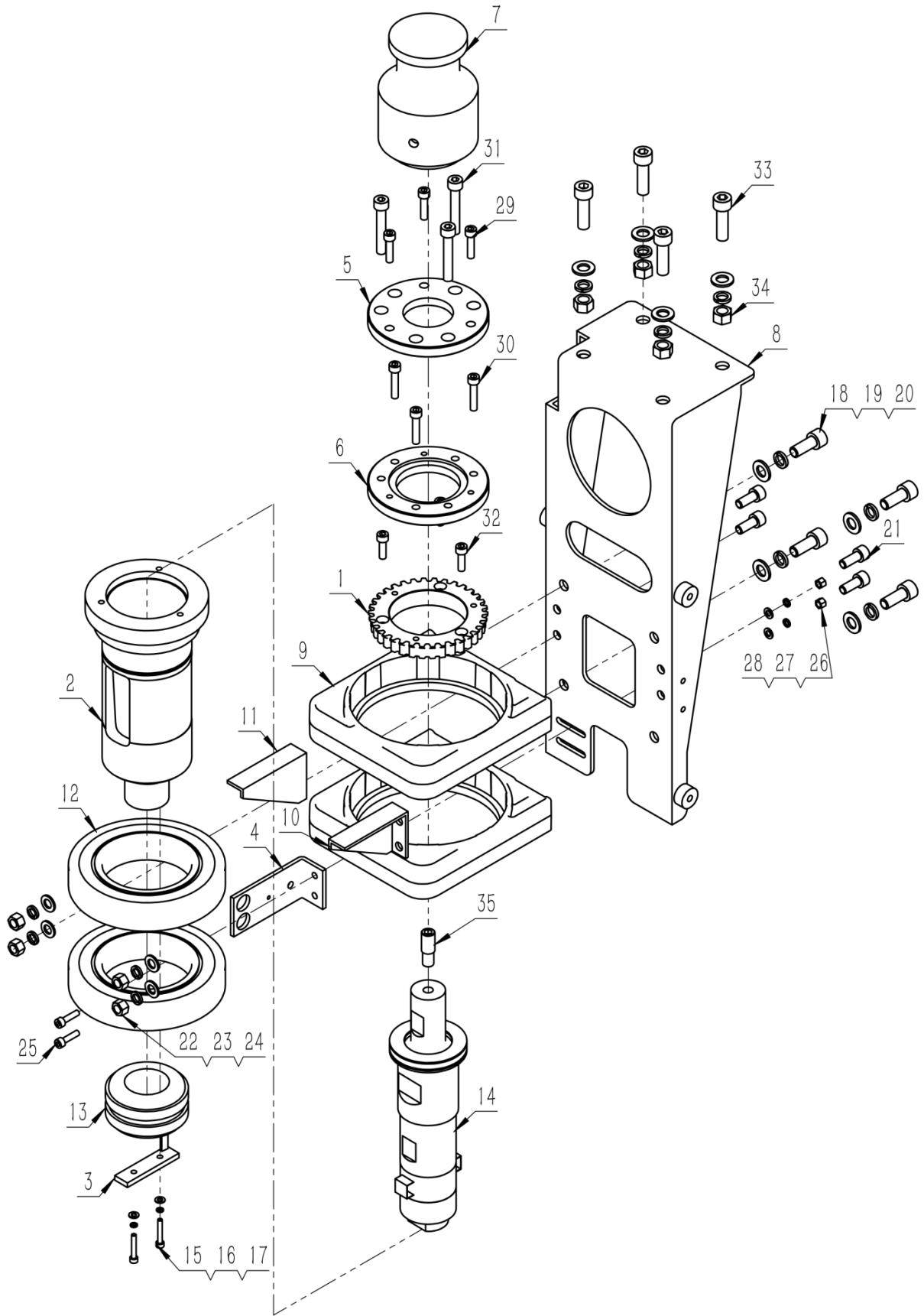
序号 /No.	图号/Parts No.	名称	Description	数量 /Qty
1	50901045	送料左连片	Feed left connect piece	1
2	50901046	送料右连片	Feed right connect piece	1
3	50901050	传动轴	Shaft	1
4	50901049	下链轴	Chain axis	1
5	50902020	辊传动链轮	Roller drive sprocket	1
6	50901061	辊连齿轮	Roll gear	2
7	50902041	尼龙辊	Nylon roller	1
8	50902041-1	辊轴	Roller	1
9	50901051	联轴器	Coupling	1
10	50901048	端头固定座	End fixed seat	1
11	50902035	轴承 UC8	Bearing UC8	1
12	509B02012	深沟球轴承 608-2Z	Ball bearing 608-2z	4
13	418S02090	内六角圆柱头螺钉 M5×20	Hexagon socket cylinder head screw M5 x 20	6
14	419S10005	内六角平端紧定螺钉 M5×6	Hexagon socket set screw M5×6	7

## 7、压辊组件



序号 /No.	图号/Parts No.	名称	Description	数量 /Qty
1	50901067	面板	Cover	1
2	50902044	拖轮气缸	Tug cylinder	1
3	50901070	气缸座	Cylinder block	1
4	50901017	鱼叉	Harpoon	1
5	50901018	拖轮导架	Tug guide	1
6	418S04010	M6螺丝	M6 screw	1
7	50901052	拖布轮轴	Mop shaft	1
8	50901047	拖布轮架	Mop wheel carrier	1
9	50902040	拖布轮	Mop wheel	1
10	50901054	拖轮销	Tug pin	1
11	509B02014	轴承628	Bearing 628	2
12	41012066	M10螺母	M10 nut	1
13	418S04022	M8螺丝	M8 screw	1
14	Ws-001	垫片	gasket	3
15	418N04001	M8螺母	M8 nut	1
16	28080246	M10螺丝	M10 screw	1
17	50902032	气管接头	Tracheal joint	2

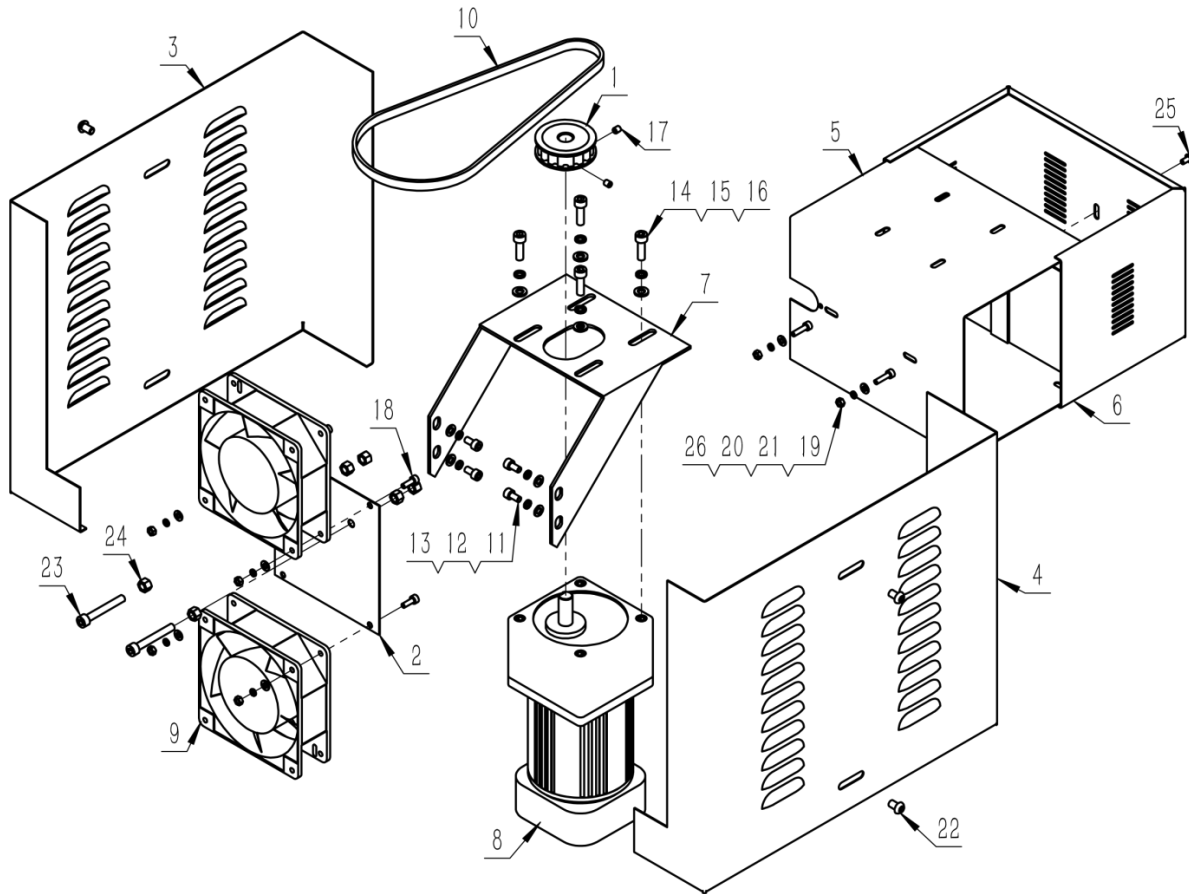
## 8、转筒组件



## 8、转筒组件

序号 /No.	图号/Parts No.	名称	Description	数量 /Qty
1	50901071	大带轮	Big belt wheel	1
2	50901064-1	轴筒	Axis cylinder	1
3	50902023	铜环拉紧板	Copper ring tensioning plate	1
4	50901058	电刷安装板	Brush mounting plate	1
5	50901064-2	换能器上法兰片	Flange on transducer	1
6	50901064-3	换能器下法兰片	Lower flange of transducer	1
7	50901064-4	花轮底盘	Wheel chassis	1
8	50901075	纵向电机座	Longitudinal motor seat	1
9	50901075-1	轴承座	bearing	2
10	50901075-2	右筋	Right rib	1
11	50901075-3	左筋	The left rib	1
12	509B02025	深沟球轴承 6216-2Z	Ball bearing 6216-2Z	2
13	50902031	集电环	Collector ring	1
14	50901064-8	换能器组件	Transducer assembly	1
15	418S06082	内六角圆柱头螺钉 M4×25	Hexagon socket head screw M4×25	2
16	418W02025	平垫圈 C 级 4×0.8	Flat gasket Class C 4× 0.8	2
17	418W03002	标准型弹性垫圈(装配)4×1.1	Standard elastic washer 4× 1.1	2
18	41007031	内六角圆柱头螺钉 M10×25	Hexagon socket head screw M10×25	4
19	41002023	平垫圈 C 级 10×2	Flat gasket Class C 10 x 2	8
20	41002023	标准型弹性垫圈(装配)10×2.6	Standard elastic washer 10× 2.6	8
21	418S04022	内六角圆柱头螺钉 M8×20	Hexagon socket cylinder head screw M8 x 20	4
22	418N04001	1 型六角螺母C 级M8	Hex nut, model 1, class C, M8	4
23	41002023	平垫圈 C 级 8	Flat gasket Class C 8	4
24	41002023	标准型弹性垫圈(装配)8×2.1	Standard elastic gasket 8× 2.1	4
25	418S02090	内六角圆柱头螺钉 M5×20	Hexagon socket cylinder head screw M5 x 20	2
26	419N06069	1 型六角螺母C 级M5	Hex nut, Model 1, Class C, M5	2
27	418W04017	平垫圈 C 级 5×1	Flat gasket Class C 5 x 1	2
28	418W04037	标准型弹性垫圈(装配)5×1.3	Standard elastic washer 5× 1.3	2
29	418S02014	内六角圆柱头螺钉 M6×25	Hexagon socket head screw M6 x 25	3
30	418S02094	内六角圆柱头螺钉 M6×30	Hexagon socket head screw M6 x 30	3
31	418S04022	内六角圆柱头螺钉 M8×50	Hexagon socket head screw M8 x 50	3
32	418S02104	内六角圆柱头螺钉 M6×20	Hexagon socket cylinder head screw M6 x 20	3
33	28080246	内六角圆柱头螺钉 M10×35	Hexagon socket head screw M10×35	4
34	41012066	1 型六角螺母C 级M10	Hexagon nut, model 1, class C, M10	4
35	50901064-9	双螺纹接头	Double threaded joint	1

## 9、转筒附件



## 9、转筒附件

序号 /No.	图号/Parts No.	名称	Description	数量 /Qty
1	50901072	小带轮	Small pulley	1
2	50901055	筒风扇联板	Tube fan coupling	1
3	50901060	罩壳一	Cover A	1
4	50901060-1	罩壳二	Cover B	1
5	50901065	小电箱底	Small electricity box base	1
6	50901065-1	小电箱盖	Small electricity box cover	1
7	50901059	转筒电机座	Rotary drum motor base	1
8	50902043	调速电机	Speed regulating motor	1
9	41012080	风扇 120x120	Fan	2
10	50902017	同步带 240L	Synchronous belt	1
11	418S03030	内六角圆柱头螺钉 M5×10	Hexagon socket cylinder head screw M5 x 10	4
12	418W04017	平垫圈 C 级 5×1	Flat gasket Class C 5 x 1	4
13	418W04037	标准型弹性垫圈(装配)5×1.3	Standard elastic washer 5× 1.3	4
14	418S02104	内六角圆柱头螺钉 M6×20	Hexagon socket cylinder head screw M6 x 20	4
15	418W04017	平垫圈 C 级 6×1.6	Flat gasket Class C 6 x 1.6	4
16	418W04037	标准型弹性垫圈(装配)6×1.6	Standard elastic gasket 6× 1.6	4
17	419S10005	内六角平端紧定螺钉 M5×6	Hexagon socket set screw M5×6	2
18	418S02048	内六角圆柱头螺钉 M4×12	Hexagon socket head screw M4×12	4
19	419N06069	六角薄螺母 M4	Hexagon thin nut M4	6
20	418W02025	平垫圈 C 级 4×0.8	Flat gasket Class C 4× 0.8	6
21	418W03002	标准型弹性垫圈(装配)4×1.1	Standard elastic washer4× 1.1	6
22	416S01005	内六角平圆头螺钉 M6×10	Hexagon socket head flat head screw M6 x 10	4
23	418S02094	内六角圆柱头螺钉 M6×45	Hexagon socket head screw M6 x 45	2
24		六角螺母 C 级 M6	Hexagon nut Class C M6	6
25	418S02048	内六角平圆头螺钉 M4×8	Hexagon socket head flat head screw M4×8	1
26	418S02048	内六角圆柱头螺钉 M4×16	Hexagon socket cylinder head screw M4×16	2