



锁杆控制杆
→ 阀杆B
→ 阀杆A

尊敬的用户：

欢迎您使用我厂生产的KZ-32/19气动捆扎机，在开机之前，请仔细阅读本使用说明书，将会使您对本机的性能及特点有一全面的了解，从而能安全熟练地操作使用本机。

本机的特点：安全可靠、收紧力大、操作方便、动作迅速、捆扎牢固，只需一名工人便能完成捆带的收紧、锁扣、剪断等工作，因此能广泛的用于各种钢材以及有色金属材料的捆扎包装，特别是一些大而重的钢材捆扎。

Honored users.

Welcome you to use our newly-made product-model KZ-32/19Pneumatic strapper. Please carefully read this instruction manual before using the tool,which will enable you to have a comprehensive understanding of the functions and characteristics of the product,thus operate it safely and skillfully.

The machine features safe, reliable,convenient and (prompt action),tired firmly and a worker can tighten the belt to complete bundle,lock and cut work.It can be used in the peckaging and strapping of a wide variety of steel and non-ferrous metal materials.

一、技术参数

Technical Specification

1、使用空气压力： 1.Air pressura	0.35—0.6Mpa
2、使用的捆带规格： 2.Steel Strapping type	0.8—1.2X32mm
3、捆带的拉紧速度： 3.Tensioning speed	5.3m/min
4、喂带轮拉紧力： 4.Feedwheel tension	≥9807N
5、锁扣部分抗拉强度： 5.Pulling tension to the notch	≥16850N
6、整机重量： 6.Weight	15Kg
7、捆扎全过程平均耗气： 7.Average air consumption during bundling	1m ³

注：以上的技术参数在0.5Mpa气压下的给定值，其中喂带轮的拉紧力随着气压的增高而增加。

Note:The above specifications are fixed number under 0.5 Mpa ari pressure.The feedwheel tensionl will increase with the air pressure.28000 N is measured under.

二、安装要求

Installation

1、使用捆扎机时,车间内应具有0.35—0.6Mpa的压缩空气气源,而压缩空气必须通过关闭阀、油水分离器、压力调节阀、注油器(俗称气源三联件)进入捆扎机。分支管路必须从总管上方分出,接捆扎机的软管内径为应大于 $\phi 8\text{mm}$,详见图(一)。

1. When operating make sure the compressed air source is between 0.35-0.6MPa in the workshop. The compressed air should go into the machine through cut-off valve, filter, the regulator valve and the oil lubricator (called three union in short). Branch pipelines are taken from the top of the main pipeline. The air hose tube is above 12.7mm. D. see fig1.

2、捆扎机通过平衡器吊挂在可旋转或可移动的横梁或悬臂上,使捆扎机能自由的移至捆扎物上方,操作高度可通过平衡器获得。

2. By the balancer, the machine can be hung on the turning or moving beam or jib arm and can be moved over the top of the package freely. The operating height can be achieved from the balancer.

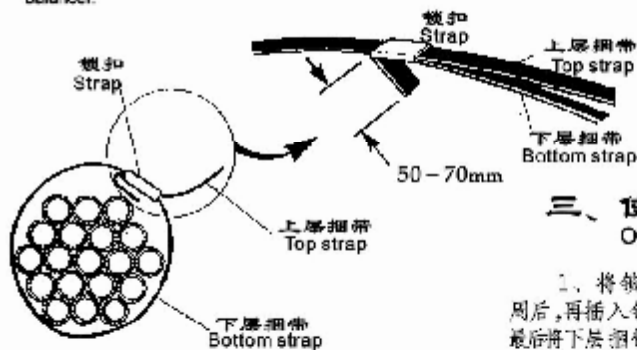


图2 (Fig2)

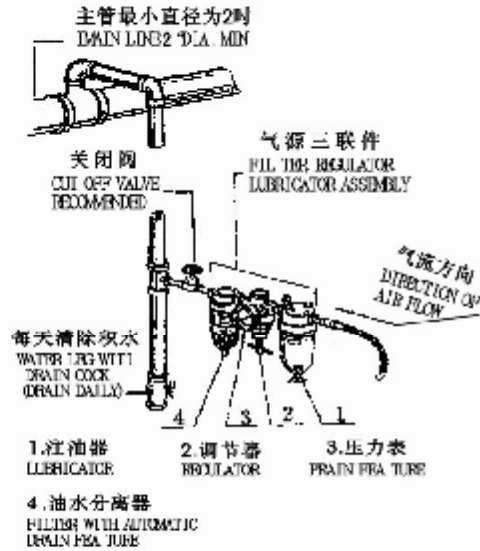


图1 (Fig1)

三、使用方法及步骤

Operation Instructions

1、将锁扣套在捆带上并绕捆扎物一周后,再插入锁扣,以形成上、下层的钢带,最后将下层捆带在离锁扣50—70mm处折过来。详见图(二)

1. As indicated in Fig2 thread the strap through a seal. Encircle the bundle and rethread the strap end through the seal. Bend the strap back under the seal, about 50-70mm.

2、打开气源开关，移动捆扎机，使之接近捆扎物的上方，将上层钢带置于喂带轮与垫轮之间，并将捆扎机向前移动，使锁扣与锁扣机构的位置对正，此时捆扎准备工作完毕。详见图(三)。

2.Switch on the air source valve, move the strapper to the top of the package put the top strap between the feed wheel and then growheel push the strapper forward until the front of theseal stop contacts the end of the seal.Then the preparation is over. See Fig.3

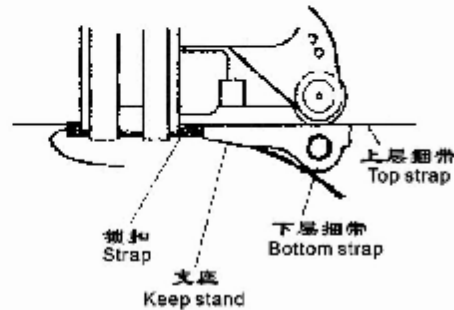


图3 (Fig3)

3、将控制阀杆A按下，喂带轮压住开始捆带工作，使捆带收紧，收至喂带轮停止工作后，按下控制阀杆B，即完成锁扣的咬紧及剩余捆带的切断，整个操作便告完成。

3.Press the operating level A once the strap pressed by the feed-wheel is working. Press down the operating level B again when the strap being tensioned,and the feed wheel stops working. Finish notching tale seal and cutting off the top strap. Then the operation is completed.

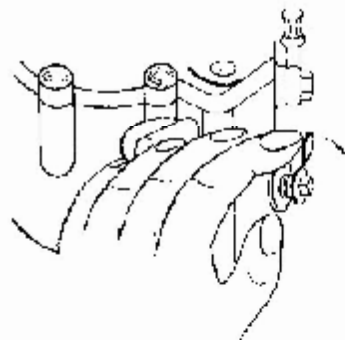


图4 (Fig4)

4、将如果出现不正常情况，如捆带放置不正，锁扣未进入锁扣机构，被中途停机，应用手转动锁杆控制杆，整个机器将自行恢复原始状态，即可以重新开始工作。详见图(四)。

4.If something unusual happens like wrong position of the belt, the notch not contacting the notching tool and you want to stop during operation,you should turn the lock rod. Regulator,By hand,the strapper will remain the original state automatically.that is,you can resume your work. See Fig4.

四、维护与保养

Maintenance

1、在气动马达和气缸体内及所有的传动,转动件中,每班使用前,必须注入适量的润滑油,另外,应在注油器中定数、定量的注满22#气轮油,才能保持固定的供油量,当气动马达工作时,从注油器中滴下的油为40-60滴/min最佳。

1.Fill the lubricator with 22# steam turbine oil to keep a quantity of lubricating oil in the motor and the cylinder and all transmission part and winding parts before every use. When the motor is working, fill the oil through the lubricator at a rate of 40-60 drops per minute.

2、压缩空气不符0.35-0.6Mpa时,必须给予调整,否则,过低的压力将影响捆扎质量,过高的压力会使机器磨损过快。

2. When the compressed air is not 0.35-0.6 Mpa adjust it, otherwise lower tension will influence strapping quality while higher tension will do harm to the machine.

3、注油器,油水分离器每使用三个月应用煤油清洗一次,并每天清除油水分离器中的积水。

3. The lubricator and the filter should be cleaned with kerosene once every three months, and drain the water from the filter daily.

4、喂带轮与毡轮之间的间隙应在0.5-0.7mm之间,否则应予以调整,并及时清除喂带轮上的积屑及脏物。

4. The interval between the feedwheel and the gyrowheel is between 0.5 and 0.7 mm. If not, adjust it and clean the iron fillings and dirt on the feedwheel in time.

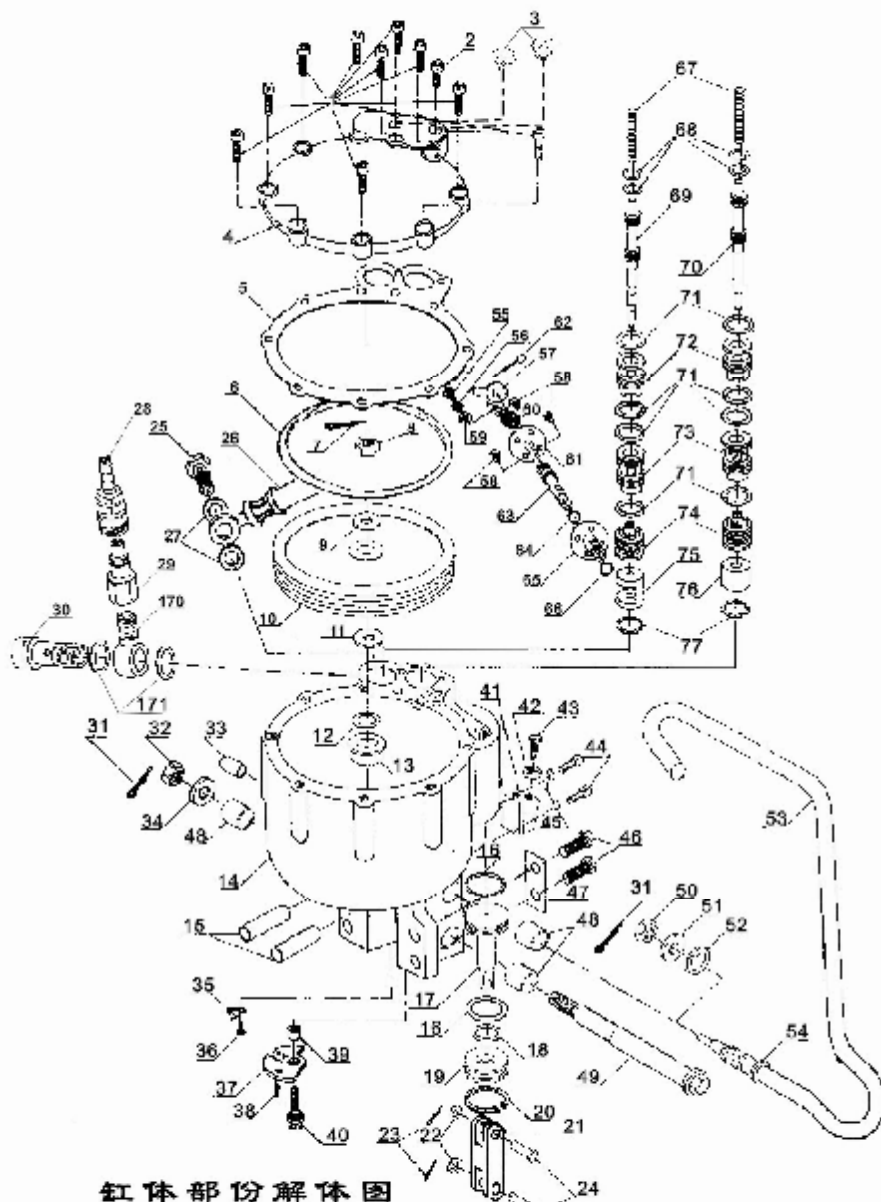
5、由于长期使用中零件的磨损,环境的污染,润滑不良,可能会出现故障,因此及时发现故障,及时排除很重要,下列的检查及维修,使用通用工具都能解决,能掌握以下的技术将不会因小故障而造成停产、停工而失去宝贵的时间和求助于生产厂家。

5. Some problems may arise because of wearing, environmental pollution and lack of lubrication. So it is important to spot and eliminate the breakdown. The following will be of great help to your repair work and will not influence your production and will save your

五、常见的故障及排除方法

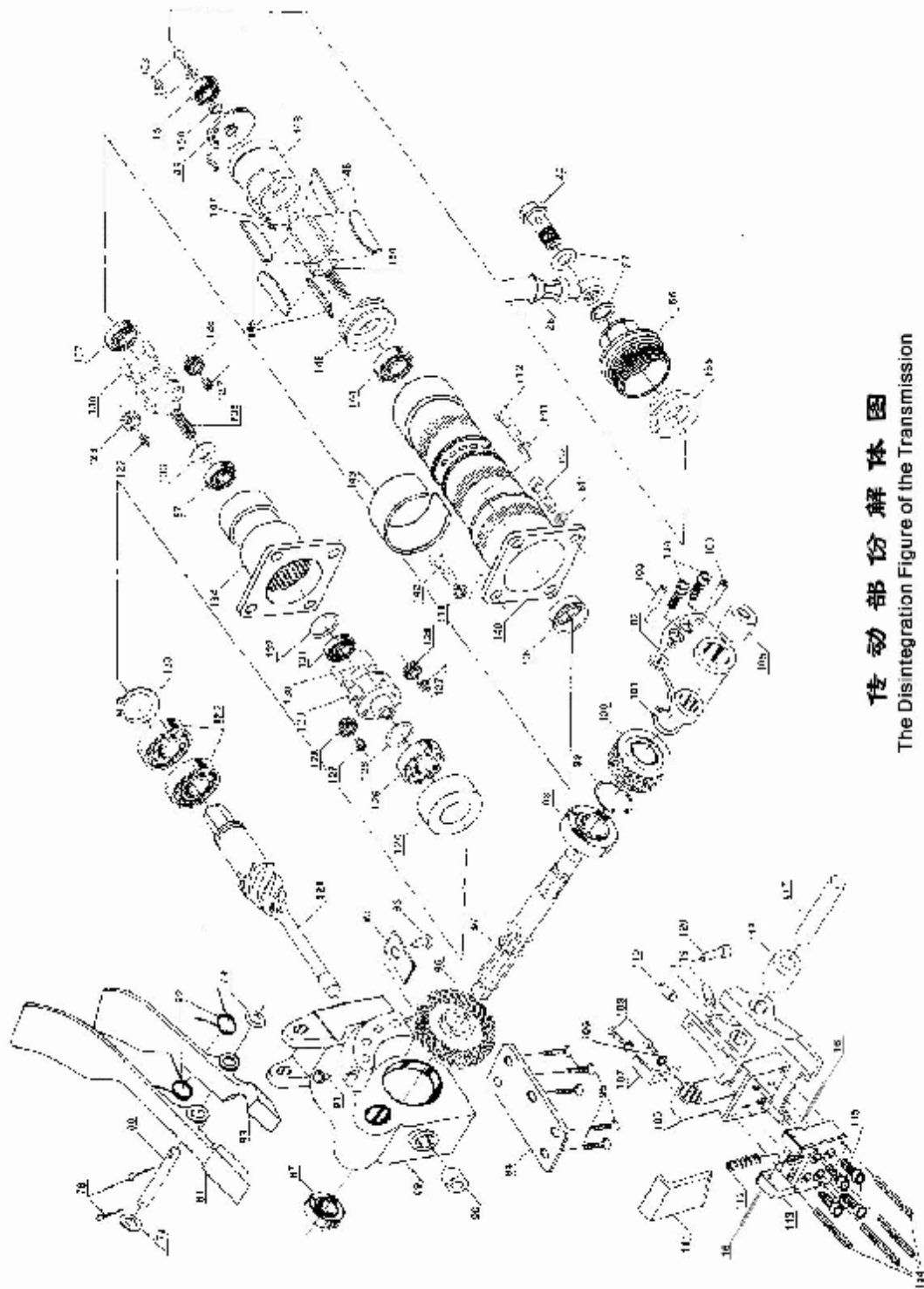
Common breakdowns and methods to eliminate

故障现象 Symptom	故障原因 Cause	排除方法及维修 Methods to eliminate
捆扎不紧或 拉力不够 Loose strapping or lack of tension	管路泄漏 Pipeline leak	检查气源压力管路是否有泄漏, 及时予以检修。 Check whether the air source pipeline is leaking or not and mend it.
	喂带轮空转或打滑 The feedwheel or slipping of	检查喂带轮齿表面是否清洁及喂带轮与空轮的间隙是否正确, 如轮齿舌尖过于平钝应予以更换, 并及时清除齿面和积屑与脏物。 Check whether the surface of the feedwheel is clean or the gap between the feedwheel and the gyrowheel is proper. When the teeth of the gear become too flat, change it and clean the dirt and leftovers on the teeth of the gear.
	小活塞不动作 Small piston not working	按下阀杆A, 支座及气动马达部分没有动作, 锁杆密封圈及小活塞密封圈磨损过大, 应予以更换, 装配时应清洗并涂二硫化油。 Press the valve A, and the pneumatic motor and there is no response, the seal of the lock bar and small piston are wearing too much. And should be changed, and should be oiled when installing.
	气动马达噪声过大 及声音不正常 Too much noise and abnormal sound of the motor	先在进气孔, 注入适量的机油, 按下阀杆A, 观察气动马达的转动是否正常, 如不正常, 检查齿轮, 叶片及各轴承是否磨损。更换以上各部件, 装配时请注意调整隔套的方向, 正确的方向应是内孔大倒角靠在转子后端面, 装配时应清洗并涂上黄油。 Fill oil into the air source press the valve A, then check whether the motor is working soundly. If not, check the gear, vane and every bearing, change those part.
锁扣机构 不工作 The lock not function	其他 Others	卸下支座, 检查是否有变形及断裂的现象, 有之应予以更换, 更换后应调整喂带轮和空轮之间的间隙。 Check whether supporting the stand is malformed or broken. If so, change it and then adjust the gap between the feedwheel and gyrowheel.
	气压过低 Low air pressure	检查气源压力, 管路是否有泄漏, 及时予以检修, 压力必须在0.35-0.6Mpa之间。 Check the air pressure of the air source, if the pipeline is leaking or not. Repair it promptly. The air pressure must be 0.35-0.6Mpa.
	大活塞密封圈磨损 The seal to the big piston is wearing	更换密封圈, 更换时清洗缸体, 装配时大活塞槽内应涂上黄油。 Change the seal and clean the cylinder. Add grease in the piston groove when installing.
捆带切不断 The belt not being cut off	锁扣部份 各铰链夹死 The chains twisted in the lock	清洗铰链各传动件与连接件, 如发现磨损过大应予以更换, 更换后, 各件的配合部位应注入22#气轮油。 Clean the transmission and connecting part of the chains. If broken, change it and fill 22# oil in every part.
	排气孔或 阀芯底部漏气 The air vent or the bottom of the valve switch is leaking	检查68#、71#密封圈是否破损, 有之, 请予以更换, 装配时请注意74#、73#、72#阀套的方向及位置, 并涂上黄油。 Check whether 68#、71# seal is broken. If so, change it. When installing, pay attention to the direction and location of the 74#、73#、72# valve cap.
	上下刀磨损过大 The top and bottom blade is wearing	更换切刀及支座, 装配时应涂上适量的黄油。 Change it and the stand. Add some oil when installing.
	气压过低 Low air pressure	排除方法以上已作说明。 See the above
	拉力不够 Low tension	排除方法以上已作说明。 See the above

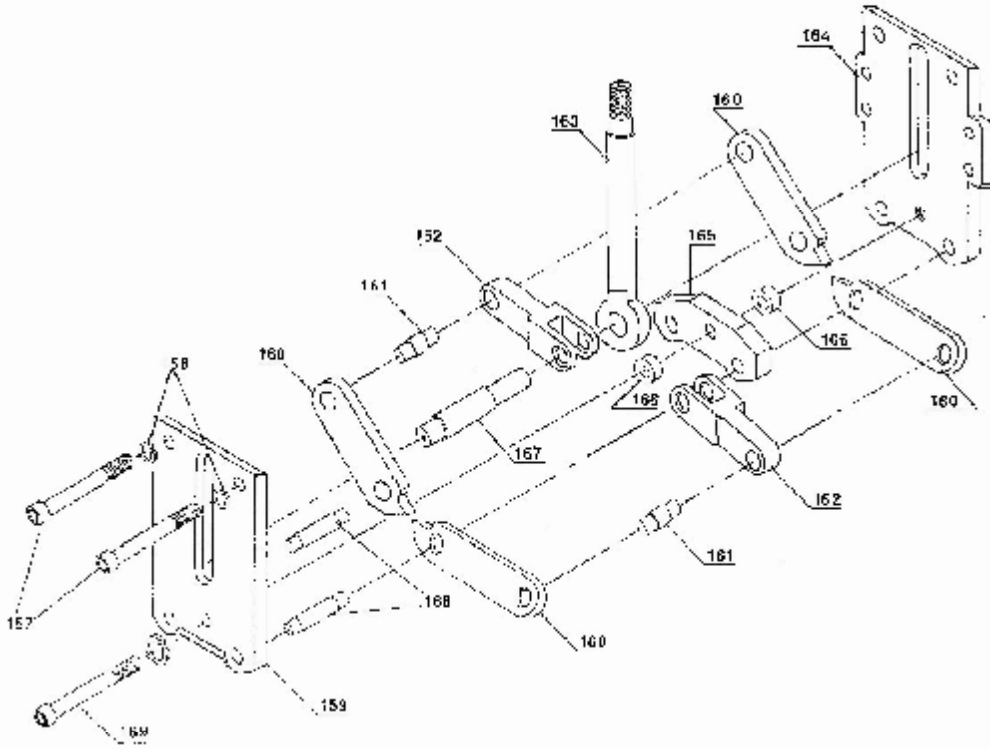


缸体部份解体图

General Disintegration Figure of the Cylinder



传动部份解体图
The Disintegration Figure of the Transmission



锁扣部份解体图

The Disintegration of the locker

零件明细表 Parts List

序号 No	图号 Fig.No	零件名称 Description	规格 Specification	代号 Code No	数量 QTY
1		内六角螺钉 Socket	M6×25		10
2		内六角螺钉 Socket	M6×15		1
3	01-13	弹簧座 Spring holder			2
4	01-09	缸盖 Cylinder cap			1
5	01-08	缸垫 Cylinder gasket			1
6		O型密封圈 O-gasket	φ156×φ5.7		1
7		开口销 Forelock	φ2×20		1
8		螺母 Nut	M12		1
9		垫圈 Washer	φ12		1
10	01-105	活塞塞 Piston			1
11	01-106	垫片 Piston washer			1
12		O型密封圈 O-gasket	φ20.5×φ2.4		1
13	01-10	活塞杆套 Piston bar sleeve			1
14	01-07	缸体 Cylinder			1
15	01-11	衬套 Bushing			2
16		O型密封圈 O-gasket	φ39×φ3.5		2
17	01-05	小活塞 Small piston			1
18		O型密封圈 O-shape seal	φ19.3×φ2.4		1
19	01-06	小气缸盖 Small cylinder cap			1
20		孔用弹性挡圈 Hole-usage elastic tamper	φ38		1
21	01-03	小连杆 Small piston link			1
22		垫圈 Washer	φ6		2
23		开口销 Forelock	φ1.5×2		2
24	01-04	连杆销 Link pin			2
25	01-17	连接螺钉 Pivot shaft			2
26	01-200	软管总成 Hose			1
27		垫圈 washer	φ12×1 (紫铜) [br/>(copper)]		4
28	01-35	快速接头 Instant connector			1
29	01-36	气嘴 Air cap			1
30	01-35	管接头 Hose connector			1
31		开口销 Cotter pin	φ2.5×25		2
32		螺母 Nut	M10		1
33	01-23	铜套 A Copper sheathing A			1
34		垫圈 Washer	φ10		1
35	01-30	凸轮弹簧 Cant spring			1

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36	01-31	销 钉 Pin			1
37	01-29	凸 轮 Cam			1
38		弹性圆柱销 Elastic taper bolt	$\phi 2 \times 6$		1
39	01-34	轴 套 Mechanical bearing			1
40	01-32	螺 钉 Screw			1
41	01-02	限 位 座 Spacer stand			1
42		螺 母 screw nut	M6		1
43		螺 钉 Screw	M8×30		1
44		内六角螺钉 Socket screw	M5×20		2
45		弹性垫圈 Elastic washer	$\phi 5$		2
46		外六角螺钉 Outer hexagon screw	M8×20		4
47	01-001	锁 片 Lock blade			2
48	01-26	制 套 B Copper sheathing B			3
49	01-24	吊 架 销 Hanger pin			1
50		螺 母 Screw nut	M14		1
51		垫 圈 Washer	$\phi 14$		1
52		弹性垫圈 Elastic washer	$\phi 14$		1
53	01-12	挂 钩 Hooker			1
54	01-28	挂钩垫圈 Hooker washer			1
55		沉头螺钉 Counter-sunk screw	M4×18		1
56	01-39	锁杆弹簧挂套 Lock bar spring cap			1
57	01-40	锁杆控制杆 Control rod of the lock bar			1
58		沉头螺钉 Counter sunk screw	M4×12		3
59	01-38	弹簧销挡 Spring pin buffer			1
60	01-42	锁杆弹簧 Spring to the lock bar			1
61	01-37	锁杆导板 Lock bar			1
62		开口销 Cotter pin	$\phi 1.2 \times 15$		1
63	01-41	锁 杆 Lock bar			1
64		O型密封圈 O-shape seal	$\phi 8 \times \phi 1.5$		1
65	01-43	锁杆架 Lock bar frame			1
66		O型密封圈 O-shape seal	$\phi 12 \times \phi 1.7$		1
67	01-14	弹 簧 Spring			2
68		O型密封圈 O-shape seal	$\phi 12 \times \phi 1.7$		4

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69	01-21	阀 芯 B Valve switch B			1
70	01-22	阀 芯 A Valve switch A			1
71		○型密封圈 O-shape seal	φ24×φ2.4		8
72	01-18-02	阀 套 III Valve pocket			2
73	01-18-01	阀 套 II Valve pocket			2
74	01-18	阀 套 I Valve pocket			2
75	01-19	套 I sleeve			1
76	01-20	套 II sleeve			1
77		孔用弹性挡圈 Hole-used elastic shield ring	φ24		2
78		开 口 销 Cotter pin	φ2×15		2
79		垫 圈 Washer	φ8		2
80	02-46	阀 杆 销 Valve stem pin			1
81	02-34	阀 杆 A Valve A			1
82	02-27	扭 转 弹 簧 Torsional spring			2
83	02-32	阀 杆 B Valve B			1
87		轴 承 Bearing	φ15×φ32×8	7000102	2
89	02-34	蜗 轮 箱 Worm-gear case			1
90		滚 针 轴 承 Needle bearing	φ8×φ14×10	6941/8	1
91	02-44	挡 块 Back plate			1
92	02-45	限 位 板 Spacer board			1
93		沉 头 螺 钉 Sunk screw	M5×15		1
94	02-39	蜗 轮 箱 盖 Worm-gear cap			1
95		沉 头 螺 钉 Sunk screw	M4×10		5
96	02-35	蜗 轮 Worm-gear			1
97	02-40	蜗 轮 轴 Bearing of the worm-gear			1
98		轴 承 Bearing	φ17×φ35×10	80103	1
99		孔用弹性挡圈 Circlip for hole	φ35×1.5		1
100	02-41	喂 带 轮 Feedwheel			1
101		轴用弹性挡圈 Shaft-Usage elastic hamper	φ15×1		1
102	02-43	主 轴 吊 架 Line shaft hanger			1

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103		内螺圆锥销 insidescrew taperbolt	$\phi 8 \times 25$		2
104		内六角螺钉 Socket screw	M6 \times 25		2
105	02-38	吊架轴承 Bearing of the hanger			1
106		弹性垫圈 Elastic washer	$\phi 5$		2
107	03-06	限位角块 Position horn / lock			1
108		内六角螺钉 Socket screw	M5 \times 16		2
109	03-01	支 座 Base			1
110		内六角螺钉 Socket screw	M5 \times 10		1
111	03-03	切 刀 Parting tool			1
112	03-04	弹 簧 Spring			1
113	03-02	切 刀 架 Rest			1
114		弹性圆柱销 Elastic cylinder pin	$\phi 4 \times 30$		4
115		内六角螺钉 Socket screw	M6 \times 20		4
116		弹性圆柱销 Elastic tapered pin	$\phi 4 \times 16$		2
117	03-07	差 轮 轴 Gyro wheel shaft			1
118	03-08	垫 轮 Gyro wheel			1
119		内六角紧定螺钉 Socket holding screw	M5 \times 8		1
120		内六角紧定螺钉 Socket holding screw	M8 \times 16		1
121	02-33	蜗 杆 Worm			1
122		轴 承 Bearing	$\phi 17 \times \phi 35 \times 10$	103	2
123		轴用弹性挡圈 Shaft-usage elastic hamper	$\phi 17 \times 1$		1
124	02-26	轴承座 (I) Bearing stand (I)			1
125		轴 承 Bearing	$\phi 17 \times \phi 35 \times 10$	103	1
126	02-25	第二空转架垫圈 The second idle stand washer			1
127		滚针轴承 Needle bearing	$\phi 6 \times \phi 10 \times 9.5$	29242/8AK	4
128	02-20	空 转 齿 轮 Idle gear			4
129	02-24	第 二 空 转 架 The second idle shelf			1
130		空 转 轮 轴 Idle wheel bearing			4
131		轴 承 Bearing	$\phi 15 \times \phi 32 \times 9$	102	1
132	02-23	隔 圈 Space ring			1
134	02-21	内 齿 轮 Inner gear			1
136	02-22	第一空转架垫圈 Washer to the first idle stand			1
137		轴 承 Bearing	$\phi 12 \times \phi 28 \times 8$		1

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序号 No	图号 Fig.No	零件名称 Description	规格 Specification	代号 Code No	数量 QTY	
138	02-18	第一空转架	First icle stand		1	
139	02-17	轴承座(II)	Bearing stand		1	
140	02-01	马达壳	Motor cap		1	
141		弹性垫圈	Elastic washer	φ6	4	
142		内六角螺钉	Socket screw	M6×20	4	
143	02-14	排气罩	Exhaust hood		1	
144		轴 承	Bearing	φ10×φ30×9	80200D(NTN)	1
145	02-16	气缸前盖	Front cap of the cylinder		1	
146	02-11	叶 片	Vane		5	
147		弹性圆柱销	Elastic tapered pin	φ3×8	2	
148	02-10	气 缸	Cylinder		1	
149	02-09	气缸后盖	Back cap of the cylinder		1	
150	02-08	调整隔套	Adjusting space coating		1	
151		轴 承	Bearing	φ9×φ26×8	60029D(NTN)	1
152	02-07	垫 圈	Washer		1	
153		沉头螺钉	Sunk screw	M5×12	1	
154	02-12	转 子	Rotator		1	
155	02-06	轴 承 盖	Bearing cap		1	
156	02-05	进气压盖	Air-in cap		1	
157		螺 钉	Screw		2	
158		弹性垫圈	Elastic washer	φ8	3	
159	01-109	前 侧 板	Front side board		1	
160	01-110	夹 紧 块	Stretching block		4	
161	01-102	连 杆 销	Connecting rod pin		2	
162	01-110	连 杆	Connecting rod		2	
163	01-107	活 塞 杆	Piston rod		1	
164	01-108	后 侧 板	Back side board		1	
165	01-103	砧 块	Saddle		1	
166	01-104	隔 套	Space coating		2	
167	01-101	缸 杆 销	Cylinder rod pin		1	
168	01-112	夹 紧 块 销	Stretching block pin		2	
169		内六角螺钉	Socket screw	M8×50	1	
170		球 接 头	Sphere joint		1	
171		铜 垫 圈	Bronze washer	φ14	2	

装箱单

Packing List

产品型号 Model	KZ-32/19	出厂编号 Number of Production	
毛重 Gross Weight	16Kg	净重 Net Weight	15Kg
随机文件 Appendix	使用说明书壹份 Operating Instruction manual		
随机工具 By-product Tools	内六角扳头壹套 Spanner 1 set 6	孔 6" Hole 轴 Shaft	用档圆钳各一把 Retainer Pliers
随机易损件 Fragile By-product parts			
序号 Number	名称 Description	规格 Size	数量 Quantity
146	叶片 Blade		5
100	喂带轮 Feedwheel		1
6	密封圈 seal	$\phi 156 \times \phi 5.7$	1
16	密封圈 seal	$\phi 39 \times \phi 3.5$	2
68	密封圈 seal	$\phi 12 \times \phi 1.7$	4
12	密封圈 seal	$\phi 20.5 \times \phi 2.4$	1
18	密封圈 seal	$\phi 19.3 \times \phi 2.4$	1
64	密封圈 seal	$\phi 8 \times \phi 1.5$	1
71	密封圈 seal	$\phi 24 \times \phi 2.4$	8
66	密封圈 seal	$\phi 12 \times \phi 1.7$	1