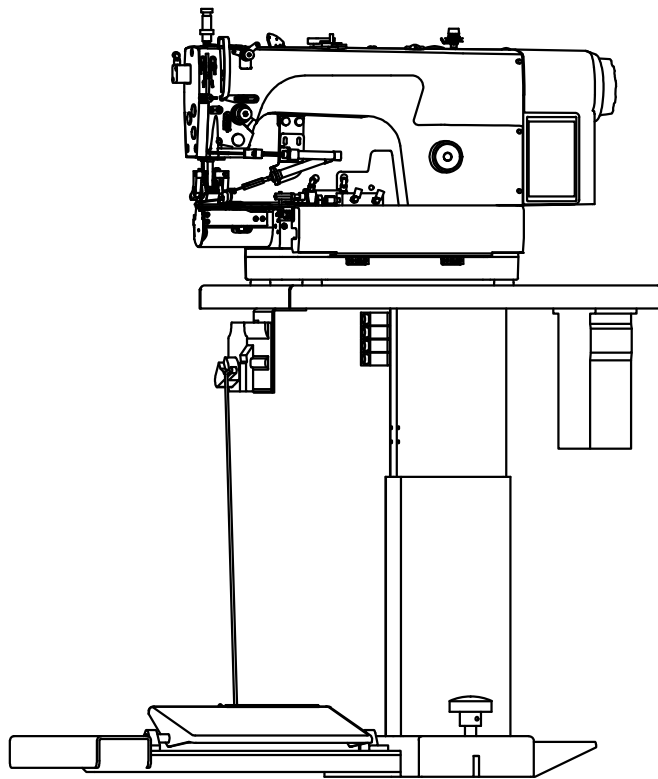


辘脚缝纫机

Roller foot Sewing Machine



使用说明和零件手册
INSTRUCTION MANUAL PARTS LIST

使用说明
Directions for use

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1. 安全标志及其定义

Safety symbols and definition



(1)、警告、注意标志:操作机器时,注意周边各相关部件或装置,以避免由此部件或装置引起的损伤.

Warning, caution symbol: When you are operating the machine, please pay attention to the related parts or devices, to avoid get hurt by these parts or devices.



(2)、警告、小心标志:机器操作时,注意运动部件或装置,避免手或其他人身部位受到损伤.

Warning, be careful symbol: When the machine is running, please pay attention to the moving parts or devices, to avoid the hands or body get hurt.



(3)、接地线标志:机器操作时,确保与地线相连接.

Earth wire symbol: When the machine is running, please make sure the machine is connecting well with the earth wire.

2、警告牌及指示标识

Warning label and show tag



(1)、护手装置:机器操作时,注意运动部件或装置,避免手或其他人身部位受到损伤.

Finger guide: When the machine is running, please pay attention to the running parts or devices, to avoid the hands or body get hurt.



(2)、地线标识:确保地线接地良好,以避免由于环境或其它因素产生的静电影响人身安全.

Earth wire symbol: Make sure the earth wire is connecting well, to avoid affect people's safety by environment or static from other factors.



(3)、转向标识:机器操作运转时确保机器正确的转向,以避免由此引起的机器损坏.

Turning symbol: When the machine is running, please make sure the machine's running direction is correct, to avoid the machine get damage by this problem.



(4)、警告标识:机器操作运转时,确保各(如:挡针板、皮带护罩、接地线等)防护部件按装到位,以保证人身安全.

Warning symbol: When the machine is running, please make sure (eg: needle guard, belt cover, earth wire ect.) the parts are in the correct places, to assure people's safety.

3. 安全措施的基本概念

Basic concept for safety measures

1)、应用和目的

Application and purpose

本公司所开发的缝纫机是为提高缝制行业的生产效率, 提升产品质量. 不推荐您使用与上述使用目的不相符合的缝纫机.

The industrial sewing machine developed by our company is for improving production's efficiency in sewing business, we don't recommend you to use the sewing machine which is not the same purpose for you sewing.

2)、工作环境

Working environment

(1) 不适合在温度与湿度较极端的工作环境.

The machine is not suitable for working in the extremely temperature and humidity environment.

(2) 不适合在户外, 或光线照射较强的地方.

The machine is not suitable for working in outdoor, or the place where is strong sunlight.

(3) 不适合在带有灰尘, 腐蚀性、放射性物质的环境中.

The machine is not suitable for working in the environment where is full of dust, or have causticity or radioactivity matter.

(4) 不适合在电压起伏超过上下10%幅度.

The machine is not suitable for working if the fluctuation of the voltage is exceed 10 %.

(5) 不符合马达规格标准的电压供电.

The machine is not suitable for working if the voltage not in accordance with the motor's standard.

(6) 不适合在高电流转换器, 高频率焊机产生强电流、强磁声的区域内.

The machine is not suitable for working in the areas where is high electric current transducer, or strong electric current, strong magnetic-acoustic from high frequency soldering machine.

4. 安全操作及其注意

Safety operation and advert

1)、拆箱和运输

Unpacking and transportation

- (1) 放置或转运时确认机器与向上标记摆放一致, 拆箱时从箱子顶部打开.
When the machine is putting or transporting please make sure it is the same direction with the up sign, and unpacking the machine at the top of the carton.
- (2) 从箱子里取出机器时, 不要用手握住靠针的部位.
When you are taking out the machine from the carton, please don't catch the place which is near of the needle by your hands.
- (3) 有车辆搬运时, 切勿使机器遭受强烈震动或撞击.
Please don't let the machines get strong shock or hit when the machines are transporting.

2)、安装及准备

Installation and preparation

- (1) 确保台板安装坚固, 避免台板在承重时由于安装不到位引起的状况.
Make sure the table is installed firmly, to avoid the table can't bear the weight because of the installation's mistake.
- (2) 安装摆放机器时, 选择适当的光线与合理的摆设以保证舒适的工作环境.
Choose the proper sunlight place or reasonable place to installation the machine so make sure the environment comfortable.
- (3) 根据电机的使用说明来正确安装电机.
According the motor's instruction to install the motor.
- (4) 在未完成安装前, 切勿触按电源.
If the installation is not completely finished, please don't connect the electric power.
- (5) 谨慎安装电线, 连接好机器、电机和带电装置.
Install the wires carefully, and connect the machine, motor, and electrification devices well.
- (6) 不要在带电线路路上放置、施加任何物体.
Don't put anything on the electrification wires.
- (7) 电线需远离驱动器.
The wires should be far away from the drive.
- (8) 连接好接地线.
Connecting the earth wire well.
- (9) 对操作的员工需进行安全与技能方面的培训, 以保证机器的正确使用与安全
的操作.
The operators should be get a safety and skilled training, to make sure the correct and safety operation.

3)、操作注意事项

Operation advert item

- (1) 切不可使润滑油、硅油等溅到眼睛.
The lubricant oil and silicon oil can not be spattered in the eyes.
- (2) 在添加润滑油时, 应使用本机专用的润滑油.
Use the special lubricant oil when you are lubrication.

- (3) 在接通电源时,切不可把手放到机器的运动部件上。
You can not put your hands in the moving parts when you want to turn on the electric power.
- (4) 操作前确保机器转向与机器转向标志一致。
Make sure the machine's turning direction is the same with the turning direction sign before you operate.
- (5) 如果机器配备了皮带护罩、挡针板等防护装置时,确保这些安全设备都已装配。
If the machine have belt cover、needle guard、ect please make sure they are all installed.
- (6) 使用机器时,手指、头发等切勿靠近机针或其它运动部件。
Don't let your fingers、hair、ect near of the needle or moving parts when you are operating the machine.
- (7) 穿线、换机针时,首先需关闭电源。
Turn off the electric power before you threading or changing the needle.
- (8) 不使用机器时,一定要记得关闭电源。
Turn off the electric power when you don't need use the machine.
- (9) 使用时,如遇到任何故障或有异常声响与气味,要立即切断电源。
When you are operating the machine,if the machine get any problems or unusual noise or strange smell, please turn off the electric power immediately.

4)、保养与检修

Maintenance inspection and repair

- (1) 保证机器的维护与维修由专门的技术人员来完成。
Machine's maintenance inspection and repair should be finished by special technicians.
- (2) 对机器的维护与维修必需在切断电源的状态下进行。
Turn off the electric power before to maintenance inspection and repair.
- (3) 如果使用离合器马达,注意需将马达余电使用完后进行。
If use clutch motor, please make sure the motor's electricity is out.
- (4) 维修过程中请使用指定本机专用零部件。
Use the special parts in your maintenance inspection and repair.

1. 机器规格

Machine Specifications

性能规格 performance requirement	63970 锁式辘机 Locking foot roller	63971 链式辘脚机 Chain reel machine	63972 锁链互换辘脚机 Chain interchangeable foot roller
中厚料 Cloth of medium thickness	✓	✓	✓
厚料 The thick cloth	✓	✓	✓
加密缝 Encryption seam	✓	✓	✓
反包 Anti-pack	✓		
反包中厚料 Backpack thick material	✓		
加密缝反包 Encryption seam anti packet	✓		
最高缝纫速度 Maximum sewing speed	≤3500		
压脚上升量 Pressure foot lift	≤11mm		
采用机针 Needle	DP×5 18#	DP×5 14#	DV×57 18#
送布方式 Feed way	上下滚轮及针复合送料方式 Compound feeding way of upper and lower roller and needle		
噪音 The noise	缝速n=3500min时, 工作环境噪音Lpa≤80bB (A) When n=3500min, Working environment noise Lpa 80bB(A)		
旋梭 Hook	自动供油式专用全回转1.6倍旋梭 Automatic oil supply special 1.6 times rotary shuttle		
工作气压 Work pressure	0.4-0.5MPa		

2. 机器特点

The machine features

- 1). 锁式线迹圆筒底板, 在机针背后采用上下滚轮同步送料, 并且机针与上下滚轮也采用复合同步送料结构方式; 此结构送料方式, 在缝制布料时不会造成布料拉伤, 并且在缝制牛仔极厚布料时可以让送布变得更为简单、顺畅。而且由于采用旋梭结构, 使得面线和梭线交织在缝料中部, 也让线迹更牢固。

The locking type thread trace cylinder bottom plate adopts the upper and lower rollers to feed synchronously behind the machine needle, and the needle and the upper and lower rollers also adopt the compound synchronous feeding structure;

This structure of feeding method, in the sewing cloth will not cause fabric strain, and in the sewing denim extremely thick fabric can make the cloth delivery more simple and smooth.

And because of the use of rotary shuttle structure, so that the face line and shuttle line interwoven in the middle of the sewing material, also make the stitch more solid.

- 2). 链式线迹圆筒底板, 在机针背后采用上下滚轮同步送料, 并且机针与上、下滚轮也采用复合同步送料结构方式; 此结构送料方式, 在缝制布料时不会造成布料拉伤, 并且在缝制牛仔极厚布料时可以让送布变得更为简单、顺畅。而且由于采用弯针结构, 可以让线迹富有弹性且不用换底线。

The chain stitch cylinder bottom plate adopts the upper and lower rollers for synchronous feeding on the back of the machine needle, and the needle and the upper and lower rollers also adopt the compound synchronous feeding structure;

This structure of feeding method, in the sewing cloth will not cause fabric strain, and in the sewing denim extremely thick fabric can make the cloth delivery more simple and smooth.

And because of the bent needle structure, you can make the stitch elastic and do not need to change the bottom line.

- 3). 此机可以实现锁、链式线迹互换, 真正实现了一机多能的作用。

This machine can realize the interchangeability of lock and chain stitch, and truly realize the function of one machine and multiple functions.

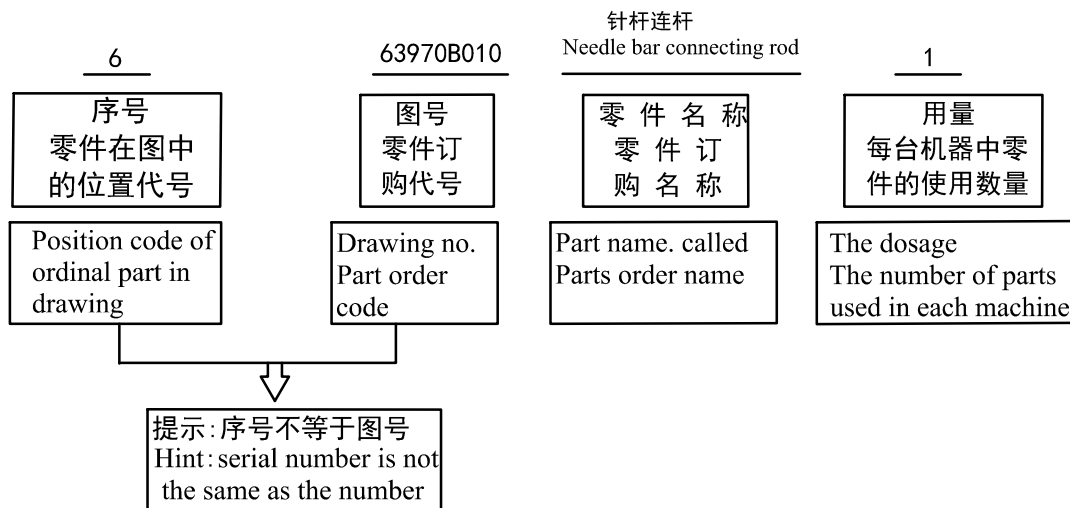
3. 图解

The illustration

- 1). 此手册是为维修机器时方便订购零件而编制, 及其各个部件都以分解图的形式清楚地表达了其真实的装配位置, 在每一页部件图中都有一份明细表, 表中列有序号、图号、零件名称及用量。

This manual is prepared for the convenience of ordering parts for maintenance of the machine, and each part clearly expresses its true assembly position in the form of decomposition diagram. In each side of the part drawing, there is a detailed list with the order number, drawing number, part name and quantity.

如下: The following



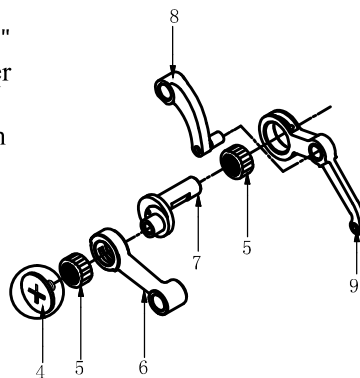
- 2). 机器中虽然相同的零件在不同的多个部位使用, 但其图号均是相同的, 如右图: 圆圈内的螺钉序号时"4", 图号为"63970B01001".

Although the same parts are used in different parts of the machine, the drawing Numbers are all the same, such as the screw number in the circle right in the picture, When "4", the figure number is "63970B01001".

- 3). 不同的零件都有其各自的图号; 用户若要订购零件可先在"零件实用手册"根据其立体图样确定其装配位置, 在其所在位置的序号查询相应的零件图号, 图号确定后就可以向本公司订购所需零件。(前提在我公司单位提供范围内)

Different parts have their own drawing number; If the user wants to order the parts, he can first confirm the three-dimensional drawing in the "parts utility manual" Assembly location, in the location of the serial number query the corresponding part number, figure number determined after you can order the required parts from the ompany. (if provided by our company)

- 4). 订购所需零件时, 请注明图号、零件名称、数量。(如: 63970B010 针杆连杆组件 1件)
Please specify drawing number, part name, The number. (for example: 63970B010 pin rod connecting rod 1 piece)



4. 机针与旋梭的关系

The relationship between needle and hook

- 1). 转动手轮, 使针杆位于最高点, 移开针板, 松开旋梭上的三个紧定螺钉, 用手握住旋梭和梭架。

Rotate the hand wheel so that the needle rod is at the highest point, remove the needle plate and loosen the rotation three set screws on the shuttle, hold the hook and the hook by hand.

- 2). 转动旋梭使旋梭的梭尖达到机针的中心位置。(钩线尖与机针中心位置重合, 如右图D所示。)

Rotate the hook so that the hook point reaches the center of the needle. (hook line the needle point coincides with the needle center, as shown in figure D on the right).

- 3). 在此位置时, 旋梭钩线尖应高出机针孔上沿1-1.5毫米(见右图F)。

At this position, the hook line point should be 1 to 1.5 mm above the machine pinhole (see figure F, right).

- 4). 水平移动旋梭(右图C)保持机针与梭尖的间隙应为0.04-0.1毫米最合适。(注意: 间隙过小的话, 会损伤旋梭尖。间隙过大的话, 会跳针。)

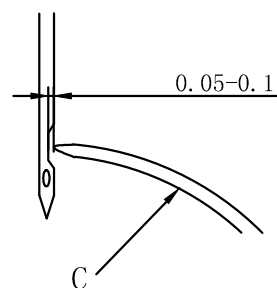
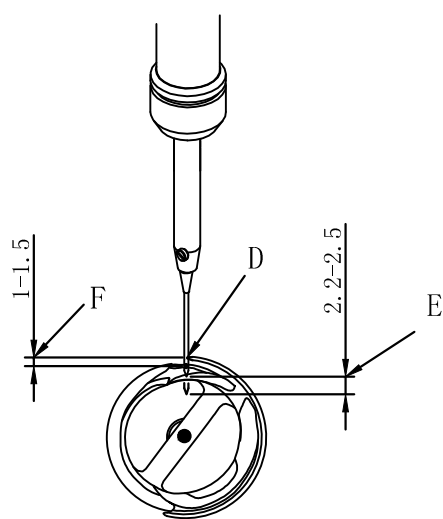
Horizontal moving hook (figure C on the right) should maintain the clearance between the needle and the needle tip 0.04-0.1 mm is most suitable. (note: too small a gap can cause damage Spinning the end of the shuttle. If the gap is too large, the needle will jump).

- 5). 保持旋梭在这一位小心的拧紧相对梭尖的一个螺钉, 然后再拧紧剩下的两个螺钉。

Keep the hook in place and carefully tighten a screw relative to the point of the hook. Then tighten the remaining two screws.

- 6). 再次核对旋梭与机针的同步, 如不同步重复以上步骤。

Check the synchronization of the hook and needle again. If not, repeat the above steps



5. 梭芯套的拆卸及穿线

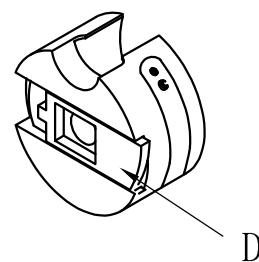
Disassemble and threading of lock core sleeve

- 1). 梭芯套拆卸: 按机器运转方向转动手轮直到机针达到最高点, 用左手伸到机器的左端针板的下面, 打开旋梭支架端面盖, 将梭芯套的梭门盖底向上撬起, 即可将梭芯套从旋梭中拉出来. 开启锁门盖保持梭芯在梭芯套内. 当锁门盖闭合时梭芯被松开, 可以拆下.

Disassemble the bobbin case: Turn the hand wheel according to the running direction of the machine until the needle reaches its highest point and reach it with your left hand.

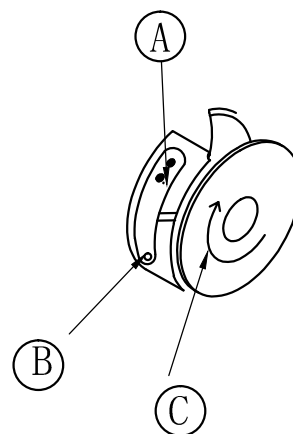
Under the needle plate at the left end of the machine, open the end face cover of the rotating shuttle support and pry up the bottom of the shuttle door cover of the shuttle core sleeve, which not only The bobbin case can be pulled out of the rotating shuttle. Open the door cover to keep the bobbin in the bobbin sleeve. When the door lid is closed.

At the same time, the bobbin is released and can be removed.



- 2). 梭芯套穿线: 将梭芯装入梭芯套, 把线穿过梭壳的穿线门(右图A)然后把线往(右图B)方向拉, 从线张力弹簧下面的穿线门(右图B)拉出来.

Bobbin threading: load the bobbin into the bobbin sleeve, pull the thread through the bobbin housing threading door (figure A, right), then pull the thread in the direction (figure B, right), and pull it out from the threading door (figure B, right) under the thread tension spring.



- 3). 将梭芯装入梭芯套后, 应注意梭芯的旋向应如(右图C)方向转动. After the bobbin is inserted into the bobbin sleeve, it shall be noted that the direction of rotation of the bobbin shall be as shown in (figure C on the right).

6. 机针的更换及穿线

Needle replacement and threading

- 1). 将机针缺口向右(面对手轮)插入针杆, 向上推至最顶端, 然后锁紧螺钉(右图A).

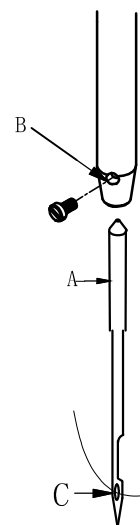
Insert the needle lever into the needle notch to the right (facing the hand wheel), push it up to the top, and then tighten the screw (figure A on the right).

- 2). 操作者可以通过针杆底端的横孔(右图B)观察机针是否完全插入.

The operator can observe whether the needle is fully inserted through the crosscutting at the bottom of the needle rod (figure B, right).

- 3). 机针穿过针眼时应如(右图C)所示从左到右.

The machine needle should pass through the eye of the needle from left to right as shown in (figure C, right)



7. 改变线迹长度（针距）

Change stitch length (stitch length)

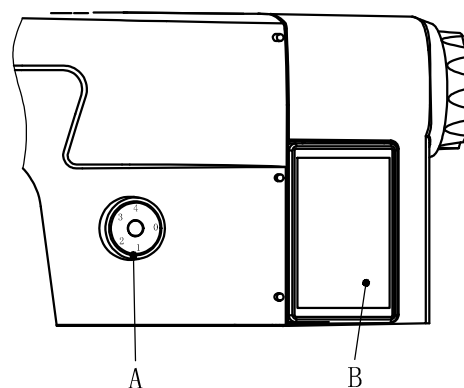


注意：
CAUTION

为了防止突然启动造成人身事故，请关掉电源，确认马达完全停止后再进行。

To prevent accidents caused by sudden start, please turn off the power and make sure the motor stops completely before proceeding.

- 1). 调节针距旋钮（A），调至需要的针距大小。
Adjust needle pitch knob A, to the desired needle pitch
- 2). 在操作显示屏（B）上，对针距输入对应的数值
On operation display B, enter the corresponding value for the pin pitch key



8. 压脚压力的调整

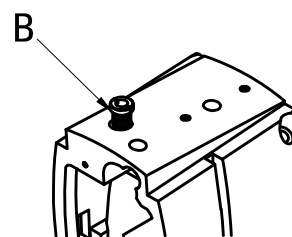
Adjustment of foot pressure

压脚的压力，要根据缝料的厚度加以调整，缝纫厚料时，应加大压脚的压力。可将机头顶部的调压螺钉顺时针旋转。反之，缝制薄料时，应减少压脚的压力，将调压螺钉逆时针旋转。

Foot pressure, according to the thickness of the seam to be adjusted, sewing thick material, should increase the pressure of the foot.

The pressure regulating screw on the top of the head can be rotated clockwise.

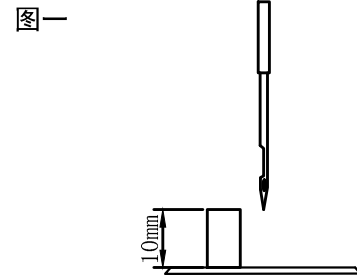
On the contrary, when sewing thin material, should reduce the pressure of the foot, the pressure regulating screw counterclockwise rotation.



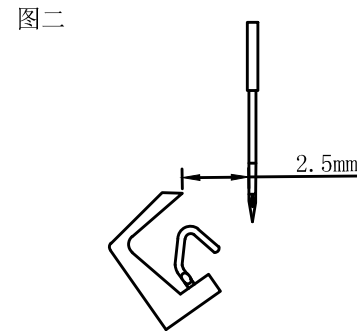
9. 机针与弯针的关系

The relationship between machine needle and bent needle

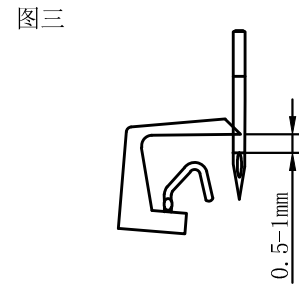
- 1). 机针安装: 以机针C型槽向正左侧方向为准.
机针高度: 当机针运行到最高点时, 机针与针板的距离10mm, 用附件中的量块进行高度定位. (如图一所示)
Machine needle installation: machine needle c-groove should be in the direction to the left.
Needle height: The distance between the needle and the needle plate when the needle is at its highest point 10mm, height positioning with the attached gauge block, (as shown in figure 1)



- 2). 机针运行到最低点时, 弯针尖与机针的距离为2.5mm, (如图二所示)
When the needle reaches the lowest point, the distance between the bent tip and the needle is 2.5mm. (See figure 2)

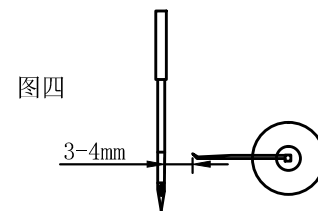


- 3). 当弯针尖运行到与机针C行槽中心重合时, 弯针尖高于针孔距离为0.5-1mm之间, 间隙为0.02-0.1mm.
When the bent needle point runs to the center of machine needle C row groove, the bent needle point, the distance above the pinhole is 0.5-1mm, and the clearance is 0.02-0.1mm.



The contact point with the machine needle must be in the forward and backward operation of the bent needle keep the synchronization relationship, if the synchronization relationship is not correct, need to bend the needle eccentricity
The wheel adjusts. (as shown in figure 3)

- 4). 机针与拨针. 当机针在最低点时, 机针与拨针的距离为3-4mm, (如图四所示)
弯针与拨针. 当弯针孔A与拨针C型槽相结合时, 弯针孔A正处于拨针C型槽的右侧, 此时弯针与拨针的高低尺寸为1mm, (如图五所示)

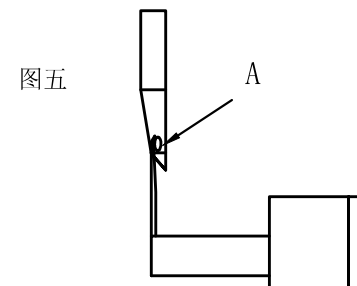


machine needle and dial needle: when the machine needle is at the lowest point, the distance between machine needle and dial needle is 3-4mm, (as shown in figure 4)

Bent needle and pick needle. When the bent pin hole A is combined with the pick needle c-groove, bend the needle.

Hole A is on the right side of the draw pin C groove, and the height of the bent needle is the same as that of the draw needle.

(The size of 1mm is shown in figure 5)

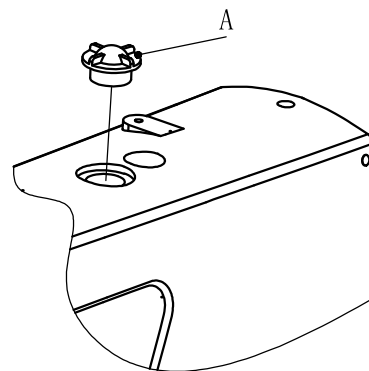


10. 机器的润滑 Lubrication of the machine

⚠ 注意 / CAUTION

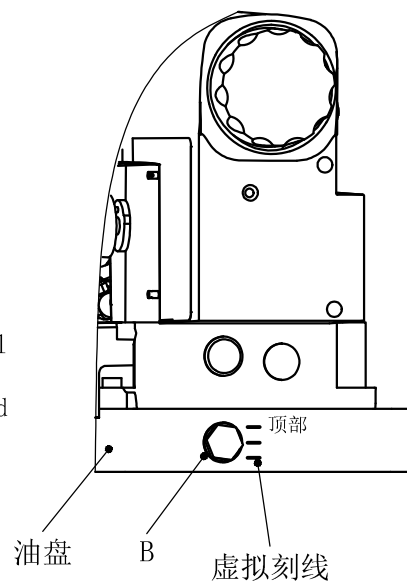
- ⊘ 加油时, 务必带上护目镜和手套, 以免油不慎掉入眼睛或是沾到皮肤, 而造成伤害。
Be sure to wear protective goggles and gloves when handling the lubricating oil gets into your eyes or onto your skin, otherwise inflammation can result.
- 在任何情况下, 切勿饮用润滑油, 否则会导致呕吐和腹泻。
Furthermore, do not drink the oil under any circumstances, as it can cause vomiting and diarrhea.
- 润滑油要放在儿童够不到的地方。
Keep the oil out of the reach of children.

- 1). 机器在加油后必须先以低速运转几分钟, 以便机器内部的油可以充分分散, 达到润滑零件的目的。
After refueling, the machine must run at a low speed for a few minutes, so that the oil inside the machine can be fully dispersed to achieve the purpose of lubricating parts.



- 2). 本机使用的润滑油为10#白油, 加油如下图:
The lubricating oil used in this machine is no. 10 white oil, and it is lubricated as shown in the figure below:
- 3). 用扳手将A(油窗)打开, 把准备好的白油加入;
Open A(oil window) with A wrench, and add the prepared white oil;
- 4). 加完油后需把油窗锁紧(不要遗漏油窗下面的密封垫, 否则会导致漏油);
After adding oil, lock the oil window tightly (do not leave out the sealing gasket under the oil window, or it will cause oil leakage);

- 5). 从油盘油窗B观测油量, 油量高度需要在油窗视线位一半到顶部之间, 低于一半建议加油以保证润滑系统的正常运转
Observe oil volume from oil pan oil window B, The oil height needs to be between the oil window line of sight, halfway to the top, Less than half recommended refueling to ensure the normal operation of the lubrication system



11. 旋梭油量调节 Oil volume adjustment of spindle

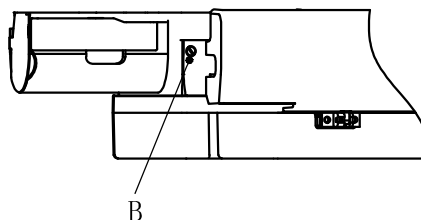


注意：
CAUTION

注意旋梭已是高速运转的，为了防止人身事故，调整油量时，请加以充分的注意
Note that the spindle is operating at high speed, In order to prevent personal accidents, please take full care when adjusting the level.

- 1). 使用一字螺丝刀对调节螺钉进行旋转调节。
顺时针旋梭油量减小，逆时针旋梭油量增大
Turn and adjust the adjusting screws using a flat-head screwdriver. The amount of oil in the clockwise spindle decreases, and the amount of oil in the counterclockwise spindle increases

旋梭油量增大 ↻ 旋梭油量减小



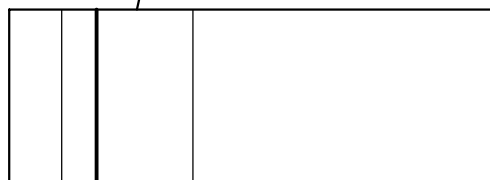
- 2). 油量确认的方法：
Method of oil quantity confirmation

- 2.1. 测试时确保机器已经过3分钟左右的空转（适当的间歇运转）
When testing make sure the machine has been idling for about three minutes (Appropriate intermittent operation)

- 2.2. 请在缝纫机转动时将油量确认纸张插入，与旋梭之间的距离3-10mm
Please insert the oil check paper while the machine is running, the distance between it and the spindle is 3-10mm

- 2.3. 油量确认时间为5秒
The oil quantity confirmation time is five seconds

旋梭飞溅出来的油
The spatter of oil from the spinner



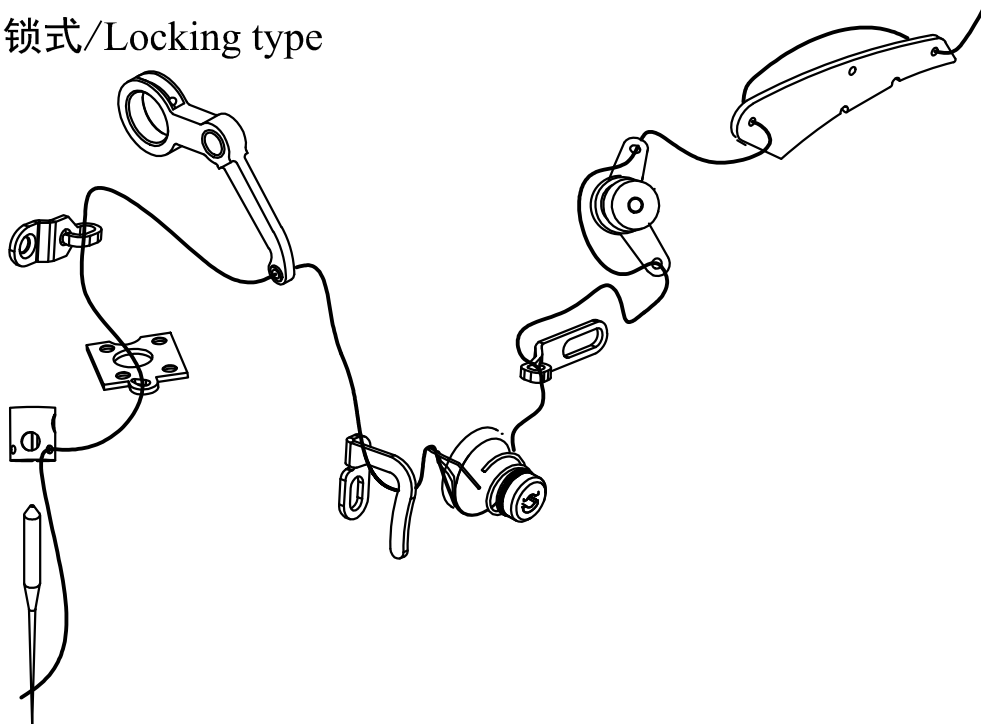
油量确认纸张：25mm×70mm左右
Oil quantity confirmation paper

薄料-中厚料：0.5-1mm
厚料：1-3mm
Thin material medium thick material: 0.5 to 1mm
Thick material: 1 to 3mm

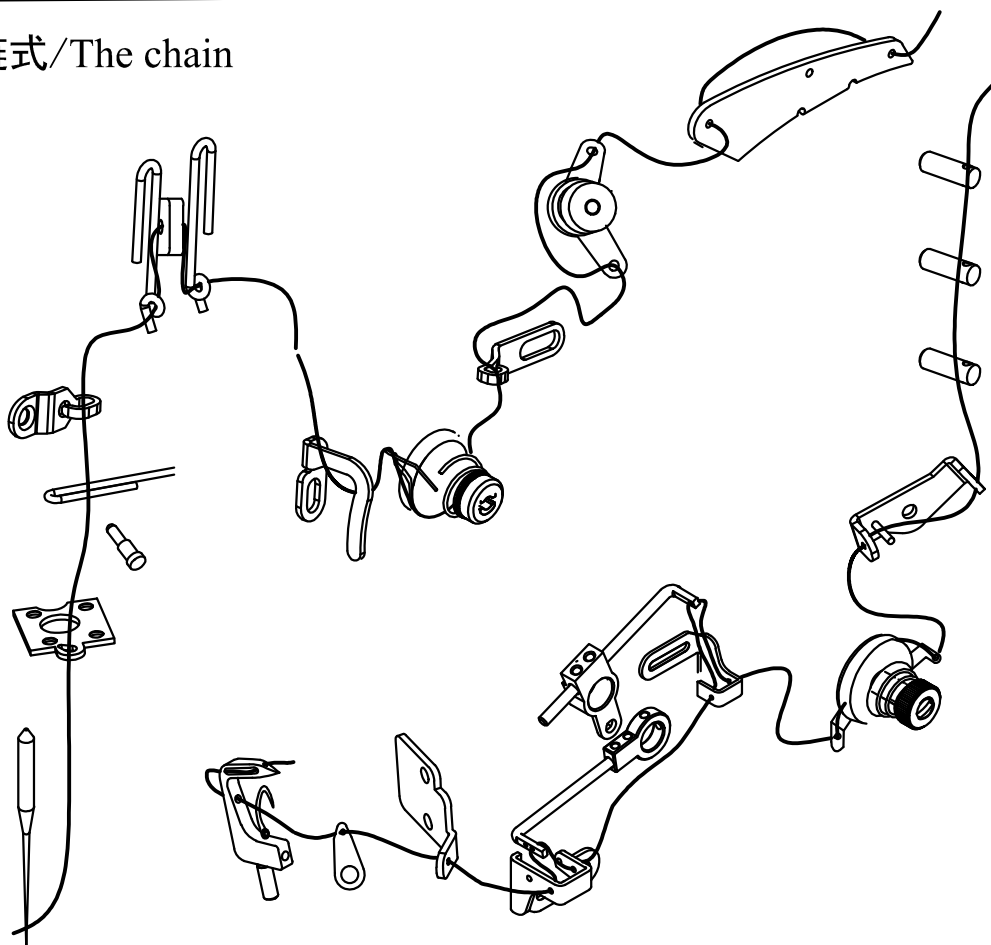
12. 穿线图

Wearing map

1) 锁式/Locking type



2) 链式/The chain



13. 线张力器 Wire tensioner

- 1) 一个完美的线迹是机针线和旋梭线在缝线截面中央锁在一起, 这种线迹可通过调节两条线的张力来获得。

A perfect stitch is where the machine needle and the bobbin are locked together in the center of the stitch section. This stitch can be obtained by adjusting the tension between the two threads.

- 2) 缝线的张力应根据缝料的不同, 缝线的粗细以及其他的一些因素而变动. 在实际使用中是根据缝纫出来的线迹来调整针, 梭线的张力, 使之能获得完美的线迹。

The tension of the stitches should vary according to the material, the thickness of the stitches and other factors. In practice, the tension of the needle and the bobbin thread is adjusted according to the stitching to obtain perfect stitches.

- 3) 机针(面线)张力的调整

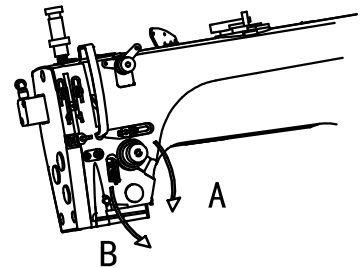
Adjustment of needle (thread) tension

- a. 把线张力螺母1向A方向顺时针转动, 上线张力变强。

Turn the thread tension nut 1 clockwise in the direction of A to increase the thread tension.

- b. 向B方向逆时针转动则变弱。

Counterclockwise in the B direction becomes weaker.



- 1) 梭芯上线的张力有一个紧定螺钉1调节簧片2的压力来获得. 当弹簧片完全抱着梭芯套并且梭芯可通过梭线悬挂则弹簧片的压力适当. 当梭线张力调节合适后, 很少会因为机针线张力的变化而改变, 也能获得一个好线迹。

The tension of the bobbin upper thread is obtained by adjusting the pressure of reed 2 with a set screw 1.

The pressure on the spring sheet is appropriate when the spring sheet is fully attached to the bobbin sleeve and the bobbin can be suspended through the bobbin line. When the bobbin tension is adjusted properly, it will rarely change due to the change of needle and thread tension, and a good stitch can be obtained.

- 2) 旋梭线(底线)张力的调整

Adjustment of bobbin thread tension

- a. 将梭芯从支撑座上取下

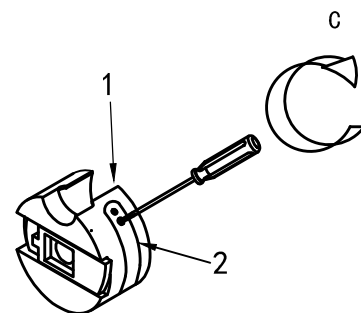
Remove the bobbin from the support seat

- b. 把线张力紧定螺钉向顺时针右C的方向转动, 底线张力变强。

Turn the thread tension set screw clockwise C to the right to increase the thread tension.

- c. 向左逆时针的方向变弱。

It's getting weaker in the counterclockwise direction to the left.



14. 夹线组件的调整

Adjustment of clamping wire components

测试挑线簧(右图A)的张力. 当压迫和释放时, 保证有足够的张力快速回复. 需要调节时, 按一下步骤进行.

Test the tension of the take-up spring (figure A). When pressed and released, make sure there is enough tension to recover quickly. When you need to adjust, follow these steps.

- 1). 松开位于机壳下面、夹线组件右边机头上的紧定螺钉拆下夹线组件.

Loosen the set screw on the right head of the clamping assembly under the housing and remove the clamping assembly.

- 2). 适当松开夹线器座(右图C)上的紧定螺钉(右图B).

Properly loosen the set screw (right figure B) on the wire holder holder (right figure C).

- 3). 逆时针方向转动夹线螺钉(右图D)挑线簧(右图A), 张力减少.

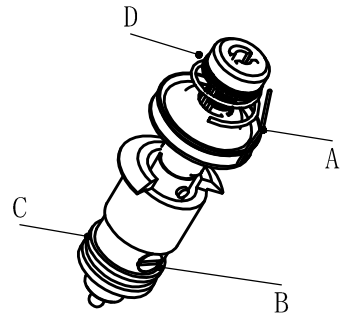
Turn the thread clamp screw counterclockwise (figure D) and thread take-up spring (figure A) to reduce the tension.

- 4). 顺时针方向转动夹线螺钉(右图D)挑线簧(右图A), 张力增加.

Turn the thread clamp screw clockwise (figure D) and thread take-up spring (figure A) to increase the tension.

- 5). 获得所需张力后, 将紧定螺钉(右图B)拧紧.

After obtaining the required tension, tighten the set screw (figure B on the right).



15. 气动型应注意事项

Pneumatic type should be noted

- 1). 本机器工作气压为0.5-0.6Mpa, 作业人员开始工作前需检查气压是否在规定范围内.

The working air pressure of the machine is 0.5-0.6mpa, and operators shall check whether the air pressure is within the prescribed range before starting work.

- 2). 工作压力不足可能会造成如下状况:

Insufficient work pressure may cause the following conditions:

- (1) 卷边筒打开、关闭动作不顺畅;

The opening and closing action of the flanging barrel is not smooth;

- (2) 缝线剪不断或不能完全剪断;

Continuous or incomplete cutting of stitches;

- (3) 压脚抬起达不到有效高度;

The presser foot cannot reach the effective height;

- (4) 勾线动作未能准确完成;

The marking action could not be completed accurately;

16. 一般故障及其处理方法

故障分类	可能产生的原因	处理方法
断针	<ol style="list-style-type: none"> 1. 机针太细或缝料坚厚 2. 机针弯曲 3. 机针高低位置不对, 方向错误 4. 缝纫时用力推拉缝件 5. 同步是否正确 	<ol style="list-style-type: none"> 1. 选择合适的机针、缝线及缝料 2. 更换机针 3. 校正机针位置 4. 稍加扶持、切勿用力推拉 5. 调整好基本配合同步
锁式跳针	<ol style="list-style-type: none"> 1. 机针与旋梭的侧隙和高低不对, 以及方向错误 2. 机针弯曲 3. 针板容针孔太小, 机针和缝料的厚度 4. 底线张力和压脚压力过弱 	<ol style="list-style-type: none"> 1. 参照说明书机针与旋梭的关系校正 2. 更换机针 3. 选择合适的机针、缝料 4. 增加底线张力和压脚的压力
断线	<ol style="list-style-type: none"> 1. 缝线质量不好 2. 机针与缝线粗细不相称 3. 过线部位表面粗糙 4. 夹线力过紧 5. 机针位置装错 6. 机针过热熔断化纤线 7. 底线张力太弱 	<ol style="list-style-type: none"> 1. 选用优质缝线 2. 选择合适的机针与缝线 3. 换新零件, 抛光过线处 4. 放松夹线螺母 5. 校正机针和旋梭的配合及位置 6. 对化纤线采用机针冷却 7. 调整底线面线张力
浮线	<ol style="list-style-type: none"> 1. 旋梭质量不好, 安装位置不对 2. 机针太细 3. 面线张力弱 4. 压脚有问题 5. 挑线簧弱 6. 过线部分表面粗糙 	<ol style="list-style-type: none"> 1. 换新旋梭, 增加旋梭返回量 2. 选用粗机针 3. 增加面线张力 4. 减小压脚沟槽的根部离针距离, 换压脚 5. 增强挑线簧的张力
线迹歪斜	<ol style="list-style-type: none"> 1. 面线张力太大 2. 机针太细, 或太粗 3. 机针安装不正 4. 针杆过线孔过大 	<ol style="list-style-type: none"> 1. 减弱面线张力 2. 选用适当机针, 参照说明书规定 3. 校正机针方位 4. 使用小孔的针杆过线
缝料起皱	<ol style="list-style-type: none"> 1. 面线张力太强挑线簧弹力过强 2. 针板压脚不光滑, 压力配合不当 3. 机针太粗 4. 梭芯太重 5. 针板容针孔太大 6. 底面线粗细差距过大 	<ol style="list-style-type: none"> 1. 减弱面线张力和挑簧弹力 2. 抛光针板、压脚面, 并调整压脚的压力 3. 用细机针 4. 减轻梭芯重量或铝梭芯 5. 用小孔针板

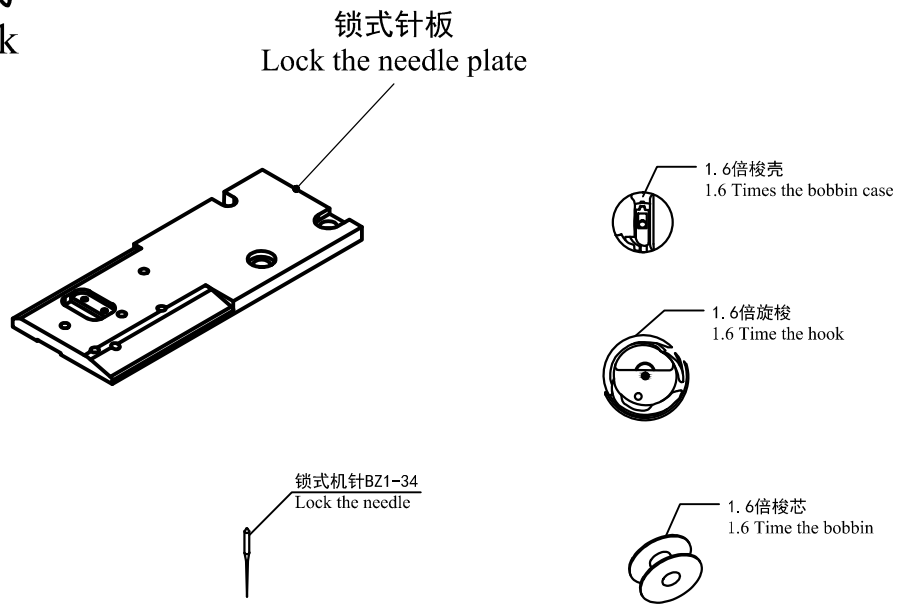
General faults and their handling methods

Fault classification	Possible causes	Processing method
Broken needle	<ol style="list-style-type: none"> 1.The needle is too thin or the sewing material is too thick 2.Needle bending 3.Wrong needle height and direction 4.Push and pull the sewing parts when sewing 5.Correct synchronization 	<ol style="list-style-type: none"> 1.Select suitable needle, thread and material 2.Replace the needle 3.Adjust needle position 4.Slightly support, do not push and pull
Jump needle lock	<ol style="list-style-type: none"> 1.Wrong side clearance and height between the needle and the hook, as well as wrong direction 2.Needle bending 3.The needle plate allows too small pinhole, and the thickness of needle and sewing material 4.Thread tension and foot pressure are too weak 	<ol style="list-style-type: none"> 1.Refer to the manual to correct the relationship between machine needle and hook 2.Replace the needle 3.Select suitable needle and sewing material 4.Increase the thread tension and foot pressure
Bolt	<ol style="list-style-type: none"> 1.The quality of stitches is not good 2.Machine needle and sewing thread thickness do not match 3.Rough surface of the crossing part 4.Excessive clamping force 5.Wrong needle position 6.The needle is overheated and fuses the chemical fiber line 7.Thread tension is too weak 	<ol style="list-style-type: none"> 1.Choose high-quality stitches 2.Choose the right needle and thread 3.Replace new parts and polish over the line 4.Loosen the clip nut 5.Alignment of needle and hook 6.Adopt needle cooling for chemical fiber line 7.Adjust the tension of the bottom line

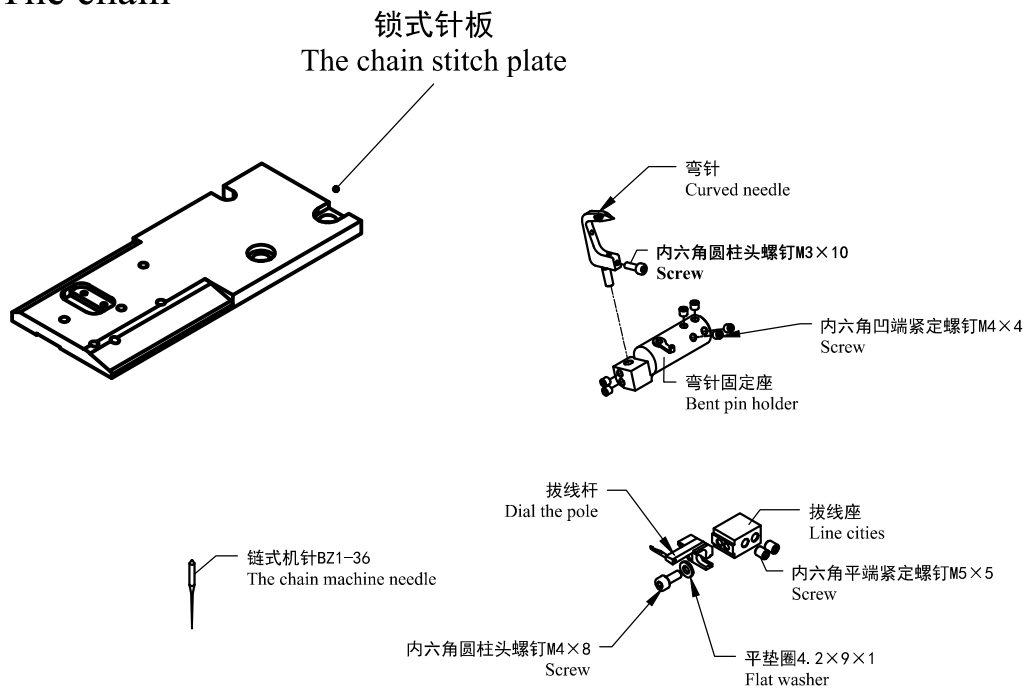
<p>Float line</p>	<ol style="list-style-type: none"> 1.The quality of the hook is bad and the installation position is wrong 2.The needle is too thin 3.Weak tension of facial line 4.There is something wrong with the foot press 5.Weak thread take-up spring 6.Rough surface at the crossing part 	<ol style="list-style-type: none"> 1.Replace the rotary shuttle and increase the return amount of the rotary shuttle 2.Select thick needle 3.Increase the tension of the surface line 4.Reduce the distance between the root of the foot groove and the needle, Change the presser foot 5.Enhance the tension of thread take-up spring
<p>Stitch skewed</p>	<ol style="list-style-type: none"> 1.Too much tension in the surface line 2.The needle is too thin or too thick 3.Improper needle installation 4.Excessive needle rod thread hole 	<ol style="list-style-type: none"> 1.Reduce the tension of the surface line 2.Select appropriate needle and refer to the instructions 3.Adjust needle position of the machine 4.Thread with the needle rod of the eyelet
<p>Sewing the material corrugate</p>	<ol style="list-style-type: none"> 1.The tension of the thread is too strong, and the spring of the thread take-up is too elastic 2.The foot of the needle plate is not smooth, and the pressure is improperly matched 3.The needle is too thick 4.The bobbin is too heavy 5.The pinhole of the needle plate is too large 6.Underside line thickness difference is too large 	<ol style="list-style-type: none"> 1.Reduce the tension of the surface line and the spring tension 2.Polish the needle plate, press the foot surface and adjust it Foot pressure 3.Use a fine machine needle 4.Reduce the weight of the bobbin or aluminum bobbin 5.Use a pinhole plate

17. 锁链互换零件 Chain exchange parts

锁式 Lock



链式 The chain

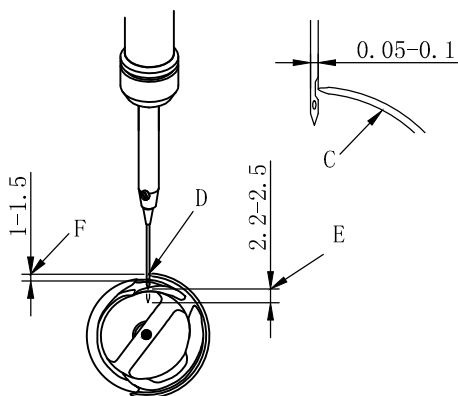


18. 锁链互换流程

63922链式更换锁式流程

首先将链式配件拆卸下来：

1. 将链式机针拆下来；
2. 将链式针板拆下（拆针板的时候把气管关掉）；
3. 将链式拔线器拆下；
4. 将链式弯针座整个拆下；
5. 将链式右挡块拆下；
6. 将链式左挡块全拆下；
7. 将链式挑线杆拆下；
8. 将链式旋梭支架前盖板拆下；
9. 将链式拉筒拆下；



换上锁式的配件：

1. 换上锁式机针；
2. 放旋梭（后调整）；
3. 针杆摇到最低点，机针孔露出旋梭内孔半个针孔左右，旋梭尖达到机针孔上一端1毫米；机针与旋梭间隙0.01mm-0.02mm；
4. 放锁式机针（压脚孔和机针孔对齐后螺丝拧紧），调整机针上的定位钩到旋梭定位槽深0.5mm左右；
5. 插上针板气管（剪线气缸）再把旋梭支架前挡板和拉筒装回，后调整下；
6. 调电控参数；

63922链式更换锁式流程

1. 拆下机头盖、卷边筒、前盖板

2. 拆下锁式针位组，压脚

3. 装链式专用机针

4. 装链式针板

5. 将机针调到最高，这时机针尖到针板C的距离和量块D的高度相等。

6. 弯针轴位部分装到底部

7. 机针运动到最低点时与弯针最后点之间的距离约2.5mm

8. 手轮向工作方向旋转，机针上升到弯针尖与机针槽下端接触，弯针尖与机针的间隙大约0.02mm左右

9. 保持弯针与机针前后进退一致

10. 在弯针与机针接近前护针先接触机针，确保机针与弯针不会碰撞

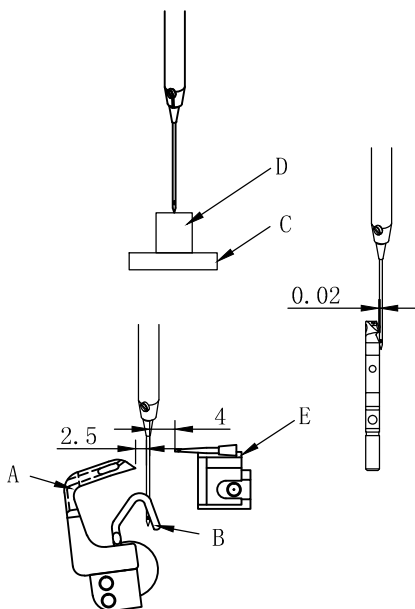
11. 弯针钩完线到拨线杆范围，拨线杆尖正好对准弯针过线孔的左侧，这时机针与拨线杆尖间距约4mm

12. 装上链式针板，压脚

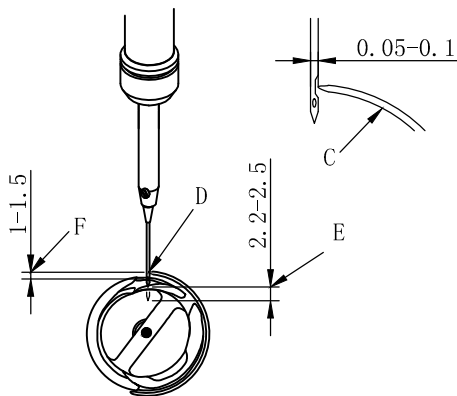
13. 调电控参数

14. 调好后装上机头盖

15. 装前盖板卷边筒



18.Chain exchange process

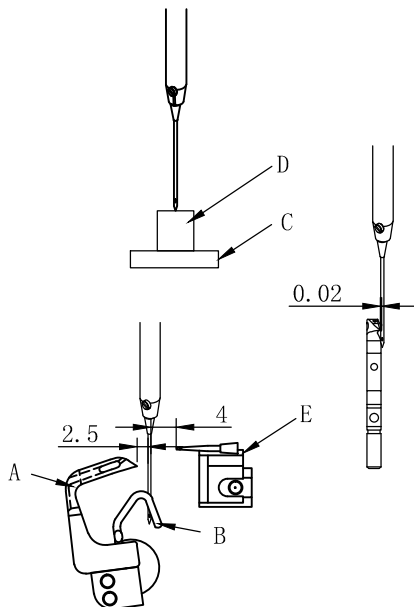


Lock:

Change locking type accessories:

- 1.Change locking type needle;
- 2.Release the spindle (After adjustment) ;
- 3.When the needle rod is shaken to the lowest point, the pinhole of the machine exposes about half a pinhole of the inner hole of the rotary shuttle, and the tip of the rotary shuttle reaches 1mm to the upper end of the machine pinhole. Needle and spindle clearance 0.01mm-0.2mm;
- 4.Lock type needle(Screw the pin hole after the pin hole is aligned with the pin hole), Adjust the positioning hook on the needle to the positioning slot of the spindle about 0.5mm deep;
- 5.Then put back the front baffle of the spindle support and the pulling cylinder;
- 6.Adjust electric control;

The chain:



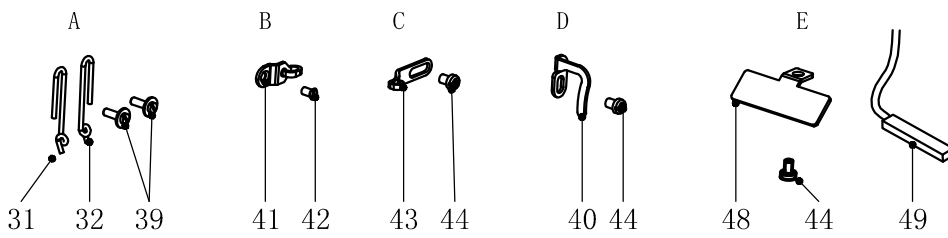
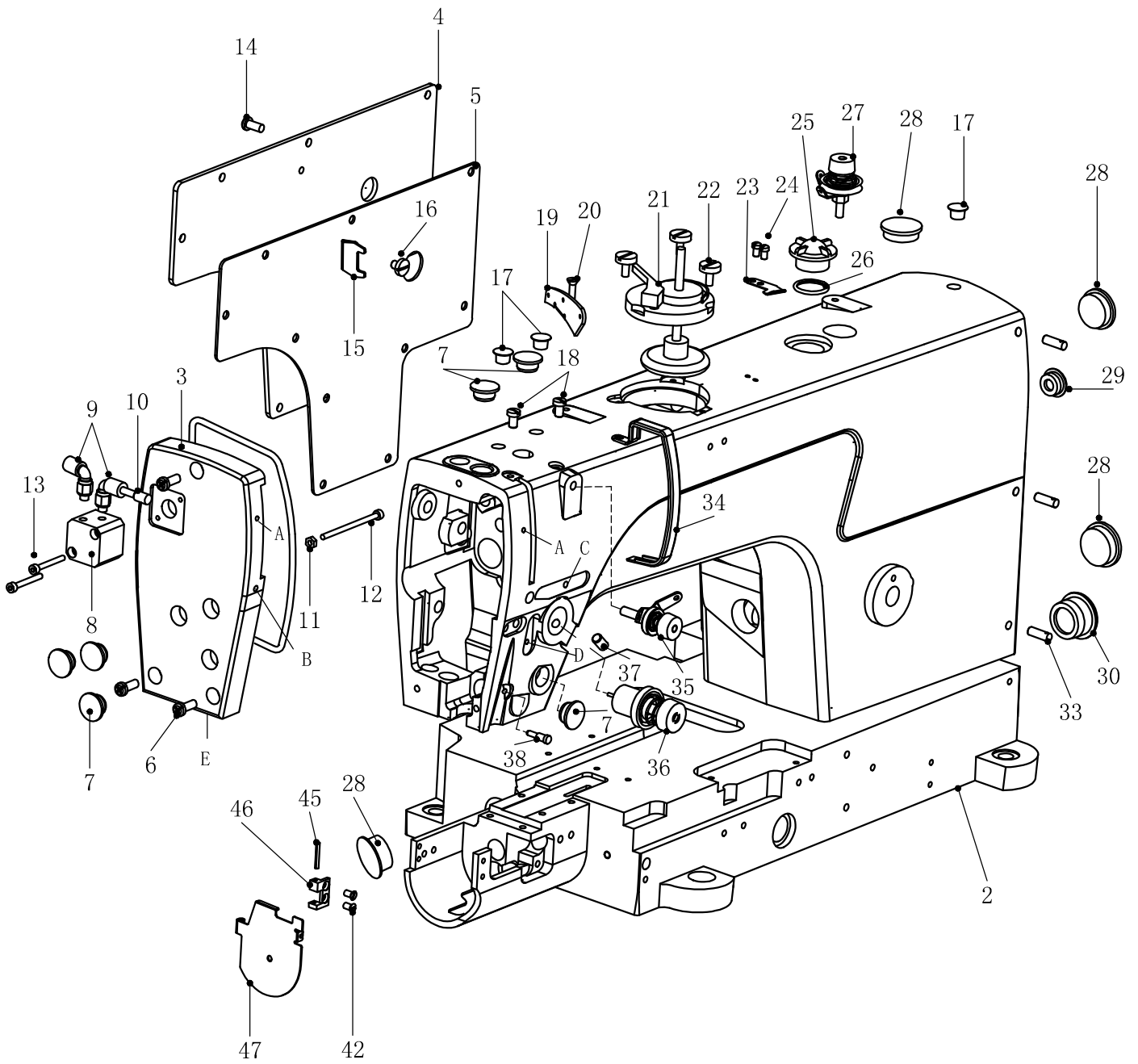
- 1.Remove the head cover, rolling Jane and front cover
- 2.Remove the locking pin group and press the foot
- 3.Install chain type special machine needle
- 4.Install chain type pin plate
- 5.Set the needle to the highest setting so that the distance between needle tip and needle plate C is equal to the height of measuring block D.
- 6.The bending needle shaft part is installed at the bottom.
- 7.When the needle moves to the lowest point, the distance from the last point of the curved needle is about 2.5 mm.
- 8.When the handwheel rotates in the working direction, the needle rises to the point where the curved needle tip contacts the lower end of the needle slot, and the gap between the curved needle tip and the needle is about 0.02mm
- 9.Keep the curved needle and the machine needle moving forward and backward in unison.
- 10.Before the curved needle approaches the curved needle, the needle guard touches the curved needle to ensure that the curved needle does not collide with the curved needle.
11. after the looper hooks the thread, it is within the range of the thread drawing rod, and the tip of the thread drawing rod is just aligned with the left side of the thread passing hole of the looper. At this time, the distance between the needle and the tip of the thread drawing rod is about 4mm.
12. Mount the chain needle plate and press the foot.
13. Adjust the electric control parameters.
14. After adjustment, install the computer head cover.
15. Install the front cover curling cylinder.

零件手册
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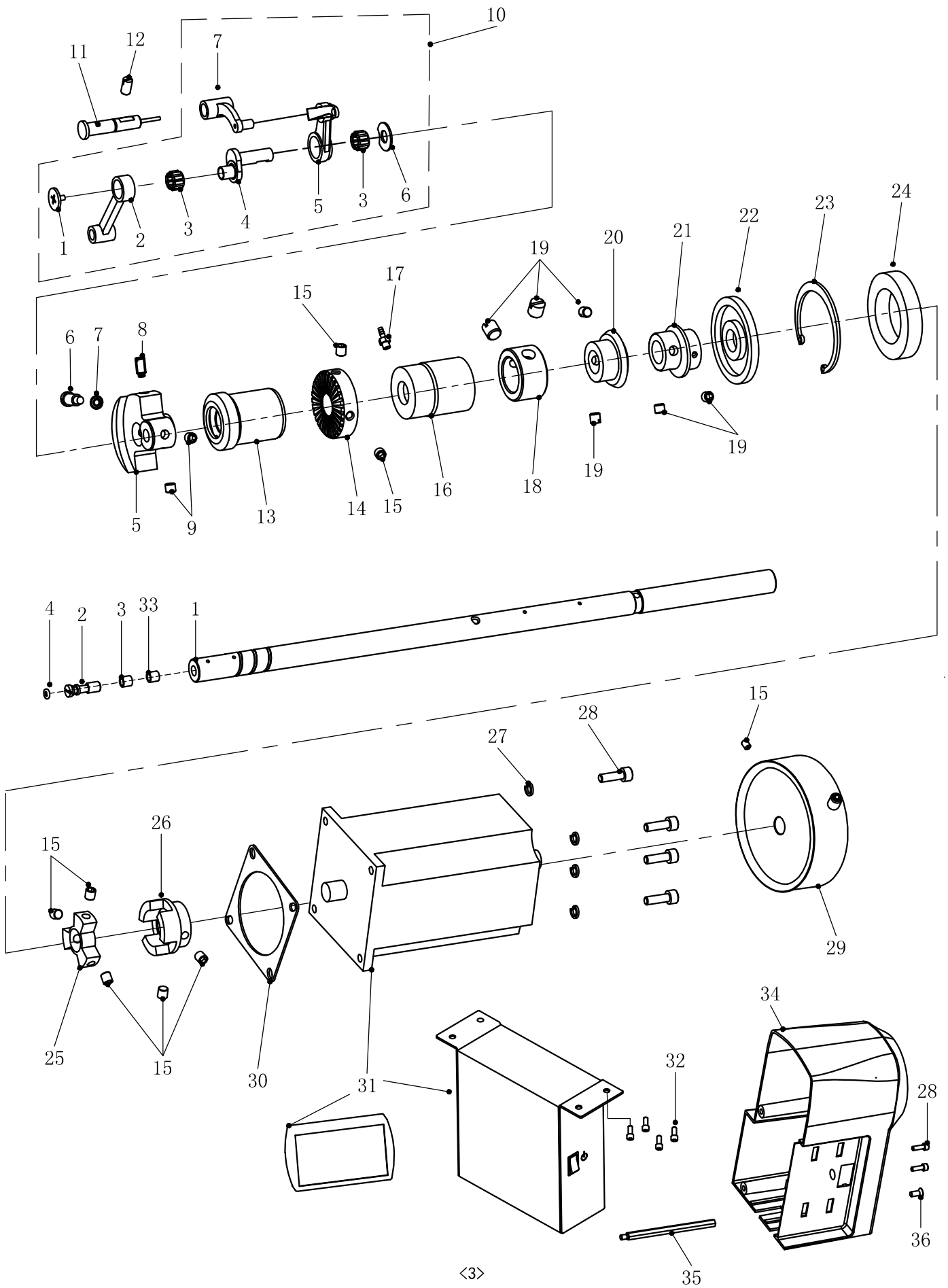
A. 机架部份/Rack part



A. 机架部份/Rack part

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970A-1	63970A001	63970机头/63972Machine frame	1
2	63970A-2	63970A002	63972底座/63972Pedestal	1
3	63970A-3	63970A003	面板/Front panel	1
4	63970A-4	63970A004	侧盖板/The side cover	1
5	63970A-5	63970A005	侧盖板防油垫/Side cover oil-proof pad	1
6	63970A-6	LD00133	一十字复合槽盘头螺钉SM3/16"32-12/Screw	3
7	63970A-7	63970A007	φ12橡皮塞/Rubber stopper	7
8	63970A-8	927Q-1-69	松线气缸SDA12×5/Loose wire cylinder	1
9	63970A-9	927Q-2-29	L型接头PL04M5C/L type joint	2
10	63970A-10	63970A010	气管塞PP4/Tracheal plug	1
11	63970A-11	LD00556	内六角圆柱头螺钉M3×50/Screw	1
12	63970A-12	LM00031	M3螺母/Nut	1
13	63970A-13	LD00468	内六角圆柱头螺钉(镀镍)M3×25/Screw	1
14	63970A-14	LD00137	一十字复合槽盘头螺钉SM3/16"32-10/Screw	10
15	63970A-15	63970A015	侧杆连板限位/Connecting rod limit	1
16	63970A-16	LD00007	一字球面圆柱头螺钉SM3/16"32-5.5/Screw	1
17	63970A-17	63970A017/J02-14	橡皮塞φ8.5/rubber stopper	4
18	63970A-18	LD00027	一字球面圆柱头螺钉SM3/16"32-7.5/Screw	2
19	63970A-19	63970A019/J02-04	上过线板/Wire passing board	1
20	63970A-20	LD00344	一字沉头球面螺钉SM11/64"40-8/Screw	2
21	63970A-21	63970A021	绕线器组件/Winder assembly	1
22	63970A-22	LD00307	一字圆柱头螺钉M4×10/Screw	3
23	63970A-23	63970A023/J02-61	割线刀片/Cutting blade	1
24	63970A-24	LD00341	一字圆柱头螺钉SM9/64"40-5.5/Screw	2
25	63970A-25	V08-30	油窗/Oil window	1
26	63970A-26	0XQ00016	O型圈φ24×φ2.5/O ring	1
27	63970A-27	63970A027/J14-28	夹线器/Yarn trapper	1
28	63970A-28	9588A107	橡皮塞φ20.5/rubber stopper	4
29	63970A-29	927D012	橡皮塞φ13.5/rubber stopper	1
30	63970A-30	V01-43	橡皮塞φ23/rubber stopper	1
31	63970A-31	63970A031/J02-20	右过线钩/Right cross line hook	1
32	63970A-32	63970A032/J02-20-1	左过线钩/Left cross line hook	1
33	63970A-33	63970A033	过线销/Thread passing pin	3
34	63970A-34	63970A034	挑线杆护罩/Take-up bar shield	1
35	63970A-35	63970A0035	辅助夹线器/Auxiliary wire clamp	1
36	63970A-36	63970A0036	夹线器组件/Clamp as-wire	1
37	63970A-37	LD00209	一字内紧定螺钉SM15/64"28-10/Screw	1
38	63970A-38	9588A132	扭簧限位销/Torsion spring limit pin	1
39	63970A-39	63970A039/J02-27	压板螺钉/Screw	2
40	63970A-40	63970A040	缓线钩/Slow line hook	1
41	63970A-41	63970A041/J02-28	左过线/Right crossing	1
42	63970A-42	LD00340	一字沉头螺丝SM9/64"40-6/Screw	3
43	63970A-43	63970A043	右过线/Right crossing	1
44	63970A-44	LD00158	一十字复合槽盘头螺丝SM9/64"40-5.5/Screw	3
45	63970A-45	TXX00018	弹性销φ2.2×16/Elastic pin	1
46	63970A-46	63970A046	旋梭盖支架/Swivel cover support	1
47	63970A-47	63970A047/J18-57	旋梭盖/Rotary shuttle cover	1
48	63970A-48	63970A048	LED灯架/Lamp holder	1
49	63970A-49	998A154	LED灯(TD4-5V)/Lamp	1
				1
				1

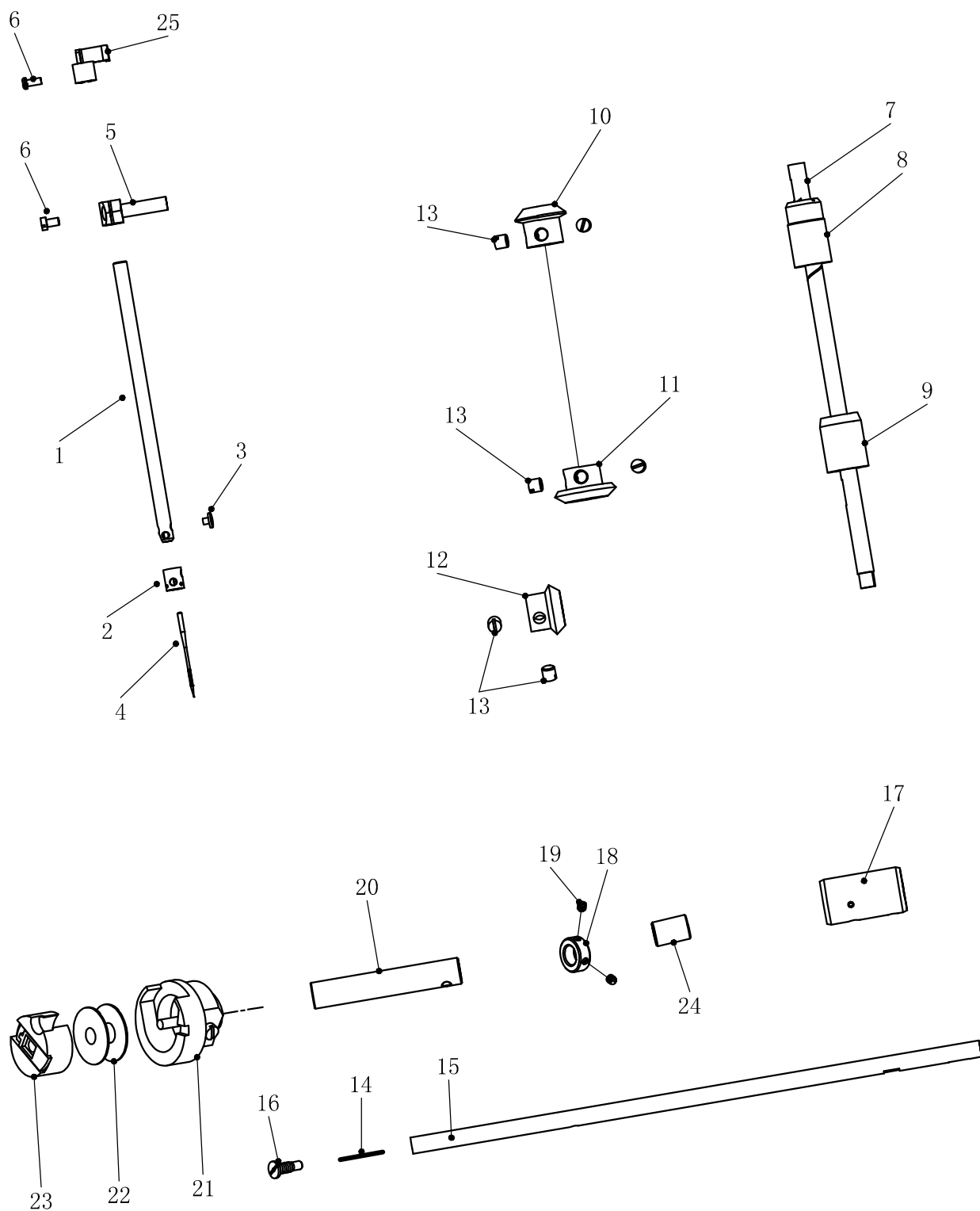
B. 上轴组件/Upper shaft assembly



B. 上轴组件/Upper shaft assembly

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970B-1	63970B001	上主轴/Upper spindle	1
2	63970B-2	V02-14	油量调节销/Oil quantity adjusting pin	1
3	63970B-3	V02-15	油量调节销橡胶套/Rubber sleeve	1
4	63970B-4	0XQ00011	O型圈 $\phi 6.46 \times \phi 1.78$ /O-ring	1
5	63970B-5	63970B005	针杆曲柄/Needle bar crank	1
6	63970B-6	V02-18	针杆曲柄定位螺钉/Set screw	1
7	63970B-7	0XQ00013	O型圈 $\phi 9.2 \times \phi 2.4$ /O-ring	1
8	63970B-8	V02-20	针杆曲柄固定螺钉/Set screw	1
9	63970B-9	LD00505	一字内紧定螺钉SM1/4"40-5.2/Screw	2
10	63970B-10	63970B010	挑线杆组件/Take up bar assembly	1
10-1	63970B-10-1	63970B01001	挑线曲柄螺钉(左旋)/Screw	1
10-2	63970B-10-2	63970B01002	针杆连杆/Needle bar link	1
10-3	63970B-10-3	63970B01003	滚针轴承 $\phi 12 \times \phi 8 \times 7.8$ /Needle bearing	2
10-4	63970B-10-4	63970B01004	挑线曲柄/Thread take-up crank	1
10-5	63970B-10-5	63970B01005	挑线杆/Take-up bar	1
10-6	63970B-10-6	63970B01006/J03-46	垫片/Shim	1
10-7	63970B-10-7	63970B01007	挑线连杆/Thread take-up connecting rod	1
11	63970B-11	63970B011	挑线连杆销/Take up link pin	2
12	63970B-12	LD00209	一字紧定SM15/64"28-10/Screw	1
13	63970B-13	63970B013	上轴前套/Upper shaft front sleeve	1
14	63970B-14	63970B014/J14-20	绕线轮/Winder wheel	1
15	63970B-15	LD00003	内六角螺钉M6×6/Screw	9
16	63970B-16	63970B016	上轴中套/Upper shaft middle sleeve	1
17	63970B-17	63970B017/J18-22	过油螺钉/Oil screw	1
18	63970B-18	V04-28	挡圈/Retaining ring	1
19	63970B-19	LD00195	一字紧定SM1/4"40-6/Screw	6
20	63970B-20	63970B020	上轴斜齿轮/Yarn trapper	1
21	63970B-21	63970B021	针距摆动偏心轮/Needle pitch swing eccentric	1
22	63970B-22	YF00020	油封/Oil seal	1
23	63970B-23	TDQ00010	A型孔用弹性挡圈/Inner snap ring	1
24	63970B-24	ZC00043	双面防尘深沟球轴承/rubber stopper	1
25	63970B-25	V20-18	联轴器A/Coupling A	1
26	63970B-26	V20-16	联轴器B/Coupling B	1
27	63970B-27	DQ00010	弹性垫圈M5/Elastic washer	4
28	63970B-28	LD00092	内六角圆柱头M5×16/Screw	6
29	63970B-29	63970B029/J14-23	手轮/Screw	1
30	63970B-30	63970B030/J14-32	电机防油垫圈/Oil washer	1
31	63970B-31	63970B031	电控组件/Screw	1
32	63970B-32	LD00233	内六角圆柱头M5×10/Screw	4
33	63970B-33	V02-13	曲柄油量限制毡/Wool felt	1
34	63970B-34	63970B034	直驱一体罩壳/Cover piece	1
35	63970B-35	63970B035	支撑六角柱/Cover piece	1
36	63970B-36	LD00544	内六角沉头螺钉M5×12/Screw	1

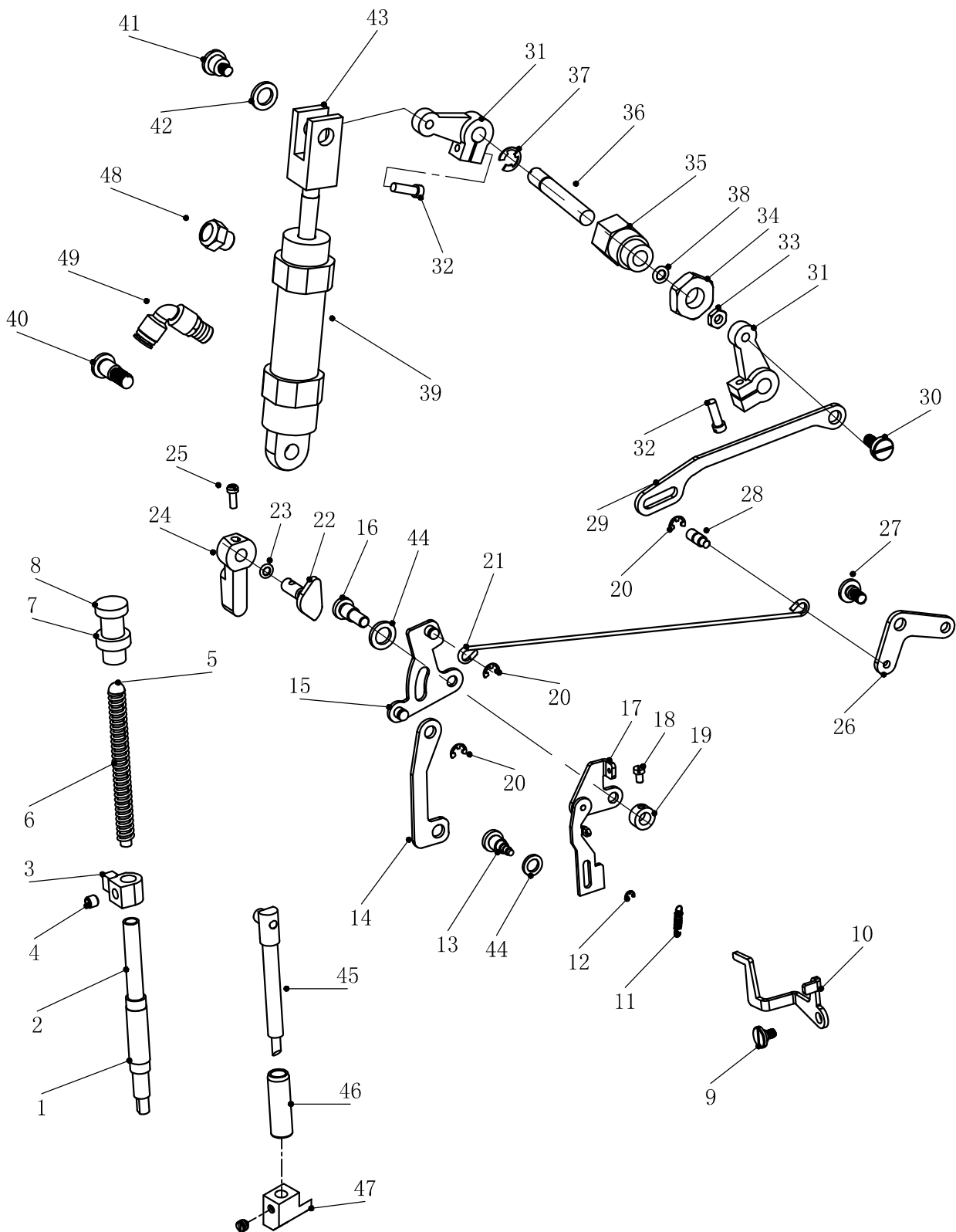
C. 针杆、竖轴、旋梭传动组件/Drive assembly



C. 针杆、竖轴、旋梭传动组件/Drive assembly

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970C-1	63970C001/V15-12	381针杆/Needle bar	1
2	63970C-2	V15-14	针杆线钩/Needle bar thread hook	1
3	63970C-3	LD00085	一字球面圆柱头螺钉SM1/8"44-3.2/Screw	1
4	63970C-4	BZ1-34	锁式机针/Lock the needle DP×5 18#	1
4-1	63970C-4-1	BZ1-34L	锁式机针/Lock the needle DP×5 11#	1
4-2	63970C-4-2	BZ1-34M	锁式机针/Lock the needle DP×5 14#	1
4-3	63970C-4-3	BZ1-36	链式机针/Lock the needle DV×57 18#	1
5	63970C-5	63970C005	针杆连接柱/Swing shaft needle	1
6	63970C-6	LD00134	一十字复合槽盘头螺钉SM9/64"40-8/Screw	2
7	63970C-7	63970C007	竖轴/Vertical axis	1
8	63970C-8	63970C008	竖轴上套/Upper sleeve of vertical shaft	1
9	63970C-9	V06-04	竖轴下套/Lower sleeve of vertical shaft	1
10	63970C-10	63970C010	竖轴上齿轮/Gear on vertical shaft	1
11	63970C-11	63970C011	竖轴下齿轮/vertical shaft lower gear	1
12	63970C-12	63970C012	旋梭齿轮/Rotary shuttle gear	1
13	63970C-13	LD00195	一字紧定SM1/4"40-6/Screw	6
14	63970C-14	63970C014	过油滤芯（市场先找样品再出图）/J01-01	1
15	63970C-15	63970C015	旋梭轴/Rotary shuttle shaft	1
16	63970C-16	63970C016/J22-01	旋梭前端螺钉/Screw	1
17	63970C-17	63970C017	旋梭后套/Rotary shuttle bake sleeve	1
18	63970C-18	63970C018	旋梭轴挡圈Φ7.94×Φ14-7/Check ring	1
19	63970C-19	LD00178	内六角紧定螺钉SM11/64"40-3.2/Screw	2
20	63970C-20	63970C020	旋梭前套/Rotary shuttle front cover	1
21	63970C-21	63970C021/J06-01	旋梭/Shuttle	1
22	63970C-22	63970C022/J06-02	1.6梭壳/1.6 Shuttle shell	1
23	63970C-23	63970C023/J06-03	1.6梭芯/1.6 Shuttle core	1
24	63970C-24	63970C024	多用铜套/Copper sleeve	1
25	63970C-25	63970C025	链式打线架/Fight line	1

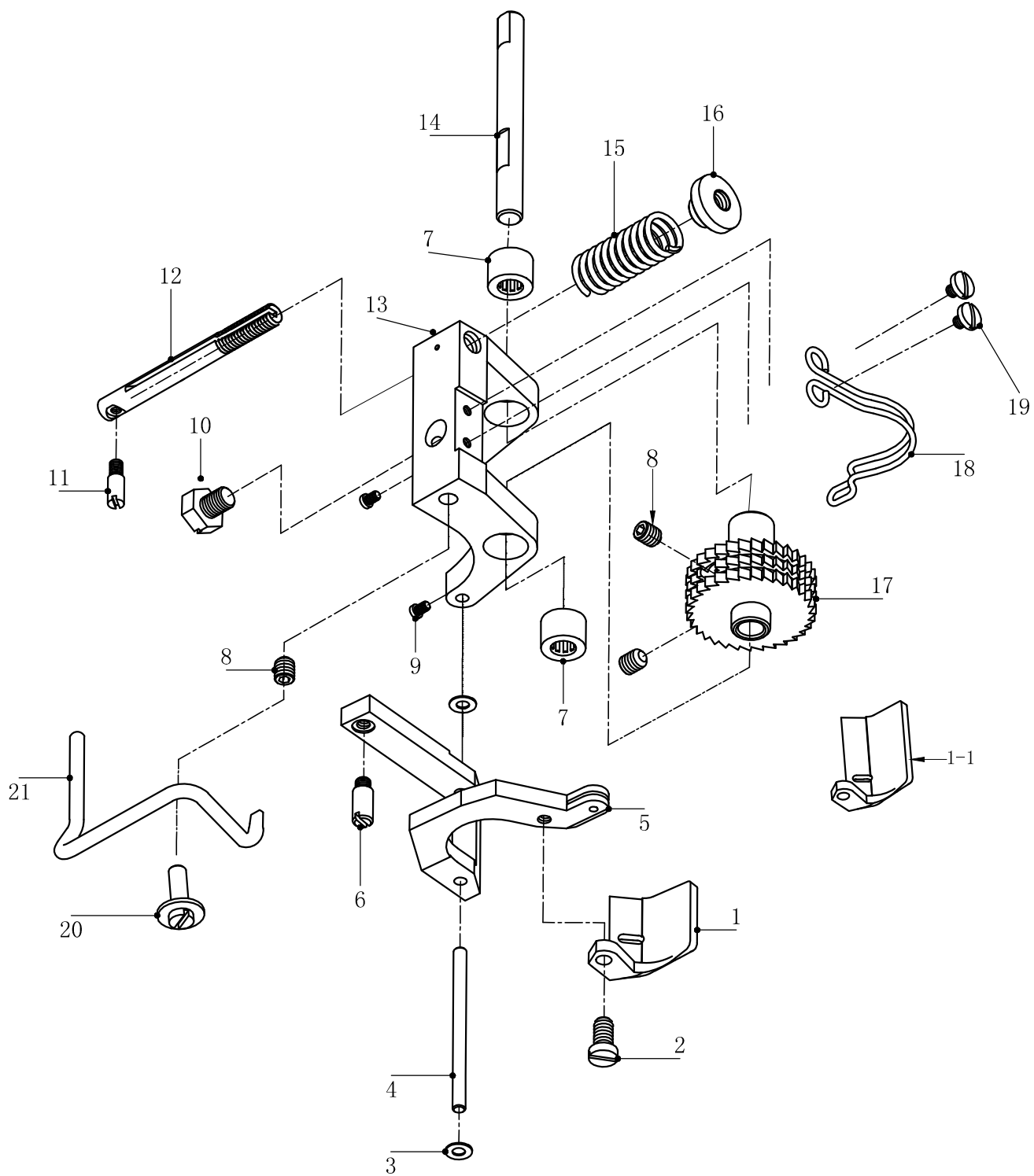
D. 抬压脚组件/Presser foot lifting assembly



D. 抬压脚组件/Presser foot lifting assembly

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970D-1	63970D001	压杆套/Compression rod sleeve	1
2	63970D-2	63970D002	压杆轴/Compression bar shaft	1
3	63970D-3	63970D003	压杆导向块/Pressure bar guide block	1
4	63970D-4	LD00505	一字内紧定螺钉SM1/4"40-5.2/Screw	1
5	63970D-5	V03-03	压杆顶杆/Pressure bar	1
6	63970D-6	V03-04	压杆弹簧/Compression bar spring	1
7	63970D-7	V03-02-G	调压螺母/Pressure regulating nut	1
8	63970D-8	V03-01-G	调压螺钉/Pressure regulating screw	1
9	63970D-9	63970D009	张力释放连杆轴位螺钉/Axial screw	1
10	63970D-10	63970D010	张力释放连杆/Tension release link	1
11	63970D-11	63970D011	张力拉簧A/Drag spring	1
12	63970D-12	TDQ00032	E型卡簧 $\phi 3$ /E-type circlip	1
13	63970D-13	63970D013	张力释放板轴/Tension release plate shaft	1
14	63970D-14	63970D014	提拉支架/Lifting bracket	1
15	63970D-15	63970D015	摆动支架/Swing support	1
16	63970D-16	63970D016	抬压脚定位螺钉/Set screw	1
17	63970D-17	63970D017	松线组件/Loose wire assembly	1
18	63970D-18	LD00127	一字圆柱头螺钉SM9/64"40-6/Screw	1
19	63970D-19	D5-39	轴位挡圈/Axial retaining ring	1
20	63970D-20	TDQ00002	E型卡簧 $\phi 5$ /E-type circlip	3
21	63970D-21	63970D021	提拉杆/Lifting rod	1
22	63970D-22	63970D022	压脚扳手凸轮部件/Com components	1
23	63970D-23	OXQ00038	压脚扳手轴O型圈 $\phi 7.35 \times \phi 1.8/0$ -ring	1
24	63970D-24	V03-15	压脚扳手/Presser foot wrench	1
25	63970D-25	LD00280	一十字复合槽盘头螺钉SM9/64"40-11.5/Screw	1
26	63970D-26	63970D026	压脚气缸连杆/Cylinder connecting rod	1
27	63970D-27	63970D027	压脚提拉轴位螺钉/Axial screw	1
28	63970D-28	63970D028	轴位螺钉/Axial screw	1
29	63970D-29	63970D029	侧板连杆/Side plate connecting rod	1
30	63970D-30	63970D030	抬压脚气缸摆动臂轴位螺钉/Axial screw	1
31	63970D-31	63970D031	摆动臂/Swing arm	2
32	63970D-32	LD00188	一字圆柱头螺钉SM3/16"28-15.5/Screw	1
33	63970D-33	LM00067	螺母SM15/64"28-4/Nut	1
34	63970D-34	LM00068	螺母M16 $\times 1.5$ -4/Nut	1
35	63970D-35	63970D035	螺纹管/Threaded pipe	1
36	63970D-36	63970D036	螺纹管轴/Threaded pipe shaft	1
37	63970D-37	TDQ0003	E型卡簧 $\phi 7$ /E-type circlip	1
38	63970D-38	OXQ00023	O型圈 $\phi 12$ 线径2/0-ring	1
39	63970D-39	927Q-1-49	抬压脚气缸/Cylinder	1
40	63970D-40	63970D040	压脚气缸固定轴位螺钉/Axial screw	1
41	63970D-41	63970D041	叉臂轴位螺钉/Axial screw	1
42	63970D-42	DQ00020	叉臂轴位螺钉垫片/Shim	1
43	63970D-43	63970D043	叉型零件/Fork parts	1
44	63970D-44	DQ00149	红钢纸垫圈 $\phi 14 \times \phi 8 \times 1$ /Shim	2
45	63970D-45	63970D045	提拉杆/Lift rod	1
46	63970D-46	63970D046	提拉杆套/Lift rod set	1
47	63970D-47	63970D047	抬压脚顶块/Convex piece	1
48	63970D-48	927Q-5-07	V型消声器BSLM-G01/muffler	1
49	63970D-49	927Q-2-28	L型接头/L joint APL4-01	1
50	63970D-50	LD00023	内六角紧定螺钉SM11/64"40-5/Screw	1

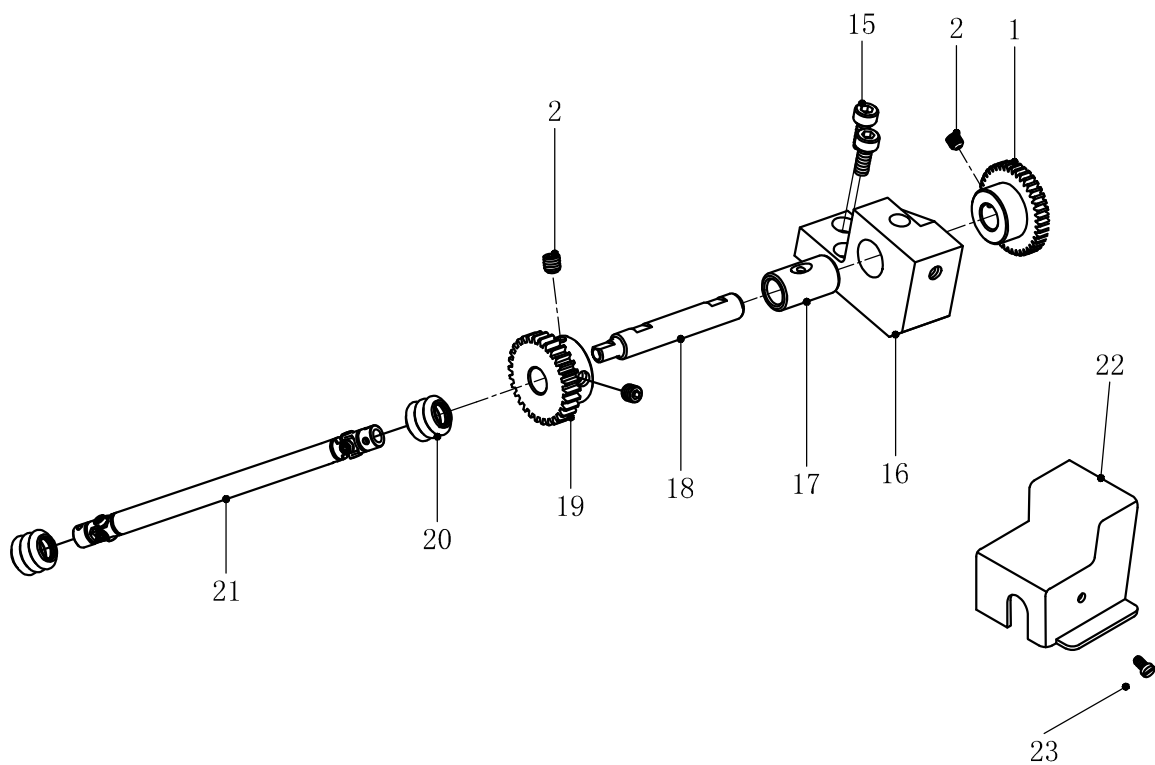
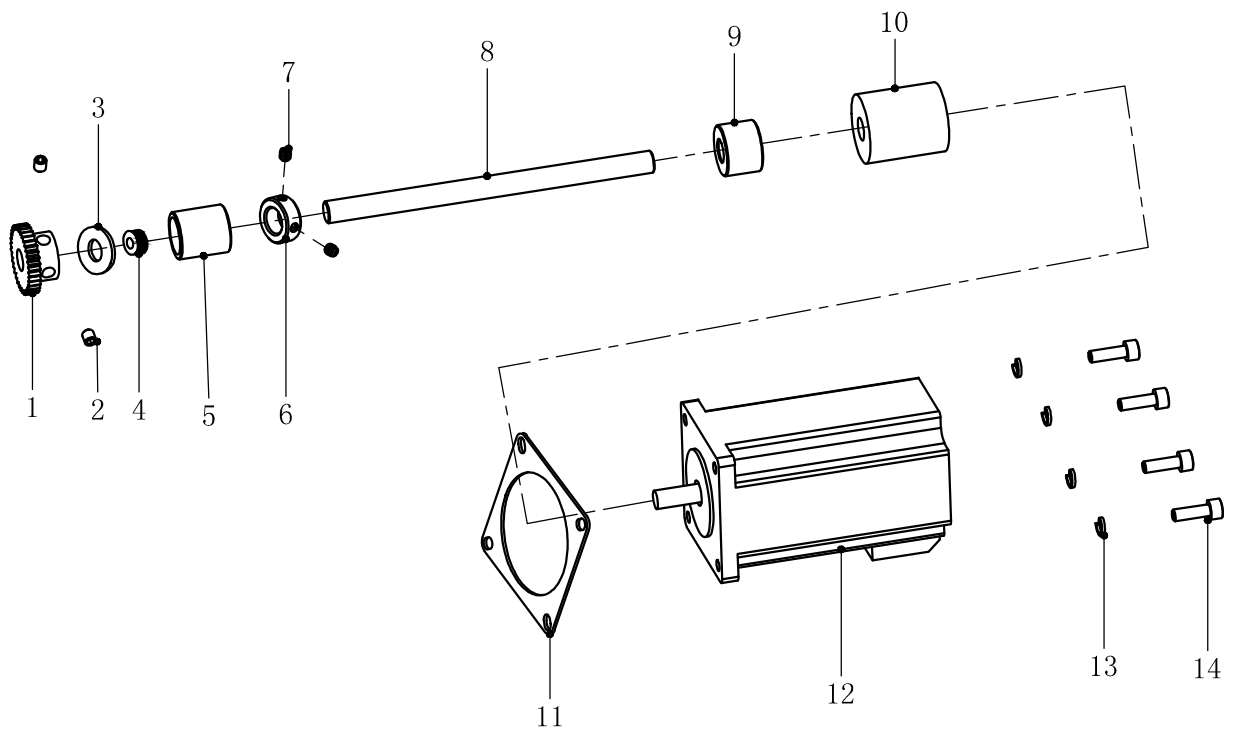
E. 上送料齿轮组件/Upper feeding gear assembly



E. 上送料齿轮组件/Upper feeding gear assembly

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970E-1	63970E001/J05-01	压脚 (H) /Presser foot	1
1-1	63970E-1-1	63970E001-1/J05-01-A	压脚 (2.2) Presser foot	1
1-2	63970E-1-2	63970E001-2/J05-01-B	压脚 (2.0) Presser foot	1
1-3	63970E-1-3	63970E001-3/J05-01-C	压脚 (1.6) Presser foot	1
1-4	63970E-1-4	63970E001-4/J05-01-D	压脚 (1.0) Presser foot	1
2	63970E-2	LD00537	针压脚定位螺钉SM9/64"40-7/Screw	1
3	63970E-3	DQ00044	压脚支架轴垫圈Φ3/Washers	2
4	63970E-4	63970E004/J05-06	压脚支架轴/Presser foot support shaft	1
5	63970E-5	63970E005/J05-04	压脚支架/Presser foot bracket	1
6	63970E-6	63970E006/J05-05	压脚支架螺销/Screw pin for foot support	1
7	63970E-7	ZC00002	滚针轴承/Needle roller bearing	2
8	63970E-8	LD00360	一字紧定螺钉 SM7/32"32-5/Screw	3
9	63970E-9	LD00538	开槽圆柱头螺钉SM3/32"56-5.3/Screw	2
10	63970E-10	LD00367	外六角开槽螺钉SM7/32"32-6 /Screw	1
11	63970E-11	63970E011/J05-11	调节杆螺销/Thread pin	1
12	63970E-12	63970E012/J05-10	压脚支架调节杆/Adjusting rod	1
13	63970E-13	63970E013/J05-25	齿形送料上轮支架/Gear feeding bracket	1
14	63970E-14	63970E014/J05-28	齿形送料上轮轴/Toothed feeding wheel shaft	1
15	63970E-15	63970E015/J05-29	调节杆簧/Adjust the bar spring	1
16	63970E-16	63970E016/J05-30	调节杆螺母SM7/32"32/Nut	1
17	63970E-17	63970E017	齿形送料上轮 (厚料) /Toothed feeding wheel	1
18	63970E-18	63970E018/J05-34	导布钢丝/Fabric guide wire	1
19	63970E-19	LD00350	一字圆柱头螺钉SM1/8"44-7/Screw	2
20	63970E-20	63970A039/J02-27	压板螺钉/Screw	1
21	63970E-21	63970E021/J10-15	机针冷却铜管/Needle cooling copper pipe	1

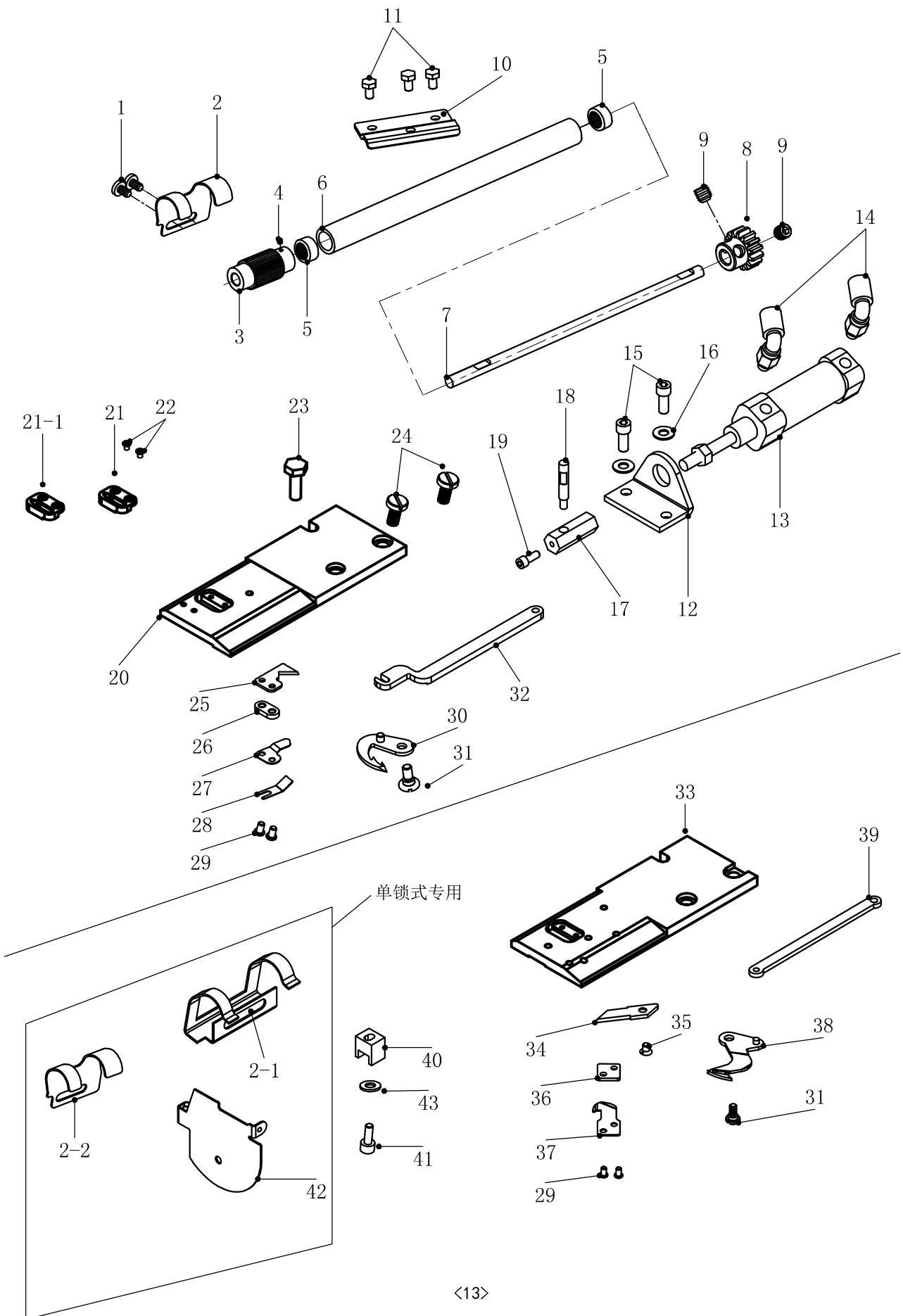
F. 电机送料组件/Motor feeding assembly



F. 电机送料组件/Motor feeding assembly

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970F-1	63970F001/J07-18	针距齿轮 (41齿) /Stitch gear (41teeth)	2
2	63970F-2	LD00083	内六角紧定M5×5/Screw	6
3	63970F-3	DQ00079	不锈钢平垫 $\phi 18 \times \phi 10-1.3$ /Flat pad	1
4	63970F-4	YF00026	下过渡齿轮轴油封/Oil seal	1
5	63970F-5	63970F005/J01-32	送料前套/Feed front sleeve	1
6	63970F-6	63970F006/J07-14	齿轮轴挡圈/Retaining ring	1
7	63970F-7	LD00143	内六角紧定螺钉SM15/64"28-6/Screw	2
8	63970F-8	63970F008/J07-12	送料轴/Feeding shaft	1
9	63970F-9	63970F009/J01-42	送料后套/Feed back sleeve	1
10	63970F-10	63970F010	梅花联轴器30-35内孔8-9.528/Coupling	1
11	63970F-11	63970F011	下送料电机防油垫/Stepper motor	1
12	63970F-12	63970F012/J21-22	下送料电机 60电机高100/Stepper motor	1
13	63970F-13	DQ00070	$\phi 4$ 弹簧垫片/Spring washer	4
14	63970F-14	LD00220	内六角圆柱头螺钉M4×16/Screw	4
15	63970F-15	LD00094	内六角圆柱头螺钉M5×12/Screw	2
16	63970F-16	63970F016/J07-20	针距齿轮支架/Needle pitch gear support	1
17	63970F-17	63970F017/J07-21	针距齿轮轴铜套/Copper sleeve	1
18	63970F-18	63970F018/J07-23	针距齿轮轴/Needle pitch gear shaft	1
19	63970F-19	63970F019/J07-24	下送料齿轮 (30齿) /Bottom feeding gear	1
20	63970F-20	MA6-01	万向节护套/Universal joint sheath	2
21	63970F-21	63970F021/J07-46	绕行连接轴/Winding connection shaft	1
22	63970F-22	63970F022	针距齿轮罩/Winding connection shaft	1
23	63970F-23	LD00348	固定螺钉SM7/32"32/Screw	1

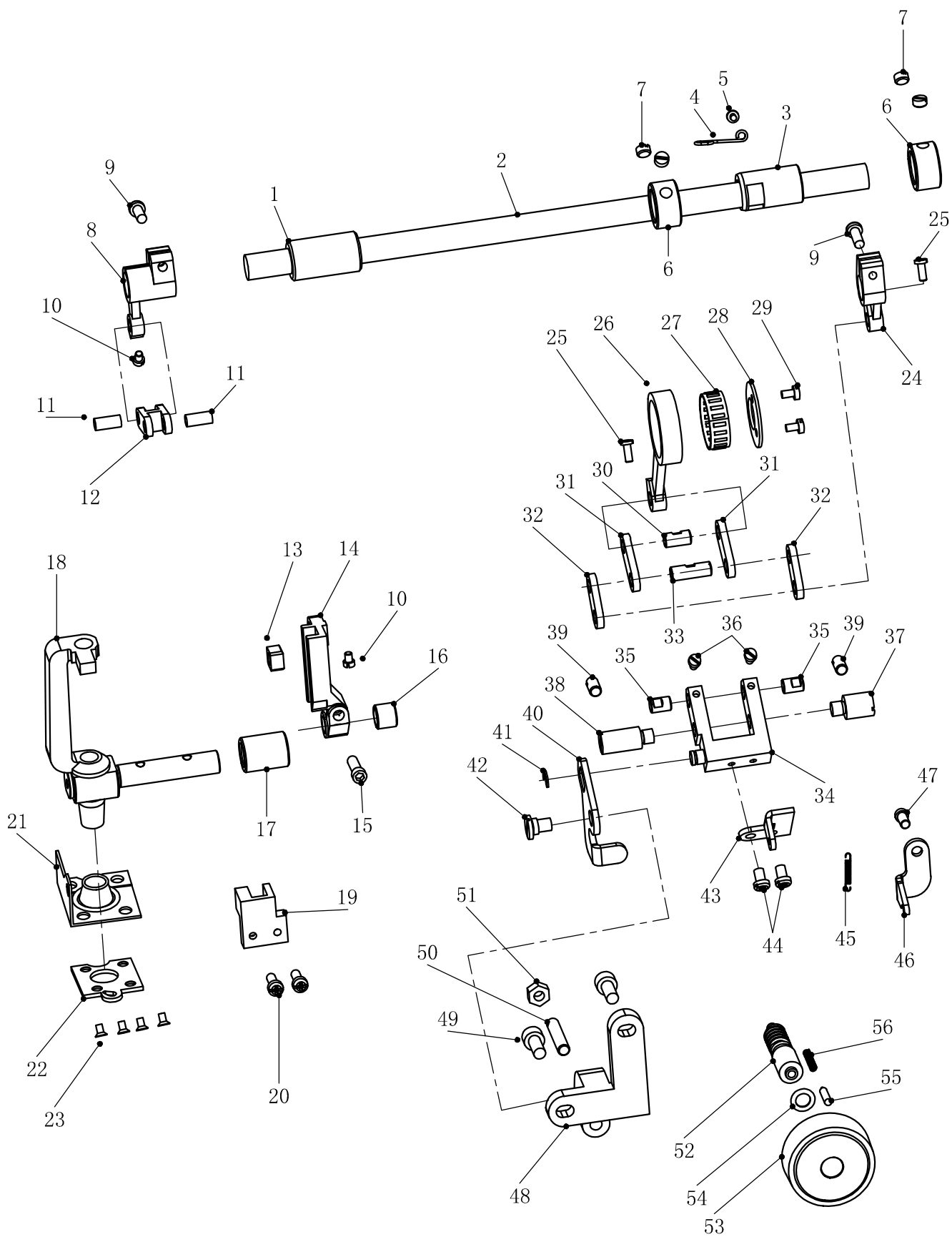
G. 针板部分/Needle plate part



G. 针板/Needle plate part

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970G-1	LD00158	一十字复合槽盘头螺钉SM11/64"40-5.5/Screw	2
2	63970G-2	63970G002	锁链互换下挡料板/Retaining plate	1
2-1	63970G-2-1	63970G002-1	单锁式下挡料板/Retaining plate	1
2-2	63970G-2-2	63970G002-2	单锁式下挡料板(小裤脚)/Retaining plate	1
3	63970G-3	63970G003	送料下轮/Lower feeding wheel	1
4	63970G-4	LD00331	一字紧定螺钉SM7/32"32-3/Screw	1
5	63970G-5	ZC00002	滚针轴承 $\phi 11.11 \times \phi 6.35-7.94$ /Needle bearing	2
6	63970G-6	63970G006	送料下轮轴座/Shaft seat	1
7	63970G-7	63970G007	送料下轮轴/Lower wheel shaft	1
8	63970G-8	63970G008/J07-41	下送料齿轮(15齿)/Bottom feeding gear	1
9	63970G-9	LD00359	内六角紧定螺钉M5 \times 4/Screw	4
10	63970G-10	63970G010	送料下轮轴座压板/Shaft base pressing plate	1
11	63970G-11	LD00305	外六角螺钉SM3/16"32-7/Screw	3
12	63970G-12	63970G012/J11-41	剪线气缸座/shear wire cylinder seat	1
13	63970G-13	927Q-1-04	剪线气缸 PB16 \times 10U/Shear wire cylinder	1
14	63970G-14	927Q-2-29	L型接头 PL4-M5C/L joint	2
15	63970G-15	LD00026	内六角圆柱头螺钉M4 \times 10/Screw	2
16	63970G-16	DQ00005	平垫圈 $\phi 8.4 \times \phi 4.2-1.1$ /Flat washer	2
17	63970G-17	63970G017/J11-42	气缸连接柱/Cylinder connection column	1
18	63970G-18	63970G018	气缸连接柱销/Connecting pin	1
19	63970G-19	LD00054	内六角圆柱头螺钉M3 \times 8/Screw	1
20	63970G-20	63970G020	链式针板/Chain needle plate	1
21	63970G-21	63970G021	过线器(2.2)/Threading device	1
21-1	63970G-21-1	63970G021-1	过线器(1.8)/Threading device	1
22	63970G-22	LD00639	十字沉头螺钉M2 \times 3/Screw	2
23	63970G-23	LD00274	外六角螺钉SM11/64"40-13.5/Screw	1
24	63970G-24	LD00190	一字圆柱头螺钉SM11/64"40-7.5/Screw	2
25	63970G-25	63970G025/J19-32	链式定刀/Chain-set knife	1
26	63970G-26	63970G026/J19-33	定刀垫块/Fixed knife cushion block	1
27	63970G-27	63970G027/J19-34	动刀压片/Tablet	1
28	63970G-28	63970G028/J19-35	动刀小压片/Small tablet	1
29	63970G-29	LD00354	一字圆柱头螺钉SM3/32"56-5.5/Screw	4
30	63970G-30	63970G030/J19-38	链式动刀/Chain moving knife	1
31	63970G-31	63970G031/J11-09	动刀轴位螺钉/Axial screw	2
32	63970G-32	63970G032	链式动刀拉杆/Moving knife pull rod	1
33	63970G-33	63970G033	锁式针板/Needle plate	1
34	63970G-34	63970G034/J11-10	锁式定刀/Fixed knife	1
35	63970G-35	LD00353	一字沉头螺钉M3 \times 4/Screw	1
36	63970G-36	63970G036/J11-49	动刀压片垫片/Tablet gasket	1
37	63970G-37	63970G037/J11-43	动刀压片/Moving blade pressing	1
38	63970G-38	63970G038/J11-07	锁式动刀/Moving knife	1
39	63970G-39	63970G039	锁式动刀连杆/Moving knife connecting rod	1
40	63970G-40	63970G040/J07-31	旋梭定位钩/Positioning hook	1
41	63970G-41	LD00193	内六角圆柱头螺钉 M3 \times 10	1
42	63970G-42	63970G042/J07-35	旋梭支架盖/Rotary hook support cover	1
43	63970G-43	DQ00044	压脚支架轴垫圈 $\phi 3$ /Washers	1

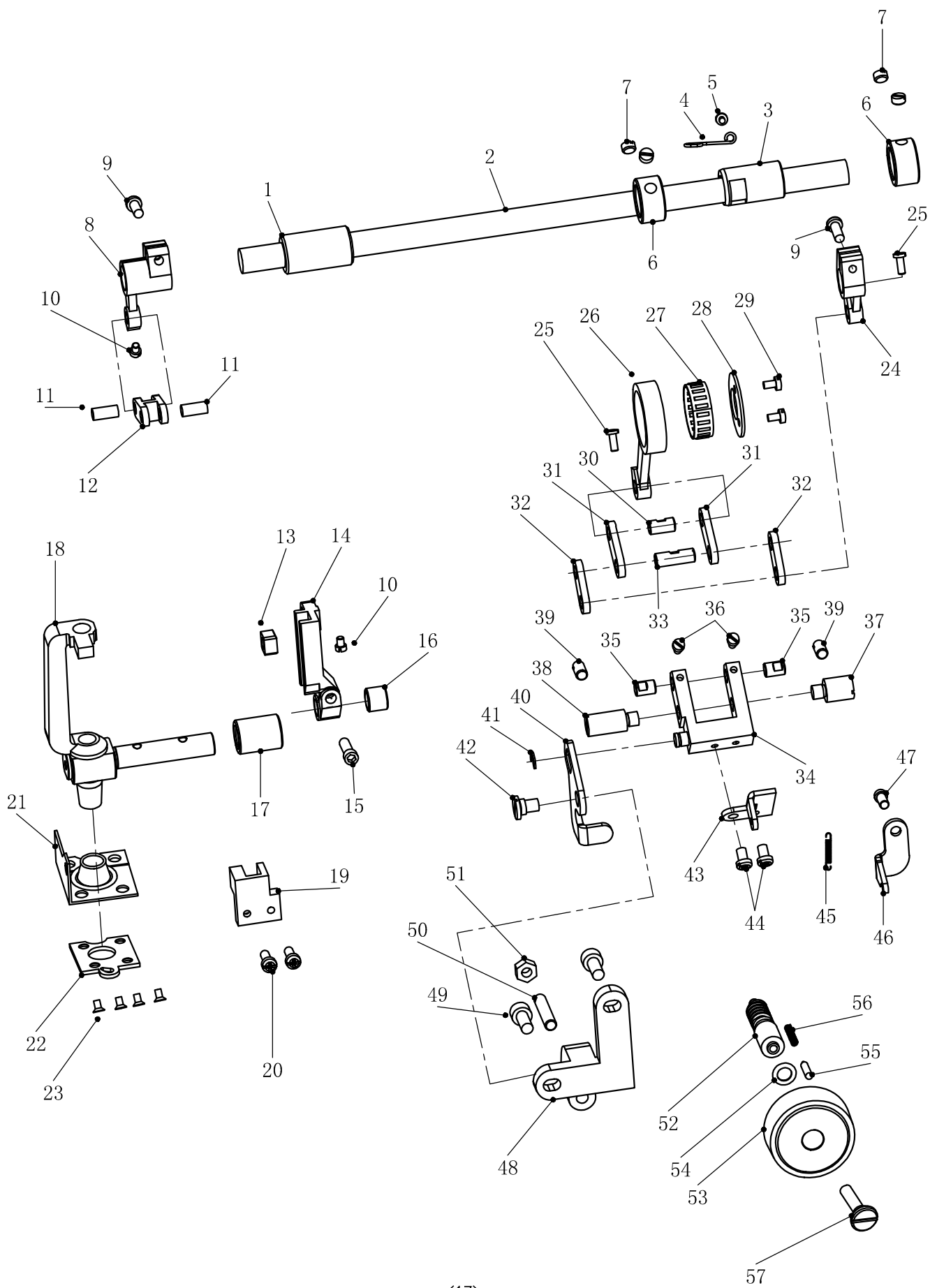
H. 针送料组件/Needle feed assembly



H. 针送料组件/Needle feed assembly

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970H-1	63970H001	摆动轴前套/Front cover	1
2	63970H-2	63970H002	摆动轴/Oscillating shaft	1
3	63970H-3	63970H003	摆动轴后套/Back cover	1
4	63970H-4	63970H004	过油管支架/Oil pipe support	1
5	63970H-5	LD00204	一字球面圆柱头螺钉SM9/64"40-6/Screw	1
6	63970H-6	A08-12	摆动轴挡圈/Retaining ring	2
7	63970H-7	LD00003	内六角紧定螺钉M6×6/Screw	4
8	63970H-8	63970H008	针送料轴腕/Wire clamp cylinder	1
9	63970H-9	LD00336	一十字复合槽盘头螺钉SM3/16"28-12/Screw	1
10	63970H-10	LD00160	一字圆柱头螺钉SM9/64"40-4.4/Screw	2
11	63970H-11	63970H011	连接座销/Pivot pin	2
12	63970H-12	63970H012	H型连接座/H-type connecting seat	1
13	63970H-13	63970H013	针杆滑块/Needle bar slide	1
14	63970H-14	63970H014	针杆滑轨/Needle bar slide	1
15	63970H-15	LD00092	内六角圆柱头螺钉M5×16/Screw	1
16	63970H-16	ZC00070	针杆摆动架轴承单面封/Needle bearing	1
17	63970H-17	63970H017	针杆摆动架轴套/Swing frame shaft sleeve	1
18	63970H-18	63970H018	针杆摆动架/Needle bar swing frame	1
19	63970H-19	63970H019	摆动支架导轨/Swing support guide rail	1
20	63970H-20	LD00280	一十字复合槽盘头螺钉SM9/64"40-11.5/Screw	2
21	63970H-21	63970H021	机头防油垫/Nose oil pad	1
22	63970H-22	63970H022	防油垫压板/Oil proof pressing plate	1
23	63970H-23	LD00344	一字沉头螺钉SM11/64"40-8/Screw	4
24	63970H-24	63970H024	摆动轴腕(后)/Swing shaft wrist	1
25	63970H-25	LD00151	一字圆柱头螺钉SM9/64"40-8.9/Screw	2
26	63970H-26	63970H026	针距摆动曲柄/Needle pitch swing crank	1
27	63970H-27	ZC00069	滚针轴承 $\phi 29 \times \phi 25-9.5$ /Needle bearing	1
28	63970H-28	63970H028	偏心凸轮盖板/Eccentric cam cover plate	1
29	63970H-29	LD00204	一字球面圆柱头螺钉SM9/64"40-6/Screw	2
30	63970H-30	63970H030	短轴销/Stub pin	1
31	63970H-31	63970H031	步行连接/Walking connection	2
32	63970H-32	63970H032	连接板/Connecting plate	2
33	63970H-33	63970H033	长轴销/Long shaft pin	1
34	63970H-34	63970H034	针距调节支架/Adjusting bracket	1
35	63970H-35	63970H035	连接柱/Right crossing	2
36	63970H-36	LD00127	一字圆柱头螺丝SM9/64"40-6/Screw	2
37	63970H-37	63970H037	短连接柱/Short connecting column	1
38	63970H-38	63970H038	长连接柱/Long connecting column	1
39	63970H-39	LD00063	内六角紧定螺钉SM15/64"28-10/Screw	2
40	63970H-40	63970H040	调节连杆板/Adjusting plate	1
41	63970H-41	TDQ00002	E型卡簧 $\phi 5$ /Screw	1
42	63970H-42	63970H042	摆动架座轴位螺钉/Axial screw	1
43	63970H-43	63970H043	摆动弹簧钩/Swing spring hook	1
44	63970H-44	LD00158	一十字复合槽盘头螺钉SM11/64"40-5.5/Screw	2
45	63970H-45	63970H045	张力弹簧B/Tension spring	1
46	63970H-46	63970H046	调整连板弹簧钩/Adjusting spring hook	1
47	63970H-47	LD00152	一字球面圆柱头螺钉SM3/16"28-9/Screw	1
48	63970H-48	63970H048	针距调节座/Needle pitch adjusting	1
49	63970H-49	LD00535	内六角圆柱头螺钉M6×14/Screw	1
50	63970H-50	LD00269	内六角紧定螺钉M6×35/Screw	1

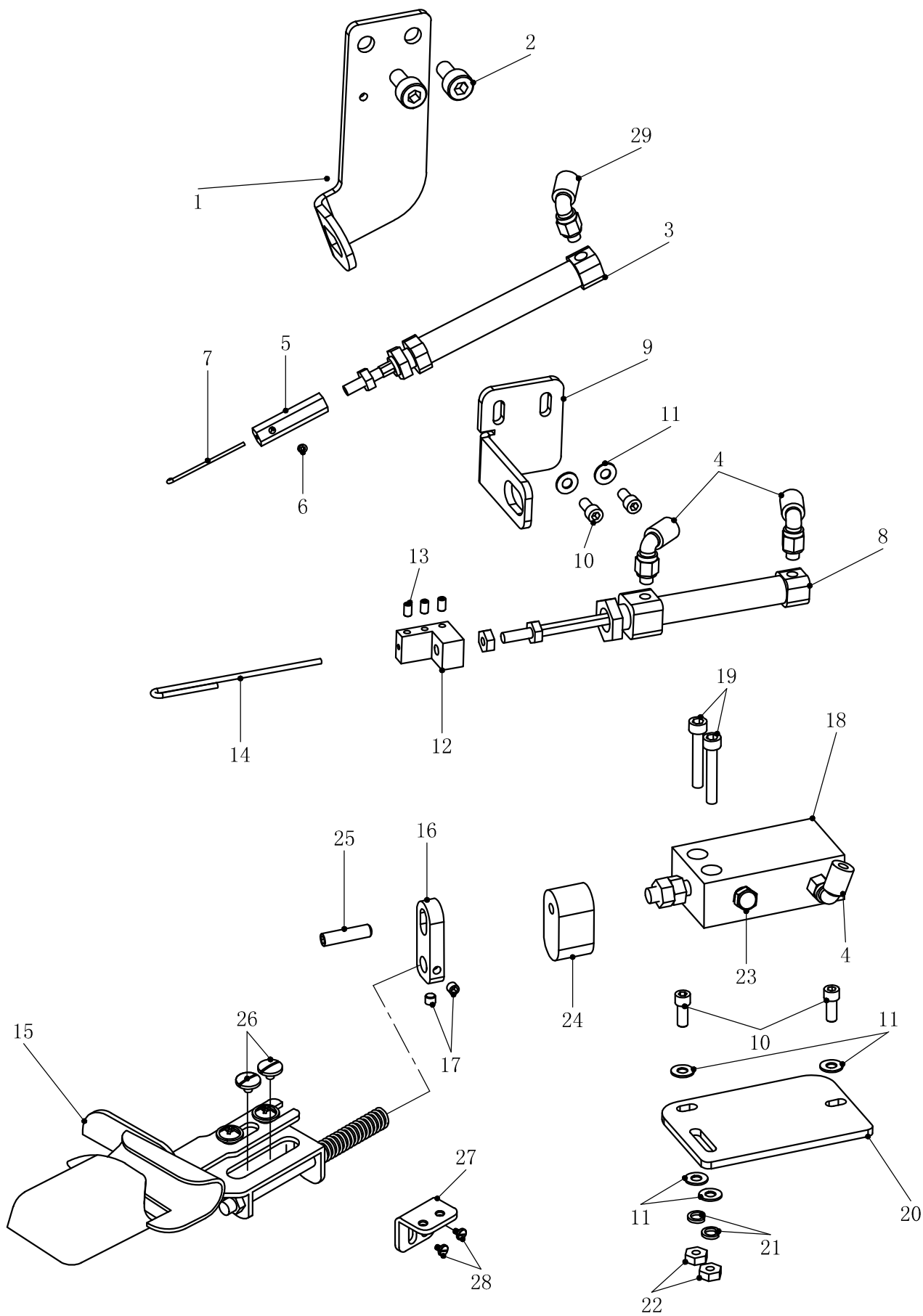
H. 针送料组件/Needle feed assembly



H. 针送料组件/Needle feed assembly

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
51	63970H-51	LM00006	M6螺母/Nut	1
52	63970H-52	V05-03	送料调节螺柱/Adjusting stud	1
53	63970H-53	V05-01	送料距旋钮部件/Knob component	1
54	63970H-54	OXQ00014	O型圈外径 ϕ 12.2线径 ϕ 2.4/O-ring	1
55	63970H-55	V05-05	送料距锁合销/Locking pin	1
56	63970H-56	V05-06	送料距锁合销簧/Locking pin spring	1
57	63970H-57	LD00206	一字圆柱头螺丝SM3/16"28-18/Screw	1

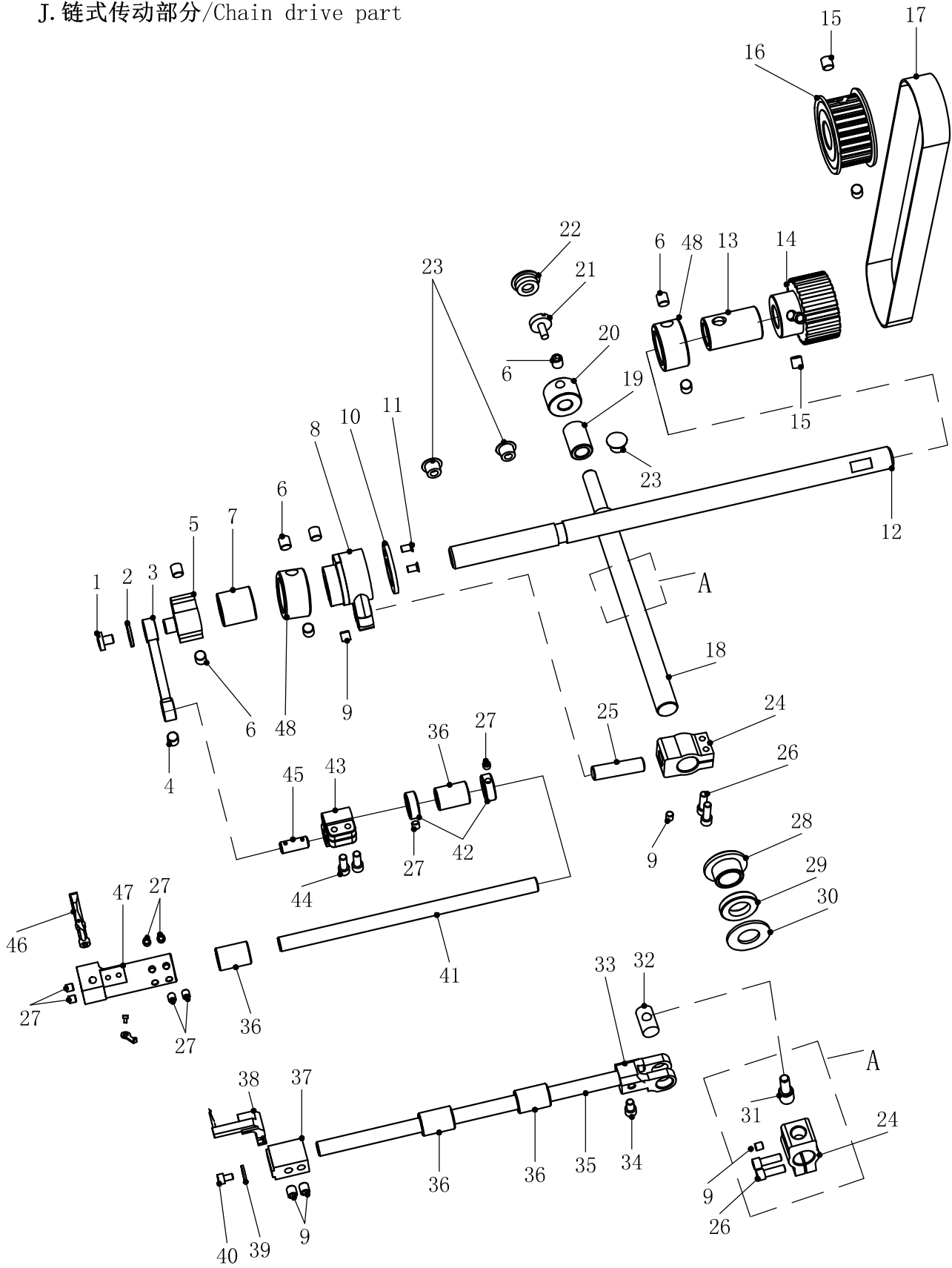
I. 拉线组件、卷边筒组件/Medium and thick materials



I. 拉线组件、卷边筒组件/Medium and thick materials

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970I-1	63970I001	扫线气管支架/Bracket	1
2	63970I-2	LD00316	内六角圆柱头螺钉M6×12/Screw	2
3	63970I-3	927Q-1-26	扫线气缸 CJKB10-30SZ/Cylinder	1
4	63970I-4	927Q-2-29	L型接头 PLA-M5C/L joint	2
5	63970I-5	63970I005	扫线钩固定嘴/Wire sweeping base	1
6	63970I-6	LD00040	内六角紧定螺钉 M3×3/Screw	1
7	63970I-7	63970I007	扫线钩/Wire sweeping hook	1
8	63970I-8	927Q-1-01	打线气缸 CJ2KB10-30SZ/Cylinder	1
9	63970I-9	63970I009	打线气缸固定支架/Fixed support	1
10	63970I-10	LD00104	内六角圆柱头螺钉M4×8 /Screw	4
11	63970I-11	DQ00043	平垫 φ10×φ4.2-0.8/Flat pad	4
12	63970I-12	63970I012/J11-53	打线钩固定块/Wire hook fixing block	1
13	63970I-13	LD00125	内六角紧定螺钉M3×5/Screw	3
14	63970I-14	63970I014/J11-52	打线钩/Tie the wire hook	1
15	63970I-15	63970I015/J05-42	卷边筒组件/Crimping cylinder assemblies	1
16	63970I-16	63970I016	直立双孔支架/Bracket	1
17	63970I-17	LD00197	内六角紧定螺钉M4×3.2/Screw	2
18	63970I-18	927Q-1-70	卷边通气缸CDU16-20/Cylinder	1
19	63970I-19	LD00412	内六角圆柱头螺钉M4×25 /Screw	2
20	63970I-20	63970I020	卷边桶气缸底板/Floor	1
21	63970I-21	DQ00070	弹垫 φ4/Spring washer	2
22	63970I-22	LM00043	螺母M4/Nut	3
23	63970I-23	927Q-5-08	V型消声器BSLM-M5/V muffler	1
24	63970I-24	63970I024	卷边筒顶块/Convex piece	1
25	63970I-25	LD00298	内六角紧定螺钉M5×20/Screw	1
26	63970I-26	LD00007	一字圆柱头螺钉SM3/16"32-5.5/Screw	2
27	63970I-27	63970I027/J18-34	卷边筒支架/Bracket	1
28	63970I-28	LD00096	一字球面圆柱头螺钉M5×8/Screw	2
29	63970I-29	927Q-2-19	气动节流阀QSC04-M5B/Throttle	1

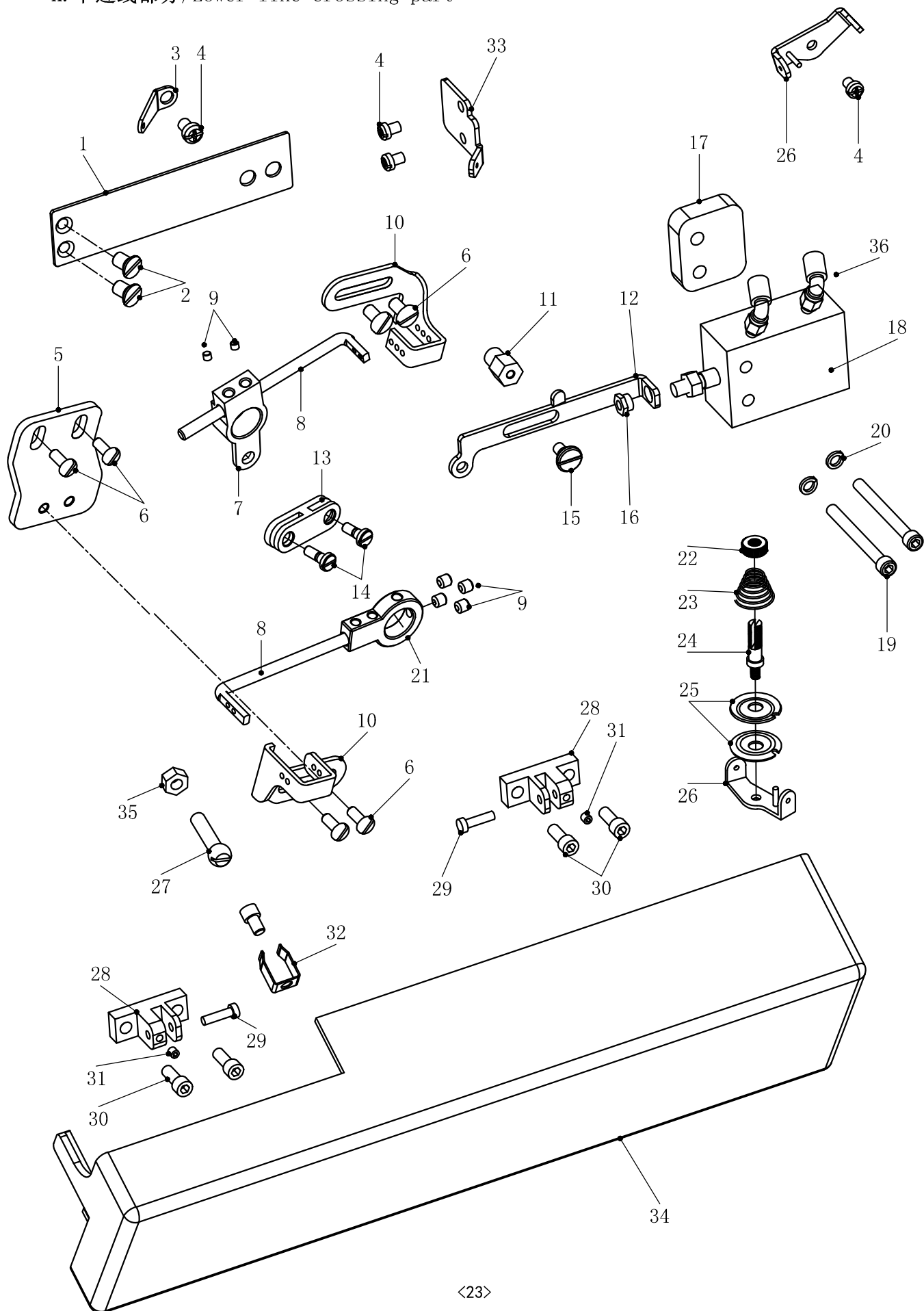
J. 链式传动部分/Chain drive part



J. 链式传动部分/Chain drive part

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970J-1	LD00007	一字球面圆柱头螺钉SM3/16"32-5.5/Screw	1
2	63970J-2	DQ00082	平垫圈 $\phi 9 \times \phi 4.2-1$ /Flat Washer	1
3	63970J-3	63970J003	弯针偏心连杆/Connecting rod	1
4	63970J-4	LD00160	一字圆柱头螺钉SM9/64"40-4.4/Screw	1
5	63970J-5	63970J005/J18-09	弯针偏心轮/Eccentric wheel	1
6	63970J-6	LD00003	内六角紧定螺钉M6×6/Screw	7
7	63970J-7	63970J007	下轴前套/Lower shaft front sleeve	1
8	63970J-8	63970J008/J18-05	拨线偏心轮组件/Eccentric assembly	1
9	63970J-9	LD00083	内六角紧定螺钉M5×5/Screw	6
10	63970J-10	63970J010/J18-07	偏心轮挡片/Blank	1
11	63970J-11	LD00202	一字沉头螺钉SM9/64"40-7.5 60° /Screw	2
12	63970J-12	63970J012	下轴/Lower shaft	1
13	63970J-13	63970J013/J01-50	下轴后套/Lower shaft rear sleeve	1
14	63970J-14	63970J014	下同步轮/Lower synchronizing wheel	1
15	63970J-15	LD00097	内六角紧定螺钉M6×8/Screw	4
16	63970J-16	63970J016	上同步轮/Upper synchronizing wheel	1
17	63970J-17	63970J017	同步带/Synchronizing belt	1
18	63970J-18	63970J018	横轴/Horizontal axis	1
19	63970J-19	63970J019	横轴后套/Horizontal shaft rear sleeve	1
20	63970J-20	H2-30	挡圈/Retaining ring	1
21	63970J-21	LD00307	一字圆柱头螺钉M4×10/Screw	1
22	63970J-22	927D012	橡胶塞 $\phi 13.5$ /Rubber stopper	1
23	63970J-23	63970A017/J02-14	橡胶塞 $\phi 8.5$ /Rubber stopper	3
24	63970J-24	63970J024	双用曲柄/Crank	2
25	63970J-25	63970J025	弯针曲柄销/Pin	1
26	63970J-26	LD00116	内六角圆柱头螺钉M4×12/crew	4
27	63970J-27	LD00004	内六角紧定螺钉M4×4/Screw	6
28	63970J-28	63970J028/J18-52	横轴铜套/Copper sleeve	1
29	63970J-29	YF00006	油封/Oil seal	2
30	63970J-30	DQ00083	平垫圈 $\phi 24 \times \phi 12.2-1.6$ /Flat washer	1
31	63970J-31	63970J031	拨线曲柄销/Pin	1
32	63970J-32	63970J032/J18-44	拨线连接销/Pin	1
33	63970J-33	63970J033/J18-43	拨线轴座/Shaft seat	1
34	63970J-34	LD00182	内六角圆柱头螺M4×6/Screw	1
35	63970J-35	63970J035	拨线轴/Reel	1
36	63970J-36	63970C024	多用铜套/Copper sleeve	4
37	63970J-37	63970J037/J18-40	拨线座/Line cities	1
38	63970J-38	63970J038/J18-39	拨线杆/Dial the pole	1
39	63970J-39	DQ00064	平垫圈 $\phi 9 \times \phi 4.2-1$ /Shim	1
40	63970J-40	LD00182	内六角圆柱头螺钉M4×8/Screw	1
41	63970J-41	63970J041	弯针轴/Bending needle shaft	1
42	63970J-42	63970C018	旋梭轴挡圈 $\phi 7.94 \times \phi 14-7$ /Check ring	2
43	63970J-43	63970J043/J18-27	弯针曲柄/Curved needle Crank	1
44	63970J-44	LD00026	内六角圆柱头螺钉M4×10/Screw	2
45	63970J-45	63970J045/J18-14	曲柄销/Pin	1
46	63970J-46	63970J046/J18-32	弯针/Curved needle	1
47	63970J-47	63970J047/J18-30	弯针固定座/Bending needle fixing seat	1
48	63970J-50	A08-12	摆动轴挡圈/Retaining ring	2
49	63970J-51	LD00178	内六角紧定螺钉SM11/64"40-3.2/Screw	4
51	63970J-52	M04-34	引线装置1/Lead device	1
52	63970J-53	LD00293	内六角圆柱头螺钉M3×5/Screw	1

K. 下过线部分/Lower line crossing part



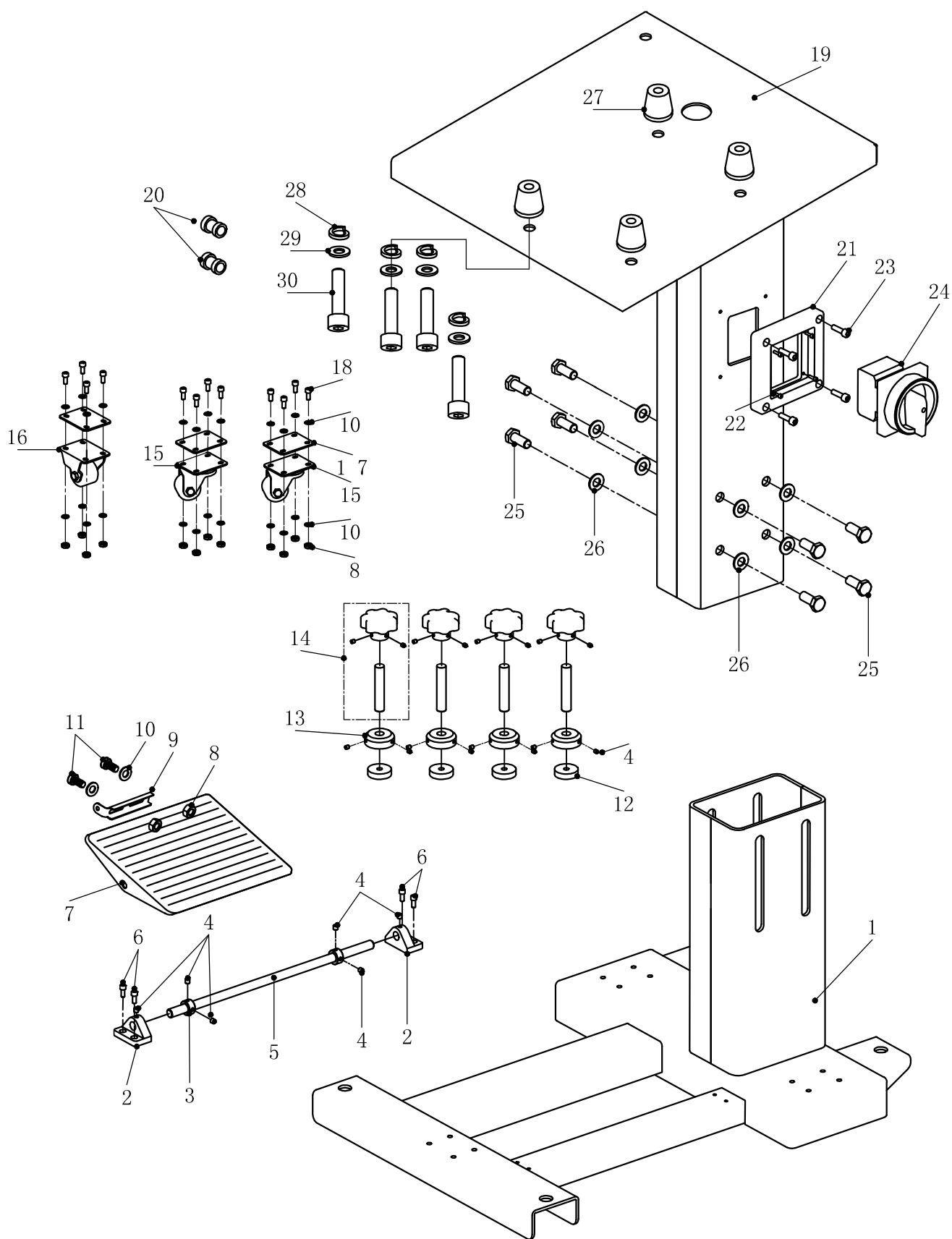
K. 下过线部分/Lower line crossing part

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970K-1	63970K001/J18-33	前盖板/Front cover plate	1
2	63970K-2	LD00202	一字沉头螺钉SM9/64 “40-4/Screw	2
3	63970K-3	A07-12	过线片/Before that line	1
4	63970K-4	LD00158	一十字复合槽盘头螺钉SM11/64 “40-5.5/Screw	4
5	63970K-5	63970K005/J19-21	打线架安装支架/Mounting bracket	1
6	63970K-6	LD00351	一字球面圆柱头螺钉 SM11/64 “40-6/Screw	6
7	63970K-7	63970K007/J19-15	回线挡圈/Back line retaining ring	1
8	63970K-8	63970K008/J19-14	下打线杆 /Hit the wire rod	2
9	63970K-9	LD00004	内六角紧定螺钉M4×4/Screw	6
10	63970K-10	63970K010/J19-04	下打线架 /Playing wire rack	2
11	63970K-11	63970K011	支撑螺钉/Screw	1
12	63970K-12	63970K012	连接小板/Connecting a small board	1
13	63970K-13	63970K013/J19-19	传动双眼连杆/Screw	1
14	63970K-14	63970K014/J19-20	传动连杆轴位螺钉/Axial screw	2
15	63970K-15	63970K015/J19-12	连接小板轴位螺钉/Axial screw	1
16	63970K-16	63970K016	下打线调节螺母/Nut	1
17	63970K-17	63970K017	松线气缸垫板/Backing plate	1
18	63970K-18	927Q-1-38	下打线松线气缸CU16-10/Cylinder	1
19	63970K-19	LD00255	内六角圆柱头螺钉M4×30/Screw	2
20	63970K-20	DQ00070	弹垫Φ4/Spring washer	2
21	63970K-21	63970K021/J19-22	打线挡圈/Hit the line block ring	1
22	63970K-22	K1-29	夹线螺母/Clamp nut	1
23	63970K-23	K1-28-B	夹线簧/Centerline spring	1
24	63970K-24	D3-06	压线杆/Wire rod	1
25	63970K-25	A07-06	压线板/Coupling plate	2
26	63970K-26	H1-15	支架/Bracket	2
27	63970K-27	63970K027	下过线罩卡柱/Clamping column	1
28	63970K-28	63970K028	下过线护罩座/Shield seat	2
29	63970K-29	63970K029	护罩座销/Pin	2
30	63970K-30	LD00026	内六角圆柱头螺钉M4×10/Screw	4
31	63970K-31	LD00040	内六角紧定螺钉3×3/Screw	2
32	63970K-32	63970K032	下过线罩卡簧/Snap ring	1
33	63970K-33	63970K033	下过线板/Snap ring	1
34	63970K-34	63970K034	下过线护罩/Lower wire shield	1
35	63970K-35	LM00042	螺母M5/Nut	1
36	63970K-36	927Q-2-29	L型接头 PLA-M5C/L joint	2

L. 油路部分/Oil circuit

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970L-1	63970L001	机头吸油棉/Oil absorbent cotton	1
2	63970L-2	63970L002	机头棉压簧/Compression spring	1
3	63970L-3	V08-16	油管夹/Tubing clamp	3
4	63970L-4	LD00158	一十字复合槽盘头螺钉SM11/64 “40-5.5/Screw	1
5	63970L-5	63970B017/J18-22	过油螺钉/Oil Screw	5
6	63970L-6	63970L006	旋梭支架吸油棉/Oil absorbent cotton	1
7	63970L-7	63970L007	旋梭支架棉压簧/Compression spring	1
8	63970L-8	LD00127	一字圆柱头螺钉SM9/64 “40-6/Screw	1
9	63970L-9	LD00182	内六角紧定螺钉M4×6/Screw	2
10	63970L-10	927Q-2-39	微型接头 /Micro connector	2
11	63970L-11	63970L011	柱塞/Plunger	1
12	63970L-12	TH00093	旋梭支架吸油弹簧/Spring	1
13	63970L-13	63970L013	柱塞泵螺钉/Screw	1
14	63970L-14	63970L014	油泵/Oil pump	1
15	63970L-15	LD00104	内六角圆柱头螺钉M4×8/Screw	2
16	63970L-16	DQ00043	平垫 $\phi 10 \times \phi 4.2-0.8$ /Floor	1
17	63970L-17	63970L017	1分外丝×8mm宝塔接头/Pagoda connector	1
18	63970L-18	63970L018	分油座/Oil separator	1
19	63970L-19	LD00412	内六角圆柱头螺钉M4×25/Screw	1
20	63970L-20	LD00178	内六角紧定螺钉SM11/64 “40-3.2/Screw	1
21	63970L-21	63970L021	旋梭控油螺钉/Oil control screw	1
22	63970L-22	63970L022	底座支脚/Support column	4
23	63970L-23	OXQ00060	油盘O型圈 $\phi 310 \times \phi 5/0$ -ring	1
24	63970L-24	63970L024	油盘/An oil pan	1
25	63970L-25	927A028	加油器标尺/Oil scale	1
26	63970L-26	63970L026/J20-18	密封圈/sealing ring	1
27	63970L-27	LD00324	内六角圆柱头螺钉M12×12/Screw	1
28	63970L-28	LD00449	内六角圆柱头螺钉M8×25/Screw	3
29	63970L-29	LD00628	内六角圆柱头螺钉M8×20/Screw	1
30	63970L-30	OXQ00049	调压螺钉O型圈 $\phi 7.15 \times \phi 1.8/0$ -ring	1

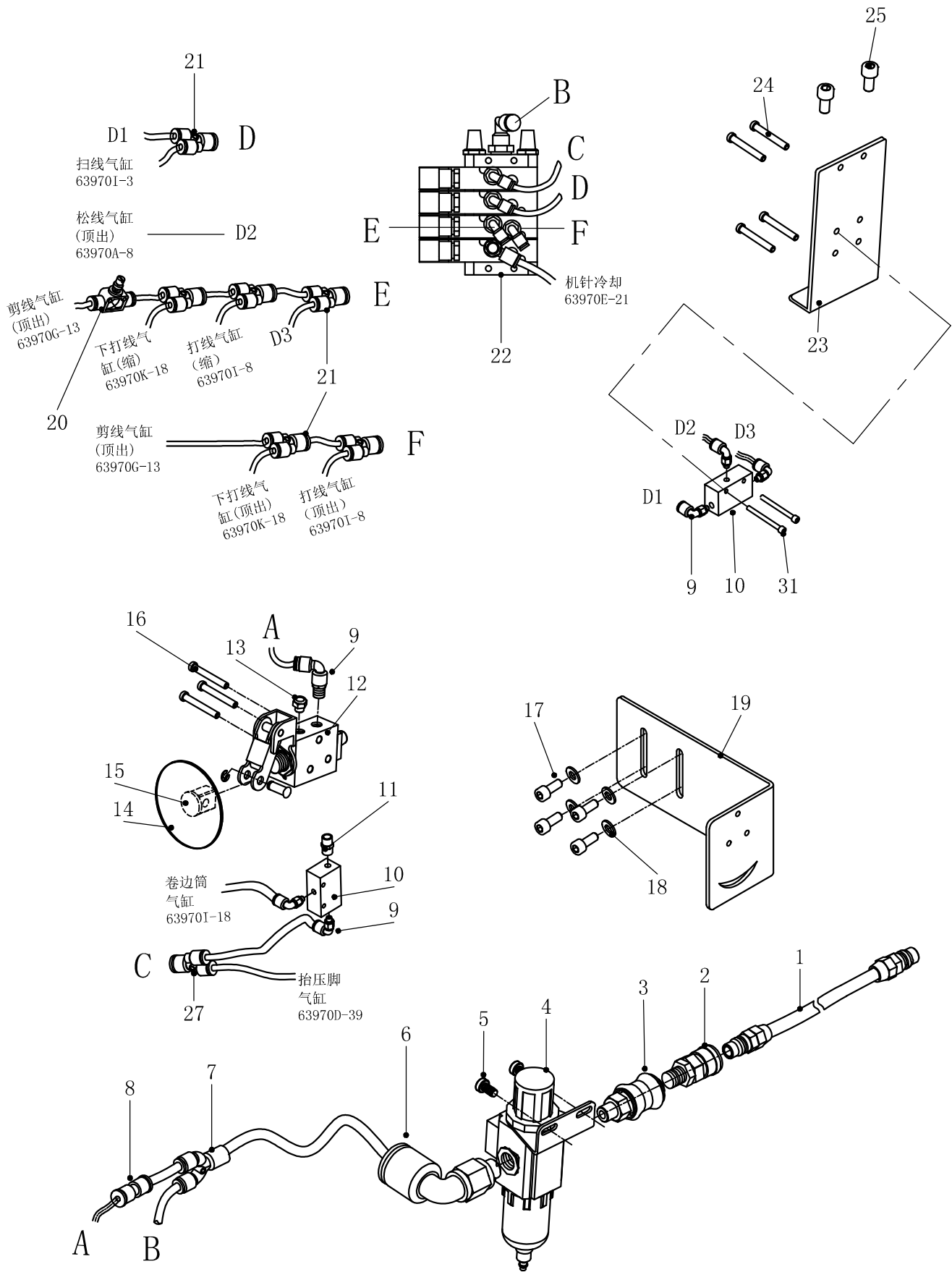
M. 铁台板部分/Iron platen section



M. 铁台板部分/Iron platen section

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970M-1	63970-TB-1	铁台板底座/Iron platen	1
2	63970M-2	927TB033	踏板支架/Pedal scaffolding	2
3	63970M-3	9588A124	踏板挡圈/Pedal retaining ring	2
4	63970M-4	LD00003	内六角紧定螺钉M6×6/Screw	14
5	63970M-5	927TB36	踏板轴/Pedal shaft	1
6	63970M-6	LD00233	内六角圆柱头螺钉M5×10/Screw	4
7	63970M-7	927TB32	踏板/Pedal	1
8	63970M-8	LM00050	螺母M6/Nut	14
9	63970M-9	927TB061	拉杆片/Pull rod tablets	1
10	63970M-10	DQ00050	平垫圈 $\phi 12 \times \phi 6.2 \times 1.2$ /Flat washer	26
11	63970M-11	LD00238	内六角圆柱头螺钉M6×10/Screw	2
12	63970M-12	927TB004	橡胶垫/Rubber mat	4
13	63970M-13	927TB051	脚座/Foot seat	4
14	63970M-14	927TB064	调节法兰组件/Adjusting flange assemblies	4
15	63970M-15	927TB040	动轮/Wheel	2
16	63970M-16	927TB042	定轮/Fixed wheel	1
17	63970M-17	927TB056	垫板/Pad	3
18	63970M-18	LD00237	内六角圆柱头螺钉M6×20/Screw	12
19	63970M-19	63970-TB-2	上台板组件/Platform board assembly	1
20	63970M-20	927TB057	护线套/Wire sheath	2
21	63970M-21	927TB055	电源开关安装板/Power switch mounting plate	1
22	63970M-22	LD00256	内六角圆柱头螺钉M3×16/Screw	4
23	63970M-23	LD00277	内六角圆柱头螺钉M5×16/Screw	4
24	63970M-24	927TB13	电源开关/Power switch	1
25	63970M-25	LD00231	外六角螺钉M12×30/Screw	8
26	63970M-26	DQ00049	平垫圈 $\phi 24 \times \phi 12.2 \times 2$ /Flat washer	8
27	63970M-27	63970M027	油盘橡胶垫/Oil pan rubber pad	4
28	63970M-28	DQ00062	弹性垫圈 $\phi 8.2 \times \phi 13.5 \times \phi 2.2$ /Screw	4
29	63970M-29	DQ00049	平垫圈 $\phi 24 \times \phi 12.2 \times 2$ /Flat washer	4
30	63970M-30	LD00543	内六角圆柱头螺钉M8×40/Screw	4

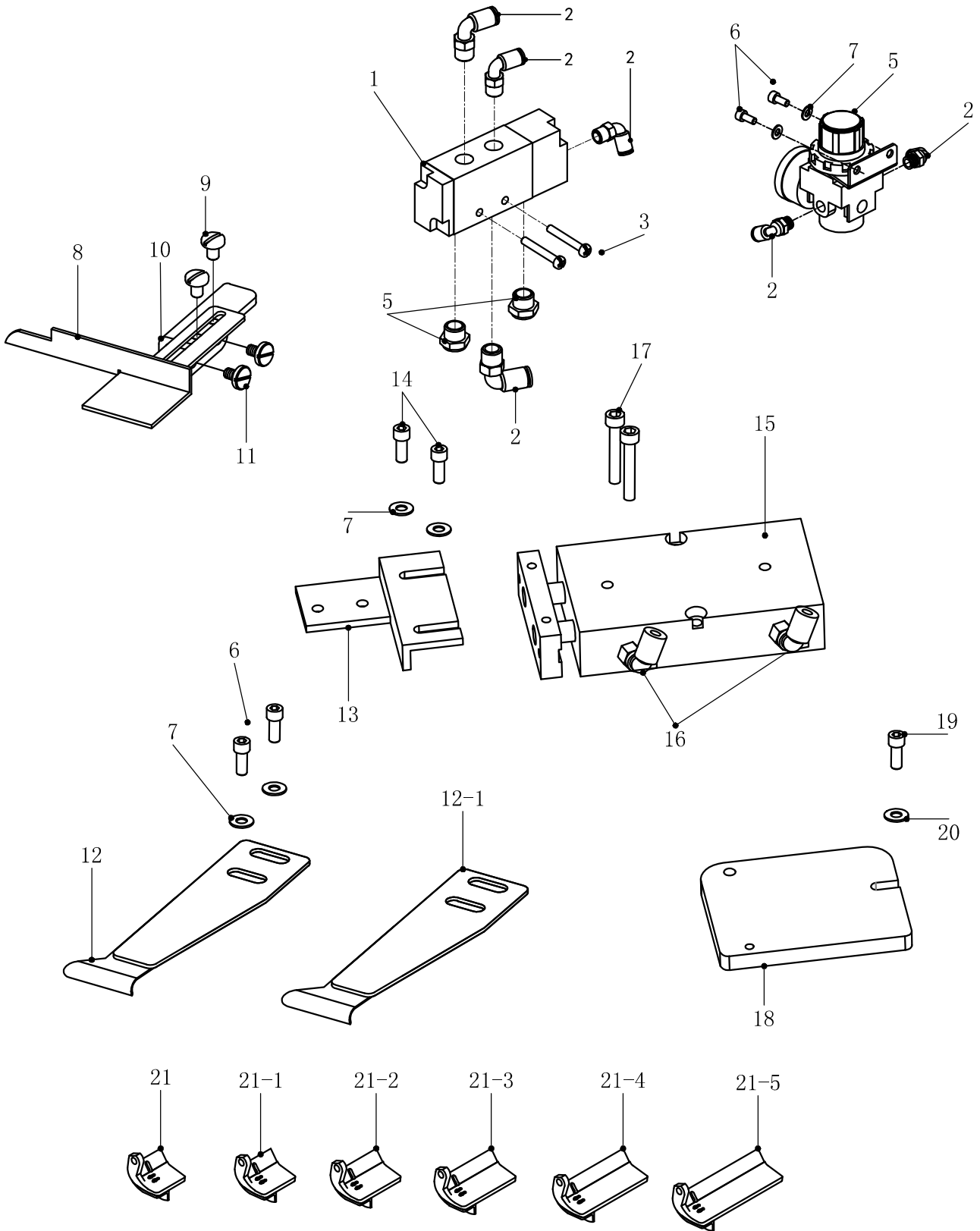
N. 气动控制部分/Pneumatic control section



N. 气动控制部份/Pneumatic control section

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970N-1	927PA035	螺旋气管UC8×5-60R/Spiral trachea	1
2	63970N-2	927Q-2-31	快换接头(母体)SMD-20-ZN/Connector	1
3	63970N-3	927Q-3-07	手滑阀HSV08/Hand sliding valve	1
4	63970N-4	927Q-4-04	调压过滤器AFR2000/Pressure regulating filter	1
5	63970N-5	LD00258	内六角圆柱头螺钉M5×8/Screw	2
6	63970N-6	927Q-2-05	L型接头APL6-02/L joint	1
7	63970N-7	927Q-2-08	Y型螺纹三通APY6/Y-type threaded three	1
8	63970N-8	927Q-2-12	减径直通APG6-4/Minus straight through	1
9	63970N-9	927Q-2-28	L型接头/L joint APL4-01	6
10	63970N-10	927Q-3-29/J12-17	膝提三通阀/Knee lift three way valve	2
11	63970N-11	927q-2-66/J12-16	双螺纹接头/Dual threaded connectors	1
12	63970N-12	927Q-3-04	气控阀M3R210-06/Air control valve	1
13	63970N-13	927Q-5-07	消声器BSL01/Muffler	1
14	63970N-14	63970N014/J12-11-1	膝靠盘/Knee plate	1
15	63970N-15	63970N015/J12-11-2	膝靠盘连接块/Knee disk connection block	1
16	63970N-16	LD00562	十字盘头螺钉(镀彩)M4×28/Screw	2
17	63970N-17	LD00233	内六角圆柱头螺钉M5×10/Screw	4
18	63970N-18	DQ00052	不锈钢平垫圈 $\phi 10 \times \phi 5.2 \times 0.8$ /Flat washer	4
19	63970N-19	63970N019/J12-01	膝靠安装板/Mounting plate	1
20	63970N-20	927Q-2-01	单向节流阀ASA4/One-way throttle valve	1
21	63970N-21	927Q-2-07	Y型三通APY4/Y-tyepethree	6
22	63970N-22	63920Q-ZJ-01	电磁阀组件/Solenoid valve assembly	1
23	63970N-23	63970N023/J17-04	电磁阀座安装板/Mounting plate	1
24	63970N-24	LD00255	内六角圆柱头螺钉M4×30/Screw	2
25	63970N-25	LD00250	内六角圆柱头螺钉M5×12/Screw	2
26	63970N-26	LD00404	内六角圆柱头螺钉M4×22/Screw	2
27	63970N-27	927Q-2-06	Y型减径三通APW6-4/Y-tyepethree	1

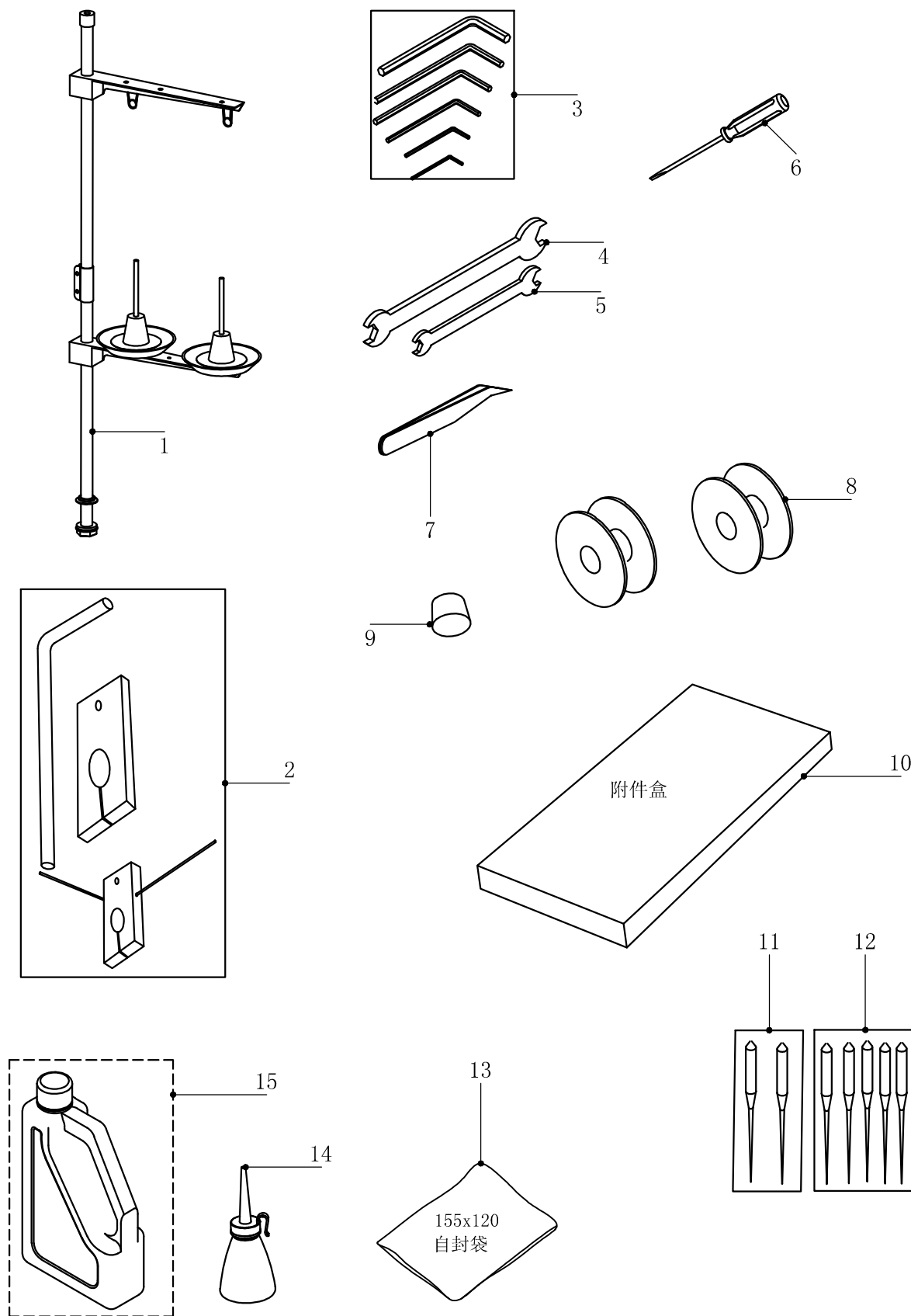
0. 锁式反包部分/Pneumatic control section



0. 锁式反包部份/Pneumatic control section

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	639700-1	927Q-3-03	气控阀/Valve	1
2	639700-2	927Q-2-28	L型接头PL0401C/L Connector	6
3	639700-3	LD00318	内六角圆柱头螺钉M3×40/Screw	2
4	639700-4	927Q-5-07	消声器BSLM01/Elomination machine	2
5	639700-5	927Q-4-01	调压阀AR150/Valve	1
6	639700-6	LD00030	内六角圆柱头螺钉M5×8/Screw	4
7	639700-7	DQ00060	平垫圈φ5/Washer	4
8	639700-8	639700007/J13-02	导料板组件/Guide plate components	1
9	639700-9	LD00007	导料板固定螺钉SM3/16"32/Screw	2
10	639700-10	639700010/J13-08	反包拉筒支架/Anti-bag pull tube bracket	1
11	639700-11	LD00348	固定螺钉SM7/32"32/Screw	2
12	639700-12	639700012/J13-05	反拉筒组件/Reverse pull cylinder assembly	1
12-1	639700-12-1	63970001201/J13-03	拉筒组件大/Reverse pull cylinder assembly	1
13	639700-13	639700013	反包卷边通支架/Bracket	1
14	639700-14	LD00044	内六角圆柱头螺钉M5×10/Screw	2
15	639700-15	927Q-1-60	双杆气缸TN16-40/Double pole cylinder	1
16	639700-16	927Q-2-29	L型接头 PLA-M5C/L joint	2
17	639700-17	LD00404	内六角圆柱头螺钉M4×22/Screw	2
18	639700-18	639700018	反包气缸底板/Cylinder bottom	1
19	639700-19	LD00116	内六角圆柱头螺钉M4×12 /Screw	1
20	639700-20	DQ00043	平垫φ10×φ4.2-0.8/Flat pad	1
21	639700-21	639700021/J13-01	反包压脚1.2/Anti-packet pressing feet	1
21-1	639700-21-1	63970002101/J13-01-A	反包压脚1.5/Anti-packet pressing feet	1
21-2	639700-21-2	63970002102/J13-01-B	反包压脚2.0/Anti-packet pressing feet	1
21-3	639700-21-3	63970002103/J13-01-C	反包压脚2.5/Anti-packet pressing feet	1
21-4	639700-21-4	63970002104/J13-01-D	反包压脚3.0/Anti-packet pressing feet	1
21-5	639700-21-5	63970002105/J13-01-E	反包压脚3.5/Anti-packet pressing feet	1

P. 附件/Accessory



P. 附件/Accessory

序号/SN	代号/Code number	件号/Part number	名称/Description	数量/Number
1	63970P-1	V11-01/2	线架组件/Wire rack components	1
2	63970P-2	FJ4-21-1	线架支架/Wire rack bracket	1
3	63970P-3	FJ4-11	内六角扳手/Hexagon wrench	1
4	63970P-4	FJJ08-12	外六角扳手 (8-10) /Outer hexagon	1
5	63970P-5	FJJ08-13	外六角扳手 (5.5-7) /Outer hexagon	1
6	63970P-6	FJ8-7	螺丝刀 (中) /Screw driver (medium)	1
7	63970P-7	FJ4-8	镊子/Tweezers	1
8	63970P-8	63970C023	1.6倍梭芯/shuttle core	2
9	63970P-9	63970P009/J01-70	磁铁/Magnet	1
10	63970P-10	FG4-10	附件盒/Accessory box	1
11	63970P-11	BZ1-36	链式机针DP×57 18#/Needle	2
12	63970P-12	BZ1-34	锁式机针DP×5 18#/Needle	5
13	63970P-13	FJ-D-9	塑料袋/Plastic bags	1
14	63970P-14	FJ7-28	油壶 (小) /Oil kettle (small)	1
15	63970P-15	FJ8-11	油壶 (大) /Oil kettle (large)	1