

**GEM2210/1310  
ELECTRONIC EMBROIDERY  
SEWING MACHINE  
电子花样缝纫机**

**使用说明书 & 零件样本**  
Operation Instruction & Parts Book

为了安全地使用，请您在使用之前一定阅读本使用说明书。另外，请您注意保管本使用说明书，以便随时查阅；零件更改设计时，恕不另行通知。

Read safety instructions carefully and understand them before using. Retain this Operation Instruction for future reference. Excuse for not notice in advance while the design of the sparepart has to be changed.

非常感谢您购买本公司的工业缝纫机。在使用缝纫机之前，请仔细阅读<为了您的安全使用>和使用说明书。

工业缝纫机的特性之一，是要在机针和旋梭等运动零部件附近进行操作，而这些零部件很容易引起受伤的危险，所以请在接受过培训的人员或有熟练操作技术的人员的指导下，正确地使用本缝纫机。

# 为了您的安全使用

## 1. 安全使用的标记及其意义

本使用说明书及产品所使用的标记和图案记号是为了您的安全而正确地使用本产品，防止您及他人受到危害和损害。

表示方法及含义如下：

### 说明



**危险**

如果忽视此标记而进行了错误的操作，必将导致人员死亡或重伤。



**注意**

如果忽视此标记而进行了错误的操作，有可能会引起人员受伤及造成设备损坏。

### 图案和符号



符号△表示“应注意事项”。  
三角中的图案表示必须要注意的内容。  
(如左图的符号表示“注意受伤”。)



符号○表示“禁止”。



符号●表示“必须”。  
圆圈中的图案表示必须要做的内容。  
(如左图的符号表示“必须接地”。)

Thank you very much for buying our sewing machine. Before using your new machine, please read the safety instructions below and the explanations given in the Operation Instruction.



With industrial sewing machines, it is normal to carry out work while positioned directly in front of moving parts such as the needle and thread take-up lever, and consequently there is always a danger of injury that can be caused by these parts. Follow the instructions from training personnel and instructors regarding safe and correct operation before operating the machine so that you will know how to use it correctly.

## SAFETY INSTRUCTIONS

### 1. Safety indications and their meanings

This instruction manual and the indications and symbols that are used on the machine itself are provided in order to ensure safe operation of this machine and to prevent accidents and injury to yourself or other people. The meaning of these indications and symbols are given below.

#### Indications

 <b>DANGER</b>	The instructions which follow this term indicate situations where failure to follow the instructions will almost certainly result in death or severe injury.
 <b>CAUTION</b>	The instructions which follow this term indicate situations where failure to follow the instructions could cause injury when using the machine or physical damage to equipment and surroundings.

#### Symbols



..... This symbol ( $\triangle$ ) indicates something that you should be careful of. The picture inside the triangle indicates the nature of the caution that must be taken. (For example, the symbol at left means "beware of injury".)



..... This symbol ( $\otimes$ ) indicates something that you must not do.



..... This symbol ( $\bullet$ ) indicates something that you must do. The picture inside the circle indicates the nature of the thing that must be done. (For example, the symbol at left means "you must make the ground connection".)

# 安全注意事项

## 危险



打开控制箱盖时，必须先关闭电源开关并将电源插头从插座上拔下，至少等待5分钟后，再打开控制箱盖。触摸带有高电压的区域将会造成人员伤亡。

## 注意

### 使用环境



应避免在强电气干扰源(如高频焊机)的附近使用缝纫机。  
强电气干扰源可能会影响缝纫机的正确操作。



缝纫机的最佳工作环境是相对湿度在45%-85%的范围内，干燥或潮湿的环境均会影响缝纫机的正确操作。



电源电压的波动应该在额定电压的±10%以内的环境下使用。  
电压大幅度的波动会影响缝纫机的正确操作。



使用时应避免暴露于直射的阳光下。  
直射的阳光会影响缝纫机的正确操作。



电源容量应大于缝纫机的消耗能量。电源容量不足会影响缝纫机的正确操作。



万一发生雷电暴风雨时，关闭电源开关，并将电源插头从插座上拔下。雷电可能会影响缝纫机的正确操作。



环境温度应在5°C-35°C的范围内使用。  
低温或高温会影响缝纫机的正确操作。

### 安装



请让受过培训的技术人员来安装缝纫机。



固定电缆时，不要过度弯曲电缆或用卡钉固定得过紧，会引起火灾或触电的危险。



请委托购买商店或电气专业人员进行电气配线。



如果使用带小脚轮的工作台，则应该固定小脚轮，使其不能移动。



安装工作必须由两人以上来完成。



缝纫机头倒下或竖起时，请用双手进行操作。单手操作时因缝纫机的重量万一滑落易导致受伤。



在安装完成前，请不要连接电源，如果误按启动开关，缝纫机动作会导致受伤。



使用润滑油或黄油时，务必戴好保护眼镜和保护手套等，以防润滑油落入眼中或沾在皮肤上，这是引起发炎的原因。  
另外，润滑油或黄油不能饮用，否则会引起呕吐和腹泻。  
将油放在小孩拿不到的地方。



请在切断电源后，再拔掉电源插头。不然易成为控制箱发生故障的原因。



必须接地。接地线不牢固，是造成触电或误动作的原因。

# Notes On Safety








## DANGER













Wait at least 5 minutes after turning off the power switch and disconnecting the power cord from the wall outlet before opening the face plate of the control box. Touching areas where high voltages are present can result in severe injury.

## CAUTION

### Environmental requirements

-  Use the sewing machine in an area which is free from sources of strong electrical noise such as high-frequency welders. Sources of strong electrical noise may cause problems with correct operation.
-  Any fluctuations in the power supply voltages should be within  $\pm 10\%$  of the rated voltage for the machine. Voltage fluctuations which are greater than this may cause problems with correct operation.
-  The power supply capacity should be greater than the requirements for the sewing machine's electrical consumption. Insufficient power supply capacity may cause problems with correct operation.
-  The ambient temperature should be within the range of 5°C to 35°C during use. Temperatures which are lower or higher than this may cause problems with correct operation.
-  The relative humidity should be within the range of 45% to 85% during use, and no dew formation should occur in any devices. Excessively dry or humid environments and dew formation may cause problems with correct operation.
-  Avoid exposure to direct sunlight during use. Exposure to direct sunlight may cause problems with correct operation.
-  In the event of an electrical storm, turn off the power and disconnect the power cord from the wall outlet. Lightning may cause problems with correct operation.

### Installation

-  Machine installation should only be carried out by a qualified technician.
-  Contact your dealer or a qualified electrician for any electrical work that may need to be done.
-  The installation should be carried out by two or more people.
-  Don't connect the power cord until installation is complete, otherwise the machine may operate if the foot switch is depressed by mistake, which could result in injury.
-  Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.
-  Install the safety covers to the machine head and motor.
-  Hold the machine head with both hands when tilting it back or returning it to its original position. Furthermore, after tilting back the machine head, do not push the face plate side or the pulley side from above, as this could cause the machine head to topple over, which may result in personal injury or damage to the machine.
-  All cords should be secured at least 25mm away from any moving parts. Furthermore, do not excessively bend the cords or secure them too firmly with staples, otherwise there is the danger that fire or electric shocks could occur.
-  If using a work table which has casters, the casters should be secured in such a way so that they cannot move.
-  Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they don't get into your eyes or onto your skin, otherwise inflammation can result. Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhoea. Keep the oil out of the reach children.

# 安全注意事项

## 注意

### 缝纫



本缝纫机仅限于接受过安全操作培训的人员使用。



为了安全起见，在使用本缝纫机之前，请安装保护装置。如果未安装这些安全装置就使用缝纫机，会造成人身伤害及缝纫机损坏。



本缝纫机不能用于除缝纫以外的任何其他用途。



缝纫过程中不要触摸任何活动部件或将物件靠在运动部件上，因为这会导致受伤或缝纫机损坏。



发生下列情况时，请切断电源。否则误按动启动开关，缝纫机动作会导致受伤。

- 机针穿线时
- 更换机针或梭芯时
- 缝纫机不使用，或人离开缝纫机时



如果缝纫机操作中发生误动作，或者听到异常的噪声或闻到异常的气味，应立即切断电源。然后与购买商店或受过培训的技术人员联系。



如果使用带小脚轮的工作台，则应该固定小脚轮，使其不能移动。



如果缝纫机出现故障时，请与购买商店或受过培训的技术人员联系。

### 清洁



在开始清洁作业前，请切断电源。如果误踩了脚开关，缝纫机动作会导致人员受伤。



使用润滑油或黄油时，务必戴好保护眼镜和保护手套等，以防润滑油落入眼中或沾在皮肤上，这是引起发炎的原因，另外，润滑油或黄油不能饮用，否则会引起呕吐和腹泻。将油放在小孩拿不到的地方。

# Notes On Safety

## CAUTION

### Sewing



This sewing machine should only be used by operators who have received the necessary training in safe use beforehand.



If using a work table which has casters, the casters should be secured in such a way so that they cannot move.



The sewing machine should not be used for any applications other than sewing.



Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.



Be sure to wear protective goggles when using the machine.  
If goggles are not worn, there is the danger that if a needle breaks, parts of the broken needle may enter your eyes and injury may result.



Do not touch any of the moving parts or press any objects against the machine while sewing as this may result in personal injury or damage to the machine.



Turn off the power switch at the following times, otherwise the machine may operate if the foot switch is depressed by mistake, which could result in injury.

- When threading the needle
- When replacing the needle and bobbin
- When not using the machine and when leaving the machine unattended



If an error occurs in machine operation, or if abnormal noises or smells are noticed, immediately turn off the power switch. Then contact your nearest dealer or a qualified technician.



If the machine develops a problem, contact your nearest dealer or a qualified technician.

### Cleaning



Turn off the power switch before carrying out cleaning, otherwise the machine may operate if the foot switch is depressed by mistake, which could result in injury.



Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin, otherwise inflammation can result. Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhoea. Keep the oil out of the reach of children.

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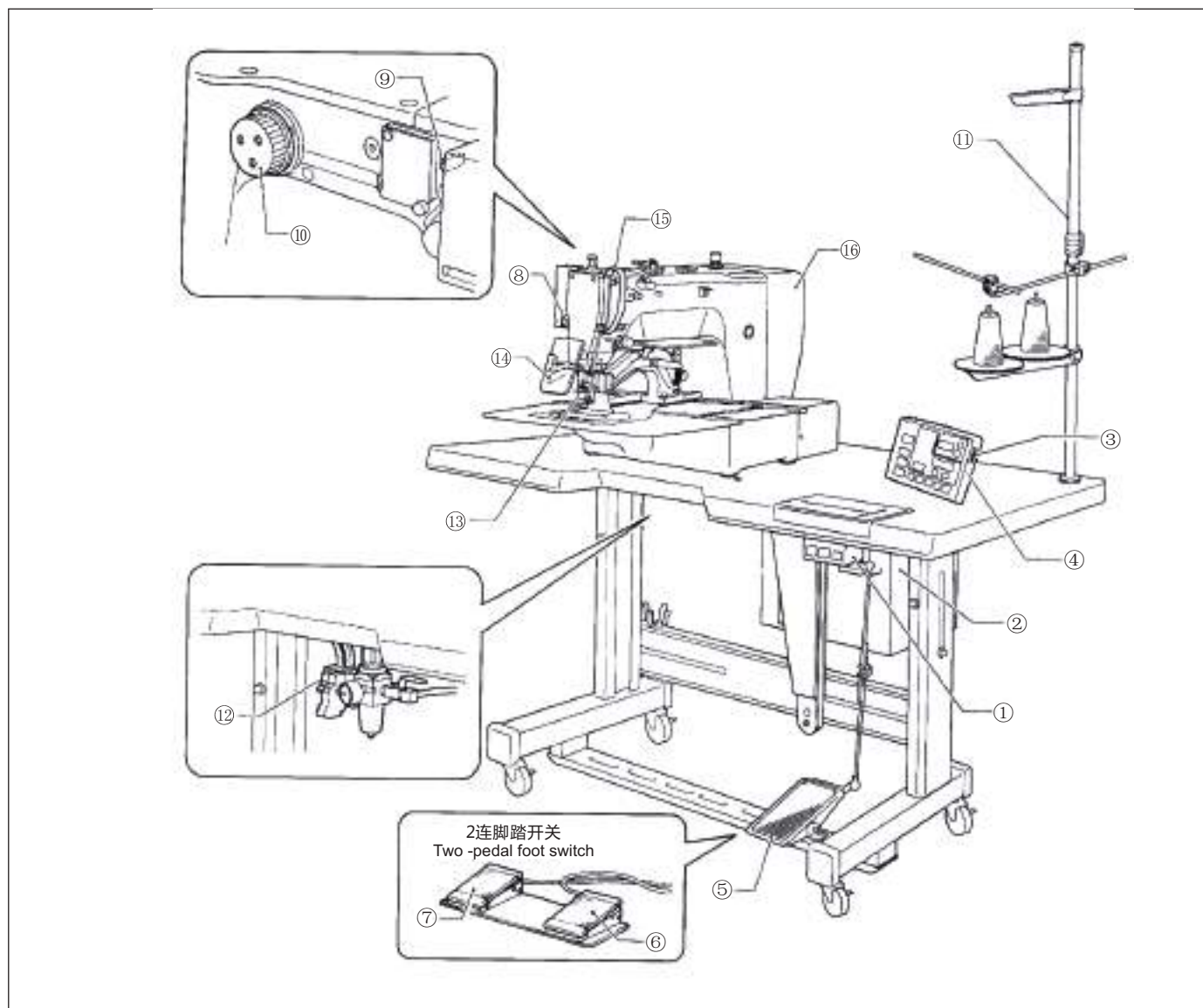


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1. 各部件名称 Names of major parts



- ① 电源开关
- ② 控制箱
- ③ USB接口
- ④ 操作盘
- ⑤ 脚踏开关（电磁规格）
- ⑥ 压脚开关（空压规格）
- ⑦ 启动开关（空压规格）
- ⑧ 暂停开关
- ⑨ 扫线用开关
- ⑩ 皮带轮
- ⑪ 线架
- ⑫ 电磁阀（空压规格）

安全保护装置

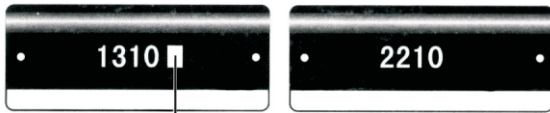
- ⑬ 护指器
- ⑭ 护眼板
- ⑮ 挑线杆防护罩
- ⑯ 马达罩

- ① Power switch
- ② Control box
- ③ USBslot
- ④ Operation panel
- ⑤ Foot switch (solenoid specifications)
- ⑥ Work clamp switch (pneumatic specifications)
- ⑦ Start switch (pneumatic specifications)
- ⑧ STOP switch
- ⑨ Thread wiper switch
- ⑩ Pulley
- ⑪ Cotton stand
- ⑫ Solenoid valve (pneumatic specifications)

Safety devices:

- ⑬ Finger guard
- ⑭ Eye guard
- ⑮ Thread take-up cover
- ⑯ Motor cover

## 2. 规格 Specifications



电磁式抬压脚 Solenoid-type work clamp lifter


空压式抬压脚 Pneumatic-type work clamp lifter

使用的缝纫机 Sewing machine	平缝花样缝缝纫机（带大旋梭） Lock stitch, pattern tacking sewing machine (with large shuttle hook)
线迹形式 Stitch formation	单针平缝 Single needle lock stitch
最高缝纫速度 Max. sewing speed	2,700rpm 2,700 rpm
缝纫尺寸(X×Y) Sewing area (X x Y)	最大300×200mm Max. 300 x 200 mm
送布驱动方式 Feed mechanism	间歇送布（脉冲马达驱动） Intermittent feed, pulse motor drive
针迹节距 Stitch length	0.05 N12.7mm 0.05 - 12.7 mm
针数 No. of stitches	内存500,000针(※) 500,000-stitch internal memory(*)
最大针数 Maximum no. of stitches	20,000针（1个程序） 20,000 stitches (per program)
存储可能缝纫的数据 No of sewing data items that can be stored	内存：512种类(※) Internal memory: 512(*)
抬压脚方式 Work clamp lift method	空压式 Pneumatic method
压脚上升量 Work clamp height	最大30mm Max. 30 mm
2段压脚 2-step work clamp	左右一体式压脚 Integrated-type work clamp
间歇压脚上升量 Intermittent presser foot lift amount	22mm 22 mm
间歇压脚行程 Intermittent stroke	2~4.5mm. 4.5~10mm或0(出厂时3mm) 2 - 4.5 mm, 4.5 - 10 mm or 0 (Default setting 3 mm)
使用的旋梭 Rotary hook	半回转2倍旋梭（标准旋梭另买） Double-capacity shuttle hook (standard shuttle hook sold separately)
扫线装置 Wiper device	标准装备 Standard equipment
切线装置 Thread trimmer	标准装备 Standard equipment
数据存储方式 Data storage method	内存（快擦写存储器），CF卡(32MB~2GB)[选购件]3.5磁盘ZHD/1.44MB. ZDD Internal memory (Flash memory), CF card (32 MB - 2 GB)[Option] 3.5 floppy disk 2HD/1.44MB. 2DD
用户程序数 User programs	999
循环程序数 Cycle programs	9
马达 Motor	AC伺服马达750W 750 W AC servo motor
质量 Weights	头部：约160kg. 操作盘：约0.6 kg控制箱：14.2—16.2 kg（根据电压不同而不同） Machine head approx. 160 kg, operation panel approx. 0.6 kg Control box 14.2 - 16.2 kg (Differs depending on destination)
电源 Power supply	单相220V, 3相220V / 380V / 400V 500VA Single-phase 220 V, Three-phase 220 V/380 V/400 V 500 VA
空气压力 Air pressure	0.5 Mpa 1.8 l/min 0.5 Mpa 1.8 l/min.

※根据各个程序的针数的不同，能够存储的缝纫数据和针数也有所不同

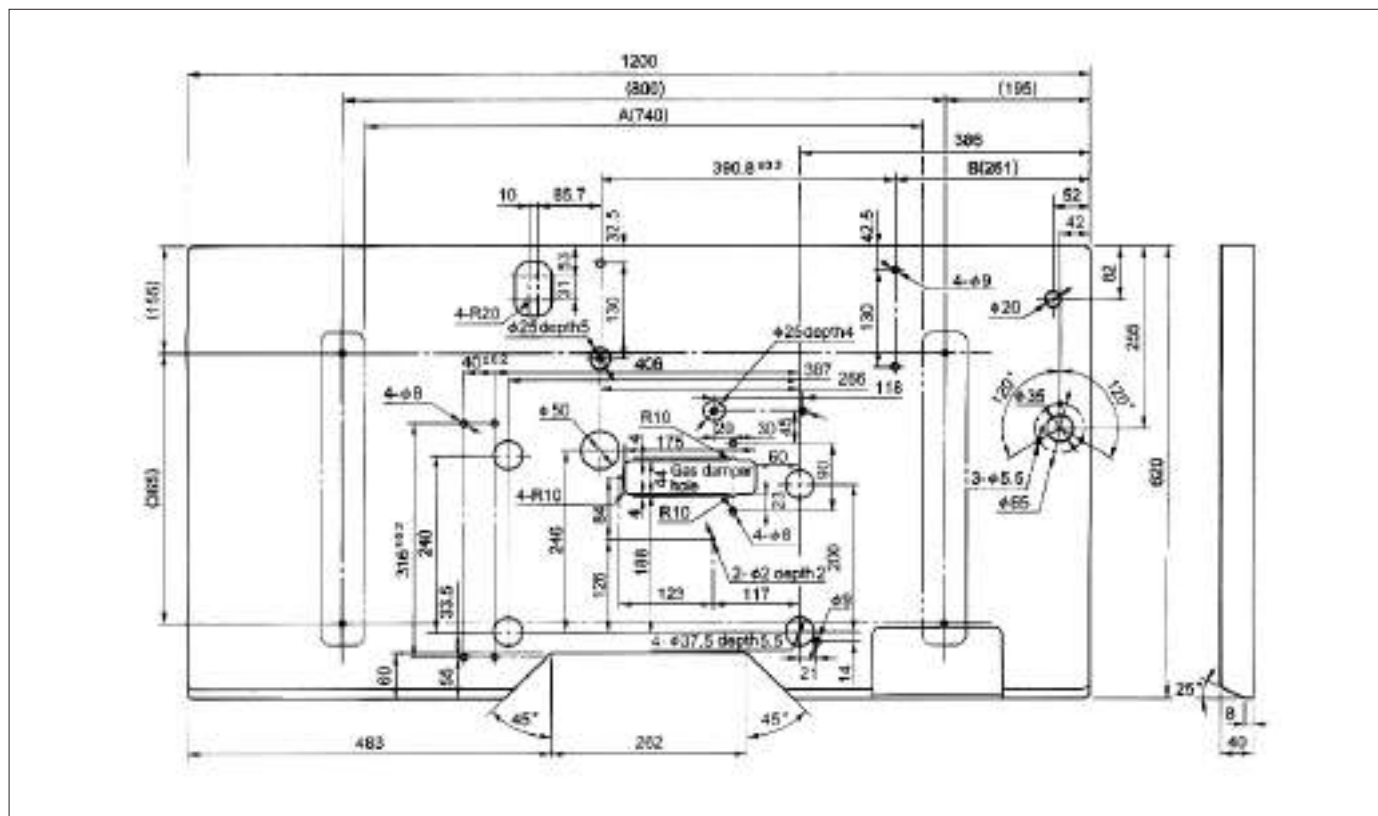
※The number of data items and stitches that can be stored will vary depending on the number of stitches in each program.

### 3. 安装方法 Installation

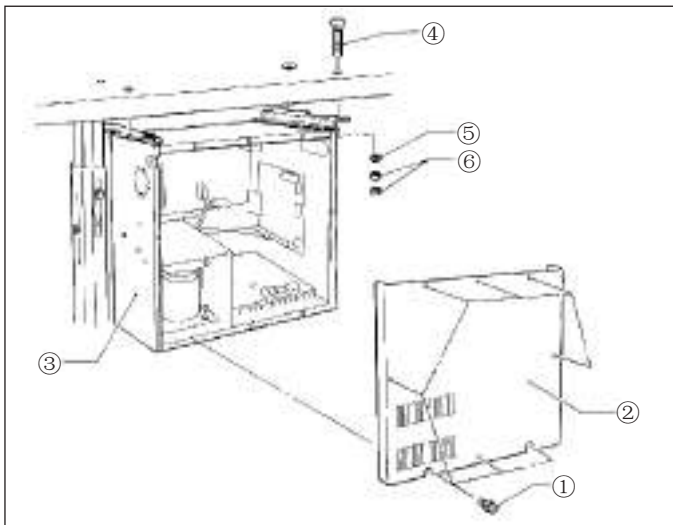
 <p><b>注意</b> CAUTION</p>	<p>※请让受过培训的技术人员来安装缝纫机。                  ※请委托购买商店或电气专业人员进行电气配线。                  ※安装工作必须由两人以上来完成。                  ※在安装完成前, 请不要连接电源, 如果误踩脚开关, 缝纫机动作会导致受伤。                  ※缝纫机头倒下或竖起时, 请用双手进行操作。                  另外在缝纫机头倒下的状态下, 请不要用力压缝纫机。如缝纫机失去平衡, 滑落到地上是造成受伤或缝纫机损坏的原因。                  ※所有电缆应固定在离活动部件至少25mm以外处。另外, 不要过度弯曲电缆或用卡钉固定得过紧, 会引起火灾或触电的危险。                  ※必须接地。接驳地线不牢固, 是造成触电或误动作的原因。                  ※请在机头及马达上安装安全罩壳。                  ※Machine installation should only be carried out by a qualified technician.                  ※Contact your Brother dealer or a qualified electrician for any electrical work that may need to be done.                  ※The installation should be carried out by two or more people.                  ※Do not connect the power cord until installation is complete.                  If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.                  ※Hold the machine head with both hands when tilting it back or returning it to its original position. Furthermore, do not apply excessive force when tilting back the machine head. The sewing machine may become unbalanced and fall down, and serious injury or damage to the sewing machine may result.                  ※All cords should be secured at least 25 mm away from any moving parts. Furthermore, do not excessively bend the cords or secure them too firmly staples, otherwise there is the danger that fire or electric shocks could occur.                  ※Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.                  ※Install the safety covers to the machine head and motor.</p>
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#### 3-1. 工作台板加工图 Table processing diagram

- 台板的厚度应达40mm, 能够承受缝纫机的重量, 并能够承受缝纫机的震动。
- 如果机脚的内侧尺寸A小于740mm, 请将控制箱的安装位置 (B=261mm) 移向左侧进行加工。
- 请确认控制箱应离开机脚10mm以上。如果控制箱过于靠近机脚, 则可能会引起缝纫机的误动作。
- The thickness of the table should be at least 40 mm, and it should be strong enough to bear the weight and vibration of the sewing machine.
- If the distance A between the insides of the legs is less than 740 mm, move the control box installation position to the left (B = 261 mm).
- Check that the control box is at least 10 mm away from the leg. If the control box and the leg are too close together, it may result in incorrect sewing machine operation.



### 3-2. 控制箱的安装方法 Installing the control box



拧下固定螺钉①[8个]，拆下控制箱的盖子②。

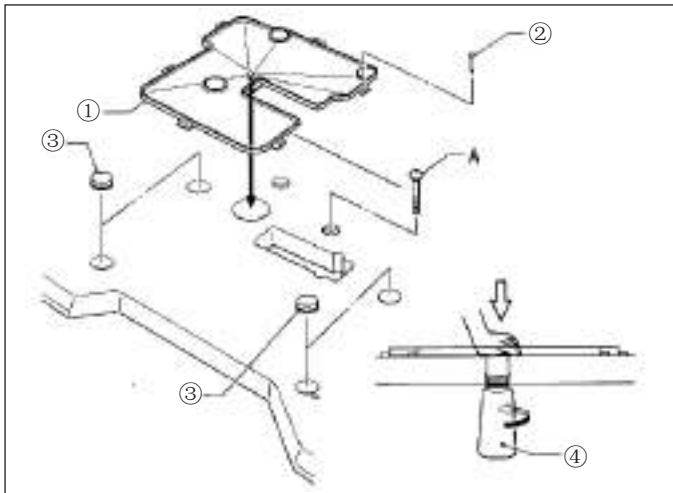
- ③控制箱
- ④螺栓[4个]
- ⑤垫圈[4片]
- ⑥螺母[8个]

**EN**

Remove the eight screws ①, and then remove the control box cover ②.

- ③ Control box
- ④ Bolts[4 pcs.]
- ⑤ Plain washers[4 pcs.]
- ⑥ Nuts[8 pcs.]

### 3-3. 油盘的安装方法 Installing the oil pan



当使用电磁规格时，在安装油盘前，请先装上用于踏脚用复合件的螺栓(A)。

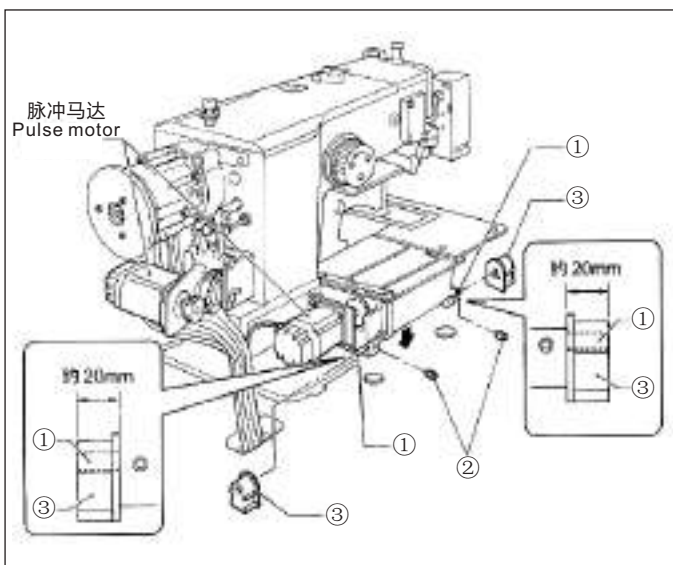
- ①油盘
- ②钉[7个]
- ③防震橡皮[4个]
- ④注油罐

**EN**

For solenoid specifications, install the treadle unit mounting bolt (A) before installing the oil pan.

- ① Oilpan
- ② Nails [7 pcs.]
- ③ Rubber cushions [4 pcs.]
- ④ Waste oiltank

### 3-4. 缝纫机头部的安装方法 Installing the head



- ①机头支撑销[2个]

- ②螺钉[2个]

- ③机头铰链橡皮组[2个]

将机头轻轻地放在油盘、防震橡皮上。

(注意)

- 请注意不要让电线夹在机头和油盘之间。
- 在拿机头时，请不要握住脉冲马达。否则可能会引起脉冲马达的故障。

**EN**

- ① Pins [2 pcs.]

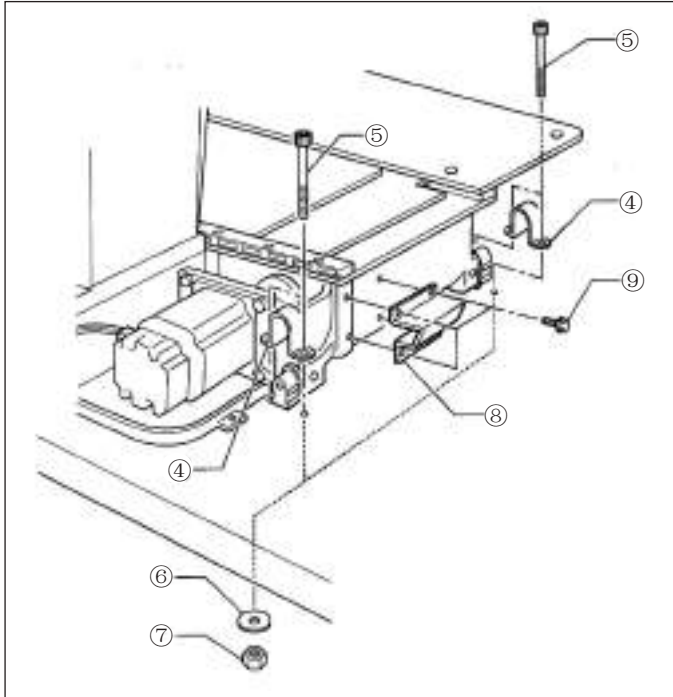
- ② Set screws [2 pcs.]

- ③ Hinge rubber assemblies [2 pcs.]

Place the machine head gently on top of the oil pan and the rubber cushions.

(NOTE)

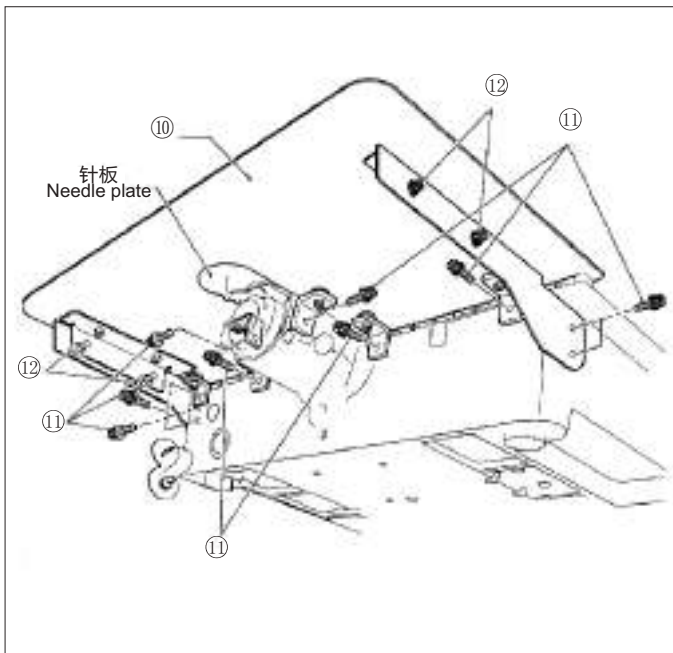
- Be careful not to get the cords clamped between the machine head and the oil pan.
- When holding the machine head, do not hold it by the pulse motor. This may cause problems with operation of the pulse motor.



- ④ 机头铰链套[2个]
- ⑤ 螺栓[4个]
- ⑥ 垫圈[4片]
- ⑦ 螺母[4个]
- ⑧ 机头撑杆
- ⑨ 螺栓带垫圈[4个]

**EN**

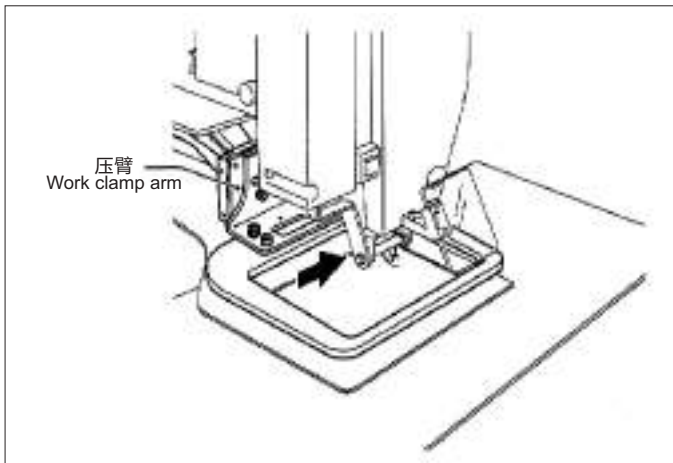
- ④ Hinge holders [2 pcs]
- ⑤ Bolts [4 pcs.]
- ⑥ Plain washers [4 pcs.]
- ⑦ Nuts [4 pcs.]
- ⑧ Head rest
- ⑨ Bolts with washer [4 pcs.]



- ⑩ 针板辅助板
  - ⑪ 螺栓带垫圈[10个]
- 为了使针板辅助板⑩和针板在同一高度平面，旋松螺栓带垫圈⑫进行调整。  
(注意) 请将针板辅助板水平安装。

**EN**

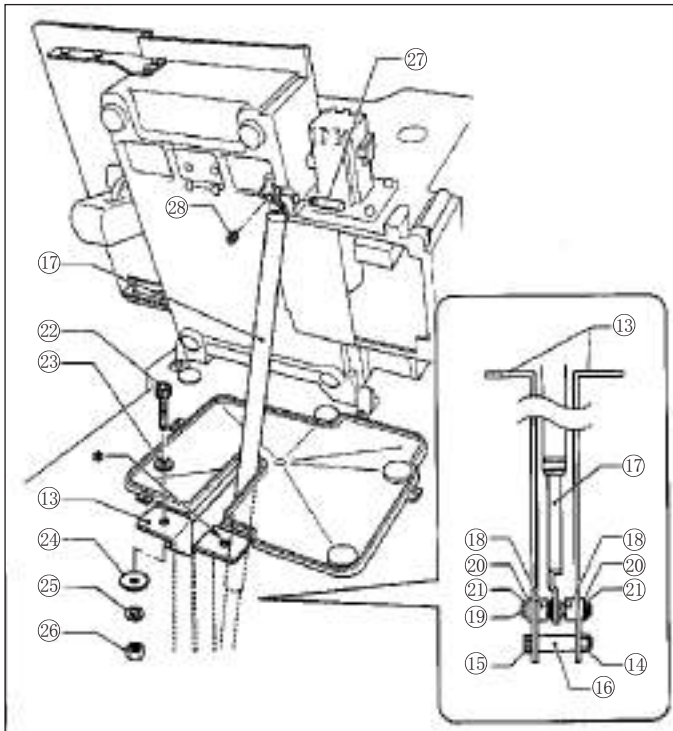
- ⑩ Auxiliary plate
  - ⑪ Bolts with washer [10 pcs.]
- Loosen the bolts with washer ⑫ and adjust so that the auxiliary plate ⑩ and the needle plate are at the same height.  
(NOTE) Install the auxiliary plate so that it is horizontal.



从缝纫机正面将压臂移动到最右侧（图中箭头方向）之后，慢慢地将缝纫机头部倒下。  
(注意) 缝纫机头部的操作请2个人以上，使用双手慢慢地将缝纫机头部倒下。

**EN**

Move the work clamp arm all the way to the right when looking from the front of the sewing machine (the direction of the arrow in the illustration), and then gently tilt back the machine head.  
(NOTE) Two or more people should tilt back the machine head, and it should be tilted gently while being held with both hands.



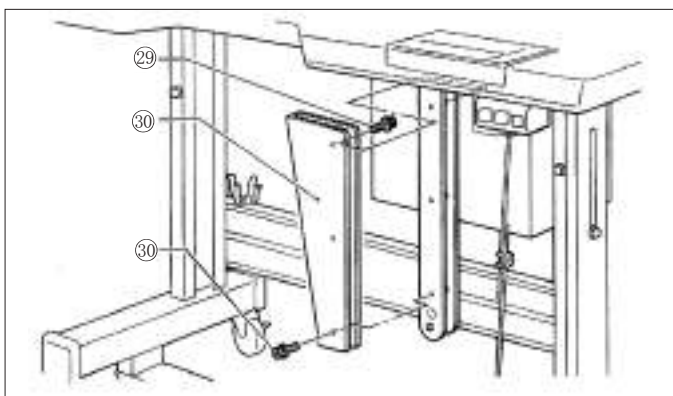
- ⑬ 缓冲器支架[2片]
- ⑭ 垫片
- ⑮ 螺栓
- ⑯ 螺母
- ⑰ 缓冲器
- ⑱ 轴套[2个]
- ⑲ 缓冲器轴D
- ⑳ 垫圈[2片]
- ㉑ 制动轮E[2个]
- ㉒ 螺栓[2个]
- ㉓ 垫圈(中)[2片]
- ㉔ 垫圈(大)[2片]
- ㉕ 弹簧垫圈[2片]
- ㉖ 螺母[2个]
- ㉗ 缓冲器轴U
- ㉘ 螺钉

(注意)如果是电磁规格时,印有\*的请使用螺栓⑲、垫圈⑲、垫圈⑲。弹簧垫圈⑲、螺母⑲,将踏脚用复合件一起拴住。

**EN**

- ⑬ Gas spring holders [2 pcs.]
- ⑭ Spacer
- ⑮ Bolt
- ⑯ Nut
- ⑰ Gas spring .
- ⑱ Shaft collars [2 pcs]
- ⑲ Gas spring shaft D
- ⑳ Plain washers [2 pcs.]
- ㉑ Retaining rings E [2 pcs.]
- ㉒ Bolts [2 pcs]
- ㉓ Plain washers (medium) [2 pcs.]
- ㉔ Plain washers (large) [2 pcs.]
- ㉕ Spring washers [2 pcs]
- ㉖ Nuts [2 pcs.]
- ㉗ Gas spring shaft U
- ㉘ Set screw

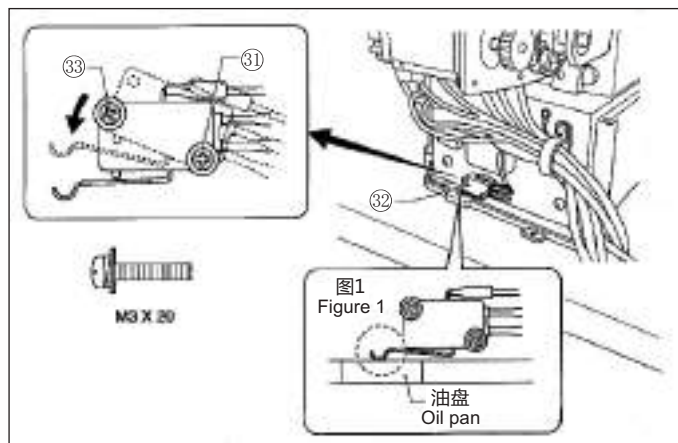
(NOTE) For solenoid specifications, the bolts ⑲, plain washers ⑲ plain washers ⑲, spring washers ⑲ and nuts ⑲ in the places marked with \* are also used to install the treadle unit.



- ㉙ 缓冲器支架盖
- ㉚ 螺栓带垫圈[6个]

**EN**

- ㉙ Gas spring support cover
- ㉚ Bolts with washer[6 pcs.]

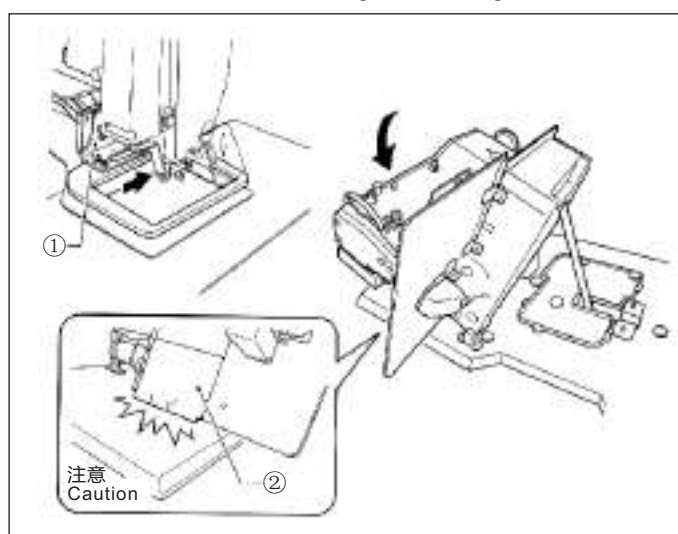


- 慢慢地将机头返回到原位。
- 松开螺钉⑩，在如图所示的位置上安装头部开关⑩，使用螺钉⑩和附属螺钉M3X20 ⑩将头部开关⑩固定。
- 如图1所示，确认接通头部开关⑩。

**EN**

- Gently return the machine head to its original position. Loosen the screw ⑩. Move the machine head switch ⑩ to the position shown in the illustration, and then secure the machine head switch ⑩ with the screw ⑩ and the accessory M3×20 screw ⑩.
- Check that the machine head switch ⑩ is turned on as shown in figure 1.

3-5. 缝纫机头部的倒下 Tilting the sewing machine head

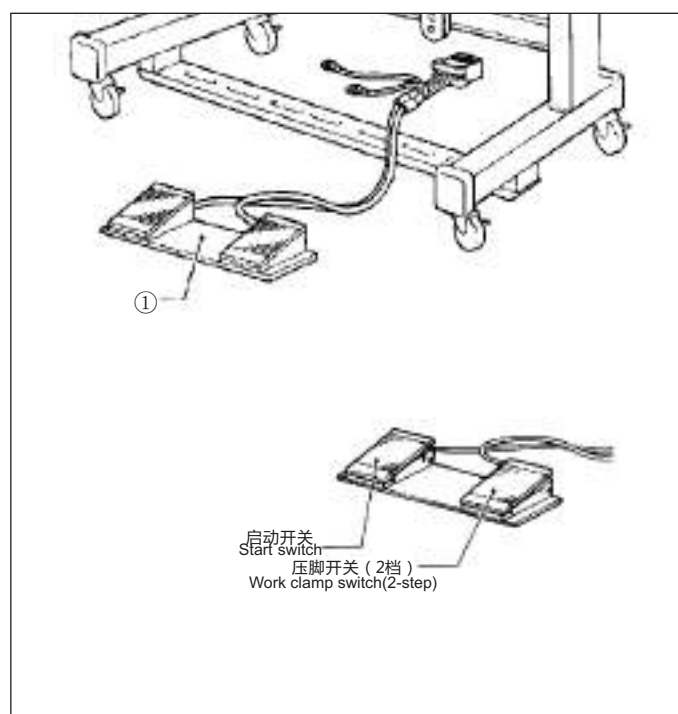


- 1) 从缝纫机正面将压臂①移动到最右侧（图中箭头方向）。
  - 2) 使用双手慢慢地将缝纫机头部向工作台的左侧倒下。
- (注意)倒下缝纫机头部时，请一定将压臂移动到最右侧之后再倒下缝纫机头。如果压臂留在左侧倒下缝纫机头部时，外盖L②有可能会破损。

**EN**

- 1) Move the presser arm assembly ① as far as it will go in the direction of the arrow in the illustration (to the right when looking from the front of the sewing machine)
  - 2) Stand at the left side of the table, and gently tilt the machine head towards you.
- (NOTE) Always be sure to move the work clamp arm all the way to the right before tilting back the machine head. If you try to tilt back the machine head while the work clamp arm is still on the left side, it may damage the outer cover L ②.

3-7. 2连脚踏开关的安装方法 Installing the two-prdal foot switch



- ①脚踏开关  
将脚踏开关①的插头插入主基板的XS3引出线相连。

<脚踏开关的操作法>

当踩下压脚开关（右侧）时二压脚会放下，当踩下启动开关时（左侧）时缝纫机将启动。

**EN**

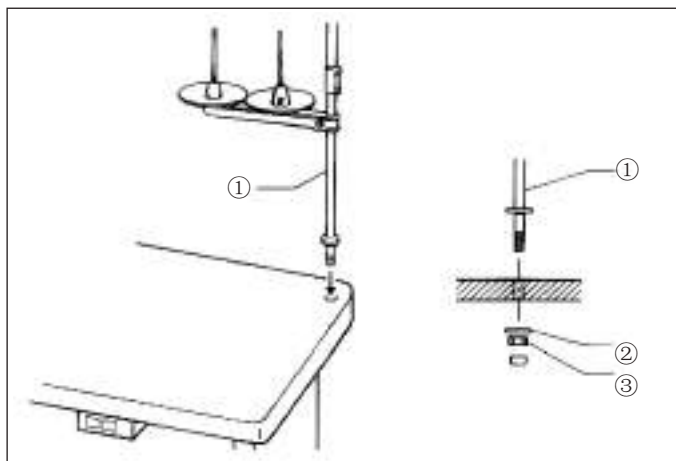
- ① Foot switch  
Insert the connector for the foot switch ① into XS3 on the main P.C. board.

<Foot switch operating method>

When the work clamp switch (right) is depressed, both work clamps are lowered, and when the start switch (left) is depressed, the sewing machine starts sewing.



### 3-8. 线架的安装方法 Installing the cotton stand

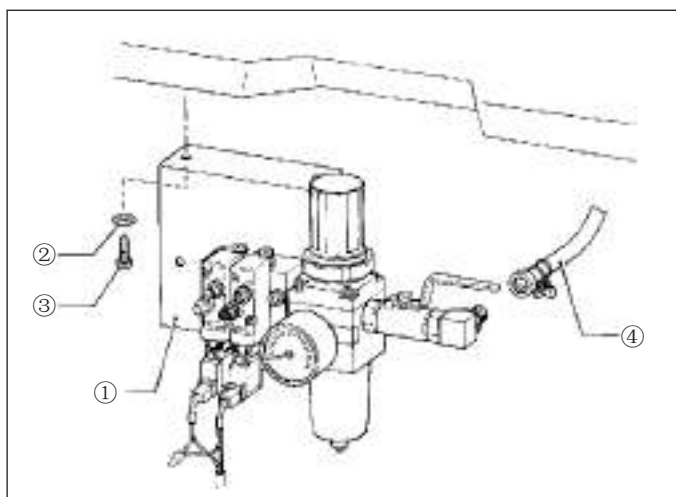


①线架  
(注意)按装上垫圈②。请拧紧螺母③使线架完全不能移动。

EN

① Cotton stand  
(NOTE) Fit the washer ②, and then securely tighten the nut ③ so that the cotton stand does not move

### 3-9. 空压用复合件的安装方法 (空压规格) Installing the pneumatic unit (pneumatic specifications)



安装在工作台的下面。

- ①电磁阀组
- ②垫圈[2片]
- ③螺钉[2个]
- ④皮管

安装好空压用复合件后, 请进行空气压力的调整。  
(参考[10-16. 空气压力的调整])

(注意)安装空压用复合件时, 请不要碰到控制箱和工作台脚。

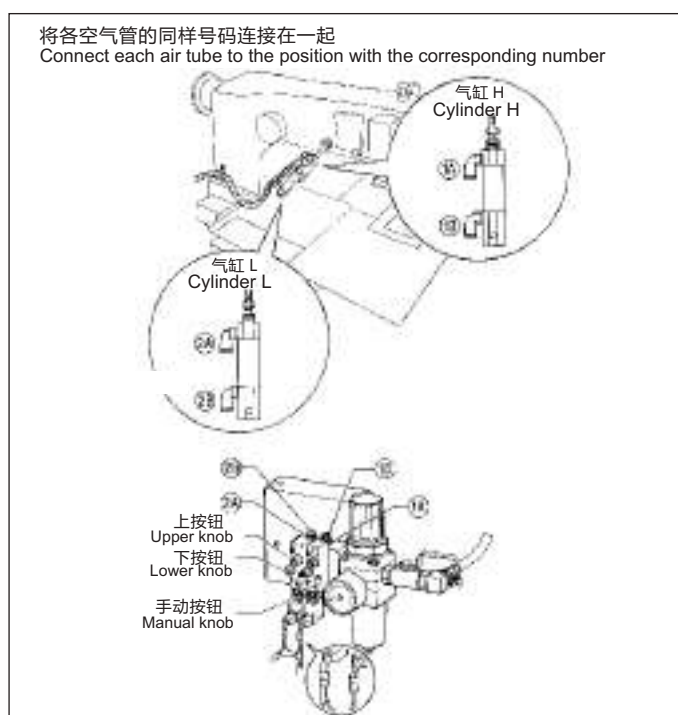
EN

Install underneath the work table.

- ① Solenoid valve assembly
- ② Washers[2 pcs.]
- ③ Wood screws[2 pcs.]
- ④ Rubberhose

After installing the pneumatic unit, adjust the air pressure  
(Refer to "10-16. Adjusting the air pressure". )

(NOTE) Make sure that the pneumatic unit does not touch the control box or the work table leg.



#### <速度控制的调整>

使用阀门的按钮可以调整压脚的上升和下降的速度。请使用调节按钮, 让左右的压脚以同样的速度进行运动。

- 旋紧上按钮, 压脚的上升速度会变缓慢。反之, 如旋松上按钮, 压脚的上升速度会变快。
  - 旋紧下按钮, 压脚的下降速度会变缓慢。反之, 如旋松下按钮, 压脚的下降速度会变快。
- 在切断电源的状态下, 如使用手动按钮能使压脚运动。

EN


#### <Adjusting the speed controller>

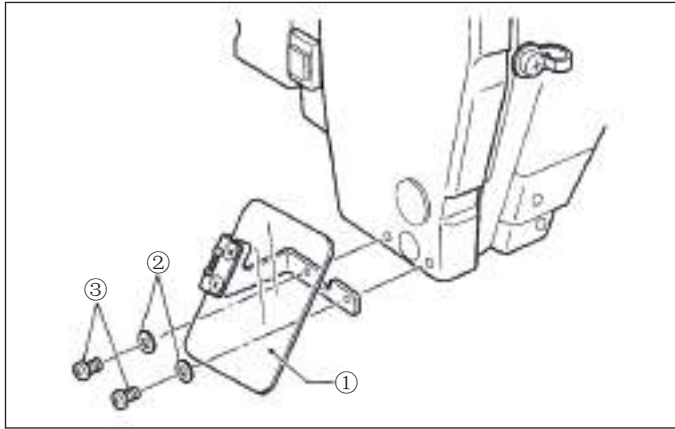
You can use the valve knobs to adjust the lifting and lowering speeds. The valve knobs should be adjusted so that the left and right sides of the work clamp operate at the same speed.

- When the upper knob is tightened, the lifting speed becomes slower. When it is loosened, the lifting speed becomes faster.
- When the lower knob is tightened, the lowering speed becomes slower. When it is loosened, the lowering speed becomes faster.

You can operate the work clamp while the power is turned off by pressing the manual button.

3-10. 护眼板的安装方法 Installing the eye guard

 <p><b>注意</b> CAUTION</p>	<p>为了安全起见，在使用本缝纫机之前，请安装保护装置。 如果未安装这些安全装置就使用缝纫机，会造成人身伤害及缝纫机损坏。</p> <p>Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.</p>
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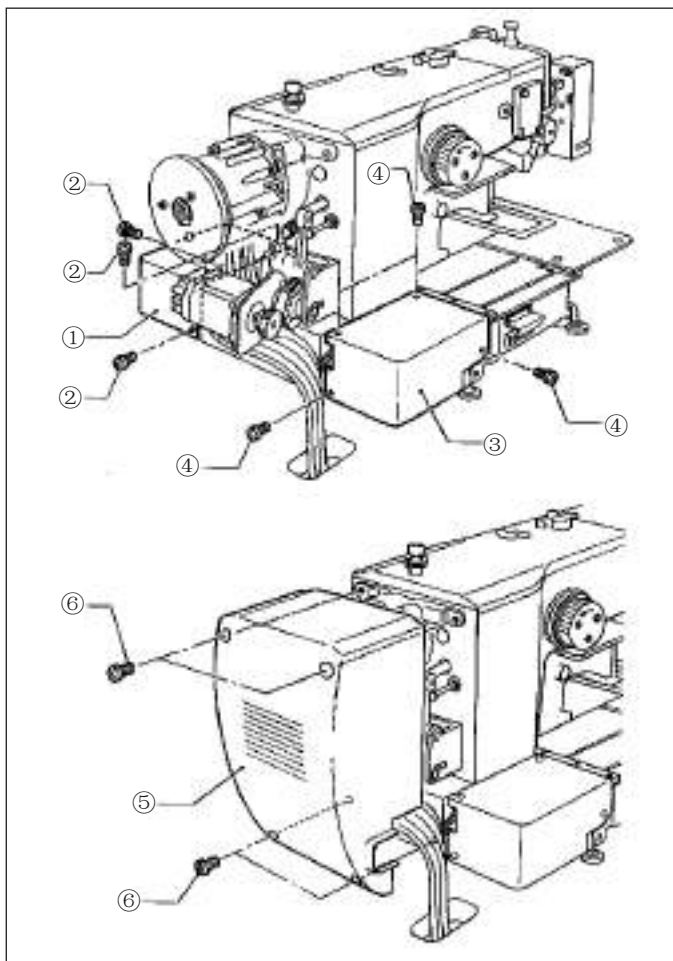


- ① 护眼板组件
- ② 垫圈[2片]
- ③ 螺钉[2个]

**EN**

- ① Eye guard assembly
- ② Plain washers [2 pcs.]
- ③ Screws [2 pcs.]

3-11. 马达盖的安装方法 Installing the motor cover



- ① 马达盖R
- ② 螺钉[4个]
- ③ 马达盖L
- ④ 螺钉[4个]
- ⑤ 马达盖
- ⑥ 螺钉[4个]

(注意) 在安装马达盖①时，请注意不要夹住电线等。

**EN**

- ① Motor cover R
- ② Screws [4 pcs.]
- ③ Motor cover L
- ④ Screws [4 pcs.]
- ⑤ Motorcover
- ⑥ Screws [4 pcs.]

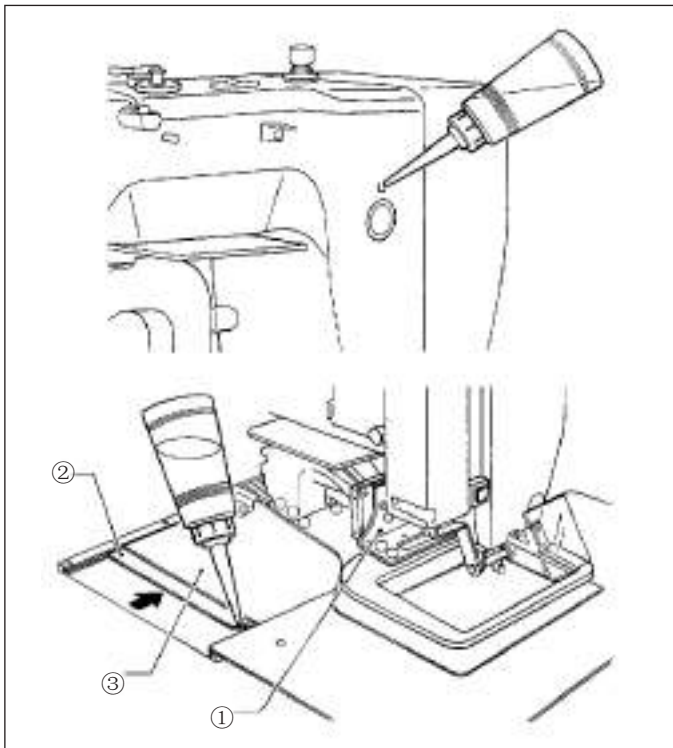
(NOTE) Be careful not to clamp the cords when installing the motor cover.

3-12. 加油 Lubrication



**注意**  
**CAUTION**

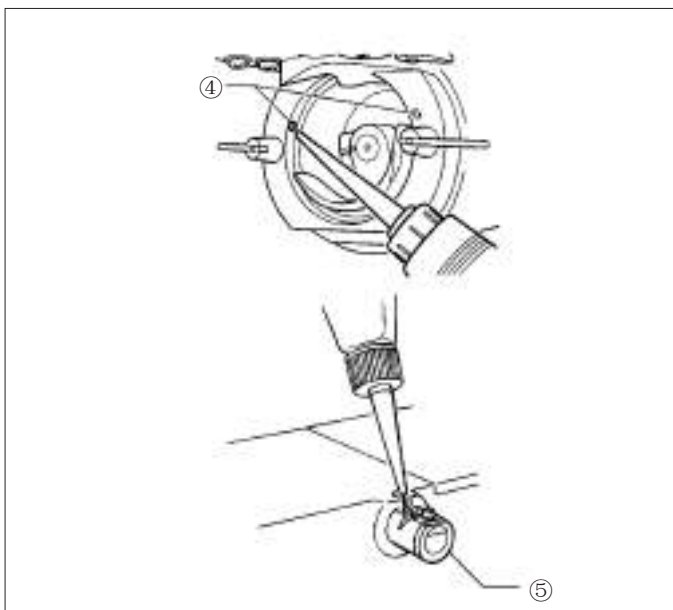
※在加油未完成前，请勿插上电源。  
如果误踩脚开关，缝纫机动作会导致受伤。  
※使用润滑油及黄油时，务必戴好保护眼镜和保护手套等，以防润滑油及黄油落入眼中或沾在皮肤上，这是引起发炎的原因。  
另外，润滑油及黄油不能饮用，否则会引起呕吐和腹泻。  
将油放在儿童拿不到的地方。  
※Do not connect the power cord until lubrication is complete.  
If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.  
※Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin. If the oil and grease get into your eyes or onto your skin, inflammation can result.  
Furthermore, do not drink or eat the lubricating oil or grease. They may cause diarrhea or vomiting.  
Keep the oil out of the reach of children.



- 1) 向机壳侧面的油箱注油。
- 2) 从缝纫机正面将压臂①移动到最右侧，将外盖L②滑动到内盖L③的中间，使底板的油孔能看见，从该油孔向底板侧面的油箱注油。  
(注意)当油面下降到油面指示窗的1/3左右时，请务必加注机油。如果油面下降到油面指示窗的1/3以下，则可能会成为机器烧伤等故障的原因。

**EN**

- 1) Fill the arm-side oil tank with oil.
- 2) Move the work clamp arm ① as far as it will go to the right when looking from the front of the sewing machine, and then slide the outer cover L ② into the inner cover L ③ so that the lubrication hole in the bed is visible. Pour oil into the bed side oil tank through this hole.  
(NOTE) Be sure to fill the machine with oil when the oil level is down to about one-third full in the oil sight glass. If the oil drops below the one-third level, there is the danger that the machine may seize during operation.

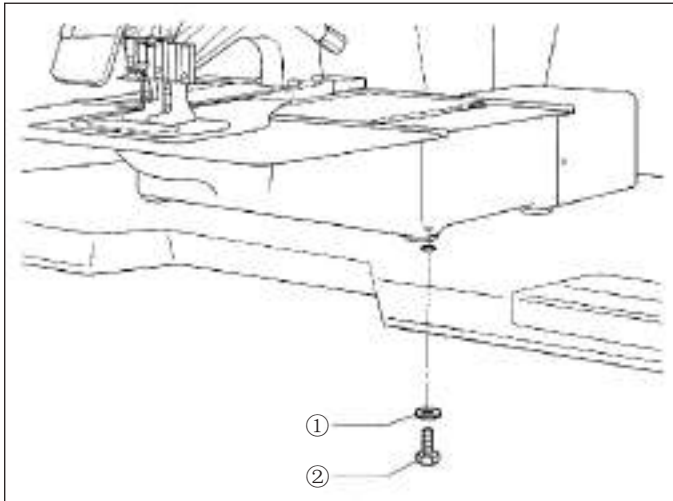


- 3) 给大旋梭本体组件的2个孔④注入机油，使毛毡上含有微量的机油。  
(注意)如果大旋梭本体组件的毛毡上没有机油，则可能会成为缝纫故障的原因。
- 4) 如果使用冷却液槽⑤时，请在槽中注入硅油(100mm<sup>2</sup>/s)。

**EN**

- 3) Pour oil in through the two holes ④ of the shuttle race base assembly so that the felt is lightly moistened.  
(NOTE) If there is no more oil on the felt of the shuttle race base assembly, problems with sewing may result.
- 4) If using the liquid cooling tank ⑤, fill it with silicon oil (100 mm<sup>2</sup>/s).

### 3-13. 机头部固定螺栓的安装方法 Installing the machine head fixing bolt



- ① 垫圈
  - ② 机头部固定螺栓
- (注意) 缝纫机运转时, 请将机头部固定螺栓拆除。

EN

- ① Plain washer
  - ② Machine head fixing bolt
- (NOTE) When operating the sewing machine remove the machine head fixing bolt.

## 4. 缝纫前的准备 Preparation before sewing

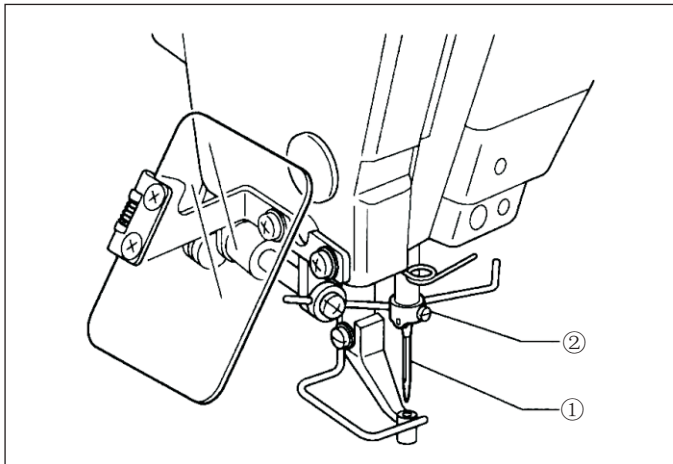
### 4-1. 机针的安装方法 Installing the needle



**注意**  
CAUTION

为了防止缝纫机的意外启动, 请关掉电源之后进行操作

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

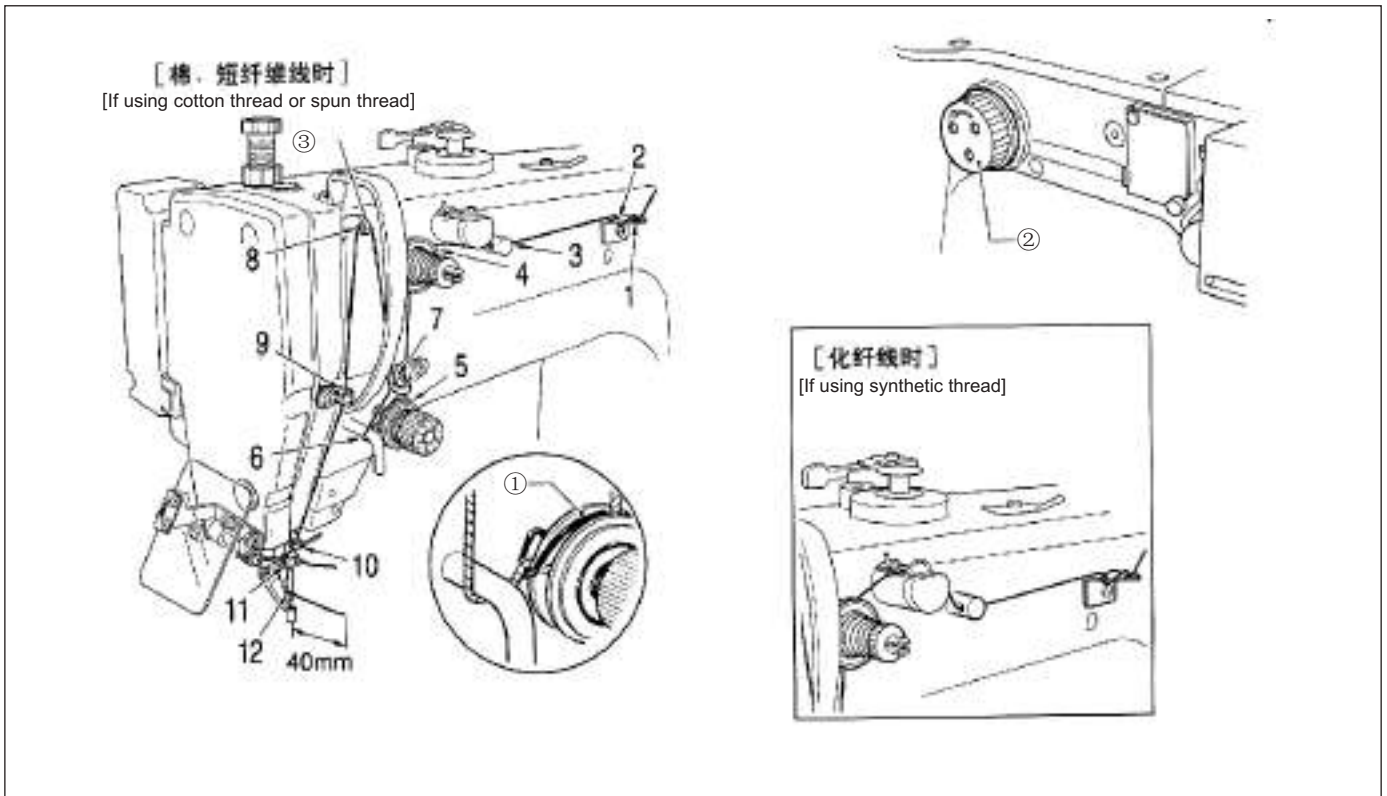


- 1) 松开螺钉①。
- 2) 机针②的长槽朝着正面, 笔直插到底并用力拧紧螺钉①。

EN

- 1) Loosen the set screw ①.
- 2) Insert the needle ② in a straight line as far as it will go, making sure that the long groove on the needle is at the front, and then securely tighten the set screw ①

#### 4-2. 面线的穿法 Threading the upper thread

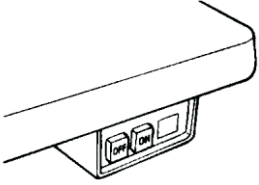







- 请回转缝纫机手轮②，将挑线杆③调到最高点后，进行穿线。(容易穿线，且可防止开始缝纫时的脱线。)
- 在线穿过机针后，从机针孔残留的线的长度为40mm左右。如残留的线过长有可能会打结。

#### EN

- Turn the machine pulley ② and raise the thread take-up ③ to its highest position before threading the upper thread. (This will make threading easier and it will prevent the thread from coming out at the sewing start.)
- When threading the thread through the needle, allow a distance of approximately 40 mm between the needle hole and the end of the thread. If the trailing length of the thread is too long, it may cause the thread to become tangled.

< 穿线模式 > Threading mode

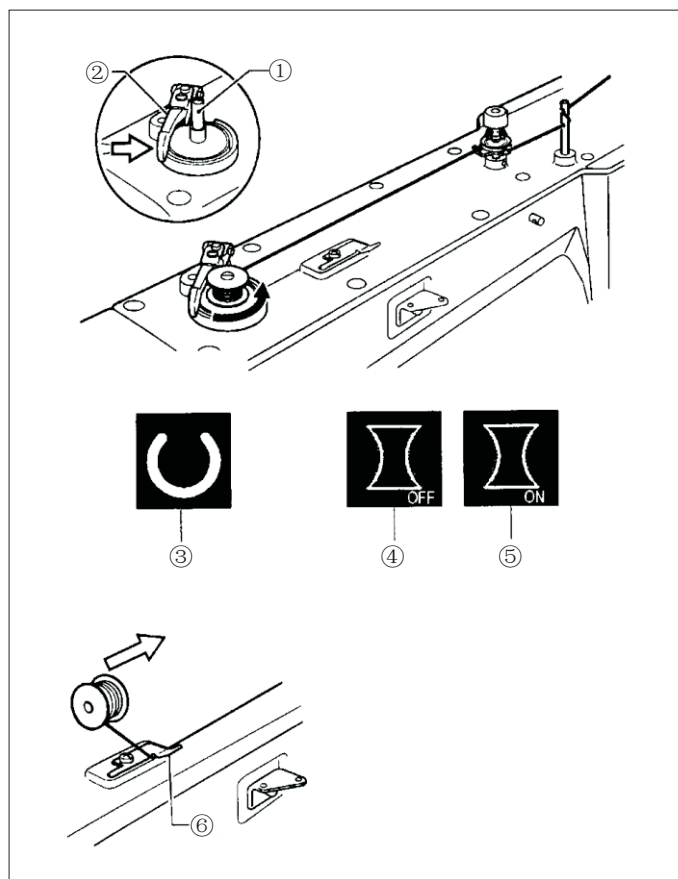
1		<p>打开电源 Turn on the power switch</p>
2	<p>按回零键 press the home position key</p> 	<p>按穿线键，同时键符改变。 press the threading key, and the key change</p>   <p>※降下压脚。 The work clamp will drop</p>
3	<p>进行穿线 Threading the thread</p>	
4	<p>穿线模式结束 Ending threading mode</p>	<p>按穿线键，同时键符改变。 press the threading key, and the key change</p>   <p>※压脚返回到进入穿线模式前的状态。 The work clamp will return to where it was before threading mode was started</p>

在穿线模式下，即使踩下踏脚开关，缝纫机也不会启动，所以非常安全

**EN**

Threading mode is safe because the sewing machine will not start even when the foot switch is depressed.

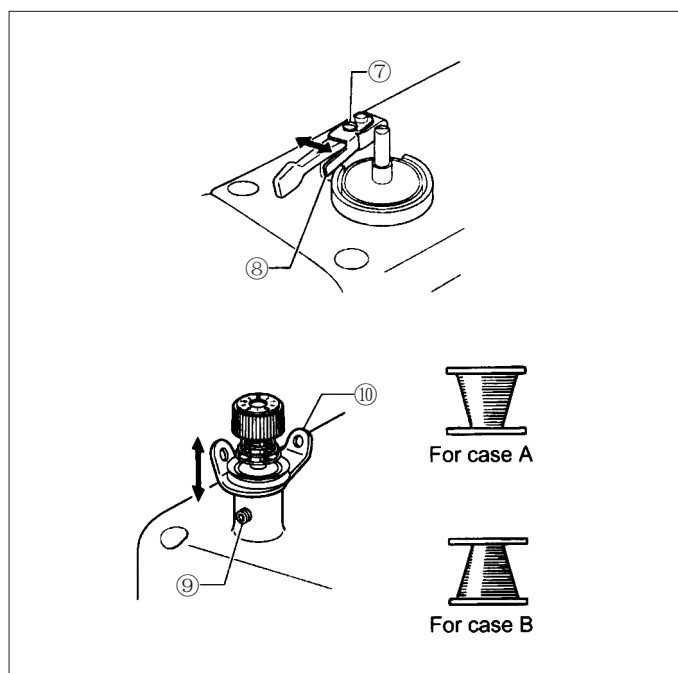
4-3. 底线的绕线方法 Winding the lower thread



- 1) 将梭芯置于梭芯卷线轴①上。
- 2) 按照图示那样穿线，将线在梭芯内绕几圈，然后推梭芯压臂柄②。
- 3) 打开电源。
- 4) 按回零键③进行原点检测。
- 5) 确认机针不会碰到压脚，按绕线键④，使绕线键④切换成绕线键⑤，并处于“ON”状态，将脚踏开关踩到第2档位置，开始绕线。  
(2连脚踏开关时，踩下2连脚踏开关的启动开关)
- 6) 当绕线量达到规定的数量(梭芯外径的80%~90%时，应停止绕线，梭芯压臂柄②将自动返回(如果在中途踩下脚踏开关的启动开关，或按下绕线键⑤，使绕线键⑤切换成绕线键④，并处于“OFF”状态，则停止绕线)。
- 7) 拆下梭芯，将线钩在切刀⑥上，朝箭头方向拉梭芯将线切断。

EN

- 1) Place the bobbin onto the bobbin winder shaft ①.
- 2) thread the thread as shown in the illustration wind the thread around the bobbin several times, and then press the bobbin presser arm ②.
- 3) turn on the power switch.
- 4) press the time position key ③, the sewing machine move to the time position.
- 5) check that the needle not touch the clamp, and then press the bobbin winder key ④, the bobbin winder key ④ change to key ④ change to the bobbin winder key ⑤, and it keep in the state "ON", depress the foot switch to the 2nd step, and it will start wind.  
(If using a two-pedal foot switch, depressing the start switch two-pedal foot switch.)
- 6) once winding of set amount of lower thread (80%-90% of the bobbin capacity) is completed, the bobbin presser arm ② will return automatically.
- 7) remove the bobbin, hook the thread onto the knife ⑥, and then pull the bobbin in the direction of the arrow to cut the thread.



调节梭芯绕线量

拧松螺钉⑦，调节梭芯压杆⑧。

EN

Adjusting the bobbin winding amount

Loosen the screw⑦ and move the bobbin presser⑧ to adjust.

如果梭芯上的线不均匀

拧松止动螺钉⑨，上下移动卷线用夹线器⑩进行调节。

※在A的情况下，将卷线用夹线器⑩向下移动。

※在B的情况下，将卷线用夹线器⑩向上移动。


EN

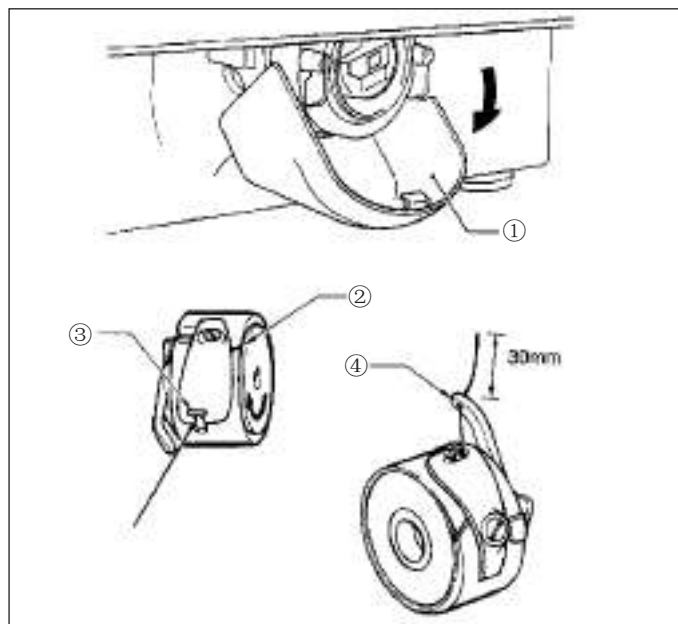
If the thread winds onto the bobbin unevenly

Loosen the set screw ⑨ and move the bobbin winder tension assembly ⑩ up and down to adjust.

※ For case A, move the bobbin winder tension assembly ⑩ down, and for case B, move it upward.

#### 4-4. 梭心套的装取方法 Installing the bobbin case

 <p><b>注意</b> CAUTION</p>	<p>为了防止缝纫机的意外起动，请关掉电源之后进行操作 Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.</p>
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- 1) 向下拉大旋梭盖①将其打开。
- 2) 按底线向右卷绕的方向握住梭芯，然后将梭芯插入梭芯套。
- 3) 将底线穿过线槽②，然后从导线部③中拉出。
- 4) 当拉出底线后，检查梭芯是否按箭头方向转动。
- 5) 将线穿过套柄上的线孔④，使线端长出30 mm左右。
- 6) 拿住梭芯套上的捏手，将梭芯套插入旋梭。

**EN**

- 1) Pull the shuttle race cover ① downward to open it.
- 2) While holding the bobbin so that the thread winds to the right, insert the bobbin into the bobbin case.
- 3) Pass the thread through the slot ② and pull it out from the thread hole ③.
- 4) Check that the bobbin turns in the direction of the arrow when the thread is pulled.
- 5) Pass the thread through the lever thread hole ④, and then pull out approximately 30 mm of thread.
- 6) Hold the latch on the bobbin case and insert the bobbin case into the rotary hook.

#### 4-5. 缝纫张力 Thread tension

规格 Specifications	厚布料(-01) heavy-weight materials(-01)	中厚布料(-02) heavy-weight materials(-02)
面线 Upper thread	相当#20号 #20 or similar	相当#50号 #50 or similar
底线 Lower thread	相当#20号 #20 or similar	相当#50号 #50 or similar
面线的张力(N) Upper thread tension (N)	1.4 - 1.8	0.8 - 1.2
底线的张力(N) Lower thread tension (N)	0.2 - 0.3	0.2 - 0.3
预张力(N) Pre-tension (N)	0.2 - 0.4	0.1 - 0.3
机针 Needle	DPx17#19	DPx5#16
常用回转数 Normal sewing speed	2,000rpm	2,000rpm

##### 4-5-1. 底线的张力 Lower thread tension



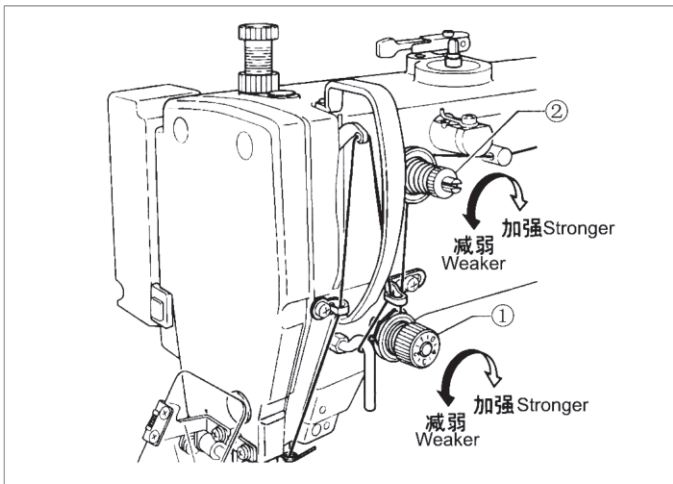
转动调节螺钉①来调节底线的张力，将张力调节到当用手握住线端时梭芯套靠它的自重不会滑落的程度，尽可能调弱张力。

**EN**

Adjust the thread tension to the weakest possible tension by turning the thread tension nut ① until the bobbin case will not drop by its own weight while the thread end coming out of the bobbin case is held.



#### 4-5-2. 面线的张力 Upper thread tension



- 1) 转动夹线螺母①，根据缝制品进行张力的调节（主夹线器）。
- 2) 用夹线螺母②（副夹线器）进行调节，使面线残留量在40, mm左右的范围内。

**EN**

- 1) Turn the tension nut ① (main tension) to adjust the tension as appropriate for the material being sewn.
- 2) Use the tension nut ② (sub tension) to adjust the upper thread trailing length to about 40 mm.

### 5. 缝纫 Sewing



**注意**  
**CAUTION**

发生下列情况时，请切断电源。  
当误踩脚开关时，缝纫机动作会导致受伤。

- 机针穿线时
- 更换机针或梭芯时
- 缝纫机不使用，或人离开缝纫机时

缝纫过程中不要触摸任何活动部件或将物件靠在运动部件上，因为这会导致受伤或缝纫机损坏。

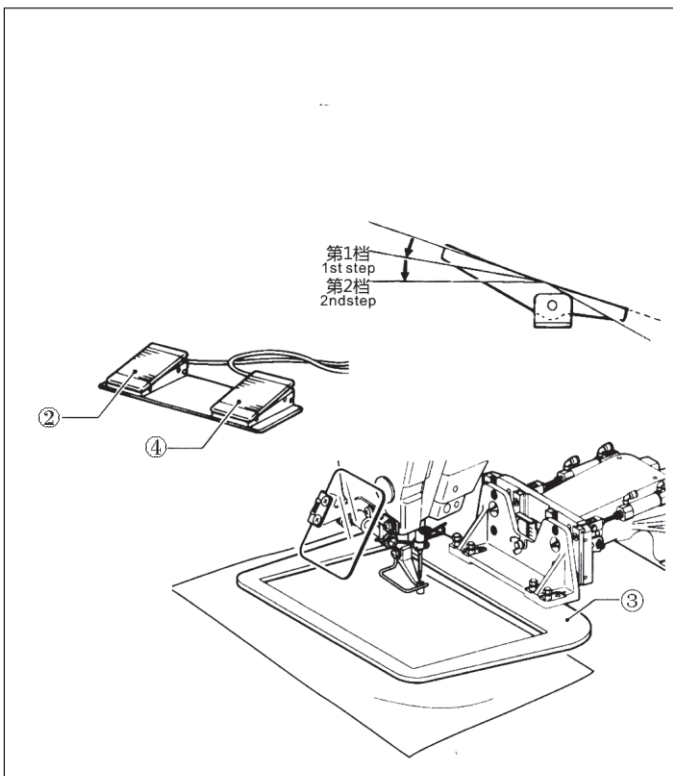
Turn off the power switch at the following times.

If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.

- When threading the needle
- When replacing the bobbin and needle
- When not using the machine and when leaving the machine unattended

Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.

#### 5-1. 缝纫的方法 Sewing

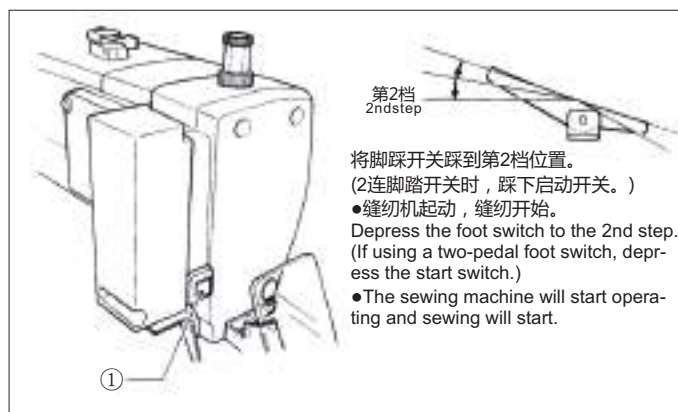


- 1) 打开电源。
- 2) 按 或 键翻页，按数字键选择要缝纫的程序号。
- 3) 按回零键①进行原点检测。
- 4) 将布料放在压脚板③的下面
- 5) 将脚踩开关踩到第1档(2连开关时,先踩放下压脚④)
  - 压脚板③下降。
- 6) 将脚踩开关踩到第2档(2连开关时,先踩放下压脚②)
  - 缝纫机起动。
- 7) 缝纫一结束就剪线，然后压脚板③上升。

**EN**

- 1) Turn on the power switch.
- 2) Press the or key to turn on the page, and press the data key to select the sewing program .
- 3) Press the time position key ①, the sewing machine will move to the loading position.
- 4) Place the article to be sewn underneath the work clamp ③.
- 5) Depress the foot switch to the 1st step.  
(if using a two-pedal foot switch, depress the start switch ④.)
  - The work clamp ③ will drop.
- 6) Depress the foot switch to the 2nd step.  
(if using a two-pedal foot switch, depress the start switch ②.)
  - The sewing machine will start sewing.
- 7) When sewing is complete, the thread will be trimmed and the work clamp ③ will rise.

### 5-2. 暂停开关的使用方法 Using the stop switch



在缝制中或是试送布中，如果按了暂停开关①，缝纫机立即会停止。

<接着缝制的方法>

在缝制中，当出现断线或是底线用完等情况时，按下了暂停开关①后，还是可以在出现断线的位置处继续接着缝制工作的。

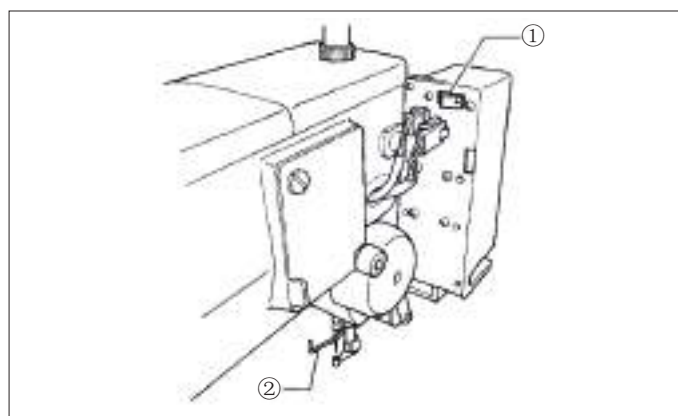
EN

If you press the STOP switch ① while sewing or test feeding is in progress, the sewing machine will stop immediately.

<Continuing sewing from a stopping point>

If you have pressed the STOP switch ① at times such as if the thread breaks while sewing or the lower thread runs out, you can resume sewing from the point where the thread ran out.

### 5-3. 扫线用开关的使用方法 Using the thread wiper switch




使用扫线用开关①，可以切换扫线杆②的开和关(ON/OFF)。

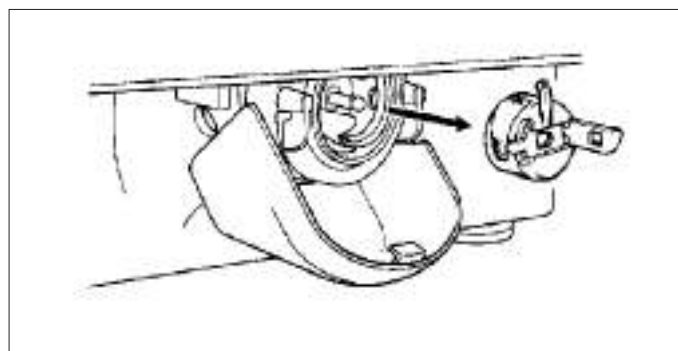
EN

The thread wiper switch ① can be used to turn the thread wiper ② on and off.

## 6. 保养 Cleaning

 <p><b>注意</b> CAUTION</p>	<p>※在开始清洁作业前，请切断电源。 如果误踩了脚开关，缝纫机动作会导致人员受伤。 ※使用润滑油和黄油时，务必戴好保护眼镜和保护手套等，以防润滑油落入眼中或沾在皮肤上，这是引起发炎的原因。 另外，润滑油或黄油不能饮用，否则会引起呕吐和腹泻。 将油放在儿童拿不到的地方。 ※Turn off the power switch before carrying out cleaning. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result. ※Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin. If the oil and grease get into your eyes or onto your skin, inflammation can result. Furthermore, do not drink or eat the lubricating oil or grease. They may cause diarrhea or vomiting. Keep the oil out of the reach of children.</p>
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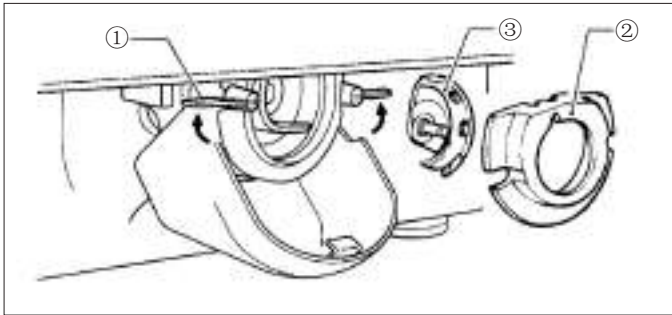
### 6-1. 旋梭的清扫 Cleaning the rotary hook



1) 将大旋梭盖向下拉开，取出梭芯盒。

EN

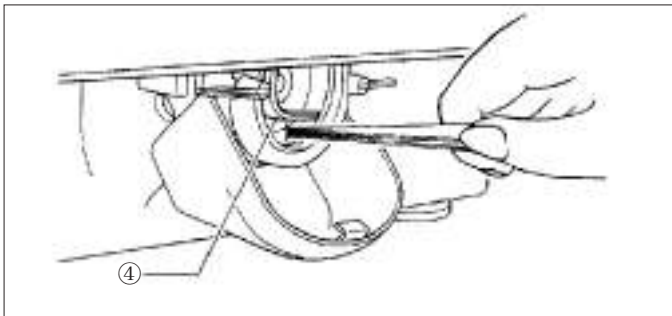
1) Pull the shuttle race cover downward to open it, and then remove the bobbin case.



2) 将大旋梭固定柄①朝箭头方向打开，取出大旋梭②和中旋梭③。

EN

2) Open the setting claw ① in the direction indicated by the arrow, and then remove the shuttle race base ② and the shuttle hook ③.

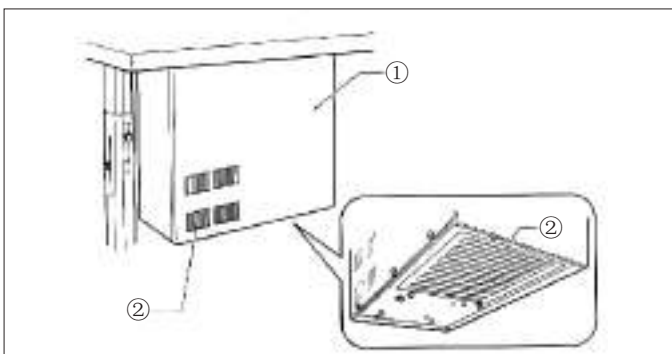


3) 将梭托④的四周，旋梭线导向上部及旋梭边缘的棉尘和线屑等清理干净。

EN

3) Clean all the dust and thread ends from around the driver ④, the top of the rotary hook thread guide and the shuttle race.

### 6-2. 控制箱进气口的清扫 Cleaning the control box air inlet ports

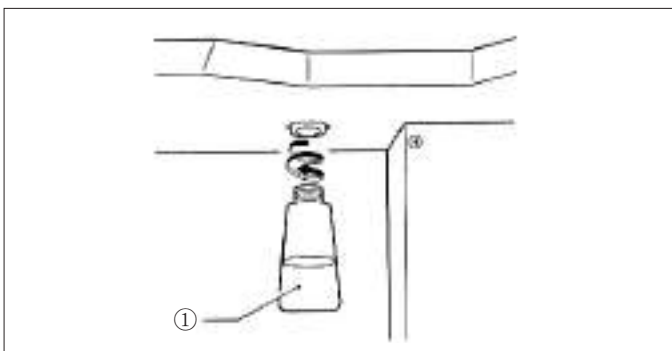


请每月一次左右用吸尘器清洁控制箱①的进气口②处的滤网。

EN

Use a vacuum cleaner to clean the filter in the air inlet ports ② of the control box ① at least once a month.

### 6-3. 更换润滑油 Draining the oil



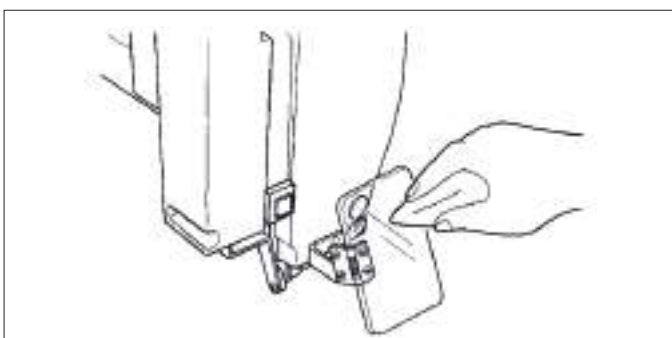
1) 当油壶①内积满了废油时，请拆下油壶①，并清除里面的废油。

2) 清除完后，将油壶①拧回到原来位置。

EN

1) Remove and empty the oiler ① whenever it is full.  
2) After emptying oiler ①, screw it back into its original position.

### 6-4. 护眼板的清洁 Cleaning the eye guard

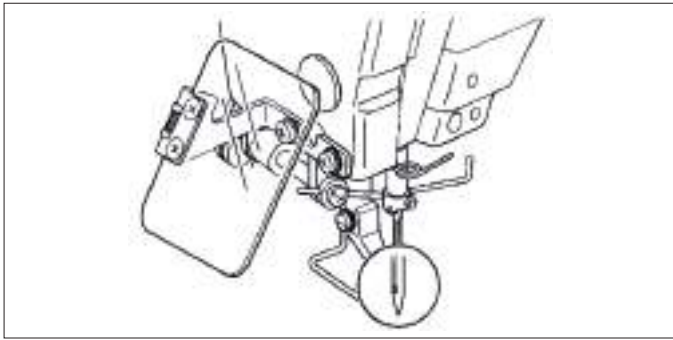


护眼板污秽时，请用软布将其擦拭干净。  
(注意) 请勿使用有机溶液如汽油或稀释剂清洁护眼板。

EN

Wipe the eye guard clean with a soft cloth.  
(NOTE) Do not use solvents such as kerosene or thinner to clean the eye guard.

## 6-5. 机针的检查 Checking the needle



缝纫开始前先确认针头有否断裂，机针有否弯曲。

**EN**


Always check that the tip of the needle is not broken and also that the needle is not bent before starting sewing.

## 6-6. 加油 Lubrication

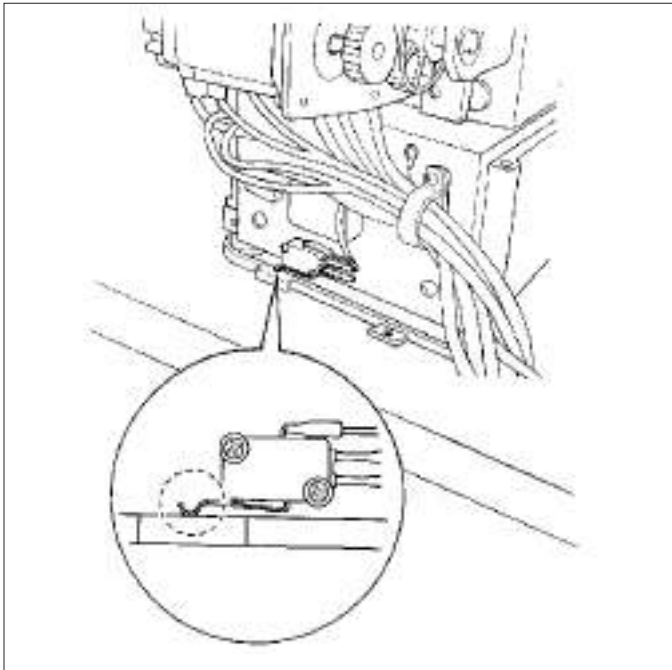
参考[3-11. 加油]所述，添加机油。

Lubricate the sewing machine while referring to "3-10. Lubrication".

## 7. 标准调整 Standard adjustments

 <p><b>注意</b> <b>CAUTION</b></p>	<p>※只有经过训练的技术人员才能进行缝纫机的维修、保养和检查。                  ※与电气有关的维修、保养和检查请委托购买商店或电气专业人员进行。                  ※发生下列情况时，请关闭电源。并拔下电源线插座。否则误踩下脚踏开关时，缝纫机动作会导致受伤。</p> <ul style="list-style-type: none"> <li>•检查，调整和维修</li> <li>•更换旋梭等易损零部件</li> </ul> <p>※在检查、调整和修理任何使用气动装备之前，请先断开气源，并等压力表指针下降到“0”为止。                  ※在必须接上电源开关和气源开关进行调整时，务必十分小心遵守所有的安全注意事项。                  ※缝纫机头倒下或竖起时，请用双手进行操作。另外在缝纫机头倒下的状态下，请不要用力压缝纫机。如缝纫机失去平衡，缝纫机头滑落到地上是造成受伤或缝纫机损坏的原因。                  ※使用润滑油及黄油时，务必戴好保护眼镜和保护手套等，以防润滑油及黄油落入眼中或沾在皮肤上，这是引起发炎的原因。另外，润滑油及黄油不能饮用，否则会引起呕吐和腹泻。                  将油放在儿童拿不到的地方。                  ※取下的安全保护装置，必须要安装回去。且请务必安装在原位上，并检查能否正常的发挥作用。</p> <p>※Maintenance and inspection of the sewing machine should only be carried out by a qualified technician.                  ※Ask your Brother dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.                  ※Turn off the power switch and disconnect the power cord before carrying out the following operations. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.</p> <ul style="list-style-type: none"> <li>•Inspection, adjustment and maintenance</li> <li>•Replacing consumable parts such as the rotary hook</li> </ul> <p>※Disconnect the air hoses from the air supply and wait for the needle on the pressure gauge to drop to "0" before carrying out inspection, adjustment and repair of any parts which use the pneumatic equipment.                  ※If the power switch and air need to be left on when carrying out some adjustment, be extremely careful to observe all safety precautions.                  ※Hold the machine head with both hands when tilting it back or returning it to its original position. In addition, do not subject the machine head to extra force while it is tilted back. If this is not observed, the machine head may become unbalanced and fall down, and serious injury or damage to the sewing machine may result.                  ※Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin. If the oil and grease get into your eyes or onto your skin, inflammation can result. Furthermore, do not drink or eat the lubricating oil or grease. They may cause diarrhea or vomiting.                  Keep the oil out of the reach of children.                  ※If any safety devices have been removed, be absolutely sure to re-install them to their original positions and check that they operate correctly before using the machine.</p>
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7-1. 头部开关的确认 Checking the machine head switch

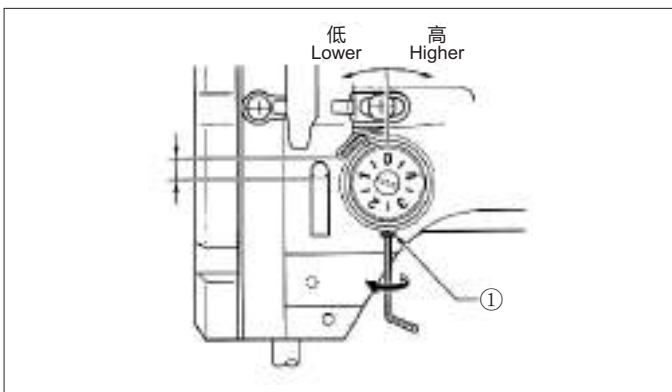


如图所示，确认接通头部开关

EN

Check that the machine head switch is turned on as shown in the illustration.

7-2. 挑线弹簧的调整 Adjusting the thread take-up spring



规格 Specifications	厚布料(-01) heavy-weight materials(-01)	中厚布料(-02) heavy-weight materials(-02)
挑线簧高度 (mm) Thread take-up spring height (mm)	7-10	7-10
挑线簧强度 (N) Thread take-up spring tension (N)	0.6-1.2	0.2-0.5

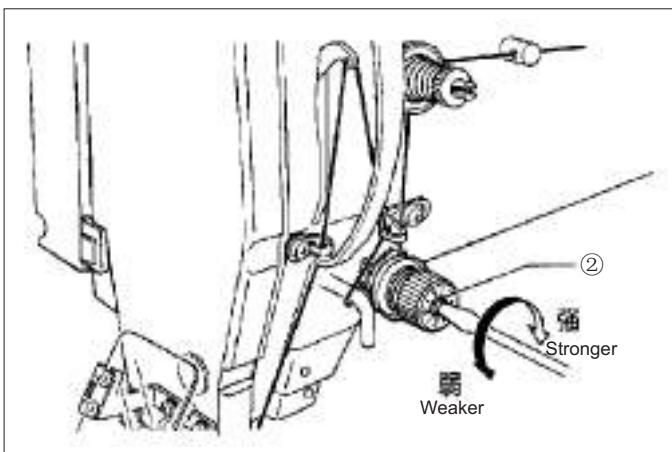
<挑线簧高度>

松开固定螺钉①，转动调节器全体进行调节。

EN

<Thread take-up spring height>

Loosen the set screw ① and turn the adjuster to adjust.



<挑线簧强度>

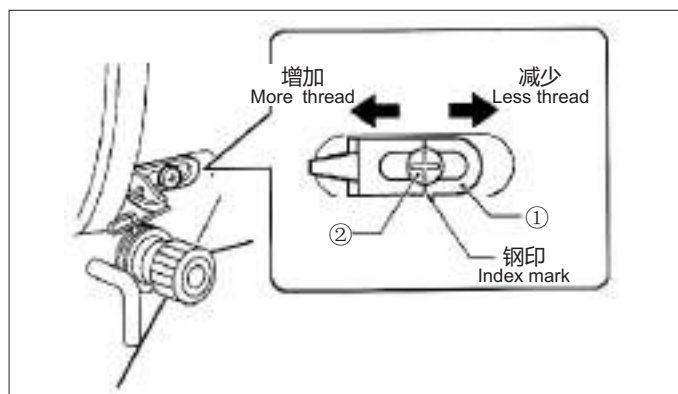
用螺丝刀转动夹线杆②进行挑线簧强度的调节。  
(注意)如果对挑线簧③不能正确的进行调整，那么每次剪线后，面线的残留量有可能会长短不一致。

EN

<Thread take-up spring tension>

turn the tension stud ② with a screwdriver to adjust the tension.  
(NOTE)If the thread tension spring ③ is not adjusted correctly, the upper thread trailing length will be uneven after thread trimming.

### 7-3. 机壳线导向R的调整 Adjusting arm thread guide R



机壳线导向R①的位置,当螺钉②被固定在钢印的位置时为标准位置。

松开螺钉②,移动机壳线导向R①进行位置的调节。

- 当缝纫厚料时,向左移动机壳线导向R ①。(挑线量增加。)
- 当缝纫薄料时,向右移动机壳线导向R ①。(挑线量减少。)

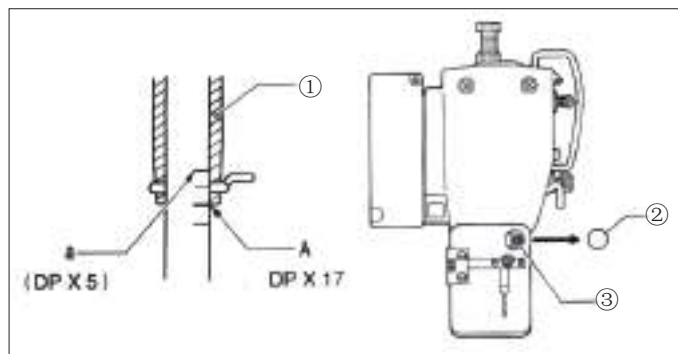
**EN**

The standard position of arm thread guide R ① is when the screw ② is aligned with the index mark.

Loosen the screw ② and move arm thread guide R ① to adjust.

- When sewing heavy material, move arm thread guide R ① to the left. (The thread take-up amount will become greater.)
- When Sewing light material, move arm thread guide R ① to the right. (the thread take-up amount will become less.)

### 7-4. 针杆高度的调整 Adjusting the needle bar height



转动手轮使针杆降至最低点时,将针杆F方的第二根基线A与针杆轴套①下端对齐,卸下橡皮栓②并松开螺钉③,上下移动针杆进行调整。

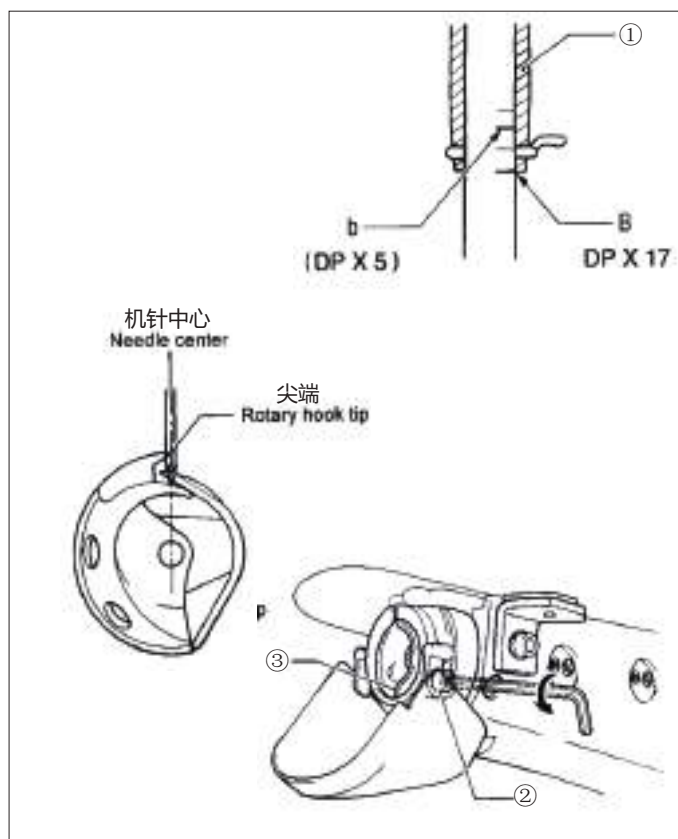
※使用DP×5的机针时,应与最上方的基线a对齐。

**EN**

Turn the machine pulley to move the needle bar to the lowest position. Then remove the rubber plug ②, loosen the screw ③ and then move the needle bar up or down to adjust so that the second reference line from the bottom of the needle bar (reference line A) is aligned with the lower edge of the needle bar bush ①.

※ If using a DP X 5 needle, use the highest reference line (reference line a).

### 7-5. 针杆上升量的调整 Adjusting the needle bar lift amount



转动手轮使针杆从最低点开始上升,当针杆最下方的基线B与针杆轴套①下端对齐时,旋梭尖端应与机针中心对齐一致,松开螺栓②,移动梭托③进行调整。

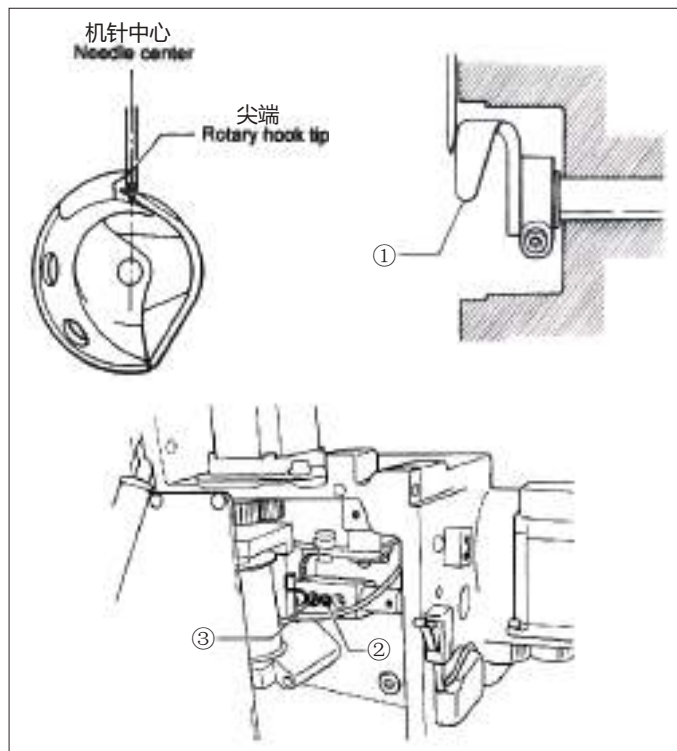
※ 使用DP×5的机针时,应与从上方开始的第二根基线b对齐。

**EN**

Turn the machine pulley to raise the needle bar from the lowest position until the lowest reference line on the needle bar (reference line B) is aligned with the lower edge of the needle bar bush ①, and then loosen the bolt ② and move the driver ③ so that the tip of the rotary hook is aligned with the center of the needle.

※ If using a DP X 5 needle, use the second reference line from the top of the needle bar (reference line b).

7-6. 梭托导针部的调整 Adjusting the drive needle guard



转动手轮使旋梭尖端与机针中心对齐时，梭托导针部①好象要与机针接触似的，松开螺钉②，转动偏心轴③进行调整。

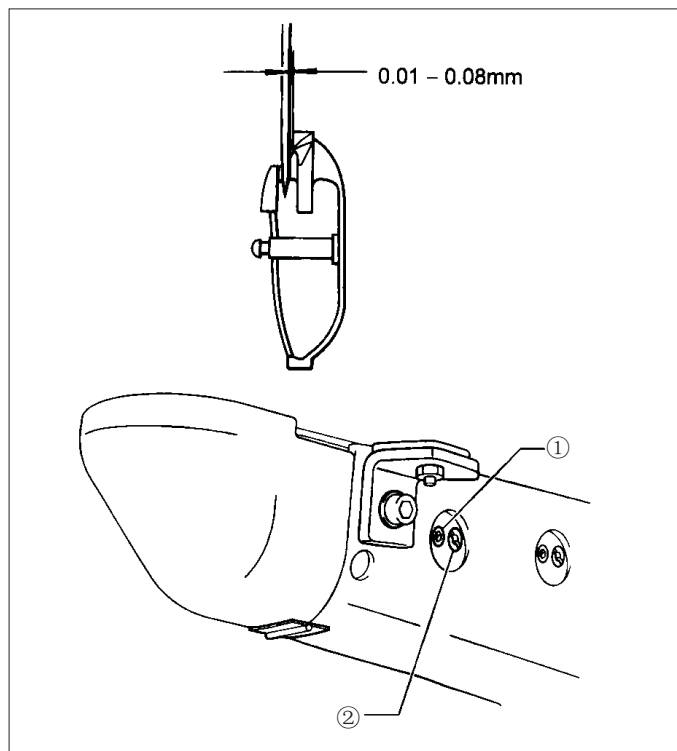
（注意）如果导针部的过度导入会使机针的负担加重，还会引起夹线不良。此外，如果导针部不导入，则中旋梭的梭尖端会和机针相接触，会产生跳针的原因。

**EN**

Turn the machine pulley to align the tip of the rotary hook with the center of the needle, and then loosen the set screw ② and turn the adjusting stud ③ to adjust so that the driver needle guard ① is touching the needle.

(NOTE) If it crosses the needle more than necessary, it will place a load on the needle, or it may cause poor thread tension. Furthermore, if it does not cross the needle at all, the tip of the rotary hook will interfere with the needle and skipped stitches may occur.

7-7. 针隙的调整 Adjusting the needle clearance

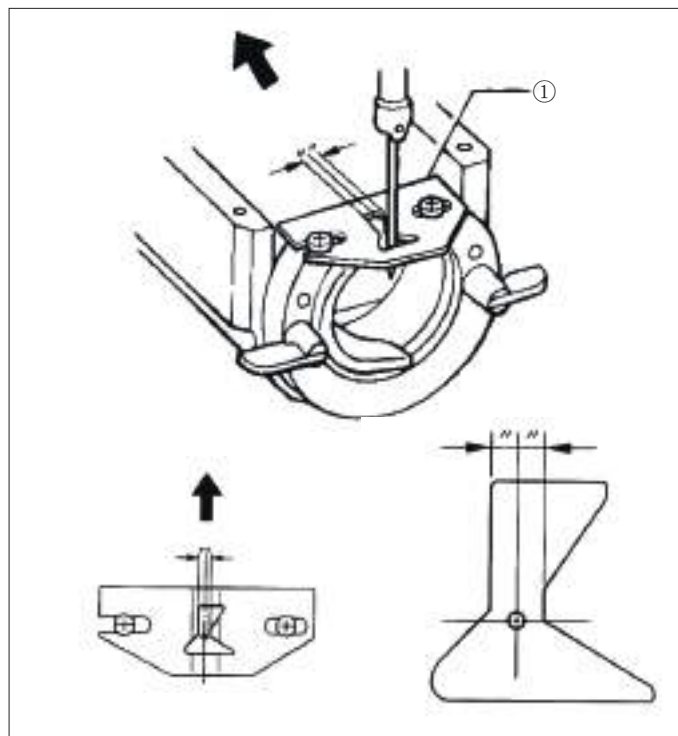


转动手轮使旋梭尖端与机针中心对齐时，机针和旋梭尖端之间的间距为0.01-0.08mm，并松开螺钉①，转动旋梭调节轴②进行调整。

**EN**

Turn the machine pulley to align the tip of the rotary hook with the center of the needle, and then loosen the set screw ① and turn the adjusting stud ② to adjust so that the clearance between the needle and the rotary hook is 0.01 - 0.08 mm.

7-8. 旋梭导线器的调整 Adjusting the shuttle race thread guide



左右位置是将旋梭导线器①的针槽作为机针中心的分配位置，前后位置是将旋梭导线器①按箭头方向压上并安装的位置。

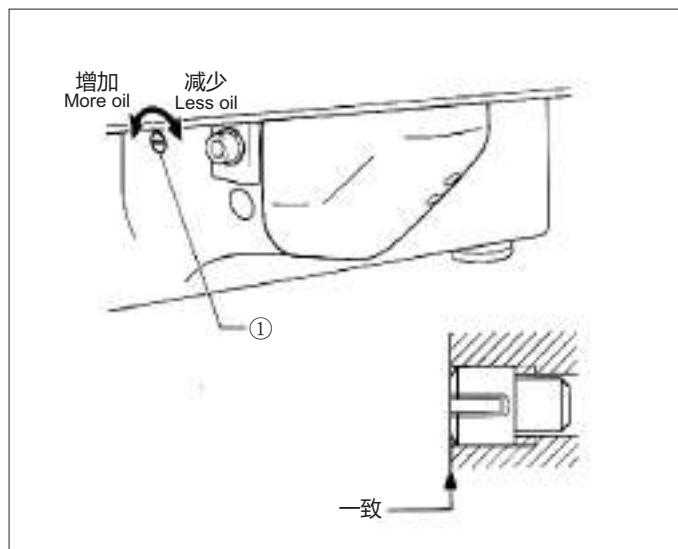
(注意)如果旋梭导线器①的位置不佳，则会导致断线，缝线受污或是线被缠绕。旋梭导线器的位置①在出厂时已作调整完。请尽可能不作改动。

EN

Install the shuttle race thread guide ① by pushing it in the direction of the arrow so that the needle groove is aligned with the center of the needle plate hole.

(NOTE) If the shuttle race thread guide ① is in the wrong position, thread breakages, soiled thread or tangling of the thread may occur. The position of the shuttle race thread guide ① is adjusted at the time of shipment from the factory. It should not be changed if possible.

7-9. 旋梭供油量的调整 Adjusting the rotary hook lubrication amount



螺钉①的头部和底板的端面呈一致状态时为适量的位置。供油量的调节，可从该位置起向右旋转3周的范围内进行调节。

- 螺钉①向右旋转时供油量减少。
- 螺钉①向左旋转时供油量增加。

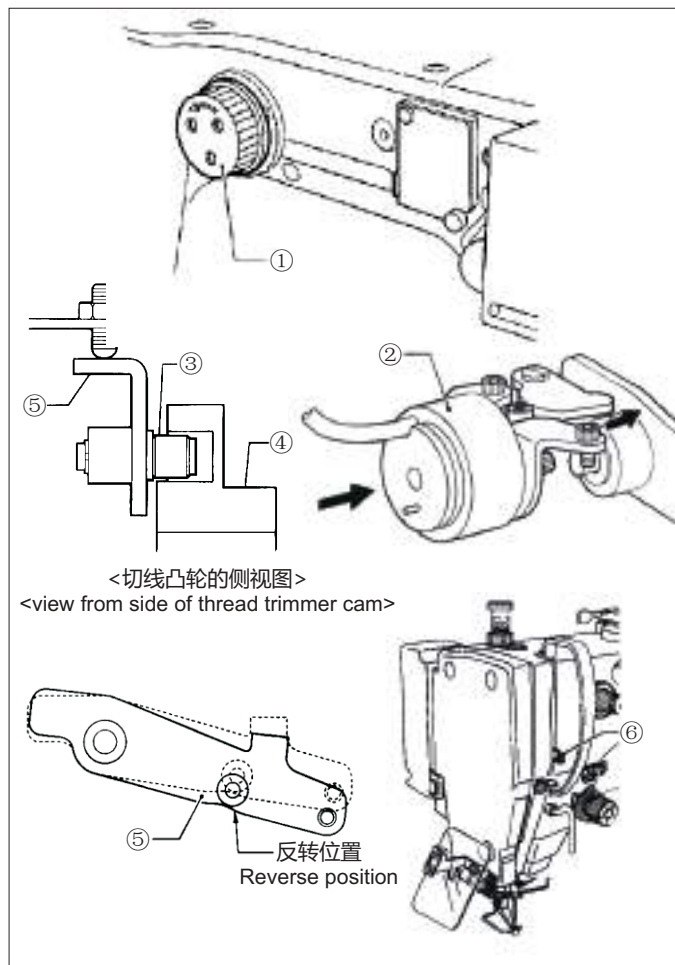
EN

The optimum position is when the head of the set screw ① is aligned with the edge of the bed. The rotary hook lubrication amount can be adjusted within three turns to the right from that position.

- If the set screw ① is turned clockwise, the lubrication amount becomes smaller.
- If the set screw ① is turned counter clockwise, the lubrication amount becomes greater.



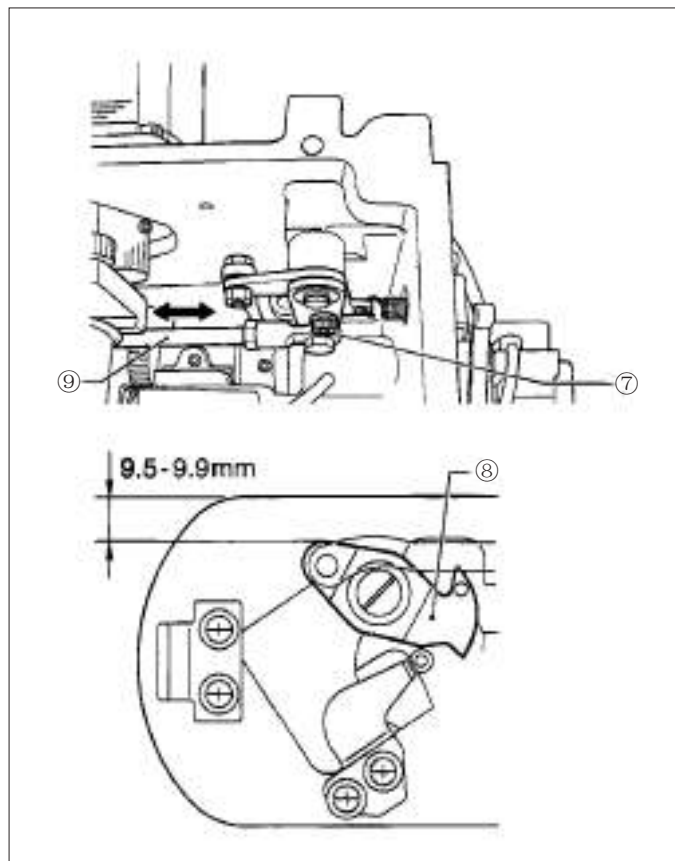
7-10. 动刀的位置调整 Adjusting the position of the movable knife



- 1) 取下上盖，将机头放倒。
- 2) 用手转动手轮①使针杆在最低位置屈，将切线电磁铁②完全压到底。
- 3) 在切线滚轮③嵌入切线凸轮④的槽中的状态下，用手回转手轮①，使切线驱动杆⑤在反转位置(挑线杆⑥处于最低位置附近)。

EN

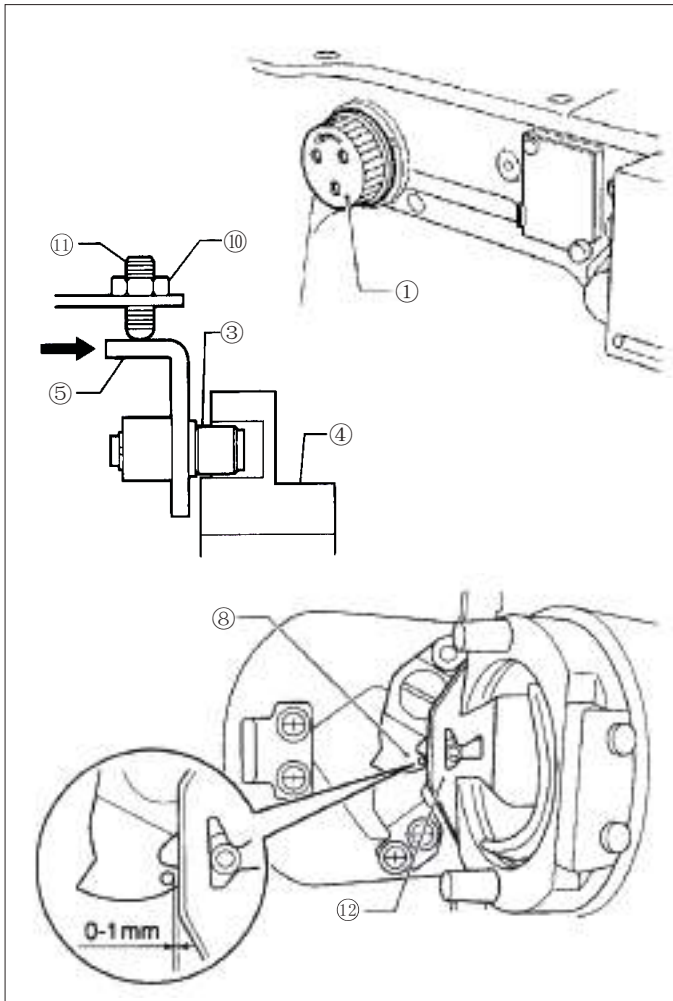
- 1) Open the top cover and tilt back the machine head.
- 2) Turn the pulley ① by hand to lower the needle bar to its lowest position, and push the thread trimmer solenoid ② as far as it will go.
- 3) With the collar ③ inserted into the groove of the thread trimmer cam ④, turn the pulley ① by hand to set the driving lever ⑤ to the reverse position (when the thread take-up ⑥ is close to its lowest position).



- 4) 松开插孔螺栓⑦。
- 5) 将针板右侧的棱线到动刀⑧的棱线距离保持在9.5-9.9 mm，前后移动切线杆H⑨来进行调整。
- 6) 拧紧插孔螺栓⑦后，再次确认上述的位置。

EN

- 4) Loosen the bolt ⑦.
- 5) Move the thread trimming rod H ⑨ forward or back to adjust so that the distance from the ridge line on the right side of the needle plate to the ridge line on the movable knife ⑧ is 9.5 - 9.9 mm.
- 6) After tightening the bolt ⑦, check the above position once more.

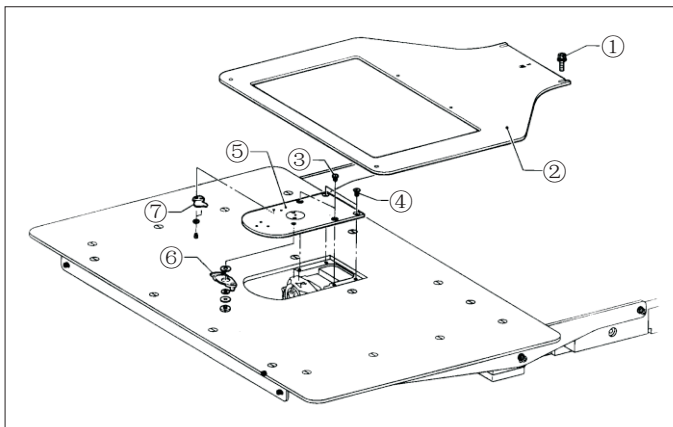


- 7) 用手转动手轮①使针杆置于最低位置。
- 8) 松开螺母⑩，将切线滚轮③嵌入切线凸轮④的槽中并碰到其内侧为止后旋紧螺钉⑪。再从此开始将其按逆时针方向回转约1/4转。
- 9) 旋紧螺母⑩，确认切线滚轮③不能接触到切线凸轮④的内侧。还有，用于将切线驱动杆⑤推向切线凸轮侧，切线滚轮③嵌入到切线凸轮④的槽中后，当松开手后确认切线驱动杆⑤应能顺利复位。
- 10) 动刀⑧的孔的外周和旋梭线导向⑫的棱线，在留有一定的间隙状态下确认其间隙范围在0-1mm之间。

**EN**

- 7) Turn the pulley ① by hand to move the needle bar to its lowest position.
- 8) Loosen the nut ⑩, tighten the set screw ⑪ until the collar ③ is touching the inside of the groove in the thread trimmer cam ④, and then turn it back in the counterclockwise direction by approximately 1/4 of a turn.
- 9) Tighten the nut ⑩, and then check that the collar ③ is not touching the inside of the groove in the thread trimmer cam ④. In addition, push the driving lever ⑤ by hand toward the thread trimmer cam until the collar ③ touches the groove of the thread trimmer cam ④, and then check that the driving lever ⑤ returns smoothly to its original position when it is released.
- 10) Check that there is a gap of about 0-1 mm between the outside of the hole in the movable knife ⑧ and the ridge line on the shuttle race thread guide ⑫ when there is still play between the parts.

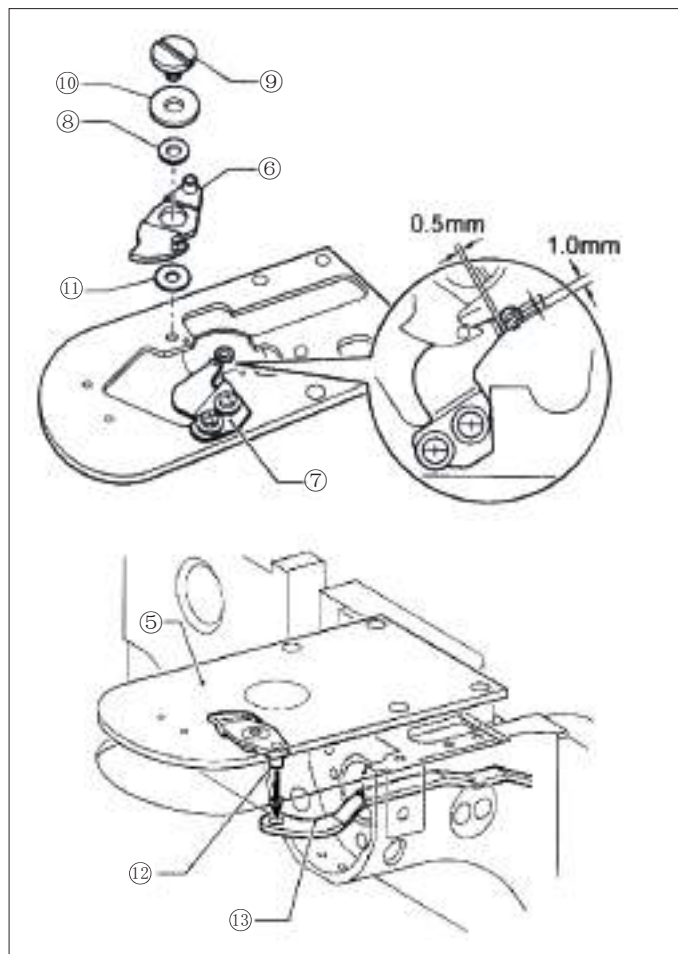
7-11. 动刀和定刀的更换方法 Replacing the movable and fixed knives



- 1) 松开螺栓①[2个]，拆下送料板②。
- 2) 打开大旋梭盖，旋下螺钉③[2个]和螺钉④[2个]，拆下针板⑤。
- 3) 拆下动刀⑥和定刀⑦。

**EN**

- 1) Loosen the two bolts ① and then remove the feed plate ②.
- 2) Open the shuttle race cover, remove the two screws ③ and the two flat screws ④, and then remove the needle plate ⑤.
- 3) Remove the movable knife ⑥ and the fixed knife ⑦.

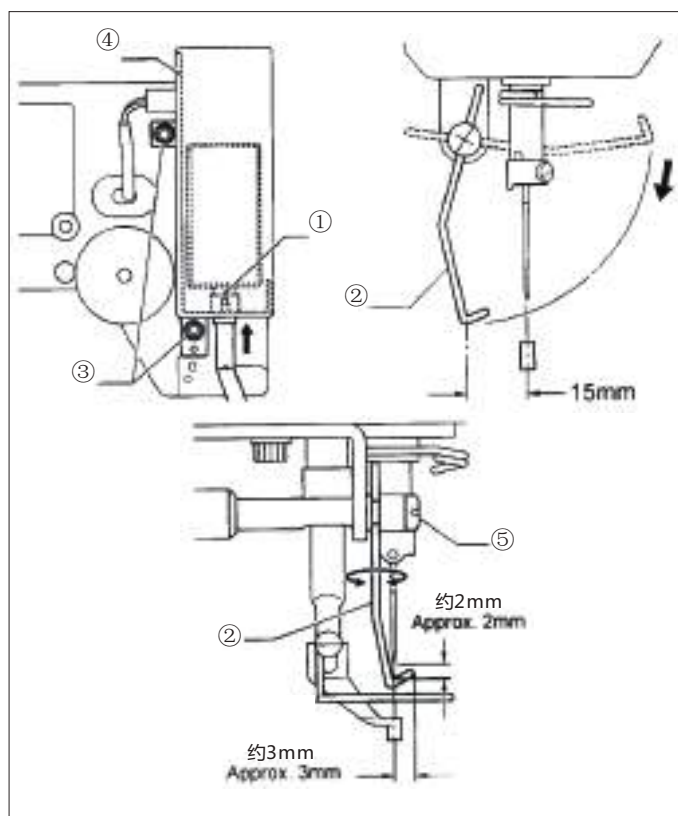


- 4) 在如图所示位置安装新的定刀⑦。
- 5) 在动刀圈套⑧的外周部和段螺钉⑨处涂上润滑脂, 和轴向垫圈⑩及动刀之间的垫片⑪。再加上新的动刀⑥一起安装。
- 6) 确认动刀⑥和定刀⑦在切线时的锋利度。为了能很好的切线使用附属的动刀之间的垫片(厚度 $t=0.2, 0.3, 0.4$ )来进行调整。  
※ 当刃压很低, 不能完全切断缝线时, 请使用薄的动刀之间的垫片。  
※ 当刃压很高, 动刀⑥的回转很重时, 请使用厚的动刀之间的垫片。
- 7) 在动刀的销⑫处涂上润滑脂嵌入动刀连杆⑬的孔中, 然后安装针板⑤。
- 8) 确认针孔中心和机针对齐。

**EN**

- 4) Install the new fixed knife ⑦ in the position shown in the illustration.
- 5) Apply grease to the outside of the collar ⑧ and to the shoulder screw ⑨, and then install the new movable knife ⑥ together with the thrust washer ⑩ and the movable knife spacer ⑪.
- 6) Check that the movable knife ⑥ and fixed knife ⑦ cut the thread cleanly. Replace the movable knife spacer with accessory spacers ( $t=0.2, 0.3, 0.4$ ) so that the knives trim the thread accurately.  
※ If the knife pressure is too weak and the thread is not completely cut, use a thinner movable knife spacer.  
※ If the knife pressure is too strong and the movable knife ⑥ turns stiffly, use a thicker movable knife spacer.
- 7) Apply grease to the pin ⑫, place it into the movable knife connecting plate ⑬, and install it to the needle plate ⑤.
- 8) Check that the needle is aligned with the center of the needle hole.

7-12. 扫线器的调整 Adjusting the thread wiper

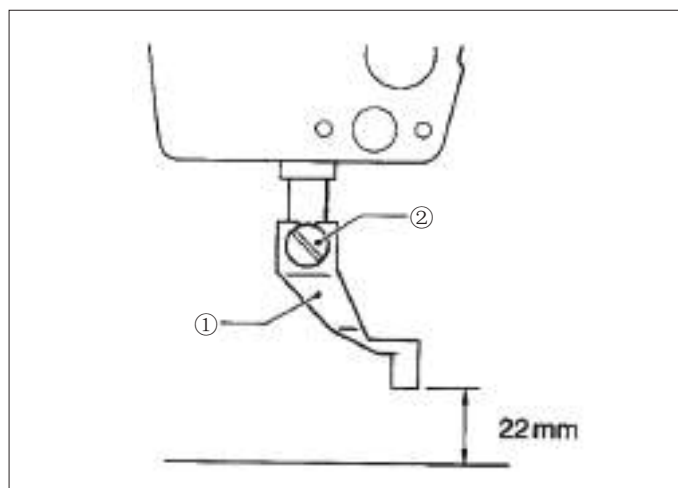


- 1) 扫线器的电磁铁插棒①被拉到最大时, 为使扫线杆②能扫过机针中心向前15mm处, 将螺钉③[2个]松开, 电磁铁安装板④整体上下移动来进行调整。
- 2) 操作扫线杆②为了使其在通过机针的下面时, 扫线杆②和机针的尖端之间的间隙约为2, mm左右, 扫线杆②的尖端到机针中心约为3mm左右, 松开螺钉⑤调整扫线杆②的位置。  
(注意) 请确认扫线杆②不可碰到护指器。

**EN**

- 1) Loosen the two screws ③ and shift the entire solenoid setting plate ④ up or down to adjust so that the thread wiper ② is 15 mm in front of the needle center when the plunger ① of the thread wiper solenoid is driven to the full stroke.
- 2) Loosen the screw ⑤ and adjust the position of the thread wiper ② so that the distance from the thread wiper to the tip of the needle is approximately 2 mm and the tip of the thread wiper ② is approximately 3 mm from the center of the needle when the thread wiper ② passes below the needle during operation.  
(NOTE) Check that the thread wiper ② does not touch the finger guard.

7-13. 间歇压脚的安装位置 Presser foot installation position



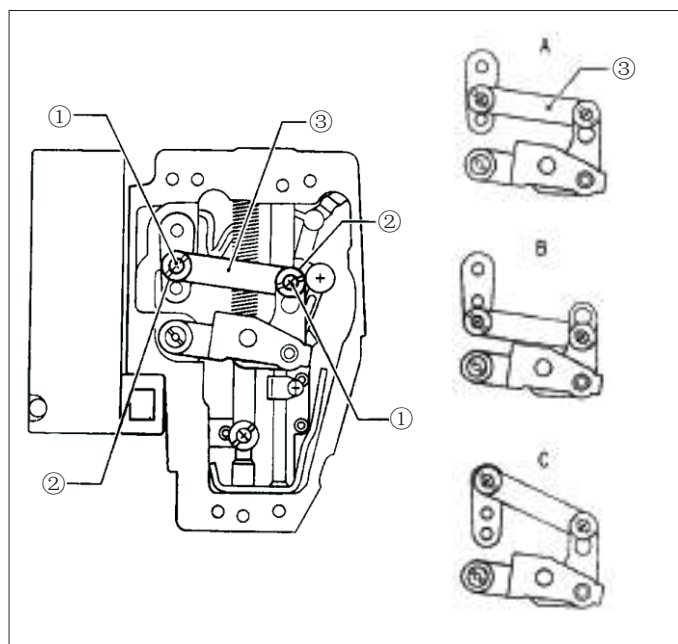
缝纫机在停止位置处间歇压脚①呈上升状态时，从间歇压脚①的底部到针板表面的距离为22mm时将螺钉②装上拧紧。

EN

Install the presser foot ① with the screw ② so that the distance from the bottom of the presser foot to the top of the needle plate is 22 mm when the sewing machine is sloped and the presser foot ① is raised.

7-14. 间歇压脚行程的变换 Changing the intermittent stroke

<间歇连杆A的安装位置的更改> <changing the installation position of stepping clamp link A>



根据间歇压脚连杆的位置调整,及间歇连杆A的安装位置的更改,可以在2~10mm之间更改间歇压脚的行程。

- 1) 拆下面板。
- 2) 取出螺钉①[2个]和段螺钉②[2个],拆下间歇连杆A③。
- 3) 间歇连杆A③的安装位置可更改成在上述的A~C中的任何位置。在各个不同的安装位置处,如下表所示,当对间歇连杆的位置进行调整时,间歇压脚的行程在下表所示的范围内可进行调整。(参考下一页)

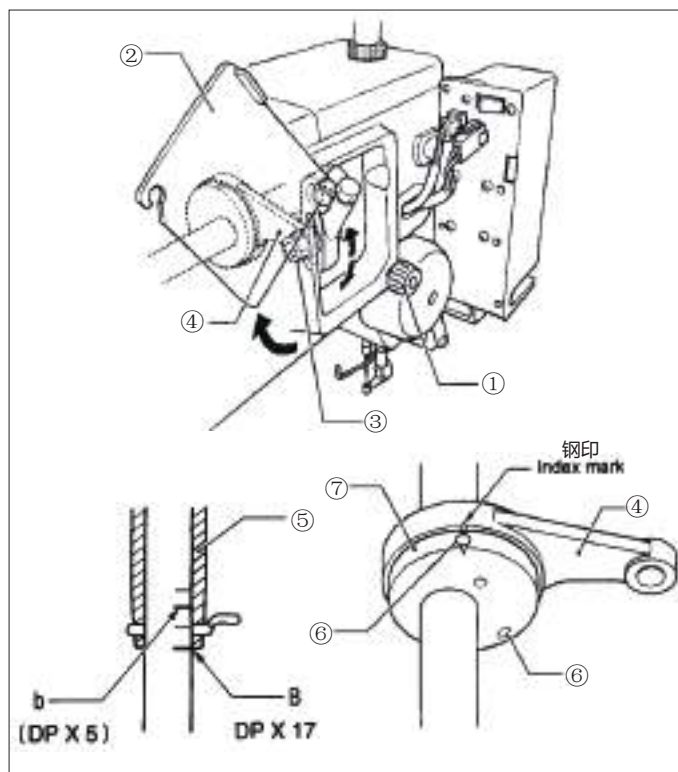
EN

The intermittent stroke can be adjusted to within 2 - 10 mm by adjusting the position of the stepping clamp connecting rod and changing the installation position of stepping clamp link A.

- 1) Remove the face plate.
- 2) Remove the two screws ① and the two shoulder screws ② and then remove stepping clamp link A ③.
- 3) Change the installation position for stepping clamp link A ③ to either A, B or C above. If the position of the stepping clamp connecting rod is adjusted as described in the following at any one of the installation positions, the adjustment range for the intermittent stroke will as given in the following table.(Refer to the next page.)

安装位置 installation position	间歇压脚行程的范围 intermittent stroke range	
A	2-4.5mm	
B	4.5-10mm	
C	0mm(间歇压脚不能上下移动) 0mm(presser foot does not move up and down)	

<间歇压脚连杆的位置调整> <stepping clamp connecting rod position adjustment>



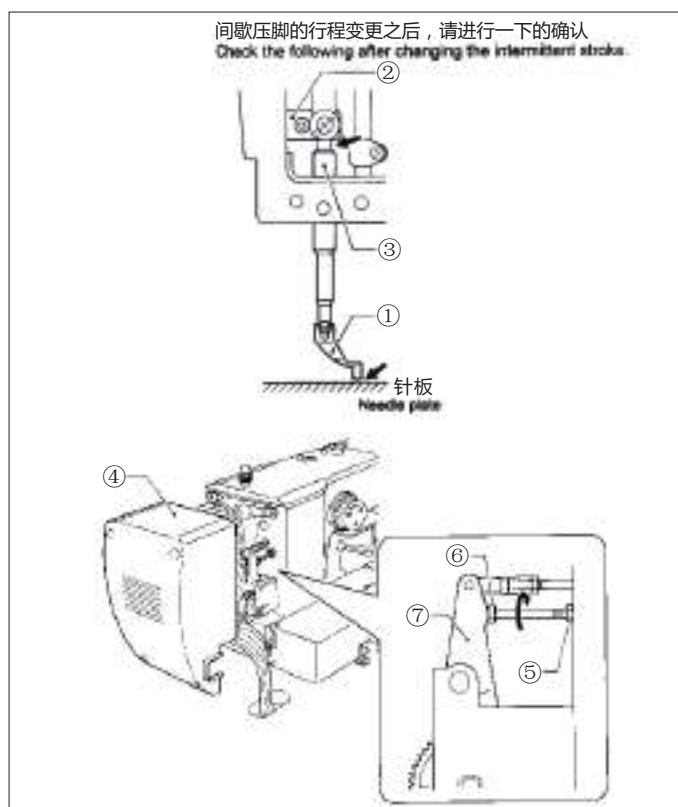
- 1) 松开螺钉①，打开间歇盖板②。
- 2) 旋松螺母③，调整间歇压脚连杆④的位置。
  - 如将间歇压脚连杆④向上去的位置时，间歇压脚行程变大。
  - 如将间歇压脚连杆④向下去的位置时，间歇压脚行程变小。
- 下面是针杆和间歇压脚操作时应同步。
- 3) 回转手轮让针杆从最下点向上升，使针杆的最下面的基线和针杆轴套⑤的下端面一致对齐。（如果是使用DP×5的机针时，请与从上往下数第二条的基线b对齐。）
- 4) 拆下上盖，旋松螺钉⑥[2个]。
- 5) 使间歇压脚凸轮⑦和间歇压脚连杆④的钢印一致后，拧紧螺钉⑥。

EN

- 1) Loosen the screw ①, and then open the cover ②.
- 2) Loosen the nut ③, and then adjust the position of the stepping clamp connecting rod ④.
  - When the stepping clamp connecting rod ④ is raised, the intermittent stroke will increase.
  - When the stepping clamp connecting rod ④ is lowered, the intermittent stroke will decrease.

**Next, adjust the needle bar and presser foot timing.**

- 3) Turn the machine pulley to raise the needle bar from the lowest position until the lowest reference line on the needle bar (reference line B) is aligned with the lower edge of the needle bar bush ⑤.  
(If using a DP x 5 needle, align with the second reference line from the top(reference line b).)
- 4) Open the top cover and loosen the two set screws ⑥.
- 5) Align the index marks on the stepping clamp cam ⑦ and the step ping clamp connecting rod ④, and then lighten the set screws ⑥



- 1) 在间歇压脚①呈下降状态，回转手轮使间歇压脚①降到最下点。
- 2) 确认间歇压脚①是否没碰到针板，还有压杆抱箍②是否也没碰到压杆轴套③。

<如果有碰到时>

- 拆下马达盖④。  
旋松螺母⑤，回转螺栓⑥使其推动间歇驱动杆⑦来调整，直到上述2处不被碰到为止。

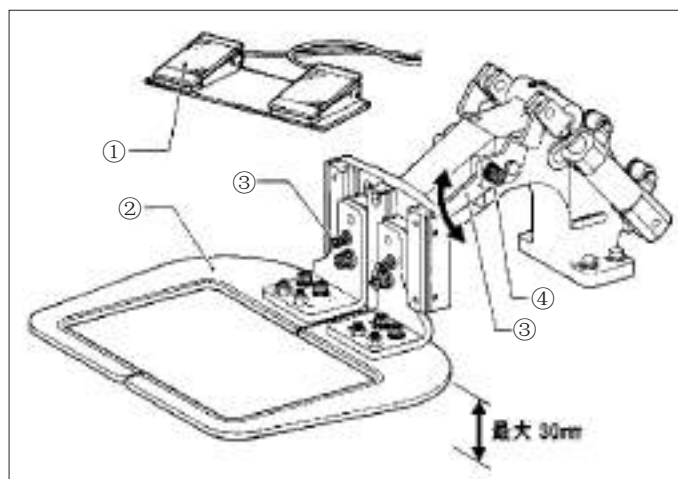
EN

- 1) With the intermittent presser foot ① lowered, turn the pulley to move the intermittent presser foot ① to its lowest position.
- 2) Check that the presser foot ① does not touch the needle plate and that the presser bar clamp ② does not touch the presser bar bush ③.

**<If they are touching>**

Remove the motor cover ④. Loosen the nut ⑤, and turn the bolt ⑥ until it is pressing against the intermittent drive lever ⑦, and then adjust until the two points mentioned above are not touching.

7-15. 压脚上升量的调整 Adjusting the work clamp lift amount



<电磁规格>

可以使用操作盘在15mm~25mm之间进行设定。

<气压规格>

压脚的最大上升量为从针板向上30mm。

1. 送入气压，踩下脚踏开关①。压脚②向上升起。
2. 旋松压脚臂杆③的螺栓④[2个]，上下移动来调整压脚臂杆③。

EN

<Solenoid specifications>

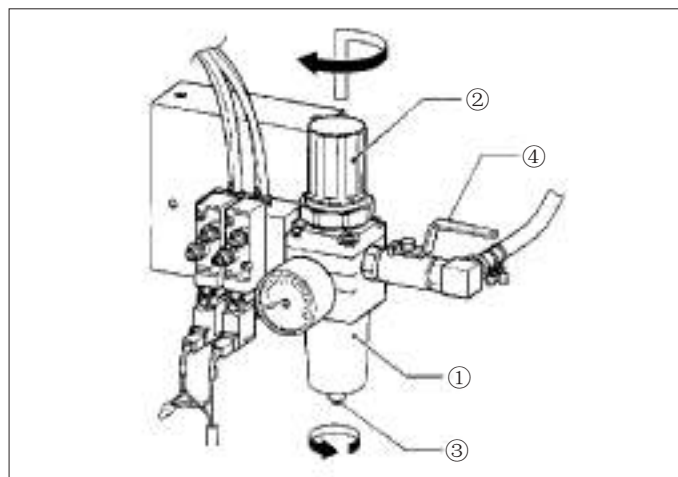
The operation panel settings can be used to adjust the height to within 15 - 25 mm. (Refer to "5-7. Setting the work clamp lift amount.")

<Pneumatic specifications>

The maximum lift amount for the work clamp is 30 mm above the top of the needle plate.

1. Turn on the air, and depress the work clamp switch ① to raise the work clamp ②.
2. Loosen the two bolts ④ of the work clamp arm lever ③, and move the work clamp arm lever ③ up or down to adjust.

7-16. 空气压力的调整(空压规格) Adjusting the air pressure (pneumatic specifications)



将调节器①的舵轮②向上拔起后再回转，使空气压力调整到0.5Mpa。

调整完了后，将舵轮②往下按锁住。

如果调节器①内的瓶中积有水时，按箭头方向回转排水旋栓③，将水放掉。

(注意)请慢慢打开气压栓④。

EN

Lift up the handle ② of the regulator ① and then turn it to adjust the air pressure to 0.5 MPa.

After adjustment is complete, push the handle ② downward to lock it.

If water has collected in the bottle of the regulator ①, turn the drain cock ③ in the direction indicated by an arrow to drain the water.

(NOTE) Open the air cock ④ slowly.

8. 故障检修 Troubleshooting



注意

CAUTION

为了防止缝纫机的意外起动，请关掉电源之后进行操作

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

- 请您在要求维修或服务前，先检查以下各项。
- 如果以下方法仍然不能解决问题，关闭电源开关，向受过训练的技术人员或经销商咨询。
- Please check the following points before calling for repairs or service.
- If the following remedies do not fix the problem, turn off the power switch and consult a qualified technician or the place of purchase.

现象 Problem	原因 Cause	措施 Remedy	参照 Reference
压脚不能上升 Work clamp does not lift.	压脚操作很重 Work clamp moves stiffly.	在压脚的运动部分涂敷适当的润滑脂 Apply a suitable amount of grease to the sliding parts of the work clamp.	
	抬压脚汽缸的空气接管的弯曲, 破损 (空压规格) Air tube of presser lifter cylinder is bent or damaged (Pneumatic specifications).	修正弯曲了的接管或更换新的 Straighten the bend in the tube or replace the tube.	
压脚不能下降 Work clamp does not drop.	压脚操作很重 Work clamp moves stiffly.	在压脚的运动部分涂敷适当的润滑脂 Apply a suitable amount of grease to the sliding parts of the work clamp.	
	抬压脚汽缸的空气接管的弯曲, 破损 (空压规格) Air tube of presser lifter cylinder is bent or damaged (Pneumatic specifications).	修正弯曲了的接管或更换新的 Straighten the bend in the tube or replace the tube.	
压脚上升量不正确 Work clamp lift amount is incorrect.	操作盘上的压脚设定值不正确 (电磁规格) Work clamp lift amount setting at operation panel is incorrect (Solenoid specifications).	更改压脚设定值 Change the work clamp lift amount setting.	
	压脚臂杆的位置不对 (空压规格) Work clamp arm lever position is incorrect. (Pneumatic specifications)	调整压脚臂杆的位置 Adjust the position of the work clamp arm lever.	P. 29
压脚不能上升到最高点 Work clamp does not lift to the maximum height.	压脚臂组件的定位器的位置不对 (电磁规格) Work clamp arm stopper position is incorrect (Solenoid specifications).	调整定位器的位置 Adjust the position of the stopper.	
	汽缸接头的位置不对 (空压规格) Cylinder joint position is incorrect. (Pneumatic specifications)	调整汽缸接头的位置 Adjust the position of the cylinder joint.	
扫线器操作不好 Thread wiper does not operate correctly.	扫线器和机针有干扰 The thread wiper is obstructing the needle.	调整扫线器的高度 Adjust the height of the thread wiper.	P. 28
		调整扫线器的操作量 Adjust the stroke of the thread wiper.	
	扫线器的位置不对 Thread wiper position is incorrect.	调整扫线器的操作量 Adjust the stroke of the thread wiper.	
底线被卷在一边 Lower thread winds to one side.	卷线夹线器组的高度不对 Bobbin winder tension assembly height is incorrect.	调整卷线夹线器组的高度 Adjust the height of the bobbin winder tension assembly.	
底线被卷的量不恰当 Lower thread winding amount is incorrect.	梭芯压杆的位置不对 Bobbin presser position is incorrect.	调整梭芯压杆的位置 Adjust the position of the bobbin presser.	
脱线 Thread slips out of the needle.	在缝纫开始时有脱线 Stitches being skipped at the sewing start.	请参考[跳针]一览表 Refer to "Skipped stitches occur".	
	机针处线的残余量不稳定, 偏差很大 Upper thread length is irregular.	调整副夹线器 Adjust the sub-tension.	
	旋梭导线器的位置不对 Position of shuttle race thread guide is incorrect	调整旋梭导线器的位置 Adjust the position of the shuttle race thread guide.	P. 25

现象 Problem	原因 Cause	措施 Remedy	参照 Reference
面线断线 Upper thread breaks.	线张力太强 Upper thread tension is too strong.	调整面线张力 Adjust the upper thread tension.	P. 18
	机针的安装方法不正确 Needle is incorrectly installed.	正确的方向按装机针 Install the needle correctly.	P. 13
	和机针相比线太粗 Thread is too thick for the needle.	选择使用符合机针的线 Select a thread that matches the needle.	
	挑线簧的强度和高度不正确 Thread take-up spring tension and height are incorrect.	调整挑线簧的强度和高度 Adjust the tension and height of the thread take-up spring.	P. 22
	旋梭、针孔板和机针等有缺陷和毛刺 Damage or burring of the rotary hook, needle hole plate or needle.	分别将这些零部件磨光或更换 Repair or replace the problem part.	
	因发热断线（化纤线） Thread breaking from heat (Synthetic thread)	使用冷却液槽 Use a cooling tank.	
	穿线不正确 Thread is threaded incorrectly.	在道上正确穿线 Thread the thread correctly.	P. 14
底线断线 Lower thread breaks.	底线张力太强 Lower thread tension is too strong.	调整底线张力 Adjust the lower thread tension.	P. 17
	针孔板、和梭芯盒的角部有缺陷 Damage to corners of needle hole plate or bobbin case.	分别将这些零部件磨光或更换 Repair or replace the problem part.	
跳针 Skipped stitches occur	机针和旋梭尖端的间隙过大 Clearance between needle and rotary hook tip is too great.	调整机针的间隙 Adjust the needle clearance.	P. 24
	机针和旋梭的相遇不正确 Needle and rotary hook timing is incorrect.	调整针杆的上升量 Adjust the needle bar lift amount.	P. 23
	梭托如果在必要以上的过度导人机针 The driver is covering the needle more than necessary.	调整梭托导针部 Adjust the driver needle guard.	P. 24
	机针弯曲 Needle is bent.	更换机针 Replace the needle.	
	机针的安装方法不正确 Needle is incorrectly installed.	正确的方向按装机针 Install the needle correctly.	P. 13
断针 Needle is broken.	机针和旋梭尖端的间隙过大 Clearance between needle and rotary hook tip is too great.	调整机针的间隙 Adjust the needle clearance.	P. 24
		调整针杆的上升量 Adjust the needle bar lift amount.	P. 23
	机针弯曲 Needle is bent.	更换机针 Replace the needle.	
	进针时机针被拉偏 Needle deflection	选择符合缝纫条件的机针降低回转数 Select a needle that is suitable for the sewing conditions. Reduce the sewing speed.	
	机针太细 Needle is too thin.	选择符合缝纫条件的机针 Select a needle that is suitable for the sewing conditions.	
咬线 Thread jamming.	挑线簧的强度和高度不正确 Thread take-up spring tension and height are incorrect.	调整挑线簧的强度和高度 Adjust the tension and height of the thread take-up spring.	P. 22
	机针和旋梭的相遇不正确 Needle and rotary hook timing is incorrect.	调整针杆的上升量 Adjust the needle bar lift amount.	P. 23
	旋梭导线器没能分线 Shuttle race thread guide is not separating the threads.	调整旋梭导线器的位置 Adjust the position of the shuttle race thread guide.	P. 25



现象 Problem	原因 Cause	措施 Remedy	参照 Reference
面线未切断 Upper thread is not trimmed.	动刀的刀锋不利 Movable knife is not cutting cleanly.	更换新的动刀 Replace with a new one.	P. 27
	定刀的刀锋不利 Fixed knife is not cutting cleanly.	磨快定刀或是更换新的动刀 Sharpen the fixed knife or replace it with a new one.	P.27
	动刀勾不住面线 Movable knife is not picking up the upper thread.	调整旋梭导线器的位置 Adjust the position of the shuttle race thread guide.	P. 25
		调整针杆的上升量 Adjust the needle bar lift amount.	P. 23
	最后一针因跳针，动刀勾不住面线 Movable knife is not picking up the upper thread because the last stitch is being skipped.	请参考[跳针]一览表 Refer to "Skipped stitches occur".	
	动刀的位置不正确 Movable knife position is incorrect.	调整动刀的位置 Adjust the position of the movable knife.	P. 26
副夹线器的张力太弱 Sub-tension is too weak.	回转夹线螺母进行调整 Turn the sub-tension nut to adjust the tension.		
布料的背面缝纫针迹不良 Poor stitch finish on underside of material.	旋梭导线器不能完全分线 Shuttle race thread guide is not separating the threads enough.	调整旋梭导线器的位置 Adjust the position of the shuttle race thread guide.	P. 25
	面线不够紧密 Incorrect tightening of the upper thread	调整面线张力 Adjust the upper thread tension.	P. 18
	机针处线的残余量不稳定，偏差很大 Upper thread length is irregular.	调整副夹线器 Adjust the sub-tension.	
线不够紧密 Incorrect tightening of the thread	面线张力太弱 Upper thread tension is too weak.	调整面线张力 Adjust the upper thread tension.	P. 18
	底线张力太弱 Lower thread tension is too weak.	调整底线张力 Adjust the lower thread tension.	P. 17
	挑线簧的强度和高度不正确 Thread take-up spring tension and height are incorrect.	调整挑线簧的强度和高度 Adjust the tension and height of the thread take-up spring.	P. 22
	机壳线导向R的位置不正确 Position of arm thread guide R is incorrect.	调整机壳线导向R的位置 Adjust the position of arm thread guide R.	P. 23
机针处线的残余量不稳定，偏差很大 Upper thread length is irregular.	挑线簧的强度和高度不正确 Thread take-up spring tension and height are incorrect.	调整挑线簧的强度和高度 Adjust the tension and height of the thread take-up spring.	P. 22
	副夹线器的张力太弱 Sub-tension is too weak.	回转线调整螺母进行调整 Turn the sub tension nut to adjust the tension.	
	定刀的刀锋不利 Fixed knife is not cutting cleanly.	磨快定刀或是更换新的动刀 Sharpen the fixed knife or replace it with a new one.	P. 27
接通电源，即使踩下脚踏开关缝纫机也不启动 Sewing machine does not operate when the power is turned on and the foot switch is depressed.	头部开关不起作用 Machine head switch does not work.	确认头部开关的电源线是否脱开着 Check if the machine head switch cord is disconnected.	
		调整头部开关的位置 Adjust the position of the machine head switch.	P. 7
	如果头部开关有故障的话更换新的开关 If the machine head switch is malfunctioning, replace it with a new one.		

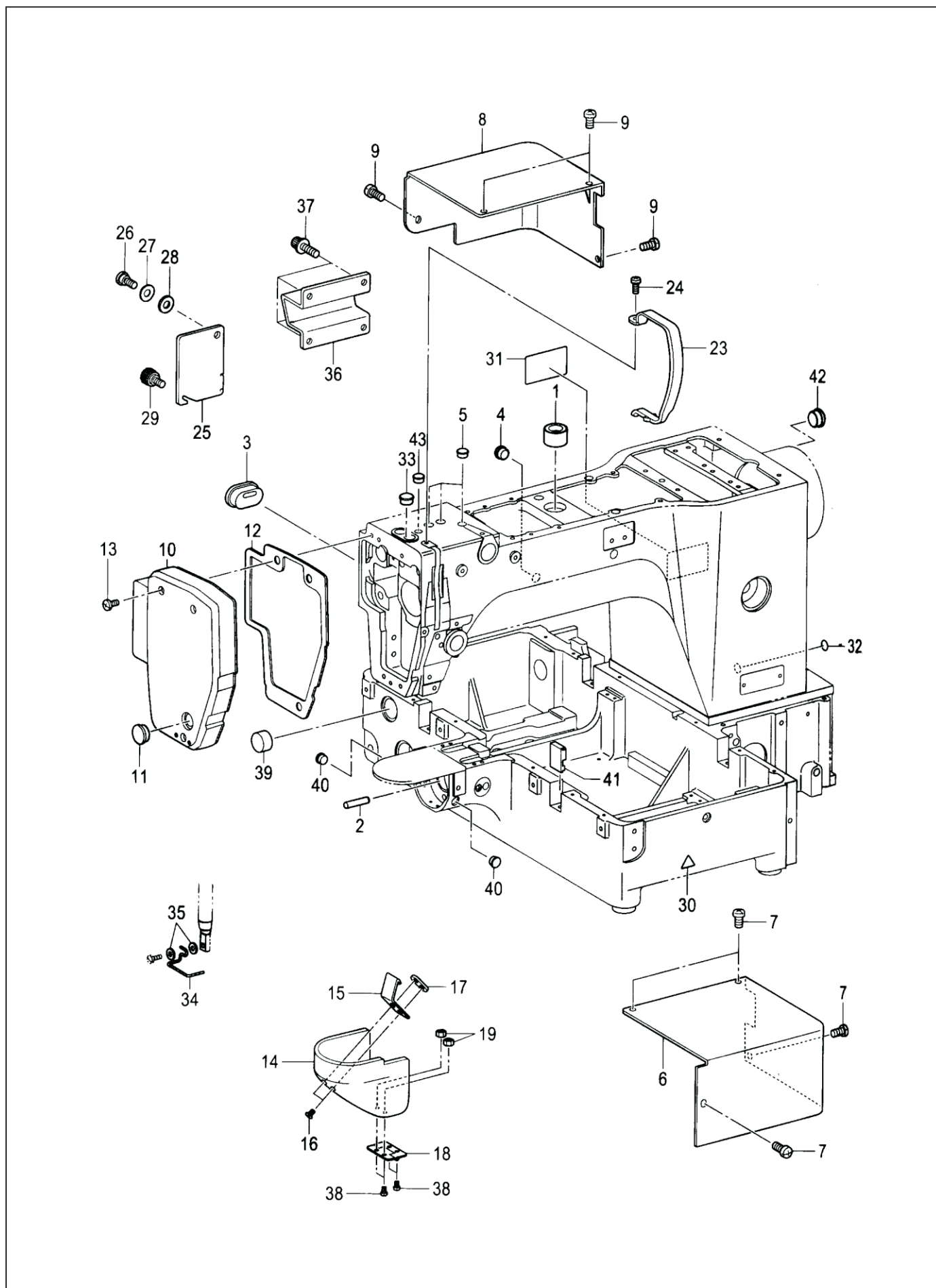
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# 1. 机体部分 Machine body

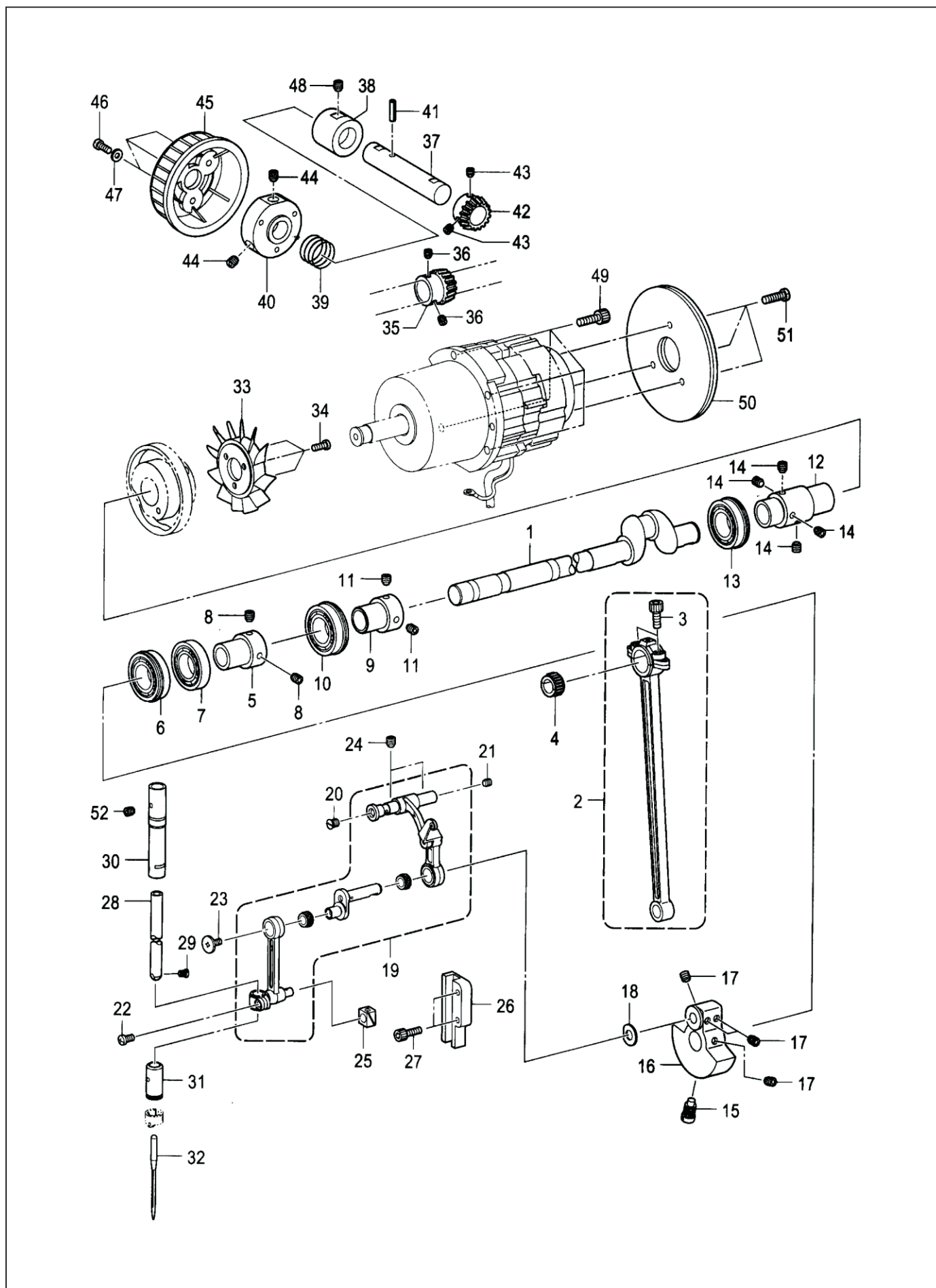


# 1.机体部分 Machine body

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1	#01	564-01-01	轴套 U	Bushing U	1
2		550-01-04	圆柱销	Dowel pin	1
3		563-01-03	橡皮塞 20-15	Rubber cap 20-15	1
4		550-01-02	橡皮塞 13.5	Rubber cap, 13.5	1
5		550-01-03	橡皮塞 10.5	Rubber cap, 10.5	3
6		563-01-06	马达盖 R	Motor cover R	1
7		12-40601025-02	螺钉 M6x10	Screw pan M6x10	4
8		563-01-08	马达盖 L	Motor cover L	1
9		12-40601025-02	螺钉 M6x10	Screw pan M6x10	4
10		563-01-10	面板	Face plate	1
11		550-01-15	橡皮塞 15.5	Rubber cap, 15.5	1
12		563-01-12	面板垫片	F-plate packing	1
13		12-40601025-02	螺钉 M6x10	Screw pan M6x10	3
14		563-01-14	大旋梭盖	Shuttle race cover	1
15		563-01-15	大旋梭盖挂钩 D	Shuttle race cover hook D	1
16		12-10300520-02	螺钉 M3x5	Screw, plat M3x5	2
17		563-01-17	板螺母	Nut plate	1
18		563-01-18	铰链	Hinge	1
19		14-60302420-02	螺母 M3	Stepping cover	2
23		550-01-13	挑线杆防护罩	Thread take-up cover	1
24		12-40401025-02	螺钉 M4x10	Screw pan M4x10	1
25		563-01-25	间歇盖板	Stepping cover	1
26		550-09-05	段螺钉 7-3	Shoulder screw, 7-3	1
27		22-08000000-08	弹簧垫圈	Spring washer	1
28		21-07205120-01	垫圈	Washer plain	1
29		563-01-29	螺钉 M5	Screw, M5	1
30		44-00000006-00	警告标记	Mare, injry	1
31		44-00000001-00	操作注意标签 (中/英)	Label, caytion CHN/END	1
32		44-00000002-00	接地标记	Label, grounding	1
33		563-01-33	橡皮塞 13	Rubber cap, 13	1
34		563-01-34	护指器	Finger guard	1
35		21-03808100-01	平垫圈 L3.5	Washer plain L3.5	2
36		563-01-36	机头撑杆	Head rest	1
37		16-60601422-02	螺栓 M6x14	Bolt, socket M6x14	4
38		12-40300525-01	螺钉 M3x5	Screw pan M3x5	4
39		563-01-39	橡皮塞 26	Rubber cap 26	1
40		563-01-40	橡皮塞 11.5	Rubber cap 11.5	2
41		563-01-41	橡皮盖	Rubber cap	2
42		563-01-33	橡皮塞 13	Rubber cap 13	1
43		563-01-43	橡皮塞 8	Rubber cap 8	2
44		563-01-44	车壳2210 2010		1
45		563-01-45	底座2210 2010		1

NOTE:  
#01...电磁式  
<FOR SOLENOID TYPE>

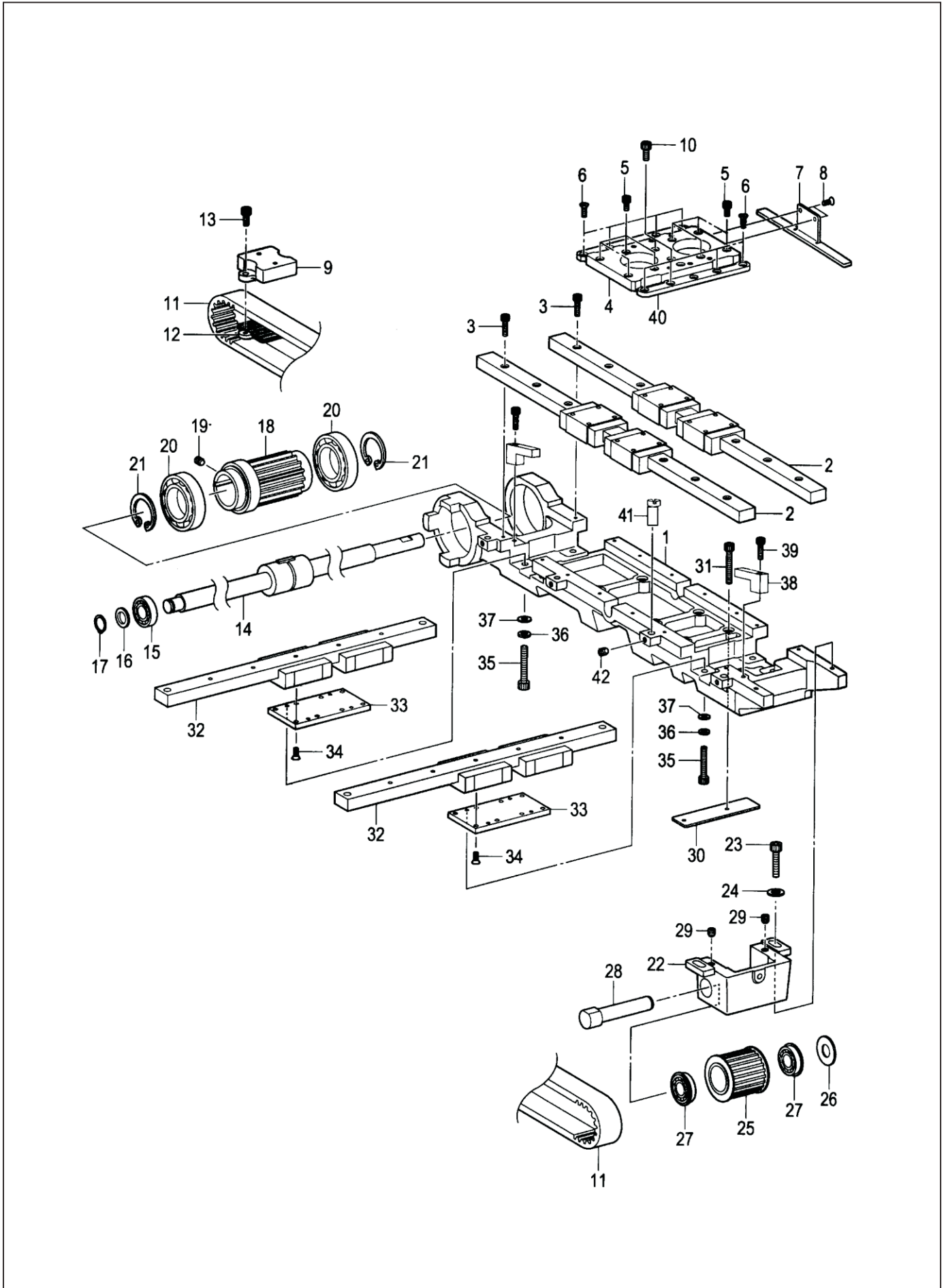
## 2.上轴·针杆装置 Upper shaft and needle bar mechanism



## 2.上轴·针杆装置 Upper shaft and needle bar mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-02-01	上轴	Upper shaft	1
2		550-02-02	曲柄轴组件	Crank rod assy	1
3		12-60501622-01	螺栓 M5x16	Bolt socket M5x16	2
4		550-02-03	滚针轴承 K15x18x14	Needle bearing	2
5		550-02-04	轴承套	Ball bearing bush	1
6		550-02-05	轴承 6904DDUNR	Ball bearing 6904DDUNR	1
7		550-02-06	轴承 R-6904DDU	Ball bearing 6904DDU	1
8		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (ft) M6x6	2
9		550-02-04	轴承套	Ball bearing bush	1
10		550-02-07	轴承 6004DDUNR	Ball bearing 6004DDUNR	1
11		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (ft) M6x6	2
12		563-02-12	管接头 G	Joint g	1
13		550-02-09	轴承 6204DDUNR	Ball bearing 6204DDUNR	1
14		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (ft) M6x6	4
15		12-00801430-01	螺钉 M8	Screw,M8	1
16		563-02-16	针杆曲柄 G	Thread take-up crank G	1
17		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (ft) M6x6	4
18		550-02-11	垫圈 8	Washer, plain special 8	1
19		563-02-19	针杆连杆组件 FK	Thread take-up lever FK set	1
20		12-10500620-01	螺钉 M5x6	Screw flat M5x6	1
21		12-80500512-01	螺钉 M5x5	Set screw socket (ft) M5x5	1
22		12-40400825-01	螺钉 M4x8	Screw pan M4x8	1
23		550-02-12-07	螺钉 SM3.57-40x6L	Screw SM3.57-40x6L	1
24		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
25		563-02-25	滑块	Slide block	1
26		550-02-14	滑块导向 B	Slide block guide	1
27		12-60401622-01	螺栓 M4x16	Bolt socket M4x16	2
28		563-02-28	针杆	Needle bar	1
29		11-00090420-01	螺钉 SM3.57-40x4.5	Set screw,SM3.57-40x4.5	1
30		563-02-30	针杆轴套 UK	Needle bar bush UK	1
31		550-02-17	针棒轴套 D	Needle bar bush D	1
32		502-02-17	机针 (DPx17<#19>)	Needle DPx17<#19>	1
33		550-02-20	叶轮	Fan	1
34		12-40400825-01	螺钉 M4x8	Screw pan M4x8	3
35		563-02-35	齿轮 R	Pulley gear r	1
36		12-80500512-01	螺钉 M5x5	Set screw socket (ft) M5x5	2
37		563-02-37	上轮轴	Pulley shaft	1
38		563-02-38	上轮轴套	Pulley bush	1
39		563-02-39	上轮弹簧	Pulley spring	1
40		563-02-40	上轮基座	Pulley base	1
41		41-20401200-00	弹簧销 4x12	Pin spring roll aw4	1
42		563-02-42	齿轮	Pulley gearl	1
43		12-80500512-01	螺钉 M5x5	Set screw socket (ft) M5x5	2
44		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (ft) M6x6	2
45		563-02-45	上轮	Pulley	1
46		12-40401025-02	螺钉 M4x10	Screw pan M4x10	3
47		21-04210120-02	垫圈 L4	Washer plain L4	3
48		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
49		12-60501622-01	螺栓 M5x16	Bolt socket M5x16	4
50		563-02-50	惯性轮 2	Fries wheel 2	2
51		12-40401025-02	螺钉 M4x10	Screw pan M4x10	3
52		12-80600512-01	螺钉 M6x5	Set screw socket (ft) M6x5	1

### 3.送料装置 Feed mechanism

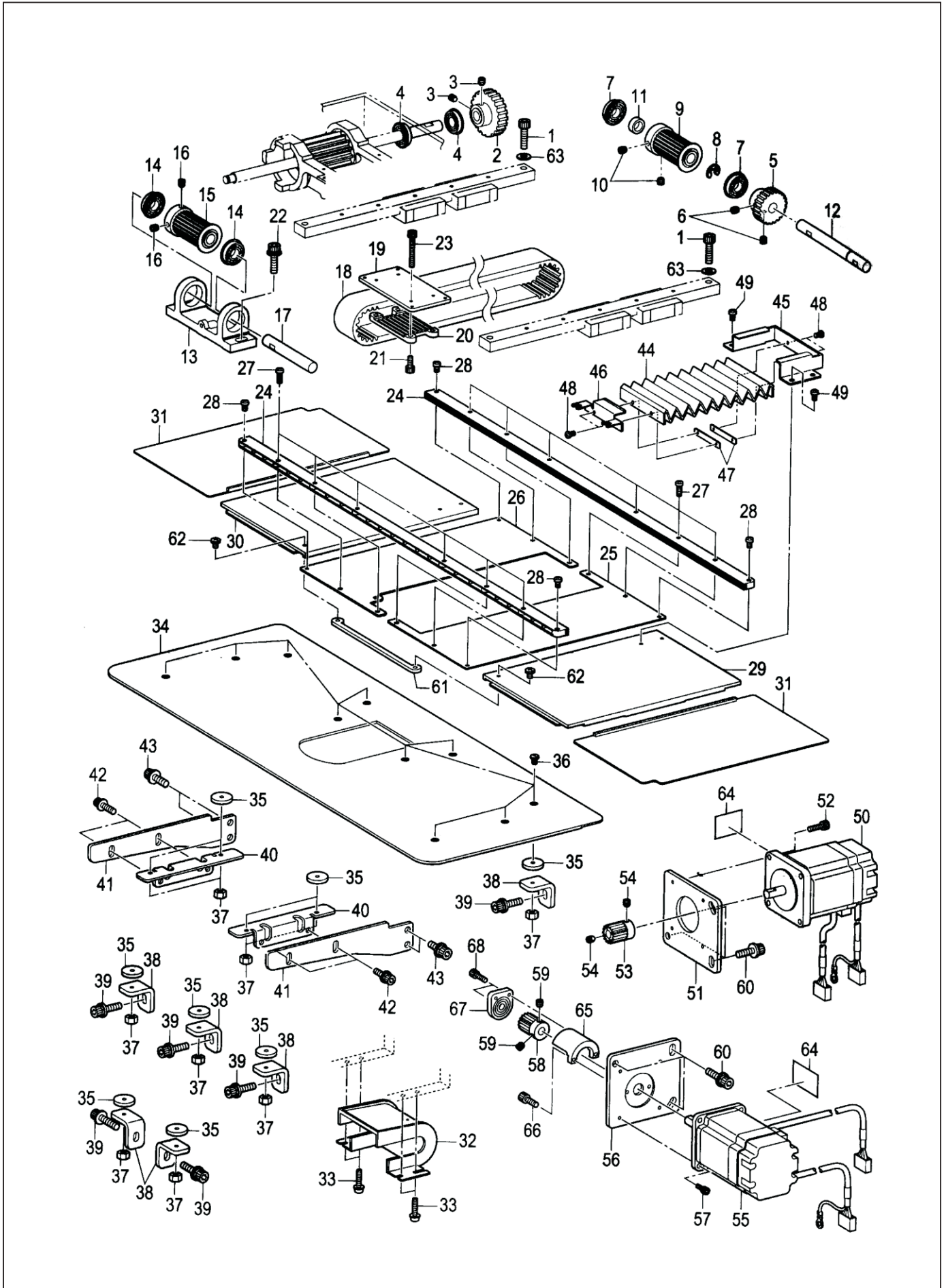


### 3.送料装置 Feed mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-03-01	送布基座组件	Feed bracket assy	1
2		563-03-02	X-LM 导向	X-LM guide	2
3		12-60301422-01	螺栓 M3x14	Bolt socket M3x14	15
4		563-03-04	送布台 (X)	Feed bracket X	1
5		12-60300622-01	螺栓 M3x6	Bolt socket M3x6	8
6		12-10300620-01	螺钉 M3x6	Screw flat M3x6	8
7		563-03-07	传感器板 (X)	X-sensor plate	1
8		12-10300620-01	螺钉 M3x6	Screw flat M3x6	2
9		563-03-09	皮带支架(X)	X-belt holder	1
10		12-60400822-01	螺栓 M4x8	Bolt socket M4x8	2
11		563-03-11	X-GT 皮带	X-GT belt	1
12		563-03-12	皮带支架板 (X)	X-belt holder plate	1
13		12-60400822-01	螺栓 M4x8	Bolt socket M4x8	2
14		563-03-14	花键轴 (Y)	Y-ball spline	1
15		213-03-06	球轴承 6000VV	Ball bearing radial 6000VV	1
16		21-10210182-03	平垫圈 10	Washer plain 10	1
17		25-10000000-08	轴用挡圈 C10	Retaining ring external C10	1
18		563-03-18	X-左轮组件	X-left pulley	1
19		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
20		563-03-20	球轴承 6806VV	Ball bearing 6806VV	2
21		27-42000000-08	孔用挡圈 C42	Retaining ring external C42	2
22		563-03-22	X-轮基座	X-pulley bracket	1
23		12-60501622-01	螺栓 M5x16	Bolt socket M5x16	2
24		21-05215110-02	平垫圈 5	Washer plain 5	2
25		563-03-25	X-右轮组件	X-right pulley assy	1
26		21-10210182-03	平垫圈 10	Washer plain 10	1
27		563-03-27	球轴承 6900ZZNR	Ball bearing 6900ZZNR	2
28		563-03-28	X-轮支点轴	X-pulley fulcrum shaft	1
29		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
30		563-03-30	Y-传感板	Y-sensor plate	1
31		12-60402022-01	螺栓 M4x20	Bolt socket M4x20	2
32		563-03-32	Y-LM 导向	Y-LM guide	2
33		563-03-33	Y-LM 垫片	Y-LM spacer	2
34		12-10300620-01	螺钉 M3x6	Screw flat M3x6	16
35		12-60402022-01	螺栓 M4x20	Bolt socket M4x20	8
36		22-04000000-08	弹簧垫圈 2-4	Washer spring 2-4	8
37		21-04210080-02	平垫圈 4	Washer plain 4	8
38		564-03-38	挡块	Clamp h-position	2
39		12-60402022-01	螺栓 M4x20	Bolt socket M4x20	2
40		563-03-40	固定板	Holder plate	2
41		563-03-41	调节销	Adjust pin	4
42		12-80300512-01	螺钉 M3x5	Screw flat M3x5	4



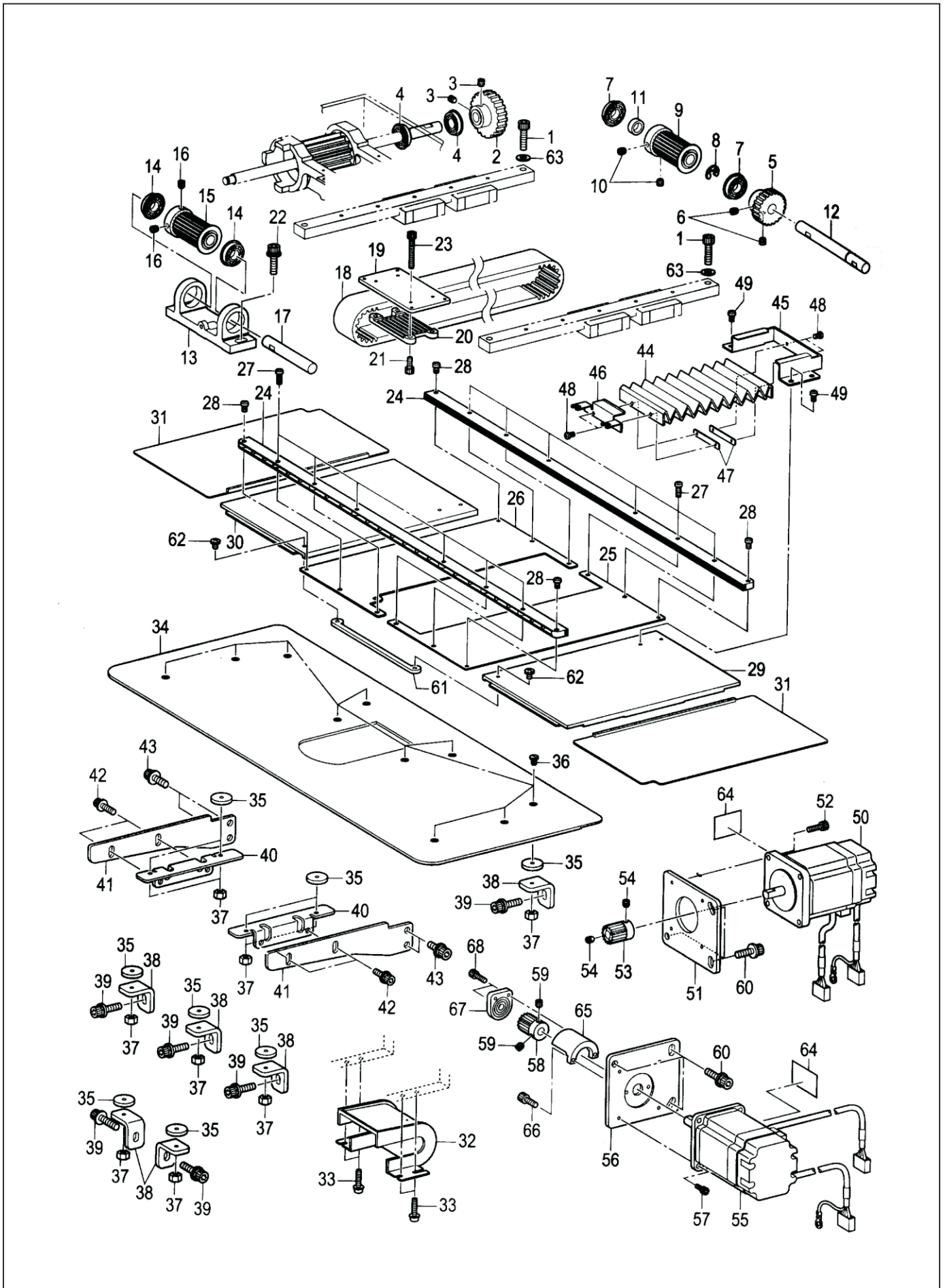
# 4.送料装置 Feed mechanism



#### 4.送料装置 Feed mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		12-60602022-01	螺栓 M6x20	Bolt socket M6x20	4
2		563-04-02	X-送布齿轮	X-feed gear	1
3		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
4		563-03-27	球轴承 6900ZZNR	Ball bearing 6900ZZNR	2
5		563-04-05	Y-送布齿轮	Y-feed gear	1
6		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
7		563-03-27	球轴承 6900ZZNR	Ball bearing 6900ZZNR	2
8		24-08000000-08	挡圈 E8	Retaining ring E8	1
9		563-04-09	Y-轮组件	Y-pulley assy	1
10		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
11		563-04-11	Y-轮轴套	Y-pulley collar	1
12		563-04-12	Y-驱动轴	Y-pulley driving shaft	1
13		563-04-13	Y-轮基座	Y-pulley bracket	1
14		563-03-27	球轴承 6900ZZNR	Ball bearing 6900ZZNR	2
15		563-04-15	基座带轮组件	Y-pulley assy	1
16		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
17		563-04-17	Y-轮支点轴	Y-pulley fulcrum shaft	1
18		563-04-18	Y-GT 皮带	Y-gt belt	1
19		563-04-19	Y-皮带支架板	Belt support plate	1
20		563-04-20	Y-皮带支撑板	Y-bely work clamp plate	1
21		12-60400822-01	螺栓 M4x8	Bolt socket M4x8	4
22		16-60602022-01	螺栓 M6x20	Bolt socket M6x20	2
23		12-60402022-01	螺栓 M4x20	Bolt socket M4x20	4
24		563-04-24	盖轨道	Cover rall	2
25		563-04-25	固定盖 (R)	Fixatiom R	1
26		563-04-26	固定盖 (L)	Fixatiom L	1
27		12-40401025-02	螺钉 M4x10	Screw fan M4x10	12
28		16-40400625-02	螺钉 M4x6	Screw fan M4x6	4
29		563-04-29	内盖组件 R	Inside cover R assy	1
30		563-04-30	内盖组件 L	Inside cover L assy	1
31		563-04-31	外盖组件	Outsde cober assy	2
32		563-04-32	Y-皮带轮盖	Belt cover Y	1
33		16-40401025-02	螺栓 M4x10DB	Screw pan M4x10	2
34		563-04-34	补助板	Auxiliary plate	1
35		563-04-35	补助板缓冲	Auxiliary plate cushion	10
36		12-70401220-02	螺钉 M4x12	Screw M4x12	10
37		14-60403020-02	六角螺母 M4	Nut 2 M4	10
38		563-04-38	补助板支架	Auxiliary plate bracket	6
39		16-60601422-02	螺栓 M6x14	Bolt socket M6x14	6
40		563-04-40	补助板支架 U	Support plate guide U	2
41		563-04-41	补助板支架 D	Support plate guide D	2
42		16-60501022-02	螺栓 M5x10	Bolt socket M5x10	4
43		16-60601422-02	螺栓 M6x14	Bolt socket M6x14	4
44		563-04-44	蛇纹管	Bellow	1
45		563-04-45	蛇纹管支架 R	Bellow presser R	1
46		563-04-46	蛇纹管支架 F	Bellow presser F	1
47		563-04-47	板螺母	Bellow nut	2
48		12-40300425-02	螺钉 M3x4	Screw fan m3x4	4
49		12-40400421-02	螺钉 M4x4	Screw fan m4x4	4
50		563-04-50	脉冲马达组件X	Pulse motor assy X	1
51		563-04-51	马达安装板	Motor bracket plate	1
52		12-60401022-01	螺栓 M4x10	Bolt socket M4x10	4

# 4.送料装置 Feed mechanism

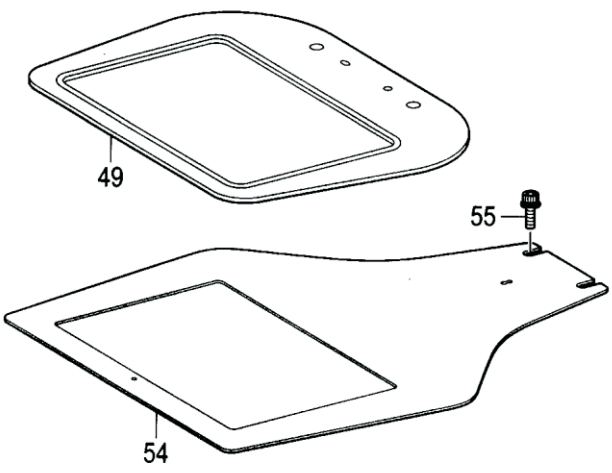
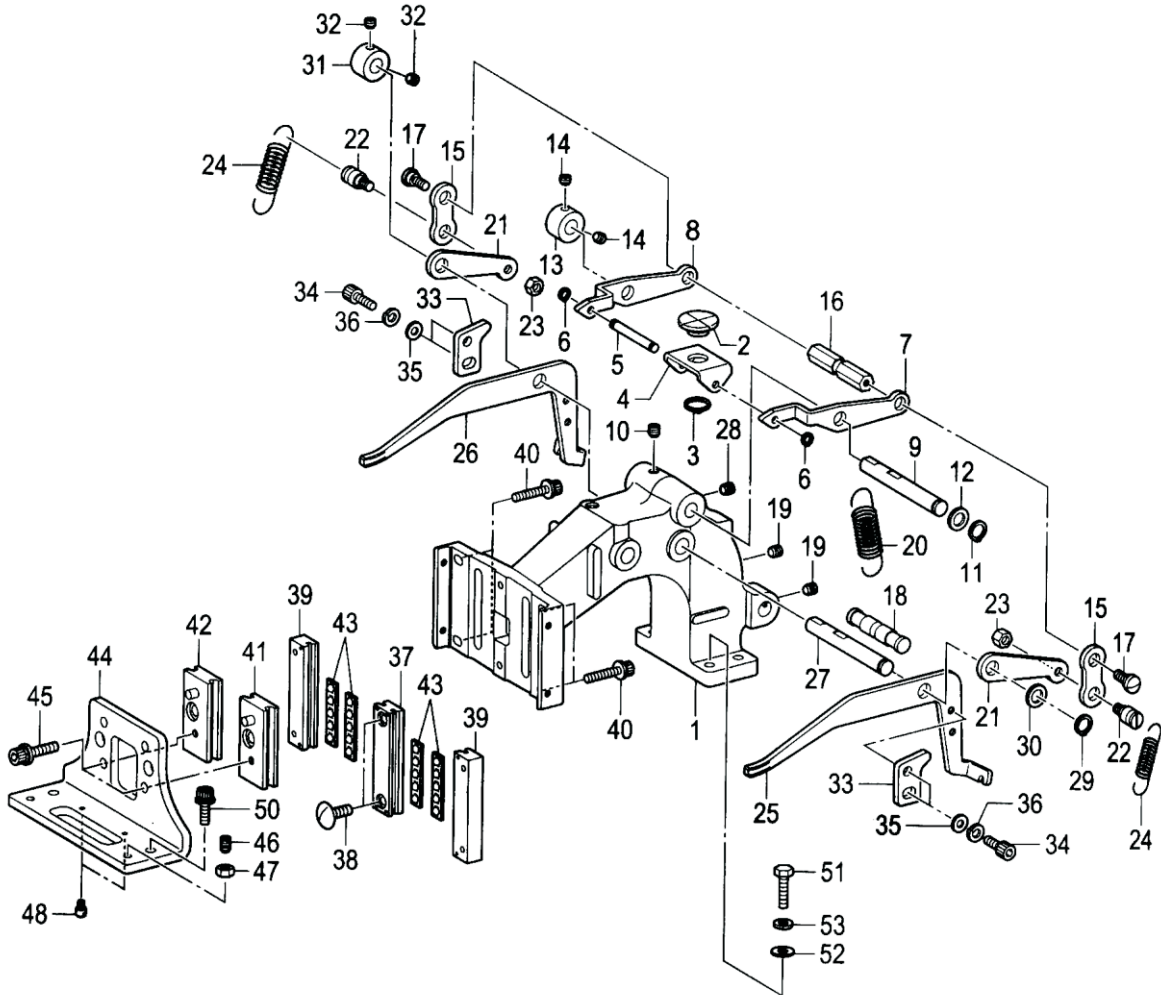


#### 4.送料装置 Feed mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
53		563-04-53	驱动齿轮 16	Gear 16	1
54		12-80600512-01	螺钉 M6x5	Set screw socket (ft) M6x5	2
55		563-04-55	脉冲马达组件 Y	Pulse motor assy Y	1
56		563-04-56	马达安装板	Motor bracket plate	1
57		12-60401022-01	螺钉 M4x10	Bolt socket M4x10	4
58		563-04-53	驱动齿轮 16	Gear 16	1
59		12-80600512-01	螺钉 M6x5	Set screw socket (ft) M6x5	2
60		16-60601422-02	螺钉 M6x14	Bolt socket M6x14	6
61		563-04-61	盖连接板	Cover connect plate	1
62		12-70400520-02	螺钉 M4x5	ScrewM4x5	2
63		21-06010130-01	垫圈	Washer	4
64		44-00000014-00	注意符号 30x40	Mark attention 30x40	2
65		563-04-65	轴承支架座	Bearing holder base	1
66		12-60501022-01	螺栓 M5x10	Bolt socket M5x10	2
67		563-04-67-01	轴承支架	Bearing holder	2
67		563-04-67-02	调心球轴承 126	Ball bearing 126	1
67		563-04-67	轴承支架组件	Bearing holder assy	2
68		12-60401022-01	螺钉 M4x10	Bolt socker M4x10	2

# 5.送料装置<电磁式> Feed mechanism<For Solenoid type>

< 电磁式 / For Solenoid type >

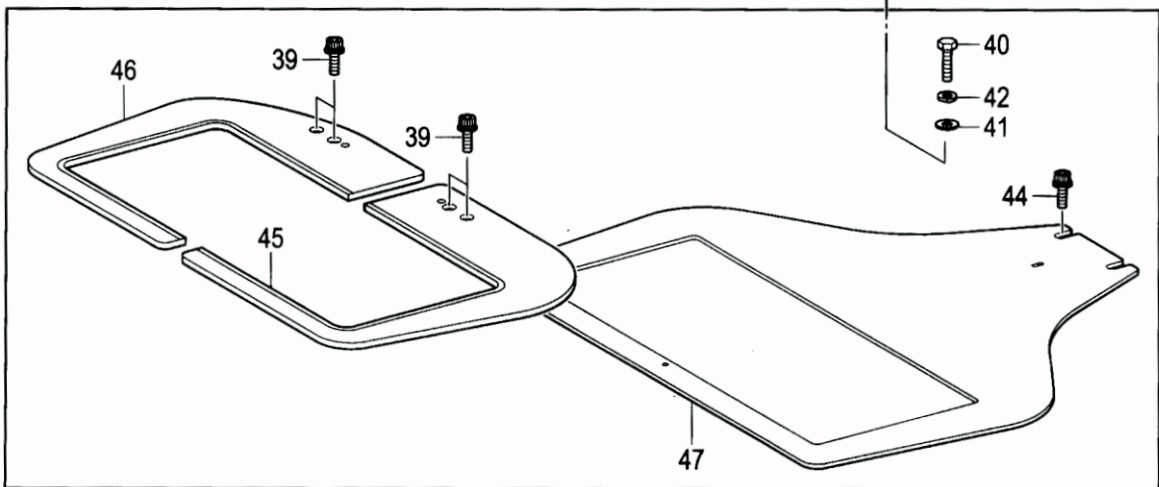
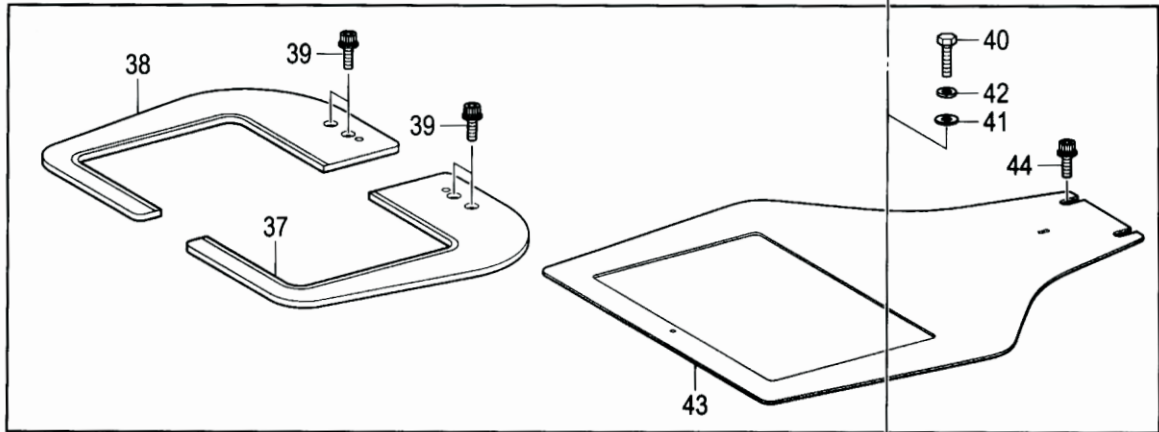
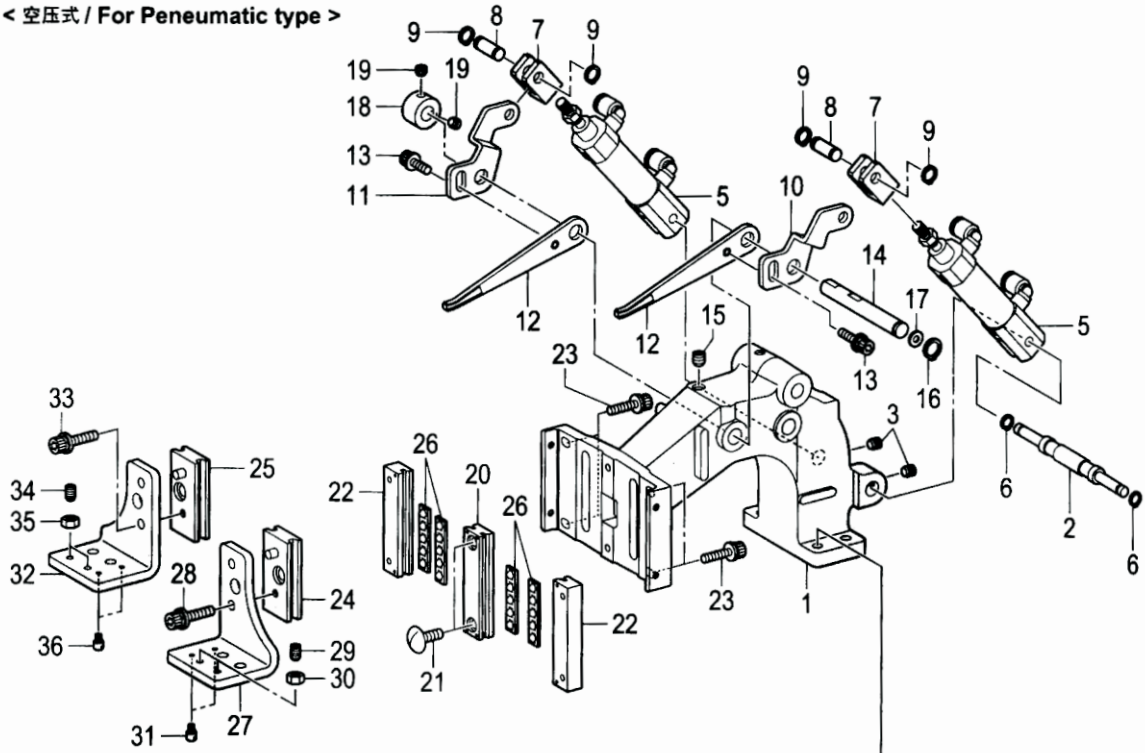


## 5.送料装置<电磁式> Feed mechanism<For Solenoid type>

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-06-01	压脚臂	Work clamp	1
2		564-05-02	滑块	Slider	1
3		25-10000000-08	轴用挡圈 C10	Retaining ring external C10	1
4		564-05-04	滑块支架	Support slider	1
5		564-05-05	滑块支架轴	Support shaft slider	1
6		25-04000000-09	轴用挡圈 C4	Retaining ring external C4	2
7		564-05-07	压脚柄 R	Work clamp lifter lever R	1
8		564-05-08	压脚柄 L	Work clamp lifter lever L	1
9		563-06-14	压脚臂杆轴	Work clamp lifter shaft	1
10		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
11		25-08000000-08	轴用挡圈 C8	Retaining ring external C8	1
12		550-02-11	垫圈 8	Washer plain special 8	1
13		550-03-25	紧圈 B	Set screw collar B	1
14		12-80600512-01	螺钉 M6x5	Set screw socket (ft) M6x5	2
15		564-05-15	连杆	Connecting rod	2
16		564-05-16	弹簧挂钩轴A	Spring holder shaft A	1
17		564-05-17	段螺钉 M5	Shoulder screw M5	2
18		564-05-18	弹簧挂钩轴B	Spring holder shaft B	1
19		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
20		564-05-20	弹簧	Spring lift	1
21		564-05-21	连接板	Connecting link	2
22		564-05-22	弹簧挂钩	Work clamp spring holder	2
23		14-60504020-02	六角螺母 M5	Nut 2 M5	2
24		564-05-24	弹簧	Work clamp spring	2
25		564-05-25	压脚臂杆 R	Work clamp lifter lever R	1
26		564-05-26	压脚臂杆 L	Work clamp lifter lever L	1
27		563-06-14	压脚臂杆轴	Work clamp lifter lever L	1
28		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
29		25-08000000-08	轴用挡圈 C8	Retaining ring external C8	1
30		550-02-11	垫圈 8	Washer plain special 8	1
31		550-03-25	紧圈 B	Set screw collar B	1
32		12-80600512-01	螺钉 M6x5	Set screw socket (ft) M6x5	2
33		564-05-33	定位板	Stopper	2
34		12-60500822-02	螺栓 M5x8	Bolt socket M5x8	4
35		21-05215110-02	平垫圈 5	Washer plain 5	4
36		22-05000000-08	弹簧垫圈 2-5	Washer spring 2-5	4
37		563-06-20	压脚导向组件 A	Work clamp guide a assy	1
38		12-70401620-02	螺钉 M4x16	Screw M4x16	2
39		563-06-22	压脚导向组件 B	Work clamp guide a assy	2
40		16-60401422-02	螺栓 M4x14	Set screw socket M4x14	4
41		563-06-24	压脚滑块组件 R	Work clamp slider assy R	1
42		563-06-25	压脚滑块组件 L	Work clamp slider assy L	1
43		563-06-26	压脚挡板组件	Work clamp retainer assy	4
44		564-05-44	压脚	Work clamp	1
45		16-60501222-02	螺栓 M5x12	Bolt socket M5x12	2
46		12-80501012-01	螺钉 M5x10	Set screw socket (ft) M5x10	2
47		14-60504020-02	六角螺母 M5	Nut 2 M5	2
48		563-06-31	定位段螺钉	Shoulder screw	2
49		564-05-49	压板组件 1310	Work clamp 1310 assy	1
50		16-60501022-02	螺栓 M5x10	Bolt socket M5x10	2
51		12-90501623-02	螺钉 M5x16	Bolt M5x16	4
52		21-05215110-02	平垫圈 5	Washer plain 5	4
53		22-05000000-08	弹簧垫圈 2-5	Washer plain 2-5	4
54		564-05-54	送料板 1310	Feed plate 1310	1
55		16-60501022-02	螺栓 M5x10	Bolt socket M5x10	2

# 6.送料装置<空压式> Feed mechanism<For Pneumatic type>

< 空压式 / For Pneumatic type >



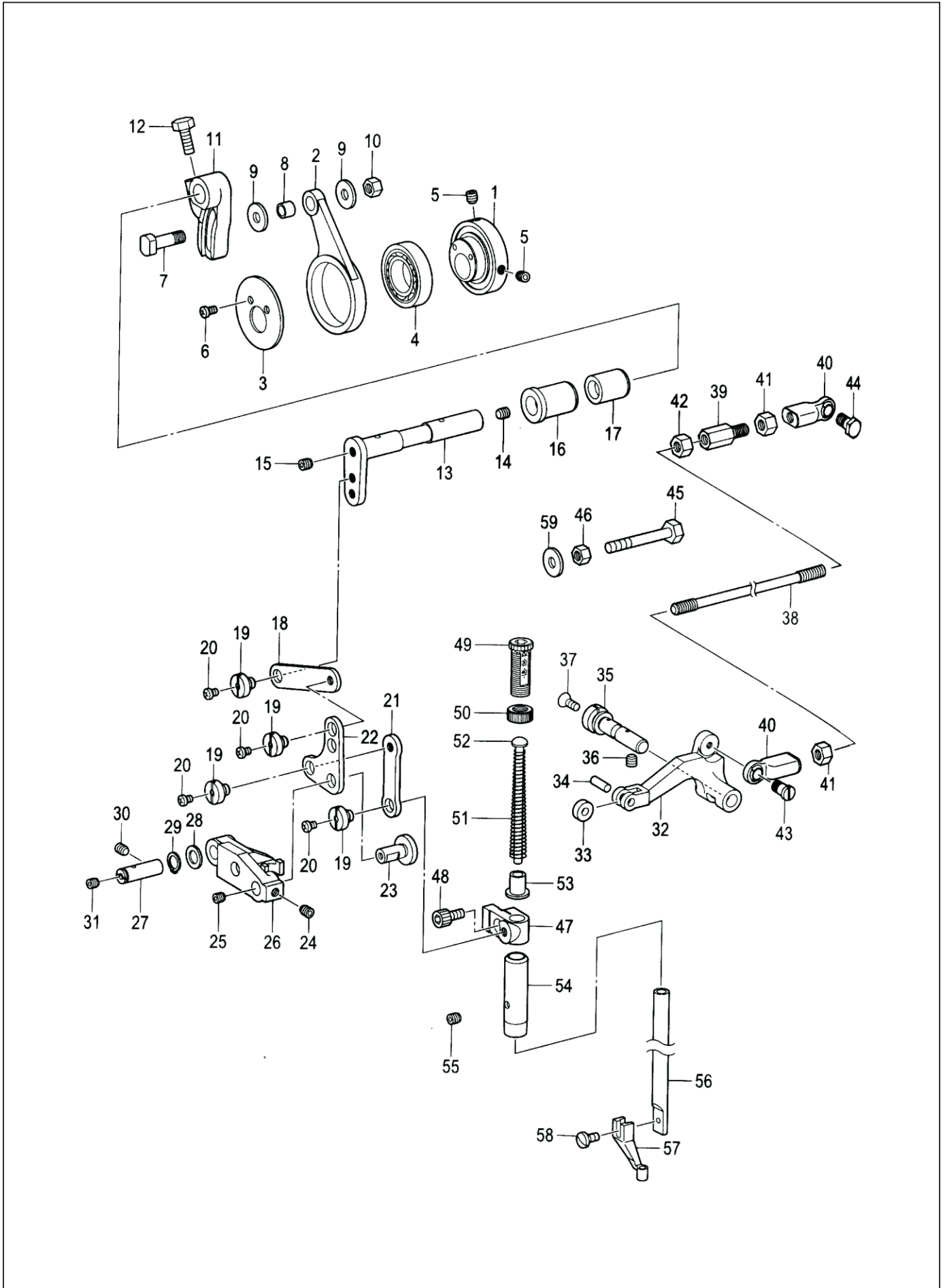
## 6.送料装置<空压式> Feed mechanism<For Pneumatic type>

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-06-01	压脚臂	Work clamp	1
2		563-06-02	气缸轴	Cylinder shaft	1
3		12-80600612-01	螺钉 M6x6	Set screw socket (ft)M6x6	2
5		563-06-05	气缸组件 R	Air cylinder assy	2
6		25-05000000-09	轴用挡圈 C5	Air cylinder ring external C5	2
7		563-06-07	气缸接头	Cylinder joint	2
8		563-06-08	气缸接头轴	Cylinder joint shaft	2
9		25-06000000-08	轴用挡圈 C6	Retaining ring external C6	4
10		563-06-10	压脚柄 R (气压)	Work clamp lifter lever R air	1
11		563-06-11	压脚柄 L (气压)	Work clamp lifter lever L air	1
12		563-06-12	压脚臂杆 (气压)	Work clamp lifter shaft air	2
13		16-60400822-02	螺栓 M4x8	Bolt socket M4x8	2
14		563-06-14	压脚臂杆轴	Work clamp lifter shaft	1
15		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
16		25-08000000-08	轴用挡圈 C8	Retaining ring external C8	1
17		550-02-11	垫圈 8	Washer plain special 8	1
18		550-03-25	紧圈 B	Set screw collar B	1
19		12-80600512-01	螺钉 M6x5	Set screw socket (ft) M6x5	2
20		563-06-20	压脚导向组件 A	Work clamp guide a assy	1
21		12-70401620-02	螺钉 M4x16	Screw M4x16	2
22		563-06-22	压脚导向组件 B	Work clamp guide b assy	2
23		16-60401422-02	螺栓 M4x14	Bolt socket M4x14	4
24		563-06-24	压脚滑块组件 R	Work clamp slider assy R	1
25		563-06-25	压脚滑块组件 L	Work clamp slider assy L	1
26		563-06-26	压脚挡板组件	Work clamp retainer assy	4
27		563-06-27	压脚 R	Work clamp R	1
28		16-60501222-02	螺栓 M5x12	Bolt socket M5x12	1
29		12-80501012-01	螺钉 M5x10	Set screw socket (ft) M5x10	2
30		14-60504020-02	六角螺母 M5	Nut 2 M5	2
31		563-06-31	定位段螺钉	Shoulder screw	2
32		563-06-32	压脚 L	Work clampL	1
33		16-60501222-02	螺栓 M5x12	Bolt socket M5x12	1
34		12-80501012-01	螺钉 M5x10	Set screw socket (ft) M5x10	2
35		14-60504020-02	六角螺母 M5	Nut 2 M5	2
36		563-06-31	定位段螺钉	Shoulder screw	2
37	#3	564-06-37	压板组件 1310R	Work clamp 1310R assy	1
38	#3	564-06-38	压板组件 1310L	Work clamp 1310L assy	1
39		16-60501022-02	螺栓 M5x10	Bolt socket M5x10	4
40		12-90501623-02	螺栓 M5x16	Bolt M5x16	4
41		21-05215110-02	平垫圈 5	Washer plain 5	4
42		22-05000000-08	弹簧垫圈 2-5	Washer spring 2-5	4
43	#3	564-06-43	送料板 1310	Feed plate 1310	1
44		16-60501022-02	螺栓 M5x10	Bolt socket M5x10	2
45	#4	563-06-45	压板组件 2210R	Work clamp 2210R assy	1
46	#4	563-06-46	压板组件 2210L	Work clamp 2210L assy	1
47	#4	563-06-47	送料板 2210	Feed plate 2210G	1

NOTE:  
#03... For1310  
#04... For2210



# 7. 抬压脚装置 Work clamp lifter mechanism

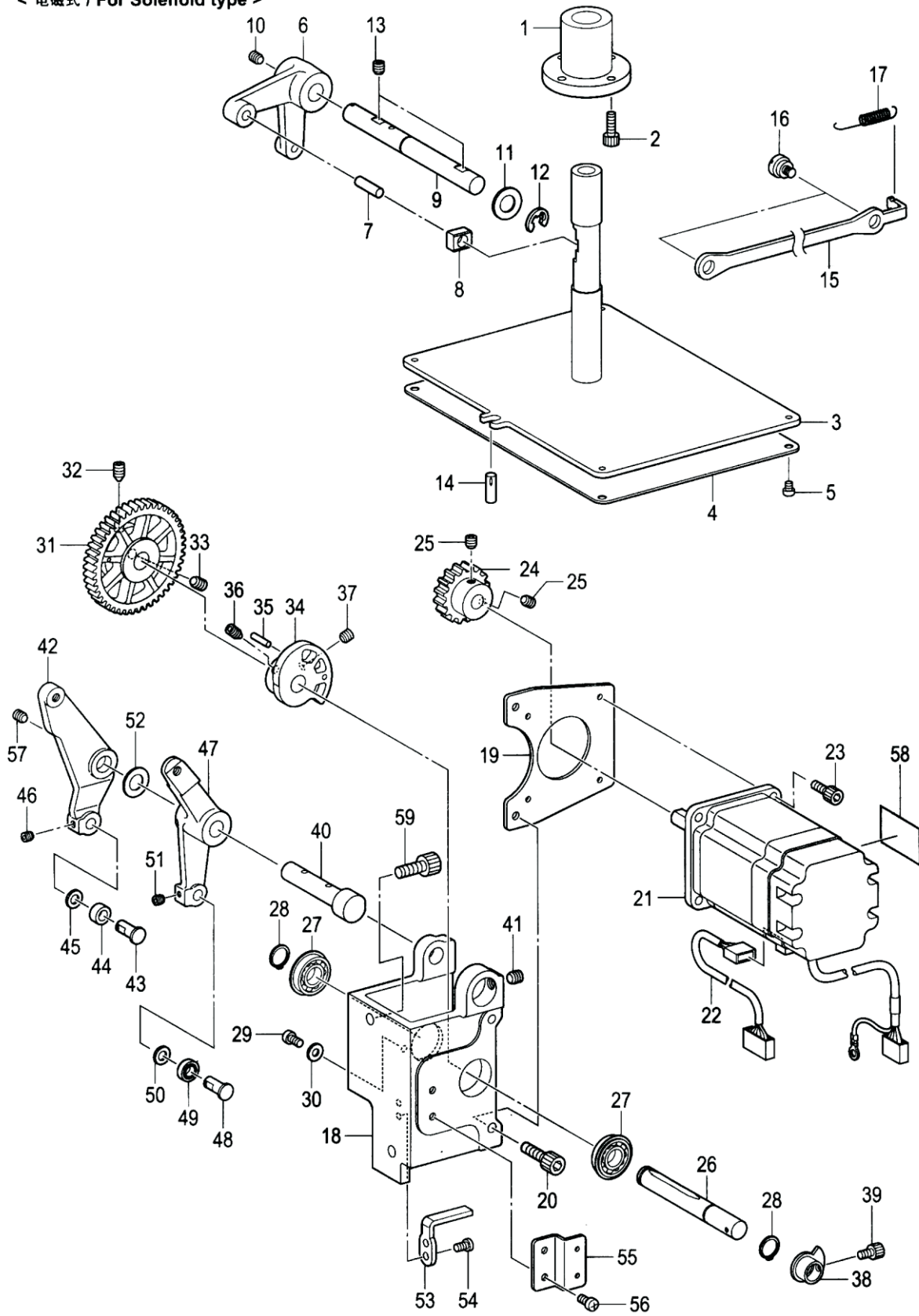


## 7.抬压脚装置 Work clamp lifter mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-07-01	凸轮	Stepping clamp cam	1
2		563-07-02	连杆	Stepping clamp con.rod	1
3		563-07-03	垫圈	Washer stepping clamp cam	1
4		563-07-04	轴承 6805VV	Ball bearing 6805VV	1
5		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (ft) M6x6	2
6		12-40400625-01	螺钉 M4x6	Screw pan M4x6	2
7		563-07-07	滚轮轴	Roller shaft stepping clamp	1
8		563-07-08	滚轮	Roller stepping clamp	1
9		21-06215162-03	垫圈	Washer	2
10		14-60605020-02	螺母 M6	Nut 1 M6	1
11		563-07-11	压臂 R	Stepping clamp arm R	1
12		12-90601623-01	螺栓 M6x16	Bolt M6x12	1
13		563-07-13	压臂 F	Stepping clamp arm F	1
14		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
15		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (ft) M6x6	1
16		563-07-16	压臂轴套 F	Bush stepping clamp F	1
17		563-07-17	压臂轴套 R	Bush stepping clamp R	1
18		563-07-18	间歇连杆 A	Bush stepping clamp A	1
19		563-07-19	段螺钉 6	Shoulder screw 6	4
20		12-40300425-02	螺钉 M3x4	Screw pan M3x4	4
21		563-07-21	间歇连杆 B	Stepping clamp linkB	1
22		563-07-22	间歇连杆	Stepping clamp link	1
23		563-07-23	连杆轴	Shaft stepping clamp link	1
24		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
25		12-80400412-01	螺钉 M4x4	Set screw socket (ft) M4x4	1
26		563-07-26	连接板	Stepping clamp ligier link	1
27		563-07-27	连接板轴	Shaft stepping clamp lifter link	1
28		21-08010122-03	垫圈	Washer	1
29		25-08000000-08	轴用挡圈 C8	Retaining ring external C8	1
30		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
31		12-80400412-01	螺钉 M4x4	Set screw socket (ft) M4x4	1
32		563-07-32	间歇提升杆	Stepping clamp lifter	1
33		563-07-33	提升杆滑轮	Roller stepping clamp lifter	1
34		563-07-34	滚轮轴	Roller	1
35		563-07-35	提升杆轴	Shaft stepping clamp lifter	1
36		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
37		12-10400920-02	螺钉 M4x9	Screw flat M4	1
38		563-07-38	提升连杆	Stepping clamp lifter rod	1
39		563-07-39	提升连杆接头	Joint stepping clamp lifter	1
40		563-07-40	接头组件 R	Ball joint assy	2
41		14-60605020-02	六角螺母 M6	Nut 3 M6	2
42		14-65603020-01	螺母 M6x0.75	Nut (ft) M6	1
43		563-07-43	段螺钉	Shoulder screw	1
44		550-09-17	段螺钉B M6	Shoulder screw B M6	1
45		12-90605020-02	螺栓 M6x50	Bolt M6x50	1
46		14-60605020-02	螺母 M6	Nut 1 M6	1
47		563-07-47	压紧杆接头	Presser bar clamp	1
48		12-60400822-01	螺栓 M4x8	Bolt socket M4x8	1
49		563-07-49	调节螺栓 M14	Presser adjusting screw M14	1
50		563-07-50	调节螺母 M14	Adjust screw nut	1
51		563-07-51	弹簧	Presser bar spring	1
52		563-07-52	弹簧导向	Presser bar spring guide	1
53		563-07-53	弹簧管套	Collar presser bar spring	1
54		563-07-54	压紧杆轴套	Presser bar bush	1
55		12-80600512-01	螺钉 M6x5	Set screw socket (ft) M6x5	1
56		563-07-56	压紧杆	Presser bar	1
57		563-07-57	压脚	Work clamp	1
58		11-60091320-01	螺钉 SM3.57x12	Screw SM3.57x12	1
59		21-06225150-01	垫圈	Washer	1

# 8. 抬压脚装置<电磁式> Work clamp lifter mechanism<For Solenoid type>

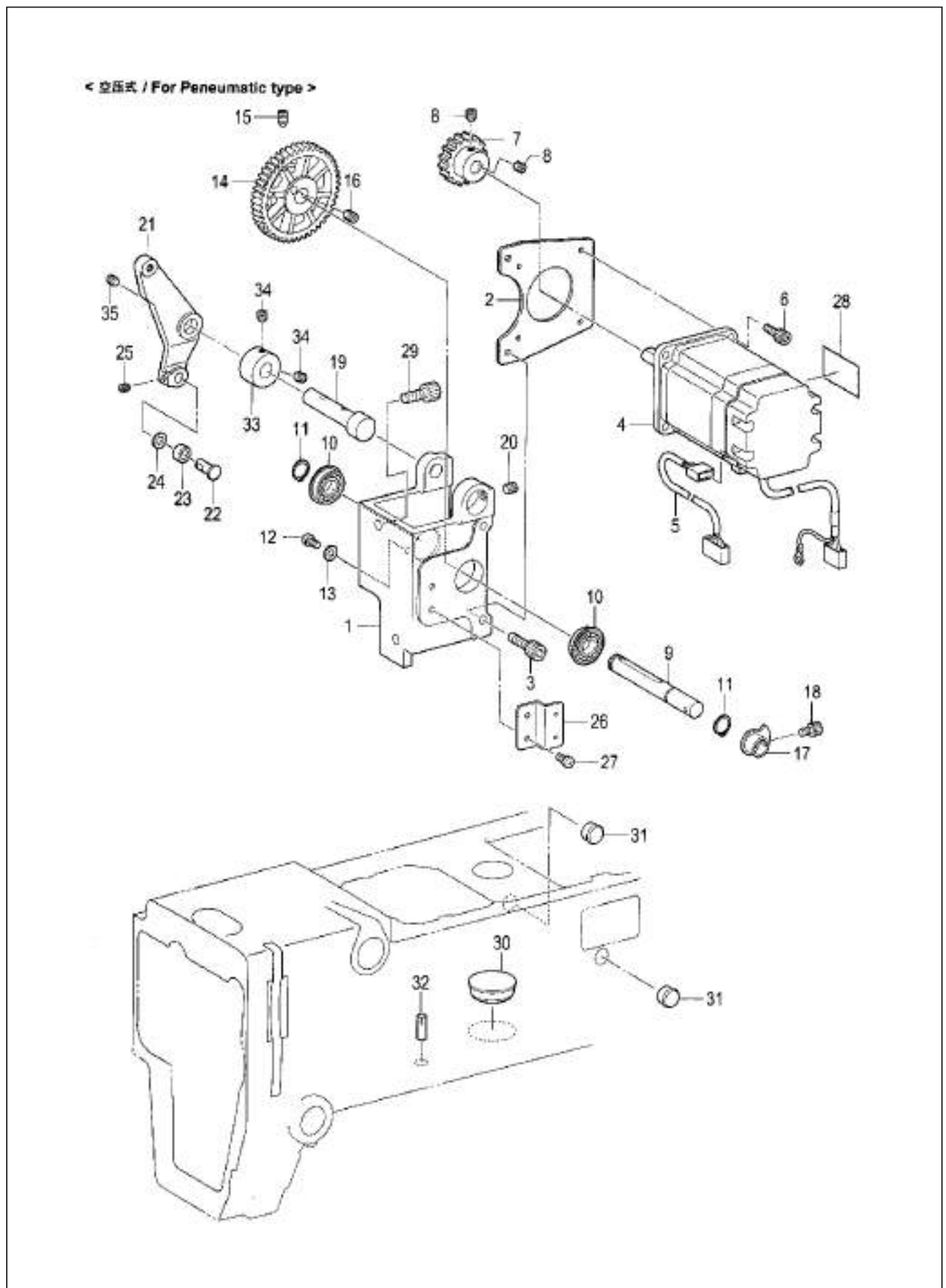
< 电磁式 / For Solenoid type >



## 8.抬压脚装置<电磁式> Work clamp lifter mechanism<For Solenoid type>

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		564-08-01	滑杆轴套	Slide bush	1
2		12-60401022-01	螺钉 M4x10	Bolt socket M4x10	4
3		564-08-03	压脚提升板组件	Work clamp lifter pate assy	1
4		564-08-04	底座板 E	Seat E	1
5		12-40400421-02	螺钉 M4x4	Screw pan M4x4	1
6		564-08-06	压脚提升杆	Work clamp lifter lever	1
7		564-08-07	销	Pin	1
8		550-04-06	压脚提升滑块	Needle bar guide slide block	1
9		564-08-09	提升杆轴 B	Work clamp lever shaft B	1
10		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
11		21-10210182-03	平垫圈 10	Washer plain 10	1
12		24-08000000-08	挡圈 E8	Retaining ring E8	1
13		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
14		564-08-14	带槽销	Dowel pin	1
15		564-08-15	压脚提升杆	Work clamp lifter pate assy	1
16		550-04-10	段螺钉	Shoulder screw	2
17		564-08-17	弹簧	Presser bar spring	1
18		563-09-01	马达座	Motor bracket	1
19		563-09-02	压脚马达座	Work clamp motor plate	1
20		12-60501022-01	螺栓 M5x10	Bolt socket M5x10	2
21		563-09-04	脉冲马达组件 P	Pulse motor assy P	1
22		563-09-05	马达端线 P	Motor harness P	1
23		12-60401022-01	螺钉 M4x10	Bolt socket M4x10	4
24		563-09-07	驱动齿轮	Work clamp driving gear	1
25		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
26		563-08-26	压脚支点轴	Work clamp fulcrum shaft	1
27		563-03-27	球轴承 6900ZZNR	Ball bearing 6900ZZNR	2
28		25-10000000-08	轴用挡圈 C10	Retaining ring external C10	2
29		12-40400625-01	螺钉 M4x6	Screw pan M4x6	1
30		21-04210080-02	平垫圈 4	Washer plain 4	1
31		563-09-14	凸轮齿轮	Work clamp cam gear	1
32		12-80601042-01	螺钉 M6x10	Set screw socket (ft) M6x10	1
33		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
34		563-08-34	压脚凸轮	Work clamp cam	1
35		563-08-35	滚针 3x11.8	Needle roller 3x11.8	1
36		12-80601042-01	螺钉 M6x10	Set screw socket (cn) M6x10	1
37		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x10	1
38		563-09-17	压脚原点挡块	Work clamp h-position dog	1
39		12-60400622-01	螺栓 M4x6	Bolt socket M4x6	1
40		563-09-19	压脚柄轴	Work clamp lever shaft	1
41		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
42		563-08-42	间歇驱动杆	Stepping w-clamp driving lever	1
43		550-04-13	压脚滚轮轴	W-clamp lifter roller shaft	1
44		550-04-12	轴承 R-696ZZ	Ball bearing radial 696ZZ	1
45		21-06106100-01	垫圈	Washer	1
46		12-80500512-01	螺钉 M5x5	Set screw socket (ft) M5x5	1
47		563-08-47	压脚驱动杆	Work clamp driving shaft	1
48		550-04-13	抬压滚轮轴	W-clamp lifter roller shaft	1
49		550-04-12	轴承 R-696ZZ	Ball bearing radial 696ZZ	1
50		21-06106100-01	垫圈	Washer	1
51		12-80500512-01	螺钉 M5x5	Set screw socket (ft) M5x5	1
52		21-10210182-03	平垫圈 10	Washer plain10	1
53		563-08-53	凸轮定位	Work clamp cam stopper	1
54		12-40400625-01	螺钉 M4x6	Screw pan M4x6	2
55		563-09-26	压脚传感器板	Work clamp sensor plate	1
56		12-40400625-01	螺钉 M4x6	Screw pan M4x6	2
57		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
58		44-00000014-00	电机注意符号 30x40	Mark attention 30x40	1
59		12-60601222-01	螺栓 M6x12	Bolt socket M6x12	2

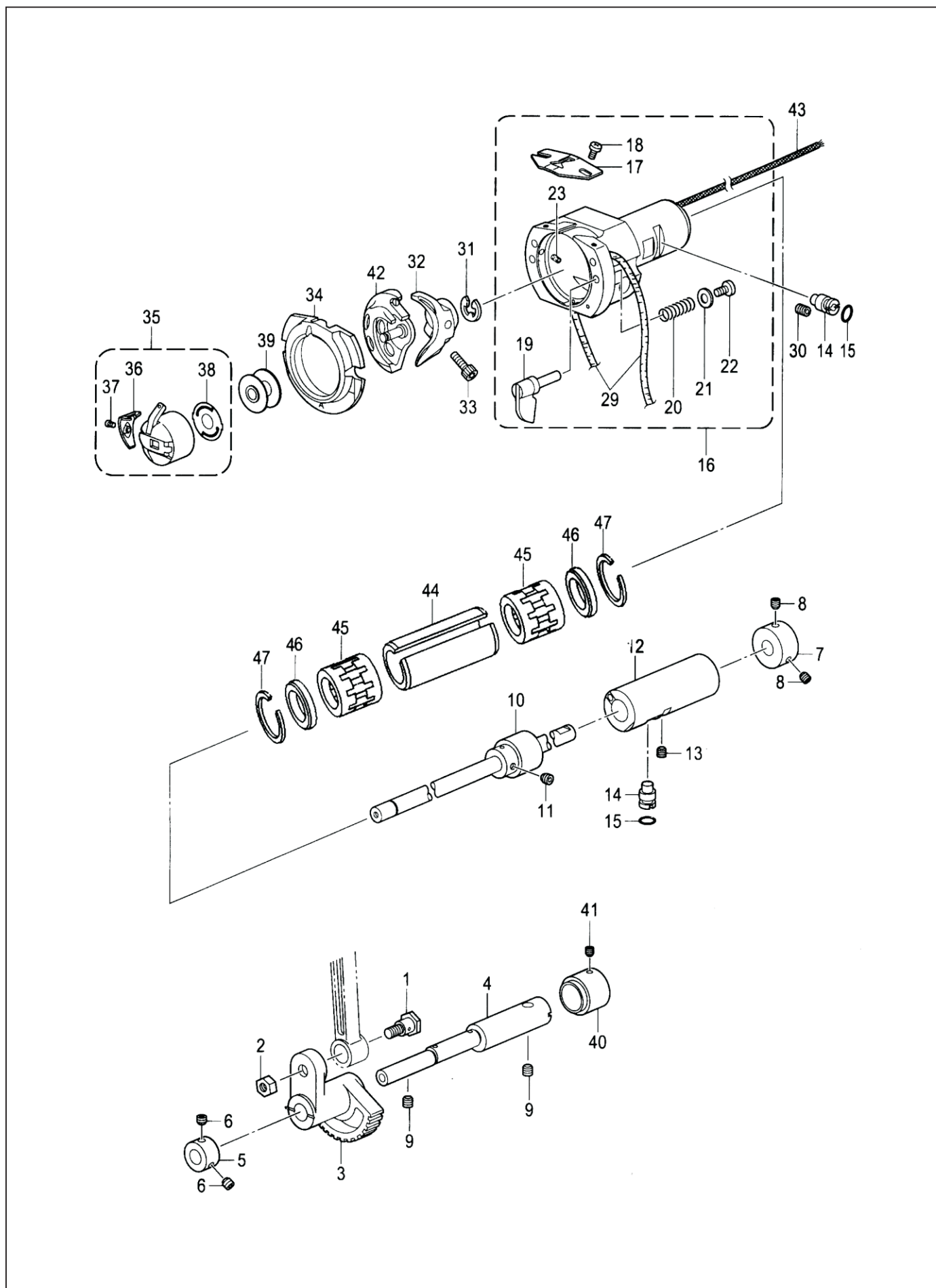
9. 抬压脚装置<空压式> Work clamp lifter mechanism<For pneumatic type>



## 9. 抬压脚装置<空压式> Work clamp lifter mechanism<For pneumatic type>

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-08-18	马达座	Motor bracket	1
2		563-09-02	压脚马达板	Work clamp motor plate	1
3		12-60501022-01	螺栓 M5x10	Bolt socket M5x10	2
4		563-09-04	脉冲马达组件 P	Pulse motor assy P	1
5		563-09-05	马达端线 P	Motor harness P	1
6		12-60401022-01	螺栓 M4x10	Bolt socket M4x10	4
7		563-09-07	驱动齿轮	Work clamp driving gear	1
8		12-80600612-01	螺钉 M6x6	Set screw socekt (ft) M6x6	2
9		563-08-26	压脚支点轴	Work clamp fulcrum shaft	1
10		563-03-27	球轴承 6900ZZNR	Ball bearing 6900ZZNR	2
11		25-10000000-08	轴用挡圈 C10	Retaining ring external C10	2
12		12-40400625-01	螺钉 M4x6	Screw pan M4x6	1
13		21-04210080-02	平垫圈 4	Washer plain 4	1
14		563-09-14	凸轮齿轮	Work clamp cam gear	1
15		12-80601042-01	螺钉 M6x10	Set screw socekt (cn) M6x10	1
16		12-80600612-01	螺钉 M6x6	Set screw socekt (cn) M6x6	1
17		563-09-17	压脚原点挡块	Work clamp h-position dog	1
18		12-60400622-01	螺栓 M4x6	Bolt socket M4x6	1
19		563-09-19	压脚柄轴	Work clamp lever shaft	1
20		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
21		563-09-21	间歇驱动杆	Stepping w-clamp driving lever	1
22		550-04-13	抬压滚轮轴	W-clamp lifter roller shaft	1
23		550-04-12	轴承 R-696ZZ	Ball bearing radial 696ZZ	1
24		21-06106100-01	垫圈	Washer	1
25		12-80500512-01	螺钉 M5x5	Set screw socket (ft) M5x5	1
26		563-09-26	压脚传感器板	Work clamp sensor plate	1
27		12-40400625-01	螺钉 M4x6	Screw pan M4x6	2
28		44-00000014-00	机电注意符号 30x40	Mark attention 30x40	1
29		12-60601222-01	螺栓 M6x12	Bolt socket M6x12	2
30		563-09-30	橡皮塞 29	Rubber cap 29	1
31		550-01-03	橡皮塞 10.5	Rubber cap 10.5	2
32		563-09-32	带槽销	Pin dowel	1
33		563-09-33	紧圈	Set screw collar	1
34		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
35		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1

# 10. 下轴装置 Lower shaft mechanism

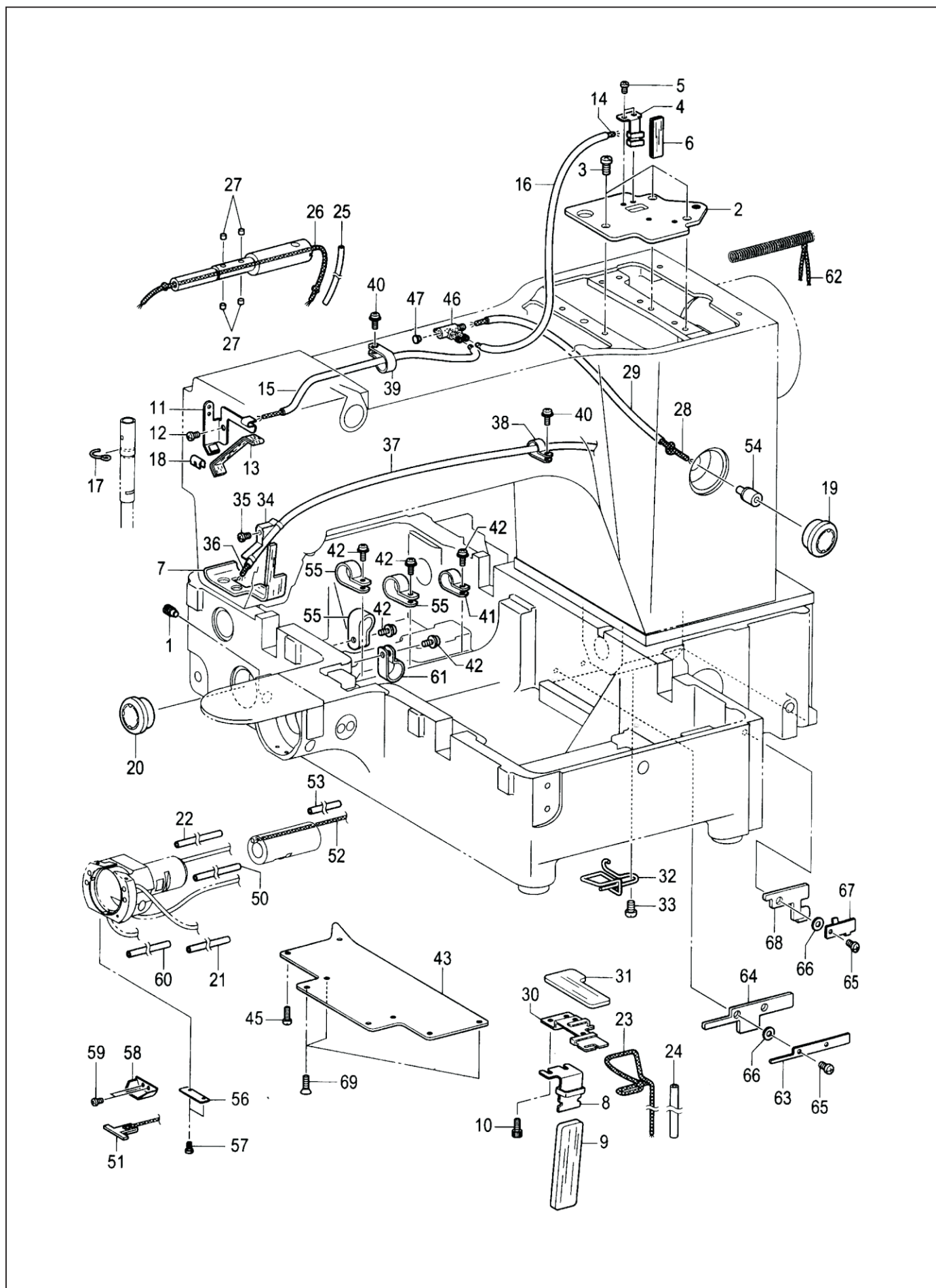


## 10. 下轴装置 Lower shaft mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		550-05-01	段螺钉	Shoulder screw	1
2		14-65603020-01	螺母 M6x0.75	Nut (ft) M6	1
3		550-05-02	摆动齿轮	Rock gear	1
4		563-10-04	摆动齿轮轴	Rock gear shaft	1
5		550-03-25	紧圈 B	Set screw collar B	1
6		12-80600512-01	螺钉 M6x5	Set screw socket (ft) M6x5	2
7		550-05-08	紧圈	Set screw collar	1
8		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (ft) M6x6	2
9		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
10		563-10-10	下轴组件	Lower shaft assy	1
11		12-80500512-01	螺钉 M5x5	Set screw socket (ft) M5x5	1
12		563-10-12	下轴轴套	Lower shaft bush	1
13		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
14		550-05-07	旋梭调节轴	Adjusting stud	2
15		31-04518000-09	O型圈 PW3	O ring PW3	2
16		563-10-16	大旋梭基座组件 G	Shuttle race base assy G	1
17		550-05-09-09	旋梭线导向	Shuttle race thread guide	1
18		12-60300420-02	螺钉 M3x4	Screw M3x4	2
19		550-05-09-02	大旋梭固定柄	S-race base setting clam	2
20		550-05-09-03	弹簧	Compression spring	2
21		21-03405070-01	垫圈 M3	Washaer plain M3	2
22		12-40300625-01	螺钉 M3x6	Screw M3x6	2
23		550-05-09-04	油毡	S-race base felt	2
29		43-20300000-00	油毡 $\phi 3$ L=380	Felt L=380	2
30		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
31		24-07000000-09	挡圈 E7	Retaining ring E7	1
32		563-10-32	梭托 D	Driber D	1
33		12-60501222-01	螺栓 M5x12	Bolt socket M5x12	1
34		550-05-13	外旋梭	Shuttle race base	1
35		563-10-35	梭芯套组件	Bobbin case assy	1
36		563-10-36	调节弹簧	Tension spring	(1)
37		563-10-37	螺钉	Screw	(1)
38		563-10-38	防空转弹簧	Anti-spin spring	(1)
39		563-10-39	梭芯	Bobbin	1
40		550-05-04	紧圈 R	Set screw collar R	1
41		12-80500512-01	螺钉 M5x5	Set screw socect (ft) M5x5	1
42		563-10-42	中旋梭	Shuttle hook	1
43		43-10400000-00	油线 4x4 L=400	Wick 4x4 L=400	0.4
44		550-05-11	轴圈	Bush	1
45		550-05-06-02	垫片	Spacer coller	2
46		550-05-10	滚针轴承 K8x12x11	Needle bearing	2
47		28-10010126-09	切口卡簧	Reiaining ring	2



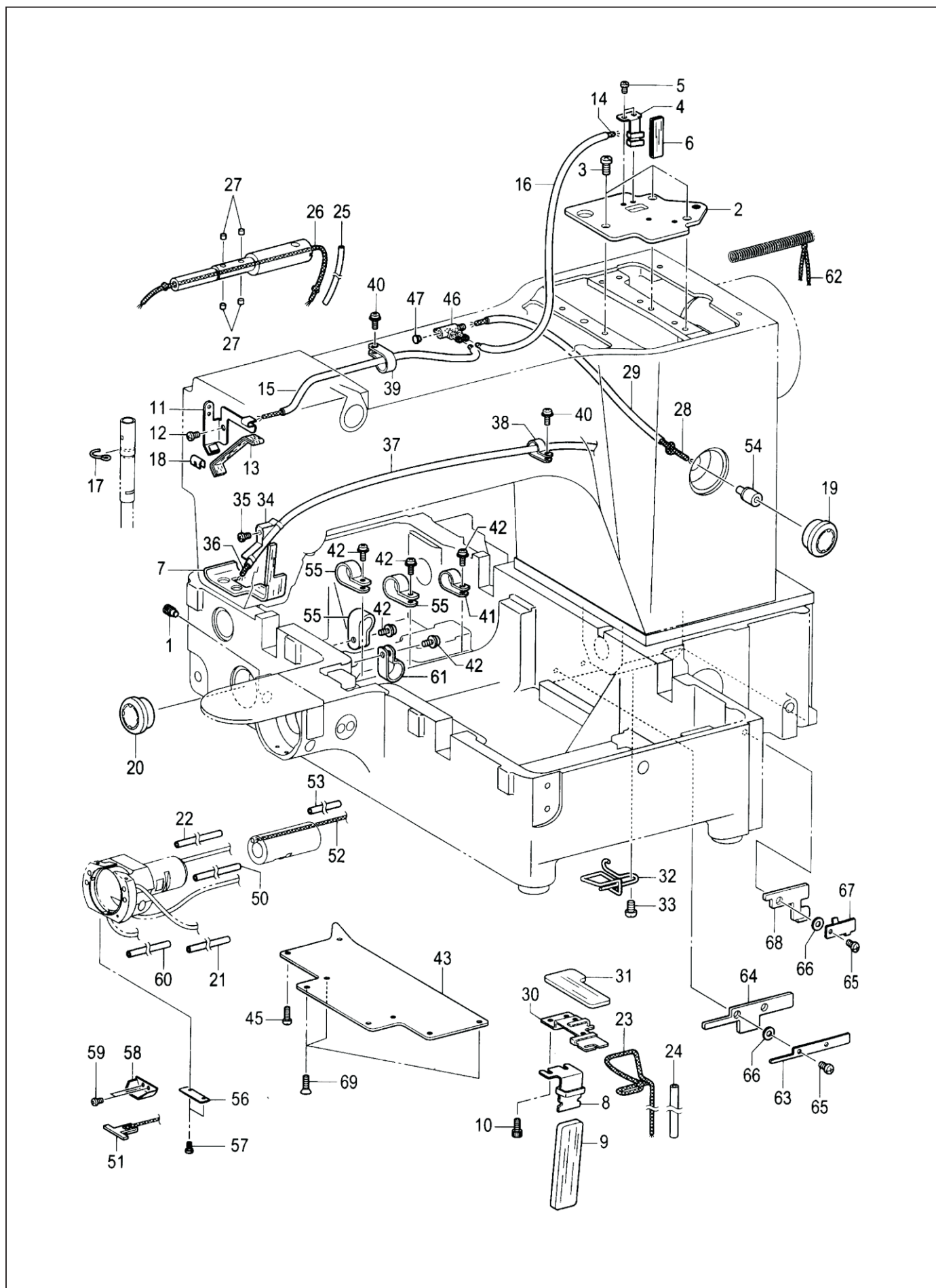
# 11. 供油润滑装置 Lubrication



## 11.供油润滑装置 Lubrication

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		550-06-01	螺钉	Set screw	1
2		563-11-02	曲柄盖	Crank cover	1
3		12-40601025-02	螺钉 M6x10	Screw pan M6x10	3
4		563-11-04	曲柄供油板	Crank wick plate	1
5		12-40400625-01	螺钉 M4x6	Screw pan M4x6	2
6		563-11-06	毡油线	Flat wick L=90	1
7		563-11-07	油毡	Felt	1
8		550-06-04	下轴给油支架	Lower shaft wick support	1
9		550-06-05	下轴齿轮油毡	Lower shaft gear felt	1
10		12-60400622-01	螺栓 M4x6	Bolt socket M4x6	2
11		563-11-11	供油支架	Wick support	1
12		12-40400625-01	螺钉 M4x6	Screw pan M4x6	1
13		563-11-13	毡油线	Flat wick L=180	1
14		43-10250000-00	油线 $\phi 2.5$ L=780	Wick L=780	1
15		42-05003000-00	油管 $\phi 3x\phi 5$ L=240	Oil tube L=240	0.24
16		42-05003000-00	油管 $\phi 3x\phi 5$ L=210	Oil tube L=210	0.21
17		563-11-17	油线挂钩	Wick support	1
18		563-11-18	油线支架	Wick support	1
19		563-11-19	油视窗	Oil gauge window	1
20		563-11-20	油视窗	Oil gauge window	1
21		42-05003000-00	油管 $\phi 3x\phi 5$ L=330	Oil tube L=320	0.33
22		42-05003000-00	油管 $\phi 3x\phi 5$ L=240	Oil tube L=240	0.24
23		43-10400000-00	油线 4x4 L=680	Wick L=680	0.68
24		42-05003000-00	油管 $\phi 3x\phi 5$ L=450	Oil tube L=450	0.45
25		42-05003000-00	油管 $\phi 3x\phi 5$ L=120	Oil tube L=120	0.12
26		43-20600000-00	油线 6x6 L=300	Wick 6x6 L=300	0.3
27		563-11-27	油毡	Felt	4
28		43-10400000-00	油线 4x4 L=400	Wick 4x4 L=400	0.4
29		42-05003000-00	油管 $\phi 3x\phi 5$ L=280	Oil tube L=280	0.28
30		550-06-20	齿轮供油支架	Gear wick support	1
31		550-06-21	油毡	Gear felt	1
32		563-11-32	油线夹 B	Lower shaft wick support B	1
33		12-40600825-01	螺钉 M6x8	Screw pan M6x8	1
34		563-11-34	回油管管托	Tube holder	1
35		12-40400625-01	螺钉 M4x6	Screw pan M4x6	1
36		43-10400000-00	油线 4x4 L=700	Wick 4x4 L=700	0.7
37		42-05003000-00	油管 $\phi 3x\phi 5$ L=620	Oil tube L=620	0.62
39		501-13-05-09	电线夹 #6	Cord holder #6	1
39		501-10-09	电线夹 #8	Cord holder #8	1
40		16-40401025-02	螺栓 M4x10	Screw pan M4x10	2
41		501-13-05-09	电线夹 #6	Cord holder #6	1
42		16-40401025-02	螺栓 M4x10	Screw pan M4x10	5
43		563-11-43	油盖	Oil cover	1
45		12-40401025-02	螺钉 M4x10	Screw pan M4x10	5
46		563-11-46	管接头 L	Terminal L	1
47		563-11-47	橡皮塞 4.2	Rubber cap 4.2	1
50		42-05003000-00	油管 $\phi 3x\phi 5$ L=320	Oil tube L=320	0.32
51		563-11-51	油毡组件	Felt assy	1
52		43-10250000-00	油线 $\phi 2.5$ L=200	Wick 2.5x200	1
53		42-05003000-00	油管 $\phi 3x\phi 5$ L=110	Oil tube L=110	0.11
54		563-11-54	油嘴管	Oil feeding pipe	1
55		501-10-09	电线夹 #8	Cord holder #8	3

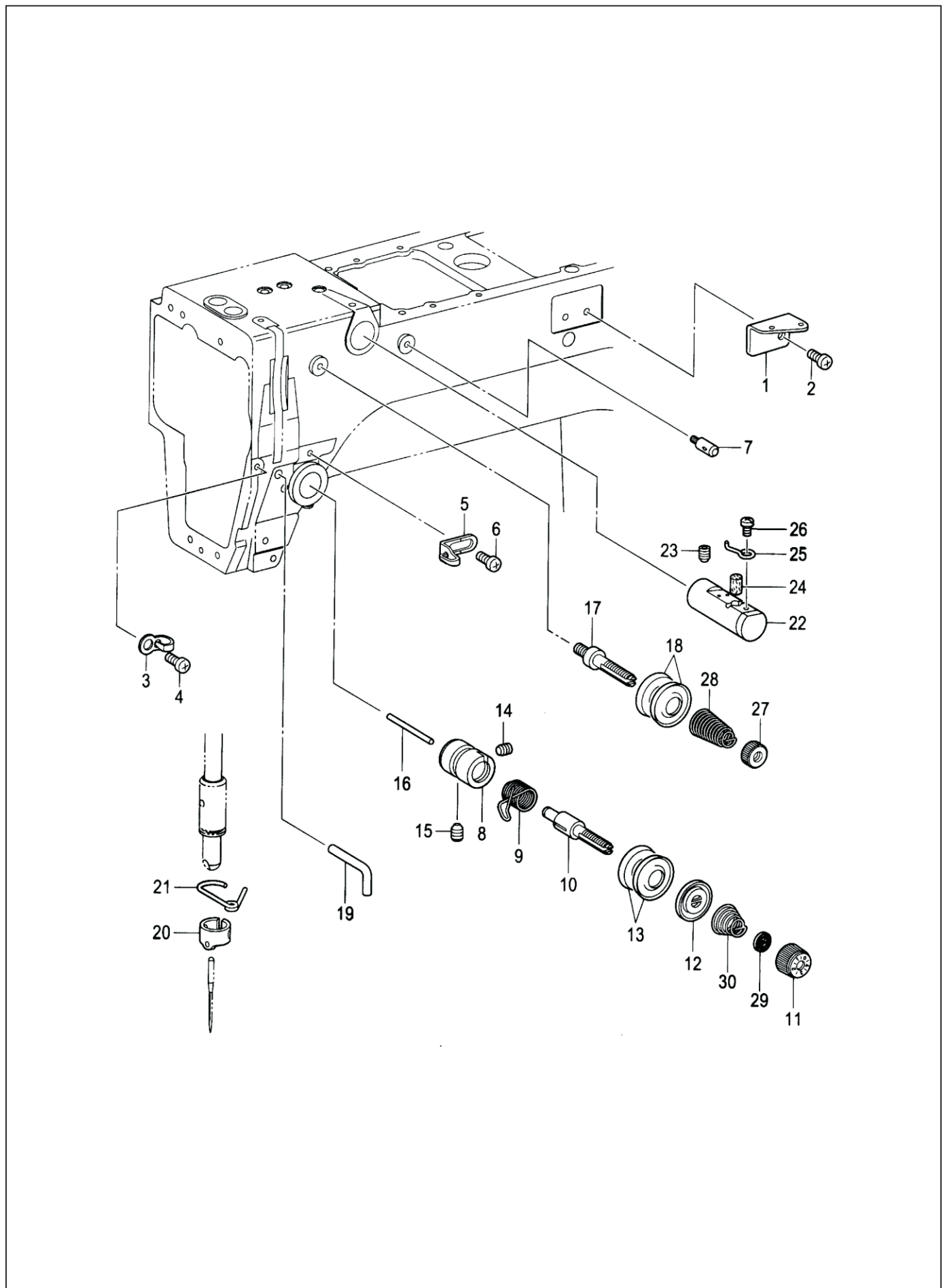
# 11. 供油润滑装置 Lubrication



## 11.供油润滑装置 Lubrication

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
56		550-05-09-05	油毡支架	Felt holder	1
57		12-60300520-01	固定螺钉 M3x5.5	Screw M3x5.5	2
58		550-05-09-06	油毡支架	Felt holder	1
59		12-60300420-01	螺钉 M3x4	Screw M3x4	2
60		42-05003000-00	油管 $\phi 3 \times \phi 5$ L=300	Oil tube L=300	0.3
61		501-10-12	电线夹 #10	Cord holder #10	1
62		43-10300000-00	油线 L=140	Wick L=140	0.14
63		563-11-63	油毡压板 L	Wick suppot L	1
64		563-11-64	底板油毡 L	Felt bed L	1
65		12-40400625-01	螺钉 M4x6	Screw pan M4x6	3
66		22-04000000-08	弹簧垫圈 2-4	Washer spring 2-4	3
67		563-11-67	油毡压板 R	Wick support R	1
68		563-11-68	底板油毡 R	Felr bed R	1
69		12-10400920-02	螺钉 M4x9	Screw flat M4	3

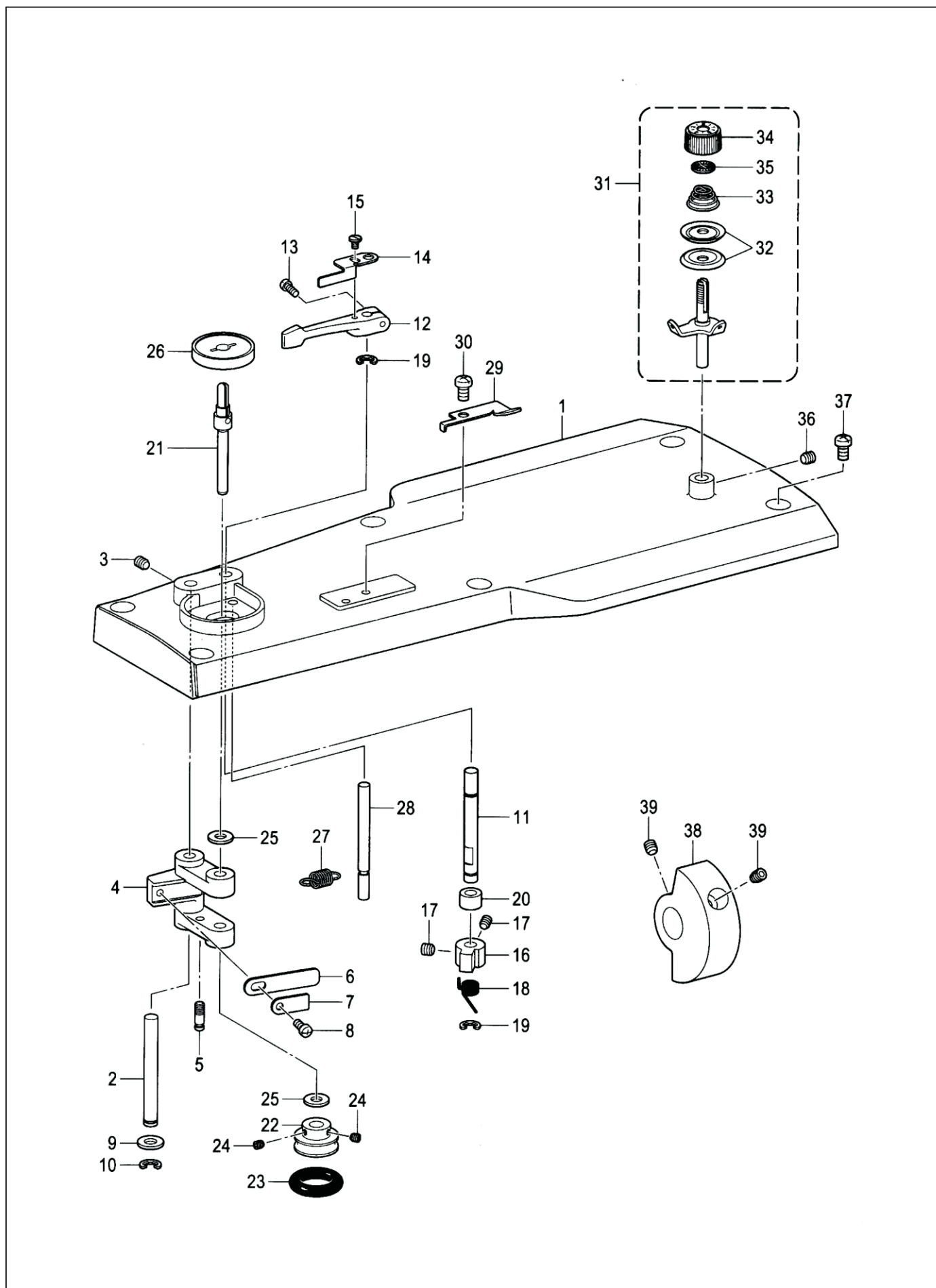
## 12.穿线装置 Threading mechanism



## 12.穿线装置 Threading mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		550-07-01	过线导向 A	Arm thread guide A	1
2		12-40500625-02	螺钉 M5x6	Screw pan M5x6	1
3		563-12-03	过线导向 B	Arm thread guide B	1
4		12-40500625-02	螺钉 M5x6	Screw pan M5x6	1
5		563-12-05	过线器 C	Arm thread guide C	1
6		12-40500625-02	螺钉 M5x6	Screw pan m5x6	1
7		563-12-07	面线导向杆	Upper thread guide stud	1
		550-07-06	夹线器组件		1
8		550-07-06-01	夹线座	Tension bracket	(1)
9		551-07-06-02	调节弹簧	Thread take-up spring	(1)
10		113-07-09-2	夹线杆轴	Tension stup	(1)
11		113-07-09-9	压线螺母	Tension nut	(1)
12		113-07-09-6	夹线压盘	Tension disc presser	(1)
13		113-07-09-5	夹线盘	Disc tension	(1)
14		11-80090610-01	固定螺钉 SM3.57x6	Set screw SM3.75	(1)
15		12-80600612-01	螺钉 M6x6	Set screw (ft) M6x6	(1)
		550-07-08	小夹线器组件		(2)
16		113-07-07	松线销	Tension release pin	1
17		550-07-08-01	夹线杆轴 A	Tension stud A	(1)
18		113-07-09-5	夹线盘	Disc tension	(1)
19		563-12-19	线钩	Thread guide arm	1
20		551-07-09	针杆线导向	Needle bar thread guide	1
21		550-07-10	针杆轴套线导向 D	N-bar bush thread guide D	1
22		550-07-11	线冷却器组件	Needle cooler assy	1
23		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
24		550-07-12	油毡 8x15.5	Felt 8X15.5	1
25		550-07-13	过线钩	Needle cooler thread guide	1
26		11-40090425-01	螺钉 SM3.57-40x40	Screw pan SM3.57-40x4	1
27		550-07-08-02	夹线螺母	Tension nut	1
28		550-07-08-03	弹簧	Sub tension spring	1
29		113-07-19-8	止动垫圈	Washer	(1)
30		551-07-06-07	夹线簧	Tension spring	(1)

# 13.卷线装置 Bobbin winder mechanism

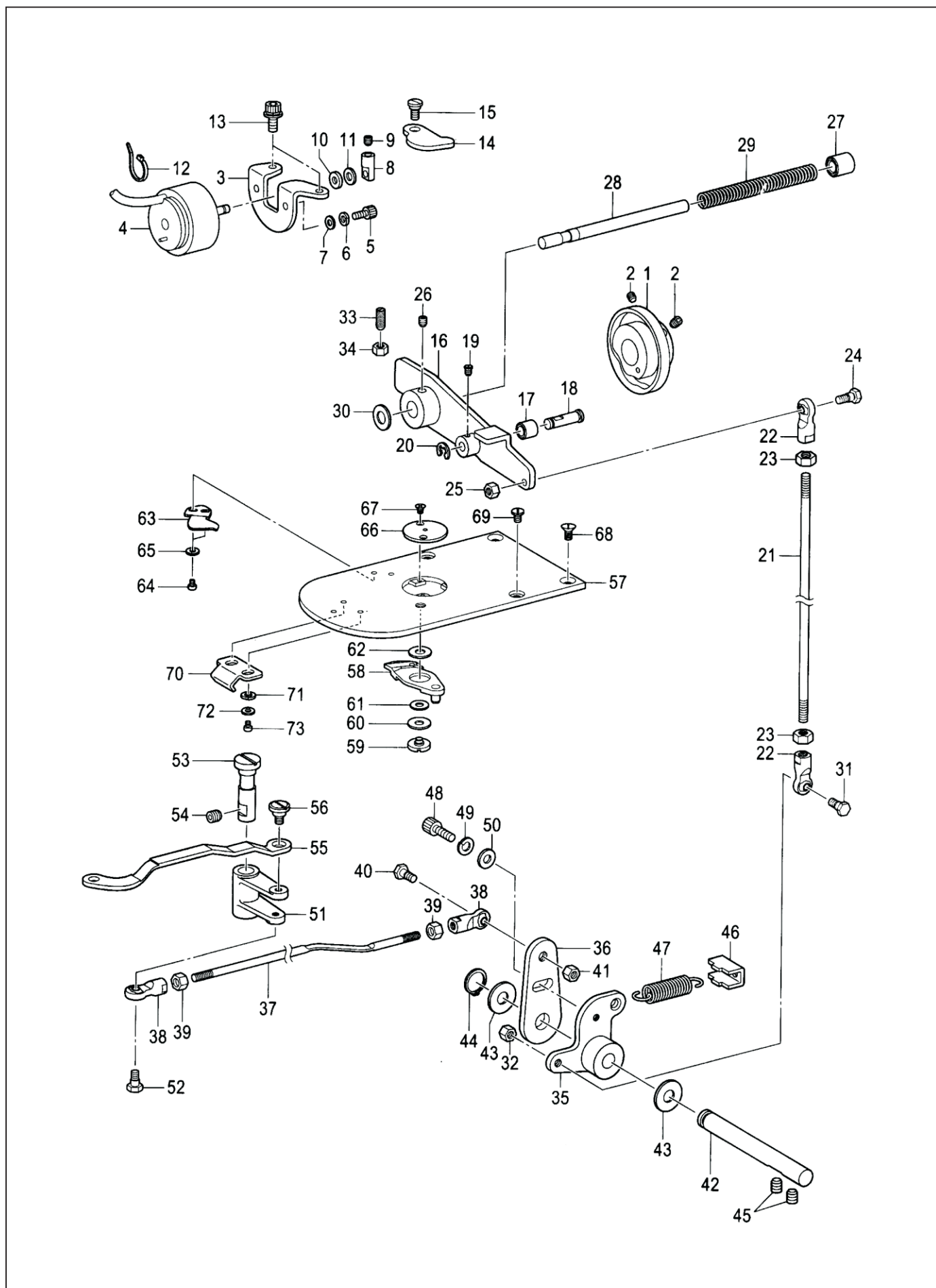


### 13.卷线装置 Bobbin winder mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-13-01	顶盖	Top cover	1
2		550-08-02	卷线手柄轴	Shaft bw lever	1
3		12-80500512-01	螺钉 M5x5	Set screw socket (ft) M5x5	1
4		550-08-03	卷线手柄	Bobbin winder lever	1
5		550-08-04	弹簧挂钩	Spring hook	1
6		550-08-05	板弹簧	Plate spring	1
7		550-08-06	弹簧板 A	Washer	1
8		12-40350625-01	螺钉 M3.5x6	Screw pan M3.5x6	1
9		21-06210122-03	垫圈	Washer	1
10		24-05000000-08	挡圈 E5	Retaining ring E5	1
11		550-08-07	卷线卡爪轴	Stup b-winder	1
12		550-08-08	梭芯压臂柄	Bobbin presser arm	1
13		12-40401225-02	螺钉 M4x12	Screw pan M4x12	1
14		550-08-09	梭芯压杆	Bobbin presser	1
15		12-70400520-02	螺钉 M4x5	Screw M4x5	1
16		550-08-10	卷线卡爪	Claw b-winder	1
17		12-80400412-01	螺钉 M4x4	Set screw socket (ft) M4x4	2
18		550-08-11	弹簧	Spring twist	1
19		24-05000000-08	挡圈 E5	Retaining ring E5	2
20		563-13-20	垫片	Spacer collar	1
21		550-08-12	卷线轴	Bobbin winder shaft	1
22		550-08-13	卷线器	Wheel b-winder	1
23		31-14070000-09	橡皮圈	Bobbin winder rubber band	1
24		12-80400412-01	螺钉 M4x4	Set screw socket (ft) M4x4	2
25		21-06210122-03	垫圈	Washer	2
26		550-08-14	梭芯座	Bobbin support	1
27		550-08-15	拉簧	Spring	1
28		550-08-16	止动轴	Stpper shaft b-winder	1
29		550-08-17	切刀	Knift	1
30		12-40500625-02	螺钉 M5x6	Screw pan M5x6	1
31		550-08-18	卷线器夹线组件	Bobbin winder tension assy	1
32		113-07-09-5	夹线盘	Disc tension	(2)
33		550-08-18-01	夹线弹簧	Tension spring	(1)
34		113-07-09-9	压线螺母	Tension nut	(1)
35		113-07-19-8	止动垫圈	Washer	(1)
36		12-80500512-01	螺钉 M5x5	Set screw socket (ft) M5x5	1
37		12-40601025-02	螺钉 M6x10	Screw pan M6x10	6
38		563-13-38	卷线驱动轮	Driving wheel b-winder	1
39		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (ft) M6x6	2



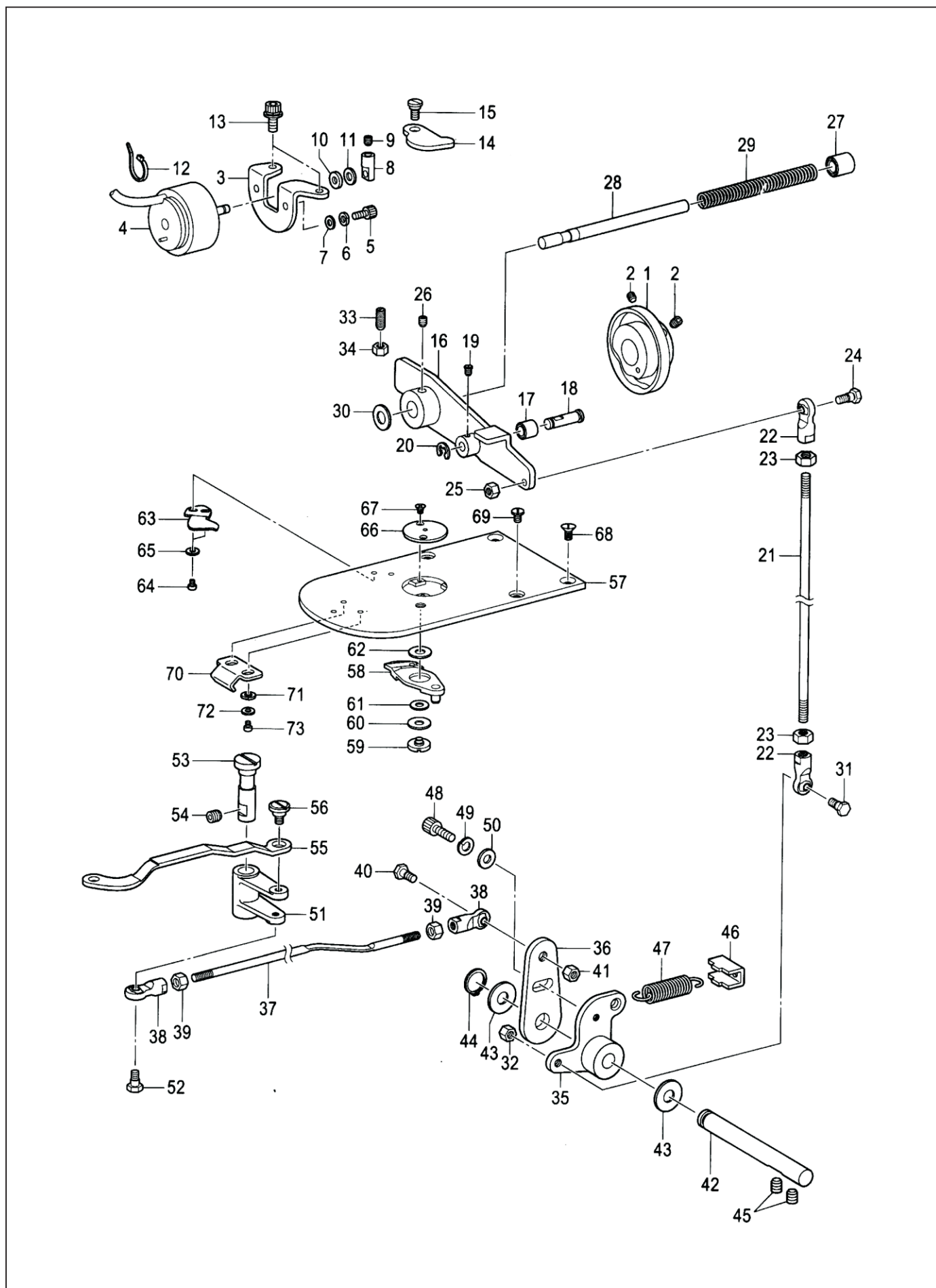
# 14.切线装置 Thread trimmer mechanism



## 14.切线装置 Thread trimmer mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-14-01	切线凸轮	Thread trimmer cam	1
2		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (fy) M6x6	2
3		563-14-03	电磁铁安装板	Setting plate solenoid	1
4		563-14-04	切线电磁铁	Thread trimmer solenoid	1
5		12-90400823-01	螺栓 M4x8	Bolt M4x8	2
6		22-04000000-08	弹簧垫圈 2-4	Washer spring 2-4	2
7		21-04210080-02	平垫圈 4	Washer plain 4	2
8		550-09-06	电磁铁杆	Solenoid lever	1
9		12-80400412-01	螺钉 M4x4	Set screw socket (ft) M4x4	1
10		158-09-38	电磁铁缓冲垫圈	Solenoid cushion	1
11		21-06225120-01	垫圈	Washer	1
12		109-02-28	电线扎带100mm	Band 1m	1
13		16-60501022-02	螺栓 M5x10	Bolt screw socket M5x10	2
14		563-14-14	驱动压杆	Pushing lever d-lever	1
15		550-09-05	段螺钉 7-3	Shoulder screw 7-3	1
16		563-14-16	切线驱动杆组件	Tr-driving lever	1
17		550-09-09	切线滚轮	Collar tr-trimmer	1
18		550-09-10	切线滚轮轴	Collar shaft	1
19		12-90400520-01	螺钉 M4x5	Set screw M4x5	1
20		24-04000000-08	挡圈 E4	Retaining ring E4	1
21		550-09-15	切线杆 V	Thread trimmer rodv	1
22		550-09-16	接头组件	Ball joint assy	2
23		14-60605020-02	螺母 M6	Nut 1 M6	2
24		550-09-17	段螺钉 B M6	Shoulder screw B M6	1
25		14-60605020-02	六角螺母 M6	Nut 3 M6	1
26		12-85600612-01	固定螺钉 M6x0.75-6	Set screw socket (ft) M6x6	1
27		550-09-11	轴套 8x15	Bush 8x15	1
28		550-09-12	驱动杆导向轴	Guide shaft	1
29		550-09-13	弹簧	Spring compression	1
30		550-09-14	减震垫圈	Cushion	1
31		550-09-17	段螺钉 B M6	Shoulder screw B M6	1
32		14-60605020-02	六角螺母 M6	Nut 3 M6	1
33		12-80601960-02	螺钉 M6x19	Set screw M6x19	1
34		14-60605020-02	螺母 M6	Nut 1 M6	1
35		550-09-18	切线杠杆 V	Thread trimmer lever V	1
36		550-09-19	切线杠杆 H	Thread trimmer leverH	1
37		563-14-37	切线杆 H	Thread trimmer rod H	1
38		550-09-16	接头组件	Ball joint assy	2
39		14-60605020-02	螺母 M6	Nut 1 M6	2
40		550-09-17	段螺钉 B M6	Shoulder screw B M6	1
41		14-60605020-02	六角螺母 M6	Nut 3 M6	1
42		550-09-20	切线杠杆轴	Shaft tr-trimmer lever	1
43		21-08215182-03	垫片	Spacer	2
44		25-08000000-08	轴用挡圈 C8	Retaining ring external C8	1
45		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	2
46		550-09-21	弹簧挂钩	Spring hook	1
47		550-09-22	切线复位弹簧	Spring extension	1
48		12-60501222-01	螺栓 M5x12	Bolt socket M5x12	1
49		22-05000000-08	弹簧垫圈 2-5	Washer spring 2-5	1
50		21-05215110-02	垫圈 5	Washer plain 5	1
51		550-09-24	动力曲柄	Moving knife lever	1
52		550-09-25	段螺钉 6.35-6	Shoulder screw 6.35-6	1

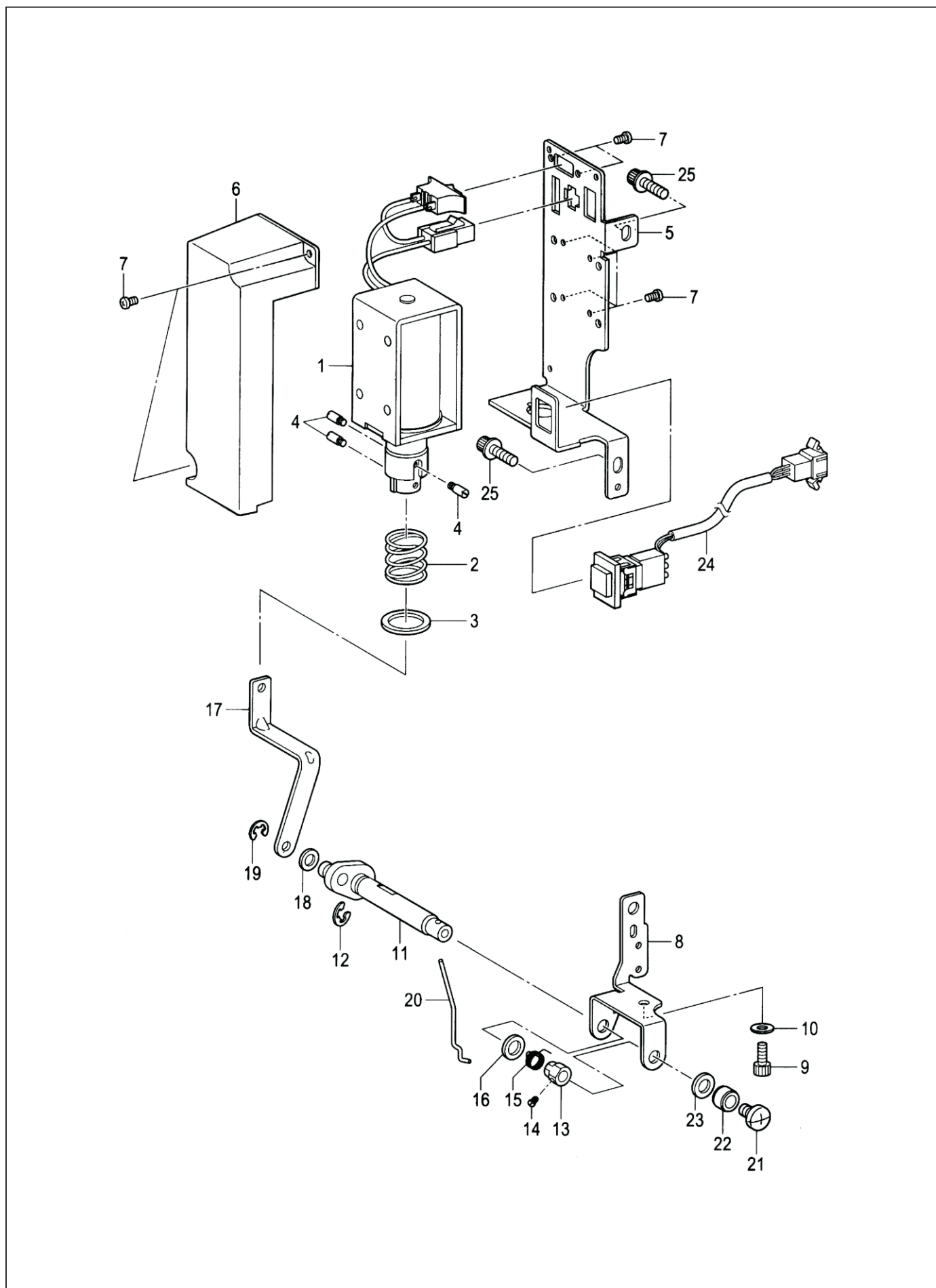
# 14.切线装置 Thread trimmer mechanism



## 14.切线装置 Thread trimmer mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
53		563-14-53	动力杆轴	Shaft movable knife lever	1
54		12-80600612-01	螺钉 M6x6	Set screw socket (ft) M6x6	1
55		550-09-27	动力连杆	M-knife connecting plate	1
56		550-09-28	段螺钉 6-1.8	Shoulder screw 6-1.8	1
57		563-14-57	针板 A组件	Needle plate A	1
58		563-14-58	动力组件 F	Movable knife assy F	1
59		563-14-59	段螺钉	Movable knife shoulder screw	1
60		563-14-60	动力圈套	Thrush washer	1
61		563-14-61	动力圈套	Movable knife collar	1
62		563-14-62-01	垫片 0.2	M-knife spacer T0.2	1
62		563-14-62-02	垫片 0.3	M-knife spacer T0.3	1
62		563-14-62-03	垫片 0.4	M-knife spacer T0.4	1
63		563-14-63	定刀 F	Fixed knife F	1
64		12-40300425-02	螺钉 M3x4	Screw pan M3x4	2
65		21-03405070-01	垫圈 M3	Washer plain M3	2
66		563-14-66	针孔板2.4C0.4	Needle hole plate 2.4C0.4	1
67		11-10060320-01	螺钉 SM2.38	Screw	2
68		12-10400920-02	螺钉 M4	Screw flat M4	2
69		12-60400820-02(薄)	螺钉 M4x8	Screw M4x8	2
70		563-14-70	大旋梭盖挂钩 U	Shuttle base cover hook U	1
71		22-03000000-08	弹簧垫圈 2-3	Washer spring 2-3	2
72		21-03405070-01	垫圈 M3	Washer plain M3	2
73		12-40300425-02	螺钉 M3x4	Screw pan M3x4	2

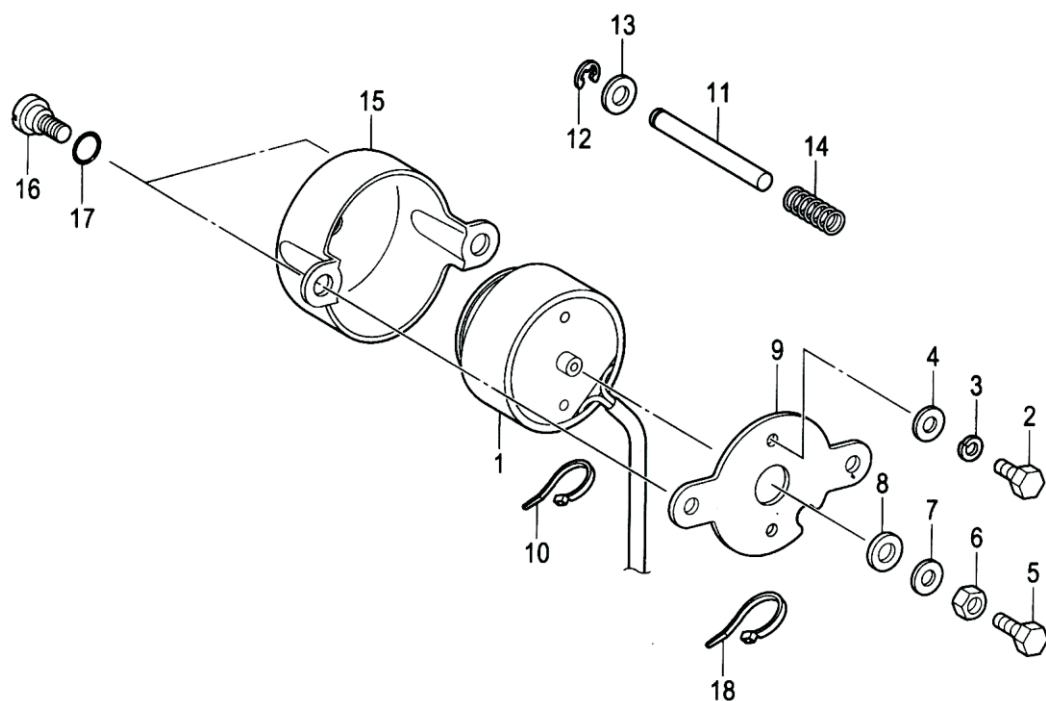
# 15.扫线装置 Thread wiper mechanism



## 15.扫线装置 Thread wiper mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-15-01	扫线电磁铁组件	Thread wiper solenoid assy	1
2		563-15-02	挡线弹簧	Thread wiper spring	1
3		21-19010270-01	平垫圈	Washer plain	1
4		563-15-04	柱塞销	Plunger pin	3
5		563-15-05	扫线电磁铁安装板	T-wiper solenoid setting plate	1
6		563-15-06	电磁铁盖	Solenoid cover	1
7		12-40300625-01	螺钉 M3x6	Screw pan M3x4	8
8		563-15-08	扫线轴托架	Thread wiper shaft bracket	1
9		12-60400822-01	螺栓 M4x8	Bolt socket M4x8	1
10		21-04210080-02	平垫圈 4	Washer plain 4	1
11		563-15-11	扫线曲柄组件	Thread wiper crank assy	1
12		24-04000000-08	挡圈 E4	Retaining ring E4	1
13		563-15-13	螺纹紧圈	Set screw collar	1
14		12-60350620-01	螺钉 M3.5-5	Set screw (cp) M3.5-5	1
15		563-15-15	扭簧	Spring	1
16		563-15-16	消音垫	Silent sheet	1
17		563-15-17	扫线杆	Thread wiper rod	1
18		21-04508080-01	垫圈	Washer	1
19		24-03000000-08	挡圈 E3	Retaining ring E3	1
20		563-15-20	扫线钢丝	Wiper	1
21		12-40400525-01	螺钉 M4x5	Screw bind M4x5	1
22		563-15-22	挡线轴挡圈	Thread wiper stud collar	1
23		21-05608100-01	垫圈	Washer	1
24		563-15-24	停止开关组件	Stop switch assy	1
25		16-60501222-02	螺栓 M5x12	Bolt socket M5x12	2

# 16.松线装置 Tension release mechanism

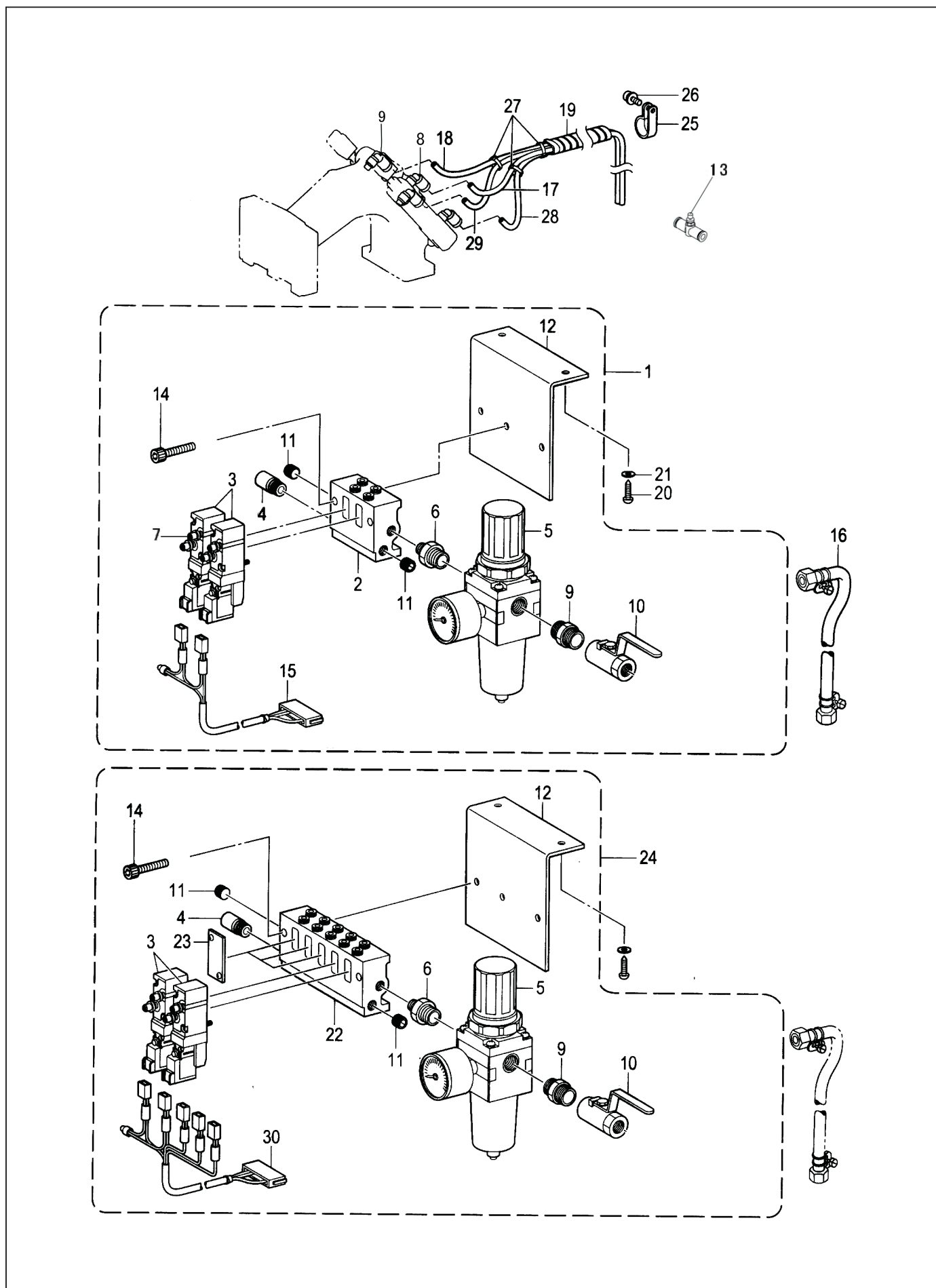


## 16.松线装置 Tension release mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-16-01	松线电磁铁 HV	Tension release solenoid HV	1
2		12-90400823-01	螺栓 M4x8	Bolt M4x8	2
3		22-04000000-08	弹簧垫圈 2-4	Washer spring 2-4	2
4		21-04210080-02	平垫圈 4	Washer plain 4	2
5		12-90401423-02	螺栓 M4x14	Bolt M4x14	1
6		14-60403020-02	六角螺母 M4	Nut 3 M4	1
7		21-04210080-02	平垫圈 4	Washer plain 4	1
8		158-09-38	电磁铁缓冲垫圈	Solenoid cushion	1
9		563-16-09	电磁铁安装板	Setting plate solenoid	1
10		109-02-28	电线扎带	Band 1M	1
11		550-11-02	松线杆	Tension release bar	1
12		24-04000000-08	挡圈 E4	Retaning ring E4	1
13		21-05215110-02	平垫圈 5	Washer plain 5	1
14		550-11-03	弹簧	Spring compression	1
15		550-11-04	电磁铁盖	Solenoid cover	1
16		550-09-05	段螺钉 7-3	Shoulde screw 7-3	2
17		31-06718000-09	O型圈 P7	O ring P7	2
18		563-16-18	电线夹 M150	Bingder M150	1



17.空压装置<空压式> Air pressure mechanism <For Pneumatic type>

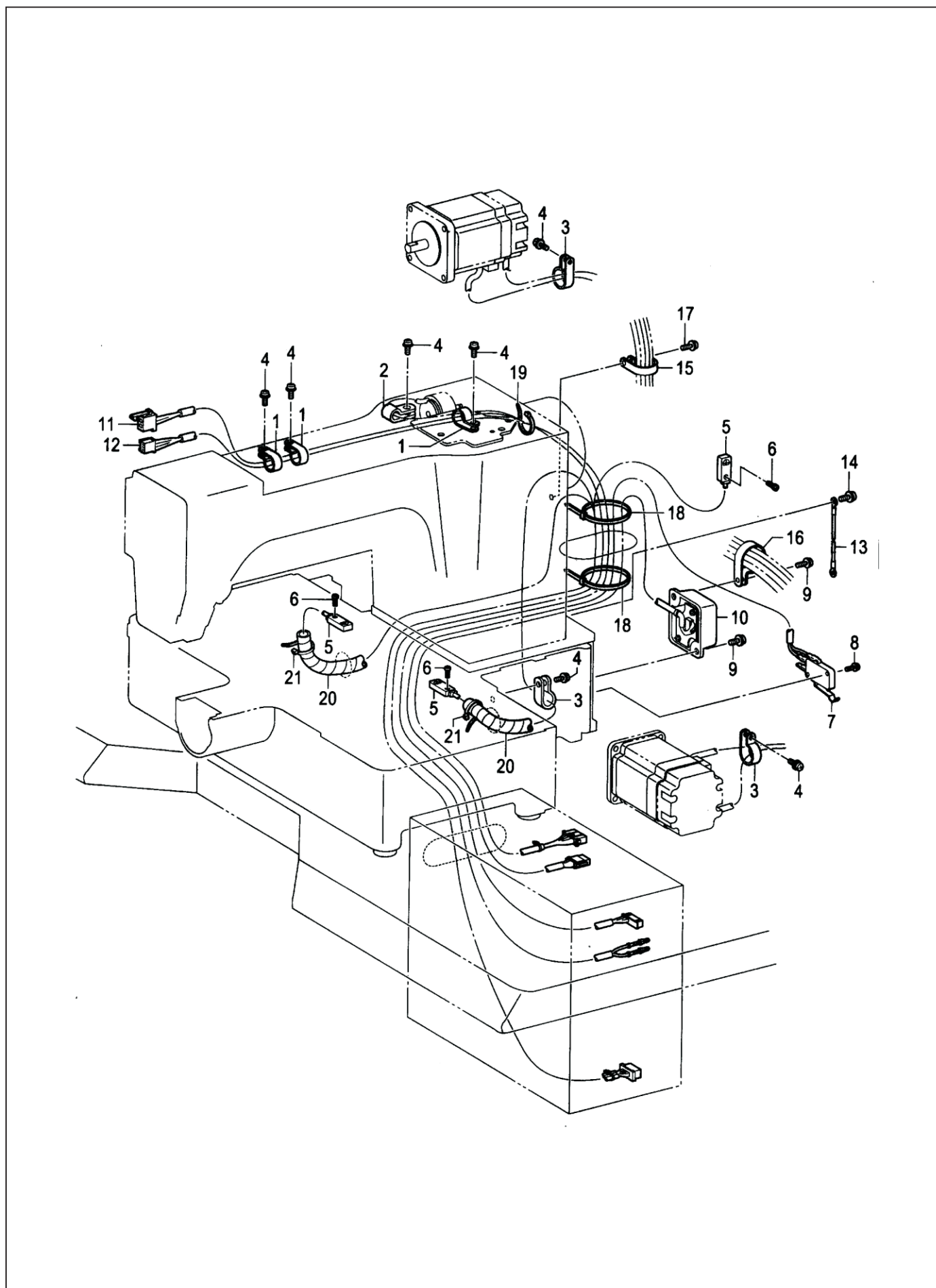


## 17.空压装置<空压式> Air pressure mechanism <For Pneumatic type>

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-17-01	电磁阀组件 2A	Solenoid valve assy 2A	1
2		563-17-02	双通汇流板	Manifold2	1
3		563-17-03	电磁阀SY3120-5LOZD-C4	Valve SY3120-5LOZD-C4	2
4		563-17-04	消声器	Silencer	1
5		563-17-05	气压阀	Air valve	1
6		563-17-06	管接头	Joint	1
7		563-17-07	管接头(Φ4直通)	Joint	4
8		563-17-08	管接头(Φ4弯头)	Joint	2
9		563-17-09	可调速管接头(Φ4)	Joint	2
10		563-17-10	手动阀	Valve	1
11		563-17-11	汇流板密封螺钉	Screw	3
12		563-17-12	阀安装板	Setting plate valve	1
13		563-17-13	速度调节阀	Speed controller	2
14		12-60503022-01	螺栓 M5x30	Bolt socket M5x30	2
15		563-17-15	阀门接线2连组件	Valve harness x2 assy	2
16		563-17-16	橡皮管接头	Air hose,w/connector	1
	#5	45-04002500-00	气管		2
17	#6	45-04002500-00	空气管 R(Φ4)	Air tube R	1
18	#6	45-04002500-00	空气管 L(Φ4)	Air tubeL	1
19		563-17-19	保护用弹性管470S(Φ12)	Spiral 470S	1
20		563-17-20	木螺钉 M4. 1x20	Wood screw,round 2 m4. 1x20	1
21		21-04210080-02	平垫圈 4	Washer plain 4	1
22		563-17-22	集合管 5	Cord holder #5	3
23		563-17-23	隔板	Blanking plate assy	1
24		563-17-24	电磁阀组件 5A	Solenoid valve assy 5A	1
25		501-13-05-09	电线夹	Cord holder,#6	2
26		16-40401025-02	螺栓 M4x10	Screw pan M4x10	2
27		109-02-28	电线夹 1. 9x80	Fastening band,1.9x80	1
28	#6	45-04002500-00	空气管 R(Φ4)	Air tubeR	1
29	#6	45-04002500-00	空气管 L(Φ4)	Air tubeL	3
30		563-17-30	阀门接线2连组件	Valve harness x2 assy	1

NOTE:  
#5... 2M  
#6... 1M

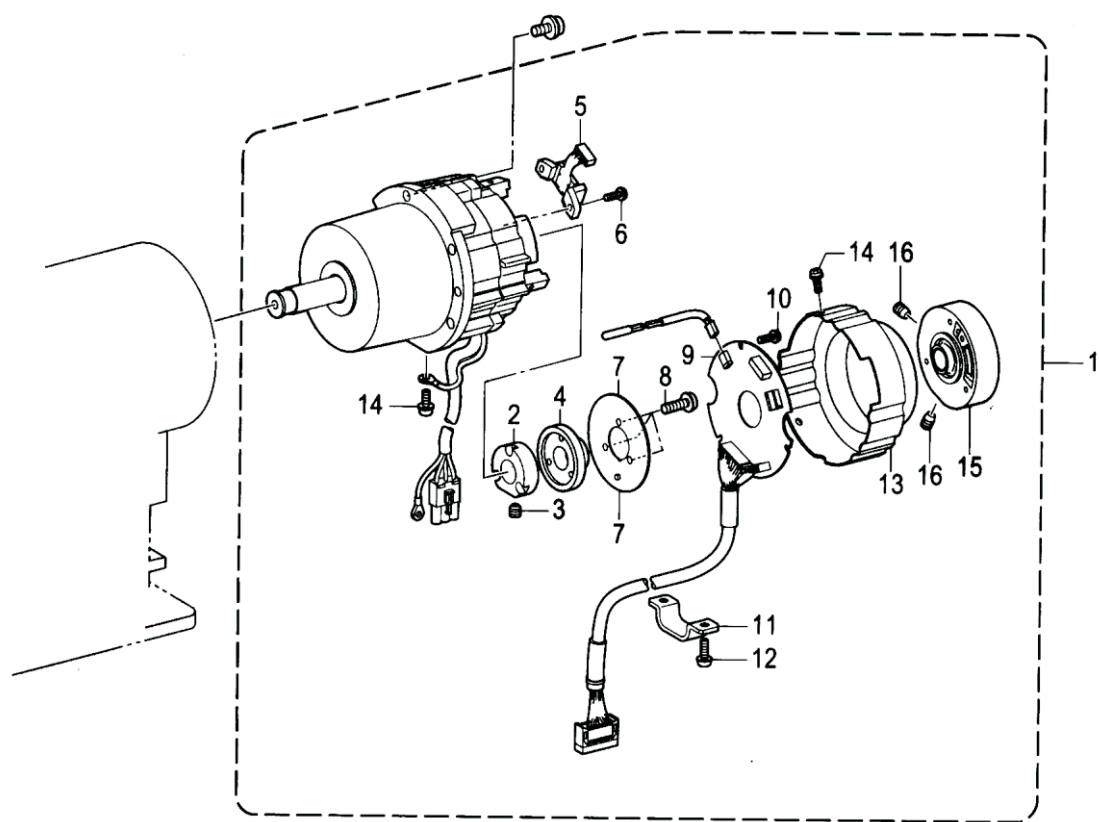
# 18. 电气部品装置 Power supply equipment mechanism



## 18.电气部品装置 Power supply equipment mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		501-10-09	电线夹 #8	Cord holder #8	3
2		563-11-38	压线板	Cord holder 4N	1
3		501-10-09	电线夹 #8	Cord holder #8	3
4		16-40401025-02	螺栓 M4x10	Screw pan M4x10	7
5		563-18-05	传感器组件	H-position sensor assy	2
6		12-40300825-01	螺钉 M3x8	Screw pan M3x8	2
7		563-18-07	机头开关组件	Switch assy machine head	1
8		16-40301625-02	螺栓 M3x16	Screw pan M4x16	2
9		16-40401025-02	螺栓 M4x10	Screw pan M4x10	2
10		563-18-10	头部检出复合件	Head detector unit assy	1
11		563-18-11	电磁铁接线	Thread wiper solenoid harness	1
12		563-18-12	开关接线	Stop switch harness	1
13		563-18-13	接地线 450	Ground wire 450	1
14		16-40401025-02	螺栓 M M4x10	Screw pan M4x10	1
15		501-10-11	电线夹 #12	Cord holder #12	1
16		501-10-11	电线夹 #12	Cord holder #12	1
17		16-40401025-02	螺栓 M4x10	Screw pan M4x10	2
18		563-16-18	电线夹 M150	Binder M150	2
19		109-02-28	电线扎带	Band 1M	1
20		563-17-19	螺线管140SS(φ4)	Spiral 140ss	2
21		109-02-28	电线扎带	Band 1M	2

# 19. 马达装置 Motor mechanism

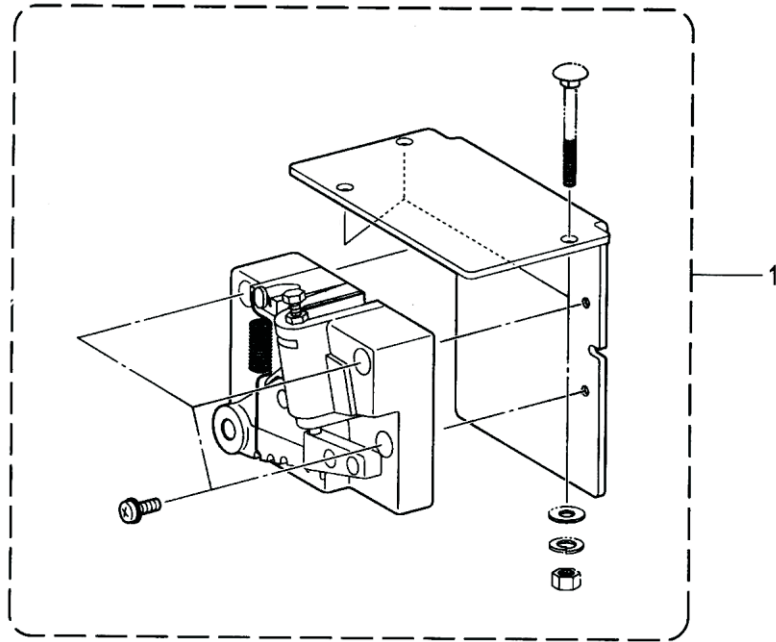


## 19.马达装置 Motor mechanism

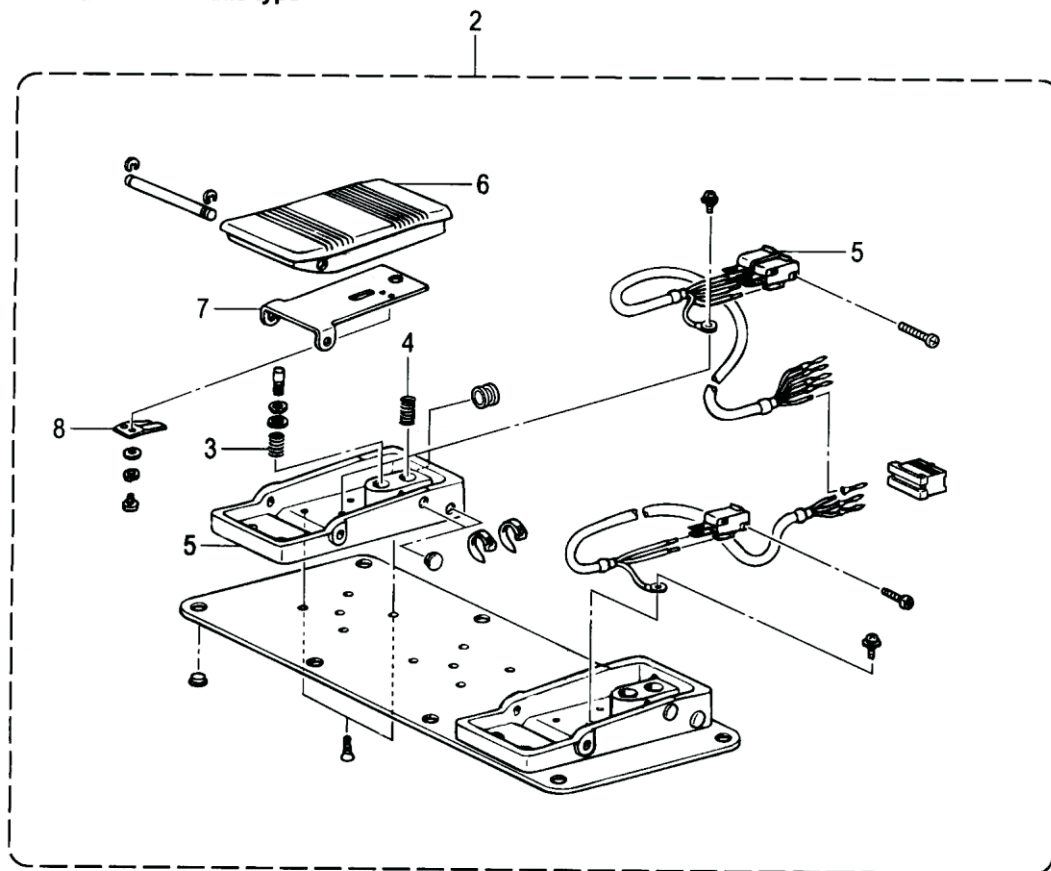
序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-19-01	马达组件 CDD-430D	Motor assy CDD-430D	1
2		563-19-01-01	磁鼓 CDD	Drum CDD	(1)
3		12-80400612-01	螺钉 M4x6	Set screw socket M4x6	(1)
4		563-19-01-03	磁铁 180P36	Magnet 180P36	(1)
5		563-19-01-04	MR感应器组件 180P	Mr sensor assy 180P	(1)
6		16-40300825-02	螺栓 M3x8	Set screw socket M3x8	(1)
7		563-19-01-06	屏蔽板 CDD	Shield plate CDD	(1)
8		563-19-01-07	螺栓 M2.6x10	Set screw socket M2.6x10	(3)
9		563-19-01-08	ENC 基板组件 430#2	Nec pcb assy 430#0	(1)
10		16-40300625-02	螺栓 M3x6	Set screw socket M3x6	(3)
11		563-19-01-10	电线固定夹 CDD-HT	Cord holder CDD-HT	(1)
12		16-40401025-02	螺栓 M4x10	Set screw socket M4x10	(3)
13		563-19-01-12	编码器盖	Encoder cover	(1)
14		16-40300825-02	螺栓 M3x8	Screw pan M3x8	(3)
15		563-19-01-14	同步轮组件 430D	Pulley holder assy 430D	(1)
16		12-80500612-01	螺钉 M5x6	Set screw socket M5x6	(2)

## 20.踏板关系 Foot switch pedal mechanism

< 电磁式 / For solenoid type >



< 空压式 / For Pneumatic type >



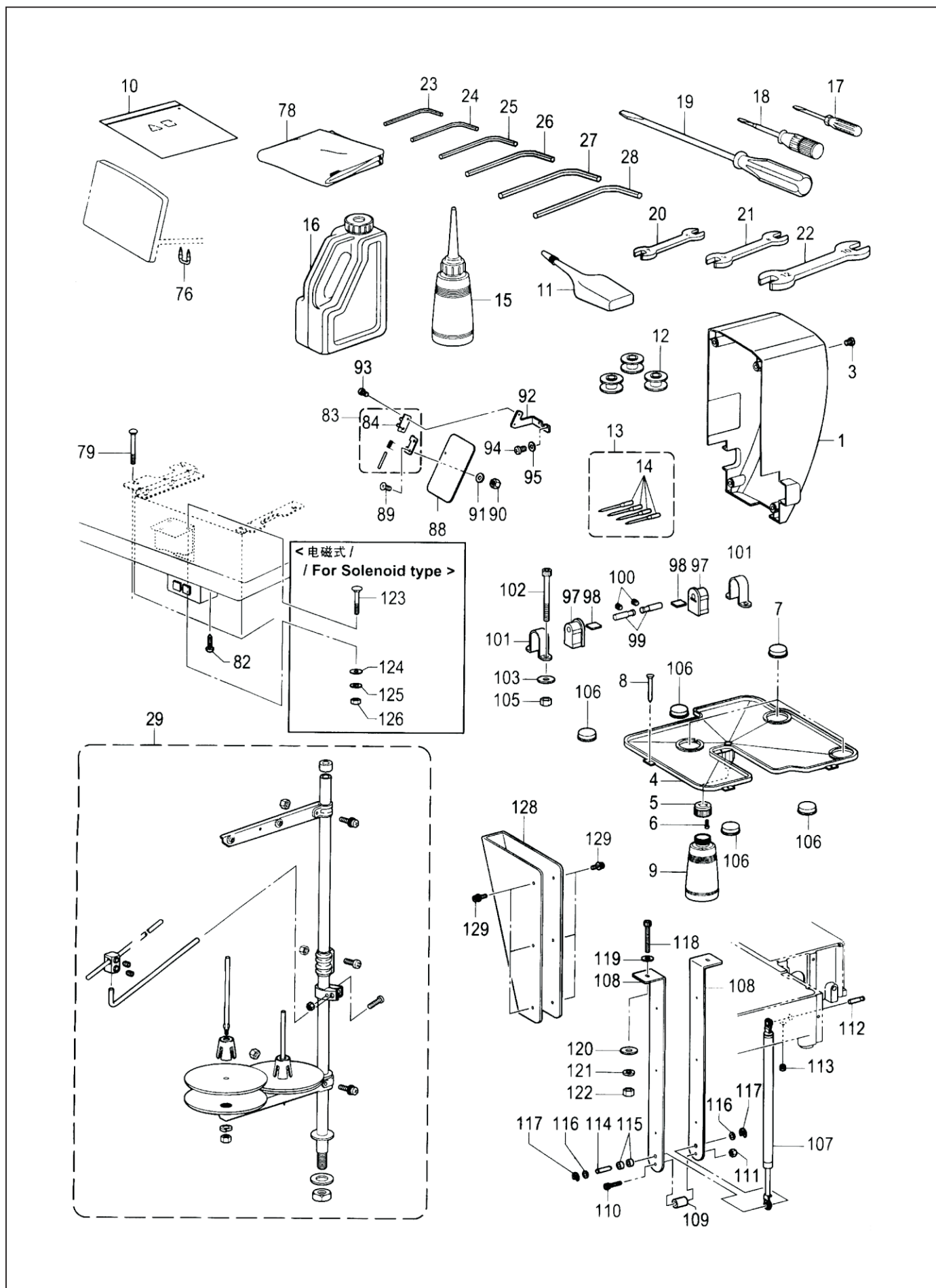
## 20.踏板关系 Foot switch pedal mechanism

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1	#01	564-20-01	脚踏复合件 A	Treadle unit.a assy	1
2	#02	563-20-02	2连脚踏开关组件	2-pedal foot switch sw assy	1
3	#02	563-20-02-01	弹簧	Spring compression 10x30	(1)
4	#02	563-20-02-02	弹簧	Foot pedal spring	(2)
5	#02	563-20-02-03	开关 VX	Pin button micro switch VX	(3)
6	#02	563-20-02-04	脚踏板	Foot pedal	(2)
7	#02	563-20-02-05	脚踏护板	Protection plate pedal	(2)
8	#02	563-20-02-06	弹簧板	Spring plate	(2)

NOTE:  
 #01...电磁式  
 <FOR SOLENID TYPE>  
 #02...空压式  
 <FOR PENEUMATIC TYPE>



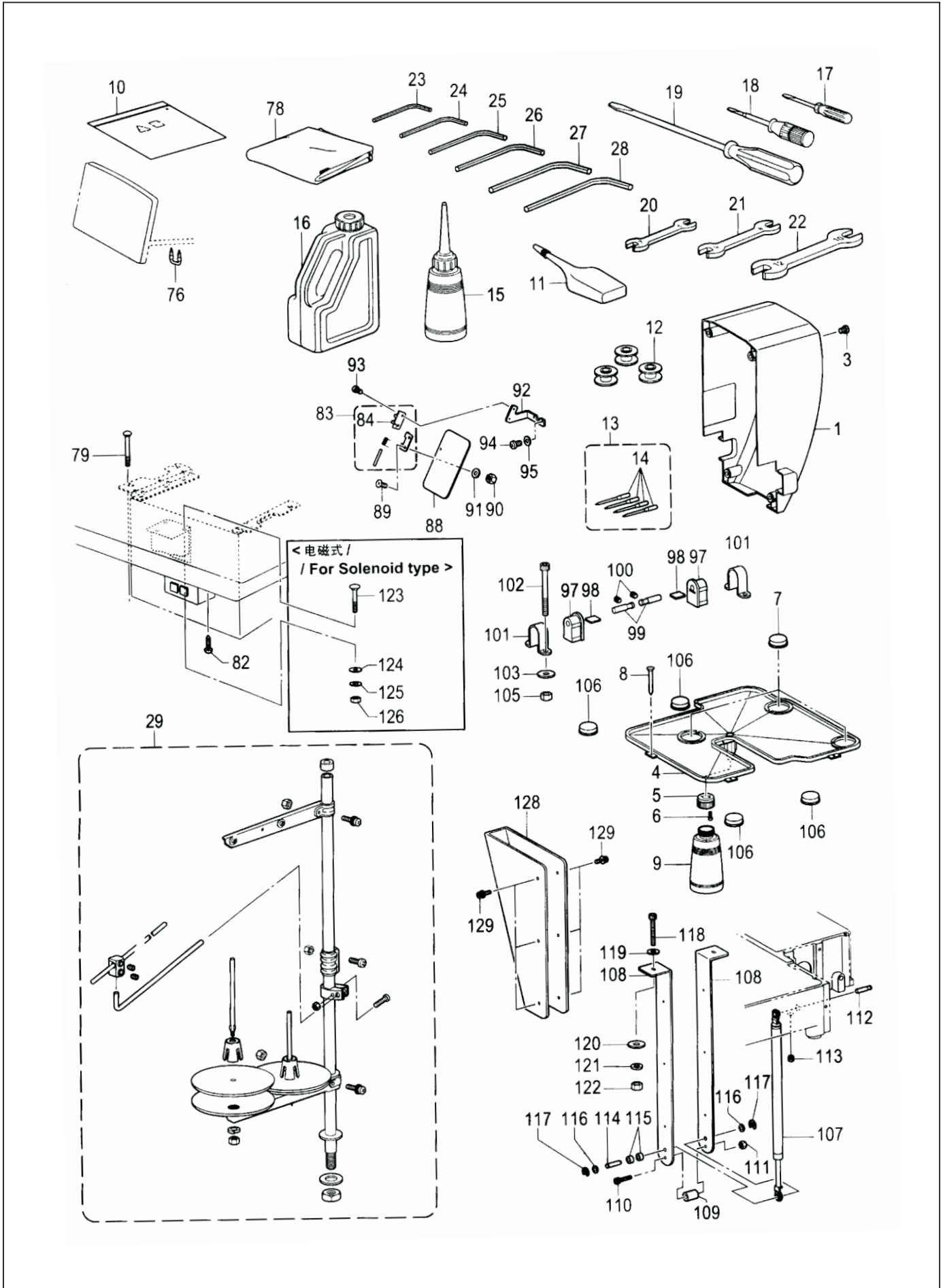
# 21.附件 Accessories



## 21.附件 Accessories

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
1		563-21-01	马达盖	Motor cover	1
3		12-40601025-02	螺钉 M6x10	Screw pan M6x10	4
4		563-21-04	油盘	Oil pan	1
5		524-01-26-01	废油回收壶盖	Dust oiler	1
6		550-18-03	螺销 M3x12	Tapping screw pan v M3x12	2
7		550-18-04	缓冲橡皮垫	Rubber Cushion	3
8		563-21-08	钉	Nail	7
9		524-01-26	废油回收油壶	Oiler	1
10		563-21-10	附属品塑料袋	Accessory bag	1
11		279-11-19	硅油	Silicome oil	1
12		563-10-39	梭芯	Bobbin	3
14		502-02-17	机针 DPx17<#19>	Deedle DPx17	4
15		279-11-18	油壶组件	Oiler assy	1
16		101-12-21-00	油罐组件	Oil tank assy	1
17		101-12-17	螺丝刀 (小)	Screw-driver 1.9x52	1
18		101-12-16	螺丝刀 (中)	Screw-driver 3.4x70	1
19		101-12-15	螺丝刀 (大)	Screw-driver 5.5x190	1
20		2304-11-01	梅花扳手 6x7	Wrench 6x7	1
21		550-18-15	双头扳手 8x9	Wrench 8x9	1
22		124-12-04	扳手 10x12	Wrench 10x12	1
23		279-11-29	内六角扳手 1.5	Hexagonal wrench 1.5	1
24		301-20-13	内六角扳手(2)	Hexagonal wrench 2	1
25		301-20-15	内六角扳手(2.5)	Hexagonal wrench 2.5	1
26		301-20-26	内六角扳手 (3)	Hexagonal wrench 3	1
27		301-20-28	内六角扳手 (4)	Hexagonal wrench 4	1
28		301-20-29	内六角扳手 (5)	Hexagonal wrench 5	1
29		101-11-01	线架组件 2DTHF	Cotton stand assy 2DTHF	1
76		563-21-76	U形卡钉	Staple 10x20	7
78		563-21-78	机头罩	Head cover	1
79		563-21-79	螺栓 M6x45	Bolt socket M6x45	4
82		563-21-82	木螺钉 M4.5x16	Wood screw round 2 M4.5x16	2
83		563-21-83	护眼板组件 D	Eye guard set D	1
83		550-18-24	铰链组件	Hinge assy	1
84		550-18-24-01	护眼板铰链	Eye guard hinge	1
85		550-18-24-02	铰链板	Hinge	1
86		550-18-24-04	销	Pin	1
87		550-18-24-03	弹簧	Eye guard hinge	1
88		550-18-25	护眼板	Eye guard	1
89		11-10080920-02	螺钉 SM3.18-40x8	Screw flat SM3.18-40x8	2
90		13-60083020-01	螺母 M3.18	Nut M3.18	2
91		21-03208070-02	平垫圈 3	Washer plain 3	2
92		563-21-92	护眼板架 A	Eye guard holder A	2
93		11-40090621-02	螺钉 SM3.57-40x5	Screw pan SM3.57-40x5	2
94		12-40400625-01	螺钉 M4x6	Screw pan M4x6	2
95		21-04508080-01	垫圈	Washer	2
97		550-18-09	橡皮铰链	Rubber cushoin	2
98		550-18-10	垫片	Spacer	2
99		550-18-07	机头支承销	Pin	2
100		12-80600612-01	螺钉 M6x6	Set screw socket (cp) M6x6	2
101		550-18-08	头部铰链座	Hinge holder	2
102		12-60606022-02	螺栓 M6x60	Bolt socket M6x60	4
103		21-08523380-02	垫圈 2.3x8.5x38	Washer 2.3x8.5x38	4

# 21.附件 Accessories

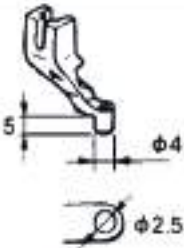
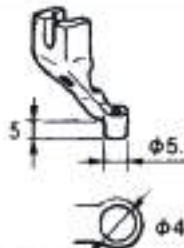
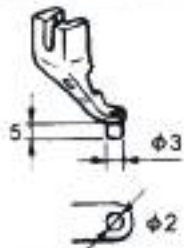
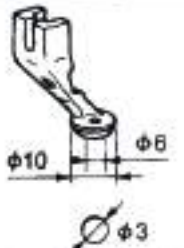
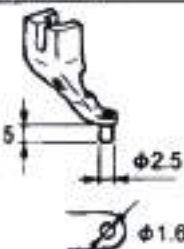


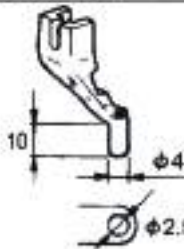
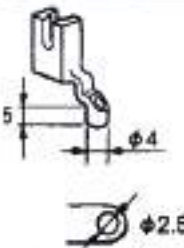
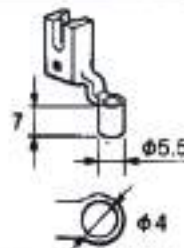
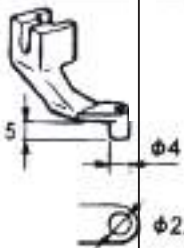



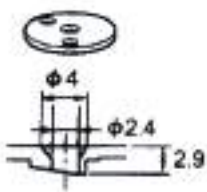
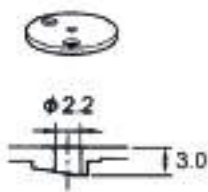
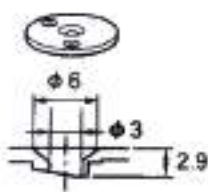
## 21.附件 Accessories

序号 NO.	注解 NOTE	图号 REF NO.	名称	DESCRIPTION	数量 AMT
105		14-60605020-02	螺母 M6	Nut 1 M6	4
106		550-18-04	缓冲橡皮垫	Rubber cushoin	4
107		563-21-107	缓冲器	Shock absorber gas	1
108		563-21-108	缓冲器支架	Holder absorber	2
109		563-21-109	档圈	Spacer	1
110		12-60604022-01	螺栓 M6x40	Bolt Socket M6x40	1
111		14-60605020-02	螺母 M6	Nut 1 M6	1
112		563-21-112	轴 U	Shaft U	1
113		12-80600612-01	螺钉 M6x6	Set screw socket (cp) M6x6	1
114		563-21-114	轴 D	Shaft D	1
115		563-21-115	轴套 GS	Shaft collar gas	2
116		21-08512200-02	垫圈 S8	Washer plain S8	2
117		24-06000000-08	挡圈 E6	Retaining ring E6	2
118		12-60606022-02	螺栓 M6x60	Bolt socket M6x60	2
119		21-06515200-02	平垫圈 6	Washer plain 6	2
120		21-08523380-02	垫圈 2.3x8.5x38	Washer 2.3x8.5x38	2
121		22-06000000-08	弹簧垫圈 2-6	Washer spring 2-6	2
122		14-60605020-02	螺母 M6	Nut 1 M6	2
123	#1	12-60606022-02	螺栓 M6x60	Bolt M6x60	2
124	#1	21-06515200-02	平垫圈 6	Washer plain 6	2
125	#1	22-06000000-08	弹簧垫圈 2-6	Washer spring 2-6	2
126	#1	14-60605020-02	螺母 M6	Nut 1 M6	2
128		563-21-128	支架盖	Holder absorber cover	1
129		16-60400822-02	螺栓 M4x8	Bolt socket M4x8	6
130		563-21-130	电控组件		1
131		563-21-131	包装箱组件		1

NOTE:  
#01...电磁式  
<FOR SOLENID TYPE>

## 22.工模具一览表 Gauge parts list

压脚 / Presser foot			
A / S42843-001 *	B / S42844-001	C / S42845-001	D / S42846-001
			
E / S42847-001	F / 157237-001	G / 158592-001	J / S42848-001
			
A-CUT / S40214-001	B-L / S49448-001	XA / S42849-101	H / SA4811-001 *
			

针孔板 / Needle hole plate		
2.4 C0.4 / SA3336-001 *	2.2 / SA5221-001 *	3.0 C1.5 / SA5222-001 *
		

印有\*记号的为标准零部件  
The \*symbols for Standard parts.

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