

在使用缝纫机之前请阅读本使用说明书。  
请将本使用说明书放在便于查阅的地方保管。



步进电机上下复合送料平缝机 A0323系列  
TOP&BOTTOM FEEDING LOCKSTITCH  
SEWING MACHINE WITH STEPPING MOTOR

使用说明书  
OPERATION MANUAL  
零件手册  
PARTS BOOK



手机官网



官方订阅号

浙江中捷缝纫科技有限公司  
ZOJE SEWING MACHINE CO.,LTD

## 为了创造更加美好的环境

# 请您协作

首先对您使用本公司的产品表示衷心的感谢！

本公司致力于关爱地球环境，制定了“智能制造、绿色制造”的基本方针。当地的公民在环境保护活动中也应该对当地社会、环境二方面尽每个人的微薄之力。

因此，希望您能配合这个计划，作为环境保护活动的一环，在平时处理废弃物的时候能多加注意。

1. 不用的包 材料 ， 为了能再次回收利用，请交付给当地相关回收公司进行处理。
2. 使用完的润滑油、请根 相关的 律 和规定进行妥善处理。
3. 产品保养或修理需要更换零部件时，有不需要的电路板和电子零件，以及产品废弃时，请作为电子废弃物处理。

## In order to create a better environment

# Please cooperate with you

First of all, I would like to express my heartfelt thanks to you for using our products.

Our company is committed to caring for the earth's environment and has formulated the basic policy of "intelligent manufacturing and green manufacturing". Local citizens in environmental protection activities should also do little to the local community, the environment two aspects of everyone's contribution.

Therefore, I hope you can cooperate with this plan, as part of the environmental protection activities, when dealing with wastes in peacetime can pay more attention.

1. Unused packaging materials, in order to be recycled again, please send them to the local recycling company for disposal.
2. Lubricants used shall be properly handled according to relevant laws and regulations.
3. When parts need to be replaced in product maintenance or repair, there are unnecessary circuit boards and electronic parts, and when products are discarded, please treat them as electronic waste.

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。

工业缝纫机的特性之一，因为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，所以请在受过培训的人或熟练人员的安全操作知识的指导下，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产品，防止您及其他人受到危害和损害。

表示方 及含意如下。

#### 标记

 <b>危险</b>	该内容表示如果忽视此标记而进行了错误的操作，必将导致死亡或重伤。
 <b>警告</b>	该内容表示如果忽视此标记而进行了错误的操作，肯定会引起人员死亡或重伤。
 <b>注意</b>	如果忽视此标记而进行错误的操作，有可能会引起人员受到轻微或中度的伤害。

### 图案和符号



..... 该符号(△)表示“应注意事项”。  
三角中的图案表示必须要注意的实质内容。  
(例如，左边的图案表示“当心受伤”。)



..... 该符号(⊘)表示“禁止”。



..... 该符号(●)表示“必须”。  
圆圈中的图案表示必须要做的事情的实质内容。  
(例如，左边的图案表示“必须接地”。)

Thank you very much for purchasing our industrial sewing machine  
Before using the sewing machine, please read <for your safe use> and use instructions carefully

The characteristic of industrial sewing machine is that it should be operated near the moving parts such as needles and spindles, which are easy to cause injury, so please use the sewing machine correctly under the guidance of the safety operation knowledge of trained or skilled personnel.




## For Your Safe Use

### [1] Safety Usage Marking And Its Significance

The labels and pattern marks used in this instructions and products are for your safety and correct use of the products to prevent you and others from being harmed and damaged.


The methods and implications are as follows.

#### Sign

 <b>Danger</b> This content indicates that if this mark is mishandled, it will cause death to become serious.
 <b>Warning</b> This content indicates that if this mark is mishandled, people will die or be seriously injured.
 <b>Note</b> That if this mark is mishandled, it may cause minor or moderate injuries.

### Patterns And Symbols




..... The symbol (  ) indicates “points for attention”.  
The pattern in the triangle represents the essential content that must be paid attention to.  
(For example, the pattern on the left shows “watch out for injuries”.)



..... The symbol (  ) indicates “prohibition”.



..... The symbol (  ) indicates “must”.  
The pattern in the circle indicates the substance of what must be done.  
(For example, the pattern on the left shows “must be grounded”.)

## [2] 安全注意事项

### ⚠ 危险



在关闭电源开关并将电源插头从插座上拔下后, 至少等待5分钟, 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。

### ⚠ 警告



缝纫机内不允许进入任何液体, 否则会引起火灾、电击或操作故障。

如果缝纫机内(机头或控制箱)进入任何液体, 请立即关闭电源, 并将电源插头从插座上拔出, 然后联系销售商或资深技术人员。

### ⚠ 注意

#### 使用环境



请不要在有电源线干扰及静电干扰等有强电气干扰源影响的环境下使用。  
强电气干扰源可能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。



电源容量应大于缝纫机的消耗电量。电源容量不足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。



相对湿度应在45%-85%的范围内, 并且设备内不会形成结露的环境下使用。干燥或多湿的环境和结露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。



请勿将USB存储器以外的设备连接到USB连接端口上。否则有可能导致故障。

#### 安 装



请让受过培训的技术人员来安 缝纫机。



请委托购买商店或电气专业人员进行电气配线。



缝纫机重约38kg, 安 工作必须由两人以上来完成。



在安 完成前, 请不要连接电源, 如果误踩下脚踏板时, 缝纫机动作会导致受伤。



请在切断电源后, 再拔掉电插头。  
不然易成为控制箱发生故障的原因。



必须接地。  
接驳地线不牢固, 是造成触电或误动作的原因。



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。



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。



缝纫机头倒下时, 请一定要固定工作台, 不可使其随意移动。  
工作台移动易发生脚等被夹住之事故, 是导致人身事故的原因。



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。



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。

将油放在小孩拿不到的地方。

## [2] Safety Precautions

### Danger



After closing the power switch and unplugging the power plug from the socket, wait for at least 5 minutes before opening the control box cover. Touching areas with high voltage can cause casualties.

### Warning



No liquid is allowed to enter the sewing machine, otherwise it will cause fire, electric shock and operation failure.



If any liquid enters the sewing machine (head or control box), turn off the power supply immediately, pull the plug out of the socket, and contact the vendor or senior technicians.

### Be Careful

#### Use Environment



Please don't use in the environment with strong electrical interference sources such as power line interference and electrostatic interference.

Strong electrical interference sources may affect the correct operation of sewing machines.



The fluctuation of power supply voltage should be used in the environment of rated voltage less than  $\pm 10\%$ .

The large fluctuation of voltage will affect the correct operation of sewing machine.



The power supply capacity should be greater than the power consumption of the sewing machine. Insufficient power supply capacity will affect the correct operation of sewing machine.



The ambient temperature should be used in the range of 5-35 degrees Celsius.

Low or high temperature will affect the correct operation of sewing machine.



Relative humidity should be in the range of 45% - 85%, and the equipment will not form condensation environment. Dry or wet environment and dew will affect the correct operation of sewing machine.



In case of thunderstorm, turn off the power switch and pull the power plug off the socket. Lightning may affect the correct operation of sewing machine.



Do not connect devices other than USB memory to USB connection ports. Otherwise, it may lead to failure.

#### Install



Ask trained technicians to install sewing machines.



Please commission the purchase shop or electrical professionals for electrical wiring.



The sewing machine weighs about 35Kg. Installation must be completed by more than two people.



Please do not connect the power supply before the installation is completed. If you step on the pedal by mistake, the sewing machine will cause injury.



Please unplug the plug after cutting off the power supply. Otherwise, it will easily become the cause of the failure of the control box.



It must be grounded.

Insufficient ground connection is the cause of electric shock or misoperation.



When fixing the cable, do not bend the cable excessively or fix it too tightly with clamps, which may cause fire or electric shock.



If a worktable with casters is used, the casters should be fixed so that they cannot move.



When the head of the sewing machine falls down, please make sure that the worktable is fixed and not moved at will. Accidents such as foot clamping have occurred in the movement of worktable, which is the cause of personal accidents.



When the sewing machine head falls down or stands up, please operate with both hands.

One-handed operation can easily cause injury if the weight of the sewing machine slips.














When lubricating oil and butter are used, it is necessary to wear protective glasses and gloves to prevent lubricating oil from falling into serious or sticking to the skin, which is the cause of inflammation.

In addition, lubricants or butter should not be drunk, otherwise vomiting and diarrhea will occur.





Keep oil out of reach of children

## ⚠ 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。
-  本缝纫机不能用于除缝纫外的任何其他用途。
-  使用缝纫机时必须戴上保护眼镜。  
如果不戴保护眼镜，断针时就会有危险，机针的折断部分可能会弹入眼睛并造成伤害。
-  发生下列情况时，请切断电源。  
否则误踩下脚踏板时，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
-  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。
-  为了安全起见，在使用本缝纫机之前，请安 保 护 置。如果未安 这些安全 置就使用缝纫机，会造成人身伤害及缝纫机损坏。
-  缝纫过程中，不要触摸任何运动部件或将物件靠在运动部件上，因为这会导致人员受伤或缝纫机损坏。
-  缝纫机头倒下时，请一定要固定工作台，不可使其随意移动。  
工作台移动易发生脚等被夹住之事故，是导致人身事故的原因。
-  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。
-  如果缝纫机操作中发生误动作，或听到异常的噪音或闻到异常的气味，应立即切断电源。然后请与购买商店或受过培训的技术人员联系。
-  如果缝纫机出现故障，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。  
如果误踩下脚踏板时，缝纫机动作会导致人员受伤。
-  缝纫机头倒下时，请一定要固定工作台，不可使其随意移动。  
工作台移动易发生脚等被夹住之事故，是导致人身事故的原因。
-  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。
-  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。  
将油放在小孩拿不到的地方。

### 保 养 和 检 查

-  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。并从电源插座上拔下插头。  
否则误踩下脚踏板时，缝纫机动作会导致受伤。
  - 检查、调整和维修
  - 更换旋梭，切刀等易损零部件
-  打开马达罩盖前，务必先关闭电源，等待一分钟后，再执行操作。  
触摸马达表面可能会导致烫伤。
-  在必须接上电源开关进行调整时，请务必切换到保养模式。  
务必十分小心遵守所有的安全注意事项。
-  缝纫机头倒下时，请一定要固定工作台，不可使其随意移动。  
工作台移动易发生脚等被夹住之事故，是导致人身事故的原因。
-  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。
-  更换零件或安 可选附件时，请务必仅使用正品零件。  
本公司将不承担由使用非正品零件而造成的任何事故或故障责任。
-  取下的安全保护 置，再次安 时，请务必安在原位上，并检查能否正常的发挥作用。
-  为了防止发生事故及故障，请勿擅自改造本缝纫机。  
本公司将不承担由改造本缝纫机而造成的任何事故或故障责任。

# Be careful

## Sewing



This sewing machine is only used by persons trained in safe operation.



This sewing machine cannot be used for any purpose other than sewing.



Protective glasses must be worn when sewing machines are used.

If you don't wear protective glasses, there will be danger when you break the needle. The broken part of the needle may pop into your eyes and cause injury.



When the following happens, please cut off the power supply. Otherwise, when you step on the pedal, the sewing machine will cause injury.

·When the needle goes through the thread

·When changing needle or shuttle core

·When a sewing machine is not in use or when a person leaves the sewing machine



If a worktable with casters is used, the casters should be fixed so that they cannot move.



For the sake of completeness, please install protective device before using this sewing machine. If these safety devices are not installed, use sewing opportunities to cause personal injury and sewing machine damage.



During the sewing process, do not touch any moving parts or place the objects on the moving parts, because this will cause injuries to people or damage to the sewing machine.



When the head of the sewing machine falls down, please make sure that the worktable is fixed and not moved at will.

Accidents such as foot clamping have occurred in the movement of worktable, which is the cause of personal accidents



When the sewing machine head falls down or stands up, please operate with both hands.

One-handed operation can easily cause injury if the weight of the sewing machine slips.



If the sewing machine operates incorrectly, or hears abnormal noise or smells abnormal odor, the power supply should be cut off immediately. Then contact the shop or trained technicians.



If the sewing machine breaks down, please contact the shop or trained technicians.

## Clean



Please cut off the power supply before starting the cleaning operation.

If you step on the pedal by mistake, the sewing machine will cause injury.



When the head of the sewing machine falls down, please make sure that the worktable is fixed and not moved at will.

Accidents such as foot clamping have occurred in the movement of worktable, which is the cause of personal accidents.



When the sewing machine head falls down or stands up, please operate with both hands.

One-handed operation can easily cause injury if the weight of the sewing machine slips.



When lubricating oil and butter are used, it is necessary to wear protective glasses and gloves to prevent lubricating oil from falling into serious or sticking to the skin, which is the cause of inflammation.

In addition, lubricants or butter should not be drunk, otherwise vomiting and diarrhea will occur.

Keep oil out of reach of children

## Maintenance And Inspection



Only trained technicians can repair, maintain and inspect sewing machines.



Maintenance, maintenance and inspection related to electricity should be entrusted to purchasing shops or electrical professionals.



Turn off the power supply when the following happens. Pull the plug from the power outlet.

Otherwise, when you step on the pedal, the sewing machine will cause injury.

·Inspection, adjustment and maintenance

·Replacement of fragile parts such as spindle and cutter



Before opening the motor cover, be sure to turn off the power supply, wait a minute, and then perform the operation.

Touching the motor surface can cause burns.



When the power switch must be connected to adjust, be sure to switch to maintenance mode.

Be careful to observe all safety precautions



When the head of the sewing machine falls down, please make sure that the worktable is fixed and not moved at will.

Accidents such as foot clamping have occurred in the movement of worktable, which is the cause of personal accidents



When the sewing machine head falls down or stands up, please operate with both hands.

One-handed operation can easily cause injury if the weight of the sewing machine slips.



When replacing parts or installing optional accessories, be sure to use only genuine parts.

The Company will not be liable for any accident or malfunction caused by the use of non-authentic parts.



When removing the safety protection device and installing it again, be sure to install it in situ and check whether it can work properly.



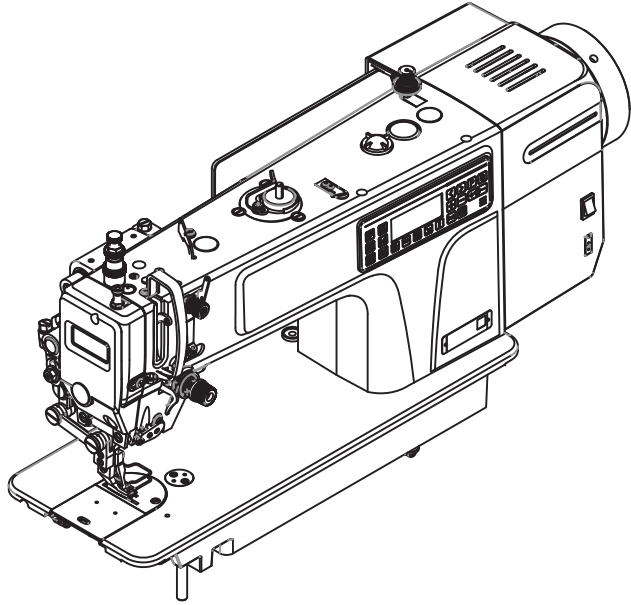
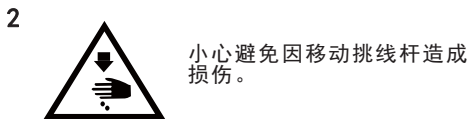
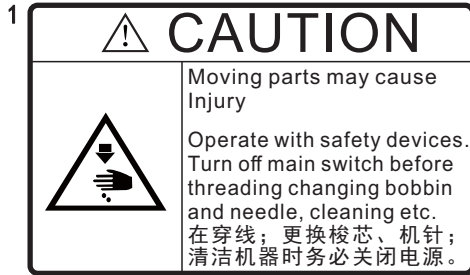
In order to prevent accidents and malfunctions, please do not alter the sewing machine without authorization.

The Company will not be liable for any accident or malfunction caused by the modification of the sewing machine.

## [2] 警告标签

缝纫机上有下列警告标签。

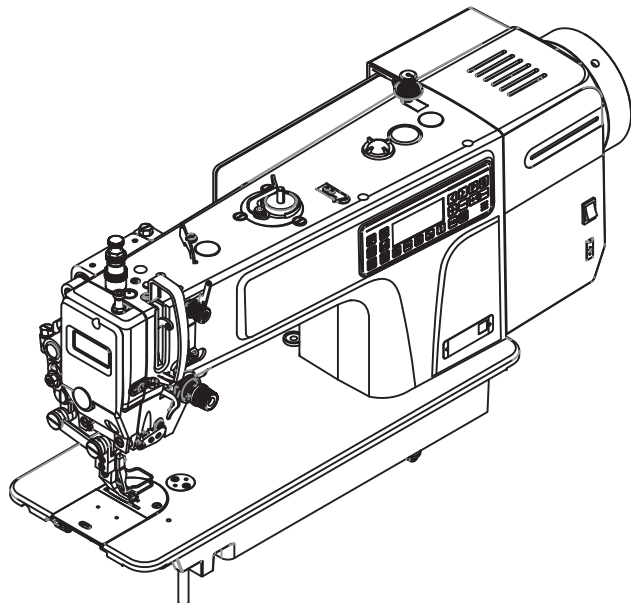
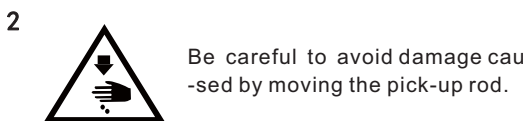
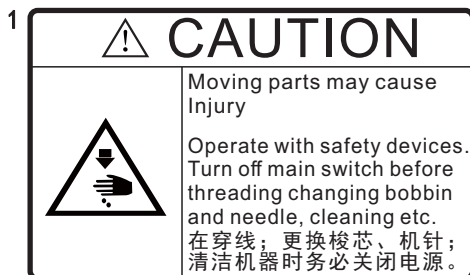
当使用缝纫机时，请遵守标签上的说明。如果标签脱落或模糊不清，请和购买商店联系。



## [2] Warning Label

The following warning labels are on the sewing machine

When using the sewing machine, please follow the instructions on the label. If the label falls off or is ambiguous, please contact the purchase shop.



# 使用说明

## Operation Instruction

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# 1 机器简介

## Brief introduction

步进电机上下复合送料自动剪线平缝机系单直针，采用连杆式送料，连杆挑线机构，旋梭勾线，形成301线迹。

本机采用油泵自动润滑，运转轻滑，噪音低，振动小，特别适用于缝制皮革，帆布，厚重装饰布，织带类织物，如：箱包，汽车座垫，帐篷，沙发等。

步进电机控制的针距大小，倒顺缝，精准可控。控制压脚高度可调。

This machine is designed with link type feed mechanism and link lever thread take-up mechanism and full lubrication by pump.

It's suitable for sewing leather, canvas and other heavy weight materials; such as suitcase, car seat, tent, sofa, etc.

The stepper motor controls the size of the needle pitch and reverses the seam, which is accurate and reliable. Control the height of the pressing foot.

# 2 主要技术规格

## Main Technical Specifications

规格	参数	
缝料	中厚料	
最高转速	2500针/分	
最大针距	8mm	
针杆行程	37mm	
压脚交互量	2.5-5.5mm	
采用机针	Dp×17 22#	
压脚提升高度	手控	5mm(最大)
	膝控	13mm(最大)
采用旋梭	自动润滑大旋梭	
供油方式	全自动供油	
电机功率	750W	

Specification	Parmeter	
Application	Medium & heavy weight materials	
Max sewing speed	2500s.p.m	
Max stitch length	8mm	
Needle bar stroke	37mm	
Lifting amount if presser feet	2.5-5.5mm	
Needle	Dp×17 22#	
Presser foot lift height	Hand lifter	5mm(Max)
	Knee lifter	13mm(Max)
Hook	Large lubrication hook	
Lubrication	Automatic lubrication	
Motor power	750W	

### 3 机器的安装 (图1、图2、图3、图4) Mounting the Machine (Fig.1, Fig. 2, Fig.3 and Fig. 4)

#### 1.油盘的安装

1) 油盘②应放置在台板上的凹槽四角上。  
2) 将两只机头座垫①安装在油盘②的A边 (朝操作者一边), 将两只油盘支座③安装在油盘②的B边 (机头连接钩接合一边), 然后放上油盘②。

3) 将机头连接钩⑤插入底板销孔内, 与台板的机头连接钩座④相嵌合再把机头放到油盘四只角的机头座垫上。

#### 1.Fixing oil tray

1) Put the oil tray ② on the four groove corners on the sewing table.

2) Fix two arm cushion ① to the A side of oil tray ② (facing the operator). Fix the two stand bases ③ to the B side of oil tray ② (hinge side), then fix the oil tray ②.

3) Insert machine head coupling hook ⑤ into the pin holes in the bottom plate such that it is embedded into the coupling hook seat ④, and put the machine head onto the seating washer on four corners of the oil tray.

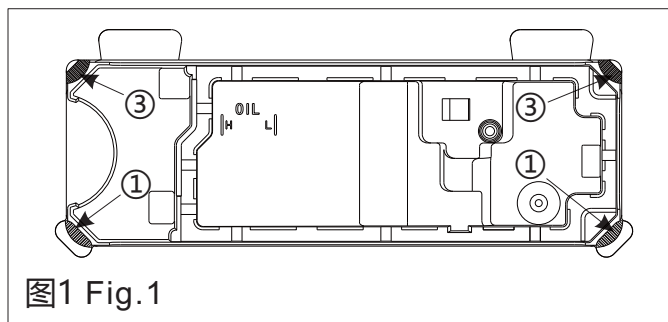


图1 Fig.1

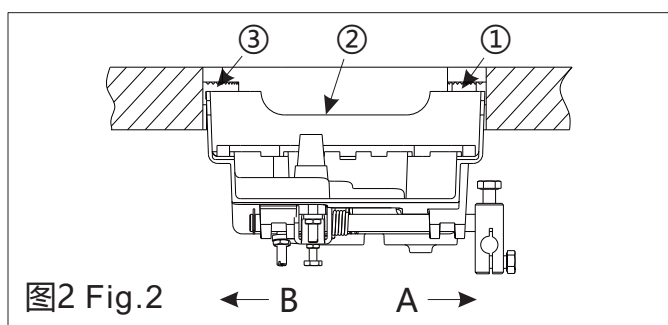


图2 Fig.2

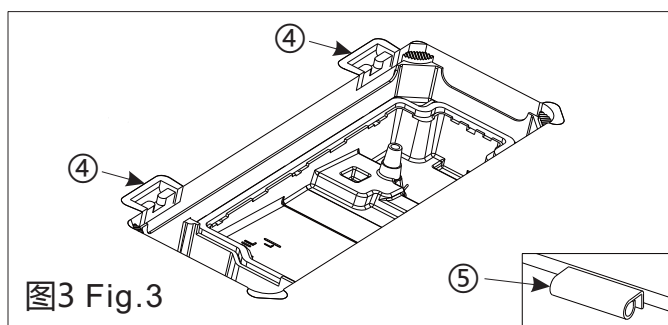


图3 Fig.3

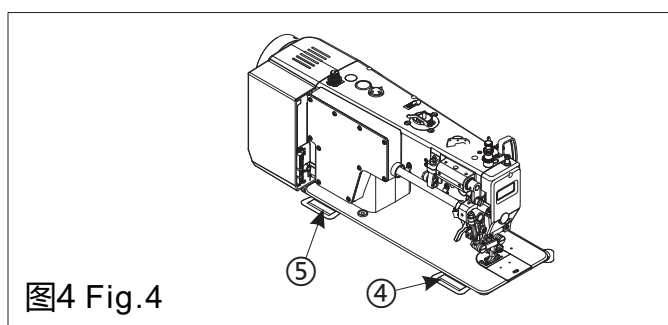


图4 Fig.4

### 4 机器的润滑 (图5) Lubrication (Fig.5)

#### 1.润滑须知

1) 向油盘①注入缝纫机油 (10号白油) 至“H”记号A。  
2) 当油面低于“L”记号B时, 应再加油。

#### 1.Information on lubrication

1) Fill oil pan ① with sewing machine oil (10 white oil) up to H mark A.  
2) When the oil level lowers below L mark B, refill the oil pan with the specified oil.

3) 加油后, 开动机器, 应看到油液飞溅到油窗②上, 说明润滑正常。

4) 至于飞溅的油量多少与总润滑油量多少无关。

3)When you operate the machine after lubrication, you will see splashing oil through oil sight window ② if the lubrication is adequate.

4)Note that the amount of the splash oil is unrelated to the amount of the lubricating oil.



注意:

1.为了防止缝纫机的意外启动, 请关掉电源之后再进行操作。



Caution:

1.To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.

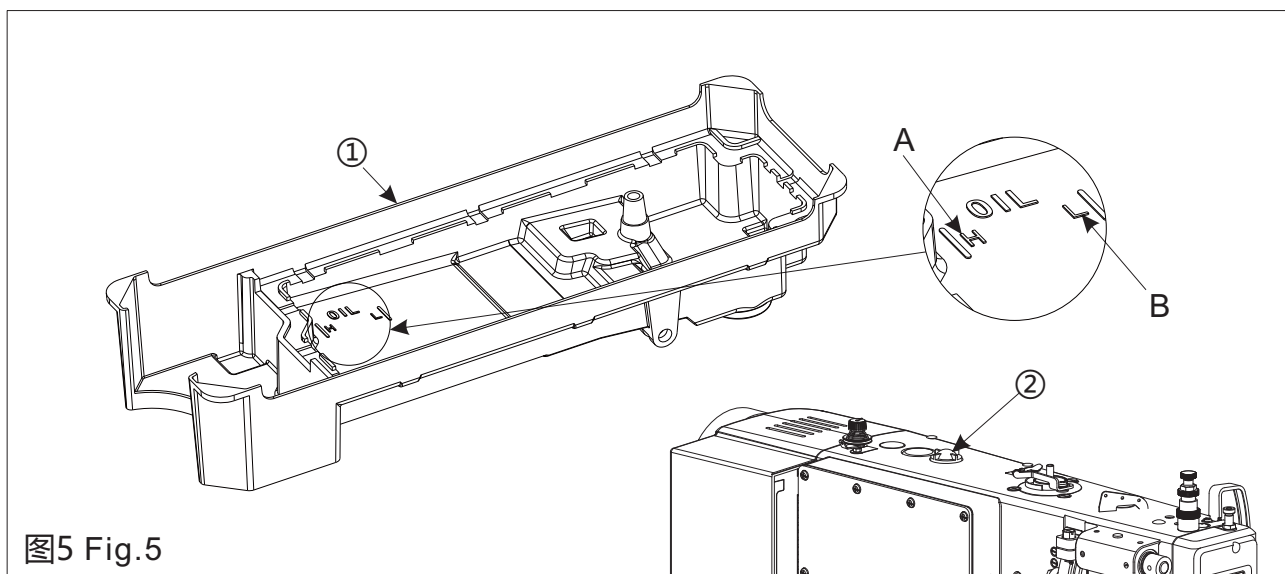


图5 Fig.5

## 5 旋梭油量调节 (图6、图7、图8) Oil mass Adjustment of Rotating Hook (Fig. 6, Fig. 7, Fig. 8)

### 1.调节方法

1) 旋梭的油量是用旋梭油量调节螺钉①来调节: 当旋梭油量调节螺钉朝 + 方向A转动时, 油量将增大; 朝 - 方向B转动时, 油量将减小。

2) 调节油量后缝纫机应进行约30秒钟的空转, 以确认油量状态。

### 1.Adjustment method

1) Adjust the oil mass of rotating hook using adjusting screw ①:Turning the adjusting screw of the front shaft sleeve on bottom shaft towards + direction A, the oil amount will increase, and towards - direction B, the oil amount will decrease.

2)When adjustment of oil mass is over, allow the sewing machine to idle for about 30 seconds to confirm the state of oil mass.



注意:

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Caution:

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## 2.油量的确认方法

1) 机头冷却时, 请进行三分钟左右的空转(适当的间歇运转)。

2) 请在缝纫机转动时将油量确认专用纸插入(具体操作见图8所示)。

3) 油量确认时间为5秒。



注意:



- 1.进行上述操作时, 确认油盘内的油面高度处在“MAX”和“MIN”范围内。
- 2.旋梭是高速运转的。为了防止人身事故, 调节油量时, 要充分注意手指不要碰到旋梭。

### 1. Confirming the Oil Mass

1) To cool down the machine head, allow it idle for about 3 minutes (appropriate discontinuous running).

2) Insert the special oil mass confirmation paper when the sewing machine is rotating (detailed operations are described in Fig. 8).

3) Oil mass confirmation time lasts for 5 seconds.



Caution:



1. Prior to the above-mentioned operation, Make sure the oil height in the oil plate ranges between MAX and MIN.
2. Rotating hook works at high speed. To prevent human injury, the operator shall keep his fingers away from the rotating hook during oil mass adjustment.

### 3. 油量适合标样

1) 右图标样(见图8)根据不同的缝制工序需求进行增或减的微调整, 但应注意不要增加或减少过多。油量过少时会引起旋梭发热, 油量过多时会污染缝料。

2) 用油量确认专用纸测试三次, 直至确认3次油量确认专用纸油迹均无变化为止。

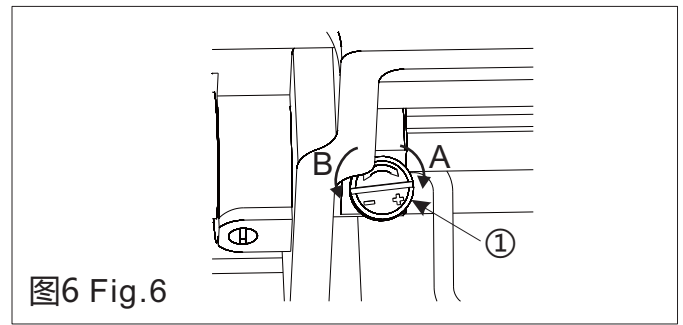


图6 Fig.6

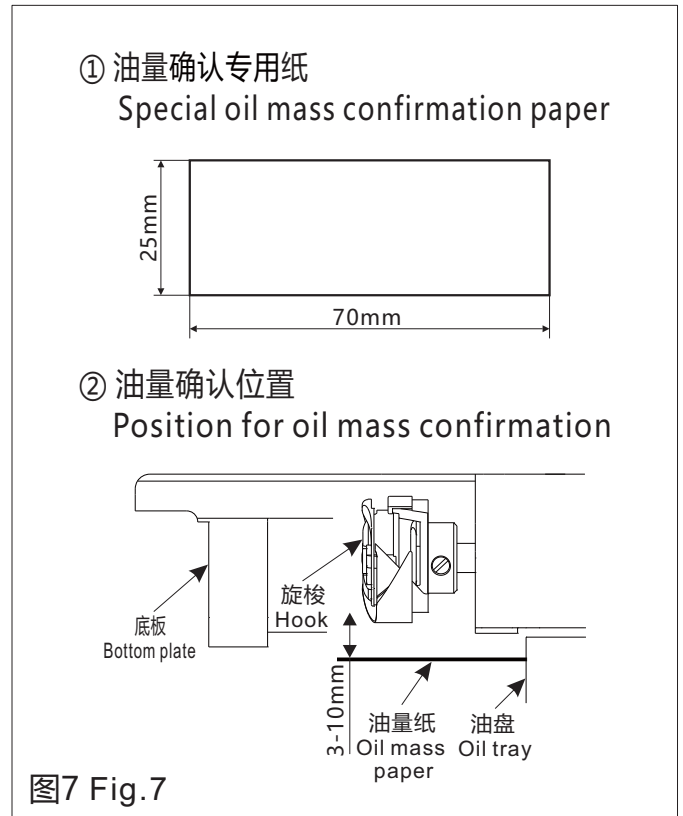


图7 Fig.7

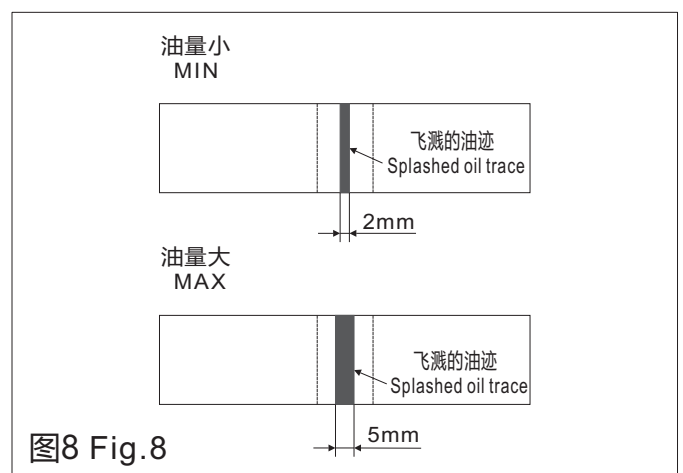


图8 Fig.8

### 3. Guide sample of oil mass adequacy

1) The guide sample shown in the right-hand figure (see Fig. 8) may be finely adjusted (increased or reduced) as per different sewing processes; however, excessive increase or reduction shall be avoided. Too little oil mass may lead to rotating hook heating, and overmuch oil mass may lead to contamination of the sewing materials.

2) Test the oil mass 3 times using special oil mass confirmation paper till the oil traces indicated by the special paper show no changes.

## 6 机针的装法 (图9) Mounting the Needle (Fig.9)

1. 转动上轮使机针上升到最高处。
2. 拧松夹针螺钉②，手拿机针①将机针①的凹弧部分A正对右方向B。
3. 将机针朝箭头方向插入针孔的底部，直至插不进为止。
4. 拧紧夹针螺钉②。
5. 务必使机针的长槽C正对左方向D。



注意:



1. 为了防止缝纫机的意外启动，请关掉电源之后再进行操作。
2. 机针有各种编号，请根据所用线的粗细和缝料来选择适当的机针。

1. Turn the upper wheel to allow the needle to reach its maximum height.

2. Unscrew needle carrying screw ②, hold needle ① by hand, and align the indentation A of needle to right direction B.

3. Insert the needle into the bottom of needle hole in direction of arrow till it reaches the end point.

4. Screw down the needle carrying screw ②.

5. Take care to ensure that the elongated slot C on the needle is aligned to the left direction D.



Caution:



1. To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.

2. Needles are available in different sizes. Please select appropriate needle as per the thickness of threads and the sewing materials.

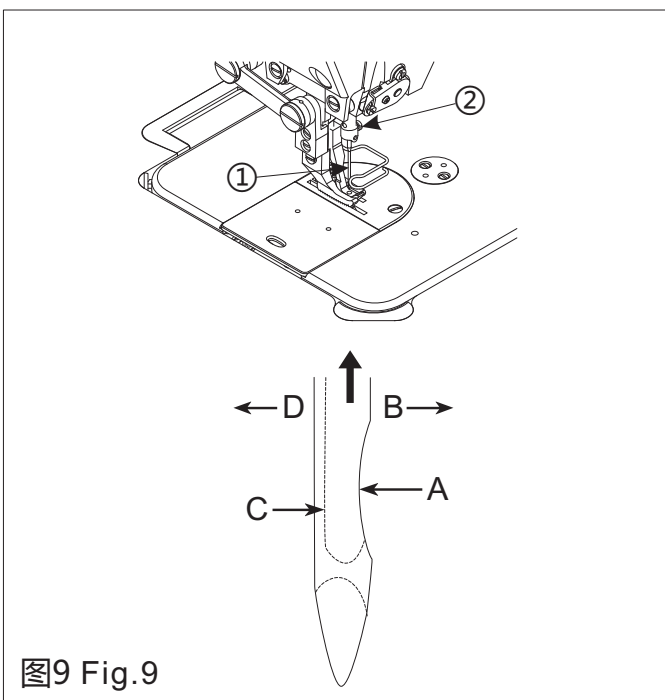


图9 Fig.9

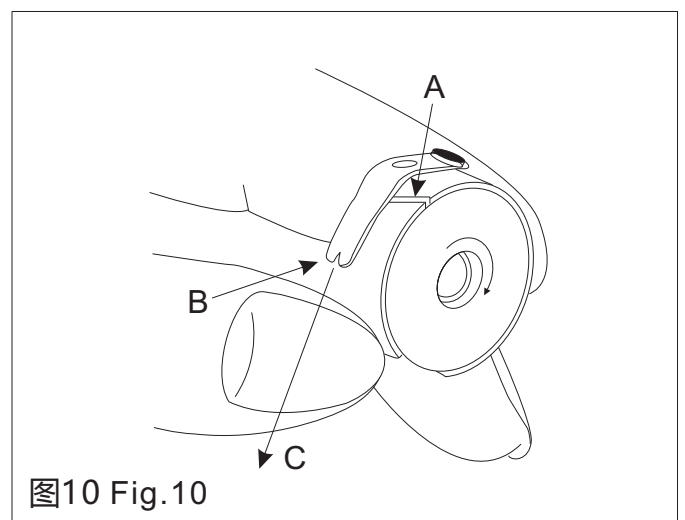


图10 Fig.10

## 7 梭芯的装法 (图10) Mounting the Bobbin (Fig. 10)

1. 按住梭子，将梭芯装入梭子内。
2. 将线从梭子上的线槽A中穿过，朝C方向拉出。这样，线通过夹线簧从孔B处引出。
3. 拉底线时，梭芯应按箭头方向顺时针转动。

1. Hold the rotating hook by hand, and fit the bobbin into the rotating hook.
2. Thread the thread through the thread groove in the rotating hook, and draw out the thread in direction C. In this way, the thread is led out of hole B through the tension spring.
3. When bobbin thread is drawn, the bobbin shall turn clockwise in direction of arrow.

## 8 面线的穿法 (图11) Threading the Needle Thread (Fig. 11)

穿面线时针杆应在最高位置，然后由线架上引出线头按图示序号顺序进行穿线。

Thread the needle thread when needle bar stays in its highest position, lead out the thread end from the thread stand, and conduct threading as per the serial numbers indicated in the figure.

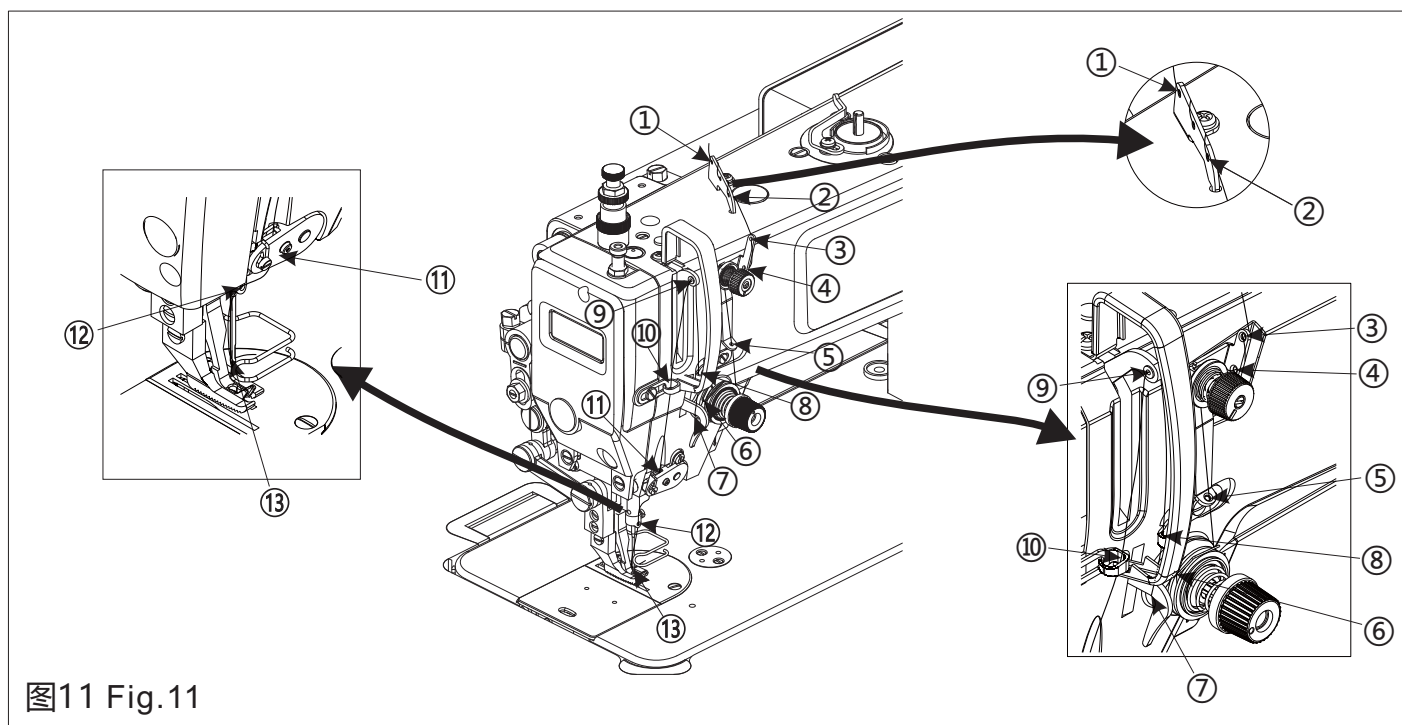


图11 Fig.11

## 9 底线的卷绕 (图12、图13) Winding up the Bobbin Thread (Fig. 12, Fig. 13)

1. 底线卷绕的方法
  - 1) 把梭芯①装到绕线轴②上。
  - 2) 把线架右侧的卷线如右图所示穿线，并把线端向右缠绕梭芯数圈。
  - 3) 把卷绕手柄③推到A方向，然后运转缝纫

1. Bobbin thread winding-up method
  - 1) Fit bobbin ① onto spool ②.
  - 2) Thread the right-hand thread coiling on thread stand as shown in right-hand figure, and reel the thread end rightwards onto the bobbin for several turns.
  - 3) Push winding lever ③ over to direction

机。梭芯①向C方向转动，线卷绕到梭芯①上。卷绕线满后卷绕手柄③自动向B方向弹开并停止卷绕。

4) 取下梭芯①，用绕线切刀④切断机线。



注意:

1.卷绕底线时，请将要卷绕的底线处于梭芯①和夹线板③之间拉线状态下开始绕线。

2.不进行缝制时给梭芯①绕底线时，请把面线从挑线杆孔上抽出来，把梭芯①从旋梭里卸下来后再进行。

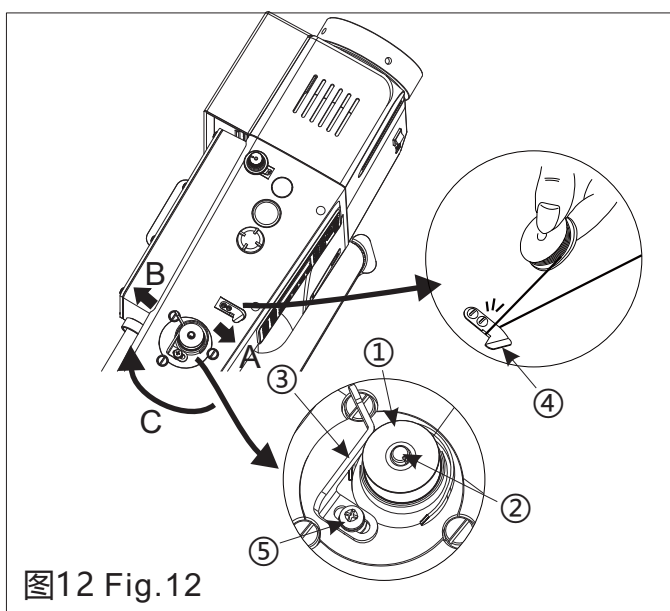


图12 Fig.12

## 2.底线卷绕的调节

1) 调整底线卷线量时，请拧松固定螺钉⑤，把卷绕手柄③移动到A方向或B方向，然后再固定螺钉⑤。A方向变少，B方向变多。

2) 如果线不能平绕梭芯时，请拧松螺母⑥，转动绕线夹线器，调整夹线板⑦的高度：

a.旋梭①中心和夹线板⑦中心高度一样时为标准位置。

b.下部卷的多时，向如右图D方向移动绕线夹线器的位置，上部卷的多时，向如右图E方向移动绕线夹线器的位置。

A, and run the sewing machine. Bobbin ① is rotated in direction C, and thread is reeled onto bobbin ①. Once the reel is full, winding lever ③ is pushed toward direction B, and winding is over.

4) Remove bobbin ①, and trim off the thread using winding trimmer ④.



Caution:

1.To reel the bobbin thread, set the bobbin thread to between bobbin ① and thread gripper plate ③ in taking-up mode, and start thread winding.  
2.To reel bobbin thread onto bobbin ① when no sewing is performed, draw the needle thread out of hole in the take-up lever, remove bobbin ① out of rotating hook.

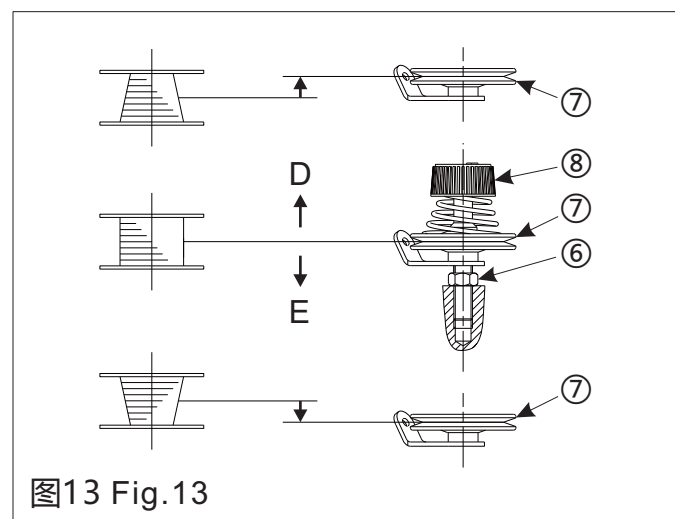


图13 Fig.13

## 1.Adjusting the bobbin thread winding

1)To adjust the winding capacity of bobbin thread, unscrew fixing screw ⑤, set winding lever ③ in direction A or direction B, and fix screw ⑤ again. Direction A is intended for reduction, and direction B is intended for increase.

2)If thread cannot be wound onto the bobbin flatly, unscrew nut ⑥, turn the winding tension disco, and adjust the height of height of thread gripper plate ⑦.

a.The standard position is reached once the center heights of rotating hook ① and thread gripper plate ⑦ are identical.

c.调整绕线夹线器到合适位置后，把固定螺钉⑥拧紧。

3) 调整底线卷绕张力时，请转动线张力螺母⑧进行调整。

b.If the winding amount on the lower part is bigger, move the winding tension disco in direction D indicated in the right-hand figure. If the winding amount on upper part is bigger, move the winding tension disco in direction E indicated in the right-hand figure.

c.When the winding tension disco reaches its suitable position, screw down fixing screw ⑥.

3)Adjust the winding tension of bobbin thread by turning thread tension nut ⑧.

## 10 针距的调节 (图14) Adjusting the Stitch Length (Fig. 14)

1.按压操作面板①处的按键，“+”表示针距加大，“-”表示针距减小。

2.数字越大，相应的针距越大。

3.具体调整方法请参照电控使用说明书。

1.Press the key at the operation panel ①, "+" indicates that the needle pitch increases, "-" indicates that the needle pitch decreases.

The number is the stitch length in mm.

2.The larger the number. The longer the stitch length will be.

3.Please refer to the operation manual of electric control for specific adjustment methods.

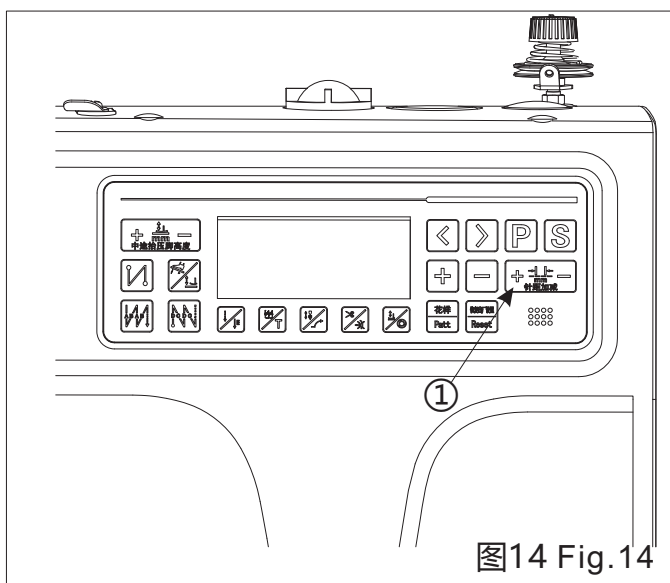


图14 Fig.14

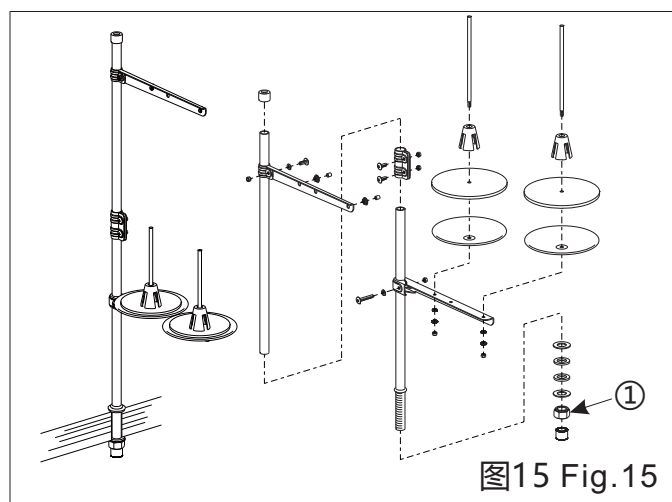


图15 Fig.15

## 11 线架的安装(图15) Mounting the Thread Stand (Fig.15)

1.如右图所示那样将线架部件安装到缝纫机台板线架安装孔上。

2.旋紧线架杆下节固定螺母①固定线架。

1.As shown in right-hand figure, mount the thread stand component onto the mounting hole for thread stand on the sewing machine table.

2.Screw down retaining nut ① for lower segment of thread stand lever to fix the thread stand.

## 12 膝提高度的调节 (图16、图17) Adjusting the Knee Lifting Height (Fig.16, Fig. 17)

1.膝提时的标准高度是13mm。

2.用膝提调整螺钉①可以调节压脚提升量，最大可至16毫米。



注意:

1.为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



2.当压脚提升超过16mm时，请不要运转缝纫机，因为针杆②与压脚③会相碰。

1.Standard knee lifting height is 13mm.

2.Knee-lifting adjusting screw ① may be used to adjust the lifting amount of presser foot, and the maximum lifting amount may reach 16mm.



Caution:

1.To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.



2.When the presser foot lifting exceeds 16mm, do not run the sewing machine because needle bar ② may collide with presser foot ③.

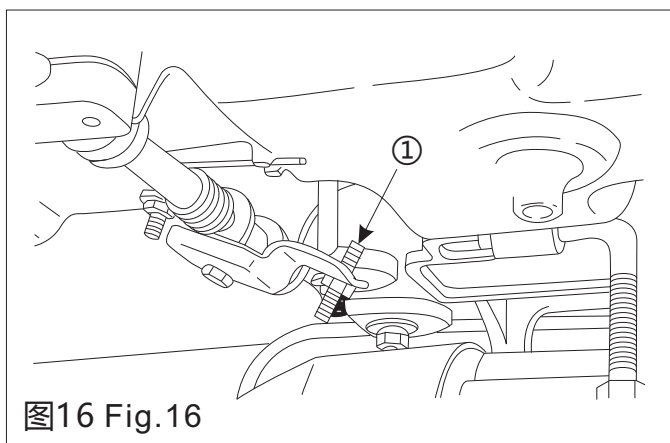


图16 Fig.16

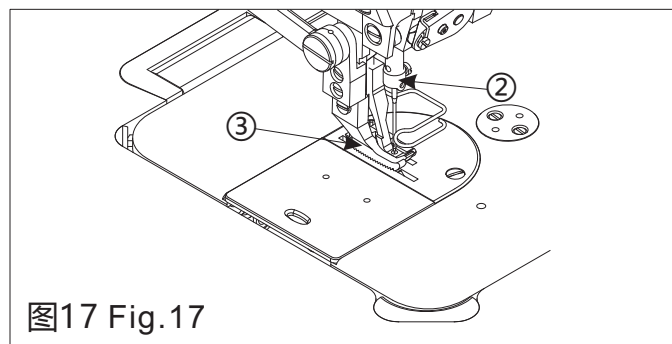


图17 Fig.17

## 13 挑线簧的调节 (图18、图19) Adjusting the Take-up Spring (Fig.18, Fig. 19)

1.挑线簧摆动量的调节

1) 若将夹线器⑤中的螺钉③朝顺时针方向(即A方向)转动时，挑线簧①的摆动量将增大；若朝逆时针方向(即B方向)转动时，挑线簧①的摆动量将减小。

2.挑线簧张力的调节

1) 旋松螺钉②，取出夹线器⑤(组件)。

2) 旋松线器⑤中螺钉④。

3) 若将夹线器⑤中的螺钉③朝顺时针方向(即A方向)转动时，挑线簧①的张力将增大；若逆时针方向(即B方向)转动时，挑线簧①的张力将减小。

1.Adjusting the oscillating quantity of take-up spring

1) The oscillating quantity of take-up spring ① is increased if screw ③ in tension disco ⑤ is turned clockwise (namely in direction A), and it ① is reduced if the screw is turned counter clockwise (namely in direction B).

2.Adjusting the tension of take-up spring

1) Unscrew screw ②, and take out tension disco ⑤(assembly).

2) Unscrew screw ④ in tension disco ⑤.

3) The tension of take-up spring ① is increased if screw ③ in tension disco ⑤ is turned clockwise (namely in direction A), and it ① is reduced if the screw is turned counterclockwise (namely in direction B).

4) 调节结束后旋紧螺钉④，并将夹线器⑤(组件)装入机器中再旋紧螺钉②。

### 3.挑线簧调整适当的判断依据

1) 确认挑线簧①的张力调整后，把面线向B方向拉出，如果在挑线簧①达到最低位置之前面线B处就被拉动,请减弱挑线簧①的张力。



注意:



1.为了防止缝纫机的意外启动，请关掉

电源之后再进行操作。

2.通常机器在出厂前,挑线簧均已调整妥善，只是在缝纫特殊的缝料或特殊的缝线时，才需要重新进行调整。

4) Screw down screw ④ when adjustment is over, fit tension disco ⑤(assembly) into the machine, and screw down screw ②.

### 3.Judgment basis for adjustment adequacy of take-up spring

1) Confirm that the tension of take-up spring ① is properly adjusted, draw out the needle thread in direction B. If place B of needle thread is drawn before take-up spring ① reaches its lowest position, reduce the tension of take-up spring ①.

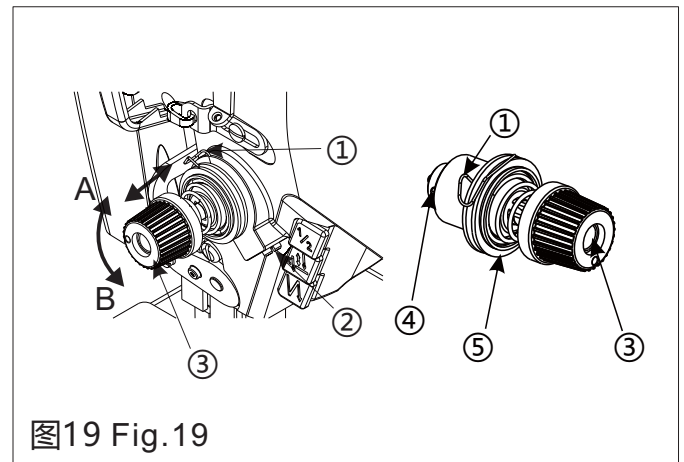
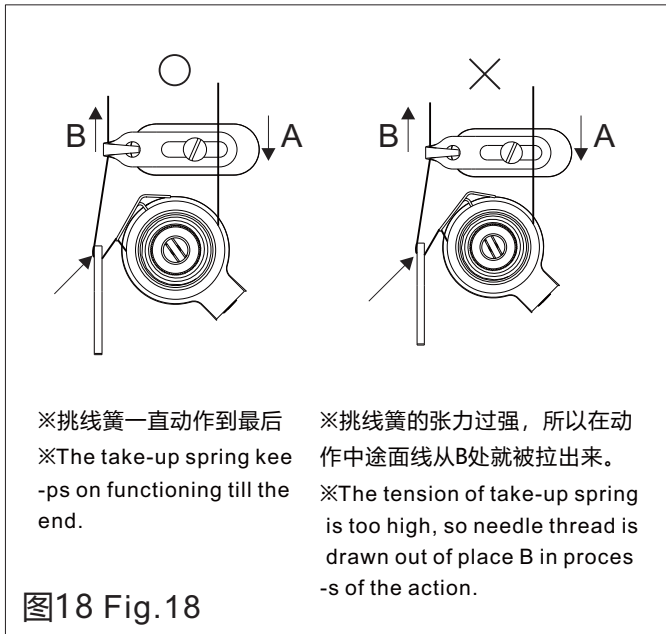


Caution:



1.To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.

2.The take-up spring is already adjusted properly before the machine leaves the factory as a rule, and it requires readjustment only for sewing of special materials or usage of special stitch threads.



## 14 缝线张力调整 (图20) Adjusting the Tension of Stitch Thread (Fig.20)

### 1.面线张力的调节

1) 若将夹线器中的调节螺母①朝顺时针方向(即A方向)转动时，面线张力将增大；若朝逆时针方向(即B方向)转动时，面线张力将减小。

### 2.底线张力的调节

1) 若将夹线螺钉②朝顺时针方向(即C方向)转动时，底线张力将增大；若朝逆时针方向(即D方

### 1.Adjusting the tension of needle thread

1) The tension of needle thread is increased if the adjusting nut ① in tension disco is turned clockwise (namely in direction A), and it is reduced if the nut is turned counterclockwise (namely in direction B).

### 2.Adjusting the tension of bobbin thread

1) The tension of bobbin thread is increased if the adjusting screw ② is turned clockwise (namely in direction A), and it is reduced if t

向)转动时, 底线张力将减小。



注意:



1.为了防止缝纫机的意外启动, 请关掉

电源之后再进行操作。

the screw is turned counterclockwise (namely in direction B).



Caution:



1. To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.

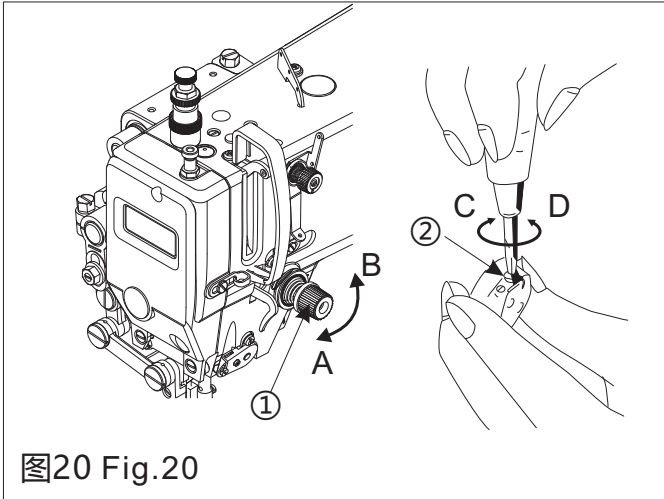


图20 Fig.20

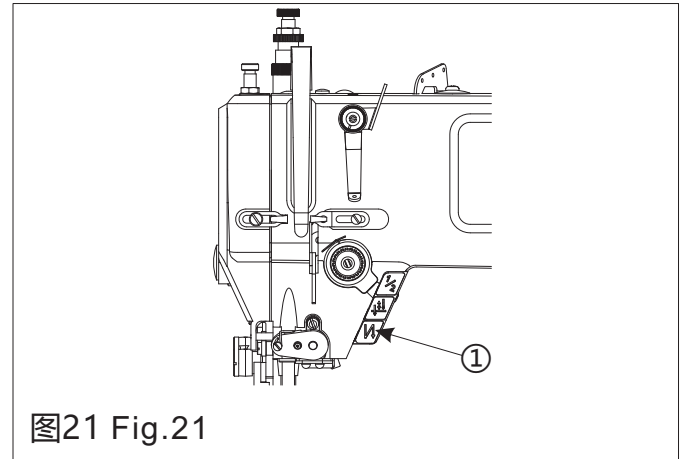


图21 Fig.21

## 15 缝纫及倒缝、补针 (图21) Sewing and backtacking (Fig.21)



1.按下电源开关。  
2.踩下踏板, 缝制开始, 正常缝制过程中, 按下自动倒缝开关①, 便开始反向送料, 松开后, 则恢复正常送料。



1. Turn the power on.  
2. Depress the treadle to start sewing, when the reverse sewing switch ① is on during sewing, the feed will be reversed. After release, the feed will recover to normal.

## 16 挑线杆挑线量的调节 (图22) Adjusting the Take-up Amount of Take-up Lever (Fig.22)

1.右线钩上的刻线C与螺钉中心一致时为标准位置。  
2.缝制厚料时, 应旋松螺钉①再将右线钩②朝左方向(即A方向)移动, 以增大挑线量, 调节完成后旋紧螺钉①。  
3.缝制薄料时, 应旋松螺钉①再将右线钩②朝右方向(即B方向)移动, 以减小挑线量, 调节完成后旋紧螺钉①。

1. The standard position is obtained when graduation line C on right thread hook is aligned to screw center.  
2. For thick material sewing, unscrew screw ① and move right thread hook ② to the left (namely in direction A) to increase the take-up amount, and screw down screw ① when adjustment is over.  
3. For thin material sewing, unscrew screw ① and move right thread hook ② to the right (namely in direction B) to reduce the take-up amount, and screw down screw ① when adjustment is over.

-  **注意:**  
 1.为了防止缝纫机的意外启动, 请关掉电源之后再进行操作。

-  **Caution:**  
 1.To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.

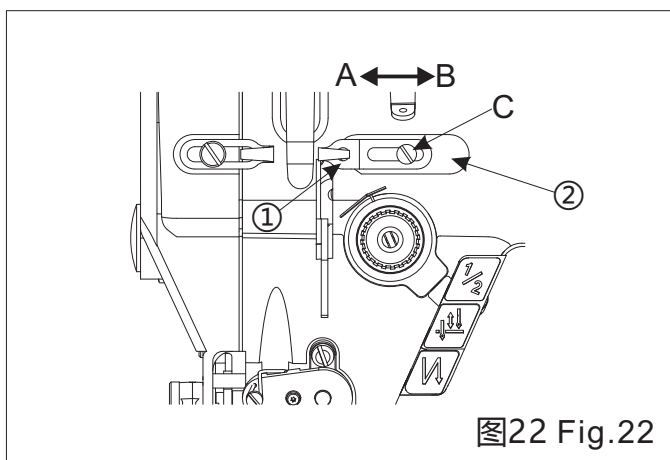


图22 Fig.22

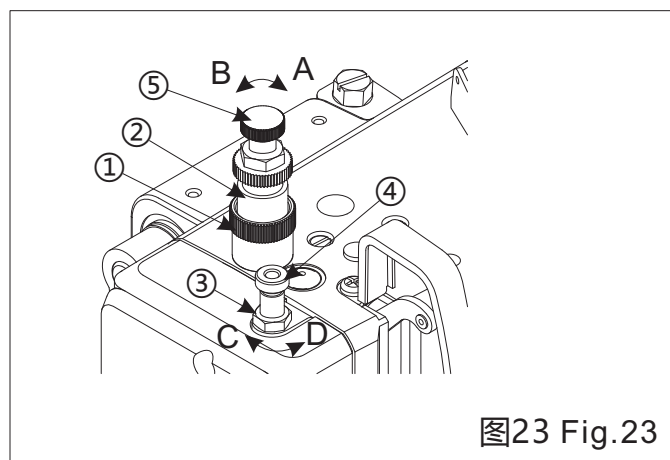


图23 Fig.23

## 17 压脚压力的调节 (图23) Adjusting the Presser Foot Pressure (Fig.23)

- 1.旋松调压螺钉锁紧螺母①。
- 2.转动调压螺钉②来调节压脚压力, 在压力不够的情况下, 可以转动螺钉⑤来增加压力。保证缝料不打滑的情况下, 压脚压力尽可能的弱一些。
- 3.拧紧调压螺钉锁紧螺母①。
- 4.旋松锁紧螺母③。
- 5.转动调节螺钉④来调节送料压脚的压力, 顺时针转动调节螺钉④来增大压力, 逆时针转动则减小压力。
- 6.拧紧锁紧螺母③。

- 1.Loosen the lock nut ①.
- 2.Turn the adjusting screw ② to adjust the pressure of presser foot, if it's not enough, please turn the screw ⑤ to increase the pressure. The pressure should be as weak as possible, but strong enough so that the material doesn't slip.
- 3.Tighten the nut ①.
- 4.Loosen the nut ③.
- 5.Turn the screw ④ clock wise to increase the pressure, on the contrary, turn the screw counterclockwise to decrease the pressure.
- 6.Tighten the nut ③.

## 18 手动抬压脚高度的调节 (图24) Adjusting the Manual Foot Lifting Height (Fig.24)

- 1.将压脚扳手朝顺时针转动使压脚抬起, 旋松压杆导架紧固螺钉①, 上下移动压杆②来调节手动抬压脚高度(压脚高度为针板面与小压脚底面的距离, 手动抬压脚高度的标准值为5mm)。
- 2.调节结束后, 拧紧压杆导架紧固螺钉①。

- 1.Turn clockwise the presser foot lever to up-lift the presser foot, unscrew tightening screw ① of presser bar spring bracket, moving upward/downward pressure bar ② to adjust the manual foot lifting height (presser foot height indicates the distance from the surface of needle plate to the bottom surface of presser foot, and



注意:

- 1.为了防止缝纫机的意外启动, 请关掉电源之后再进行操作。

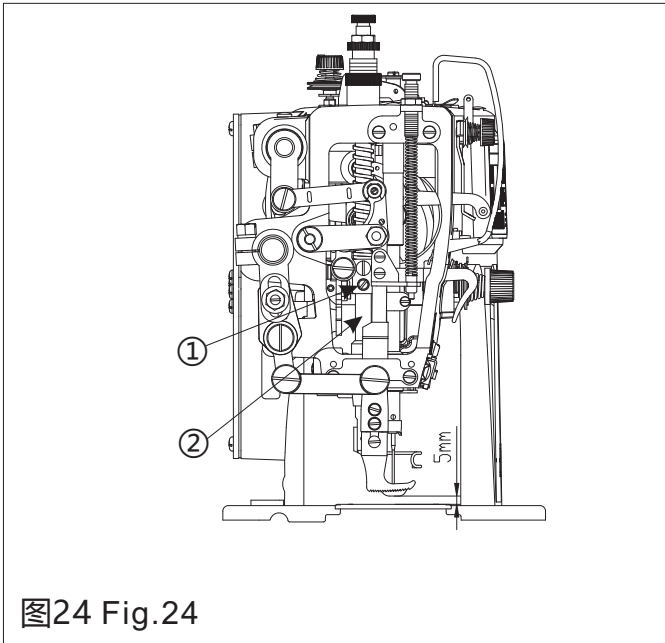


图24 Fig.24

- the standard value of manual foot lifting height is 6mm).
2. When adjustment is over, screw down tightening screw ① of presser bar spring bracket.



Caution:

1. To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.

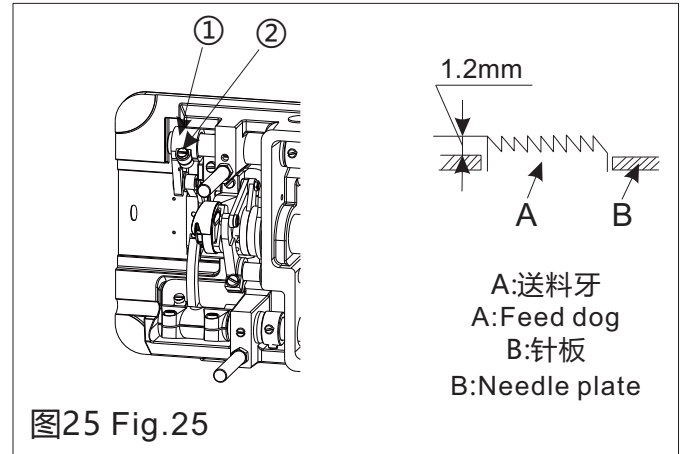


图25 Fig.25

## 19 送料牙的高度 (图25) Height of the feed dog (Fig.25)

- 1.送料牙一般应比针板高出1.2毫米。
- 2.送料牙高度的调节
  - 1) 旋松抬牙叉形曲柄①的紧固螺钉②。
  - 2) 上下移动牙架进行调节。
  - 3) 旋紧曲柄螺钉②。

1. The feed dog is factory-adjusted so that it just out from the throat plate 1.2mm.
2. To adjust the height of the feed dog
  - 1) Loosen screw ② of crank ①.
  - 2) Move the feed bar up or down to make adjustment.
  - 3) Securely tighten screw ②.



注意:

- 1.为了防止缝纫机的意外启动, 请关掉电源之后再进行操作。



Caution:

1. To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.

## 20 送料牙的倾斜 (图26) To tilt the feed dog (Fig.26)

- 1.标准的倾斜, 是在牙架销上的刻点A与牙架曲柄①上的刻点B对齐。
- 2.为了防止浮线, 要送料方向高, 则旋松固定螺钉, 用螺丝刀把牙架销朝箭头方向转动90°。

1. For standard adjustment, align point A with point B of the feed bracket.
2. To prevent thread float, it has to make the sending direction higher, so loose the screw and turn the feeding bar shaft 90° in the direction of the arrow with a screwdriver.

3.为了防止缝料的潜移,要送料方向低,则牙架销朝箭头相反方向转动90°。

3.To prevent uneven material feed, turn the feeding bar shaft 90° in the opposite direction from the arrow with a screwdriver.



注意:



1.为了防止缝纫机的意外启动,请关掉电源之后再进行操作。

2.无论什么时候,调节送料牙的倾斜,送料牙的高度会发生变化;所以,在调整之后,请再次确认送料牙的高度。



Caution:



1.To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.

2.Whenever make the adjustment, the height of the feed dog changes. so after adjustment, please check the height of the feed dog again.

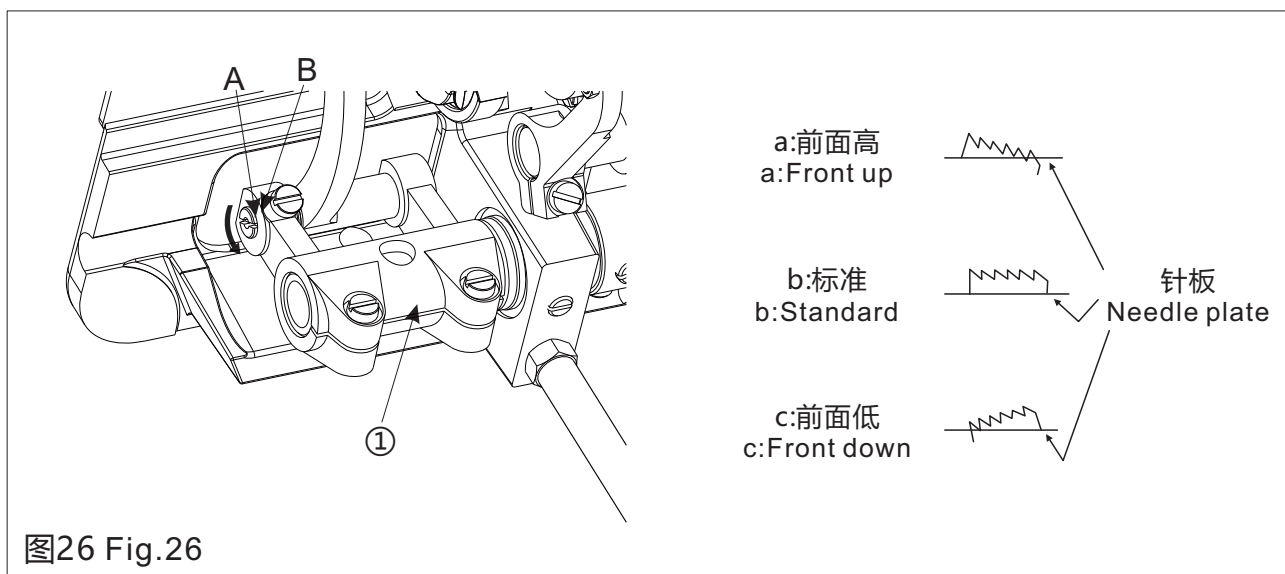


图26 Fig.26

## 21 调节机针与送布机构同步 (图27) Adjusting the timing of needle and feed mechanism(Fig.27)

标准位置:

当送布牙从最高位置下降,机针孔中心③应与针板上表面②、送布牙顶端①在同一水平面上。通过调整送布凸轮和抬牙凸轮的位置进行

- 1.卸下后窗板。
- 2.逆时针转动上轮,以上轴油孔④为基准,将抬牙凸轮的第二个固定螺钉⑤的中心与上轴油孔④中心对齐且稍微向下偏一点(半个螺孔)。
- 3.同时,将送布凸轮的第三个紧固螺钉⑥的中心与上轴油孔④中心对齐且稍微偏上一点。

The standard timing is when the feed dog is lowered from its highest position until it is flush with the top of the needle plate ②, and the needle eye ③ is also aligned horizontally with the surface. Adjust by changing the phases of feed cam and eccentric wheel UD.

- 1.Remove the rear cover.
- 2.Turn the machine pulley in reverse direction using the oil hole ④ on the upper shaft as a reference mark.align the center of the second fixing screw⑤ of the lifting cam with the center of the oil hole on the upper shaft and slightly lower it (half of the screw hole).
- 3.At the same time, align the center of the third fastening screw⑥ of the feeding cam with the center of the upper shaft oil hole and slightly tilt it upwards.



注意:

- 1.为了防止缝纫机的意外启动, 请关掉电源之后再进行操作。
- 2.千万小心不要将送料偏心轮移动得太多, 不然会造成断针现象。



Caution:

- 1.To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.
- 2.Be careful not to move the feed eccentric cam too far, or else needle breakage may result.

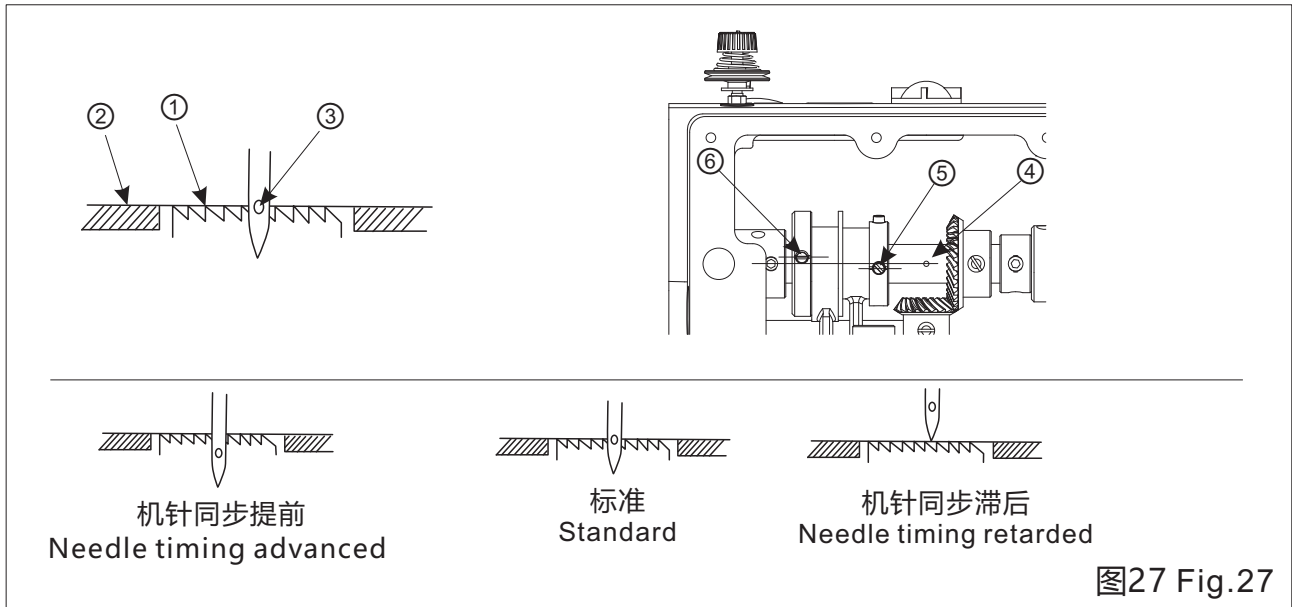


图27 Fig.27

## 22 机针与旋梭的位置的调整 (图28) Adjusting the Positions of Needle and Rotating Hook (Fig.28)

1.转动上轮, 使针杆下到最低点, 再旋松针杆连接柱紧固螺钉①。

2.使针杆②上的刻线A对准针杆下轴套③的下端, 然后旋紧针杆连接柱紧固螺钉①。

3.旋松3颗旋梭紧固螺钉并转动上轮, 使针杆②的上刻线B对准针杆下轴套③的下端。

4.移动旋梭使旋梭的勾线尖⑤对准机针④的缺口处并使机针④的缺口处与旋梭的勾线尖⑤间隙为0.1mm, 然后拧紧旋梭紧固螺钉。

1.Turn the upper wheel to allow the needle bar to reach its lowest point, and unscrew trip bolt ① of needle bar joint pin.

2.Align graduation line A on needle bar ② to the lower end of lower shaft sleeve ③ of needle bar, and screw down tightening screw ① of needle bar joint pin.

3.Unscrew 3 tightening screws of rotating hook, turn the upper wheel, and align graduation line B on needle bar ② to the lower end of lower shaft sleeve ③ of needle bar.

4.Move the rotating hook such that its threaded hooking tip is aligned to the notch on needle ④, ensure that the clearance between notch on needle ④ and thread hooking tip ⑤ ranges 0.5mm, and screw down the tightening screw of rotating hook.



注意:

- 1.为了防止缝纫机的意外启动, 请关掉电源之后再进行操作。
- 2.若机针④的缺口处与旋梭勾线尖⑤的间隙过小, 会磨损旋梭梭尖; 若间隙过



Caution:

- 1.To prevent the unexpected startup of sewing machine, trim off the power supply before the operation is conducted.

大，会引起跳动针。

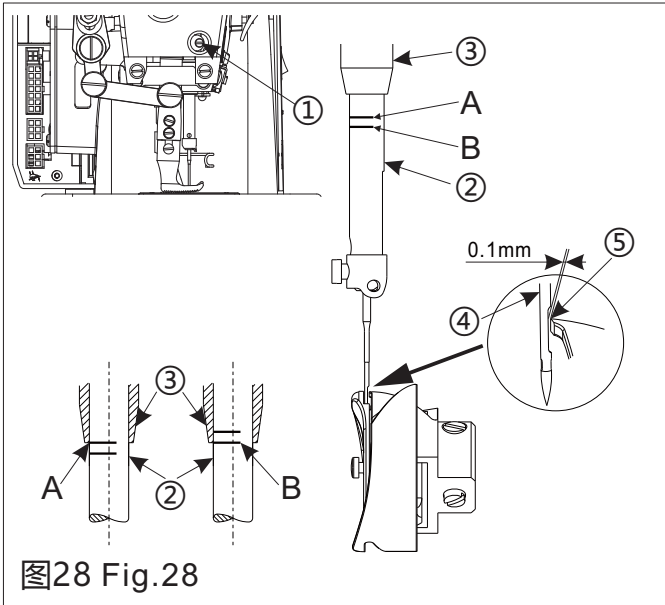


图28 Fig.28

2.If the clearance between notch on needle ④ and thread hooking tip ⑤ of rotating hook is too small, rotating hook tip may be worn; if the clearance is excessive, skipped stitch may take place.

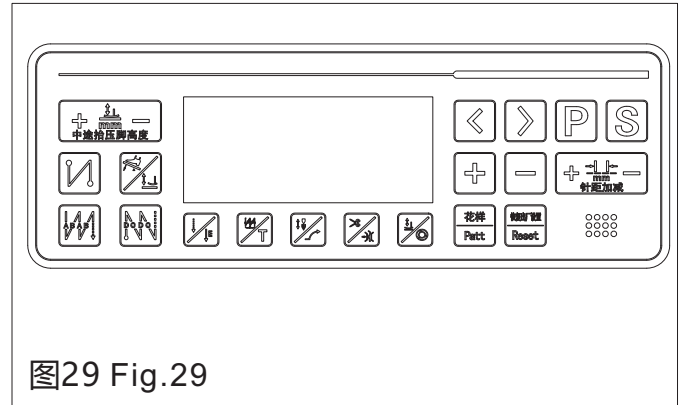


图29 Fig.29

## 23 调节倒顺缝针距误差(图29) Adjust the needle spacing error of reverse stitching (Fig.29)

针距已经由步进电机来控制，没有机械调整倒顺缝针距误差的功能，如需对倒顺缝针距误差进行调整，请直接调整电控相应参数，具体调整方法请参照电控使用说明书。

The needle pitch has been controlled by the stepping motor and has no function of mechanically adjusting the needle pitch error of reverse sewing. If it is necessary to adjust the needle pitch error of reverse sewing, please directly adjust the corresponding parameters of the electric control. Please refer to the operation manual of electric control for specific adjustment methods.

## 24 调节松线器的挺线(图30) Adjust the tension release (Fig.30)

压脚在提升范围内，夹线器上的夹线板有一个张开期，挺线的时间可进行调节。调解时，先卸下机头后侧面的橡皮塞，用螺丝刀旋松膝控提升杠杆螺钉①，这是松线凸轮②可以左右移动，往右移挺线慢，往左移挺线快。

The opening time of the thread tension discs can be adjusted. Remove the rubber cap on the rear of arm, and turn the screw ① then the thread release cam ② can be moved left or right. Move the cam rightward, the release time will be slow. Move the cam leftward, the release time will be quick.

## 25 调节油泵供油(图31) Adjust the oil pump (Fig.31)

当低速运转时，观察油窗，无喷油现象时，请转动供油调节板①，将其盖住油孔②。

If the oil is not circled observed from the oil gauge window at a lower sewing speed, turn the oil adjustment plate ① to cover the oil hole ②.

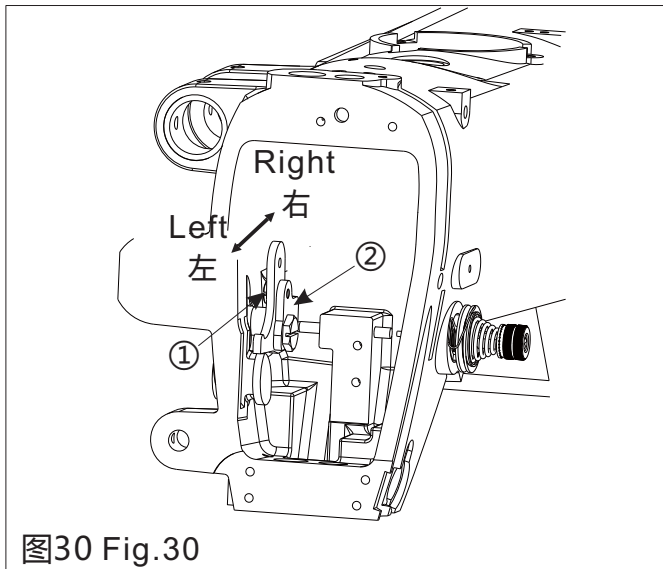


图30 Fig.30

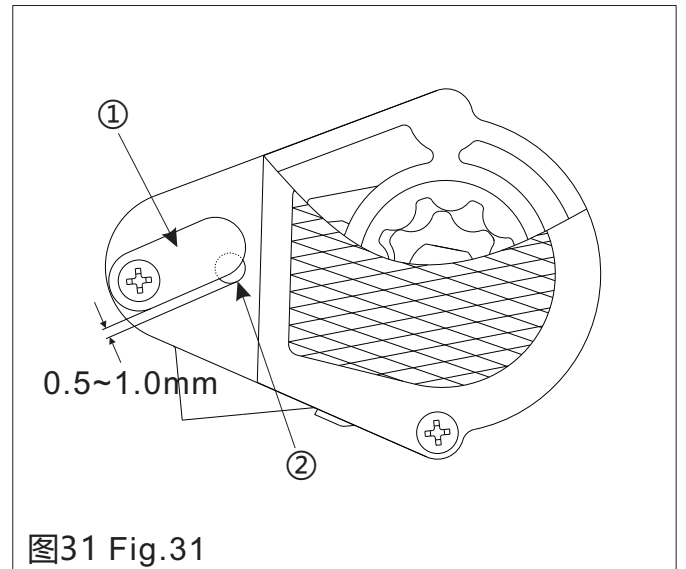


图31 Fig.31

## 26 调节摆压脚与小压脚交替提升量(图32) Adjusting the lifting amount if presser feet (Fig.32)

1.摆压脚①及小压脚②的垂直方向运动:

\* 摆压脚及小压脚是交替式的上下运动。

\* 摆压脚及小压脚上升高度一般是相同的或是小压脚的上升高度略低一些。

将挑线杆置于最下位置，放下压脚扳手，松开螺钉③使压降升降前曲柄④左右移动来调节交替提升量。

右移：两压脚交替提升量趋于相同。

左移：小压脚的提升量减小。

2.摆压脚、小压脚前后方向间隙的调节:

根据缝料的不同要改变摆压脚，小压脚的提升量。先将偏心轮连杆螺钉⑤旋松，然后上下移动来调节螺钉与压脚升降轴的中心距，中心距调小，则各自的提升量都增加。

3.摆压脚、小压脚前后方向间隙的调节:

为了在缝纫过程中，使摆压脚槽的前端与小压脚后端面不碰撞，必须保持适当的间隙C(3mm左右)。

旋松摆压脚前曲柄螺钉⑥，然后上下转动压脚摆动轴⑦来进行调节。

1.Vertical movement of presser foot ② and walking foot ① :

\*The walking foot , and presser foot move vertically one after another.

\*Usually the stroke if walking foot and presser same or the stroke of presser foot is slightly lower.

Place the thread take-up lever at the lowest position, and lower the presser bar lifter, loosen the screw ③ and move the upper feed lifting cam ④.

Move it rightward to make the stroke of two feet be equal.

Move it leftward to make the stroke of presser foot be smaller.

2.Adjusting the lifting amount of two feet to materials to be sewn:

Loosen the screw ⑤, and move the screw upward to increase the lifting amount or move the screw downward to decrease the lifting amount.

3.Adjusting the forward/backward clearance of the two feet.

To keep the front groove of walking foot not strike the rear of the presser foot, the clearance of C must be kept about 3mm.

Loosen the screw ⑥ of feed arm R, and then turn then turn the feed rock shaft ⑦ to adjust.

4.Adjusting the feed amount of walking foot ( Fig. A)

\*The standard ration of feed amount between feed dog and walking foot is 1:1.

The feed amount of walking foot can be adjust

#### 4. 摆压脚的调节 (见A部) :

\* 送布牙送料量与摆压脚送料量之间的标准比率为1:1 (同步送料)。

摆压脚的送料量可根据缝料不同进行调整, 松开螺母⑧, 上下移动摆压脚滑块⑨来调节。

向上: 减小中心距L, 摆压脚送料量减小。

向下: 增大中心距L, 摆压脚送料量增大。

-ed to suit for the materials to be sewn. Loosen the nut ⑧, and move the slide block ⑨ to adjust.

Upward: decrease the distance L to make the feed amount be smaller.

Downward: increase the distance L to make the feed amount be larger.

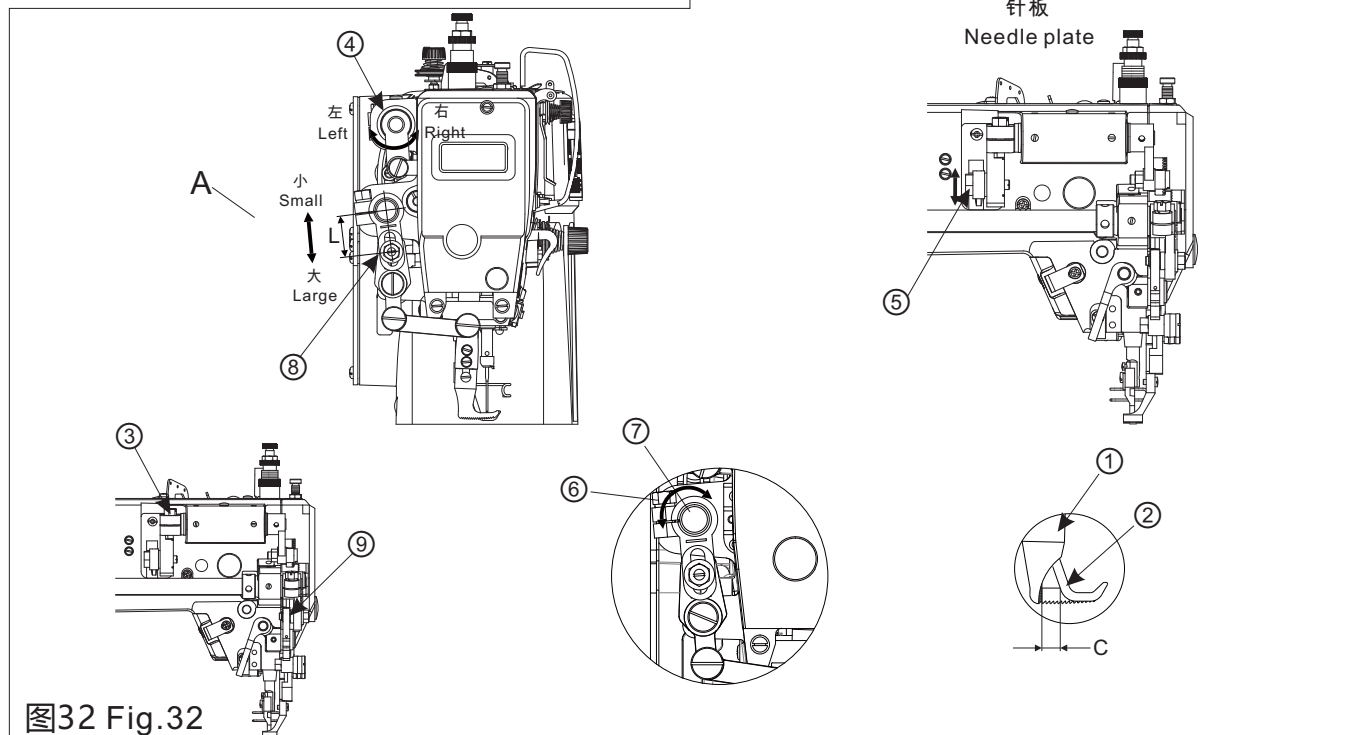


图32 Fig.32

## 27 剪线装置的调整 Adjusting the trimming mechanism

### 1. 剪线装置(图33) Trimming mechanism (Fig.33)

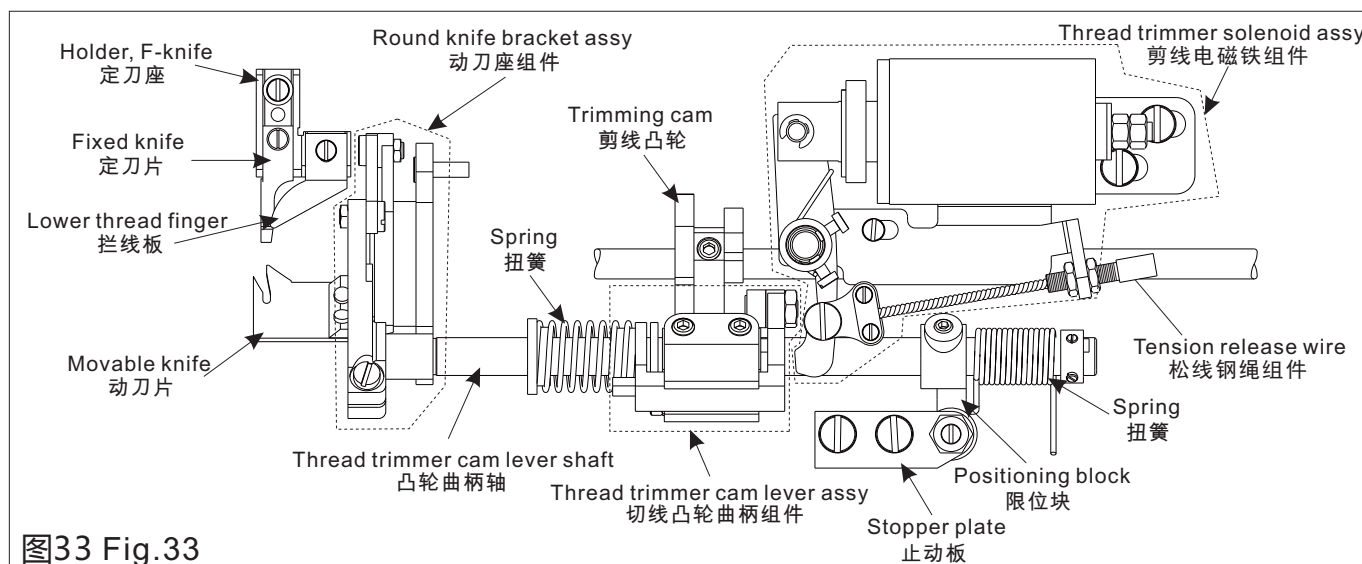


图33 Fig.33

## 2.定刀片与动刀片的关系 (图34)

1)定刀片①与动刀片②的位置应保证0.3mm。

2)可以如图所示进行调整定刀座或定刀片的位置。

3)移开旋梭定位勾，安装定刀座。

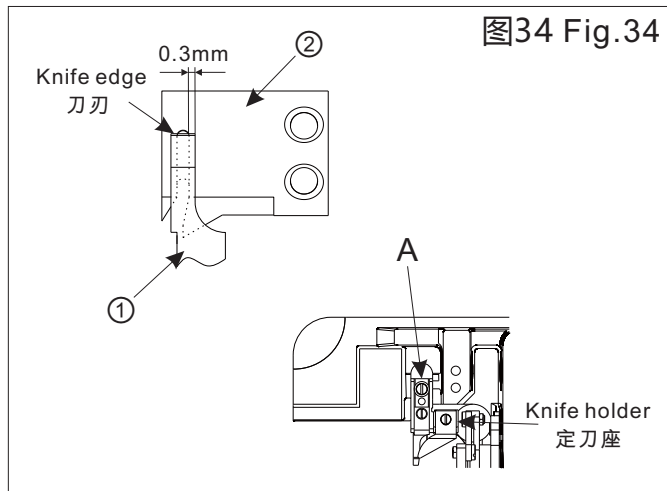


图34 Fig.34

## 2.The relation between fixed knife and movable knife(Fig.34)

1)The clearance between fixed knife ① and movable knife ② should be 0.3mm

2)Adjust the position illustrated by the Fig.34.

3)Move the bobbin case opener and adjust the holder of fixed knife .

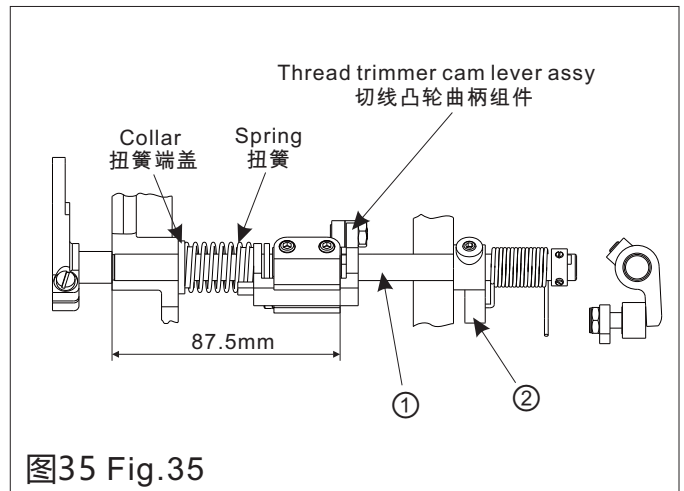


图35 Fig.35

## 3.凸轮曲柄轴 (图35)

1)装配时，将凸轮曲柄轴①最先装到底板上。

2)切线凸轮曲柄组件必须如图所示安装，固定在凸轮曲柄轴①上的平面处。

3)轻轻转动凸轮曲柄轴①，将限位块②安装在凸轮曲柄轴①上的平面处。

## 3.Thread trimmer cam lever shaft(Fig.35)

1)Install the shaft ① on the machine bed first.

2)Install the trimmer cam lever assy on the shaft ① as illustrated.

3)Slightly turn the shaft ①, and install the positioning block ② as illustrated.

## 4.安装剪线电磁铁 (图36)

1)剪线电磁铁的行程：

a.标准的行程为6.0mm。

b.通过调节螺母A来调整行程。

2)安装剪线电磁铁：

a.剪线电磁铁用螺钉B和C来固定。

b.在安装时必须保证驱动板①与凸轮曲柄②之间的间隙为1mm。

c.电磁铁工作时，凸轮曲柄③与凸轮曲柄②之间会有0.5mm的间隙，这是标准的情况。

如需调整,可以如图36所示箭头方向移动剪线电磁铁。

## 4.Installing the trimming solenoid(Fig.36)

1)The stroke of solenoid:

a.The standard stroke is 6.0mm.

b.Turn the nut A to adjust the stroke.

2)Install the solenoid

a.Fixed the solenoid by the screws B and C.

b.Be sure to keep the clearance between the driven plate ① and cam lever ② 1mm.

c.When the solenoid is active, there should be a 0.5mm clearance between the cam lever ③ and cam lever ②.

If need to adjust. Please move the solenoid base shown by the arrow.

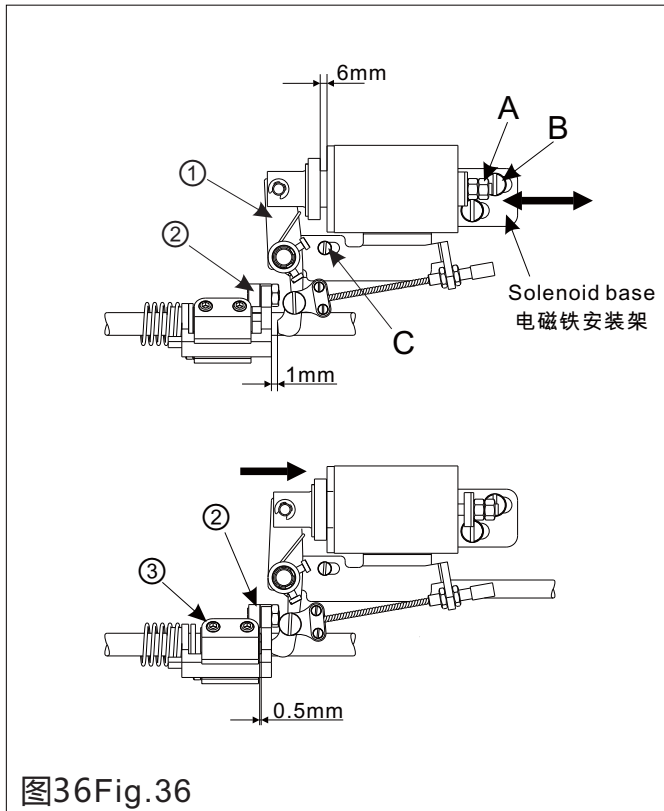


图36 Fig.36

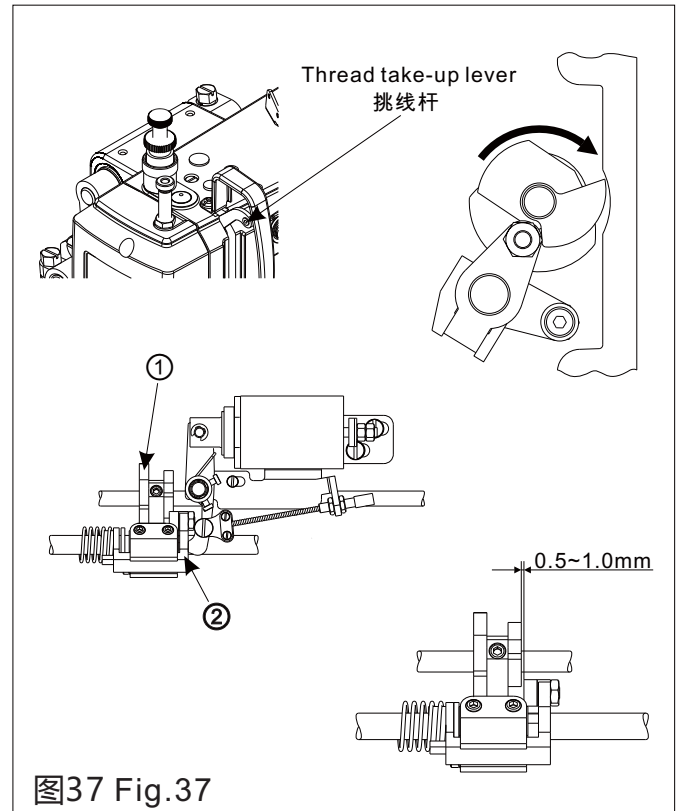


图37 Fig.37

### 5. 安装剪线凸轮 (图37)

- 1) 转动上轮，使挑线杆处于最高位置。
- 2) 手动打开电磁铁，移动并旋转剪线凸轮①，直到接触凸轮曲柄②的滚柱，然后固定凸轮。
- 3) 关闭电磁铁，使凸轮曲柄②回复到原始位置，这样凸轮①与凸轮曲柄②的滚柱端面会产生0.5~1.0mm的标准间隙。

5. Installing the trimming cam(Fig.37)
- 1) Turn the wheel, make the thread take-up lever in the highest position.
- 2) Set the solenoid active, turn the trimming cam ① until the cam is touched with the roller of the cam lever ②, then fix the cam.
- 3) Set the solenoid inactive and make the lever ② restore to the original position, there should be a 0.5~1.0mm clearance between the cam ① and the roller of the cam lever ②.

### 6. 刀片的调整 (图38)

- 1) 动刀片与定刀片的关系：  
如图所示，动刀片①与机针中心的距离为7.5mm，定刀片②与机针中心的距离为5mm。
- 2) 刀片的调整：  
开启剪线功能，这样剪线凸轮会使动刀片①向右旋转。当动刀片①转动到其最远位置时，与定刀片②的间隙为1.5-2.0mm。
- 3) 剪线压力的调整：  
如果剪线情况不良，尤其当线较粗时，只需增加剪线压力即可。剪线压力如下所述进行调整：

6. Adjusting the knives(Fig.37)
- 1) The relation between fixed knife and movable knife:  
The clearance between movable knife ① and needle center is 7.5mm, and the clearance between fixed knife ② and needle center 5mm.
- 2) Adjusting the knives  
Set the function of trimming thread active, the movable knife ① will turn rightward by the trimming cam. When the movable knife ① moves to its furthest position, the clearance between two knives ① and ② should be 1.5-2.0mm.
- 3) Adjusting the trimming pressure:  
If the thread trimming not smoothly, especially the thick thread used, just need to increase the trimming pressure. The trimming pressure is adjusted as follows: loosen the nut B, adjust the screw A to get the reasonable pressure.

松开螺母B，通过调节螺钉A来增加或减小剪线压力。

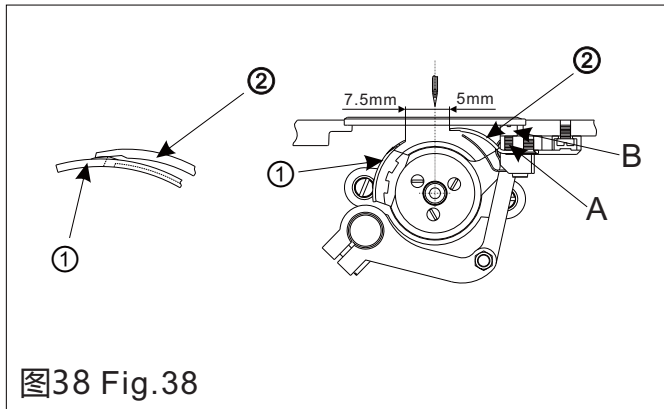


图38 Fig.38

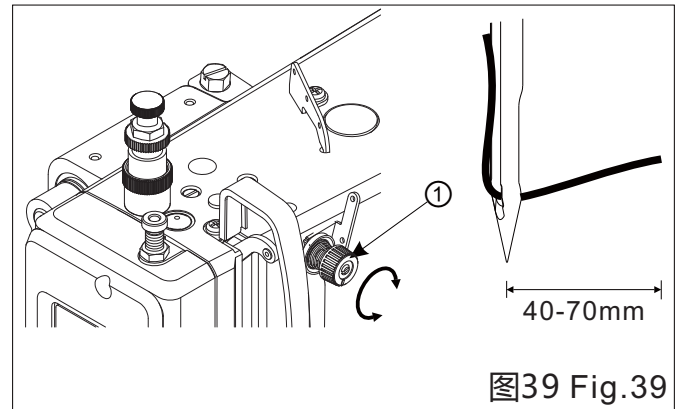


图39 Fig.39

## 28 调节剪线后的线头长度(图32) Adjusting the trailing length after thread trimming(Fig.39)

通过转动小夹线螺母①来调节。

在剪线的时候，夹线器松开，面线只有小夹线器提供的张力。标准面线线头的长度为40~70mm。如果小夹线螺母①旋紧，那么面线的线头长度就短；如果小夹线螺母①旋松，那么面线的线头长度就长。

Turn the nut ① to adjust the trailing length. At the time of thread trimming, the thread tension mechanism will release and the needle thread tension is only applied by the thread ①. The standard trailing length for the needle thread is 40-70mm. If increase the thread guide tension, the trailing length will be short; If decrease the thread guide tension, the trailing length will be longer.

# 零件手册

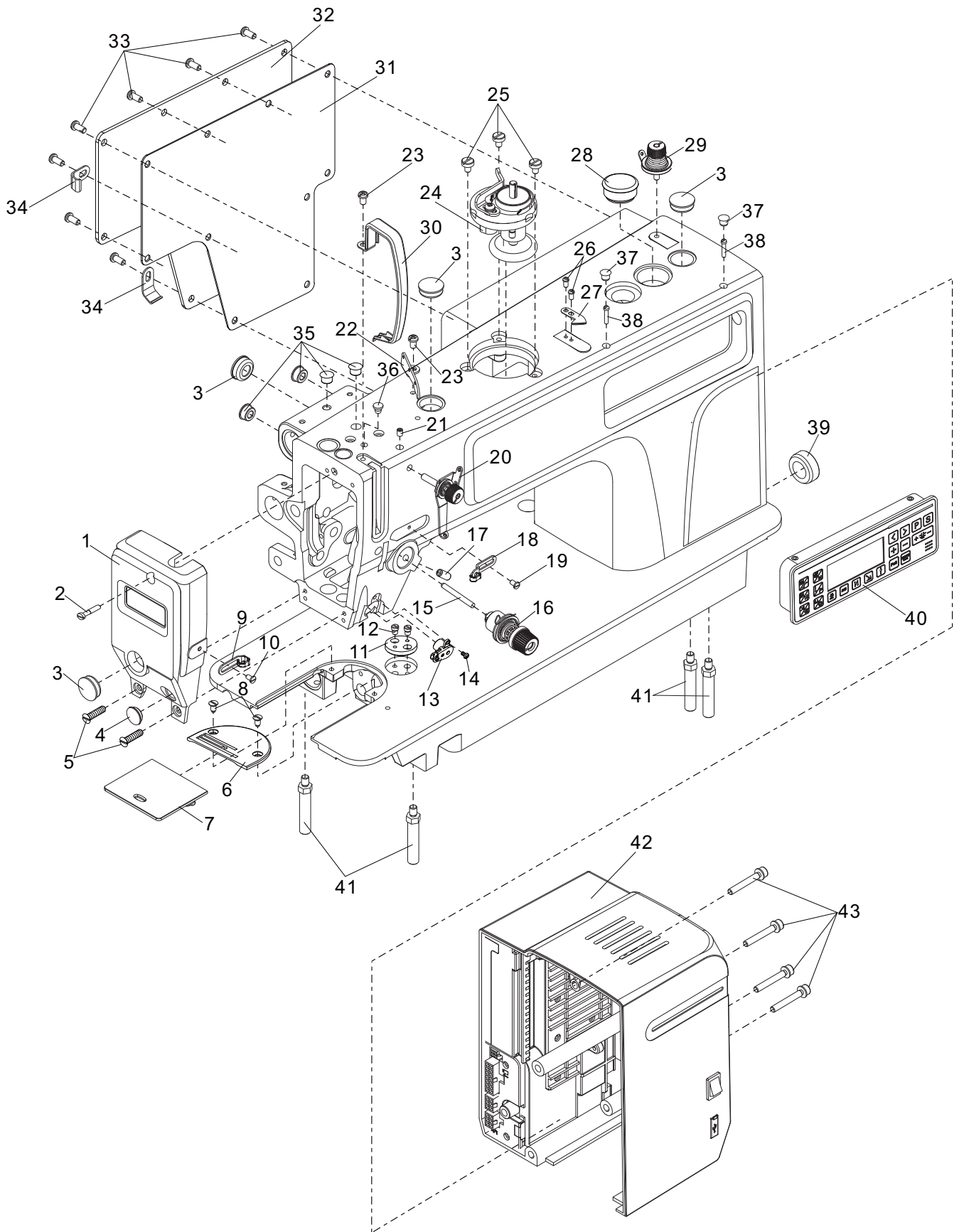
## PARTS BOOK

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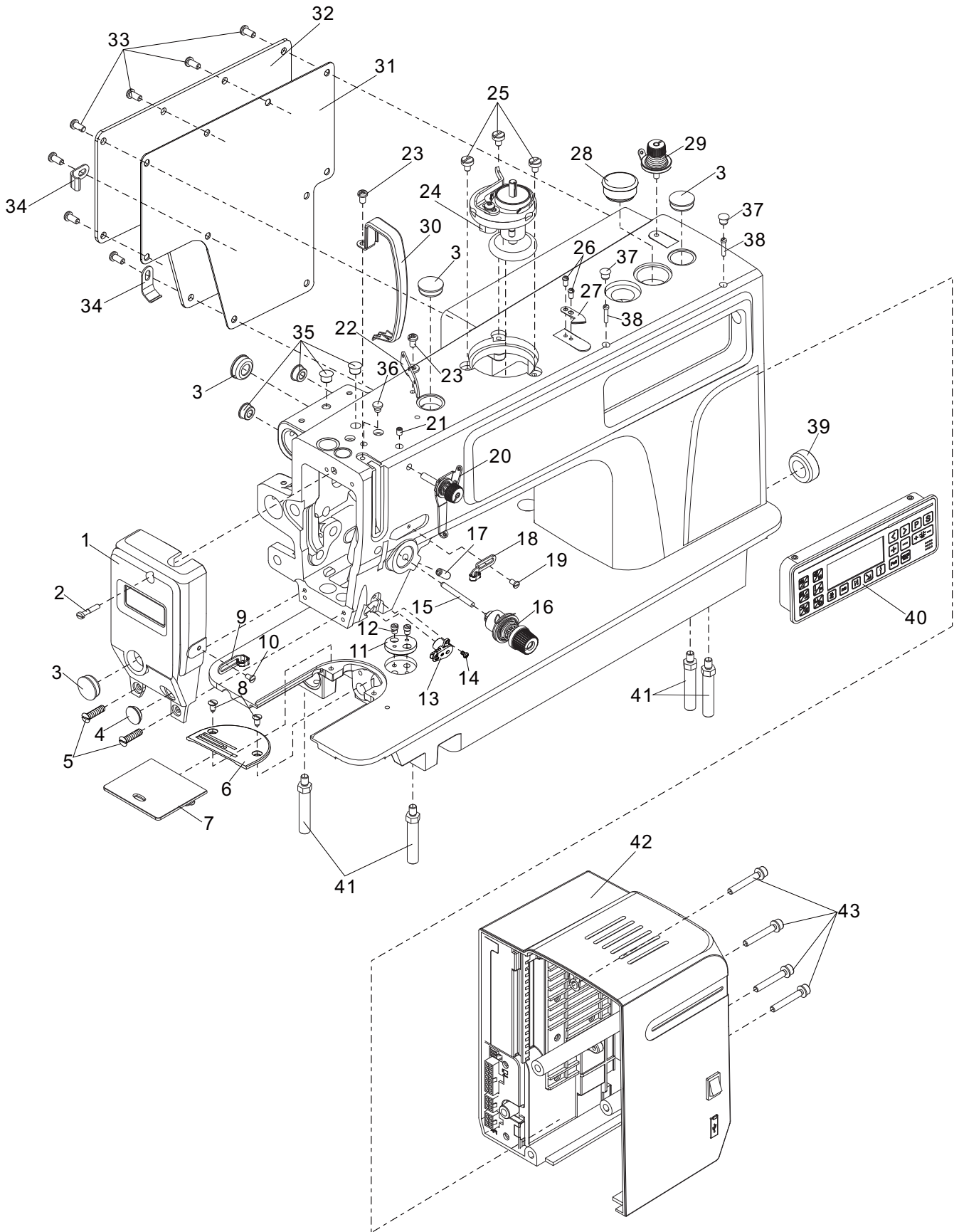
一	机壳部件 Casting Mechanism	25
一	针杆、挑线部件 Needle Bar & Thread Take-up Mechanism	29
三	压脚部件 Presser Foot Mechanism	31
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机壳部件  
Casting Mechanism





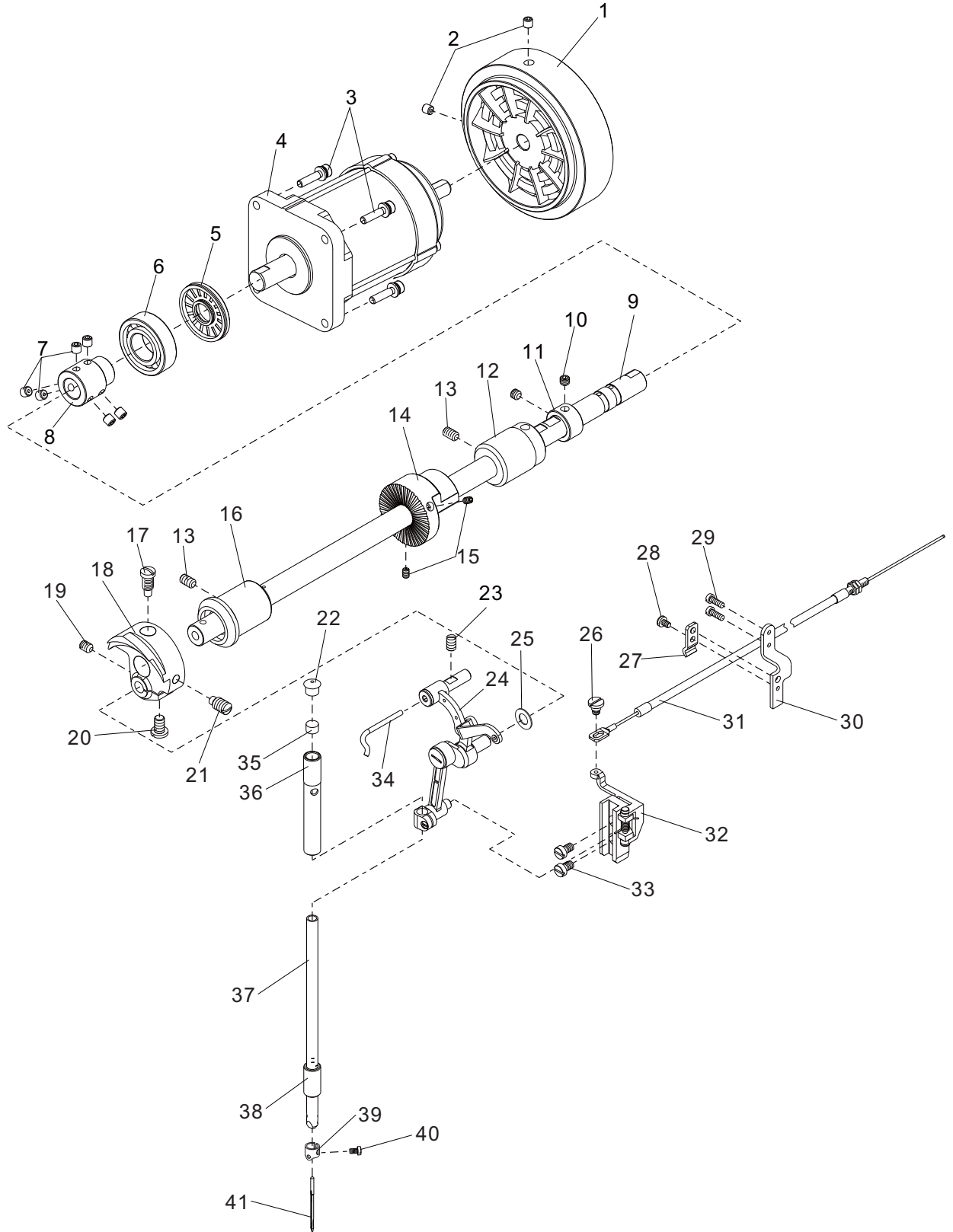
机壳部件  
Casting Mechanism





针杆、挑线分组件

Needle Bar & Thread Take-up Mechanism

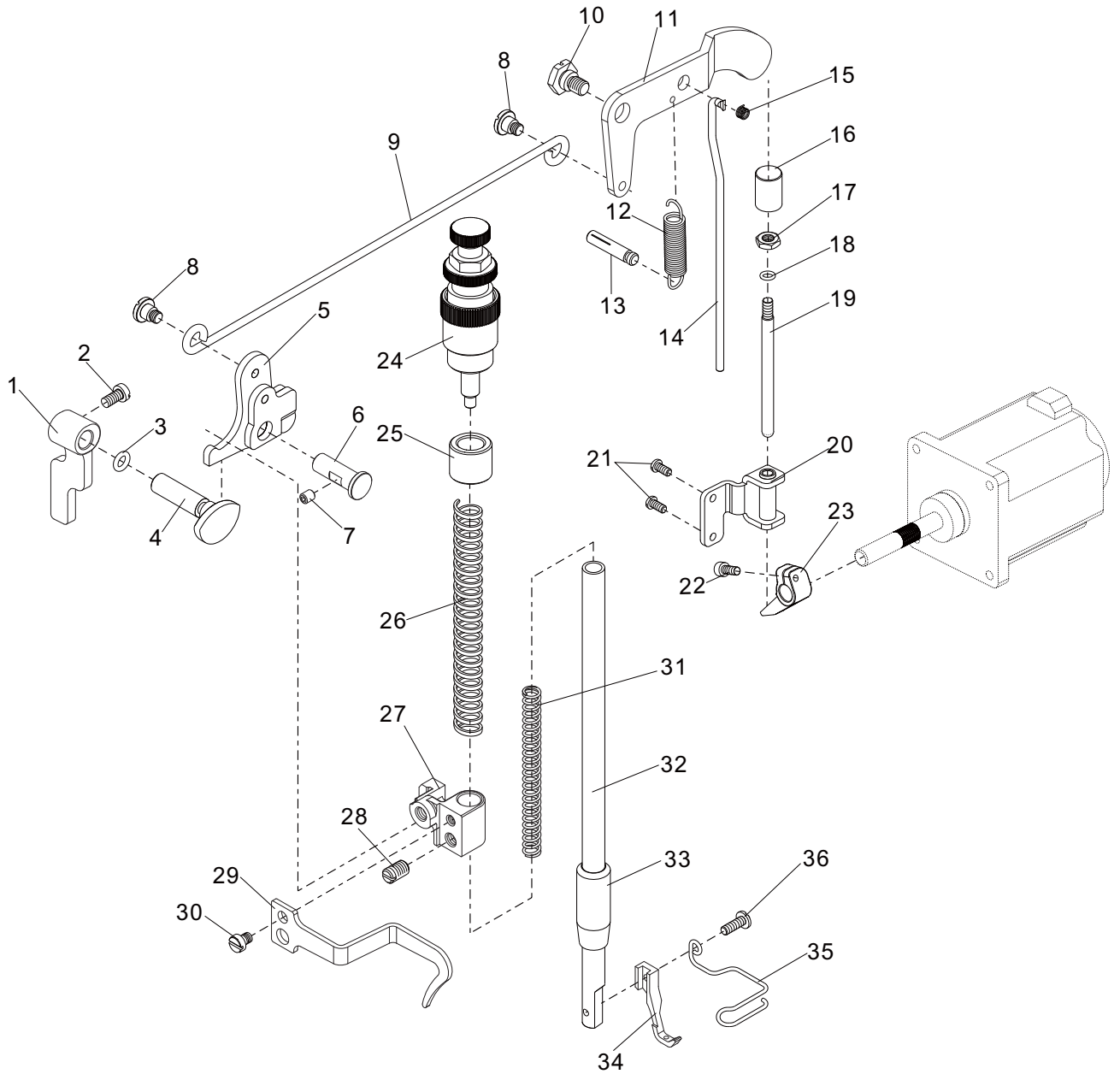


## 针杆、挑线分组件

## Needle Bar &amp; Thread Take-up Mechanism

序号 Ref. No.	件号 Part No.	名称	Name of part	数量 QTY	备注 Remark
1	20033001	手轮	Hand wheel	1	
2	10011232	螺钉	Screw	2	
3	10006157	螺钉组件	Screw	4	
4	10084618	主轴电机	Motor	1	
5	10058925	油封	Oil seal	1	
6	10050517	轴承	Bearing	1	
7	10011642	螺钉	Screw	6	
8	10080859	上轴后轴套	Upper shaft rear sleeve	1	
9	10083420	上轴	Upper shaft	1	
10	10038073	螺钉	Screw	2	
11	10043330	上轴挡圈	Collar	1	
12	10043332	上轴中轴套	Bush.M	1	
13	10010678	螺钉	Screw	2	
14	10080544	绕线器主动轮	Winder driving wheel	1	
15	10026903	螺钉	Screw	2	
16	10043335	上轴前轴套	Bush.L	1	
17	10010545	针杆曲柄定位螺钉	Screw	1	
18	10086706	针杆曲柄	Thread take-up crank	1	-M机型
	10043341	针杆曲柄	Thread take-up crank	1	-CT机型、-CX机型
19	10010065	螺钉	Screw	1	
20	10043340	螺钉	Screw	1	
21	10010082	螺钉	Screw	1	
22	10010587	橡胶塞	Rubber cap	1	
23	10013538	螺钉	Screw	1	
24	10049432	挑线机构	Thread take-up lever set	1	
25	10011622	垫片	Washer	1	
26	10046141	铰链螺钉	Screw	1	
27	10046135	松线压板	Wire holder.D	1	
28	10013518	软线固定板螺钉	Screw	1	
29	10045116	油线固定板螺钉	Screw	2	
30	10046150	松线钢绳固定架	Wire holder.U	1	
31	10046195	松线钢绳组件	Tension release wire	1	
32	10050045	针杆接头滑块导轨组件	Needle bar slider guide rail assembly	1	
33	10068445	滑块槽螺钉	Screw	2	
34	10008062	油线	Oil wick	1	
35	10043375	毛毡	Felt	1	
36	10011063	针杆上轴套	Bush.U	1	
37	10068229	针杆	Needle bar	1	
38	10043365	针杆下轴套	Bush.D	1	
39	10061033	针杆线钩	Thread guide	1	
40	10010588	夹针螺钉	Screw	1	
41	*	机针	Needle	1	

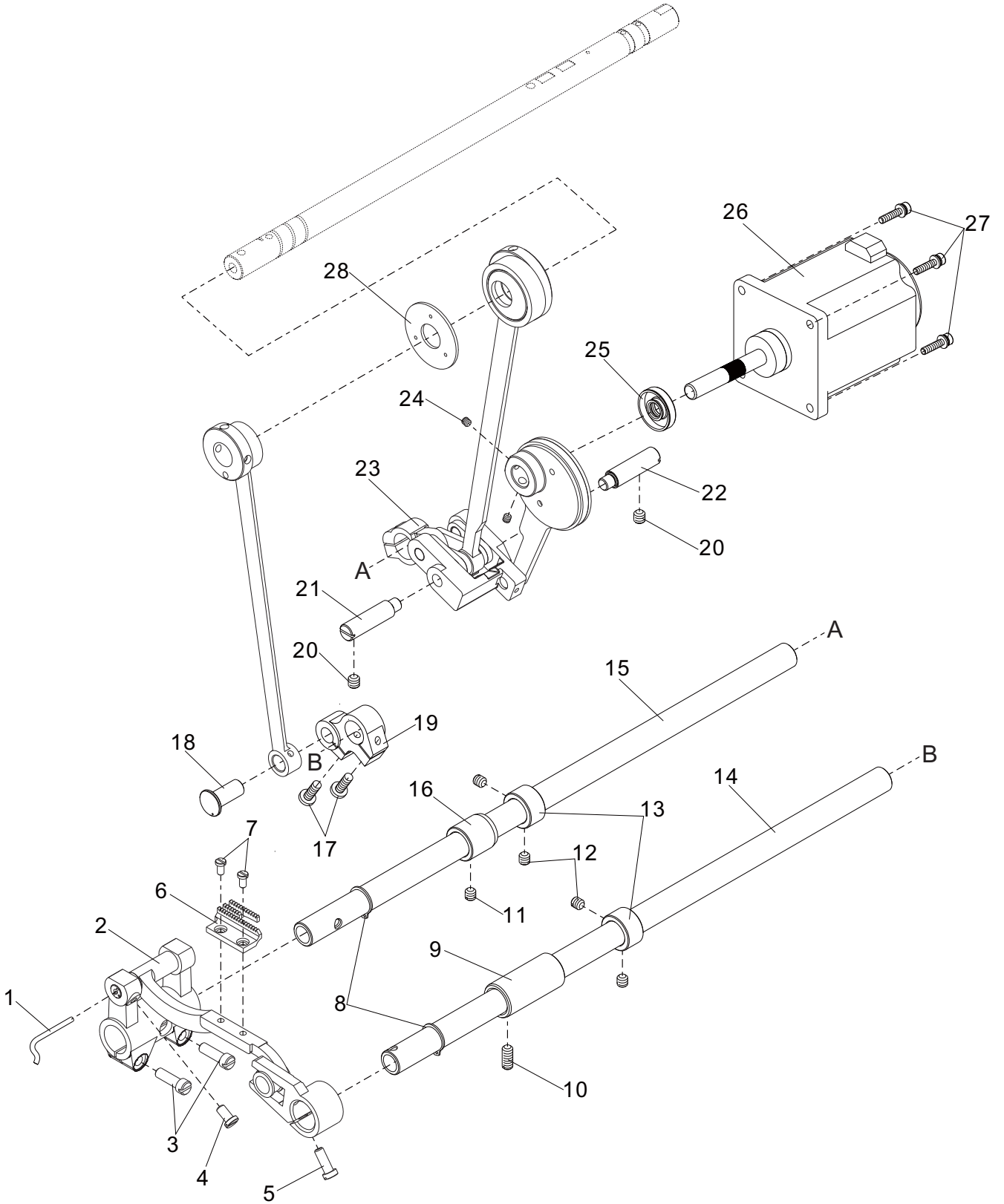
压脚部件  
Presser Foot Mechanism



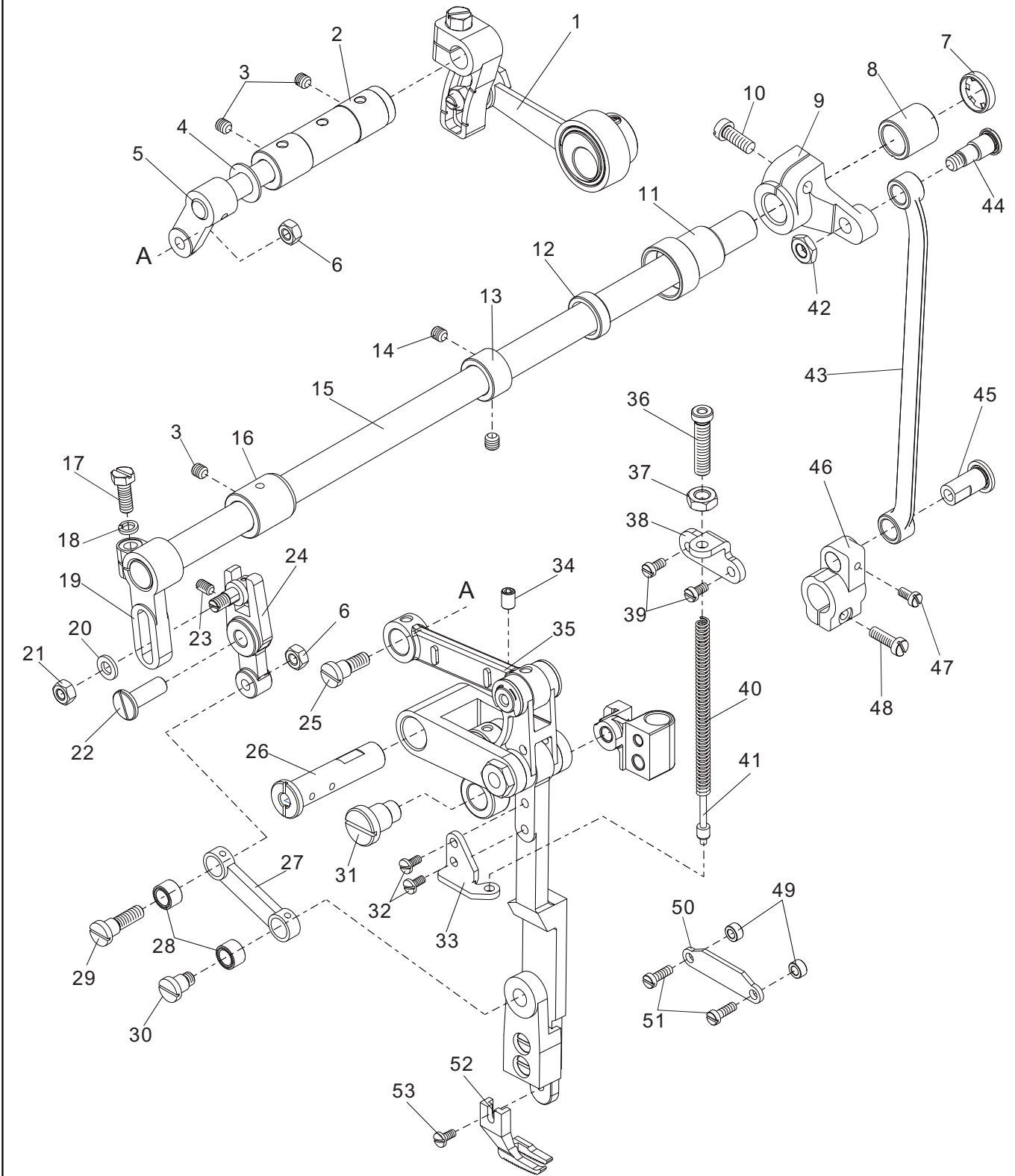


# 四

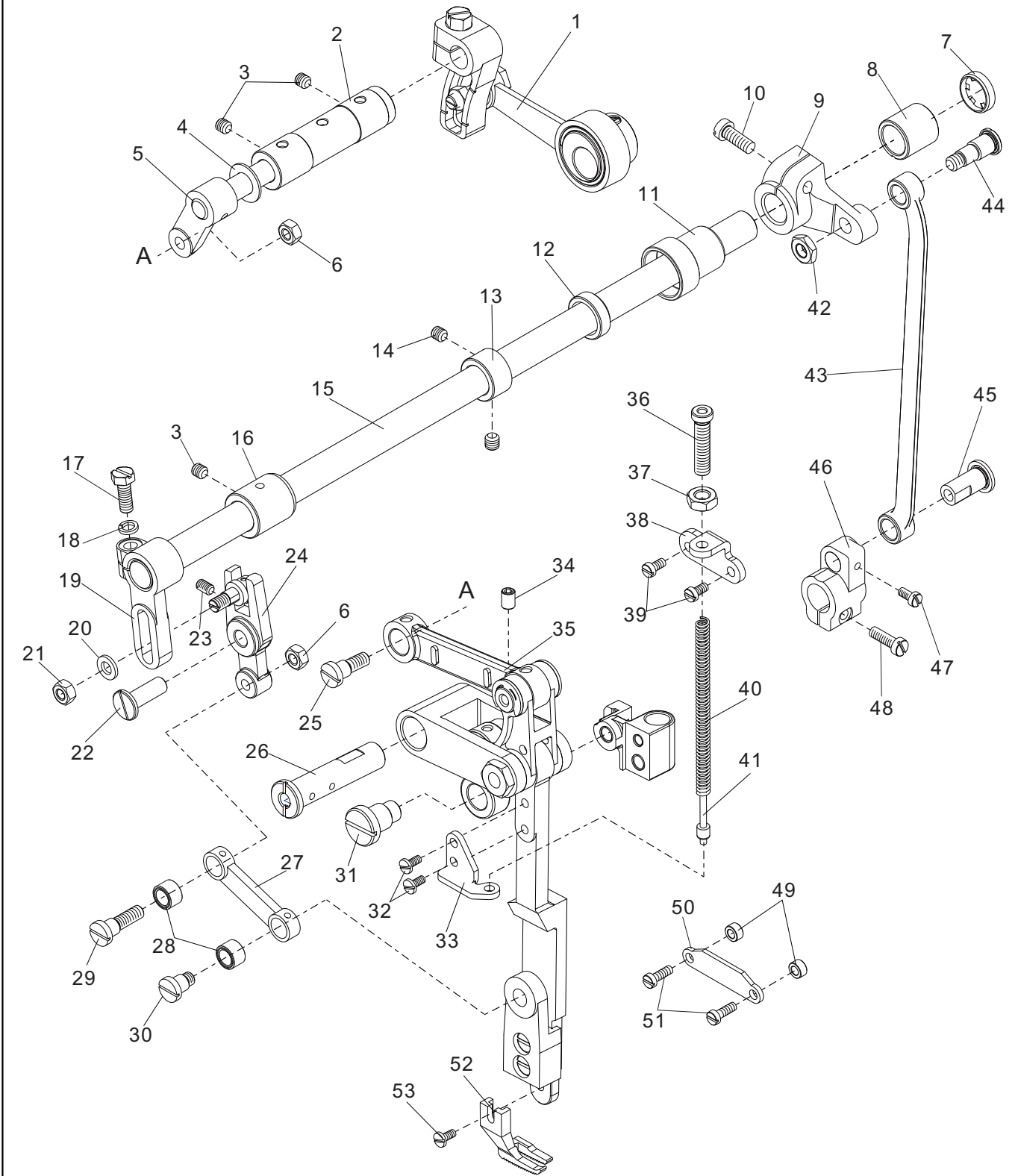
## 送料部件 Feed Mechanism







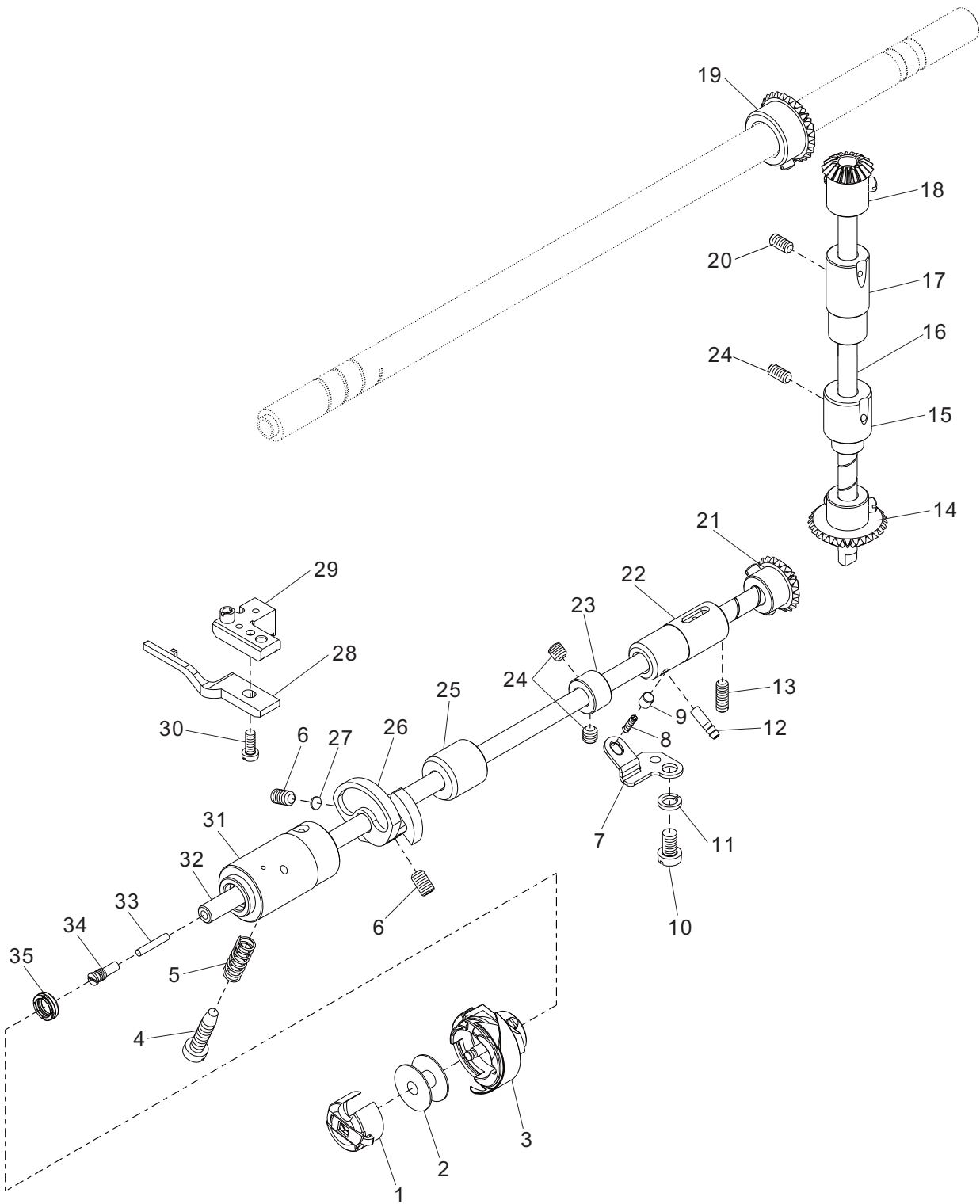
序号 Ref. No.	件号 Part No.	名称	Name of part	数量 QTY	备注 Remark
1	10085776	压脚升降偏心轮组件	Eccentric wheel assembly	1	-M机型
	10070559	压脚升降偏心轮组件	Eccentric wheel assembly	1	-Ct机型
	10071506	压脚升降偏心轮组件	Eccentric wheel assembly	1	-CX机型
2	10089860	压脚升降轴轴套	Bush	1	
3	10006264	螺钉	Screw	3	
4	10087202	垫片	Washer	1	
5	10084363	压脚升降轴组件	Feed lifting shaft assy	1	
6	10043500	压脚送料变动连接螺母	Nut	2	
7	10070579	橡胶堵塞	Rubber blockage	1	
8	10070578	摆动轴后套	Swinging axle rear sleeve	1	
9	10072356	压脚摆动后曲柄	Pressing foot swing rear crank	1	
10	10046184	曲柄螺钉	Crank screw	1	
11	10068193	摆动轴中套	Swinging axle sleeve	1	
12	10012536	油封	Oil seal	1	
13	10043330	上轴紧圈	Upper shaft tightening ring	1	
14	10038073	螺钉	Screw	2	
15	10080856	摆动轴	Swing shaft	1	
16	10070577	摆动轴前轴套	Swinging axle front axle sleeve	1	
17	10068220	螺钉	Screw	1	
18	10003077	垫圈	Grommet	1	
19	10046181	压脚摆动前曲柄	Pressing foot swing front crank	1	
20	10005504	螺母	Nut	1	
21	10080919	垫圈	Grommet	1	
22	10043496	销	Melt	1	
23	10026903	螺钉	Screw	1	
24	10068568	叉形杆组件	Fork shaped rod assembly	1	
25	10043498	螺钉	Screw	1	
26	10080869	摆动曲柄轴	Swinging crank shaft	1	
27	10068226	摆压脚连杆	Swinging pressure foot connecting rod	1	
28-1	10069507	轴承	Bearing	2	
28-2	10069508	轴承	Bearing	2	
28-3	10069509	轴承	Bearing	2	
28-4	10069510	轴承	Bearing	2	
28-5	10069511	轴承	Bearing	2	优先选用该分档
28-6	10069512	轴承	Bearing	2	
28-7	10069513	轴承	Bearing	2	
28-8	10069514	轴承	Bearing	2	
29	10068721	摆压脚连杆螺钉（长）	Screw long	1	
30	10068255	摆压脚连杆螺钉（短）	Screw short	1	
31	10040792	螺钉	Screw	1	
32	10010018	螺钉	Screw	2	
33	10043490	定位板	Positioning plate	1	
34	10010678	螺钉	Screw	1	
35	10083022	压脚摆动曲柄组件	Pressure foot swing crank assembly	1	
36	10043526	摆压脚调压螺钉	Screw	1	



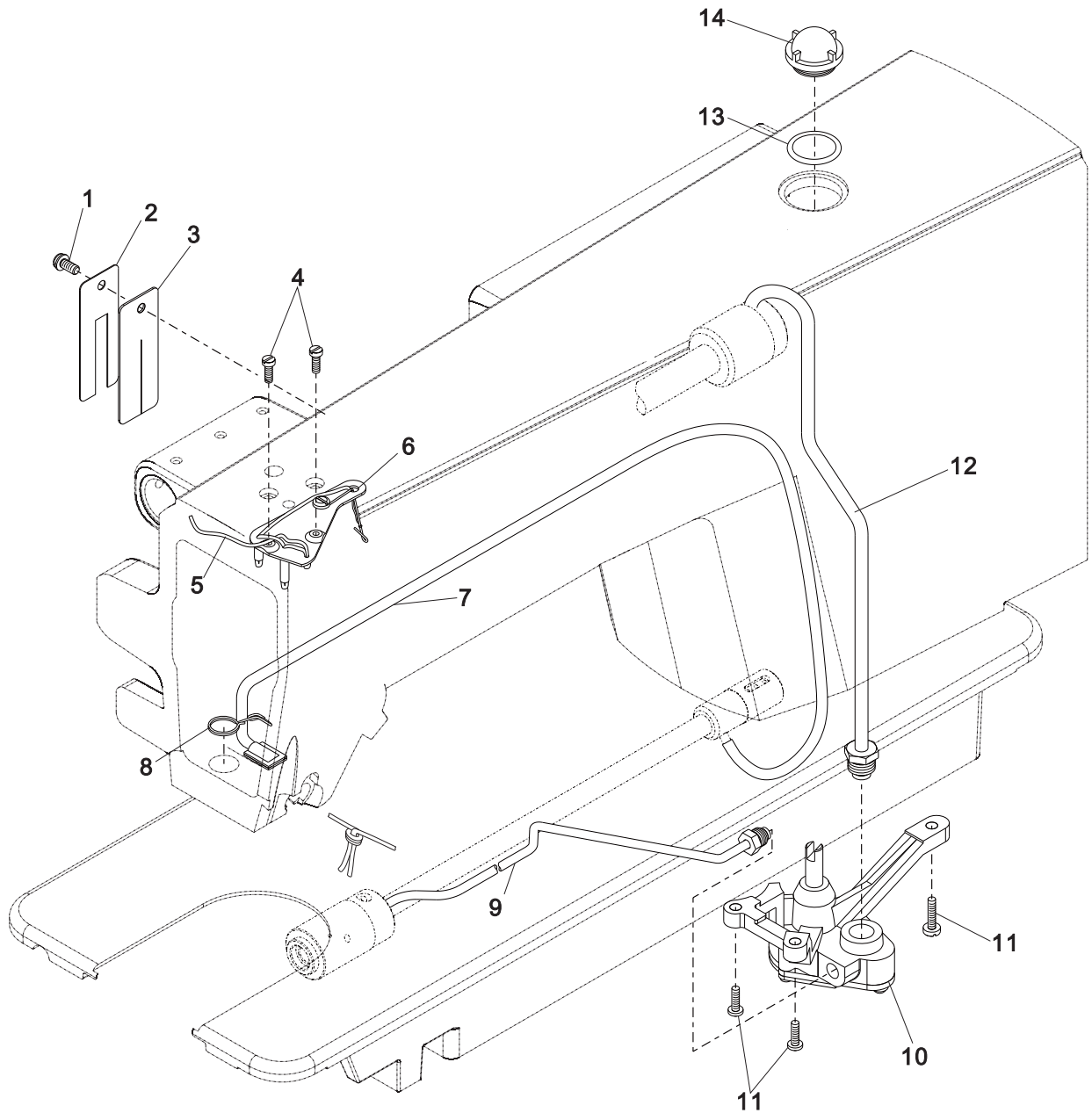




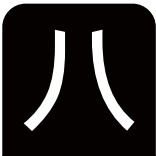
旋梭部件  
Hook Mechanism



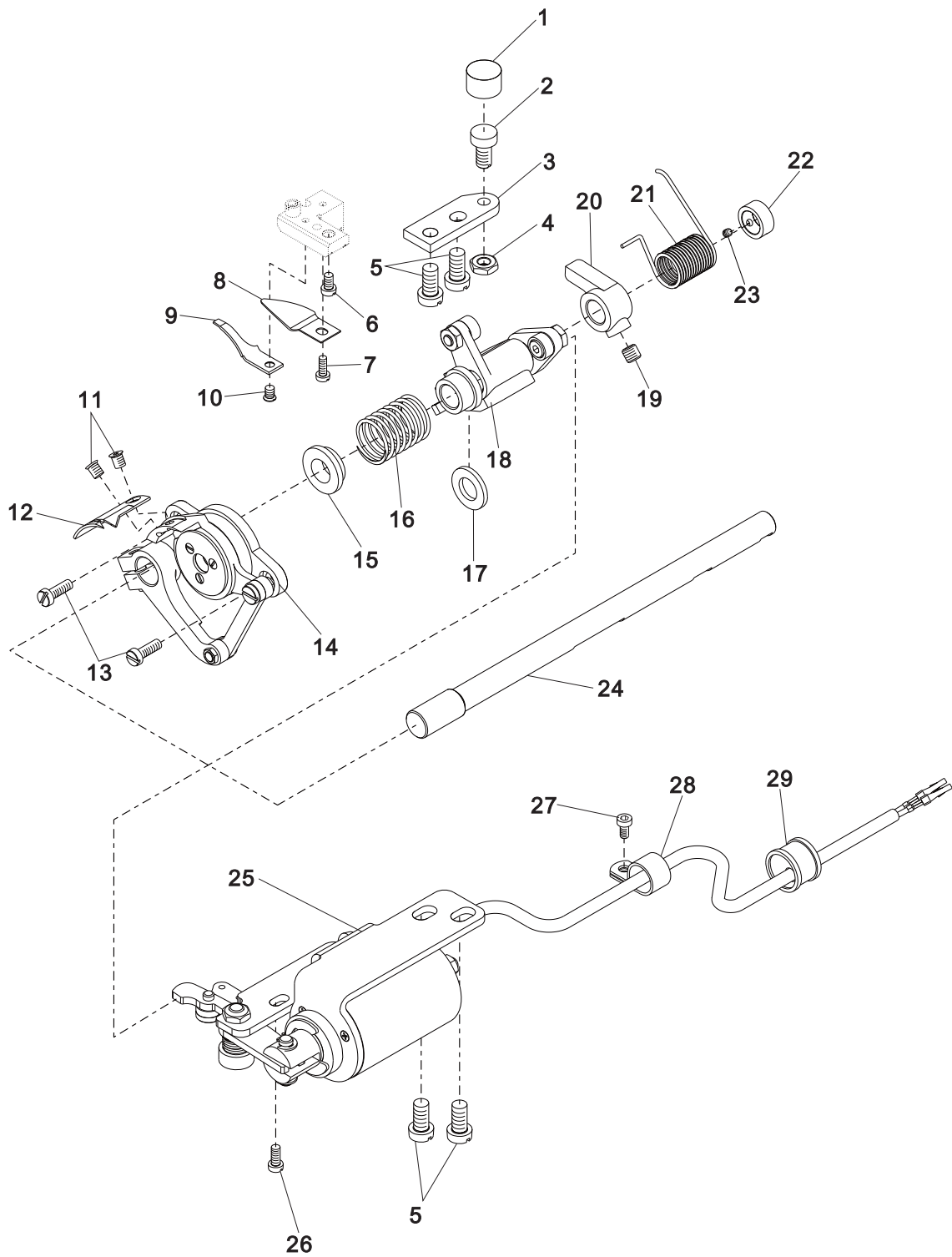








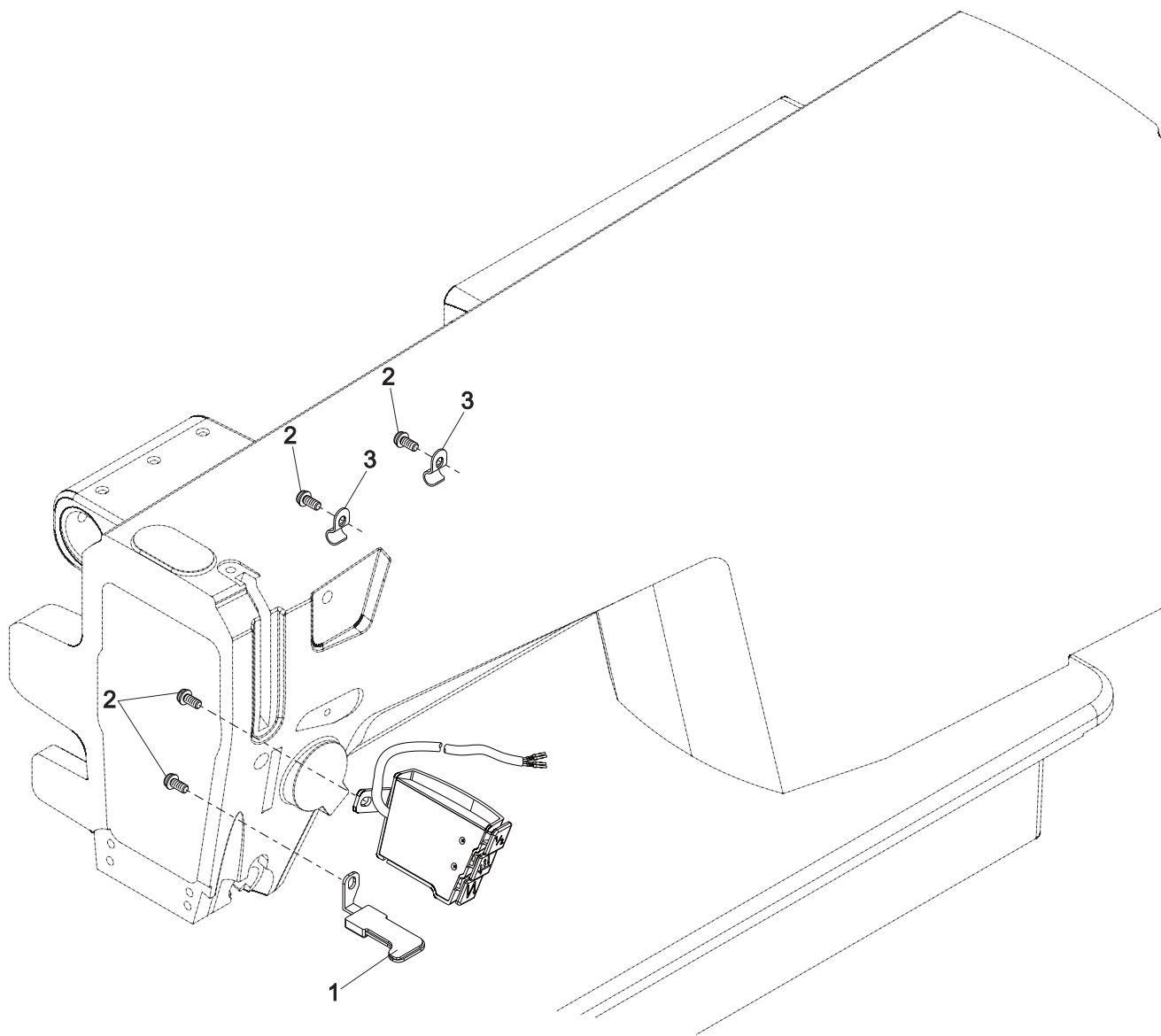
剪线部件  
Thread Trimming Mechanism





# 九

## 倒缝部件 Reverse Stitching Mechanism

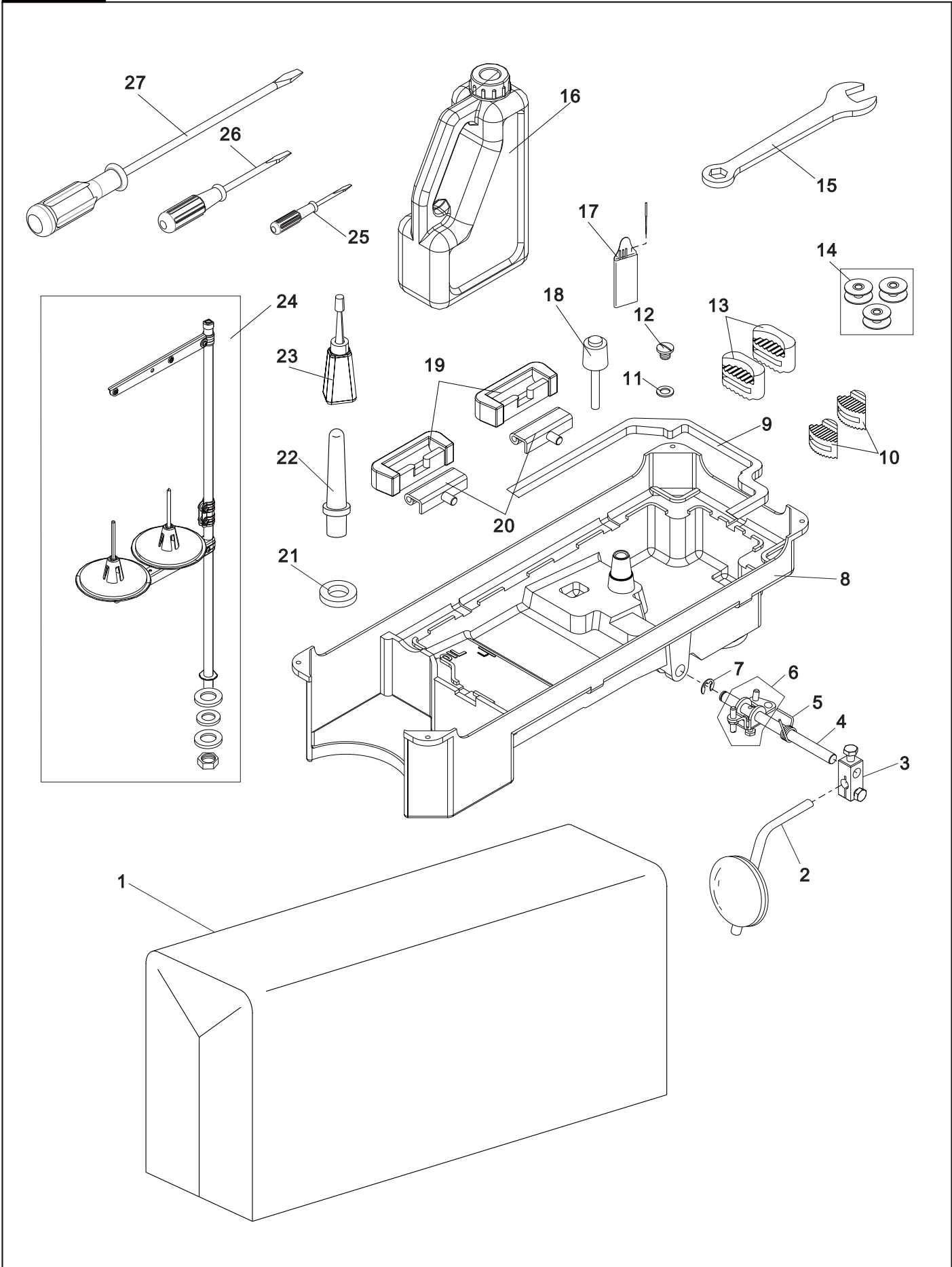






附件

Accessories For Model





\*请注意:由于产品改进,本手册内容可能会与实际购买的产品略有出入。

10091636



**浙江中捷缝纫科技有限公司**  
**ZOJE SEWING MACHINE CO.,LTD**

地址:浙江省玉环市大麦屿街道兴港东路198号  
ADD:DAMAIYU HING KONG ROAD NO.198,YUHUAN,  
ZHEJIANG,CHINA

国内营销中心: Domestic Marketing center  
TEL:0576-87338345 87338215 FAX:0576-87338222

国际营销中心: Oversea Marketing center  
TEL:+86-576-87377013 87378896 FAX:+86-576-87338266  
Http://www.zoje.com E-mail:export@zoje.com