

# 使用说明书

## Operation Instruction

电脑长臂上下复合送料厚料平缝机

Computer long arm upper and lower composite feed thick material leveling machine

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 (△) 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 (⊘) indicates something that you must not do.



..... This symbol (●) 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 $\pm 10\%$ 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 $5^{\circ}\text{C}$ - $35^{\circ}\text{C}$ 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。



缝纫机重约40公斤，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 sewing machine weighs approximately 40kg. 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。
-  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。

#### 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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## 1. 机器简介 Profile of the machine

本系列平缝机（自动剪线）单直针，采用连杆式送料，挑线杆挑线，旋梭勾线，形成301线迹。机头加长设计，令操作回转空间更宽敞。超长针杆行程，大互动量交替压脚，使缝厚能力更显出色。

本机采用油泵自动润滑,运转轻滑、噪音低、振动小,特别适合手箱包、汽车座垫、帐篷、沙发等皮革、帆布、厚重装饰布、织带类物品的缝制。

### EN

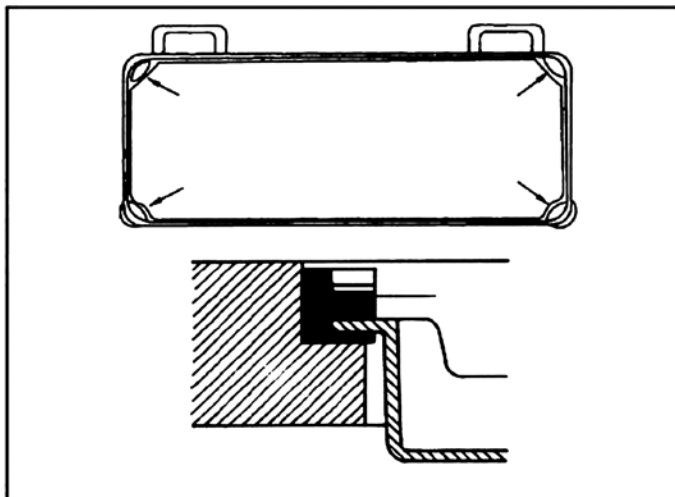
Thick material up and down feeding (auto trimming) a single straight needle sewing machine system, using the link type feed, thread take-up pick-line, Rotating hook line, form 301 stitch. Extended nose design, make operation more spacious space rotation. Long needle bar stroke, a large amount of interaction alternating presser foot, so that Seam thickness capacity is even more remarkable.

This machine adopts oil pump auto lubrication, smooth running light, low noise, vibration, especially for hand luggage, car seat, tents, sofas and other leather, Canvas, heavy fabrics, sewing items like ribbon.

## 2. 规格 Specifications

型号 Type	640E-TD3	
用途 Tailor	中厚料~厚料 Thick	
最高转速 Sewing speed	2200rpm	
最大针距 Stitch length	9mm	
针杆行程 Needle	38mm	
挑线杆行程 Thread take-up	73mm	
压脚交互量 Presser foot interactive quantity	2. 0-5. 5mm	
外压脚操作系统 The presser foot operating system	标盘 Standard plate	
机针 Needle	DPx17 23#	
旋梭 Hook	全自动润滑自动旋梭（剪线）	
润滑系统 Lubrication system	自动供油	
剪线装置 Trimming device	有o	
倒缝装置 Reverse stitching device	有o	
压脚提升高度 Press foot hoisting height control	手提 Hand control	6mm
	膝提 Knee	16mm
配套电机功率（W）		750mm

## 3. 机头的安装 Install the machine

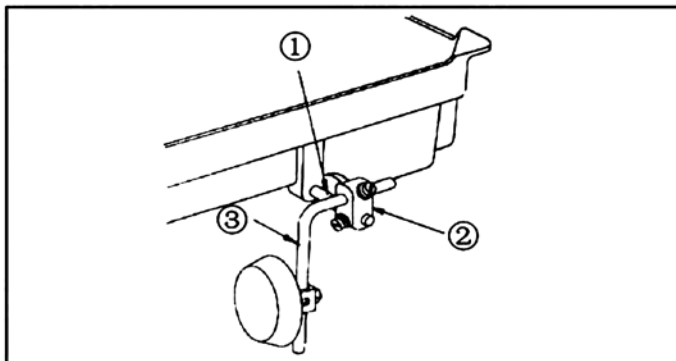


- 1) 将机头支座固定在工作台凹槽四角。
- 2) 将油盘四角搁在机头支架的中间。
- 3) 将机头连接钩放入底板孔内，与台板的机头铰链相嵌合，再将机头放到四只角的机头支座上。

### EN

- 1.Put the rubber cushion on the four corner of the tale socket.
- 2.Hold the oil reservoir in the middle of the rubber cushion.
- 3.Put the head connecting hook socket into table, then connect the head connecting hook socket and the head connecting hook which should be on the head, and the machine head will be put on the oil reservoir.

#### 4. 膝控装置安装 Install the knee-control device

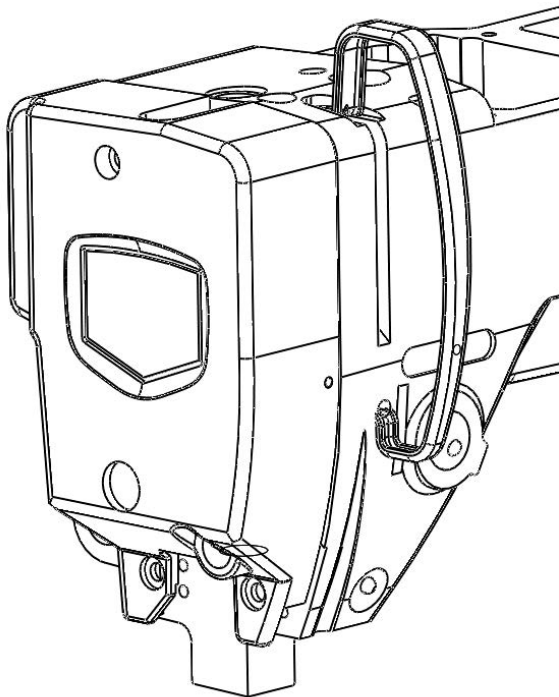


1. 尽量拉出膝控铰链轴①，进行适当安装。
2. 在轴上装上膝控碰块接头②。
3. 在膝控碰块接头上装膝控碰块弯轴组件③。

**EN**

1. Pull the device ① and adjust it.
2. Install the joint ②.
3. Install device ③.

#### 4-2. 挑线杆防护罩底部定期清理 The bottom of the rod shield is cleaned regularly.



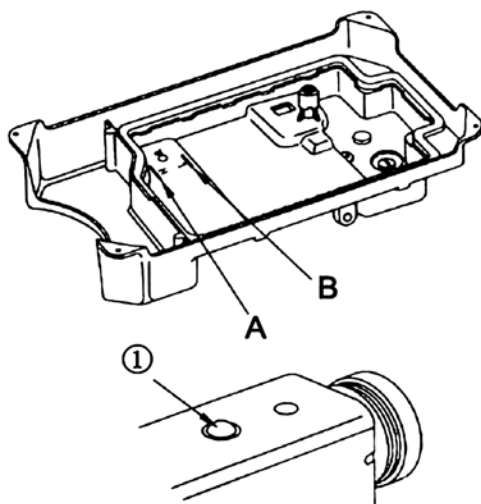
定期清理挑线杆防护罩底部积油，防止油污过多。  
Clean up the bottom oil of rod shield regularly to prevent too much oil.

## 5. 润滑 Lubricating



**注意**  
**CAUTION**

加油结束之前，不能接触电源开关，否则误踩踏板启动，可能会受伤事故  
加润滑油时，请使用保护身体的眼镜。手套防止与眼或皮肤接触，同时应放在小孩碰不到的地方。  
首次使用机械时，或长时间不使用时，必须加油。  
Plug in only after oil supply is finished. If the operator mistakenly steps on the pedal with the plug in, the machine will start automatically and can cause severe injuries.  
When handling lubricants, wear protective glasses or gloves to avoid contact with your eyes or skin. Inflammation may be caused otherwise. Never drink lubricants since they can cause vomiting or diarrhea. Keep out of the reach of children.  
Operate the machine only after adding oil when the machine is being used for the first time or has been left unused for a long time.



将油注入油盘A位置。  
在操作过程中，需经常检查油位高度，如油位低于B位置时须加油至A位置。

注意：操作机器时，可以通过油窗①检查油润滑情况。

**EN**

Fill oil pan with new special oil up to A .  
In the operating process, need to check the level of the oil level. After filling the oil pan, the oil surface should lie A lines.

Note: Operating machine, Can through the oil window ① check the oil lubrication condition.

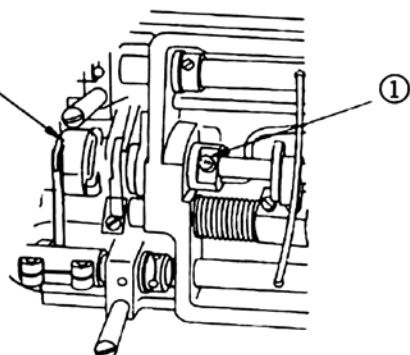


**注意**  
**CAUTION**

在以下机器的调整时，请关闭电源开关。误踩踏板机械启动时，可能会发生身体损伤事故。  
使用离合式马达时，关闭电源后，由于惯性，马达会暂时旋转。马达完全停止后，进行操作。  
Always turn off the power when mounting a needle. If the operator mistakenly steps on the pedal while the power is on, the machine will start automatically and can result in physical injuries.  
When using clutch motor, be aware that the motor will continue to rotate for a while even after the power is switched off due to inertia. Start to work on the sewing machine only after the motor has come to a complete stop.

## 6. 旋梭润滑的调整 Rotary hook lubrication adjustment

旋梭  
hook



减少 lower  
增加 Increase

顺时针 (+) 转动油量调整螺丝①，出油量会增加，相反逆时针 (-) 转动油量调整螺丝①时，出油量会减少。

注：调整该螺钉后，机器应至少运转30秒钟，然后检查旋梭出油量。

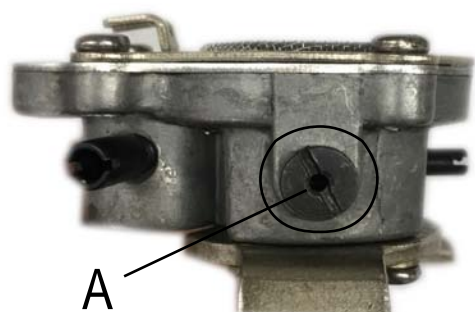
**EN**

When you turn clockwise (+) the lubrication adjustment screw ① inserted in the front bushing of the lower shaft, the amount of oil will increase while turning to counterclockwise (-) will decrease the amount.

Note: Adjust the screws, the machine should be running at least 30 seconds, then check whether the oil into the hook.



## 7. 油泵的调整 Pump adjustment



调整方法如下:

通过调整调节螺钉A进行油泵油量大小调整。

**EN**

**Adjustment:**

The oil volume of the pump is adjusted by adjusting the adjusting screw A.

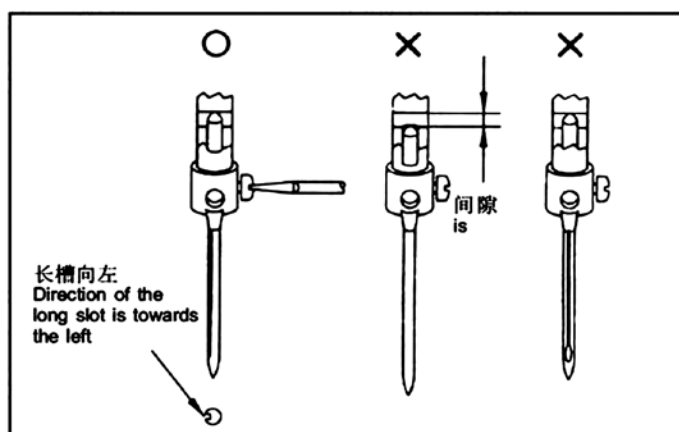
## 8. 安装机针 Replace needles



**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.



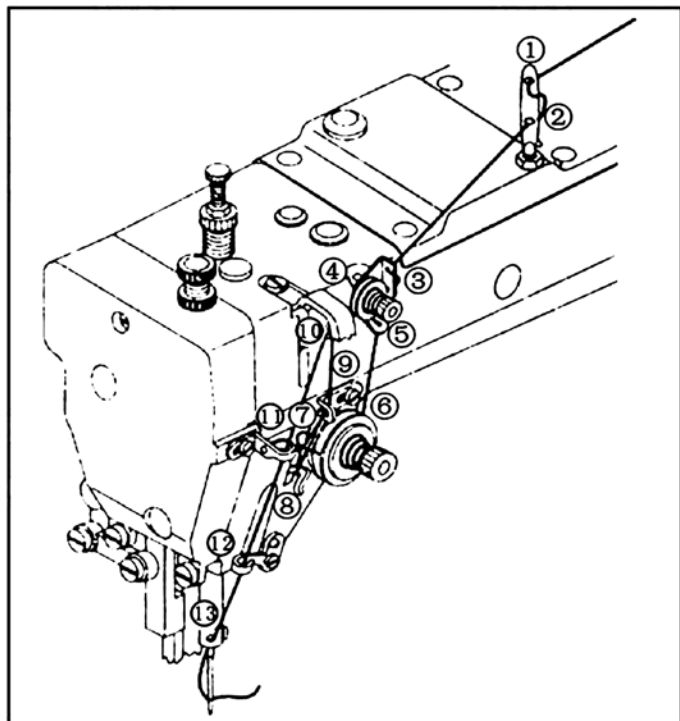
插入机针至底部, 拧紧螺钉, 保持长槽方向向左.

注意: 用涤纶线倒缝时若发生断线, 前机针的长槽向前侧转, 有可能会避免该情况发生. 一般避免将长槽朝向后侧.

**EN**

Needle should reach the bottom of needle bar, and then tighten the screw. Direction of the long slot is towards the left.

## 9. 穿面线 Routing upper thread



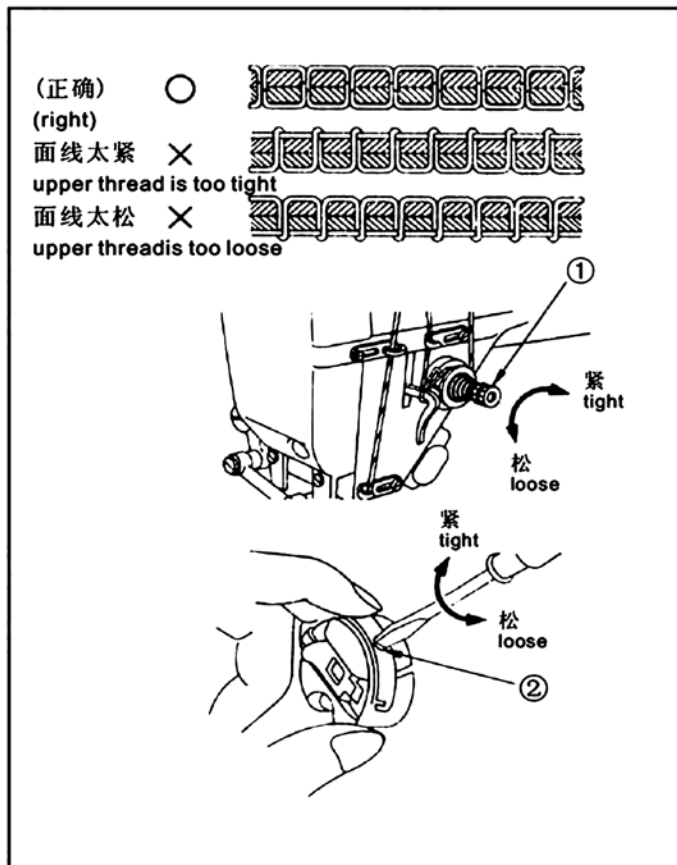
将挑线杆转到最高位置, 然后如图所示穿线.

**EN**

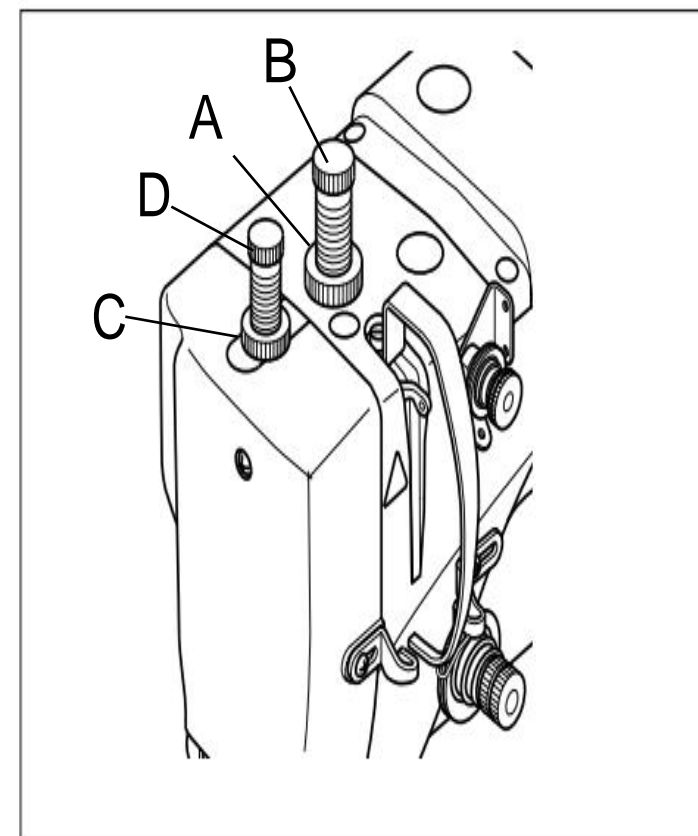
Into the thread take-up position, then as shown threading.



## 10. 线张力调整 Adjusting the thread tension



## 11. 压脚压力的调整 Presser foot pressure



### 1. 线调整装置

如图所示，顺时针转动压线螺母①，面线张力会变强，相反则会变弱。根据布料、缝线、线距等缝纫条件，线的张力会有所不同，因此需要按照不同情况，进行调整。

### 2. 底线张力调整

如图所示，在线调整螺钉②上利用起子，顺时针转动，底线张力会变强，相反则会变弱。

### EN

### 1. Thread control assembly

Like in Figure, turning the tension adjustment nut ① of the thread tension control assembly clockwise makes the upper thread tension stronger and counterclockwise makes it weaker. The result of the needlework depends on the sewing conditions such as the sewing material, used thread and stitch length. So please adjust as desired.

### B. Adjusting the thread take up tension

As in Figure 27, insert the driver into the groove ② of the thread tension control assembly. Turn clockwise to make the spring tension stronger and counter clockwise to make it weaker.

### 调节压脚压力

1、旋松调压螺钉锁紧螺母A。

2、转动调压螺钉B来调节压脚压力。

\*在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A。

### 调节送料压脚压力

1、旋松锁紧螺母C。

2、转动调节螺钉D来调节送料压脚的的压力。

3、拧紧锁紧螺母C。

### Adjust foot pressure

1, loose pressure adjustment screw lock nut A.

2, turn the pressure adjustment screw B to adjust the foot pressure.

:: The pressure on the foot is as weak as possible to ensure that the material does not slip.

3, tighten the pressure adjustment screw lock nut A.

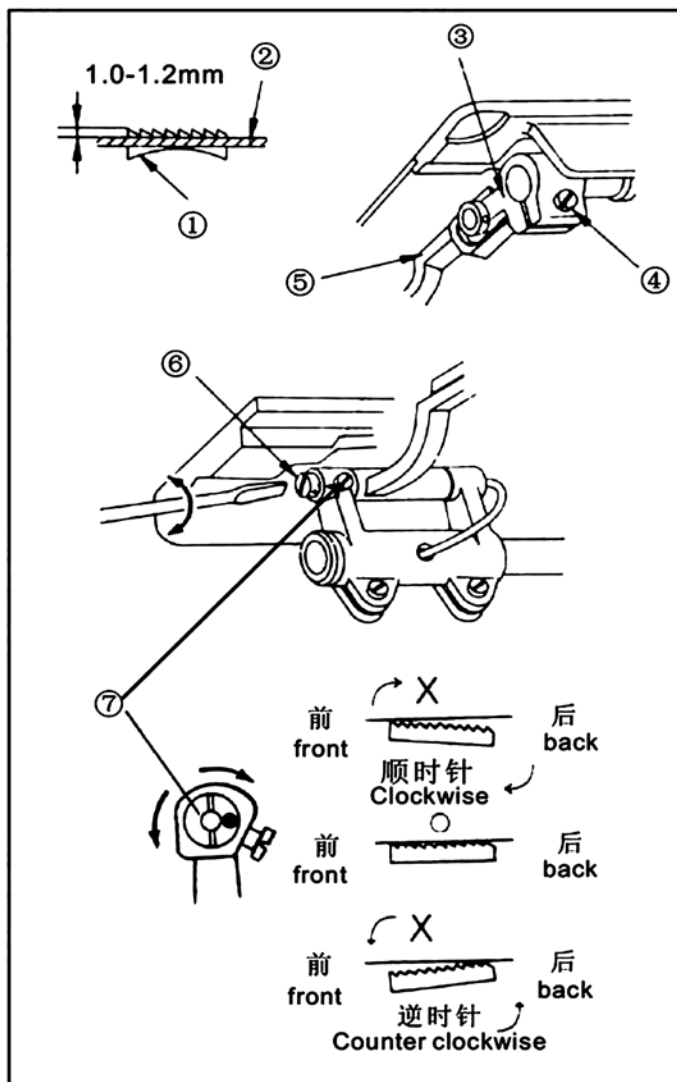
### Adjust feed pressure

1, loose lock nut C.

2, turn the adjustment screw D to adjust the pressure of the feed pin.

3, tighten the lock nut C.

## 12. 调整送布牙 Adjusting the feed dog



### 1. 送布牙高度

- (1)送布牙①应高于针板②平面1.0-1.2mm为宜。
- 1)放松抬牙曲柄(前)③上的螺钉④,然后将牙架⑤上下移动。
- 2)调整结束后,旋紧螺钉④。

### 2. 调整送布牙倾角

- (1)旋松螺钉⑦。
- (2)用螺钉刀左右旋转牙架曲柄偏心轴⑥进行整。若顺时针转动,牙架曲柄偏心轴⑥、牙齿前高后低,若按相反方向逆时针转动牙架曲柄偏心轴⑥、牙齿前低后高。
- (3)调整结束,旋紧螺钉⑦。

**EN**

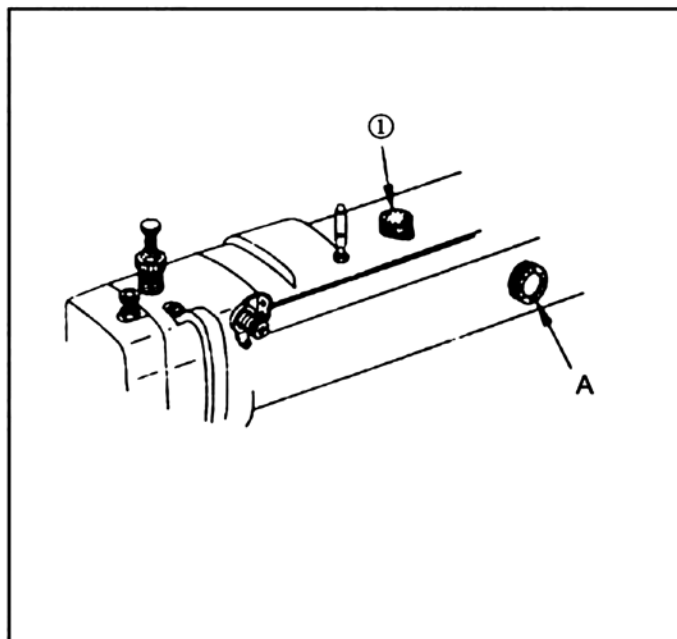
### 1. Feed dog height.

- (1)feed dog ① should higher than ② 1.0mm.
- (2)adjust the feed dog height.
- 1)loose the screw ④ in crank ③ and lower down ⑤ .
- 2)after adjust,tight the screw ④.

### 2. Adjust the feed dog angle.

- (1)loose screw ⑦.
- (2)adjust ⑥.
- (3)finish and tightening ⑦.

## 13. 内外压脚的调整 Adjusting the auxiliary and upper feed presser foot



### 1. 交互运动的调整

- (1)内外压脚的交互量调整范围为2mm-5.5mm。
  - (2)内外压脚的交互运动量可通过机壳上的提升压脚标盘A来调节。
  - (3)上盖板的标盘①是限制提升压脚标盘A的。
- 注:由小到大进行调整时,先调整标盘①,再调整标盘A;相反,由大到小进行调整时,先调整标盘A,再调整标盘①。

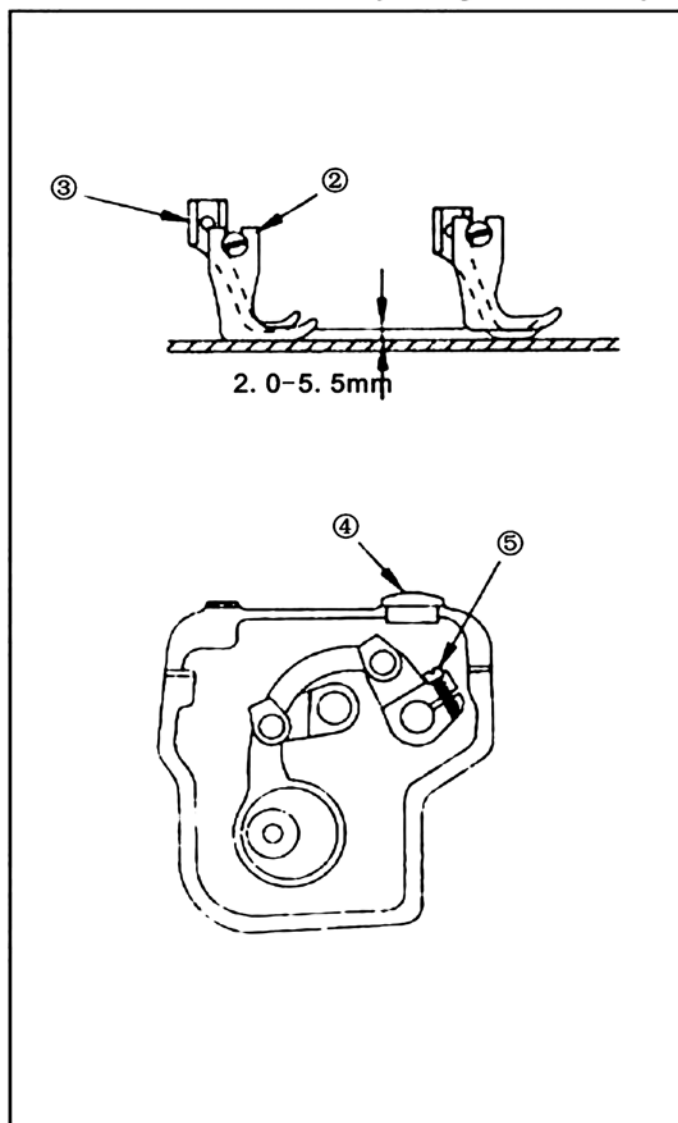
**EN**

### 1. Interactive motion adjustment

- (1)The vertical running range of the auxiliary presser foot and the upper feed presser foot is from 2 to 5.5 mm.
- (2)The vertical running amounts of the auxiliary presser foot and the upper feed presser foot are easily adjustable from the climb device dial attached to the front side of the machine.
- (3)The dial ① attached to the upper cover is a dial which controls the running amount dial A.

Caution:When you adjust the number from lower one to a higher, you should adjust the dial ① reverse case, the adjustment of the dial A should be done first.

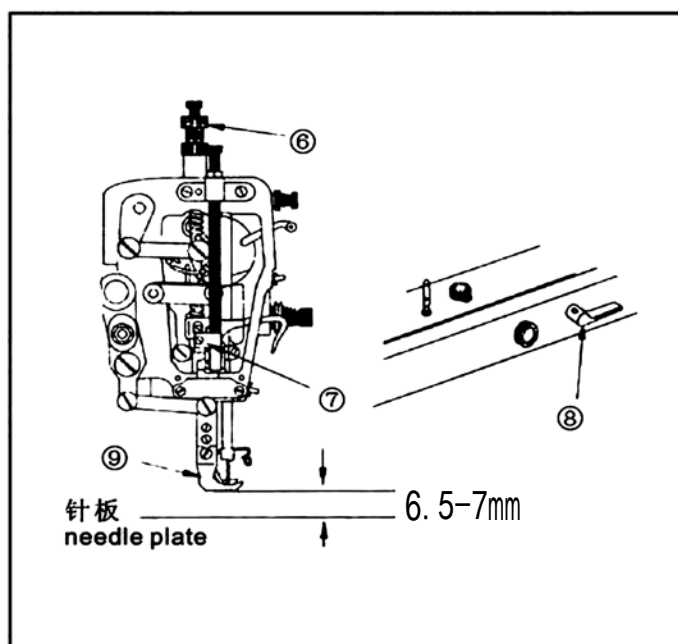
### 13. 内外压脚的调整 Adjusting the auxiliary and upper feed presser foot



2. 改变内外压脚的交互运动的平衡
- (1) 增加外压脚②的提升量并减少内压脚③提升量。
- 1) 取下上盖板上的橡皮塞④。
- 2) 旋转主动轮直到内压脚③从针板上抬起。
- 3) 旋松螺钉⑤。
- 4) 将内压脚向下调到接触针板，再旋紧螺钉⑤。
- 5) 这样，内压脚的提升量就减少一定的值，而外压脚的提升量则增加同样的数值。
- (2) 与上面相反的情况，减少外压脚的提升量，增大内压脚提升量的调整如下：
- 1) 首先，旋转主动轮直到外压脚抬离针板。
- 2) 旋松螺钉⑤。
- 3) 调好后，旋紧螺钉⑤。这样将减少外压脚的提升量。

#### EN

2. To change the balance the interactive movement of inner and outer presser foot
- (1) Increase the height of outer presser foot② and decrease the height of inner presser foot③.
- 1) Remove rubber stopper ④ from the upper back cover.
- 2) Rotate the hand wheel until inner presser foot③ lift from the needle plate.
- 3) Loosen the screw ⑤.
- 4) Lower the inner presser foot to the needle plate and tighten screw ⑤.
- 5) In this way, the height of the inner presser foot decreased by a certain value and the outer increased by the same value.
- (2) Contrary to the above, to decrease the height of the outer presser foot and increase the height of the inner presser foot, the adjustment is as follows:
- 1) Firstly, rotate the hand wheel until the outer presser foot lifted from the needle plate.
- 2) Loosen screw ⑤.
- 3) After adjustment, tighten screw ⑤, thus decreasing the height of the outer presser foot.

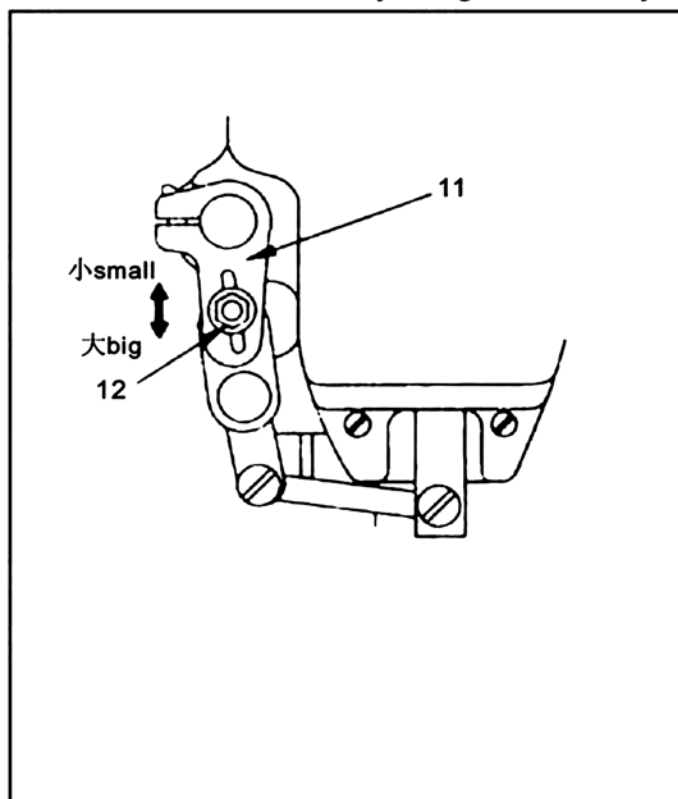


3. 外压脚的调整方法
- 松开调压螺钉⑥和压杆导架螺钉⑦。
- 提升压脚扳手⑧时，上下调整压杆导架螺钉⑦。
- 让外压脚⑨提升到离针板上7毫米的位置。
- 调整完后，完全拧紧压杆导架螺钉⑦。适当调好调压螺钉⑥。

#### EN

3. Adjusting the auxiliary presser foot
- Loosen the presser bar pressure adjustment screw ⑥ and the bracket fixing screw ⑦.
- Adjust vertically the bracket fixing screw ⑦ so that the auxiliary presser foot⑨ goes up by 7mm from the upper side of the needle plate when the presser bar lifter⑧ is up.
- When the adjustment is finished, fix tightly the bracket fixing screw ⑦ and adjust adequately the pressure adjustment screw⑥.

### 13. 内外压脚的调整 Adjusting the auxiliary and upper feed presser foot



#### 4. 外压脚运动量的调整

外压脚和送布牙运动量以1:1为标准, 根据缝制条件, 能调整外压脚的运动量。

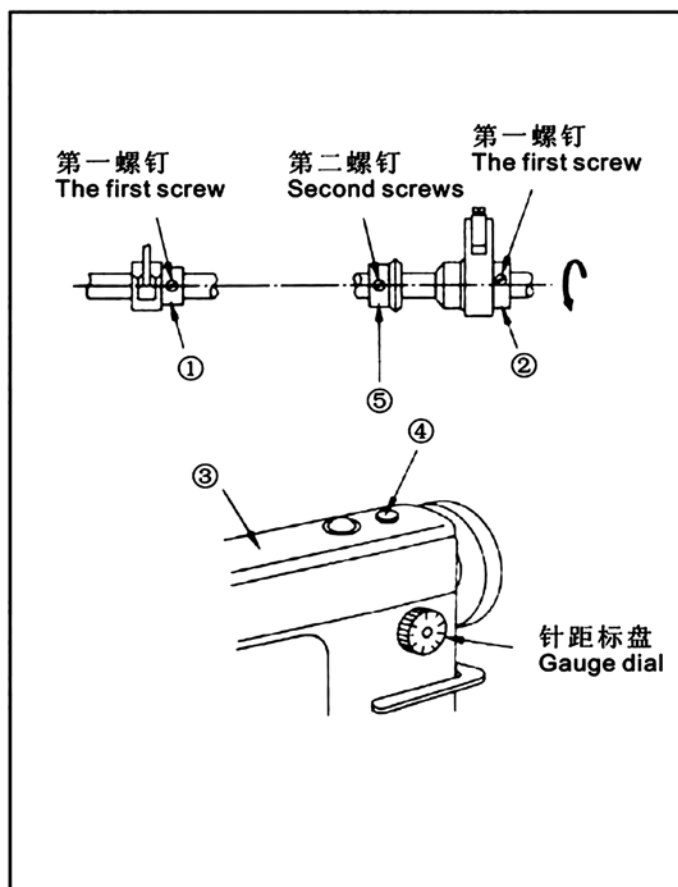
松开位于压脚摆动曲柄(左)11上的螺母12, 往上移动提升压脚变动曲柄轴, 运动量会变小, 相反就会变大。

**EN**

#### 4. Adjusting feeding amount of auxiliary presser foot

The normal proportion of feeding amount between the feed dog and the auxiliary presser foot is 1:1. You can adjust the feeding amount of the auxiliary presser foot in accordance with the conditions of materials in use. loosen the nut 12 and move upward the presser foot vertical move control shaft, and the feeding amount becomes smaller. If you move it downward, the amount increases. Be sure to tight the nut 12 when the adjustment is finished.

### 14. 送布牙同步关系的调整 Adjusting the synchronous relationship of the feed dog



#### 1. 转动手轮, 使针杆位于最高位置;

2. 打开上盖, 如图所示位置: 送布凸轮“左”①的第一颗螺钉和送布凸轮“右”②上的第一颗螺钉与上轴中心线位于同一平面上。

注: 送布凸轮②的位置调节, 可以取下上盖上的橡皮塞④进行, 但是单齿轮⑤不易看到, 调节时应小心保护。

**EN**

1. turn the pulley with hands to fix the needle bar to the highest point.

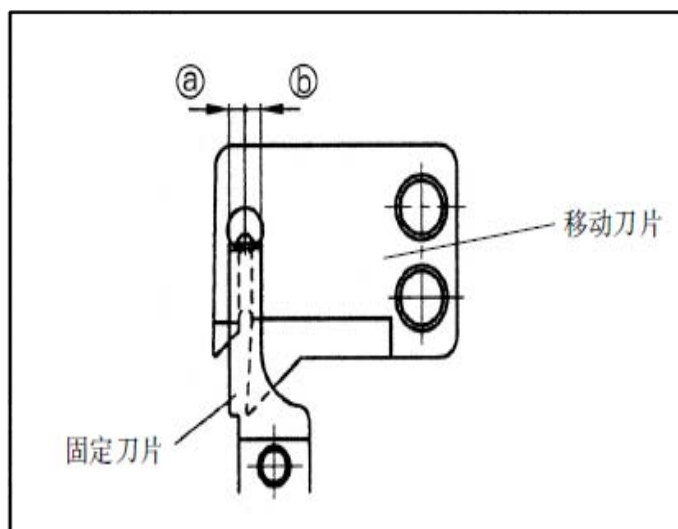
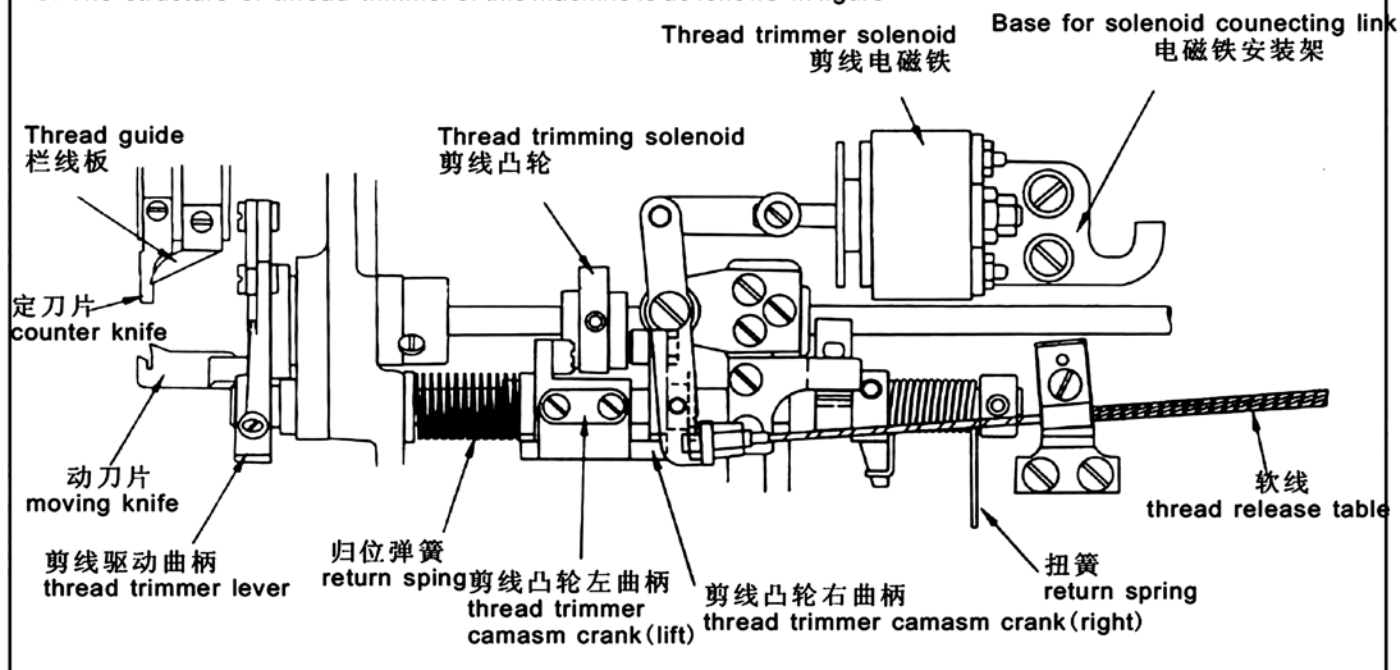
2. The standard position will be when the center of the No. 1 fixing bolt of the presser foot vertical move cam ① is aligned with the center line of the upper shaft, the bottom of the No. 1 fixing bolt of the feed cam ② is aligned with the center line of the upper shaft.

Caution: When adjusting the feed lifting cam ②, users can remove the rubber plug ④ of the upper cover. During adjusting, users should be cautious because it is hard to have a vision of the single gear ⑤.

## 15. 剪线机构的调整 Adjusting for thread trimmer (自动剪线型)

1. 本缝纫机的切线机构如下图所示。

1. The structure of thread trimmer of this machine is as follows in figure



### 2. 定刀与动刀的调整

(1) 如图所示，其标准是动刀片断面位于定刀片中央的。

(2) 若图上的A部变大，就会发生三段线。这成为切线后从针孔里脱离锋线的原因。

此外，若B部变大，就成为切线错误的原因，因此请注意。

**EN**

### 2. Adjusting fixing blade and movable knife

(1) Like in Figure, the standard position is where the cut part of the movable knife is aligned with the center of the fixed blade.

(2) When part A becomes bigger in figure, three pieces of threads are to be produced, causing the thread missing after the trimming. If part B becomes bigger, it can cause a trimming miss.

So be cautious in adjusting the right position.

### 3. 剪线凸轮曲柄位置的调整

(1) 装配时，将剪线曲柄轴①最先装在底板上。

(2) 剪线凸轮左、右曲柄必须如图所示安装，固定在剪线轴①上的平面处。

(3) 轻轻转动剪线轴①，将限位块②安装在剪线轴①上的平面处。

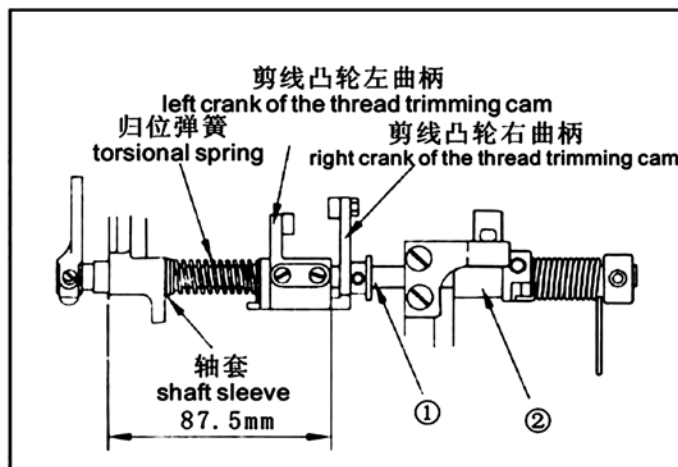
**EN**

### 3. Adjusting the crank of the thread trimming cam

(1) While assembling, users should first set the crank shaft of the thread trimming cam on the platform.

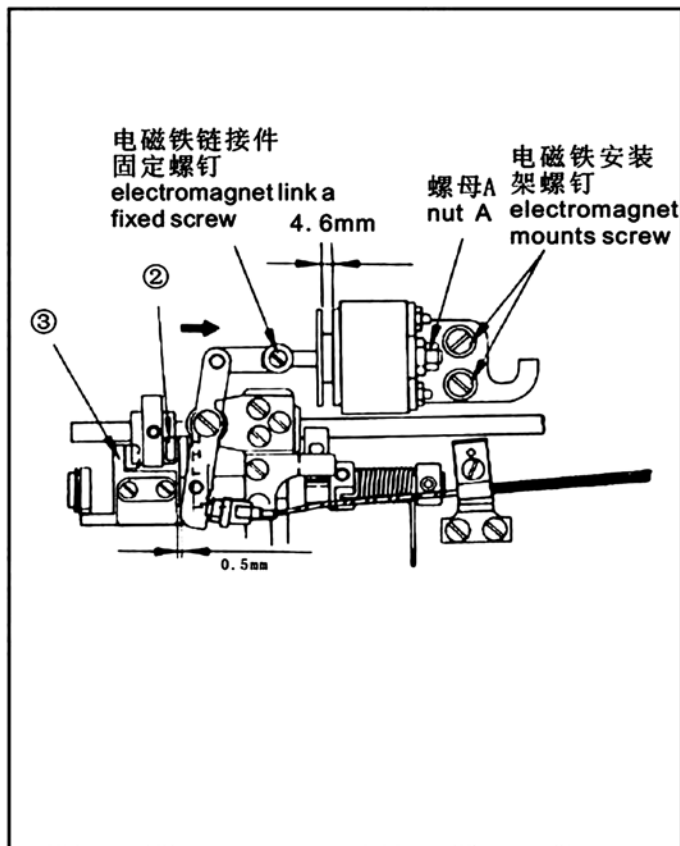
(2) The left and right crank must be set on the flat of the thread trimming shaft referring to the Figure.

(3) Gently rotate the trimming shaft①, and set the set block② on the flat of the trimming shaft①.





## 15. 剪线机构的调整 Adjusting for thread trimmer(自动剪线型)



### 4. 安装剪线电磁铁

#### (1) 剪线电磁铁的行程:

- 标准的行程为4.6mm.
- 通过调节螺母A来调整行程。

#### (2) 剪线电磁铁的调整

- 电磁铁的安装位置以电磁铁工作时，凸轮左曲柄③与凸轮右曲柄②之间有0.5mm间隙为标准。
- 如需调整，可按图所示箭头方向移动电磁铁安装架。

**EN**

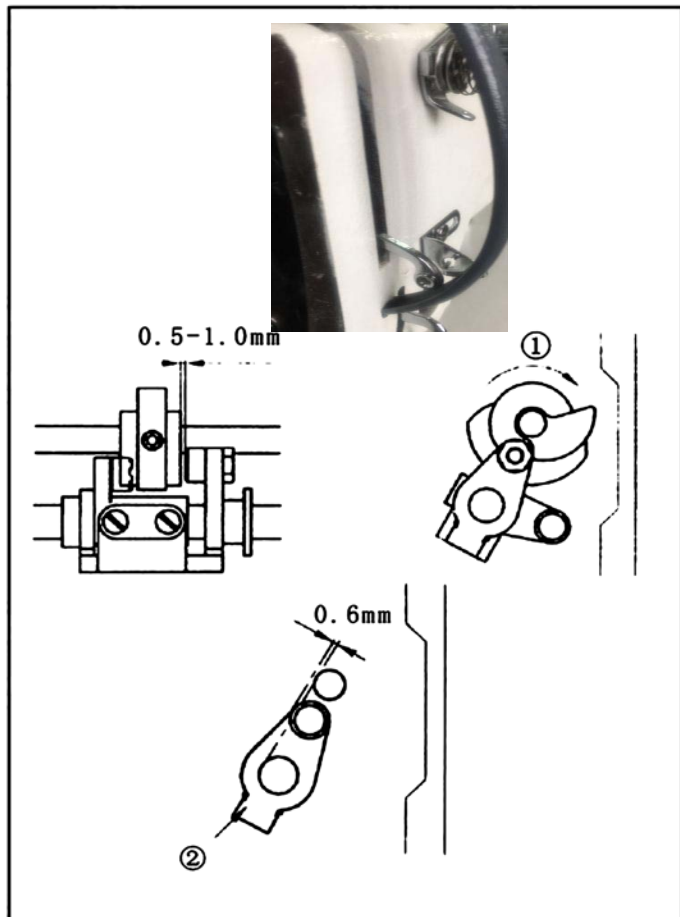
### 4. installation of thread trimmer

#### (1) working amount of the thread trimming solenoid.

- The standard working amount of the thread trimming solenoid is 4.6mm.
- By adjusting the nut to adjust A trip.

#### (2) adjusting the thread trimming solenoid

- if you run the solenoid under this circumstance, a gap of 0.5mm occurs between the left crank ③ and the right crank ②. This state is the standard.
- If you need to adjust. Can be shown as shown in figure and direction of arrow mobile electromagnet mounts.



### 5. 安装剪线凸轮

#### (1) 在挑线杆位于最低点时。

#### (2) 在启动剪线电磁铁状态下，朝正方向回转剪线凸轮①直到接触滚柱，然后固定凸轮。

#### (3) 剪线电磁铁关闭，使凸轮曲柄②恢复到原始置，这样凸轮与滚柱端面将以0.5-1.0mm间隙为标准。

**EN**

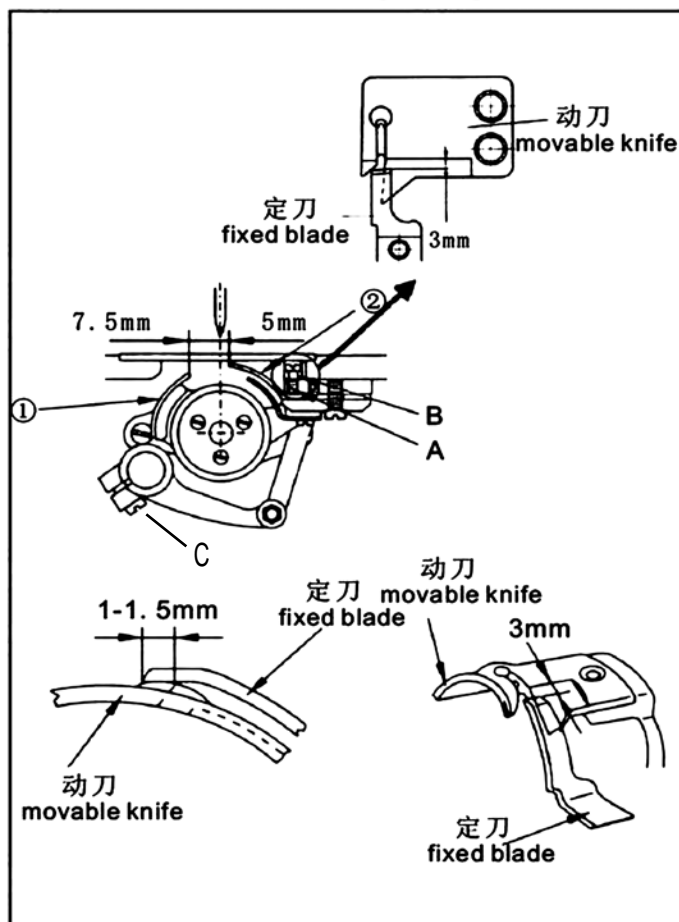
### 5. Installation of thread trimming cam

#### (1) When the joystick is at the lowest point.

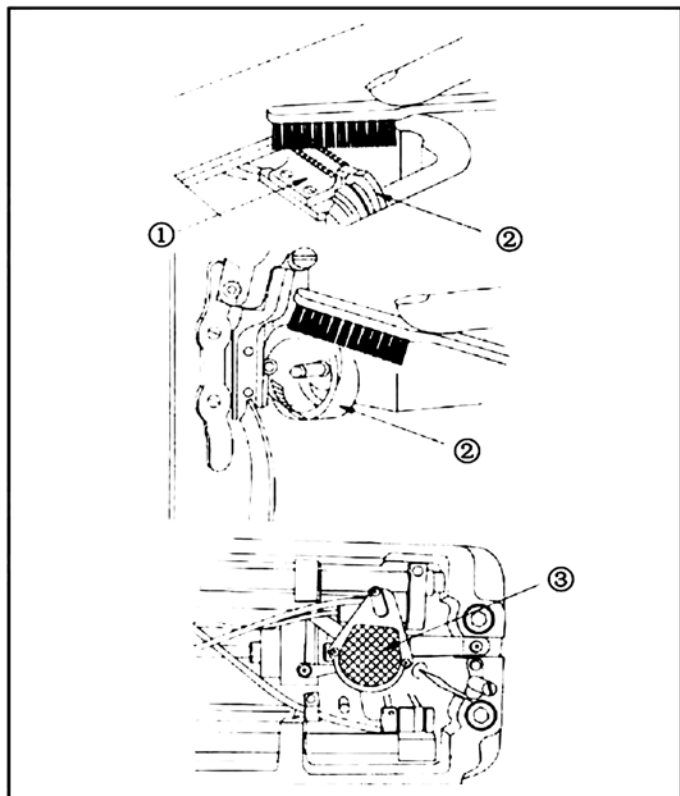
#### (2) Under the thread trimming solenoid is in operation, rotate the trimming cam ① clockwise and fix the cam when it connected with the roller.

#### (3) When the thread cam following crank returned by stopping the operation of the thread trimming solenoid, the edge end between the cam and the roller should be from 0.5 to 1.0mm. It is the standard.

## 15. 剪线机构的调整 Adjusting for thread trimmer (自动剪线型)



## 16. 定期清洁机器 Regular cleaning machine



### 6. 刀片位置调整

#### (1) 动刀与定刀的位置调整:

如图所示, 动刀①与机针中心的距离为7.5mm, 定刀②与机针中心的距离为5mm。通过螺钉C调整动刀位置。

#### (2) 动刀移动量调整:

开动电磁铁, 启动机器。剪线凸轮会使动刀①向右旋转。当动刀①移动到其最远位置时, 其断面定刀②的端点进行到1.0mm-1.5mm。

#### (3) 刀片压力调整:

A. 如图所示, 动刀和定刀开始接触为标准状态。

B. 如果剪线情况不良, 尤其当线较粗时, 只需增加定刀张力即可。

C. 定刀张力可调整: 松开螺母B, 通过调节螺钉A来调节螺母B。

### EN

### 6. Adjusting the position of blade

(1) Adjusting the position of the movable knife ① and the fixed blade ② Adjust the position of the cutter through screw C.

The standard position of the movable knife is 7.5mm from the needle center, and 5mm for the fixed blade.

(2) Adjusting the progress amount of the movable knife

If you run the machine putting the solenoid in the operation mode, the movable knife ① will rotate by the thread trimming cam. The standard will be where the cut part of the movable knife ① progresses 1.0 to 1.5mm from the end edge of the fixed blade ② when the progress amount of the movable knife is in its maximum.

(3) Adjusting blade pressure

A. As in Figure, the standard is when the contact between the movable knife and the fixed blade begins.

B. In particular, when the cutting quality gets worse by using a thick thread, strengthen a little bit the tension of the fixed blade.

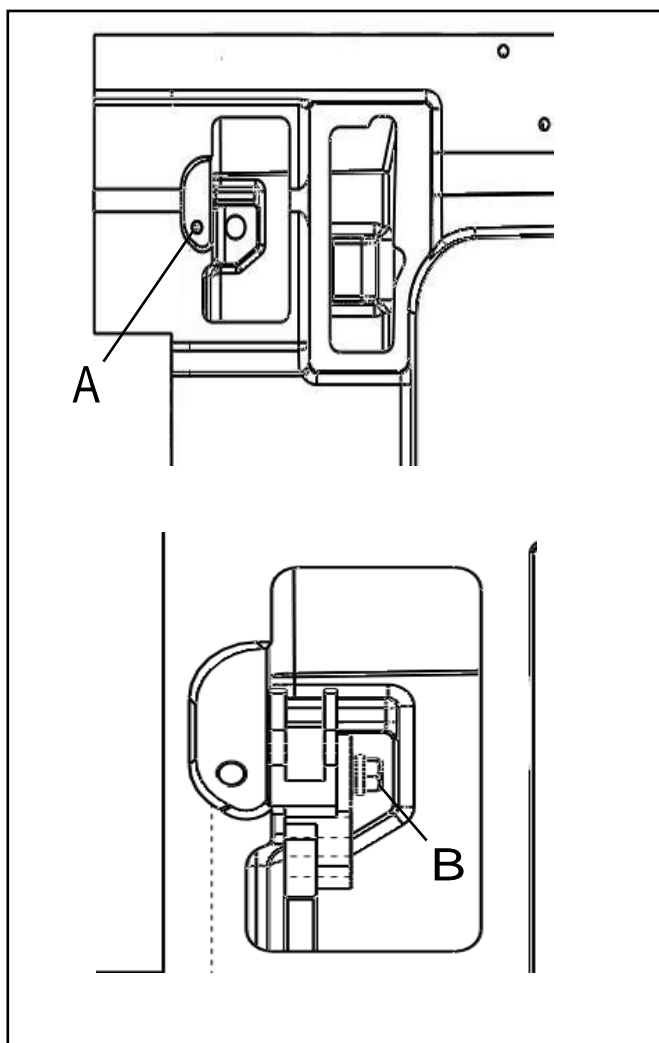
C. In order to adjust the tension of the fixed blade, loosen the tension adjustment nut with the wrench box and adjust the tension using the tension adjustment bolt.

定期清扫送布牙①、旋梭②和油泵③。

### EN

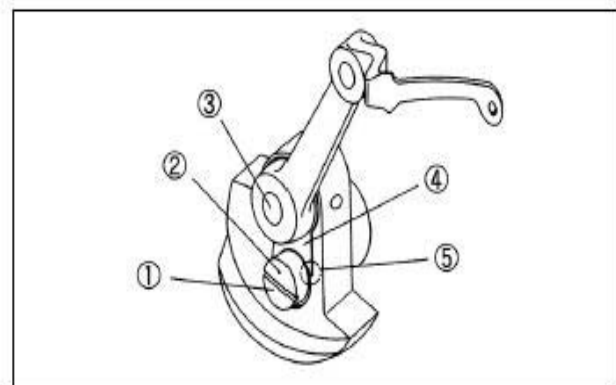
Regular cleaning feed dog ①, hook ② and pump hook ③.

# 17、调节倒顺缝针距误差 adjust the margin error of inverted stitch



- 1、卸下倒缝电磁铁盖板。
  - 2、松开固定螺钉A，使用扳手旋转偏心调节销B。
  - 3、拧紧固定螺钉A。
- 1, remove the inverted seam electromagnet cover.  
2. Loosen the fixed screw A, rotate the eccentric adjustment pin B.  
3, tighten the fixed screw A.

# 18、调整挑线器油量 adjust the fuel volume of the finder



在油量调整件①头部上标示的点②位置和挑线器曲柄轴孔中心③维持一致时，油量就会最多。左右转动，越接近链接凸轮垫圈④的角部⑤时，油量就会越少。此外，过了链接凸轮垫圈的角部后，就不会出油。

the more the point② of the control plate of oil flow① goes close to the center of hole of thread take-up crank shaft, the more oil comes. On the other hand, the more the point goes close to the corner⑤ of the link cam washer, the less oil comes. And when the point goes past the corner of the link cam washer④, the oil does not come out.



## 19. 故障原因及对策

### 缝纫机故障处理方法

编号	故障状态	确认事项	故障原因	处理事项
1	断针	针的方向、高度	插针方向不好	把针向正确的方向重新插入，紧贴到最上端
		针	针弯	换针
		锯齿定时	对针杆运动的锯齿定时不好	调整锯齿定时
		针杆提升量	针与旋梭的定时不好	调整针与旋梭的定时
		针杆高度	针与旋梭的定时不好	调整针与旋梭的定时
		针与锯齿之间的缝隙	针与旋梭的定时不好	调整针与旋梭的定时
2	断线	穿线状态	穿线错误	正确穿线
		针	针弯，针尖动了	换针
		针的方向、高度	插针位置不好	向正确方向插针
		面线张力	面线张力过大	适当调整面线张力
		底线张力	底线张力过大	适当调整底线张力
		挑线器弹簧工作量	工作量过大	调整弹簧工作量
3	穿线状态不良	线张力	面线底线张力不好	调整上下线的张力
		挑线器弹簧张力	挑线器弹簧张力不适当	调整挑线器弹簧张力
		开松机和旋梭间的缝隙	开松机和旋梭间的缝隙不好	调整开松机和旋梭间的缝隙
4	缝纫开始时，面线掉出或跳针	针的方向、高度	插针位置不好	向正确方向插针
		针	针弯，针尖动了	换针
		穿线方法	穿线错误	正确穿线
		针与旋梭间的缝隙	针与旋梭的定时不好	调整针与旋梭的定时
		切线后的面线余量	针上的面线余量过短	把控制面板的面线余量调整幅度调大
		底线把	切线后，底线把无法离住底线	适当调整底线把的位置及张力
		针上面停止位置确认	针上面停止位置不好，缝纫开始时，挑线器把面线拉出去	针上面停止时，重新调整胶片位置
5	不能切线	动刀片与旋梭间的缝隙	动刀片与旋梭高度及距离不符合	重新调整动刀片的设定位置
		固定刀片张力确认	动刀片与固定刀片的张力及接触状态不好	调好动刀片与固定刀片的张力及接触状态
		针方向	插针状态不好	正确插针
		动刀片、固定刀片刀刃	动刀片、固定刀片刀刃有毛病或磨损	交换动刀片、固定刀片
		切线凸轮定时	切线凸轮定时不对	调整切线凸轮定时
		线松开工作量	线松开工作量过少	重新调整线松开工作量
6	切线结束后缝线余量过短	切线定时	切线定时不对	调整切线定时
		线张力调整碟的开量	线张力调整碟的开量过小	调整线松开工作量
		辅助线张力调整装置张力	辅助线张力调整装置张力过大	调整辅助线张力
		挑线器弹簧工作量	挑线器弹簧工作量过大	调整挑线器弹簧工作量
		控制面板的线松开调整幅度	幅度调整得过小	把幅度调大

## 19. Causes of troubles and troubleshooting

### Sewing machine troubleshooting

No	Symptom	Checkpoints	Root cause	Corrective action
1	Needle breaks	Direction and height of needle	Needle is inserted into wrong position	Reinsert the needle correctly
		Needle	Needle is bent	Change the needle
		Timing of feed dog	Bad timing of feed dog	Adjust the timing of feed dog
		Ascending level of needle bar	Bad timing of needle and hook	Adjust the timing of needle and hook
		Height of needle	Bad timing of needle and hook	Adjust the timing of needle and hook
		Gap between needle and hook	Bad timing of needle and hook	Adjust the timing of needle and hook
2	Thread breaks	Threading method	Wrong threading	Thread the needle correctly
		Needle	Bent needle or broken needle tip	Change the needle
		Direction and height of needle	Needle inserted in the wrong position	Insert the needle correctly
		Upper thread tension	Too tight upper thread tension	Reduce tension of upper thread
		Lower thread tension	Too tight lower thread tension	Reduce tension of lower thread
		Working capacity of take-up lever spring	Loose upper thread	Adjust take-up lever spring
3	Poor thread adjustment	Thread tension	Upper and lower thread tensions are bad	Adjust the upper and lower thread tensions
		Thread take up spring tension	Thread take up spring tension is inadequate	Adjust the thread take up spring tension
		Gap between opener and hook	The gap between the opener and hook is inadequate	Adjust the gap between the opener and hook
4	Upper thread falls out when starting to sew or sewing is skipped.	Direction and height of needle	Needle is inserted into wrong position	Reinsert the needle correctly and push in to its highest level.
		Needle	Needle is bent	Change the needle
		Threading	Wrong direction	Insert the thread in the right way.
		Gap between the needle and the hook	The timing between the needle and hook is bad	Adjust the timing between the needle and hook
		Remaining upper thread length after trimming	The length of the remaining upper thread is too short	Increase the adjustment volume of the upper thread on the control box
		Lower thread holder	After trimming, lower thread holder does not hold the lower thread	Adjust the location and tension of the lower thread holder.
		Check the up-stop position of the needle	Due to problems in the up-stop position of the needle, the thread take up lever pulls the upper thread out of the needle when the sewing starts	Readjust the needle's up-stop film position
5	Trimming miss	The gap between the movable knife and the hook	The height and distance between the movable knife and the hook do not match	Readjust the movable knife setting position
		Check the tension of fixed knife	Tension and contact of movable and fixed knives are bad	Correct the tension adjustment and surface contact of movable and fixed knives.
		Direction of the needle	Needle is not inserted correctly	Insert the needle correctly
		Blade side of movable and fixed knives	Scratch and abrasion of movable and fixed knives	Replace movable knife or fixed knife.
		Trimming cam timing	The timing of trimming cam is wrong	Adjust the timing of trimming cam
		Thread release stroke	Thread release stroke is too small	Readjust the thread release stroke
6	Too short thread length after trimming	Trimming timing	Wrong trimming timing	Adjust the trimming timing
		Opening of the thread tension adjusting plate	The opening on the thread tension control plate is too small	Adjust the thread release stroke
		Tension of auxiliary thread tension adjustment assembly	Too strong tension on the auxiliary thread tension control assembly	Adjust the tension of the auxiliary thread tension control assembly
		Thread take up stroke	Thread take up stroke is too large	Adjust the thread take up stroke
		Thread release adjustment volume on the control box	Volume is adjusted to too low	Increase the volume adjustment.