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ZOJE
中捷缝纫机
SEWING MACHINE

直驱微油针送布平缝机 ZJ9903系列

STRAIGHT NEEDLE FOR OIL DISPLACEMENT MICRO MACHINE

使用说明书
零件手册
OPERATION MANUAL
PARTS BOOK

中国·浙江中捷缝纫科技有限公司
ZOJE SEWING MACHIN CO., LCD
地址: 浙江玉环大麦屿开发区 邮编: 317604
ADD: DAMAIYUDEVELOPMENT, YUHUAN, ZHEJIANG, 317604 CHINA
网址: <http://www.zoje.com> Email: sales@zoje.com
国内营销中心/Domestic Business Center
Tel: 0576-87338345 87338215 Fax: 0576-87338222
国际营销中心/International Business Center
Tel: +86576-87333222 87338299 Fax: +86576-87332702

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

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运转缝纫机前的注意事项

注意: 为了防止机械的错误动作或损伤, 请确认如下项目。

- ☞ 请卸下缝纫机机台上安装的放气盖(红色)。
- ☞ 使用之前请一定往油槽中加机油。
- ☞ 最初使用缝纫机前, 请把机器打扫干净。
- ☞ 清除运送途中积存的灰尘, 并加油。
- ☞ 请确认电压设定是否正确。
- ☞ 请确认电源插头是否正确连接。
- ☞ 电压规格不同时, 请绝对不要使用。
- ☞ 请确认马达皮带轮的旋转方向是否正确。
- ☞ 请不要把缝纫机向前倒, 以免漏油或损坏零件。
- ☞ 本缝纫机安装有机头放倒后不让缝纫机转动的开关。因此, 运转缝纫机时, 请正确的设置缝纫机台板后再打开电源开关。

BEFORE OPERATION

Caution: To avoid malfunction and damage of the machine, confirm the following.

- ☞ Remove air-vent cap (red color) attached to the sewing machine bed.
- ☞ Be sure to pour in the oil before using.
- ☞ Before you put the machine into operation for the first time after the set-up, clean it thoroughly.
- ☞ Remove all dust gathering during transportation and oil it well.
- ☞ Confirm that the voltage has been correctly set.
- ☞ Confirm that the power plug has been properly connected to the power supply.
- ☞ Never use the machine in the state where the voltage type is different from the designated one.
- ☞ Confirm that the direction of rotation of the motor pulley is correct.
- ☞ Do not tilt the sewing machine head toward this side since oil leakage or parts breakage occurs.
- ☞ A safety switch is installed so that the sewing machine cannot be operated with the head tilted. When operate the sewing machine, turn On the power switch after properly setting the head on the table.

1. 主要技术规格、参数

用途	薄料
最大缝速	3500rpm
针距	0~4mm
使用机针	DP×5 9#~18#
压脚高度	手提8mm（标准） 膝提15mm（最大）
使用机油	旋梭：10号白油 齿轮箱：壳牌22号液压油
使用电机	550W

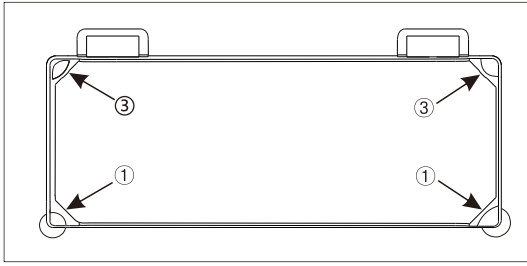
1. Specifications

Application	薄料
Sewing speed	3500rpm
Stitch length	0~4mm
Needle	DP×5 9#~18#
Presser foot lift	By hand lifter 8mm (standard) By knee lifter 15mm (max.)
Oil	Hook: White Oil No. 10 Gear Box: Shell Tellus Oil No. 22
Rated power	550W

2. 缝纫机的安装 Installation

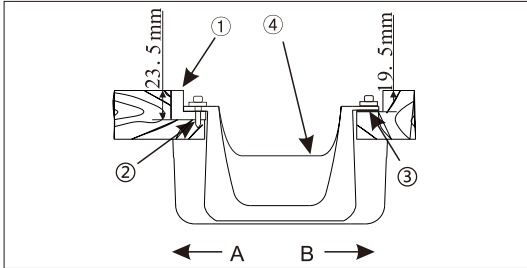
1. 油盘的安裝

- 1) 油盘放置在台板上的凹槽四角上；
- 2) 两只油盘支座①用油盘座钉②固定在A一边（朝操作者一边），将两只油盘坐垫③用油盘座钉②固定在一起（与机头连接钩结合在一边）然后放上油盘④；
- 3) 卸下底板上的放气盖⑤。（搬动机头时，请一定把放气盖⑤盖上）



4) 将机头连接钩⑧插入底板销孔内，与台板的机头连接钩座⑨相嵌合再把机头放到油盘四只角的机头坐垫③上。

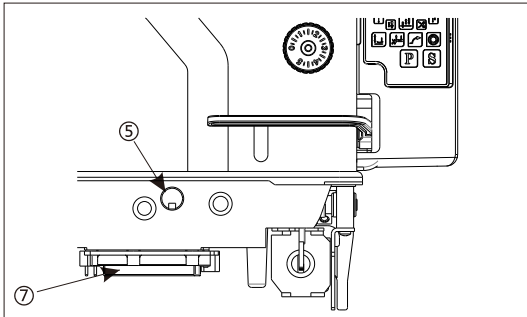
注意: 如果不卸下放气盖⑤运转缝纫机，就会有油从齿轮箱⑦漏出。



1. Intallaing the oil pan:

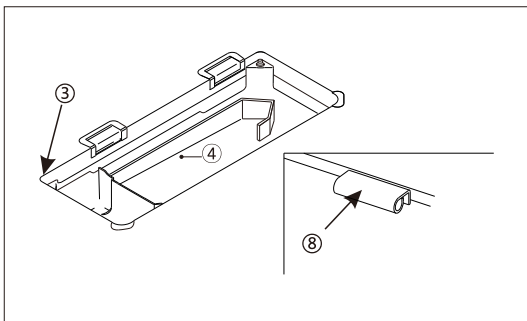
1) The oil pan should rest on the four corners of the machine table groove;

2) Two rubber seats ① for supporting the head portion on the ooperator side A are fixed on the extended portion of the table by hitting the nails ②, and the other two rubber cushion seats ③ on the hinged side B are fixed by using a rubber-based adhesive. Then, oil pan ④ is placed;

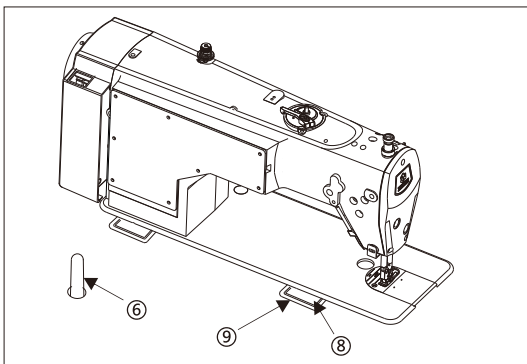


3) Remove air vent cap ⑤ attached to the machine bed; (Be sure to attached cap when transporting the machine head in the state that the machine head is removed from the machine table.)

4) Fit hinge ⑧ into the opening in the machine bed, and fit the machine head to table rubber hinge ⑨ before placing the machine head on cushions ③ on the four corners.



Caution: If the sewing machine is operated without removing air vent cap ⑤, oil leakage from gear-box portion ⑦ may occur.



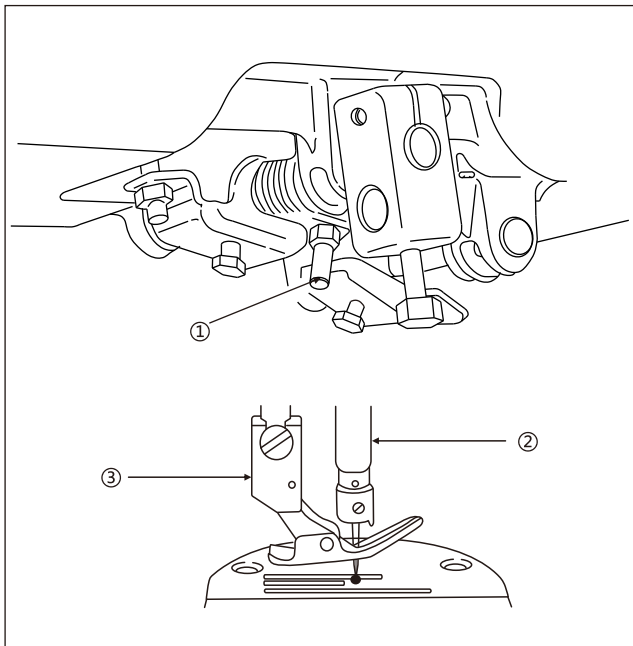
3. 膝动提升高度的调整 Adjusting the height of the knee lifter



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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



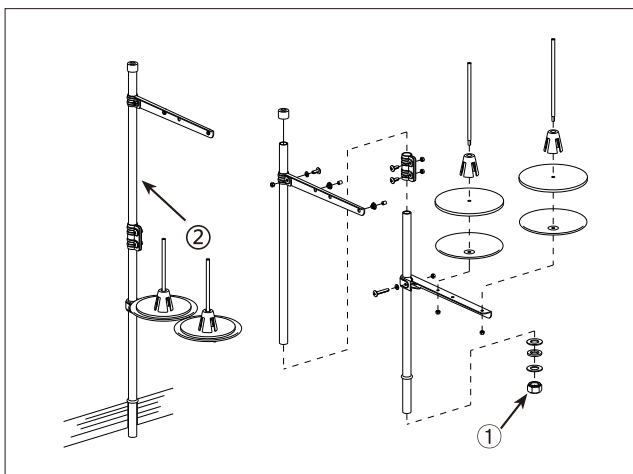
1. 用膝提时的标准压脚高度是10毫米；
2. 用膝提调整螺钉①可以调节压脚提升量最大可至15毫米；

注意：当压脚提升超过10毫米时，请不要运转缝纫机，因为针杆②与压脚③会相碰。

1. The standard height of the presser foot lifted using the knee lifter is 10mm.
2. You can adjust the presser foot lift up to 15mm using knee lifter adjust screw ①.

Caution: Do not operate the sewing machine state that the presser foot ③ is lifted 10mm or more since the needle bar ② in contact with the presser foot ③.

4. 线架的安装 Installing the thread stand



1. 如 图所示那样线架安装到缝纫机台板孔上。
2. 用固定螺母①固定线架。
3. 顶线配线时，请把电源线从线架杆②中穿过。

1. Assemble the thread stand unit, and insert it in the machine table.
2. Tighten locknut ① to fix the thread stand.
3. For ceiling wiring , pass the power cord through spool rest rod ②.

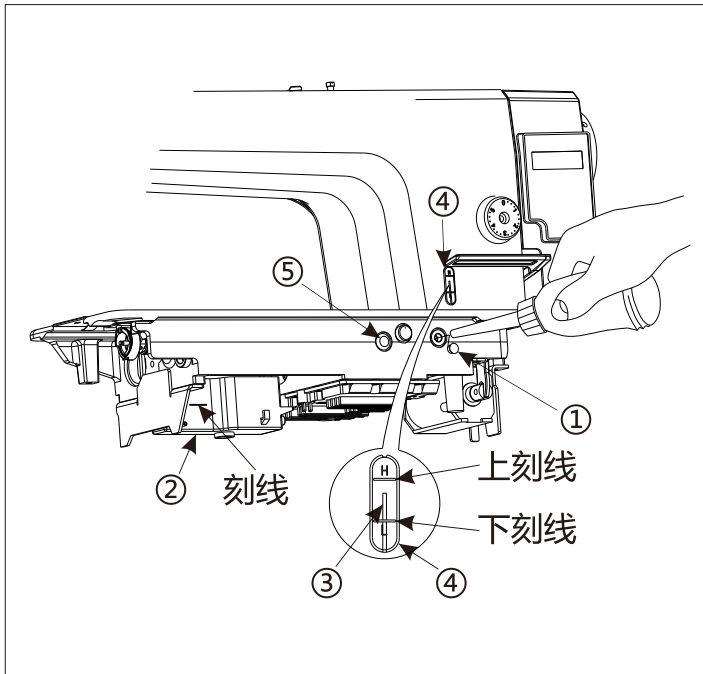
5. 加油 Lubrication



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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



缝纫机运转之前, 请一定往旋梭油槽中加油

1. 把缝纫机放到, 并支到机头支撑杆上。
2. 卸下加油口的盖①, 使用附带的加油壶加入ZJ1号机油。
3. 请把油加满到油槽②的刻线位置。请注意加油过多的话, 机油会从油槽空气孔漏出来, 不能正常加油。
4. 使用缝纫机时, 如果油量指示杆③指到油量指示窗④的下刻线以下, 请进行加油。

注意:

1. 使用新缝纫机或较长时间没有使用的缝纫机时, 请先进行3000~3500转/分钟的磨合运转之后再使用。
2. 请不要把橡胶栓③拔掉。

Fill the oil tank with oil for hook lubrication before the sewing machine.

1. Tilt the machine head until it comes in contact with the head support rod.
2. Remove oil hole cap ① and fill the oil tank with ZJ NO. 1 using the oiler supplied with the machine.
3. The amount of oil should reach up to the engraved maker line of oil tank ②.
If the oil is filled excessively, it will leak from the air vent hole in the oil tank or proper lubrication will be not performed. So, be carefull.
4. when you operate the sewing machine, refill oil if the top end of oil amount indicating rod③comes down to the lower engraved marker line of oil amount indicating rod comes down to the lower engraved marker line of oil amount indicating window④.

Caution:

1. When you use a new sewing machine or a sewing machine after an extended period of disuse, run your machine at 3,00 to 3,500rpm for the purpose of break-in.
2. Do not remove rubber plug ③.

6. 旋梭油量的调整

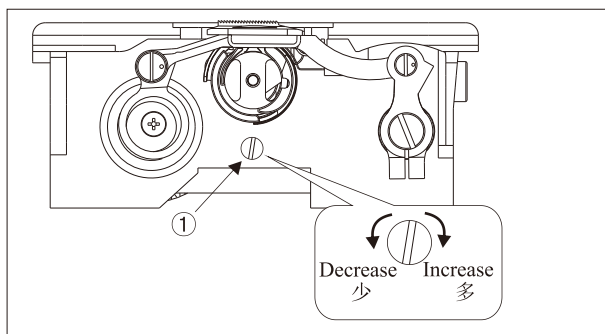
Adjusting the amount of oil in the hook



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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



旋梭的油量用旋梭油量调节螺钉①来调节。

调节方法：

拧紧（向右转动）旋梭油量调节螺钉①后，旋梭油量变多，拧松（向左转动）旋梭油量变少。

- 注意：
1. 微量供油型缝纫机使用RP旋梭（干式旋梭）时，请一定把油量调到最小，不让机油流出。
 2. 使用RP旋梭（干式旋梭）时，也一定不要把机油槽的油放掉。

Adjustment of the amount of oil in the hook is performed with oil amount adjustment screw.

Adjustment procedure:

Tighten (turn clockwise) oil amount adjustment screw ① to increase the amount of oil in the hook, or loosen (turn counterclockwise) to decrease it.

- Caution:
1. When using RP hook (hook for dry head) for the SS type, be sure to loosen the oil amount adjustment screw up to the minimum so as to reduce the oil amount in the hook.
 2. Never drain the oil in the oil tank even when RP hook (hook for dry head) is used.

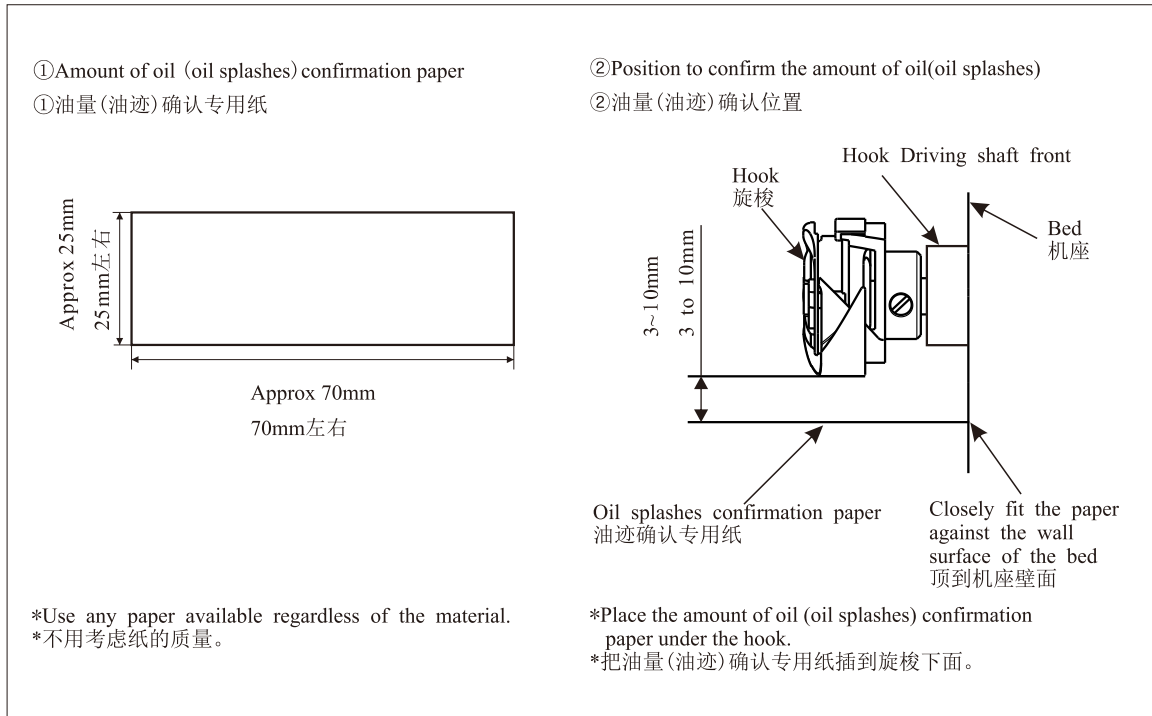
7. 旋梭部油量（油迹）的调整方法 Adjusting the amount of oil (oil splashes)



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



Warning: Be extremely careful about the operation of the machine since the amount of oil has to be checked by turning the hook at a high speed.



1. 油量（迹）确认方法

进行下列2)操作时，请卸下滑板，同时要充分注意手指不要碰到旋梭。

- 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（油迹）确认专用纸插入。
- 3) 确认油槽中是否有油。
- 4) 油量（油迹）确认时间为5秒。

1. How to confirm the amount of oil (oil splashes)

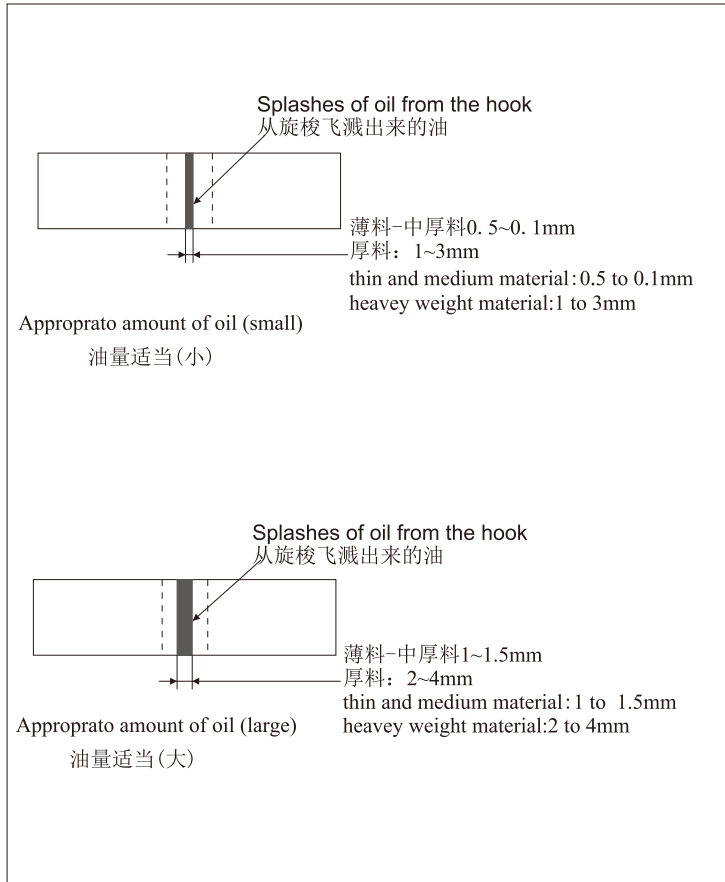
When carrying out the procedure described below in 2, remove the slide plate and take extreme caution not to allow your fingers to come in contact with the hook.

- 1) If the machine has not been sufficiently warmed up for operation, make the machine run idle for approximately three minutes. (Moderate intermittent operation)
- 2) Place the amount of oil (oil splashes) confirmation paper under the hook while the sewing machine is in operation.

3) Confirm that oil exists in the oil tank.

4) Confirmation of the amount of oil should be completed in five seconds. (Check the period of time with a watch.)

2. 油量（油迹）适合标样



1) 左图标样根据缝制供需需要微调增减，但注意增减不能过大。油量减少时，会发热烧坏旋梭。油量过多时，会污染缝料。

2) 油量（油迹）应确认3次均无变化方可。

2. Sample showing the appropriate amount of oil

1) The amount of oil shown in the samples on the left should be finely adjusted in accordance with sewing processes.

Be careful not to excessively increase/decrease the amount of oil in the hook. (If the amount of oil is too small, the hook will be seized (the hook will be hot). If the amount of oil is too much, the sewing product may be stained with oil.)

2) Adjust the amount of oil in the hook so that the oil amount (oil slashes) should not change while checking the oil amount three times (on the three sheets of paper).

8. 机针的安装方法 Attaching the needle



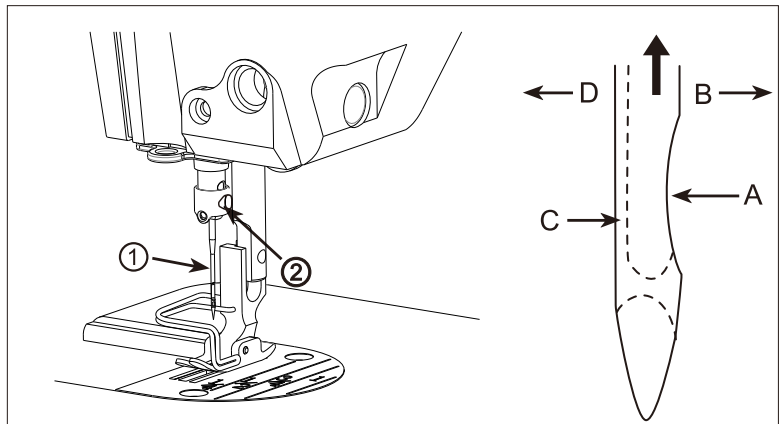
注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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

请使用DBx1或DPx5的机针。请根据线的粗细、布料的种类选择适当的机针。

1. 转动手轮, 把针杆升到最高处。
2. 拧松机针固定螺钉②, 手拿机针把①凹部A横向转到B的方向。
3. 把机针插到针孔的深处。
4. 拧紧机针固定螺钉②。
5. 确认针的长孔C在左横向D的方向。



注意: 使用长丝线时, 如果机针凹部朝向前方, 容易发生线环不稳定或断线的现象。

使用这类机线时, 请把机针稍稍向后倾斜安装, 就可以有效的防止这些现象。

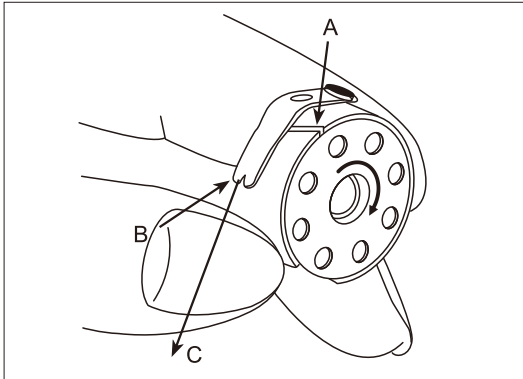
A needle of DBx1 or DPx5 should be used. Select a proper needle size according to the count of thread and the type of material used.

1. Turn the hand-wheel until the needle bar reaches the highest point of its stroke.
2. Loosen screw ②, and hold needle ① with its indented part A facing exactly to the right in direction B.
3. Insert the needle fully into the hole in the needle bar in the direction of the arrow until the end of hole is reached.
4. Securely tighten screw ②.
5. Check that long groove C of the needle is facing exactly to the left in direction D.

Caution: When filament thread is used, if the indented part of the needle is tilted toward operator's side, the loop of thread becomes unstable. As a result, hangnail of thread or thread breakage may occur. For the thread that such phenomenon likely to occur, it is effective to attach the needle with its indented part slightly slanting on the rear side.

9. 梭心的安装方法

Setting the bobbin into the bobbin case

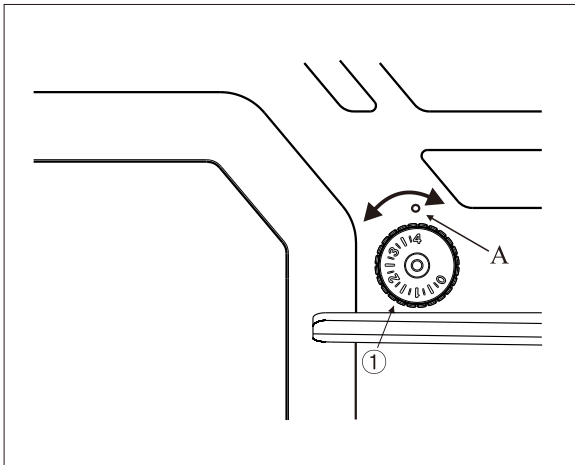


1. 将梭芯装入梭子内；
 2. 将线从梭子上的线槽A中穿过，朝B方向拉出。这样，线通过夹线簧下从孔B引出；
 3. 拉底线C时，梭心应该按箭头方向转动。
1. Install the bobbin in the bobbin case so that the thread would direction is clockwise.
 2. Pass the thread through thread slit A, By so doing, the thread will pass under the tension spring and come out from notch B.

3. Check that the bobbin rotates in the direction of the arrow when thread C is pulled.

10. 针距的调节 Adjusting the stitch length

1. 将送料距旋钮①按箭头方向转动，旋至所需数字对准机壳上的刻点A；
2. 旋钮上的刻度线数字单位用毫米表示；
3. 若欲缩短线迹长度，转动送料距旋钮。



1. Turn stitch length dial ① in the direction of arrow, and align the desired number to marker dot A on the machine arm.
2. The dial calibration is in millimeters.
3. When you want to decrease the stitch length, turn stitch length dial ①.

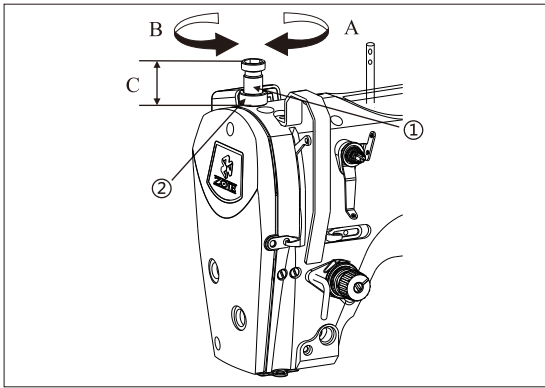
11. 压脚压力的调节 Presser foot pressure



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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1. 旋松调压螺母②顺时针（即A方向）转动压力脚调节螺钉，压力将增强；
2. 逆时针（即B方向）转动压力脚调节螺钉，压力将减弱；
3. 调节后旋紧调压螺母②；
4. 对一般布料而言，压脚调节螺钉的标准高度为32~34毫米（4.5Kg）。

1. Loosen nut ②, as you turn presser spring regulator ① clockwise (in direction A), the presser foot pressure will be increased.
2. As you turn the presser spring regulator counterclockwise (in direction B), the pressure will be decreased.
3. After adjustment, tighten nut ②.
4. For general fabrics, the standard height of the presser foot spring regulator is 32 to 34 mm (4.5Kg).

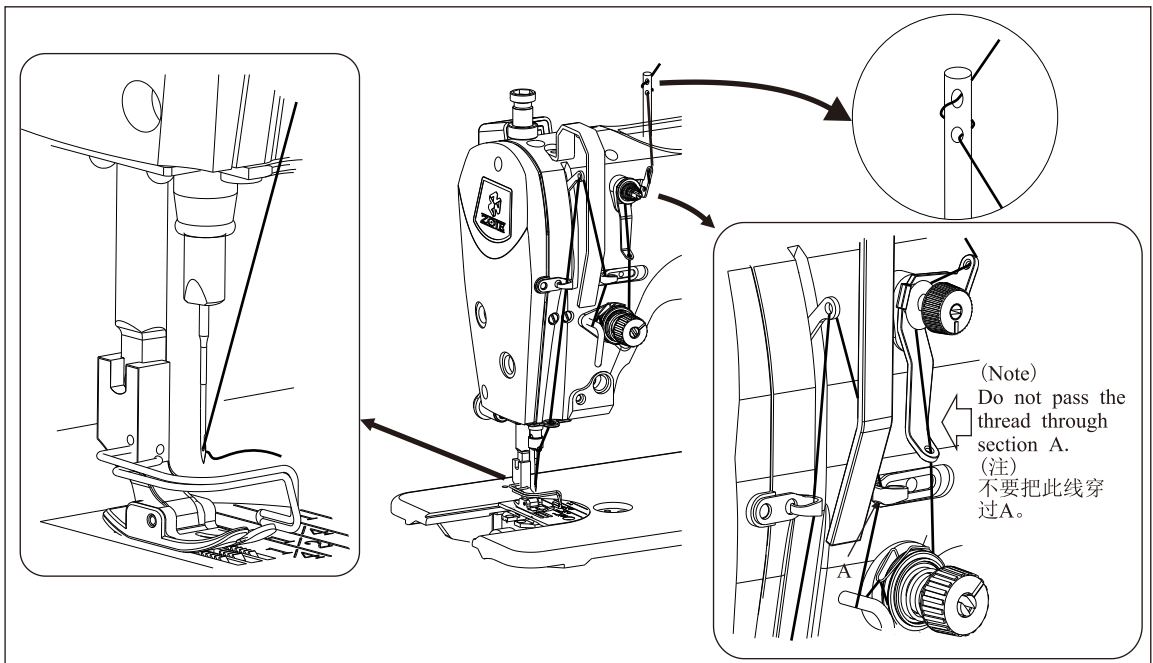
12. 面线穿线的方法 Threading the machine head



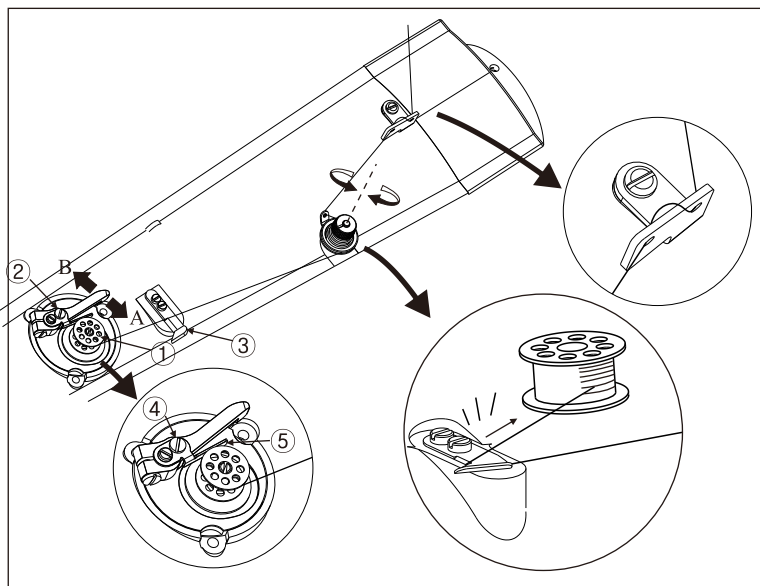
注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



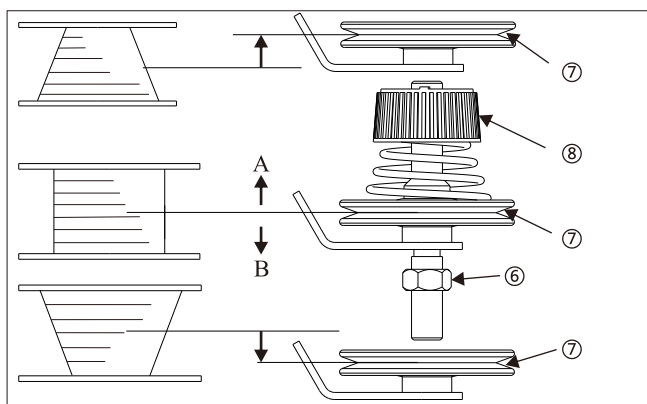
Warning: Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



13. 底线的卷绕方法 Winding the bobbin thread



1. 把梭芯推到卷绕轴①的最里面；
2. 把线架右侧的卷线如图所示穿线，并把线端向右缠绕数圈（铝旋梭时，把线端向右缠绕后再把线张力盘过来的线向左缠绕数圈后，就容易绕线了）。
3. 把卷线拨杆②推到A方向，转动缝纫机。梭心向C方向转动，线卷绕到梭心上。卷绕结束后卷线轴①自动停止。
4. 取下梭心，用切线保持板③切断机线。



5. 调整底线卷线量时，请拧松固定螺钉④，把调节板⑤移动到A方向或B方向，然后再固定螺钉④。A方向变少，B方向变多。
6. 如果线不能平绕梭心时，请拧紧螺母⑥，转动卷线张力器，调整线张力盘⑦的高度：

☞ 旋梭中心和张力盘中心高度一样时为标准位置；

☞ 下部卷的多时，向如图A方向移动张力盘的位置，上不卷的多时，向如图B方向移动线张力盘⑦的位置。

调整到合适位置后，把固定螺钉⑥拧紧。

7. 调整底线卷绕张力时，请转动线张力螺母⑧进行调整。

注意：

1. 卷绕底线时，请在梭心和张力盘⑦之间拉线的状态下开始绕线。

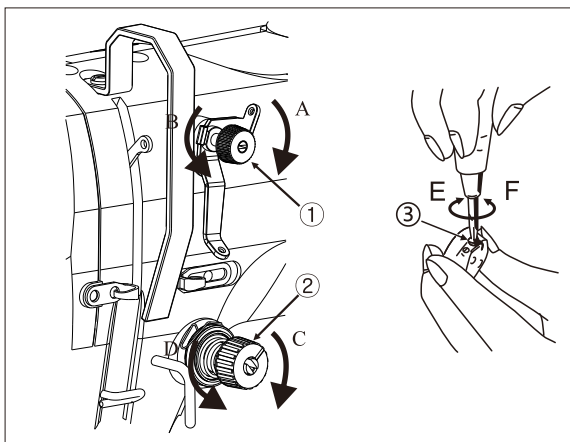
2. 不进行缝制时给梭心绕底线时，请把上线从挑线杆孔上抽出来，把梭心从旋梭里卸下来后再进行。

1. Insert the bobbin deep into the bobbin winder spindle ① until it will go no further.
 2. Pass the bobbin thread pulled out from the spool rested on the right side of the thread stand following the order as shown in the figure on the left. Then, wind clockwise the end of the bobbin thread on the bobbin several times. (In case of the aluminum bobbin, after winding clockwise the end of the bobbin thread, wind counterclockwise the thread coming from the bobbin thread tension several times to wind the bobbin thread with ease.)
 3. Press the bobbin winder trip latch ② in the direction of A and start the sewing machine. The bobbin rotates in the direction of C and the bobbin thread is wound up. The bobbin winder spindle ① automatically as soon as the winding is finished.
 4. Remove the bobbin and cut the bobbin thread with the thread cut retainer.
 5. To adjust the winding amount of the bobbin thread, loosen the setcrew ④ and move the bobbin winder adjusting plate ⑤ to the direction of A or B. Then, tighten the setcrew ④. To the direction of A: Decrease; to the direction of B: Increase.
 6. In case that the bobbin thread is not wound evenly on the bobbin, loosen the nut ⑥ and turn the bobbin thread tension to adjust the height of the thread tension disk ⑦.
- ☞ It is the standard that the center of the bobbin is as high as the center of the thread tension disk.
 - ☞ Move the position of the thread tension disk ⑦ to the direction of A as shown in the figure on the left when the winding amount of the bobbin thread on the lower part of the bobbin is excessive and to the direction of B as shown in the figure on the left when the winding amount of the bobbin thread on the upper part of the bobbin is excessive.
- After the adjustment, tighten the nut ⑥.

Caution:

1. When winding the bobbin thread, start the winding in the state that the thread between the bobbin and thread tension disk ⑦ is tense.
2. When winding the bobbin thread in the state that wing is not performed, remove the needle thread from the thread path of thread take-up and remove the bobbin from the hook.

14. 缝线的张力的调整 Thread tension



1. 面线张力的调整

- 1) 把面线张力螺母①顺时针方向（A方向）转动，面线的张力变强；
- 2) 把面线张力螺母①逆时针方向（B方向）转动，面线的张力变弱；
- 3) 把线张力螺母②向右C方向转动，面线张力变强；
- 4) 把线张力螺母②向左D方向转动，面线张力变弱。

2. 底线张力的调整

- 1) 把张力螺钉③向右E的方向转动，底线张力变强；
- 2) 向左F方向转动的变弱。

1. Adjusting the needle thread tension

- 1)As you turn thread tension nut ①clockwise (in direction A), the thread remaining on the needle after thread trimming will be shorter.
- 2)As you turn nut ① counterclockwise (in direction B), the thread length will be longer .
- 3)As you turn thread tension nut ② clockwise(in direction D), the needle thread tension will be increased.
- 4)As you turn nut ② counterclockwise (in direction D) , the needle thread tension will be decreased.

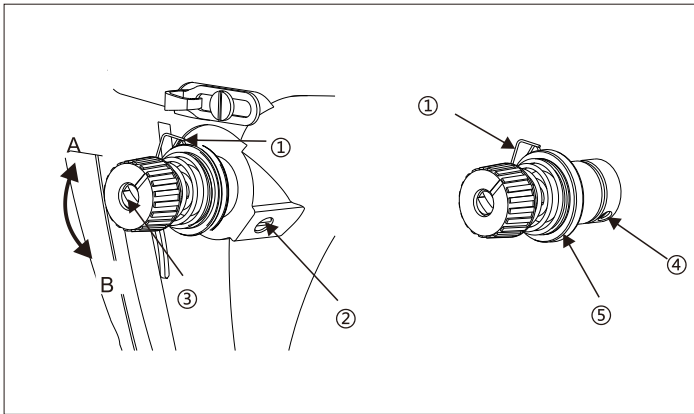
2.Adjusting the bobbin thread tension

- 1)As you turn tension adjust screw ③ clockwise (in direction E), the bobbin thread tension will be increased.
- 2)As you turn screw③ counterclockwise (in direction F), the bobbin thread tension will be decrease.

15. 挑线簧的调节 Thread take-up spring

1. 挑线簧摆动量的调节：

- 1) 旋松定位螺钉②；
- 2) 把夹线螺钉③朝顺时针方向（即A方向）转动时，挑线簧的摆动量将增大；



3) 把夹线器螺钉③朝逆时针方向（即B方向）转动时，挑线簧的摆动量将减小。

2. 挑线簧的张力调节：

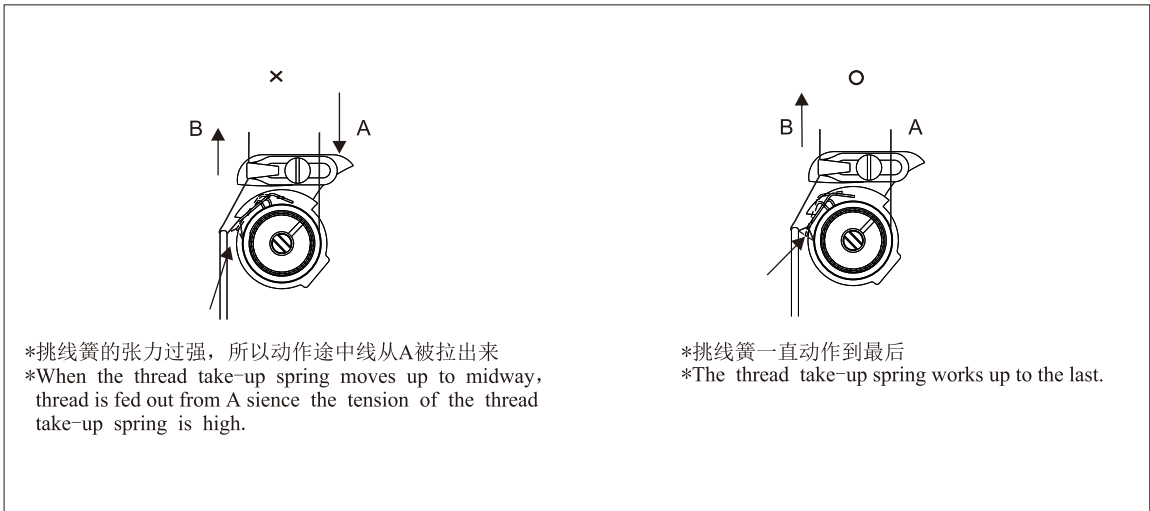
1) 旋松定位螺钉②，取出夹线器⑤（组件）；

2) 旋松定位螺钉④，并转动夹线器螺钉③；

3) 把夹线器螺钉③朝顺时针方向（即A方向）转动，挑线簧的张力件增大；

4) 把夹线器螺钉③朝逆时针方向（即B方向）转动时，挑线簧的张力将减小。

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。



挑线簧调整适当的判定方法：确认挑线簧的压力调整后，把面线向B方向拉出，如果在挑线簧达到最低位置之前面线B处就被拉动，请减弱挑线簧的压力。

1. Changing the stroke of thread take-up spring

1) Loosen setscrew ②.

2) As you turn tension post ③ clockwise (in direction A), the stroke of the thread take-up spring will be increased.

3) As you turn tension post ③ counterclockwise (in direction B), the stroke will be decreased.

2. Changing the pressure of thread take-up spring

1) Loosen setscrew ②, and remove thread tension ⑤.

2) Loosen setscrew ④.

3) As you turn tension post ③ clockwise (in direction A), the pressure will be increased.

4)As you turn tension post ③ counterclockwise (in direction B), the pressure will be decreased.

Usually, upon the machine coming out, all the take-up spring has been adjusted well, only while sew special material thread , it need to be adjusted again.

To judge the work of the thread take-up spring, confirm whether or not the thread take-up spring works up to the last before needle thread is pulled out from A when pulling out needle thread in the direction of B after the pressure of the thread take-up pring has been performed. When it does not work up to the last, decrease the pressure of the thread take-up spring. In addition , the stroke of the thread take-up spring is excessively small, the spring does not work properly. For the general fabrics, a stroke of 10 to 13mm in proper.

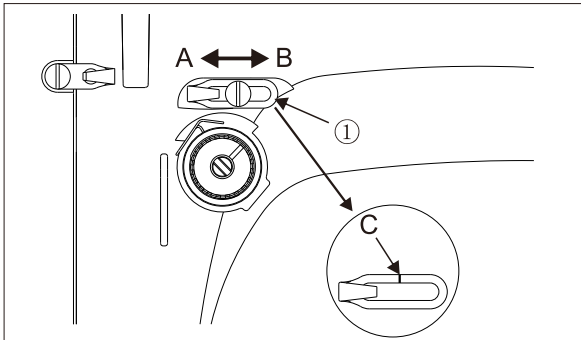
16. 挑线杆挑线量的调节 Adjusting the thread take-up stroke



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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



1. 缝制厚料时, 应将右线钩①朝左方向A方向移动, 以增大挑线量;
2. 缝制薄料时, 应将右线钩①朝右方向B方向移动, 以减少挑线量;
3. 右线钩①上的刻线C与螺钉中心一致时为标准位置。

1. When sewing heavy-wight materials, move thread guide ① to the left (in direction A) to increase the length of thread pulled out by the thread take-up.
2. When sewing light-wight materials, move thread guide ① to the right (in direction A) to decrease the length of thread pulled out by the thread take-up.
3. Normally, thread guide ① is positioned in a way that marker line C is aligned with the center of the screw.

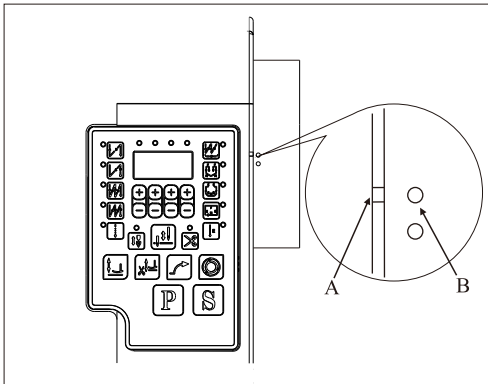
17. 机针停止位置的调整 Adjusting the needle stop position



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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



1. 剪线后的停止位置

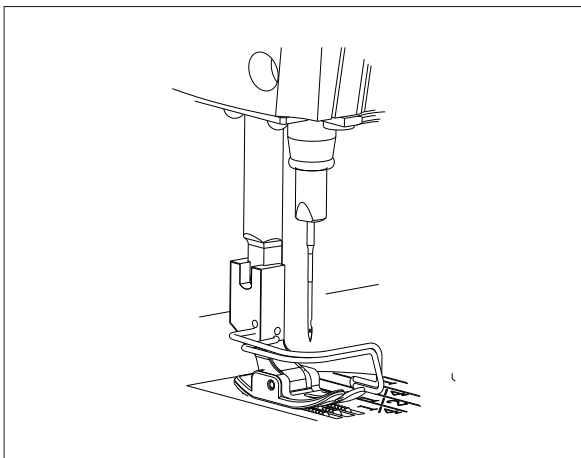
- 1) 标准的机针停止位置是手轮外罩的刻点A和手轮的刻点B一致时的位置。
- 2) 上针位基准位置调整（参数P-75），设置P-75参数，改变机头基准偏移位置，以调整上针位的位置。

1. Stop position after thread trimming

- 1) The standard needle stop position is obtained by aligning marker dot A on the pulley cover with white marker dot B on the hand-wheel.
- 2) The needle position reference position adjustment (Parameter P-75). Set up the parameter of P-75, changing the datum shift position of machine' nose to adjust the needle position.

2. 缝制的结束

踏板从前踩踏变为中立时的机针位置的调整（参数P-69）
设置下针位的位置，从上针的偏移角度。



2. Lower stop position

The lower needle stop position when the pedal is returned to the neutral position after the front part of the pedal is depressed can be adjusted as follows. (Parameter P-69)
Setup the lowest position of needle, from the point of the needle position offset.

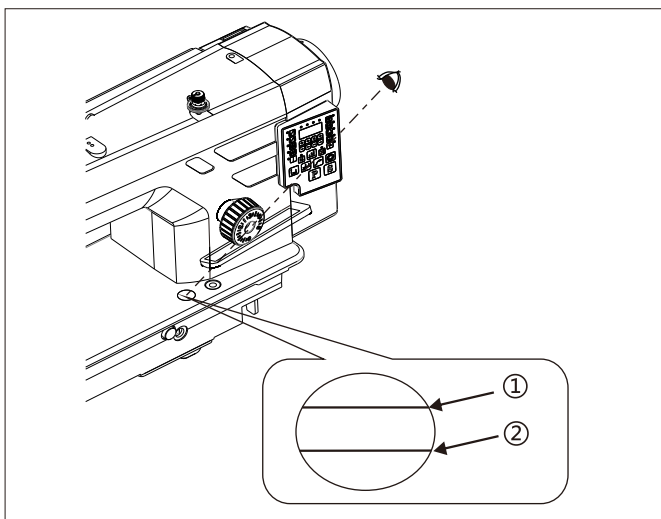
18. 齿轮箱润滑油查看与添加 Oil check and addition



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。

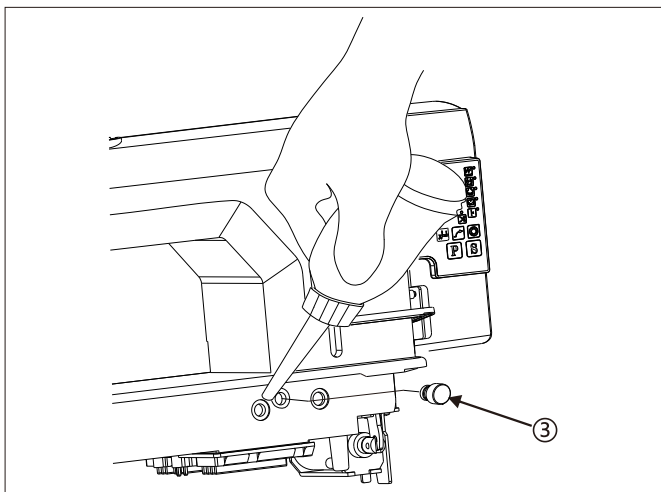


Warning: Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



运转缝纫机时，请一定要查看齿轮箱润滑油是否充足，及时添加充足的润滑油。

1. 缝纫机出厂时已往齿轮箱添加充足的润滑油，缝纫机在使用时，齿轮箱中的润滑油会不断的被消耗，通过机器上的齿轮箱油标可以实时查看齿轮箱润滑油是否充足，按图标查看位置可清晰查看到齿轮箱油标上的刻度，刻线①表示齿轮箱油量充足可安全使用缝纫机，刻线②表示齿轮箱油量已消耗完毕，需要尽快添加齿轮油。
2. 如果齿轮箱中的润滑油已消耗完毕，可按图示揭开③齿轮箱橡皮塞，然后按图示方法添加润滑油，当润滑油液面达到刻度线①即可。



When the sewing machine running, please check lubricating oil of gear box is sufficient or not. Add sufficient oil in time.

1. When you open the new machines, the lubricating oil of gear box is sufficient. While you running the machines, the oil is spent contnously, we can inspect the oil oil of gear box is sufficient or not through the oil mark on gear box . According to the picture , we can see gear box's oil mark.
① , It means oil is enough and machines can be running safely. ②, It means oil is used out and need to add oil inmmdiately.

2. If the oil is used out , please uncover the rubber plug ③ of gear box(note the picture), then add lubricating oil, it is ok when the oil is up to the scale ① of oil mark.

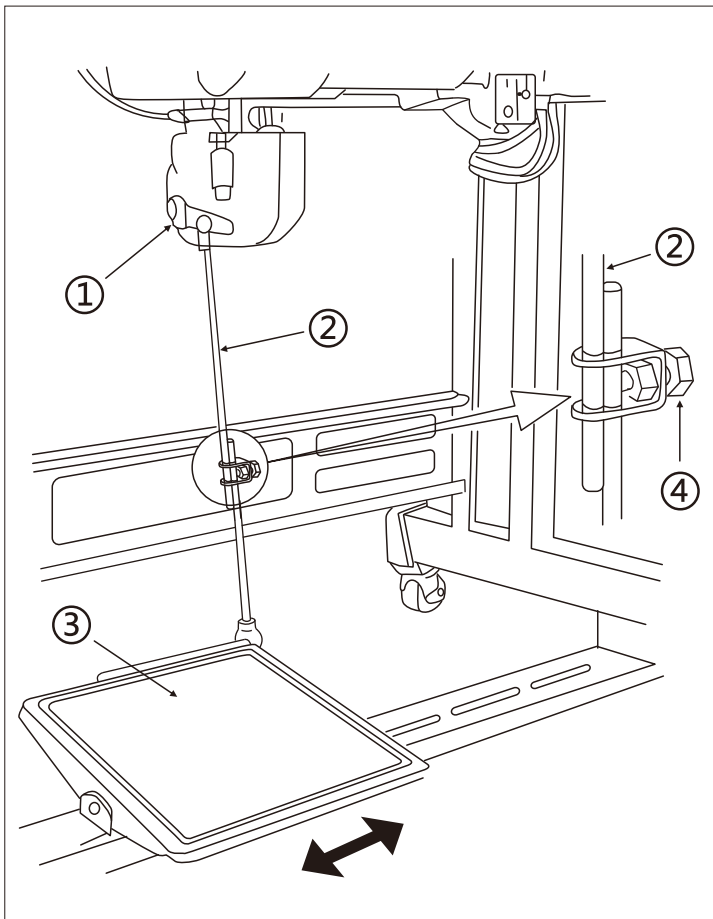
19. 踏板的调整 Adjusting of the pedal



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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



1. 连杆的安装

向箭头方向移动踏板调节板③，让马达控制杆①和连接杆②成一直线。

2. 踏板的角度

- 1) 调节连接杆的长度即可以改变踏板的角度。
- 2) 拧松调节螺钉④，移动连接杆②进行调节。

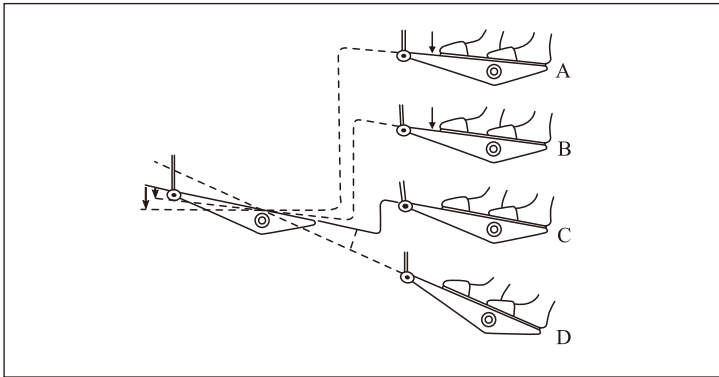
1. Installing the connecting rod

Move pedal ③ to the right or left as illustrated by the arrows so that motor control lever ① and connecting rod ② are straightened.

2. Adjusting the pedal angle

- 1) The pedal tilt can be freely adjusted by changing the length of the connecting rod.
- 2) Loosen adjust screw ④ , and adjust the length of connecting rod ②.

20. 踏板的操作 Pedal operation



1. 踏板有4级操作

- 1) 向前轻轻踩踏板为低速缝纫B;
- 2) 再继续往前踩踏板为高速缝纫A; (但是, 设定了自动倒缝开关后, 倒缝结束之后为高速缝纫);
- 3) 向后踩踏板为切线动作D。

□ 使用自动压脚提升装置时, 在停止和切线之间增加一级开关向

后轻轻踩踏板, 为压脚提升动作C在再继续踩踏板为切线动作。

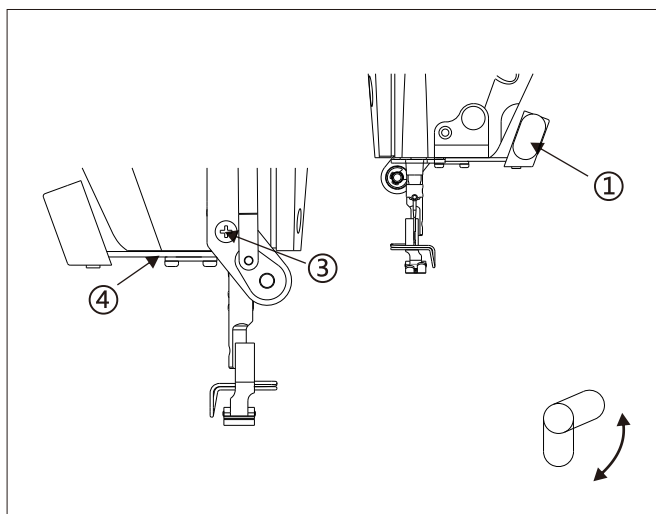
- ☞ 始缝的自动倒缝中, 把踏板返回中立位置则缝纫机倒缝结束后停止。
- ☞ 从高速缝纫或低速缝纫中向后用力踩踏板缝纫机均可切线。
- ☞ 缝纫机切线中把踏板返回中立位置但机器仍然把线切完。
- ☞ 缝纫机停止机针下降停止之后, 如果想升起机针时, 请往后踩一次踏板。

1.The pedal is operated in the following four steps:

- 1)The machine runs at low sewing speed when you lightly depress the front part of the pedal B.
 - 2)The machine runs at high sewing speed when you further depress the front part of the pedal A.
(If the automatic reverse feed stitching has been preset, the machine runs at high speed after it completes reverse feed stitching.)
 - 3)The machine trims threads when you fully depress the part of the pedal D.
- If your machine is provided with the Auto-lifter, an addition step is given between the machine stop and thread-trimming step. The presser foot goes up when you lightly depress the back part of the pedal C, and if you futher depress the back part, the thread trimmer is actuated.
 - ☞ If you reset the pedal to its neutral position during the automatic reverse feed stitching at seam start, the machine stops after it completes the reverse feed stitching;
 - ☞ The machine will perform normal thread trimming even if you depress the back part of the pedal immediately following high or low speedsewing.
 - ☞ The machine will completely perform thread trimming even if you reset the pedal to its neutral position immediately after the machine started thread trimming action.
 - ☞ When the machine stops with its needle down, and if you want to bring the needle up, depress the back part of the pedal once.

21. 单触手动倒缝

One-touch type reverse feed stitching mechanism



1. 使用方法

- 1) 按下开关拨杆①, 缝纫机立即倒缝;
- 2) 手一松开立即变为正向倒缝。

1. How to operate

- 1) The moment switch ① is pressed, the machine performs reverse feed stitching.
- 2) The machine resumes normal feed stitching the moment the switch lever is released.

2. 开关的高度 Height of the switch



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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

1) 开关①有两挡位置可以使用;

2) 想把开关①的位置再降下时，请拧紧缝纫机背面的固定螺钉③，降下开关座④。

1) Switch ① can be used in two positions by turning it.

2) In addition, when you desire to lower the position of switch ①, loosen setscrew ③ located in the back of the machine head and lower switch base ④.

22. 机针与旋梭的关系 Needle-to-hook relationship



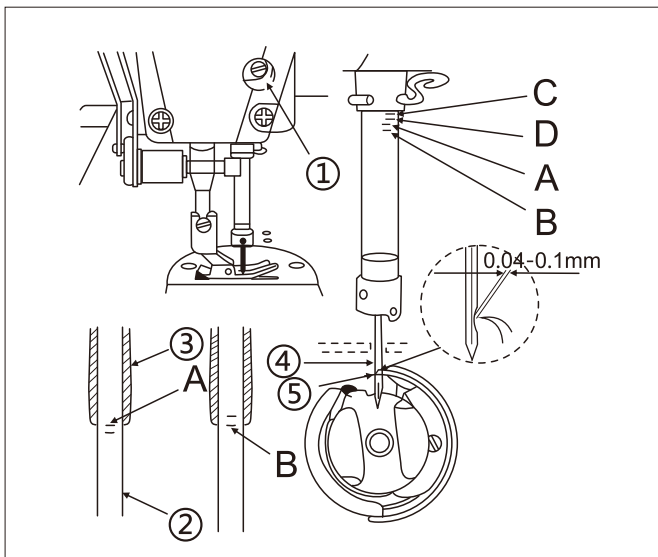
注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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

1. 转动手轮, 使针杆下到最低点, 然后拧松针杆连接柱紧固螺钉①;
2. 确定针杆的高度:
 - 1) 使用DB针时, 使针杆②上的刻线A对准针杆下轴套③的下端, 然后拧紧针杆连接柱定位螺钉①;
 - 2) 使用DA针时, 使针杆②上的刻线C对准针杆下轴套③的下端, 然后旋紧针杆连接柱定位螺钉①;
3. 确定旋梭位置:

- 1) 使用DB针时, 旋松三颗旋梭定位螺钉, 并转动上轮, 使针杆②在上升的方向刻线B对准针杆下轴套③的下端;



- 2) 使用DA针时, 旋梭三颗旋梭定位螺钉, 并转动上轮使针杆②在上升的方向刻线D对准针杆下轴套③的下端;
4. 在上述状态下, 使旋梭的钩线尖⑤对准机针④的中心, 针与旋梭的间隙为0.04~0.1(大约)毫米, 然后拧紧旋梭紧固螺钉。

注意:

1. 若间隙太小, 会磨损梭尖; 若间隙太大, 会引起跳针;
2. 旋梭损坏后更换, 请使用相同的型号。

1. Turn the hand-wheel to bring the needle bar down to the lowest point of its stroke, and loosen setscrew ①.
2. Adjusting the needle bar height:
 - 1) While using DB needle, align marker line A with bottom end of needle bar lower bushing ③, then tighten setscrew ①.

2) While using DA needle, align marker line C with the bottom end of needle bar lower bushing ③, then tighten setscrew ①.

3. Locate the hook position:

1) While using DB needle, loosen the three hook set screw, turn the hand-wheel, and align marker line B on ascending needle bar ② with the bottom end of needle bar lower bushing ③.

2) While using DA needle, loosen the three hook set screw, turn the hand-wheel, and align marker line D on ascending needle bar ② with the bottom end of needle bar lower bushing ③.

4. After making the adjustments mentioned in the above steps, align hook blade point ⑤ with the center of the needle ④, Provide a clearance of 0.04mm to 0.10mm(reference value) between the needle and the hook, then securely tighten setscrews in the hook.

Caution:

1. If the clearance between blade point of hook and the needle is smaller than the specified value, the blade point of hook will be damaged. If the clearance is larger, stitch skip-ping will result.

2. Use a hook of the same part No. When replacing your hook with a new one.

23. 定刀和动刀的研磨与更换

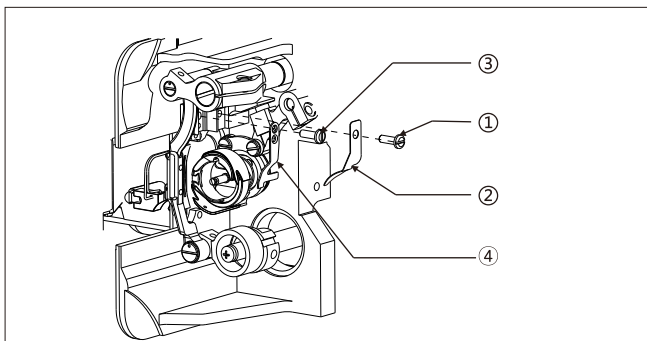
Change of counter knife and moving knife



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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



23.1 固定刀

1. 放倒机头。

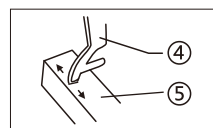
2. 松掉螺钉①，拆下旋梭定位钩②。

3. 松掉螺钉③，取出固定刀④。

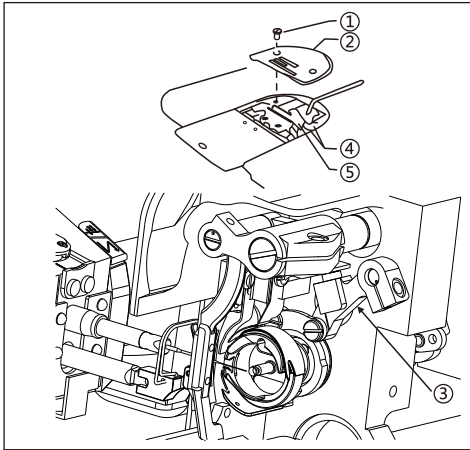
*安装方法 请按照上面的相反步骤进行。

固定刀的研磨方法

如刀具变钝，按图示在油石⑤上磨快固定刀④。



23. 2动刀



1. 取下机针。
 2. 用抬压脚扳手抬起压脚。
 3. 松掉螺钉①[2个]，然后取出针板②。
 4. 转动手轮，将针杆上升至最高的位置。
 5. 放倒机头。
 6. 按箭头所示方向推动切线驱动曲柄③直至看到螺钉④的位置。
 7. 松掉螺钉④[2个]，然后取出动刀⑤。
- * 安装方法请按照上面相反的步骤进行。

24. 剪线装置的调整

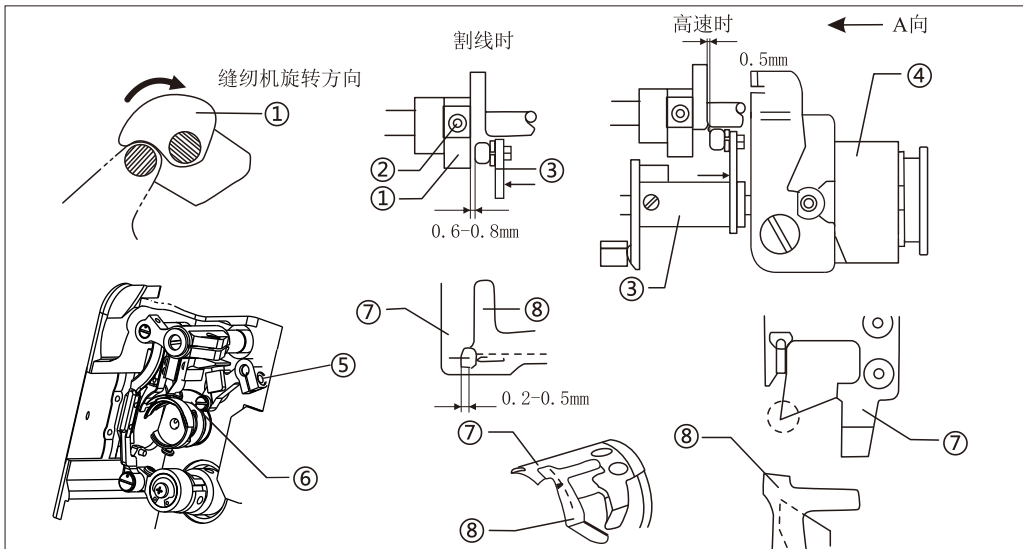
Adjustment of trimming system



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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



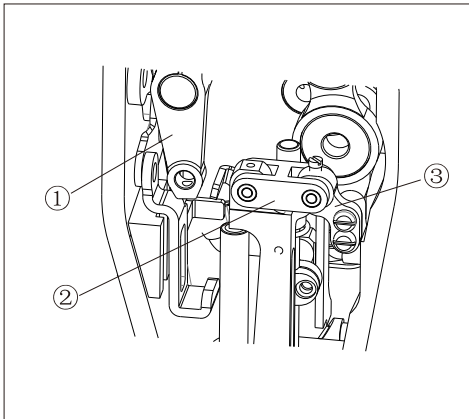
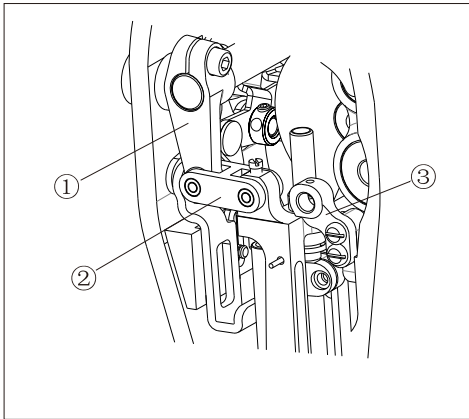
(一) 剪线凸轮位置的调节

转动缝纫机的上轮，当针杆从最低位置上升5mm时，用手沿A方向压紧剪线电磁铁④的铁芯，在电磁铁④的作用下，切线凸轮曲柄组件③中的滚珠被压进剪线凸轮①的凹部，临时旋紧剪线凸轮①中的螺钉②，放开电磁铁铁芯，电磁铁④复位。旋松螺钉②，左右调整剪线凸轮①位置，使剪线凸轮①右端面与滚珠左端面间隙为0.5mm，旋紧螺钉②，完成剪线凸轮①位置的调节。

(二)动刀、定刀位置的调节

压紧电磁铁铁芯,切线凸轮曲柄组件③中滚珠进入剪线凸轮①凹部,转动上轮,当刀轴连杆⑥带动动刀⑦做剪线动作时,定刀⑧前端与动刀⑦刃口应当啮合0.2~0.5mm。如果没有啮合,旋松螺钉⑤移动刀轴连杆⑥使定刀⑧的前端与动刀⑦的刃部啮合。动刀⑦、定刀⑧位置调节后要能保证在手动剪线时能剪断203棉线。

25. 送布方式的转换 Sending to the change



注意:为了防止缝纫机意外活动,请关掉电源后在操作



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

- 1) 把针杆小连杆②与摆轴前曲柄①用螺钉连接时,该机器的送布方式为针送布。
- 2) 把针杆小连杆②与针杆支架固定座③用螺钉连接时,该机器的送布方式为下送布
- 1) when you use screw to connect needle bar small rod ② with swing front crank shaft ①, the feed way of machine is needle feed.
- 2) when you use screw to connect needle bar small rod ② with needle Bar holder ①, the feed way of machine is lower feed

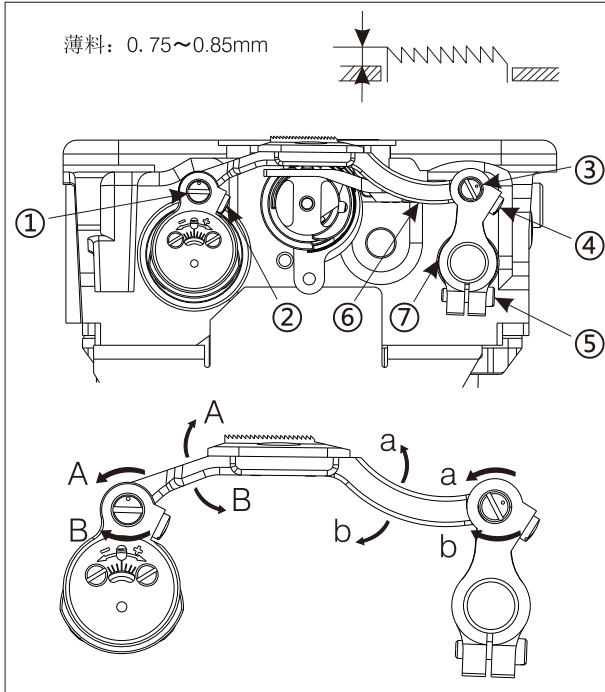
26. 送料牙的高度和倾斜度 Height and tilt of the feed dog



注意:为了防止缝纫机的意外启动,请关掉电源之后再进行操作。



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



送料牙的高度是高出针板 0.9mm
(布料为1.1mm)，请根据布料的具体情况调节适当的高度。

1. 送料牙的高度和倾斜度的调整

- 1) 拧松抬牙曲柄调节偏心销①紧定螺钉②以及牙架座偏心销③的紧定螺钉④；
- 2) 用螺丝刀转动①、③两销，就可以改变送料牙的高度和倾斜度；
- 3) 有关各销的转动方向和牙架⑥的倾斜度关系请参照图示；
- 4) 调整后请把拧松的螺钉拧紧固定。

(请在推住①、③偏心销的状态下拧紧②、④两颗紧定螺钉)。

注意:

1. 如果只用一侧的偏心销来调整送料牙的倾斜度, 送料牙的高度也会变化, 所以请一定要用两侧的销来调整。
2. 如果调整销位置之后, 送料牙的运动位置偏斜, 请拧紧牙架座⑦的紧定螺钉⑤, 调整送料牙的运动位置。

Height of the feed dog protrudes from the throat plate surface by 0.75 to 0.85mm (1mm for heavy type), Adjust the height in accordance with the material to be used.

1. Adjusting the height and tilt of the feed dog

- 1) Loosen setscrew ② in feed bar friving shaft ① and setscrew ④ in feed bar rocker shaft ③.
- 2) Height and tilt of the feed dog will change by turning both shafts ① and ③ with a screwdriver.
- 3) For the relation between the rotating direction of each shaft and tilt of feed bar ⑥, refer to the figure on the left.
- 4) After the adjustment, securely tighten the setscrews. (Tighten setscrews ② and ④ in the state that shafts ① and ③ are pushed against the hand-wheel side.)

Caution:

1. If the tilt of the feed dog is adjusted with one shaft only, the height of the feed dog changes. Be sure to adjust it with both shafts.
2. Movement position of the feed dog may be shifted depending on the adjusting position of the shaft. At this time, loosen setscrew ⑤ in feed rocker shaft arm ⑦ and adjust the movement position.

27. 送布的同步 Adjusting the feed timing



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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

改变抬牙凸轮①的固定位置，就可用改变送料的同步时间。

送料同步的调整方法：

1. 放倒缝纫机，拧松抬牙凸轮①的两颗固定螺钉②；
2. 转动抬牙凸轮①，就可以变更送布的同步时间。
 - ☞ 顺时针转动抬牙凸轮①，上下抬牙的同步时间变快；
 - ☞ 逆时针转动抬牙凸轮①，上下抬牙的同步时间变慢。

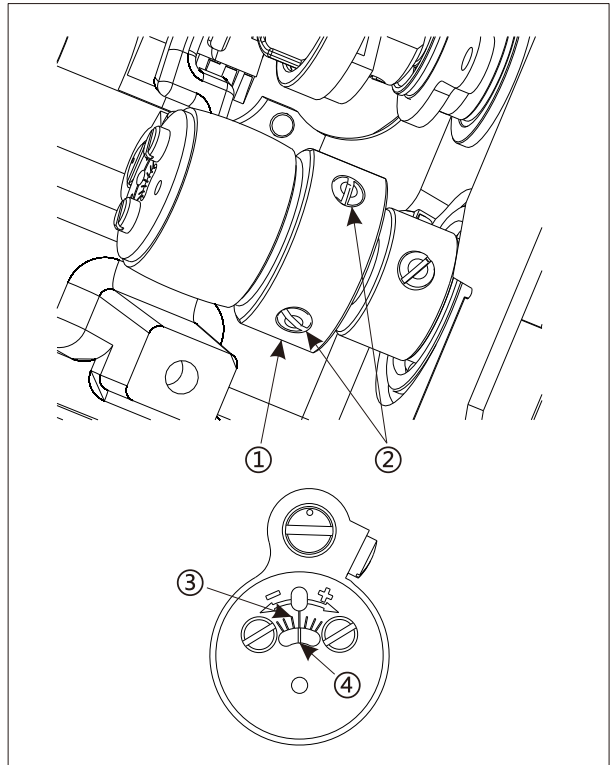
注意：一般情况，把刻度③的中央对准刻线。

The feed timing can be changed by changing the stop position of feed eccentric cam ①.

How to adjust the feed timing

1. Tilt the sewing machine head and loosen two setscrews ② in feed eccentric cam ①.
2. Turn feed eccentric cam ① to change the feed timing.
 - ☞ Turn feed eccentric cam ① in the direction of (+) → Increases the feed timing.
 - ☞ Turn feed eccentric cam ① in the direction of (-) → Decreases the feed timing.

Caution: For general use, use the machine in the state that center of graduation ③ is aligned with the engraved marker line



28. 解除机构

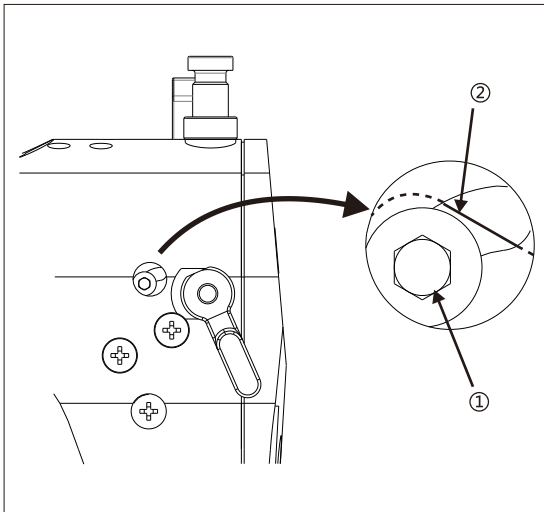
Thread tension release releasing mechanism



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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



利用松线解除机构，缝制中也可用提升面线也不松线。（厚的叠层部用膝动提升压脚，让它越过叠层部，二线张力不变化）

解除方法

- 1)卸下缝纫机的盖子，用内六角扳手拧松松线变换螺钉①；
- 2)把螺钉①固定到松线变换板②的最上部。抬起压脚时夹线器也不松线，面线张力也不松弛（只在切线时夹线器才松线）。

注意：螺钉的位置，只能固定到松线变换板的最上或最下位置，其它位置不能使用。缝纫机出货时固定在最下位置。

By means of the thread tension release releasing mechanism, sewing can be performed without slacking the needle thread tension even when the presser foot is lifted during sewing. (Even when the presser foot is slightly lifted at the thick overlapped section by the knee lifter, this mechanism can prevent the thread tension from being changed.)

How to release

- 1) Remove the cap in the machine head and loosen thread tension release changeover screw ① using a hexagon wrench.
- 2) Fix screw ① on the top of thread tension release changeover plate ②. The thread tension disk does not rise even when the presser foot is lifted, and the needle thread tension is not loosened. (The thread tension disk rises only when thread trimming is performed.)

Caution: Do not use screw ① at any position other than the top or bottom position of the thread tension release changeover plate. The screw has been factory-set to the bottom position at the time of delivery.

29. 微量压脚提升

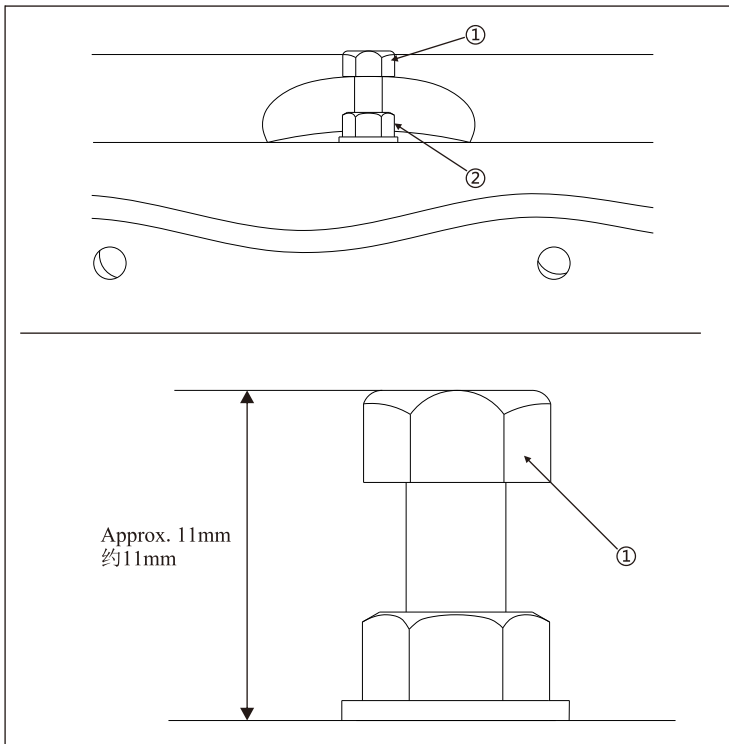
Micro-lifting mechanism of the presser foot



注意：为了防止缝纫机的意外启动，请关掉电源之后再进行操作。



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



缝制丝绒等起毛性缝料时，使用微量的压脚提升螺钉①功能就可以不使缝料缝偏，减轻缝料的损伤。

在螺母②拧松的状态下，一点一点拧紧微量压脚提升螺钉①，调整到适合缝料的让压脚微量上升位置，然后将螺母②固定。

注意：微量压脚提升机构不使用时，请把螺钉①高度调整到比缝纫机高约11mm的位置。微量压脚提升机构提升后缝纫机的送布能力会减弱。

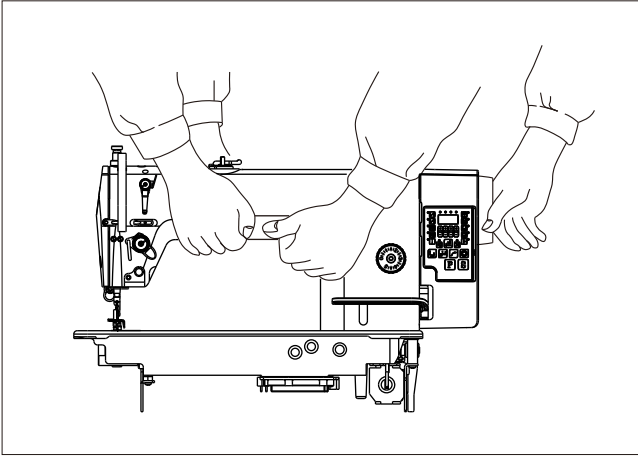
When sewing velvet or the like which is fluffy, slippage of material or damage of material is reduced by using screw ① for presser foot micro-lifting.

Gradually tighten screw ① for presser foot micro-lifting in the state that nut ② is loosened, adjust the presser foot to the position where it is finely lifted until it matches the material, and fix it with nut ②.

Caution: When the presser foot micro-lifting mechanism is not used, adjust the height of screw ① so that it is higher by approximately 11mm than the sewing machine. If the sewing machine is operated in the state that the micro-lifting mechanism is working, sufficient feed force can not be obtained.

30. 缝纫机的搬运及放置注意事项

Caution when carrying or placing the sewing machine



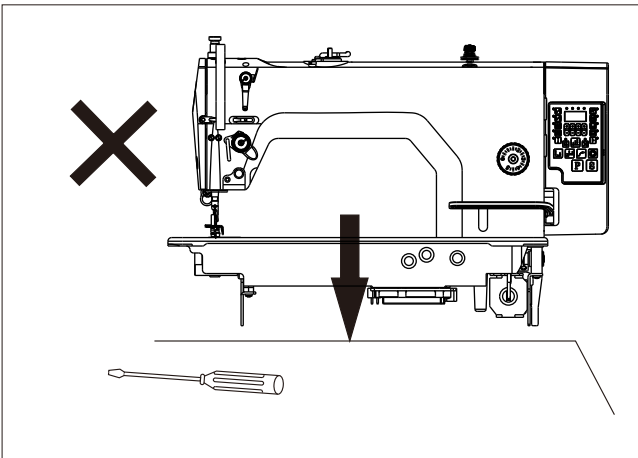
1. 搬运方法

请按图示那样, 由两人来搬运。

注意: 请不要抬着手轮来搬运。

2. 放置缝纫机时的注意事项

请不要把螺丝刀等东西放到放置缝纫机的地方。



1. How to carry the sewing machine.

Carry the sewing machine with two persons as shown in the figure.

Caution:

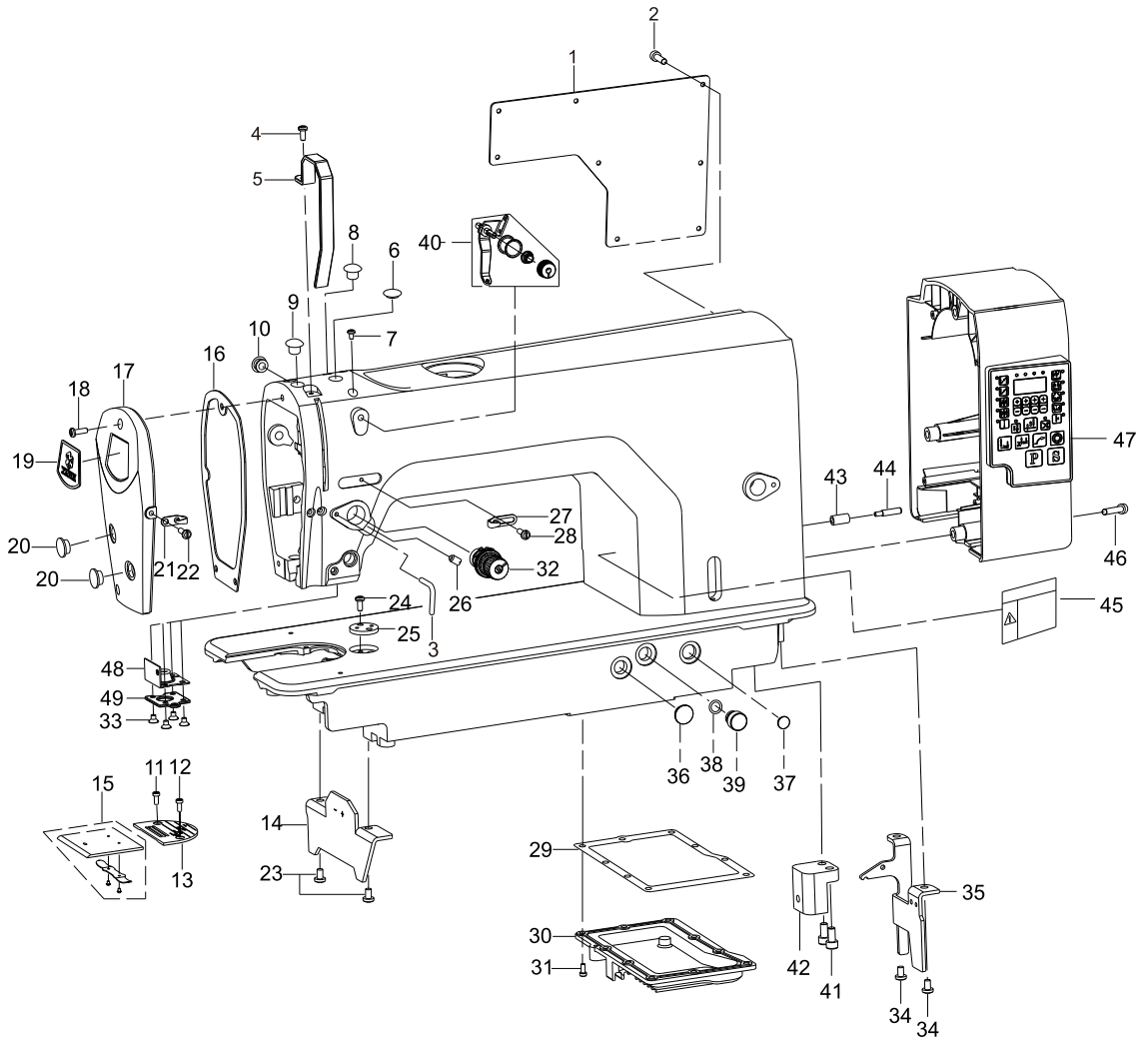
Do not hold the hand-wheel.

2. Caution when placing the sewing machine.

Do not place any protruding thing such as screwdriver or the like on the place where the sewing machine is set.

1、机体部件

MACHINE FRAME & MISCELLANEOUS COVER COMPONENTS

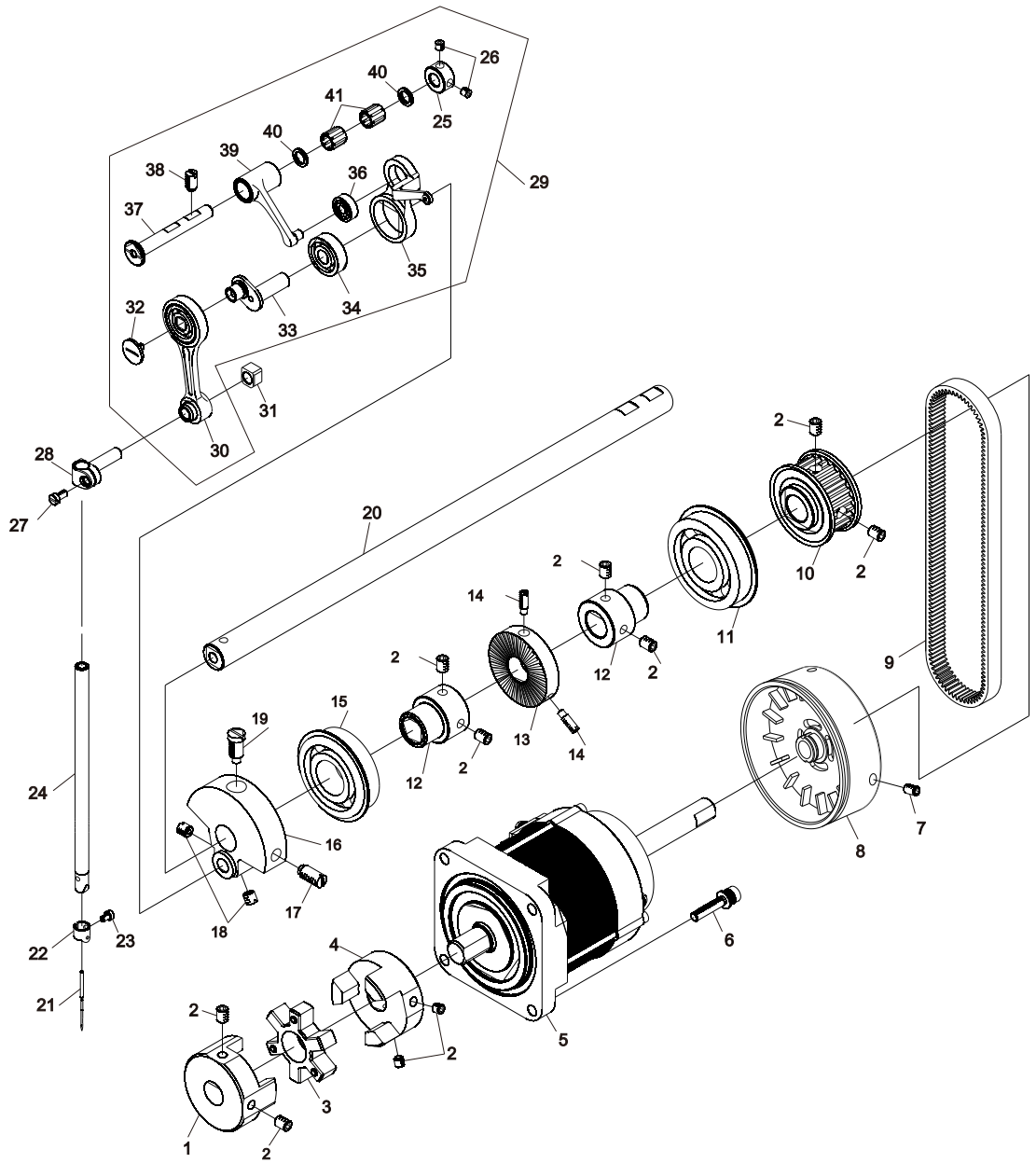


1、机体部件

MACHINE FRAME & MISCELLANEOUS COVER COMPONENTS

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	20003404	后盖板	Side Plate	1
2	10008972	螺钉 SM3/16"×28 L=10	Screw	7
3	10022343	缓线钩	Arm Thread Guide	1
4	10008972	螺钉 SM3/16"×28 L=10	Screw	1
5	20003407	挑线杆防护罩	Thread Take-up Lever Cover	1
6	10012147	橡胶塞	Rubber Plug	1
7	10010900	螺钉 SM11/64"×40 L=12	Screw	1
8	10008943	橡胶塞	Rubber Plug	2
9	10012158	橡胶塞	Rubber Plug	2
10	10012128	橡胶塞	Rubber Plug	1
11	10009005	螺钉 SM11/64"×40 L=6.8	Screw	1
12	10012463	螺钉 SM11/64"×40 L=6.8	Screw	1
13	10022847	针板	Needle Plate	1
14	10012135	前支撑板	Front Plate	1
15	10013706	推板部件	Slide Plate ASM	1
16	10022846	面板垫	Face Plate Packing	1
17	20006907	面板	Pace Plate	1
18	10008972	螺钉 SM3/16"×28 L=10	Screw	3
19	1005468	面板装饰牌	Face plate Adorning	1
20	10008977	橡胶塞	Rubber Plug	2
21	10008937	左线钩	Arm Thread Guide B	1
22	10008973	螺钉 SM11/64"×40 L=6	Screw	1
23	10012142	螺钉 SM15/64"×28 L=9	Screw	2
24	10004374	螺钉 SM11/64"×40 L=4.8	Screw	2
25	10004373	限位挡片	Ruler Stop Seat	1
26	10010593	螺钉 SM15/64"×28 L=7.5	Screw	1
27	10054575	右线钩	Arm Thread Guide A	1
28	10008973	螺钉 SM11/64"×40 L=6	Screw	1
29	10012143	箱盖密封垫	Gear Box Packing	1
30	10012145	齿轮箱盖	Gear Box Cover	1
31	10004611	螺钉 SM3/16"×28 L=15	Screw	10
32	10041354	夹线器组件	Thread Tenston Asm	1
33	10011049	螺钉 M4×8	Screw	4
34	10012142	螺钉 SM15/64"×28 L=9	Screw	2
35	10012148	后支撑板	Back Plate	1
36	10012128	橡胶塞	Rubber Plug	1
37	10012136	橡胶塞	Rubber Plug	1
38	10012139	O型圈	Rubber Ring	1
39	10012141	排气阀	Air-discharging	1
40	10012867	上夹线器部件	Thread Tension Guide	1
41	10011313	螺钉 M6×12	Screw	2
42	10022344	倒缝电磁铁支座	Revers Feed Solenoid Base	1
43	10013621	倒缝板手螺柱套	Revers Feed Lever Stopper	1
44	10012149	螺钉	Screw	1
45	10007516	机头安全提示牌	Safety Label	1
46	10006157	螺钉组件	Screw	4
47	10034326	一体式电控(桶)	Controll Box	1
48	10022342	机头下防油板橡胶垫	Rulley Cover	1
49	10022848	机头下防油板	Plate	1

2、上轴、挑线分 部件 Main Shaft & Thread Take-up Cover Components



2、上轴、挑线分部件

Main Shaft & Thread Take-up Cover Components

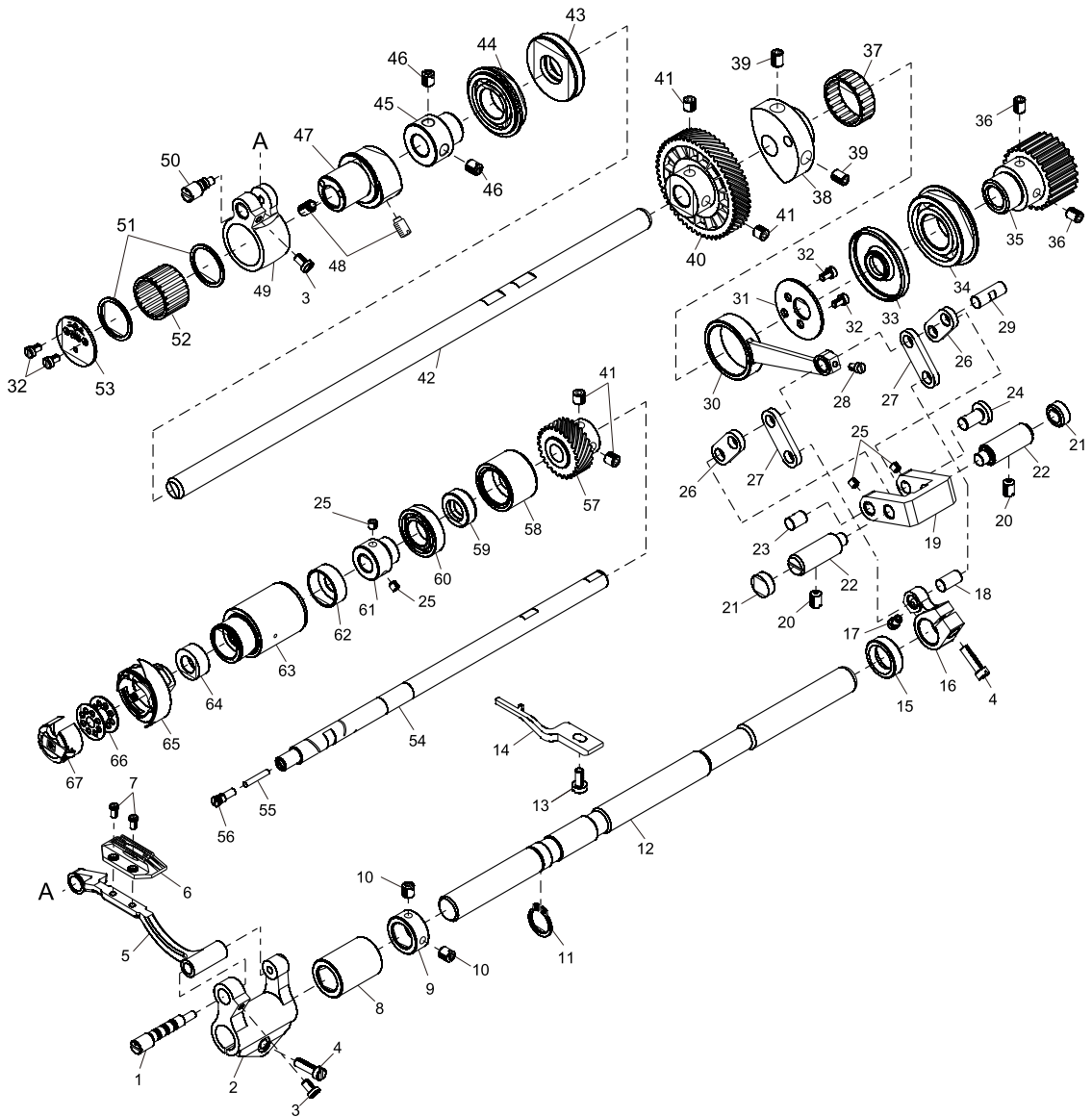
序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10012613	上轴联轴器	Coupling	1
2	10009187	螺钉	Screw	10
3	10011227	传动连接橡胶块	Rubber ring	1
4	10012615	电机联轴器	Coupling	1
5	10034325	电机	Motor	1
6	10006157	螺钉组件	Screw ASM.	4
7	10002436	螺钉	Screw	2
8	20010974	上轮组件	Head wheel ASM.	1
9	10012497	齿形带	Cog belt	1
10	10006241	上轴同步齿形带轮	Belt pulley	1
11	10025862	上轴后轴承	Bearing	1
12	10012668	轴承套	Bearing bush	2
13	10013112	绕线驱动轮	Driving wheel	1
14	10012062	螺钉	Screw	2
15	10039211	上轴前轴承	Bearing	1
16	10012607	针杆曲柄	Crank	1
17	10010082	螺钉	Screw	1
18	10005020	螺钉	Screw	2
19	10010545	螺钉	Screw	1
20	10012663	上轴	Main shaft	1
21	10004858	DP×5 14#机针	Needle DB×1 14#	1
22	10013181	针杆线钩	Thread guide	1
23	10013182	螺钉	Screw	1
24	10022347	针杆组件	Needle bar ASM.	1
25	10005745	挡圈	Closing ring	1
26	10013590	螺钉	Screw	2
27	10030286	螺钉	Screw	1
28	10010590	针杆连接柱	Joint pin	1
29	10022346	挑线杆组件	Thread take-up lever Asm.	1
30	10005785	针杆连杆组件	Connecting rod ASM.	1
31	10010586	针杆连接柱滑块	Sliding block	1
32	10010537	螺钉	Screw	1
33	10023444	挑线曲柄	Crank	1
34	10003607	轴承	Bearing	1
35	10005791	挑线杆	Thread take-up lever	1
36	10003595	轴承	Bearing	1
37	10005794	挑线连杆销	Pin	1

2、上轴、挑线分部件

Main Shaft & Thread Take-up Cover Components

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
38	10010083	螺钉	Screw	1
39	10005788	挑线连杆	Connecting rod	1
40	10005786	垫圈	Washer	2
41	10005747	轴承	Bearing	2

3、下轴送料部件 Horizontal Feed & Vertical Feed And Hook Driving Shaft Components



3、下轴送料部件

Horizontal Feed & Vertical Feed And Hook Driving Shaft Components

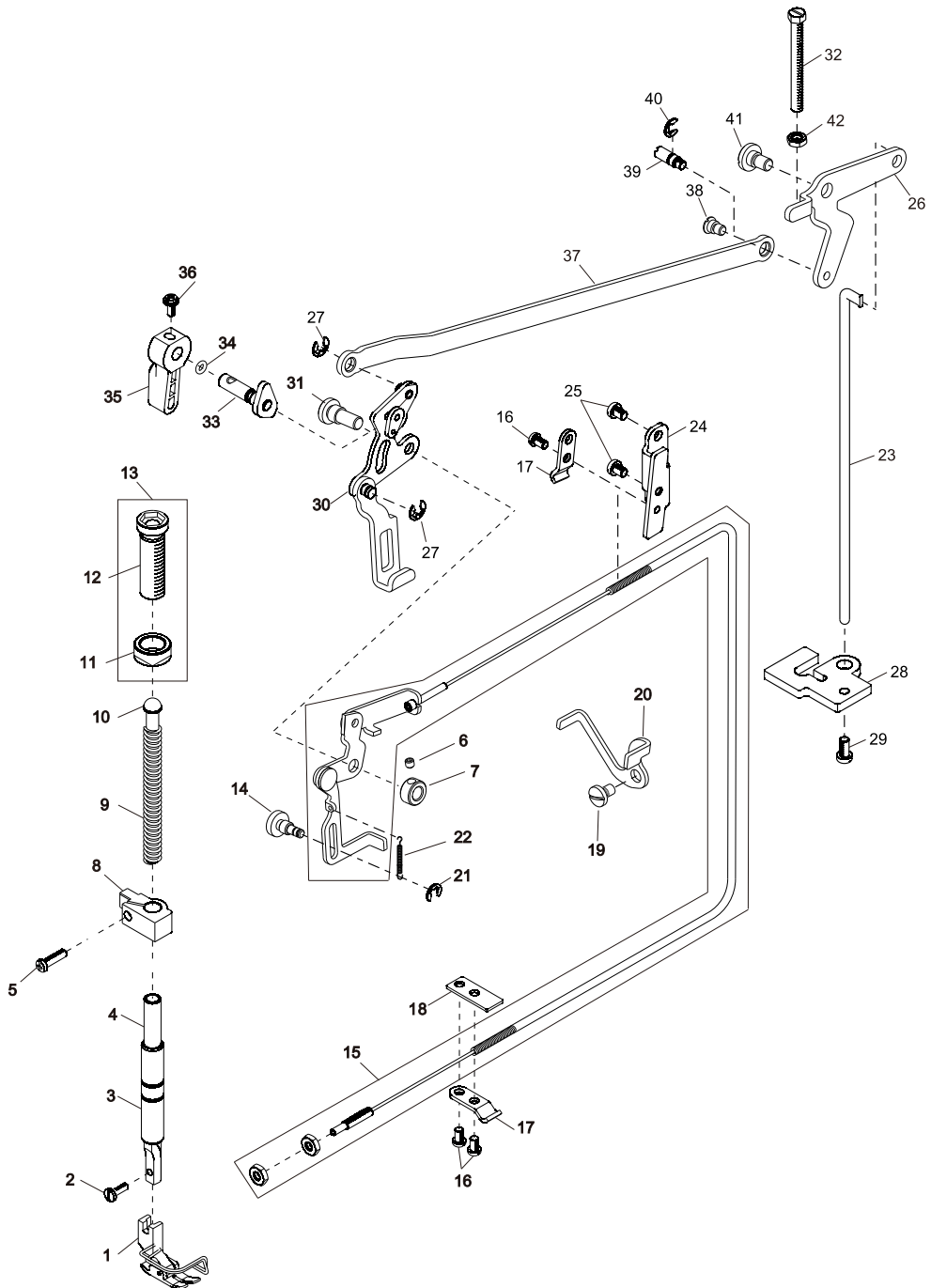
序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10012490	牙架座偏心销	Pin	1
2	10012540	牙架座	Feed bar driving crank	1
3	10010074	螺钉	Screw	2
4	10010095	螺钉	Screw	2
5	10012531	牙架组件	Feed bar ASM.	1
6	10022849	送料牙	Feed dog	1
7	10010099	螺钉	Screw	2
8	10012494	送料轴轴套	Shaft sleeve	1
9	10006134	挡圈	Closing ring	1
10	10012162	螺钉	Screw	2
11	10003290	挡圈	Closing ring	1
12	10032116	送料轴	Feed rocker shaft	1
13	10010066	螺钉	Screw	1
14	10012530	旋梭定位钩	Positioning finger	1
15	10012536	送料轴油封	Oil seal	1
16	10012492	送料后曲柄	Crank	1
17	10013015	螺钉	Screw	1
18	10035639	送料后曲柄销	Pin	1
19	10005746	送料摆动座	Feed adjusting	1
20	10010506	螺钉	Screw	2
21	10012495	橡胶塞	Rubber plug	2
22	10035633	送料摆动座销	Pin	2
23	10035637	销	Pin	1
24	10035645	销	Pin	1
25	10013590	螺钉	Screw	5
26	10035641	送料短摆动板	Connecting plate	2
27	10035635	送料长摆动板	Connecting plate	2
28	10010071	螺钉	Screw	1
29	10035643	送料连杆销	Pin	1
30	10005787	送料摆动连杆	Connecting rod	1
31	10005742	送料偏心轮挡片	Cover plate	1
32	10010643	螺钉	Screw	4
33	10012538	拾牙轴后油封	Oil seal	1
34	10025882	拾牙轴后轴承	Bearing	1
35	10012535	拾牙轴同步齿形带轮	Gear	1
36	10009187	螺钉	Screw	2

3、下轴送料部件

Horizontal Feed & Vertical Feed And Hook Driving Shaft Components

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
37	10005792	送料偏心轮滚针轴承	Bearing	1
38	10005740	送料偏心轮	Feed drive eccentric cam	1
39	10010678	螺钉	Screw	2
40	10012462	拾牙轴斜齿轮	Gear	1
41	10008862	螺钉	Screw	2
42	10012489	拾牙轴	Feed driving shaft	1
43	10012533	拾牙轴前油封	Oil seal	1
44	10026364	拾牙轴前轴承	Bearing	1
45	10012501	拾牙轴前轴承套	Bearing bush	1
46	10010065	螺钉	Screw	2
47	10006135	拾牙凸轮	Cam	1
48	10010083	螺钉	Screw	2
49	10005789	拾牙曲柄	Crank	1
50	10012498	拾牙曲柄偏心销	Pin	1
51	10005790	拾牙凸轮滚针轴承挡圈	Closing ring	2
52	10005744	拾牙凸轮滚针轴承	Bearing	1
53	10012503	拾牙凸轮挡板	Cover plate	1
54	10012534	下轴	Hook driving shaft	1
55	10010063	油芯	Oil wick	1
56	10010064	螺钉	Screw	1
57	10012554	下轴斜齿轮	Gear	1
58	10012678	下轴后轴套	Shaft sleeve	1
59	10012423	下轴后轴套油封	Oil seal	1
60	10026221	下轴轴承	Bearing	1
61	10012585	下轴轴承轴套	Bearing bush	1
62	10014503	下轴前轴套后油封	Oil seal	1
63	10014463	下轴前轴套	Shaft sleeve	1
64	10013029	下轴前轴套前油封	Oil seal	1
65	10013965	旋梭	Hook	1
66	10025484	梭芯	Bobbin	1
67	10006924	梭壳	Bobbin case	1

4、抬压脚部件 HANG LIFTER & TENSION RELEASE COMPONENTS



4、抬压脚部件

HANG LIFTER & TENSION RELEASE COMPONENTS

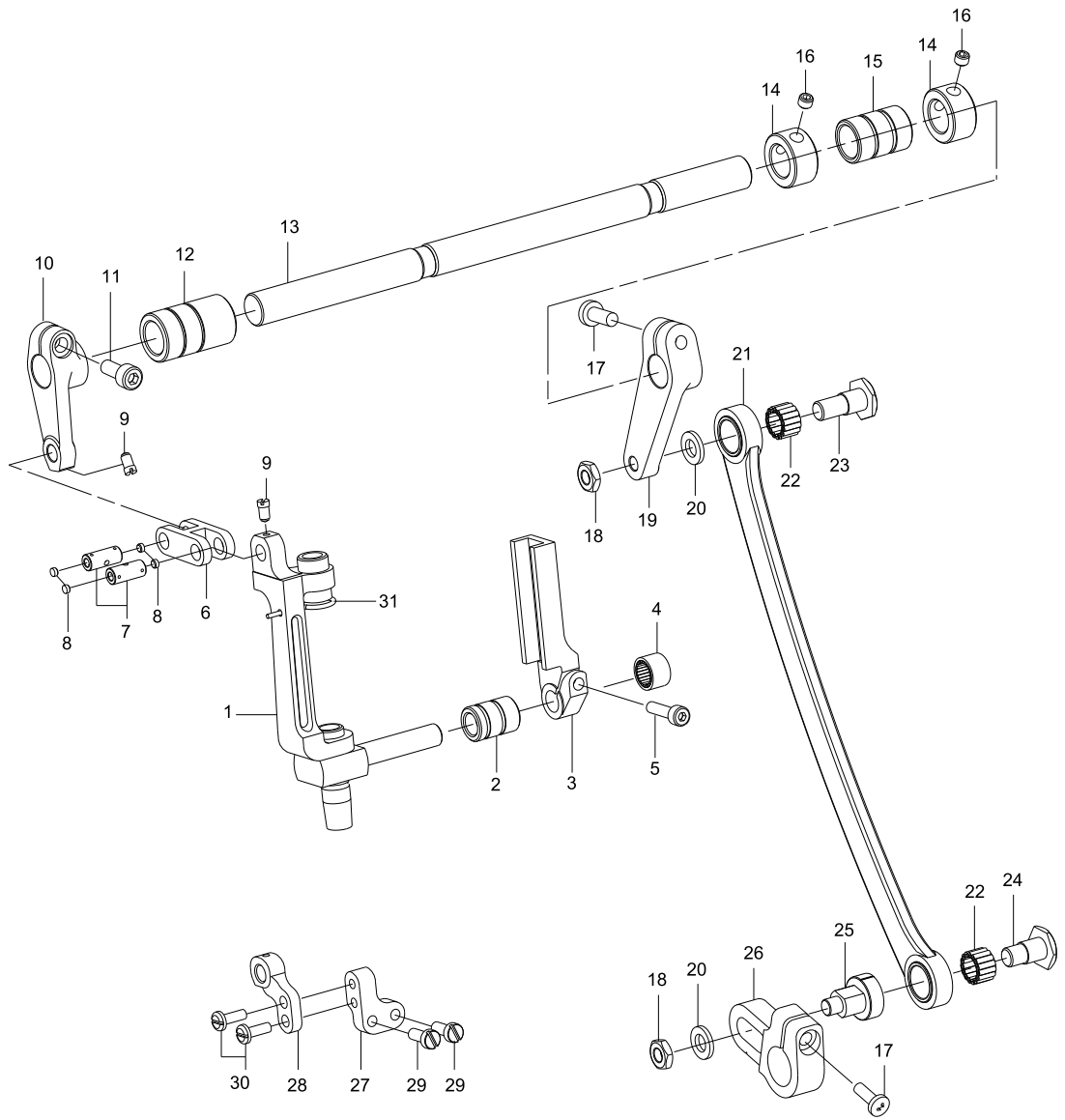
序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10022352	活压脚部件	Presser foot ASM.	1
2	10010650	螺钉	Screw	1
3	10014141	压杆轴套	Bearing support	1
4	10013328	压杆	Presser bar	1
5	10013567	螺钉SM11/64"×40 L=15.8	Screw	1
6	10011887	螺钉 SM9/64"×40 L=4	Screw	2
7	10013375	挡圈	Collar	1
8	10022349	压杆导架	Presser guide bar bracket	1
9	10004473	调压弹簧	Spring	1
10	10012426	调压导杆	Presser guide bar	1
11	10011023	调压螺母	Nut	1
12	10013325	调压螺钉	Screw	1
13	10021342	调压螺钉组件	Screw ASM.	1
14	10022351	销	Pin	1
15	10022855	松线钢丝部件	Loosing line ASM.	1
16	10012130	螺钉	Screw	3
17	10012445	软管压板	Wire holder	2
18	10033588	垫片	Base plate	1
19	10012181	螺钉	Screw	1
20	10022854	松线顶板	Tension Release Return	1
21	10003248	挡圈	Closing ring	1
22	10022508	弹簧	Spring	1
23	10030397	抬压脚顶杆	Connecting rod vertical	1
24	10005881	抬压脚拉线固定架	Fixing shutter	1
25	10012621	螺钉	Screw	2
26	10022853	抬压脚后杠杆	Lifting lever link	1
27	10010649	挡圈	Closing ring	2
28	10012429	抬压脚顶杆导板	Guide plate	1
29	10012637	螺钉	Screw	1
30	10022851	前杠杆组件	Hand lifter link ASM.	1
31	10022350	销	Pin	1
32	10012633	压脚上升调节螺钉	Screw	1
33	10013809	压脚扳手凸轮组件	Hand lifter CAM ASM.	1
34	10010027	O形圈	O-ring	1
35	10011064	压脚扳手	Hand lifter	1
36	10010016	螺钉	Screw	1
37	10022852	抬压脚拉杆	Lifting lever connecting rod	1

4、抬压脚部件

HANG LIFTER & TENSION RELEASE COMPONENTS

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
38	10005882	螺钉	Screw	1
39	10013109	螺钉	Screw	1
40	10013038	挡圈	Closing ring	1
41	10012430	螺钉	Screw	1
42	10012625	螺母	Nut	1

5、针杆摆动部件 THE NEEDLE BAR SWING COPONENTS

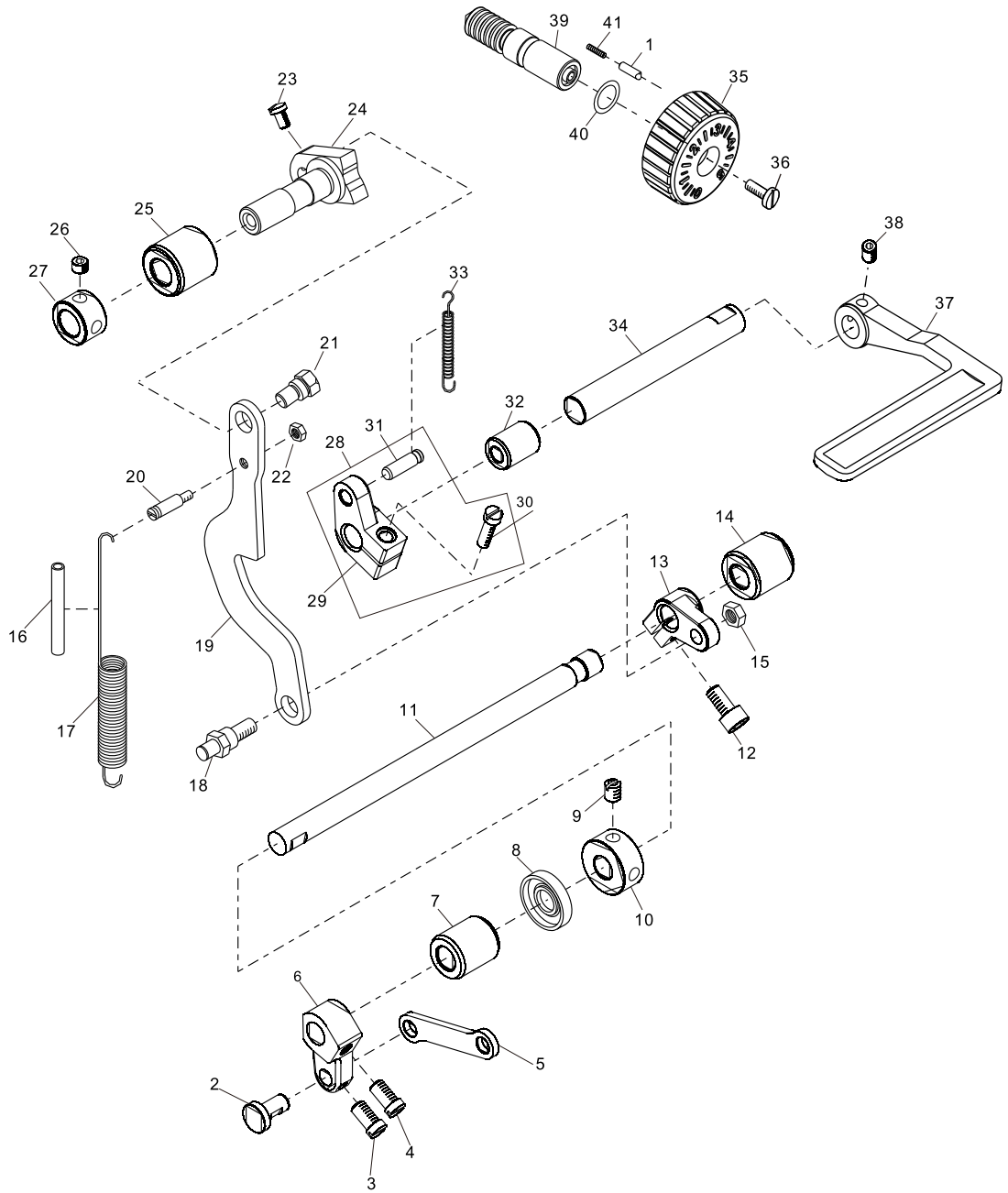


5、针杆摆动部件

THE NEEDLE BAR SWING COPONENTS

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10022509	针杆支架组件	ROCKING BASE COMPL	1
2	10022340	轴套	BUSHING	1
3	10023449	针杆滑块导轨	SLIDE BLOCK GUIDE	1
4	10003549	BK0808轴承	BEARING	1
5	10014395	螺钉M4×14	SCREW	1
6	10023454	针杆摆动小连杆	DRIVING LINK	1
7	10022856	销	LINK PIN	2
8	10022363	小连杆销堵塞	PLUG	4
9	10022354	螺钉SM9/64"×40 L=6	SCREW	2
10	10022355	摆动轴前曲柄	DRIVING CRANK FRONT	1
11	10004611	螺钉SM3/16"×28 L=12	SCREW	1
12	10022338	轴套	BUSHING	1
13	10022356	针杆支架摆动轴	NEEDLE FEED SHAFT	1
14	10011284	挡圈	COLLAR	2
15	10022339	轴套	BUSHING	1
16	10012014	螺钉 M5×4	SCREW	2
17	10022858	螺钉 SM3/16"×28 L=12	SCREW	2
18	10012855	螺母 M6×3.5	NUT	2
19	10022357	摆动轴后曲柄	NEEDLE FEED ROD CPMP	1
20	10000836	垫圈	WASHER	2
21	10022353	大连杆分组件	NEEDLE FEED ROD CPMP	1
22	10014106	轴承 K8×12×7.8	BEARING	1
23	10022358	螺钉	SCREW	1
24	10022858	螺钉	SCREW	1
25	10022857	连接螺钉	SCREW	1
26	10022360	针杆支架摆动调节曲柄	NEEDLE FEED ARM	1
27	10022362	针杆支架固定基座	GUIDE	1
28	10022361	针杆支架固定座	GUIDE	1
29	10011794	螺钉 M4×10	SCREW	2
30	10012507	螺钉 M3.5×10	SCREW	2
31	10008064	油线	WICK	1

6、倒缝部件 Feed Adjust Mechanism Components



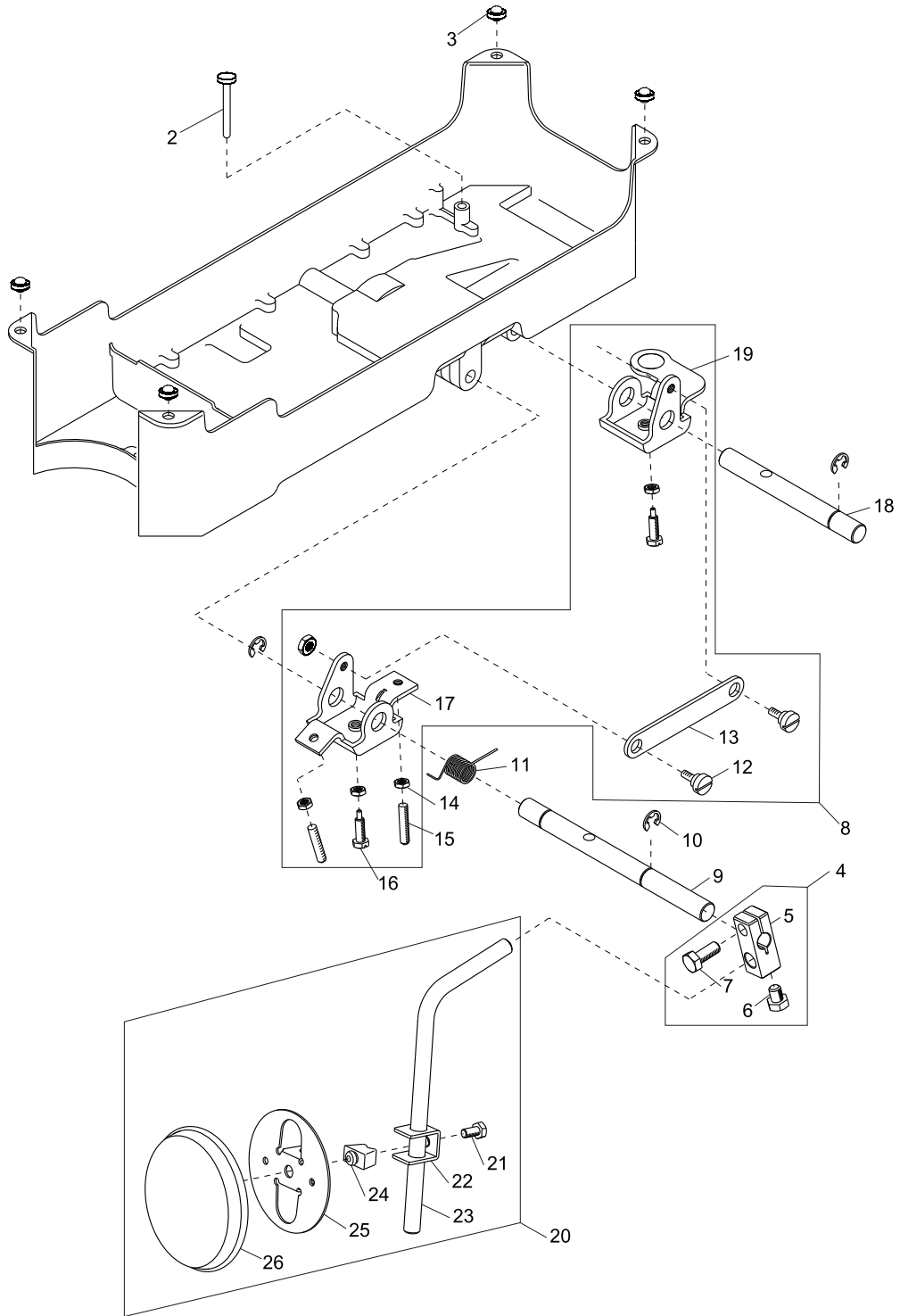
6、倒缝部件 Feed Adjust Mechanism Components

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10013870	旋钮锁销	Pin	1
2	10026507	连接销	Connecting pin	1
3	10010092	螺钉	Screw	1
4	10010092	螺钉	Screw	1
5	10026508	摆动座摆动连板	Connecting plate	1
6	10026506	摆动座前曲柄	Crank	1
7	10012629	针距调节轴前套	Shaft sleeve	1
8	10012622	针距调节轴油封	Oil seal	1
9	10003921	螺钉	Screw	2
10	10012627	挡圈	Closing ring	1
11	10013867	针距调节轴	Adjusting shaft	1
12	10010095	螺钉 SM3/16"×28 L=15.5	Screw	1
13	10012424	摆动座后曲柄	Crank	1
14	10012586	针距调节轴后套	Shaft sleeve	1
15	10012620	螺母	Nut	1
16	10007795	油管	Oil pipe	1
17	10031476	倒送料调节簧	Spring	1
18	10012418	连接销	Connecting pin	1
19	10012680	针距调节连接板	Connecting plate	1
20	10012635	弹簧挂销	Pin	1
21	10013866	针距调节偏心销	Pin	1
22	10010106	螺母	Nut	1
23	10010643	螺钉 SM9/64"×40 L=6	Screw	2
24	10012583	针距调节座	Adjustor	1
25	10012626	针距调节座轴套	Shaft sleeve	1
26	10008862	螺钉 SM1/4"×40 L=5.8	Screw	2
27	10012428	挡圈	Closing ring	1
28	20000150	倒缝扳手曲柄组件	Crank ASM.	1
29	10012638	倒送料曲柄	Crank	1
30	10010095	螺钉	Screw	1
31	10010287	弹簧挂销	Pin	1
32	10012578	倒送料扳手轴轴套	Shaft sleeve	1
33	10012676	倒送料曲柄簧	Spring	1
34	10012419	倒送料轴	Reverse feed shaft	1
35	10014418	针距调节旋钮	Knob	1
36	10010281	螺钉 SM3/16"×28 L=18	Screw	1

6、倒缝部件 Feed Adjust Mechanism Components

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
37	20003414	倒送料扳手	Reverse feed spanner	1
38	10009187	螺钉 M6×8	Screw	1
39	10010286	送料调节螺柱	Screw bolt	1
40	10010240	O形圈	O-ring	1
41	10013869	旋钮锁簧	Spring	1

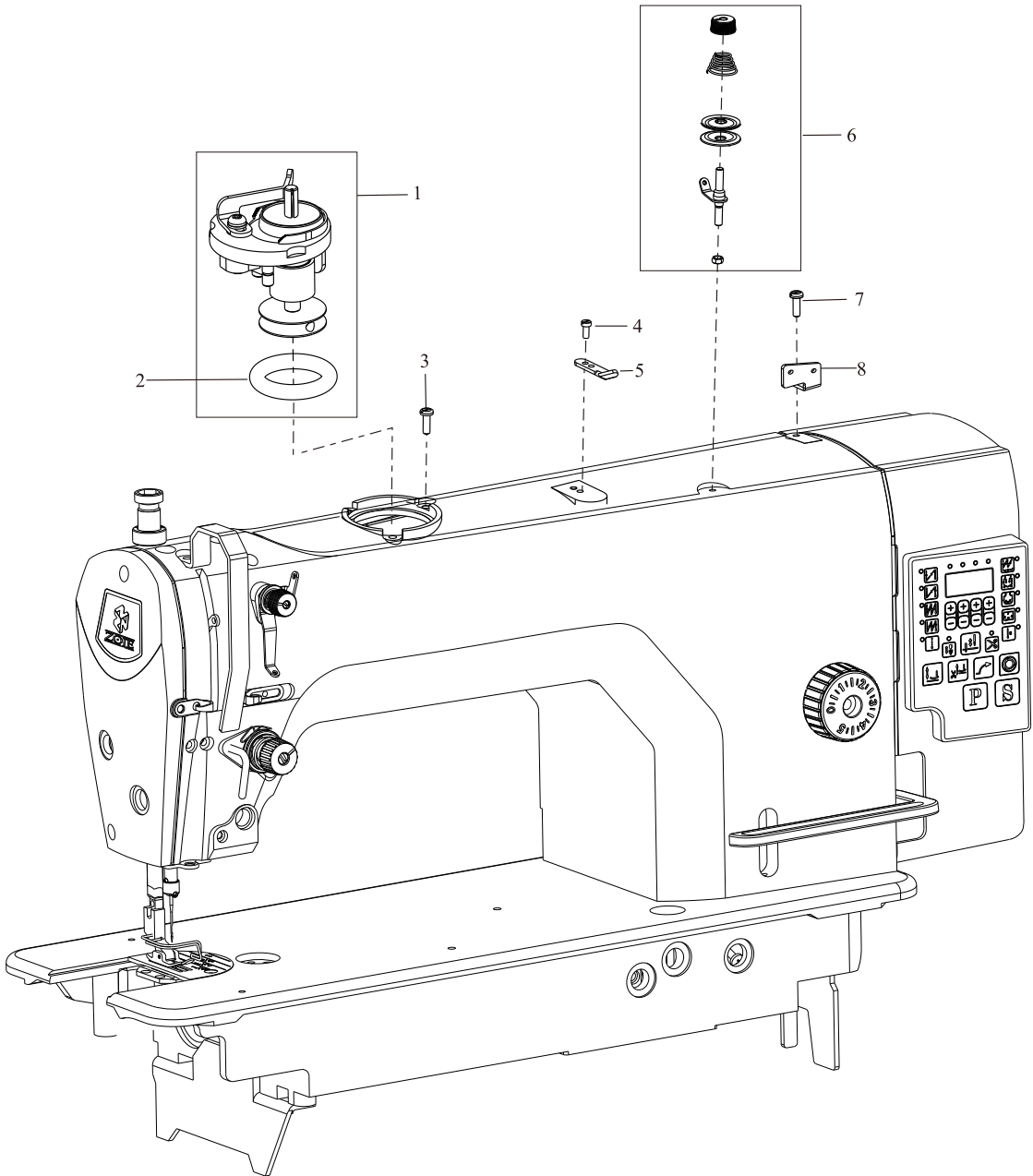
7、油盘膝提部件 Presser Foot Components Of Oil Plate Knee Lift



7、油盘膝提部件 Presser Foot Components Of Oil Plate Knee Lift

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10012632	油盘	Oil reservoir	1
2	10012631	抬压脚顶杆	Knee lifter presser rod	1
3	10013102	机头座垫	Head Gasket	4
4	10002562	操纵杆接头组件	Bracket ASM.	1
5	10003896	操纵杆接头	Bracket	1
6	10002610	螺钉	Screw	1
7	10002613	螺钉	Screw	1
8	10024632	膝控限位架组件	Connecting Rod ASM.	1
9	10008450	抬压脚轴 I	Knee pressing shaft I	1
10	10002559	挡圈	Snap ring	3
11	10012677	弹簧	Spring	1
12	10008465	螺钉	Screw	2
13	10008464	连接板	Connecting Plate	1
14	10003890	螺母	Nut	6
15	10003895	螺钉	Screw	2
16	10003898	螺钉	Screw	2
17	10008463	膝控限位架 I	Connecting Rod I	1
18	10008466	抬压脚轴 II	Knee pressing shaft II	1
19	10008383	膝控限位架 II	Connecting Rod II	1
20	10009985	操纵杆部件	Knee pressing plate ASM.	1
21	10003894	螺钉	Screw	1
22	10003897	操纵杆接头	Knee pressing plate holder	1
23	10003901	操纵杆	Knee pressing plate rod	1
24	10003900	操纵杆垫	Knee pressing plate rubber	1
25	10003891	操纵板	Knee pressing plate	1
26	10004223	操纵板软垫	Knee pressing cover	1

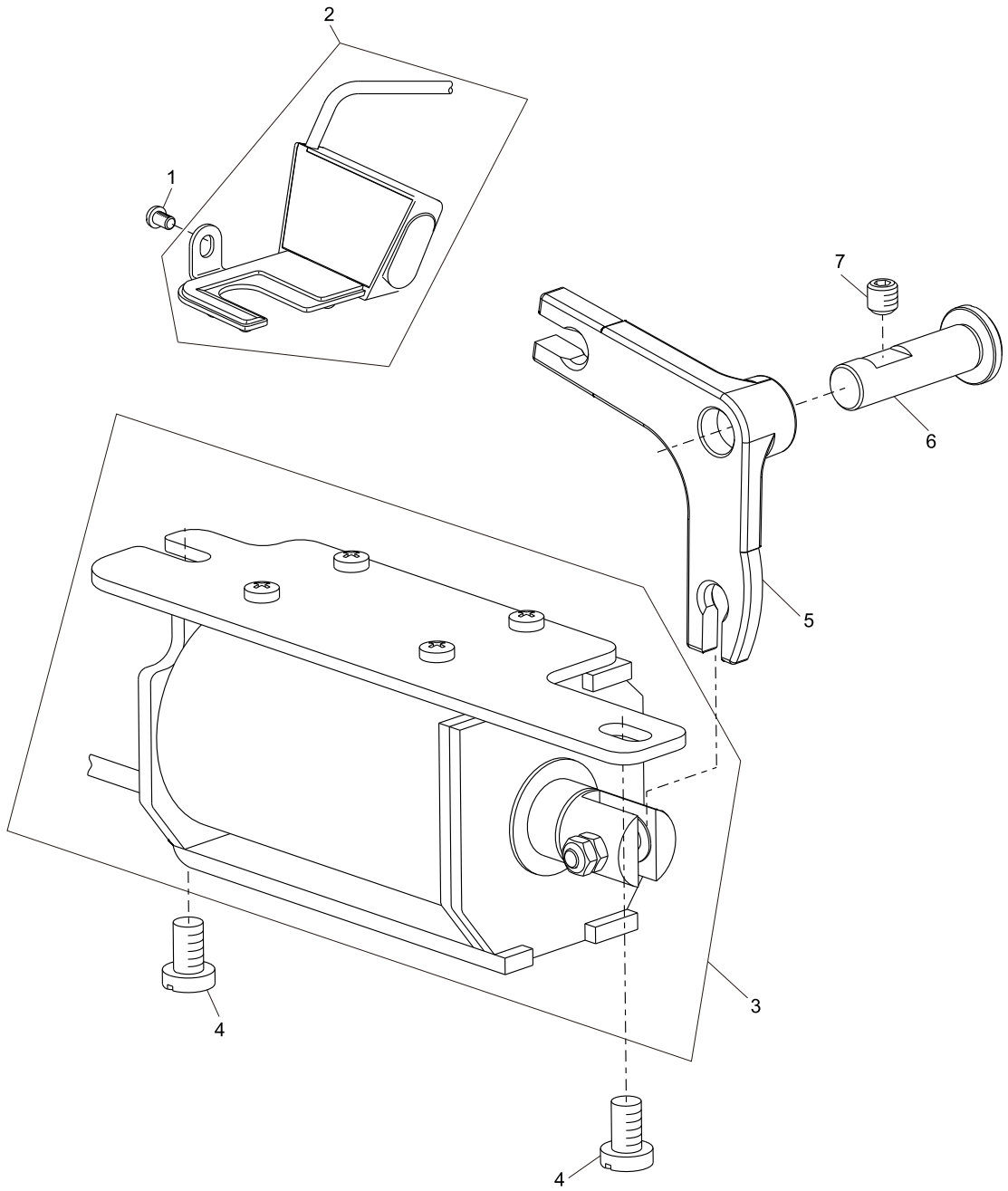
8、绕线部件部件 Bobbin Winder Components



8、绕线部件部件 Bobbin Winder Components

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10029803	绕线器	Bobbin winder ASM	1
2	10008773	橡胶轮	Rubber ring	1
3	10004380	螺钉	Screw	3
4	10050423	螺钉	Screw	2
5	10011149	绕线切刀	Thread cutter	1
6	10013064	绕线夹线器	Bobbin thread tension ASM	1
7	10011158	螺钉	Screw	1
8	10011200	上过线板	Thread Guide Plate	1

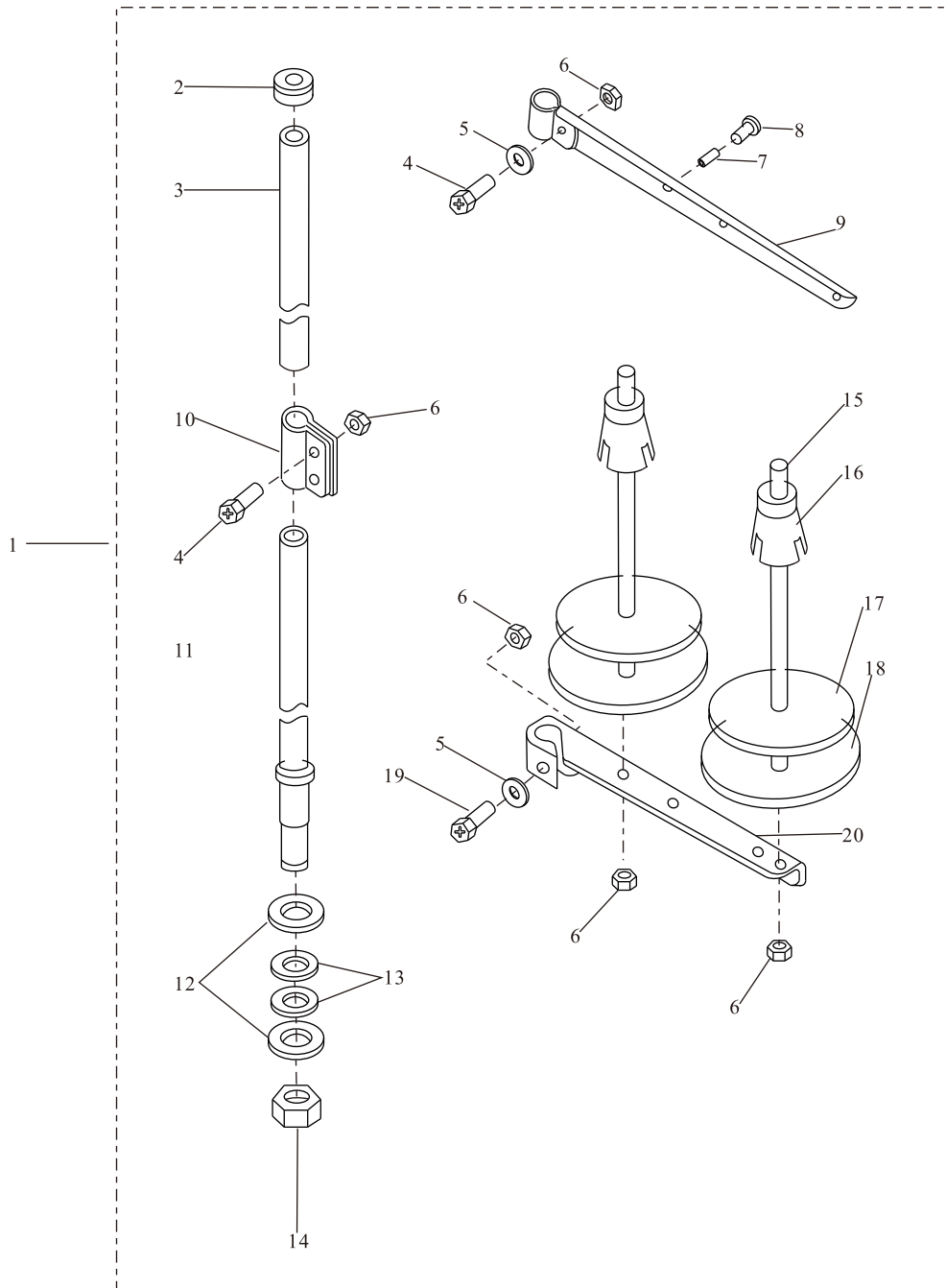
9、自动倒缝部件 Automatic Reverse Feed Components



9、自动倒缝部件 Automatic Reverse Feed Components

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10008934	螺钉	Screw	1
2	10038021	点动送料开关组件	Option Switch Asm	1
3	10034506	倒缝电磁铁组件	Electromagnet ASM	1
4	10012142	螺钉	Screw	2
5	10012587	倒缝摆臂	Washer	1
6	10012628	倒缝摆臂销	Crank Pin	1
7	10013538	螺钉	Screw	1

10、过线架部件 THREAD STAND COMPONENTS

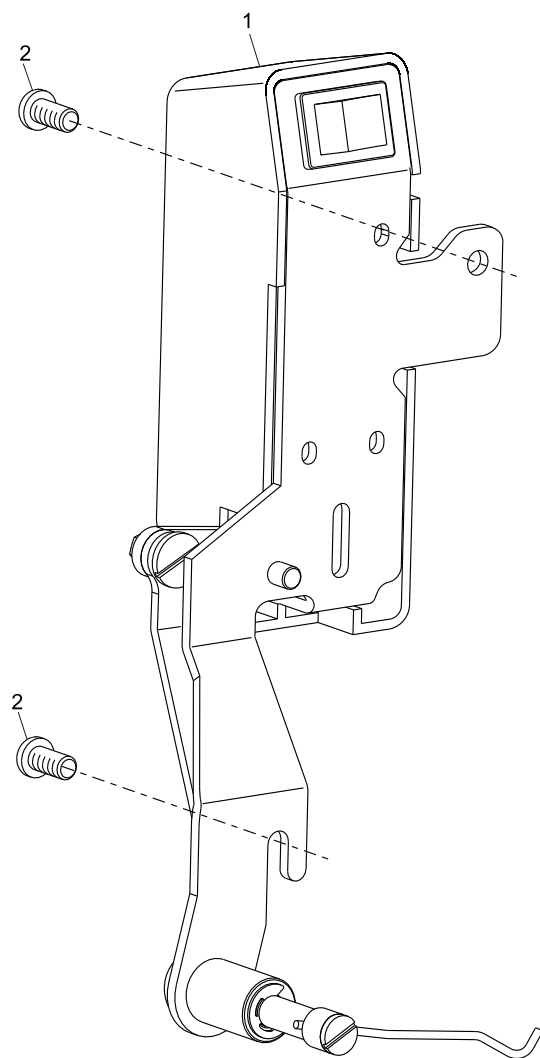


10、过线架部件

THREAD STAND COMPONENTS

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10007130	二线线架部件	Thread Stand ASM.	
2	10004282	线架上支撑管套	Column Cap	1
3	10004293	线架上支撑管	Column Pipe(Upper)	1
4	10003301	M5×14螺钉	Screw	2
5	10003022	垫圈	Washer	5
6	10002953	M5螺母	Nut	5
7	10004289	过线管	Thread Guide Pipe	1
8	10004285	过线管套	Thread Guide Bushing	1
9	10004298	上过线架	Thread Hanger(Upper)	1
10	10004286	撑管夹	Column Pipe Connector	1
11	10004291	线架下撑管	Column Pipe (Lower)	1
12	10004290	垫圈	Washer 16×30×1.5	2
13	10004295	垫圈	Washer 16.5×27.5×3	2
14	10002953	M5螺母	Nut	1
15	10004288	线轴	Spool	2
16	10004287	线盘塑料压块	Spool Cushion	2
17	10004281	线盘软垫	Soft Cushion Of Thread Plate	2
18	10004299	线盘	Thread Plate	2
19	10003312	M5×30螺钉	Screw	1
20	10004284	下过线架	Thread Hanger(Lower)	1

11、拨线部件 Wiper Components

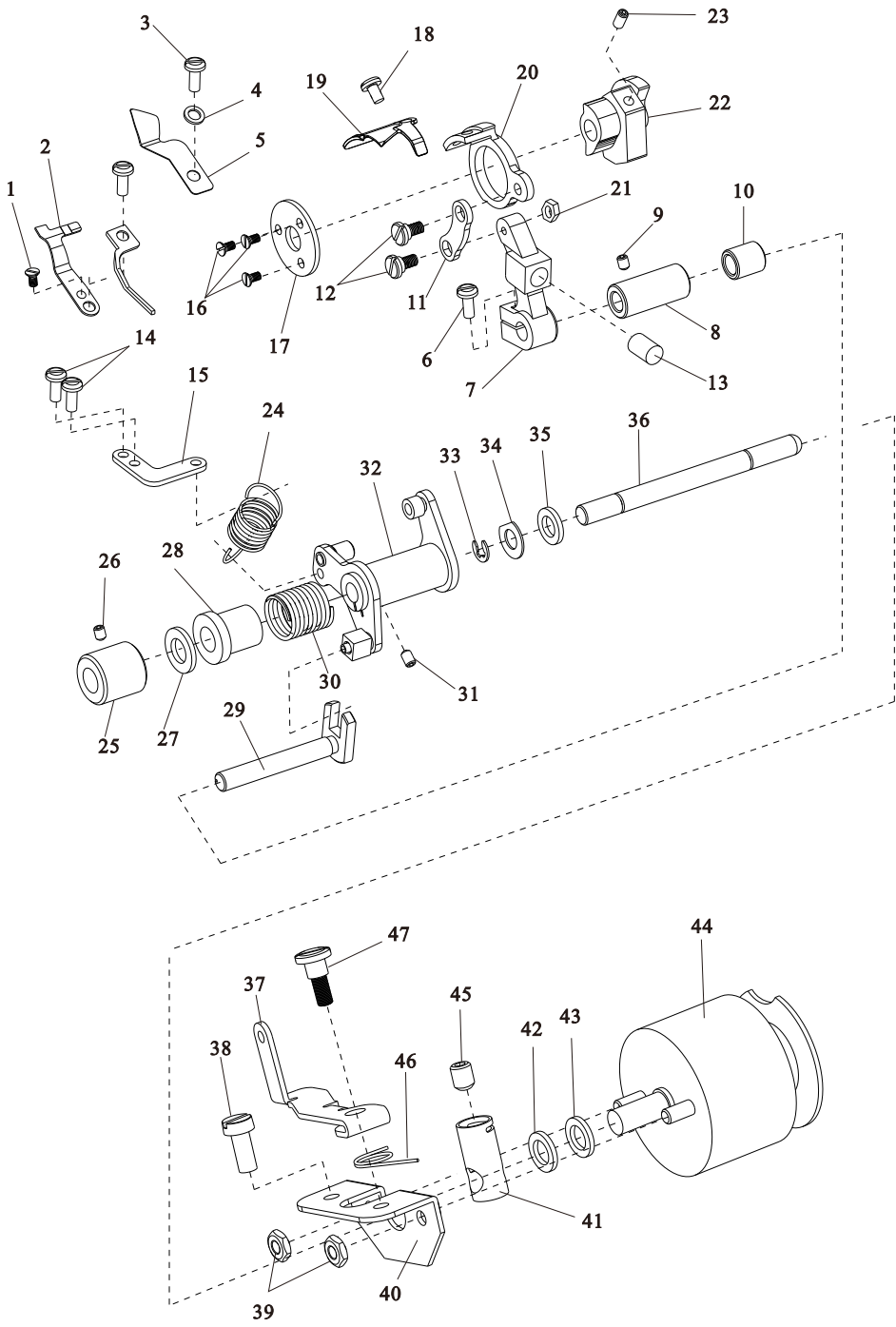


11、拨线部件

Wiper Components

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10034507	拨线器组件	Wiper ASM.	1
2	10008972	螺钉	Screw	2

12、自动剪线部件 THREAD TRIMMER COMPONENTS (Rotation Knife)



12、自动剪线部件

THREAD TRIMMER COMPONENTS (Rotation Knife)

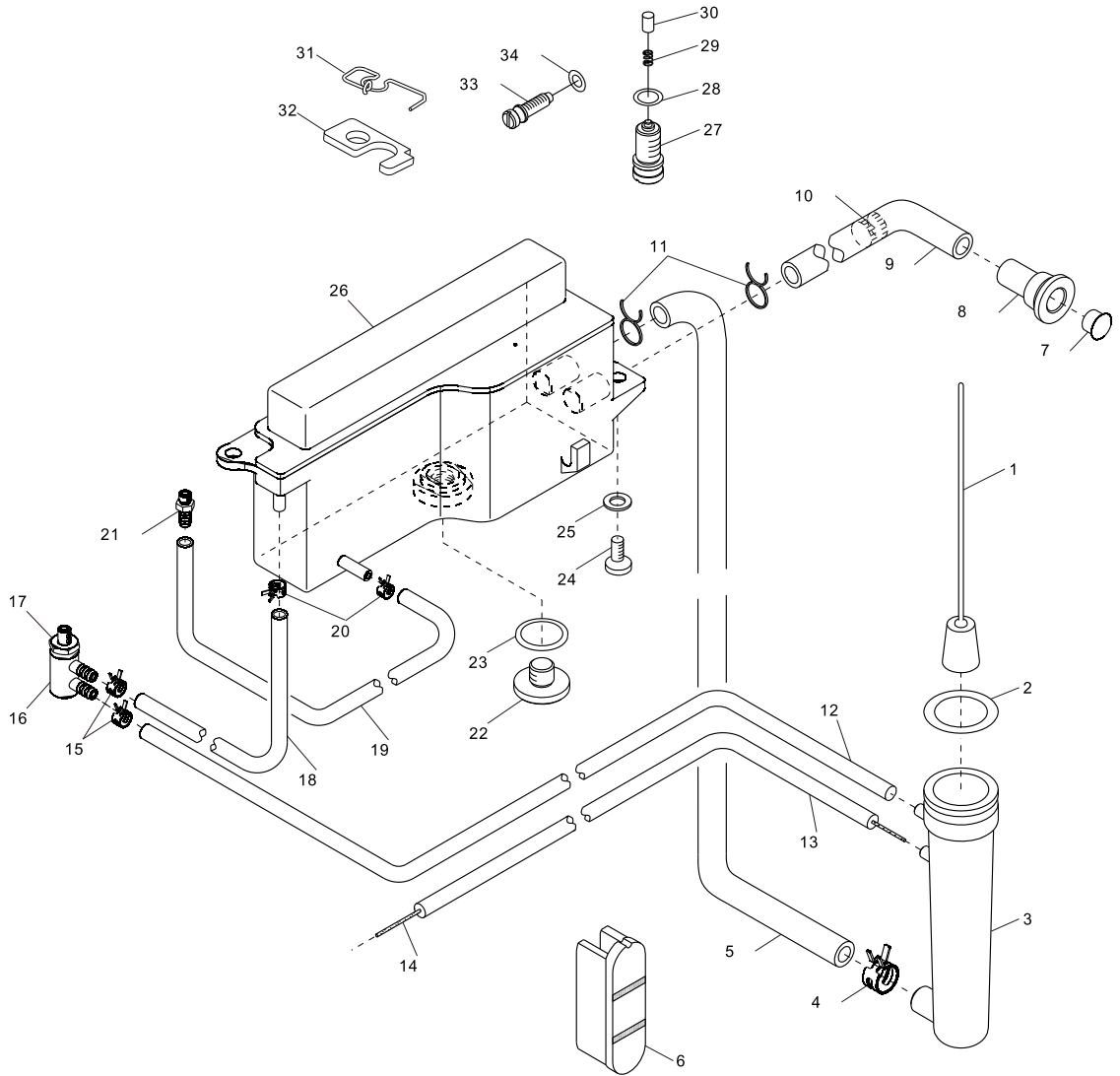
序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10011422	螺钉	Screw SM9/64"×40 L=4	1
2	10011421	定刀	Fixed Knife	1
3	10014474	螺钉	Screw SM11/64"×40 L=9	3
4	10013154	垫圈	Washer	2
5	10011584	分线器	Dispart Thread Shuttle	1
6	10013333	螺钉	Screw SM3/16"×32 L=14	1
7	10013013	切线驱动曲柄	Trimming Crank	2
8	10013024	轴套	Bushing	1
9	10012162	M5×5螺钉	Screw	1
10	10013027	轴套	Bushing	1
11	10013044	刀轴连杆	Knife Shaft Connecting Bar	1
12	10026142	螺钉	Screw	2
13	10041773	切线驱动曲柄止动块	Crank Block	1
14	10010595	M4×7.5螺钉	Screw	2
15	10013023	弹簧固定板	Fixed Plate	1
16	10009626	M3×4.35螺钉	Screw	3
17	10013026	刀架压板	Knife Holder	1
18	10011588	螺钉	Screw SM11/64"×40 L=4.7	2
19	10030280	动刀	Round Knife	1
20	10013045	动刀架	Round Knife Bracket	1
21	10009471	螺母	Nut	1
22	10010736	剪线凸轮	Thread Trimmer Cam	1
23	10013465	螺钉	Screw SM1/4"×40 L=10	2
24	10028226	弹簧	Spring	1
25	10014462	轴套	Bushing	1
26	10012162	M5×5螺钉	Screw	1
27	10013008	垫圈	Washer	1
28	10014196	扭簧端盖	Spring Cover	1
29	10013007	切线驱动曲柄轴	Trimming Crank Shaft	1
30	10008812	弹簧	Spring	1
31	10008862	螺钉	Screw SM1/4"×40 L=5.8	1
32	10013878	切线凸轮曲柄组件	Trimming Cam Crank ASM	1
33	10009654	垫圈	Washer	1
34	10003031	垫圈	Washer	1
35	10011650	垫圈	Washer	1
36	10011697	切刀驱动轴	Trimming Shaft	1
37	10013050	松线座	Loosing Plate	1

12、自动剪线部件

THREAD TRIMMER COMPONENTS (Rotation Knife)

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
38	10011605	螺钉	Screw SM1/4"×28 L=12	1
39	10009471	M4螺母	Nut	2
40	10006131	剪线电磁铁安装座	Solenoid Base	1
41	10013046	剪线电磁铁连接体	Solenoid Connecting Shaft	1
42	10011845	垫圈	Washer	1
43	10011606	垫圈	Washer	1
44	10034509	剪线电磁铁	Thread Trimmer Solenoid	1
45	10013590	螺钉	Screw SM11/64"×40 L=4	1
46	10008834	弹簧	Spring	1
47	10012467	螺钉	Screw	1

13、润滑部件 OIL LUBRICATION COMPONENTS



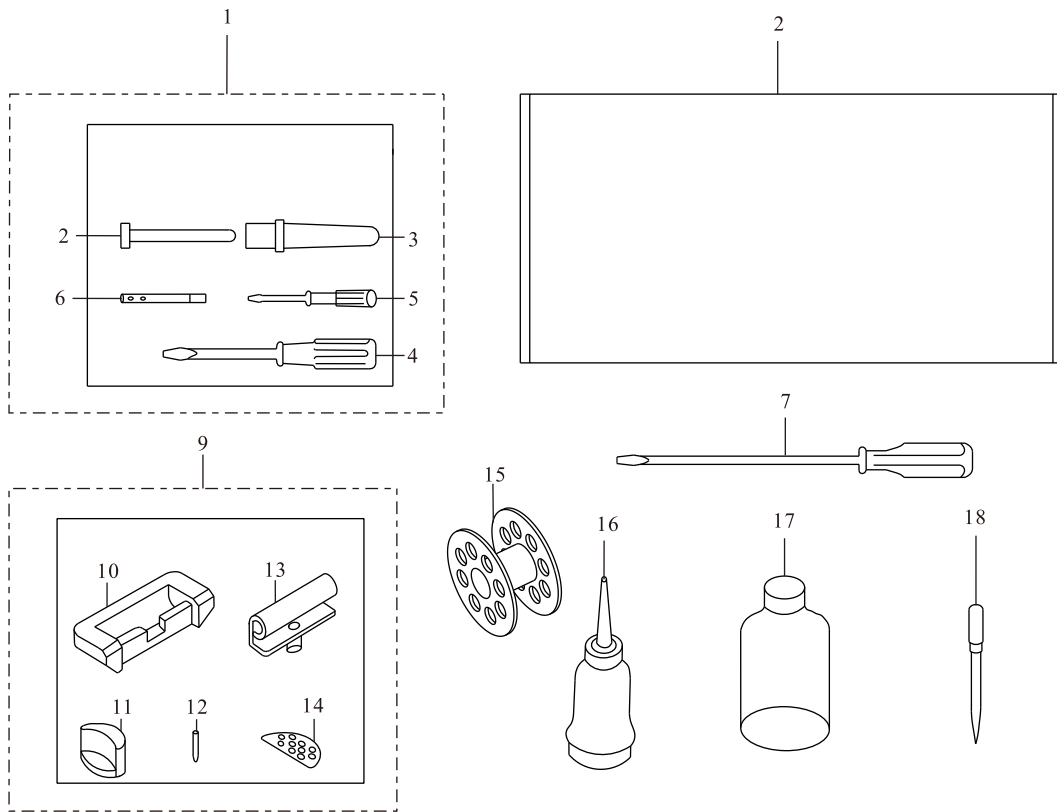
13、润滑部件

OIL LUBRICATION COMPONENTS

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1	10000569	油标	Floater ASM.	1
2	10008777	油杯O形圈	O-ring	1
3	10008782	油杯	Floater case	1
4	10013048	大油管紧固簧	Pipe stopper	1
5	10007806	油杯大油管	Oil pipe	1
6	10008772	油标窗	Oil sight window	1
7	10008943	加油杯橡胶塞	Rubber plug	1
8	10026510	加油杯	Oil inlet	1
9	10007806	总进油管	Oil pipe	1
10	20007434	滤油嘴组件	Oil filter ASM.	1
11	10008785	大油管紧固簧	Pipe stopper	2
12	10007800	回油管	Oil pipe	1
13	10007800	机头供油管	Oil pipe	1
14	10008101	面部供油线	Oil wick	1
15	10012160	小油管紧固簧	Pipe stopper	2
16	10030182	油管三接头组件	Oil connection ASM.	1
17	10013012	螺母	Nut	1
18	10007800	回油管	Oil pipe	1
19	10007800	旋梭供油管	Oil pipe	1
20	10012160	小油管紧固簧	Pipe stopper	2
21	10008779	油管接头	Oil connection	1
22	10008783	螺钉	Screw	1
23	10010240	O形圈	O-ring	1
24	10008972	油盒固定螺钉	Screw	2
25	10009469	垫圈	Washer	2
26	10012669	油盒	Oil tank ASM.	1
27	10013025	柱塞螺钉	Screw	1
28	10014461	O形圈	O-ring	1
29	10014386	柱塞簧	Plunger spring	1
30	10012609	柱塞	Plunger	1
31	10022507	毛毡压簧	Oil felt presser	1
32	10022345	回油毛毡	Oil felt	1
33	10012667	油量调节螺钉	Screw	1
34	10012606	O形圈	O-ring	1

14、附件

ACCESSORIE PART COMPONENTS



14、附件

Auxiliaries

序号 Ref. No.	件号 PartNo.	名 称	Name of the part	数量 Qty.
1		附件A	Accessorie Bag Asm A	1
2	10012631	抬压脚顶杆	Knee Lifter Presser Rod	1
3	10004514	机头支柱	rame Support Bar	1
4	10010995	中螺丝刀	Screw Driver,Middle	1
5	10013185	中螺丝刀	Screw Driver,Small	1
6	10005639	过线柱	Needle Thread Guide ASM	1
7	10010994	大螺丝刀	Screw Driver,Large	1
8	10001177	机头罩	Frame Viinyl Cover	1
9		附件B	Accessorie Bag ASM B	1
10	10006286	机头连接钩座	Rubber Cushion	2
11	10013113	油盘支座	Oil Reservoir Seat	2
12	10003889	油盘座钉	Nail	6
13	10004466	机头连接钩部件	Hinge Compl	2
14	10013101	油盘座垫	Oil Reservoir Cushion	2
15	10010060	梭芯	Bobbin	3
16	10013294	小油壶	Oiler ASM	1
17	10060866	油箱	Oil Box	1
18	10034917	DB×114#格罗茨机针	Needle	3
19	10034916	DP×518#格罗茨机针	Needle	3