

GLOBAL

390 D

**spare parts &
instruction manual**

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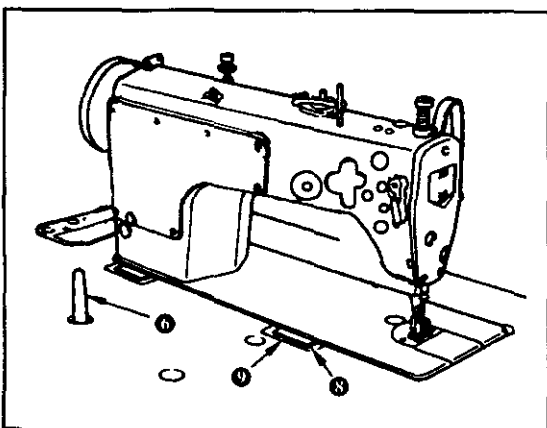
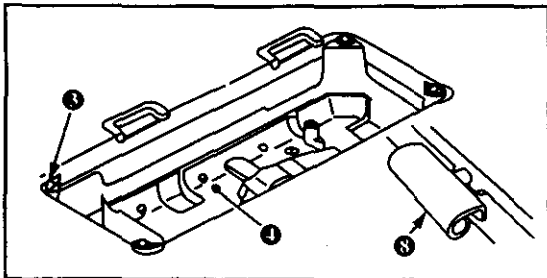
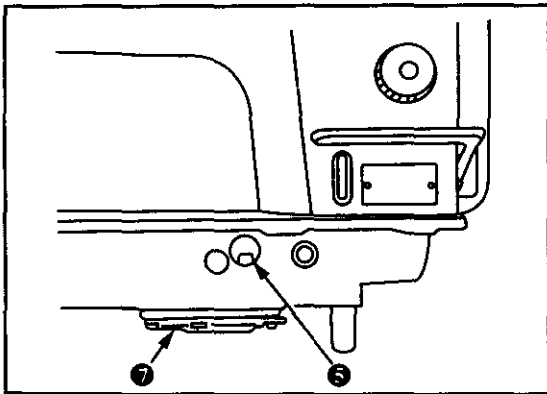
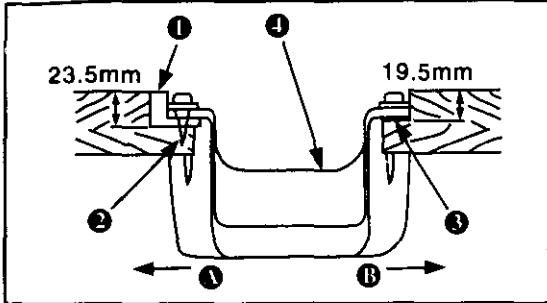
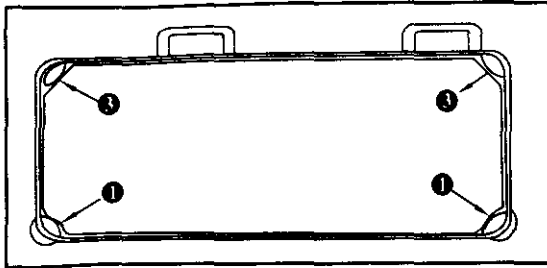
1.主要技术规格、参数

用途	微量供油型		干机头型	
	薄料—中厚料	厚料	薄料—中厚料	极薄料、内衣料
最高缝速	5000rpm	4500rpm	4000rpm	3500rpm
最大针距	5mm			
使用机针	DB×1 9#~18#	DB×1 20#~23#	DB×1 9#~18#	DB×1 SF9#~18#
压脚高度	手提10mm (标准) 膝提15mm (最大)			
使用机油				
使用电机	370W			

1. Specifications

Application	Micro-oil		oil-free	
	Thin-medium material	Heavy material	Thin-medium material	Thin, underwear
Sewing speed	5000rpm	4500rpm	4000rpm	3500rpm
Stitch length	Max 5mm			
Needle	DB×1 9#~18#	DB×1 20#~23#	DB×1 9#~18#	DB×1 SF9#~18#
Presser foot lift	By hand lifter 10mm (standard) By knee lifter 15mm (max.)			
Oil				
Rated power	370W			

2. 缝纫机的安装 Installation



1. 油盘安装

- 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），将两只油盘座垫③用油盘座钉②固定在B一边（与机头连接钩接合一边）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座垫③上。

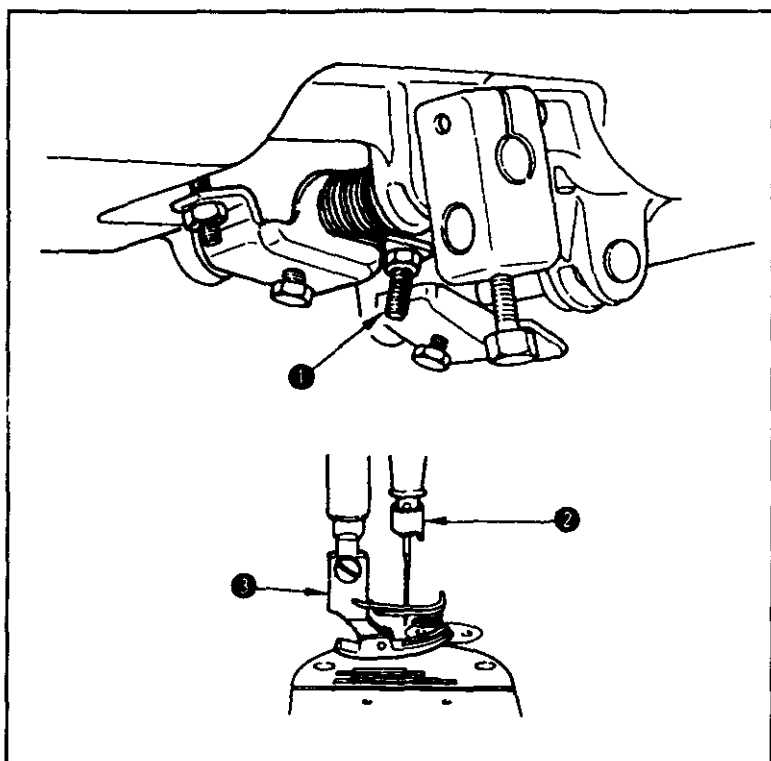
注意：如果不卸下放气盖⑤运转缝纫机，就会有油从齿轮箱⑦漏出。

1. Installing 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 operator 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 attach 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. 膝提高度的调节 Adjusting the height of the knee lifter

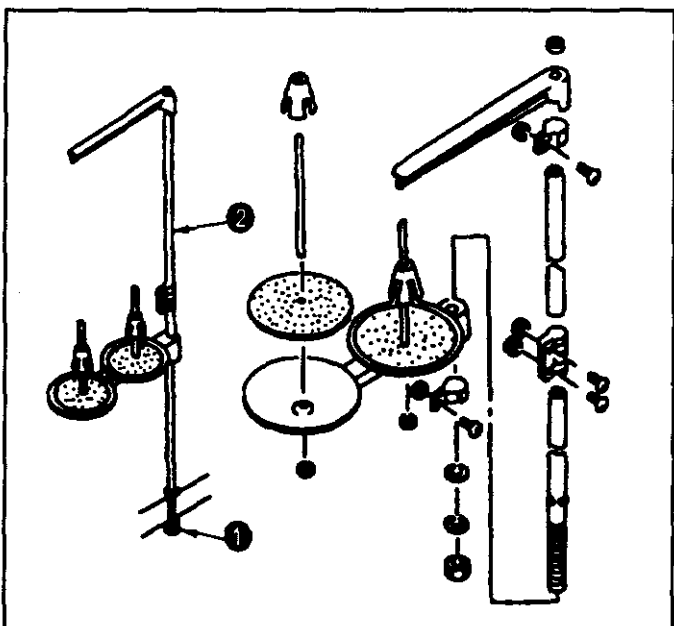


1. 用膝提时的标准压脚高度是10毫米；
 2. 用膝提调整螺钉①可以调节压脚提升量最大可至15毫米；
- 注意：当压脚提升超过10毫米时，请不要运转缝纫机，因为针杆②与压脚③会相碰。

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 lifter 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 hole 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.

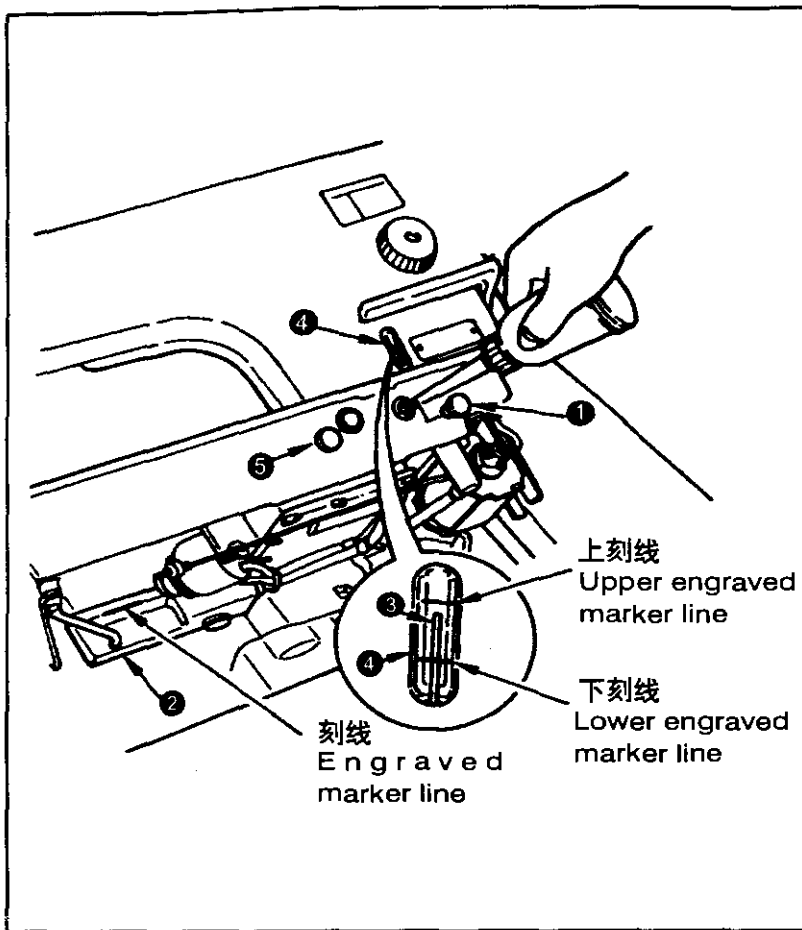
5. 加油 Lubrication (适用于微量供油型机器)



注意：为了防止缝纫机的意外起动，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.



运转缝纫机之前，请一定往旋梭油槽中加油

1. 把缝纫机放倒，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ZJ 1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，也会发生不能正常加油的现象。
4. 使用缝纫机时，如果油量批示杆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⑤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 cap①and fill the oil tank with using the oil supplied with the machine.
3. The amount of oil should reach up to the engraved marker line of oil tank②.
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 careful.
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 window④.

(Caution) 1.when you use a new sewing machine or a sewing machine after an extended period of disuse, run your machine at 3,000 to 3,500rpm for the purpose of break-in

2. Do not remove rubber plug⑤

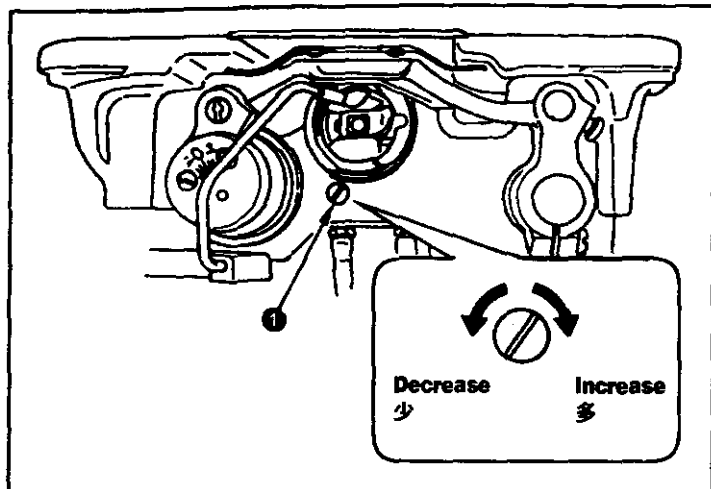
6. 旋梭油量的调整 (适用于微量供油型机头) Adjusting the amount of oil in the hook



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.



旋梭油量用旋梭油量调节螺钉①来调节。

1. 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，也一定不能把机油槽的油放掉。

Adjustment of the amount of oil in the hook is performed with oil amount adjustment screw ①

1. Adjustment procedure

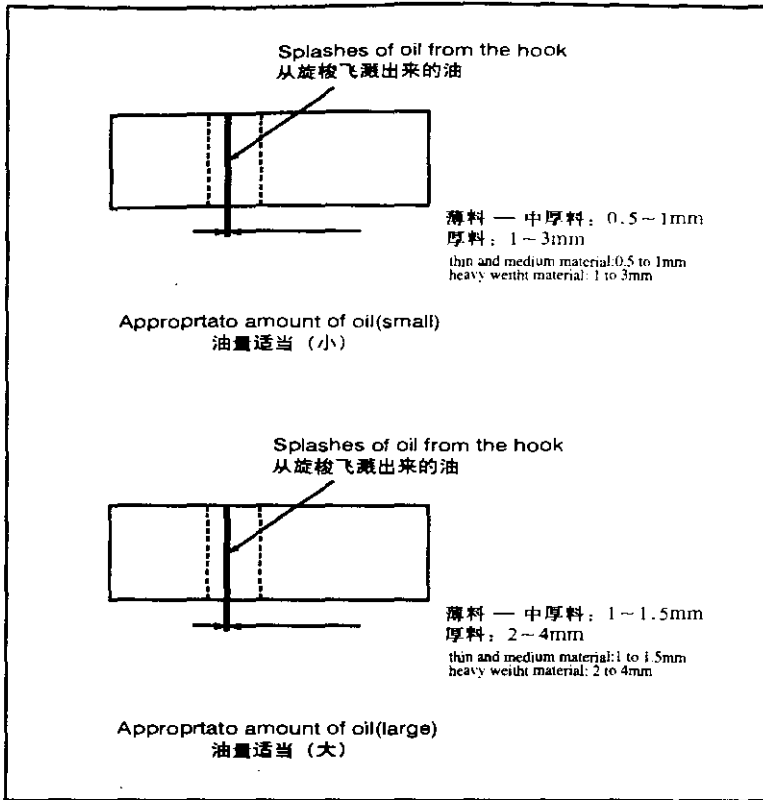
Tighten (turn clockwise) oil amount adjustment screw ① to increase the amount of oil in the hook, or loosen (turn counterclockwise) to decrease it.

(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.

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

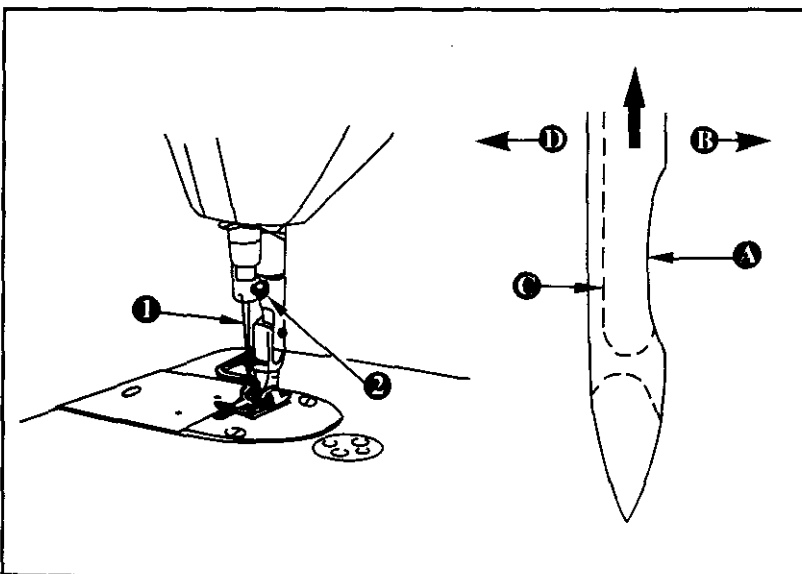
1) The amount of oil shown in the samples on the left should be finely adjusted in accordance with sewing processes. Be careful not to excessively increase/decrease the amount of oil in the hook.(if the amount of oil is too small, the hook will be seized (the hook will be hot). If the amount of oil is 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 splashes) 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

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

注意：使用长丝机线时，如果机针凹部朝向前方，容易发生线环不稳定或

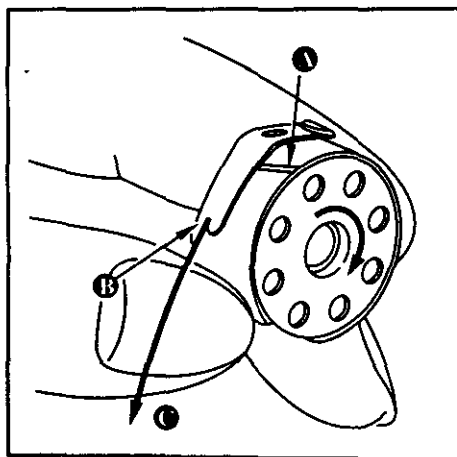
断线的现象。使用这类机线时，请把机针稍稍向后倾斜安装，就可以有效地防止这些现象。

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 ③ facing exactly to the right in direction ④.
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 ⑤ of the needle is facing exactly to the left in direction ⑥.

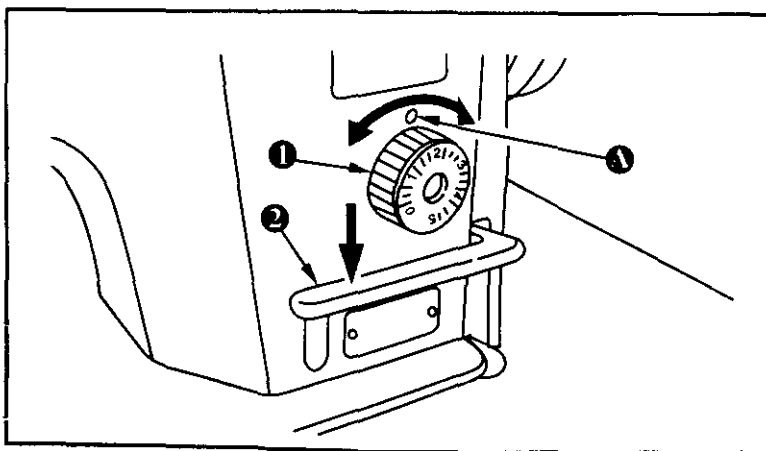
Caution: When filament thread is used, if the indented part of the needle is tilted toward operator's side, the loop of thread becomes unstable, As a result, hangnail of thread or thread breakage may occur. For the thread that such phenomenon is likely to occur, it is effective to attach the needle with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

9. 梭心的安装 Setting the bobbin into the bobbin case

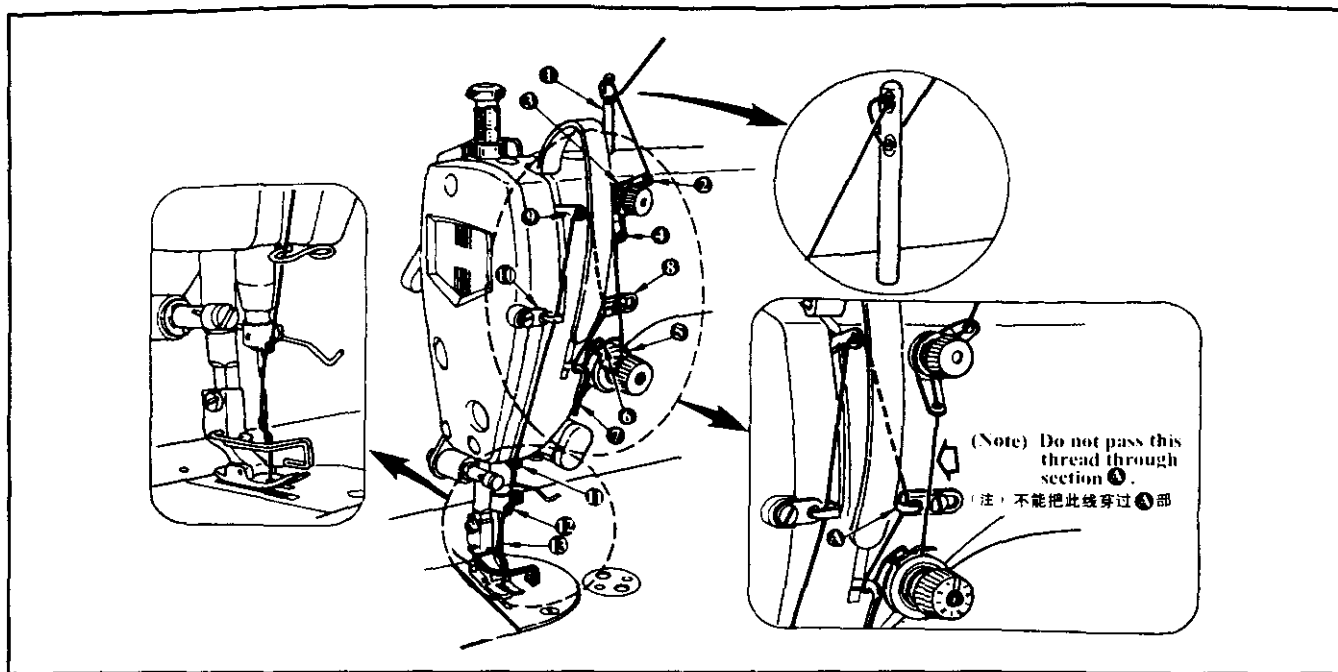


1. 将梭心装入梭子内；
2. 将线从梭子上的线槽A中穿过，朝B方向拉出。这样，线通过夹线簧下从线孔B处引出；
3. 拉底线C时，梭心应按箭头方向转动。
1. Install the bobbin in the bobbin case so that the thread wound direction is clockwise.
2. Pass the thread through thread slit A, and pull the thread in direction B. By so doing, the thread will pass under the tension spring and come out from notch B.
3. Check that the bobbin rotates in the direction of the arrow when thread C is pulled.

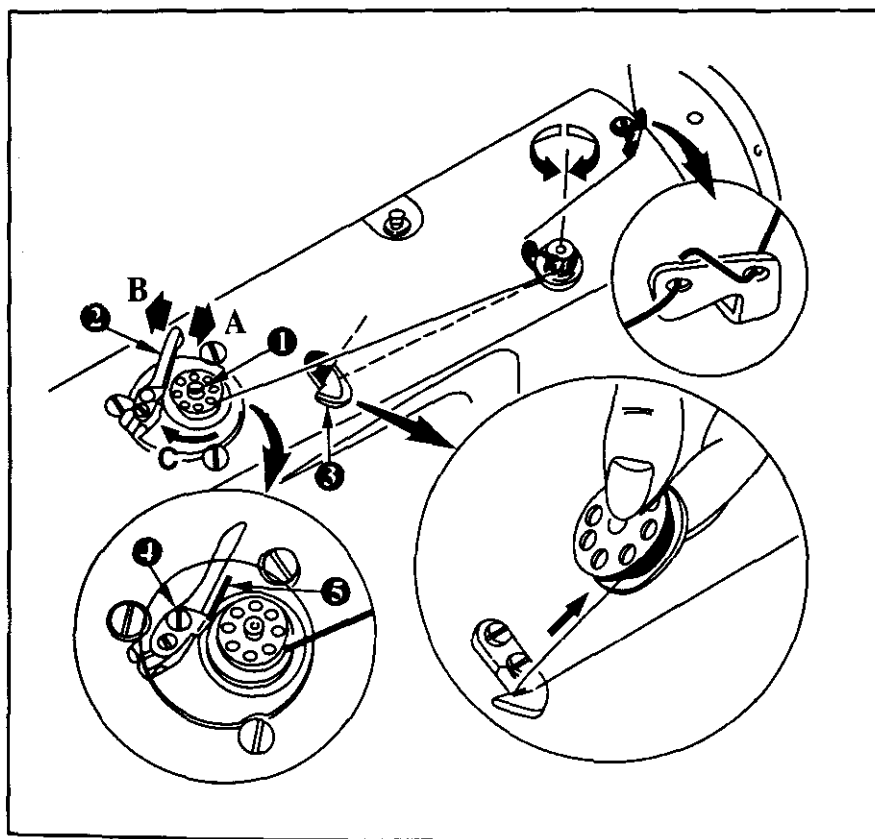
10. 针距的调节 Adjusting the stitch length



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



13. 底线的卷绕方法 Winding the bobbin thread

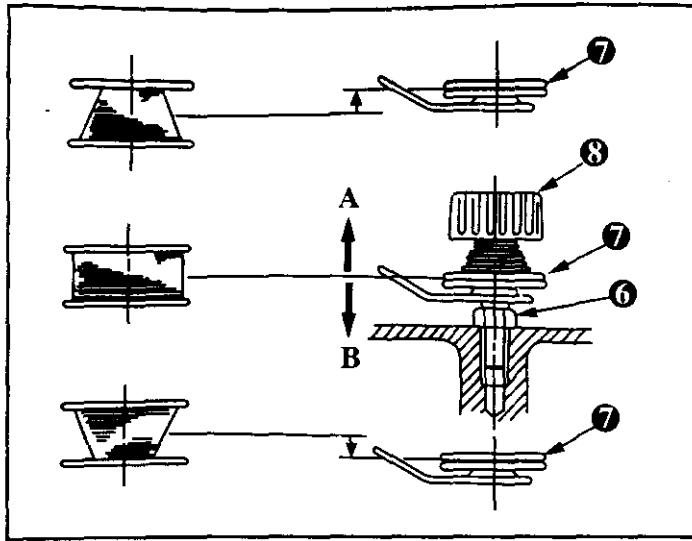


1. 把梭心推到卷绕轴①的最里面；
2. 把线架右侧的卷线如图所示穿线，并把线端向右缠绕数圈（铝旋梭时，把线端向右缠绕后，再把线张力盘过来的线向左缠绕数圈后，就容易绕线了）。
3. 把卷线拔杆②推到A方向，转动缝纫机。梭心向C方向转动，线卷绕到梭心上。卷绕结束后卷线轴①自动停止。
4. 取下梭心，用切线保持板③切断机线。
5. 调整底线卷线量时，请拧松固定螺钉④，把调节板⑤移动到A方向或B方向，然后再固定螺钉④。A方

向变少，B方向变多。

6. 如果线不能平绕梭心时，请拧松螺母⑥，转动卷线张力器，调整线张力盘⑦的高度：
 - 旋梭中心和线张力盘中心高度一样时为标准位置；
 - 下部卷得多时，向如图A方向移动线张力盘⑦的位置，上部卷得多时，向如图B方向移动线张力盘⑦的位置。

调整到适合的位置后，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，请在梭芯和线张力盘⑦之间拉线的状态开始绕线。

2. 不进行缝制时给梭芯绕底线时，请把上线从挑线杆过线孔上抽出来，把梭芯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 ③.

5) To adjust the winding amount of the bobbin thread, loosen the setscrew ④ and move the bobbin winder adjusting plate ⑤ to the direction of A or B. Then, tighten the setscrew 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.

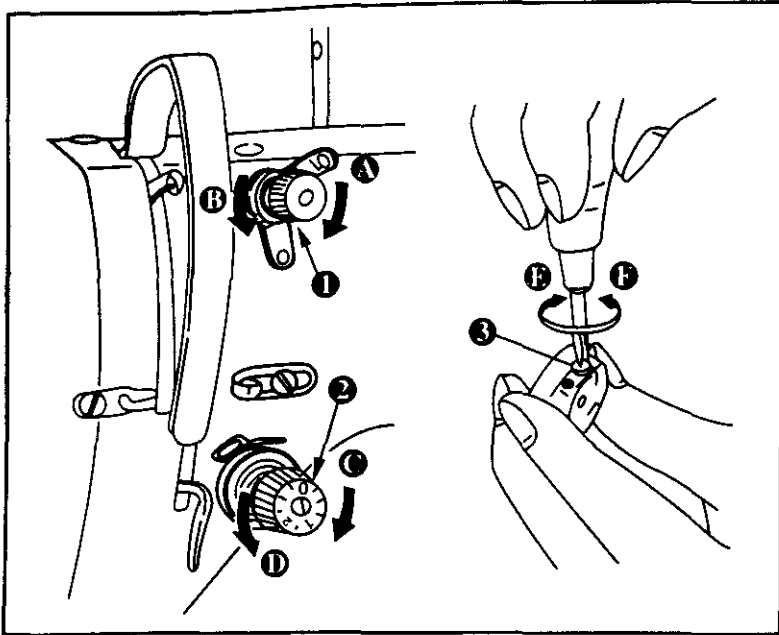
7) To adjust the tension of the bobbin winder, turn the thread tension nut ⑧.

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

2. 底线张力的调整

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

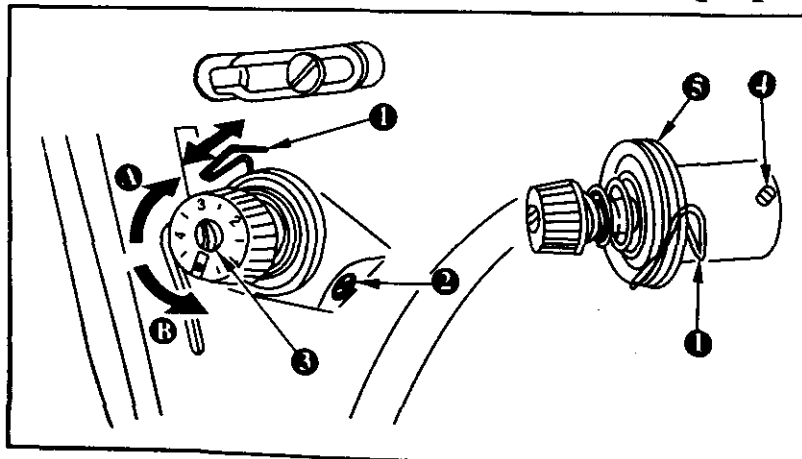
1. Adjusting the needle thread tension

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

2. Adjusting the bobbin thread tension

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

15. 挑线簧的调节 Thread take-up spring

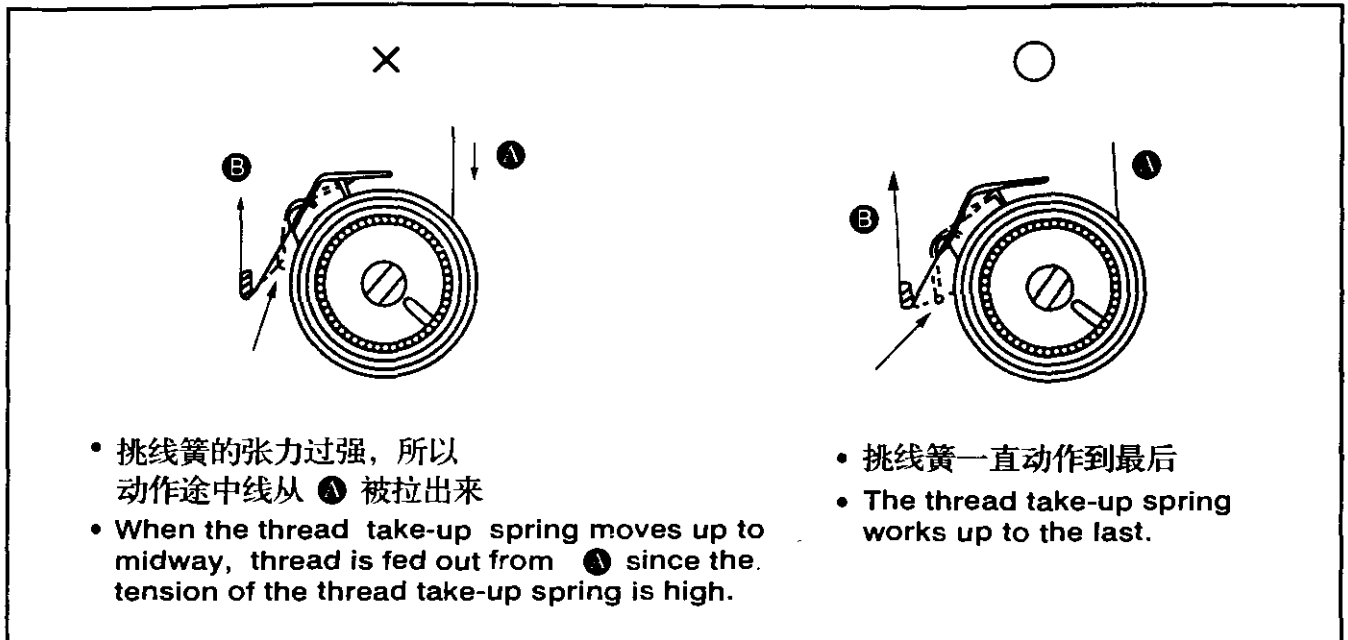


1. 挑线簧摆动量的调节:

- 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. 挑线簧张力的调节:

- 1) 旋松定位螺钉②，取出夹线器⑤（组件）；
 - 2) 旋松定位螺钉④，并转动夹线螺钉③；
 - 3) 把夹线螺钉③朝顺时针方向（即A方向）转动时，挑线簧的张力将增大；
 - 4) 把夹线螺钉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Ⓑ方向拉出，如果在挑线簧到达最低位置之前面线Ⓑ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

- 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 spring 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 13 mm is proper.

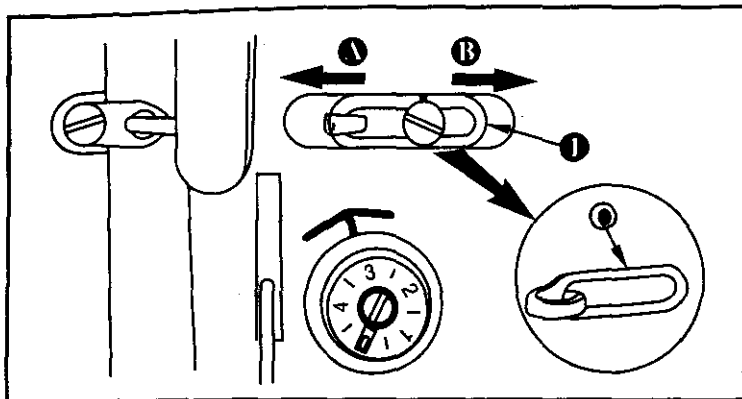
16. 挑线杆挑线量的调节 Adjusting the thread take-up stroke



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-weight 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-weight materials, move thread guide ① to the right (in direction B) to decrease the length of thread pulled out by the thread take-up.

1) Normally, thread guide ① is positioned in a way that marker line C is aligned with the center of the screw.

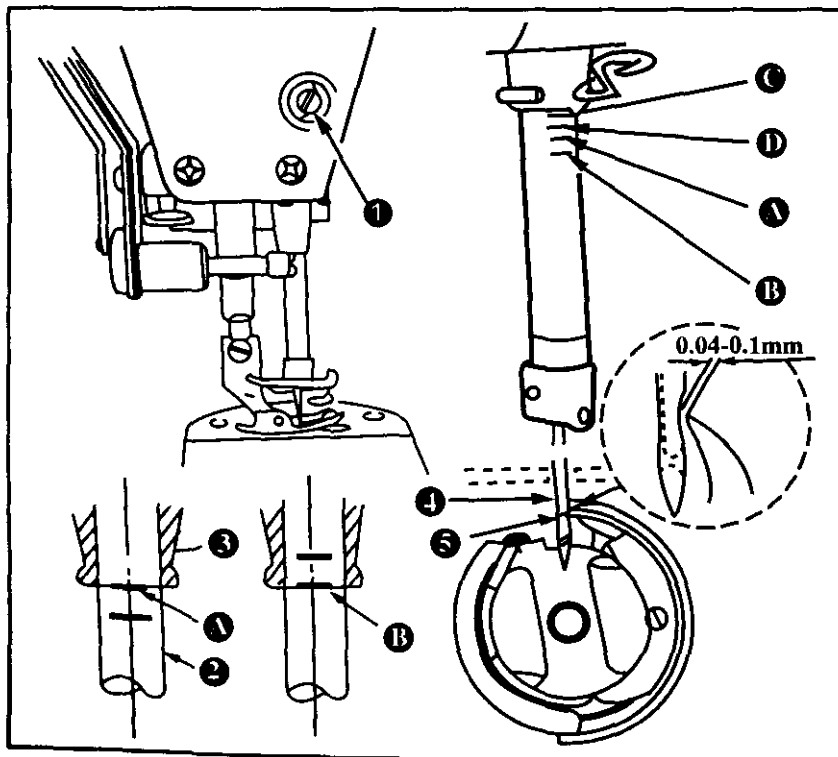
17. 机针与旋梭的关系 Needle-to-hook relationship



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. 转动上轮，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；

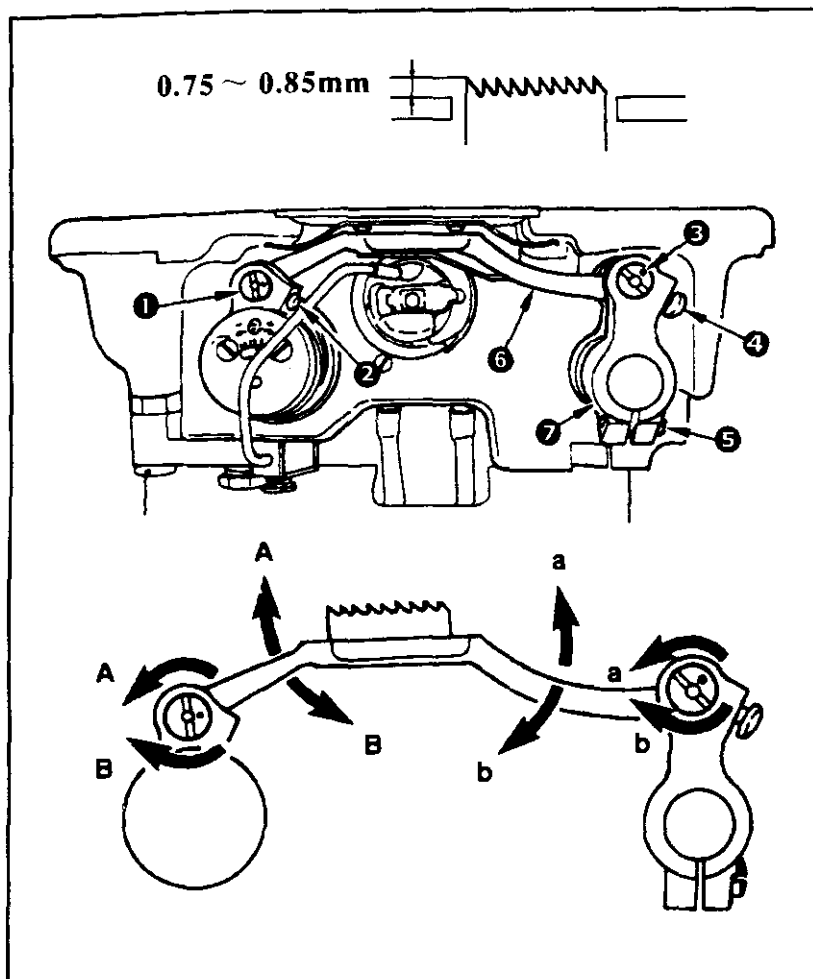
2) 使用DA针时，使针杆②上的刻线C对准针杆下轴套③的下端，然后旋紧针杆连接柱定位螺钉①。

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D

18. 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起动，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 0.75-0.85mm (H型为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，请拧松牙架座⑦的紧定螺钉⑤，调整送料牙的运动位置。

Height of the feed dog is adjusted so that the feed dog protrudes from the throat plate surface by 0.75 to 0.85 mm (1 mm for H 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 driving 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.

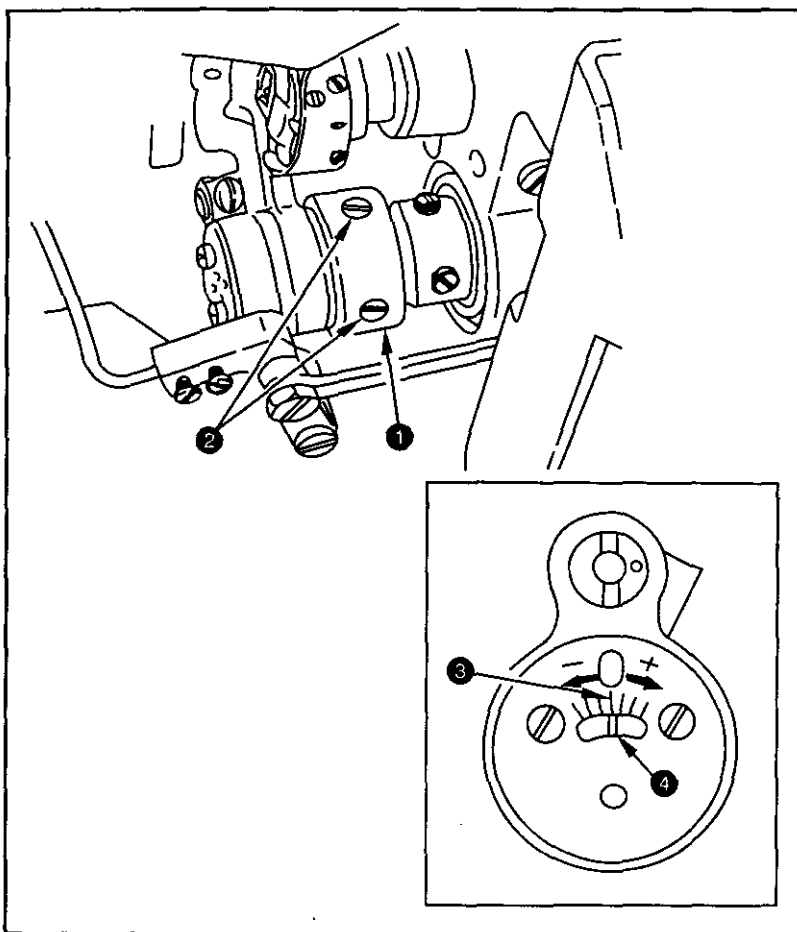
19. 送料的同步 Adjusting the feed timing



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，就可以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。

把抬牙曲柄的刻度③对准抬牙轴的刻线④

- 向 (+) 方向转动抬牙凸轮①，上下抬牙的同步时间变快；
- 向 (-) 方向转动抬牙凸轮①，上下抬牙的同步时间变慢。

注意：一般情况，请把刻度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. Align graduation ③ on the feed bar driving arm with engraved marker line ④ on the feed driving shaft.
- 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.

20. 微量压脚提升

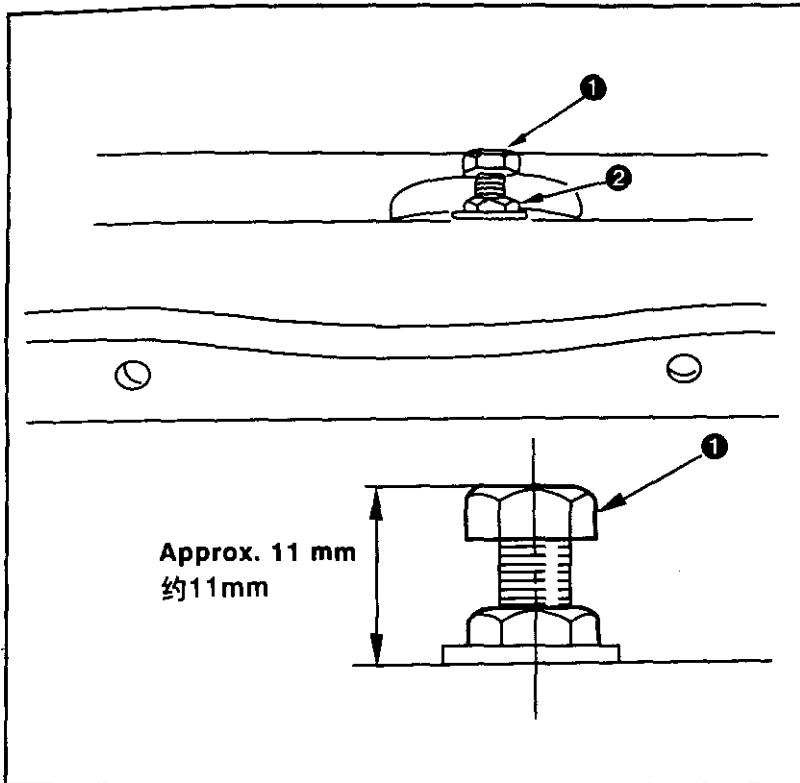
Micro-lifting mechanism of the presser foot



注意：为了防止缝纫机的意外起动，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.



缝制绒线等起毛性缝料时，使用微量压脚提升螺栓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栓①，调整到适合缝料的让压脚微量上升的位置，然后将螺母②固定。

注意：微量压脚提升机构不使用时，请把螺栓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 11 mm than the sewing machine. If the sewing machine is operated in the state that the micro-lifting mechanism is working, sufficient feed force cannot be obtained.

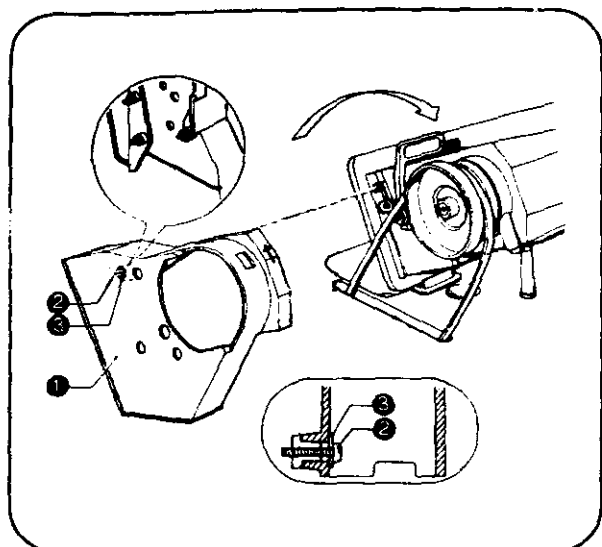
21. 皮带罩安装 Installing the belt cover



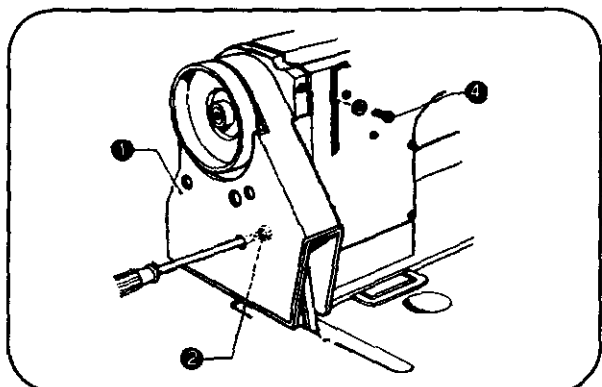
注意：为了防止缝纫机的意外起动，请关掉电源之后再进行操作。



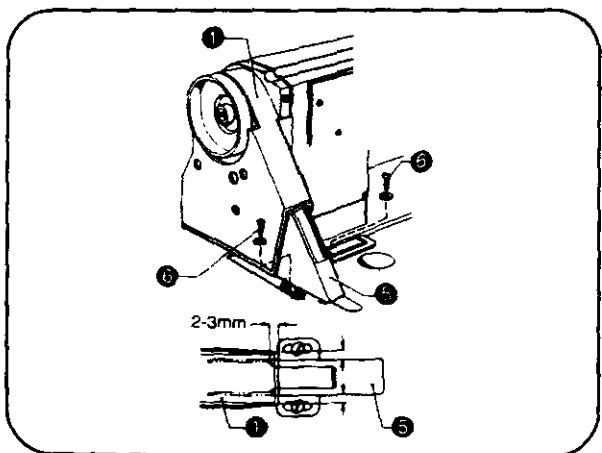
Warning: Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

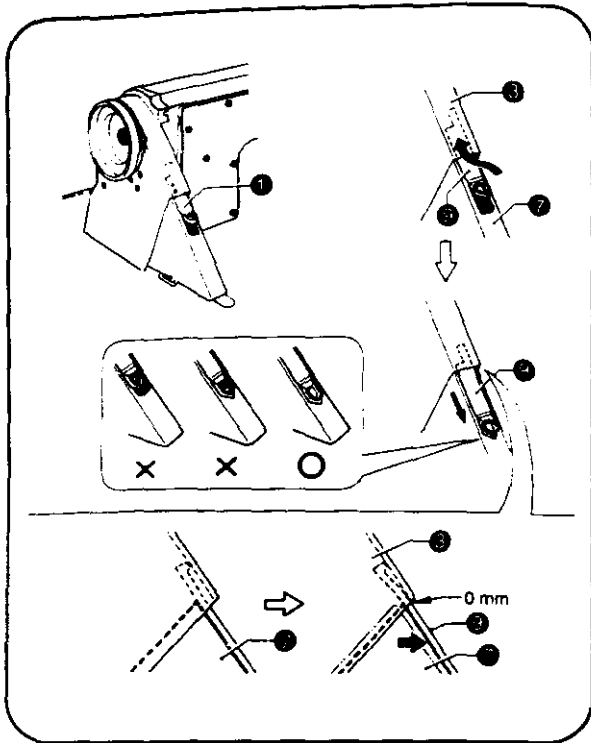


1. 将机头翻到。
2. 将螺钉②和垫圈③固定在上皮带罩①内面的橡皮垫上（三处）。
3. 将上皮带罩①安装在机头上轮上，翻转机头恢复到原位。



4. 按第2步拧紧三个螺钉②和螺钉④，将上皮带罩固定好。
5. 将下皮带罩⑤与下皮带罩①的重叠部分变为2-3mm，然后临时性的拧紧两个螺钉⑥。
6. 把下皮带罩⑤的防护盖⑦放在上皮带罩①之间，然后将其放入下皮带罩⑤的凹槽内。



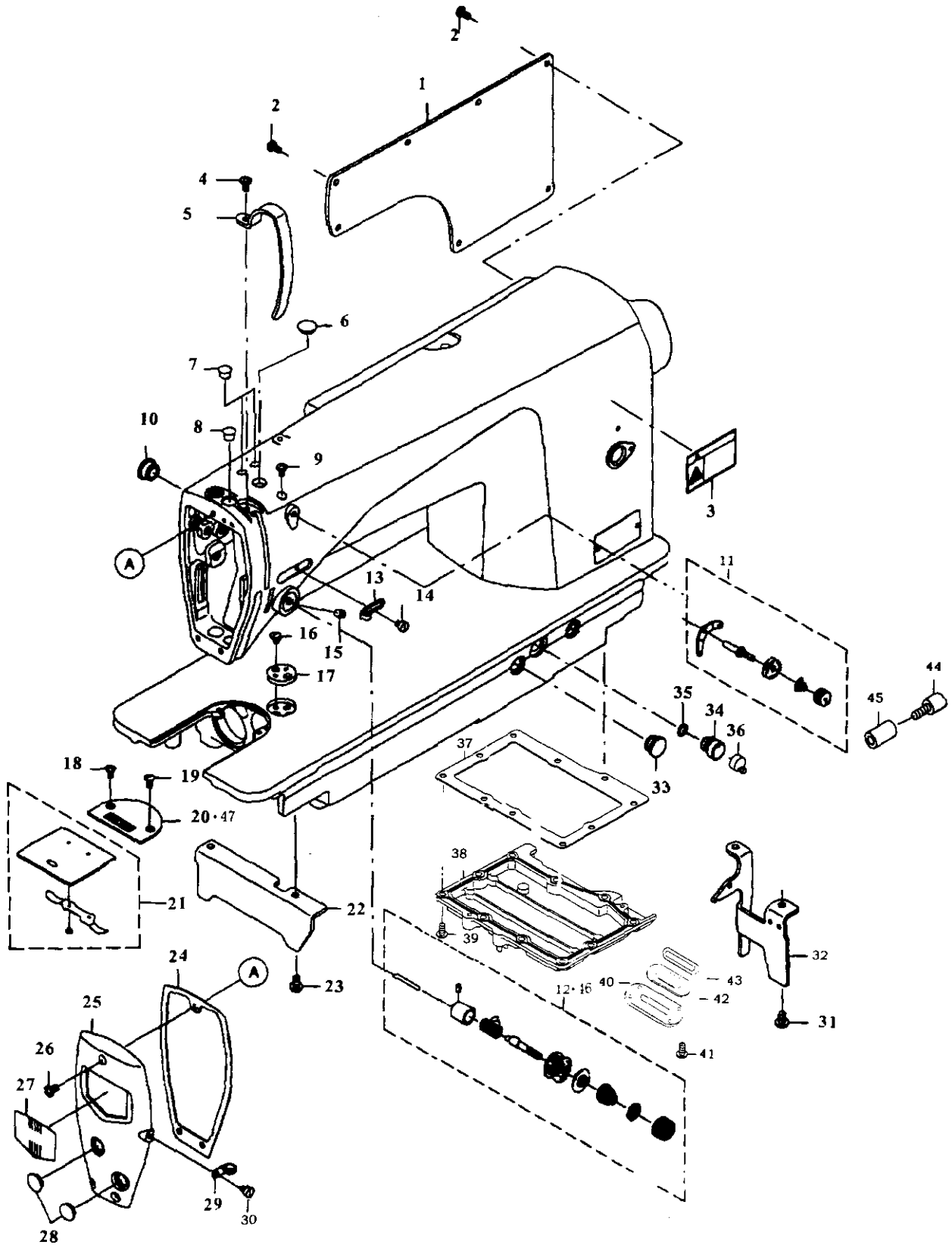


7. 将防护盖⑦沿下皮带罩⑤的凹槽尽可能下。
8. 将下皮带罩⑤向操作者拉，直到上皮带罩①与下皮带罩⑤的防护盖⑦之间无间隙。
9. 参考第5步，完全拧紧2个螺钉⑥。

1. Tilt back machine head.
2. Attach the screw ② and washers ③ to the rubber cushions on the inside of the belt cover ① (in three places).
3. Place belt cover ① onto the machine pulley, and then return the machine head to its original position.
4. Tighten the three screws ② attached in step 2. above and the screw ④ to install belt cover ①.
5. Place belt cover ⑦ so that it overlaps the belt cover ① by 2-3mm, and then provisionally tighten the screws ⑥.
6. Insert the cover ⑦ of belt cover ⑤ in between the belt cover ① and belt cover ⑤, and then place it into the groove cover ⑤.
7. Slide the cover ⑦ down along the groove of belt cover ⑦ as far as it will go.
8. Pull belt cover ⑤ toward you until there is no clearance between the belt cover ① and the cover of ⑦ belt cover.
9. Fully tighten the two screws ⑥. (Refer to step 5.)

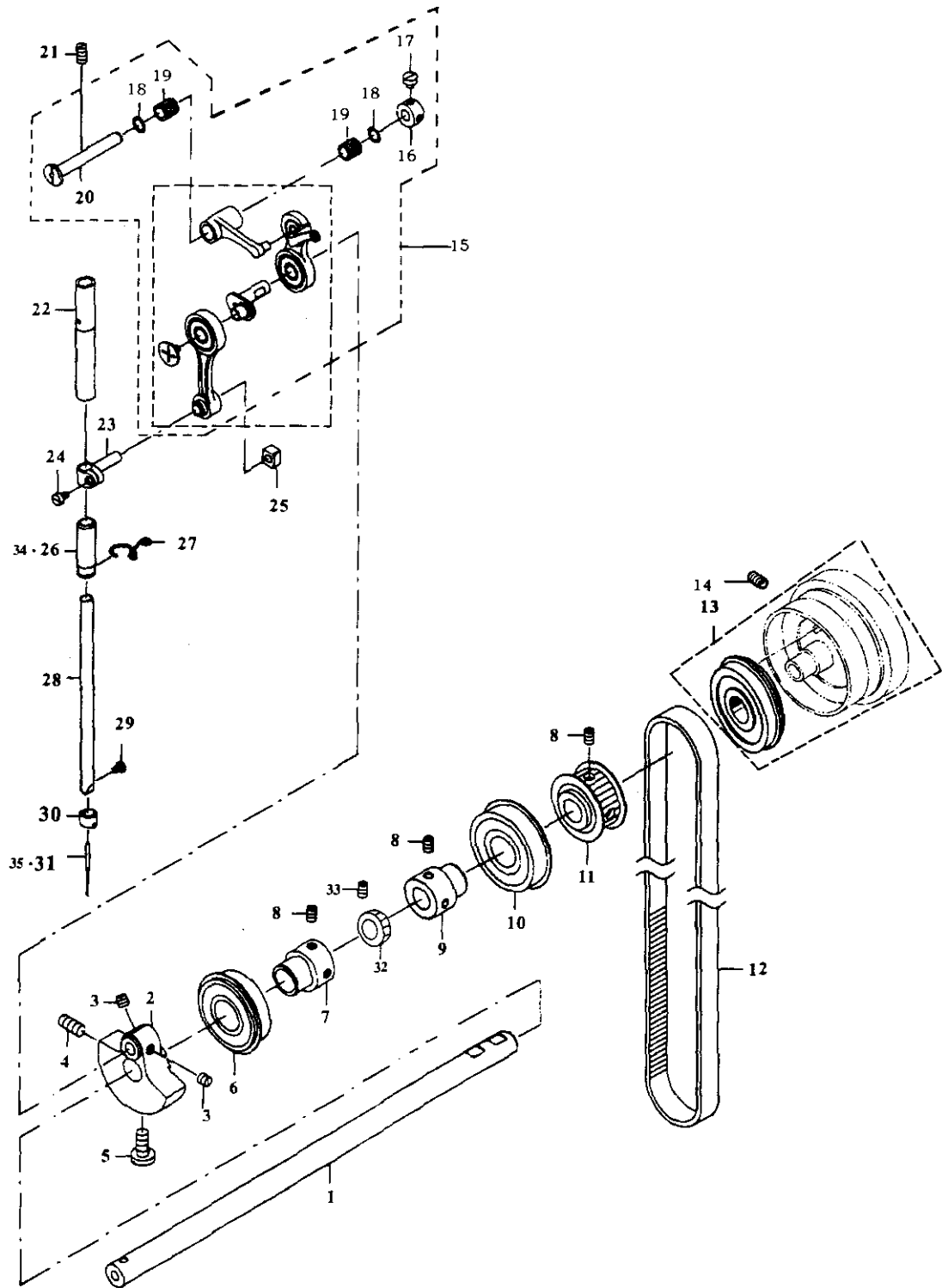
1、机体部件

MACHINE FRAME & MISCELLANEOUS COVER COMPONENTS



2、上轴部件

MAIN SHAFT & NEEDLE BAR COMPONENTS

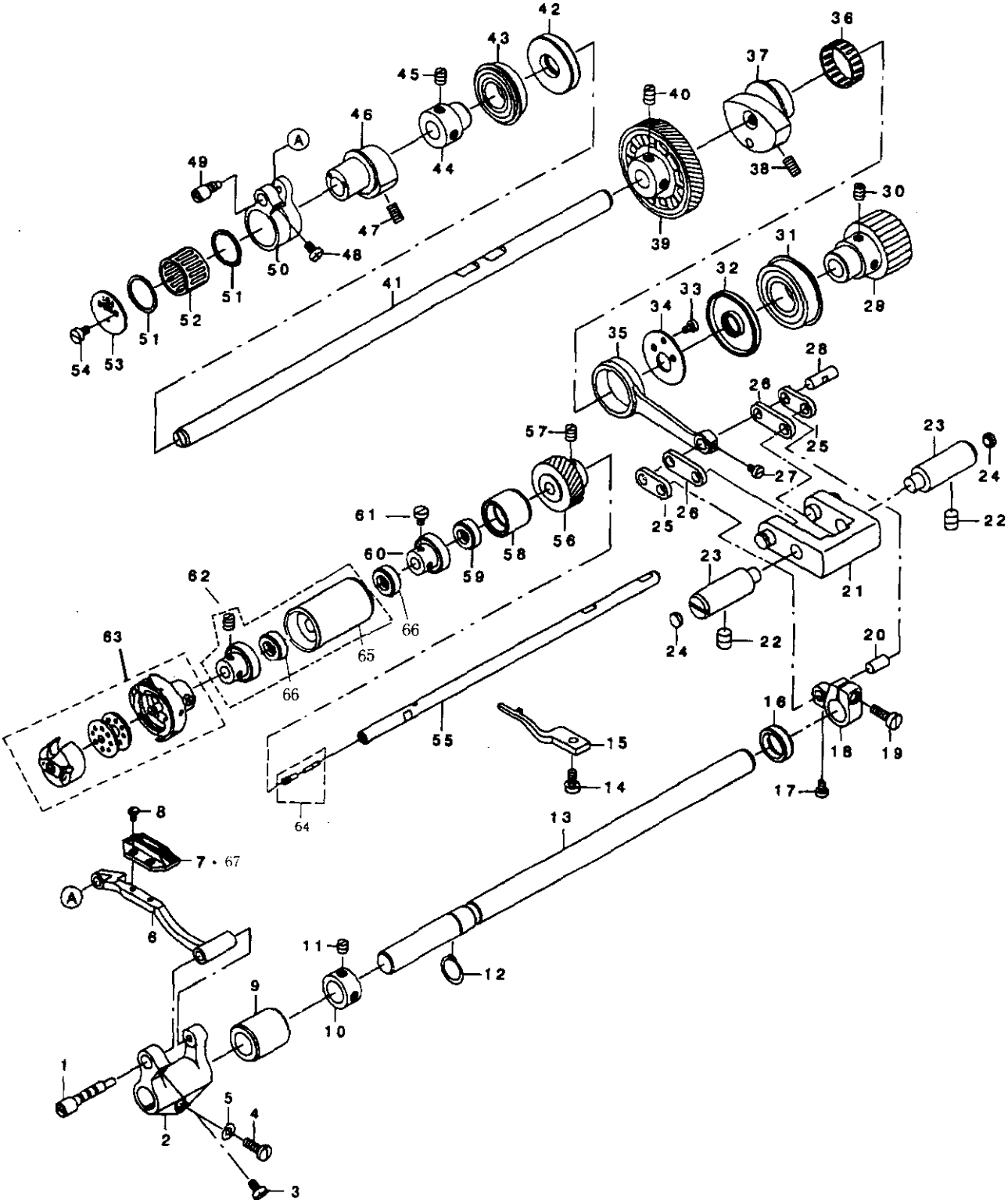


2、上轴部件

序号 REF.No.	件号 Part No.	名称	Name of the part	数量 Qty.	微油	无油	
						薄料 中厚料	极薄料 内衣料
1	217GZ101	上轴	MAIN SHAFT	1	☆	☆	☆
2	217GH101	针杆曲柄	COUNTER WEIGHT	1	☆	☆	☆
3	GS305-8	挑线曲柄紧固螺钉	SCREW	2	☆	☆	☆
4	GS307-8	针杆曲柄紧固螺钉	SCREW	1	☆	☆	☆
5	GS371-8	针杆曲柄定位螺钉	SCREW	1	☆	☆	☆
6	217GU102	上轴前轴承	BEARING	1	☆	☆	☆
7	217GO106	上轴前轴承套	MAIN SHAFT BEARING SUPPORT	1	☆	☆	☆
8	217GS107	上轴前轴承套螺钉	SCREW	6	☆	☆	☆
9	217GO105	上轴后轴承套	MAIN SHAFT BEARING SUPPORT	1	☆	☆	☆
10	217GU101	上轴后轴承	BEARING	1	☆	☆	☆
11	217GP101	上轴同步齿形带轮	SPROCKET,UPPER	1	☆	☆	☆
12	27GE101	齿形带	TIMING BELT	1	☆	☆	☆
13	216GP110	上轮组件	HEAD WHEEL ASM	1	☆	☆	☆
14	SS-6151328	上轮紧固螺钉	SCREW	2	☆	☆	☆
15	217BJ108	挑线杆组件	THREED TAKE-UP ASM	1	☆	☆	☆
16	217GK101	挑线杆铰链轴挡圈	THRUST COLLAR	1	☆	☆	☆
17	217GS108	挑线杆铰链轴挡圈螺钉	SCREW	2	☆	☆	☆
18	217GK102	挑线杆铰链轴滚针轴承挡圈	BEARING SUPPORT	2	☆	☆	☆
19	217GU103	挑线杆铰链轴滚针轴承	BEARING	2	☆	☆	☆
20	217GZ103	挑线杆铰链轴	THREED TAKE-UP CRANK SHAFT	1	☆	☆	☆
21	GS308-8	挑线杆铰链轴紧固螺钉	SCREW	1	☆	☆	☆
22	217GO103	针杆上套	NEEDLE BAR METAL UPPER	1	☆	☆	☆
23	GR598-8	针杆连接柱	NEEDLE ROD HOLDER	1	☆	☆	☆
24	GS311-8	针杆连接柱螺钉	SCREW	1	☆	☆	☆
25	GU152-8	针杆连接柱滑块	SLIDE BLOCK	1	☆	☆	☆
26	217GO104	针杆下套	NEEDLE BAR METAL LOWER	1	☆	☆	-
27	GR909-8	针杆下套分线勾	NEEDLE BAR THREAD GUIDE	1	☆	☆	☆
28	217GZ102	针杆	NEEDLE BAR	1	☆	☆	☆
29	GS467-8	支针螺钉	SCREW	1	☆	☆	☆
30	GR904-8	针杆过线环	NEEDLE BAR THREAD GUIDE	1	☆	☆	☆
31	217GU101	机针DPx5 14#	NEEDLE DB×1 #14	1	☆	☆	-
32	217GC151	绕线器驱动轮	BOBBLE WINDER DRIVING WHEEL	1	☆	☆	☆
33	217GC152	绕线器驱动轮螺钉	SCREW	2	☆	☆	☆
34	218GO153	针杆下套	NEEDLE BAR METAL LOWER	1	-	-	☆
35	218GV101	机针	NEEDLE	1	-	-	☆

3、下轴送料部件

HORIZONTAL FEED & VERTICAL FEED AND HOOK DRIVING SHAFT COMPONENTS



3、下轴送料部件

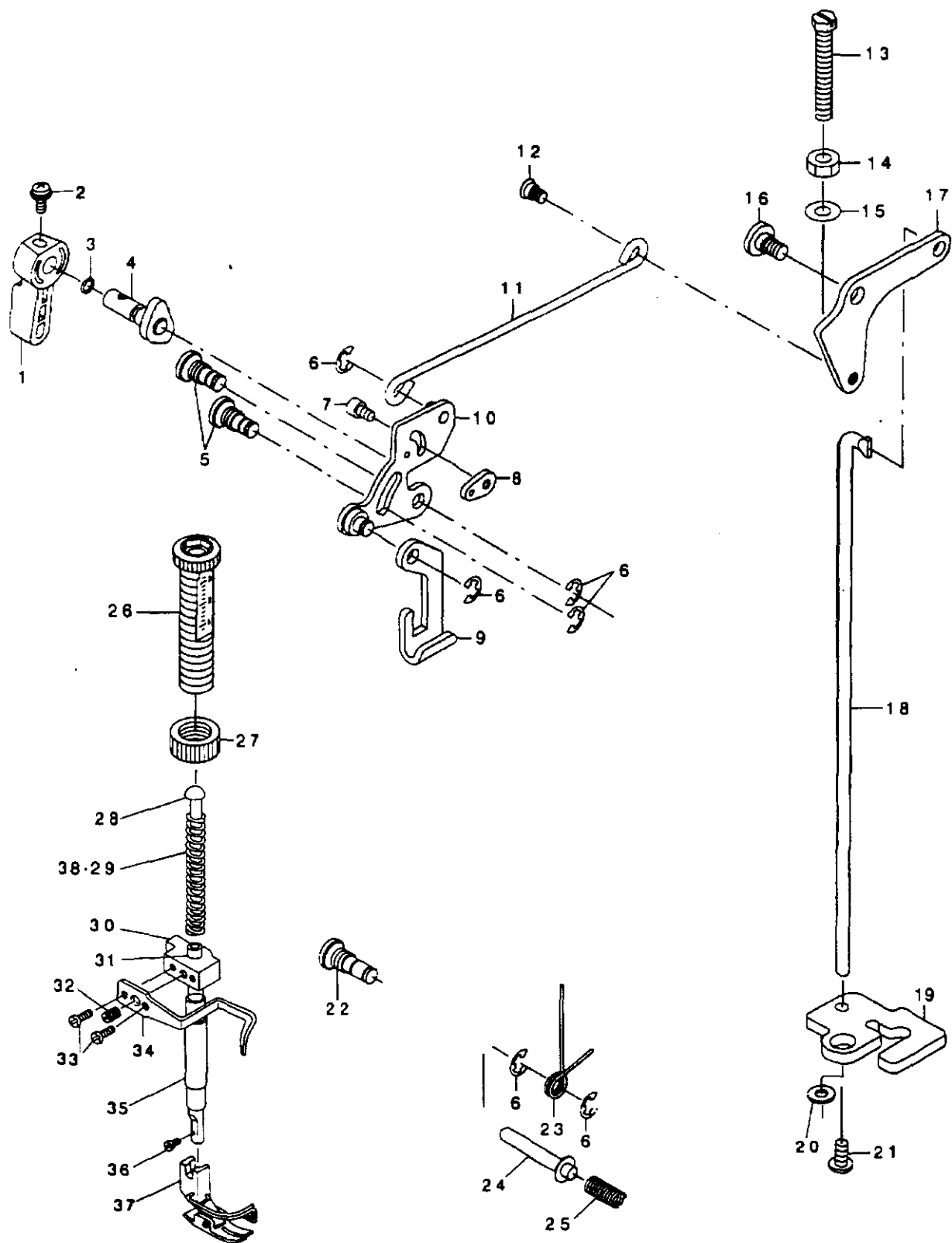
序号 REF.No.	件号 Part No.	名称	Name of the part	数量 Qty.	微油	无油	
						薄料 中厚料	极薄料 内衣料
1	217GX105	牙架座偏心销	FDDE ROCKER BASE SHAFT	1	☆	☆	☆
2	217GH107	牙架座	FEED ROCKER BASE ARM	1	☆	☆	☆
3	GS336-8	牙架座偏心销紧定螺钉	SCREW	1	☆	☆	☆
4	GS335-8	牙架座固定螺钉	SCREW	1	☆	☆	☆
5	GR646-8	牙架座垫圈	WASHER	1	☆	☆	☆
6	GM192-8	送料牙	FEED BASE	1	☆	☆	-
7	217GH106	牙架	FEED DOG	1	☆	☆	☆
8	GS337-8	送料牙螺钉	SCREW	2	☆	☆	☆
9	217GO108	送料轴轴套	FEED ROCKER SHAFT METAL	1	☆	☆	☆
10	GR589-8	送料轴挡圈	MAIN SHAFT THRUST COLLAR	1	☆	☆	☆
11	GS305-8	送料轴挡圈螺钉	SCREW	2	☆	☆	☆
12	217GK104	送料轴卡圈	BETAINING RING	1	☆	☆	☆
13	217GZ105	送料轴	FEED ROCKER SHAFT METAL	1	☆	☆	☆
14	GS328-8	旋梭定位勾螺钉	SCREW	1	☆	☆	☆
15	GR631-8	旋梭定位勾	BOBBIN CASE HOLDER	1	☆	☆	☆
16	217GF104	送料轴油封	OIL SEAL	1	☆	☆	☆
17	GS338-8	送料后曲柄销紧定螺钉	SCREW	1	☆	☆	☆
18	217GH111	送料后曲柄	FEED ROCKER ARM	1	☆	☆	☆
19	GS334-8	送料后曲柄固定螺钉	SCREW	1	☆	☆	☆
20	GX208-8	送料后曲柄销	WALKING FOOT PIN B	1	☆	☆	☆
21	217BJ118	送料摆动板座组件	ADJUSTING LINK ASM	1	☆	☆	☆
22	GS316-8	送料摆动座销紧定螺钉	SCREW	2	☆	☆	☆
23	217GX106	送料摆动座销	ADJUSTING LINK ASM FULCRUM SHAFT	2	☆	☆	☆
24	217GR114	送料摆动座销孔橡皮塞	RUBBER PLUG	2	☆	☆	☆
25	GR640-8	送料摆动座短连接板	CONNECTING LINK,B	2	☆	☆	☆
26	217GH110	送料摆动座长连接板	CONNECTING LINK,A	2	☆	☆	☆
27	GS333-8	送料连接销螺钉	SCREW	1	☆	☆	☆
28	GX204-8	送料连杆销	WALKING FOOT PIN C	1	☆	☆	☆
29	217GC116	抬牙轴同步齿形带轮	LOWER SPROCKET	1	☆	☆	☆
30	217GS107	抬牙轴同步齿形带轮螺钉	SCREW	2	☆	☆	☆
31	217GU110	抬牙轴后轴承	BEARING	1	☆	☆	☆
32	217GF103	抬牙轴后油封	OIL SEAL	1	☆	☆	☆
33	GS311-8	送料偏心轮挡片螺钉	SCREW	2	☆	☆	☆
34	217GR115	送料偏心轮挡片	FEED ROCKER CAM PLATE	1	☆	☆	☆
35	217GH109	送料摇动连杆	FEED ROCKER ROD	1	☆	☆	☆
36	217GU109	送布偏心轮滚针轴承	NEEDLE BEARING	1	☆	☆	☆
37	217GT102	送料偏心轮	FEED ROCKER CAN PLATE	1	☆	☆	☆
38	GS308-8	送料偏心轮螺钉	SCREW	2	☆	☆	☆
39	217BJ116	抬牙轴斜齿轮	GEAR,LARGE	1	☆	☆	☆
40	SS-7161040	抬牙轴斜齿轮螺钉	SCREW	2	☆	☆	☆
41	217GZ104	抬牙轴	FEED DRIVING SHAFT	1	☆	☆	☆
42	217GF102	抬牙轴前油封	OIL SEAL	1	☆	☆	☆
43	217GU107	抬牙轴轴承	BEARING	1	☆	☆	☆
44	217GO108	抬牙轴轴承套	BEARING SUPPORT	1	☆	☆	☆
45	GS319-8	抬牙轴轴承套螺钉	SCREW	2	☆	☆	☆

3、下轴送料部件

序号 REF.No.	件号 Part No.	名称	Name of the part	数量 Qty.	微油	无油	
						薄料 中厚料	极薄料 内衣料
46	217GT101	抬牙凸轮	FDDE DRIVG CAM	1	☆	☆	☆
47	GS308-8	抬牙凸轮紧定螺钉	SCREW	2	☆	☆	☆
48	GS336-8	抬牙曲柄偏心销紧定螺钉	SCREW	1	☆	☆	☆
49	217GX104	抬牙曲柄偏心销	FEED DRIVG BASE SHAFT	1	☆	☆	☆
50	217GH108	抬牙曲柄	FEED DRIVING BASE ARM	1	☆	☆	☆
51	217GK103	抬牙凸轮滚针轴承挡圈	FEED DRIVING CAM THRUST BUSH	2	☆	☆	☆
52	217GU106	抬牙凸轮滚针轴承	BEARING	1	☆	☆	☆
53	217GR114	抬牙凸轮挡板	FEED DRIVING CAM PLATE	1	☆	☆	☆
54	GS311-8	抬牙凸轮挡板螺钉	SCREW	2	☆	☆	☆
55	217GZ104	下轴	HOOK SHAFT	1	☆	☆	☆
56	217GC103	下轴斜齿轮	GEAR SMALE	1	☆	☆	☆
57	GS319-8	下轴斜齿轮螺钉	SCREW	2	☆	☆	☆
58	217GO112	下轴后轴套	HOOK SHAFT REAR METAL	1	☆	☆	☆
59	217GF105	下轴后轴套油封	HOOK DRIVING SHAFT OIL SEAL	1	☆	☆	☆
60	217BJ122	下轴后轴套油组件	BEARING SUPPORT ASM	1	☆	☆	☆
61	SS-611064	下轴后轴承套螺钉	SCREW	2	☆	☆	☆
62	217BJ114	下轴前轴承组件	HOOK SHAFT MATAL COMPL	1	-	☆	☆
63	217BJ110	旋梭组件	HOOK ASM	1	☆	☆	☆
64	227GB150	下轴限油组件	OIL SEAL SCREW ASM	1	☆	-	-
65	218GB102	油泵体	HOOK SHAFT METAL COMPL	1	☆	-	-
66	218GF101	油泵体油封	OIL SEAL	1	☆	-	-
67	218GB103	牙架	FEED DOG	1	-	-	☆

4、抬压脚部件

HAANG LIFTER & TENSION RELEASE COMPONENTS

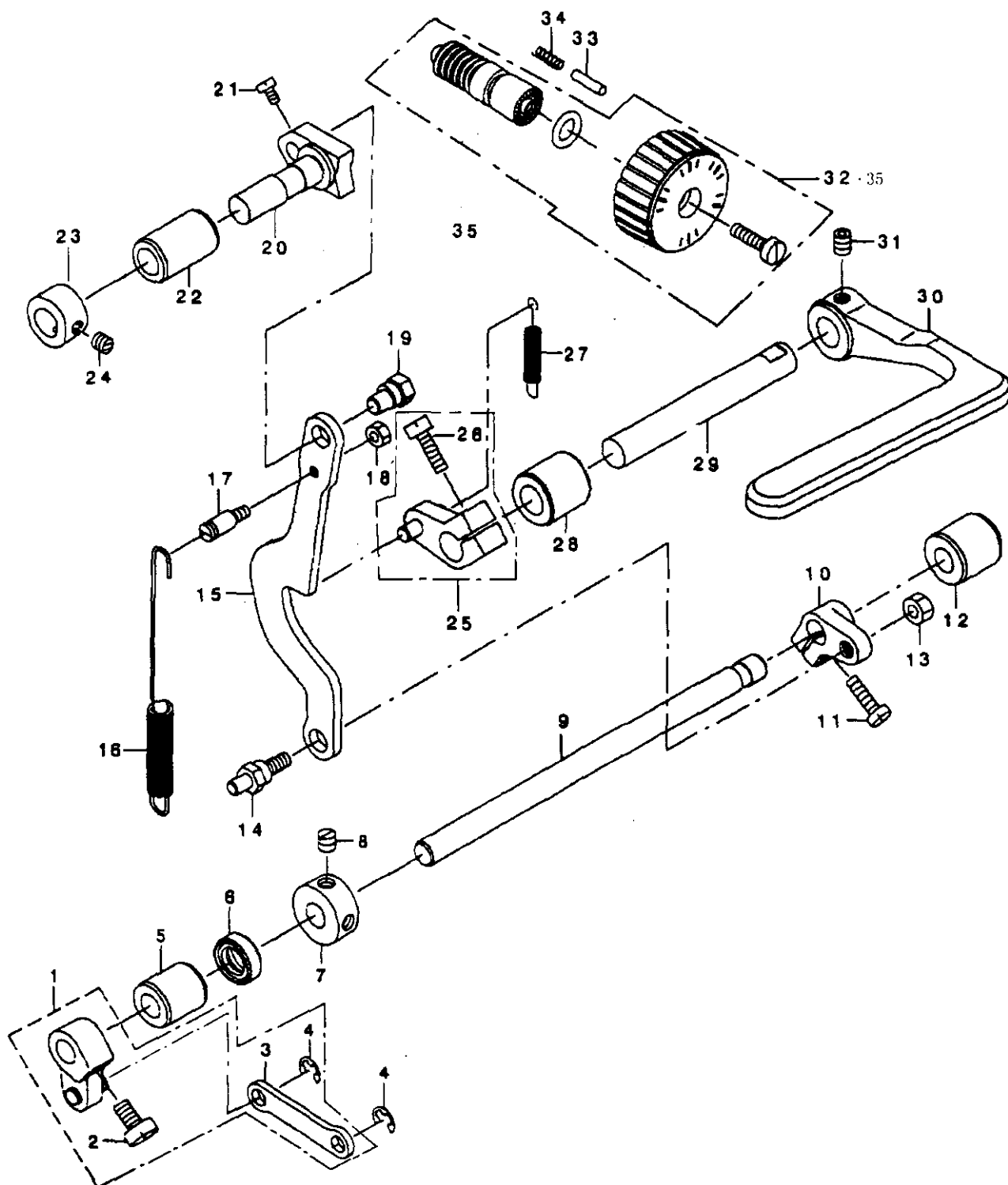


4、抬压脚部件

序号 REF.No.	件号 Part No.	名称	Name of the part	数量 Qty.	微油	无油	
						薄料 中厚料	极薄料 内衣料
1	GR619-8	压脚扳手	HAND LIFTER	1	☆	☆	☆
2	GS322-8	压脚扳手螺钉	SCREW	1	☆	☆	☆
3	GR621-8	压脚扳手轴O形圈	RUBBER RING	1	☆	☆	☆
4	GR620/2-8	压紧杆提升凸轮组件	HAND LIFTER CAM ASM.	1	☆	☆	☆
5	GS323-8	前杠杆轴	LINK SHAFT	2	☆	☆	☆
6	GR625-8	卡簧	E-RING	7	☆	☆	☆
7	217GS116	连接销螺钉	SCREW	1	☆	☆	☆
8	217GH119	小连板	PLATE	1	☆	☆	☆
9	GR622-8	压脚升降板	LIFTING PLATE	1	☆	☆	☆
10	217BJ128	前杠杆组件	LIFTING LINK COMPL	1	☆	☆	☆
11	217GH117	膝控提升杆	LIFTING LEVER CONNECT ROD	1	☆	☆	☆
12	217GS115	拉杆螺钉	HINGE SCREW	1	☆	☆	☆
13	217GS109	六角螺钉	BOLT	1	☆	☆	☆
14	217GL101	螺母	NUT	1	☆	☆	☆
15	217GK105	垫圈	WASHER	1	☆	☆	☆
16	217GS112	后杠杆轴位螺钉	HING SCREW	1	☆	☆	☆
17	217GH116	后杠杆	LIFTING LEVER LINK	1	☆	☆	☆
18	217GH115	膝控提升拉杆	CONNECTING ROD	1	☆	☆	☆
19	217GH113	提升杠导板	CONNECTING ROD GUIDE	1	☆	☆	☆
20	217GF106	抬压脚顶杆O形圈	WASHER	1	☆	☆	☆
21	217GS113	提升杠导板螺钉	SCREW	1	☆	☆	☆
22	GS324-8	拉线杠杆轴	TENSION RELEASE SHAFT	1	☆	☆	☆
23	GW189-8	松线顶板复位簧	TENSION RELEASE RETURN SPRING	1	☆	☆	☆
24	217GX101	松线辅钉	TENSION RELEASM SUPPORTING PIN	1	☆	☆	☆
25	GW185-8	松线辅钉弹簧	TENSION RELEASE PIN SPRING	1	☆	☆	☆
26	217GS111	调压螺钉	PRESSER SPRING REGULATOR	1	☆	☆	☆
27	GL168-8	调压螺母	NUT	1	☆	☆	☆
28	GR613-8	压紧杆弹簧导柱	PRESSER GUIDE BAR	1	☆	☆	☆
29	GW187-8	压杆弹簧	PRESSER SPRING	1	☆	☆	☆
30	GR614-8	压紧杆架	PRESSER BAR GUIDE BRACKET	1	☆	☆	☆
31	GZ231-8	压紧杆	PRESSER BAR	1	☆	☆	☆
32	GS319-8	压杆导架螺钉	SCREW	1	☆	☆	☆
33	GS320-8	缓线调节勾螺钉	SCREW	2	☆	☆	☆
34	GR615-8	大线勾	PRESSER BAR THREAD GUIDE	1	☆	☆	☆
35	217GD114	压杆衬套	BUSHING	1	☆	☆	☆
36	GS321-8	活压脚螺钉	SCREW	1	☆	☆	☆
37	GM164/5-8	压脚组件	PRESSER FOOT ASM.	1	☆	☆	☆
38	218GW101	压杆弹簧	PRESSER SPRING	1	-	-	☆

5、倒缝部件

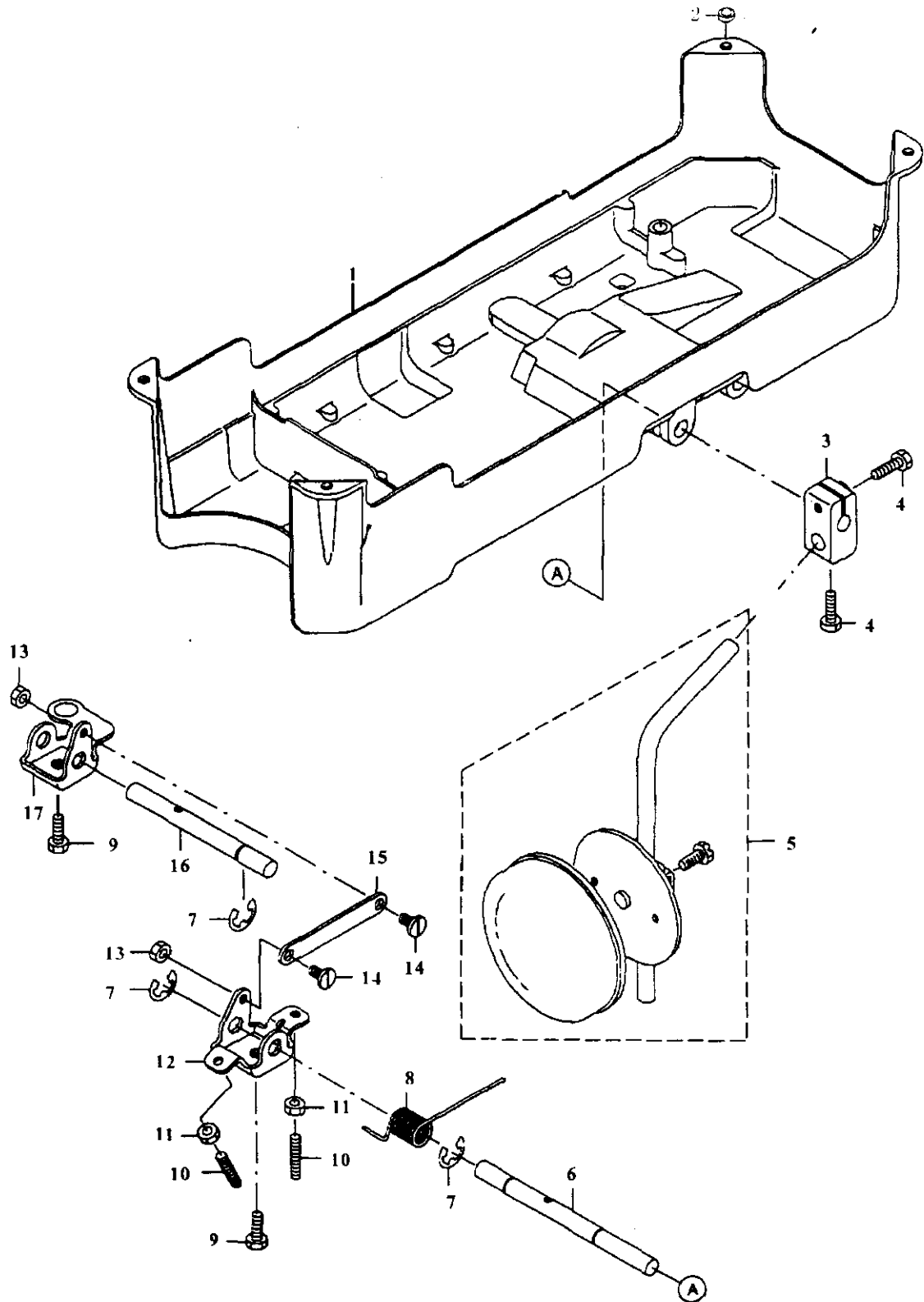
FEED ADJUST MECHANISM COMPONENTS



5、倒缝部件

序号 REF.No.	件号 Part No.	名称	Name of the part	数量 Qty.	微油	无油	
						薄料 中厚料	极薄料 内衣料
1	217BJ131	送料摆动座前曲柄组件	FEED CHANGING SHAFT ARM.A	1	☆	☆	☆
2	GS332-8	送料摆动座前曲柄螺钉	SCREW	1	☆	☆	☆
3	217GH121	送料摆动座摆动连板	ADJUSTING LINK CONNECTING LINK	1	☆	☆	☆
4	GR625-8	送料摆动座前曲柄销卡簧	E-RING	1	☆	☆	☆
5	217GO115	针距调节轴前套	METAL.A	1	☆	☆	☆
6	217GF107	针距调节轴油封	FEED CHANGING SHAFT OIL SEAL	1	☆	☆	☆
7	217GK106	针距调节轴挡圈	THRUST COLLAR	1	☆	☆	☆
8	GS305-8	针距调节轴挡圈螺钉	SCREW	2	☆	☆	☆
9	217GZ106	针距调节轴	FEED CHANGING SHAFT	1	☆	☆	☆
10	217GH124	送料摆动座后曲柄	FEED CHANGING SHAFT ARM.B	1	☆	☆	☆
11	GS334-8	送料摆动座后曲柄螺钉	SCREW	1	☆	☆	☆
12	217GO116	针距调节轴后套	METAL.B	1	☆	☆	☆
13	217GL103	摆动座后曲柄连接销螺母	NUT	1	☆	☆	☆
14	217GX111	送料摆动座后曲柄连接销	FEED CHANGING SHAFT ARMB PIN	1	☆	☆	☆
15	217GH125	针距调节连接板	FEED ADJUSTING ROD	1	☆	☆	☆
16	217GW102	倒送料调节簧	FEED ADJUSTING SPRING	1	☆	☆	☆
17	217GX112	弹簧挂销	SPRING SUSPENSION	1	☆	☆	☆
18	217GL104	弹簧挂销螺母	NUT	1	☆	☆	☆
19	217GX110	针距调节偏心销	FEED ADJUSTING PIN	1	☆	☆	☆
20	217GH126	针距调节座	FEED ADJUSTING BASE	1	☆	☆	☆
21	GS311-8	针距调节座螺钉	SCREW	2	☆	☆	☆
22	217GO118	针距座轴套	ADJUSTING BASE SHAFT METAL	1	☆	☆	☆
23	217GK107	针距调节座挡圈	COLLAR ASM	1	☆	☆	☆
24	217GS117	针距调节座挡圈螺钉	SCREW	2	☆	☆	☆
25	217BJ134	倒送料扳手曲柄组件	FEED LEVER ARM ASM	1	☆	☆	☆
26	GS334-8	倒送料曲柄螺钉	SCREW	1	☆	☆	☆
27	217GW101	倒送料曲柄簧	FEED LEVER SPRING	1	☆	☆	☆
28	217GO117	倒送料扳手轴轴套	FEED LEVER SHAFT METAL	1	☆	☆	☆
29	217GZ107	倒送料轴	FEED LEVER SHAFT	1	☆	☆	☆
30	217GH120	倒送料扳手	FEED LEVER	1	☆	☆	☆
31	217GS107	倒送料轴紧定螺钉	SCREW	2	☆	☆	☆
32	217BJ129	针距标盘组件	FEED DIAL ASM	1	☆	☆	-
33	GX211-8	针距旋钮锁销	PIN	1	☆	☆	☆
34	GW191-8	针距旋钮锁簧	SPRING	1	☆	☆	☆
35	218BJ102	针距标盘组件	FEED DIAL ASM		-	-	☆

6. 油盘膝提部件 UNDER COVER COMPONENTS



6、油盘膝提部件

序号 REF.No.	件号 Part No.	名称	Name of the part	数量 Qty.	微油	无油	
						薄料 中厚料	极薄料 内衣料
1	217GR116	油盘	UNDER COVER	1	☆	☆	☆
2	GR683-8	机头座垫	HEAD GASK	4	☆	☆	☆
3	GR689-8	操纵杆接头	BRACKET	1	☆	☆	☆
4	GS358-8	接头螺栓	SCREW	2	☆	☆	☆
5	GR690-8	操纵杆部件	KNEE PAD PLATE	1	☆	☆	☆
6	217GZ108	抬压脚轴 I	KNEE PRESS ROD	1	☆	☆	☆
7	GR688-8	挡圈	E-RING	3	☆	☆	☆
8	217GW103	复位弹簧	SPRING	1	☆	☆	☆
9	GS356-8	双向曲柄定位螺钉	SCREW	2	☆	☆	☆
10	GS357-8	双向曲柄限位调节螺柱	SCREW	2	☆	☆	☆
11	GL170-8	双向曲柄限位调节螺母	NUT M6	2	☆	☆	☆
12	217GH127	膝控限位架 I	BRACKET	1	☆	☆	☆
13	217GL105	螺母	NUT	1	☆	☆	☆
14	217GS118	连接板螺钉	HINGE SCREW	2	☆	☆	☆
15	217GH129	连接板	CONNECTING ROD	1	☆	☆	☆
16	217GZ109	抬压脚轴 II	SHAFT	1	☆	☆	☆
17	217GH130	膝控限位架 II	CONNECTING ROT	1	☆	☆	☆

10、润滑部件

序号 REF.No.	件号 Part No.	名称	Name of the part	数量 Qty.	微油	无油	
						薄料 中厚料	极薄料 内衣料
1	101BJ139	油标	FLOATER ASM.	1	☆	-	-
2	101GF127	油杯O形圈	RUBBER RING	1	☆	-	-
3	101GB189	油杯	FLOATER CASE	1	☆	-	-
4	101GW118	小油管紧固簧	PIPE STOPPER A	4	☆	-	-
5	101GW119	大油管紧固簧	PIPE STOPPER B	3	☆	-	-
6	227GB108	油杯大油管	VINYL TUBE, WHITE	1	☆	-	-
7	101GR108	油标窗	OIL SIGHT WINDOW	1	☆	-	-
8	101GB180	加油杯	OIL INLE	1	☆	-	-
9	227GB107	总进油管	VINYL TUBE, WHITE	1	☆	-	-
10	227GB118	垫片	WASHER	1	☆	-	-
11	227GB119	弹簧垫片	SPRING WASHER	2	☆	-	-
12	GS300-8	油盒固定螺钉	SCREW	2	☆	-	-
13	101GF128	油合O形圈	RUBBER RING	2	☆	-	-
14	101GS175	油合短螺钉	SCREW	1	☆	-	-
15	227GB114	回油管	TUBE	1	☆	-	-
16	227GB110	机头润滑油管	TUBE	1	☆	-	-
17	227GB113	面部供油线	OIL WICK	1	☆	-	-
18	227GB114	回油管	TUBE	1	☆	-	-
19	227GB101	油盒	OIL TANK ASM	1	☆	-	-
20	227GB104	面部油线板组件	OIL WICK SUPPORT ASM	1	☆	-	-
21	227GB105	面部油线板	OIL WICK SUPPORT	1	☆	-	-
22	227GB106	面部油线	OIL WICK	1	☆	-	-
23	227GB107	面部油线板螺钉	SCREW	1	☆	-	-
24	GR678-8	回油毡夹	OIL FELT PRESSER	1	☆	-	-
25	GR676-8	回油除尘毡	OIL RETURN FELT	1	☆	-	-
26	227GB117	油量调节螺钉O型圈	RUBBER RING	1	☆	-	-
27	227GB116	油量调节螺钉	OIL ADJUSTING SCREW	1	☆	-	-
28	101GX116	柱塞	PLUNGER	1	☆	-	-
29	101GW112	柱塞簧	PLUNGER SPRING	1	☆	-	-
30	101GS159	柱塞螺钉	PLUNGER SCREW	1	☆	-	-
31	101GF122	柱塞螺钉O形圈	RUBBER RING	1	☆	-	-
32	101GB178	油管接头	LUBRICATION CONNECTOR	2	☆	-	-
33	227GB107	总进油管	TUBE	1	☆	-	-
34	227GB111	总回油管	TUBE	1	☆	-	-
35	101GB172	油管三接头	DISTRIBUTOR	1	☆	-	-