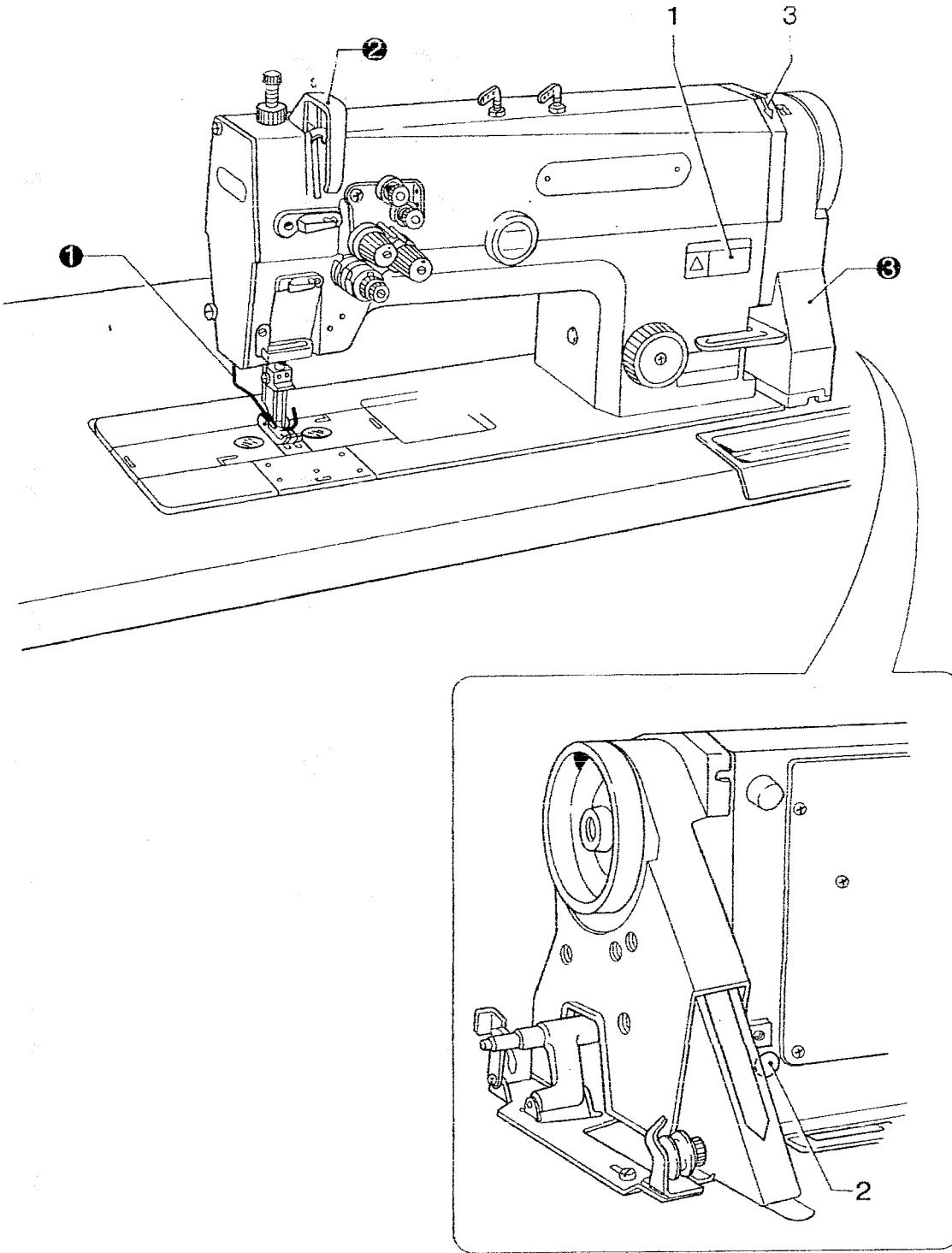


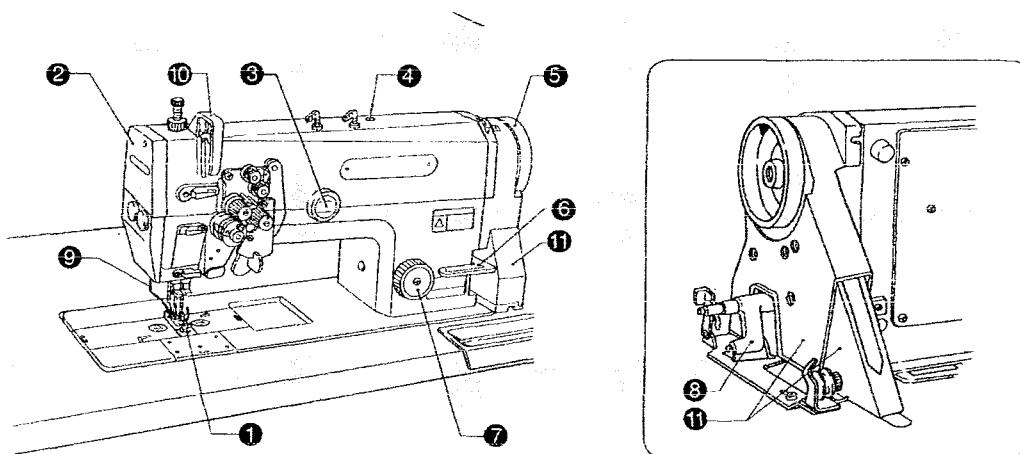
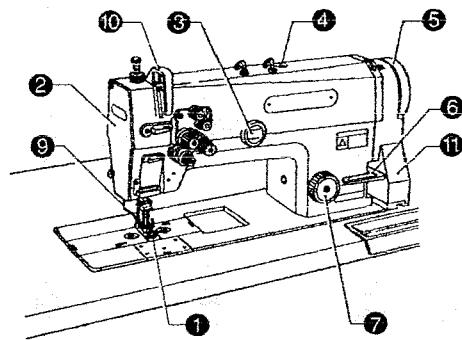
# ARTiSAN.®



ARTiSAN.®  
**2220**  
Operators Manual  
and  
Spare Parts Booklet



# 主要零件名称 NAMES OF MAJOR PARTS



① 针板      ② 面板      ③ 油窗      ④ 注油孔      ⑤ 上轮      ⑥ 倒送料板手  
⑦ 针距旋钮      ⑧ 核心绕线器

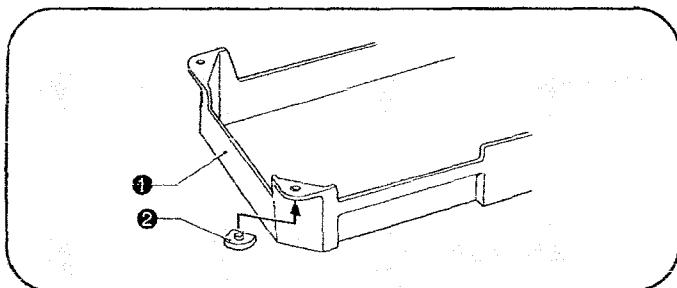
安全装置  
⑨ 护指架      ⑩ 挑线杆护罩      ⑪ 皮带罩

① Needle plate      ② Face plate      ③ Oil gauge window      ④ Oil inlet      ⑤ Machine pulley  
⑥ Reverse Stitching lever      ⑦ Sfitch length dial      ⑧ Bobbin winder

Safety devices  
⑨ Finger guard      ⑩ Thread take-up cover      ⑪ Belt cover

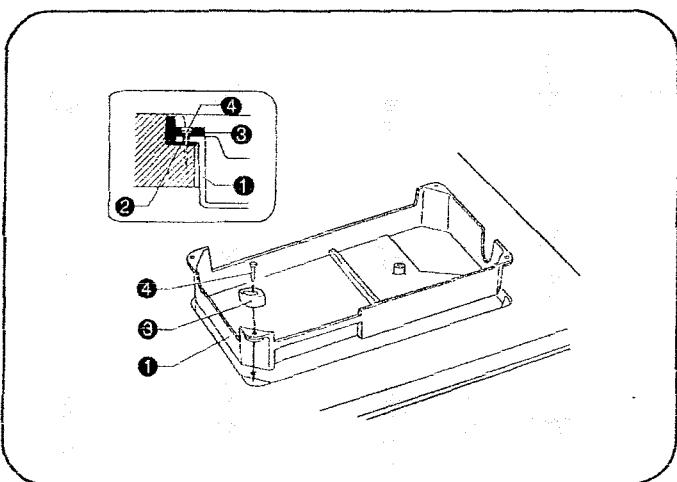
## -1. 油盘安装

### -1.1. Installing the oil pan



1. 将四个油盘垫②插入油盘①的四个角孔下。

1. Insert the four oil cushion ② into the oil pan ①from below so that the four corner holes are aligned.

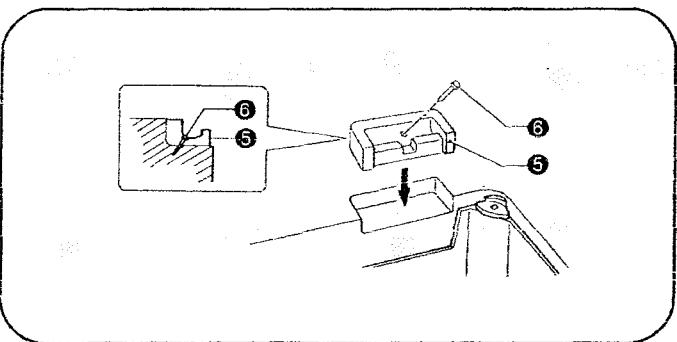


2. 将油盘①放在工作台的上个凹槽上。

3. 将四个机头座垫③放在油盘①的四个角上, 然后用四个钉子④固定。

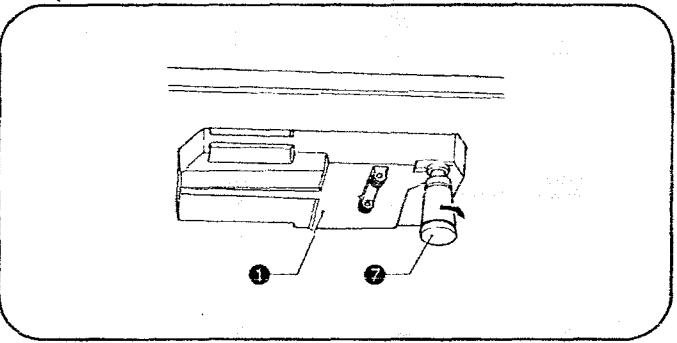
2. Place the oil pan①into the groove in the work table so that corners are aligned.

3. Place the four head cushions③on top of the corners in the oil pan①, and then secure them with the four nails ④.



4. 将两个(机头连接钩座)⑤放在台板的凹槽内, 然后用两个钉子⑥固定。

4. Insert the two rubber cushions ⑤ into the notches in the work table, and then secure them with the two nails ⑥.

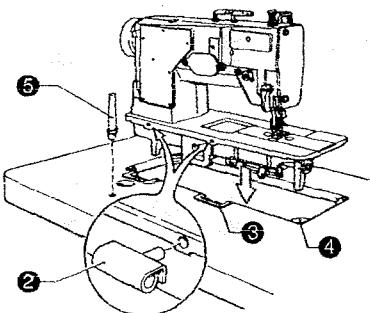
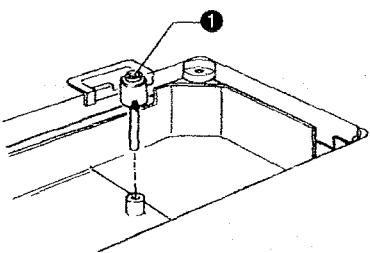


5. 将塑料小油壶⑦旋进油盘①。

5. Screw the plastic oiler ⑦ into the oil pan ①.

## -2. 机头安装

### 2. Installing the machine head



1. 插入抬压脚顶销①。

2. 将机头连接钩②插入底板上的两个孔内。

3. 将机头连接钩②放在台板上的机头连接钩座③上，机头放在油盘四角上的机头座垫④上。

4. 将机头支柱⑤敲入台板上的孔内。

1. Insert the knee lifter complying bar ①.

2. Insert the two hinges ② into the holes in the machine bed.

3. Clamp the hinges ② onto the rubber cushions ③ in the work table, and then place the machine head onto the head cushions ④ which are on top of the oil pan corners.

4. Tap the pillow ⑤ into the table hole.

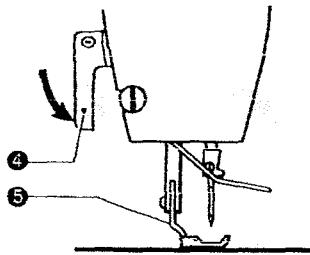
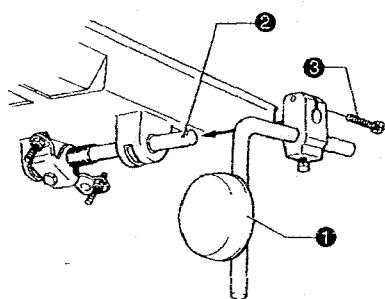
NOTE: Tap the pillow securely into the table hole.

If the pillow is not pushed in as far as it will go the machine head will not be sufficiently stable when it is tilted back.

注：敲入机头支柱时一定要将支柱敲到底。否则，机头向后翻转放置时不稳。

## -3. 膝提安装

### 3. Installing the knee lifter assembly



1. 将膝提组件①安装在油盘上的抬压脚轴②上，然后用螺栓③将其拧紧。

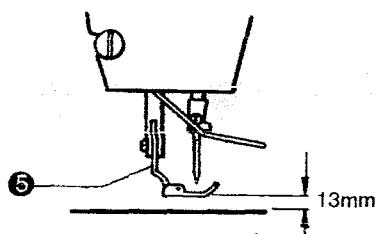
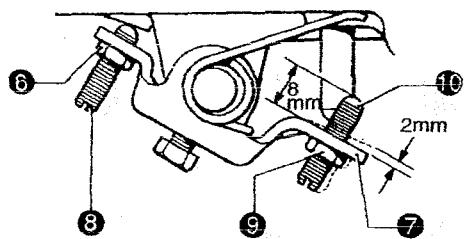
1. Place the knee lifter assembly ① onto the knee lifter bar ② on the oil pan, and then secure if by tightening the bolt ③.

#### 2. 膝提调节

1) 用压脚扳手④放下压脚⑤。

2. Adjust the knee lifter.

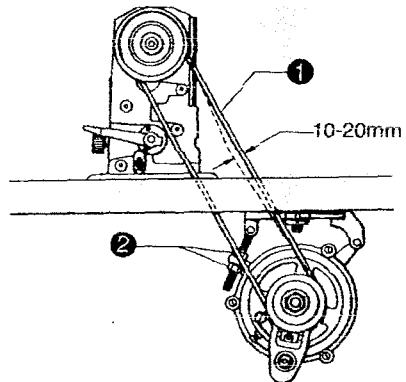
1) Lower the presser foot ④ by using the presser bar lifter ⑤.



- 2) 松开螺母⑥。
  - 3) 调节螺钉⑧, 当轻压膝碰块⑦时, 膝提①提升量约 2 mm。.
  - 4) 旋紧螺母⑥。
  - 5) 松开螺母⑨。
  - 6) 调节螺钉⑩,使螺钉⑩端部与膝碰块⑦的距离约为 8mm。
  - 7) 旋转调节螺钉⑩, 充分挤压膝提①时, 压脚⑤与针板距离为 13mm。
  - 8) 调节完毕后, 拧紧螺母⑨。
- 2) Loosen the nut ⑥.
  - 3) Turn the screw ⑧ to adjust so that the amount of play in the knee lifter ⑦ is approximately 2mm when the knee lifter plate ① is gently pressed.
  - 4) Securely tighten the nut ⑥.
  - 5) Loosen the nut ⑨.
  - 6) Turn the screw ⑩ until the distance between the end of the screw ⑩ and the knee lifter ⑦ is approximately 8mm.
  - 7) Turn the screw ⑩ to adjust so that the presser foot ⑤ is at the desired position within a distance of 13mm of the needle plate when the knee lifter ① plate is fully pressed,
  - 8) After adjustment is completes,securely tighten the nut ⑨.

#### -4. 皮带安装

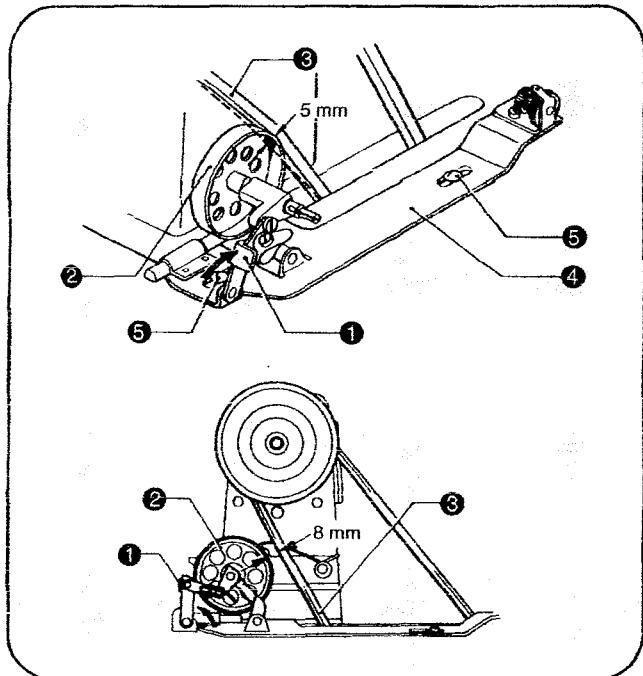
#### -4. Installing the belt



1. 将机头向后倾斜, 然后将皮带①放置在上轮和电机轮上。
  2. 调节螺母②, 使当手指用 9.8 牛(1 千克力)的力压皮带时, 皮带应偏斜 10–20mm。
1. Tilt back the machine head, and then place the belt ① onto the motor pulley and the machine pulley.
  2. Turn the nut ② to adjust so that there is 10–20mm of deflection in the belt when it is pressed with a finger with a force of 9.8 N (1kgf).

## -5. 棱心绕线器安装

### -5. Installing the bobbin winder

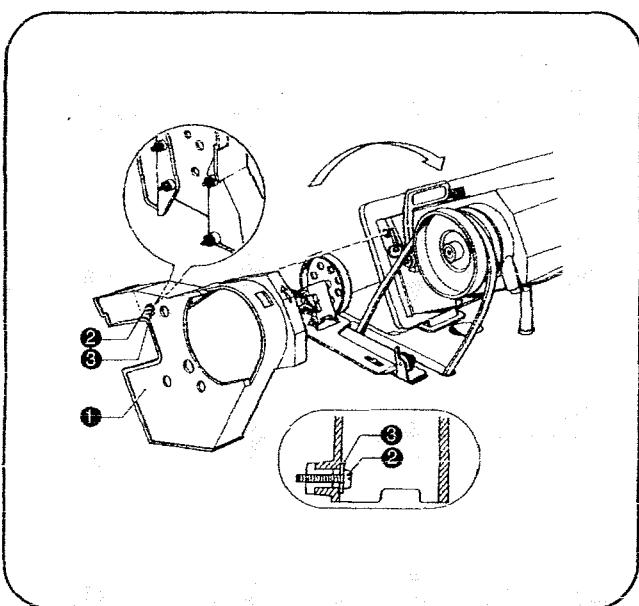


1. 尽可能推下棱心压板①。
2. 将棱心绕线轮②压下皮带④约5mm, 然后将棱心绕线器与台板上皮带孔平行放置。
3. 用2个螺钉⑤将棱心绕线器④固定在台板上。
4. 将棱心压板①扳回, 棱心绕线轮②与皮带③的距离约为8mm。

1. Push down the bobbin presser arm ① as far as it will go.
2. Place the bobbin winder wheel ② so that it pushes the belt ③ by approximately 5mm, and then place the bobbin winder ④ so that it is parallel with the belt hole in the work table.
3. Install the bobbin winder ④ to the work table with the two screw ⑤.
4. Pull the bobbin presser arm ① back and check that there is approximately 8mm of clearance between the bobbin winder wheel ② and the belt ③.

## -6. 皮带罩安装

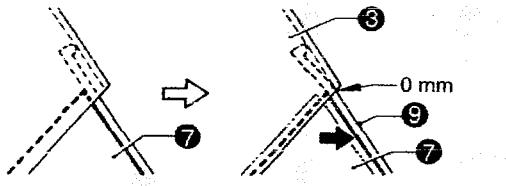
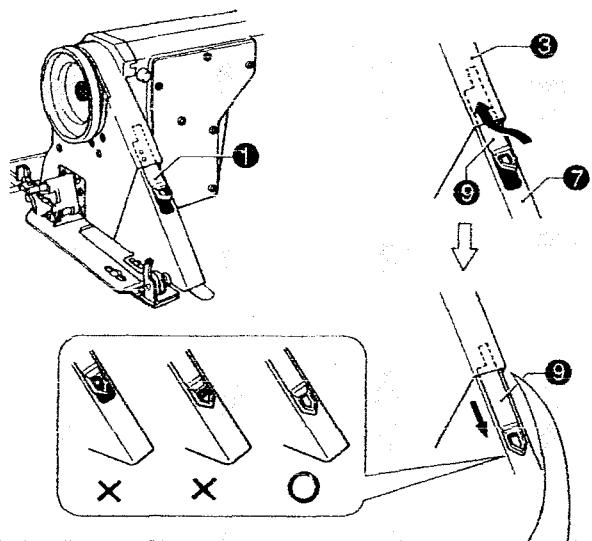
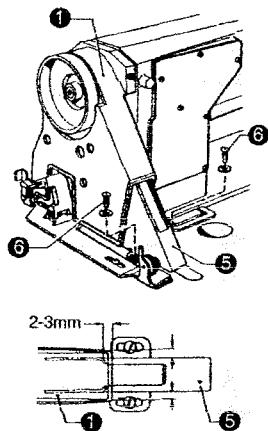
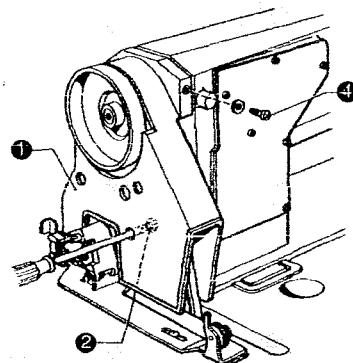
### -6. Installing the belt cover



1. 将机头翻倒。
2. 将螺钉②和垫圈③固定在上皮带罩①里面处的橡皮垫上。(四处)
3. 将上皮带罩①安放在机头上轮上, 翻转机头恢复到原位。
4. 按第2步拧紧4个螺钉②和螺钉④, 将上皮带罩①固定好。

5. 将下皮带罩⑤与上皮带罩①的重叠部分变为2-3mm, 然后临时性拧紧两个螺钉⑥。

1. Tilt back the machine head.
2. Attach the screw ② and washers ③ to the rubber cushions on the inside of the belt cover U ①(in four places).
3. Place belt cover U ① onto the machine pulley, and then return the machine head to its original position.
4. Tighten the four screws ② attached in step 2. above and the screw ④ to install belt cover U ①.
5. Place belt cover D ⑤ so that it overlaps the belt cover U ① by 2-3mm, and then provisionally tighten the two screws ⑥.

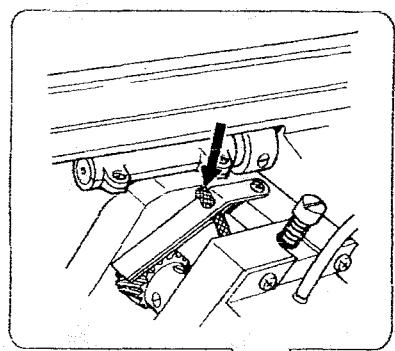
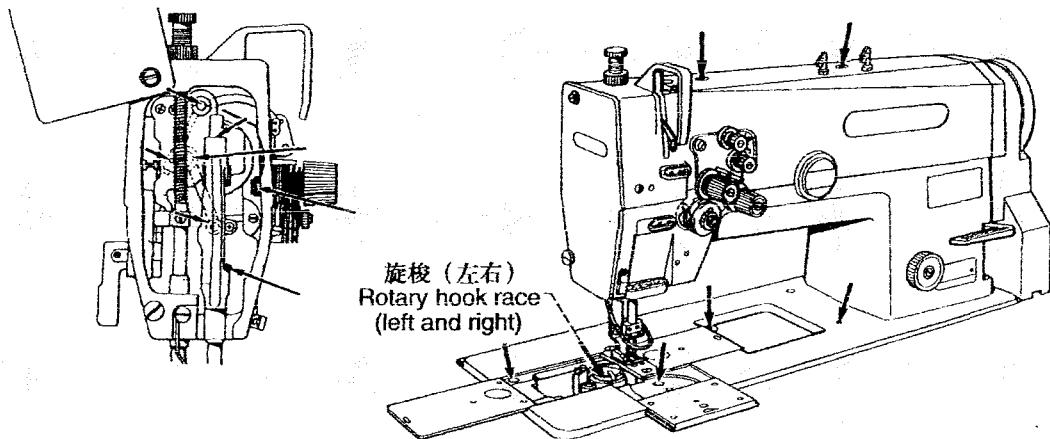


6. 把下皮带罩⑤的防护盖⑦放在上皮带罩①之间，然后将其放入下皮带罩⑤的凹槽内。  
6. Insert the cover ⑦ of belt cover D ⑤ in between the belt cover U ① and belt cover D ⑤, and then place it into the groove cover D ⑤.
7. 将防护盖⑦沿下皮带罩⑤的凹槽尽可能下。  
7. Slide the cover ⑦ down along the groove of belt cover D ⑤ as far as it will go.
8. 将下皮带罩⑤向操作者方向拉，直到上皮带罩①与下皮带罩⑤的防护盖⑦之间无空隙。  
8. Pull belt cover D ⑤ toward you until there is no clearance between the belt cover U ① and the cover of ⑦ belt cover.
9. 参考第5步，完全拧紧2个螺钉⑥。(Refer to step 5.)  
9. Fully tighten the two screw ⑥.(Refer to step 5.)

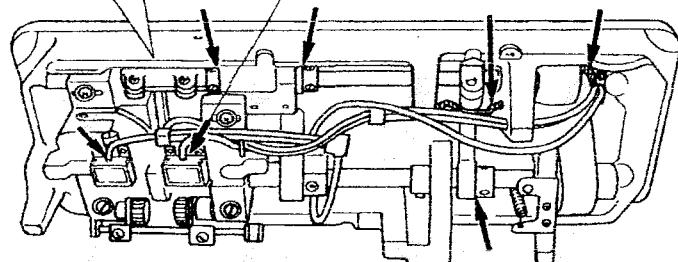
## ■ 加油

在箭头指示地方加 1-2 滴油。

Add 1-2 drops of oil in the places indicated by the arrows.

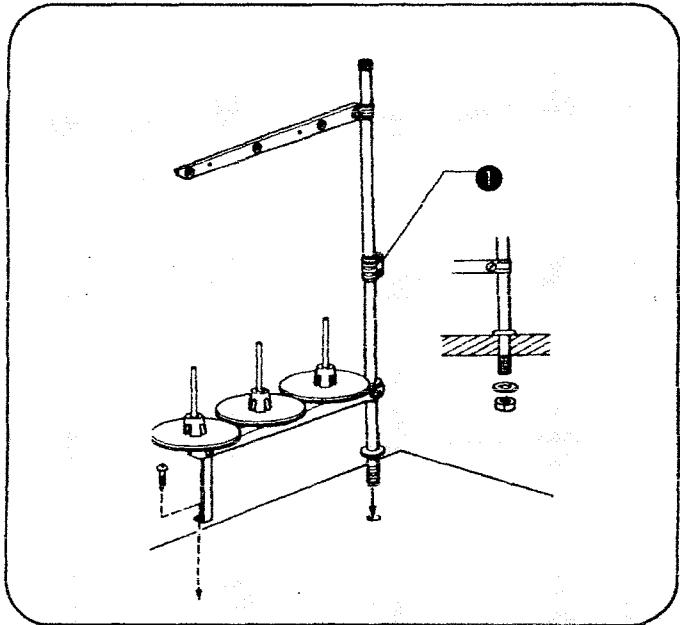


把左右梭架油盒加一半油  
Fill the left and right sub-tanks  
about half-full with oil.



## -7. 线架安装

### -7.1 Installing the cotton stand



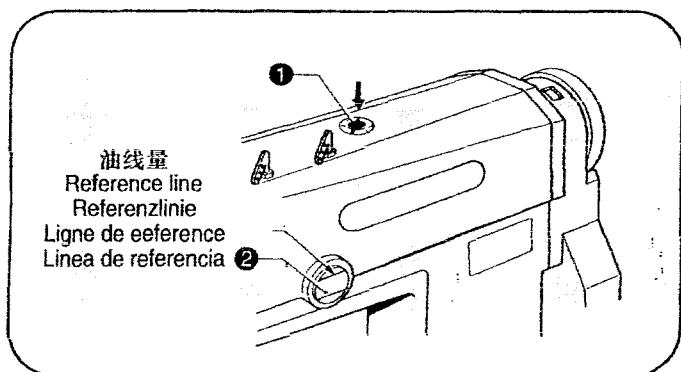
按说明书组装好线架①后，将其安装至台板远端右角处。

Assemble the cotton stand ① while referring to the cotton stand instruction manual, and then install the cotton stand to the far right corner of ① the work table.

## -8. 润滑

### -8.1 Lubrication

- 缝纫机一直要润滑。第一次使用或长期不用后再使用前，油量必需加满。
- 使用缝纫机 10 号润滑油。
- The sewing machine should always be lubricated and the oil supply replenished before it is used for the first time, and also after long periods of non-use.
- Use only the lubricating oil (Nisseki Sewing Lube 10) specified by Brother.



#### ■ 润滑

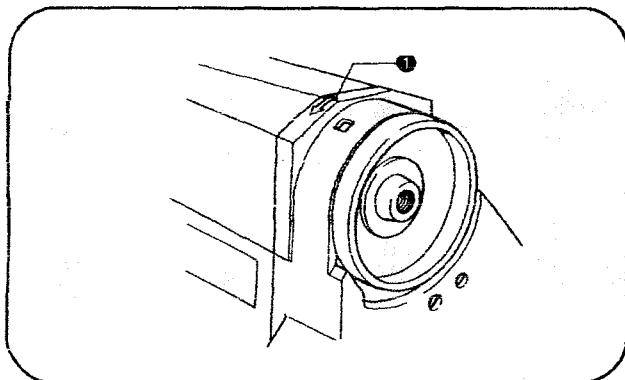
油灌入油孔①直到油窗②的油量线到上参考线。

#### ■ Lubrication

Pour oil in through the oil inlet ① until the oil level rises to the upper reference line in the oil sight glass ②.

## -9. 检查上轮旋转方向

## -9. Checking the machine pulley rotating direction



1. 插上插座，然后打开电源开关。

2. 压下踏板，按箭头方向检查上轮转动方向。

\* 若上轮转动方向相反,按电机操作说明更正上轮转动方向。

1. Insert the power cord plug into the wall outlet, and then turn on the power switch.

2. Depress the treadle and check that the direction of rotation of the machine pulley matches the direction of the arrow ①.

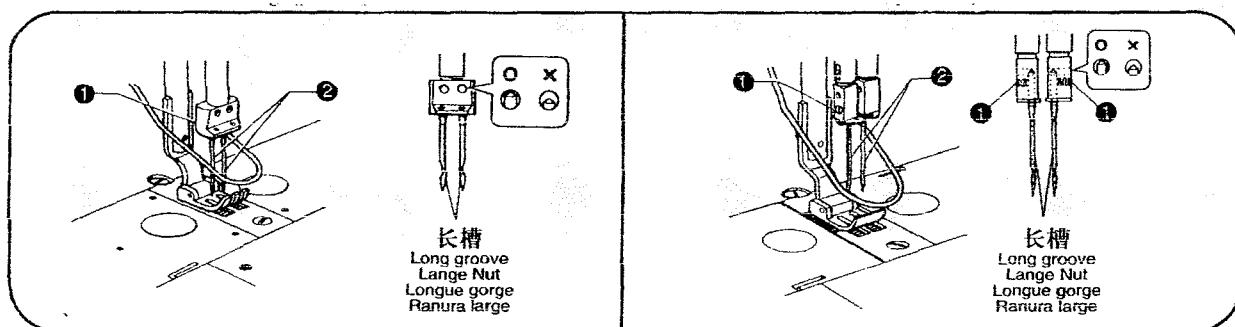
\* If the direction of rotary is reversed, change the direction of rotation to the correct to the correct direction while referring to the instruction manual for the motor.

## 操作前准备

## PREPARATION BEFORE SEWING

### -1. 安装机针

#### 1. Installing the needle



1. 松开上轮，将针杆提升到最高位置。

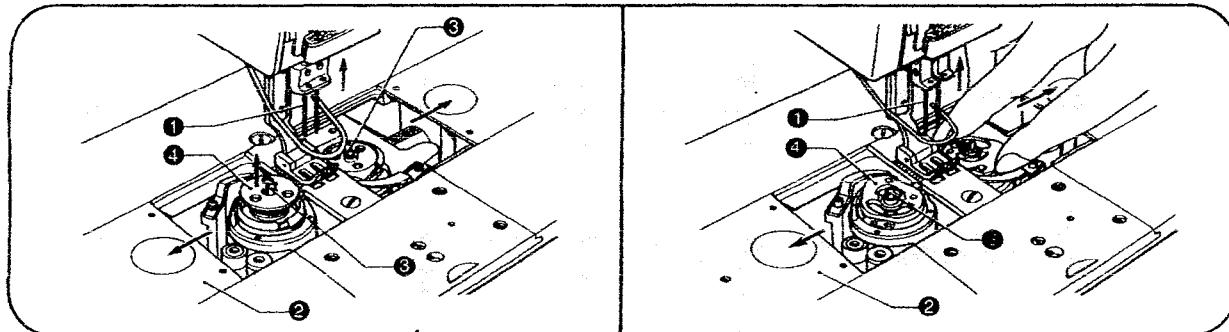
2. 松开螺钉①，长槽面向里面，拿住机针②一直插入针夹头 内，然后旋紧螺钉①。

1. Turn the machine pulley to move the needle bar to its highest position.

2. Loosen the screws ①, hold the needles ② with their long groove facing inward, insert them all the way into the needle bars, and re-tighten the screws ①.

## -2. 拆卸梭心和梭帽

### -2. Removing the bobbin or cap

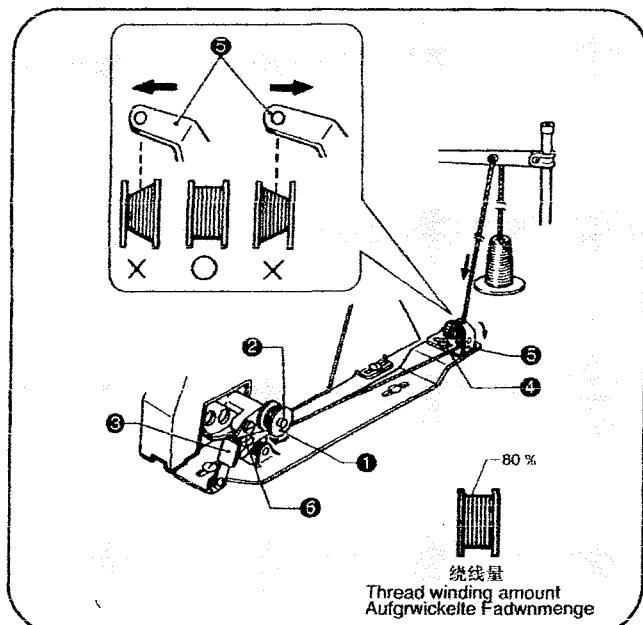


1. 将机针①抬到高位置，推开左右推板②。
2. 向上拉开梭门③，卸下梭心④。
1. Raise the needles ① to the highest positions, and open the slide plates ② by moving them to the right and left.
2. Pull the rotary hook latches ③ upward, and then remove the bobbin ④.

1. 将机针①抬到高位置，推开左右推板②。
2. 向上拉开梭门③，抬起梭帽④的角，卸掉梭帽④。
1. Raise the needle ① to the highest positions, and open the slide plates ② by moving them to the right and left.
2. After lifting up the rotary hook latch③, lift the corner of the cap ④ to remove the cap ④.

## -3. 绕梭心线

### -3. Winding the lower thread



1. 打开电源开关。
  2. 将梭心①装在梭心轴②上。
  3. 按箭头指示方向绕梭心①线几圈。
  4. 压下梭心压板③。
  5. 用压脚扳手抬起压脚。
  6. 压下踏板开始绕线。
- \* 若绕线不均匀，请松开螺钉④，将绕线架座⑤移向线少的一边。
- \* 转动调节螺钉⑥来调节绕线量。

- 增加线量：旋紧螺钉。
- 减少线量：松开螺钉。

注意：梭心上的线量应在正常满线量的 80% 为好。

1. Turn on the power switch.
2. Place the bobbin ① onto the bobbin winder shaft ②.
3. Wind the thread several times around the bobbin ① in the direction indicated by the arrow.
4. Push down the bobbin presser arm ③.

5. Raise the presser foot with presser lifter.

6. Depress the treadle. Lower thread winding will then start.

7. Once winding of the lower thread is completed, the bobbin presser arm ③ will return automatically.

\* If the thread cannot be wound on evenly, loosen the screw ④ and move the bobbin winder guide ⑤ to the side where there is less thread.

\* Turn the adjustment screw ⑥ to adjust the bobbin winding amount.

● To increase the winding amount: Tighten the screw.

● To decrease the winding amount: Loosen the screw.

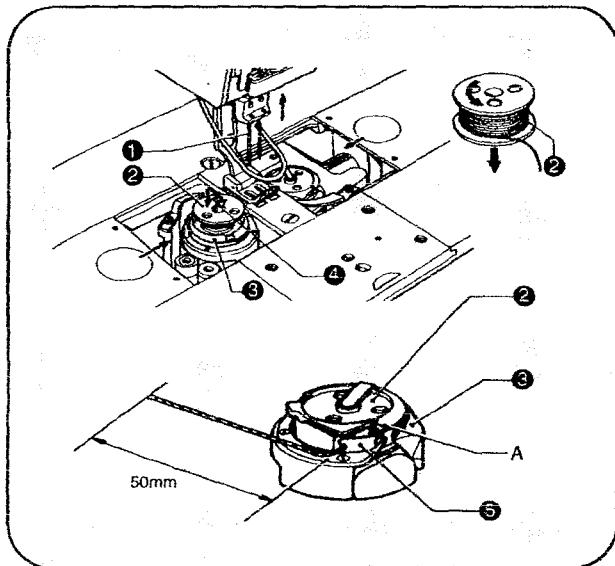
Note: The amount of thread wound onto the bobbin should be a maximum of 80% of the bobbin capacity.

## 梭心和梭帽安装

### -1. Installing the bobbin or cap

#### -1 梭心安装

##### -1.1 Installing the bobbin



1. 转动上轮将机针①提升到最高位置。
2. 按图示说明方向将梭心②放入旋梭③内。
3. 将梭门④恢复原位。
4. 转动上轮, 将旋梭③转到能看见张力簧⑤。
5. 将线穿过旋梭开口槽A后, 再从张力簧⑤穿出。
6. 拉出线约50mm。
7. 关上推板。

1. Turn the machine pulley to raise the needle ① to its highest position.
2. Insert the bobbin ② into the rotate hook ③ so that the winding direction is as shown in the illustration.
3. Return the rotary hook latch ④ to its original position.
4. Turn the machine pulley to rotary the ratory hook ③ until the tension spring ⑤ is visible.
5. Pass the thread through slit A in the rotaey hook and then pass it at under through tension spring ⑤.

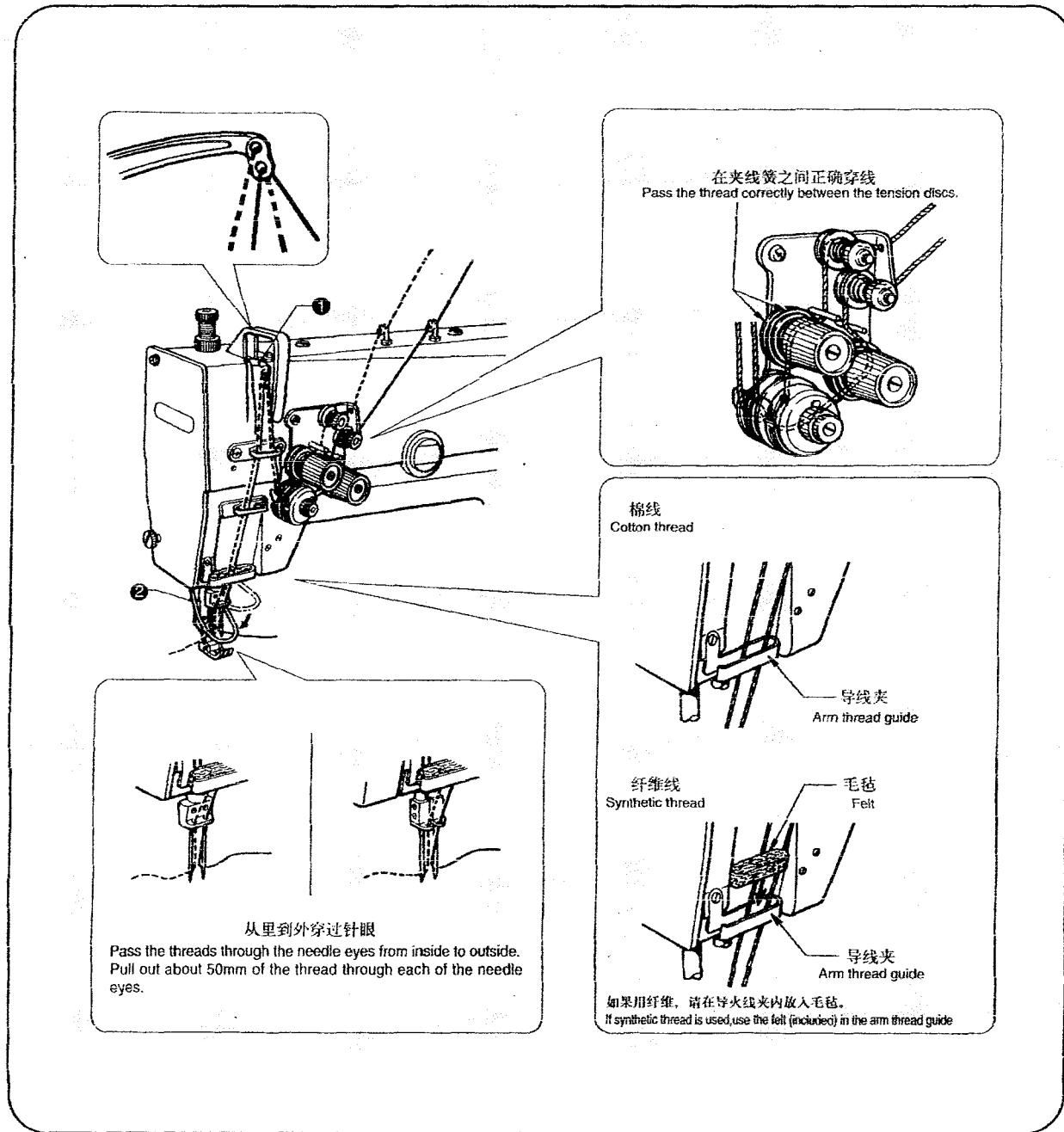
6. Pull out the thread to a length of approximately 50mm.

7. Close the slide plates.

## -5. 穿面线

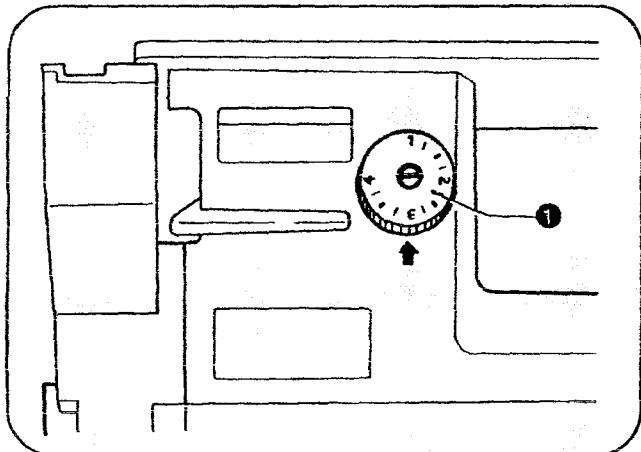
### -5. Threading the upper thread

- 穿面线前，转动上轮并提升挑线杆①，防止缝纫中缝线脱落。
- 先穿左边。
- 调节护指架②到合适位置。穿线完毕后，一定要放下压脚。
- Turn the machine pulley and raise the thread take-up lever before threading the upper thread. This will make threading easier and it will prevent the thread from coming out at the sewing start.
- Thread the left-side thread first.
- The position of the finger guard is adjustable. Be sure to lower it once threading has been completed.



## -6. 针距调节

### -6. Adjusting the stitch length



顺时针或逆时针调节针距旋钮①，针距旋钮的最上端数值即是你所需的针距。

\*数字越大，针距越大。

Turn the stitch length dial ① clockwise or counterclockwise that the desired stitch length is at the uppermost position on the dial.

\*The larger the number, the longer the stitch length will be.

## 角缝方法

### Corner sewing method

注意：如果用此种机器代替单针机时请卸下一支不用的机针，这样就可以不用下列停针方法，否则，将损伤机器。

NOTE: If using this machine in place of a single-needle machine, remove the needle which is not being used. In such cases, do not use the procedures given below to stop the unused needle bar from moving, otherwise damage to the machine may result.

#### 停止针杆(右和左)

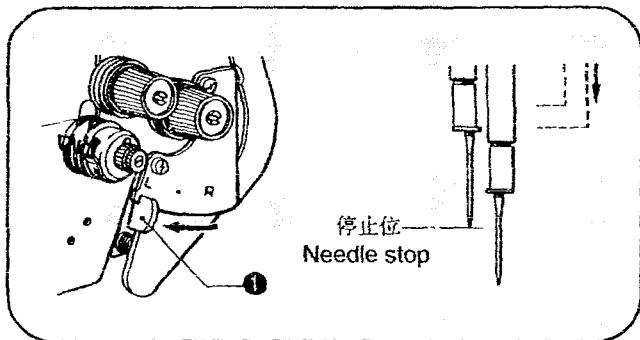
#### To stop needle bars (right and left)

●机针穿透布料后，操作停止杆。

●当一个针杆已被停止，超过1000转/分时，不要缝纫。

●Operate the stop lever after the needle has penetrated the material and has moved.

●Do not sew at speeds of over 1000 spm while one of the needle bars been stopped.



#### 停止左针杆

将停止杆①移动“L”位置。

#### To stop operation of the left needle bar:

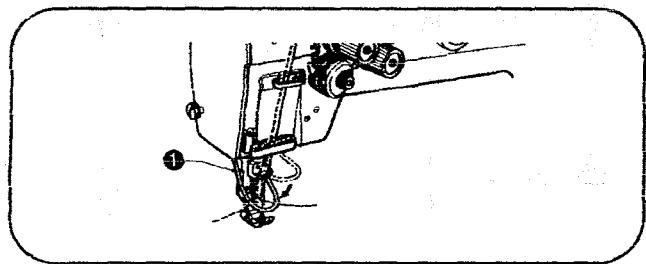
Move the stop lever ① to the “L” position.

## 7. 缝纫

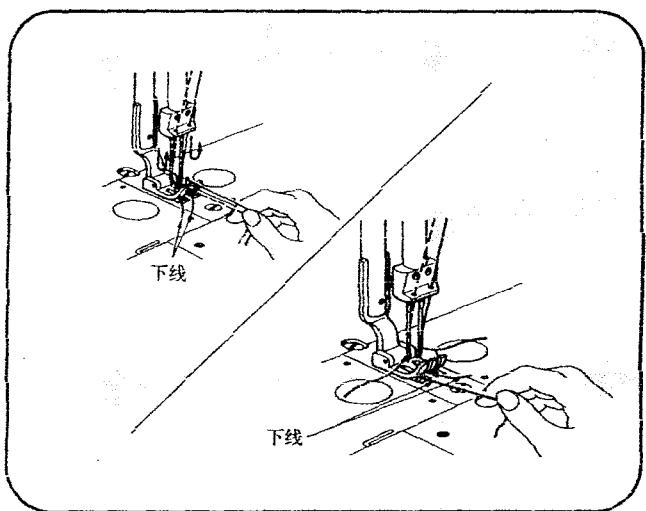
### 7. SEWING

#### 7-1、缝纫

##### 7-1. SEWING



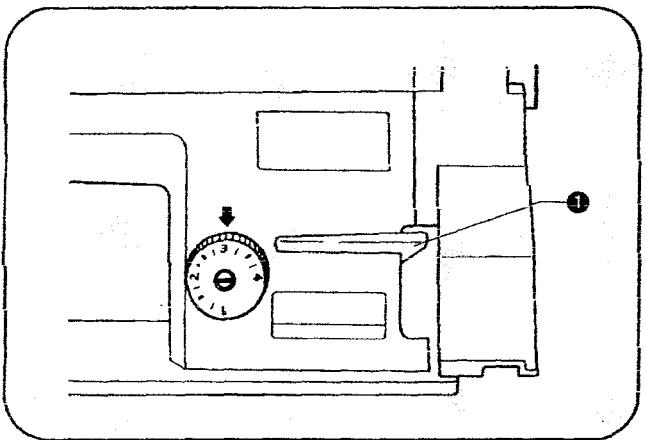
1. 放下护指架①。
1. Lower the finger guard ①.



2. 用手指拉着两根上线，用手朝操作方向转动上轮直到下线从送料牙中引出。
2. While holding the two upper threads with your fingers, turn the machine pulley by hand toward you until the lower threads come out onto the feed dog.
3. 将下线朝操作者方向拉出并检查下线是否顺畅。
3. Pull the lower threads toward you and check that they pull out smoothly.
4. 打开电源开关。
4. Turn on the power switch.
5. 压下踏板开始缝纫。
5. Depress the treadle to start sewing.

#### 7-2、倒缝

##### 7-2. Backtacking



压下倒送料扳手①，缝料将反向缝纫。当倒送料扳手恢复至原位置时，又开始正常缝纫。

When the reverse stitching lever ① is pushed, the cloth feed direction will be reversed, and when it is returned to its original position, the feed direction will change back to normal.

## 8. 底线张力

### 8. THREAD TENSION

8-1、底线张力调节

8-1. Adjusting the thread tension



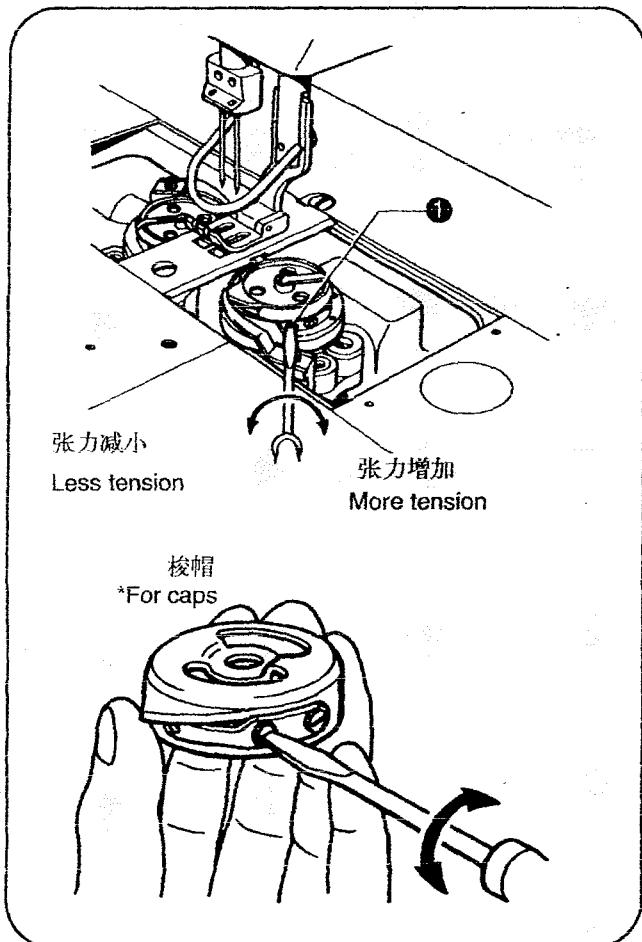
好针迹  
Good even stitches



面线张力太大或底线张力太小  
Upper thread tension too strong or lower thread tension too weak.



面线张力太小或底线张力太大  
Upper thread tension too weak or lower thread tension too strong.

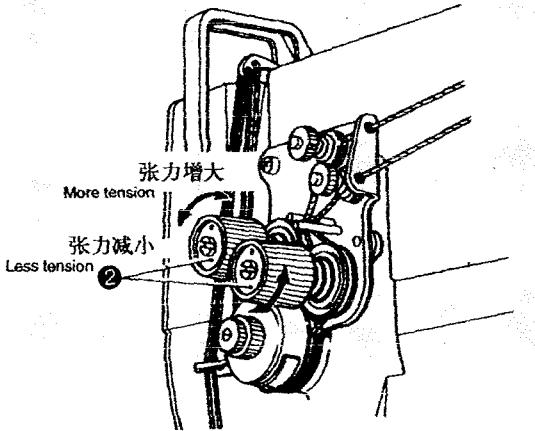


#### ■ 底线张力

根据不同的布料和缝线，调节底线张力调节螺钉①。

#### ■ Lower thread tension

The tension of the lower thread varies with the kind of cloth and thread, and can be adjusted by turning the lower thread tension adjustment screw ①.



### ■ 面线张力调节

底线张力调节后，再调节面线张力，获得良好、均匀的线迹。

1. 放下压脚。

2. 调节夹线螺母②。

### ■ Upper thread tension

After the lower thread tension has adjusted, adjust the upper thread tension so that a good, even stich is obtained.

1. Lower the presser foot.

2. Adjust by turning the thread tension nut ②.

## 8- 压脚调节

### 8- Adjusting the presser foot pressure

调整线迹 (Correct stitches)

好针迹 (Upper thread)

针迹不一致  
Skipped stitches occur  
Uneven stitch length

增大压力  
(Increase the pressure)

针迹起皱  
Stitches are puckered

减少压力  
(Decrease the pressure)

压脚压力尽可能小，但缝料不能打滑。

1. 松开调压螺母①。

2. 旋转调压螺钉②，调节压脚压力。

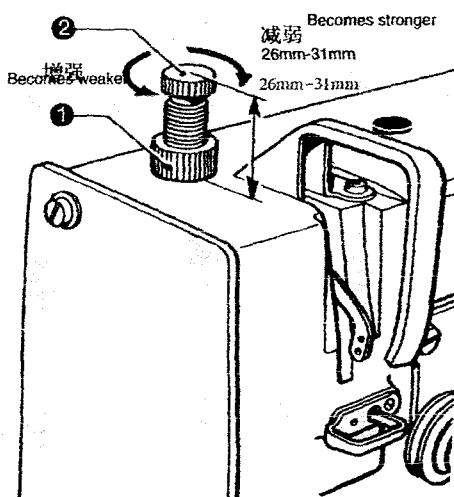
3. 旋紧调压螺母①。

The presser foot pressure should be as weak as possible, but strong enough so that the material dose not slip.

1. Loosen the adjustment nut ①.

2. Turn the adjustment screw ② to adjust the presser foot pressure.

3. Tighten the adjustment nut ①.



适用 use	压脚压力 Presser foot pressure	调压螺钉高度 Adjustment screw height
薄料 For thin materials	29.4 牛顿(3 千克力) 2.94N (3 kgf)	31mm 31mm
中厚料 For medium thick materials	39.2 牛顿(4 千克力) 39.2 N (4 kgf)	28mm 28mm
厚料 For thick materials	49 牛顿(5 千克力) 49 N (5 kgf)	26mm 26mm

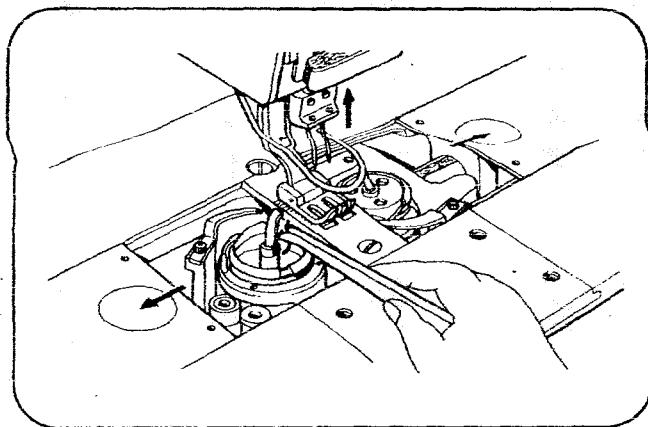
## 9. 清洁

## 9. CLEANING

\*为了更好保养和延长使用寿命，每天需进行下列清洁工作。此外，若长时间不使用机器，再次使用时，请按下列步骤操作。

\*The following cleaning operations should be carried out each day in order to maintain the performance of this machine and to ensure a long service life.

Furthermore, if the sewing machine has not been used for a long period of time, carry out the following cleaning procedures before using it again.

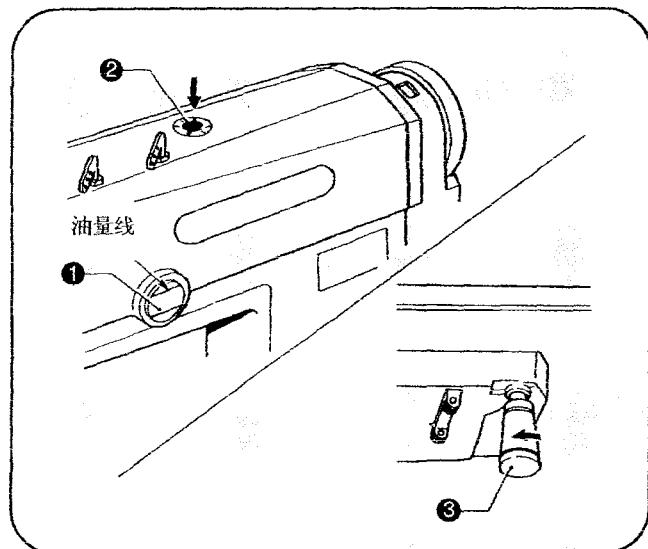


### ■ 清理旋梭

1. 转动上轮将机针提升到最高位置。
2. 打开左右推板。
3. 取下核心和梭帽。
4. 清理掉旋梭内所有碎线头。
5. 装上梭心和梭帽。

### ■ Cleaning the rotary hook

1. Turn the machine pulley to raise the needle to its highest position.
2. Open the left and right slide plates.
3. Remove the bobbin or the cap.
4. Remove all thread scraps from inside the rotary hook.
5. Replace the bobbin or the cap.



### ■ 再次加油

- \* 使用缝纫机 10 号润滑油。  
1. 如果油量到油窗①下线，通过油孔②加油，直到油量达到上线。

2. 若油壶③里的油已满，松开油壶③放掉里面的油。

3. 将油壶③旋回油盘上。

### ■ Oil replenishment

\*Use only the lubricating (No.10sewing machine oil)

1. If the oil level drops to the lower reference line in the oil sight glass ①, pour oil in through the oil inlet ② until the oil level rises to the upper reference line.

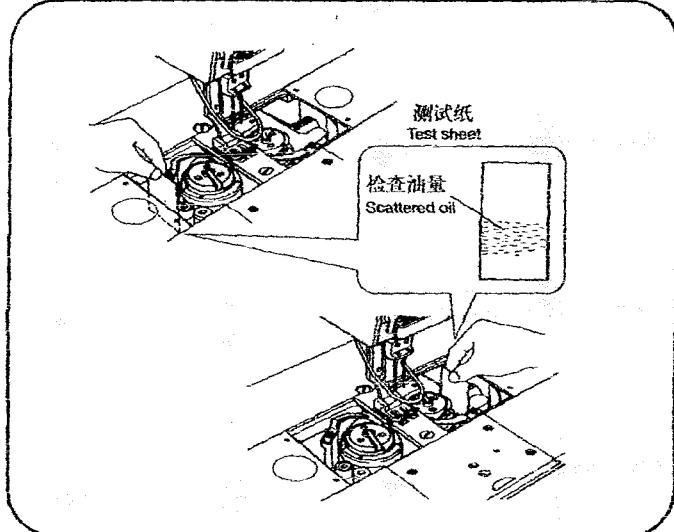
2. If the oil container ③ has filled with

oil, unscrew the oil container ③ and dispose of the oil inside it.

3. Screw the oil container ③ back into the oil pan it.

## ■ 检查油量

## ■ Checking the lubrication amount

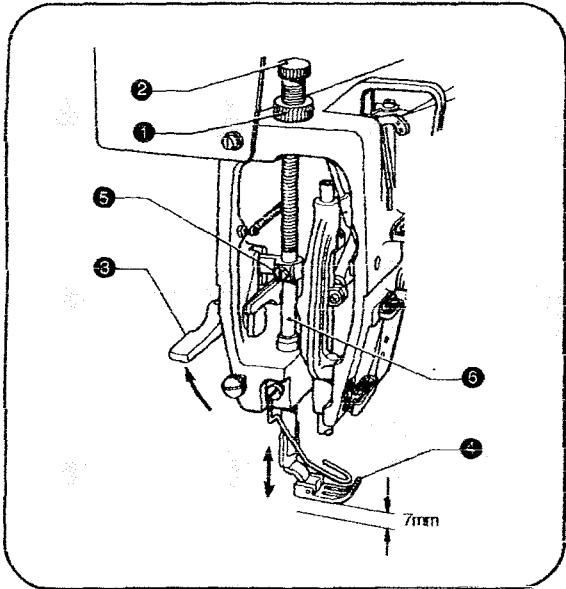


机器运转 5-10 分钟后检查油量。通过转动油量调节螺钉①来调节油量。

1. 卸下机针。
  2. 卸下核心和梭帽。
  3. 打开电源。
  4. 在旋梭左侧插入一张白纸(右旋梭则在右侧)，压下踏板进行缝纫。缝速最大时停留 10 秒左右。
  5. 停止运转，检查油迹。  
(10 秒钟后左侧油量纸的油迹呈分散状，证明油量正常。)
- After turning the lubrication adjustment screw to adjust the lubrication amount, operate the machine for 5-10 minutes before checking the lubrication amount.
1. Remove the needle.
  2. Remove the bobbin or the cap .
  3. Turn on the power.
  4. Instr a piece of white paper into the left side of the rotany hook (into the right side for the righr rotary hook) and depress the treadle fully to operate the machine at maximum speed for approximately 10 seconds.
  5. Stop the machine and check the amount of oil shown is scattered on the paper.  
(The adjustment is good if the amount of oil shown at left is scattered during approximately 10 seconds.)

## 10-2. 压脚高度调节

### 10-2. Adjusting the presser foot height



1. 松开调压螺母①, 然后松开调压螺钉②。
  2. 打开面板。
  3. 用压脚扳手③抬起压脚④。
  4. 松开螺钉⑤, 然后上下移动压杆⑥使压脚④高出针板为约 7mm。(注不要旋转压杆⑥)
  5. 旋紧螺钉⑤。
  6. 转动调压螺钉②调节压脚压力, 然后旋紧调压螺母①。(参考 21 页)
1. Loosen the nut ①, and then loosen the presser foot adjustment screw ②.  
2. Open the face plate.  
3. Raise the presser foot ④ with the presser foot lifter ③.  
4. Loosen the screw ⑤, and then move the needle bar ⑥ up or down to adjust so that the presser foot ④ is approximately 7mm above the top of the needle plate.  
NOTE: Be careful not to rotate the needle bar ⑥.  
5. Tighten the screw ⑤.  
6. Adjust the presser foot pressure by turning the presser foot adjustment screw ②, and then tighten the nut ①.  
(Refer to page 21)

## 10-3. 挑线簧调节

### 10-3. Adjusting the thread tension spring

#### ■ 挑线簧张力

左挑线簧①和右挑线簧②的标准张力是

0.147 牛—0.343 牛。 (15-35 克力)

〈左挑线簧①〉

1. 打开面板。
2. 松开螺钉⑤。
3. 松开夹线螺母⑥, 转动夹线螺钉⑦来调节张力。
4. 旋紧螺钉⑤, 然后再旋紧夹螺母⑥。

〈右挑线簧②〉

1. 松开紧固螺钉⑧。
2. 松开夹线螺母⑥、转动夹线螺母⑨来调节张力。
3. 旋紧螺钉⑧, 然后, 再旋紧夹线螺母⑨。

#### ■ Thread take-up spring tension

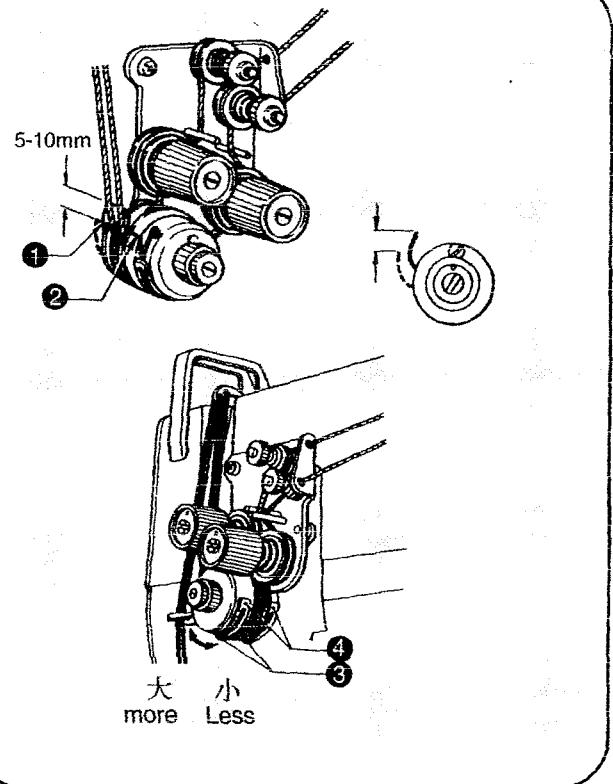
The standard tension for thread take-up spring L ① and thread take-up spring R ② is 0.147-0.343 N (15-35 g) for both spring.

<Thread take-up spring L ①>

1. Open the face plate .
2. Loosen the screw ⑤.
3. Loosen the knob ⑥, and then turn the thread tension stud ⑦ to adjust the tension.
4. Tighten the screw ⑤, and then tighten the knob ⑥.

<Thread take-up spring R ②>

1. Loosen the set screw ⑧.
2. Loosen the knob ⑥, and then turn the adjustment knob ⑨ to adjust the tension.
3. Tighten the screw ⑧, and then tighten the knob ⑨.



### ■ 挑线簧的挑线范围

左挑线簧①和右挑线簧②的标准挑线范围是5-10m。

1、松开左、右螺钉③，左、右转动挑线簧限位器④来调节挑线范围。

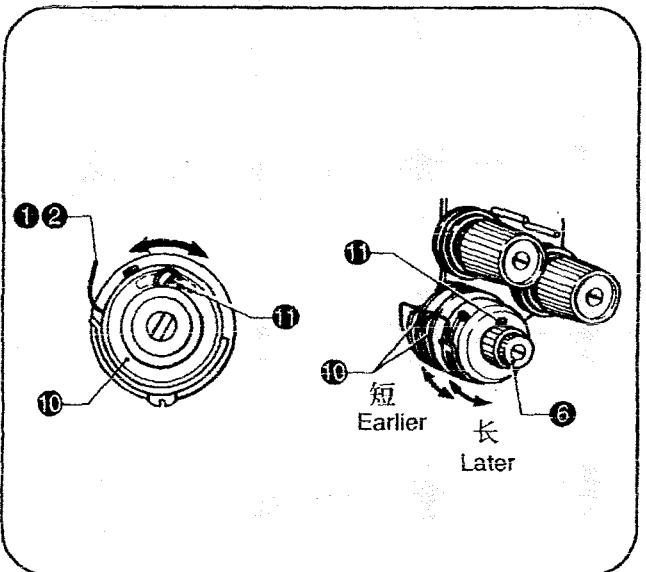
2、旋紧螺钉③。

### ■ Operating range of thread take-up spring

The standard operating range for thread take-up spring L ① and thread take-up spring R ② is 5-10mm for both springs.

1.Loose the left and right screws ③, and then turn the left and right thread take-up spring stoppers ④ to adjust the operating range.

2.Tighten the screws ③.



### ■ 挑线簧的挑线相位

左挑线簧①和右挑线簧②的标准相位是挑线簧勾⑩的挑线范围的中间位置。

1、松开螺钉⑪。

2、松开夹线螺母⑥，左右转动挑线簧勾⑩来调节张力。

3、旋紧螺钉⑪，然后再旋紧夹线螺母⑥。

### ■ Thread take-up spring operation timing

The standard operation take-up spring L ① and thread take-up spring R ② is the middle position within the operating range of the thread take-up spring guide ⑩.

1.Loose the screw ⑪.

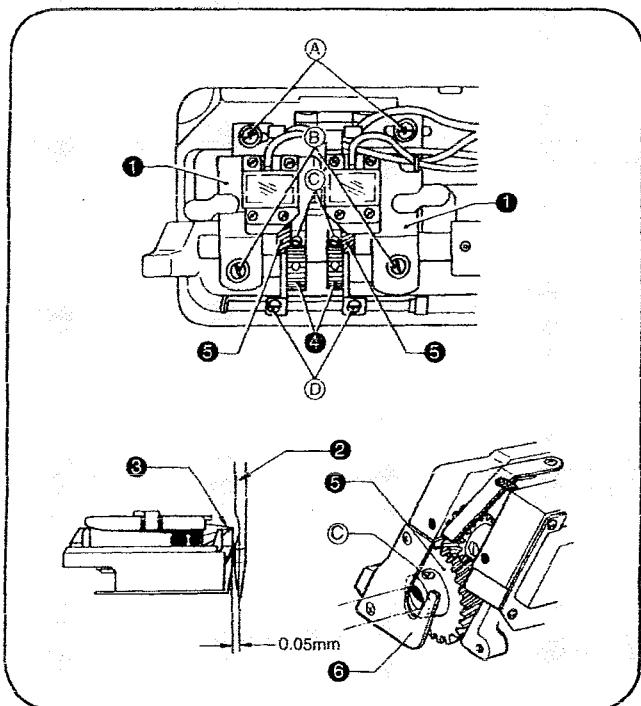
2.Loose the knob⑥, and then turn the left and right thread take-up spring guide⑩ to adjust the tension.

3.Tighten the screw⑪, and then tighten the knob

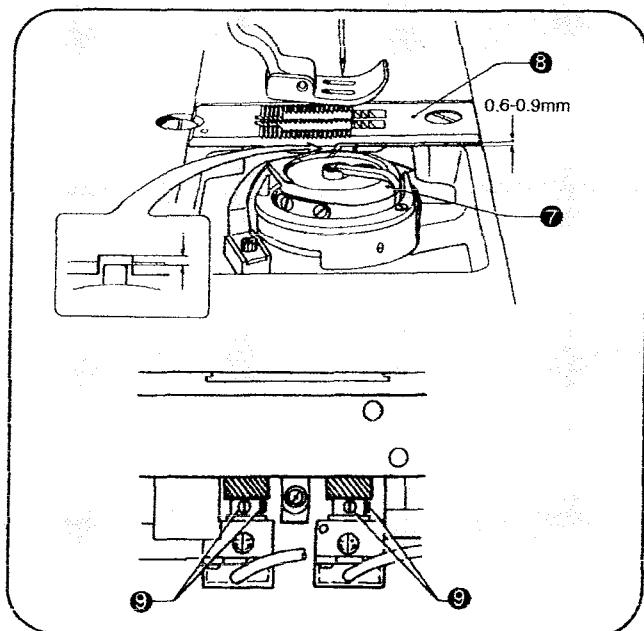
⑥.

## ■ 机针与旋梭相位调节(Adjusting the needle and rotarg hook timing)

10-4-1. 机针与旋梭尖的间隙(Needle rotarg hook point gap)



10-4-2. 旋梭与针板间隙



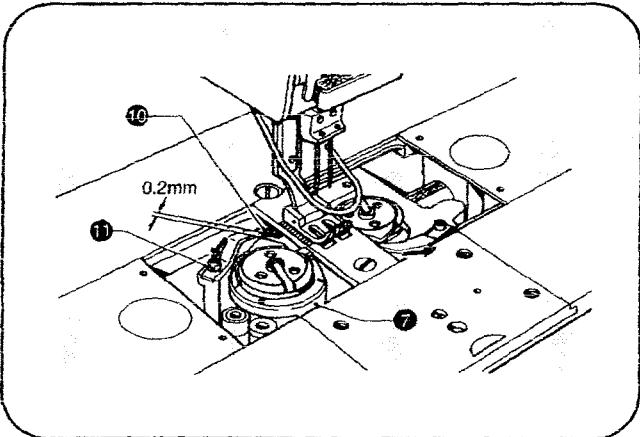
1. 放倒机头。
  2. 松开螺钉④、⑧、⑨和⑩。
  3. 移动梭架①向左或向右，直到机针②与旋梭尖③间隙是1-3mm。
  4. 旋紧螺钉⑪，然后转动调节螺钉④来调节，机针②与旋梭尖③的间隙是0.05mm。
  5. 调节后，再旋紧螺钉④、⑧、和⑨。
- 注意：旋紧螺钉⑪，直到下轴齿轮⑤轻轻接触到齿轮挡片⑥。此外旋紧螺钉⑪后，不能有任何移动。
1. Tilt back the machien head.
  2. Loosen screws④.⑧.⑨.and⑩.
  - 3.Move the rotary hook base ① to the left or right so that the clearance between the needle and the rotary hook tip ③ is 1-3mm.
  - 4.Tighten screw⑪, and then turn the adjusting screw ④to adjust so that the clearance between the needle ② and the rotary hook tip ③ is 0.05mm.
  - 5.Aftering adjusting,securely tighten screws④ ⑧ and ⑨.

Note:Tighten so that the laver shaft gear ⑤ is gently touching the thread guide plate ⑥ Furthermore, tighten screw⑪without moving it from its screw stop.

1. 卸下推板。
  2. 放倒机头。
  3. 松开紧固螺钉⑨上、下移动旋梭⑦，直到旋梭⑦与针板⑧的间隙为0.6-0.9mm。
- 注意：当紧固螺钉⑨松开时，不要转动旋梭，否则，机针与旋梭的位置改变。
4. 旋紧紧固螺钉⑨。
1. Remove the left and the right side plates.
  2. Tilt back the machine head.
  3. Tilt screw ⑨and move rotary hook ⑦.so that the clearance between the rotary hook ⑦ and needle plate ⑧ is 0.6-0.9mm.
- NOTE:Loosen screw ⑨,Rotary hook will cause the postion of the needle and Rotary hook.
4. Tighten screw ⑨.

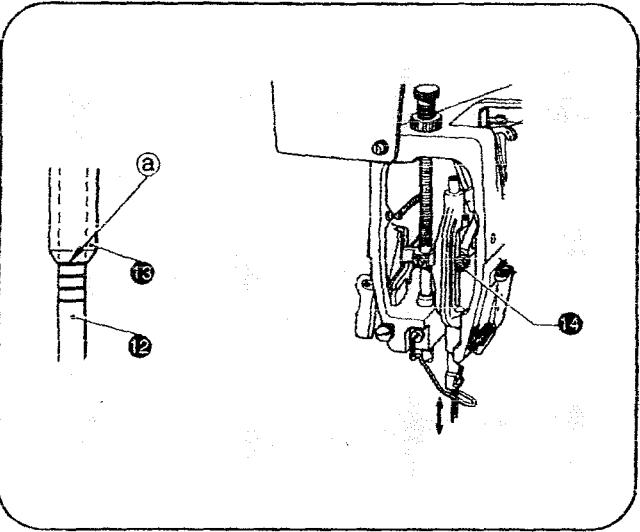
#### 10-4-3. 旋梭与分线勾的间隙

#### 10-4-3. clearance between rotary hook and opener



#### 10-4-4. 针杆高度和提升量

#### 10-4-4. Needle bar height and lift amount



1. 当分线勾⑩按箭头方向压底时, 松开紧固螺钉⑪, 左、右移动分线勾⑩, 直到旋梭⑦与分线勾⑩的间隙为 0.2mm。

2. 旋紧紧固螺钉⑪。

1. Loosen the set screw⑪ and move the opener⑩ to the left or right to adjust so that the clearance between the rotary hook⑦ and the opener⑩ is 0.2mm when the opener⑩ is pulled as far as it will go in the direction of the arrow.
2. Tighten the set screw⑪.

#### ■ 针杆高度

1. 将针距长度调至最小。
2. 打开面板。
3. 转动上轮移动针杆②到最低位置。这时, 针杆②上的参考线⑩与针杆轴套⑫的下边对齐。
4. 松开螺钉⑪, 上下移动针杆来调节针杆高度。
5. 旋紧螺钉⑪。
6. 转动上轮, 检查机针是否在送料牙的针孔中间。

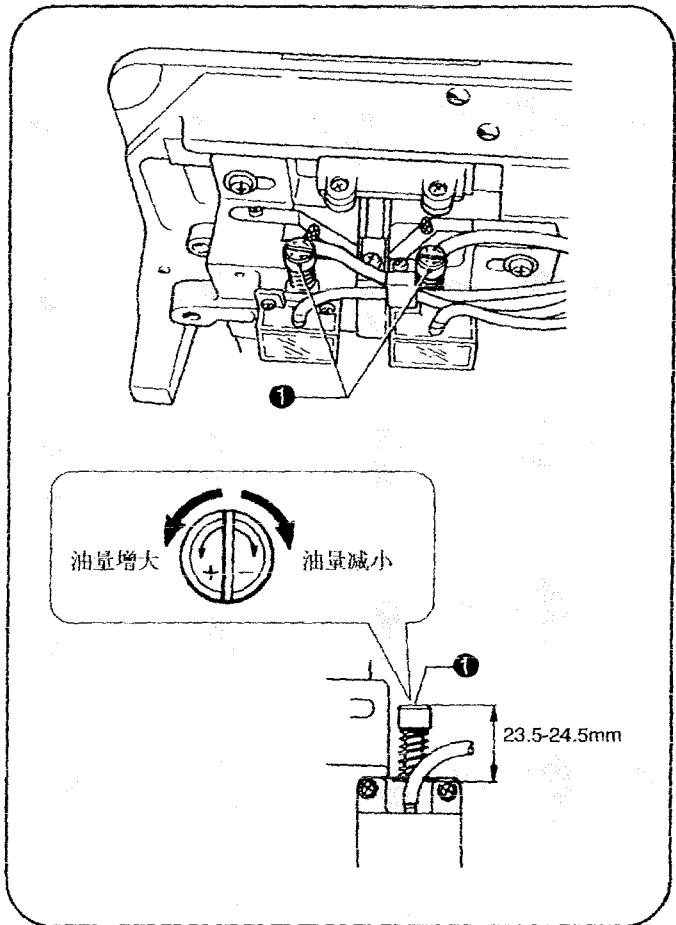
#### ■ Needle bar height

1. Change the stitch length to the smallest possible setting.
2. Open the face plate.
3. Turn the machine pulley to move the needle bar② to its lowest position.  
⑩ Reference line⑩ at the top of the needle bar must be aligned with the lower edge of the needle bar supporter⑫ at this time.
4. Loosen the screw⑪ and move the needle bar② up and down to adjust the height.
5. Tighten the screw⑪.
6. Turn the machine pulley and check that the needle goes into the middle of the needle hole in the feed fog.

## 10-5、旋梭油量调节

### 10-5. Adjusting the rotary hook lubrication amount

- 采有下列步骤调节旋梭油量。
- 无论什么时候卸下旋梭，一定要再调节旋梭油量。
- Adjust the rotary hook lubrication amount by the following procedure.
- Be sure to adjust the rotary hook lubrication amount whenever the rotary hook is replaced.



#### ■ 油量调节指南

1. 放倒机头
2. 转动油量调节螺钉①，它的高度在 23.5---24.5mm 之间。  
注意：不要松开油量调节螺钉①太多，易导致供油量过大。

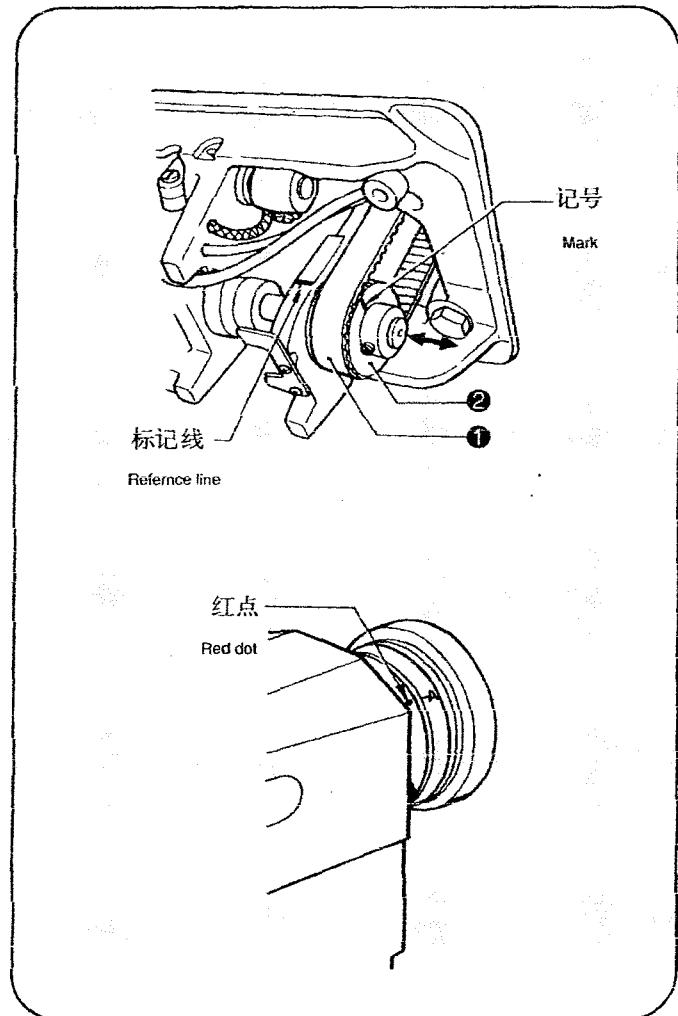
#### ■ Lubrication adjustment guide

1. Tilt back machine head.
2. Turn the lubrication adjustment screw ① to adjust its height to 23.5-24.5mm.

NOTE: Be careful not to loosen the lubrication adjustment screw ① too much otherwise the oil tank will be consumed too quickly.

## 10-6、机针与送料相位调节

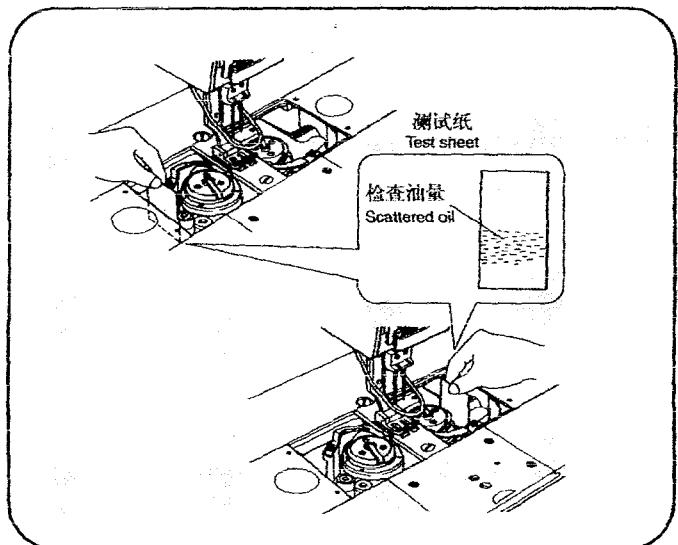
### 10-6. Adjusting of the needle and feed timing



1. 卸下机针。
  2. 卸下防护罩。
  3. 放倒机头卸下皮带①。
  4. 转动上轮直到标记“A”与红点对齐。
  5. 让上轴不动，使下皮带轮②标记与底板参考线对齐，然后固定皮带①。
  6. 检查上轮标记“A”。
  7. 装上防护罩。
  8. 装上机针。
1. Remove the needle.
  2. Remove the belt cover.
  3. Tilt the machine head back and remove the timing belt ①.
  4. Turn the machine pulley until the "A" mark is aligned with the red dot.
  5. While holding the upper shaft so that it won't move, align the mark in the lower belt pulley ② with the reference line in the arm bed, and attach the timing belt ①.
  6. Check the position of the "A" mark on the machine pulley.
  7. Replace the belt cover.
  8. Install the needle.

## ■ 检查油量

## ■ Checking the lubrication amount



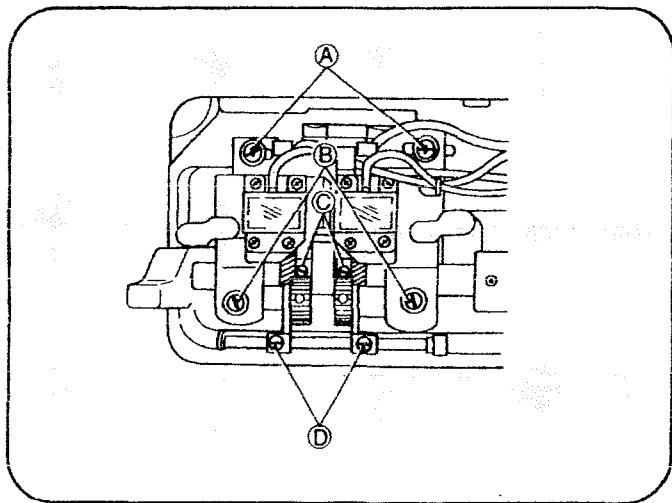
机器运转 5-10 分钟后检查油量。通过转动油量调节螺钉①来调节油量。

1. 卸下机针。
2. 卸下梭心和梭帽。
3. 打开电源。
4. 在旋梭左侧插入一张白纸(右旋梭则在右侧), 压下踏板进行缝纫。缝速最大时停留 10 秒左右。
5. 停止运转, 检查油迹。

(10 秒钟后左侧油量纸的油迹呈分散状, 证明油量正常。)

After turning the lubrication adjustment screw to adjust the lubrication amount, operate the machine for 5-10 minutes before checking the lubrication amount.

1. Remove the needle.
2. Remove the bobbin or the cap.
3. Turn on the power.
4. Instr a piece of white paper into the left side of the rotany hook (into the right side for the righr rotary hook) and depress the treadle fully to operate the machine at maximum speed for approximately 10 seconds.
5. Stop the machine and check the amount of oil shown is scattered on the paper.  
(The adjustment is good if the amount of oil shown at left is scattered during approximately 10 seconds.)

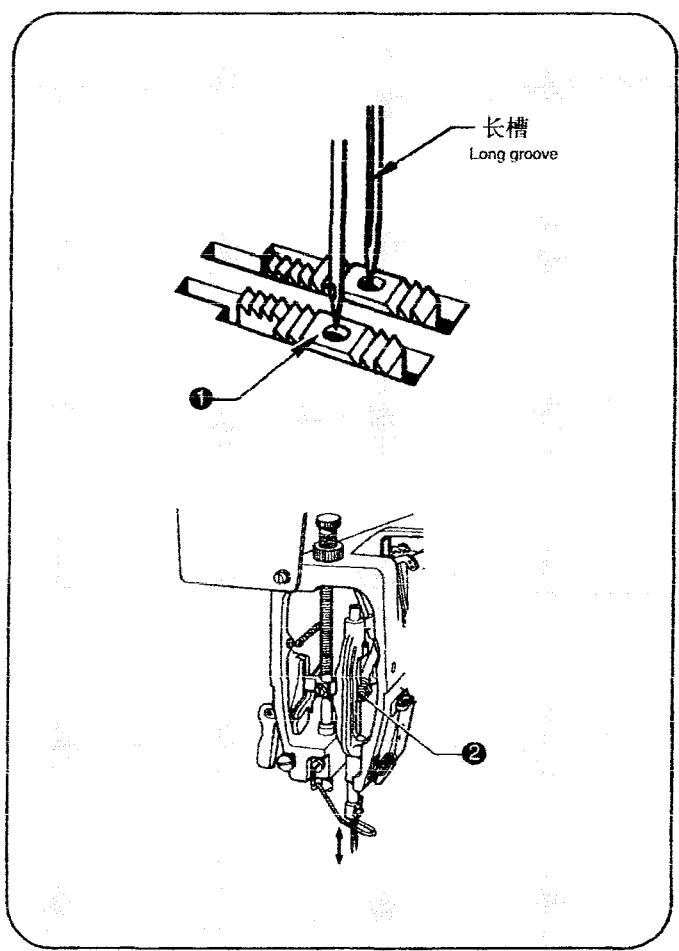


## ■ 梭架调节

当更换针间距更宽的零件时做如下调节。  
若不调节，送料牙装不上，松开螺钉④  
⑤、⑥和⑦，左右移动梭架。

## ■ Adjust the rotary hook base

Make the following adjustment when replacing the current gauge with one wider.  
The feed dog cannot be installed if this adjustment is not made. Loosen screws ④, ⑤,  
⑥ and ⑦, and shift the rotary hook base right or left.



## ■ 安装

1. 固定好针夹头。
2. 固定好机针。
3. 固定好送料牙①。

[ZJ842, ZJ875]

- 1) 转动上轮检查机针是否与送料牙的针孔中心对齐。
- 2) 松开螺钉②使机针与送料牙的针孔中心对齐。

## ■ Installation

1. Attach the needle clamp.
  2. Attach the needle .
  3. Attach the feed dog ①[842, 875]
- 1). Turn the machine pulley and check that the needle goes into the middle of the needle hole in the feed dog.
  - 2). Loosen ② and align the needles so that the needles will fall in the centers of the needle holes in the feed dog.

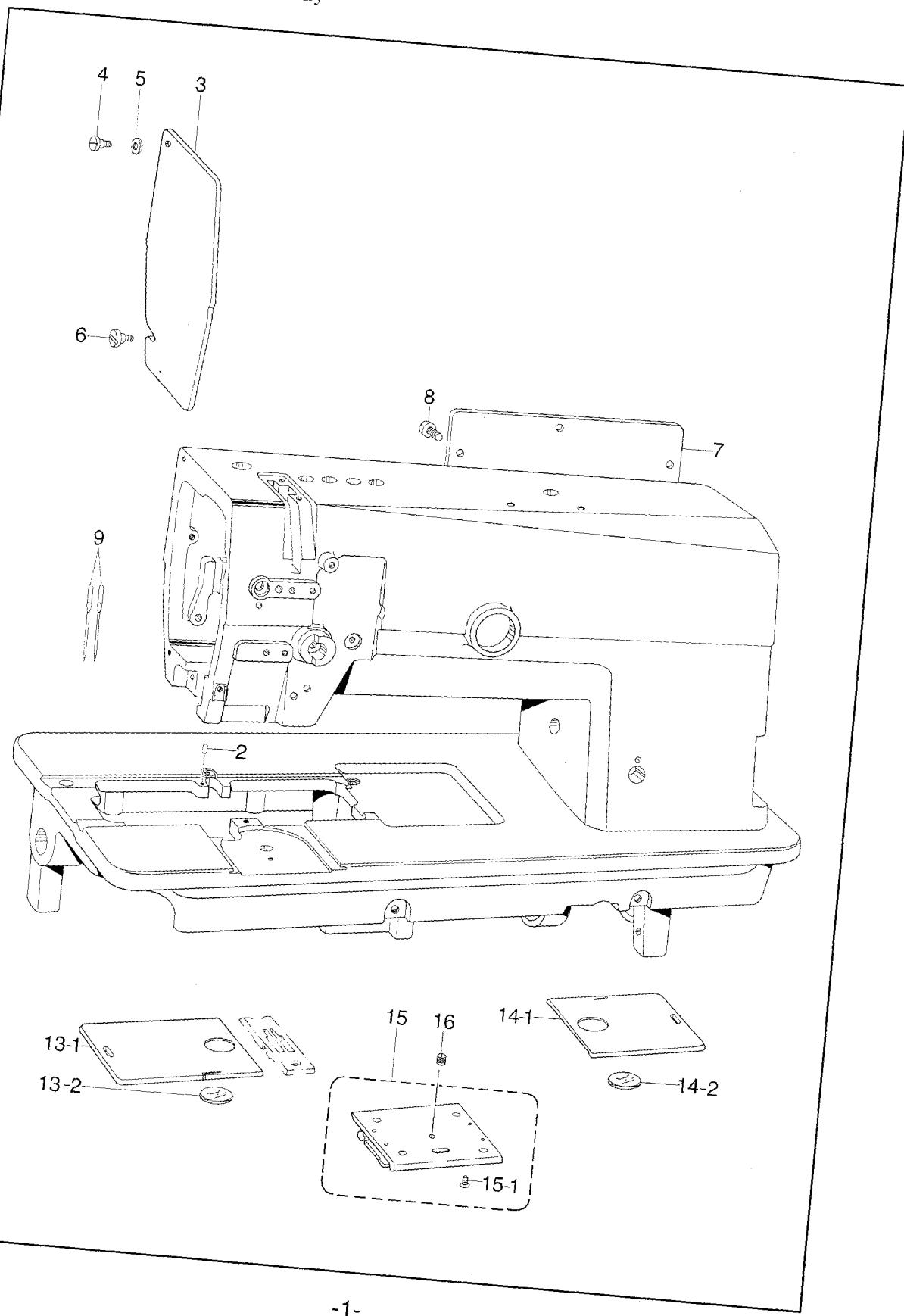
## Notes for using this parts book.

- 1.This book was prepared based on information available in January 2001.
- 2.Parts are subject to changes in design without prior notice.
- 3.Parts supplied complete assemblies are circled by a dotted line [\_\_] .

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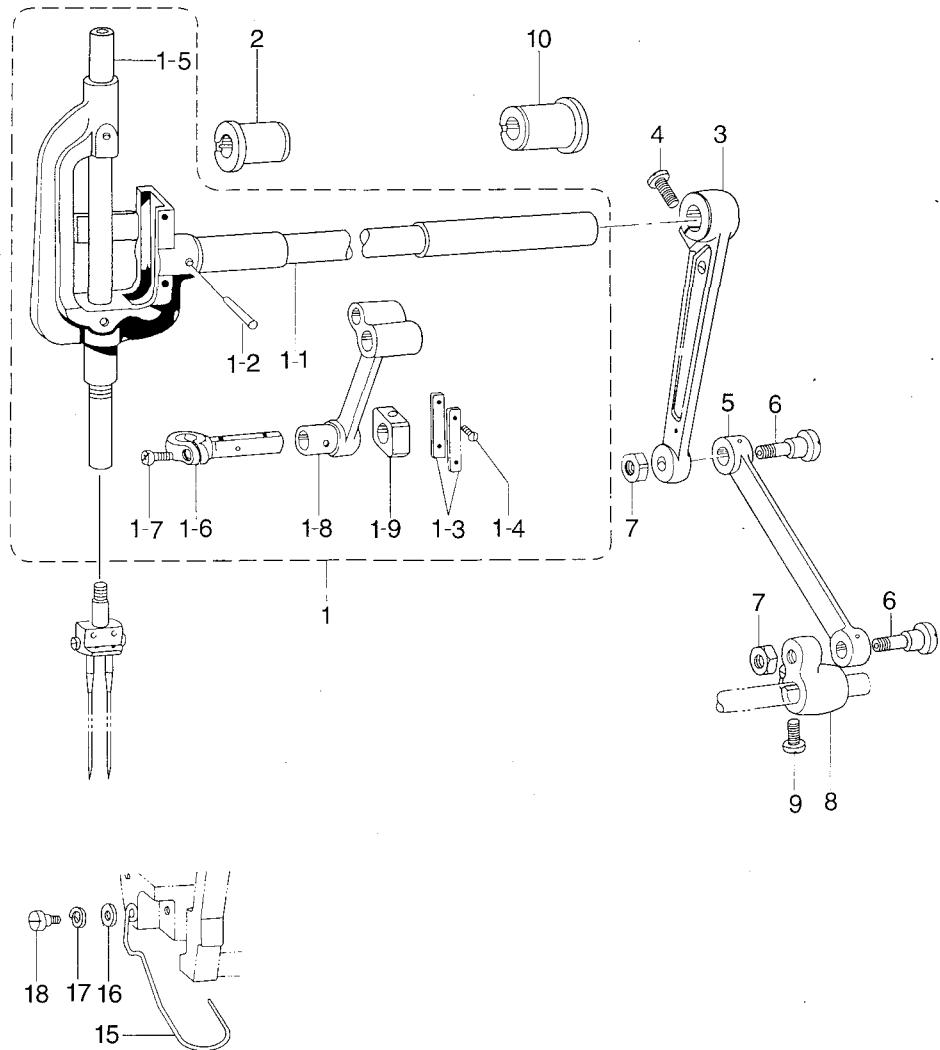
A 机壳部分 /Machine body



A 机壳部分 /Machine body

序号	件号	数量	名称	NAME OF PARTS	备注
2		1		POSITINING PIN	
3	201-0060	1		FACE PLATE	
4	SD-06090640	1		SHOULDER SCRING, SM3.57	
5	WP-05305	1		WASHER,SPRING	
6	SD-8090840	1		SCREW,SM3.57	
7	201-0110	1		REAR COVER	
8	SS-4111040	7		SCREW,PAN SM4.37-40X10	
9		2		NEEDLE DPX5(#14)	
13	201-0455	1		〈FOR NEEDLE GAUGE MAX.1〉	
13-1	201-0460	1		SLIDE PLATE ASSY(L)	
13-2	201-0470	1		SLIDE PLATE(L) DOBBIN WINDOW	
14	201-0485	1		SLIDE PLATE ASSY(R)	
14-1	201-0490	1		SLIDE PLATE(R)	
14-2	201-0500	1		BOBBIN WINDOW	
15	201-0515	1		SLIDE PLATE ASSY(F)	
15-1	201-0520	4		SCREW,FLAT SM3.18X4	
16	SS-2130432	1		SET SCREW,SM5.16	
9		2		“OPTION PATRS”	
9		2		NEEDLE DPX5(#19) 〈FOR “Shin-gosen”〉	
				NEEDLE DPX5NS(#9)	
9001-1		1		〈WARNING LABEL〉	
9002-2		1		LABEL,OPRATON CHINA	
901		1		LABEL,OPRATON ENG	
903		1		MARK,INJURY	
905		1		LABEL,ARROW	
				LABEL,GROUNDDING	

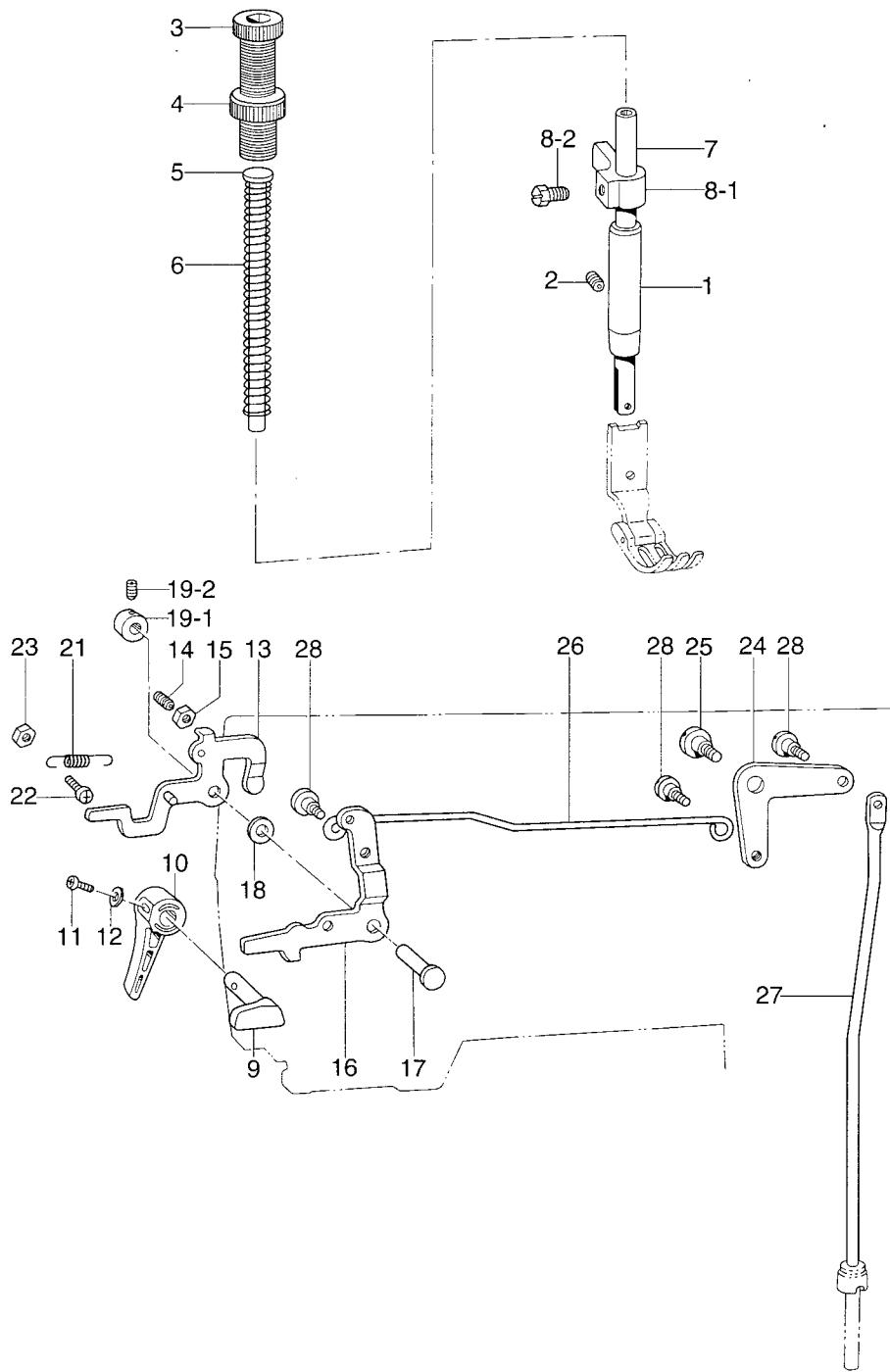
B 针杆机构 /Needle bar rocking mechanism



B 针杆机构 /Needle bar rocking nechanism

序号	件号	数量	名称	NAME OF PARTS	备注
1	201-0645	1		NEEDLE BAR ROCK SHAFT ASSY	
1-1	201-0660	1		NEEDLE BAR ROCK SHAFT	
1-2		1		PIN,TAPER 4X25	
1-3	201-0630	2		GUIDE PLATE	
1-4	SS-5060356	4		SCREW,FLAT SM2.38	
1-5	201-0690	1		NEEDLE BAR	
1-6	201-0720	1		NEEDLE BAR CRANK	
1-7	SS-4090840	1		NEEDLE BAR CRANK ROD	
1-8	201-6010	1		SLIDE BLOCK	
1-9	204-0620	1		NEEDLE BAR GUIDE SLIDE BLOCK	
2	201-0560	1		NEEDLE BAR ROCK SHAFT BUSH(L)	
3	201-1040	1		NEEDLE BAR BROCK CONNECTING ROD	
4	SS-3162020	1		SCREW,SM6.35	
5	201-1060	1		NEEDLE BAR ROCK LINK	
6	SD-8200624	2		NEEDLE BAR ROCK LINK SHAFT	
7	NS-8200524	2		NUT,SM7.94	
8	201-1070	1		NEEDLE BAR CONNECTING CRANK	
9	SS-3161820	1		SCREW,SM6.35X18	
10	201-0570	1		NEEDLE BAR ROCK SHAFT BUSH(R)	
15	201-0090	1		FINGER GUARD	
16	WP-05016	1		WASHER,PLAIN 5	
17	WS-05612	1		WASHER,SPRING 2-4.37	
18	WS-6090440	1		SHOULDER SCREW,SM3.57	

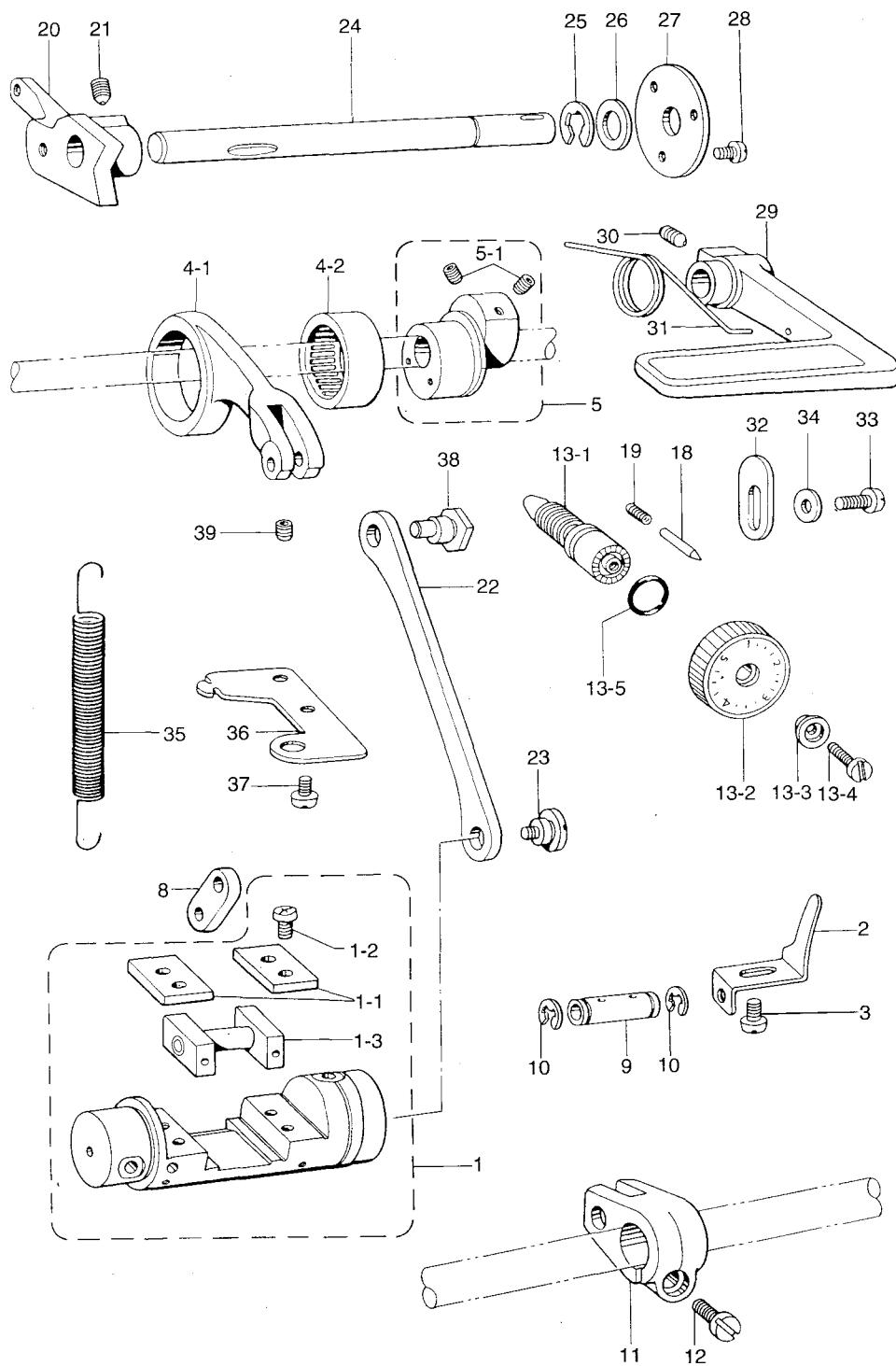
C 压脚机构 / Presser foot nechanism



C 压脚机构 / Presser foot mechanism

序号	件号	数量	名称	NAME OF PARTS	备注
1	GO307-8	1		PRESSER BAR BUSH	
2	SS-7161028	1		SET SCREW, SOCKET(CP)SM6.35	
3	GS513-8	1		PRESSER ADJUST SCREW	
4	GL202-8	1		PRESSER ADJUST NUT	
5	GX483-8	1		SPRING GUIDE	
6	BI-07614	1		PRESSER SPRING,-5	
7	201-2030	1		PRESSSER BAR	
8	201-2195	1		PRES.BAR GUIDE BRACKET W/SCR	
8-1	201-2200	1		[RESSER BAR GUIDE BRACKET	
8-2	SS-8151028	1		BOLT,SM5.95	
9	201-2060	1		PRESSER BAR LIFTER STUD	
10	GR923-8	1		PRESSER BAR LIFTER	
11	GS451-8	1		SCREW, PAN M3.5X12	
12	GO332-8	1		WASHER	
13	201-2250	1		TENSION RELEASER PLATE ASSY	
14	SS-2161728	1		SET SCREW, (FT)SM6.35	
15	NS-8160328	1		NUT, SM6.35	
16	201-2305	1		PRESSER BAR LIFER LEVER	
17	201-2040	1		PRESSER BAR LIFTER LEVER SHAFT	
18	201-2050	1		WASHER	
19-1	201-2310	1		SET SCREW COLLAT	
19-2	SS-7110440	2		SET SCREW,SOCKET(CP)SM4.37	
21	B2-3505	1		SPRING	
22	SS-4090840	1		SCREW, PAN SM3.57-40X14	
23	NS-8090340	1		NUT,1 SM3.57	
24	201-2220	1		KNEE LIFTER LEVER	
25	SD-6160628	1		SHOULDER SCREW SM6.35	
26	201-2290	1		KNEE LIFTER CONNECTING ROD	
27	201-2230	1		KNEE LIFTRE BAR	
28	SD-71220340	3		SHOULDER SCREW, SM4.76	

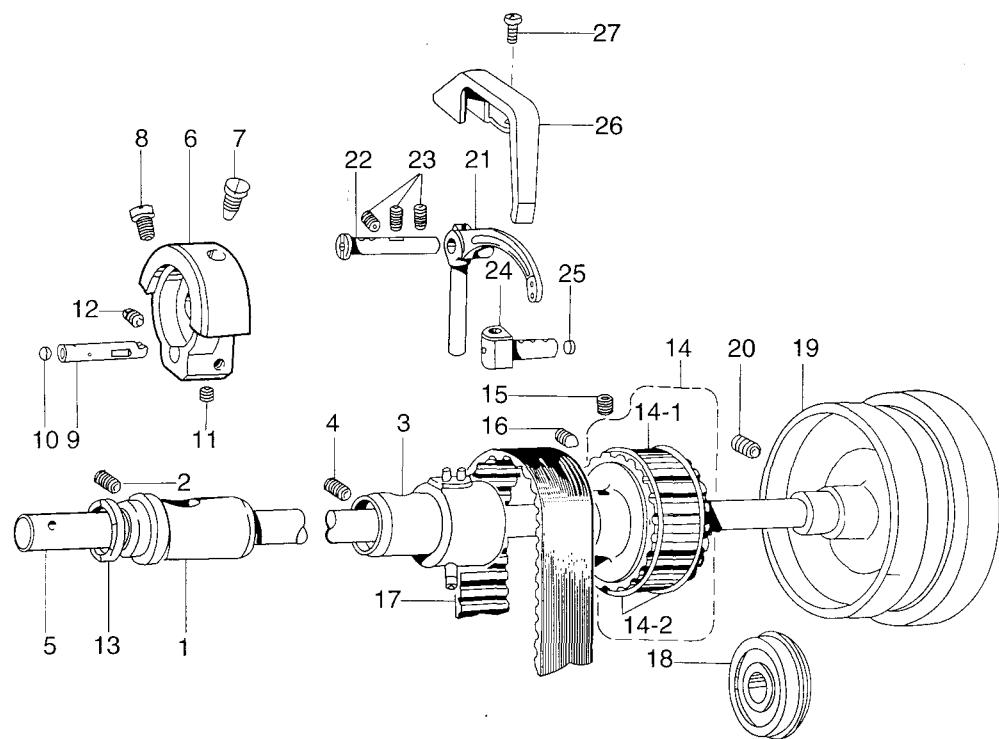
D 送料机构 / Feed mechanism



D 送料机构 / Feed mechanism

序号	件号	数量	名称	NAME OF PARTS	备注
1	201-1835	1		FEED REGULATOR ASSY	
1-1	201-1850	2		SLIDE BLOCK GUIDE PLATE	
1-2	SS-4111040	4		SCREW,PAN SM4.37-40X10	
1-3		1		FEED REGULATOR SLIDE BLOCK A.ASSY	
2	201-1670	1		FEED REGULATOR STOPPER	
3	SS-41206632	1		SCREW,PAN SM4.76-32X6	
4	201-1795	1		FEED ROCK CONNECTING ROD ASSY	
4-1	201-1800	1		FEED ROCK CONNECTING ROD	
4-2		1		NEEDLE BEARING	
5	201-1820	1		LEVEL ECCENTRIC WHEEL WITH SCR	
5-1	SS-7161040	2		SET SCREW,SOCKET(CP) SM6.35	
8	201-1890	1		FEED ROCK ARM LINK	
9	201-1900	1		FEED ROCK RING,SHAFT	
10	RC-05808	2		RETAINING RING,E6	
11	201-1910	1		PEED ROCK ARM	
12	SS-3161828	1		SCREW,SM6.35X18	
13	201-1965	1		STITCH CONTROL DIAL ASSY(4)	
13-1	201-1970	1		STITCH CONTROL SCREW	
13-2	201-1980	1		STITCH CONTROL DIAL(4)	
13-3	GO316-8	1		LENGTH CONTROL PLATE SUPPORT	
13-4	GS494-8	1		SCREW,SM4.76	
13-5	GR976-8	1		O RING	
18	GX235-8	1		POSITIONING PIN	
19	GW-216-8	1		SPRING	
20	201-1930	1		FEED REGULATOR	
21	SS-7150828	1		SET SCREW,SOCKET S.5.95	
22	201-1950	2		FEED REGULATOR CONNECTING ROD	
23	SD-6150828	1		SHOULDER SCREW,SM5.95	
25	RC-08010	1		RETAINING RING,E8	
26	WP-10510	1		WASHER,PLAIN S 10	
27	201-1700	3		WASHER	
28	SS-4090740	1		SCREW PAN SM3.57-40X7	
31	B5-20012	1		SPRING	
32	201-1690	1		REVERSE LEVER STOPPER	
33	SS-3121032	1		SCREW PAN SM4.76-32X10	
34	WP-05008	1		SCREW PLAIN M4.76	
35	B2-08010	1		SPRING,FEED REGULATOR	
36	201-1680	1		SPRING HOOK	
37	SS-4120632	2		SCREW,PAN SM4.76-32X6	
38	201-1940	1		FEEDREGULATORECCENTRICWHEELSHAFT	
39	SS-7150628	1		SET SCREW,SOCKET SM5.95	
24	201-2020	1		REVERSE STITCH LEVER SHAFT,ST	
29	201-2000	1		REVERSE LEVER ST.	
30	SS-7150828	1		SET SCREW,SOCKET SM5.95	

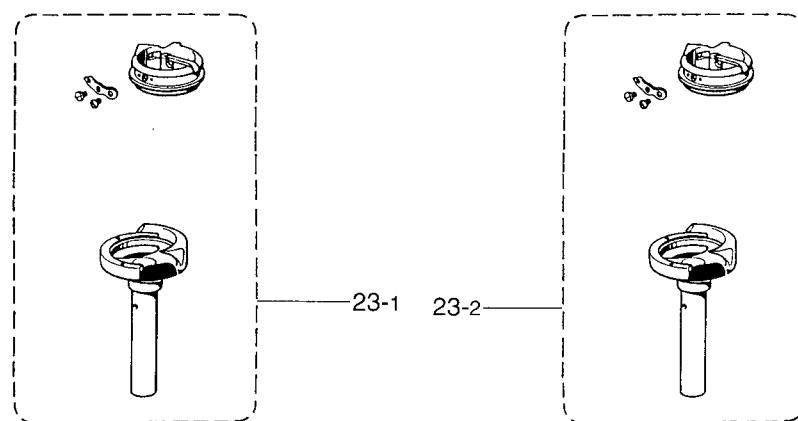
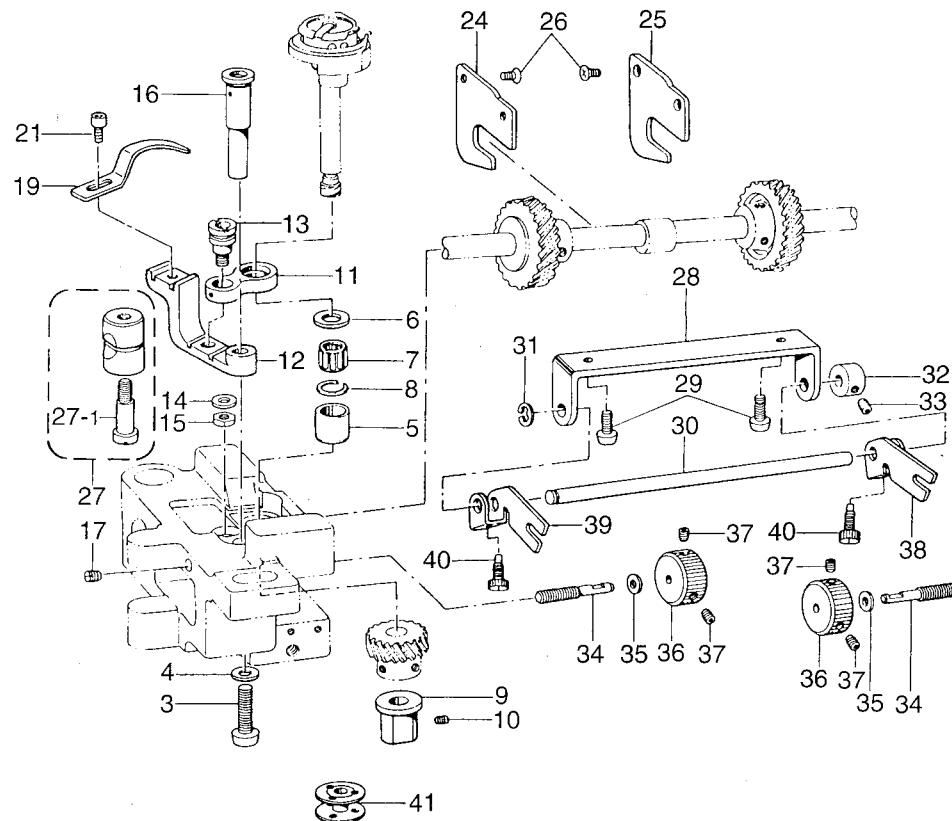
E 上轴机构 / Upper shaft mechanism



E 上轴机构 / Upper shaft mechanism

序号	件号	数量	名称	NAME OF PARTS	备注
1	201-0870	1		UPPER SHAFT BUSH	
2	SS-7161028	1		SET SCREW, SOCKET(CP) SM6.35	
3	201-090	1		UPPER SHAFT BUSHING ASSY (M)	
4	SS-7161028	1		SET SCREW, SOCKET(CP) SM6.35	
5	201-0820	1		UPPER SHAFT	
6	201-2830	1		THREAD TAKE-UP CRANK	
7	SS-6180828	1		SCREW, SM7.14	
8	SS-6181428	1		SET SCREW, SM7.14	
9	201-0840	1		NEEDLE BAR CRANK	
10	201-0850	1		PUSHER	
11	SS-2160440	1		SET SCREW, SM6.35	
12	SS-2160540	1		SET SCREW, SM6.35	
13	201-0880	1		THREAD TAKE-UP CRANK RING	
14	201-0985	1		TIMING PULLEY (U) ASSY	
14-1	201-0990	1		TIMING PULLEY (U)	
14-2	201-1000	2		TIMING PULLEY RING	
15	SS-7161040	1		SET SCREW, SOCKET(CP) SM6.35	
16	SS-7161240	1		SET SCREW, SOCKET(CN) SM6.35	
17	201-0550	1		TIMING BELT	
18		1		BALL BEARING,6204ZZNR	
19	201-1020	1		PULLEY, ST	
20	SS-6151328	2		SET SCREW, (CP) SM5.59-14	
21	201-0740	1		THREAD TAKE-UP, S3 TR	
22	201-0800	1		THREAD TAKE-UP SHAFT	
23	SS-7161028	3		SET SCREW, SOCKET(CP) SM6.35	
25	201-0780	1		PUSHER	
26	201-0050	1		THREAD TAKE-UP COVER	
27	SS-4090540	2		SCREW, PAN SM3.57-40X5	

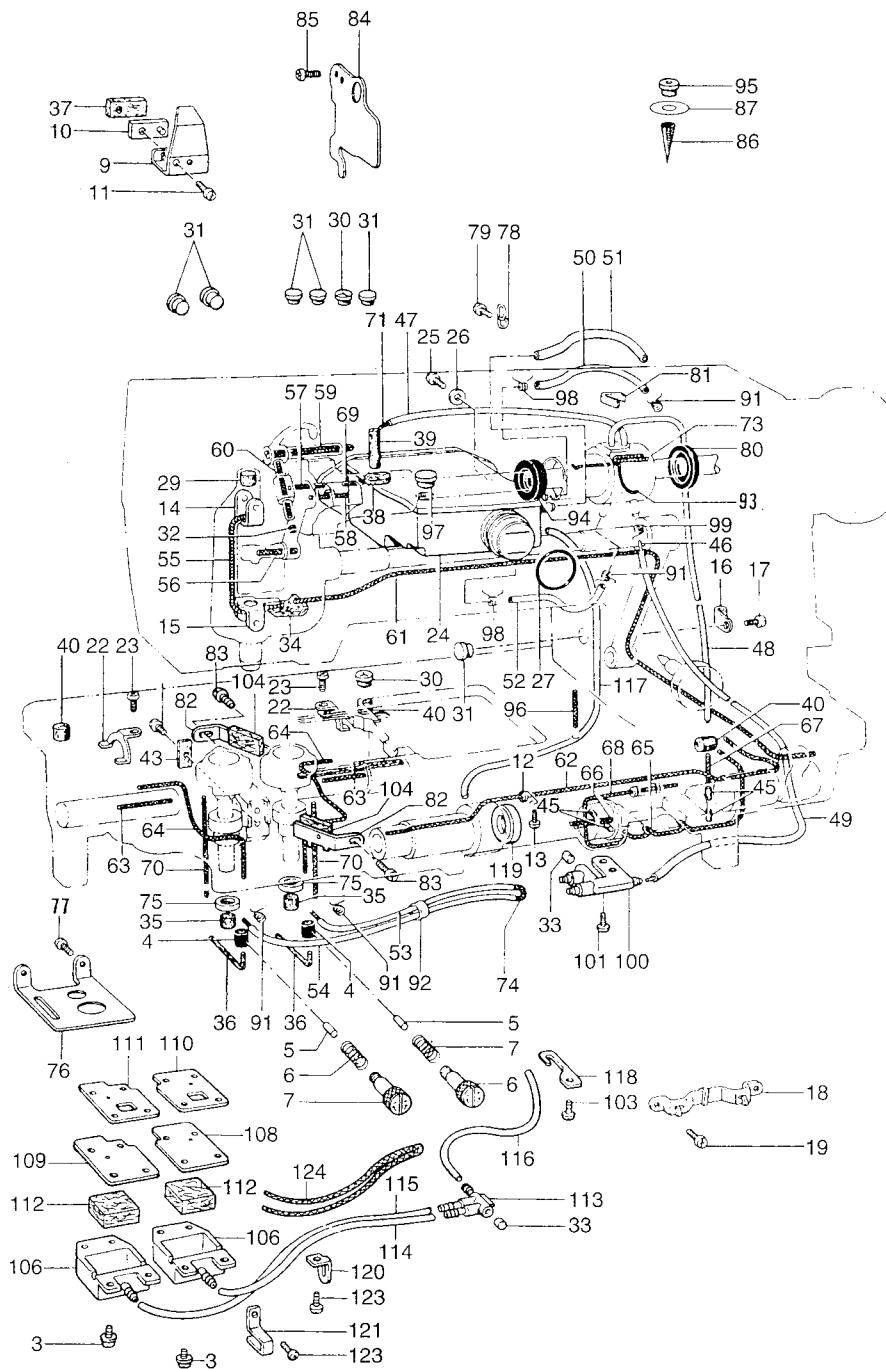
# H1 旋梭机构 / Rotary mechanism



### III 旋梭机构 / Rotary mechanism

序号	件号	数量	名称	NAME OF PARTS	备注
3	SS-4162528	2		SCREW, PAN SM6.35-28X25	
4	WP-07034	2		WASHER	
5	201-1320	2		ROTARY HOOK SHAFT BUSH(U)	
6	201-1200	2		THRUST RING	
7		2		NEEDLE BEARING	
8	RD-10810	2		STOP RING	
9	201-1210	2		ROTARY HOOK SHAFT BUSH (D)	
10	SS-1120532	2		SET SCREW, (CP) SM4.76	
11	201-1190	2		OPENER LINK	
12	201-1270	2		OPENER LEVER	
13	201-1280	2		OPENER LINK SHAFT	
14	WP-05008	2		WASHER, PLAIN M4.67	
15	NS-80203	2		NUT, SM4.76	
16	21-1300	2		OPENER LEVER SHAFT	
17	SS-1121032	2		SET SCREW, (CP) SM4.76	
19	201-1140	2		OPENER	
21	SS-7090840	2		BOLT, SOCKER SM3.57-40X8	
24	201-1160	1		GEAR GUIDE (L)	
25	201-1370	1		GEAR GUIDE (R)	
26	SS-5090440	4		SCREW, FLAT SM3.57	
27	201-1385	2		PINCH SLEEVE ASST	
27-1	SS-6151228	2		SCREW, SM5.95	
28	201-1110	1		ADJUST BAR SUPPORT	
29	SS-3221032	1		SCREW,PAN SM4.76-32X10	
30	201-1540	2		ADJUST BAR	
31	RC-04006	1		RETAINING RING,E4	
32	201-1520	1		SET SCREW COLLAR	
33	SS-7110640	1		SET SCREW,SOCKET (CP) SM4.37	
34	SS-1161740	2		ROTRY HOOK BASS ADJUST SCREW	
35	WP-04705	2		WASHER,PLAIN S4.37	
36	201-1600	2		ROTARY HOOK BASE ADJUST DIAL	
37	SS-7110640	4		SET SCREW,SOCKET (CP) SM4.37	
38	201-156	1		PRESET LEVER (R)	
39	201-1580	1		PRESET LEVER (L)	
40	SS-8090840	2		NEEDLE SET SCREW,SM3.57	
3-1 23-2 41		1 1 2		<FOR STANDARD> ROTARY HOOK ASSEMBLY ROTARY HOOK ASSEMBLY BOBBIN, ST	

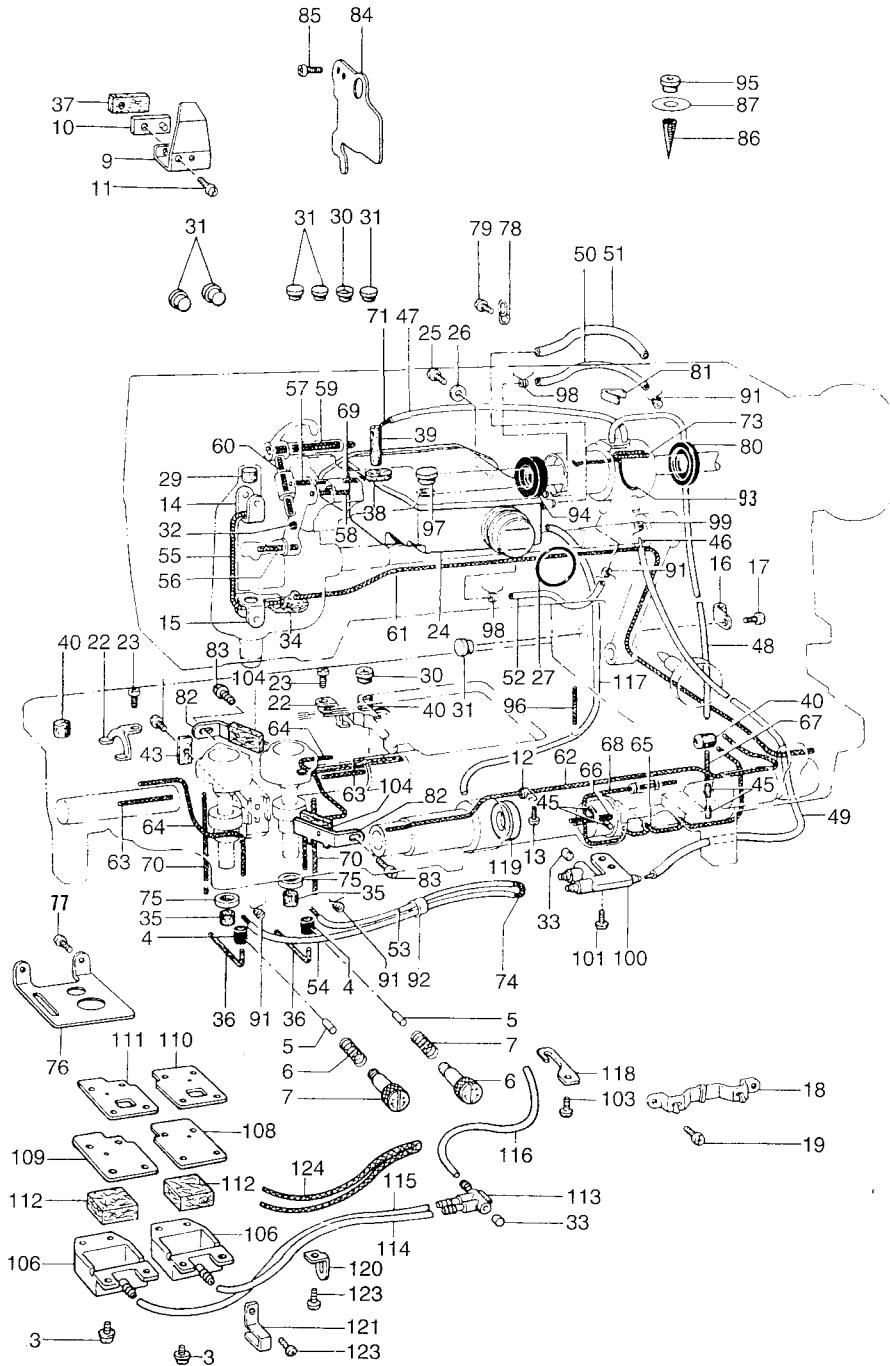
## J 润滑部分 / Lubrication



## J 润滑部分 / Lubrication

序号	件号	数量	名称	NAME OF PARTS	备注
3	SS-4090840	8		SCREW,PAN SM3.57-40X8	
4	201-2440	2		RUBBER RING	
5	201-2450	2		RUBBER ORESSER	
6	SD-8160728	2		OIL ADJUST SCREW	
7	BI-09010	2		OIL ADJUST SPRING	
9	201-2470	1		OIL STOPPER PLATE	
10	201-2480	1		OIL STOPPER PLATE PRESSER	
11	SS-4121232	1		SCREW. PAN SM4.76-32X12	
12	201-1640	1		WICK SUPPORT	
13	SS-4090540	1		SCREW, BIND SM3.57-40X5	
14	201-0600	1		FELT SUPPORT (U)	
15	201-0590	1		FELT SUPPORT (D)	
16	201-1050	1		WICK SUPPORT	
17	SS-4090540	1		SCREW, PAN SM3.57-40X5	
18	201-1870	1		WICK SUPPORT	
19	SS-4080440	2		SCREW, PAN SM3.18-40X4	
22	201-1150	2		WICK HOLDER	
23	SS-4090540	2		SCREW, PAN SM3.57-40X5	
24	201-2495	1		OIL TANK ASSY	
25	SS-3121032	2		SCREW, PAN SM4.76-32X10	
26	WP-15008	2		WASHER, PLAIN M4.76	
27	R0-03035	1		O RING, P30	
29	201-0700	1		NEEDLE BAR CAP	
30	TA-0120601	2		OIL CAP	
31	TA-0120602	6		OIL CAP	
32	201-0750	1		OIL CAP	
33	201-0570	2		OIL CAP	
34	MZ-301504	1		FELT	
35	MZ-10060	2		CLUTCH FELT	
36	MZ-30035	2		FELT	
37	MZ-311505	1		FELT, THREAD TAKE-UP	
38	MZ-241509	1		FELT, UPPER SHAFT L	
39	MZ-70030	1		FELT	
40	MZ-95014	3		FELT	
43	MZ-201202	1		FELT	
44	SS-3090640	1		SCREW, SM3.57	
45	MZ-50011	4		FELT	
46		1		WIRE	
47	BP-4828190	1		OIL TUBE (L=190)	
48	BP-4828280	1		OIL TUBE	
49	BP-4828390	1		OIL TUBE (L=390)	
50	BP-4928160	1		OIL TUBE (L=160)	
51	BP-8050165	1		OIL TUBE (L=160)	
52	BP-4828090	1		OIL TUBE (L=90)	
53	BP-4828180	1		OIL TUBE (L=180)	
54	BP-4828240	1		OIL TUBE (L=240)	
54	CQ-15530	1		OIL TUBE 75MML	
55	CQ-15200	1		WICK (L=200)	
56	CQ-30030	1		WICK (L=50)	
57	CQ-40025	1		WICK (L=30)	
58	CQ-40072	1		WICK (L=45)	
59	CQ-40138	1		WICK (L=138)	
60	CQ-40040	1		WICK 4X4 (L=40)	
61	CQ-30710	1		WICK (L=440)	
62	CQ-40350	1		WICK 4X4 (L=350)	

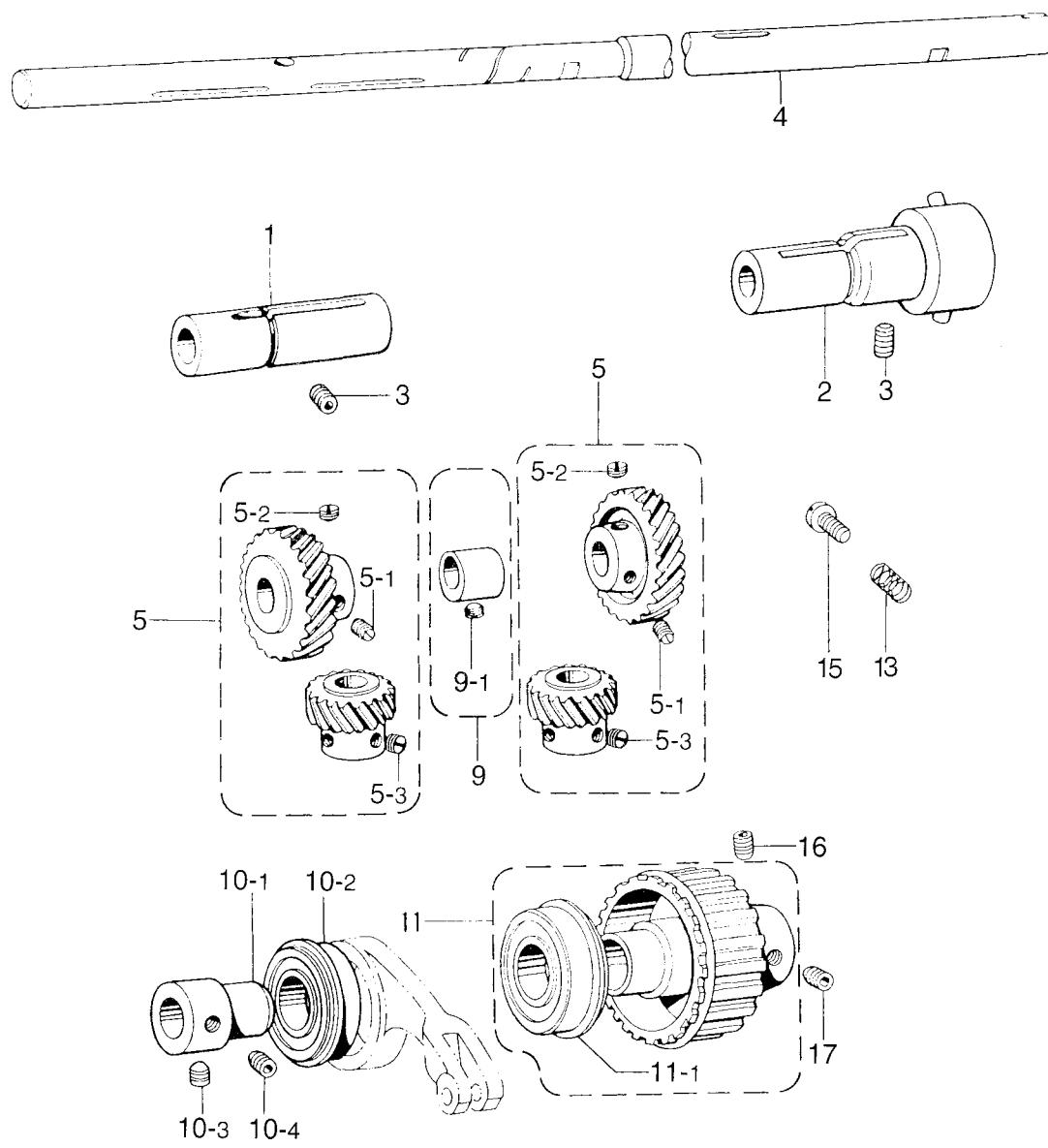
## J 润滑部分 / Lubrication



J 润滑部分 / Lubrication

序号	件号	数量	名称	NAME OF PARTS	备注
63	CQ-40040	2		WICK	
64	CQ-40250	2		WICK 4X4 (L=250)	
65	CQ-40250	1		WICK 4X4 (L=250)	
66	CQ-40040	1		WICK 4X4 (L=40)	
67	CQ-40035	1		WICK (L=35)	
68	CQ-40110	1		WICK (L=110)	
69	CQ-40025	1		WICK (L=25)	
70	CQ-40070	2		WICK (L=70)	
71	CQ-40650	1		WICK (L=650)	
73	CQ-40040	1		WICK 4X4 (L=40)	
74	CQ-15530	1		WICK (L=530)	
75	201-2430	2		SPACER	
76	201-0070	1		DUST PROTECTOR	
77	SS-4090540	2		SCREW,PAN SM3.57-40X5	
78	201-2350	1		TUBE SUPPORT	
79	SS-4110840	1		SCREW, PAN SM4.37-40X8	
80	201-0940	1		OIL SEAL	
81	201-0910	1		TUBE CALKING	
82	201-1230	2		FELT PRESSER	
83	SS-4090540	2		SCREW, PAN SM3.57-40X5	
84	201-2340	1		INTERRUPT PLATE	
85	SS-4090540	2		SCREW, PAN SM3.57-40X5	
86	201-2320	1		OIL FILTER	
87	201-2330	1		OIL MARK SHEET	
91	201-0950	7		TUBE CLIP	
92	BP-4828005	1		OIL TUBE (L=5)	
93	CQ-40070	1		WICK (L=70)	
94	201-0930	1		OIL SEAL	
95	TA-0120603	1		OIL CAP	
96	CQ-40035	1		WICK (L=35)	
97	TA-0120602	1		OIL CAP	
98	201-0950	3		TUBE CLIP	
99	201-0950	1		TUBE CLIP	
100	201-2540	1		TERMINAL	
101	SS-4090640	2		SCREW, PAN SM3.57-40X6	
103	SS-4090640	1		SCREW, PAN SM3.57-40X6	
104	MZ-400803	2		FELT	
106	201-2570	2		SUB-TANK	
108	201-2410	1		OIL SEAL R,SUB-TANK	
109	201-2390	1		OIL SEAL L,SUB-TANK	
110	201-2420	1		SUB-TANK COVER R	
111	201-2400	1		SUB-TANK COVER L	
112	MZ-302108	2		FELT SUB-TANK	
113	201-2560	1		TERMINALL	
114	BP-4828135	1		OIL TUBE, SUB-TANK R	
115	BP-4828300	1		OIL TUBE, SUB-TANK L	
116	BP-4828135	1		OIL TUBE, PLUNGER PUMP	
117	BP-4828600	1		OIL TUBE, OIL TANK	
118	201-2360	1		TUBE SUPPORT BRACKET	
119	201-1460	1		OIL SEAT,PLUNGER PUMP	
120	201-2370	1		TUBE SUPRT BRACKET L	
121	201-2380	1		OIL TUBE SUPPORT	
122	WP-04010	8		WASHER	
123	SS-4120632	2		SCREW, PAN SM4.76-32X6	
124	CQ-15430	1		WICK (L=370), SUN-TANK	

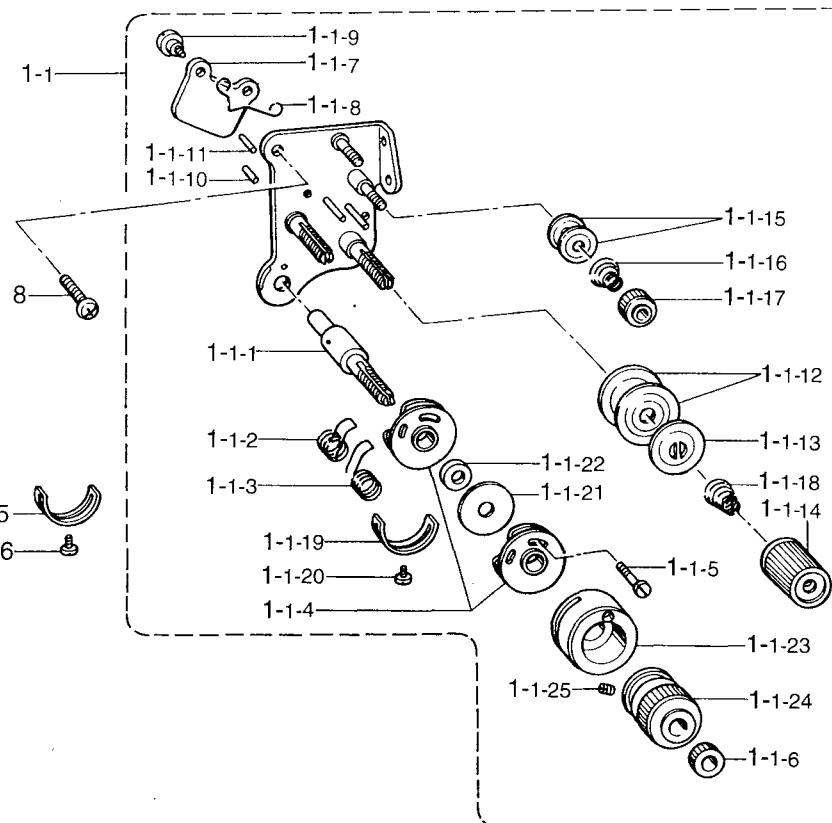
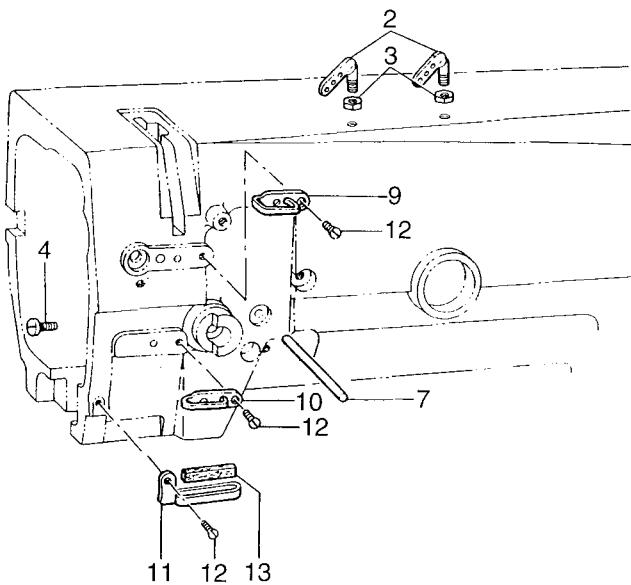
K 下轴机构 / Lower shaft mechanism



K 下轴机构 / Lower shaft mechanism

序号	件号	数量	名称	NAME OF PARTS	备注
1	201-1080	1		ROTARY HOOK BASE BUSH L	
2	201-1435	1		ROTARY HOOK BASE BUSH ASSY (R)	
3	201-1100	2		SET SCREW, SOCKET (CP) SM6.35	
4	201-1335	1		LOWER SHAFT, ST	
5	SS-2160540	2		SPIRAL GEAR ASSY (A)	
5-2	SS-2160540	2		SET SCREW, SM6.35	
5-1	SS-2160540	4		SET SCREW, SM6.35	
5-3	201-1420	6		SET SCREW, (CP) SM6.35	
9	SS-1160340	1		VERTICAL FEED ECCENTRIC WHEEL ASSY	
9-1	201-1475	1		SET SCREW, SM6.35	
10-1	201-1480	1		BALL BEARING ASSY	
10-2		1		BALL BEARING, 6004ZZNR	
10-3	SS-7161240	1		SET SCREW, SOCKET (CN) SM6.35	
10-4	SS-7161040	1		SET SCREW, SOCKET (CP) SM6.35	
11		1		TIMING PULLEY D ASSY SET	
11-1	201-1500	1		TIMING PULLEY D ASSY	
13	201-1090	1		PLUNGER	
14	BI-02805	1		PLUNGER SPRING	
15	SS-6160540	1		SCREW, SM6.35X5	
16	SS-7061040	1		SET SCREW, SOCKET (CP) SM6.35	
17	SS-7161240	1		SET SCREW, SOCKET (CN) SM6.35	

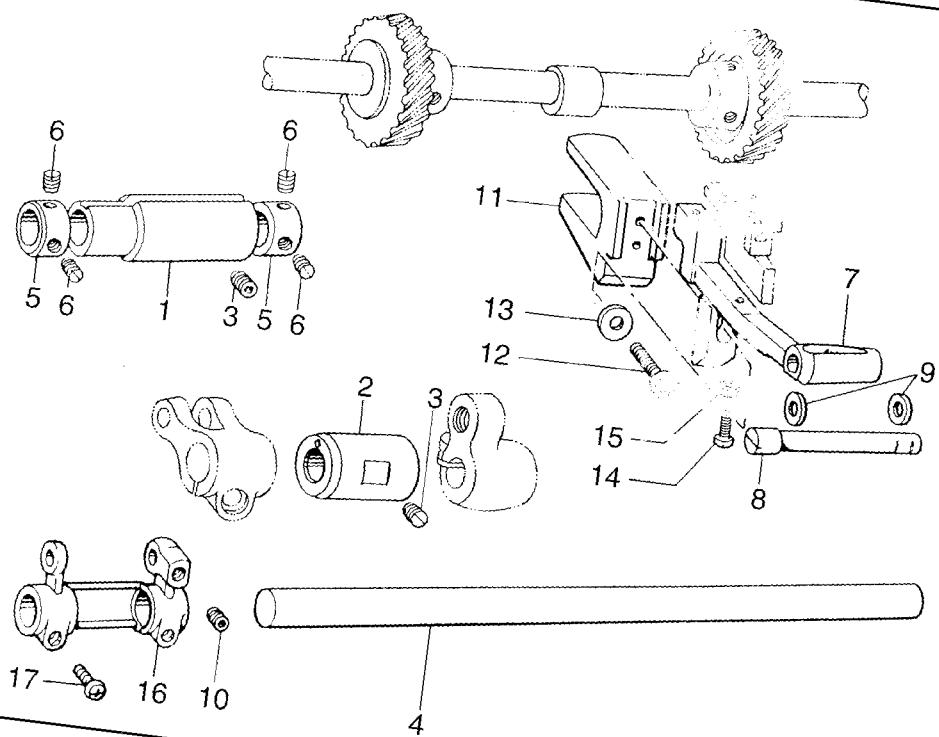
## L1 过线压线机构 / Threading mechanism



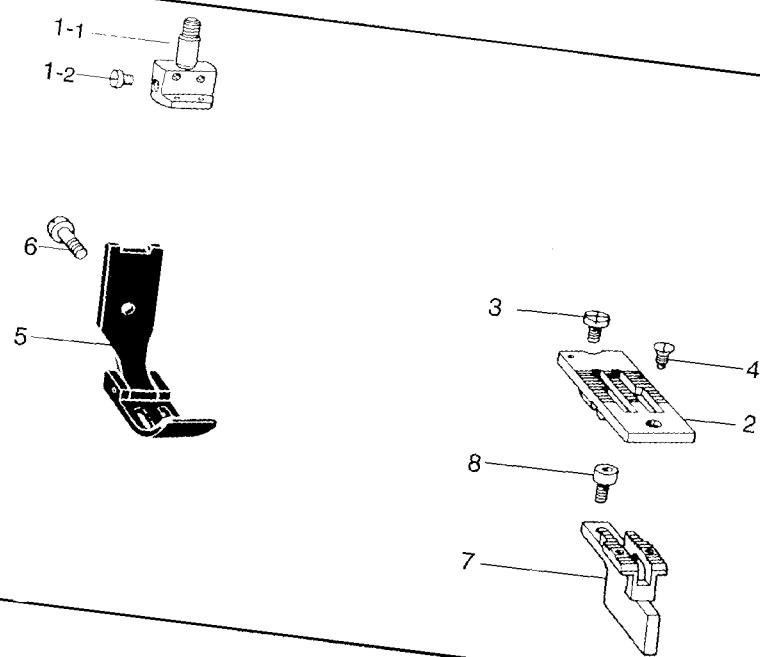
L1 过线压线机构 / Threading mechanism

序号	件号	数量	名称	NAME OF PARTS	备注
1-1	201-0165	1		UPPER THREAD TENSION ASSY, D	
1-1-18	B4-17713	2		SPRING,TENSION ADJUST	
1-1-1	201-0170	1		TENSION STUD	
1-1-2	B5-1040501	1		THREAD TAKE-UP SPRING L	
1-1-3	B5-1040502	1		THREAD TAKE-UP SPRING R	
1-1-4	201-0315	2		THNSION SPRING GUIDE ASSY	
1-1-5	SL-6060632	1		SCREW, SM2.38	
1-1-6	201-0190	1		TENSION NUT	
1-1-7	201-0250	1		TENSION RELEASE PLATE	
1-1-8	201-0260	1		SPRING, TENSION RELEASE	
1-1-9	SD-6090140	2		SHOULDER SCREW, SM3.57	
1-1-10	201-0280	1		PIN, TENSION ELEASE(L)	
1-1-11	201-0270	1		PIN, TENSION RELEASE(R)	
1-1-12	201-0220	4		TENSION DISC	
1-1-13	201-0210	2		TENSION DISC PRESSER	
1-1-14	201-0200	2		TENSION NUT	
1-1-15	201-0240	4		THREAD GUIDE DISC	
1-1-16	B4-12404	2		SPRING,PRE-TENSION (A)	
1-1-17	201-0230	2		TENSION NUT	
1-1-19	201-0080	1		TENSION SPRING STOPPER	
1-1-20	SS-4090540	1		SCREW, PAN SM3.57-40X5	
1-1-21	201-0290	1		SPACER	
1-1-22	201-0300	1		COLLAT	
1-1-23	201-0380	1		STOPPER SUPPORT	
1-1-24	201-0180	1		ADJUST THUMB	
1-1-25	SS-2080640	1		SET SCREW, (CP) SM3.18	
2	201-0010	2		THREAD RETAINER	
3	NS-81528	2		NUT, SM5.95	
4	SS-3090840	1		SCREW,SM3.57	
5	201-0080	1		TENSION SPRING STOPPER	
6	SS-4090540	1		SCREW, PAN SM3.57-40X5	
7	201-0020	1		TENSION RELEASE BAR	
8	SS-4110840	1		SCREW, PAN SM4.37-40X8	
9	201-0030	1		ARM THREAD GUIDE (U)	
10	201-0040	1		ARM THREAD GUIDE (M)	
12	SS-5090440	3		SCREW, FLAT SM3.57	
11	201-0440	1		ARM THREAD GUIDE (D)	
13	MZ-330807	1		FELT	

G 送料轴机构 / Feed shaft mechanism



M 针组零件 / Gauge part



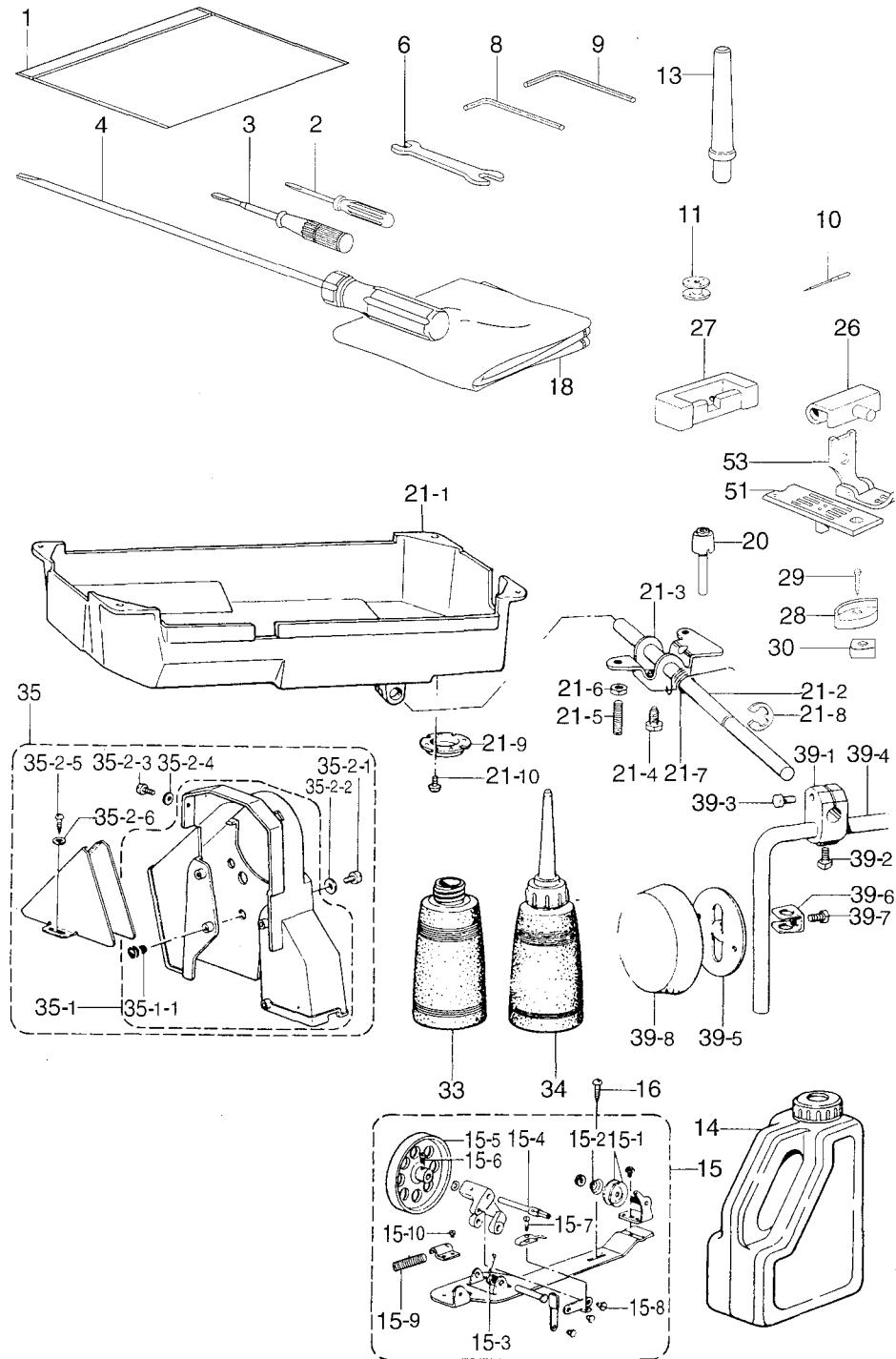
G 送料轴机构 / Feed shaft mechanism

序号	件号	数量	名称	NAME OF PARTS	备注
1	201-1620	1		FEED SHAFT BUSH (L)	
2	201-1630	1		FEED SHAFT BUSH (R)	
3	SS-7161028	2		SET SCREW, SOCKET (CP) SM6.35	
4	201-1610	1		FEED ROCK SHAFT	
5	201-1780	2		SET SCREW, SM6.35	
6	SS-2160440	4		FEED BAR, ST	
7	201-1720	1		FEED BAR,ST	
8	201-1730	1		FEED BAR SHAFT	
9	WP-07310	2		RHRUST RING	
10	SS-7150628	1		SET SCREW, SOCKET SM5.95	
11	201-1750	1		FEED BAR FORK	
12	SS-4151428	1		SCREW, PAN SM5.95-28X14	
13	WP-06506	1		WASHING, PLAIN S6	
14	SS-4081040	1		SCREW, PAN SM3.18-40X12	
15	NS-8080240	1		NUT,1 SM3.18	
16	201-1740	1		FEED ROCK BASE ARM	
17	SS-4111240	2		SCREW, PAN SM4.37-40X12	

M 可换零件 / Gauge part

序号	件号	数量	名称	NAME OF PARTS	备注
1	201-0675	1		NEEDLE CLAMP ASSY	
1-2	SS-6090440	2		SCREW,SM3.57	
2	201-0100	1		NEEDLE PALTE(ASSY)	
3	SS-6110640	1		SCREW,SM4.37	
4	SS-5110640	1		SCREW, FLAT SM4.37	
5	201-2155	1		PRESSER FOOT ASSY	
6	SD-6090540	1		SCREW, SM3.57	
7	201-1760	1		PEED DOG	
8	SS-7080744	2		SCREW,SM3.18	

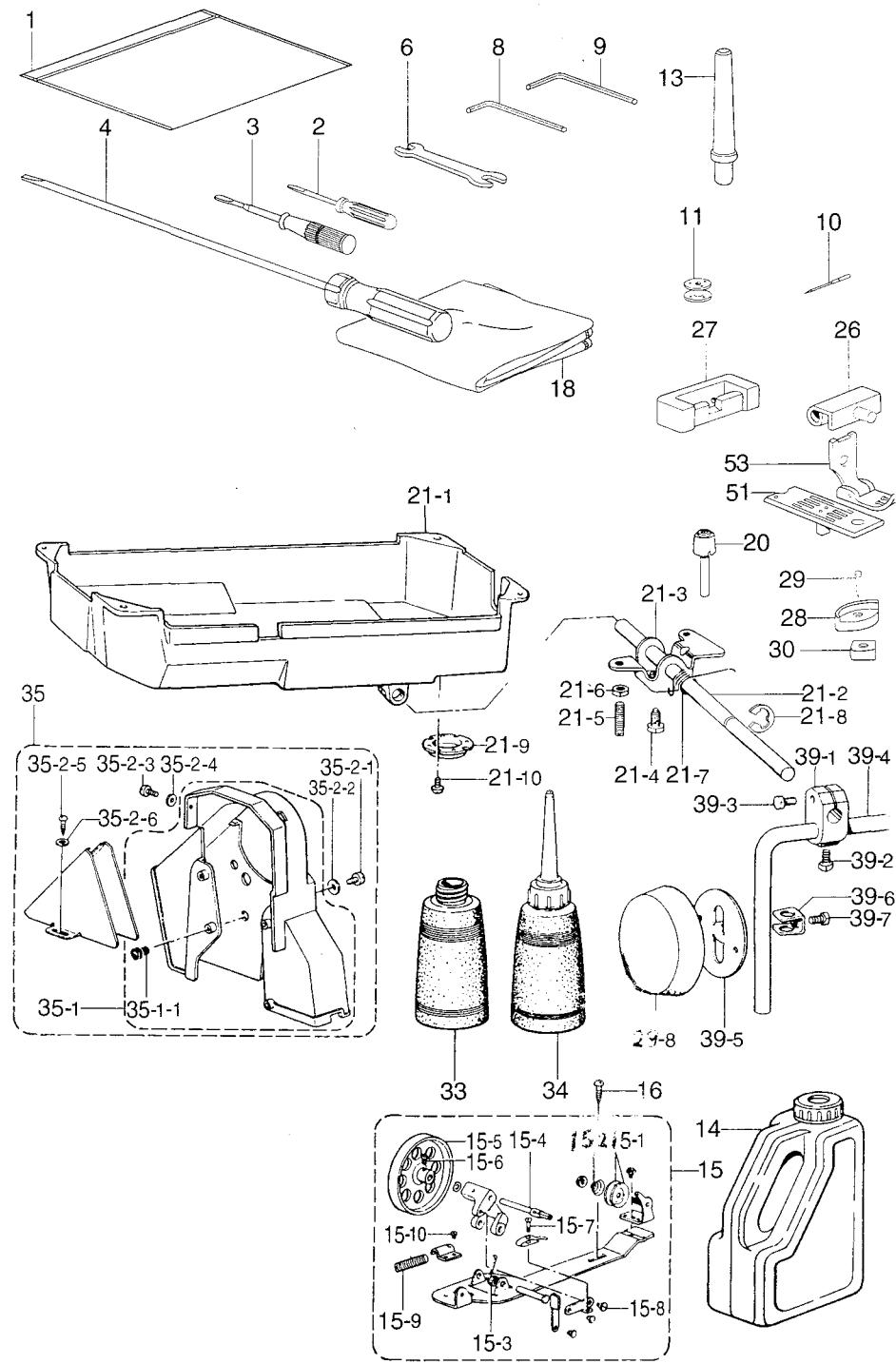
## Z1 附件部分 / Accessories



Z1 附件部分 /Accessories

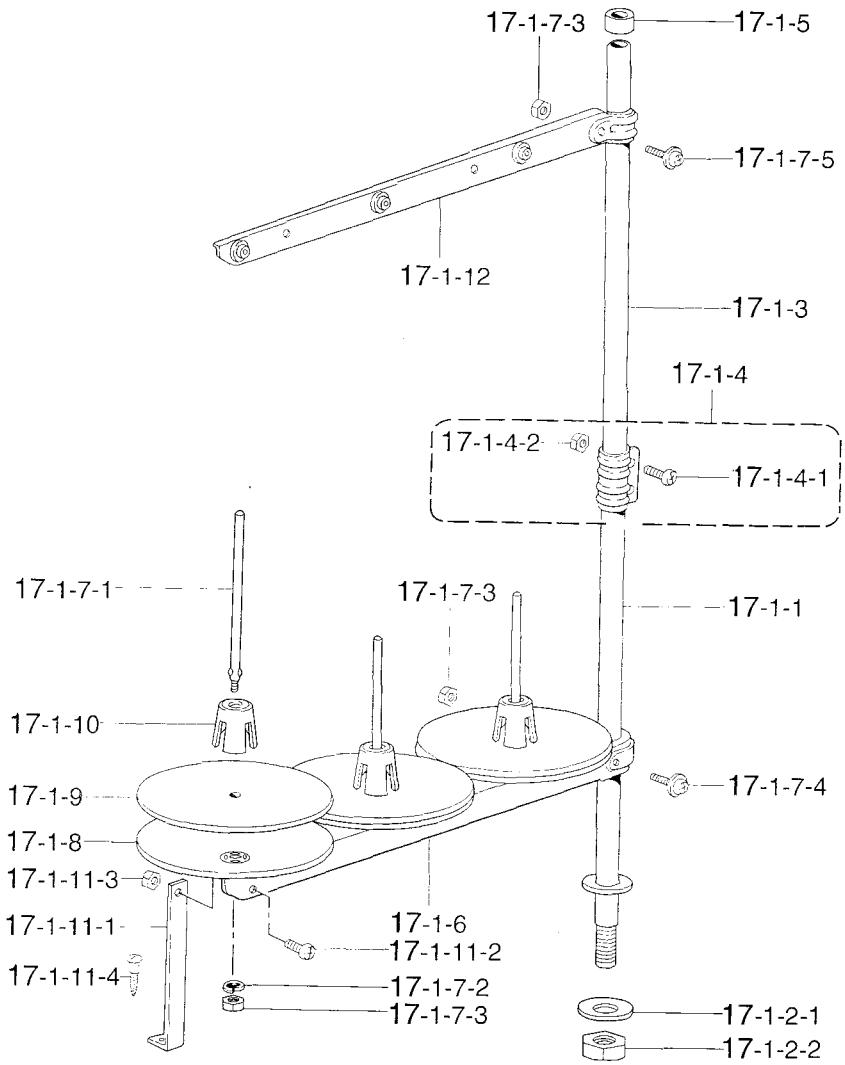
序号	件号	数量	名称	NAME OF PARTS	备注
1	201-2640	1		ACCESSORY BAG	
2		1		SCREW DRIVER, 1.9X52	
3		1		SCREW DRIVER, 3.4X70	
4		1		SCREW DRIVER, 4.7X250	
6		1		SPANNER	
8		1		HEXAGONAL WRENCH 2	
9		1		HEXAGONAL WRENCH 3	
10		4		NEEDLE DPX5(#14)	
11		4		BOBBIN, ST	
13		1		HEAD REST	
14	201-2620	1		OIL TANK	
15		1		BOBBIN WINDER ASSY	
15-1		2		TENSION DISC	
15-2		1		TENSION SPRING	
15-3		1		SPRING	
15-4		1		BOBBIN WINDER SHAFT	
15-5		1		BOBBIN WINDER	
15-6		1		SET SCREW, (FT) SM4/37X5	
15-7		1		SCREW, SM3.18	
15-8		1		SHOULDER SCREW, SM3.18	
15-9		1		BOBBIN WINDER WHEEL STOPPER	
15-10		1		SCREW,PAN SM3.57-40X3.5	
16	GBS204-8	2		WOOD SCREW, ROUND M5.5X20	
18	201-2640	1		HEAD COVER	
20	201-2125	1		KNEE LIFER COMPLYING BAR	
21	201-2075	1		OIL PAN ASSY	
21-1	201-2080	1		OIL PAN	
21-2	201-2100	1		KNEE LIFTER SHAFT	
21-3	GR905-8	1		KNEE LIFTER	
21-4	GS484-8	1		BOLT, SM5.95	
21-5	GL205-8	2		SET SCREW, SM5.95	
21-6	GL204-8	2		NUT, SM5.95	
21-7	GW217-8	1		TWIST SPRING	
21-8	GO344-8	1		RETAINING RING,E10	
21-9	201-2110	1		DRAIN	
21-10	SS-4090540	2		SCREW, PAN SM3.57-40X5	

## Z1 附件部分 / Accessories



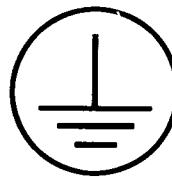
Z1 附件部分 /Accessories

序号	件号	数量	名称	NAME OF PARTS	备注
26	GR993-8	2		HEAD HINGE	
27	GO321-8	2		RUBBER CUSHION	
28	GR940-8	4		HEAD CUSHION	
29	GR950-8	8		NAIL	
30	GR932-8	4		OIL PAN CUSHION	
33	201-2630	1		OILER	
34	201-2630	1		OILER ASSY	
35	201-2655	1		BELT COVER ASSY	
35-1	201-2660	1		BELT COVER COLLAR ASSY	
35-1-1	201-2670	4		RUBBER COLLAR	
35-2-1	SS-4122032	4		SCREW, PAN SM4.76-32X20	
35-2-2	WP-05510	4		WASHER, PLAIN L5	
35-2-3	SS-4110840	1		SCREW, PAN SM4.37-40X8	
35-2-4	WP-04710	1		WASHER, PLAIN M4.37	
35-2-5	GBS204-8	2		WOOD SCREW,ROUND M5.5X20	
35-2-6		2		WASGER, PLAIN S5.56	
39		1		KNEE LIFTER ASSY	
39-1	GR926-8	1		KNEE LIFTER JOINT	
39-2	GS508-8	1		BOLT, SM7.94	
39-3	GS506-8	1		BOLT, SM5.95X20	
39-4	GZ286-8	1		KNEE LIFTER BAR	
39-5	GR894-8	1		KNEE LIFTER PLATE	
39-6	GR895-8	1		KNEE LIFTER PLATE STOPPER	
39-7	GS503-8	1		BOLT, SM5.95	
39-8	GR931-8	1		KNEE LIFTER PLATE COVER	
37		1	-----	"OPTION PARTS"	
38		1	-----	HEIGHT GAUGE, PORTRY HOOK B831 GAUGE, NEEDLE & PRESSER BAR	



Z1 附件部分(标准件) /Accessories(Standard)

序号	件号	数量	名 称	NAME OF PARTS	备注
17-1		1		COTTON STAND ASSY (3D)	
17-1-1		1		COLUMN PIPE (D)	
17-1-2-1	GO336-8	1		WASHER, PLAIN 16	
17-1-2-2	GL206-8	1		NUT, 5/8	
17-1-3	GZ285-8	1		COLUMN PIPE	
17-1-4	GR900-8	2		COLUMN JOINT ASSY	
17-1-4-1	GS462-8	2		SCREW, PAN M5X14	
17-1-4-2	GL207-8	1		NUT,1M5	
71-1-5	GO318-8	1		COLUMN CAP	
71-1-6	201-2590	1		SPOOL HOLDER 3	
17-1-7-1	GO370-8	3		SPOOL SHAFT (B)	
17-1-7-2	GO338-8	5		WASHER, SPRING 2-5	
17-1-7-3	GL207-8	1		NUT, 1 M5	
17-1-7-4	GS463-8	1		SCREW, PAN (P WASHER) M5X32	
17-1-7-5	GS462-8	3		SCREW, PAN (P WASHER) M5X14	
17-1-8	GR720-8	3		SPOOL STAND BASE	
17-1-9	GR750-8	3		SPOOL MAT	
17-1-10	GR927-8	1		SPOOL CUSHION	
17-1-11-1	201-2600	1		SPOOL HOLDER SUPPORT (A)	
17-1-11-2	GS462-8	1		SCREW, PAN M5X10	
17-1-11-3	GL207-8	1		NUT, 1 M5	
17-1-11-4	GBS204-8	1		WOOD SCREW, ROUND M4.5X22	
17-1-12	201-2610	1		THREAD HANGER ASSY 3	

序号		名称	尺寸	代号
1		Label, operation Eng.	40X64	
2		Mark,injury	L=16 R=0.8	
3		Mark,arrow	10X30	
4		Mark,grounding	Ø12	