

# 高速直驱拖轮链式缝纫机

HIGH SPEED DIRECT DRIVE TUGBOAT CHAINSTITCH SEWING



使用说明和零件手册

INSTRUCTION MANUAL PARTS LIST

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# 使用说明

## Operation Manual

## **一、开车前的注意事项**

1. 油盘内未加油绝对不能开车.
2. 机器运转时, 从上轮外侧看转向应该为逆时针方向、注意、不能倒转.
3. 在最初使用的一个月内, 应把缝速降低为每分钟3500针进行缝纫作业
4. 按照电动机标牌上的标注, 检查电源、电压及单相、三相是否正确.

### **一、Pre-start checks.**

1. The machine shall not be started running until the completion of oiling.
2. The rotating direction of the balance wheel, when the machine is started running, shall be in counter-clockwise one. (View from the right side of the balance wheel.) A warning shall be given in advance against making the machine run while balance wheel turning clockwise.
3. The machine shall be under operation at less than 4,500 s.p.m. for the first month.
4. Check power source, voltage, and phase number to see whether they are in accordance with the ratings on the name plate of the motor to be used.

## **二、使用注意事项**

1. 机器运转时, 请勿将手放到针的下部.
2. 机器运转时, 请勿将手指伸入挑线杆护罩内.
3. 机器已停止后, 才能盘动上轮.
4. 关掉电动机开关后, 由于惯性上的缘故, 电动机还会继续旋转一段时间, 所以要注意, 未停止转动不能将机器倾倒.
5. 机器运转时, 请勿将手指、头发或其它东西靠近或接触上轮, "V"形皮带、电动机、也不要将东西放置在它们附近
6. 装拆皮带罩及护指器时, 请勿开动机器.

## **二、Operating instructions:**

1. Do not put your hands under the lower part of the needle when the machine is running.
2. Do not put your fingers into the thread take-up lever cover when the machine is running.
3. Only when the machine stops can you turn the balance wheel by hand.
4. After the motor switch being turned off, due to inertia, the machine tilted unless it stops.
5. Keep away from the balance wheel, V-belt, winder and the motor.
6. Do not start running the machine during mounting or replacing the belt cover, finger guard, etc.

### 三、机器规格

线迹形式	并列双针双线链式缝
速 度	最高每分钟3500转
机 针	TV×7 14#~21# 或 UY128GAS 14#~20#
针迹长度	1.4~4mm
针杆行程	30mm
双线间距范围	1/8" 5/32" 3/16" 7/32" 1/4" 5/16" 3/8" 1/2"
挑线形式	针杆挑线
弯 针	独立调节式 1/8"~1/2" 通用
保针架	摇动式、固定式并用
膝提压脚	上升量 8~10mm
供 油	叶片泵
润滑油	10号白油

### Specification

Stitch type	Two-needle double-row chain stitch
Speed	Max. 3,500 s.p.m.
Needle	TV×7 14#~21#或UY128GAS 14#~20#
Stitch length	1.4~4mm
Stroke of needle bar	30mm
Gauges of double-row chain stitch	1/8" 5/32" 3/16" 7/32" 1/4" 5/16" 3/8" 1/2"
Thread take-up type	Needle bar thread take up type
Looper	Separately adjustable type, for the range of 1/8" to 1/2"
Needle guard	Oscillating type and rigid type
Light clearance of knee lifter	8~10mm
Oil supply	Impeller-type pump
Lubricating oil	#10 white oil

### 四、机器的安装(图1)

1. 油盘的安装：将油盘支座①和油盘座③装在台板矩孔的四角，用油盘座钉②将其固定，再装上油盘(图1)。

2. 将机头边接钩放入底板孔内，与台板的机头连接钩座相嵌合，再将机头放到四只角的缓冲垫上。

### 4、Installation of the machine(Fig. 1)

#### 1. To instal the oil reservoir:

Put the oil reservoir rubber cushion ① and oil reservoir felt cushion ③ on four corners of the opening of the table, fix them with the wood screws ②, then instal the oil reservoir(Fig. 1)

2. Put the machine connecting hooks into the holes to engage respectively two hinges seated in the table, then place the machine on the four cushions.

### 五、加油(图2. 图3)

1. 向油盘内加缝纫机油(10号白油)至HIGH记号部位(图2)。

2. 如果油面低于Low 记号，应再加油。

3. 加油后开动机器,润滑正常时,应看到油液喷到油窗上(图3).至于喷到油窗上的油量多少与总油量的多少无关,所以不必担心.

4. 如需换新油,只要拆下油盘的排油螺钉,污油就能排出.

5. 使用新机器或长期未使用的缝纫机时,需抬起压脚以每分钟3500~4000针的速度空转约10分钟.

### 5、Oiling (Figs. 2 and 3)

1. Oiling shall be made in oil reservoir and the oil surface also be made to level the mark "High" before the machine is started running (Fig. 2)

2. Oiling shall be kept on until the oil surface has been brought above the mark "Low" (Fig. 3)

3. The normal condition of lubrication is that the oil shall spray onto the oil sight. The amount of oil spraying onto the oil sight is not at all proportional to the total amount of oil in the oil reservoir. There is nothing to worry about.

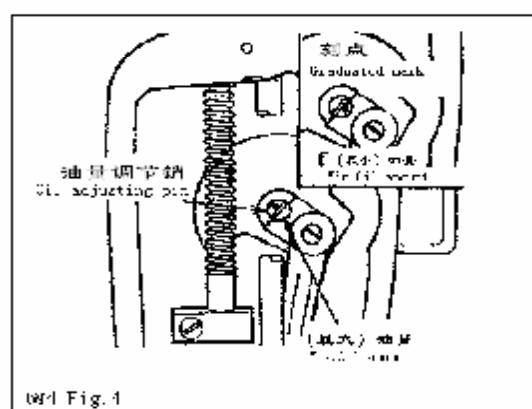
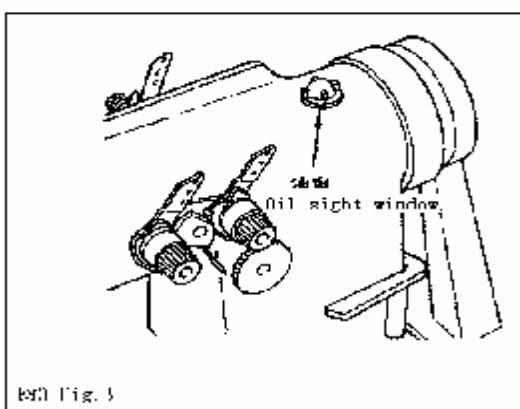
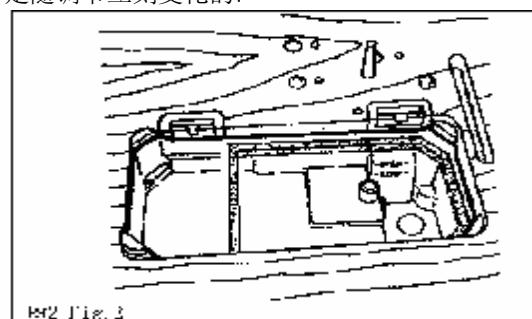
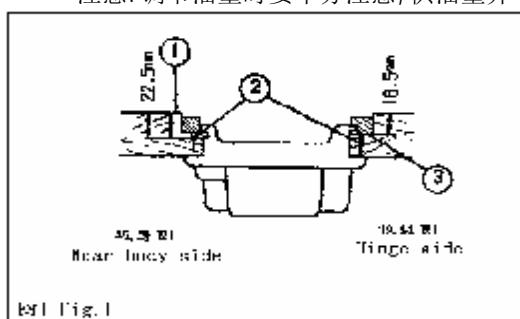
4. Only when the drain cover screw is loosened and taken off can old oil be drained out and new oil be supplied again.

5. When a new model or those standing idle for long time are to be operated, presser foot shall be lifted and run idle for about ten minutes.

### 六、面部油量调节(图4)

转动油量调节销,可以调节针杆连杆销的供油量,调节销的刻点,靠近针杆连杆销时,油量最小,反之,则油量最大(图4).

注意: 调节油量时要十分注意,供油量并不是随调节立刻变化的.



## 6. How to regulate oil amount by means of manipulating elements on the face plate(Fig. 4)

To turn oil-amount adjusting pin to regulate oil amount of the thread take-up crank, min. oil amount will be supplied when the mark of adjusting pin moves to the thread take-up crank as near as you desire. Otherwise, max. oil amount will be supplied.

## 七、面线穿线法(图5)

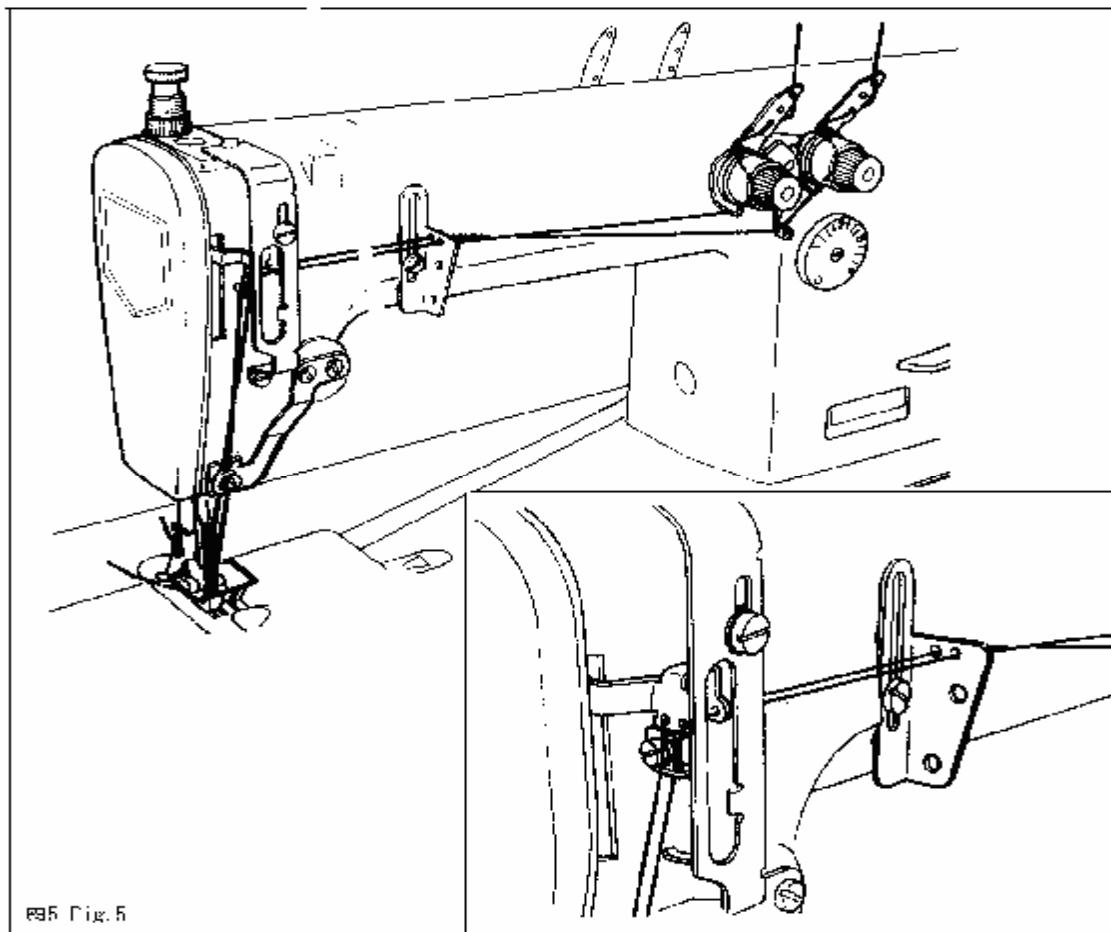
在针杆上升到最高位置时,按图5所示顺序依次穿过各线孔.

1. 线从操作者一侧向外穿过机针.
2. 面线穿过机针后必须再拉出100mm长线头.

## 7. The threading of needle thread.

To thread the eyes of the needles in the order as shown in Fig.5:

1. To make thread go through the eye of the needle outwards. (View from the operator's side)
2. To pull out 100mm of the remaining thread after needle thread going through the eyes of the needles.



## 八、底线的穿法(图6、图7)

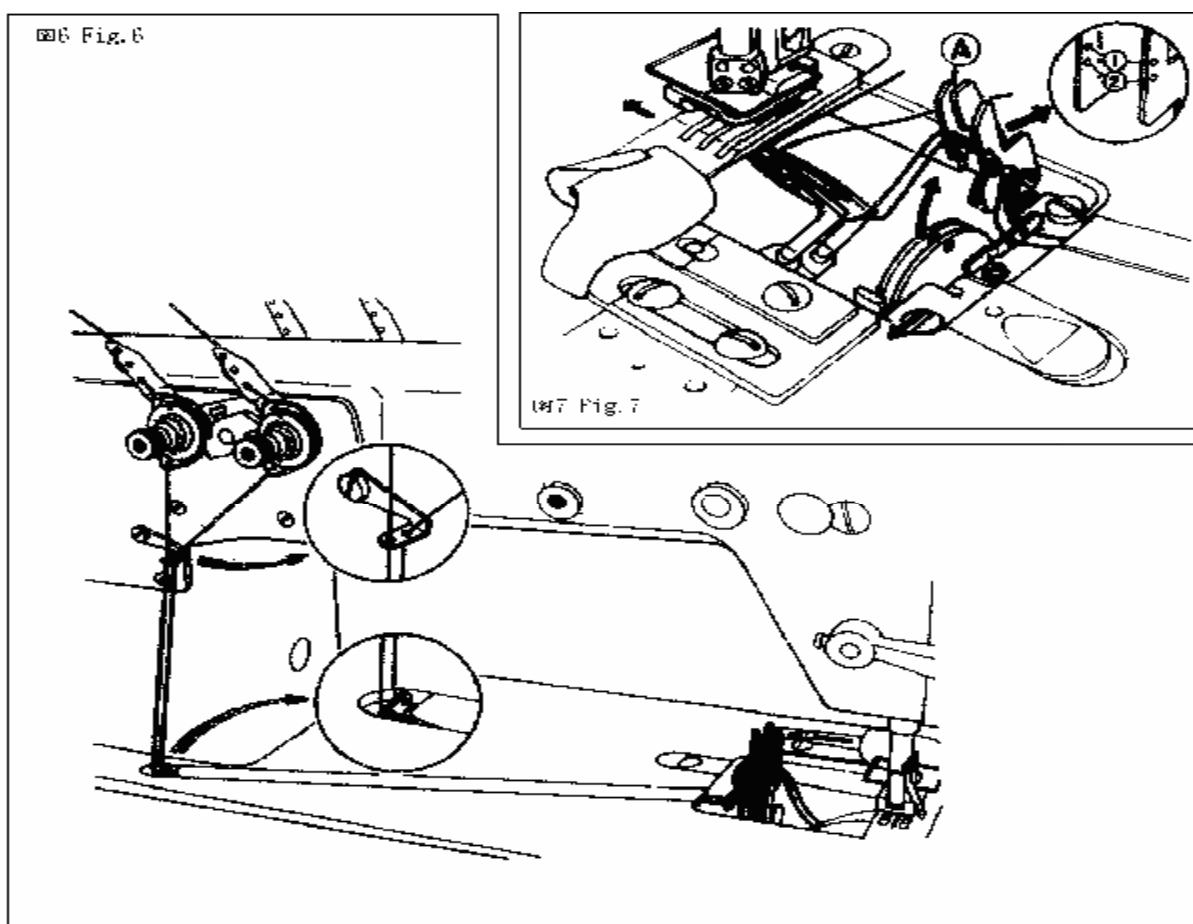
底线按图示顺序依次穿过各线孔.

1. 按图6 所示穿过夹线器单面导线板, 如用捻度大的线或缝纫时需送料距大的时候应穿二个孔.
2. 把图中的扳簧朝操作人员侧拉, A 就向上抬起.
3. 穿弯针线时, 用附件中的镊子按图所示将线穿过, 在弯针的前端拉出50mm长线头.

## 8、The threading of bobbin thread(Fig. 6 and 7)

To make bobbin thread go through the eye of the needle in the order as shown in (Figs. 6 and 7):

1. Make the bobbin thread go through the tensioner guide plate; go through the two holes when thread of harder twist fibre is used and feed gauge is wider than usual.
2. Pull the spring toward the operator, as shown in Fig. 7 and part A will rise upwards
3. When threading the looper, the thread shall be made go through the eye of the needle with a tweezer as shown in Fig. 7 and 50mm of remaining thread be pulled out



## 九、夹线器(图8、图9、图10)

面线张力的调节(图8所示):向右转动夹线螺母张力变大.

底线张力的调节(图9所示):向右转动夹线螺母张力变大.

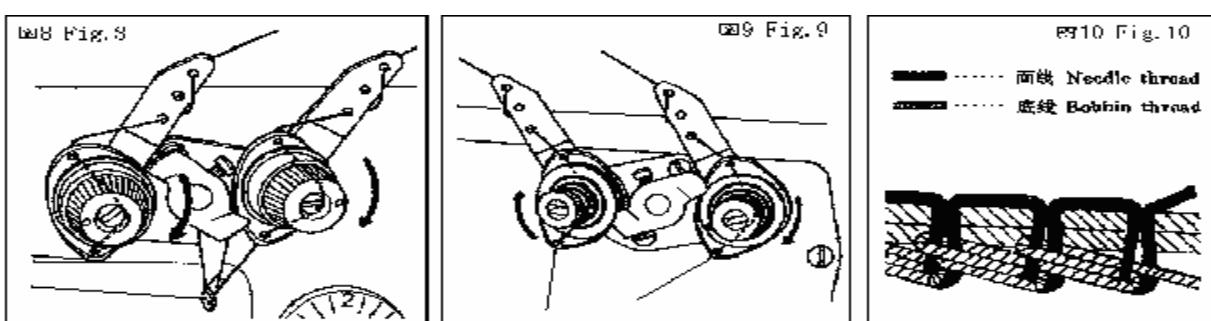
底面线的关系(图10所示)为链式线迹的形成.

### 9、Thead tension asm (Figs8, 9 and 10):

To adjust needle thread tension in accordance with sewing working condition, we can adjust needle thread tension by tension spring. Turn the tension nut clockwise to increase the tension; turn counter-clockwise to decrease the tension.

To adjust bobbin thread tension:

Turn tension screw clockwise to increase the tension; turn tension screw counter-clockwise to decrease the tension. The relation between the needle thread and the bobbin thread as shown in (Fig. 10) depicts the forming of chain stitch.



## 十、压脚(图11、图12)

压脚压力的调节(图11):顺向转动压脚调压螺钉, 压力增强, 反之则压力减弱. 对一般布料而言, 压脚调压螺钉的标准高度为27~30mm(5公斤)左右.

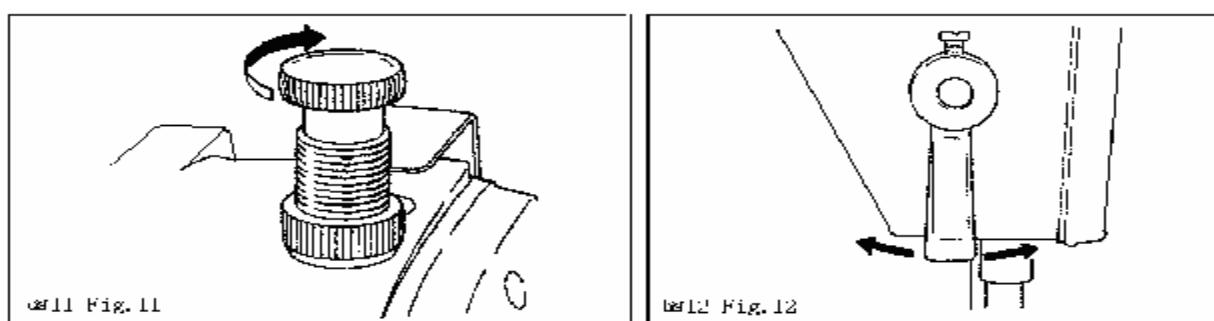
要使压脚保持在抬起位置, 只要把压脚扳手向左或向右转动即可(图12).

### 10、Presser foot (Figs. 11 and 12):

Adjustment of pressure on presser foot (Fig. 11)

Turn pressure regulating thumb screw clockwise to increase the pressure; turn pressure-regulating thumb screw counter-clockwise to decrease the pressure. For general fabric the standard height of pressure regulating thumb screw is about 27~30mm(5Kg.)

The presser bar lifter shall be turned either leftward or rightward in order to keep the presser foot under the condition of lifting position.



## 十一、针距的调节(图13)

1. 针迹长度的调节(图13)只要旋转倒送料扳手上面的针距调节旋扭至所需数字即可. 旋扭上刻度的数字用mm表示.
2. 针迹从大到小改变送料刻度时, 应一边将倒送料扳手朝下压. 一边转动送料距旋扭.
3. 针迹长度最大是4mm , 最小是1. 4mm .
4. 按下倒送料扳手, 针迹变为紧密缝(1. 4mm), 该功能可用于起始缝和终止缝, 或需加强缝纫的部份.
5. 本机不能进行倒缝.

## 11、To adjust stitch length (Fig. 13)

1. Turn feed regulating dial to the figure desired. The value of graduation is shown in millimetre(mm).
2. If you intend to change the stitch length, press down the reverse feed lever while turning the feed regulating dial.
3. Max. stitch length is 4mm Min. stitch length is 1.4mm
4. When reverse feed lever is pressed down, right-needle stitch of 1.4mm will be formed; this version of stitch is suitable for beginning and end seaming or bartacking .
5. The machine can not make reverse stitching.

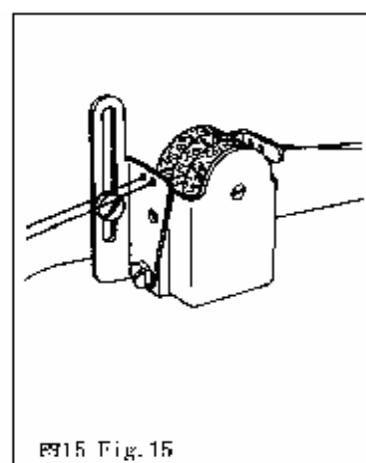
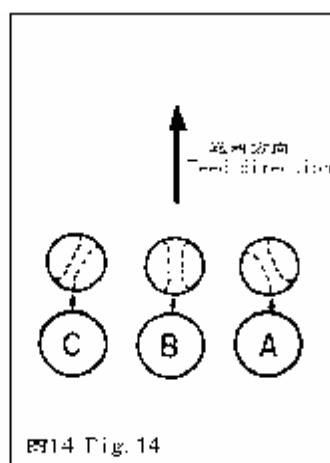
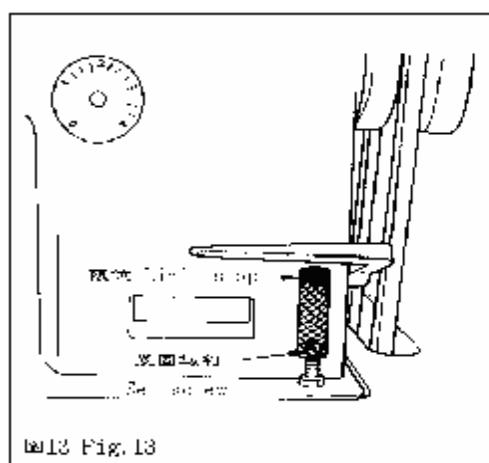
## 十二、针距的安装(图14、图15)

在使用化纤线时, 机针针孔的方向不能如(图14)中C的方向安装.

机针请使用TV×7的#9~#21或GK×2型机针. 用化纤线缝制时, 可按(图15)所示形式放置硅油, 油箱应另外定制.

## 12、Setting-up of the needle:

When thread of chemical fibre is used, the direction of the needle eye shall not be in that one, as shown in part C of Fig. 14. Needle types be desired fall within the range of #9 to #21 of TV×7; the specifically numbered needle of GK×2type is also acceptable. Oil tank shall be custom-made when thread of chemical fibre is used; silicone oil can be placed like that, as indicated in Fig. 15.



## 十三、压脚高度的调节(图16)

为了调换压脚或改变压脚高度, 角度需要:

1. 拆下面板上的孔塞(图16).
2. 旋松压杆导架的紧固螺钉进行调节.

### 3. 调节后旋紧紧固螺钉

#### 13、Adjustment of the height of the presser bar: (Fig. 16)

For the requirements of either replacing the presser foot or changing the height and angle of presser foot, the following shall be observed.

1. Take off the rubber plug in the hole from the face plate, as shown in Fig. 16.
2. Loosen the presser bar guide bracket set screw.
3. after adjusting, retighten the screw

#### 十四、送料牙的调节(图17, 图18)

旋松图18所示螺钉②, 送料牙的倾角即可调节成标准型、A型、B型, 送料牙最大突出量是0.8mm, 用图17中螺钉①调节。

#### 14. Adjustment of the height of the feed dog(Fig. 17 and 18)

Loosen the set screw ② , as shown in Fig. 18, the angle of the feed dog can be adjusted to the specified one of standard version, A version, and B version. The Max. height of 0.8mm of the projection from feed dog is adjustable by the adjusting of screw ① as shown in Fig. 17.

#### 十五、送料牙与针的同步(图19)

针尖下降至针板上平面3mm时, 送料牙刚好全部下降至针板上平面以下, 此时正好同步。可调节图19中的螺钉。

#### 15、The timing of feed dog and needle: (Fig. 19)

When the point of needle lowering down to the location of 3mm from the upper surface of the throat plate, the feed dog is right at the position below the upper surface of the throat plate, viz. the running of feed dog going well regulated in relation to the motion of needle.

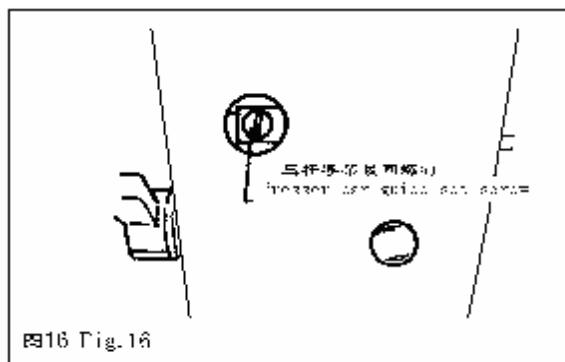


图16 Fig. 16

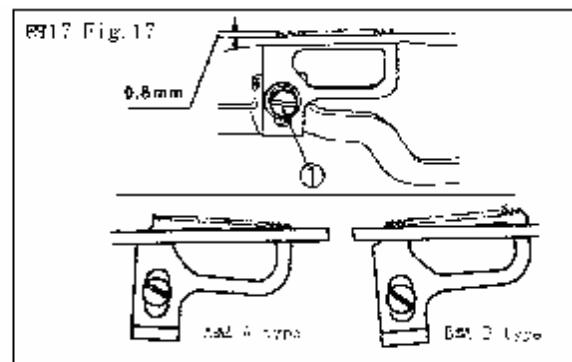


图17 Fig. 17

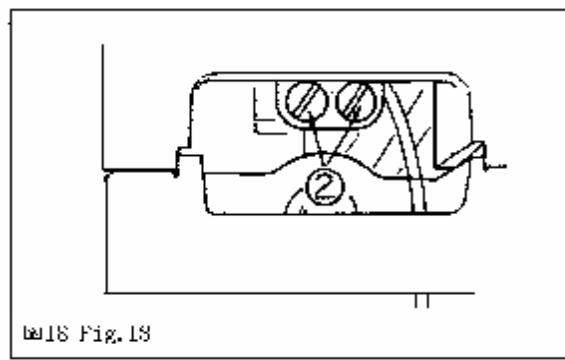


图18 Fig. 18

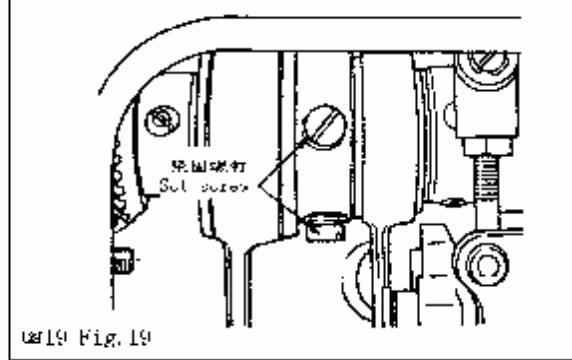


图19 Fig. 19

## 十六、针杆高度的调节(图20)

使用TV×7机针时,可用针杆上的刻线。针杆在下死点时,针杆上刻线应对准针杆下衬套的下端面(如图20所示),这样就决定了针杆的高度。

### 16、Adjustment of the height of needle bar: (Fig. 20)

When the needle of TV×7 is used, if the graduation on the needle bar is at the bottom dead centre, the mark of graduation shall be in line with the lower end of the needle bar bushing, lower, as indicated in Fig20.

## 十七、机针和弯针的调节(图21、图22)

弯针前后运动量的调节:

按如下顺序调节可得弯针椭圆运动中(图21)所示的B尺寸,通常B的尺寸在最大时为3.7mm,各种规格的机针都能缝纫。

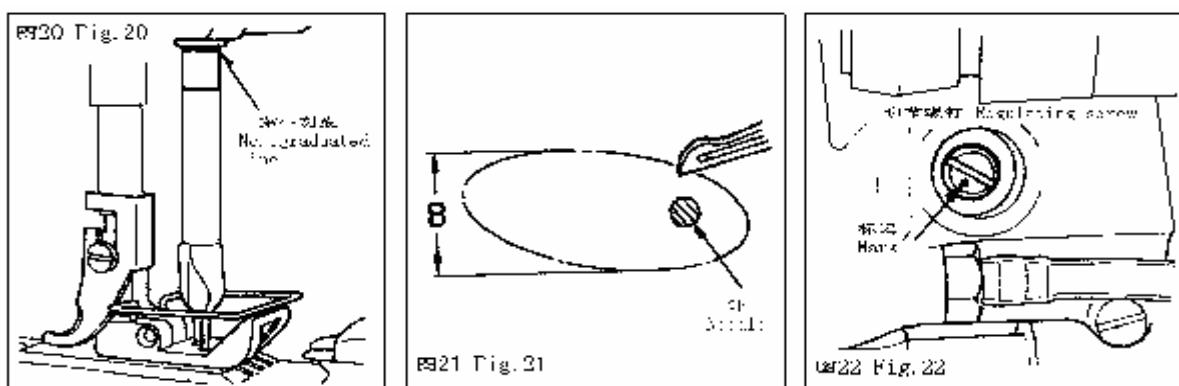
1. 拆下弯针曲柄罩壳上的橡胶塞(图22).
2. 用手转动上轮.
3. 先旋松定位螺钉和紧固螺钉, 调节有标号的螺钉.
4. 把调节螺钉上的冲印标记向右旋转, 则B的尺寸就会变大, 反之变小.
5. 旋紧定位螺钉和紧固螺钉.

### 17、Adjustment of the needle and looper(Figs. 21 and 22)

Adjustment of forward & backward motion of the looper: The dimension of part B of the looper in an elliptic motion can be measured, (refer to Fig. 21). The max. dimension of part B is usually 3.7mm, suitable for sewing operation of needles of all kinds of sizes.

The adjusting procedure is as follows:

1. Take off the rubber plug on the crank case of the looper(refer to Fig. 22)
2. Turn the balance wheel by hand.
3. First loosen set screw and positioning screw, and then adjust marked screw.
4. Turn clockwise the adjustable screw on which punch mark is printed, and The dimension of part B will be increased in value.
5. Tighten set screw and positioning screw.



## 十八、弯针相对机针的同步(图23)

机针在最低点时,弯针退到最后,旋松图示齿轮的螺钉进行同步调整(如图23)。

### 18、The timing of looper in reference to needle(Fig. 23)

The looper shall be moved backward to the lowest position while the needle is at

the bottom dead centre; loosen the screw on the gear and make timing adjustment of the looper in relation to the needle (refer to Fig23).

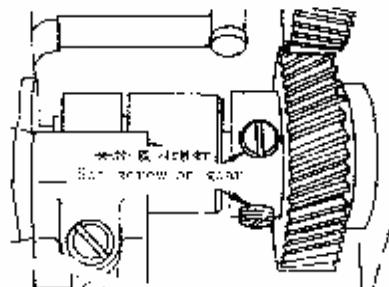


Fig.23

#### 十九. 弯针的勾取量(图24)

1. 弯针的针尖到达机针的中心位置时,弯针针尖离机针孔上端的距离标准值是2mm,此时针杆下刻线和针杆下衬套下端面对齐。(如图24)
2. 弯针的后退量约3.5mm .
3. 机针和弯针孔的相对关系如图24所示。(左右弯针可以分别调整)

#### 19. Thread - guiding amount of the looper (refer to Fig. 24)

1. The standard value of the vertical distance of the point of the looper away from the upper end of the eye of the needle is 2mm, then the graduation mark on the lower part of the needle bar shall be in line with the lower end of the needle bar bushing, lower. (refer to Fig. 24)

2. The value of the stroke moved backward by the looper is about 3.5mm .
3. The relation between the eye of the needle and the eye of the looper is indicated in Fig. 24.

(Note that the left looper and the right one can be separately adjusted).

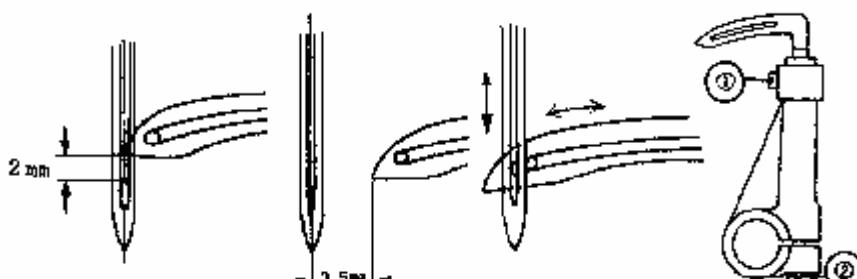


Fig.24

#### 二十、弯针和机针间和间隙

保针架调整后,机针和弯针间应留有一定间隙,即用手指轻压机针,机针也不应碰到弯针针尖。如果间隙太小了,机针的侧面与弯针针尖就会因相互碰撞而损伤。

#### 20、The clearance of loopwe and needle:

After adjusting the needle guide, the clearance of a given value between the needle and the looper shall be kept unchanged; the needle shall not touch at the point of the looper when it is pressed down softly. If the clearance is narrower than

usual, the side of the needle and the point of the looper are apt to incur breakage due to the impact of the needle side against the looper point

## 二十一、保针架的同步(图25)

保针架的同步,由(图25)中第一螺钉旋入弯针轴上的平面而决定.

### 21、The timing of needle guard: (Fig. 25)

The timing of the needle guard depends on the condition of the plane on the rock shaft of the looper when no. 1 screw has been screwed into this rock shaft.

## 二十二、保针架的位置(图26)

摆动保针架位置,使弯针勾取面线时让机针的针尖轻轻触及保针架,其高度应调整到不触及固定保针架范围,旋松(图26)中螺钉①②即可进行调节.

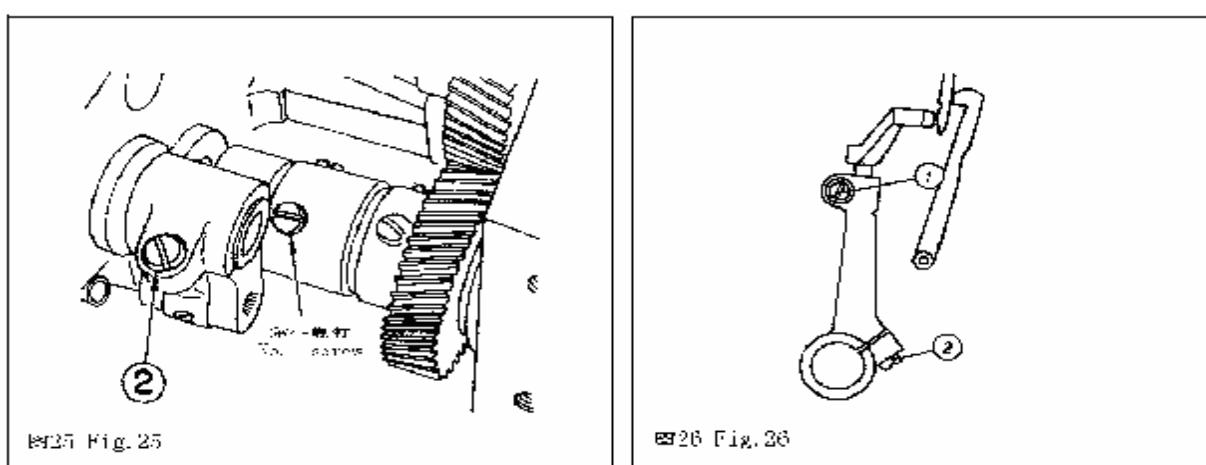
固定保针架和摆动保针架之间的关系(如图26)所示,与机针的间隙为0.1~0.2mm,缝纫机运转时不能强行夹住机针.

### 22、Position of needle guard: (Fig. 26)

Oscillating the needle guard to make the needle tip contact with needle gauge slightly.

It is recommended that the height adjustment shall not fall within the area of the left counter needle guard; the adjustment can be made by loosening screws 1 and 2. The relation between left counter needle guard and the counter needle guard is as represented in Fig. 26; the clearance from the needle falls within the range of 0.1 to 0.2mm.

Note that the forced clamp of the needle shall be prohibited when the machine is in motion.



## 二十三、底线打线凸轮(图27)

底线打线凸轮的位置如图27所示,针杆在最高点时,打线凸轮平面部分和钢丝平行部分的夹角为18°~20°,旋松螺钉B进行调整,位置决定后再旋紧.

调整时注意下列事项:底线从打线凸轮的突端A脱出时,针尖要完全进入底线弯针的线环中.

### 23、Looper thread take-up cam (Fig. 27)

Its position can be seen as shown in Fig. 27 When the needle bar is at the top dead centre, the planes of the cam and the steel wire are in parallelism; the projecting

part of the cam can slightly rise at the angle of 18 to 20 degrees; first loosen screw B, and then make adjustment, finally tighten the screw firmly. Pay close attention to the following: The needle tip shall entirely come into the thread loop of the looper when the bobbin thread rejecting from the projecting part of the cam.

#### 二十四、挑线杆线量调节板的位置(图28)

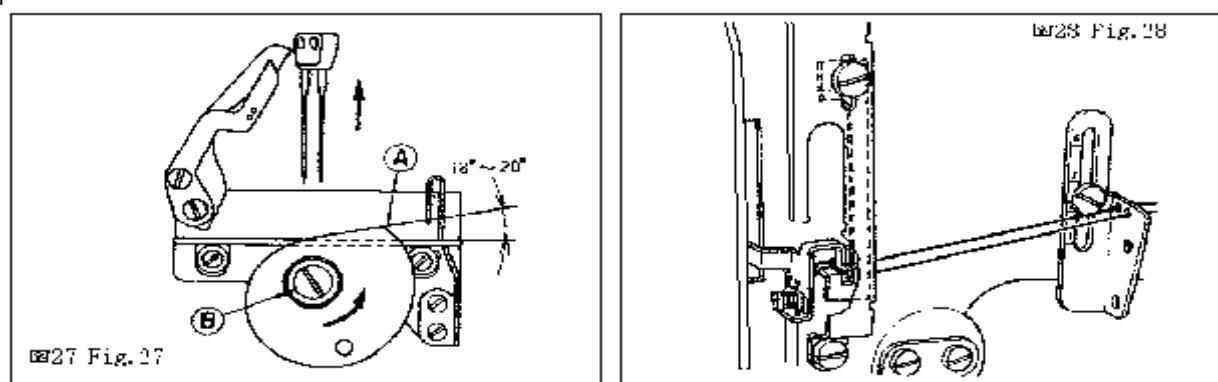
针杆在最低点时,如图28所示,用挑线杆线量调节板挡住面线,这样勾取面线时,面线线环变大。

此外,针杆在最低处时,也有拉紧面线线环的作用,通常在使用较细的缝线时,应把线量调节板降到最低点。

#### 24、The position of the thread-amount adjusting plate of the head take-up lever: (Fig. 28)

The thread-amount adjusting plate will retain the bobbin thread when the needle bar is at the bottom dead centre; in such a way the loop of the needle thread is to become bigger when the needle thread is hooked. In addition to the foregoing there is a function of the tight pulling of the needle thread loop. The thread-amount adjusting plate usually reduces to the lowest point when a thread finer than normal is used.

Note that take-up thread tension lever is another name for thread-amount adjusting plate.



#### 二十五、中间导线钩(图29)

中间导线钩的位置也关系到跳针现象的发生,一般把下列位置作为基准(图29)

棉线#80～#50	中间导线钩刻度2-3
棉线#30～#20	中间导线钩刻度3-4
化纤线#80～#50	中间导线钩刻度1-2
化纤线#30～#20	中间导线钩刻度2-3

#### 25、Frame thread eyelet: (Fig. 29)

The improper-positioning of the frame thread eyelet may be the cause of occurrence of skipping stitch.

The following locations are generally regarded as criteria(refer to Fig. 29)

Cotton thread #80～#50	Graduation marked on the frame thread eyelet2-3
Cotton thread #30～#20	Graduation marked on the frame thread eyelet3-4
Thread of chemical fibre#80～#50	Graduation marked on the frame thread eyelet1-2
Thread of chemical fibre#30～#20	Graduation marked on the frame thread eyelet2-3

## 二十六、针板的调换(图30)

GK28-1的针板出厂标准规格为 $1/4"$ (6.4mm). (图30)

改变缝线间距通常同时要更换:

1. 针夹
2. 活压脚
3. 针板
4. 送料牙
5. 摆动护针杆
6. 卷边器

左弯针和右弯针在 $1/8" \sim 1/2"$ 针板规格之内都通用. 针板宽度大时, 除上述零件外还要调换推板和凸轮盖.

### 26、Replacement of throat plate: (Fig. 30)

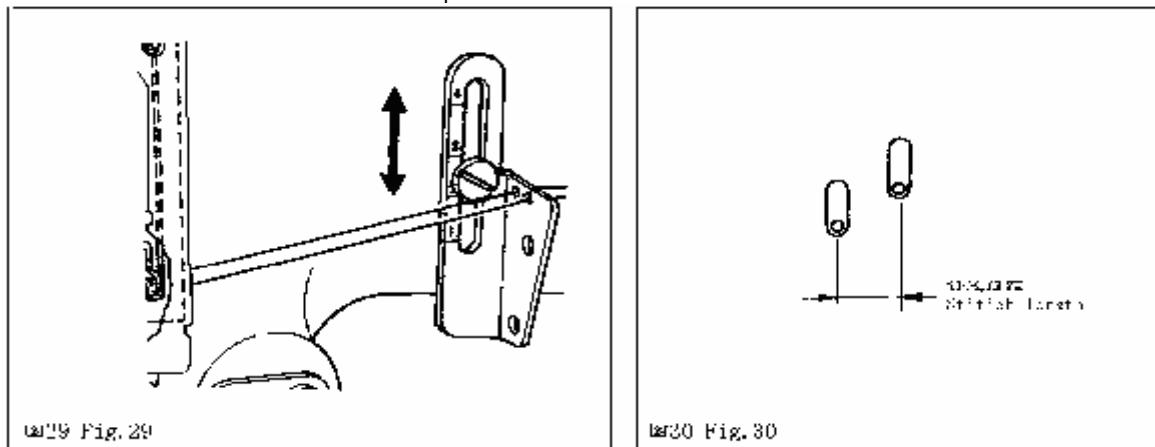
The standard size of the throat plate in parts book, which is stipulated by the manufactory, is  $1/4"$ , equivalent to 6.4mm. (Fig. 30)

The replacement of the following components is usually needed at the time when changing the gauge of double-row thread stitch.

1. Needle clamp
2. Hinged foot
3. Throat plate
4. Feed dog
5. Rear moving needle guard
6. curler

The left and right loopers within the range of the sizes of  $1/8"$  to  $1/2"$  are interchangeable.

In addition to the aforesaid, the replacement of slide plate and cam cover shall be made when the width of throat plate is on the increase.



## 二十七、缝纫机的保养

为了使缝纫机保持良好的工作状态, 要做到以下事项:

### (一). 每日必须检查的事项:

1. 运转时, 油窗内的油在飞溅.
2. 运转时, 一听到有异常声音, 即应停止缝纫作业, 并请修理工来检查

### (二). 每周一次检查部位:

1. 拆下针板、推板、凸轮盖, 用刷子清洗送料牙槽中的灰尘.
2. 把机头翻转, 去除油泵过滤网上的垃圾及油盘内的灰尘.
3. 发现润滑油黑脏时, 只需旋下油盘的排油螺钉排空污油, 换入新的润滑油.
4. 油面必须高于最低线(Low).
5. 用布擦去沾在油盘磁铁上的黑粉.

### 27、maintenance of the machine.

The following shall be adhered to in order to keep the machine in good working

condition:

(1). Daily checking:

1. the oil shall spray onto the oil sight when the machine is running.
2. Repairman shall be sent for when abnormal sound is heard during the operation of the machine.

(2). locations to be checked once a week:

1. To take off throat plate, slide plate, and cam cover; to clean dust of the slotted feed dog with a brush.
2. To turn over the head to rid both the oil filter screen on the oil pump and the interior of the oil reservoir of oil stain and dust.
3. Loosen drain hole screw and take it off; drain all the dirty oil from the oil reservoir and reoil it
4. Oil level must be above the lowest oil-level-indicating line marked "Low"
5. The black powder, adhering to the magnet in the oil reservoir shall be wiped with sponge cloth.

## 二十八、故障和措施

No.	事故内容	原因	对策
1	断线	1. 缝线质量差 2. 缝线太粗 3. 机针过热溶断缝线 4. 缝线张力太强 5. 机针、弯针、针板、保针架过线部份损伤 6. 线量未调节好	1. 使用质量好的缝线 2. 调换合适的缝线 3. 使用硅油或降低转速 4. 旋松夹线螺母 5. 用油石磨光再抛光 6. 调节线量调节板
2	跳针	1. 面线跳针	1. 调整弯针勾取量 2. 调整弯针与机针的间隙 3. 调整机针同弯针的同步 4. 根据缝线的情况调整线量调节板 5. 调整中间导线钩的位置 6. 检查机针安装是否正确 7. 检查保针架的位置和同步是否正确 8. 检查缝线是否穿正确
		2. 底线跳针	1. 按上述面线跳针1.2检查 2. 检查底线凸轮的同步 3. 稍微增强底线的张力 4. 检查缝线穿得是否正确
		3. 使用化纤线时的跳针	1. 使用硅油 2. 降低转速 3. 使用化纤线用的机针
		4. 使用合成纤维线时的跳针	1. 降低转速 2. 使用硅油
3	线迹不良	1. 面线张力太弱 2. 底线张力太弱 3. 缝线太粗 4. 中间导线钩的位置不够正确	1. 旋紧面线夹线螺母 2. 旋紧底线夹线螺母 3. 调换大号机针 4. 调整中间导线钩的位置

		5. 挑线杆线量调节板位置不正确 6. 针板	5. 调整线量调节板的位置 6. 使用针孔大的针板
4	断针	1. 机针弯 2. 送料和机针不同步 3. 压脚的安装有问题 4. 保针架有问题 5. 面线张力过强 6. 机针太粗	1. 调换机针 2. 调整到同步 3. 压脚孔、针板孔的中心与机针中心要一致 4. 检查保针架的位置与同步 5. 放松面线张力 6. 使用合适的机针
5	起绉	1. 缝线张力过强 2. 底线打线凸轮不同步 3. 各过线处光洁度有问题 4. 压脚压力太强	1. 降低缝线张力, 特别是底线的张力 2. 进行调节, 使其同步 3. 研磨各过线部分 4. 旋松调压螺钉

## 28、Common breakdowns and measures of trouble shooting:

No.	Breakdown	cause	measures to be taken
1	Thread breakage	1. Poor thread quality 2. Thread being too thick 3. Fusing thread due to high temperature of needle caused by machine's operation at high speed 4. Tension being too higher 5. Breakage of needle, looper, throat plate, and needle guard at the location of thread guide 6. Failure to adjust thread amount	1. Quality thread to be used. 2. Replacement to be made by an appropriate thread 3. Silicone oil to be used and speed to be reduced 4. The tension nut to be loosened 5. First grinding with oil stone and then polishing 6. adjusting the thread amount adjusting plate
2	skipping stitch	1. skipping stitch of needle thread (leaking of two stitches due to the looper's failure to hook the needle thread)  2. Skipping stitch of bobbin thread (leaking of one stitch, needle's failure to enter the looper eyelet)	1. adjusting thread-hooking amount of looper 2. adjusting clearance between looper and needle 3. The timing of needle in reference to looper 4. adjusting the thread-amount adjusting plate on thread amount changing conditions. 5. adjusting the frame thread eyelet 6. checking whether the mounting position of the needle is proper or not 7. To see if the location of needle guard is in an appropriate way and the timing of it is well regulated in relation to another 8. To see if the needle thread threading is in a proper way  1. Reference to the above cases 1 and 2, as to skipping stitch of the needle thread.

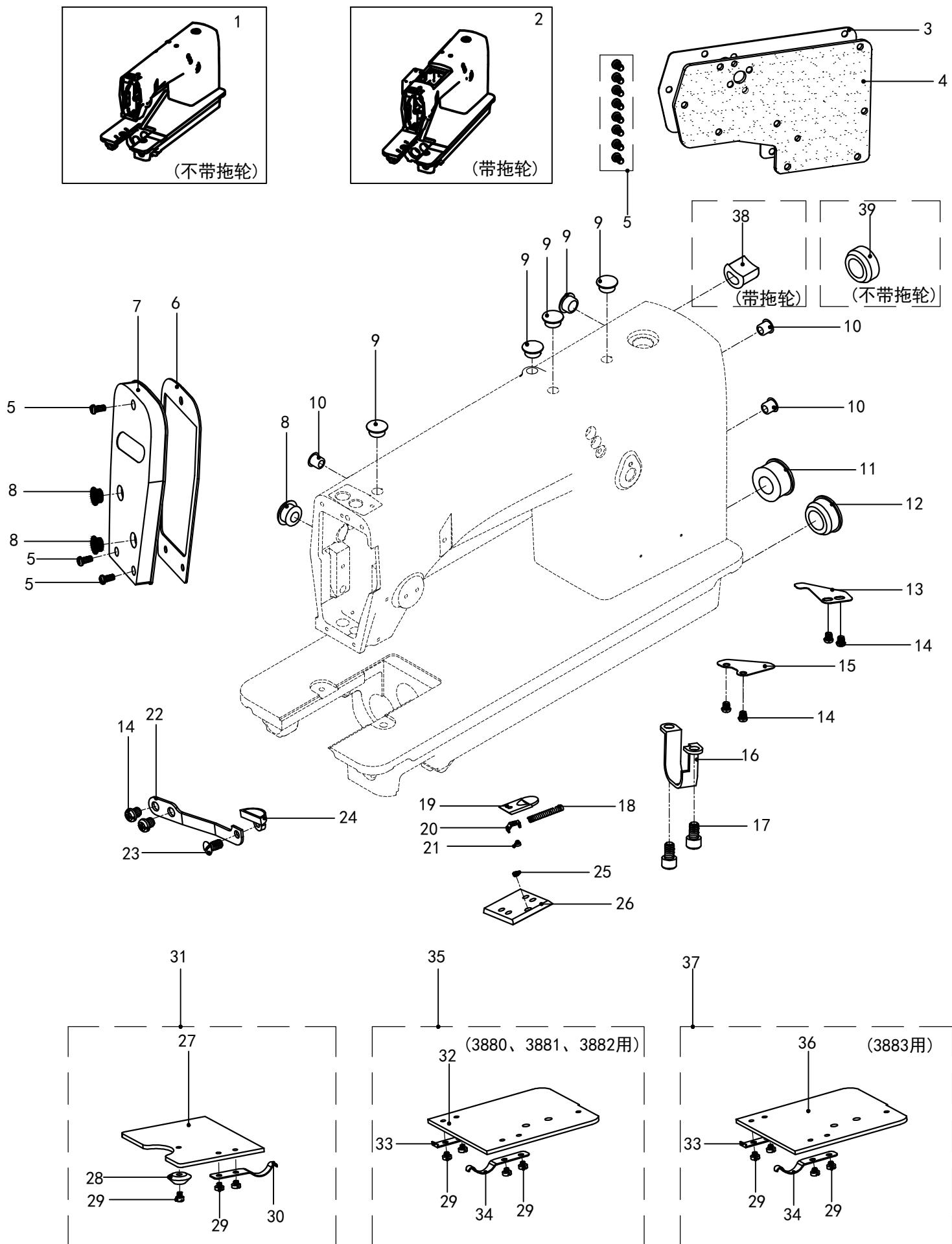
			<ol style="list-style-type: none"> <li>2. To see if the timing of bobbin thread cam has been well regulated.</li> <li>3. Increasing tension of bobbin thread a bit higher</li> <li>4. To see if the threading of bobbin thread is in a correct way</li> </ol>
		3. Skipping stitch when thread of chemical fibre being in use	<ol style="list-style-type: none"> <li>1. Using silicone oil</li> <li>2. Reducing speed</li> <li>3. Using needle for thread of chemical fibre</li> </ol>
		4. Skipping stitch when thread of polyester fibre being in use	<ol style="list-style-type: none"> <li>1. Reducing speed</li> <li>2. Silicone oil to be used</li> </ol>
3	Twisted stitches	<ol style="list-style-type: none"> <li>1. needle thread tension being too low.</li> <li>2. Bobbin thread tension being too low</li> <li>3. Sewing thread being too thick</li> <li>4. Improper position of the frame thread eyelet</li> <li>5. Improper position of thread take-up tension plate</li> <li>6. Throat plate</li> </ol>	<ol style="list-style-type: none"> <li>1. Tightening tension nut of needle thread.</li> <li>2. Thhtening tension nut of bobbin thread</li> <li>3. needle of large size to be used</li> <li>4. Readjusting it to a proper position</li> <li>5. Readjusting its position in an appropriate way</li> <li>6. The eyelet of throat plate to be used being bigger than normal one</li> </ol>
4	Breakage of needle	<ol style="list-style-type: none"> <li>1. needle being bent.</li> <li>2. The operation of feed dog being not well regulated in reference to the motion of needle</li> <li>3. Setting-up of the presser foot</li> <li>4. The problem of the timing of needle guard remaining unsolved</li> <li>5. needle thread tension being too high</li> <li>6. needle being too thick</li> </ol>	<ol style="list-style-type: none"> <li>1. needle to be replaced by another of proper size</li> <li>2. Readjusting the timing to feed dog in respect to the needle</li> <li>3. To make both the centre of the hole of the presser foot and the centre of the eyelet of the throat plate be in line with that of the eye of the needle.</li> <li>4. The positioning &amp; the timing of the needle guard to be taken into account</li> <li>5. Relaxing needle thread</li> <li>6. appropriate needle to be used</li> </ol>
5	Puckering	<ol style="list-style-type: none"> <li>1. Thread tension being too high</li> <li>2. The problem of the timing of the bobbin thread cam for thread guiding failing to be solved</li> <li>3. The problem of surface finish arising From bobbin thread going through the parts on the thread guide.</li> <li>4. The force on the presser foot being too great</li> </ol>	<ol style="list-style-type: none"> <li>1. Decreasing thread tension, esp. tension of bobbin thread.</li> <li>2. Readjusting of the very cam said to solve the timing problem</li> <li>3. Surface finishing all the arts on the thread guide</li> <li>4. Turing counter-clockwise the pressure-regulating screw.</li> </ol>

# 零件手册 PARTS LIST

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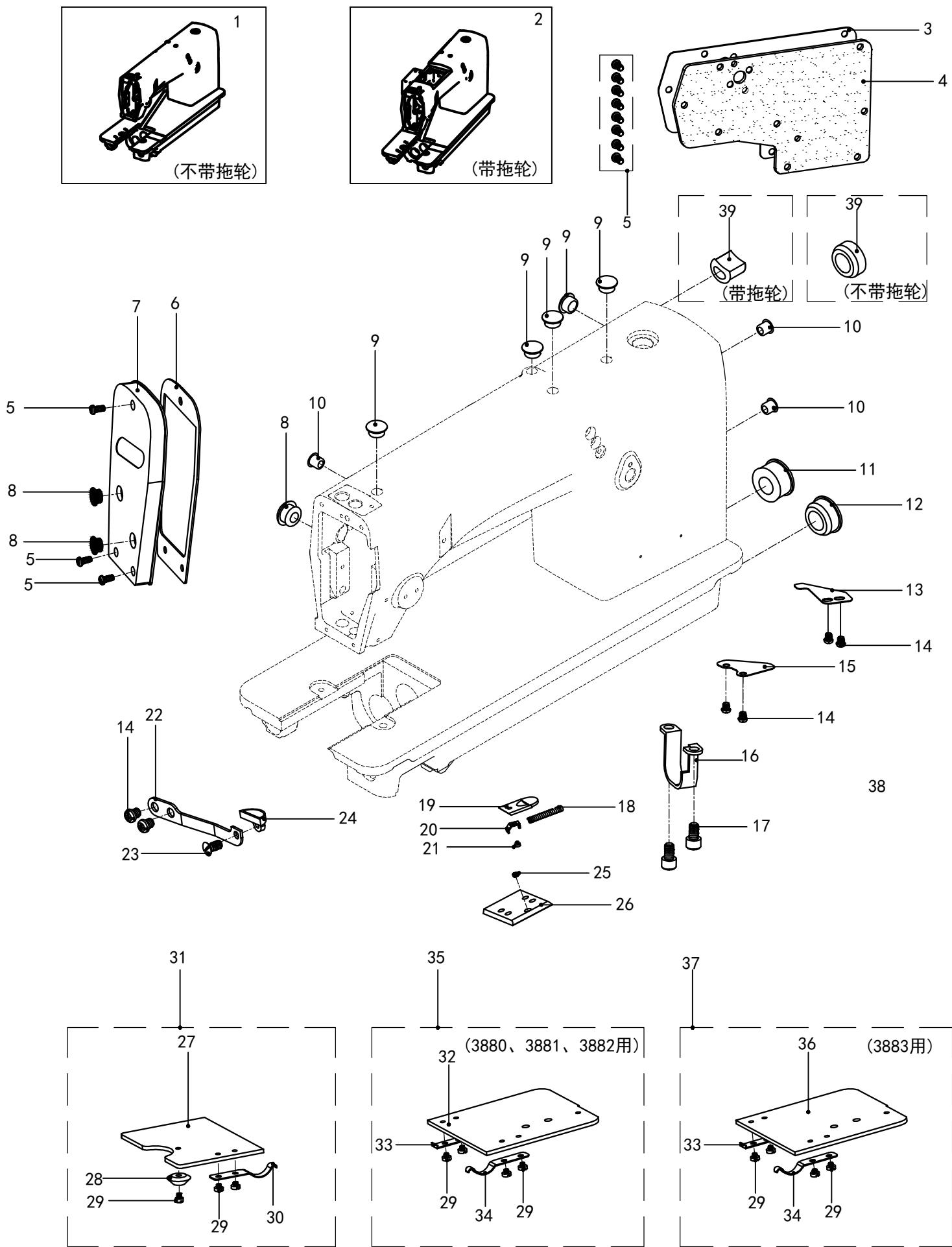
## A. 机体部份 Machine frame components



## A、机体部份 Machine frame components

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880A-1	V20-01	机壳/Machine frame	1
2	3880A-2	V20-01-P	机壳/Machine frame	1
3	3880A-3	V01-04	后窗板/Side plate	1
4	3880A-4	V01-05X	后窗板垫/Gasket	1
5	3880A-5	LD00113	螺钉SM4.36-9/Screw SM4.36	11
6	3880A-6	V01-08X	面板垫/Face plate gasket	1
7	3880A-7	V01-07	面板/Face Plate	1
8	3880A-8	V01-40	橡胶塞/Rubber Cap	3
9	3880A-9	V01-39	橡胶塞/Rubber Cap	5
10	3880A-10	V01-38	橡胶塞/Rubber Cap	3
11	3880A-11	V01-43	橡胶塞/Rubber Cap	1
12	3880A-12	V01-42	橡胶塞/Rubber Cap	1
13	3880A-13	V01-36	抬牙轴底板挡油板/Bed oil shield	1
14	3880A-14	LD00158	螺钉SM4.36-5.5/Screw SM4.76	6
15	3880A-15	V01-34	送料轴底板挡油板/Bed oil shield	1
16	3880A-16	V01-03	底板支承板/Bed support	1
17	3880A-17	LD00112	内六角圆柱头螺钉SM5.95-10/Screw SM5.95	2
18	3880A-18	TH00046	凸轮盖压板弹簧/Spring	1
19	3880A-19	V01-11	凸轮盖压板/Cam cover latch	1
20	3880A-20	V01-13	凸轮盖压板弹簧座/Spring suspension	1
21	3880A-21	LD00114	螺钉SM3.18-2.6/Screw SM3.18	1
22	3880A-22	V01-30	推板锁簧/Bed slide lock spring	1
23	3880A-23	LD00120	螺钉SM3.18-4/Screw SM3.18	1
24	3880A-24	V01-32	推板簧把手/Latch	1
25	3880A-25	LD00115	螺钉SM5.95-3.4/Screw SM5.95	1
26	3880A-26	V01-15-F	附件安装板/Attachment installing plate	1
27	3880A-27	V01-25	推板/Bed slide	1
28	3880A-28	V01-28	推板导轮/Bed slide guide	1
29	3880A-29	LD00118	螺钉SM2.38-2.5/Screw SM2.38	7
30	3880A-30	V01-26	推板簧/Spring	1
31	3880A-31	V01-24-ZJ	推板部件/Bed slide asm.	1
32	3880A-32	V01-18	凸轮盖/Cam cover	1
33	3880A-33	V01-19	凸轮盖托板/Cam cover	1
34	3880A-34	V01-20	凸轮盖弹簧/Spring	1
35	3880A-35	V01-17-ZJ	凸轮盖部件/Cam cover asm	1

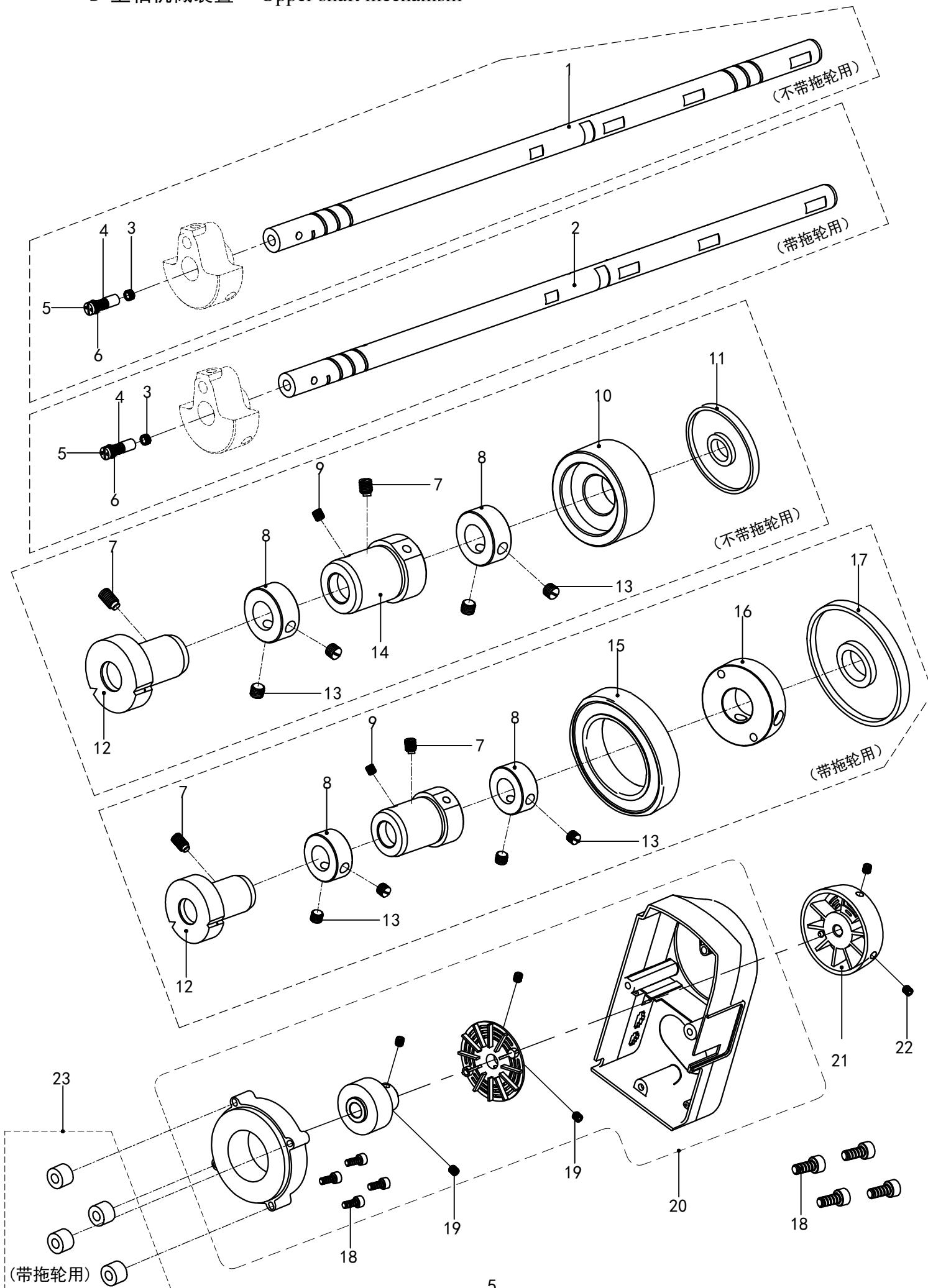
## A. 机体部份 Machine frame components



## A、机体部份 Machine frame components

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
36	3880A-36	V17-09	凸轮盖/Cam cover	1
37	3880A-37	V17-09-ZJ	凸轮盖部件/Cam cover asm	1
38	3880A-38	V20-14	橡胶塞/Rubber Cap	1
39	3880A-39	V20-66	橡胶塞/Rubber Cap	1

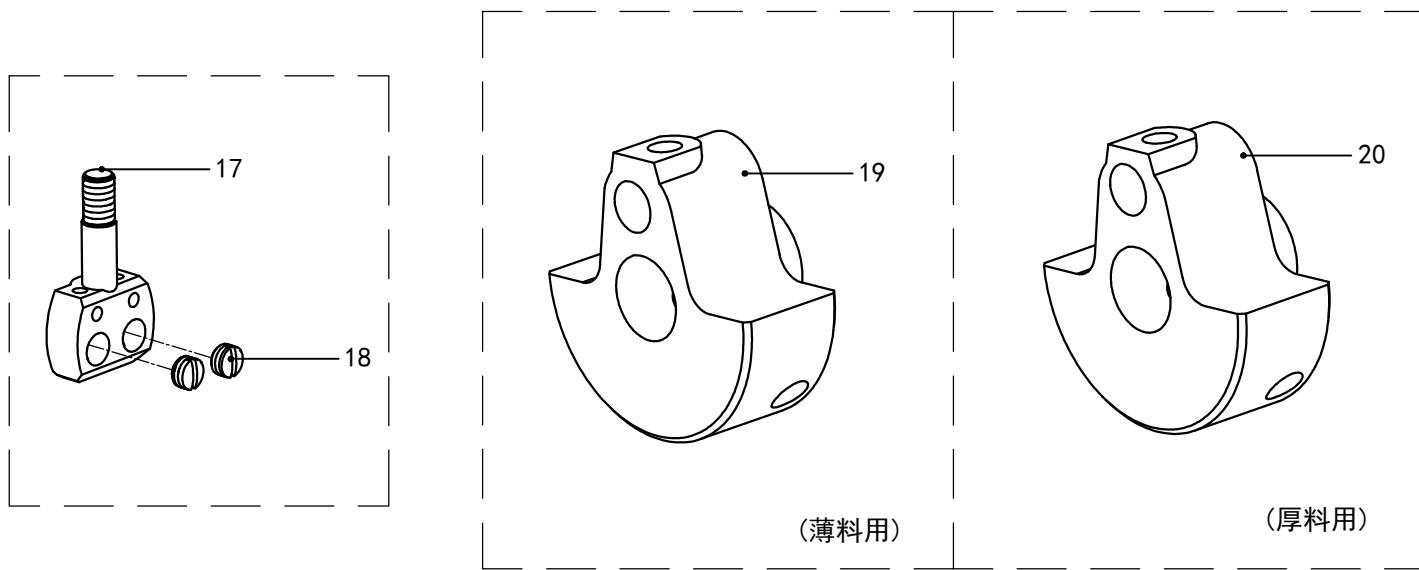
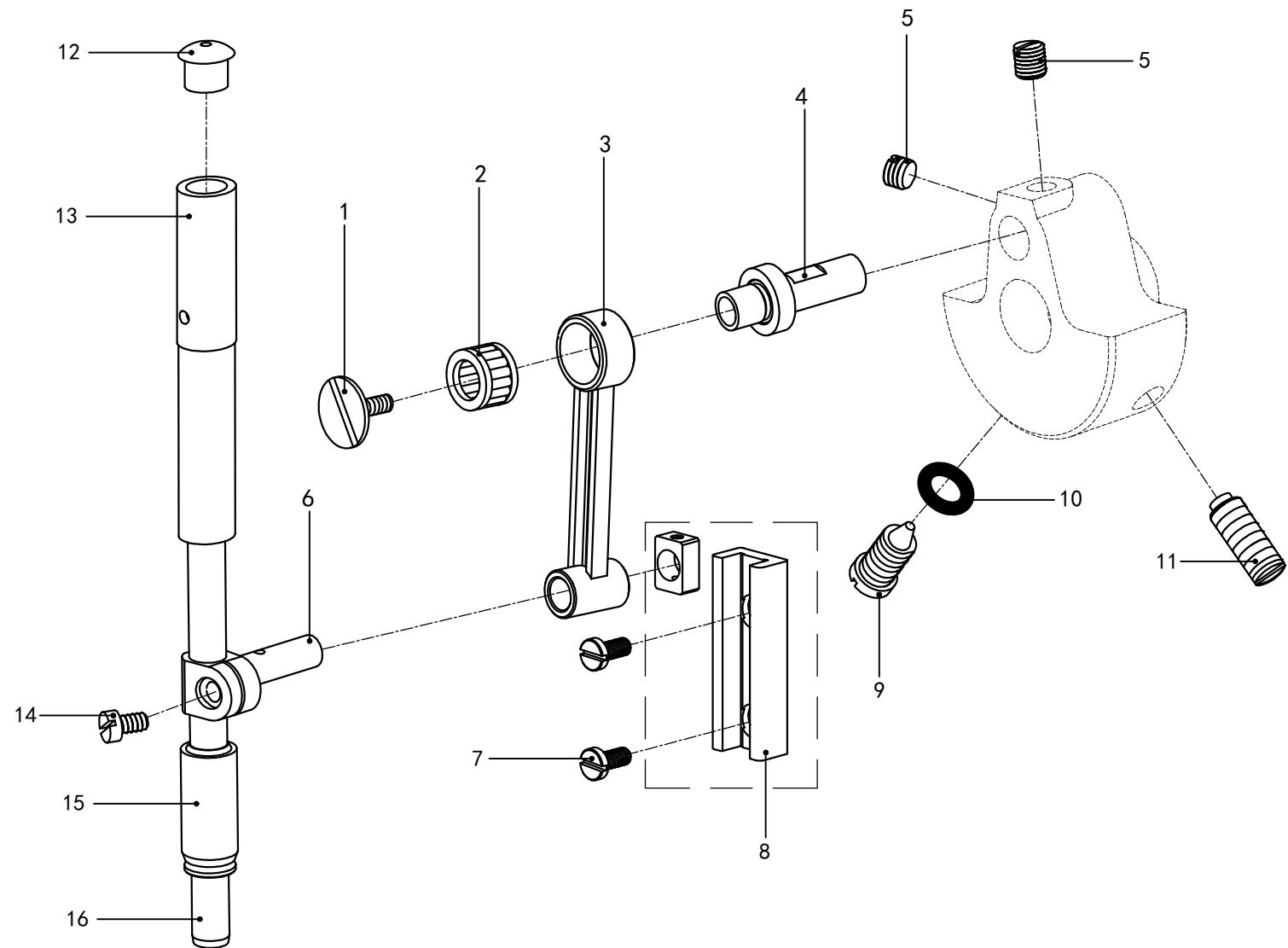
B-上轴机械装置 Upper shaft mechanism



## B-上轴机械装置 Upper shaft mechanism

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880B-1	V20-27-DD	上轴/Upper Shaft	1
2	3880B-2	V20-27-DD-P	上轴/Upper Shaft	1
3	3880B-3	V02-13	曲柄油量限制毡/Roller felt	1
4	3880B-4	V02-15	曲柄油量调节销套/Rubber bushing	1
5	3880B-5	V02-14	曲柄油量调节销/Crank oil adjusting pin	1
6	3880B-6	DXQ00011	O形圈/O Ring	1
7	3880B-7	V02-12	轴套螺钉/Screw	2
8	3880B-8	V02-07	上轴挡圈/Collar	2
9	3880B-9	LD00126	螺钉SM5.95-7/Screw SM5.95	1
10	3880B-10	V20-65	上轴后轴套/Main Shaft Bushing (Rear)	1
11	3880B-11	YF00029	油封15X36X7/Oil Seal	1
12	3880B-12	V20-19	上轴前铜套/Copper sets	1
13	3880B-13	LD00356	紧定螺钉SM6.35-6/Screw SM6.35	4
14	3880B-14	V02-09	上轴中轴套部件/Main shaft bushing intermediate	1
15	3880B-15	ZC00043	轴承/Ball Bearing	1
16	3880B-16	V20-64	轴承套/Ball bearing sets	1
17	3880B-17	YF00020	油封15X55X5/Oil Seal	1
18	3880B-18	LD00122	内六角圆柱头螺钉M5X25/Screw	8
19	3880B-19	LD00003	内六角紧定螺钉M6X6/Screw	4
20	3880B-20	3880DK-3-01	琦星简易款一体机/Motor asm.	1
21	3880B-21	V20-04DD	手轮/Hand wheel	1
22	3880B-22	LD00083	内六角紧定螺钉M5X5/Screw	2
23	3880B-23	V20-63	电机垫块/Motor cushion block	4

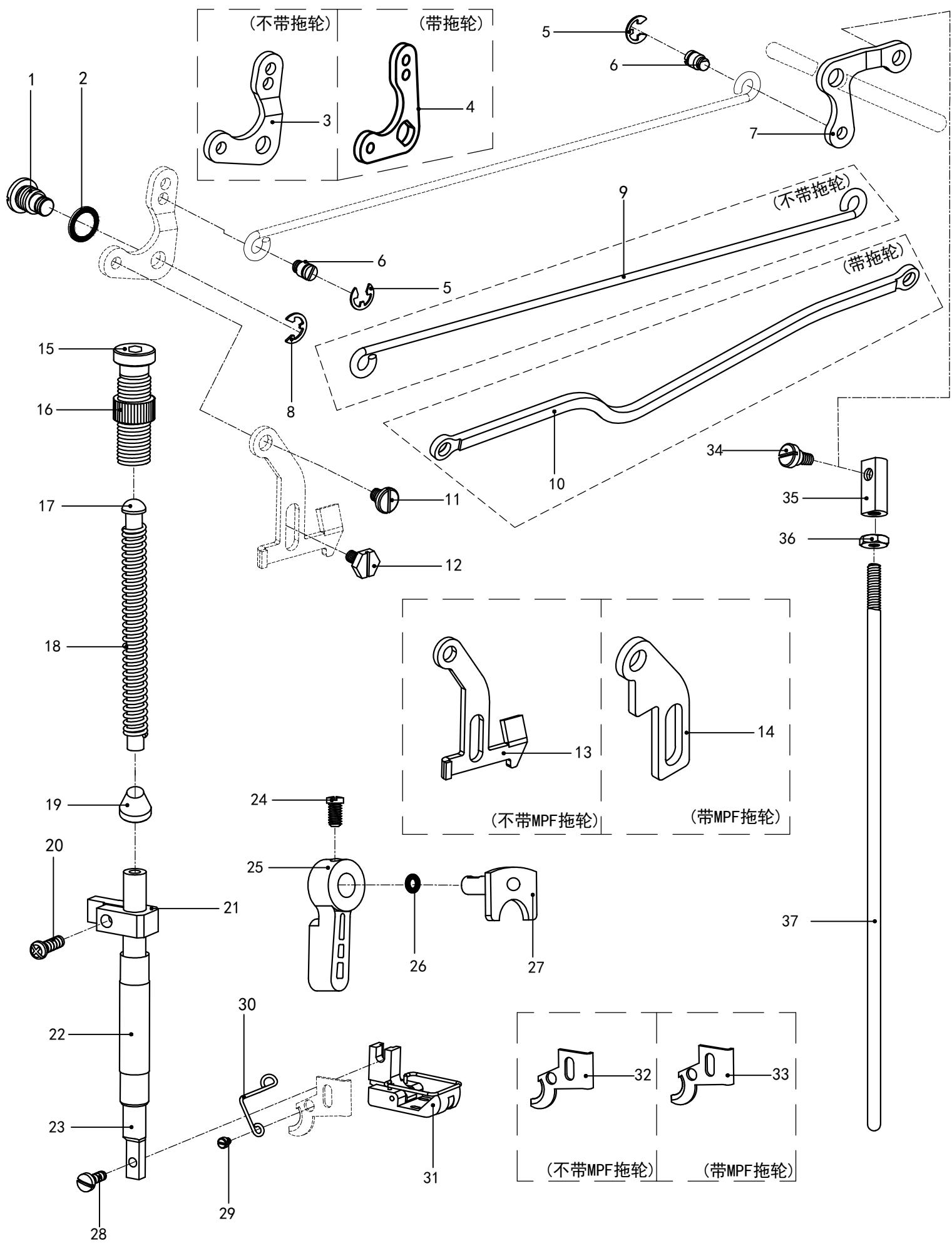
C-针杆装置 Needle bar mechanism



## C-针杆装置 Needle bar mechanism

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880C-1	V02-26	针杆连杆左旋螺钉/Left twist screw	1
2	3880C-2	ZC00010	滚针轴承/Ball Bearing	1
3	3880C-3	V02-24	针杆连杆/Connecting Rod	1
4	3880C-4	V02-21	针杆连杆销/Pin	1
5	3880C-5	LD00143	紧定螺钉SM5. 95-6/Screw SM5.95	2
6	3880C-6	V02-31	针杆抱箍/Needle Bar Clamp	1
7	3880C-7	LD00139	紧定螺钉SM3. 57-8/Screw SM3.57	2
8	3880C-8	V02-38	针杆滑块槽组件/Needle Bar GuideAssy	1
9	3880C-9	V02-18	定位螺钉SM7. 14-16/Screw SM7.14	1
10	3880C-10	DXQ00012	O形圈/O Ring	1
11	3880C-11	V02-20	紧定螺钉SM7. 14-19/Screw SM7.14	1
12	3880C-12	V02-29	针杆上衬套孔塞/Rubber plug	1
13	3880C-13	V02-27	针杆上衬套/Needle bar bushing	1
14	3880C-14	LD00127	螺钉SM3. 57-6/Screw SM3.57	1
15	3880C-15	V02-30	针杆下套/Needle Bar Bush,Lower	1
16	3880C-16	V02-34	针杆/Needle Bar	1
17	3880C-17	V02-35	针夹(1/4") /Needle clamp	1
18	3880C-18	LD00129	螺钉SM4. 36-2. 8/Screw SM4.36	2
19	3880C-19	V02-17	针杆曲柄/Counterweight asm.	1
20	3880C-20	V02-17H	针杆曲柄/Counterweight asm.	1

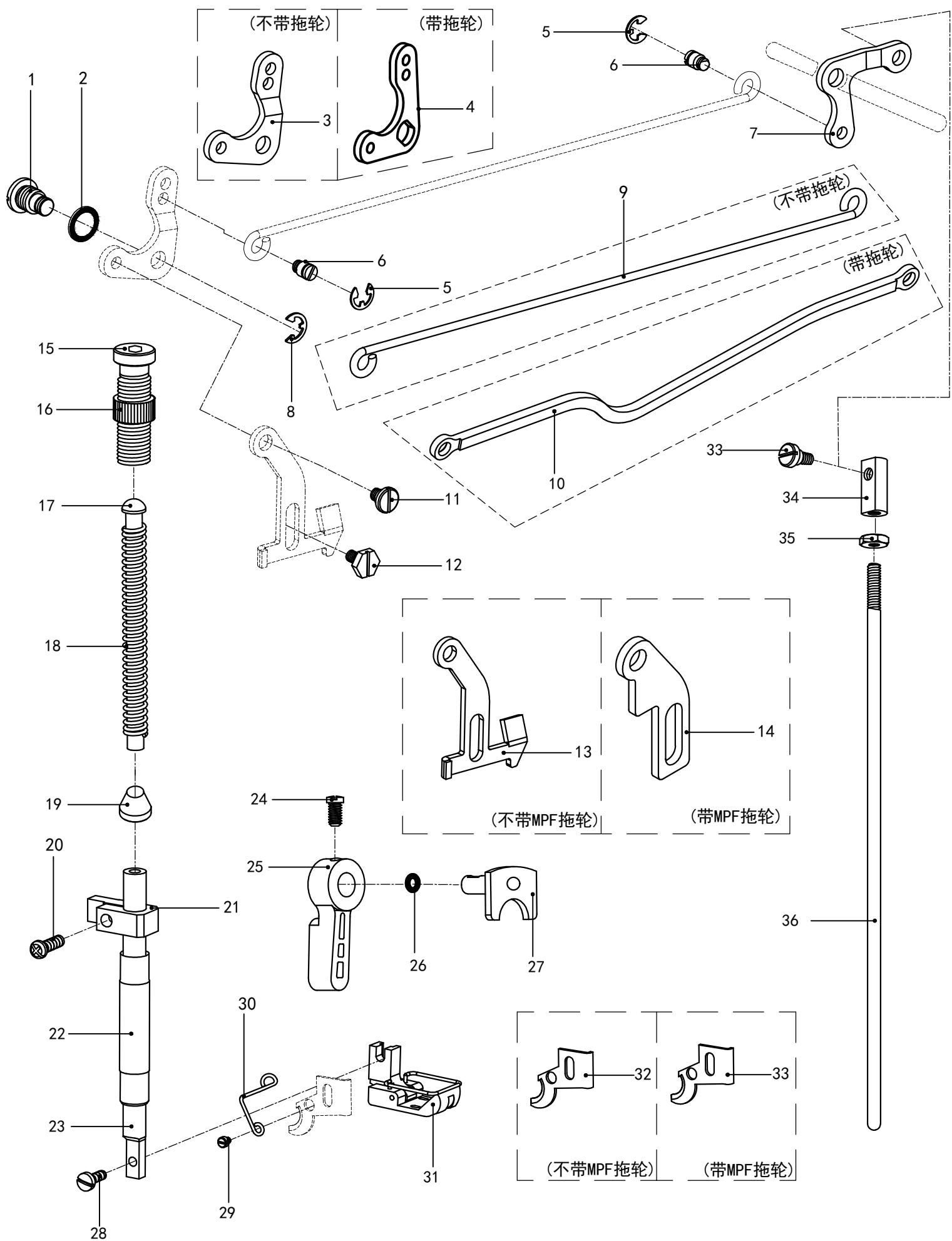
D-压脚杆装置 Presser bar mechanism



## D-压脚杆装置 Presser bar mechanism

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880D-1	V03-24	前杠杆螺纹销/Hinge pin	1
2	3880D-2	DQ00038	前杠杆螺纹销垫圈/Washer	1
3	3880D-3	V03-22	抬压脚前杠杆/Leverage tablets	1
4	3880D-4	V18-51	抬压脚前杠杆/Leverage tablets	1
5	3880D-5	TDQ00002	开口挡圈5/Ring	2
6	3880D-6	V03-29	抬压脚拉杆螺钉/Screw	1
7	3880D-7	V03-31	抬压脚后杠杆/Lifting lever link rear	1
8	3880D-8	TDQ0006	开口挡圈6/Ring	1
9	3880D-9	V03-28	抬压脚拉杆/Lifting lever connecting rod	1
10	3880D-10	V20-30	抬压脚拉杆/Lifting lever connecting rod	1
11	3880D-11	V03-23	前杠杆轴位螺钉/Hinge Screw	1
12	3880D-12	V03-21	升降板轴位螺钉/Hinge Screw	1
13	3880D-13	V03-20	压脚升降板/Lifting lever	1
14	3880D-14	V19-31	压脚升降板/Lifting lever	1
15	3880D-15	V03-01-G	调压螺钉/Presser spring rugulator	1
16	3880D-16	V03-02-G	调压螺钉螺母/Nut	1
17	3880D-17	V03-03	调压导杆/Presser bar guide bar	1
18	3880D-18	V03-04	调压簧/Presser spring	1
19	3880D-19	928D033	压杆防油套/Presser Bar Defend Oil Set	1
20	3880D-20	LD00130	螺钉SM4.36-14/Screw SM4.36	1
21	3880D-21	V03-06	压杆导架/Presser bar guide bracket asm.	1
22	3880D-22	V03-08	压杆衬套/Presser bar bushing,lower	1
23	3880D-23	V03-05	压杆/Presser bar	1
24	3880D-24	LD00152	螺钉SM4.76-9/Screw SM4.76	1
25	3880D-25	V03-15	压脚扳手/Hand lifter	1
26	3880D-26	DXQ00040	O形圈/O Ring	1
27	3880D-27	V03-18	压脚扳手凸轮部件/Hand lifter cam asm.	1
28	3880D-28	LD00132	压脚螺钉SM3.57-10.5/Screw SM3.57	1
29	3880D-29	LD00161	螺钉SM2.38-3.6/Screw SM2.38	1
30	3880D-30	V03-13	切线刀导钩/Thread knife guide	1
31	3880D-31	V03-10	压脚部件1/4 "/Presser foot asm.	1
32	3880D-32	V03-12	切线刀/Thread knife	1
33	3880D-33	V03-12-PLB	切线刀/Thread knife	1
34	3880D-34	V03-32	后杠杆轴位螺钉/Hinge Screw	1
35	3880D-35	V03-33	抬压脚顶杆接头/Swivel	1

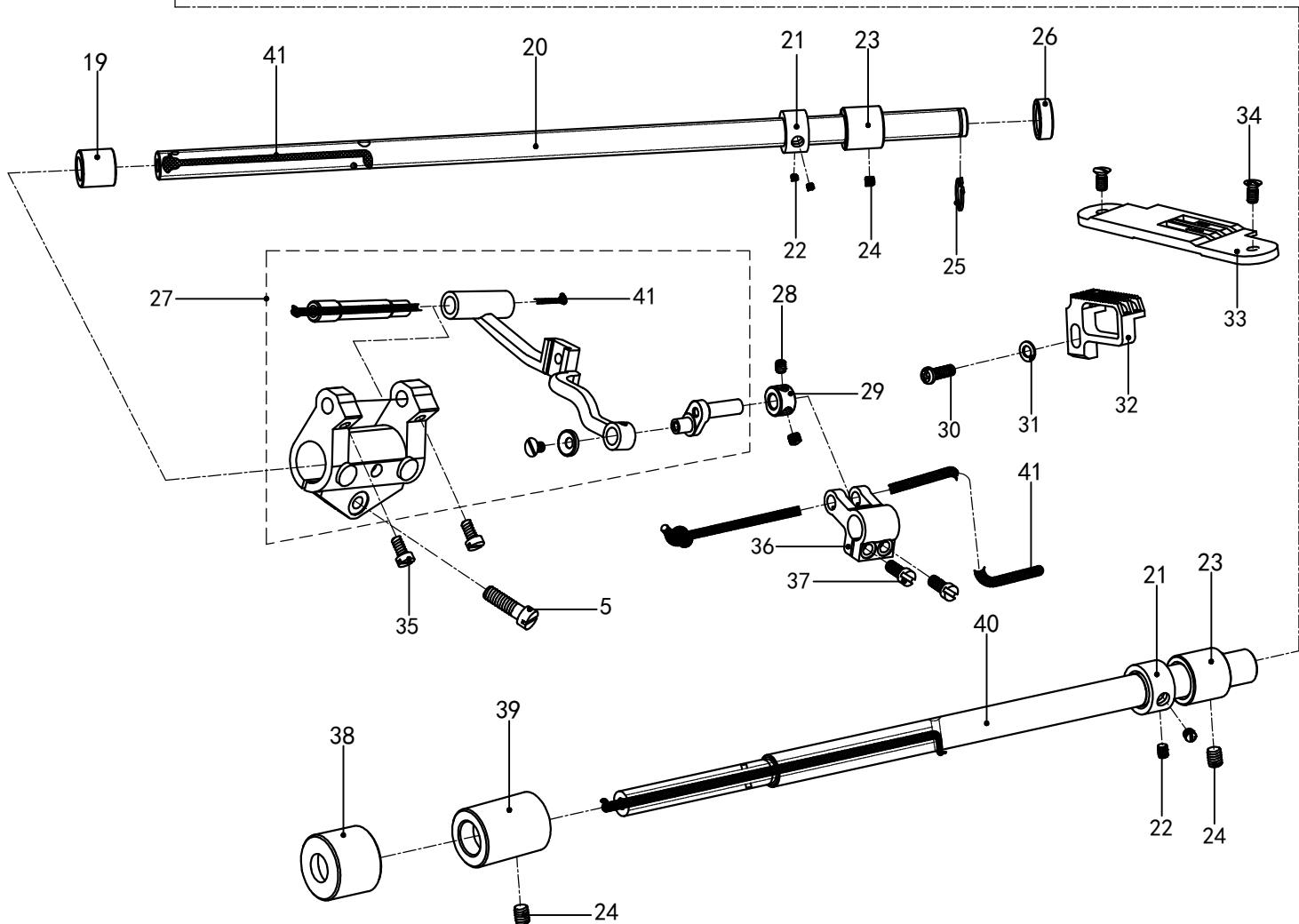
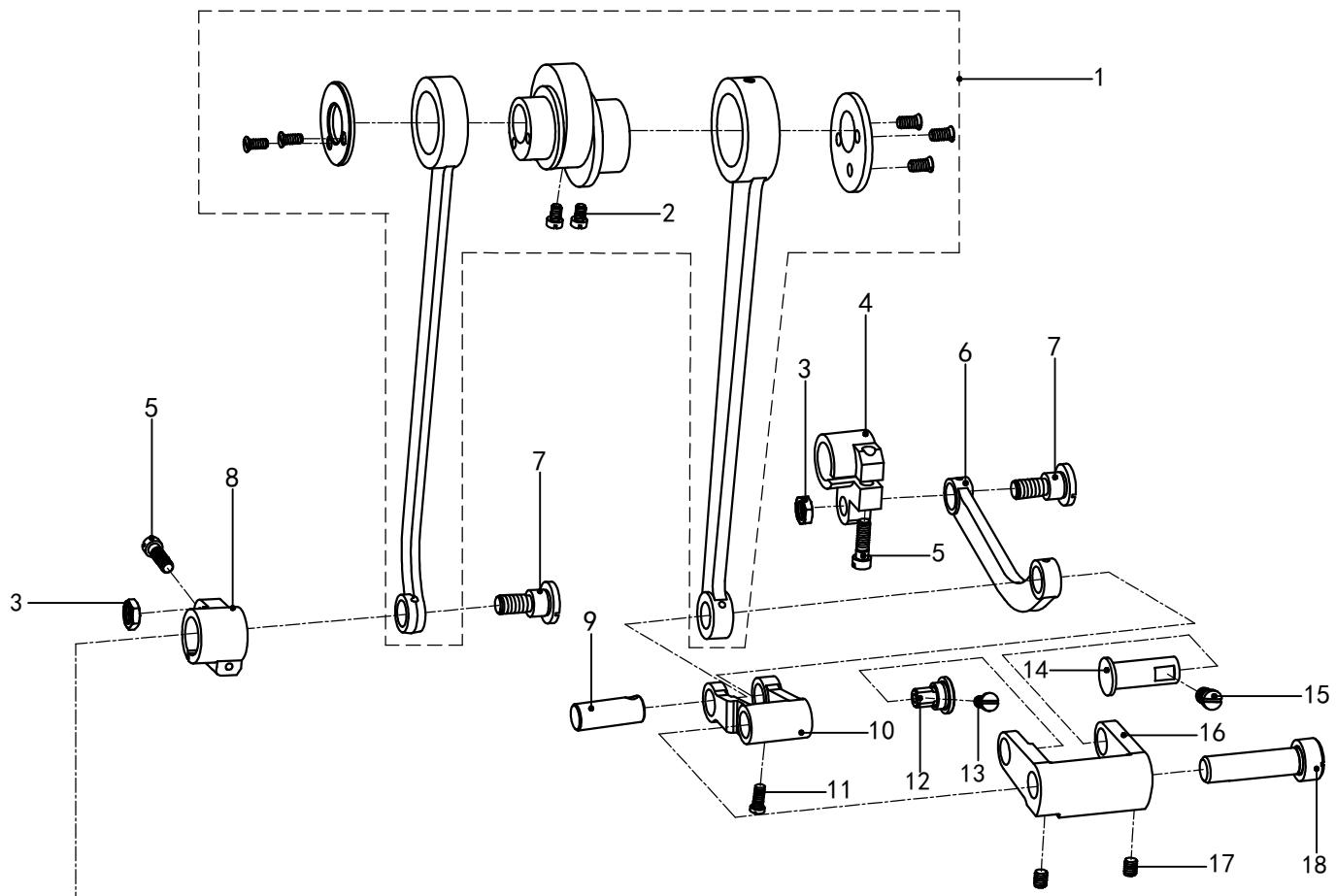
D-压脚杆装置 Presser bar mechanism



D-压脚杆装置 Presser bar mechanism

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
36	3880D-36	LM00008	螺母SM4.76/Nut SM4.76	1
37	3880D-37	V03-34	抬压脚顶杆/lifting lever connecting rod,vertical	1

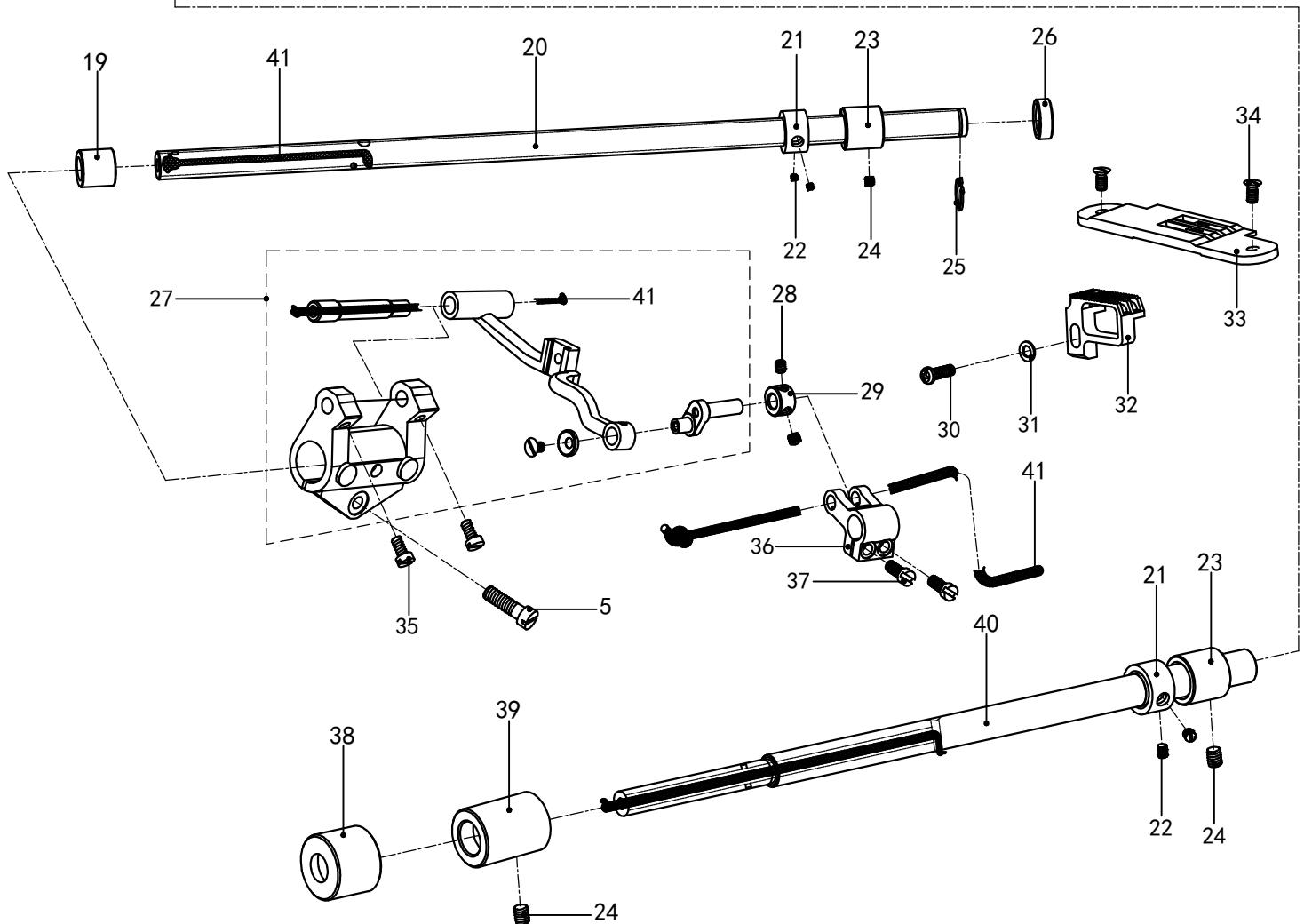
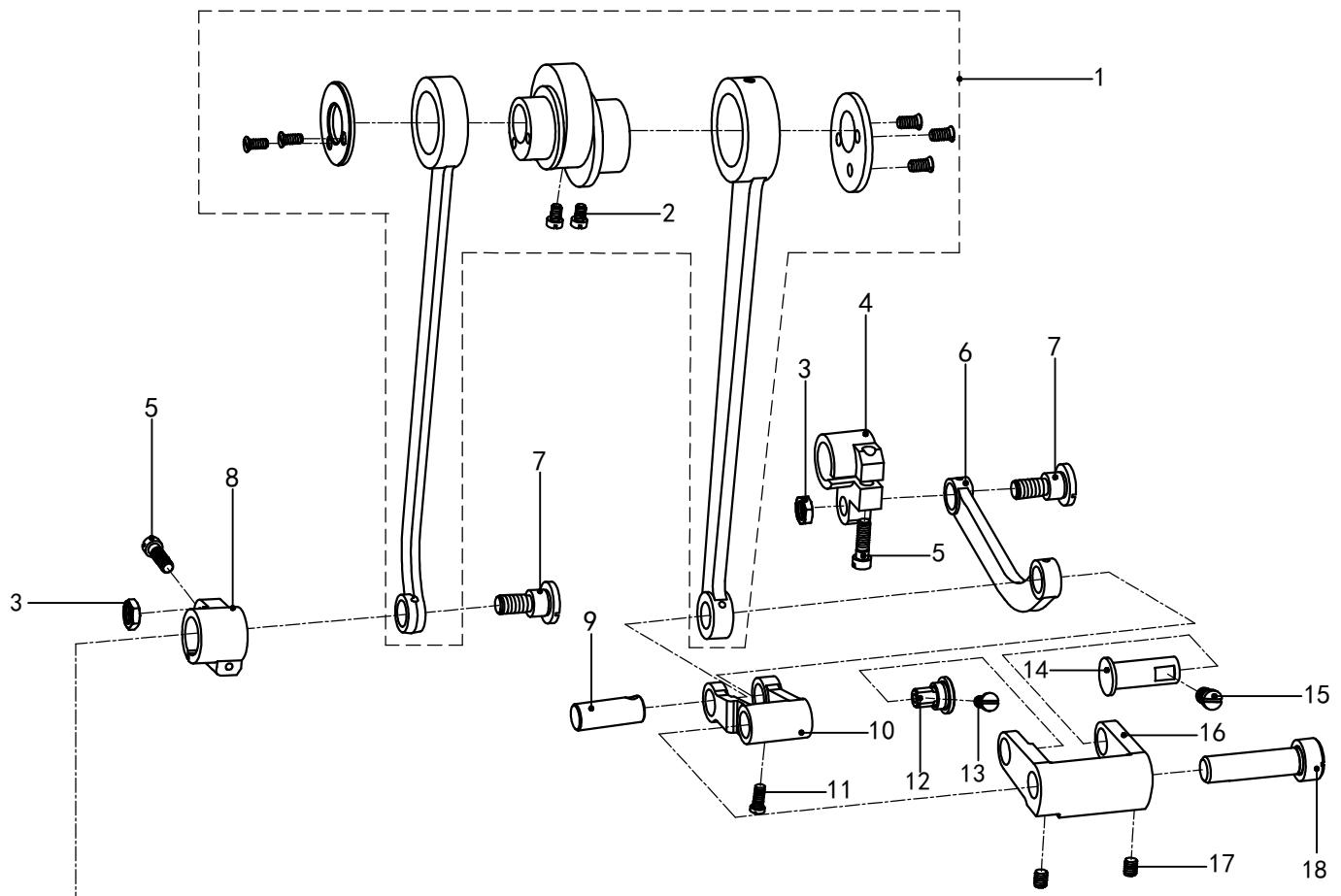
E-送料装置 Feed mechanism



## E-送料装置 Feed mechanism

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880E-1	V04-02	大连杆组件/Dalian rod assembly	1
2	3880E-2	LD00163	螺钉SM6.35-11/Screw SM6.35	2
3	3880E-3	LM00003	螺母SM7.14/Nut SM7.14	2
4	3880E-4	V04-20	送料曲柄/Feed rocker shaft crank	1
5	3880E-5	LD00188	螺钉SM4.76-15.5/Screw SM4.76	3
6	3880E-6	V04-07	送料小连杆/Connecting rod	1
7	3880E-7	V04-18	送料曲柄轴位螺钉/Hinge screw	2
8	3880E-8	V04-47	抬牙后曲柄/Feed driving shaft crank rear	1
9	3880E-9	V04-08	送料连杆销/Connecting pin	1
10	3880E-10	V04-10	送料摆杆/Feed driving rocket arm	1
11	3880E-11	LD00208	螺钉SM4.36-12/Screw SM4.36	1
12	3880E-12	V04-12	送料摆杆座左销/Hingd stud	1
13	3880E-13	LD00184	螺钉SM4.36-10.5/Screw SM4.36	1
14	3880E-14	V04-14	送料摆杆座右销/Hinge pin	1
15	3880E-15	LD00124	螺钉SM5.95-11/Screw SM5.95	1
16	3880E-16	V04-11	送料摆杆座/Feed driving rocket	1
17	3880E-17	LD00186	螺钉SM4.76-6/Screw SM4.76	1
18	3880E-18	V04-16	送料摆杆销/Hinge pin	1
19	3880E-19	V04-30	送料轴前轴套/Feed rocker shaft bushing,front	1
20	3880E-20	V04-22	送料轴/Feed rocker shaft	1
21	3880E-21	V04-28	送料轴挡圈/Thrust collar	2
22	3880E-22	LD00356	紧定螺钉SM6.35-6/Screw SM6.35	4
23	3880E-23	V04-26	送料轴轴后套/Bushing rear	2
24	3880E-24	LD00126	螺钉SM5.95-7/Screw SM5.95	3
25	3880E-25	TDQ00027	送料轴轴用挡圈/Retaining ring	1
26	3880E-26	V04-23	送料轴薄挡圈/Thrust collar	1
27	3880E-27	V04-31	牙架组件/Dental rack assembly	1
28	3880E-28	LD00510	紧定螺钉SM4.36-4/Screw SM4.36	2
29	3880E-29	V04-63	牙架连杆挡圈/Thrust collar	1
30	3880E-30	LD00130	螺钉SM4.36-14/Screw SM4.36	1
31	3880E-31	DQ00039	平垫圈/Washer	1
32	3880E-32	V04-39	送料牙1/4"/Feed dog (1/4")	1
33	3880E-33	V04-42	针板1/4"/Throat plate	1
34	3880E-34	LD00201	针板螺钉SM4.36-8.9/Screw SM4.36	2
35	3880E-35	LD00199	螺钉SM3.57-7.5/Screw SM3.57	2

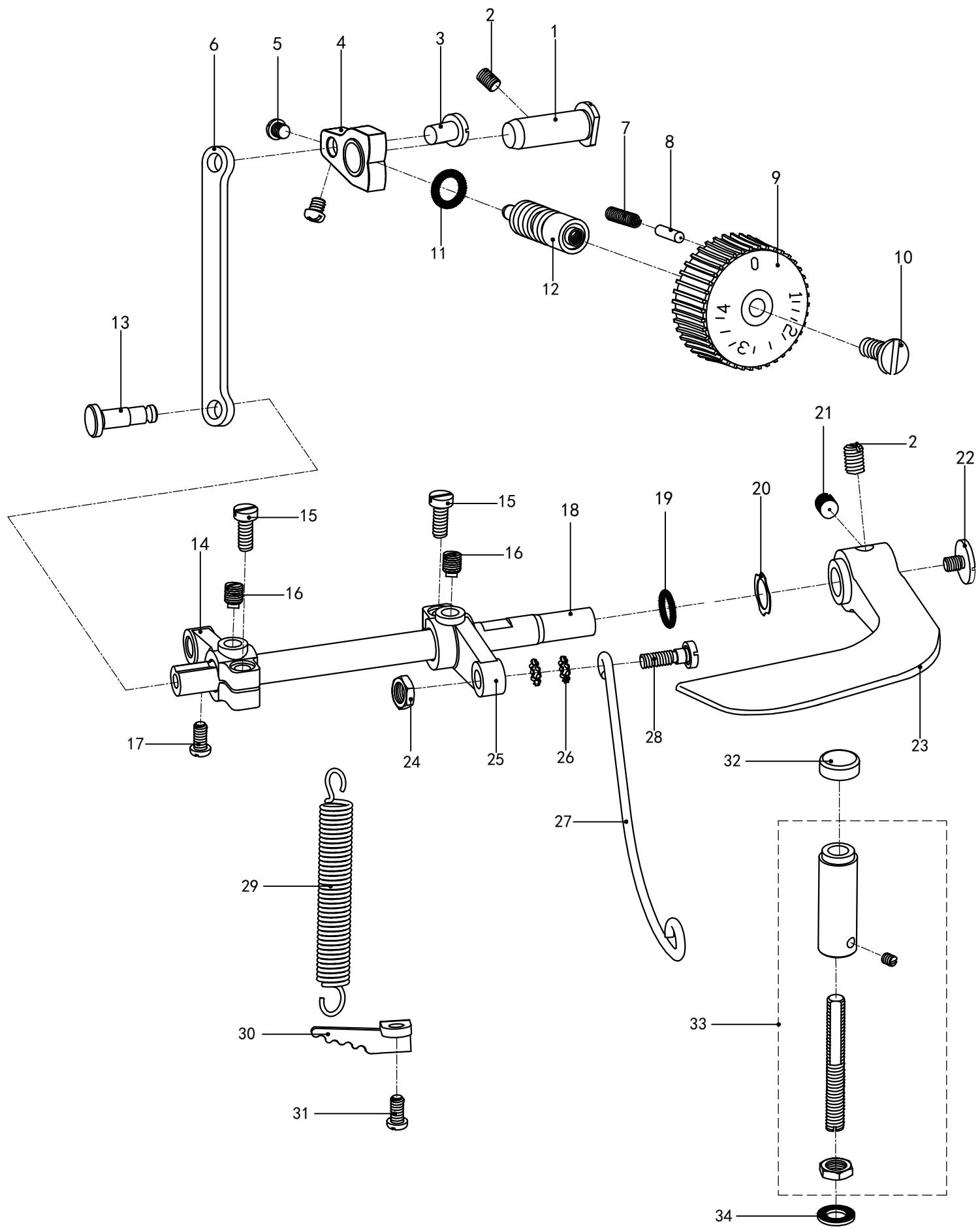
## E-送料装置 Feed mechanism



## E-送料装置 Feed mechanism

序号/No	代号/Assembly No	件号/Part No	名称/Description	数量/Num
36	3880E-36	V04-60	抬牙前曲柄/Feed rocker shaft crank	1
37	3880E-37	LD00203	螺钉SM4.76-12/Screw SM4.76	2
38	3880E-38	V04-59	抬牙轴前轴套/Feed rocker shaft bushing,front	1
39	3880E-39	V04-57	抬牙轴中轴套/Bushing,intermediate	1
40	3880E-40	V04-51	抬牙轴/Feed driving shaft	1
41	3880E-42	V08-25	油线/Wick Nipper	3

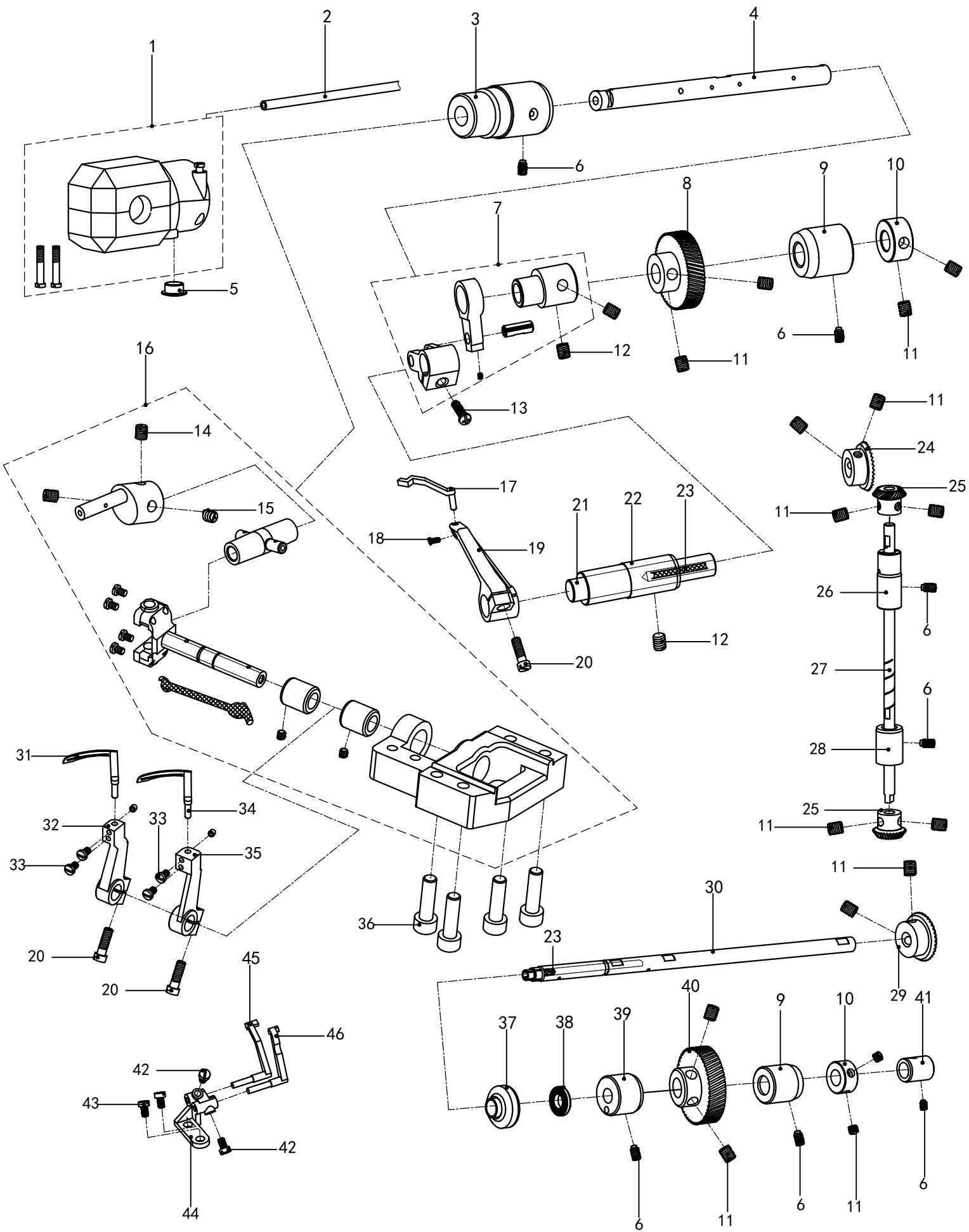
F-送料调节装置 Feeding regulating device



## F-送料调节装置 Feeding regulating device

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880F-1	V05-08	送料调节器销/Hinge pin	1
2	3880F-2	LD00126	螺钉SM5. 95-7/Screw SM5.95	2
3	3880F-3	V05-11	调节器连杆轴/Hinge pin	1
4	3880F-4	V05-07	送料调节器/Feed regulator	1
5	3880F-5	LD00023	螺钉SM4. 36-5/Screw SM4.36	2
6	3880F-6	V05-10	送料小连杆/Connecting rod	1
7	3880F-7	V05-06	送料距缩合销簧/Stitch dial lock spring	1
8	3880F-8	V05-05	送料距锁合销/Stitch dial lock pin	1
9	3880F-9	V05-01	送料距旋钮部件/Stitch dial asm	1
10	3880F-10	LD00206	螺钉SM4. 76-18/Screw SM4.76	1
11	3880F-11	DXQ00014	O形圈/O Ring	1
12	3880F-12	V05-03-F	送料调节螺柱/Feed regulating screw	1
13	3880F-13	V05-13	拉簧调节曲柄销/Tension spring suspension stud	1
14	3880F-14	V05-15	拉簧调节曲柄/Tension spring suspension crank	1
15	3880F-15	LD00188	螺钉SM4. 76-15. 5/Screw SM4.76	2
16	3880F-16	V02-12	轴套螺钉/Screw	2
17	3880F-17	LD00113	螺钉SM4. 36-9/Screw SM4.36	1
18	3880F-18	V05-21-F	倒送料轴/Reverse feed control lever shaft	1
19	3880F-19	DXQ00015	O形圈/O Ring	1
20	3880F-20	DQ00040	倒送料轴弹性垫圈/Waved Washer	1
21	3880F-21	LD00209	螺钉SM5. 95-10/Screw SM5.95	1
22	3880F-22	LD00210	螺钉SM4. 76-6. 5/Screw SM4.76	1
23	3880F-23	V05-24	倒送料扳手/Reverse feed control lever	1
24	3880F-24	LM00020	螺母SM4. 76/Nut SM4.76	1
25	3880F-25	V05-35	倒送料曲柄/Control lever crank,rear	1
26	3880F-26	DQ00042	弹性垫圈/Waved Washer	2
27	3880F-27	V05-38	倒送料连杆/Feed driving rocker arm connecting	1
28	3880F-28	V05-39	轴位螺钉/Hinge screw	1
29	3880F-29	TH00047	弹簧/Spring	1
30	3880F-30	V05-19	拉簧固定板/Suspension bracket	1
31	3880F-31	LD00208	螺钉SM4. 36-11. 5/Screw SM4.36	1
32	3880F-32	V05-34	倒送料挡块橡胶垫/Rubber cushion	1
33	3880F-33	V05-32	倒送料挡块/Lever stopper	1
34	3880F-34	DQ00041	平垫圈/Washer	1

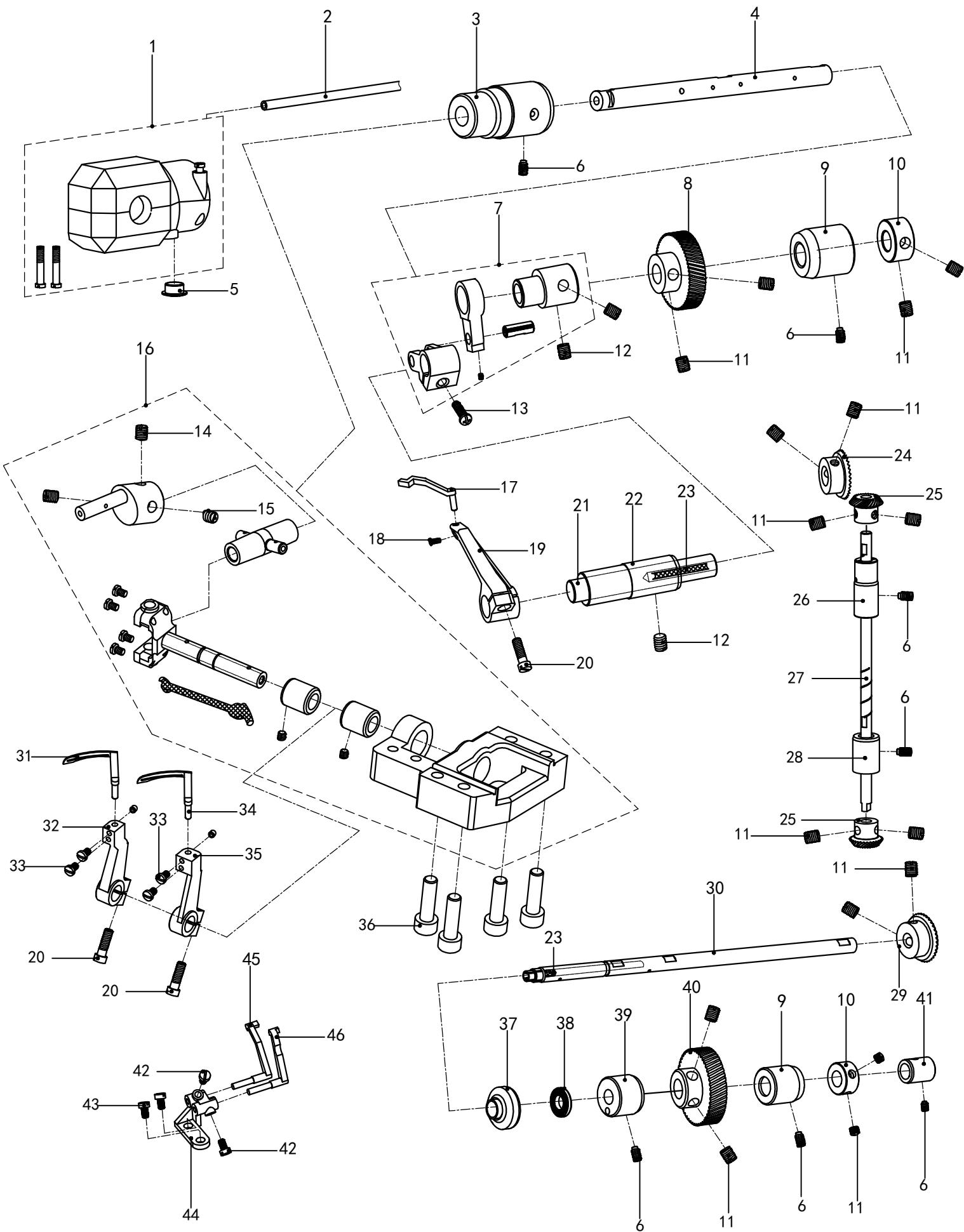
G-弯针勾线分组件 Looper thread retainer components



## G-弯针勾线分组件 Looper thread retainer components

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880G-1	V06-52	弯针曲柄罩壳部件/Crank cover asm	1
2	3880G-2	V08-18	曲柄罩壳排油管/Vinyl tube	1
3	3880G-3	V06-25	弯针轴前轴套部件/Looper thread guard bushing	1
4	3880G-4	V06-22	弯针轴/Looper rocker shaft	1
5	3880G-5	A01-01-B	橡胶塞/Rubber Cap	1
6	3880G-6	V02-12	轴套螺钉/Screw	7
7	3880G-7	V06-56ZJ	护针凸轮组件/Needle guard crank rod	1
8	3880G-8	V06-29	主动弯针齿轮/Gear asm,upper	1
9	3880G-9	V06-14	下轴中轴套部件/Bushing.intermediate	2
10	3880G-10	V06-16	挡圈/Collar	2
11	3880G-11	LD00356	紧定螺钉SM6.35-6/Screw SM6.35	16
12	3880G-12	LD00126	螺钉SM5.95-7/Screw SM5.95	3
13	3880G-13	LD00130	螺钉SM4.36-14/Screw SM4.36	1
14	3880G-14	LD00195	一字紧定螺钉SM6.35-6/Screw SM6.35	2
15	3880G-15	V06-35	弯针曲柄调节螺钉/Screw	1
16	3880G-16	V06-41ZJ	弯针座组件/Cueved needle base assembly	1
17	3880G-17	V06-70	摆动护针杆(1/4)/Driving needle guard(1/4)	1
18	3880G-18	LD00199	螺钉SM3.57-7.5/Screw SM3.57	1
19	3880G-19	V06-68	护针曲柄/rear needle guard rocker arm asm	1
20	3880G-20	LD00188	螺钉SM4.76-15.5/Screw SM4.76	3
21	3880G-21	V06-66	护针轴/Needle guard driving shaft asm	1
22	3880G-22	V06-64	护针轴套/Bushing	1
23	3880G-23	V08-25	油线/Wick Ninpper	1
24	3880G-24	V06-01	上轴伞齿轮/Gear asm	1
25	3880G-25	V06-02	竖轴上伞齿轮/Pinion asm	2
26	3880G-26	V06-03	竖轴上轴套/Bushing,upper	1
27	3880G-27	V06-07	竖轴/Upright shaft	1
28	3880G-28	V06-04	竖轴下轴套部件/Bushing,lower	1
29	3880G-29	V06-09	下轴伞齿轮/Gear asm	1
30	3880G-30	V06-10	下轴/Lower shaft asm.	1
31	3880G-31	V06-51	右弯针/Looper(RIGHT)	1
32	3880G-32	V06-49	右弯针曲柄/Looper holder asm.(RIGHT)	1
33	3880G-33	LD00202	螺钉SM3.57-7.5/Screw SM3.57	4
34	3880G-34	V06-47	左弯针/Looper(LEFT)	1
35	3880G-35	V06-45	左弯针曲柄/Looper holder asm.(LEFT)	1

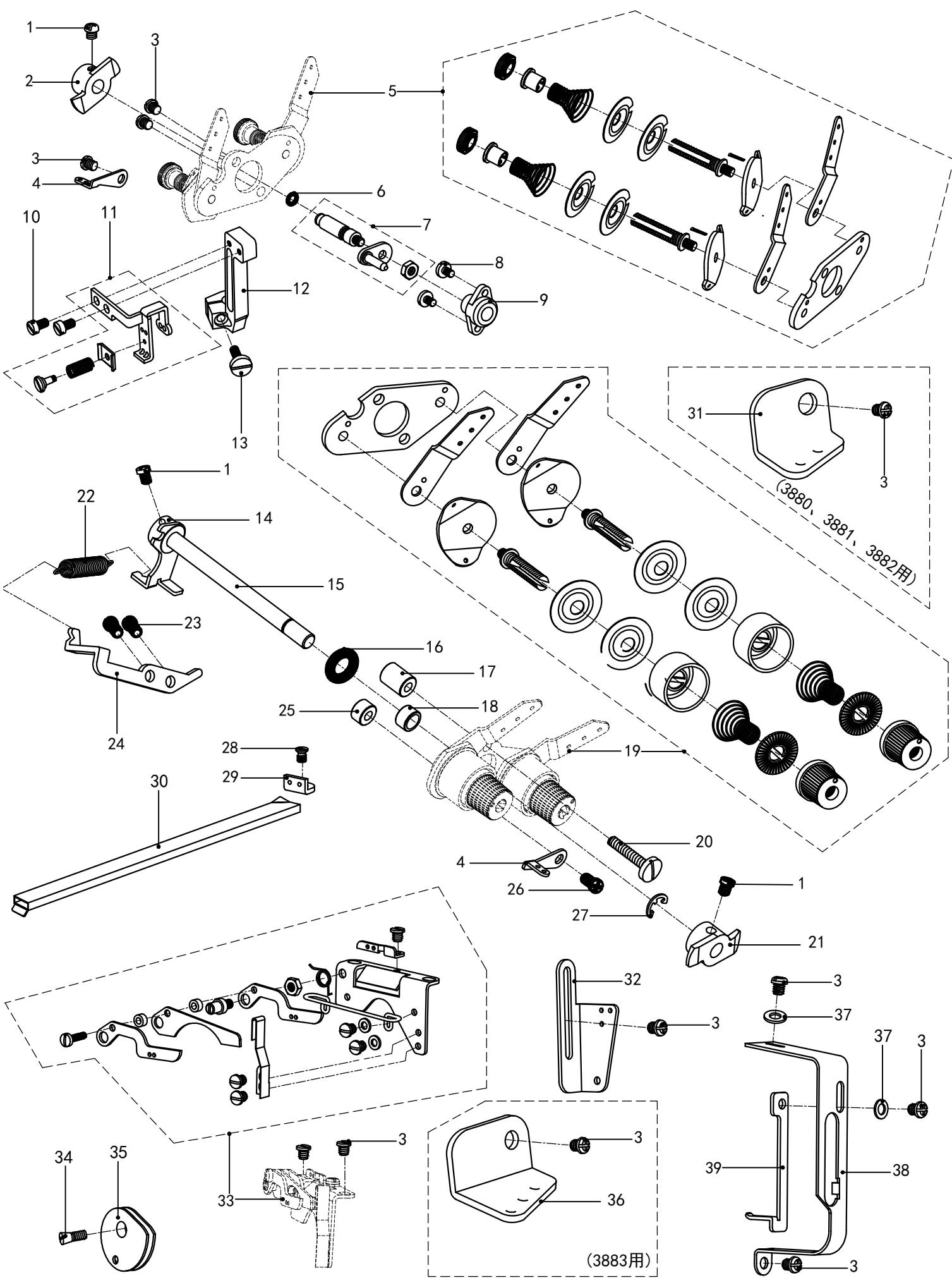
G-弯针勾线分组件 Looper thread retainer components



## G-弯针勾线分组件 Looper thread retainer components

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
36	3880G-36	LD00211	弯针曲柄罩壳部件/Crank cover asm	4
37	3880G-37	V06-20	下轴前轴套油封套/Looper thread guard bushing	1
38	3880G-38	YF00018	油封11X22X4/Oil Seal	1
39	3880G-39	V06-18	下轴前轴套部件/Bushing,front	1
40	3880G-40	V06-31	被动弯针齿轮/Gear asm,lower	1
41	3880G-41	V06-11	下轴后轴套/Bushing,rear	1
42	3880G-42	LD00127	螺钉SM3.57-6/Screw SM3.57	2
43	3880G-43	V06-73	螺钉SM4.36-10.5/Screw SM4.36	2
44	3880G-44	V06-72	护针杆座/Needle guard base	1
45	3880G-45	V06-74	左固定护针杆/Counter needle guard,left	1
46	3880G-46	V06-75	右固定护针杆/Counter needle guard,right	1

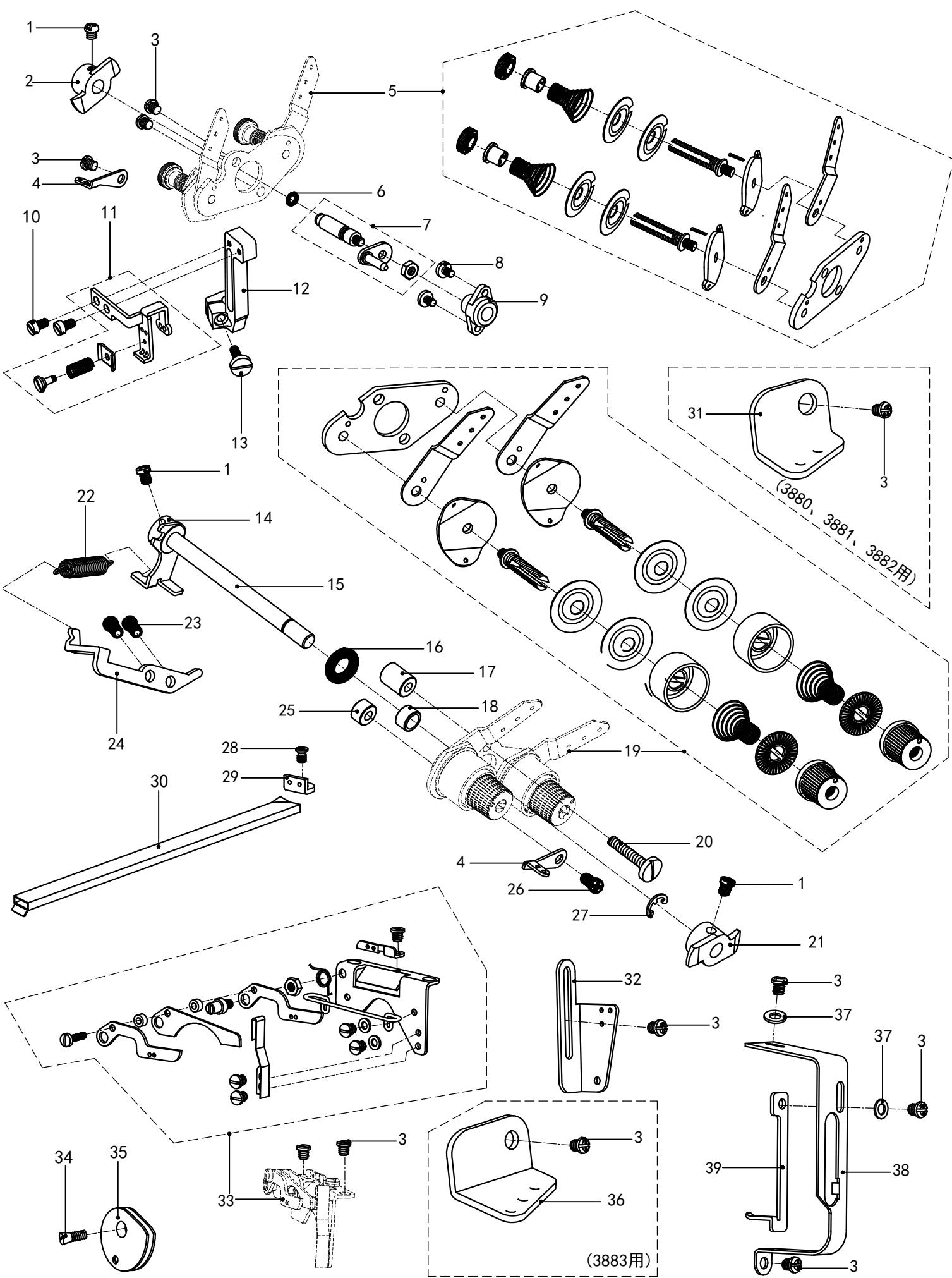
H-挑线、夹线、松线分组件 Thread take-up,thread clamping and thread loosening subassembly



H-挑线、夹线、松线分组件 Thread take-up,thread clamping and thread loosening subassembly

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880H-1	V07-17	面线松线曲柄螺钉/Screw	3
2	3880H-2	V07-89	底线松线爪/Looper thread release latch	1
3	3880H-3	LD00158	螺钉SM4.36-5.5/Screw SM4.36	11
4	3880H-4	V07-37	导线钩/Frame thread guide	2
5	3880H-5	V07-78	底线夹线器部件/Lower thread tension asm.	1
6	3880H-6	DXQ00037	O形圈/O Ring	1
7	3880H-7	V07-75	底线松线组件/Loose thread lower thread assembly	1
8	3880H-8	LD00217	螺钉SM3.57-6.2/Screw SM3.57	2
9	3880H-9	V07-72	松线轴套/Tension release shaft bushing	1
10	3880H-10	LD00127	螺钉SM3.57-6/Screw SM3.57	2
11	3880H-11	V07-03	挑线杆组件/Take-up bar assembly	1
12	3880H-12	V07-01	挑线连杆/Thread take-up lever	1
13	3880H-13	LD00213	螺钉SM3.57-10/Screw SM3.57	1
14	3880H-14	V07-16	面线松线曲柄部件/Tension release arm asm	1
15	3880H-15	V20-22	松线轴/Tension release shaft	1
16	3880H-16	DXQ00040	O形圈/O Ring	1
17	3880H-17	V07-25	夹线器上安装垫/Spacer(B)for installing plate	1
18	3880H-18	V07-23	松线轴环/Tension release shaft spacer	1
19	3880H-19	V07-28	面线夹线器部件/Needle thread tension asm.	1
20	3880H-20	LD00214	螺钉SM4.36-24/Screw SM4.36	1
21	3880H-21	V07-39	面线松线爪/Tension release latch	1
22	3880H-22	TH00048	抬压脚后杠杆弹簧/Spring	1
23	3880H-23	LD00207	螺钉SM3.57-7/Screw SM3.57	2
24	3880H-24	V07-19	后杠杆弹簧固定板/Suspension bracket	1
25	3880H-25	V07-24	夹线器下安装垫/Spacer(A)for installing plate	1
26	3880H-26	LD00215	螺钉SM4.36-19/Screw SM4.36	1
27	3880H-27	TDQ00006	开口挡圈6/Ring	1
28	3880H-28	LD00201	螺钉SM4.36-8.9/Screw SM4.36	1
29	3880H-29	V07-69	底线导线钩/Looper thread guide	1
30	3880H-30	V07-71	底线导线管/Looper thread guide tube	1
31	3880H-31	V07-93	两孔过线板架/Two hole wiring board frame	1
32	3880H-32	V07-13	中间导线钩/Frame thread shaft	1
33	3880H-33	V07-51	凸轮导线钩部件/looper thread guide asm.	1
34	3880H-34	LD00216	螺钉SM4.36-13.5/Screw SM4.36	1
35	3880H-35	V07-49	底线打线凸轮/Looper thread take-up cam	1

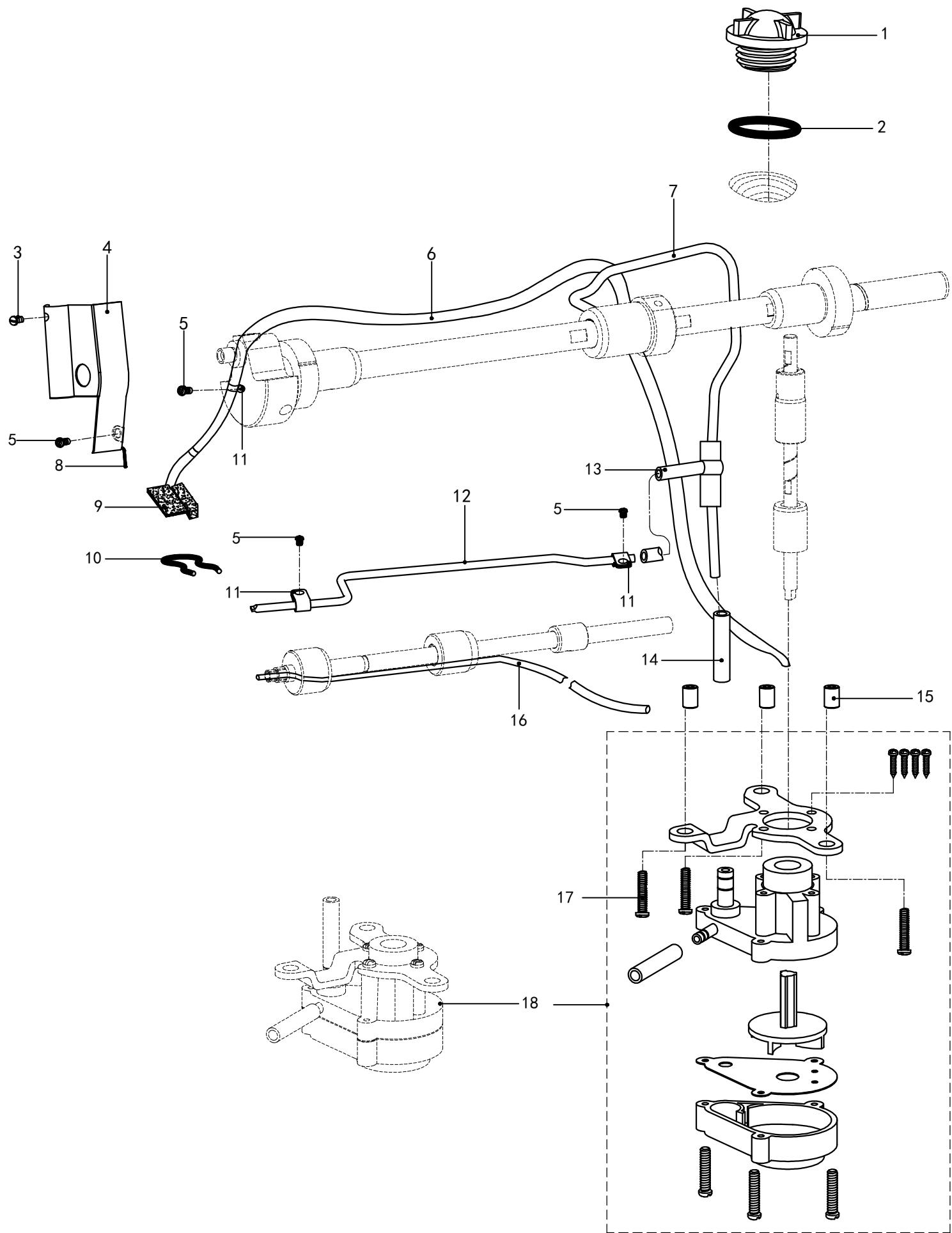
H-挑线、夹线、松线分组件 Thread take-up,thread clamping and thread loosening subassembly



## H-挑线、夹线、松线分组件 Thread take-up,thread clamping and thread loosening subassembly

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
36	3880H-36	V17-05	三孔过线板架/Three hole wiring board frame	1
37	3880H-37	DQ00039	平垫圈/Washer	2
38	3880H-38	V07-08	挑线杆护罩/Thread take-up lever guard	1
39	3880H-39	V07-10	线量调节板/Take-up thread tension lever	1

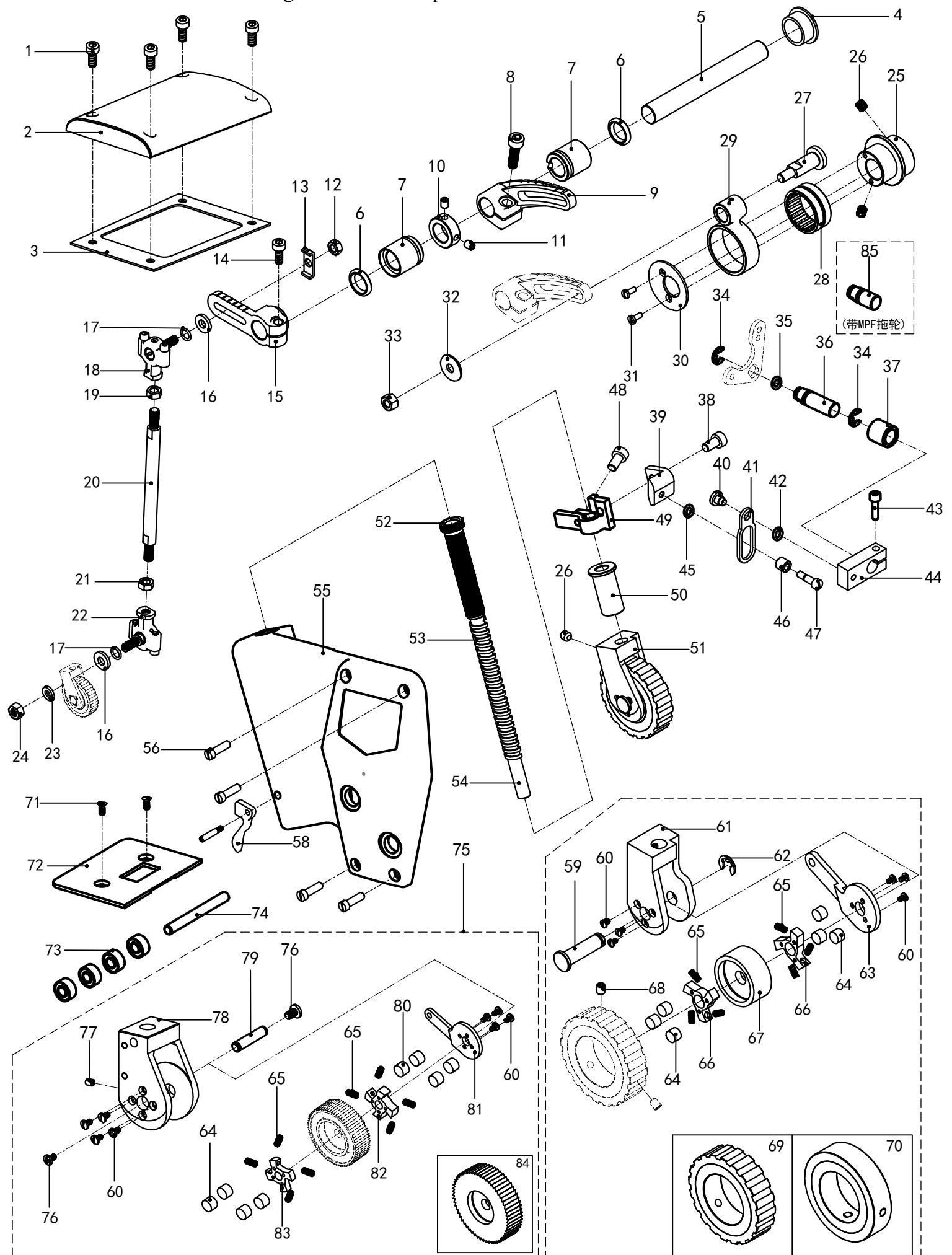
I-润滑分组件 Lubrication subassembly



## I-润滑分组件 Lubrication subassembly

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880I-1	V08-30	油窗/Oil sight window	1
2	3880I-2	DXQ00003	O形圈/O Ring	1
3	3880I-3	LD00114	螺钉SM3.18-2.6/Screw SM3.18	1
4	3880I-4	V08-24	面部挡油板/Arm oil shield	1
5	3880I-5	LD00158	螺钉SM4.36-5.5/Screw SM4.36	4
6	3880I-6	V08-18	回油管/Oil felt presser	1
7	3880I-7	V08-13	上轴供油管/Main shaft oil tube	1
8	3880I-8	V08-25	油线/Wick Ninpper	1
9	3880I-9	V08-22	回油毡/Oil felt	1
10	3880I-10	V08-23	回油毡夹/Oil felt presser	1
11	3880I-11	V08-16	油管夹/Tubing clamp	3
12	3880I-12	V08-15	齿轮供油管/Gear oil pipe	1
13	3880I-13	V08-14	齿轮供油管橡皮接头/Oil sight window base	1
14	3880I-14	V08-09	上轴供油管接头/Rubber joint	1
15	3880I-15	V08-11	油泵垫圈/Collar	1
16	3880I-16	V08-28	下轴供油管/Oil tube	1
17	3880I-17	LD00218	螺钉SM4.76-26/Screw SM4.76	3
18	3880I-18	V08-01-X	油泵部件/Lubricating oil pump asm.	1

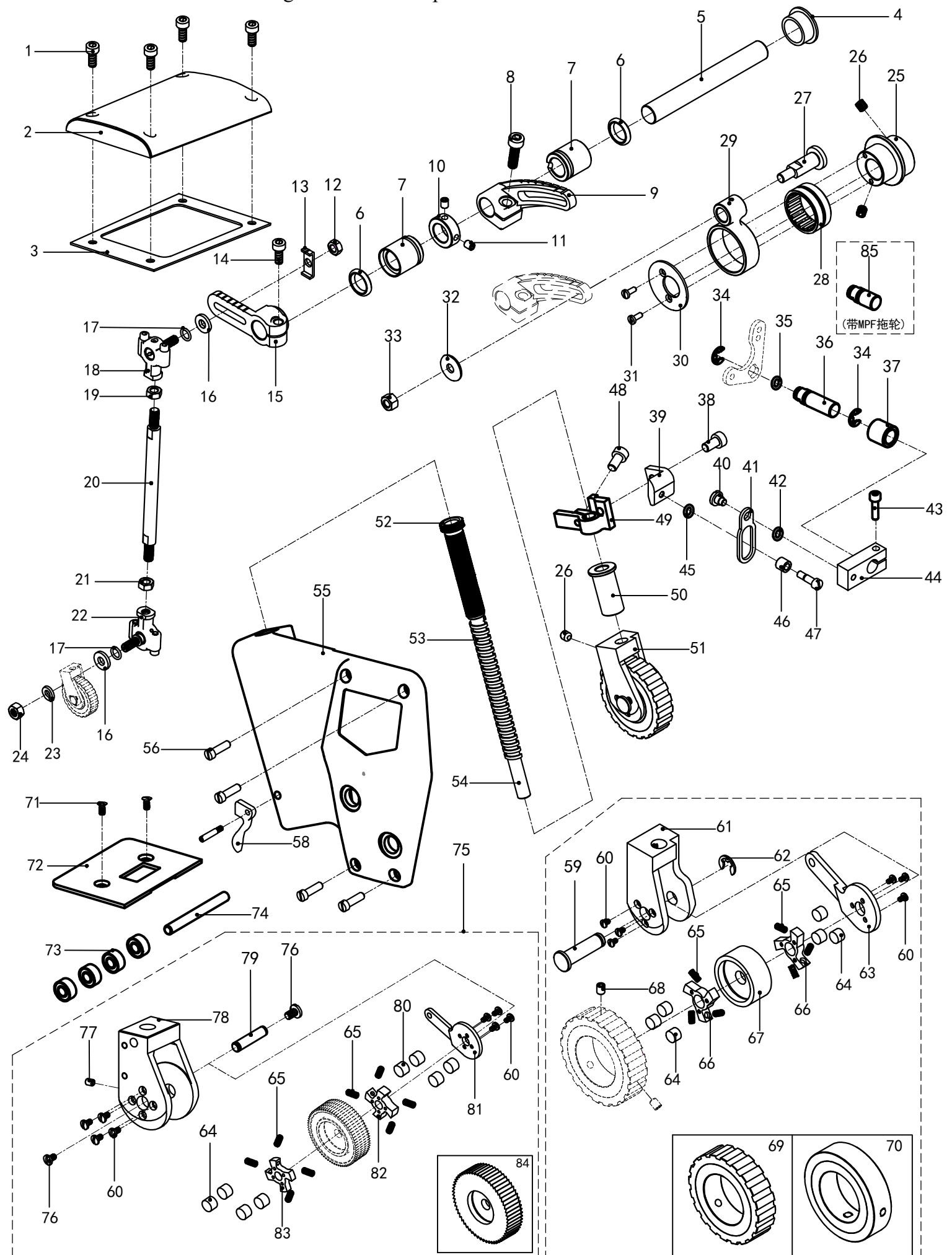
PLB-拖轮装置部件 PLB tugboat device components



## PLB-拖轮装置部件 PLB tugboat device components

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880PL-1	LD00225	内六角圆柱头螺钉M4X12/Screw	4
2	3880PL-2	V20-28	顶盖/Top cap	1
3	3880PL-3	V20-28-1	顶盖密封垫/Facking	1
4	3880PL-4	V20-34	拖布轮孔孔塞/Cushion rubber	1
5	3880PL-5	V20-35	后拖轮轴/Puller driving shaft	1
6	3880PL-6	YF00021	油封/Oil Seal	2
7	3880PL-7	V20-36	后拖轮轴铜套/Bush	2
8	3880PL-8	LD00226	内六角圆柱头螺钉M6X20/Screw	1
9	3880PL-9	V20-37	后拖轮曲柄/Puller driving lever	1
10	3880PL-10	V20-38	挡圈/Collar	1
11	3880PL-11	LD00002	螺钉M5X6/Screw	2
12	3880PL-12	LM00002	螺母5.95/Nut	1
13	3880PL-13	927PL010	刻度指示片/Calibration Instruction Tablets	1
14	3880PL-14	LD00092	内六角圆柱头螺钉M5X16/Screw	1
15	3880PL-15	V20-40	调节连杆/Adjusting Rod Assembly	1
16	3880PL-16	DQ00046	平垫圈/Washer	2
17	3880PL-17	DXQ00012	O形圈/O Ring	2
18	3880PL-18	927PL013	关节轴承组件(上)/Ball parts(Upper)	1
19	3880PL-19	LM00006	螺母M6/Nut M6	1
20	3880PL-20	V21-03	连接轴/Shaft for linking balls	1
21	3880PL-21	LM00018	螺母M6左旋/Nut M6-LH	1
22	3880PL-22	927PL017	关节轴承组件(下)/Ball parts(Lower)	1
23	3880PL-23	DQ00014	弹簧垫圈6/Spring Washer	1
24	3880PL-24	LM00004	螺母SM5.55/Nut SM5.55	1
25	3880PL-25	V18-39	偏心轮/Eccentric Wheel	1
26	3880PL-26	LD00003	紧定螺钉M6X6/Screw	3
27	3880PL-27	V20-32	轴位螺钉/Screw	1
28	3880PL-28	ZC00042	轴承/Ball Bearing	1
29	3880PL-29	V20-21	连杆/Connecting Rod	1
30	3880PL-30	V18-36	偏心轮挡片/Crank cover	1
31	3880PL-31	LD00518	螺钉SM3.18-6.5/Screw SM3.18	2
32	3880PL-32	DQ00061	平垫圈/Washer	1
33	3880PL-33	LM00024	螺母/Nut	1
34	3880PL-34	TDQ00003	开口挡圈7/Ring	2
35	3880PL-35	V18-54	O形圈/O Ring	1

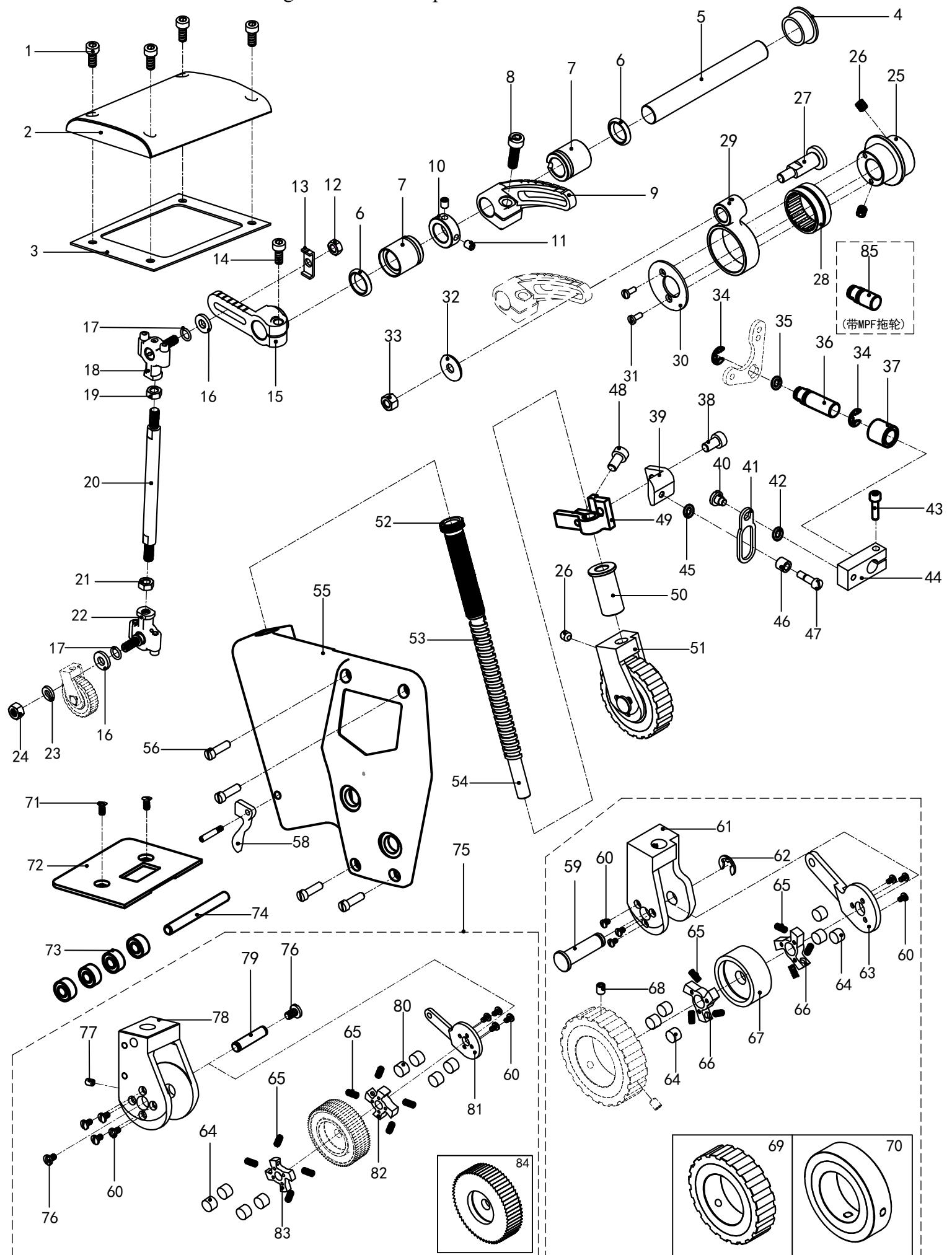
PLB-拖轮装置部件 PLB tugboat device components



## PLB-拖轮装置部件 PLB tugboat device components

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
36	3880PL-36	V18-52	抬压脚前杠杆轴/Lever shaft	1
37	3880PL-37	V18-55	抬压脚前杠杆轴套/Sleeve	1
38	3880PL-38	LD00221	螺钉SM5.95-11/Screw SM5.95	1
39	3880PL-39	V21-05	压杆夹连接座/Connecting seat	1
40	3880PL-40	V18-60	轴位螺钉/Screw	1
41	3880PL-41	V21-07	连接板/Plate	1
42	3880PL-42	DXQ00007	O形圈/O Ring	1
43	3880PL-43	LD00220	内六角圆柱头螺钉M4X16/Screw	1
44	3880PL-44	V18-56	抬压脚曲柄/Crank	1
45	3880PL-45	DXQ00011	O形圈/O Ring	1
46	3880PL-46	V21-08	滚套/Collar	1
47	3880PL-47	V21-09	轴位螺钉/Screw	1
48	3880PL-48	LD00044	内六角圆柱头螺钉M5X10/Screw	1
49	3880PL-49	927PL035	调压杆夹/Presser Bar Clamp	1
50	3880PL-50	927PL031	压杆轴套/Presser Bar Bush, D	1
51	3880PL-51	V21-04	大拖轮组件/Large tug components	1
52	3880PL-52	927PST001	调压螺母/Presser Adjust Screw	1
53	3880PL-53	V18-02	弹簧/Spring	1
54	3880PL-54	927PL026	压杆轴/Presser Bar	1
55	3880PL-55	V21-01	菱形面板/Diamond panel	1
56	3880PL-56	LD00188	螺钉SM4.76-15.5/Screw SM4.76	4
57	3880PL-57	927PL029	扳手销/Support Stud	1
58	3880PL-58	927PL030	扳手/Presser Foot Lifter	1
59	3880PL-59	927PL049	拖布轮轴/Puller Shaft	1
60	3880PL-60	LD00266	螺钉M3-5.7/Screw M3	6
61	3880PL-61	V21-10	拖轮支架/Puller Bracket	1
62	3880PL-62	TDQ00006	开口挡圈6/Ring	1
63	3880PL-63	V21-14	星轮连杆/Star Ferry Link	1
64	3880PL-64	927PL052	滚子/Rolling Shaft	6
65	3880PL-65	TH00024	弹簧/Spring	6
66	3880PL-66	927PL054	星轮/Star Ferry	2
67	3880PL-67	V21-17	胶轮内圈/Tire inner ring	1
68	3880PL-68	LD00023	螺钉SM4.36-5/Screw SM4.36	2
69	3880PL-69	V21-20	胶齿轮/Plastic gear	1
70	3880PL-70	V21-21	平胶轮/Rubber wheel	1

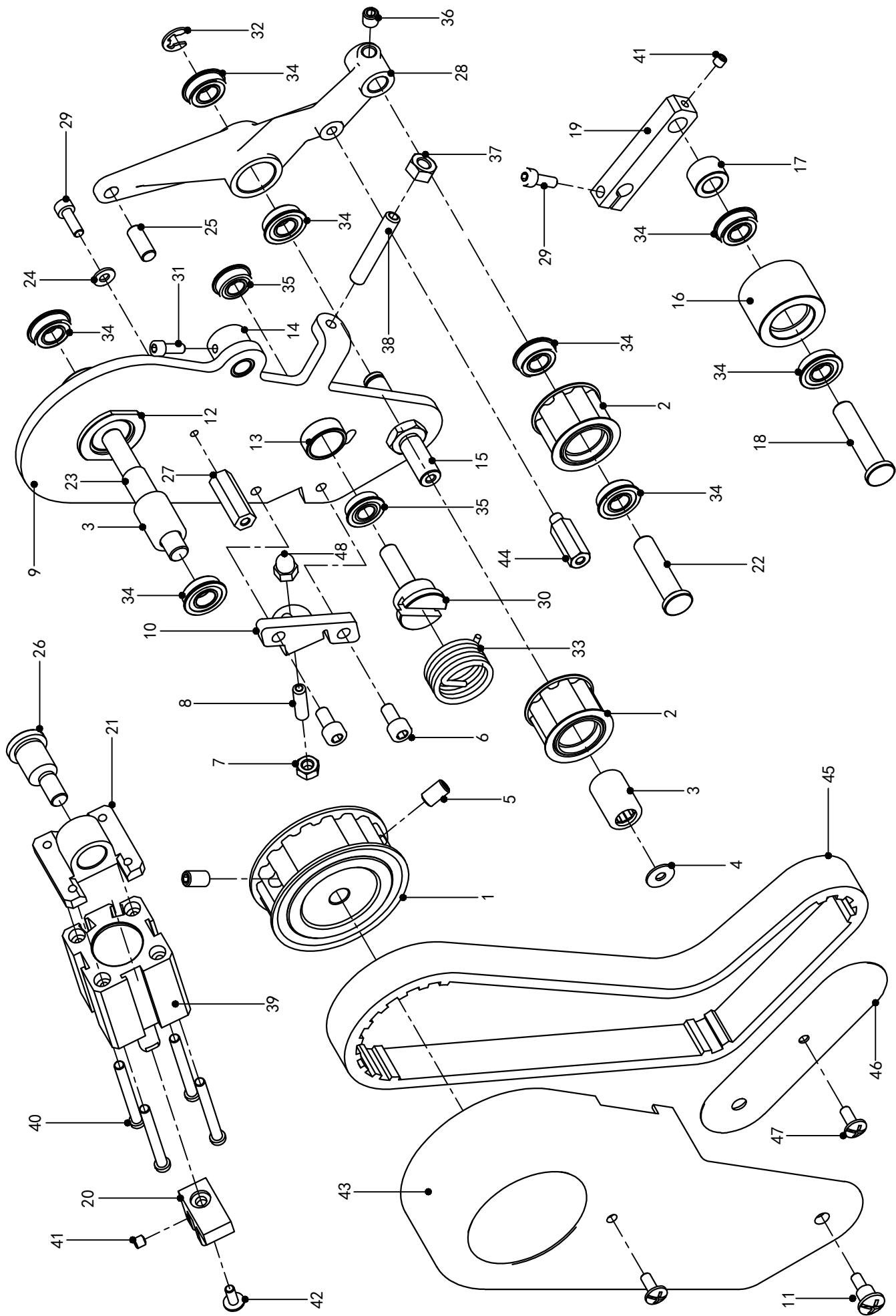
PLB-拖轮装置部件 PLB tugboat device components



## PLB-拖轮装置部件 PLB tugboat device components

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
71	3880PL-71	LD00201	螺钉SM4.36-8.9/Screw SM4.36	2
72	3880PL-72	V18-70	压板/Pressing plate	1
73	3880PL-73	ZC00064	轴承/Ball Bearing	4
74	3880PL-74	V18-71	滚针/Kingpin	1
75	3880PL-75	V21-04-T	大拖轮组件(铁) /Large tug components(Iron)	1
76	3880PL-76	LD00156	螺钉SM4.36-6/Screw SM4.36	2
77	3880PL-77	LD00125	螺钉M3X5/Screw M3	1
78	3880PL-78	V21-23	拖轮支架/Puller Bracket	1
79	3880PL-79	9588A068	拖轮轴销/Tow axle pin	1
80	3880PL-80	9588A065	驱动滚子/Rolling Shaft	4
81	3880PL-81	V21-29	星轮连杆/Star Ferry Link	1
82	3880PL-82	V21-32	驱动星轮/Star Ferry	1
83	3880PL-83	V21-35	止动星轮/Star Ferry	1
84	3880PL-84	V21-34	铁齿轮/Iron gear	1
85	3880PL-85	V18-52-D	抬压脚前杠杆轴/Lever shaft	1

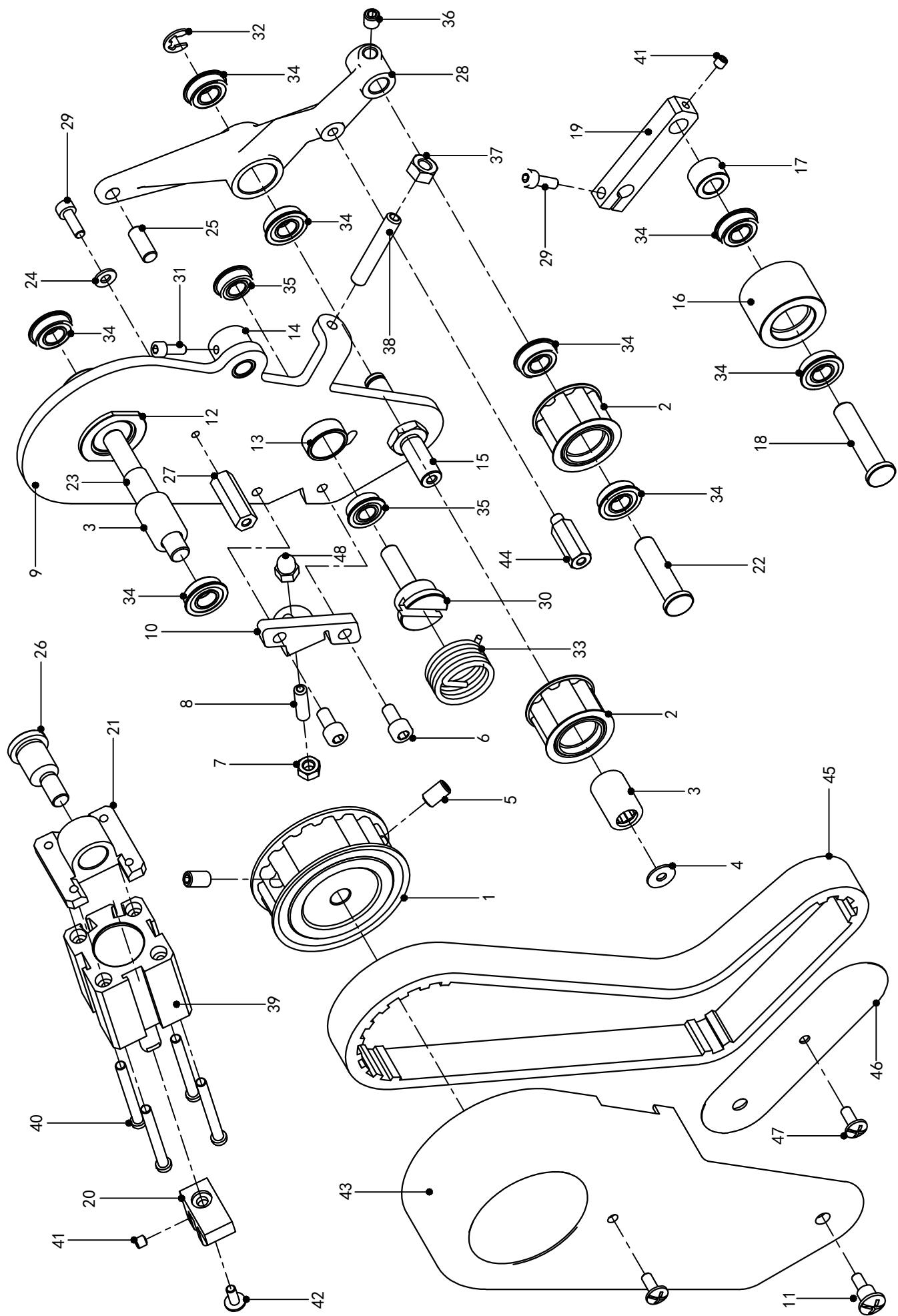
MPF-气控拖轮装置 Gas control device



## MPF-气控拖轮装置 Gas control device

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880MPF-1	9588PF001	大同步轮 (L型) /Large synchronous wheel	1
2	3880MPF-2	9588PF002	小同步轮 (L型) /Small synchronous wheel	2
3	3880MPF-3	ZC00028	单向滚针轴承/ Bearing	2
4	3880MPF-4	DQ00065	平垫圈/Washer	1
5	3880MPF-5	LD00001	内六角紧定螺钉M6X10/Screw M6	2
6	3880MPF-6	LD00044	内六角圆柱头螺钉M5X10/Screw M5	2
7	3880MPF-7	LM00017	螺母M5/Nut M5	1
8	3880MPF-8	LD00268	内六角紧定螺钉M5X20/Screw M5	1
9	3880MPF-9	9588PF009	拖轮安装板组件/Mounting plate component	1
10	3880MPF-10	9588PF010	限位角支架/Limit Angle bracket	1
11	3880MPF-11	9588PF052	轴位螺钉/Stalk bolt	1
12	3880MPF-12	9588PF012	大同步轮嵌套/Nested	1
13	3880MPF-13	9588PF013	压紧轮嵌套/Pinch roller nested	1
14	3880MPF-14	9588PF014	气缸限位销嵌套/Limit pin cylinder nested	1
15	3880MPF-15	9588PF015	下过渡同步轮轴销/Shaft pin	1
16	3880MPF-16	9588PF016	压紧轮/Pinch roller	1
17	3880MPF-17	9588PF017	压紧轮垫圈/Pinch roller washer	1
18	3880MPF-18	9588PF018	压紧轮轴销/Pressure shaft pin	1
19	3880MPF-19	9588PF019	压紧轮连杆/Pinch roller connecting rod	1
20	3880MPF-20	9588PF020	气缸连接块/Cylinder connecting piece	1
21	3880MPF-21	9588PF021	气缸连接座/Cylinder connecting seat	1
22	3880MPF-22	9588PF022	小同步轮轴销/Shaft pin	1
23	3880MPF-23	9588PF023	大同步轮轴/Large synchronous shaft	1
24	3880MPF-24	DQ00064	平垫圈4/Washer 4	1
25	3880MPF-25	9588PF025	连接块销/Connection piece pin	1
26	3880MPF-26	9588PF026	气缸限位轴销/Shaft pin	1
27	3880MPF-27	9588PF027	皮带罩安装柱/Install the column	1
28	3880MPF-28	9588PF028	小同步轮摆动连杆/Swinging rod	1
29	3880MPF-29	LD00116	内六角圆柱头螺钉M4X12/Screw M4	2
30	3880MPF-30	9588PF030	扭簧轴销/Torsional spring shaft pin	1
31	3880MPF-31	LD00182	内六角圆柱头螺钉M4X6/Screw M4	1
32	3880MPF-32	TDQ00006	开口挡圈6/Open ring	1
33	3880MPF-33	9588PF033	压紧轮扭簧/Pinch roller torsional spring	1
34	3880MPF-34	ZC00024	带挡边深沟球轴承8/Bearing	8
35	3880MPF-35	ZC00025	带挡边深沟球轴承7/Bearing	2

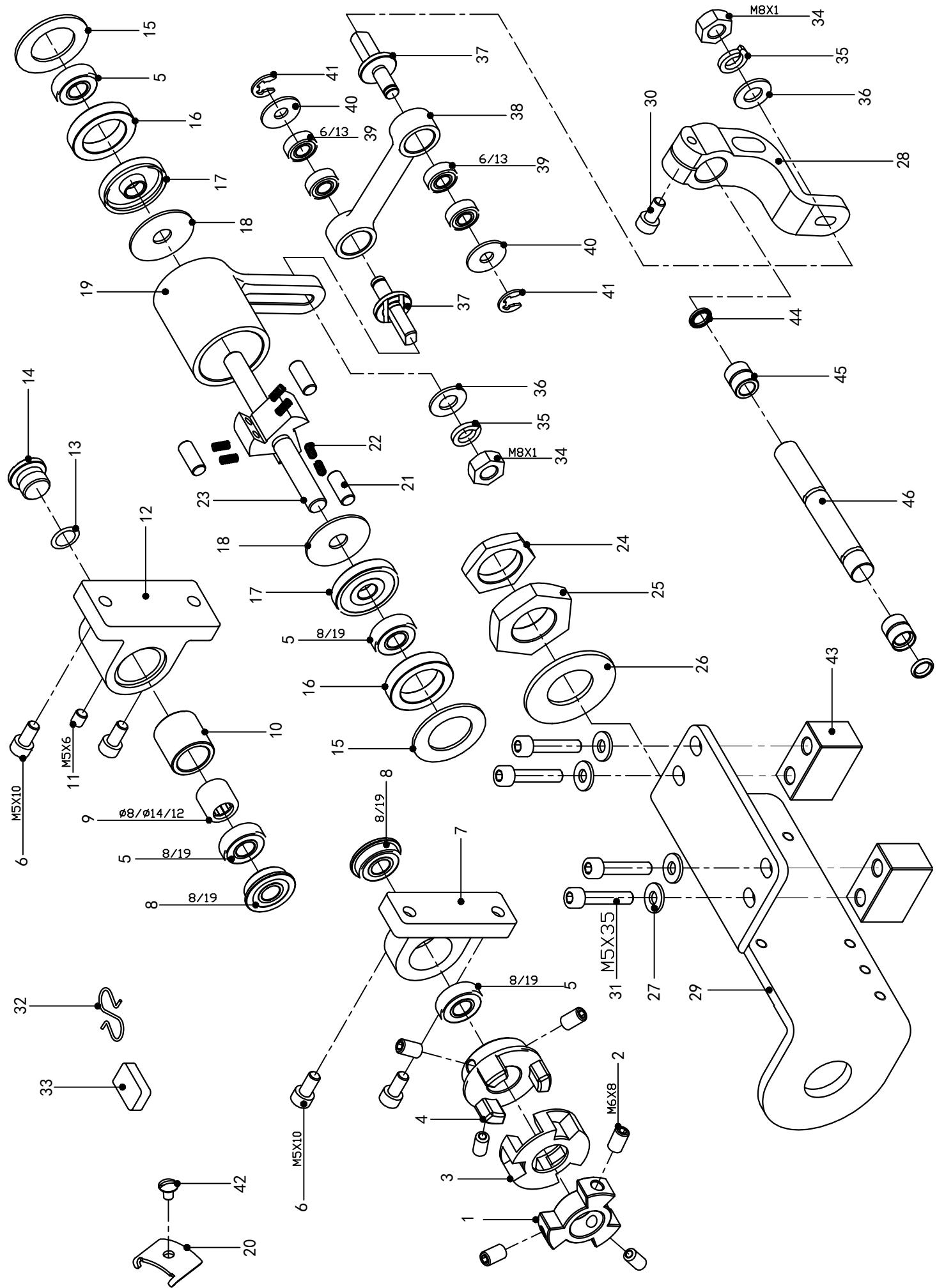
MPF-气控拖轮装置 Gas control device



## MPF-气控拖轮装置 Gas control device

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
36	3880MPF-36	LD00003	内六角紧定螺钉M6X6/Screw M6	1
37	3880MPF-37	LM00006	螺母M6/Nut M6	1
38	3880MPF-38	LD00269	内六角紧定螺钉M6X35/Screw M6	1
39	3880MPF-39	927Q.1.16	气缸SDA20X20/Cylinder SDA20X20	1
40	3880MPF-40	LD00227	螺钉M4-38/Screw M4	4
41	3880MPF-41	LD00074	内六角紧定螺钉M4X5/Screw M4	2
42	3880MPF-42	LD00272	一字螺钉M4X10/Screw M4	1
43	3880MPF-43	9588PF071	拖轮罩壳/Tug housings	1
44	3880MPF-44	9588PF068	挡板安装柱/Install the column	1
45	3880MPF-45	9588PF073	同步带210L/Synchronous belt	1
46	3880MPF-46	9588PF070	小同步轮挡板/Baffle	1
47	3880MPF-47	LD00271	一字螺钉M4/Screw M4	2
48	3880MPF-48	LM00037	尼龙盖形螺母M5/Nut M5	1

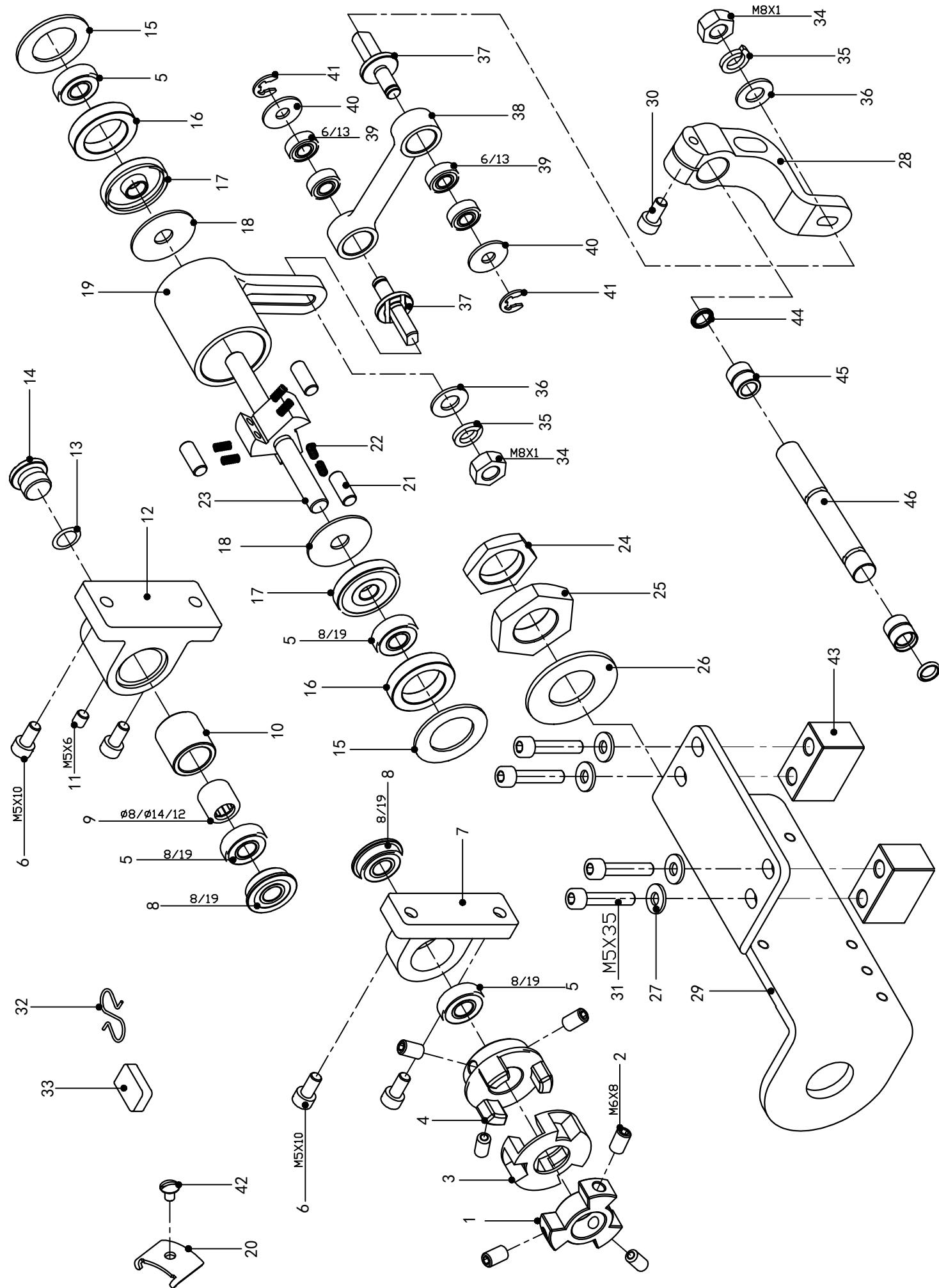
PD-拖轮驱动装置 Drive to equip



## PD-拖轮驱动装置 Drive to equip

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880PD-1	9588PF085	联轴器B/Shaft coupling B	1
2	3880PD-2	LD00097	内六角紧定螺钉M6X8/Screw M6	6
3	3880PD-3	9588PF084	联轴器缓冲垫/Cushion	2
4	3880PD-4	9588PF083	联轴器A/Shaft coupling A	1
5	3880PD-5	ZC00030	深沟球轴承8/Bearing	4
6	3880PD-6	LD00044	内六角圆柱头螺钉M5X10/Screw M5	4
7	3880PD-7	9588PF045	轴承座/Bearing block	1
8	3880PD-8	ZC00029	带挡边深沟球轴承8/Bearing	2
9	3880PD-9	ZC00026	单向滚针轴承/Bearing	1
10	3880PD-10	9588PF011	单向滚针轴承套/Bearing	1
11	3880PD-11	LD00002	内六角紧定螺钉M5X6/Screw M5	1
12	3880PD-12	9588PF007	单向驱动轴安装座/Install the seat	1
13	3880PD-13	DXQ00025	O形圈/O Ring	1
14	3880PD-14	LD00273	螺钉M16X1/Screw M16	1
15	3880PD-15	DQ00066	平垫圈/Washer	2
16	3880PD-16	9588PF044	轴承套/Bearing sleeve	2
17	3880PD-17	YF00003	油封/Oil seal	2
18	3880PD-18	DQ00059	驱动星轮间隔垫圈/Washer	2
19	3880PD-19	9588PF004	驱动摆杆/Drive the swinging rod	1
20	3880PD-20	9588PF089	缓冲垫限位片/Cushion limit	3
21	3880PD-21	9588PF077	滚子/Roller	3
22	3880PD-22	TH00024	滚子弹簧/Roller spring	3
23	3880PD-23	9588PF024	星轮驱动轴/The star wheel drive shaft	1
24	3880PD-24	LM00034	小螺母M20X1/Nut M20	1
25	3880PD-25	LM00033	大螺母M20X1/Nut M20	1
26	3880PD-26	9588PF029	盘形垫圈/Disc washer	1
27	3880PD-27	DQ00060	平垫圈/Washer	4
28	3880PD-28	V25-93	调节连杆/Adjusting Rod Assembly	1
29	3880PD-29	V25-06	拖轮安装支架/Tug mounting bracket	1
30	3880PD-30	LD00092	内六角圆柱头螺钉M5X14/Screw M5	1
31	3880PD-31	LD00224	内六角圆柱头螺钉M5X35/Screw M5	4
32	3880PD-32	9588PF088	油毡限位簧/Linoleum limit spring	1
33	3880PD-33	9588PF082	驱动摆杆羊毛毡/Felt	1
34	3880PD-34	LM00035	螺母M8X1/Nut M8	2
35	3880PD-35	DQ00062	弹簧垫圈8/Spring washer	2

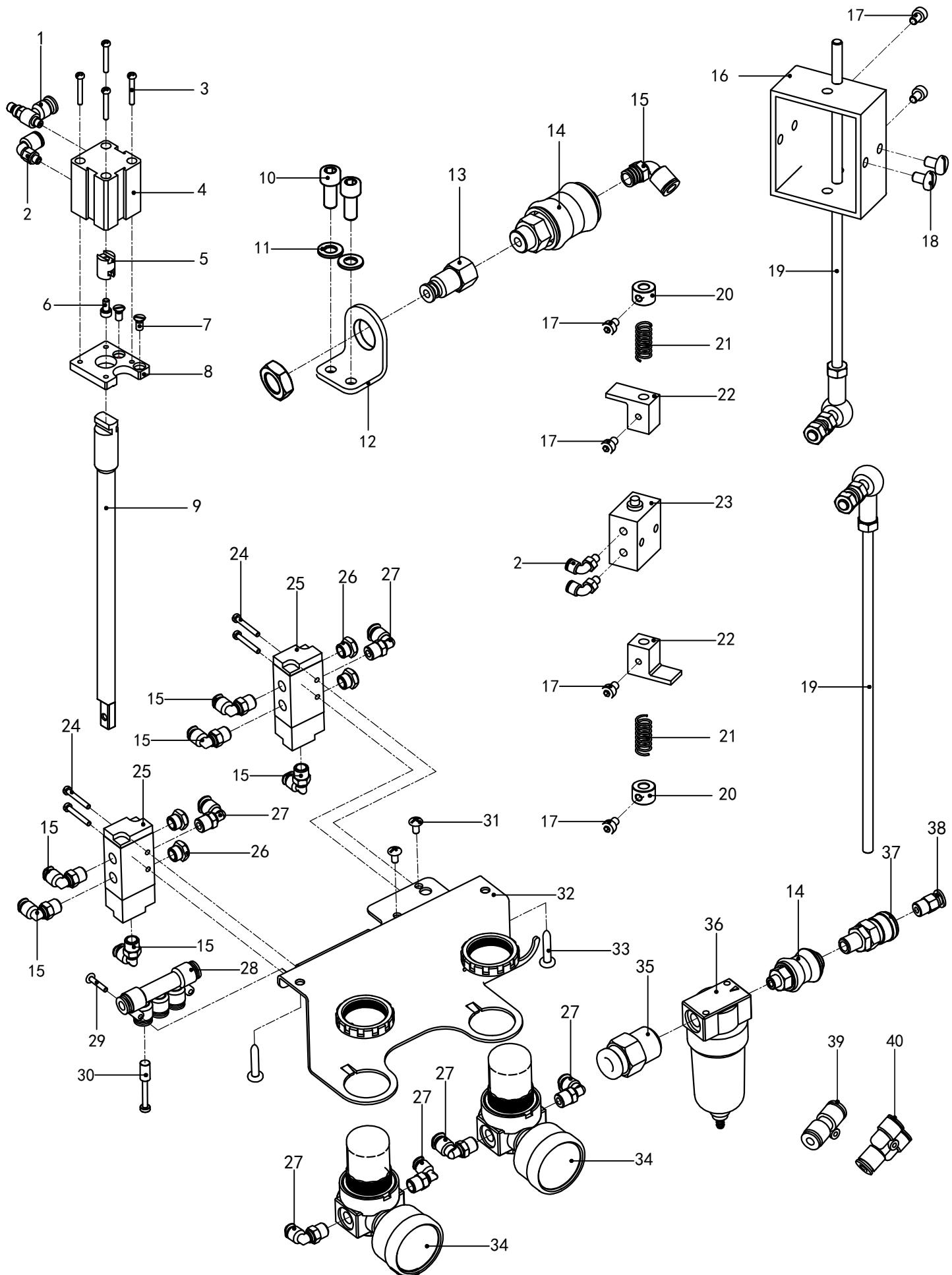
## PD-拖轮驱动装置 Drive to equip



## PD-拖轮驱动装置 Drive to equip

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
36	3880PD-36	DQ00063	平垫圈8/Washer	2
37	3880PD-37	9588PF005	连接轴位螺钉/Axis of a screw	2
38	3880PD-38	9588PF003	连杆/Connecting rod	1
39	3880PD-39	ZC00027	深沟球轴承6/Bearing	4
40	3880PD-40	DQ00061	平垫圈6/Washer	2
41	3880PD-41	TDQ00002	开口挡圈5/Open ring	2
42	3880PD-42	LD00164	螺钉SM3.18-5/Screw SM3.18	3
43	3880PD-43	V25-08	垫块/Cushion block	1
44	3880PD-44	YF00021	油封/Oil seal	2
45	3880PD-45	V20-36	后拖轮轴轴套/Rear tug shaft sleeve	2
46	3880PD-46	V20-35	后拖轮轴/Rear drag axle	1

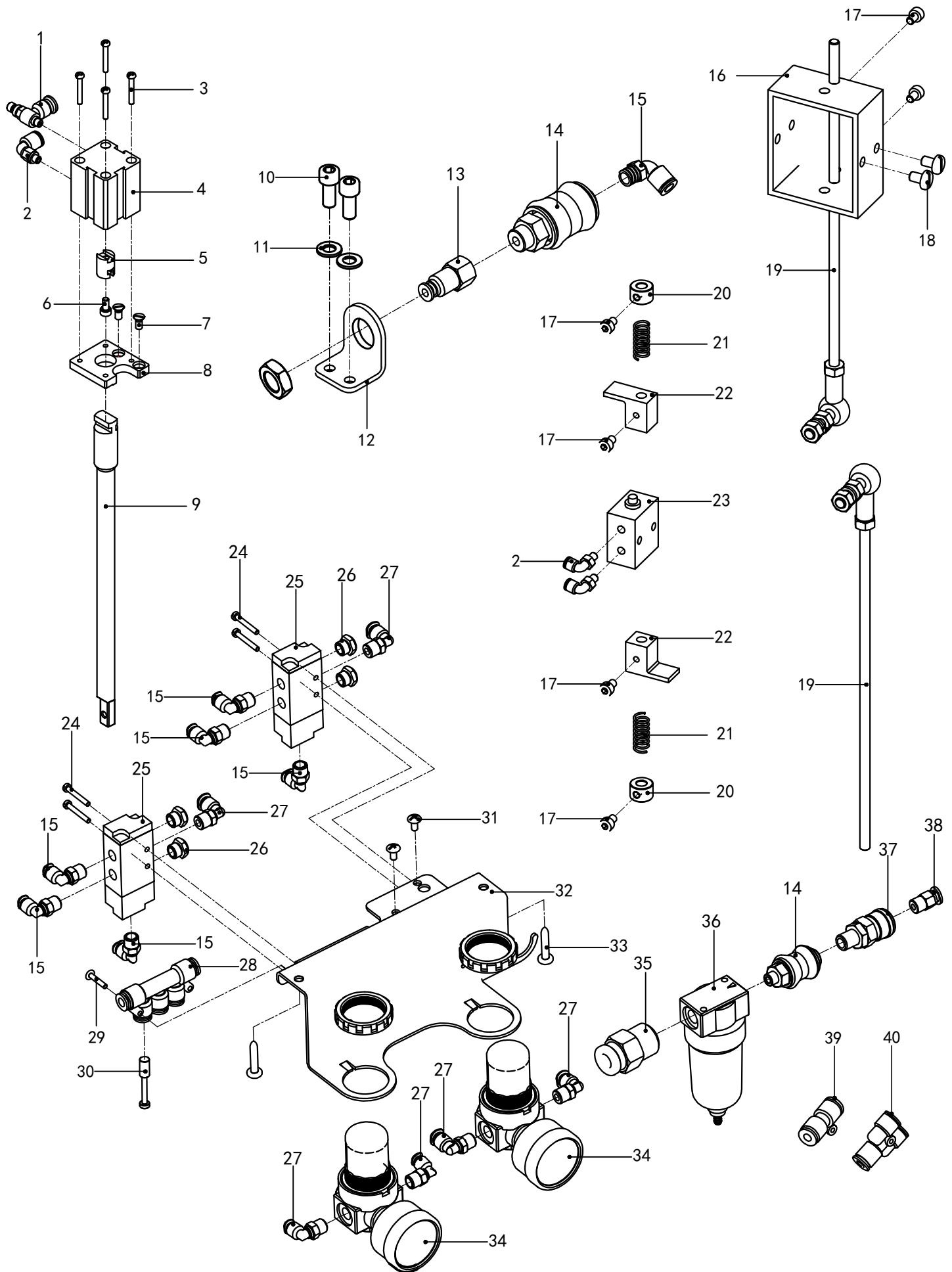
P-气动功能装置 Pneumatic device



## P-气动功能装置 Pneumatic device

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880P-1	927Q-2-18	单向节流阀ASL4-M5/Valve ASL4-M5	1
2	3880P-2	927Q-2-29	L型接头PL04M5C/“L”Connector PL04M5C	3
3	3880P-3	LD00227	螺钉M4-38/Screw M4	4
4	3880P-4	927Q-1-16	气缸SDA20X20/Cylinder SDA16X20	1
5	3880P-5	9588A073	压杆上连接/Press a pole	1
6	3880P-6	LD00104	内六角圆柱头螺钉M4X8/Screw M4	1
7	3880P-7	LD00201	螺钉SM4.36-8.9/Screw SM4.36	2
8	3880P-8	V19-03	压脚气缸安装板/Install plank	1
9	3880P-9	V19-01	压杆/Press a pole Connect	1
10	3880P-10	LD00044	内六角圆柱头螺钉M5X10/Screw M5	2
11	3880P-11	DQ00034	平垫圈5/Washer 5	2
12	3880P-12	9588A003	手滑阀固定支架/Valve fix	1
13	3880P-13	927Q-2-44	直通内牙接头APMF4-01/Thread Connector	1
14	3880P-14	927Q-3-06	手滑阀HSV06/Valve HSV06	2
15	3880P-15	927Q-2-28	L型接头PL0401C/“L”Connector PL0401C	7
16	3880P-16	927PF026	机械阀固定架/Machine valve fix	1
17	3880P-17	LD00182	内六角圆柱头螺钉M4X6/Screw M4x6	6
18	3880P-18	LD00096	螺钉M5-8/Screw M5	2
19	3880P-19	927PF018	球头拉杆组件/Ball parts	1
20	3880P-20	927PF022	挡圈/Collar	2
21	3880P-21	TH00022	弹簧/Spring	2
22	3880P-22	927PF020	气阀挡块/Spirit Valve Plate	2
23	3880P-23	927Q-3-05	机械阀S3B-M5/Machine valve S3B-M5	1
24	3880P-24	LD00241	螺钉M3-22/Screw M3	4
25	3880P-25	927Q-3-03	气控阀4A110-06/Valve 4A110-06	2
26	3880P-26	927Q-5-07	消声器BSLM01/Elimination machine BSLM01	4
27	3880P-27	927Q-2-27	L型接头PL0601C/“L”Connector PL0601C	6
28	3880P-28	927Q-2-09	五通APK6/APK6	1
29	3880P-29	LD00309	螺钉M3/Screw M3	1
30	3880P-30	927Q-5-04	管塞/Tube Fill	1
31	3880P-31	LD00262	螺钉M4-10/Screw M4	2
32	3880P-32	927PF011	气压表固定架/Barometer fix	1
33	3880P-33	LD00187	自攻螺钉ST4.8/Wood Screw ST4.8	2
34	3880P-34	927Q-4-01	调压阀AR1500/Valve AR1500	2
35	3880P-35	927Q-2-15	螺纹直通APC6-01/Thread Keep APC6-01	1

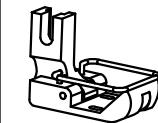
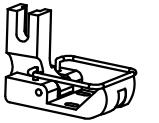
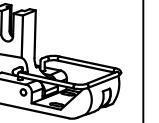
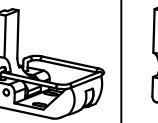
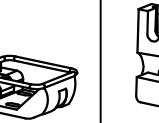
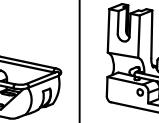
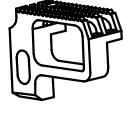
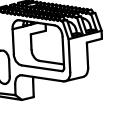
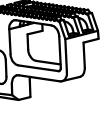
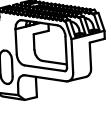
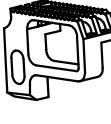
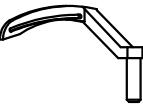
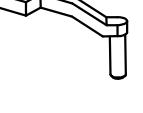
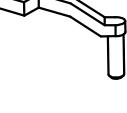
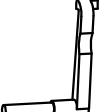
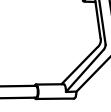
P-气动功能装置 Pneumatic device



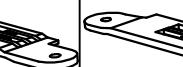
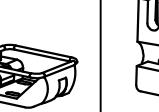
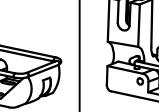
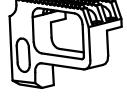
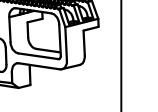
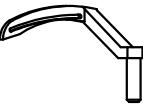
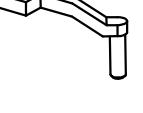
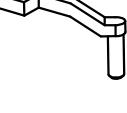
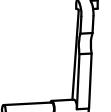
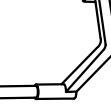
P-气动功能装置 Pneumatic device

序号/No	代号/Assembly No	件号/Part No	名称/Description	数量/Num
36	3880P-36	927Q-4-05	过滤器AF1500/Filter AF1500	1
37	3880P-37	927Q-2-32	快换接头（子体）PHM-20-ZN/Connector	1
38	3880P-38	927Q-2-54	螺纹直通IPC08-01-BK/Thread keep	1
39	3880P-39	927Q-2-12	减径直通OPU06-4/Connector Keep OPU06-4	1
40	3880P-40	927Q-2-07	Y型三通APY4/"Y"transition connector APY4	1

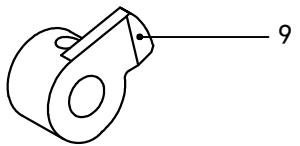
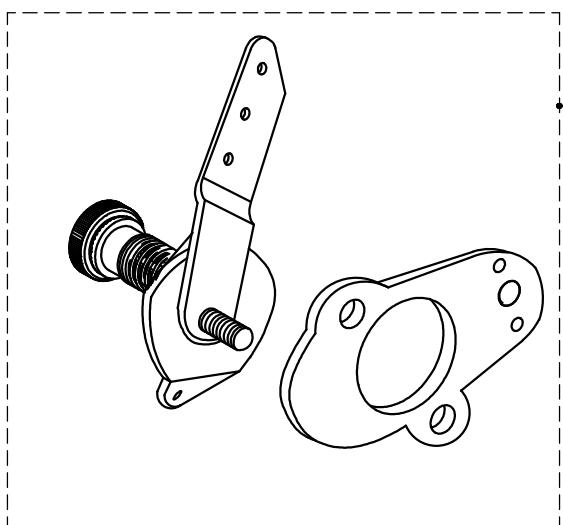
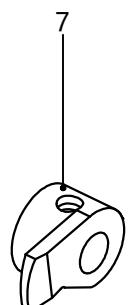
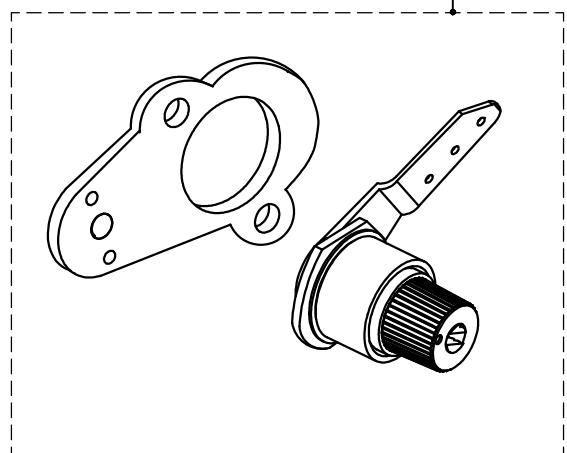
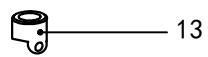
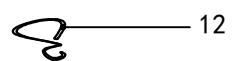
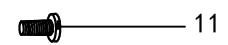
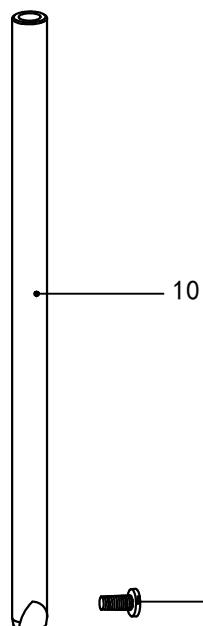
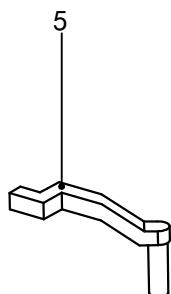
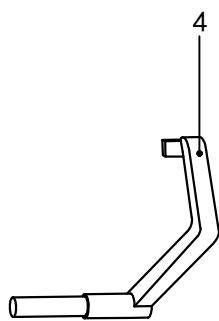
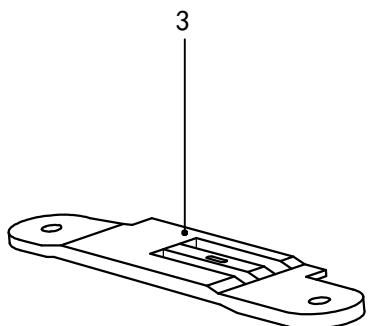
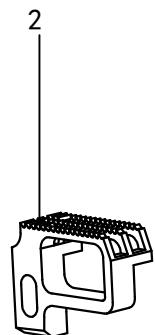
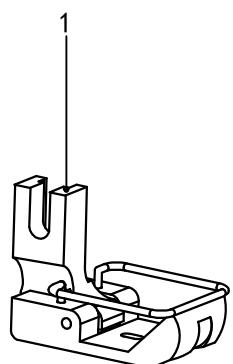
# J1-规格零部件表 Different parts list

3880 Medium Materials / Heavy Materials							
针位类型 Type	1/8(3.2mm) Thin Materials	3/16(4.8mm) Medium Materials	1/4(6.4mm) Medium Materials	5/16(7.9mm) Medium Materials	3/8(9.5mm) Heavy Materials	1/2(12.7mm) Heavy Materials	5/8(15.9mm) Heavy Materials
针夹ZJ Needle Clamp							
机针JZ Needles	TVx7 14#	TVx7 14#	TVx7 14#	TVx7 14#	TVx7 14#	TVx7 14#	TVx7 14#
针板ZB Needle Plate							
压脚YJ Presser Foot Assy							
送布牙SB Feed Dog							
右弯针 Right looper		←	←	←	←	←	←
左弯针 Left looper		←	←	←	←	←	←
摆动护针杆 Rear moving needle guard		←	←	←	←	←	
右固定护针杆 Right fixed needle guard rod		←	←	←	←	←	←
左固定护针杆 Left fixed needle guard rod		←	←	←	←	←	←

### 3880H Medium Materials / Heavy Materials

针位类型 Type	1/8(3.2mm) Thin Materials	3/16(4.8mm) Medium Materials	1/4(6.4mm) Medium Materials	5/16(7.9mm) Medium Materials	3/8(9.5mm) Heavy Materials	1/2(12.7mm) Heavy Materials	5/8(15.9mm) Heavy Materials
针夹ZJ Needle Clamp							
机针JZ Needles	UY128GAS 20#	UY128GAS 20#	UY128GAS 20#	UY128GAS 20#	UY128GAS 20#	UY128GAS 20#	UY128GAS 20#
针板ZB Needle Plate							
压脚YJ Presser Foot Assy							
送布牙SB Feed Dog							
右弯针 Right looper		←	←	←	←	←	←
左弯针 Lift looper		←	←	←	←	←	←
摆动护针杆 Rear moving needle guard		←	←	←	←	←	 V06-70-5/8
右固定护针杆 Right fixed needle guard rod		←	←	←	←	←	←
左固定护针杆 Left fixed needle guard rod		←	←	←	←	←	←

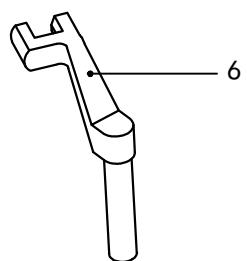
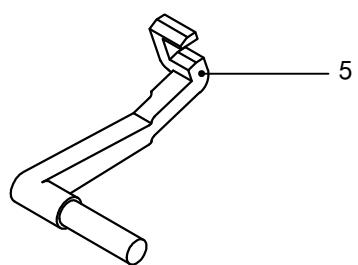
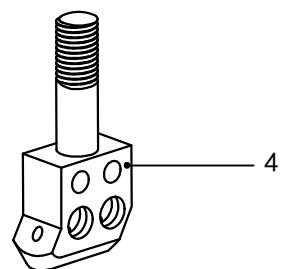
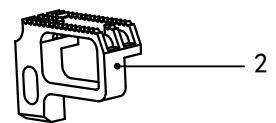
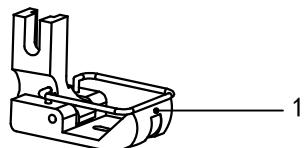
J2-381专用件部分 381 special parts



J2-381专用件部分 381 special parts

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880J2-1	V15-01	压脚部件/Presser foot asm	1
2	3880J2-2	V15-02	送料牙/Feed dog	1
3	3880J2-3	V15-03	针板/Throat plate	1
4	3880J2-4	V15-05	摆动护针杆/Rear moving needle guard	1
5	3880J2-5	V15-06	固定护针杆/Fixed needle guard rod	1
6	3880J2-6	V15-07	面线夹线器部件/Needle thread tension asm	1
7	3880J2-7	V15-08	面线松线爪/Tension release latch	1
8	3880J2-8	V15-09	底线夹线器部件/Lower thread tension asm	1
9	3880J2-9	V15-10	底线松线爪/Looper thread release latch	1
10	3880J2-10	V15-12	针杆/Needle Bar	1
11	3880J2-11	LD00120	螺钉SM3.18-4/Screw SM3.18	1
12	3880J2-12	V15-15	针杆下衬套线钩/Needle bar lower bushing hook	1
13	3880J2-13	V15-14	针杆线钩/Needle bar thread hook	1

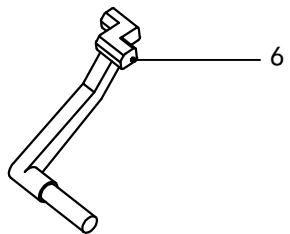
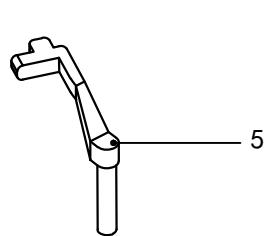
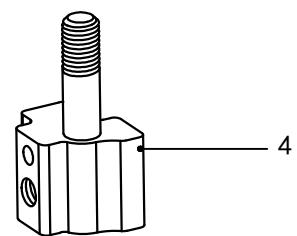
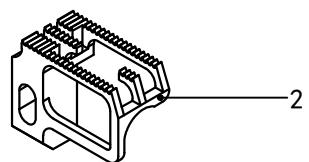
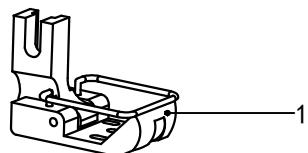
J3-382专用件部分 382 special parts



## J3-382专用件部分 382 special parts

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880J3-1	V16-01	压脚部件/Presser foot asm	1
2	3880J3-2	V16-02	送料牙/Feed dog	1
3	3880J3-3	V16-03	针板/Throat plate	1
4	3880J3-4	V16-04	针夹/Needle clamp	1
5	3880J3-5	V16-05	固定护针杆/Fixed needle guard rod	1
6	3880J3-6	V16-06	摆动护针杆/Rear moving needle guard	1

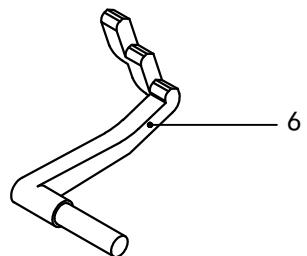
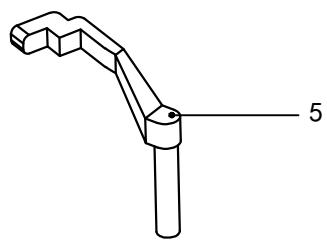
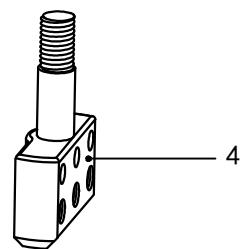
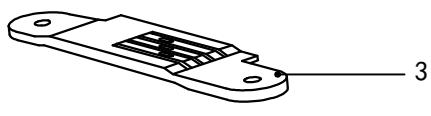
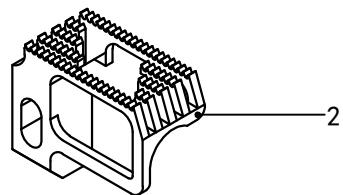
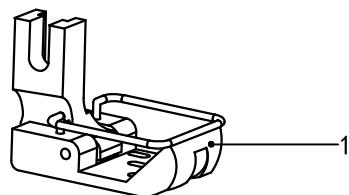
J4-383S专用件部分 383S special parts



## J4-383S专用件部分 383S special parts

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880J4-1	V17-22-R	压脚部件/Presser foot asm	1
2	3880J4-2	V17-23	送料牙/Feed dog	1
3	3880J4-3	V17-20	针板/Throat plate	1
4	3880J4-4	V17-21	针夹/Needle clamp	1
5	3880J4-5	V17-24	摆动护针杆/Rear moving needle guard	1
6	3880J4-6	V17-25	左固定护针杆/Left fixed needle guard rod	1

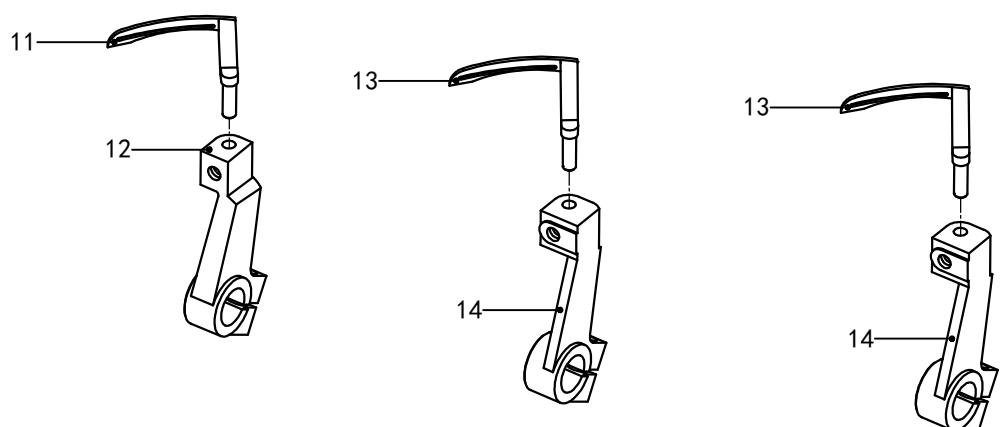
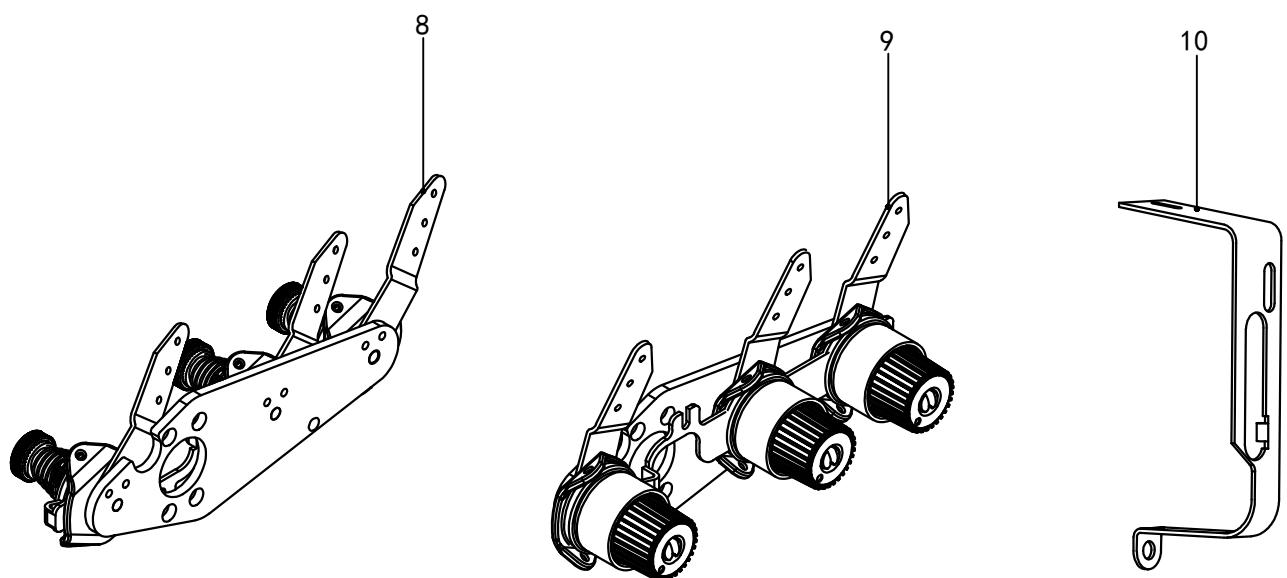
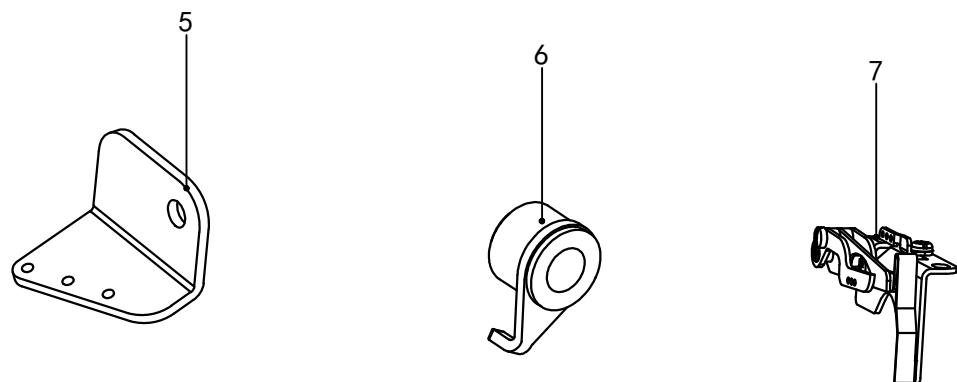
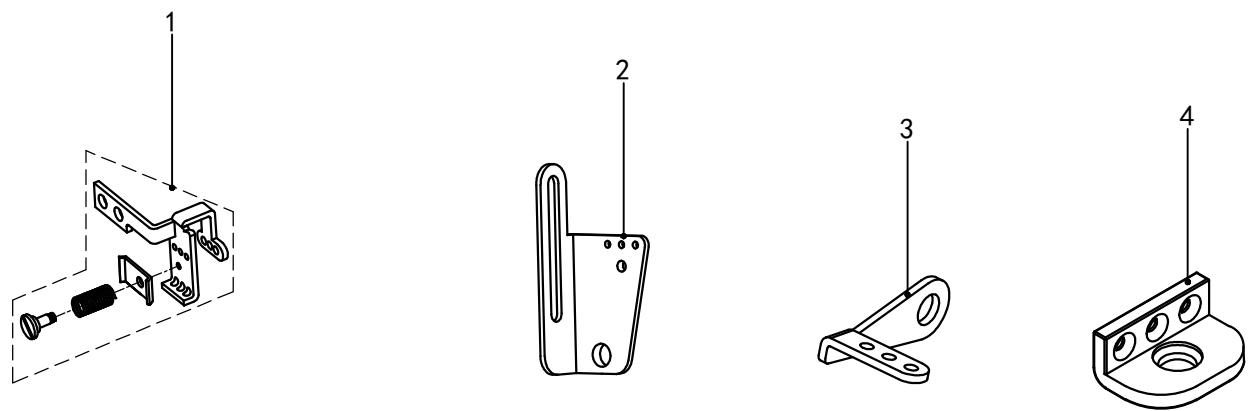
J5-383P专用件部分 383P special parts



## J5-383P专用件部分 383P special parts

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880J5-1	V17-28-R	压脚部件/Presser foot asm	1
2	3880J5-2	V17-29	送料牙/Feed dog	1
3	3880J5-3	V17-26	针板/Throat plate	1
4	3880J5-4	V17-27	针夹/Needle clamp	1
5	3880J5-5	V17-30	摆动护针杆/Rear moving needle guard	1
6	3880J5-6	V17-31	左固定护针杆/Left fixed needle guard rod	1

J6-383S、383P通用件部分 383S、383P general parts

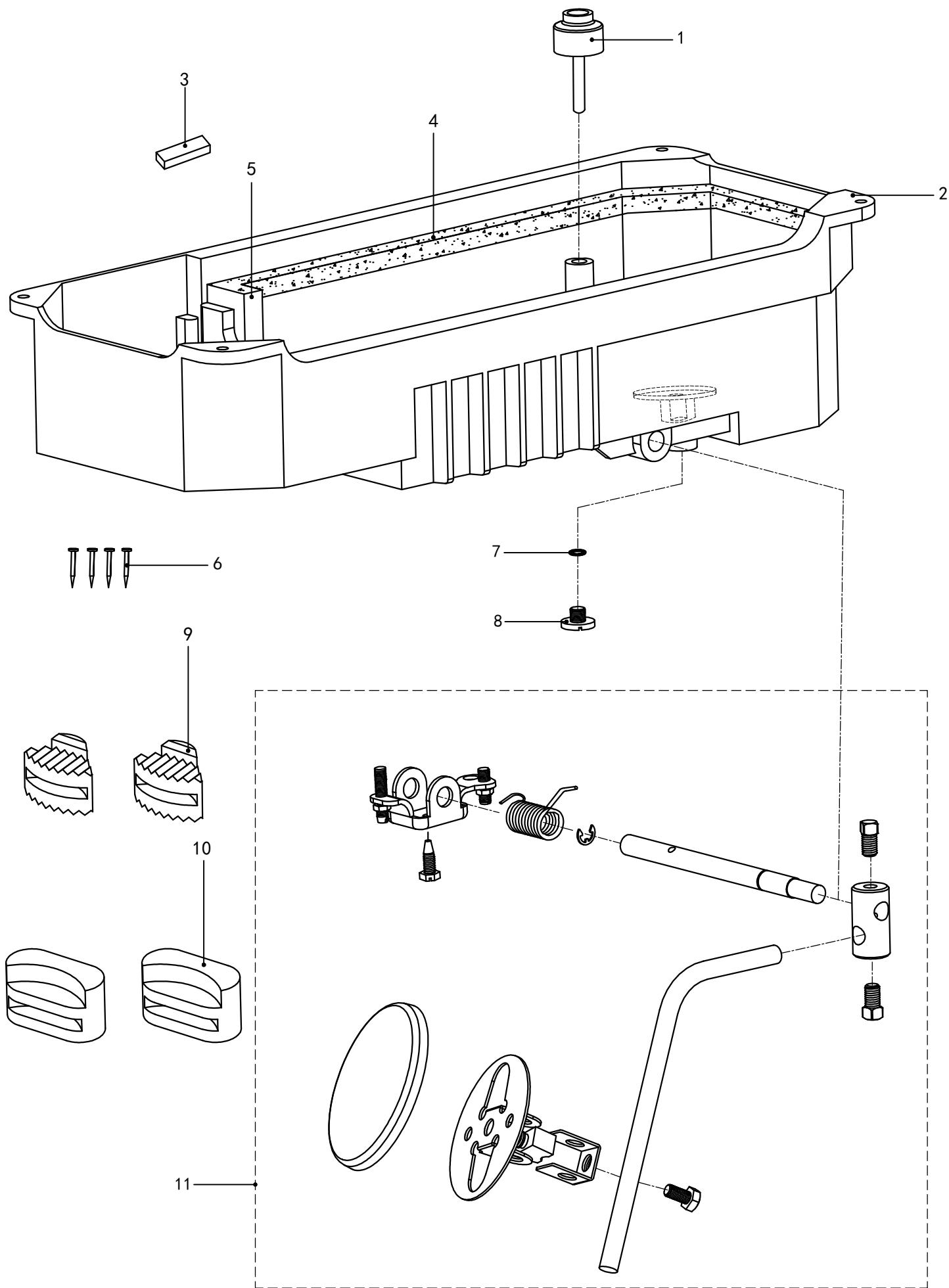


J6-383S、383P通用件部分 383S、383P general parts

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880J6-1	V17-01	挑线杆组件/Take-up bar assembly	1
2	3880J6-2	V17-02	中间导线勾/Frame thread shaft	1
3	3880J6-3	V17-03	导线勾/Frame thread guide	2
4	3880J6-4	V17-04	底线导线勾/Looper thread guide	1
5	3880J6-5	V17-05	三孔过线板架/Three hole wiring board frame	1
6	3880J6-6	V17-07	松线爪部件/Loose wire claw part	1
7	3880J6-7	V17-10	凸轮导线钩部件/looper thread guide asm	1
8	3880J6-8	V17-11	底线夹线器部件/Lower thread tension asm	1
9	3880J6-9	V17-12	面线夹线器部件/Needle thread tension asm	1
10	3880J6-10	V17-38	挑线杆护罩/Thread take-up lever guard	1
11	3880J6-11	V06-51	右弯针/Looper(RIGHT)	1
12	3880J6-12	V17-18	后弯针曲柄部件/Back bending needle crank part	1
13	3880J6-13	V06-47	左弯针/Looper(LEFT)	2
14	3880J6-14	V17-16	左弯针曲柄部件/Left bending needle crank part	2

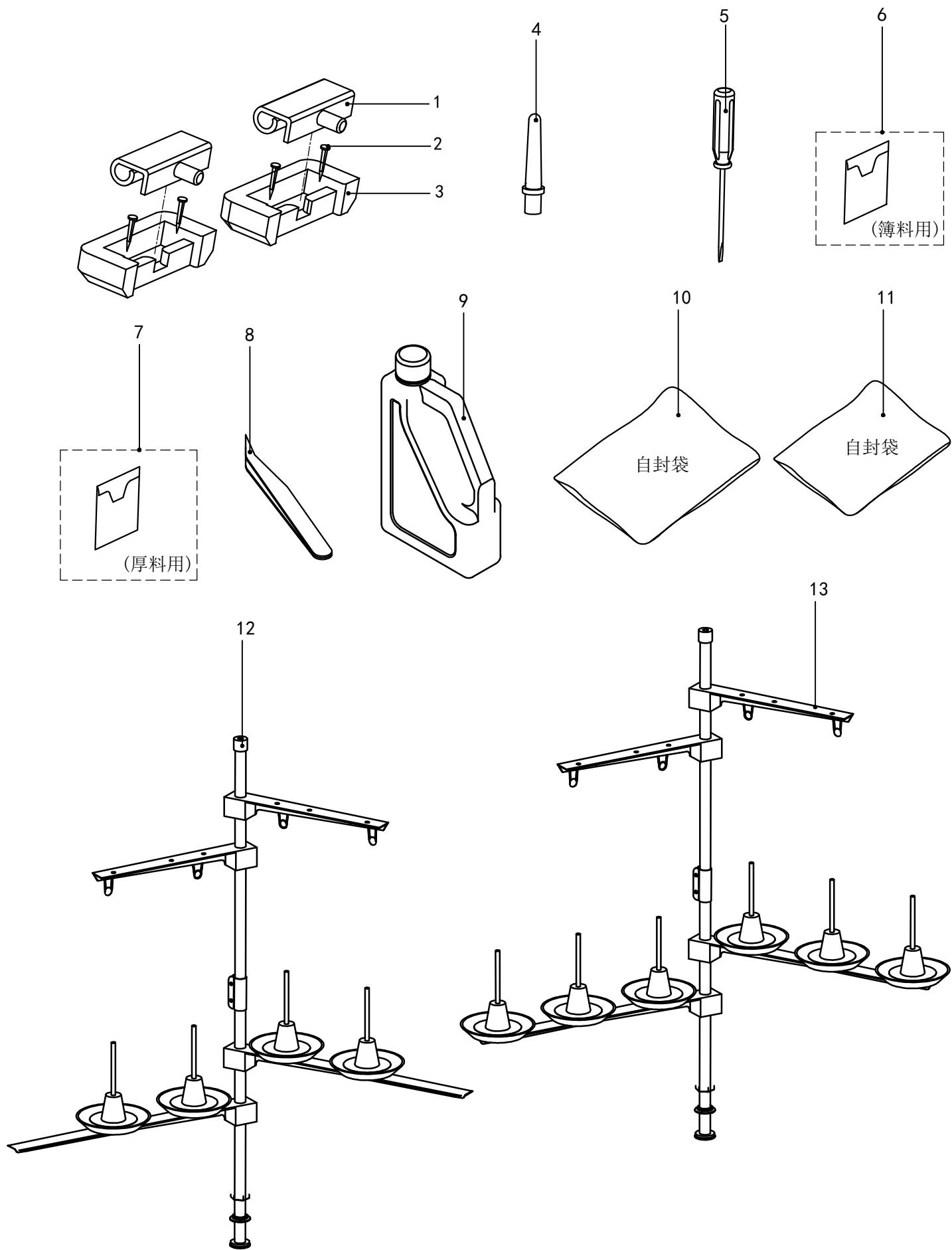
K-油盘、膝抬压脚分组件

Oil reservoir & knee lifter components



序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880K-1	V09-12	抬压脚顶销/Knee press lifter rod	1
2	3880K-2	V09-02	油盘/Oil reservoir	1
3	3880K-3	V09-03	油盘磁铁/Oil reservoir magnet	1
4	3880K-4	V09-04	油盘侧面垫/Gasket	2
5	3880K-5	V09-05	油盘端面垫/Gasket	1
6	3880K-6	V09-09	油盘座钉/Nail	4
7	3880K-7	□XQ00026	O形圈/O Ring	1
8	3880K-8	V02-01	螺钉SM7.94-13/Screw SM7.94	1
9	3880K-9	V09-07	油盘座垫/Oil reservoir felt cushion	2
10	3880K-10	V09-08	油盘支座/Oil reservoir rubber cushion	2
11	3880K-11	V09-30	抬压脚组件/Presser foot lifting assembly	1

## L-附件 Accessories



## L-附件 Accessories

序号/NO	代号/Assembly NO	件号/Part NO	名称/Description	数量/Num
1	3880L-1	V10-01	机头连接钩部件/Machine hinge plate asm.	2
2	3880L-2	LD00187	自攻螺钉/Wood Screw	4
3	3880L-3	V10-02	机头连接钩座/Machine hinge plate	2
4	3880L-4	V10-08	机头支柱/Machine rest pin	1
5	3880L-5	FJ8-7	中号螺丝刀/ScrewDriver(medium)	1
6	3880L-6	BZV2-37-14/90	机针/Needle	2
7	3880L-7	BZV2-37-20/125	机针/Needle	2
8	3880L-8	FJ4-8	镊子/Thread Tweezers	1
9	3880L-9	FJ8-11	大油壶/Oiler	1
10	3880L-10	FJ-D-9	自封袋/Accessory bag	1
11	3880L-11	FJ-D-11	自封袋/ Accessory bag	1
12	3880L-12	FJ4-20	四线架/Four wire rack	1
13	3880L-13	FJ4-19	六线架/Six wire rack	1