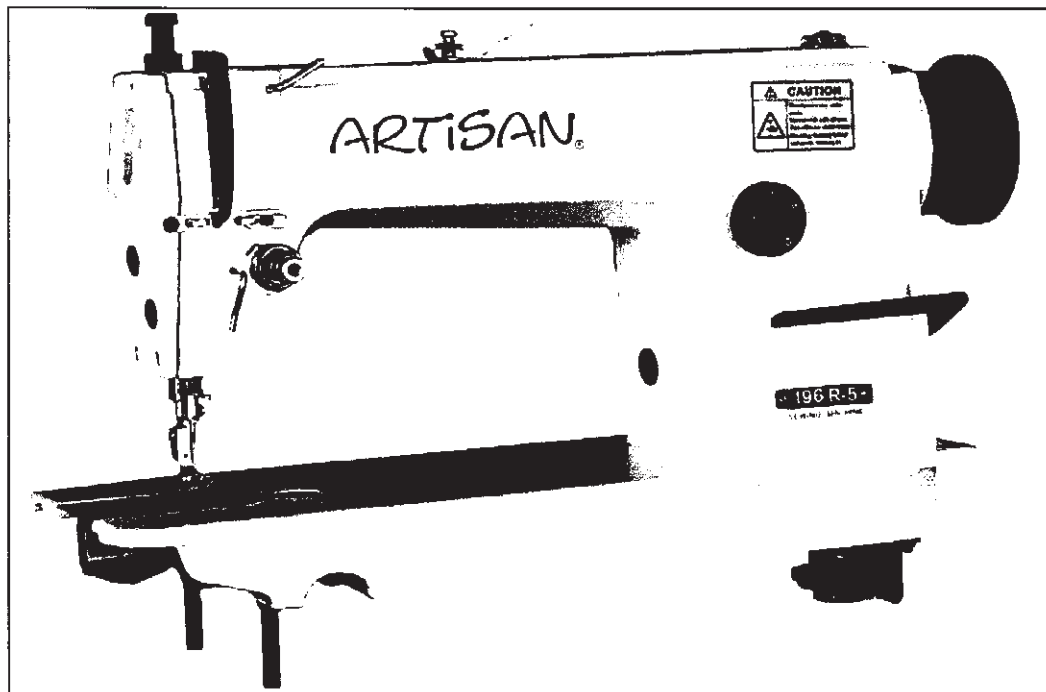


# ARTISAN®



ARTISAN®

**196 R-5**

Big Bobbin

**Operators Manual  
and  
Spare Parts Booklet**

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1. 机器简介  
1. INTRODUCTION

该自动加油平缝机是单直针锁式线迹工业用缝纫机。设有全自动润滑系统，包括旋梭自动润滑，并装有油量控制阀。采用高速缝纫机的送料机构，大大增强了机器耐用度及线迹的美观等。适用于缝制薄的和中等厚度的针、棉、毛以及化纤等织品及轻质皮革品，是服装、鞋帽行业的理想缝纫设备。

This single needle machine is manufactured for artisan lockstitch sewing machine and is suited for sewing light weight and medium weight material, which equipped with automatic oil system, including the automatic oil of the rotating hook and also equipped with control valve. For adopting high speed sewing machine feeding structure, the durability is greatly increase and the stitch is exquisite. It is the ideal sewing equipment used in the trade of garment, shoes and hats, which is suitable for knitting, cotton, wool, fabric and light leather.

2. 主要技术规格  
2. MAIN TECHNICAL SPECIFICATIONS

**196 R 2**

1	最大线迹距	4毫米
2	压脚提升高度	6毫米(膝提可达 10毫米)
3	能缝最大厚度	5毫米(自由状态)
4	使用机针	GV3(16×231)#65~#110
5	润滑油	油号: 10号白油
6	电机功率	380V/370W

1	Max. needle length	4mm
2	Presser lifting amount	6mm(10mm by knee lifting)
3	Sewing ability of max. thickness	5mm(free state)
4	Needle	Model GV3, #65~#110
5	Lubricating oil	#10 white oil
6	Power of electric machine	380V/370W

### 3. 机器安装和操作准备:

### 3. INSTALLATION OF MACHINE AND OPERATION PREPARATION

#### 1. 机器安装

##### (1) 安装地点:

为使机器在高速运转时平稳, 振动小, 安装必须有一个坚固而平坦的基础, 如果机架脚四只胶垫和地面之间有较好的接触, 就能使机架更加稳固, 运转时的噪音也会降低。

##### (2) 油盘的安装:

将两只油盘支座 1 和两只油盘座垫 3 分别装在台板凹槽的四角, 用油盘座钉 2 固定之, 再装上油盘 4 (图 1. 2)

##### (3) 机头的安装:

将机头连接钩 1 插入机壳底板孔内, 与台板上的机头连接钩座 2 相嵌合, 再将机头放到四只角的机头座垫 3 上。(图 3)

#### 1. Installation of machine:

##### (1) Place of installation:

The machine should be installed on a strong base to ensure the machine to have a steady running and minimum vibration at high speed. If the four rubber mats on the feet of the sewing machine stand have a good connection with ground, it results in lower noise in operation.

##### (2) Fitting oil pan:

Put the oil rubber cushions (1) and oil pan felt cushions (3) separately on four corners of notch of the table, fix them with the screw of oil pan (2), then install the oil pan (4). (Fig.1,2)

##### (3) Fitting machine head:

Put the machine head connecting hooks (1) into the bed holes to engage respectively two hinges (2) stated in the table, then place the machine on the four cushions (3). (Fig.3)

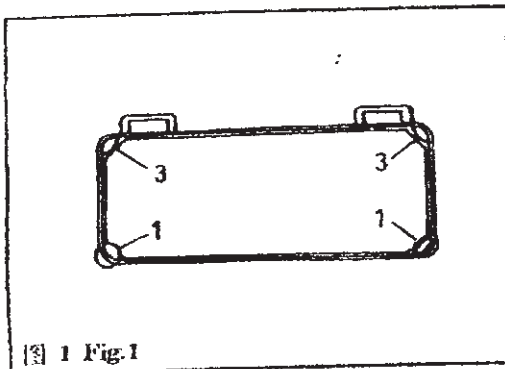


图 1 Fig.1

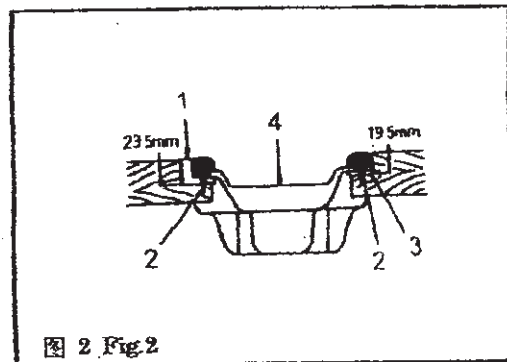


图 2 Fig.2

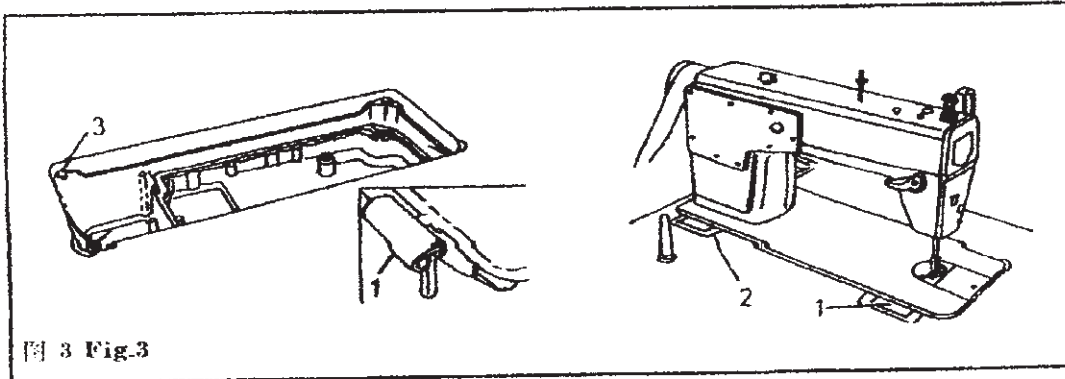


图 3 Fig.3

(4) 绕线器的安装:

安装好机头, 套上皮带后就可以着手装绕线器。安装绕线器时应将绕线轮 1 (见图 4) 对准皮带 2 的外边, 并使绕线轮和皮带之间有一定的空隙。但在按下绕线轮架 3 时应能使绕线轮和皮带相互接触, 上轮转动时, 皮带能带动绕线轮一起转动。然后拧紧木螺钉 4 将绕线器固定在台板上。

(4) Fitting thread winder:

After fitting machine head and the belt, the thread winder can be fitted. In Fig. 4 when fitting winder, the winder wheel 1 should face the outside of belt 2. Between winder wheel and belt should have a certain clearance. If push down winder wheel stand 3, the winder wheel should touch the belt. And when balance wheel running, the belt can make the winder wheel run together, then tighten screw 4 to set the thread winder on the table.

(5) 防护罩的安装: (图 5)

装好绕线器后, 即可进行皮带防护罩的安装。先将上轮罩壳 1 用螺钉 2 固定在机头上, 再将上轮罩壳盖板 3 安装在上轮罩壳上。注意, 罩壳不能与绕线器 4 相碰撞。

将传动带罩壳 5 用木螺钉 6 安装在台板上, 注意翻转机头时上轮罩壳不能与传动带罩壳相碰。

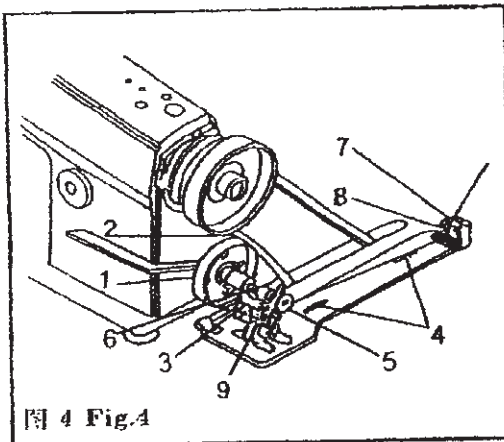


图 4 Fig.4

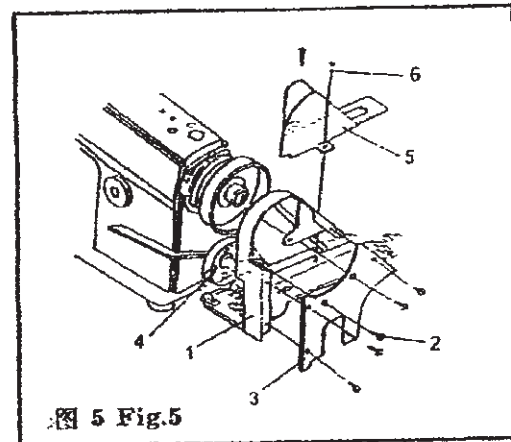


图 5 Fig.5

(5) Installing the belt cover: (Fig. 5)

After installing the bobbin winder, it can be installed the belt cover.

Fix the balance wheel cover (1) on the machine head with screw (2), then you may install the belt cover, lid (3) on the belt cover, but you must be sure that the balance wheel cover not hit the bobbin winder (4). After finishing this, fix the belt cover (5) on the collar with wooden screws (6). Note: the balance wheel cover can not hit the belt cover.

(6) 机器安装示意图: (图 6)

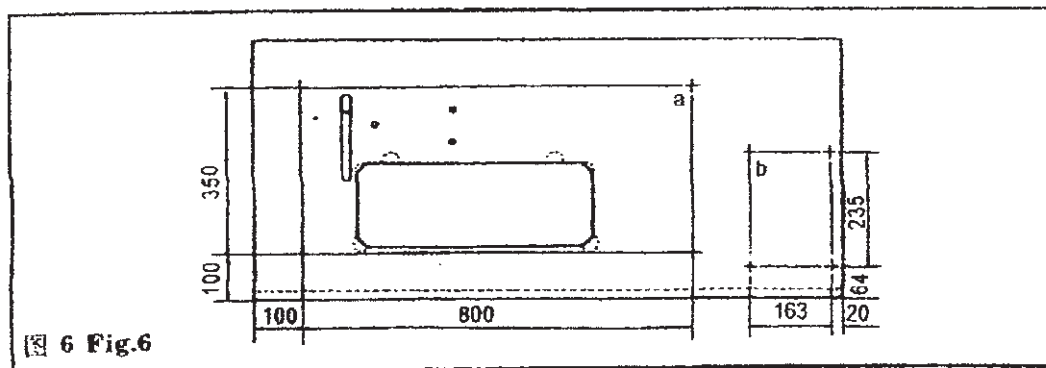
a. 机器安装位置.

b. 抽屉安装位置.

(6) Sketch map of machine stand installation: (Fig. 6)

a. Position of machine stand.

b. Position of drawer.



2. 操作准备:

(1) 清洗油污:

机器在装箱前为了防止机件生锈而涂有防锈油脂, 装箱后可能有较长时间的贮藏和长途运输阶段会造成油脂硬化或积聚灰尘。所以新机器在使用前, 必须将涂在机器各部位的防锈油脂用汽油和洁净的软布擦洗干净。

(2) 机器检查:

机头可能因在运输中受到强烈振动而使机件松动, 所以在清除油污以后, 应对机器作一次周密检查。检查时用手转动上轮, 观察机件有无转动困难、碰撞、不均匀及其他不正常现象和声响等。如有上述情况应进行适当调整。

(3) 机器润滑:

a. 润滑须知: (图 7)

在试车前应向油盘加缝纫机油（10号白油）至 HIGH 记号部位 A。加油后开动机器，应看到油液喷到油窗 2 上。至于喷到油窗上的油量多少与总油量的多少无关。但如果油盘内的油面低于 LOW 记号部位 B 时，应再加油。

\*注意：使用新机器或者长期未使用过的机器时，应在断续每分钟 1500 针左右状态下，使机器进行 10 分钟左右的适应性运转。

#### b. 调节面部油量 (图 8)

面部油箱进油量可以通过油量调节阀 1 进行调节：转动油量调节阀 1，将调节阀上的刻槽 A 平行于进油管 2 时油量最大，旋转调节阀时，油量逐渐减少，直于调节阀上的刻槽垂直于进油管时油量关闭。

#### c. 调节旋梭油量 (图 9)

将下轴前轴套上的油量调节螺钉朝 A 方向转动时，油量将增大。当油量调节螺钉朝 B 方向转动时，油量将减小。

#### (4) 试车：

a. 机器转动时，上轮应是逆时针方向转动（从上轮的外侧面看）。

b. 底线穿入后，不宜空车运转，以免轧线。

c. 为了延长机器的使用寿命，新机器在开始使用时的转速，一般应不超过每分钟 1500 转，以使机器充分磨合。经过 1~2 个月使用后，才可根椐缝料的性质、厚度的不同相应地逐步提高转速。

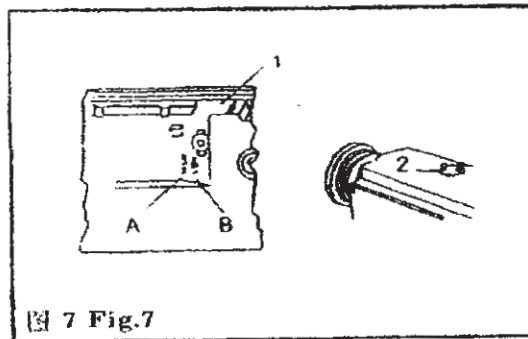


图 7 Fig.7

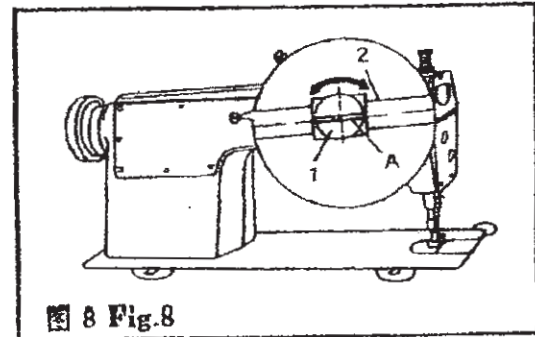


图 8 Fig.8

## 2. Operation preparation:

### (1) Cleaning:

Before packing each part of the machine, should be covered with anti-rust grease. And before operation new machine, anti-rust grease on each part of machine should be cleaned out with gasoline and clean with soft cloth.

### (2) Inspection:

Some parts of machine head may get loose due to vibration incurred in transit of rough handling, so after cleaning, the machine should be thoroughly inspected. To check the machine head by means of turning balance wheel. The machine head must be regulated in the case of conditions such as abnormal noise from the compact of moving

parts, the difficulty of the machine head to run, running into each other of moving parts.

(3) Lubrications.

a. Information for lubrication: (Fig.7)

Before starting the machine, fill oil pan with sewing machine (10# white oil) up to HIGH mark A. When you operate the machine after lubrication, you will see splashing oil through oil sight window, Note that the amount the splashing oil is unrelated to the amount of the lubrication oil, But if the oil level is lower than LOW mark B, always refill the oil.

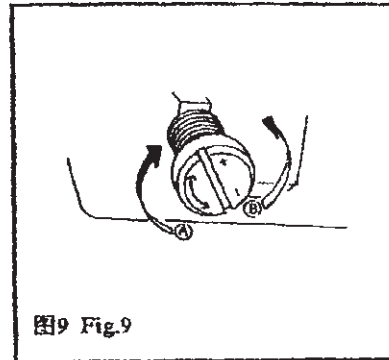


图9 Fig.9

\* Note: New machine(or those who have not been used for a long time) must be operated at a speed of 1500 s.p.m off and on for 10 minutes at first.

b. Adjusting the amount of oil supplied in the front of head(Fig.8):

The amount of oil supplied in the oil reservoir in the front of head can be adjusted by regulating valve of amount of oil(1): turn the regulating valve of amount of oil(1), when dot A on the regulating valve is parallel to oil inlet tube(2), the amount of oil is maximum, when rotating the regulating valve, the amount of oil will be reduced gradually till the dot on the regulating valve is vertical to the oil inlet pipe, the oil flow regulator is closed.

c. Adjusting the oil of rotary hook (Fig 9)

While turning the adjusting screw on the lower shaft bush to "+", the amount of oil will increase: while turning the adjusting screw to "-" the amount of oil will decrease.

(4) Testing:

- a. When machine running, the balance wheel should be counter clockwise.
- b. The machine can not run without materials after threading.
- c. At the beginning of operating, the speed of machine can be over 2500spm. Only after one or two months of running, the speed of the machine can be increased as per nature of fabrics.

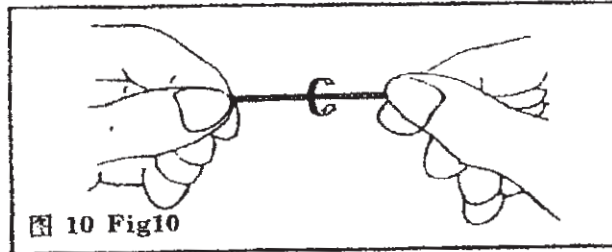
4. 机器的操作  
4. Operation

1. 缝线的选择:

面线应采用左旋线, 底线则左、右旋线均可使用。缝线旋向的鉴别, 可按图 10 所示把缝线捏住, 以右手按图箭头方向拨转缝线, 若线股越搓越紧, 则是左旋线, 反之即为右旋线。

1. Selection of sewing thread:

Needle thread should be left twisting. (Fig. 10)



2. 机针、缝线和缝料的配合:

请使用 GV3 (16×231) 机针, 机针号数请根据使用的缝料, 缝线参考下表进行选择:

2. Coordination of needle thread and material:

DP×5 needles chosen in preference. The number of needle can be selected in line with the material and thread used (See the following table)

针号	线号			缝纫材料(例)
	棉线	丝线	尼龙	
#9	100~120	30	3~56	薄纱布、薄绸、细麻纱
#11	80~100	24~30		薄麻布、薄棉布、绸缎、薄府绸
#14	60~80	20		粗布、卡其布、薄呢
#16	40~60	16~18		粗厚棉布、薄绒布、灯芯绒
#18	30~40	10~12		厚绒布、薄帆布、大衣呢

Needle No.	No. and kind of thread			For sewing
	Cotton	silk	Nylon	
#9	100-120	30		Gauze, light silk and thin haircords
#11	80-100	24-30	3-56	Gunny, thin cotton, silk and poplin
#14	60-80	20		Coarse cloth, khakt, light woolen cloth
#16	40-60	16-18		Coarse and heavy cotton coth, thin flannelette and corduroy
#18	30-40	10-12		Heavy flannelette, thin canvas and heavy woolen cloth

### 3. 装置机针:

转动上轮,使针杆上升到最高位置,旋松支针螺钉 1(见图11),注意机针的长槽应位于操作者的左面,然后把针柄插入针杆下部的针孔内,使其碰到针杆孔的底部为止,再旋转支针螺钉固定机针。

### 3. Fitting needle:

Turning balance wheel to make the needle bar in the highest position and loosen the screw 1(Fig.11). Long groove of needle should face the left of the operator, then insert the needle into the hole of the needle bar, Tighten the screw.

### 4. 穿面线和引底线:

穿面线的顺序表示在图 12中。自线团来的面线,先穿入顶部的过线板 1的右孔中,经过夹线板 2,自左孔中引出,再经过三眼线钩 3的三个线眼,向下套入夹线器 4的夹线板之间,再勾进挑线簧 5,绕过缓线调节钩 6,向上勾进右线钩 7,再穿过挑线杆 8的线孔,然后向下勾进左线钩 9,针杆套筒线钩 10,针杆线钩 11,最后将缝线自左向右穿过机针 12的针孔内,并引出 100毫米左右的线备用。

引底线时,先将面线握住,转动上轮,使针杆向下运动,并回升到最高位置,然后拉起捏住的面线线头,底线即被牵引上来,最后把底、面二根线头,一起置于压脚下面。

### 4. Threading:

As per Fig. 12, when threading needle thread, first put the thread through thread guide 1 and tension plate 2 and thread retainer 3, down through tensioner 4 and thread take up spring 5 and thread releasing hook 6, then up through right thread hook 7 and thread taking up level 8. Again down through left thread hook 9 and needle bar sleeve thread hook 10 and needle bar thread hook 11. finally pull the thread needle hole 12 from left to right with thread tail 100mm.

When threading bobbin thread, hold the needle thread while turning balance wheel to make the needle bar move down and then to make it rise in the highest position. Then the bobbin thread is pulled out with the needle thread. finally put the two threads under the presser foot.

### 5. 绕梭心线:

把梭心 5(图4)插入绕线器轴 6的顶端上。自线团来的线,先穿入过线架 7的线孔中,再夹入二块夹线板 8的中间,然后把线头在梭心上绕上几圈,把满线跳板 9向下掀压,绕线轮 1即压向皮带,在缝纫过程中就能自动绕线,梭心绕满后能自动跳开并停止。

梭心线应排列整齐而紧密,如松浮不紧,可以加大夹线板 8的压力;如排列不齐,则要移动过线架 7的位置进行调整,调整时,先松开紧固螺钉,然后左右移动过线架,使之能自动排列整齐后再紧固之。梭心线不要绕得过满,否则容易散落,一般绕到小于梭心外径 0.5~1毫米,绕线量可以用满线跳板的螺钉加以调节。

### 5. Winding bobbin:

Insert bobbin 5 (Fig.4) into the winder shaft 6. Put the needle thread through hole of

thread guide bracket 7 and insert it between two plates 8. Then the needle thread is wound several rings on the bobbin, pull down the full-thread plate 9, thus the winding wheel can press the belt, in the process of sewing, the winder can work automatically. When the bobbin is full, the winder will stop automatically.

Thread on bobbin should be arranged in good order and tight. Increasing pressure on the tension plate 8 can regulate thread tension, moving thread guide bracket 7 can regulate thread arrangement. When adjusting, first loose the fixed screw, then move thread stand in the left and right, make it to arrange in good order automatically, then fix it. Generally, bobbin can not be winded overfull. It should be lower 0.5-1mm than outer diameter of the bobbin. Amount of winding can be controlled by full-thread plate.

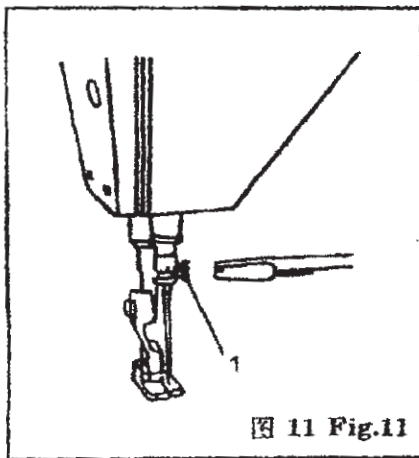


图 11 Fig.11

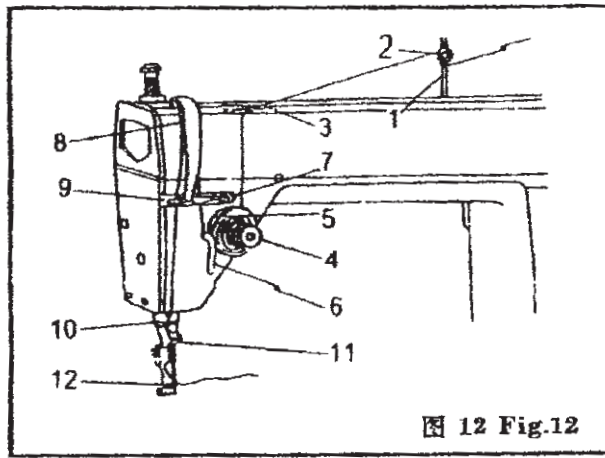


图 12 Fig.12

6. 穿梭子线:

将绕满底线的梭心 1 (图13a) 放入梭子 2 内;

把线头拖进槽 3 (图 13b) 中;

使线头滑入梭皮 4 的下面, 再将其拉进梭皮端部的导线孔5内 (图13c). 最后引出100毫米左右线备用

6. Threading bobbin case:

Put the full bobbin 1 (Fig. 13a) into the case 2;

Insert thread into slot 3 (Fig.13b);

Through the spring 4, the thread is pulled out of the hole 5 about 100mm. (Fig.13c)

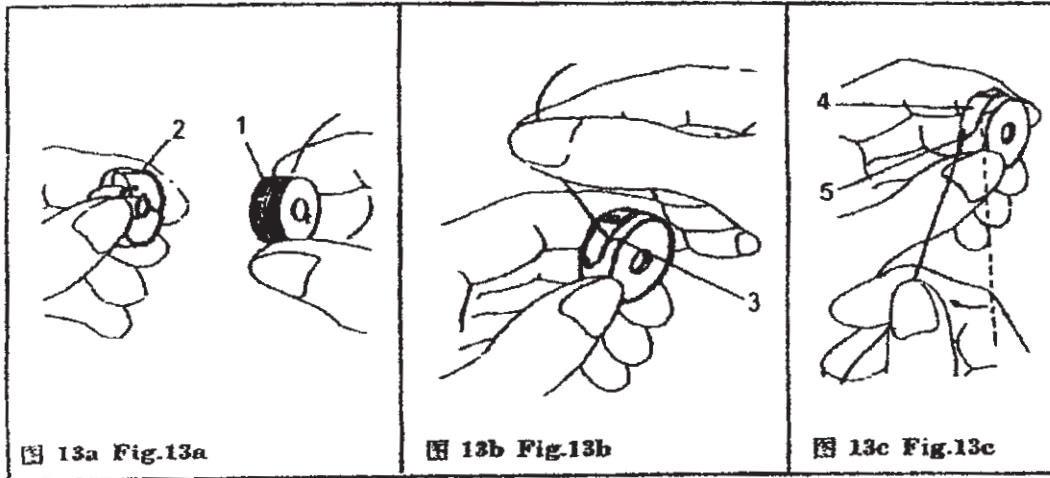


图 13a Fig.13a

图 13b Fig.13b

图 13c Fig.13c

7. 装梭子和取出梭心:

握住梭门盖 1, 把梭子 2 插入旋梭架的轴心 3 上 (图 14).

放下梭门盖, 推动梭子, 使梭门卡在轴心端部的槽口 (图 15). 观察在上轮转动时, 梭子是否平衡.

取出梭心时, 转动上轮, 将针杆升到最高位置, 拉开推板将梭子的梭门盖扳开, 即能取出梭子. 然后将梭门盖闭合, 再将装有梭心的一端向下, 梭心便自动落下 (图 16).

7. Loading and unloading bobbin

Hold bobbin case lid 1 and insert bobbin case 2 into the shaft 3 of rotary hook (Fig. 14). turn the balance wheel and check whether the bobbin is set or not.(Fig.15).

When unloading bobbin case, turn balance wheel to raise the needle bar in the highest position. Then open the bobbin case lid and take out the bobbin case (Fig.16)

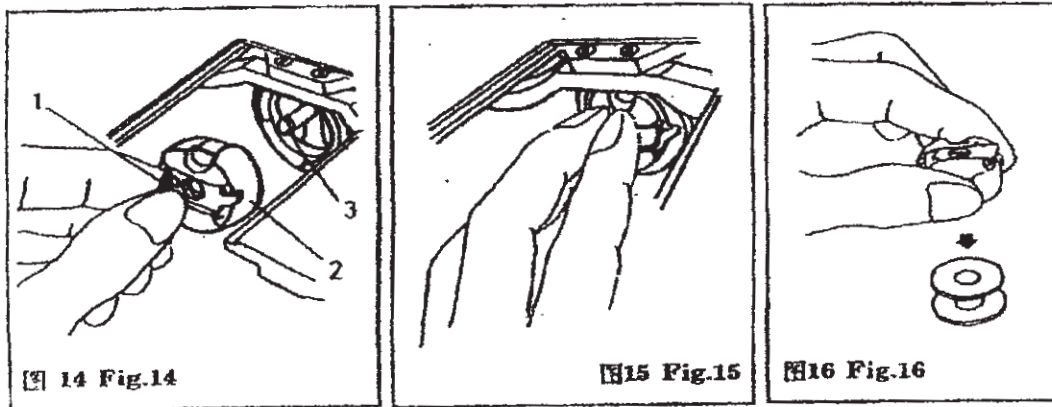


图 14 Fig.14

图 15 Fig.15

图 16 Fig.16

### 8. 针距长短调节和倒顺送料控制:

针距的长度, 可以用转动针距旋钮(图17)来调节。逆时针转动, 针距调长, 顺时针转动, 针距调短。需要倒向送料时, 可以将倒送扳手向下掀压, 即能进行倒送。手放松后, 倒送扳手能自动复位, 这时又恢复顺向送料。

### 8. Regulating needle gauge and feeding:

Turning the rotary button can regulate the width of needle gauge (Fig. 17). If turning counter clockwise, the needle gauge is wide. If turning clockwise, the needle gauge is narrow. If it is necessary to back tack, just put down the lever under the rotary button.

### 9. 缝线的张力:

缝线的张力要根据缝料的差别、缝线的粗细以及其他一些因素而变动。

实际使用中, 是依据缝纫出来的线迹来调整底、面线的张力, 使之能得到正常的线迹。各种形状的线迹, 表示在图18中。

- (a) 正常线迹。底、面线交锁在缝料中部;
- (b) 面线紧、底线松的线迹。缝线交锁部分在缝料的上面;
- (c) 面线松、底线紧的线迹。缝线交锁部分在缝料的底面;
- (d) 底、面线均松的线迹。缝线虽然交锁在缝料中部, 但底、面线浮在缝料的表面上;
- (e) 底、面线均紧的线迹。缝线虽然交锁在缝料中部, 但底、面线很紧地嵌入缝料。

### 9. Tension of thread:

Tension of thread is changed as per sewing materials thread size. In Fig. 18, there are various stitches which often appear.

- a. Normal. Two threads lock in the middle of the material.
- b. Needle thread tension is too high. Two threads lock on the surface of the material.
- c. Needle thread tension is too low. Two threads lock under the material.
- d. The two threads tension are both low. They are floating on the surface of the material.
- e. The two threads tension are both high. They are locking tightly in the material.

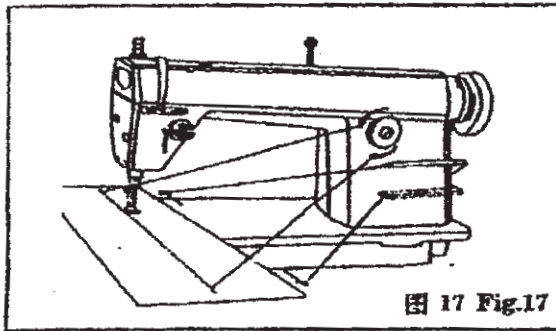


图 17 Fig.17

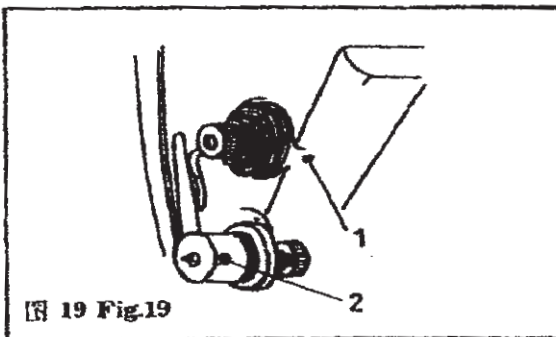


图 19 Fig.19

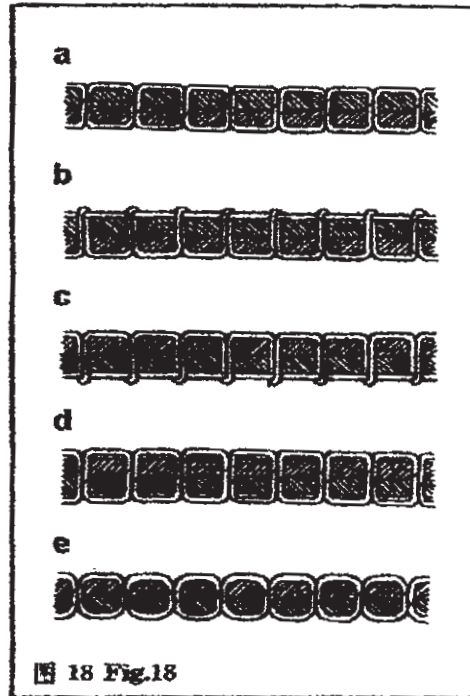


图 18 Fig.18

**(1) 挑线簧的调节:**

挑线簧的张力，一般在 20 克左右，其摆动范围为 7~10 毫米。缝制特别薄的缝料（短针距），则要减弱挑线簧的张力和放宽其摆动范围。缝制特别厚的缝料则相反。

调节挑线簧的摆动范围时，可以先松开固定螺钉 1（图 19），然后转动夹线器，以调节其摆动范围。夹线器顺时针转动，则摆动范围增大，反之则减小。最后再将固定螺钉支紧。同样，挑线簧的张力，也可以进行调节。调节时，先松开固定螺钉 1，将夹线器整个取出，再松开固定螺钉 2。这时，夹线螺钉就能转动。顺时针转动时，张力增加，反之则减少。调节好后，按同样方法，将夹线器装好。

通常，机器在出厂前，挑线簧均已调整妥善。因此，只是在缝制特殊的缝料或使用特殊的缝线时，才需要重新进行调整。

**(1) Regulating take-up spring:**

In general, the tension of take-up spring is about 25~35g and the range of swinging is 5~8mm. When sewing special light material(narrow needle gauge), the tension should be reduced and the range should be broadened. Adversely for special heavy material.

When regulating the range of swinging, first loose the fixed screw (Fig. 19), then turn the tensioner to regulate the range of swinging. If turn the tensioner clockwise, the range is broadened. If turn it anti-clockwise, the range is narrowed. Then tighten the

screw. when adjusting the tension of take-up spring, first loosen set screw 1, and take out the tensioner. then loosen set screw 2, so the tension screw can be turned. Turning clockwise can increase tension. turning anti-clockwise can reduce tension.

Generally, the take-up spring has been adjusted before ex-factory.

(2) 底面线张力的调整:

缝纫物的线迹应该如图18(a). 如果线迹不正时, 应对底、面线的张力加以调整, 使之能达到正常的线迹.

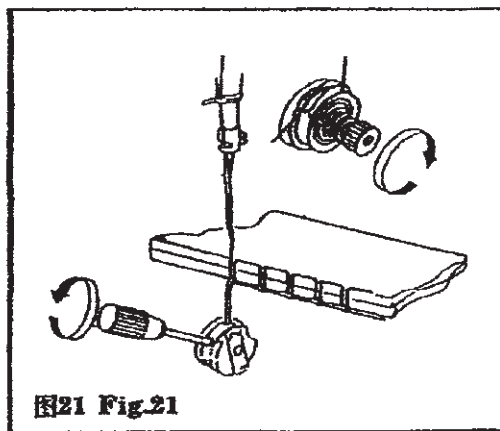
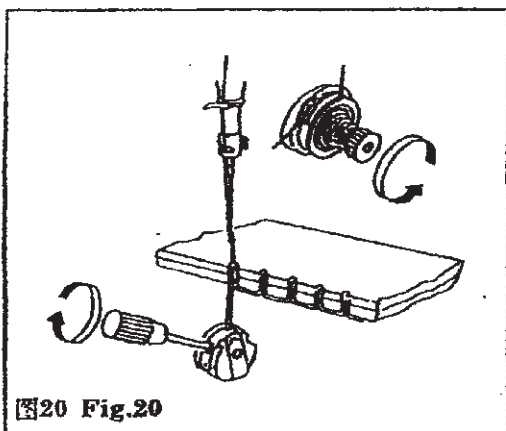
如果面线太紧, 底线太松, 则应逆时针旋转夹线螺母, 以放松面线的压力, 并用小螺丝刀旋紧梭皮螺钉, 加大底线的压力 (图20).

如果面线太松, 底线太紧, 则应顺时针旋转夹线螺母, 以加大面线的压力, 并用小螺丝刀旋松梭皮螺钉, 减小底线的压力 (图21).

如出现图18 (d)、(e) 的线迹, 也可以参照上述方法加以调整.

(2) Regulating thread tension:

The stitch on sewing material should be shown be Fig. 18a. If needle thread is too tight while bobbin thread is loose, the tension nut should be turned anti-clockwise to loosen the needle thread pressure and tighten the screw of bobbin spring to increase the bobbin thread pressure (Fig.20). Adversely in previous case (Fig.21).



#### 10. 压脚压力的调节:

压脚的压力,要根据缝料的厚度加以调整。缝制厚料时,应加大压脚的压力,这时,可以将机头顶部的调压螺钉,依图22(厚)所示箭头方向转动。反之缝薄料时,可按图22(薄)所示的方向,转动调压螺钉,以减小压脚的压力。

压脚的压力,应以能正常推送缝料为度,宜尽量减轻一些。

#### 10. Regulating pressure of prsser:

Pressure of prsser should be regulated as per sewing materials. When sewing heavy materials, the pressure should be increased. Just turn the screw on top of the machine head (Fig.22)(Heavy). Adversely when sewing light materials (Fig.22)(Light).

Pressure of prsser should be properly regulated so that it can feed material without a hitch.

#### 11. 线钩的调节:

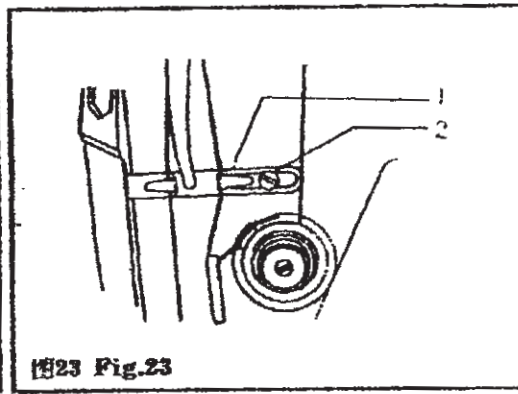
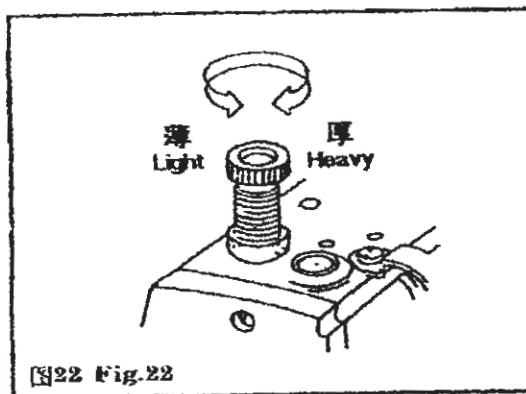
根据缝制物的厚度和针距长度调节好线钩的位置后,将能使缝制的线迹更为整齐。

在缝制厚料时,松开螺钉2(图23),将线钩1向左移动,以增加线量;在缝制薄料时则向右移动线钩以减少线量。

#### 11. Regulated thread hook:

In order to make the stitches moving beautifully, the position of thread hook should be regulated as per materials and the gauge of the needles.

When sewing heavy materials, first loosen the screw 2 (Fig. 23) and move the thread hook 1 to left to increase the thread amount. Adversely when sewing light materials.



### 5. 机器的调整 5. REGULATION OF MACHINE:

#### 1. 旋梭勾线时间的调整

旋梭与机针之间的相互运动关系，对缝纫性能的影响很大。标准的旋梭勾线时间是：当机针向下运动到最低位置后再向上回升 2.2毫米时：

- (1) 旋梭的勾线尖，应与机针的中心线一致；
- (2) 在此位置时，勾线尖应高于机针孔上边 2毫米 (图 24)。

调整的方法如下：

- (1) 旋松旋梭的三个固定螺钉；
  - (2) 转动上轮，使机针下降到最低位置后上升 2.2毫米；
  - (3) 转动旋梭，使勾线尖到达机针的中线处；
  - (4) 松开针杆连接轴紧固螺钉“1” (图 25)；
  - (5) 调整针杆的高度，使旋梭勾线尖高于机针孔上边 2毫米；最后将全部紧固螺钉旋紧。
- 在调整旋梭的勾线时间时，还注意到旋梭勾线尖与机针的侧面间隙。旋梭勾线尖平面与机针缺口底部之间的距离，应调整到 0.1毫米左右 (图 26)。

#### 1. Adjustment of looping time of rotary hook:

The moving relationship between rotary hook and needle will affect the functions of sewing greatly. The standard rotary hook looping time of is:

After the needle moves down in the lowest position, it will rise to 2.2mm, at this time:

- (1) Looping point of rotary hook should be in with the mid-line of needle;
- (2) Looping point should be 2mm higher than the hole of needle (Fig.24)

Method of regulation:

- (1) Loosen the three set screw of rotary hook,
- (2) Turn balance wheel to lower than the needle in the lowest position and then raise it 2.2mm.
- (3) Turn the rotary hook to make the looping point on the position of the midline of needle.

(4) Loosen the set screw of needle bar link shaft (Fig. 35)

(5) Regulate the height of needle bar to make the looping point 2mm higher than the hole of needle.

When regulating looping time of rotary hook, always be careful of the side clearance between looping time and needle.

The gap between the level of looping point and the bottom of needle should be regulated in 0.1 mm (Fig. 26)

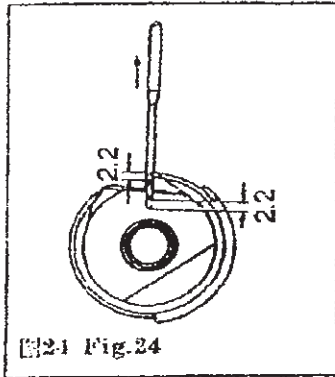


图24 Fig.24

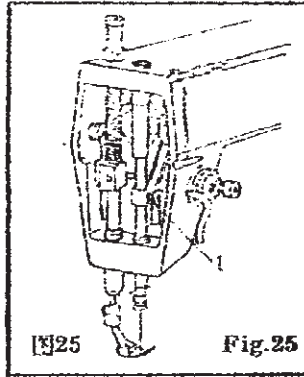


图25

Fig.25

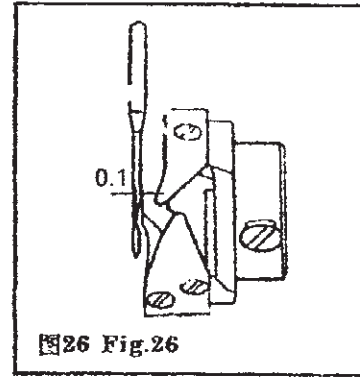


图26 Fig.26

### 2. 送布牙高度的调节:

送布牙上升到最高位置时, 齿顶面一般应高于针板平面 0.8~1毫米。如果缝纫特厚或特薄的缝料, 则需调节送布牙的高度。调节时应先松开抬牙曲柄1的紧固螺钉2 (图27), 调节好后再把螺帽旋紧。

### 2. Regulating the length of feed dogs.

The top of feed dogs should be 0.6~1mm higher than the level of needle plate when the feed dogs rise in the highest position. If sewing special heavy or light materials, the gauge of feed dogs should be regulated. When adjusting, first loosen the fixed screw 4 (Fig.24) of lifting belt crank.

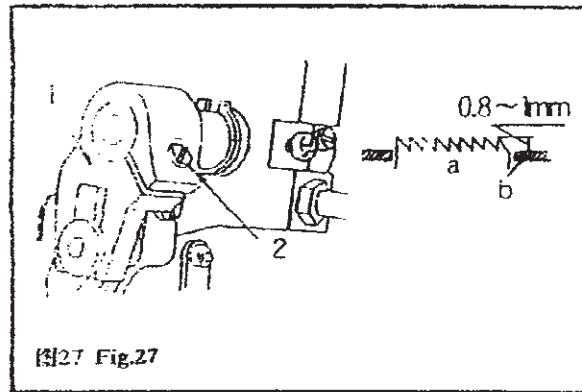


图27 Fig.27

### 6. 常见故障和处理方法:

### 6. COMMON TROUBLES AND METHODS OF TREATMENT

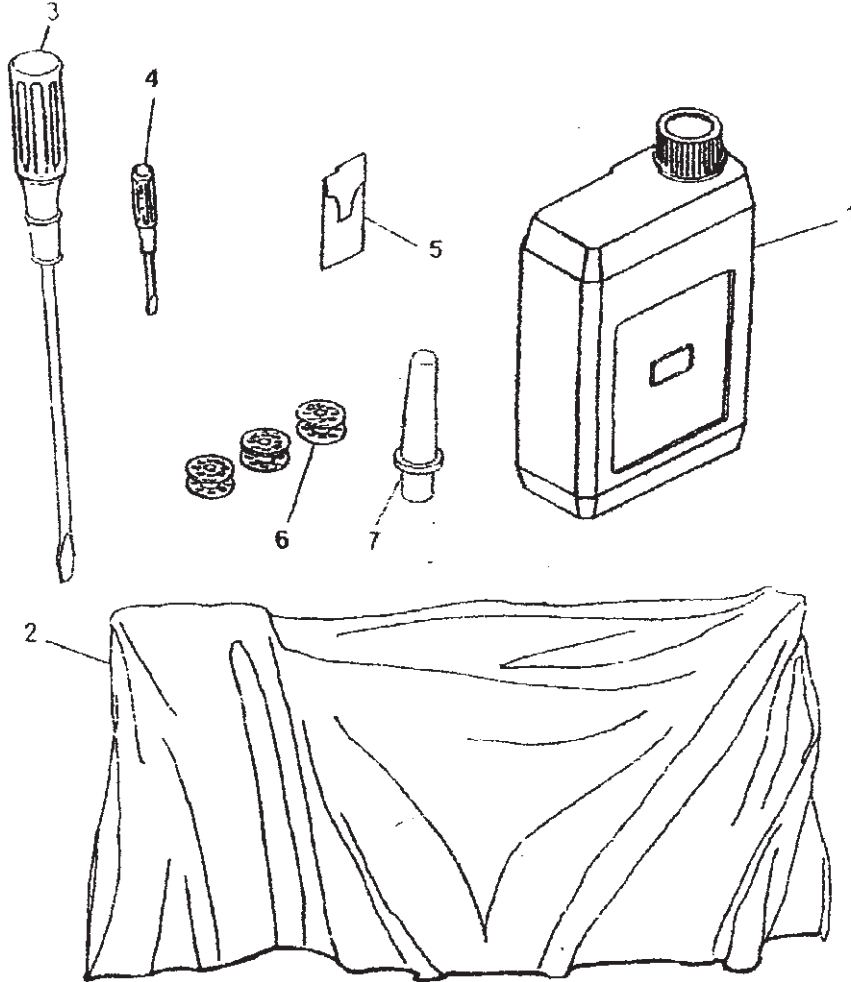
故障类型	产生原因	处理方法
断针	1. 机针太细或机针弯曲 2. 机针装法错误 3. 缝纫时用手推拉缝料 4. 缝料过干过硬	调换机针。 参看第 11 页图十一， 稍许加以扶持，不可推拉。 请按技术规格规定使用。
跳针	1. 机针弯曲或者机针粗细和 缝料厚薄不相称 2. 机针装法错误	调换机针， 参看第 11 页图十一。
断面线	1. 穿线错误 2. 面线太紧 3. 线的质量差 4. 机针太细，机针粗糙	参看第 11 页图十二。 参看第 16 页图二十，减少面线张力。 调换缝线 调换机针
断底线	1. 底线太紧 2. 梭心绕线松乱，不匀 3. 针板孔毛糙或磨损	减小底线张力 重新绕线 更换针板或用“0”砂布砂光
针迹松浮	1. 底面线没有调好 2. 挑线簧过松	调整底、面线。 参看第 14 页图十九，调节挑线簧张力。
缝料起皱	1. 缝料过薄而针距太长 2. 底、面线张力过紧 3. 压脚压力过强	适当调整 调节夹线螺母、挑线簧和梭皮螺钉 旋松调压螺钉，减轻压脚的压力

Fault	Probable cause	Solving method
Needle breaking	<ol style="list-style-type: none"> <li>1. Needle too thin or sewing materials too heavy.</li> <li>2. Needle bent.</li> <li>3. Needle bent.</li> <li>4. Strongly pull the sewing materials when sewing.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reference to the part of needle, thread, and sewing materials.</li> <li>2. Change the bent needle.</li> <li>3. Correct needle position.</li> <li>4. Properly sewing</li> </ol>
Skipped stitches	<ol style="list-style-type: none"> <li>1. The side clearance and position between needle and rotary hook badly adjusted.</li> <li>2. Loper bent</li> <li>3. Needles and materials unfit. Hole on the needle plate too large.</li> <li>4. Bobbin thread tension and presser pressure is too weak.</li> </ol>	<ol style="list-style-type: none"> <li>1. Regulating as per instruction book.</li> <li>2. Change the bent looper.</li> <li>3. Reference to the part of needle and to increase return amount of rotary sewing material. Lower the needle a little hook (for light materials).</li> <li>4. Increase them.</li> </ol>
Thread breaking	<ol style="list-style-type: none"> <li>1. Thread quality.</li> <li>2. Needle and thread unfit.</li> <li>3. Rough surface of thread guide.</li> <li>4. Tension is too tight.</li> <li>5. Needle position badly fitted.</li> <li>6. High temperature of needle fuses artificial fibre thread.</li> <li>7. Weak bobbin thread tension.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use high quality thread.</li> <li>2. Reference to the part of needle and thread.</li> <li>3. Polishing, or change a new one.</li> <li>4. Loosen the tension nut.</li> <li>5. Regulating it.</li> <li>6. Cooling needle.</li> <li>7. Regulating it.</li> </ol>
Thread floating	<ol style="list-style-type: none"> <li>1. Rotary hook is bad quality and badly fitted.</li> <li>2. Needle too thin.</li> <li>3. Feed dogs too low.</li> <li>4. Weak needle thread tension.</li> <li>5. Problem of presser foot.</li> <li>6. Weak take up spring</li> </ol>	<ol style="list-style-type: none"> <li>1. Change a new one and increase return amount of rotary hook.</li> <li>2. Change a thick one.</li> <li>3. Raise them.</li> <li>4. Increase it.</li> <li>5. Narrow the distance between bottom of the presser slot and needle. Change a new presser foot.</li> <li>6. Increase it.</li> </ol>

### 1. 机头附件

### 1. Machine head accessories

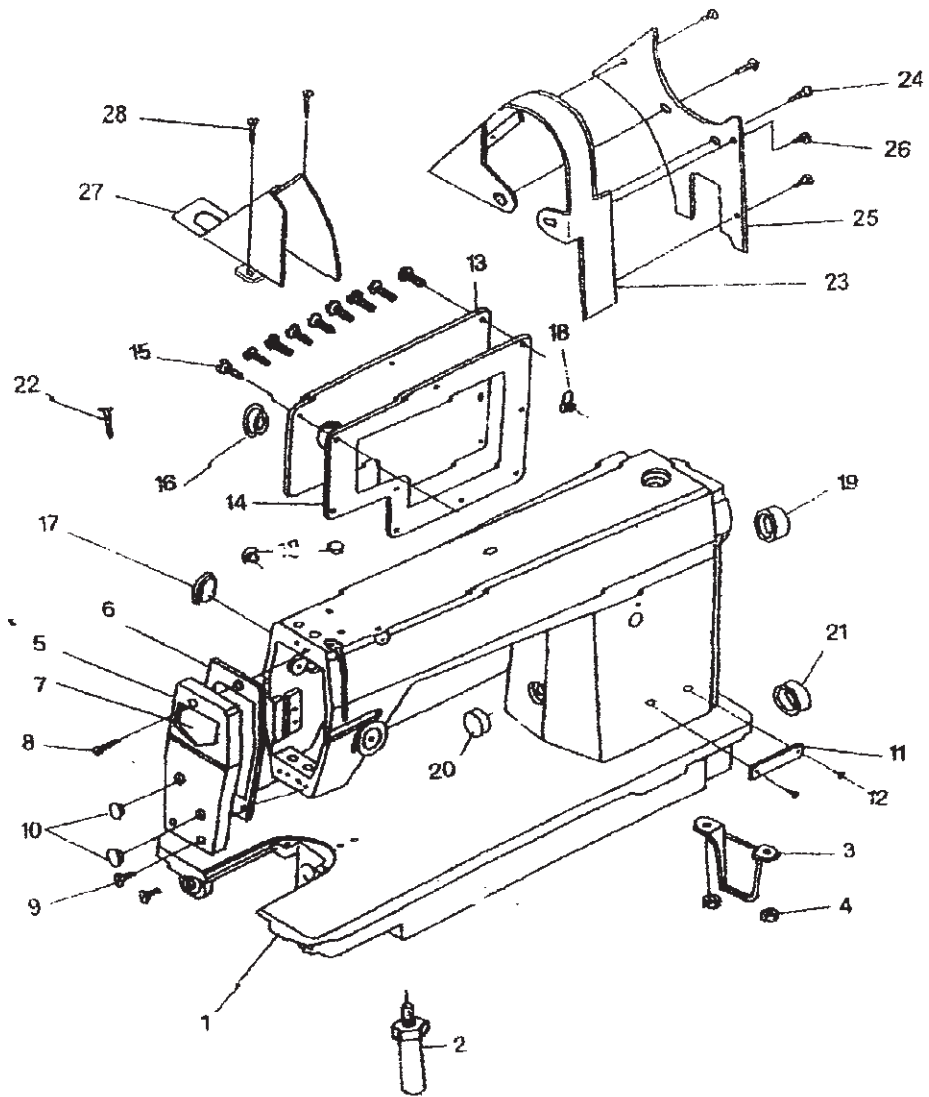
序号	件号	名称	数量
Ref.No.	Part No.	Description	Quantity
1	GR1604/3	油箱..... Oil reservoir asm. ....	1
2	GF141-8	机头罩..... Cover of machine head ...	1
3	GF141-8	螺丝刀(大)..... Screw driver (L) .....	1
4	GF116-8	螺丝刀(小)..... Screw driver (S) .....	1
5	GV3	机针..... Needle .....	1 bag
6	GR120	梭心..... Bobbin .....	3
7	GBR148	机头支柱..... Column of machine head...	1



## 2. 机壳组件

## 2.Components of Case

序号	件号	名称	数量
Ref.No	Part No.	Description	Quantity
1	GQ213-8	机壳	1
2	GS299-8	底座支柱	2
3	GR414-8	底座支承板	1
4	GL15	底座支承板螺母	2
5	GR428-8	面板	1
6	GR415-8	面板垫片	1
7	GR420-8	面板装饰板	1
8	GS35	面板上螺钉	1
9	GS020	面板下螺钉	2
10	GR1458	面板油塞	2
11	GQ216-8	型号牌	1
12	GX196-8	铆钉	2
13	GR416-8	后盖板	1
14	GR417-8	后盖板垫片	1
15	GS42	后盖板螺钉	9
16	GR539	后盖板油塞	1
17	GR539	针杆曲柄螺孔油塞	1
18	GR1461	小油塞	3
19	GR530-8	送料调节器油塞	1
20	GR1545	倒送料轴孔油塞	1
21	GR1466	下轴工艺孔油塞	1
22	GR419-8	针杆连杆油线导向管	1
23	GR016	上轮罩壳	1
24	GS54	上轮罩壳螺钉	2
25	GR017	罩壳盖板	1
26	GS81	盖板螺钉	3
27	GR018	传动带罩壳	1
28	GBS104	传动带罩壳木螺钉	2

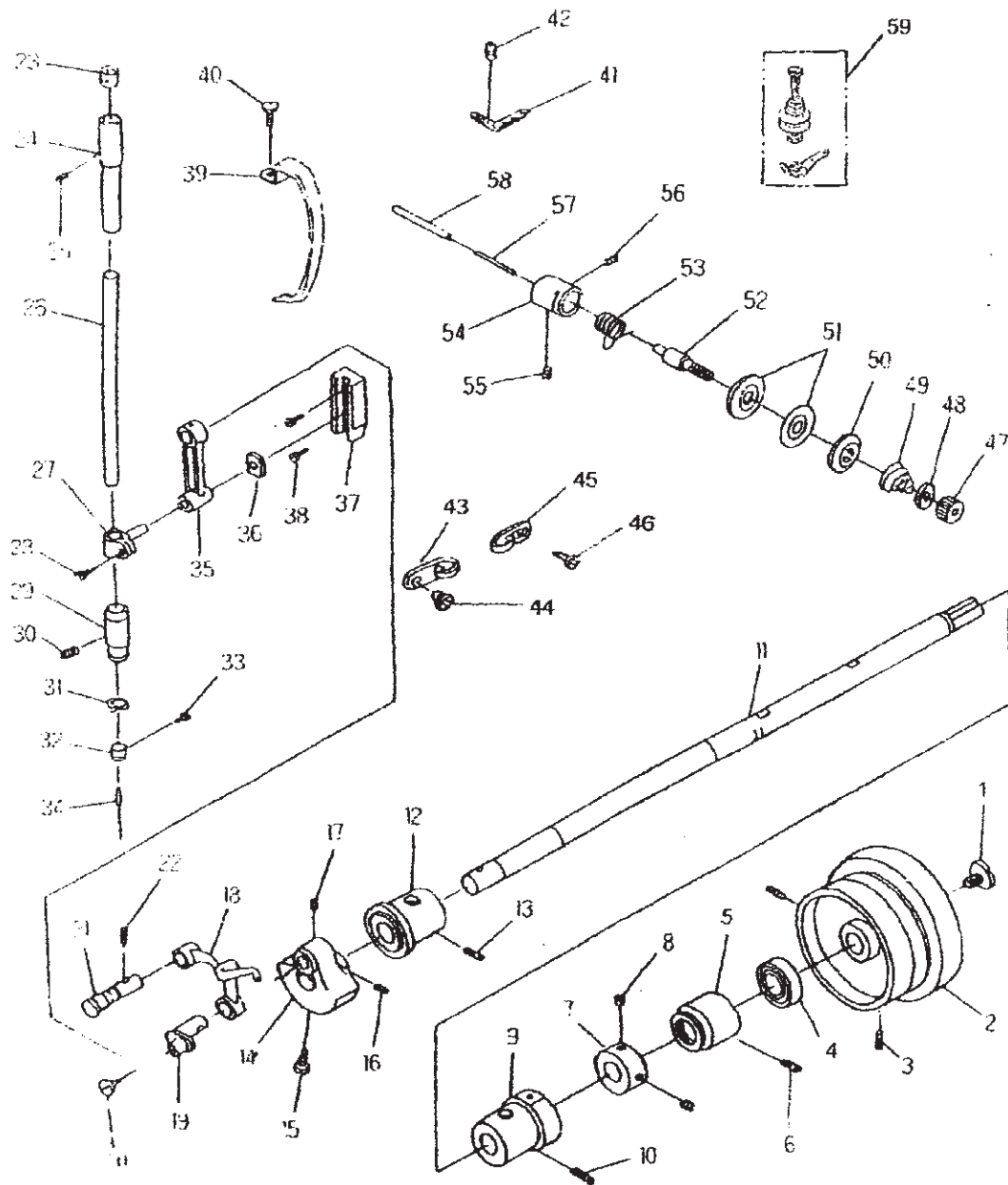


## 3. 上轴、针杆组件

## 3. Components of upper shaft and needle bar

序号 Ref.No.	件号 Part No.	名 称 Description	数量 Quantity
1	GS24	上轮吊紧螺钉	1
2	GP5	上轮	1
3	GS37	上轮螺钉	2
4	GR421-8	上轴油封	1
5	GO223-6	上轴后轴套	1
6	GS37	上轴后轴套螺钉	1
7	GR019	上轴中轴套挡圈	1
8	GS50	上轴中轴套挡圈螺钉	2
9	GO222-8	上轴中轴套	1
10	GS50	上中轴套紧固螺钉	1
11	GZ346	上轴	1
12	GO364	上轴前轴套	1
13	S2	上轴前轴套螺钉	1
14	GR89	针杆曲柄	1
15	GS38	针杆曲柄定位螺钉	1
16	GS58	挑线曲柄定位螺钉	1
17	GS39	挑线曲柄紧固螺钉	1
18	GR91/4	挑线杆部件	1
19	GR90	挑线曲柄	1
20	GS40	挑线曲柄螺钉	1
21	GX13	挑线连杆肖	1
22	GS37	挑线连杆肖螺钉	1
23	GR99	针杆油封	1
24	GO15	针杆上套筒	1
25	GS43	针杆上套筒螺钉	1
26	GZ347	针杆	1
27	GR97	针杆连接柱	1
28	GS41	针杆连接柱螺钉	1
29	GO7	针杆下套筒	1

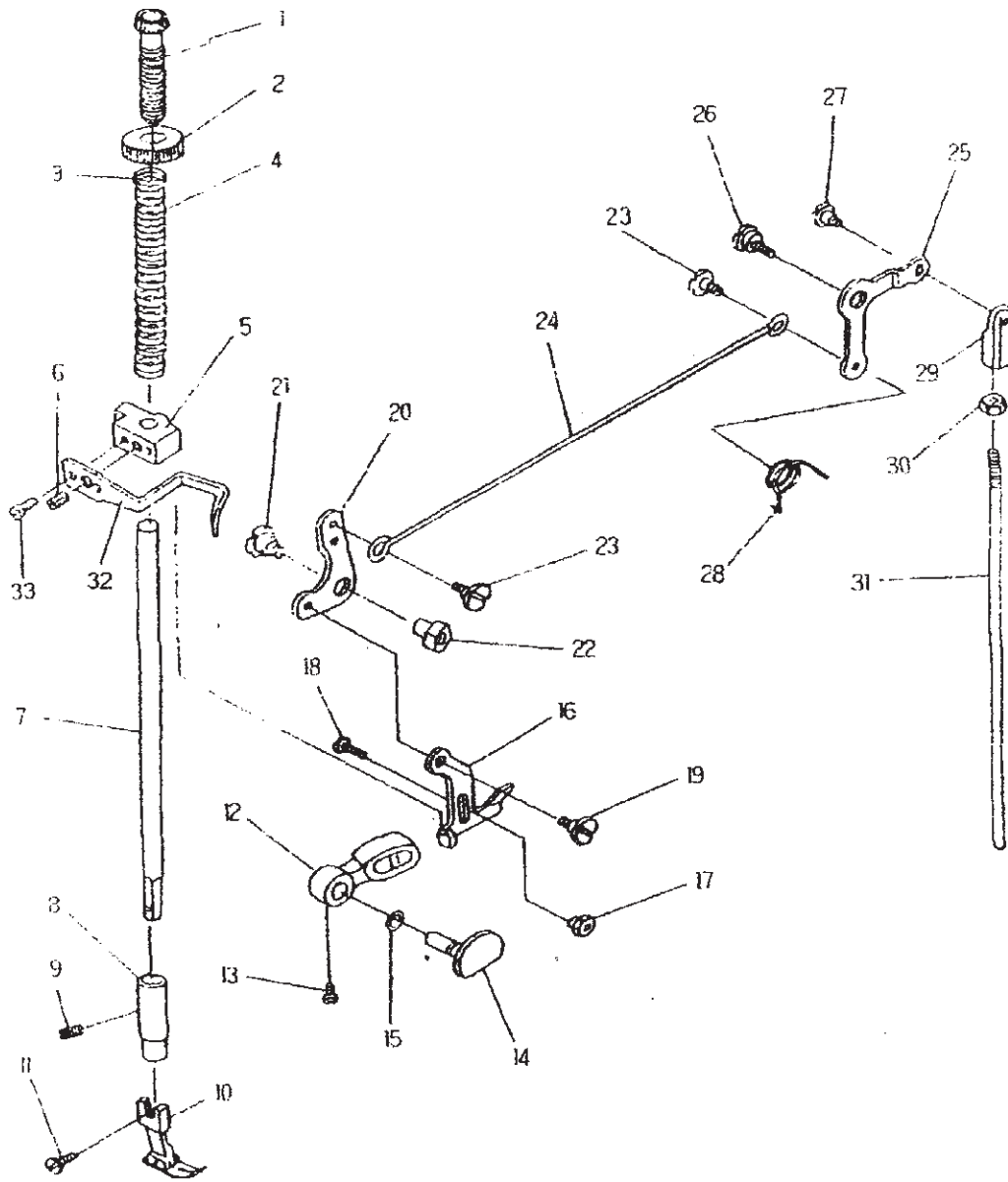
序号	件号	名 称	数 量
Ref.No	Part No.	Description	Quantity
30	GS43	针杆下套筒螺钉 .....	Screw ..... 1
31	GR100	针杆上线勾.....	Upper thread guide of needle bar ... 1
32	GR1481	针杆下线勾.....	Lower thread guide of needle bar ... 1
33	GS44	机针螺钉 .....	Screw of needle..... 1
34	GV3	机针 .....	Needle ..... 1
35	GR96	针杆连杆 .....	Rod of needle bar ..... 1
36	GU1	针杆连接柱滑块 .....	Sliding block of connecting post of needle bar ..... 1
37	GR020	针杆连接柱滑块导轨.....	Slide guide ..... 1
38	GS42	针杆连接柱滑块导轨螺钉.....	Screw ..... 2
39	GR021	挑线杆护罩 .....	Cover of thread take-up bar ..... 1
40	GS010	挑线杆护罩螺钉 .....	Screw ..... 1
41	GR101	三眼线勾.....	Three-hole thread eyelet ..... 1
42	GS45	三眼线勾支头螺针 .....	Screw ..... 1
43	GR2023	左线勾 .....	Left thread hook ..... 1
44	GS0158	左线勾螺钉.....	Screw ..... 1
45	GR471	右线勾 .....	Right thread hook ..... 1
46	GS33	右线勾螺钉.....	Screw ..... 1
47	GL10	夹线螺母 .....	Nut ..... 1
48	GR1490	夹线止动板 .....	Stop plate ..... 1
49	GW19	夹线簧 .....	Thread tension spring..... 1
50	GR1489	松线板 .....	Tension release disc ..... 1
51	GR1488	夹线板 .....	Thread tension plate ..... 2
52	GS85	夹线螺钉.....	Screw of thread tension ..... 1
53	GW18	挑线簧 .....	Spring of thread take-up ..... 1
54	GR103	挑线簧调节器.....	Regulator of thread take-up spring ... 1
55	GS83	夹线螺钉紧固螺钉 .....	Screw ..... 1
56	GS48	夹线器紧定螺钉 .....	Screw of thread tensioner ..... 1
57	GX14	松线钉 .....	Tension release pin..... 1
58	GX220-3	夹线器顶杆.....	Supporting pin of thread tension ..... 1
59	GR775/7-8	过线器部件.....	Components of thread guide ..... 1



## 4. 抬压脚组件

序号	件号	名称	数量
Ref.No.	Part No.	Description	Quantity
1	GS018	调压螺钉	1
2	GL18	调压螺母	1
3	GR1494	调压导杆	1
4	GW253	压杆簧	1
5	GR777-8	压杆导架	1
6	GS319-8	压杆导架螺钉	1
7	GZ348	压杆	1
8	GO8	压杆套筒	1
9	GS43	压杆套筒螺钉	1
10	GM200/5	活压脚部件	1
11	GS0100	活压脚螺钉	1
12	GR2823	压脚板手	1
13	GS030	压脚板手螺钉	1
14	GR462-8	压脚板手凸块	1
15	GR422-8	压脚板手凸块轴 O形圈	1
16	GR776-8	抬压脚升降板	1
17	GL11	升降板螺柱	1
18	GS69	升降板吊紧螺钉	1
19	GS88	升降板上螺钉	1
20	GR027	抬压脚前杠杆	1
21	GS69	前杠杆吊紧螺钉	1
22	GL11	前杠杆螺柱	1
23	GS87	抬压脚拉杆螺钉	2
24	GR026	抬压脚拉杆	1
25	GR761-8	抬压脚后杠杆	1
26	GS86	后杠杆螺钉	1
27	GS53	顶杆接头螺钉	1
28	GW33	后杠杆簧	1
29	GR791-8	顶杆接头	1
30	GL6	顶杆螺母	1
31	GX217-8	抬压脚顶杆	1
32	GR615-8	缓线调节勾	1
33	GS320-8	缓线调节勾螺钉	2

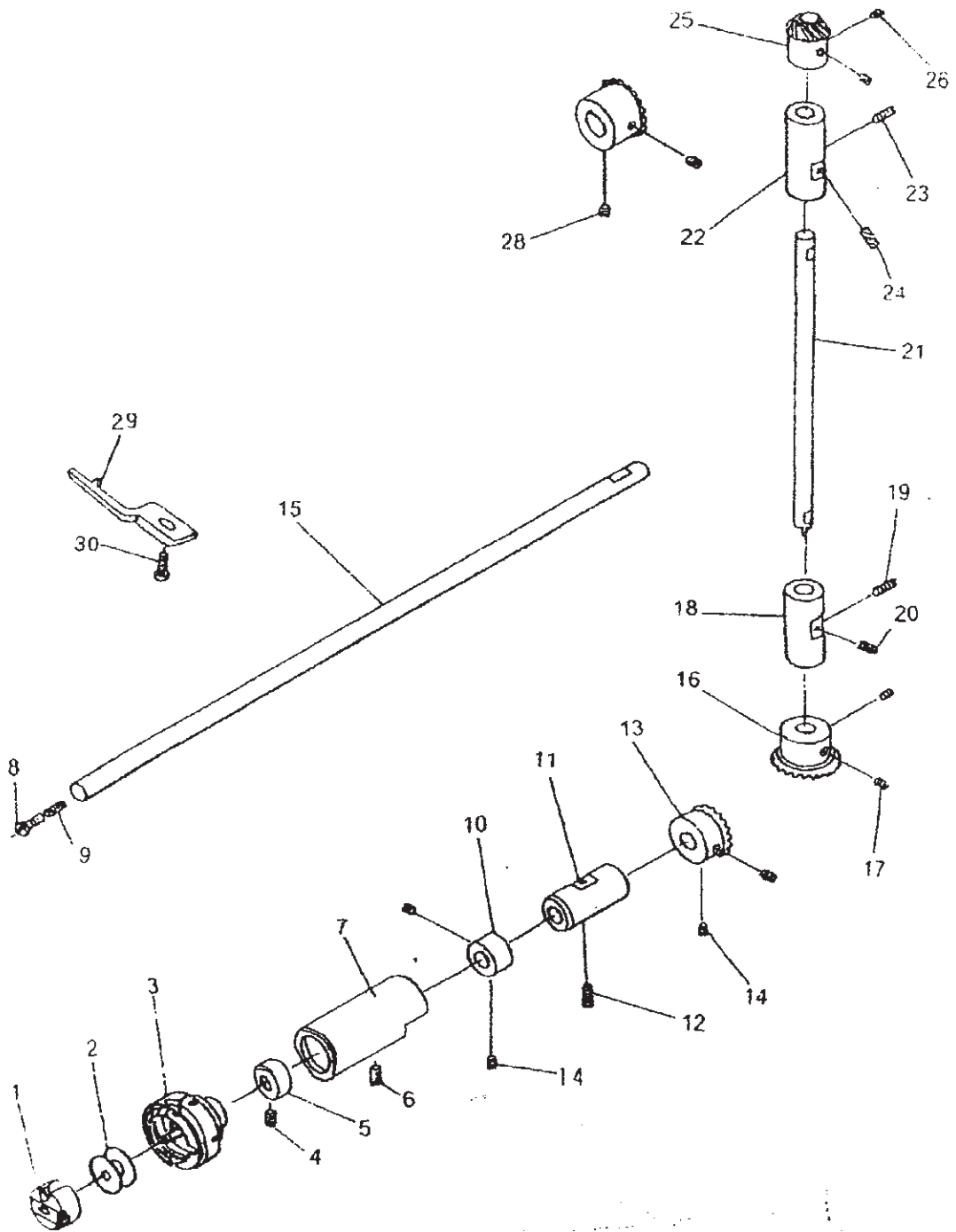
## 4. Component of presser bar



## 5. 下轴、旋梭组件

## 5. Components of lower shaft and rotary hook

序号 Ref.No.	件号 Part No.	名 称	Description	数量 Quantity
1	GN138-8	梭子 .....	Bobbin case .....	1
2	GN139-8	梭心 .....	Bobbin .....	1
3	GN137-8	旋梭 .....	Rotary hook .....	1
4	GN330-8	下轴挡油圈螺钉 .....	Screw .....	2
5	GR634-8	下轴挡油圈 .....	Oil ring .....	1
6	GS301-8	下轴前轴套螺钉 .....	Screw .....	1
7	GO269-8	下轴前轴套 .....	Bushing .....	1
8	GS329-8	下轴限油螺钉 .....	Screw .....	1
9	GR633-8	下轴限油芯 .....	Oil wick .....	1
10	GR568-8	下轴后轴套挡圈 .....	Retaining ring .....	1
11	GO244-8	下轴后轴套 .....	Rear bush .....	1
12	S2	下轴后轴套螺钉 .....	Screw .....	1
13	GC153-8	下轴伞齿轮 .....	Pinion .....	1
14	GS39	下轴伞齿轮螺钉 .....	Screw .....	4
15	GZ243-8	下轴 .....	Hook driving shaft .....	1
16	GC159-8	竖轴下伞齿轮 .....	Lower pinion .....	1
17	GS39	竖轴下伞齿轮螺钉 .....	Screw .....	2
18	GO244-8	竖轴下套 .....	Lower bush of upring shaft .....	1
19	GS37	竖轴下套螺钉 .....	Screw .....	1
20	GR123	竖轴下套油毡 .....	Oil felt .....	1
21	GZ246-8	竖轴 .....	Upright shaft .....	1
22	GO279-8	竖轴上轴套 .....	Upper bush of upring shaft .....	1
23	GS37	竖轴上轴套螺钉 .....	Screw .....	1
24	GR123	竖轴上轴套油毡 .....	Oil felt .....	1
25	GC158-8	竖轴上伞齿轮 .....	Upper pinion of upring shaft .....	1
26	GS58	竖轴上伞齿轮螺钉 .....	Screw .....	2
27	GC4	上轴伞齿轮 .....	Pinion of upper shaft .....	1
28	GS39	上轴伞齿轮螺钉 .....	Screw .....	2
29	GR631-8	旋梭定位勾 .....	Retaining hook .....	1
30	GS328-8	旋梭定位勾螺钉 .....	Screw .....	1

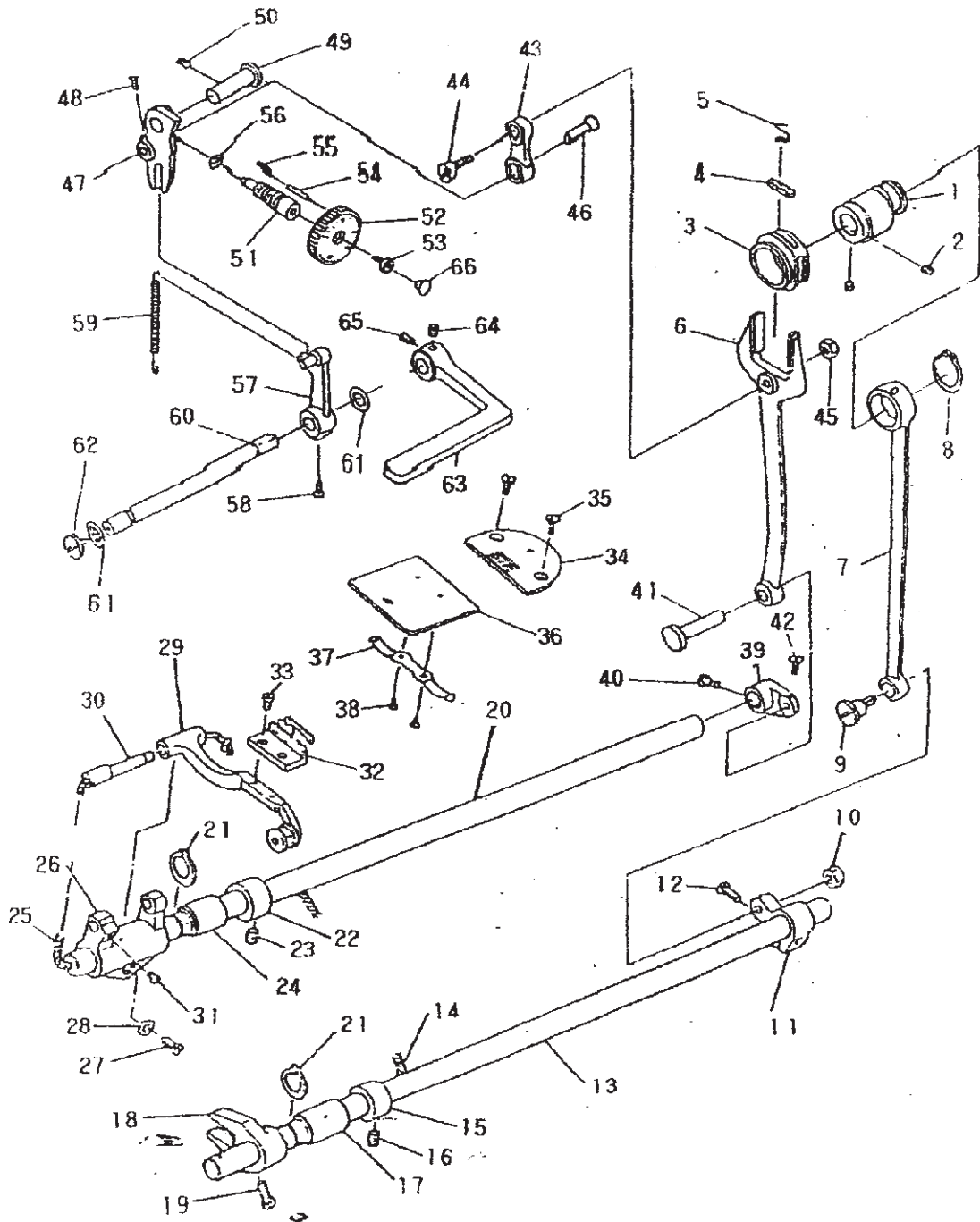


## 6. 送布、抬牙组件

## 6. Components of feeding and lifting belt

序号	件号	名称	数量
Ref.No.	Part No.	Description	Quantity
1	GT158-8	送布抬牙偏心轮	1
2	S19	偏心轮螺钉	2
3	GR741-8	偏心轮套圈	1
4	GR134	偏心轮套圈油毡	1
5	GW24	偏心轮套圈油毡簧	1
6	GR576-8	叉形送布杆	1
7	GH218-8	抬牙连杆	1
8	GR650-8	抬牙连杆轴用挡圈	1
9	GS341-8	抬牙连杆轴位螺钉	1
10	GL169-8	抬牙连杆轴位螺母	1
11	GH217-8	抬牙后曲柄	1
12	GS334-8	抬牙后曲柄螺钉	1
13	GZ236-8	抬牙轴	1
14	GR651-8	抬牙轴油线	1
15	GR589-8	抬牙轴挡圈	1
16	GS305-8	抬牙轴挡圈螺钉	2
17	GO273-8	抬牙轴前轴套	1
18	GH216-8	抬牙叉形曲柄	1
19	GS340-8	抬牙叉形曲柄螺钉	1
20	GZ244-8	送料轴	1
21	GR643-8	送料轴轴用挡圈	2
22	GR589-8	送料轴挡圈	1
23	GS305-8	送料轴挡圈螺钉 1/4×40 L=6	2
24	GO273-9	送料轴前轴套	1
25	GR644-8	送料轴油线	1
26	GR645-8	牙架座	1
27	GS335-8	牙架座螺钉 3/16×28 L=14	2
28	GR646-8	牙架座螺钉垫圈	2
29	GR647/4-8	牙架部件	1
30	GX210-8	牙架销	1
31	GS336-8	牙架销螺钉 11/64×40 L=7	1
32	GM201	送料牙	1
33	GS937-8	送料牙螺钉 1/8×44 L=6	2

序号	件号	名称	数量
Ref.No.	Part No.	Description	Quantity
34	GM166-8	针板	1
35	GS044	针板螺钉	1
36	GR147	推板	1
37	GW256	推板簧	1
38	GS68	推板簧螺钉	2
39	GR783-8	送布轴曲柄	1
40	GS298-8	送布轴曲柄螺钉	1
41	GX195-8	送布轴曲柄销	1
42	GS45	送布轴曲柄销螺钉	1
43	GR136	针距连杆	1
44	GS59	小园锥螺钉	1
45	GL7	小园锥螺母	1
46	GX18	针距连杆肖	1
47	GR037	针距调节器	1
48	GS61	针距连杆销支头螺钉	1
49	GX27	针距调节器销	1
50	S2	针调节器销螺钉	1
51	GS295-8	针距调节螺栓	1
52	GR771-8	针距旋钮	1
53	GS046	针距盘螺钉	1
54	GS28	锁合销	1
55	GW22	锁合销簧	1
56	GR424-8	针距调节螺钉 O形圈	1
57	GR787-8	倒送杆部件	1
58	GS0103	倒送杆体螺钉	1
59	GW26	倒送杆拉簧	1
60	GZ221-8	倒送杆轴	1
61	GR423-8	倒送杆轴 O形圈	2
62	GS051	倒送料轴端螺钉	1
63	GR041	倒送料扳手	1
64	GS296-8	倒送料扳手定位螺钉	1
65	GS296-8	扳手紧固螺钉	1
66	GR770-8	针距旋钮网头	1

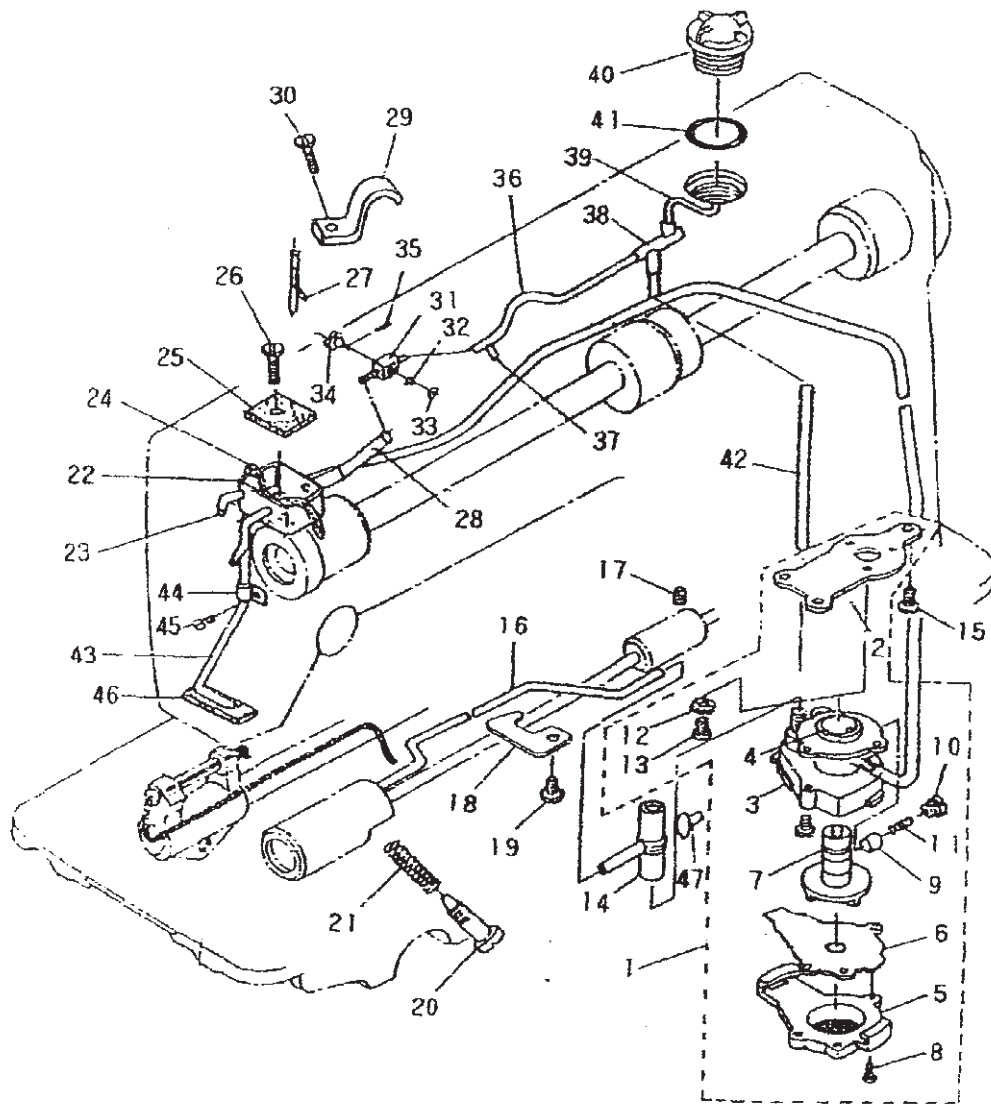


## 7. 润滑组件

## 7. Components of Lubrication

序号	件号	名称	数量
Ref.No.	Part No.	Description	Quantity
1	GR2058/21	油泵部件.....	1
2	GR425-8	油泵安装板.....	1
3	GR2060	油泵体分部件.....	1
4	GO339	油泵体衬套.....	1
5	GR2063/2	油泵盖部件.....	1
6	GR2062	油泵叶轮托板.....	1
7	GR2061	油泵叶轮.....	1
8	GS554	油泵盖螺钉.....	3
9	GR2067	回油柱塞.....	1
10	GS564	柱塞螺钉.....	1
11	GW308	柱塞簧.....	1
12	GR1550	安装止退垫圈.....	3
13	GS196	油泵安装螺钉.....	3
14	GR668-8	上轴供油管接头.....	1
15	GS053	油泵螺钉.....	3
16	GR766-8	旋梭供油管.....	1
17	GR434-8	下轴后套油毡.....	1
18	GR671-8	旋梭供油管压板.....	1
19	GS353-8	压板螺钉.....	1
20	GS352-8	旋梭油量调节螺钉.....	1
21	GW195-8	旋梭油量调节弹簧.....	1
22	GR438-8	挑线油箱组件.....	1
23	GR436-8	挑线杆、销油线.....	3
24	GR443-8	上轴前套油线.....	1
25	GR437-8	挑线油箱毛毡.....	1
26	GS079	挑线油箱安装螺钉.....	1
27	GR435-8	针杆连杆油线.....	1
28	GR444-8	挑线油箱供油管.....	1
29	GR446-8	上轴供油管压板.....	1
30	GS213-8	上轴供油管压板螺钉.....	1
31	GR45-8	上轴油量调节阀体.....	1
32	GW176-8	弹簧.....	1
33	GR431-8	垫圈.....	1

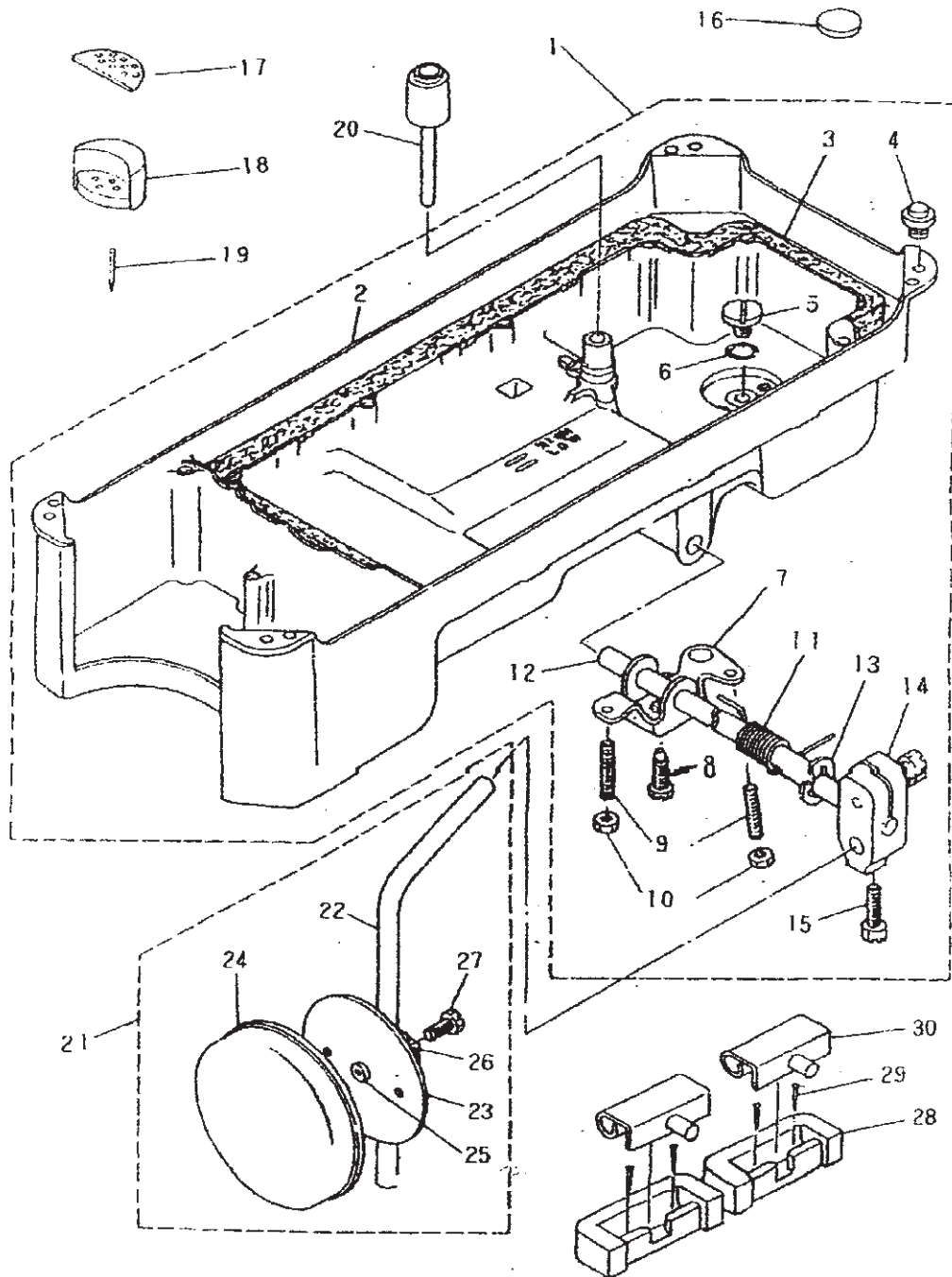
序号	件号	名称	Description	数量
Ref.No.	Part No.			Quantity
34	GR430-8	阀芯	Valve	1
35	GX187-8	销	Pin	1
36	GR449-8	上轴供油管	Oil tube of upper shaft	1
37	GR452-8	中轴套油管	Oil tube of middle bush	1
38	GR454-8	上轴输油管接头	Joint of oil tube of upper shaft	1
39	GR453-8	油窗供油管	Oil tube of oil window	1
40	GR1561	油窗	Oil window	1
41	GR1562	油窗 O形圈	O-ring	1
42	GR768-8	竖油管	Upright oil tube	1
43	GR447-8	回油管	Oil returned pipe	1
44	GR1566	回油管夹头	Head of oil felt presser	1
45	GS33	回油管夹头螺钉	Screw	1
46	GR456-8	回油过滤毛毡	Felt of oil returned filter	1
47	GR769-8	油泵油塞	Oil plug	1



## 8.油盘膝抬压脚分组件

## 8. Components of oil reservoir knee lifting presser foot

序号 Ref.No.	件号 Part No.	名 称	Description	数 量 Quantity
1	GR680/25-8	油盘部件	Oil reservoir components	1
2	GR681-8	油 盘	Oil reservoir	(1)
3	GR682-8	油 盘 垫	Cushion	(1)
4	GR683-8	机头座垫	head Cushion	(4)
5	GS355-8	排油孔螺钉	Screw	(2)
6	GR684-8	排油孔螺钉 O形圈	"O" ring	(2)
7	GH345-8	抬压脚双向曲柄	Crank	(1)
8	GS356-8	双向曲柄螺钉	Screw	(1)
9	GS357-8	双向曲柄限位调节螺钉		
		15/64× 28L=30	Screw 15/64× 28 L=30	(2)
10	GL170-8	双向曲柄限位调节螺母		
		15/64× 28	Screw 15/64× 28	(2)
11	GW196-8	双向曲柄扭簧	Twisting spring	(1)
12	G238-8	抬压脚轴	Shaft	(1)
13	GR688-8	抬压脚轴开口挡圈	Split ring	(1)
14	GR689-8	抬压脚操纵杆节头	Adjusting bar joint	(1)
15	GS358-8	操纵杆节头螺钉		
		9/32× 20L=20	Screw 9/32× 20L=20	(2)
16	GR685-8	油盘磁铁	Magnet	1
17	GR686-8	油盘座垫	Cushion	2
18	GR687-8	油盘支座	Bracket	2
19	GBX141-8	油盘座钉	Bracket pin	4
20	GH347-8	抬压脚顶销	Top pin	1
21	GR690/6	操纵杆部件	Adjusting Components	1
22	GR691-8	操 纵 杆	Adjusting bar	(1)
23	GR692-8	操 纵 板	Control plate	(1)
24	GR693-8	操纵板软垫	Cushion	(1)
25	GR694-8	操纵杆垫	Cushion	(1)
26	GR695-8	操纵杆节头	Joint	(1)
27	GS359-8	节头螺钉 15/64× 28L=15	Screw 15/64× 28L=15	(1)
28	GR1593	机头连接钩座	Hook teracket	2
29	GBX105	机头连接钩座钉	Hook bracket pin	4
30	GR1590/2	机头连接钩部件	Hook components	2

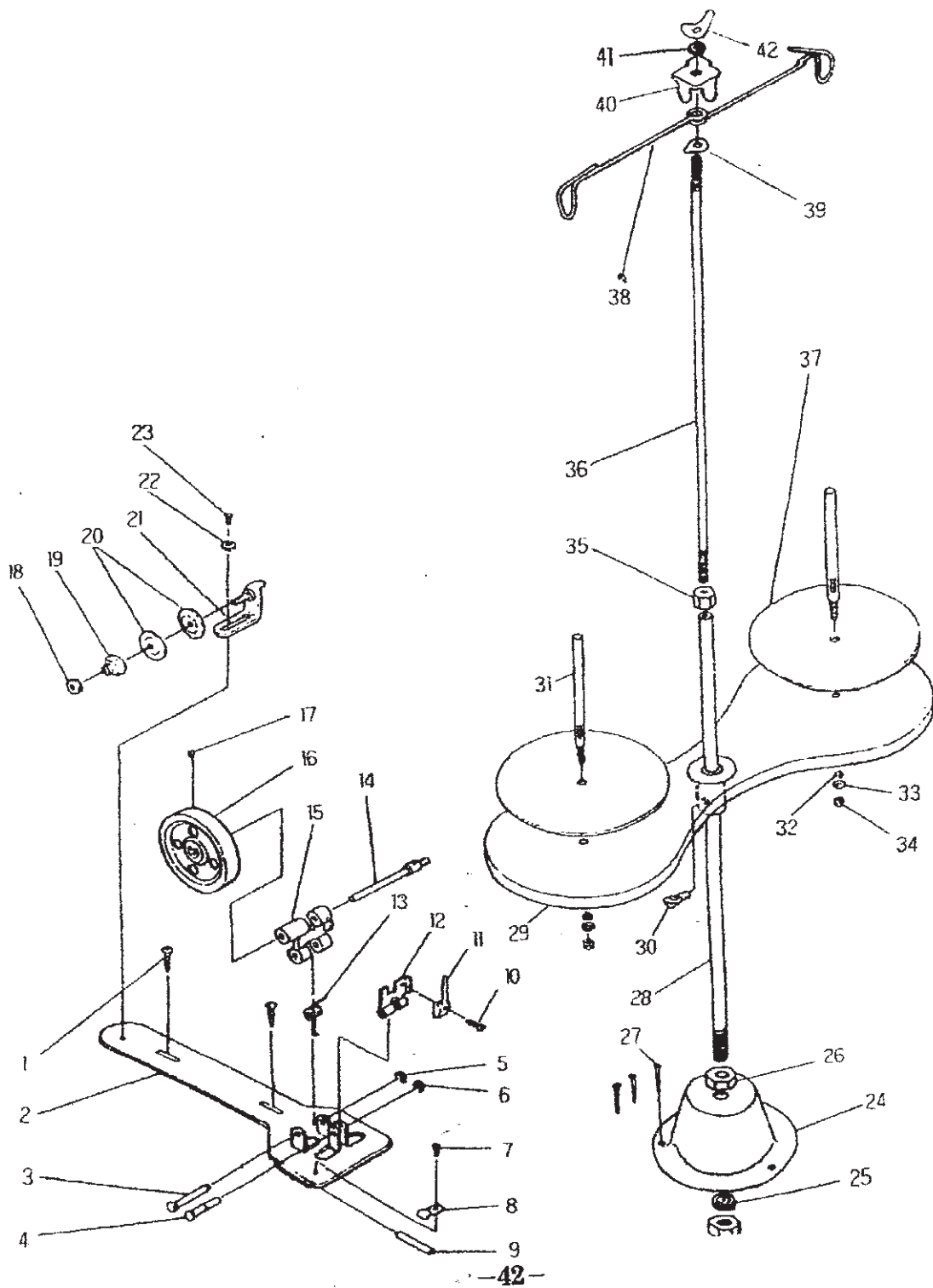


## 9. 绕线器、双线团组件

## 9. Components of thread winder, double thread bobbin

序号	件号	名称	Description	数量
Ref.No.	Part No.			Quantity
1	GBS104	绕线器木螺钉	Wood screw	2
2	GR1166	绕线器器座	Winder base	1
3	GX120	绕线架销	Pin of winding stand	1
4	GX119	满线跳板销	Pin of full thread pilte	1
5	GR273	绕线架销挡圈	Retaining ring	1
6	GR273	满线跳板销挡圈	Retaining ring	1
7	GS137	绕线止动夹螺钉	Screw	1
8	GR228	绕线止动夹	Stop clip of winding	1
9	GR201	绕线止动垫	Stop washer	1
10	GS286	满线跳板螺钉	Screw	1
11	GW184	满线跳板簧	Plate spring	1
12	GR862	满线跳板	Plate of full thread	1
13	GW114	绕线架簧	Spring of winding stand	1
14	GZ224	绕线轴	Winding shaft	1
15	GR226	绕线架	Winding stand	1
16	GP121/2	绕线轮	Winding wheel	1
17	GS134	绕线轮螺钉	Screw	1
18	GL103	过线夹线螺母	Nut	1
19	W12	过线夹线簧	Spring	1
20	GR013	过线夹线板	Plate	2
21	GR1162/2	过线架	Thread guide stand	1
22	GR122	过线架垫圈	Washer	1
23	GS118	过线架螺钉	Screw	1
24	GR1620	线架座	Base of thread stand	1
25	GR1621	线架杆下节垫圈	Washer of lower node	1
26	GL141	线架杆下节螺母	Nut of lower node	2
27	GBS120	线架座木螺钉	Wood screw of thread stand	3
28	GZ285	线架杆下节	Lower node of thread stand rod	1
29	GR1622/4	双线盘部件	Double node of thread stand rod	1
30	GS55	双线盘螺钉	Screw	1
31	GS067	线盘钉	Screw of thread plate	2
32	GR1626	线盘钉弹性垫圈	Spring washer	2

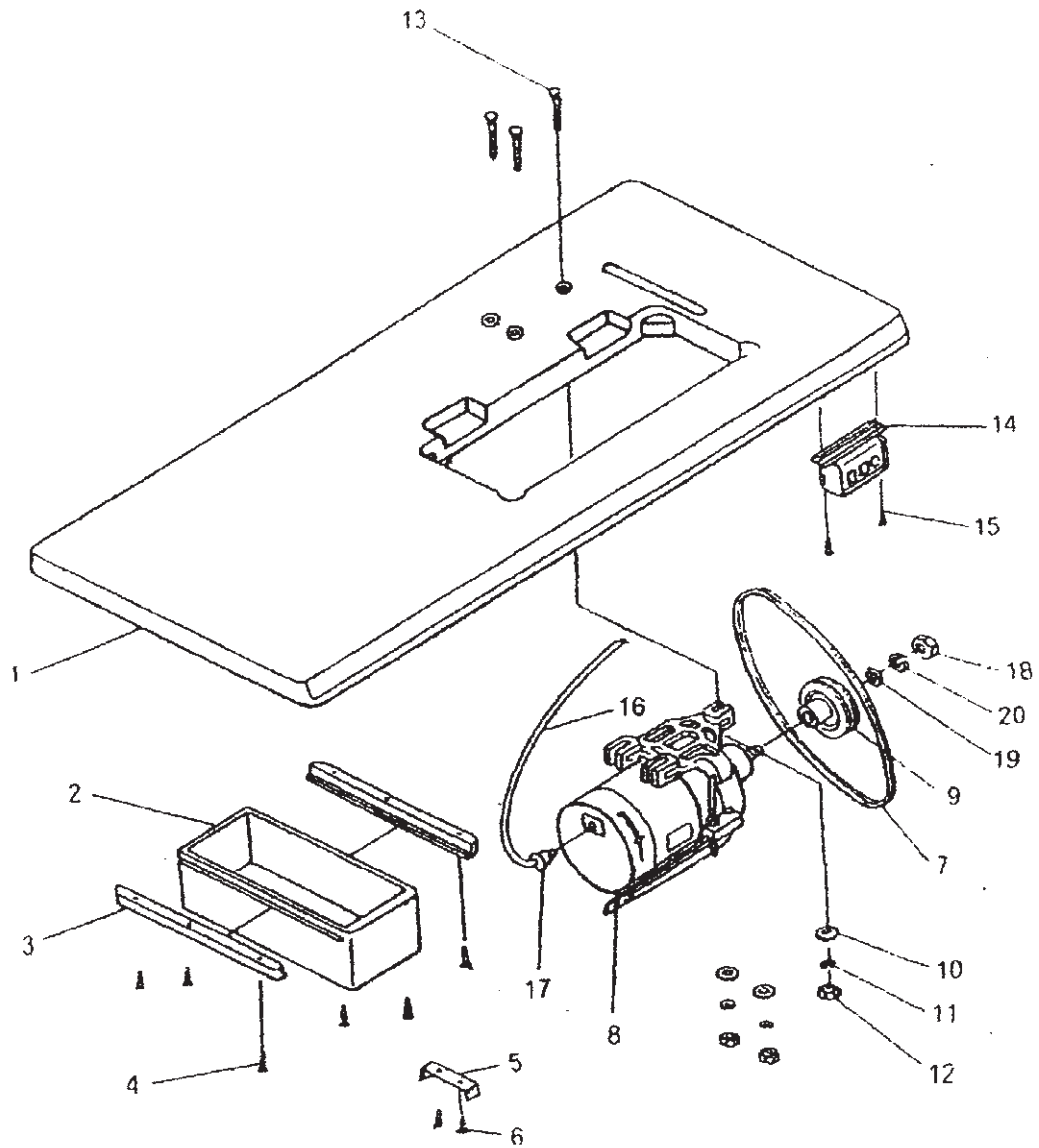
33	GR1625	线盘钉垫圈.....	Washer .....	2
34	GL23	线盘钉螺母 .....	Nut.....	2
35	GL153	线架上节连接螺母 .....	Connecting nut of upper node of thread stand .....	1
36	GZ286	线架杆上节 .....	Upper node of thread stand rod.....	1
37	GR1631	线团缓震垫 .....	Slow vibration washer of thread bobbin .....	2
38	GR1627	线架过线钩 .....	Thread guide hook .....	2
39	GR1628	过线钩螺纹挡圈 .....	Retaining ring .....	1
40	GR1629	过线钩止动垫圈 .....	Stop washer .....	1
41	GR1630	过线钩垫圈 .....	Washer .....	1
42	GL154	过线钩螺母 .....	Nut.....	1



10. 台板、电器组件

10. Components of table plate, electrical equipment

序号 Ref.No.	件号 Part No.	名 称 Description	数 量 Quantity
	GBR149/13	台板部件.....	1
1	GBR150	台板 .....	(1)
2	GBR151	抽斗 .....	(1)
3	GBR152	抽斗导轨.....	(2)
4	GBS121	抽斗导轨木螺钉 .....	(6)
5	GBR153	抽斗限位板.....	(1)
6	GBS120	抽斗限位板木螺钉.....	(2)
7		机头传动带(O型 1000) (Model O, No,1000) .....	1
8	GD220	370/2300右侧带轮离合器 电动机 .....	1
9	GP153-8	电动机带轮 .....	1
10	GKR209	电机台板连接垫圈 .....	3
11	GKR106	电机台板连接弹簧垫圈 .....	3
12	GKL101	电机台板连接螺母 .....	3
13	GKS122	电机台板连接螺钉 .....	3
14	GD227	电源开关.....	1
15	GBS104	电源开关木螺钉 .....	2
16	GD103	电机接线.....	1
17	GD219	电机接线插头 .....	1
18		电机带轮紧固螺母 .....	1
19		电机带轮垫圈 .....	1
20		电机带轮弹簧垫圈 .....	3



## 11. 机架组机

## 11. Components of stand

序号	件号	名称	数量
Ref.No.	Part No.	Description	Quantity
1	GKR193/4	边架部件	2
2	GKR194	边架座套	4
3	GKL104	调节座螺母	4
4	GKR196/2	调节座	4
5	GKR198	调节座胶垫	4
6	GKR173/3	横档部件	1
		support	1
7	GKS119	横档连接螺钉	4
8	GKR176	边架柱弹簧垫圈	4
9	GR253	边架柱垫圈	4
10	GKR178/3	踏板轴档部件	1
11	GKS110	踏板轴档螺钉	2
12	GKR122	踏板轴档垫圈	2
13	GKR181	踏板轴档定位螺母板	2
14	GKR182	踏板	1
15	GKR111	踏板杠杆	1
16	GKS102	踏板杠杆螺钉	2
17	GKR112	踏板杠杆垫圈	2
18	GKL102	踏板杠杆螺母	2
19	GKX106	踏板轴	1
20	GKR184	踏板轴座	2
21	GKS110	踏板轴座螺钉	2
22	GKR122	踏板轴座垫圈	4
23	GKL102	踏板轴座螺母	2
24	GRK116	下拉杆	1
25	GKX101	上拉杆开口销	1
26	GKR118	上拉杆	1
27	GKR183	拉杆接头	1
28	GKS110	拉杆接头螺钉	1
29	GKL101	栏杆接头螺母	1
30	GBS114	台板木螺钉	4
31	GKR112	台板木螺钉垫圈	4
32	GKR186	台板垫圈	4

