

高速单针平缝机

HIGH SPEED SINGLE NEEDLE LOCKSTITCH MACHINE SERIES

7-18/7-28 series

Kiang. Special.

使用说明书 & 零件样本

Operation instruction & Parts Book

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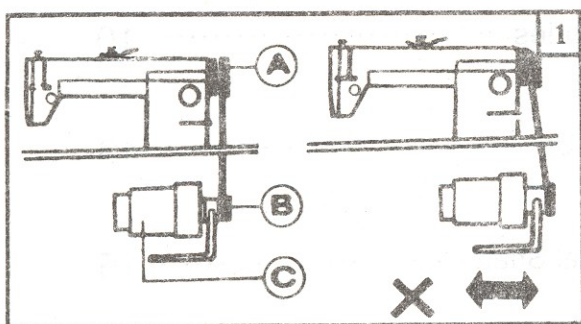
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使用说明 Instructions For Operation

1. 主要技术规格 MAIN SPECIFICATIONS

型号 Type	7-18M	7-18H	7-18B
适用 Sewing material	薄料-中厚料 Light-Medium material	厚料 Medium material	厚料 Medium material
最高缝速 Max. Sewing speed	4500rpm	3500rpm	3500rpm
针距 Stitch length	0~5	0~7	0~7
针杆行程 Needle bar stroke	30.5	35	35
压脚提升 presser foot lift	手动 By hand 膝控 By knee		
	5 13	6 13	6 13
机针 Needle	DB×1 #14	DB×1 #22	DB×1 #22
旋梭 Rotatin hook	小旋梭 small hook	小旋梭 small hook	大旋梭 large hook
电动机 Machine motor	250W或400W缝纫机专用电机 Mitsubishi clutch motor 250W or 400W		

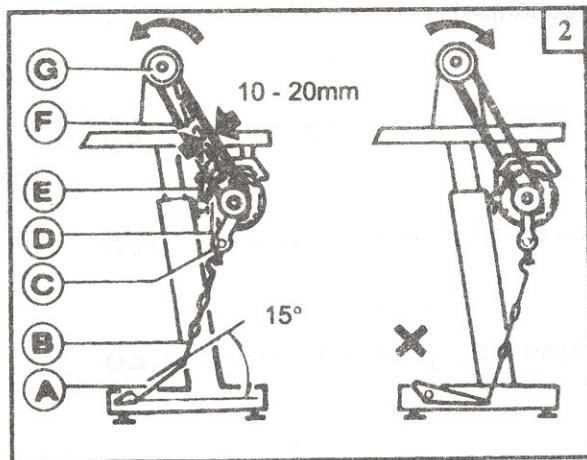
2. 电机安装(图1)INSTALL THE MOTOR(Fig.1)



将电动机C左右移动，使缝纫机主动轮槽A与电动机皮带轮槽B的位置调整成一直线即可。
Align Motor Pulley Groove (B) and Balance Wheel Groove (A) by moving the motor leftward or rightward.

3. 踏脚板与离合器拉杆连接 (图2)

CONNECT THE CLUTCHLEVER WITH THE PEDAL (Fig.2)



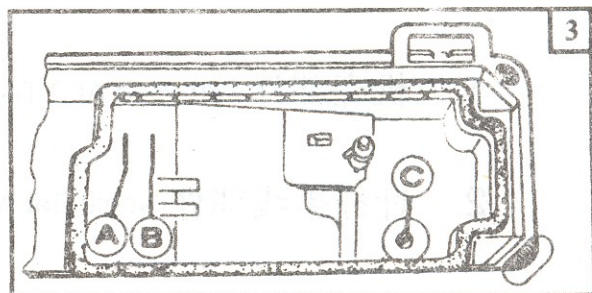
1. 踏脚板 A 安装的倾斜度应与地面以 15° 为宜。
2. 调整电动机离合器，使缝纫机拉杆 B 与离合器拉杆 C 如图连成一直线，可使机器运转平稳，寿命延长。
3. 缝纫机转动方向，从机头主动轮外侧看，应是逆时针方向。电动机的转向应一致，电动机转向可用电动机上的电源插头换转 180° 调整转向。
4. 0 型皮带 F 的张力调整，由电动机移动上下位

置来达到 F 皮带张力的大小可用手指将皮带按下，使皮带如图示弯曲 10-20 毫米程度即可。

- 1) The optimum tilt angle of Pedal (A) is approximately 15 deg.
- 2) Adjust Clutch Cover (D) so that Clutch-Lever (C) and Draw Bar (B) run in line.
- 3) The balance wheel should rotate counter-clock-wise when viewed from the outside of Balance Wheel (G). The direction of the motor pulley rotation can be reversed by reversing (turning over 180 deg.) the power plug of the motor.
- 4) Adjust the tension of V-belt (F) by turning Motor Vertical Position Screw (E). The proper tension of the V-belt is a slack of 10-20mm when the belt is depressed at the center of the belt by finger.

4. 操作准备和润滑(图3)

PREPARATION AND LUBRICATION (Fig.3)



(1) 拭擦机器

机头装箱前为了防止机件生锈，各部分均涂有较厚的防锈油脂，同时机头装箱后，还可能在较长的贮藏和长途运输阶段造成油脂硬化和积聚在机器表面的灰尘，所以必须将表面的油脂和灰尘用汽油和洁净的软布拭擦干净。

(2) 检查

机器出厂时，虽经过周密的检查和试验，但在长途运输中也可能受到强烈的振动使机件松动或歪曲，所以应该作一次周密的检查，并用手转动主动轮，看机件之间有无转动困难，碰撞现象或其它不均匀的阻力，不正常的声响，如有应作适当的调整，机器情况正常后才可正式试车。

(3) 加油

1) 油量

油量必须按油盘内标记加注。图中标记A是油量最高位。B是油量最低位。注意油量不得低于标记B，否则缝纫机各部位就会出现进油停止，造成发热咬死等情况。

2) 加油

必须使用特18#高速缝纫机油，运转前油量加至标记A。

3) 换油

① 旋下放油螺钉C，排净废油。

② 扫清油盘污尘，旋紧放油螺钉C，加注新油

1) Cleaning the machine

Before leaving the factory, the machine parts are coated with rust-preventive grease, which may be hardened and contaminated by dust during storage and shipment. This grease must be removed with gasoline.

2) Examination

Though every machine is confirmed by strict inspection and test before leaving the factory, the machine parts may be loose or

deformed after long distance transportation with jolt. A thorough examination must be performed after cleaning the machine. Turn the balance wheel to see if there is running obstruction, parts collision, uneven resistance or abnormal noise. If these exist, adjustment must be made accordingly before run-in operation.

3) Oiling

(1) Required amount of oil

Line (A) on the oil reservoir: Max. oil level.

Line (B) on the oil reservoir: Min. Oil level.

If oil level goes down under Line (B), oil cannot be distributed to each part of the machine, thus causing the parts a seizure.

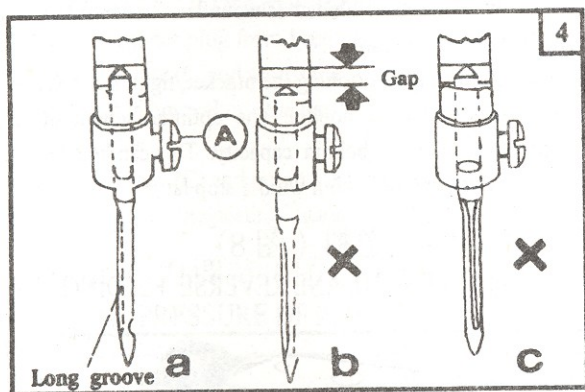
(2) Replenishing

Always use only No. 18 special machine oil for high speed sewing. Be sure to replenish oil to Line (A) before starting operation.

(3) Replacing oil

To replace oil, remove Screw (C) to drain oil. After completely draining off oil, clean the oil reservoir and securely tighten Screw (C), then fill the reservoir with fresh oil.

5. 安装机针(图4) REPLACE NEEDLES (Fig.4)



转动上轮, 使机针上升到最高位置, 旋松支针螺钉 A 将机针的长槽朝向操作者的左面, 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, 再旋紧支针螺钉 A 固定机针即可。

注意: 如图 b 所示, 机针没有碰到针杆孔的底部。如图 c 所示针槽方向面对操作者, 都是错误的。

Turn the balance wheel to lift needle bar to the upper end of its stroke. Loosen Needle Clamp Screw A. While keeping the long groove of the needle leftward fully insert the needle shank up to the bottom of the needle socket. Then tighten Needle Clamp Screw A.

Note: Fig. (b): insufficient insertion. Fig. (c): wrong direction of long groove.

6. 机针、缝线规格与缝料关系 NEEDLE, THREAD AND MATERIAL TO BE SEWN

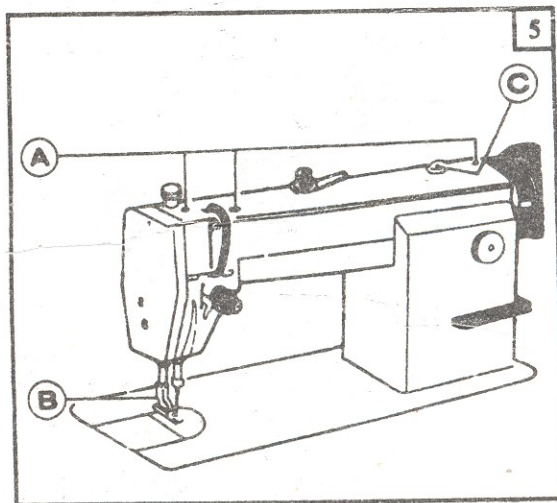
面线采用左旋线, 底线则左, 右旋线均可使用。

针用 16×231 或 DB×1. DA×1 机针。

机针号请根据缝线, 缝料参改下表进行。

机 针 号 Needle Size	缝线号 Thread Number	布料 Material
14#	60#-65#	普通棉, 毛织物等 Cotton, Woolen
16#	50#-30#	平纹布, 毛织物, 防雨衣, 薄皮革等 Muslin, Woolen, Tarpaulin, Thin, Leather
22#		中厚皮革, 帆布等 Medium leather, Canvas

7. 试车(图5) RUN-IN OPERATION (Fig.5)



新机器在开始使用和长期搁置重新使用时, 先卸下机头上部的黑色橡皮塞, 充分加油。然后抬起压脚进行低速运转 2000-2500 针/分, 并观察油窗 C 的喷油情况, 润滑正常后, 仍须保持低速 30 分钟运转试验, 以后逐渐提高缝纫速度; 经过一个月左右的使用 使机器充分跑合。然后根据工作的性质再提高到 4500 针/分。

Run-in operation is required for a new sewing machine, or a sewing machine left out of operation for a considerable length of time.

1) Remove Red Rubber Plugs (A) on the top of the arm and replenish sufficient amount of oil.

2) Lift Presser Foot (B)

3) Run the machine at a low speed (1000-1500spm) to check oil distributing condition through Oil Check Window (C).

4) Perform run-in operation at 1000-1500 spm for 30 minutes.

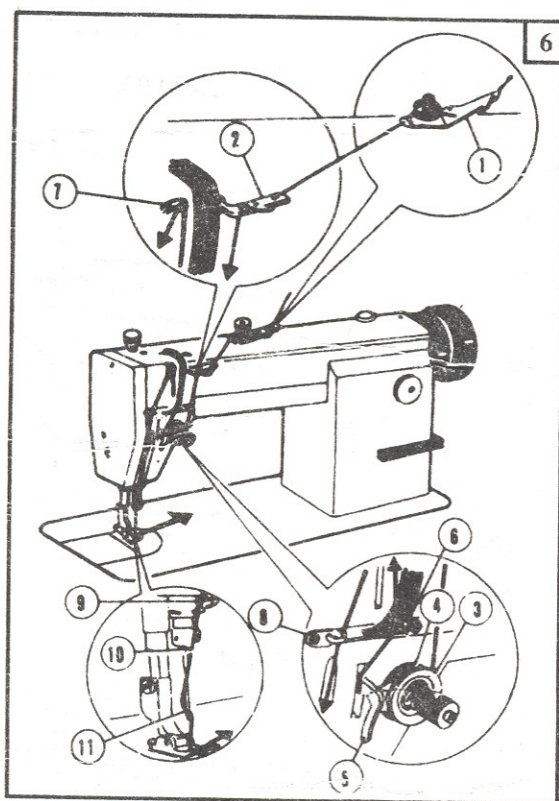
After a lapse of one month of service during which the working speed is increased gradually and the machine runs sufficiently well, the high speed 2000spm can be adopted according to the nature of the work.

8. 穿线(图6) THREADING (Fig. 6)

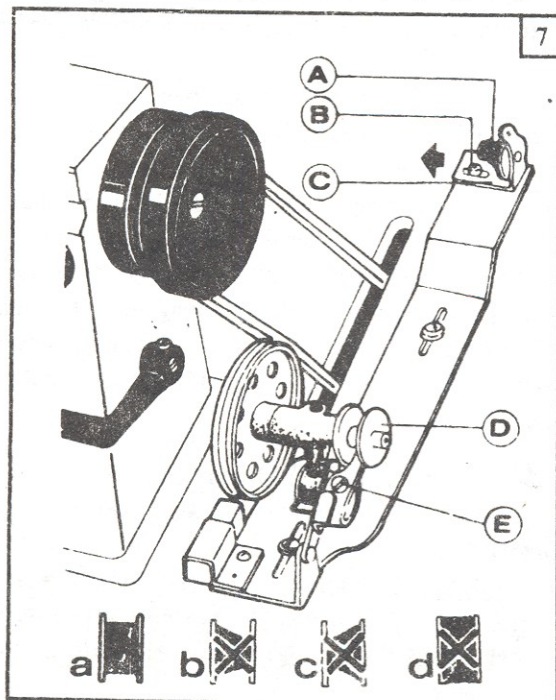
穿面线时针杆应在最高位置, 然后由线架上引出线头按顺序穿线。

引底线时, 先将面线头捏住, 转动主动轮使针杆向下运动, 再回升到最高位置, 然后拉起捏住的面线线头, 底线即被牵引上来。最后将底、面二根线头一起置于压脚下前方。

To thread the needle thread, raise needle bar to the upper end of its stroke, lead the thread from spool and perform threading as shown in Fig. 6. To draw the bobbin thread, hold the end of the needle thread and turn the balance wheel to lower the needle bar and then to lift it to its highest position. Pull the needle thread and the bobbin thread is drawn up. Put the ends of needle thread and bobbin thread forward under presser foot.



9. 绕线调节 (图7)
WINDING ADJUSTMENT (Fig. 7)



梭心线应排列整齐而紧密。如松浮不紧，可以加大过线架夹线板A的压力。如排列不齐，则要移动过线C的位置进行调整。调整时，先松开过线架螺钉B，单边绕线成图b时，向右移动过线架，单边绕线成图c时，向左移动过线架，自动排列整齐成图a后，再紧固之。

注意：绕涤纶，尼龙线时，特别要放松绕线压力，否则梭心D就可能产生断裂变形。

梭心线不要绕得过满，否则容易散落，适当的绕线量为平行绕线至梭心外径的80%，绕线量由满线跳板上的满线度调节螺钉E加以调节。

1) The wound bobbin thread should be neat and tight, if not, adjust the winding tension by turning Tension Stud Nut (A) of bobbin winder tension bracket.

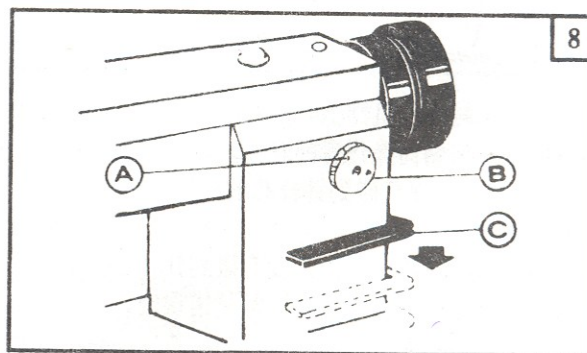
Note: nylon or polyester thread should wound with little tension, otherwise, Bobbin (D) might break or deform.

2) When the wound thread layer does not present a cylindrical shape as shown in Fig. 7 (a), loosen Set Screw (B) of bobbin winder tension bracket and slide Bracket (C) leftward or rightward. If thread is wound as shown in Fig. 7 (b), move the bracket rightward, but if thread is wound as shown in Fig. 7 (c), move the bracket leftward.

After adequately positioning the bracket, tighten Set Screw (B).

3) Do not overfill the bobbin. The optimum length of thread will fill about 80% of bobbin capacity. This can be adjusted by Adjusting Screw (E) of bobbin winder stop latch.

10. 针距倒顺送料 (图8)
SET STITCH LENGTH AND REVERSE FEEDING (Fig. 8)



针距的长短，可以用转动针距标盘A来调节。针距标盘A的平面B上的数字表示针距长短尺寸(单位为毫米)。

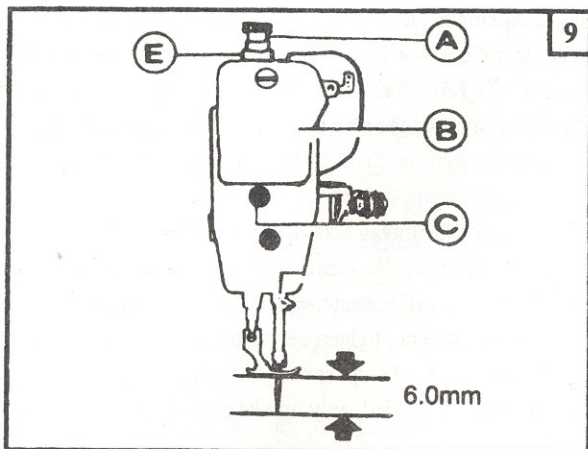
倒向送料时，可以将倒缝操作杆C向下掀压，即能进行倒送。手放松后，倒缝操作杆C自动复位，恢复顺向送料。

1) Stitch length can be set by turning Dial (A).

2) The figures on Face (B) of dial show stitch length in mm.

3) Reverse feeding starts when Reverse Feed Lever (C) is depressed, and the machine will feed forward again if Reverse Feed lever (C) is released.

11. 压紧杆高度定位 (图9)
POSITION PRESSER BAR (Fig. 9)

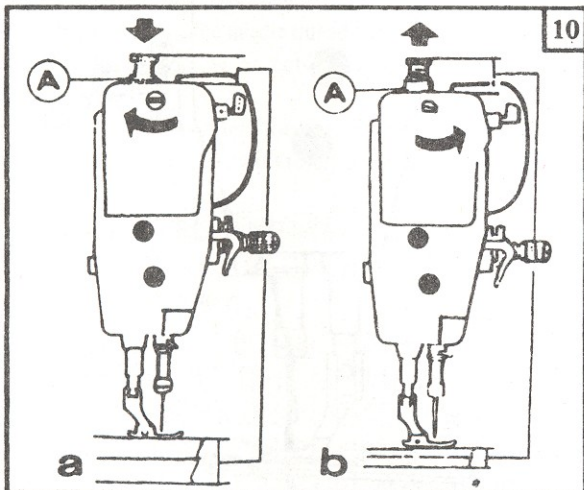


先旋松压紧杆的调压螺钉锁紧螺母E，然后旋松调压螺钉A，卸下面板B的橡皮塞，旋松螺钉C，定出压紧杆的位置(压紧杆的正确定位：在压脚上升最高时，针板面与压脚底面距离为6.0毫米)，旋紧螺钉C，塞上橡皮塞，再旋紧压紧杆调压螺钉A，然后旋紧调压螺钉锁紧螺母E，即成。

- 1) Loosen Lock Nut (E) and Pressure Regulating Thumb Screw (A).
- 2) Remove rubber plug from Face Plate (B).
- 3) Loosen Screw (C) and adjust the position of Presser Bar till the presser foot is 6mm above the throat plate with the presser foot lifted to its highest.
- 4) Tighten Screw (C) and put in the rubber plug.
- 5) Tighten Pressure Regulating Thumb Screw (A) and Lock Nut (E).

12. 压脚压力调节 (图 10)

ADJUST THE PRESSURE OF PRESSER FOOT (Fig.10)



压脚的压力，要根据缝料的厚度加以调节。首次旋松调压螺钉锁紧螺母A，缝纫厚料时，应加大压脚压力，这时将机头顶部的调压螺钉按图a所示箭头方向转动，反之，缝纫薄料时，可按图b所示的方向，转动调压螺钉，以减少压脚的压力。最后旋紧调压螺钉锁紧螺母A即成。

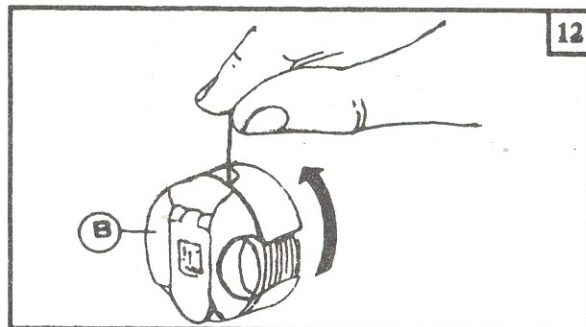
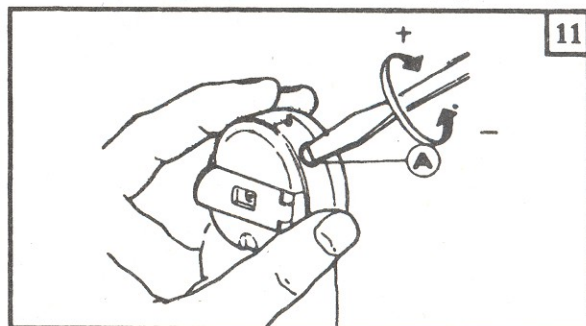
Pressure of presser foot is to be adjusted in accordance with thickness of materials to be sewn.

First loosen Lock Nut (A). For heavy materials, turn the pressure regulating thumb screw as shown in Fig. 10 (a) to increase the pressure, while for light materials, turn the pressure regulating thumb screw as shown in Fig. 10 (b) to decrease the pressure. Then tighten Lock Nut (A).

The pressure of presser foot is recommended to be less as long as normal feeding is ensured.

13. 缝线张力 (图 11, 12)

ADJUST THREAD TENSION (Fig. 11,12)



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，使之得到正常的线迹。

底线张力调整，只要用小号螺钉起子旋转梭心套上梭皮螺钉A加大或减少底线压力即可。

一般来说，底线如采用60#棉线，梭心装入梭心套后，拉出缝线穿过梭心套线孔，捏住线头吊起梭心套，梭心套则能缓缓下落。就可以使用。

面线张力以底线张力为基准。面线张力调整，主要变换夹线组件中挑线簧张力，挑线簧摆动幅度，夹线簧张力，夹线板及线勾的位置等。

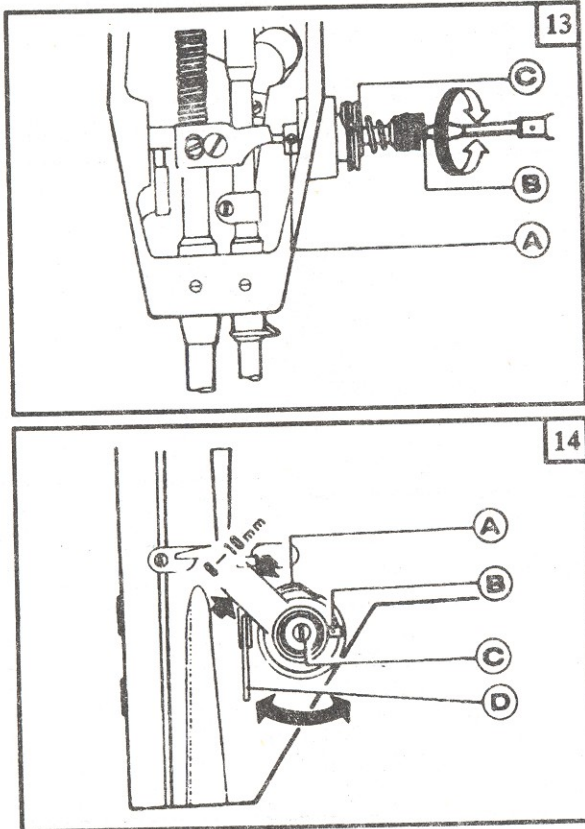
In principle, thread tension is to be adjusted in accordance with materials, thread and other factors.

In practice, thread tension is adjusted according to the stitches obtained. The needle thread tension should be adjusted with reference to the bobbin thread tension. Turn Tension Spring Regulating Screw (A) of bobbin case clockwise for more tension, or turn the screw counter-clockwise for less tension.

It is common practice to test the bobbin thread tension as shown in Fig. 12. Hold the end of the thread from delivery eye. If the bobbin case is falling slowly, the proper tension is obtained. The needle thread tension can be adjusted by setting (1) the thread take-up

spring tension, (2) the thread take-up spring stroke and (3) tension spring. All these adjustments will be described in the following.

14. 挑线簧调节 (图 13, 14) ADJUST THREAD TAKE-UP SPRING (Fig. 13, 14)



挑线簧摆动幅度为8-10毫米。缝纫薄的缝料(短针距), 则要减弱挑线簧的张力和放宽其摆动幅度, 缝制特别厚的缝料则反之。

1. 挑线簧张力调节

先旋松夹线调节座螺钉A, 夹线螺钉B就能转动, 顺时针转动时, 张力增加, 反之则减少, 调节好后, 仍将夹线调节座螺钉A旋紧。

控制方法:

松开夹线调节座螺钉A, 将夹线螺钉B, 逆时针转动, 使挑线簧C的张力压缩到0, 再把夹线螺钉B顺时针转动, 至挑线簧C触及夹线调节座上止动缺口, 然后夹线螺钉B再逆时针回转二分之一转动角度即可。最后旋紧夹线调节座螺钉A。

2. 挑线簧摆动幅度的调节

旋松夹线调节座固定螺钉B, 转动夹线器C, 调节其摆动幅度, 夹线器C顺时针转动, 摆动幅度增大, 反之则减少。调节好后, 将夹线调节座固定螺钉B旋紧。

通常, 机器在出厂前, 挑线簧均已调整妥善, 只是在缝纫特殊的缝料或特殊的缝线时, 才需要重新进行调整。

1) Adjusting the thread take-up spring tension

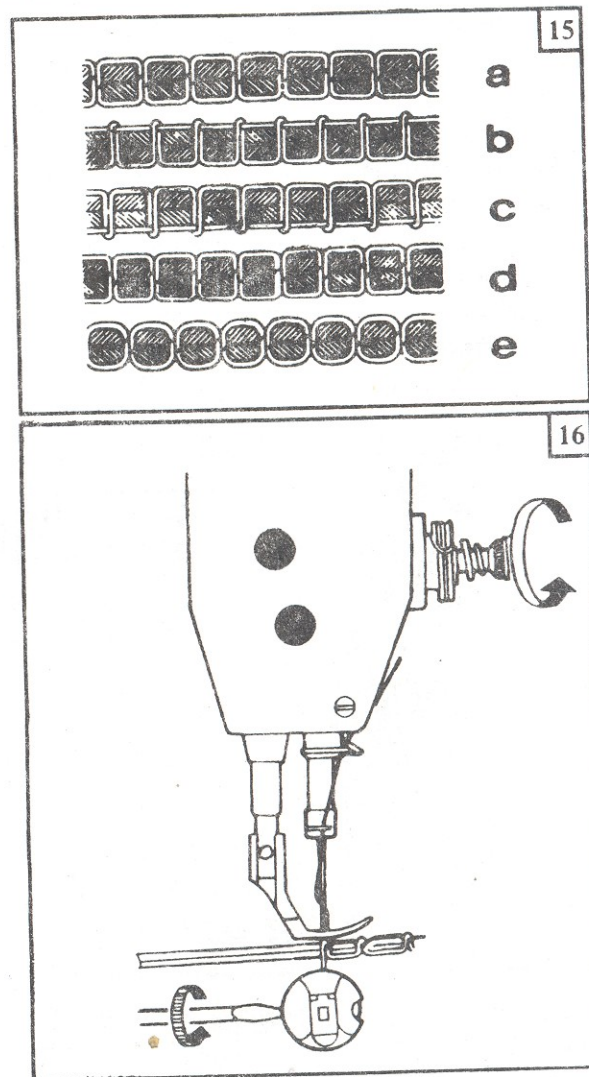
Loosen Set Screw (A), turn Tension Stud (B) clockwise to increase the spring tension, or turn the stud counter-clockwise to decrease the spring tension. After the adjustment, be sure to tighten Set Screw (A). The thread take-up spring tension should be about

30g. To Attain this, first loosen Set Screw (A), turn Tension Stud (B) counter-clockwise to decrease the tension of Thread Take-up Spring (C) to zero, then turn Tension Stud (B) clockwise until Spring (C) comes to the notch of thread tension regulating bushing, and again turn Tension Stud (B) halfway back (counter-clockwise). After the adjustment, tighten Set Screw (A).

2) Adjusting the thread take-up spring stroke

Loosen Set Screw (B), turn Stud (C) clockwise to increase the stroke or turn Stud (C) counter-clockwise to decrease the stroke. After the adjustment, tighten Set Screw (B). Before leaving the factory, the thread take-up spring has properly been adjusted. Readjustment is needed only in the case of special material or special thread.

15. 底面线张力调节 (图 15, 16) ADJUST THREAD GUIDE AND THREAD TENSION (Fig. 15, 16)



线勾装配位置的调节, 关系到缝纫质量的优劣。勾装配位置, 应适合缝料与缝纫条件。

The position of the thread guide affects stitch tightness and therefore must be adjusted according to sewing materials and sewing conditions.

线勾位置 Thread guide position	左侧 Leftward	中间 Center	右侧 Rightward
缝料 Material weight	厚料 Heavy	中厚料 Medium	薄料 Light

缝纫物的线迹应该如图a。如果线迹不正常，会出现缝料起皱和断线现象，应对底、面线的张力加以调节，使之达到正常的线迹。

(1) 如果面线太紧，底线太松，则应逆时针旋转夹线螺母，放松面线的压力，或用小号螺钉起子，旋紧梭皮螺钉，加大底线压力。

(2) 如果面线太松，底线太紧，则应顺时针旋转夹线螺母，以加大面线的压力或用小号螺钉起子，旋松梭皮螺钉，减小底线压力。

(3) 如出现图d, e的线迹，也可以参照上述方法加以调节。

Fig. 15 shows different stitch forms. Normal stitch form should be as shown in Fig. 15 (a). When abnormal stitches cause puckering and thread breakage, the tension of needle thread and bobbin thread must be adjusted accordingly.

1) In case needle thread tension is too strong or bobbin thread tension is too weak, as shown in Fig. 15 (b), turn the thumb nut counterclockwise to decrease the needle thread tension, or tighten the tension spring regulating screw of bobbin case to increase the bobbin thread tension (See Fig. 16)

2) In case needle thread tension is too weak or bobbin thread tension is too strong, as shown in Fig. 15 (c), turn the thumb nut clockwise to increase the needle thread tension, or loosen the tension spring regulating screw or bobbin case to decrease the bobbin thread tension.

3) In case of the stitch forms as shown in Fig. 15(d) and (e), adjustments can be made with reference to the above means.

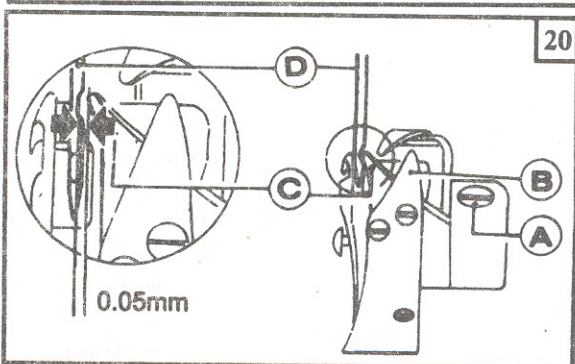
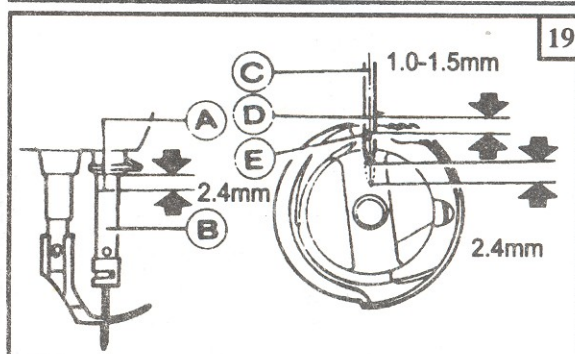
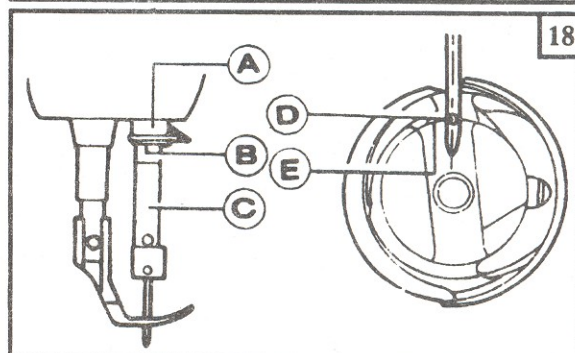
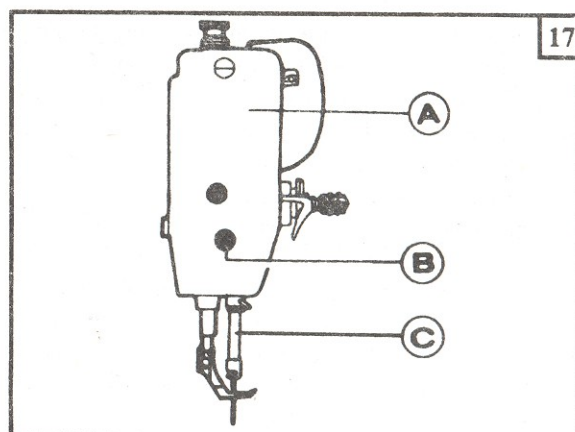
16. 机针与旋梭同步调整 (图 17, 18, 19, 20) TIME NEEDLE TO ROTATING HOOK (Fig. 17, 18, 19, 20)

(1) 机针位置的调节:

用手转动主动轮，使针杆c下降至最低位置，卸下面板A上的橡皮塞，旋松针杆C上的针杆接头螺钉B，上下移动针杆C，定出同步位置(针杆的同步位置：针杆下降至最低位置时，针杆上的同步标记B与套筒A下端面一致的位置，这时机针线孔的中心D与旋梭内面E也成一致位置如图18所示的位置)，旋紧针杆接头螺钉B，塞上橡皮塞即成。

(2) 旋梭同步的调节:

旋梭和机针之间的相互运动关系。对缝制性能的影响很大。标准的同步关系是：当机针向下运动到最低位置后，目测针杆的同步标记A的间距为2.4毫米，把针杆B从最低位置上升2.4毫米。这时旋梭的钩线尖D应与现机针的中心线C一致，在此位置时，钩线尖D高于机针线孔E上边1.0-1.5毫米。



在调节旋梭的同步关系时，还要注意到旋梭尖与机针的侧面间隙。机针D缺口的底部与旋梭钩线尖C的间隙为0.05毫米。

A. Adjusting the needle position (See Fig. 17)

1) Turn balance wheel by hand to bring Needle Bar (C) to the lowest position of its stroke.

2) Remove rubber plug from Face Plate (A)

3) Loosen Set Screw (B) of needle bar adaptor.

4) Move Needle Bar (C) vertically to adjust needle timing.

5) After the adjustment, tighten Set Screw (B) and put in the

rubber plug. The standard needle timing (See Fig. 18) is to align Timing Mark (B) on the needle bar and the bottom of Needle Bar Bushing (A) and meanwhile align the Inner Surface (E) of the hook and the center of Needle Eye (D) when the needle bar gets down to its lowest position.

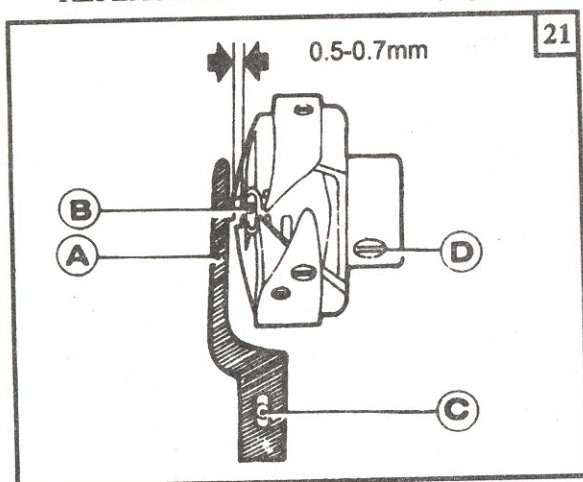
B. Adjusting the hook point timing

Timing of needle motion to rotating hook motion has a great effect on sewing performance. The standard hook point timing (See Fig. 19) is to align Hook Point (D) and Needle Centerline (C) when Needle Bar (B) is lifted by 2.4mm from the lower end of its stroke. (2.4 mm suitable for type B and type C). Besides, Hook Point (D) should be 1.0-1.5mm above the upper end of needle eye (E).

When adjusting the hook point timing, also notice that the clearance between the bottom of needle notch and Hook Point (C) should be approx 0.05mm (See Fig.20)

17. 旋梭装卸 (图 21)

REPLACE ROTATING HOOK (Fig.21)



先将针杆上升到最高位置, 拆下针板, 取下机针和梭心套。旋开旋梭定位勾螺钉C, 把旋梭定位勾A取下。再旋松旋梭螺钉D。在此位置如果取出旋梭, 旋梭将会与牙架相碰, 此时可以转动主动轮使牙架上升到最高位置。然后扭转旋梭让过牙架位置, 即能将旋梭很容易地取下。安装旋梭时, 可以重复上述过程。注意: 旋梭定位勾的安装位置应是旋梭定位勾A的勾尖侧面与机针B的侧面应成一致。其另外两侧面之间隙为0.5-0.7毫米。

1) Lift needle bar to the highest position of its stroke. 2) Remove throat plate, take down needle and bobbin case.

3) Loosen Screw (C) of hook positioner and take down Hook Positioner (A).

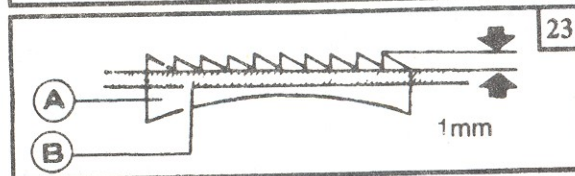
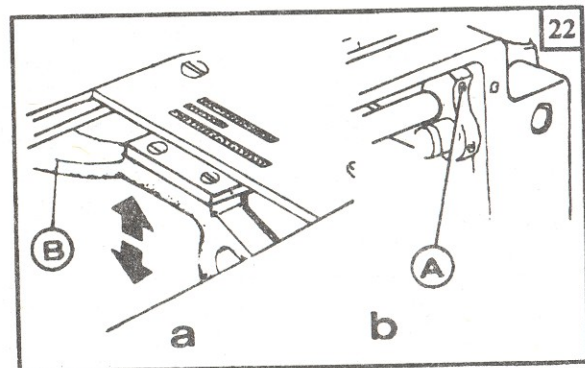
4) Loosen two Screw (D) of rotating hook

5) Turn balance wheel to raise feed bar to its highest position, then take down the rotating hook by turning it away from feed bar.

6) Installing the hook can be done in reverse sequence. Note that Needle (B) and the convex surface of Hook Positioner (A) should align with a clearance of 0.5-0.7mm between them.

18. 送布牙的调整 (图 22, 23)

ADJUST THE HEIGHT OF FEED DOG (Fig.22,23)



(1) 转动主动轮, 直至送布牙从针板面突出的最高位置为止。

(2) 旋松抬牙轴曲柄(右)螺钉A。(图22b)

(3) 把牙架B按图22a所示的箭头方向移动, 定出布牙高度(送布牙高度: 送布牙尖端至针板面B的间距为0.8mm见图23)

(4) 调节好后把螺钉A旋紧。

1) Turn balance wheel until feed dog is lifted to its highest position from throat plate surface.

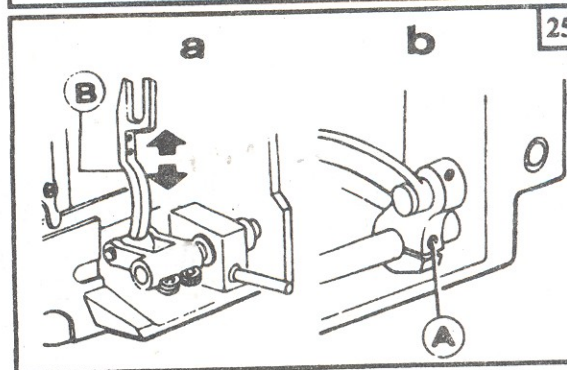
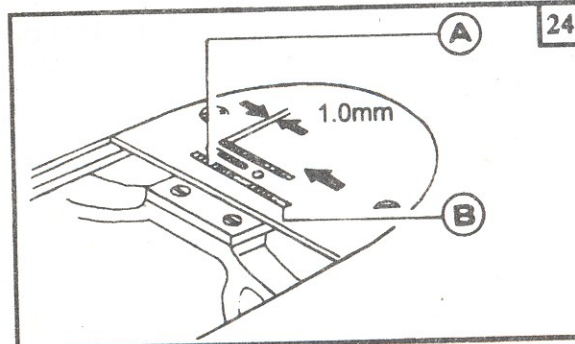
2) Loosen Screw (A) of feed lifting rock shaft crank right (S Fig. 22, b)

3) Move Feed Bar (B) in the direction shown by the arrow Fig. 22 (a) to adjust the height of the feed dog. The standard height of feed dog is that the top of feed dog is 1.0mm above Throat Plate Surface (B).

4) After the adjustment, be sure to tighten Screw (A).

19. 送布牙安装 (图 24, 25)

ADJUST THE POSITION OF FEED DOG (Fig. 24,



1. 当送布量最大, 送布牙A前端靠近板槽前侧时, 送布牙前端与针板槽前侧的间距为0.8毫米, 这是标准的送布牙安装位置。

2. 调节送布牙位置时, 先让送布运动至针板最前侧停止, 然后旋松送布轴曲柄螺钉A(见图25b), 将牙架E按图25a所示箭头方向移动, 以调节其间隙位置, 调节好后, 再把螺钉A旋紧。

The standard position of feed dog is that the clearance between the front end of the throat plate slot and the first tooth of the fully advanced feed dog is 1mm, as shown in Fig. 24.

1) Fully advance the feed dog toward the front end of the throat plate slot.

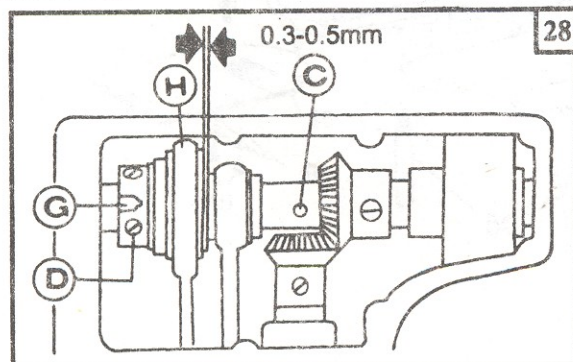
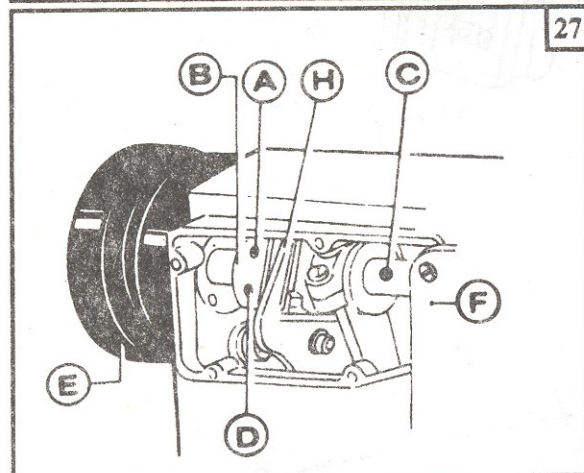
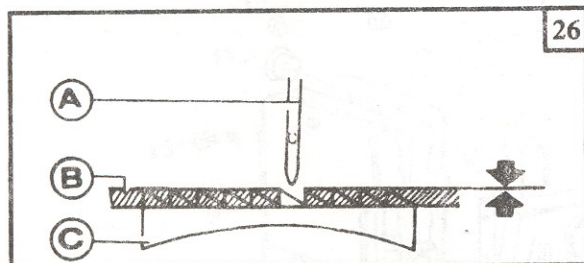
2) Loosen Feed Rock Shaft Crank Screw (A). See Fig. 25 (b).

3) Move Feed Bar (B) in the direction shown by the arrow in Fig. 25 (a) to adjust the feed dog position.

4) After the adjustment, be sure to tighten Screw (A).

20. 送布牙与机针同步调节 (图示 26,27,28)

TIME FEED MOTION TO NEEDLE MOTION (Fig. 26, 27, 28)



机针A尖端到达针板面B时, 送布牙C尖端与针板面B高低一致, 此为标准同步关系。

不同步时的调节方法: 先打开机壳后盖板F, 旋松送布凸轮螺钉A、D, 按住送布凸轮B, 再缓缓转动主动轮, 当上轴油孔C的上端与送布凸轮的基准孔的下端一致时, 即达到同步关系。

调节时, 送布凸轮B与牙叉滑块H的间隙应为0.3-0.5mm。最后, 旋紧送布凸轮螺钉A、D即可。

The standard timing of feed motion to needle motion is that the top of Feed Dog (C) is flush with Throat Plate Surface (B) when the point of Needle (A) reaches Throat Plate Surface (B). See Fig. 26

If feed motion is not timed to needle motion, adjust as follows (See Figs. 27 and 28)

1) Remove Arm Side Cover (F).

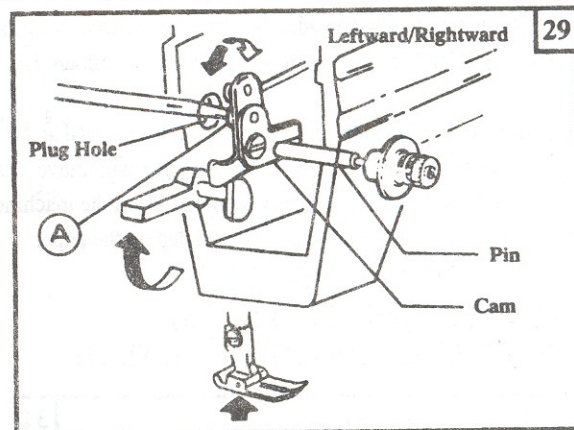
2) Loosen Set Screws (A) and (D) of feed and feed lifting eccentric.

3) Hold Feed and Feed Lifting Eccentric (B) and turn Balance Wheel (E) slowly until the upper edge of Arm Shaft Oil Hole (C) aligns with the lower edge of Reference Hole (G) of feed and feed lifting eccentric.

4) Leave a clearance of 0.3~0.5 mm between Feed and Feed Lifting Eccentric (B) and Eccentric Sleeve (H), then tighten Set Screws (A) and (D).

21. 松线器挺线调节 (图示 29)

ADJUST OPENING TIME OF THE TENSION DISCS (Fig. 29)



压脚在提升范围(2-7毫米), 夹线器上的夹线板有一个张开期, 挺线的时间可进行调节。调节时, 先卸下机头背面的橡皮塞, 用螺丝刀旋松膝控提升杠杆(左)螺钉A, 这时松线凸轮可以左右移动, 往右移挺线慢, 往左移挺线快。

调节时, 如有条件的话, 在压脚下垫上一块与压脚提升高度尺寸相等的垫块, 则调节时方便。

Within the presser foot lift range of 2-7mm opening time of the tension discs can be adjusted as follows:

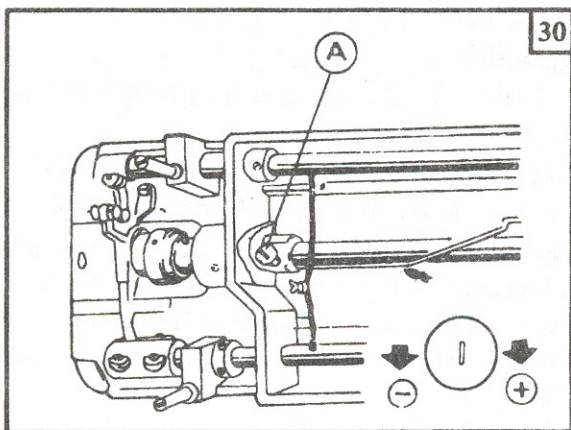
1) Remove the rubber plug from the back of arm and loosen Screw (A) of knee lifter lever (left).

2) Move the tension releasing cam leftward for earlier opening or rightward for later opening. It will facilitate the adjustment to put under the presser foot a block as thick as the presser foot lift.

3) After the adjustment, fully tighten Screw (A).

22. 旋梭油量调节 (图 30)

LUBRICATION ADJUSTMENT (Fig.30)



旋梭的油量，可以用油量调节螺钉A加以调节。顺时针方向（“+”号方向）转动油量调节螺钉A，油量增多；逆时针方向（“-”号方向）转动油量调节螺钉，则油量减少，油量调节螺钉A在回转5圈范围内调节油量，拧向紧固位置时，油量最多，拧松转5圈时，油量最少。

Adjusting the lubrication of rotating hook

The lubrication of the rotating hook can be adjusted by Oil Adjusting Screw (A) as follows:

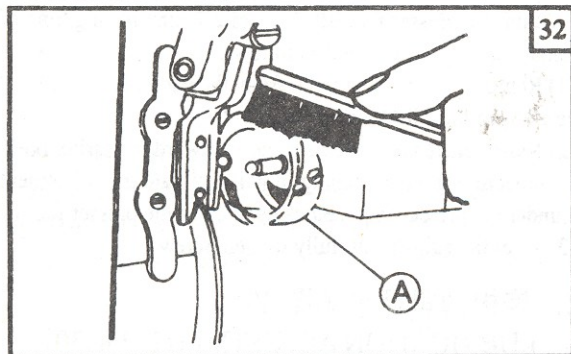
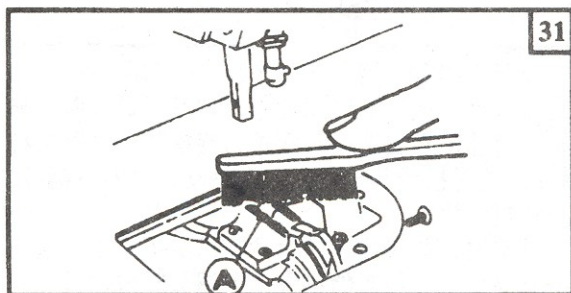
1) Turn Oil Adjusting Screw (A) clockwise to increase oil and turn Oil Adjusting Screw (A) counterclockwise to decrease oil.

2) Oil Adjusting Screw (A) adjusts oil amount within 5 turns. When Oil Adjusting Screw (A) is fully tightened, oil amount is maximum.

3) Readjustment depends on temperature, sewing speed and the like. In practice, oil amount can be judged as follows: remove the throat plate and place a piece of paper on instead, run the machine for about 20 seconds, then check the oil splashed on the paper.

23. 定期清扫 (图 31, 32, 33)

REGULAR CLEANING (Fig. 31, 32, 33)



请根据使用程度，定期清扫送布牙，旋梭，梭心套和油泵滤网等。

1 送布牙的清扫

先卸下针板，清除送布牙A间距（牙槽）内的尘垢，然后再安好针板。

2 旋梭的清扫：

清除旋梭A周围的尘垢，如图所示。同时用软布拭擦梭心套。

2 油泵滤网的清扫

如图所示，清除滤网A上的尘屑。

1) Cleaning feed dog (See Fig. 31)

Remove the throat plate and clear off the dust and lint between feed dog tooth slots.

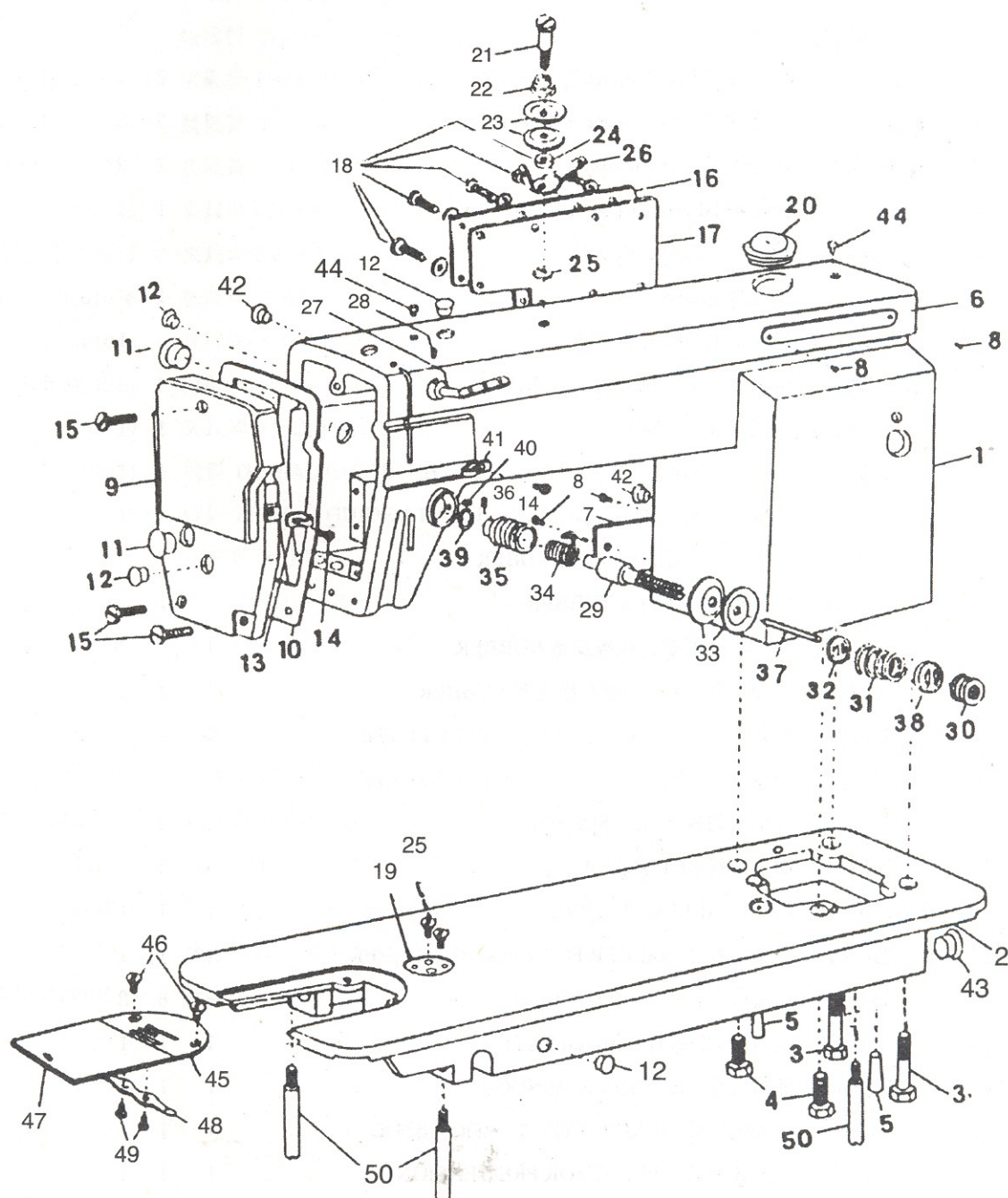
2) Cleaning rotating hook (See Fig. 32)

Swing out the machine head and clean the hook. Wipe the bobbin case with soft cloth.

3) Cleaning oil pump screen (See Fig. 33)

Swing out the machine head and clear off the dust and dirt on the oil pump screen.

1. 机壳部件 Arm Bed And It's Accessories



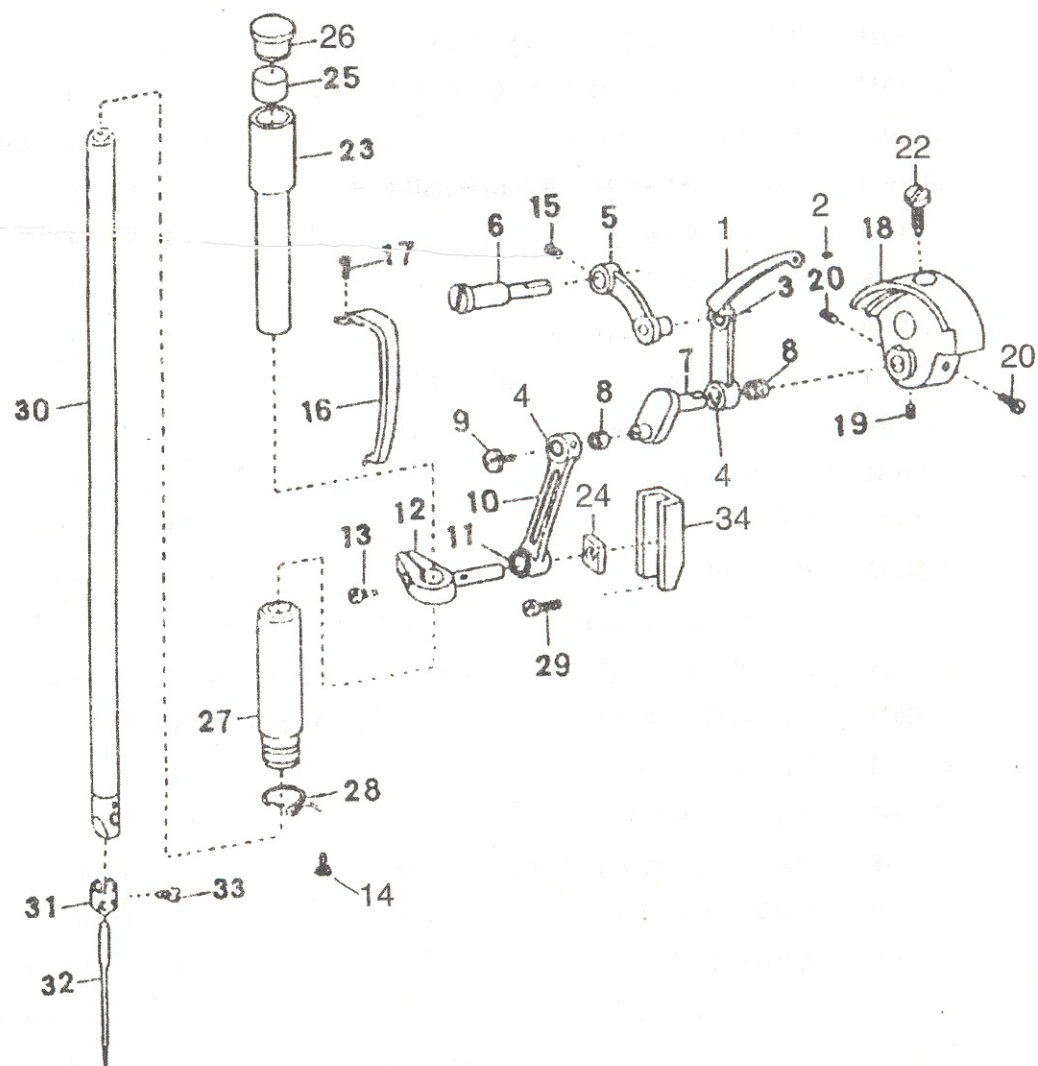
零件样本 (PARTS BOOK)

一、机壳部件 (ARM BED AND TI'S ACCESSORIES)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2302006 H01	机壳 ARM		1	1		
	2302006 H02	机壳 ARM				1	
2	2302010	底板 BED		1	1		
	2302011	底板 BED				1	
3	GB70-85	机壳螺钉 (长) SCREW BOLT		2	2	2	M12x50
4	GB70-85	机壳螺钉 (短) SCREW BOLT		2	2	2	M12x30
5	GB117-76	机壳锥销 TAPER PIN		2	2	2	6x28
6		商标牌 BRAND PLATE		1	1	1	
7	2302125	型号牌 MODLE PLATE		1			
	2302127	型号牌 MODLE PLATE				1	
	2302129	型号牌 MODLE PLATE				1	
8	GB827-86	铭牌铆钉 MODLE PLATE RIVET		4	4	4	Φ 2.5x5
9	2302016	面板 FACE PLATE		1	1	1	
10	2302017	面板垫片 GASKER FOR FACE PLATE		1	1	1	
11	2302044	面板橡皮塞 Φ19 RUBBER		1	1	1	
	2302044	回油观察孔橡皮塞 Φ19 RUBBER		1	1	1	
12	2301011	面板橡皮塞 Φ11.8 RUBBER		1	1	1	
	2301011	拾牙轴紧圈螺钉孔橡皮塞 RUBBER		1	1	1	
	2301011	膝控提升杠杆(左)螺孔橡皮塞 RUBBER		1	1	1	
13	2302013	面板线勾 THREAD GUIDE ON FACE PLATE		1	1		
	2302012	面板线勾 THREAD GUIDE ON FACE PLATE				1	
14	2301013	面板线勾螺钉 SET SCREW		1	2	2	SM9/64"x40/6
15	2302148	面板螺钉 SET SCREW		3	3	3	
16	2302020	后盖板 ARM SIDE COVER		1	1	1	
17	2302019	后盖板垫片 GASKER FOR ARM SIDE COVER		1	1	1	
18	2301017	后盖板螺钉组件 SET SCREW		8	8	8	SM11/64"x40/6
19	2301052	夹边座 CLOTH GUIDE PLATE		1	1	1	
20	2402067	油窗组件 OIL CHECK WINDOW		1	1	1	
21	2301020	小夹线螺钉 SCREW TYPE TENSION STUD		1	1	1	
22	2301021	小夹线弹簧 SPRING FOR PRE-TENSION		1	1	1	
23	2301022	小夹线板 DISC FOR PRE-TENSION		2	2	2	
24	2301023	小夹线过线板垫块 SPACE FOR PRE-TENSION		1	1	1	
25	2301053	夹边座螺钉 SET SCREW		2	2	2	SM11/64"x40/6

26	2301025	小夹线过线板PRE-TENSION THREAD GUIDE	1	1	1	
27	2301026	三眼线勾THREE-HOLE THREAD GUIDE	1	1	1	SM11/64"x40/5.5
28	2301027	线勾螺钉 SET SCREW	1	1	1	
29	2301028	夹线螺钉 THREAD TENSION STUD	1	1	1	
30	2301029	夹线螺母 THREAD TENSION STUD	1	1	1	
31	2301030	夹线弹簧 THREAD TENSION SPRING		1	1	
	2302022	夹线弹簧 THREAD TENSION SPRING	1			
32	2301031	松线板 THREAD TENSION DISC	1	1	1	
33	2301032	夹线板 THREAD TENSION DISC	1	1	1	
34	2301033	挑线簧 THREAD TAKE-UP SPRING		1	1	
	2302021	挑线簧 THREAD TAKE-UP SPRING	1			
35	2301034	夹线调节座 THREAD TENSION REGUIATING BUS	1	1	1	
36	2301035	夹线调节座螺钉SCREW	1	1	1	SM9/64"x40/6
37	2301036	松线钉 THREAD TENSION REIEASING PIN	1	1	1	
38	2301037	夹线螺母制动板 STOP DISC	1	1	1	
39	2301038	O型圈 RUBBER RING	1	1	1	
40	2301039	夹线调节座固定螺钉SCREW	1	1	1	
41	2302023	线勾 THREAD GUIDE AT ARM CENTER	1	1		
	2301040	线勾 THREAD GUIDE AT ARM CENTER			1	
42	2301041	橡皮塞 RUBBER	2	2	2	
43	2301042	橡皮塞 RUBBER	1	1	1	
44	2301043	橡皮塞 RUBBER	2	2	2	
45		针板 NEEDLE PLATE			1	
	2302121	针板 NEEDLE PLATE		1		
	2302024	针板 NEEDLE PLATE	1			
46	2301045	针板螺钉 SCREW	2	2	2	
47	2301047	推板SLIDE PLATE	1	1	1	
48	2301048	推板簧 SLIDE PLATE SPRING	1	1	1	
49	2301049	推板簧螺钉 SCREW	2	2	2	
50	2301050	底板撑杆 LEG	3	3	3	

2. 针杆挑线部件 Needle Bar And Take-up

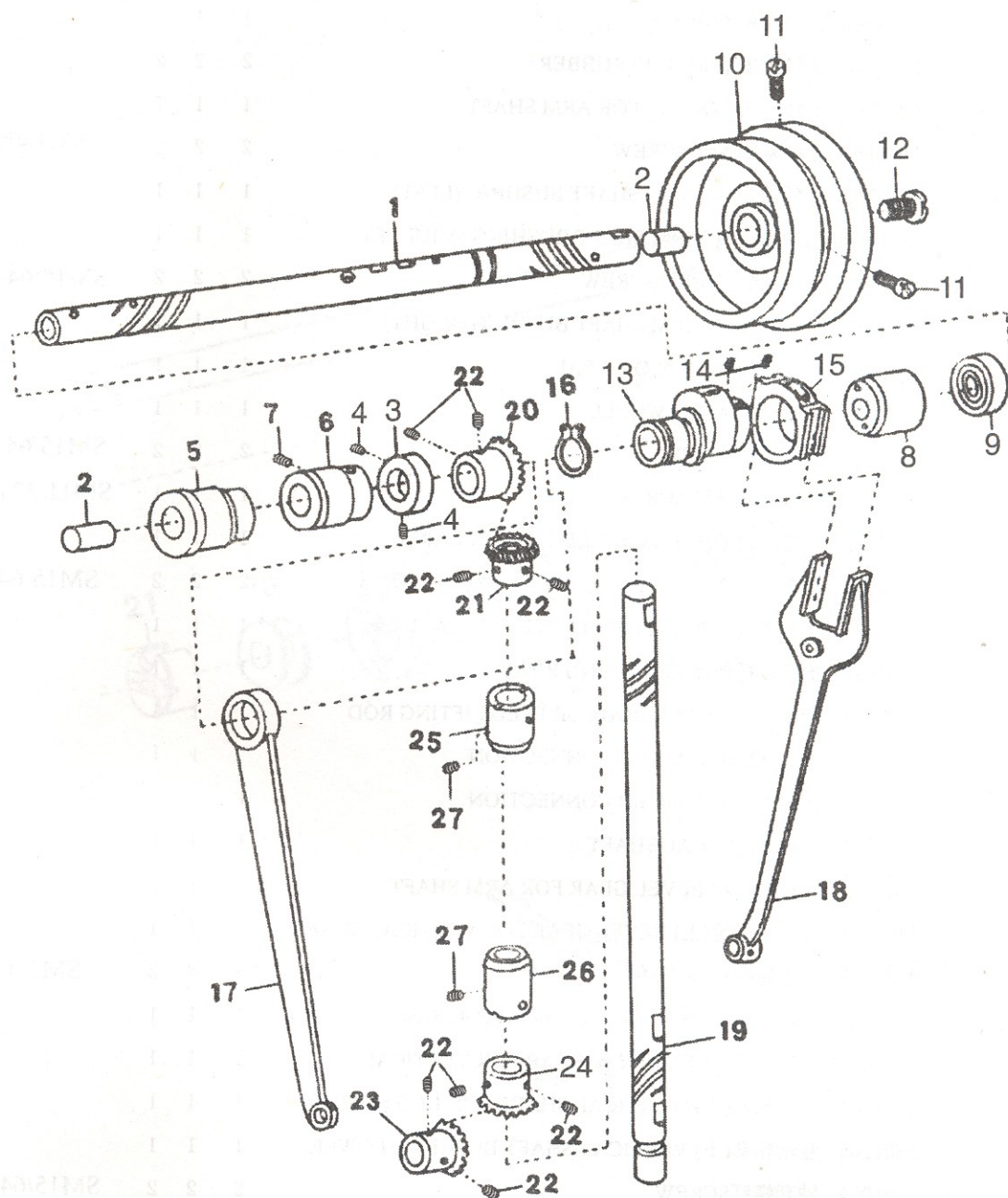


二、针杆挑线部件(NEEDLE BAR AND TAKE-UP)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2302042	挑线杆	THREAD TAKE-UP LEVER	1			
	2302044	挑线杆	THREAD TAKE-UP LEVER		1		
	2301055	挑线杆	THREAD TAKE-UP LEVER			1	
2	2302046	挑线杆孔套	BUSHING	1	1	1	
3	2302144	挑线杆轴套(小)	BUSHING	1	1	1	
4	2302145	挑线杆轴套(大)	BUSHING	1	1	1	
	2302145	针杆连杆轴套(大)	BUSHING	1	1	1	
5	2302047	挑线连杆	THREAD TAKE-UP CRANK	1	1		
	2302048	挑线连杆	THREAD TAKE-UP CRANK			1	
6	2301057	挑线连杆铰链轴	HINGE PIN	1	1	1	
7	2301058	挑线曲柄	THREAD TAKE-UP CRANK		1	1	
	2302049	挑线曲柄	THREAD TAKE-UP CRANK	1			
8	2301059	滚针轴承	NEEDLE BEARING	2	2	2	
9	2301060	挑线曲柄螺钉(左旋)	SCREW (LEFT HANDED)	1	1	1	
10	2302120	针杆连杆	NEEDLE BAR LINK	1			
	2301061	针杆连杆	NEEDLE BAR LINK		1	1	
11	2302146	针杆连杆轴套(小)	BUSHING	1	1	1	
12	2301062	针杆接头	NEEDLE BAR ADAPTOR	1	1	1	
13	2301013	针杆接头螺钉	SCREW	1	1	1	
14	2301082	下过线勾螺钉	SCREW		1	1	
15	2301064	挑线连杆铰链轴螺钉	SCREW	1	1	1	
16	2302051	挑线杆防护罩	COVER	1	1		
	2302056	挑线杆防护罩	COVER			1	
17	2301066	挑线杆防护罩螺钉	SCREW	1	1	1	SM11/64"x40/8
18	2301067	针杆曲柄	NEEDLE BAR CRANK		1	1	
	2302067	针杆曲柄	NEEDLE BAR CRANK	1			
19	5590-02-7	挑线曲柄螺钉	SCREW	2	2	2	SM1/4"x40/6
20	2301079	针杆接头滑块导轨	GUIDE FOR SLIDE BLOCK	1	1	1	
21	2301069	针杆曲柄螺钉	SCREW	1	1	1	SM9/32"x28/13
22	2301070	针杆曲柄定位螺钉	SCREW	1	1	1	SM9/32"x28/14
23	2301071	针杆轴套(上)	NEEDLE BAR BUSHING (UPPER)	1	1	1	
24	2301081	针杆接头滑块	SLIDE BLOCK	1	1	1	
25	2301072	针杆轴套(上)毡塞	FELT PLUG	1	1	1	
26	2301005	针杆轴套(上)橡皮塞	FELT PLUG	1	1	1	
27	2302003	针杆轴套(上)	NEEDLE BAR BUSHING (LOWER)	1			

	2302004	针杆轴套(上) NEEDLE BAR BUSHING (LOWER)	1	1	
28	2302005	针杆轴套(下)过线勾LOWER THREAD GUIDE	1		
	2301074	下过线勾 LOWER THREAD GUIDE	1	1	
29	2301080	滑块导轨螺钉 SCREW	2	2	2 SM1/8"x44/4.5
30	2302038	针杆组件 NEEDLE BAR ASM	1		
	2302039	针杆 NEEDLE BAR	1		
	2302040	针杆 NEEDLE BAR		1	
31	2301076	针杆过线环 THREAD GUIDE FOR NEEDLE BAR	1	1	
	2302041	针杆过线环 THREAD GUIDE FOR NEEDLE BAR	1		
32		机针 NEEDLE	1		DBx1-2 14#
		机针 NEEDLE	1	1	DBx1-2 22#
33	2301078	支针螺钉 SCREW	1	1	1 SM1/8"x44/4.5

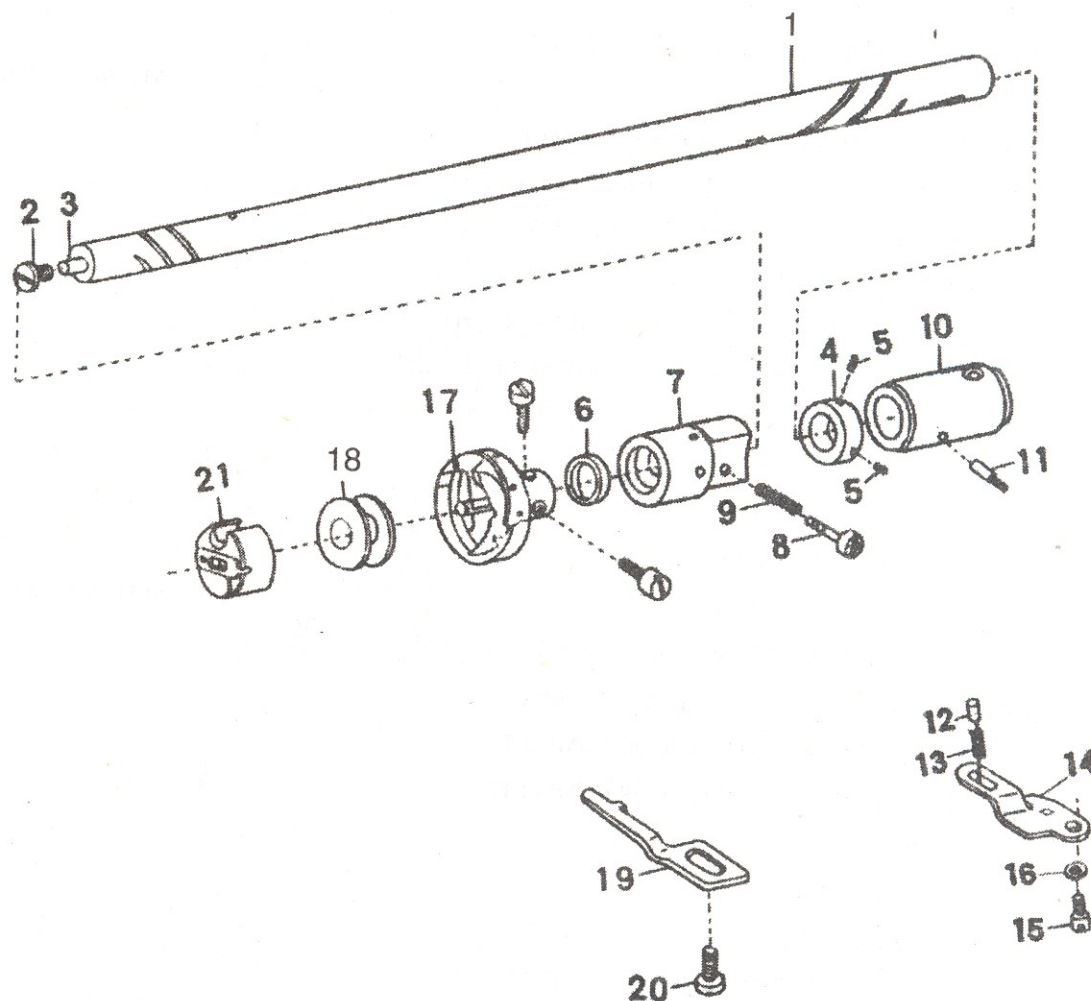
3. 上轴竖轴部件 Arm Shaft And Vertical Shaft



三、上轴竖轴部件(ARM SHAFT AND VERTICAL SHAFT)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2301083	上轴 MRM SHAFT		1	1	1	
2	2301084	上轴橡皮塞 $\phi 7.4 \times 10$ RUBBER		2	2	2	
3	2301085	上轴紧圈 COLLAR FOR ARM SHAFT		1	1	1	
4	2301086	上轴紧圈螺钉 SCREW		2	2	2	SM1/4"x40/4
5	2301087	上轴轴套(左) ARM SHAFT BUSHING (LEFT)		1	1	1	
6	2301088	上轴轴套(中) ARM SHAFT BUSHING (MIDDLE)		1	1	1	
7	2301064	上轴轴套(中)螺钉 SCREW		2	2	2	SM15/64"x28/1
8	2301089	上轴轴套(右) ARM SHAFT BUSHING (RIGHT)		1	1	1	
9	2301090	上轴轴套(右)油封 OIL SEAL		1	1	1	
10	2302028	上轮 BALANCE WHEEL		1	1	1	
11	5590-02-02	上轮螺钉 SCREW		2	2	2	SM15/64"x28/1
12	2301094	上轴油封螺钉 SCREW		1	1	1	SM11/324"x28/
13	2302043	送布凸轮 FEED AND FEED LIFTING CARM		1	1	1	
14	2301095	送布凸轮螺钉 SCREW		2	2	2	SM15/64"x28/
15	2301097	牙叉滑块 ECCENTRIC SLEEVE		1	1	1	
16	2301098	抬牙连杆挡圈 RETAINING RING		1	1	1	
17	2301099	抬牙连杆 CRANK ROD FOR FEED LIFTING ROD		1	1	1	
18	2301100	牙叉 FEED FORKED CONNECTION			1	1	
	2302139	牙叉 FEED FORKED CONNECTION		1			
19	2302030	竖轴 VERTICAL SHAFT		1	1	1	
20	2301063	上轴伞齿轮 BEVEL GEAR FOR ARM SHAFT		1	1	1	
21	2301339	竖轴伞齿轮(上) BEVEL GEAR FOR VERTICAL SHAFT		1	1	1	
22	2301103	伞齿轮螺钉 SCREW		8	8	8	SM1/4"x40/7
23	2301341	下轴伞齿轮 BEVEL GEAR FOR HOOK SHAFT		1	1	1	
24	2301343	竖轴伞齿轮(下) BEVEL GEAR FOR VERTICAL		1	1	1	
25	2301104	竖轴轴套(上) VERTICAL SHAFT BUSHING (UPPER)		1	1	1	
26	2301105	竖轴轴套(下) VERTICAL SHAFT BUSHING (LOWER)		1	1	1	
27	2301064	轴套螺钉 SCREW		2	2	2	SM15/64"x28/

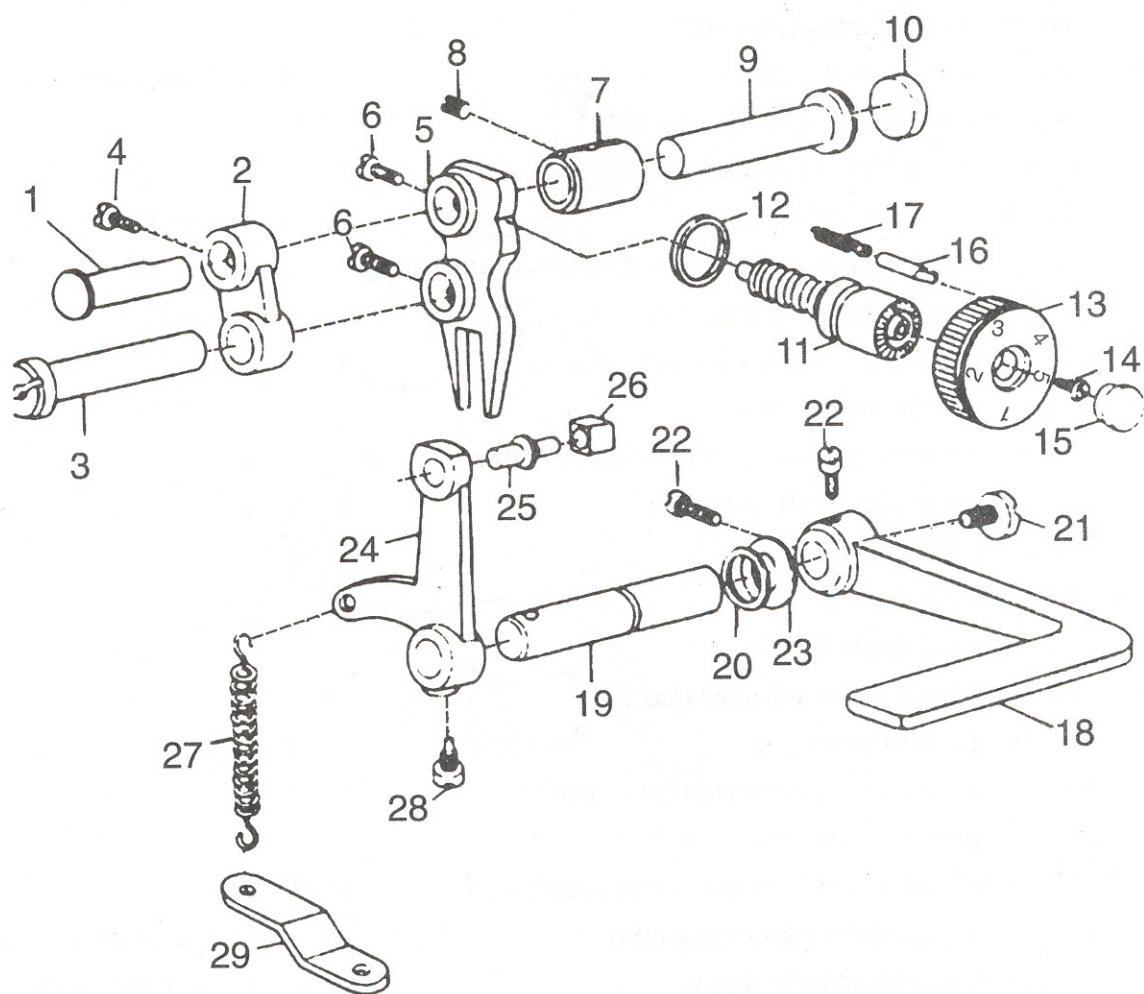
4. 勾线部件 Rotating Hook Mechanism



四、勾线部件(ROTATING HOOK MECHANISM)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2302031	下轴 RORATING HOOK SHAFT		1	1		
	2302106	下轴 RORATING HOOK SHAFT				1	
2	2301107	下轴滤油塞螺钉 FILTER SCREW		1	1	1	
3	2301108	下轴滤油塞 FILTER		1	1	1	
4	2301109	下轴紧圈 COLLAR FOR HOOK SHAFT		1	1	1	
5	2301110	下轴紧圈螺钉 SCREW		2	2	2	SM15/64"x28/4.5
6	2301111	下轴油封 OIL SEAL FOR HOOK SHAFT		1	1	1	
7	2301112	下轴轴套(左) HOOK SHAFT BUSHING (LEFT)		1	1	1	
8	2301113	油量调节螺钉 OIL ADJUSTING SCREW		1	1	1	
9	2301114	油量调节弹簧 OIL ADJUSTING SPRING		1	1	1	
10	2301115	下轴轴套(右) HOOK SHAFT BUSHING (RIGHT)		1	1	1	
11	2301116	下轴轴套油管 OIL PIPE FOR HOOK SHAFT BUSH		1	1	1	
12	2301117	柱塞 PLUNGER		1	1	1	
13	2301118	柱塞弹簧 PLUNGER SPRING		1	1	1	
14	2302112	挡板 GUIDE PLATE		1	1		
	2301119	挡板 GUIDE PLATE				1	
15	2301120	挡板螺钉 SCREW		1	1	1	SM15/64"x28/10
16		挡板螺钉弹簧垫圈 WASHER SPRING		1	1	1	
17	2402031	旋梭组件 ROTATING HOOK COMPLETE				1	
	2402030	旋梭组件 ROTATING HOOK COMPLETE		1			
	2401121	旋梭组件 ROTATING HOOK COMPLETE				1	
18	2302034	梭芯 BOBBIN		1	1		
	2301124	梭芯 BOBBIN				1	
19	2302032	旋梭定位勾 ROTATING HOOK POSITIONER		1	1		
	2302122	旋梭定位勾 ROTATING HOOK POSITIONER				1	
20	2301123	旋梭定位勾螺钉 SCREW		1	1	1	SM11/64"x40/1
21	2402029	梭心套组件 BOBBIN CASE		1	1		
	2401033	梭心套组件 BOBBIN CASE				1	

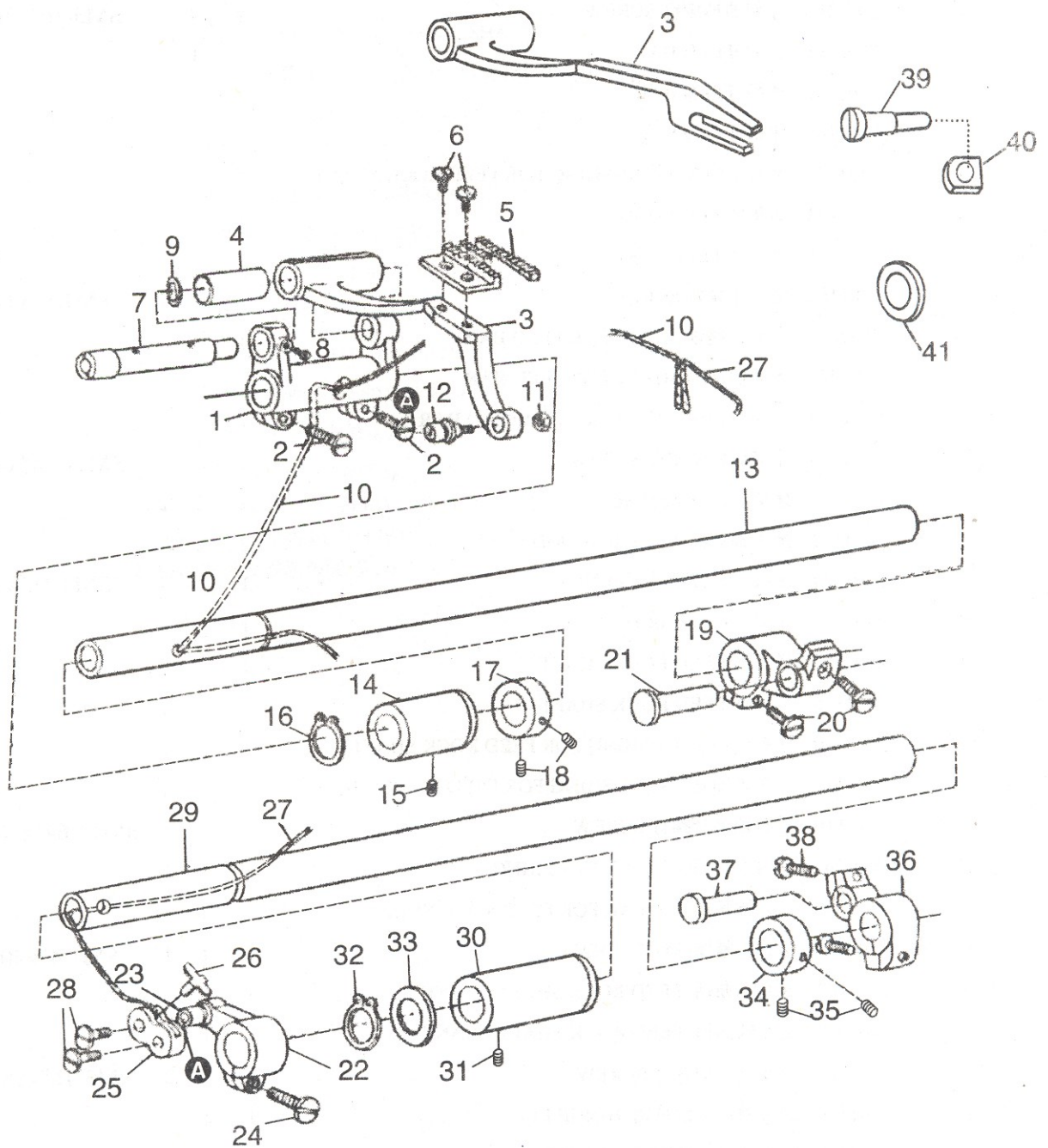
5、针距调节部件 Stitch Length Regulating Mechanism



五、针距调节部件(STITCH LENGTH REGULATING MECHANISM)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2301125	牙叉铰链轴	HINGE PIN	1	1	1	
2	2301126	针距连杆	FEED CONNECTING LINK	1			
	2302151	针距连杆	FEED CONNECTING LINK		1	1	
3	2301127	针距连杆铰链轴	HINGE PIN	1			
	2302152	针距连杆铰链轴	HINGE PIN		1	1	
4	2301120	牙叉铰链轴螺钉	SCREW	1	1	1	SM15/64"×28/10
5	2301128	针距调节摆杆	FEED RAGULATOR		1	1	
	2302025	针距调节摆杆	FEED RAGULATOR	1			
6	2301120	针距调节摆杆螺钉	SCREW	2	2	2	SM15/64"×28/10
7	2301130	针距调节摆杆轴套	BUSHING FOR FEED RAGULATOR	1	1	1	
8	2301064	针距调节摆杆轴套螺钉	SCREW	1	1	1	SM15/64"×28/10
9	2301131	针距调节摆杆铰链轴	HINGE PIN	1	1	1	
10	2301132	橡皮塞	Φ20×6 RUBBER	1	1	1	
11	2302035	针距调节螺杆	FEED RAGULATOR SCREW BAR	1	1	1	
12	2301136	针距调节螺杆O型圈	RUBBER RING	1	1	1	
13	2302037	针距标盘	DIAL		1	1	
	2302036	针距标盘	DIAL	1			
14	2301135	针距标盘螺钉	SCREW	1	1	1	SM3/16"×28/10
15	2301137	针距标盘橡皮塞	RUBBER PLUG	1	1	1	
16	2301138	止动销	STOPPER PIN	1	1	1	
17	2301139	止动销弹簧	SPRING FOR STOPPER PIN	1	1	1	
18	2301140	倒缝操纵杆	REVERSE FEED LEVER	1	1	1	
19	2301141	倒缝操纵杆短轴	REVERSE FEED LEVER SHAFT	1	1	1	
20	2301142	倒缝操纵杆轴O型圈	RUBBER RING	1	1	1	借用GEM5590-
21	2301143	倒缝操纵杆吊紧螺钉	SCREW	1	1	1	SM3/16"×28/10
22	2301120	倒缝操纵杆固定螺钉	SCREW	2	2	2	SM15/64"×28/10
23	2301144	倒缝操纵杆垫圈	WASHER	1	1	1	
24	2301145	倒缝操纵杆曲柄	REVERSE FEED CRANK	1	1	1	
25	2301213	倒缝操纵杆曲柄滑块轴	SLIDE BLOCK PIN	1	1	1	
26	2301146	倒缝操纵杆曲柄滑块	SLIDE BLOCK	1	1	1	
27	2301147	倒缝操纵杆曲柄弹簧	SPRING FOR REVERSE FEED CRA	1	1	1	
28	2301148	倒缝操纵杆曲柄螺钉	SCREW	1	1	1	SM15/64"×28/10
29	2301149	弹簧架	BRACKET FOR SPRING	1	1	1	

6. 送布部件 FEEDING AND FEED LIFTING MECHANISM

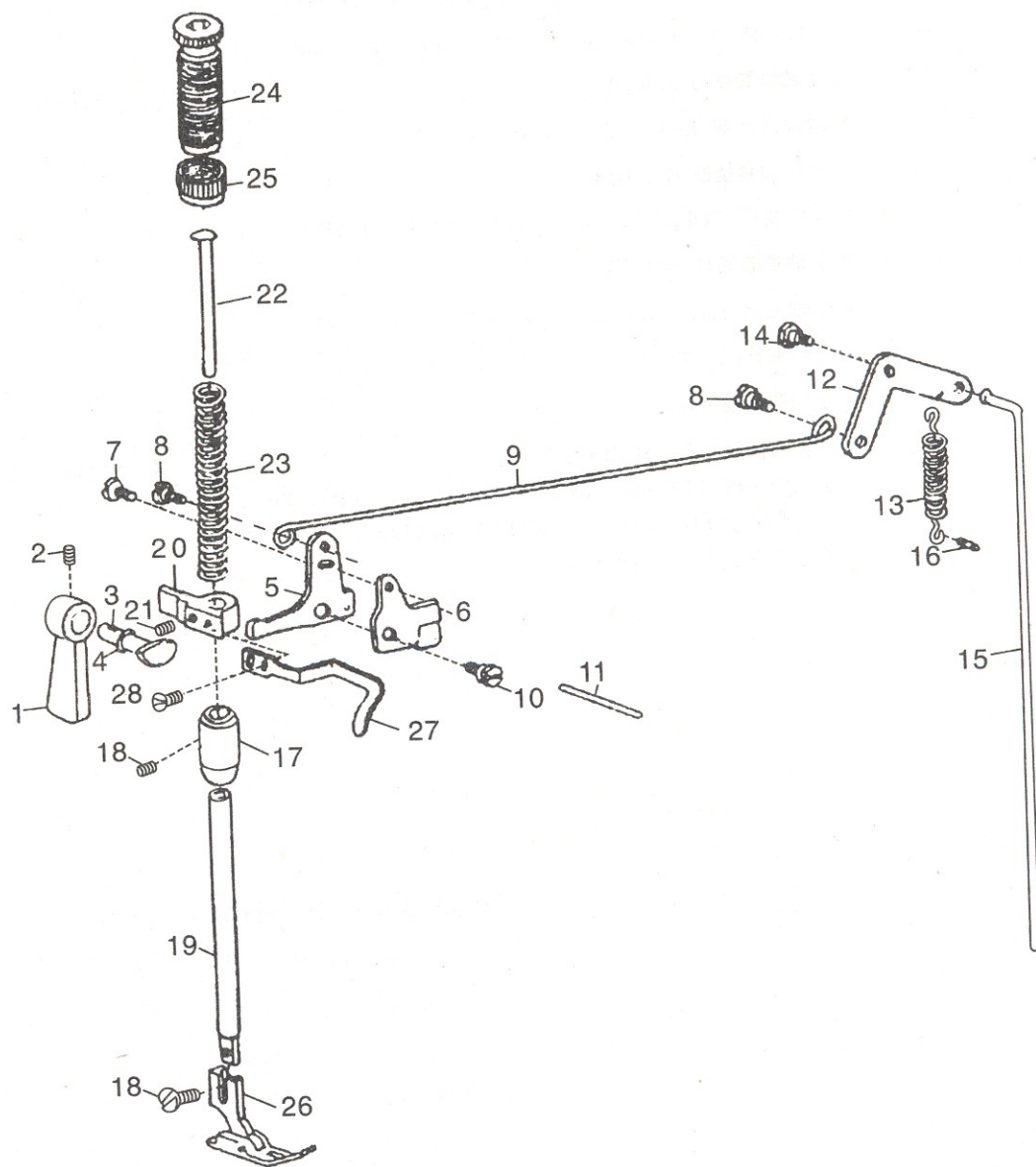


六、送布部件 (FEEDING AND FEED LIFTING MECHANISM)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2301150	牙架曲柄(FEED ROCK SHAFT CRANK)		1		1	
	2302079	牙架曲柄(FEED ROCK SHAFT CRANK)			1		
2	2301162	牙架曲柄螺钉 SCREW		2	2	2	SM3/16"x28/12
3	2302081	牙架 FEED BAR			1		
	2302082	牙架 FEED BAR		1			
	2301152	牙架 FEED BAR				1	
4	2301177	送布轴轴套 (左)BUSHING FOR FEED ROCK SHAFT				1	
5	2301154	送布牙 FEED DOG		1	1		
		送布牙 FEED DOG				1	
6	2301155	送布牙螺钉 SCREW		2	2	2	SM1/8"x44/6
7	2302076	牙架曲柄轴 SHAFT FOR FEED BAR		1			
	2302077	牙架曲柄轴 SHAFT FOR FEED BAR			1		
	2301156	牙架曲柄偏心轴 SHAFT FOR FEED BAR				1	
8	2301080	牙架曲柄轴螺钉 SCREW		1			SM11/64"x40
9	2301153	牙架垫圈 WASHER		2	2	2	
10	2301164	拾牙轴曲柄油线 OIL BRAID		2	2	2	
11	2302084	牙架连杆铰链轴螺母 NUT		1			SM3/16"x3
12	2302085	牙架连杆铰链轴 HINGE PIN		1			
13	2302086	送布轴 FEED ROCK SHAFT		1	1		
	2301158	送布轴 FEED ROCK SHAFT				1	
14	2301159	送布轴轴套 BUSHING FOR FEED ROCK SHAFT		1	1	1	
	2301176	送布轴轴套 (右)BUSHING FOR FEED ROCK SHAFT		1	1	1	
15	2301110	送布轴轴套螺钉 SCREW		1	1	1	SM15/64"x2
16	GB894-76	轴用弹性挡圈 RETAINING RING		1	1	1	
17	2301085	送布轴紧圈 COLLAR FOR FEED ROCK SHAFT		1	1	1	
18	2301086	送布轴紧圈螺钉 SCREW		1	1	1	SM1/4"x4
19	2302087	送布轴曲柄 FEED ROCK SHAFT CRANK		1			
	2302088	送布轴曲柄 FEED ROCK SHAFT CRANK			1	1	
20	2301162	送布轴曲柄螺钉 SCREW		2	2	2	SM3/16"x2
21	2301175	送布轴曲柄铰链轴 HINGE PIN		1	1	1	
	2302091	送布轴曲柄铰链轴 HINGE PIN			1	1	
22	2302092	拾牙轴曲柄(左) FEED LIFTING ROCK SHAFT CRANK		1			
	2301165	拾牙轴曲柄(左) FEED LIFTING ROCK SHAFT CRANK			1	1	
23	2301175	拾牙轴连杆铰链轴 HINGE PIN		1			
24	2301166	拾牙轴曲柄(左)螺钉 SCREW		1	1	1	SM11/64"x

25	2302095	牙架连杆 CONNECTING ROD	1	1	1	
26	2302096	牙架连杆油线夹 OIL BRAID PRESSER	1	1	1	
27	2302097	牙架连杆油线 OIL BRAID	1	1	1	
28	2302098	牙架连杆螺钉 SCREW	1			SM9/64"x40/6.5
29	2302099	抬牙轴 FEED LIFTING ROCK SHAFT	1	1		
	2301171	抬牙轴 FEED LIFTING ROCK SHAFT			1	
30	2301172	抬牙轴轴套 BUSHING FOR FEED LIFTING ROCK SHAF	1	1	1	
	2301178	抬牙轴轴套(右) BUSHING FOR FEED LIFTING ROCK SHAFT (RIGHT)	1	1	1	
31	2301064	抬牙轴轴套螺钉 SCREW	2	2	2	SM15/64"x28/10
32	GB894-76	轴用弹性挡圈 RETAINING RING	1	1	1	
33	2301173	抬牙轴轴套垫圈 WASHER	1	1	1	
34	2301085	抬牙轴紧圈 COLLAR FOR FEED LIFTING ROCK SHAFT	1	1	1	
35	2301086	抬牙轴紧圈螺钉 SCREW	2	2	2	SM1/4"x40/4
36	2302100	抬牙轴曲柄(右) FEED LIFTING ROCK SHAFT CRANK (RIGHT)	1			
	2301174	抬牙轴曲柄(右) FEED LIFTING ROCK SHAFT CRANK (RIGHT)		1	1	
37	2301175	抬牙轴曲柄铰链轴 HINGE PIN	2	1	1	
38	2301151	抬牙轴曲柄(右)螺钉 SCREW	2	2	2	SM3/64"x28/12
	2301167	抬牙叉滑块轴 FEED LIFTING CONNECTING SLEEVR PIN		1	1	
	2301168	抬牙叉滑块 FEED LIFTING CONNECTING SLEEVE		1	1	
	2301169	抬牙叉滑块垫圈 WASHER		1	1	

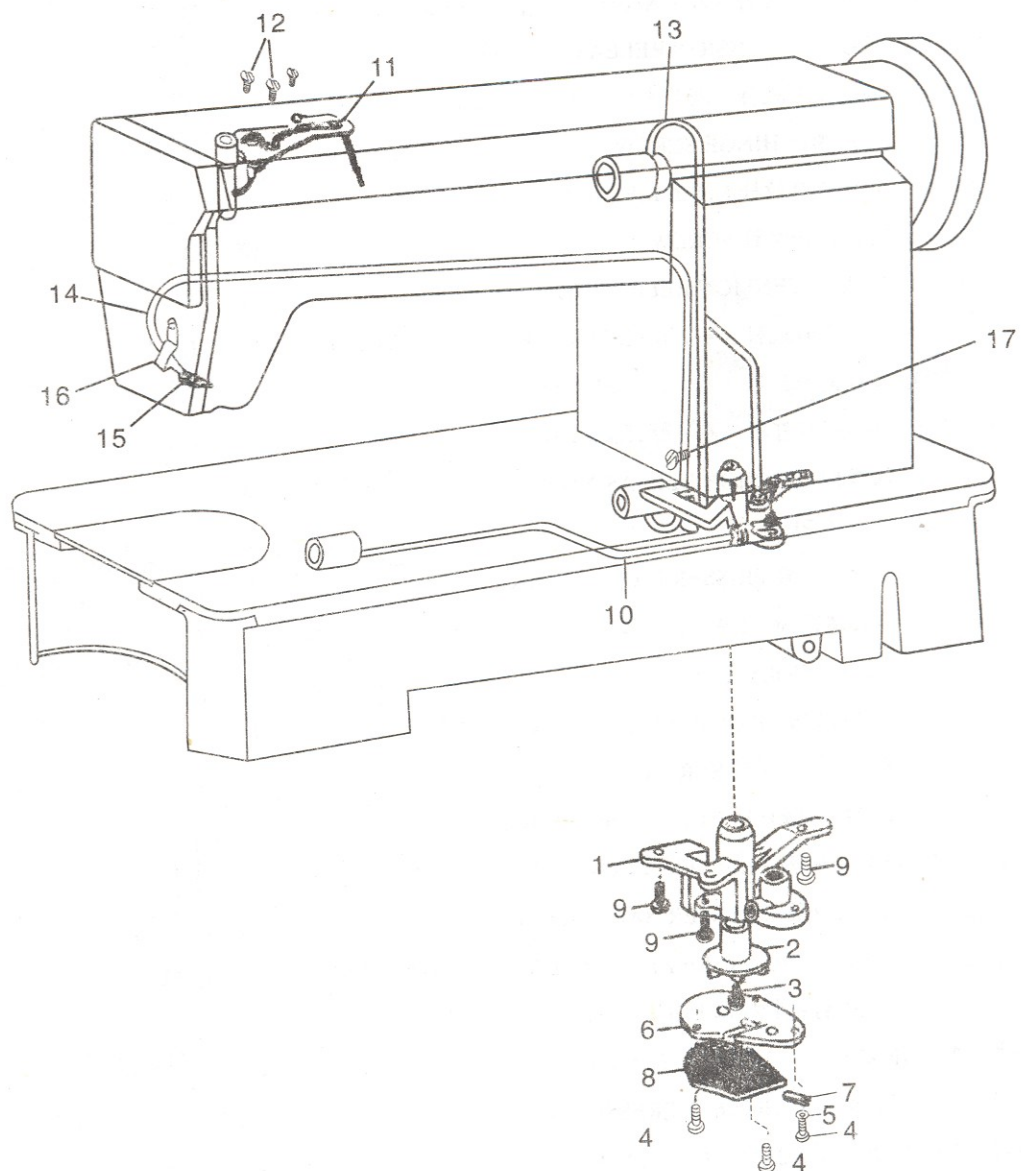
7. 压脚部件 Presser Lifting Mechanism



七、压脚部件(PRESSER LIFTING MECHANISM)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2302053	压脚板手	PRESSER BAR LIFTER	1	1	1	
2	2301027	压脚板手螺钉	SCREW	1	1	1	
3	2302055	压脚提升凸轮	PRESSER BAR LIFTING CAM	1	1	1	
4	2301181	压紧杆提升凸轮O型圈	RUBBER RING	1	1	1	
5	2301182	膝控提升杠杆(左)	KNEE LIFTER LEVER (LEFT)	1	1	1	
6	2301183	松线凸轮	TENSION RELEASING CAM	1	1	1	
7	2301184	膝控提升杠杆(左)螺钉	SCREW (LEFT)	1	1	1	
8	2301185	铰链螺钉	HINGE SCREW	1	1	1	
9	2301186	膝控提升拉杆	KNEE LIFTER ROD	1	1	1	
10	2301187	松线凸轮螺钉	SCREW	1	1	1	
11	2301188	松线杆	TENSION RELEASING PIN	1	1	1	
12	2301189	膝控提升杠杆(右)	KNEE FIFTER LEVER (RIGHT)	1	1	1	
13	2301190	膝控提升杠杆(右)弹簧	SPRING	1	1	1	
14	2301187	膝控提升杠杆(右)螺钉	SCREW	1	1	1	
15	2301191	松线杆	TENSION RELEASING PIN	1	1	1	
16	2301192	弹簧销	PIN	1	1	1	
17	2301193	压紧杆轴套	PRISSE BAR BUSHING	1	1	1	
18	2301199	压脚螺钉	SCREW	1	1	1	
19	2302074	压紧杆	PRISSE BAR	1	1	1	
20	2302056	压紧杆导架	PRISSE BAR LIFTING BRACKET	1	1	1	
21	2301095	压紧杆导架螺钉	SCREW	1	1	1	
22	2302006	压紧杆弹簧导柱	GUIDE FOR SPRING	1	1	1	
23	2302057	压紧杆弹簧	PRESSER BAR SPRING	1			
	2302058	压紧杆弹簧	PRESSER BAR SPRING		1	1	
24	2302059	调压螺钉	PRESSURE REGULATING THUMB SCREW	1	1	1	
25	2301198	调压螺钉锁紧螺母	LOCK NUT	1	1	1	
26	2402046 G01	压脚组件(2302061)	PRESSER	1			
	2402046 G02	压脚组件(2302062)	PRESSER		1		借用GEM5590-04-30
	2402046 G03	压脚组件(2302063)	PRESSER			1	
27	2301200	大线勾	UPPER THREAD GUIDE	1	1	1	
28	2301255	大线勾螺钉	SCREW	1	1	1	

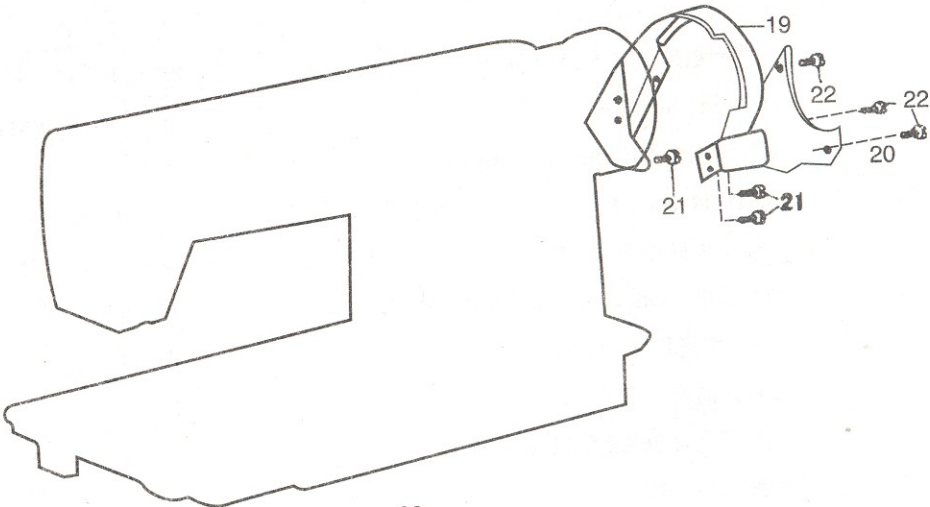
8. 油泵部件 Lubrication Mechanism



八、油泵部件(LUBRICATION MECHANISM)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2302101	油泵体 OIL PUMP BODY		1	1	1	
2	2302102	油泵叶轮 IMPELLER		1	1	1	
3	2302103	油泵叶轮螺钉 SCREW FOR IMPELLER		1	1	1	SM1/8"x44/6.5
4	2302104	油泵调节板螺钉 SCREW		3	3	3	SM1/8"x44/13
5	2301237	油泵调节板螺钉弹簧垫圈 SPRING WASHER		1	1	1	
6	2302105	油泵体盖板 COVER		1	1	1	
7	2302106	油量调节板 RAGULATOR FOR OIL		1	1	1	
8	2402065	油泵滤网组件 OIL PUMP SCREEN PLATE		1	1	1	
9	2302142	油泵体螺钉 SCREW		3	3	3	SM11/64"x40/13
10	2401065	下轴油管组件 OIL PIPE FOR HOOK SHAFT		1	1	1	
11	2430126	油线固定板 OIL BRAID FITTING PLATE		1	1	1	
12	2301199	油线固定板螺钉 SCREW		3	3	3	SM9/64"x40/11
13	2402066	上轴油管组件 OIL PIPE FOR ARM SHAFT		1	1	1	
14	2301272	回油管 OIL RETURN PIPE		1	1	1	
15	2301273	回油管滤油毡 FELT POUCH		1	1	1	
16	2301275	回油管弹簧夹 SPRING PIPE HOLD		1	1	1	
17	2301276	油管夹 PIPE HOLD		1	1	1	

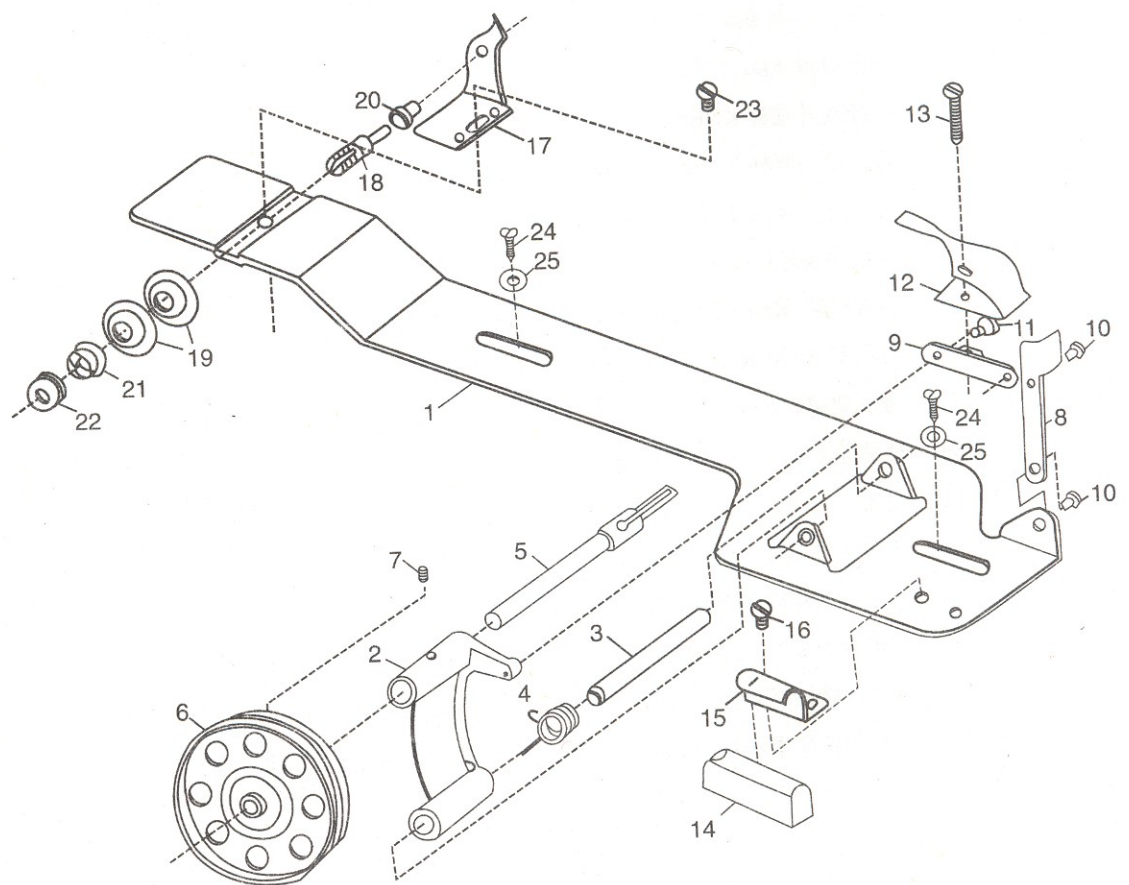
9. 油盘组件



九、油盘组件(OIL RESERVIOR AND OTHER ACCESSORIES)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2301280	油盘 OIL RESERVOIR		1	1	1	
2	2301281	放油螺钉 OIL DRAIN SCREW		1	1	1	
3	2301282	放油螺钉垫圈 WASHER		1	1	1	
4	2301283	油盘垫 (小) GASKET FOR OIL RESERVOIR(SMALL)		1	1	1	
5	2301285	油盘垫 (大) GASKET FOR OIL RESERVOIR (BIG)		1	1	1	
6	2301284	膝控铰链轴 HINGE PIN		1	1	1	
7	2301286	膝控复位弹簧 BACK SPRING FOR KNEE LIFTER		1	1	1	
8	2301092	膝控限位架 CONFINE RACK		1	1	1	
9	2301288	膝控限位调节螺钉 ADJUSTING SCREW		2	2	2	
10	2301289	调节螺母 ADJUSTING NUT		2	2	2	
11	2301290	膝控提升顶杆 KNEE LIFTER LIFTING ROD		1	1	1	
12	2301291	采控碰块弯杆 KNEE LIFTER BELL CRANK		1	1	1	
13	2301292	碰块弯杆接头 JOINT FOR KNEE LIFTER BELL CRANK		1	1	1	
14	2301293	膝控碰块弯杆接头螺钉 SCREW		2	2	1	
15	2301294	膝控碰块 KNEE LIFTER PLATE		1	1	1	
16	2301295	碰块架 BRACKET FOR KNEE LIFTER PLATE		1	1	1	
17	2301296	碰块架螺钉 SCREW		1	1	1	
18	2301297	碰块垫 PAD FOR KNEE LIFTER PLATE		1	1	1	
19	2302143	皮带罩架 BELT COVER RACK		1	1	1	
20		皮带罩板 BELT COVER PLATE		1	1	1	
21	2301017	皮带罩架螺钉 (小) SCREW		2	2	2	
22	2301303	皮带罩板螺钉 (大) SCREW		2	2	2	
23	GB896-76	膝控铰链轴开口挡圈 SNAP RING		1	1	1	
24	2301092	膝控限位架螺钉 SCREW		1	1	1	

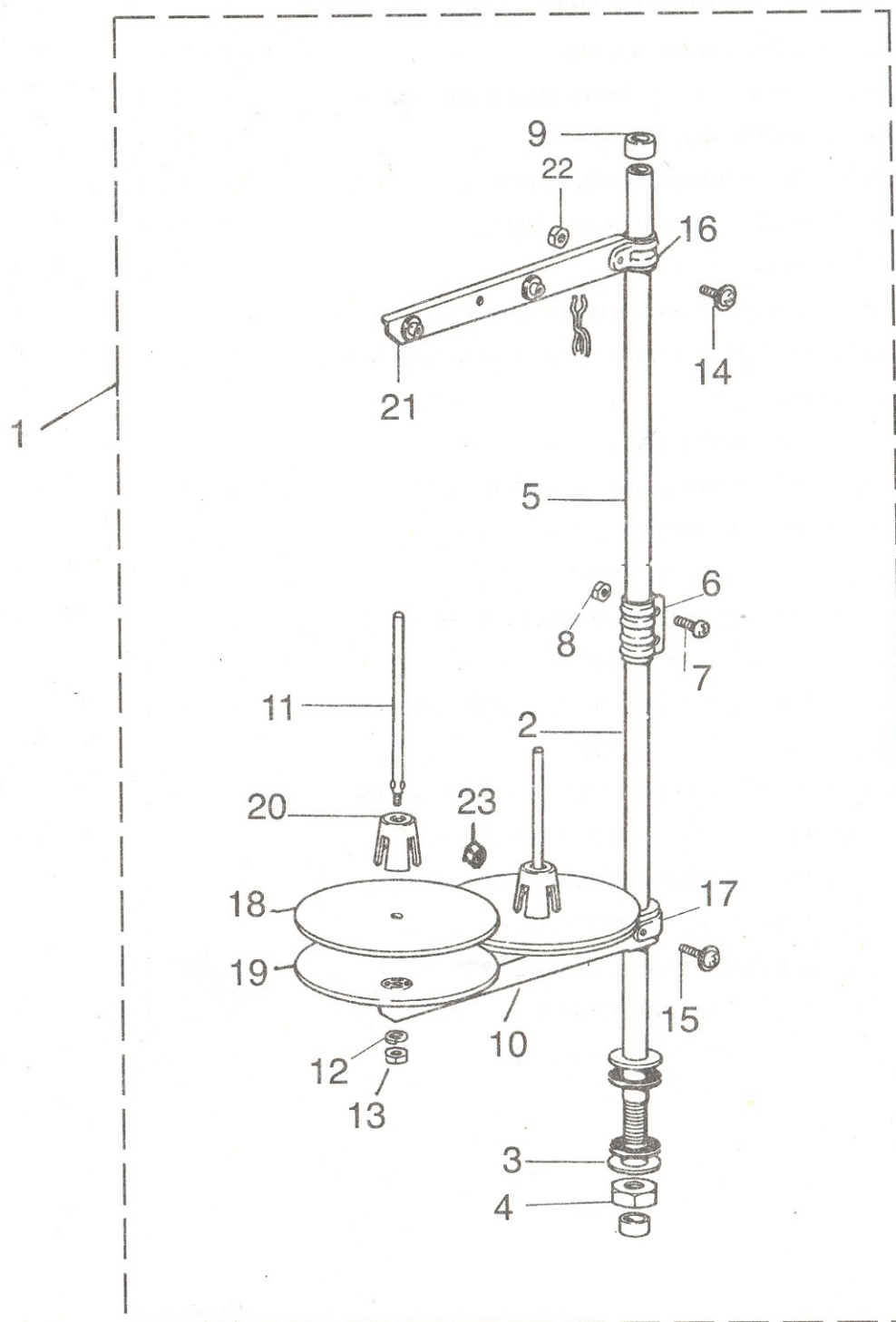
10. 绕线器组件 Bobbin Winder Mechanism



十、绕线器组件(BOBBIN WINDER MECHANISM)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2302501	绕线器底座	BOBBIN WINDER BASE	1	1	1	
2	2302502	绕线架	BOBBIN WINDER	1	1	1	
3	2302503	绕线架轴	SHAFT FOR BOBBIN WINDER ARM	1	1	1	
4	2302505	绕线架轴弹簧	SPRING	1	1	1	
5	2302506	绕线轴	BOBBIN WINDER SPINDLE	1	1	1	
6	2302507	绕线轮	BOBBIN WINDER PULLEY	1	1	1	
7	2302508	绕线轮螺钉	SCREW	1	1	1	
8	2302509	绕线摆杆	BOBBIN WINDER STOP LATCHLEVER	1	1	1	
9	2302510	绕线连杆	BOBBIN WINDER CONNECTING BAR	1	1	1	
10	2302511	铆钉	RIVET	1	1	1	
11	2302512	绕线连杆螺钉	SCREW	2	2	2	
12	2302513	满线跳板	BOBBIN WINDER STOP LATCH	1	1	1	
13	2302514	满线度调节螺钉	ADJUSTING SCREW	1	1	1	
14	2302515	制动块	STOPPER BLOCK	1	1	1	
15	2302516	制动块固定勾	FIXTURE FOR STOPPER BLOCK	1	1	1	
16	2302517	制动块固定勾螺钉	SCREW	1	1	1	
17	2302518	过线架	BOBBIN WINDER TENSION BRACKET	1	1	1	
18	2302519	过线架夹线螺钉	SCREW	1	1	1	
19	2302520	过线架夹线板	BOBBIN WINDER TENSION DISC	2	2	2	
20	2302521	夹线螺钉套	BUSHING FOR TENSION SCREW	1	1	1	
21	2302522	夹线簧	BOBBIN WINDER TENSION SPRING	1	1	1	
22	2302523	夹线螺母	TENSION STUD NUT	1	1	1	
23	2302524	过线架螺钉	TENSION BRACKET SCREW	2	2	2	
24	2302525	绕线架木螺钉	WOOD SCREW	2	2	2	
25	2302521	绕线架木螺钉垫圈	WASHER	2	2	2	

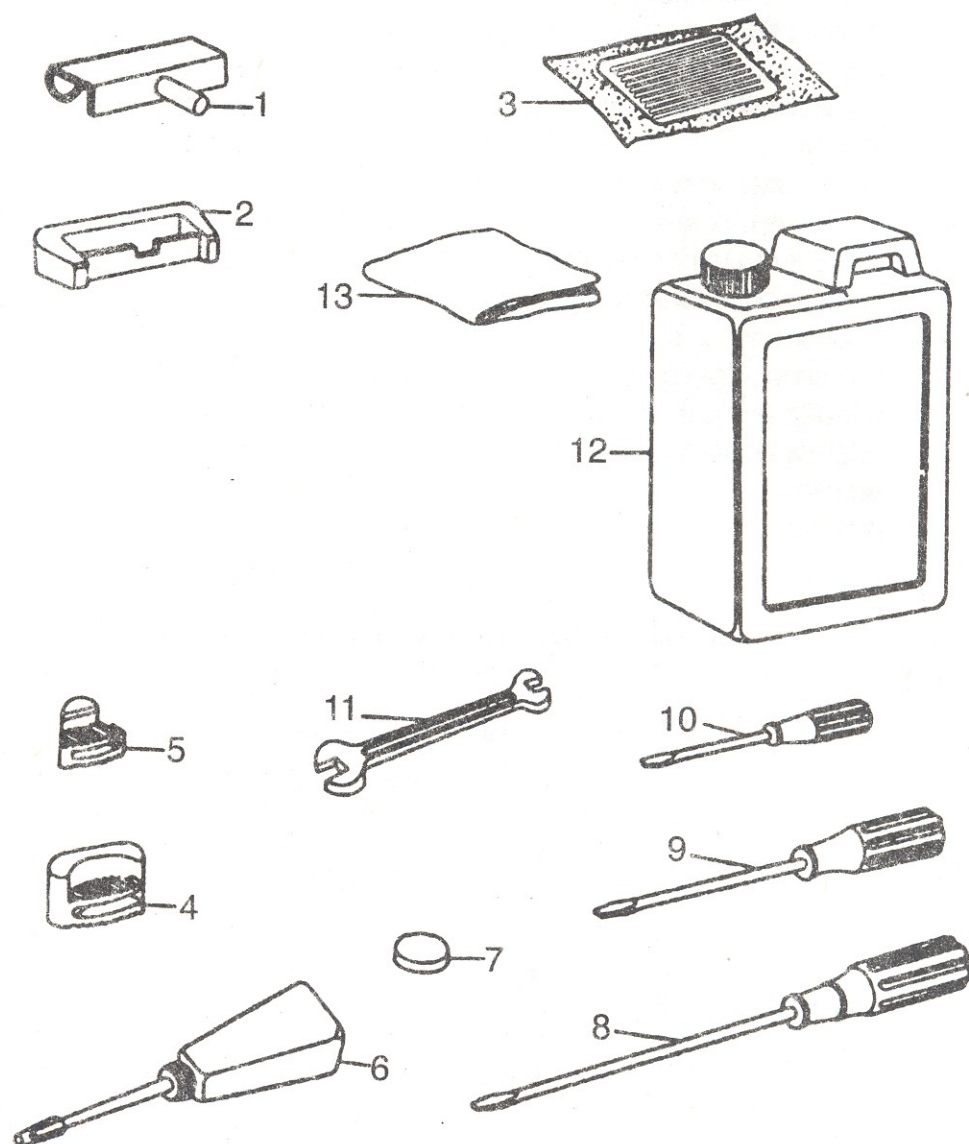
11. 线架组件 Thread Stand Mechanism



十一、线架组件(THREAD STAND MECHANISM)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2302526	线架组件	THREAD STAND	1	1	1	
2		线架下撑管焊接件	COLUMN PIPE (LOWER)	1	1	1	
3		线架下撑管垫圈	WASHER	1	1	1	
4		线架下撑管螺母	NUT	1	1	1	
5		线架上撑管	COLUMN PIPE (UPPER)	1	1	1	
6		撑管夹	COLUMN JOINT	1	1	1	
7		撑管夹螺钉	SCREW	2	2	2	
8		撑管夹螺母	NUT	2	2	2	
9		线架上管套	COLUMN CAP	1	1	1	
10		下过线架	THREAD HANGER(LOWER)	1	1	1	
11		线盘钉	NAIL	2	2	2	
12		线盘弹簧垫圈	SPRING WASHER	2	2	2	
13		螺母	NUT	2	2	2	
14		撑管夹上螺钉	SCREW	1	1	1	
15		撑管夹下螺钉	SCREW	1	1	1	
16		撑管上夹	COLUMN JOINT(UPPER)	1	1	1	
17		撑管下夹	COLUMN JOINT (LOWER)	1	1	1	
18		线盘软垫	SPOOL MAT	2	2	2	
19		线盘	SPOOL STAND BASE	2	2	2	
20		线塑撑架	SPOOL CUSHION	2	2	2	
21		上过线架	THREAD HANGER(UPPER)	1	1	1	
22		螺母	NUT	1	1	1	
23		螺母	NUT	1	1	1	

12. 附件 Other Accesories



十二、附件(OTHER ACCESSORIES)

序号 NO.	图号 REF.NO.	名称	DESCRIPTION	件数PCS			备注 REMARKS
				M	H	B	
1	2301306	机壳铰链	HINGE OF MACHINE HEAD	2	2	2	
2	2301307	机壳铰链套	RUBBER SOCKET FOR HINGE	2	2	2	
3		机针	NEEDLE	1包			DBX1-2 # 14
		机针	NEEDLE		1包	1包	DBX1-2 # 22
4	2301308	机头防振垫 (大)	RUBBER CUSHION (BIG)	2	2	2	
5	2301309	机头防振垫 (小)	RUBBER CUSHION (SMALL)	2	2	2	
6	2301310	小油壶	OILER	1	1	1	
7	2301311	磁块	MAGNET	1	1	1	
8	2301312	螺钉起子 (大)	SCREW DRIVER (LARGE)	1	1	1	
9	2301313	螺钉起子 (中)	SCREW DRIVER (MIDDLE)	1	1	1	
10	2301314	螺钉起子 (小)	SCREW DRIVER (SMALL)	1	1	1	
11	2301315	双头板手	DOUBLE-HEAD WRENCH	1	1	1	
12	2301316	油箱	OIL CONTAINER	1	1	1	
13	2301402	机罩尼龙袋	MACHINE COVER	1	1	1	