7360RB-3

INSTRUCTION MANUAL AND PARTS BOOK

1. 主要技术规格
1. Main techanical specifications

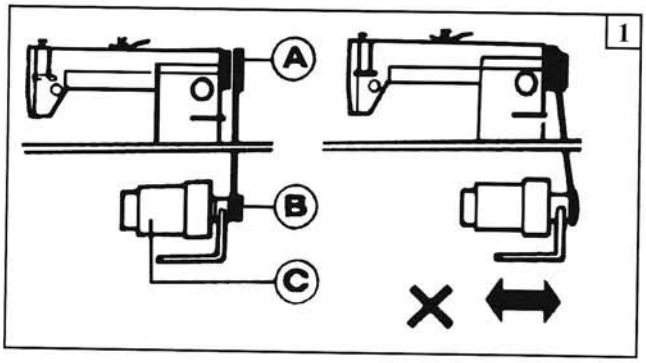
适　用	厚料-中厚料
缝　速	2000spm
针　距	0-8mm
压脚提升	手动 7mm
	膝控 13mm
机　针	DB × 1　16 × 132　22#
	DP × 5　14#-24#
供油方式	全自动供油

Application: medium and heavy duty
Max sewing speed: 2000 spm
Stitch length: 0-8mm
Presser foot lift: 7mm by hand
13mm by knee
Needle: DB × 1　16 × 231　22#
DP × 5　14#-24#
Lubrication: Auto lubrication

2. 安装电机（图1）
2. Installing 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 machine balance wheel belt groove (A) with motor pulleybelt groove (B) by moving the motor (C) leftward or rightward. Be sure the belt is not touch with table.



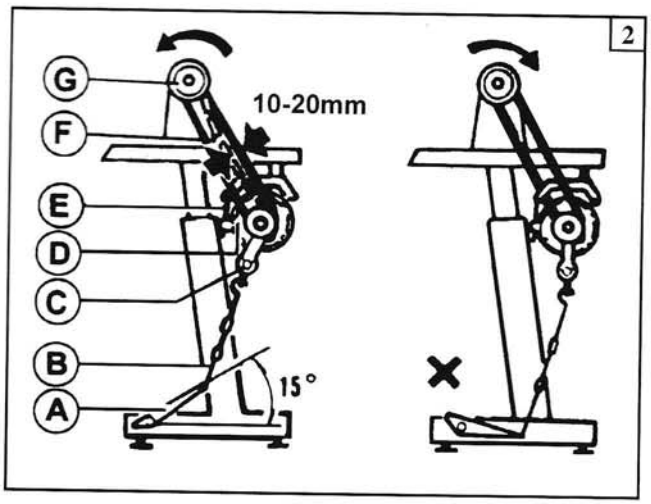
3. 踏脚板与离合器拉杆连接 (图2)
3. Connecting the clutch lever to the pedal (Fig.2)

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. O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。

a. The optimum tilt angle of pedal with floor is approx 15 degree.

b. Adjust the clutch of the motor so that clutch lever (C) and draw bar (B) run in line as Fig.6, the machine would have stable motion and long using

c. The machine balance wheel should should rotate conter clockwise for normal sewing when view from opposite side of the balance wheel. The motor rotates in the same direction. The roation can be reversed by reversing (tur n over 180 deg.) the plug of the motor.



d. Adjust the tension of V-belt Fby moving the motor vertically. The proper tension of V-belt is a slack of 10-20mm when the belt is depressed (at the belt pan) by finger.

4. 操作准备和润滑 (图3)
4. Preparation (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)试擦机器

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。

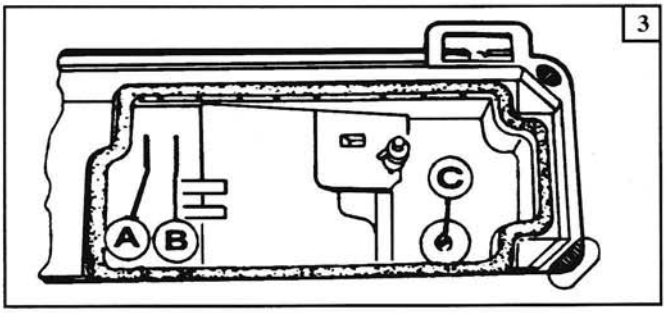
②扫清油盘污尘，旋紧放油螺钉C，加注新油。

(1) Cleaning machine

Clean off the grease and dusts on the Surface of machine with gasoline and soft cloth.

(2) Inspection

Before use a thorough inspection should be done upon the machine.Turn balance wheel slowly to see if there is any obstacle, collision and uneven resistance between parts. If there is, adjustment should be done before operation.



(3) Lubrication (Fig 3)

a.Oil amount

Oil amount must be oiled aeeording to the mark of drip pan. Mark (A) is the highest situation, Mark (B) is the lowest situation, Note that oil amount couldn`t be lower than mark (B). otherwise all parts of machine will appear heat and dead point for not gaining oil.

b.Oiling

In lubruation, HA-18sewing machine oil or HJ-7 machine oil must be used, Before running. the machine must be oiled at the mark(A).

c. Changing

Turn off the screw plugs(C), clean up the dirty oil and the dust of drip pan, then fasten the screw plugs (C), add fresh oil

5. 安装机针 (图4)
5. Installing the needle (Fig.4)

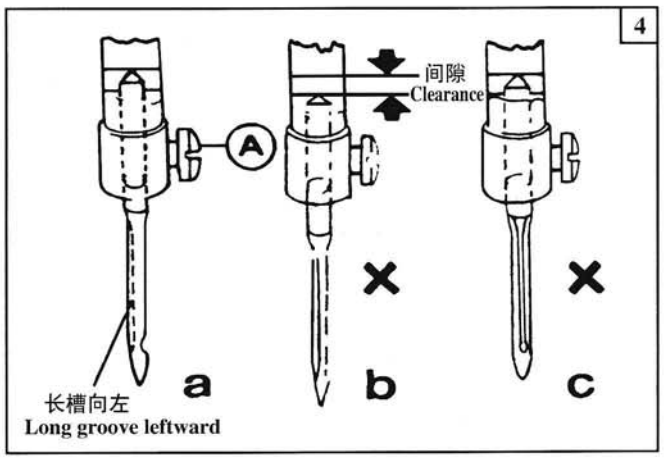
转动上轮，使机针上升到最高位置，旋松夹针螺钉A将机针的长槽朝向操作者的左面，然后把针柄插入针杆下部的针孔内，使其碰到针杆孔的底部为止，再旋紧夹针螺钉A固定机针即可。

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 the needle bar to its highest point, loosen needle set screwl, making the needle groove turn to the left side of an operator, fully insert the needle shank up to the bottom of needle socket, then tighten needle set screwl.

Note:Fig. 4 (b) insufficient insertion

Fig.4 (c) Wrong direction of groove



6. 机针、缝线规格与缝料关系
6. Coordination among the needle, the thread and the material

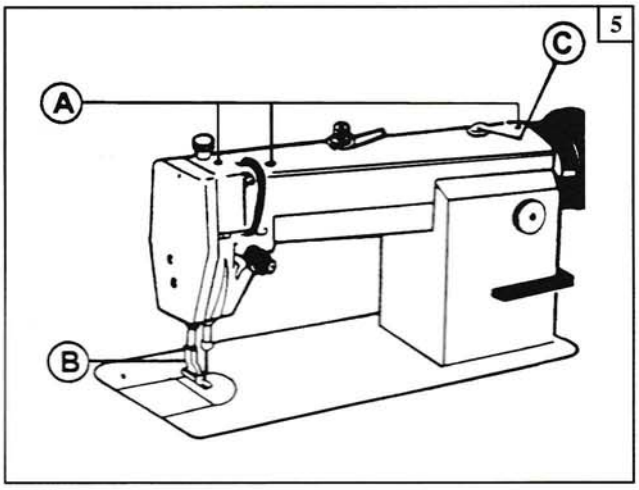
机针号	缝线号	布　料
14#	60#-65#	普通棉，毛织物等
16#	50#-30#	平纹布，毛织物， 防雨衣，薄皮革等
22#		中厚皮革，帆布等

Needle	Thread	Material
14#	60#-65#	cotton, wollen fabric
16#	50#-30#	
22#		Leather, saildothetc

7. 试车 (图5)
7. Trial run (Fig.5)

新机器在开始使用和长期搁置重新使用时，先卸下机头上部的橡皮塞，充分加油，然后抬起压脚进行低速运转1000-1500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提高到2000针／分。

when the machine left out of operation for a quite long time and used again. remove the red rubber plug on top of the machine head, oil it thoroughly. then lift the presser foot and run at a low speed of 1000~1500spm, observe the sparkling condition through oil window (C). as the lubrication is well. keep the running test at the low speed about 30 minutes, then increase the speed gradually.after month`s running to perfect its performance, then increase up to proper sewing speed.



8. 穿线 (图6)
8. Threading the needle thread (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。

When threading the needle thread. raise the needle bar to its highest position, lead the thread from the spool and pass it in the order instructed.

(1) Lead the thread down through the three-eye thread guide ①on the top.

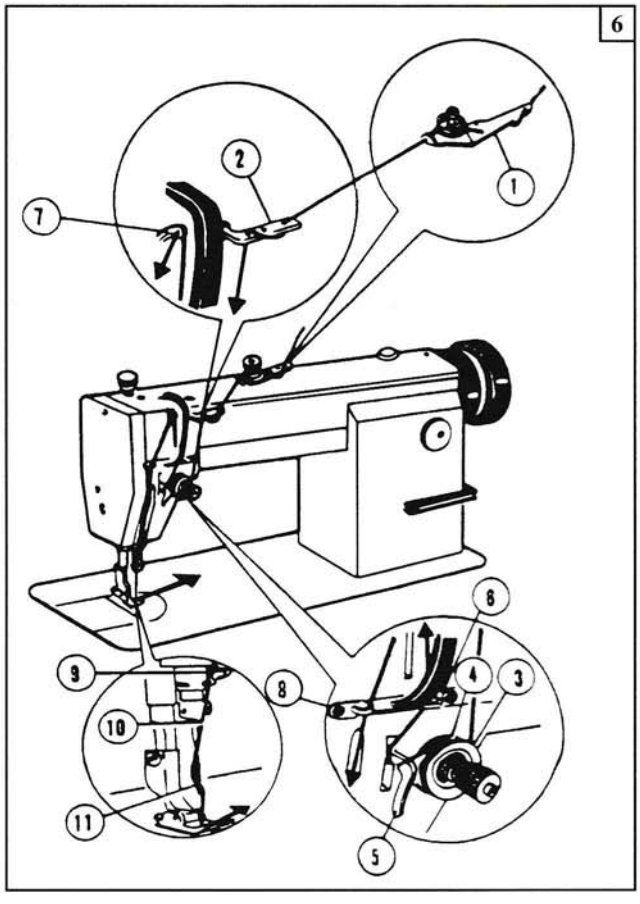
(2) Pass down thru the left hole of thread retainer②,then down thru the lower hole of thread retainer②.

(3) Pass down thru between the two tension disc③

(4) Pass up thru the hook of thread take-up spring ④, thru thread regulator ⑤. thru thread guide ⑥ and up thru the hloe of thread take-up lever⑦ .

(5) Down thru thread guide⑧. ⑨. and needle bar thread guide ⑩. then pass the thread from the left thru the aye of needle ⑪. draw out the thread approx 100mm from the needle eye.

When drawing the bobbin thread. hold the tip of the needle thread by hand. turn the balance wheel to lower the needle bar and then to lift it to its highest position. Pull the needle thread and then the bobbin thread is drawn up. put the tips of the needle and bobbin thread to ward front under the presser foot.

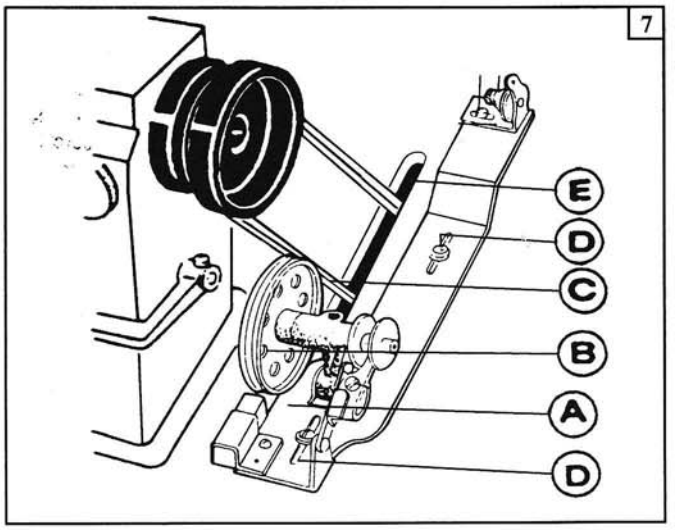


9. 绕线调节 (图7)
9. Installing the bobbin winder (Fig.7)

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。

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%。绕线量由满线跳上的满线度调节螺钉E加以调节。

Align pulley (B)of the bobbin winder with the outside of the belt, and there should be a proper clearness between them, so that pulley (B) can be contacted with the belt when stop latch thumb lever(A) is depressed, thereby the belt drives prlley (B) while the machine runing, the bobbin winder should be parallel with belt slit(E) of the bable, then fasten with two wood screw (D).



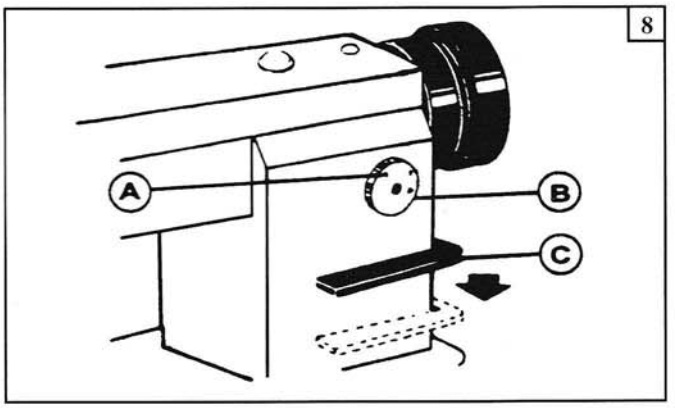
10. 针距倒顺送料 (图8)
10. Setting the stitch length and controlling the reverse sewing (Fig.8)

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向下揿压，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。

Stitch length can be set by turning stitch length regulating dial (A). The figures on the stitch length regulation dial plate (B) indicate the stitch length.

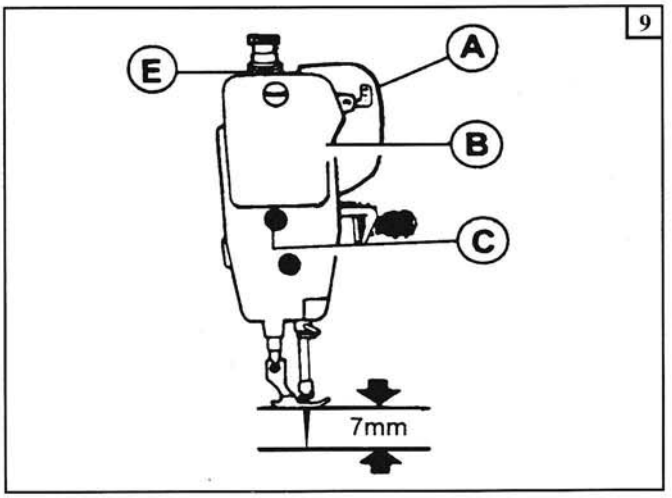
Reverse sewing can be obtained when feed reverse lever (C) is depressed and forward sewing can be restored automatically when feed reverse lever (C) is released.



11. 压紧杆高度定位 (图9)
11. To adjust the presser bar height (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7.0毫米)，旋紧螺钉C，塞上橡皮塞，再旋紧压紧杆的调压螺钉A，然后旋紧调压螺钉锁紧螺母E，即成。

Loosen the nut (E). then loosen adjusting screw (A) remove the rubber of face plat (B). loosen the screw (C). delide the position of the presser bar I the correlt position: it is 6.0mm between needle plate and presser footer. When the presser foofer rise the top. tighten the screw (C). tuck the rubber tighen the adjusting screw (A), then tighten nut (E).

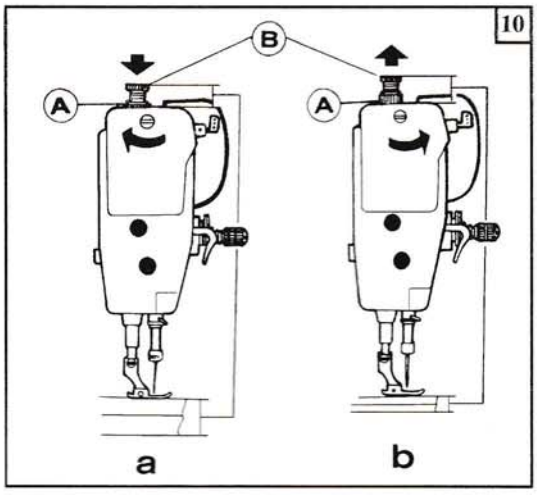


12. 压脚压力调节 (图10)
12. Adjusting the pressure of presser foot (Fig.10)

压脚的压力，要根据缝料的厚度加以调节,首先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 on presser foot is to be adjusted in accordance with materials to be sewn, Loosen lock nut (A). If heavy materials to be sewn. turn pressure regulating thumb screw colckwise as shown Fig. 10 (a) to increase the pressure While light materials to be sewm. turn the pressure regulating thumb screw counter clockwise as shown in Fig. 10 (b) to decrease the pressure on presser foot, then tighten lock nut (A).

The pressure of presser foot is proper as the sewing materials can be fed normally.



13. 缝线张力 (图11,12)
13. Adjusting the 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 general. the thread tension is to be adjusted in accordance with materiale thread and others.

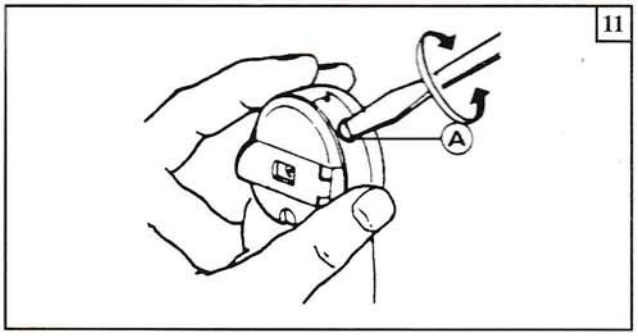
In practice. the thread tension is adjusted according to the stitches resulted to get the normal stitches.

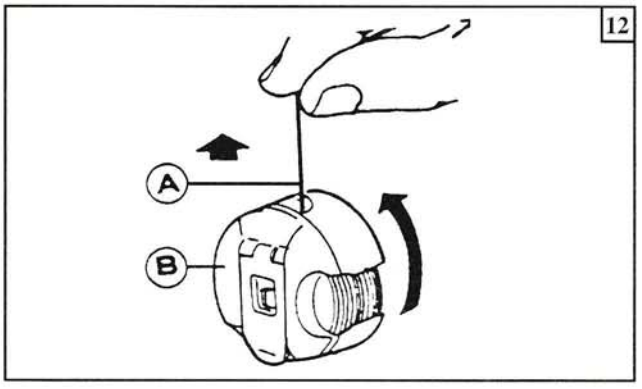
When adjusting the bobbin thread tension. turn bobbin case tension spring screw (A) clock wise for more tension or turn the screw counter clockwise for less tension.

It is a common practice to check the bobbin thread tension. In case of polyester thread 50#. hold the end of the thread . If the bobbin casej

falls down slowly the proper tension is obtained.

The needle thread tension should be adjusted with referance to the bobbin thread tension. The needle therad tension can be adjusted by changing tension of the thread take-up spring sewing range of the thread take-up spring tension of tension disc. and the position of thread guide.





14. 挑线簧调节 (图13,14)
14. Adjusting the 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O，再把夹线螺钉B顺时针转动，至挑线簧C触及夹线调节上止动缺口，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。反之则减小。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。

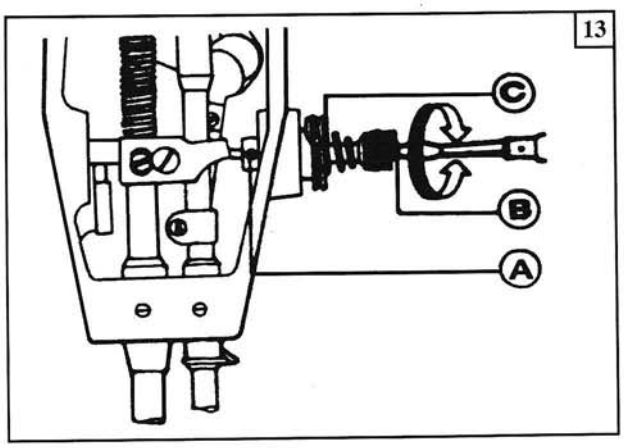
The normal sewing range of thread take-up spring is 8-10mm, For sewing light weight materials (short stitch), weaken the spring tension and widen the sewing range of spring, while for sewing heavy weight materials, strengthen the spring tension and shorten the sewing range of spring.

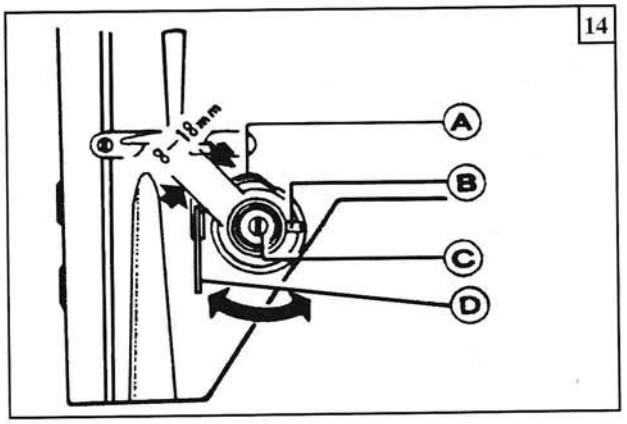
1) Adjusting the thread take-up spring tension(Fig. 18)

Loosen tension stud set screw(A), turn tension stud (B) clockwise to make the spring get more tension, or turn the tension stud counter more tension, or turn the ension stud counter clockwise to make the spring get less tension. Aftert adjustment. Be sure to tihgt tension stud set screw (A).

The method of adjustment:

Loose set screw(A) first, then to turn tension stud (B) counter clockwise to release the tension of thread take-up spring (C) to zero. and to turn tension stud (B) clokwise until spring (C) just comes into contact with the stop slot on the thread take-up spring regulator. then to further turn tension stud (B) counter-clockwise





by 1/2 turn. After adjustment, tighten tension stud set screw (A).

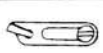
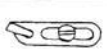
2) Adjusting the sewing range of thread take-up spring (Fig.19)

Loosen set screw (B), turn tension complete (C) clockwise to inerease the sewing range or turn tension complete (C) counter clockwise to decrease the sewing range.

Before delivery, the thread take-up spring is properly adjusted. Readjustment is needed only in the case of sewing special materials or with special thread.

15. 底面线张力调节 (图15,16)
15. Adjusting the tension of needle thread & bobbin thread (Fig 15.16)

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

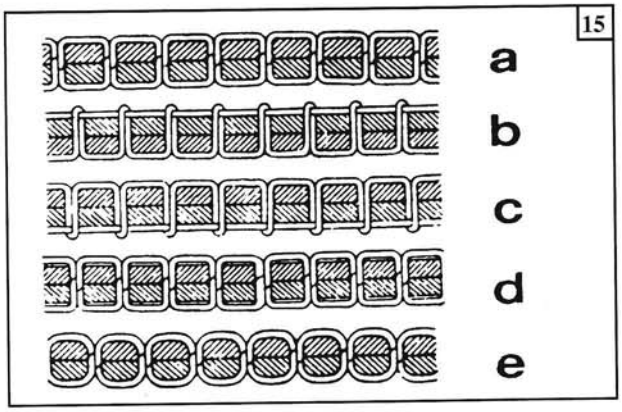
线勾位置	左侧	中间	右侧
			
缝料	厚料	中厚料	薄料

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，加大底线的压力。

(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，减小底线的压力。

(3)如出现图d，e的线迹，也可以参照上述方法加以调节。



The position of the thread guide affecrs sewing quality so it must be adjusted according to the materials to be sewn.

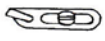
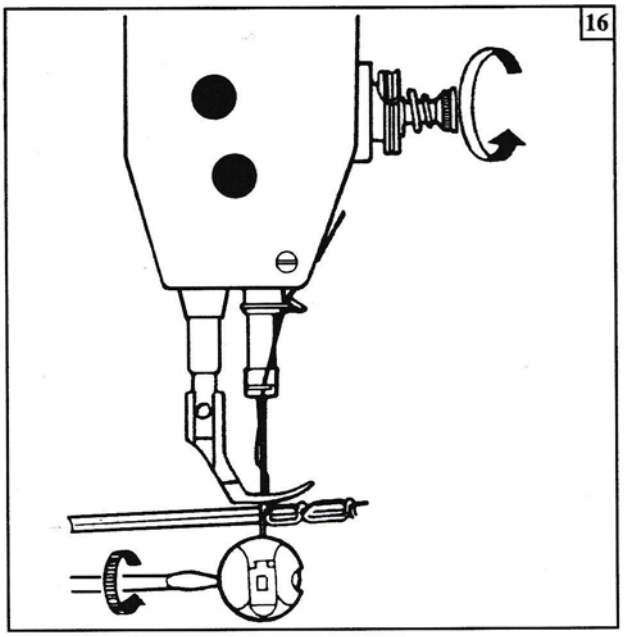
Thread guide position	Leftward	Center	Rightward
			
Material	Heavy	Medium	Light

Fig.15 shows the various type of stitch forms.

Normal stitch form should be as shown in Fig. 15 a. When abnormal stitches occur with pucke ring or thread breakage. the tension of needle thread and bobbin thread must be adjusted accordingly.

(a)The needlethread tension is too strong or the bobbin thread tension is too weak, turn the tension regulating thumb nut counter clockwise to make the needle thread get less tension or tignten the bobbin case tension regulating screw with small plastic screw driver to make the bobbin thread get more tension(Fig 16)

(b) The needle thread tension is too weak or the bobbin thread is too strong turn the tension regulating thumb nut clockwise to make the needle thread get more tension or turn the bobbin case tension regulating screw counter clockwise with small plastic screw drive to make the bobbin thread get less tension (Fig 16)



(c) Other abrormal stitches as shoewn in Fig.15(d)(e), adjustment can be made which reference to the above methods.

16. 机针与旋梭同步调整 (图17,18,19,20)
16. Timing between the needle and the rotating hook (Fig17.18.19.20)

(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下端面成一致的位置，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:

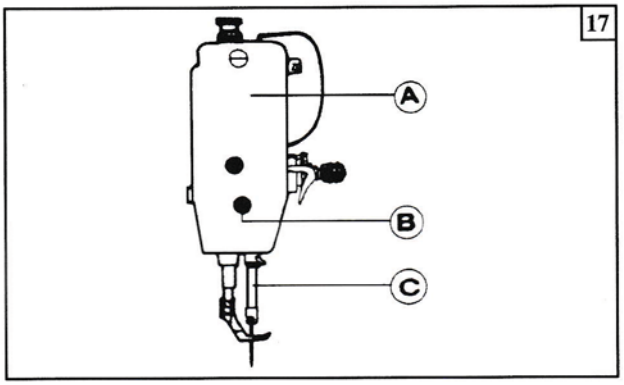
旋梭和机针之间的相互运动关系，对缝纫性能的影响很大，标准的同步关系是：当机针向下运动到最低位置后，目测针杆的同步标记A的间距为2.4毫米，把针杆B从最低位置上升2.4毫米，这时旋梭的钩线尖D应与机针的中心线C一致，在此位置时，钩线尖D应高于机针线孔E上边1.0-1.5毫米。

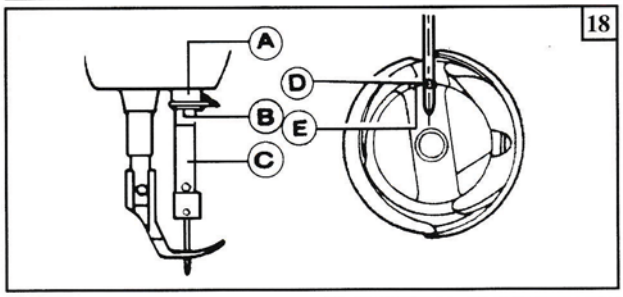
在调节旋梭的同步关系时，还要注意到旋梭尖与机针的侧面间隙。机针D缺口的底部与旋梭钩线尖C的间隙为0.05毫米。

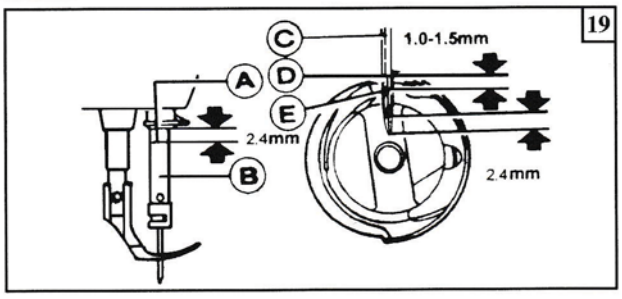
(1)Adjusting the position of needle bar

Turn the balance wheel to locate the needle bar (C) at its lowest position. remove the rubber plug in the face plate (A). then loosen the needle bar (C) connecting stud clamping screw (B) and move the needle bar (C) verically to locate the timing position (The timing position of the needle bar is : when the needle bar at its lowest position. the center of needle eye (D) coincide with inside surfasce(E) of bobbin case holder as shown in Fig.24). Tighten clamping screw (B). plug the rubber plug.

(2) Adjusting rotating hook point timing with needle.

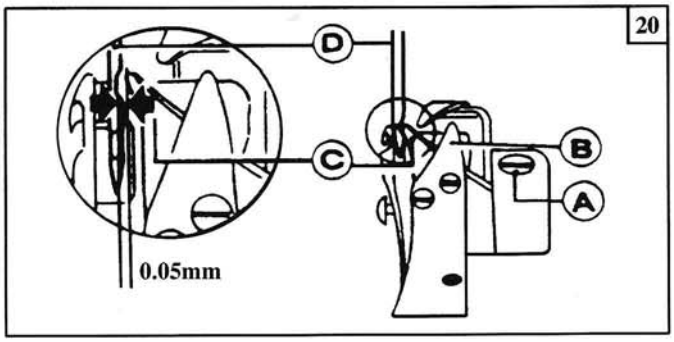






The motive relation between retating hook and needle affects the sewing quality. Standard timing relation is: turn the balance wheel to locate needle bar to its lowest position, and loft back 2.4mm the rotating hook point (D) should be coincides with needle center line (C), and hook point (D) is 1.2mm above the upper edge (E) of needle eye.

When adjusting the rotating hook point timing also to note the clearance between noth bottom of needle (D) and hook point (C) of approx 0.05mm must be maintained.(Fig.20)

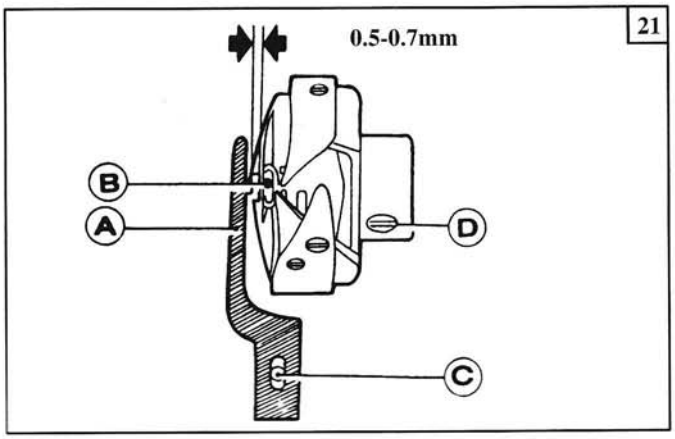


17. 旋梭装卸 (图21)
17. Removing and installing the rotating hook (Fig.21)

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。

Lift the needle bar to its highest position. remove the throat plate, take down the needle and the bobbin case, loosen rotating hook bobbin case holder position bracket screw (C) and take down position bracket(A), then loosen set screws (D) of rotating hook to keep hook freely. turning around its axis, turn the ablance wheel first to raise the feed bar to its highest position, at this time, take down the rotating hook slowly while turning it to keep away from the feed dog supprt, Installing the rotating hook can be done in reverse sequence.



The projecting flange of the position bracket (A) should be engaged in the notch(B)of the bobbin case holder, and maintain a clearance of 0.5~0.7mm between projecting flange top and the bottom of notch while installing.

18. 送布牙的调整 (图22,23)
18. Adjusting the feed dog (Fig 22.23)

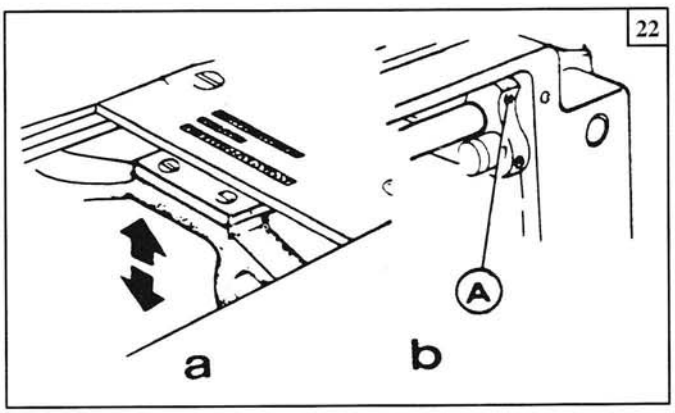
(1)转动主动轮，直到送布牙从针板面突出的最高位置为止。

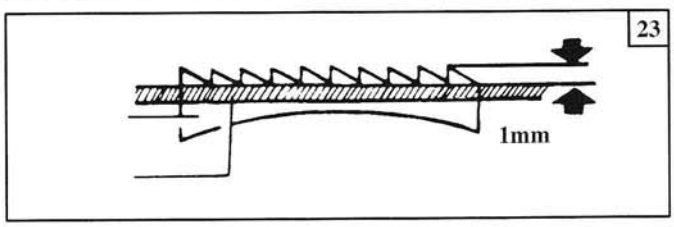
(2)旋松抬牙轴曲柄(右）螺钉A。(图22b)

(3)把牙架B按图22a所示的箭头方向移动，定出送布牙高度(送布牙高度：送布牙尖端至针板面B的间距为1mm见图23)

(4)调节好后把螺钉A旋紧。

To adjust the position of feed dog, move feed doy to the front end of throat plate, Loosen Screw A (See Fig 22b). move feed dog support B in the direction shown by arrow (Fig.22a) to adjust. After adjustment tighten Screw (A).



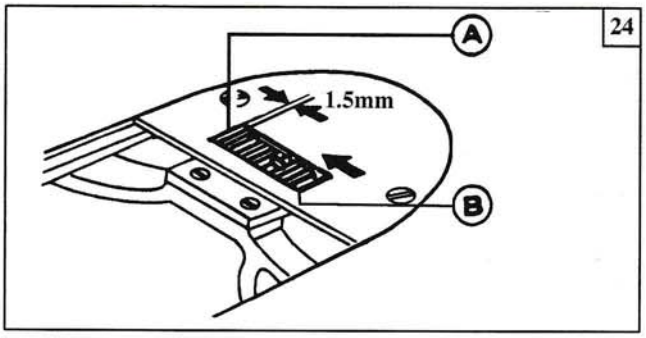


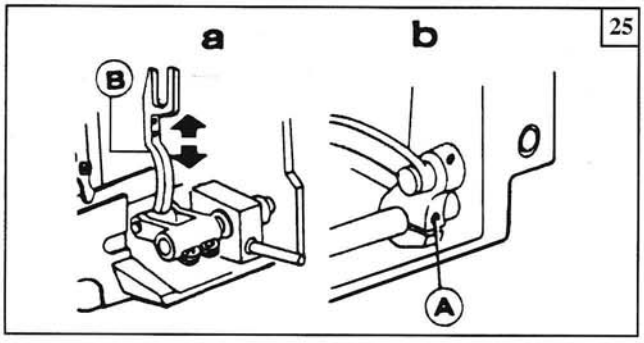
19. 送布牙安装 (图24,25)
19. Installing feed dog (Fig24.25)

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1.5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25b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。

When feed amount is at the max. the front end of feed dog (A) is near the front of throat plate slot. the gauge between the two is 1.5mm This is the standard position of feed dog.





20. 送布牙与机针同步调节 (图26,27,28)
20. Timing between the needle and Feed-Dog (Fig26.27.28)

机针A尖端到达板面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。

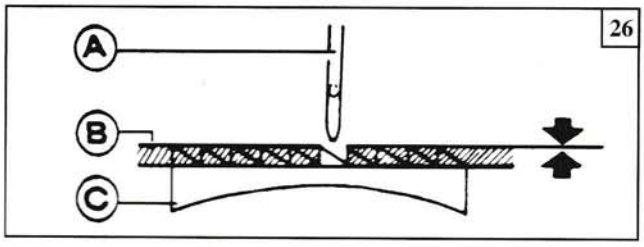
不同步时的调节方法：先打开机壳后盖板F，旋松送布凸轮螺钉A、D，按住送布凸轮B，再缓慢转动主动轮，当上轴油孔C的上端与送布凸轮的基准孔G的下端一致时，即达到同步关系。

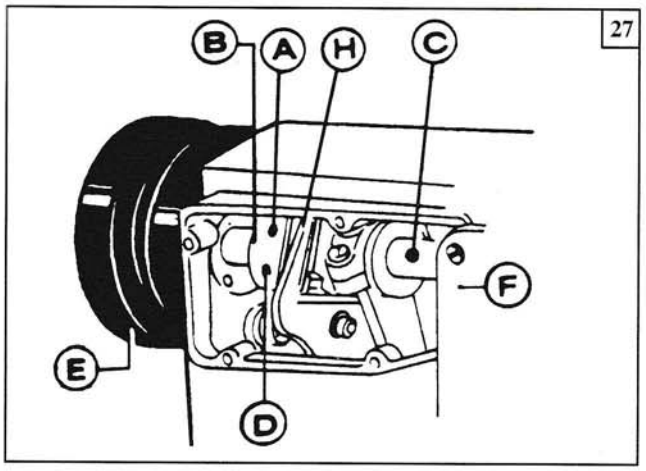
调节时，送布凸轮B与牙叉滑块H的间隙应为0.3-0.5 mm，最后，旋紧送布凸轮螺钉A、D即可。

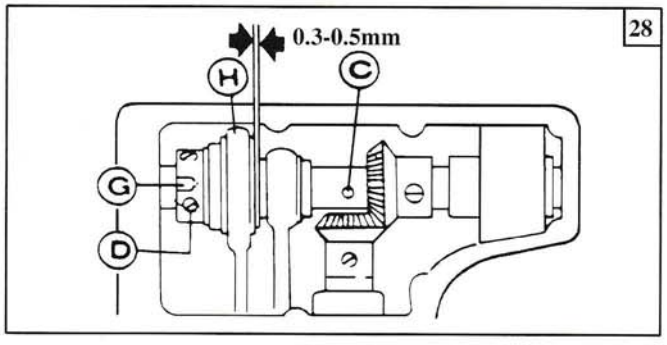
When needle point (A)locates the surfale of needle ptate (B).the topest of Feed-Dog is also locates same level of needle ptate (B). it is coord ination among the needle. Feed-Dog.needle ptate.

Adjusting the position:open balkside cover(F), loosen screw (A)(D). catch connecfor(B). then turn main shaft(E), adjust the (C) position is same as poifion(G).

When adjusting the batane befween "B" and"A" woold be 0.3-0.5mm then tighten screw (A.D)





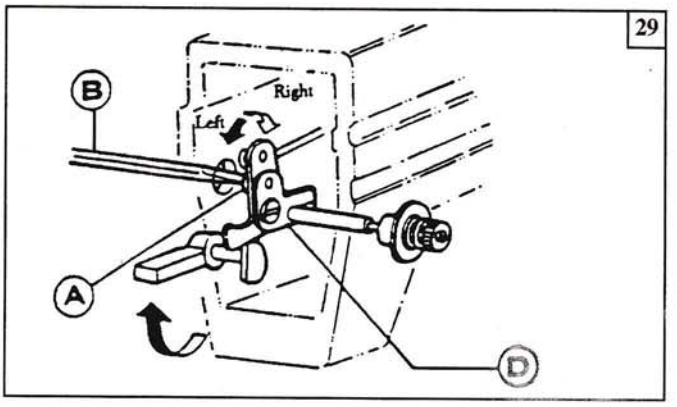


21. 松线器挺线调节 (图29)
21. Adjusting the tension releasing mechanism (Fig.29)

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。

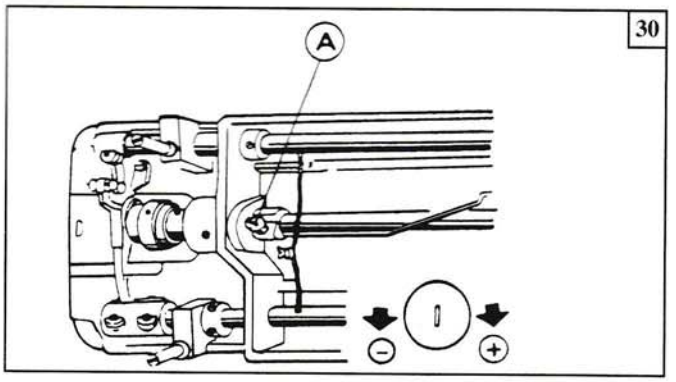
The tension discs should be pushed apart to open when the presser foot is lifted. But the open timing of the tension discs can be adjusted as follows: Remove face plate and the rubber plug at rear side of arm and loosen screw (A) of the knee lifiting lever (loft), then the tension releasing cam can be moved left-ward or rightward when the cam is moved rightward, it is later to open, otherwise it is earlier to open.



22. 旋梭油量调节 (图30)
22. Rotating hook oil amount 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圈范围内调节量, 拧向紧固位置时, 油量最多, 拧松旋转5圈时, 油量最少。

The hook oil amount can be adjusted by Screw (A). Turn it clockwise("+") to increase amount; counter-clockwise("-") to decrease. The oil amount is adjusted in the range of five turns of Screw (A): Tightning for more: Loosening for less.



23. 定期清扫 (图31,32,33)
23. periodical 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, 同时用软布试擦梭心套。

3. 油泵滤网的清扫

如图所示, 清除滤网A上的尘屑。

1)Cleaning the feed dog

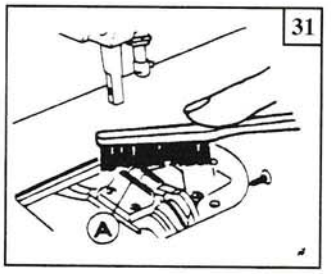
Remove the throat plate.clean off all the dust and lint on the slit of the feed dog(A),the installing the throat plate.

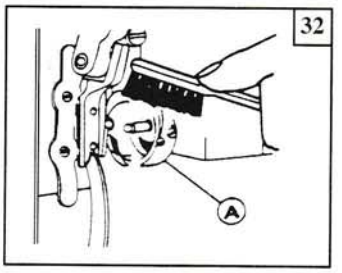
2)Cleaning the rotating hook

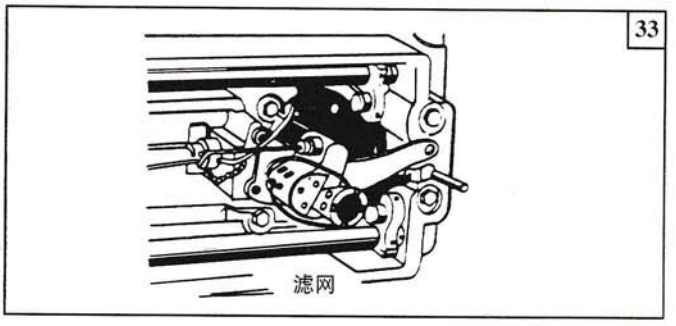
Clean off all the dust around the rotating hook (A). and clean the bobbin case with soft cloth.

3)Cleaning the oil pump filter screen

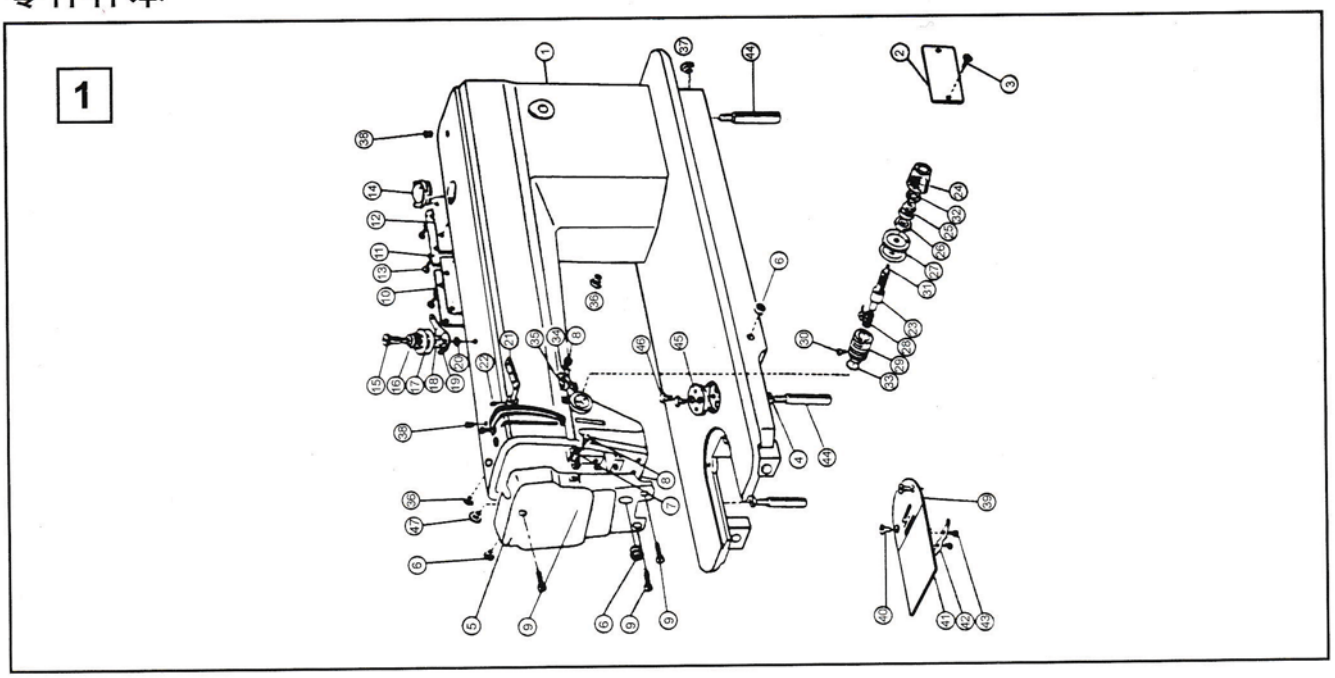
Take off the oil filter. clean off the dust of filter screen (A) with gasoline.





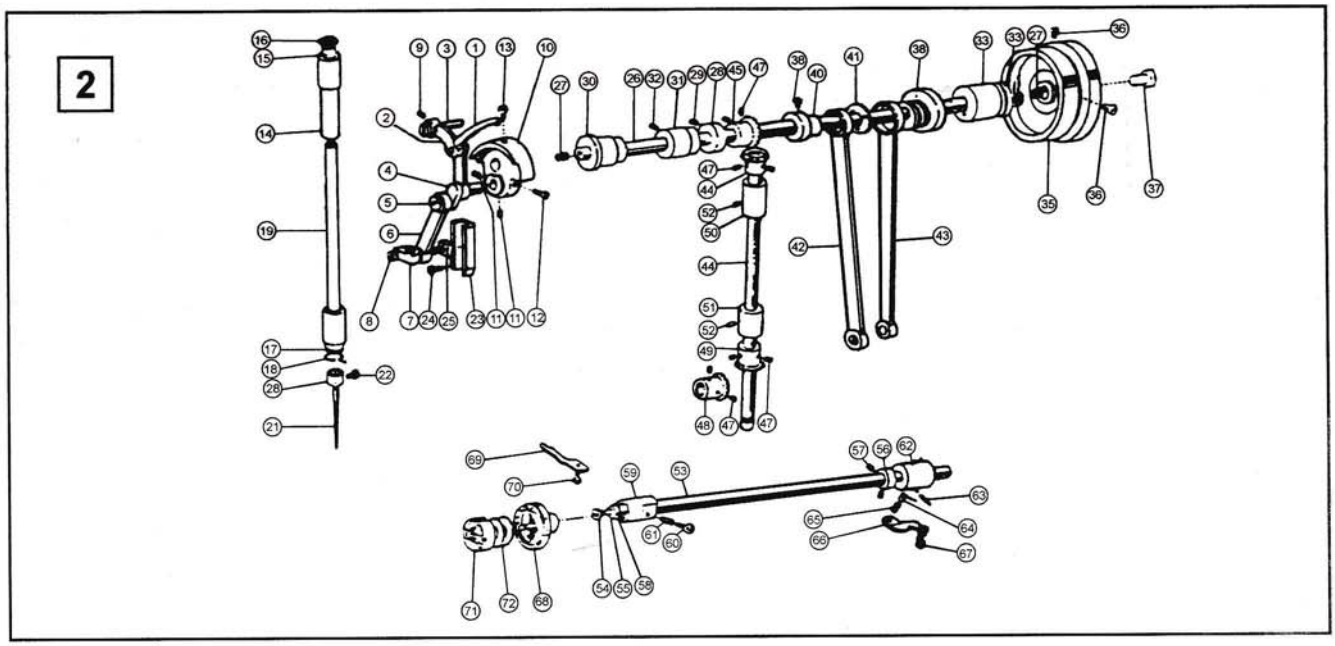


零件样本



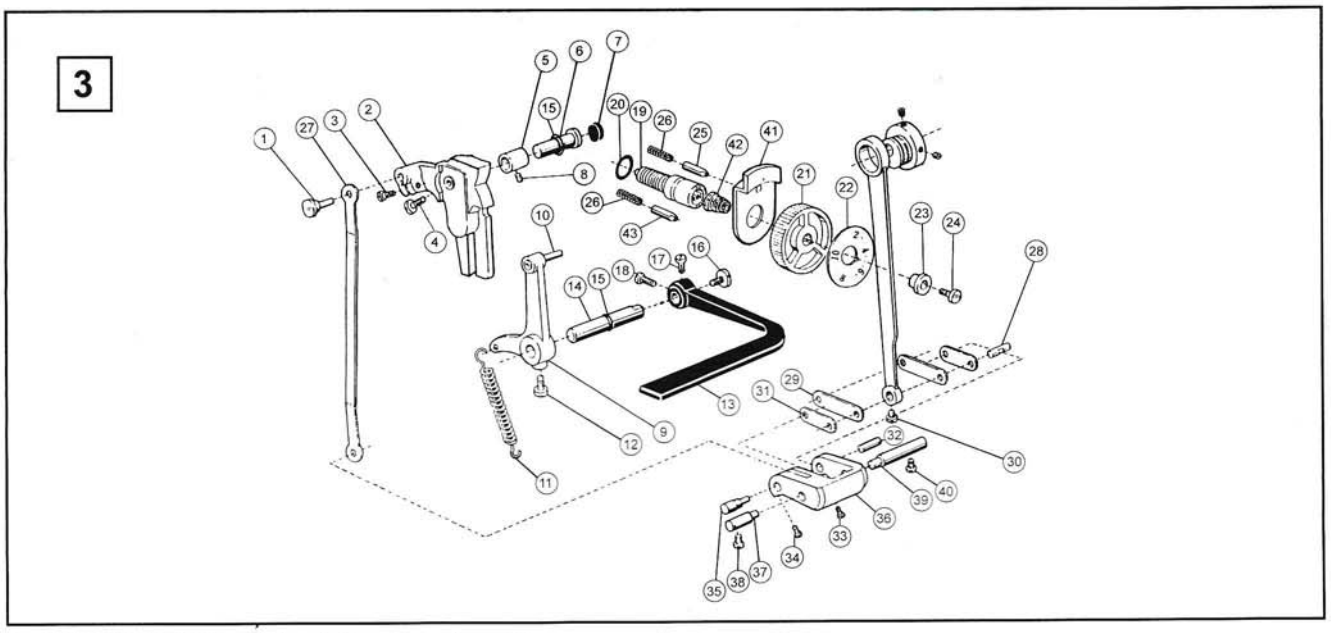
1. 机壳部件／Arm Bed Components

序 号 Ref No.	图 号 Part No.	名 称	Description	件 数 Amt Req.	备 注 Memo
1	1-1	机壳	Arm	1	
2	1-2	型号牌	Trade mark plate	1	
3	1-3	铭牌铆钉	Rivet	4	2.5x5
4	1-4	弹簧垫圈	Washer	2	垫圈6/Washer 6
5	1-5	面板	Fale plate	1	
6	1-6-A	面板橡皮塞(11.8)	Rubber plug	1	
6	1-6-B	抬牙轴紧圈螺钉孔橡皮塞	Rubber	1	
8	1-6-C	膝控提升杠杆(左)螺橡塞	Rubber	1	ø11.8
7	1-7	面板线勾	Threadcam	1	
8	1-8	面板线勾螺钉	Screw	1	SM9/64"(3.75) x 40/6
9	1-9	面板螺钉	Screw	3	SM11/64"(4.37) x 40/10
10	1-10	后盖板(左)	Side plate(Left)	1	
11	1-11	后盖板(右)	Side plate(Right)	1	
12	1-12	后盖板垫片	Washer	1	
13	1-13	后盖板螺钉组件	Screw	8	SM11/64"(4.37) x 40/9
14	1-14	油窗	Oil screen complete	1	
15	1-15	小夹线螺钉	Screw	1	
16	1-16	小夹线弹簧	Spring	1	
17	1-17	小夹线板	Tesssion disc	2	
18	1-18	小夹线过线板垫块	Screw	1	
19	1-19	小夹线过线板	Tensiondisc	1	
20	1-20	开口挡圈	Washer	1	挡圈3/Washer 3
21	1-21	三眼线勾	Three-eye finger	1	
22	1-22	三眼线勾螺钉	Set screw	1	SM11/64"(4.37) x 40/5
23	1-23	夹线螺钉	Screw	1	
24	1-24	夹线螺母小组件	Nut	1	
25	1-25	夹线弹簧	Spring	1	
26	1-26	松线板	Tread releasing plate	1	
27	1-27	夹线板	Thread tension disc	2	
28	1-28	挑线簧	Thread take-up spring	1	
29	1-29	夹线调节座	Thread tension adjusting bracket	1	
30	1-30	夹线调节座螺钉	Screw	1	SM9/64"(3.57) x 40/6
31	1-31	松线钉	Thread releasing pin	1	
32	1-32	夹线螺母止动板	Stopping plate	1	
33	1-33	O型圈	O-type ring	1	
34	1-34	夹线调节座固定螺钉	Set screw	1	SM15/64"(5.95) x 28/6
35	1-35	线勾	Thread finger	1	
36	1-36	橡皮塞(8.8)	Rubber plug	2	
37	1-37	橡皮塞(27)	Rubber plug	1	
38	1-38	橡皮塞(5.7)	Rubber plug	2	
39	1-39	针板	Sliding plate complete	1	
40	1-40	针板螺钉	Screw	1	SM11/64"(4.37) x 40/4.5
41	1-41	推板	Sliding plate	1	
42	1-42	推板簧	Spring	1	
43	1-43	推板簧螺钉	Screw	2	SM3/32"(2.38) x 56/2.2
44	1-44	底板撑钉	Bed Leg	3	
45	1-45	夹边座	Holder	1	
46	1-46	夹边座螺钉	Screw	2	SM11/64"(4.37) x 40/5
47	1-47	回油观察孔橡皮塞	Rubber plug	1	



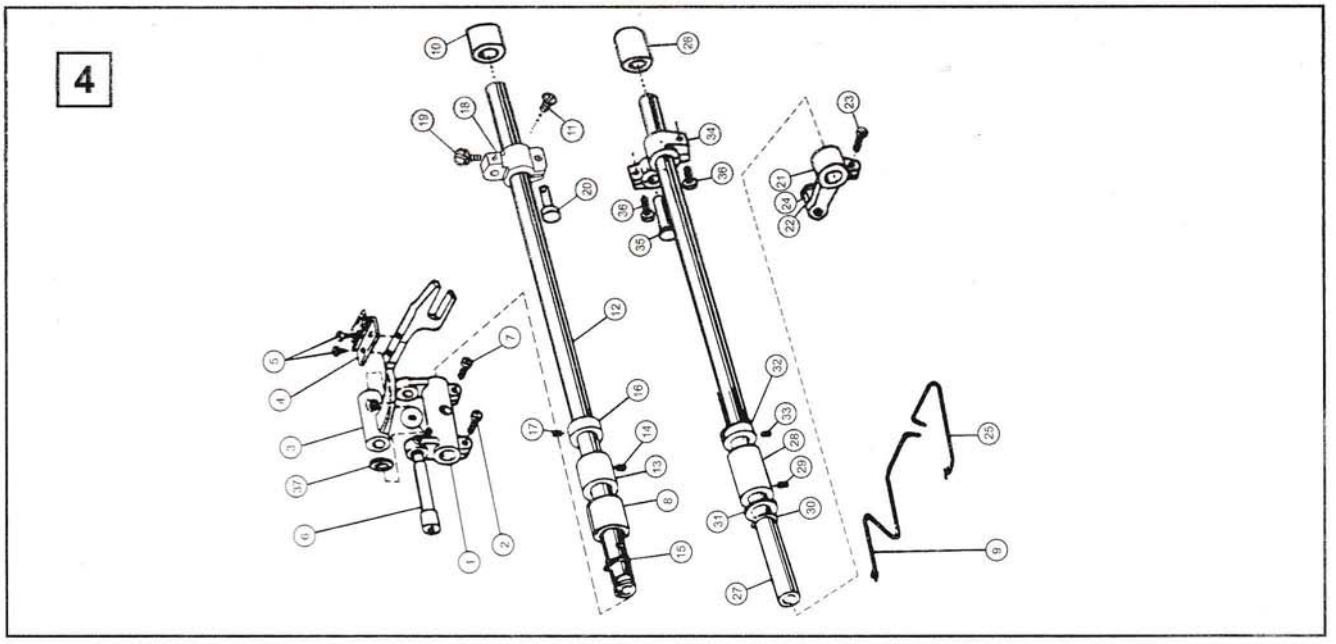
2. 针杆挑线、上轴竖轴部件 / Needle Feed Main Shaft

序 号 Ref No.	图 号 Part No.	名 称	Description	件 数 Amt Req.	备 注 Memo
1	2-1	挑线杆	Take-up thread	1	
2	2-2	挑线连杆	Take-up thread con	1	
3	2-3	挑线连杆铰链轴		1	
4	2-4-A	挑线曲柄	Thread take-up crank	1	
4	2-4-B	滚针轴承	Needle bearing	2	
5	2-5	挑线曲柄螺钉(左旋)	Endscrew Left-hand	1	
6	2-6	针杆连杆	Needle bar cramk connecting rooe	1	
7	2-7	针杆接头	Needle crank	1	
8	2-8	针杆接头螺钉	Needle bar adaptor	1	SM9/64"(3.57) x 40 6
9	2-9	挑线连针铰链轴螺钉	Screw	1	SM15/64"(5.95) x 28 10
10	2-10	针杆曲柄	Needle bar crank	1	
11	2-11	挑线曲柄定位螺钉	Screw	2	SM1/4"(6.35) x 40 6
12	2-12	针杆曲柄螺钉	Screw	1	SM9/32"(7.14) x 28 13
13	2-13	针杆曲柄定位螺钉	Set acrew	1	SM9/32"(7.14) x 28 14
14	2-14	针杆轴套(上)	Rubber bar upper buahing	1	
15	2-15	针杆轴套(上)毡塞	Felt	1	
16	2-16	针杆轴套(上)橡皮塞	Rubber plug	1	8.8
17	2-17	针杆轴套(下)	Needle bar shaft cover	1	
18	2-18	针杆轴套(下)过线勾		1	
19	2-19	针杆	Needle bar	1	
20	2-20	针杆过线环	Thread finger	1	
21	2-21	机针	Needle	1	DB x 1-2=22
22	2-22	夹针螺钉	Screw	1	SM1/8"(4.37) x 44 4.5
23	2-23	针杆接头滑块导轨	Rail	1	
24	2-24	滑块导轨螺钉	Screw	2	SM11/64"(4.37) x 40 8
25	2-25	针杆接头滑块	Sliding block	1	
26	2-26	上轴	Arm shaft	1	
27	2-27	上轴橡皮塞(ø7.4x 10)	Rubber plug	2	
28	2-28	上套紧圈	Collar	1	
29	2-29	上轴紧圈螺钉	Screw	2	SM1/4"(6.35) x 40 4
30	2-30	上轴轴套(左)	Front bushing	1	
31	2-31	上轴轴套(中)	Middle bushing	1	
32	2-32	上轴轴套(中) 螺钉	Screw	1	SM15/64"(5.94) x 28 10
33	2-33	上轴轴套(右)	Main shaft thrust collar	1	
34	2-34	上轴轴套(右)	Main shaft thrust collar	1	
35	2-35	主动轮	Rubber plug	1	
36	2-36	主动轮螺钉	Screw	2	
37	2-37	上轴油封螺钉	Screw	1	SM11/32"(8.73) x 28 10
38	2-38	送布凸轮	Feed drive eccentriteam	1	
39	2-39	送布凸轮螺钉	Screw	2	SM15/54"(5.95) x 28 7
40	2-40	牙叉滑块		1	
41	2-41	抬牙连杆挡圈	Thrust collar	1	
42	2-42	抬牙连杆	Feed crank connecfingrool	1	
43	2-43	牙叉	Feed"y"connecting asm	1	
44	2-44	竖煮	Vertical shaft	1	
45	2-45	上轴伞齿轮	Bevel gear	1	Z=27
46	2-46	竖轴伞齿轮(上)	Vertica shaft bevel gear (upper)	1	Z=18
47	2-47	伞齿轮螺钉	Screw	8	SM1/4"(6.35) x 40 7
48	2-48	下轴伞齿轮	Rock shaft bevel gear	1	Z=21
49	2-49	竖轴伞齿轮(下)	Vertical shaft bevel gear(lower)	1	Z=28
50	2-50	竖轴轴套(上)	Vertical shaft bushing(upper)complete	1	
51	2-51	竖轴轴套(下)	Verthcal shaft bushing(lower)complete	1	
52	2-52	竖轴轴套螺钉	Screw	2	SM15/64"(5.95) x 28 10
53	2-53	下轴	Hook driving shaft	1	
54	2-54	下轴滤油塞螺钉	Screw	1	
55	2-55	下轴滤油塞	Oil wick	1	
56	2-56	下轴紧圈	Hook driving shaft thrust collar	1	通GC6-1
57	2-57	下轴尽圈螺钉	Screw	2	SM15/64"(5.95) x 28 4
58	2-58	下轴油封	Oil washer	1	
59	2-59	下轴轴套(左)	Hook driving shaft thrust collar(left)	1	
60	2-60	油量调节螺钉	Screw	1	
61	2-61	油量调节弹簧	Spring	1	
62	2-62	下轴轴套(右)	Hook driving shaft thrast collar(right	1	
63	2-63	下轴轴套油管	Oie tube	1	
64	2-64	柱塞	Screw	1	
65	2-65	柱塞弹簧	Spring	1	
66	2-66	挡板	Frame	1	SM15/64"(5.95) x 28 10
67	2-67	挡板螺钉	Screw	1	
68	2-68	旋转组件	Hook Asm	1	
69	2-69	旋梭定位勾	Rotating book position finger	1	
70	2-70	旋梭定位勾螺钉	Screw	1	SM11/64"(4.37) x 40 10
71	2-71	梭芯套组件	Bobbincase	1	
72	2-72	梭芯	Bobbin	1	



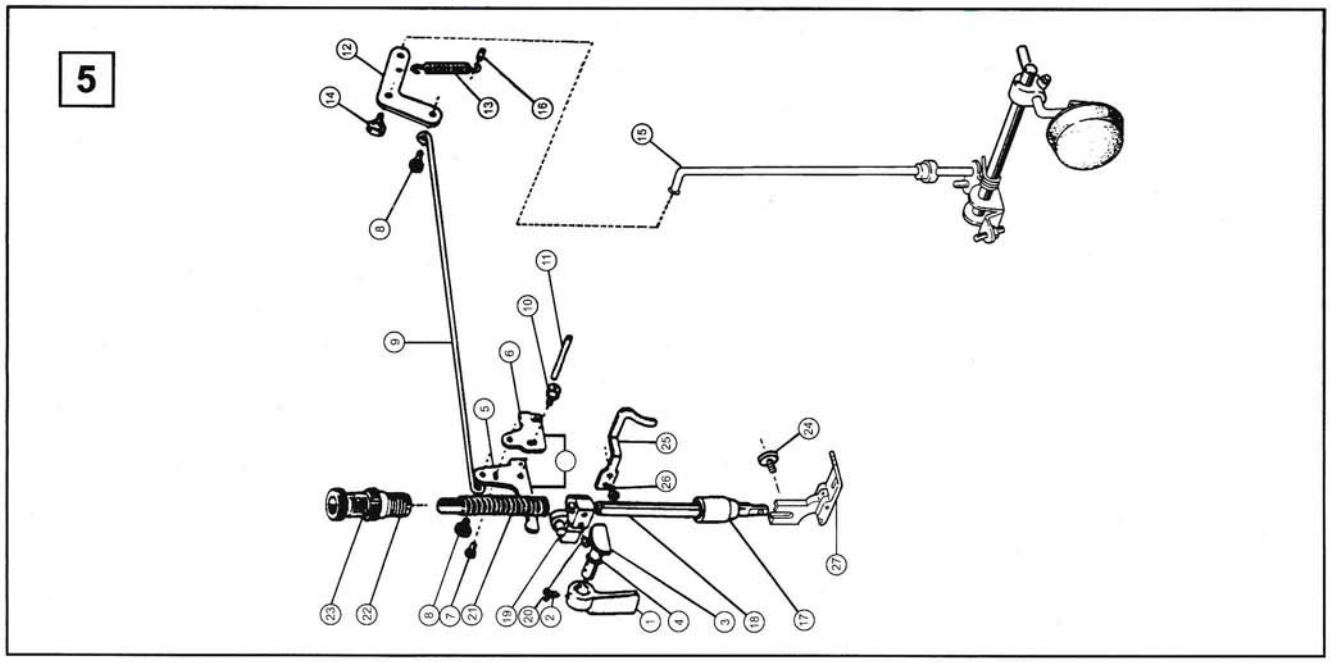
3. 针距调节部件 / Feed Machanism Components

序 号 Ref No.	图 号 Part No.	名 称	Description	件 数 Amt Req.	备 注 Memo
1	2-1	针距调节连杆销钉	feed regulaotor screw	1	
2	2-2	针距座	feed regulaotor	1	
3	2-3	针距座长螺钉	set screw	1	
4	2-4	针距座短螺钉	set screw	1	
5	2-5	针距座衬套	feed regulator bush	1	
6	2-6	针距座轴	feed regulator hinge pin	1	
7	2-7	橡皮塞	rubber plug	1	
8	2-8	针距座衬套紧固螺钉	set screw	1	
9	2-9	倒缝操纵杆曲柄	bartacking srank	1	
10	2-10	操纵杆曲柄滚柱组件	bearing assembly for bartaking crank	1	
11	2-11	操纵杆曲柄弹簧	spring for bartaking crarnk	1	
12	2-12	操纵杆曲柄螺钉	set screw	1	
13	2-13	倒缝操纵杆	bartaking lever	1	
14	2-14	倒缝操纵杆短轴	bartaking lever shaft	1	
15	2-15	O型密封圈	O ring	2	
16	2-16	倒缝操纵吊紧螺钉	screw	1	
17	2-17	反向送料扳手定位螺钉	screw	1	
18	2-18	反向送料扳手支头螺钉	screw	1	
19	2-19	针距调节螺杆	feed regulator screw	1	
20	2-20	O型密封圈	O ring	1	
21	2-21	针距盘	Dial	1	
22	2-22	针距标盘	Dial number	1	
23	2-23	标盘螺钉衬套	bush	1	
24	2-24	针距盘螺钉	screw	1	
25	2-25	止动销	stopper pin	2	
26	2-26	止动销弹簧	spring for stopper pin	2	
27	2-27	针距调节连杆	stitch adjuatment rod	1	
28	2-28	曲柄连杆长销	walking foot pin	1	
29	2-29	曲柄长连杆	connecting link	2	
30	2-30	送布连杆螺钉	set crew	1	
31	2-31	曲柄短连杆	walking foot link	2	
32	2-32	曲柄连杆短销	pin	1	
33	2-33	短连杆销螺钉	set screw	1	
34	2-34	连杆偏心轴螺钉	set screw	1	
35	2-35	连杆偏心轴	eccentric shaft	1	
36	2-36	针距调节曲柄	stitch adjusting crark	1	
37	2-37	针距调节曲柄定位销(左)	stitch adjusting pin (left)	1	
38	2-38	左定位销螺钉	set screw	1	
39	2-39	针距调节曲柄定位销(右)	stitch adjusting pin (right)	1	
40	2-40	右定位销螺钉	set screw	1	
41	2-41	针距按键	knob	1	
42	2-42	针距按键簧	spring	1	
43	2-43	针距盘挡销	stopper pin	1	



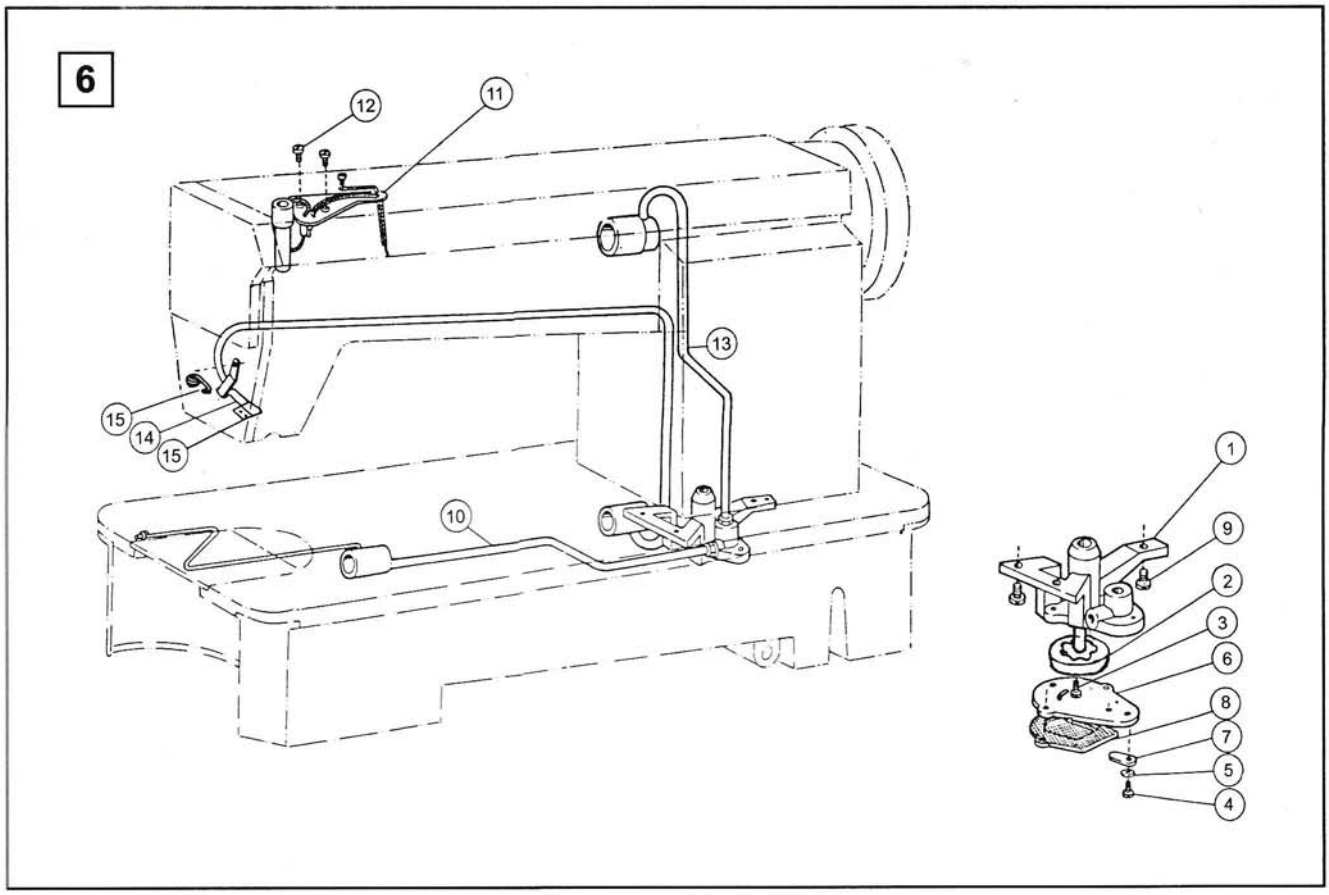
4. 送布部件 / Feed Machanism Components

序 号 Ref No.	图 号 Part No.	名 称	Description	件 数 Amt Req.	备 注 Memo
1	4-1	牙架曲柄	Feed crank	1	
2	4-2	牙架曲柄螺钉	Screw	2	SM3/16"(4.76") x 28/15
3	4-3	牙架	Feed holder	1	
4	4-4	送布牙	Feed dog	1	
5	4-5	送布牙螺钉	Screw	2	SM1/8"(3.18) x 44/6
6	4-6	牙架偏心轴	Feed Holder shaft	1	
7	4-7	牙架螺钉	Screw	1	SM11/64"(4.37) x 40/8
8	4-8	送布轴轴套(左)	Feed rocker shafter	1	
9	4-9	牙架曲柄油线	Oil wick	1	2.5 x 315
10	4-10	送布轴轴套(右)	Feed driving shaft bushing	1	
11	4-11	送布轴曲柄铰链轴螺钉	Screw	1	SM15/64"(5.95) x 28/10
12	4-12	送布轴	Feed rocker shaft	1	
13	4-13	送布轴轴套	Feeddriving shaft bushing	1	
14	4-14	送布轴轴套螺钉	Screw	1	SM15/64"(5.95) x 28/4
15	4-15	轴用弹性挡圈	Thrust collar	1	
16	4-16	送布轴紧圈	Thrust collar	1	
17	4-17	送布轴紧圈螺钉	Screw	2	SM1/4"(6.35) x 40/4
18	4-18	送布轴曲柄	Feed driving shafe cromk	1	
19	4-19	送布轴曲柄螺钉	Screw	2	SM3/16"(4.76) x 28/12
20	4-20	送布轴曲柄铰链轴	Shaft	1	
21	4-21	抬牙轴曲柄(左)	Feed crank	1	
22	4-22	抬牙叉滑块轴	Feed crcmk moving shaft	1	
23	4-23	抬牙轴曲柄(左)螺钉	Screw	1	SM11/64"(4.37) x 40/12
24	4-24	抬牙叉滑块轴	Moving crank	1	
25	4-25	抬牙轴曲柄(左)油线	Oil wick	1	2.5 x 265
26	4-26	抬牙轴轴套(右)	Feed Liftingshaft bushing	1	
27	4-27	抬牙轴	Feed lifting shaft	1	
28	4-28	抬牙轴轴套	Feed lifting shaft bushing	1	
29	4-29	抬牙轴轴套螺钉	Screw	1	SM15/64"(5.95) x 28/10
30	4-30	轴用弹性挡圈	Washer	1	
31	4-31	抬牙轴轴套垫圈	Washer	1	
32	4-32	抬牙轴紧圈	Thrust callar	1	
33	4-33	抬牙轴紧圈螺钉	Screw	2	SM1/4"(6.35) x 40/4
34	4-34	抬牙轴曲柄(右)	Feedlifting shaft crank	1	
35	4-35-A	抬牙轴曲柄铰链轴	Feed lifting	1	
35	4-35-B	送布轴轴套(左)螺钉	Screw	1	
36	4-36	抬牙轴曲柄(右)螺钉	Screw	2	SM3/16" (4.76) x 28/12
37	4-37	牙架垫圈	Snapring	1	



5. 压脚部件 / Presser Asm

序 号 Ref No.	图 号 Part No.	名 称	Description	件 数 Amt Req.	备 注 Memo
1	5-1	压脚扳手	Presser foot lift bar	1	
2	5-2	压脚扳手螺钉	Screw	1	SM11/64"(4.37) x 40/5
3	5-3	压脚提升凸轮	Presser foot lift bar	1	
4	5-4	压紧杆提升凸轮O型圈	Oil seal	1	Ø8 x 1.9
5	5-5	膝控提升杠杆(左)	Lever(left)	1	
6	5-6	松线凸轮	Thread releasing cam	1	
7	5-7	膝控提升杠杆(左)螺钉	Schew	1	SM11/64"(4.37) x 40/6
8	5-8	铰链螺钉	Screw	2	SM3/16"(4.76) x 28/3.5
9	5-9	膝控提升拉杆	Knee lifter drawing nar	1	
10	5-10	松线凸轮螺钉	Acrew	1	SM5/64"(5.95) x 28/13
11	5-11	松线杆	Thread releasing lever	1	
12	5-12	膝控提升杠杆(右)	knee lifter (evercright)	1	
13	5-13	膝控提升杠杆(右)弹簧	Spring	1	
14	5-14	膝控提升杠杆(右)螺钉	Screw	1	SM5/64"(5.95) x 28/10
15	5-15	膝控提升杠杆	Scomecting rod	1	
16	5-16	弹簧销	Pin	1	
17	5-17	压紧杆轴套	Bushing for presser bar	1	
18	5-18	压紧杆	Presser bar	1	
19	5-19	压紧杆导架	Guide for presser bar	1	
20	5-20	压紧杆导架螺钉	Screw	1	SM15/64"(5.95) x 28/7
21	5-21	压紧杆弹簧	Sping	1	
22	5-22	调压螺钉	Screw	1	
23	5-23	调压螺钉锁紧螺母	Nut	1	
24	5-24	压脚螺钉	Screw	1	SM9/64"(3.57) x 40/11
25	5-25	大线勾	Thread guide	1	
26	5-26	大线勾螺钉	Screw	1	SM11/64"(4.37) x 40/7
27	5-27	风压脚	Presser foot	1	



6. 油泵部件 / Lubrication mechanism

序 号 Ref No.	图 号 Part No.	名　　称	Description	件 数 Amt Req.	备 注 Memo
1	7-1	油泵体	Oil pump body	1	
2	7-2	油泵叶轮	Oil pump impeller	1	
3	7-3	油泵叶轮螺钉	Screw	1	
4	7-4	油泵调节板螺钉	Screw	3	
5	7-5	油泵调节板螺钉弹簧垫圈	Spring washer	1	
6	7-6	油泵体盖板	Oil pump filting plate	1	
7	7-7	油量调节板	Oil adjusting plate	1	
8	7-8	油泵滤网组件	Oil pump screen complete	1	
9	7-9	油泵体螺钉	Screw	3	
10	7-10	下轴油管组件	Oil pipe for hook shaft	1	
11	7-11	油线固定板大组件	Oil braid fitting plate	1	
12	7-12	油线固定板螺钉	Screw	2	
13	7-13	上轴油管组件	Oil pipe for arm shaft	1	
14	7-14	回油管	Oil returning pipe	1	
15	7-15	回油管滤油毡	Felt pouch for return oil filter	1	
16	7-16	回油管夹	Spring for oil felt	1	

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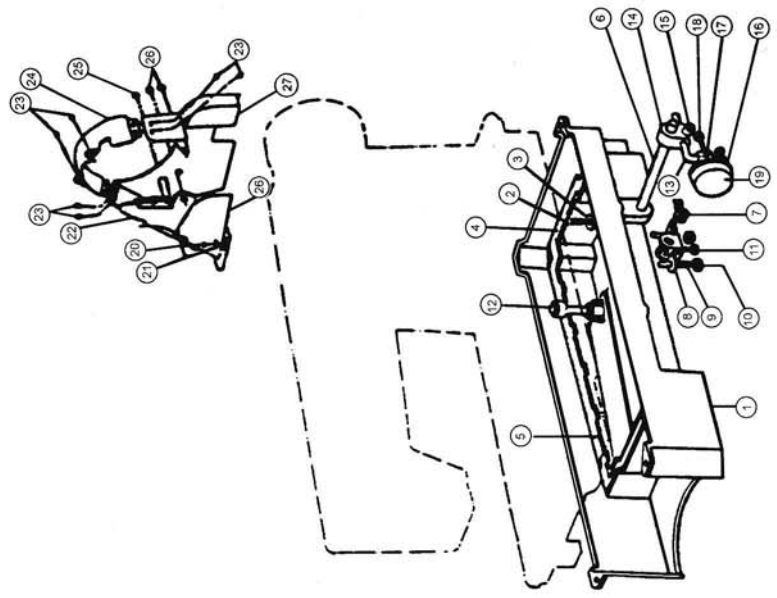
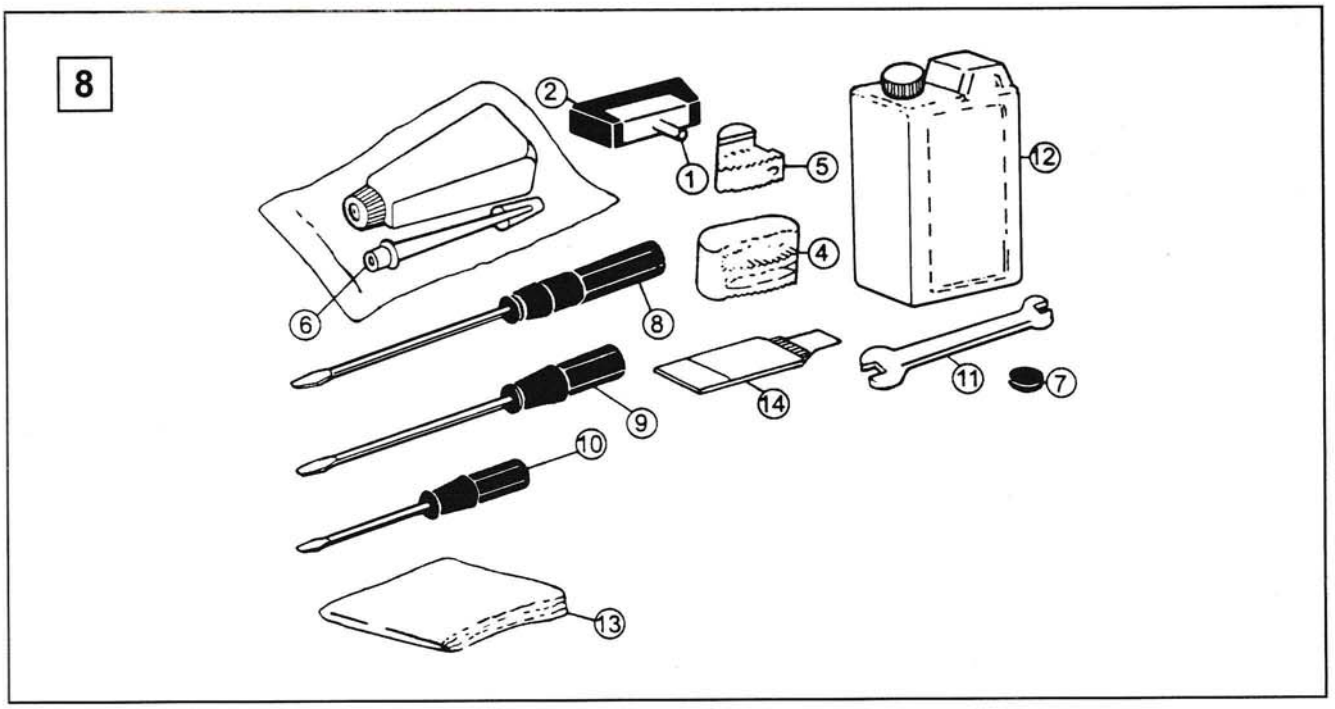


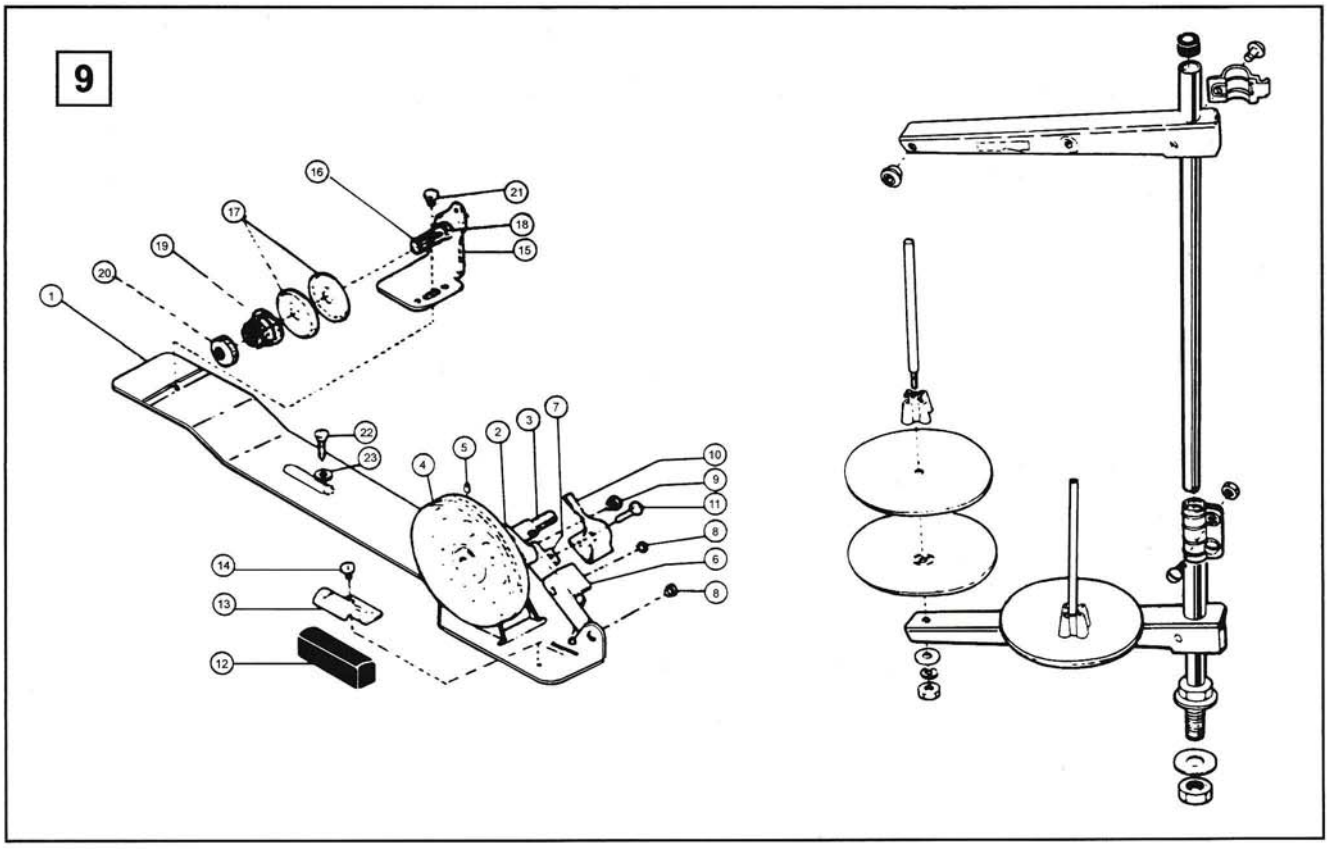
7. 油盘及附件 / Oil Reservoit & Acce

序 号 Ref No.	图 号 Part No.	名 称	Description	件 数 Amt Req.	备 注 Memo
1	8-1	油盘	Oil reseroir	1	
2	8-2	放油螺钉	Screw	1	SM5/16"(7.94) x 28/10
3	8-3	放油螺钉垫圈	Washer	1	
4	8-4	油盘垫(小)	Washer	1	
5	8-5	油盘垫(大)	Gasket(big)	1	
6	8-6	膝控铰链轴	Hinge pin	1	
7	8-7	膝控复位弹簧	Spring	1	
8	8-8	膝控限位架	Frame	1	
9	8-9	膝控限位调节螺钉	Screw	2	SM15/64"(5.95) x 28/28
10	8-10	调节螺母	Nut	2	
11	8-11	膝控限位架螺钉	Screw	1	
12	8-12	膝控提升顶杆	Knee lifter prop bar	1	
13	8-13	膝控碰块弯杆	Bent rod	1	
14	8-14	碰块弯杆接头	Screw	1	
15	8-15	膝控碰块弯杆接头螺钉	Screw	2	SM5/16"(7.94) x 18/16
16	8-16	膝控碰块	Bell	1	
17	8-17	碰块架	Bell bracket	1	SM15/64"(5.95) x 28/8
18	8-18	碰块架螺钉	Screw	1	
19	8-19	碰块垫	Pat	1	
20	8-20	皮带罩木螺钉	Screw	2	Ø4.5 x 20
21	8-21	皮带罩木螺钉垫圈	Washer	2	垫圈5/Washer 5
22	8-22	皮带罩上	Beltcover top	1	
23	8-23	螺钉	Screw	6	
24	8-24	皮带罩标志组件	Label	1	
25	8-25	皮带罩板螺母螺钉	Screw	1	M4 x 14
26	8-26	皮带罩螺钉	Screw	2	SM15/64"(5.95) x 28/8
27	8-27	皮带罩(下)	Belt cover	1	
28	8-28	皮带罩组件	Beltcoverasm	1	



8. 附件 / Accessories

序 号 Ref No.	图 号 Part No.	名　　称	Description	件 数 Amt Req.	备 注 Memo
1	9-1	机壳铰链	Machine hinge plateasm	2	
2	9-2	机壳铰链套	Machine hinge plate	2	
3	9-4	级头防震垫块（大）	Washer (big)	2	
4	9-5	机头防震垫块（小）	Washer (small)	2	
6	9-6	小油壶	Oil can (small)	1	
7	9-7	磁块	Magnet	1	
8	9-8	螺钉起子（大）	Screw driver (big)	1	
9	9-9	螺钉起子（中）	Screw driver (Middle)	1	
10	9-10	螺钉起子（小）	Screw driver (small)	1	
11	9-11	双头扳手	Spander	1	
12	9-12	油箱	Oie cam	1	
13	9-13	机罩	Dust cover	1	
14	9-14	机针	Needle	4	



9. 绕线器、线架／Bobbin Winder & Thread Stand

序 号 Ref No.	图 号 Part No.	名　　称	Description	件 数 Amt Req.	备 注 Memo
1	10-1	绕线器底座	Bobbin wiader base asm	1	
2	10-2-A	绕线架组件	Thread winder base asm	1	
	10-2-B	绕线架轴	Bobbin winder stard shaft	1	
	10-2-C	绕线架顶杆弹簧	Spring	1	
3	10-3	绕线轴	Bobbin winder shaft	1	
4	10-4	绕线轮	Thread winder asm	1	
5	10-5	绕线轮螺钉	Screw	1	
6	10-6	绕线摆杆	Bobbin winder frame pin	1	
7	10-7	绕线连杆	Connecting rod	1	
8	10-8	铆钉	Screw	2	
9	10-9	绕线连杆螺钉	Screw	1	
10	10-10	满线跳板	Bobbin winder spring	1	
11	10-11	满线度调节螺钉	Screw	1	
12	10-12	制动块	Rubber brale	1	
13	10-13	制动块固定勾	Pressed plate	1	
14	10-14	制动块固定勾螺钉	Screw	1	
15	10-15	过线架	Thread tension asm	1	
16	10-16	过线架夹线螺钉	Screw	1	
17	10-17	过线架夹线板	Tension disc	2	
18	10-18	过线架夹线轴套	Screw	1	
19	10-19	夹线簧	Tension spring	1	
20	10-20	夹线螺母	Thread tension studnud	1	
21	10-21	过线架螺钉	Screw	1	
22	10-22	绕线架木螺钉	Screw	2	
23	10-23	绕线架木螺钉垫圈	Washer	2	