

目 录

使用说明

台板加工图	1
1、主要技术规格	3
2、操作准备	3
3、安装电机	3
4、踏脚板与离合器拉杆连接	4
5、安装皮带防护罩	4
6、安装绕线机器	5
7、润滑	5
8、试车	6
9、旋梭油量调节	7
10、油泵进油调节	7
11、安装机针	8
12、机针缝线和缝料的配合	8
13、穿面线	9
14、绕线调节	9
15、针距、倒顺送料	10
16、挑线部位进油	10
17、压脚压力调节	11
18、缝线张力	11
19、挑线簧调节	12
20、底面线张力调节	13
21、机针与旋梭同步调整	14
22、旋梭装卸	15
23、送布牙安装	16
24、送布牙平面调节	17
25、针距误差调节	17
26、送布同步调节	18
27、松线器挺线调节	19
28、上送料机构的调节	19
29、压脚交叉提升机构的调节	20
30、摆压脚、小压脚总提升量的调节	20
31、摆压脚、小压脚前后方向间隙的调节	21
32、定期清扫	21~22

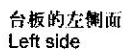
CONTENT

Operation Instruction

Schematic diagram of the machine table.....	1
1. Main technical specifications	3
2. Operation preparation	3
3. Installing the motor	3
4. Connecting the clutch lever to the pedal	4
5. Installing belt guard	4
6. Installing the bobbin winder	5
7. Lubrication	5
8. Trial run	6
9. Hook oil amount adjustment	7
10. Oil pump supply adjustment.....	7
11. Installing the needle	8
12. Coordination among needle, thread and sewing materials	8
13. Threading the needle thread	9
14. Winding adjustment	9
15. Setting the stitch length and controlling the reverse sewing	10
16. Setting the position of presser bar	10
17. Adjusting the pressure of presser foot.....	11
18. Adjusting the thread tension	11
19. Adjusting the thread take-up spring	12
20. Adjusting the tension of needle thread and bobbin thread	13
21. Timing adjustment between the needle and the rotating hook	14
22. Installing and removing rotating hook	15
23. Installing feed dog	16
24. Feed dog horizontal adjustment	17
25. Stitch length error adjustment	17
26. Feed timing adjustment	18
27. Adjusting the tension releasing mechanism	19
28. Upper feed adjustment	19
29. Adjusting presser foot alternate lift mechanism	20
30. Adjusting the lift amount of presser foot with walking presser foot	20
31. Adjusting the clearance between presser foot and walking presser foot	21
32. Periodical chcaning	21~22

Schematic diagram of the machine table (domestic)

Cut the table referring to the diagram.



A-A

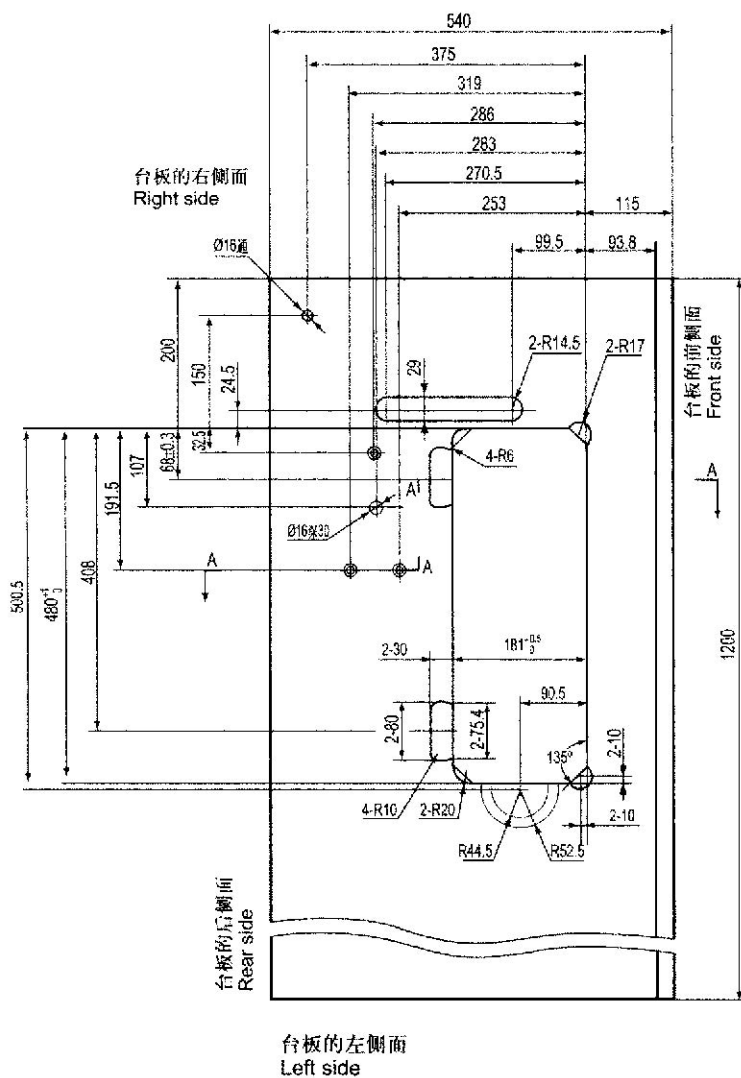


台板加工图(外销)

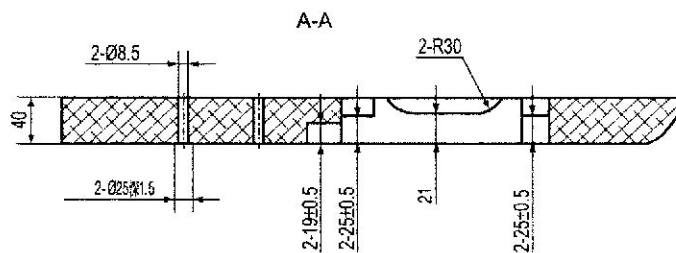
Schematic diagram of the machine table (export)

请参照下图进行台板的加工。

Cut the table referring to the diagram.



标准尺寸
Standard dimension



1. 主要技术规格

型号	JK-6380	
缝料	中厚料、厚料	
最高转速	2000针/分	
最大针距	8mm	
最大缝厚能力	8mm	
压脚交互量	3.5-5.5mm	
机针	DPx17(20#~23#)	
压脚提升高度	手控	8mm
	膝控	16mm
旋梭	自动润滑大旋梭	
供油方式	全自动供油	
电动机功率	370瓦(缝纫机专用)	

2. 操作准备

(1) 试擦机器

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试擦干净。

(2) 检查

机器出厂时,虽然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仔细的检查,并用手轻轻转动主动轮,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,如有应做适应的调整,机器情况正常后才可正式试车。

1. MAIN SPECIFICATIONS

Type	JK-6380	
Material	Medium and heavy duty	
Max.sewing speed	2000spm	
Max.stitch length	8mm	
Max.thickness	8mm	
Alternate presser foot lift volume	3.5-5.5mm	
Needle	DPx17(20#~23#)	
Presser foot lift	by hand	8mm
	by knee	16mm
Hook	Auto-lubricating big rotating hook	
Lubrication	Auto lubrication	
Motor power	370W (use for sewing)	

2. PREPARATION

(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.

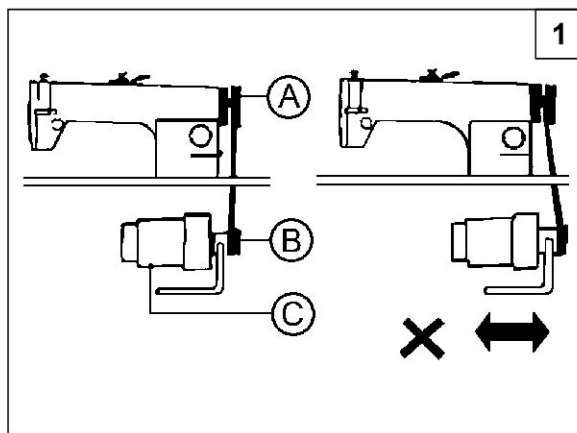
(2) Examination

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. 安装电机(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.



4. 踏脚板与离合器拉杆连接(图2) / CONNECT THE CLUTCH LEVER WITH THE PEDAL(Fig.2)

a. 踏脚板安装的倾斜度应与地面成 20° - 30° 角为宜。

b. 调整电机离合器，使机架拉杆(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。

c. 缝纫机运转方向，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，其转向可用电动机插头换转180°调整转向。

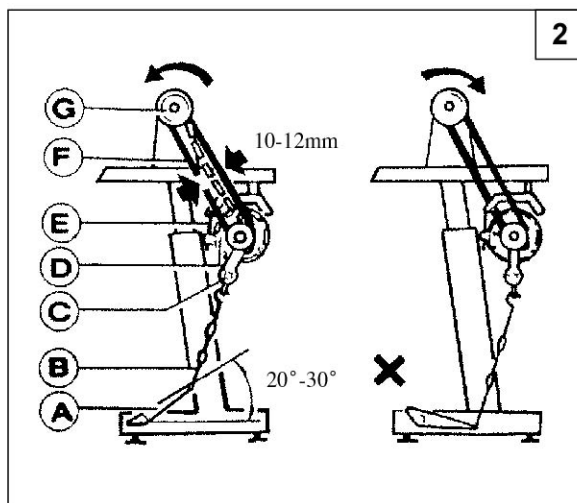
d. 三角皮带下的张力调整，由电动机移动上下位置来达到，皮带张力的大小可用手指将皮带按下，使皮带如图示弯曲成10~12毫米程度即可。

a. The optimum tilt angle of pedal (A) is approximately 20-30 deg.

b. Adjust Clutch Cover (D) so that Clutch-Lever (C) and DrawBar (B) run in line.

c. The balance wheel should rotate counter-clockwise 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.

d. 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 10-20 mm when the belt is depressed

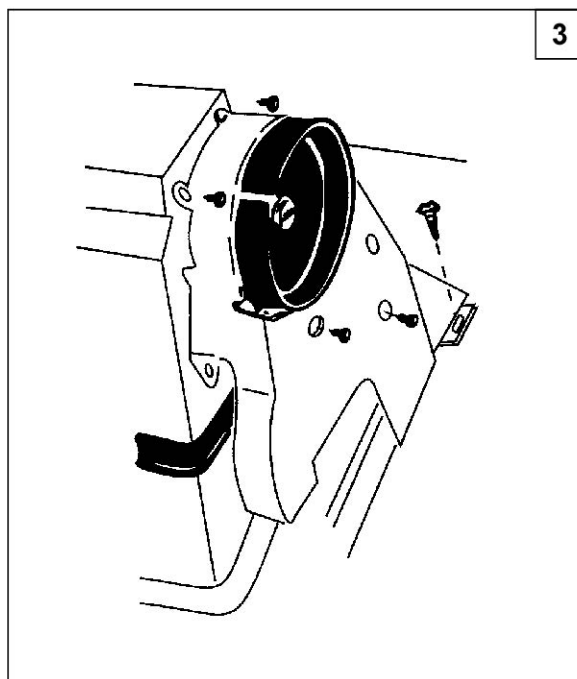


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5. 安装皮带防护罩(图3) / INSTALLING BELT GUARD (Fig 3)

从安全角度考虑，应安装皮带防护罩。

The belt guard should be installed for safety.

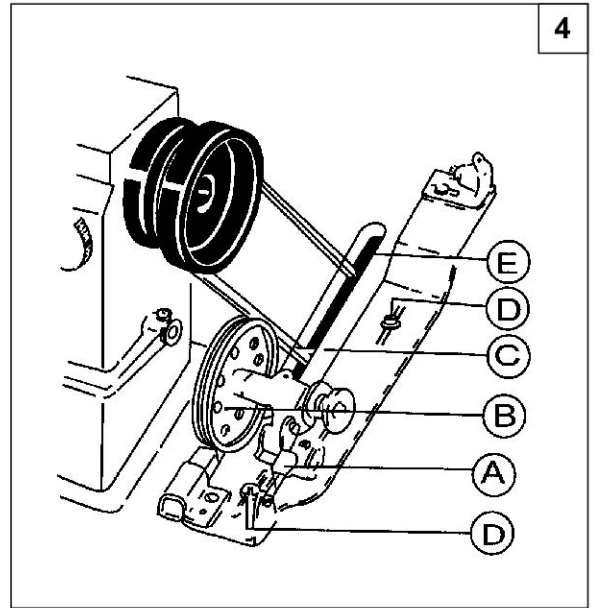


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6. 安装绕线器(图4) /INSTALLING THE BOBBIN WINDER (Fig 4)

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，先将绕线轮(B)对准皮带(C)的外边，绕线轮和皮带之间应有一定的间隙，并保证掀下绕线摆杆(A)时，绕线轮和皮带能保持相互接触。这样机器转动时，皮带将使绕线轮一起转动，并注意绕线器安装之左右位置，应与台板皮带孔(E)平行，最后拧紧自攻螺钉(D)。

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



7. 润滑(图5) /OILING (Fig 5)

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18#高速缝纫机油，运转前油量加至标记(A)。

3. 换油

旋下放油螺钉(C)，排净废油。

扫清油盘污尘，旋紧放油螺钉(C)，加注新油。

1. Required amount of oil.

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

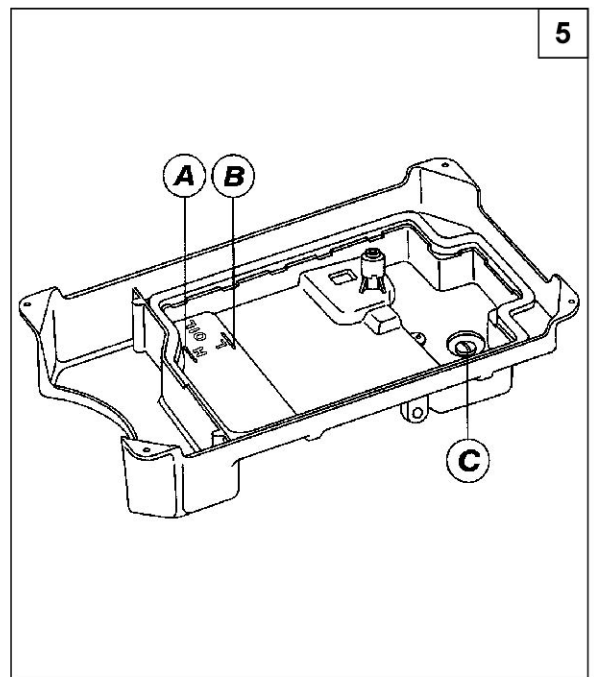
Line(B) on the oil reservoir: Min.oil level. If oil level goes down under line(B), oil cannot be distributed to each part of the machine, thus causing the parts a seizure.

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

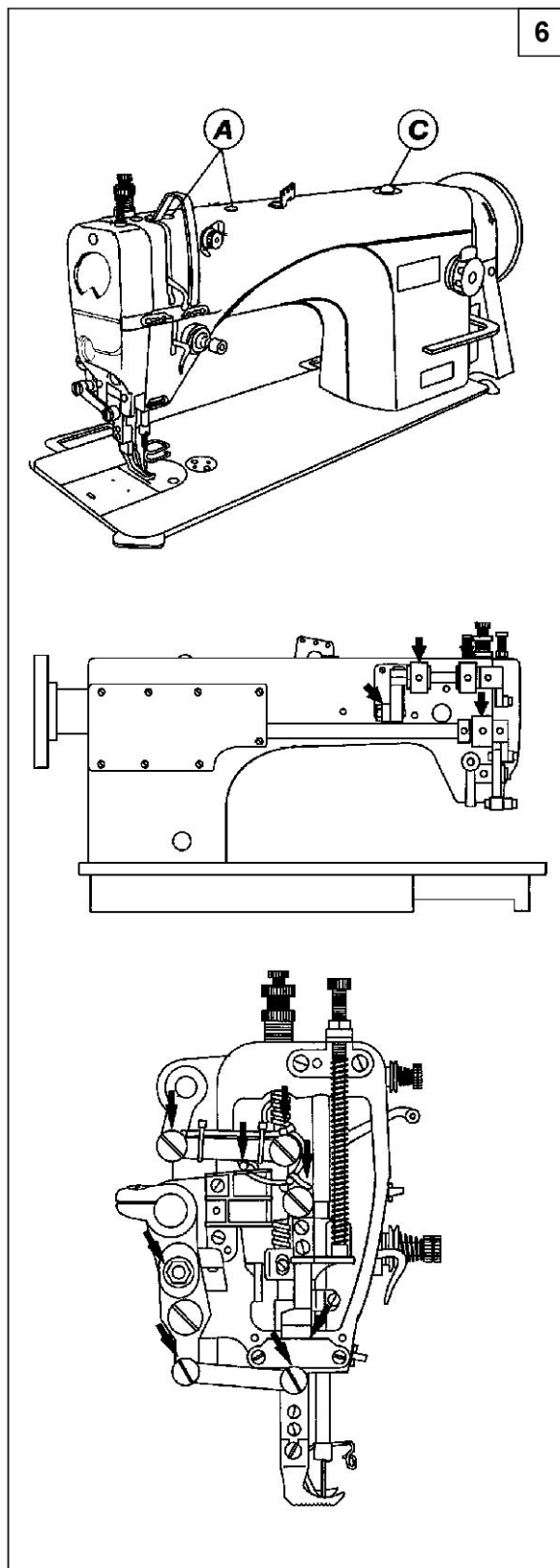
To replace oil, remove Screw(C) to drain oil. After completely draining off oil, clean the oil reservoir and securely tighten Screw(C), then fill the reservoir with fresh oil.



8.试车(图6) / RUN-IN OPERATION(Fig.6)

新机器在开始使用和长期搁置重新使用时,先卸下机头上部的白色橡皮塞和面板,按图示的位置充分加油,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分钟的运转实验,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一定缝速。

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, the 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 months running to perfect its performance, then increase up to proper sewing speed.



9. 旋梭油量调节(图7) /LUBRICATION ADJUSTMENT(Fig.7)

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。

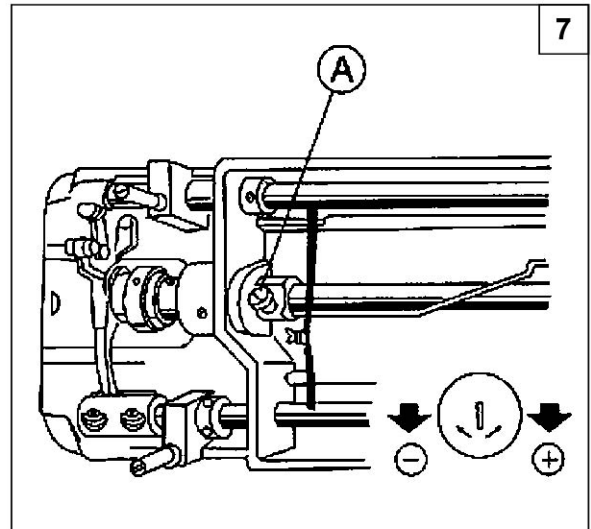
A. Adjusting oil pump.

In ordinary operation, adjustment is not required for the oil pump. If oil splashing does not occur in the oil check window when the machine runs at a low speed (approx. 2000spm),reduce the clearance of the by-pass hole.

B.Adjusting the lubrication of rotating hook.

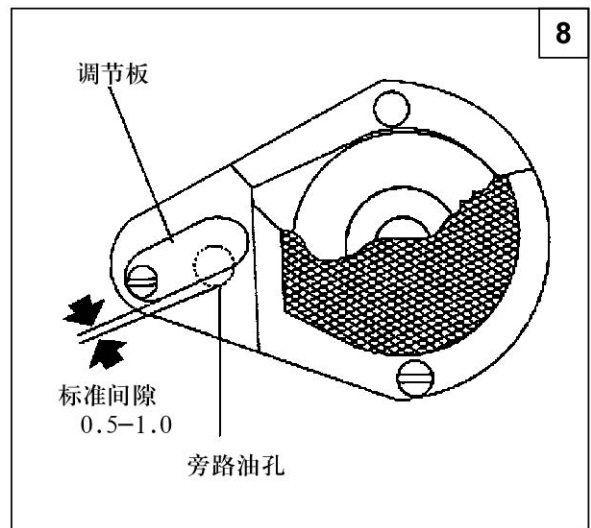
The lubrication of the rotating hook can be adjusted by Oil Adjusting Screw (A) as follows:

- 1) Turn Oil Adjusting Screw (A) clockwise to increase oil and turn Oil Adjusting Screw (A) counter clockwise 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.



10. 油泵进油调节(图8) /OIL PUMP SUPPLY ADJUSTMENT (Fig 8)

通常情况下，不作油泵进油调节，在低速运转时，观察油窗，无喷油现象时，请合拢间隙。Generally no adjustment is for oil pump, When the machine is running at a low speed, observe the oil screen. If no oil splashing,close the clearance.



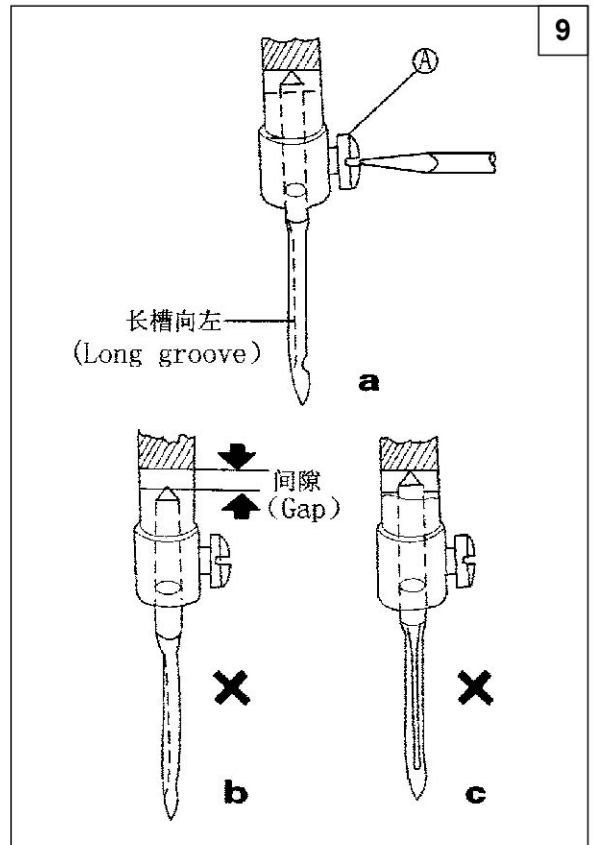
11. 安装机针(图9) / REPLACE NEEDLES (Fig.9)

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 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.

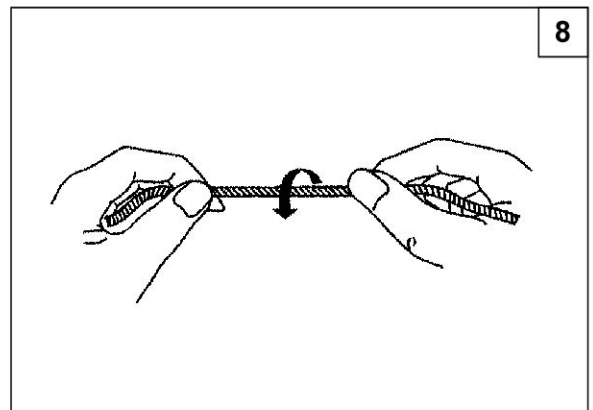
Fig.(c):wrong direction of long groove.



12. 机针、缝线和缝料的配合(图10) / COORDINATION AMONG THE NEEDLE THE THREAD AND THE MATERIAL(Fig10)

面线采用左捻线，低线则左、右捻均可使用，缝线捻向的鉴别，可按图十所示把缝线捏住，以后手按图箭头方向搓转缝线，若线股越搓越紧，则是左捻线，反之即为右捻线。

请使用DPx17型或I35x17型机针，机针的粗细应适合缝料的性质。如用过细的机针缝制紧厚的织物，机针就容易折断，也会引起跳针、断线等现象。相反如果用过粗的机针缝制紧密的织物，则会因针孔太大而损坏织物。所以应根据缝料性质不同，机针和缝线的粗细都要适当地进行选择。



The needle thread is left-twisted, the bobbin thread is left or right-twisted. Holding the thread, twist it with right hand in the direction of arrow shown in Fig 10, if it is tight, it is left-twisted, co-ntrarily, it is right-twisted.

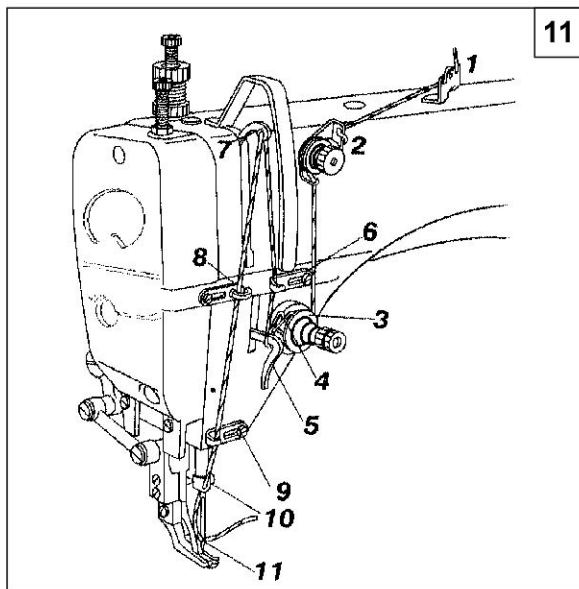
The needle is DPx17 20#~24# (JK-6320CXDPx17 25#), the needle number must be fitted for the materials. Sewing too heavy the weight of ma-terials,the needle would be breaking and skipping stitch and thread breaking for its too thin, if the needle is too thick, it would damage the clothes for its large needle hole. There for, the selection of needle and thread must be fitted to the materials.

13.穿面线(图11) / THREADING(Fig.11)

穿面线时针杆应在最高位置,然后将线架上引出线头按顺序穿线。

- (a) 穿过上面三孔线勾1.
- (b) 穿过机壳上部小夹线过线板②上的左过线孔,再通过小夹线板,然后穿过小夹线过线板②上的下过线孔。
- (c) 在夹线座的夹线板③之间通过。
- (d) 向上穿过挑线簧④,经过大线勾⑤和线勾⑥,向上从右向左穿过条线杆⑦的穿线孔。
- (e) 向下通过面板线勾⑧,下线勾⑨,及针杆过线环⑩,从左面穿过孔机针11的针孔,并引出100毫米左右的线备用。

引底线时,先将面线头捏住,转动主动轮使针杆向下运动,在回升到最高位置,然后拉起捏住的面线线头,低线即被牵引上来,最后将低、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 ① on the top.
- (2) Pass down thru the left hole of thread retainer ②, then down thru the lower hole of thread retainer ②.
- (3) Pass down thru between the two tension disc ③.
- (4) Pass up thru the hook of thread take-up spring ④, thru thread regulator ⑤, thru thread guide ⑥ and up thru the hole of thread take-up lever ⑦.
- (5) Down thru thread guide ⑧, ⑨, and needle bar thread guide ⑩, then pass the thread from the left thru the eye of needle ⑪, draw out the thread approx 100mm from the needle eye.

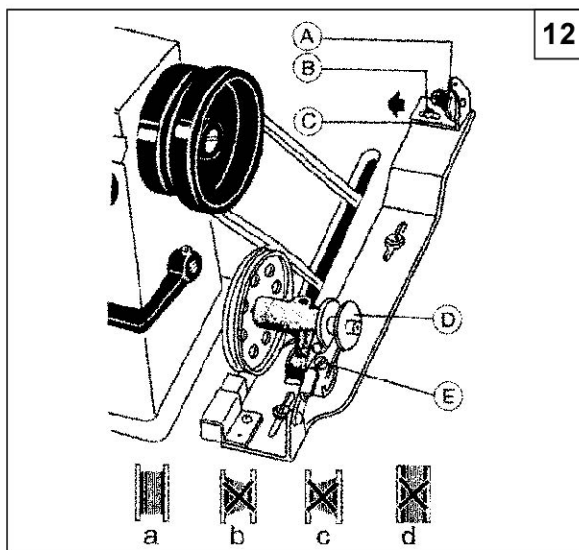
When drawing the bobbin thread, hold the tip of the needle thread by hand, turn the balance wheel to lower the needle bar and then to lift it to its highest position. Pull the needle thread and then the bobbin thread is drawn up. put the tips of the needle and bobbin thread toward front under the presser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

14. 绕线调节(图12) / WINDINGADJUSTMENT(Fig.12)

梭心线应排列整齐而紧密。如松浮不紧,可以加大过线架夹板(A)的压力。如排列不齐,则要移动过线架(C)的位置进行调整。调整时,先松开过线架螺钉(B),单边绕线成图十二(b)时,向右移动过线架;单边绕成(c)时向左移动过线架,使之能自动排列整齐成图(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 be 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 Fig7(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.

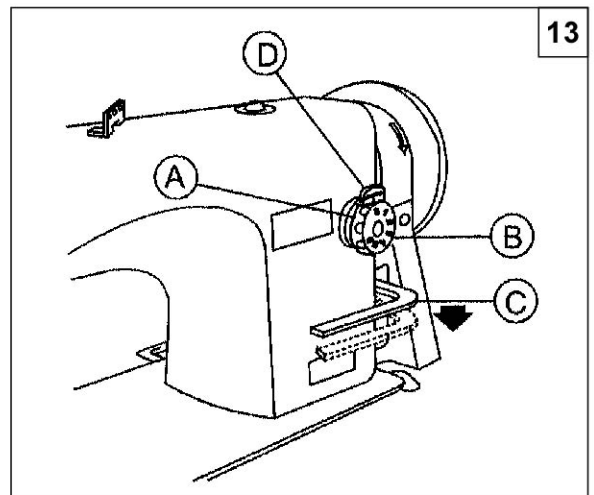
15. 针距、倒顺送料(图13) / ADJUST THE PRESSURE OF PRESSER FOOT(Fig.13)

针距的长短，可以用转动针距标盘(A)来调节。逆时针转动时针距调长；顺时针转动时针距调短。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)。注：调节针距时，要把针距按键(D)往里掀压，调整好后放手复位。

需要倒向送料时，可以将倒缝操作杆(C)向下掀压，即能进行倒缝，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.



16. 挑线部位进油 (图14)

挑线，针杆部位采用羊毛软线进油。长期使用后，如失去正常的进油作用，软(油)线被污染或硬化，就应更换新的羊毛软线，更换方法如下：

a. 打开机头面板，卸下调压螺钉、调压螺钉锁紧螺母和压紧杆等。

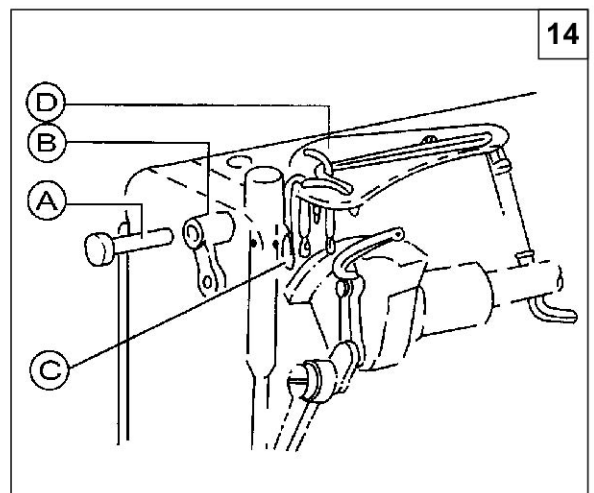
b. 再卸下挑线连杆铰链轴(A)和挑线连杆(B)。

c. 拉出针杆上套筒的软油线(C)。

d. 旋松机壳顶部(左方)上两只油线固定板螺钉，把油线固定板(D)从机头中取出。

e. 重新换羊毛软线。

f. 安装的过程是上述过程的相反。



Thread take-up section adopts woolen thread oiling. after long time of use, its function lost, so replace with a new one.

- ① Open the face plate, remove the pressure screw, lock nut and presser bar.
- ② Remove Hinge(A) and Lever (B)
- ③ Draw out Oil wick(C).
- ④ Loosen the wick fix screw on the arm top, and take out Set Plate (D).
- ⑤ Replace with a new one.
- ⑥ Installing is a reverse sequence.

17. 压脚压力调节(图15) / ADJUST THE PRESSURE OF PRESSER FOOT(Fig.15)

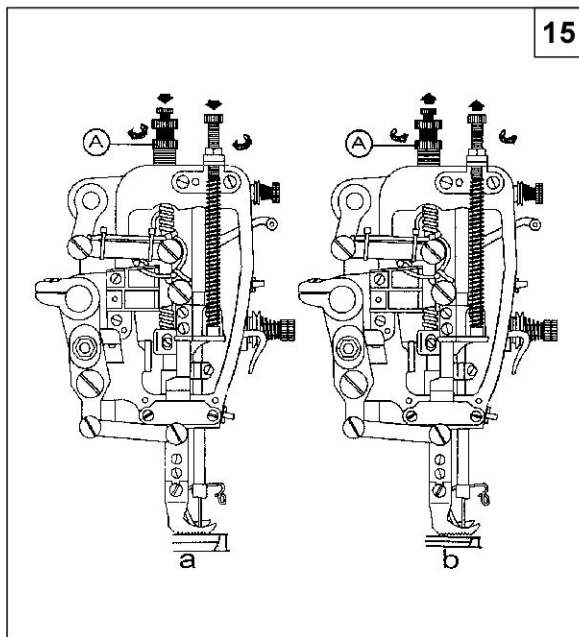
压脚的压力, 要根据缝料的厚度加以调节。首先旋松调压螺钉锁紧螺母(A), 缝厚料时, 应加大压脚压力, 这时将机头顶部的调压螺钉按图 a 所示箭头方向转动, 反之, 缝薄料时, 可按图 b 所示的方向转动调压螺钉, 以减少压脚的压力。最后旋紧调压螺钉锁紧螺母(A)即成。

压脚的压力, 应以能正常推送缝料为宜。

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.



15

18. 缝线张力(图16、17) / ADJUST THREAD TENSION(Fig.16、17)

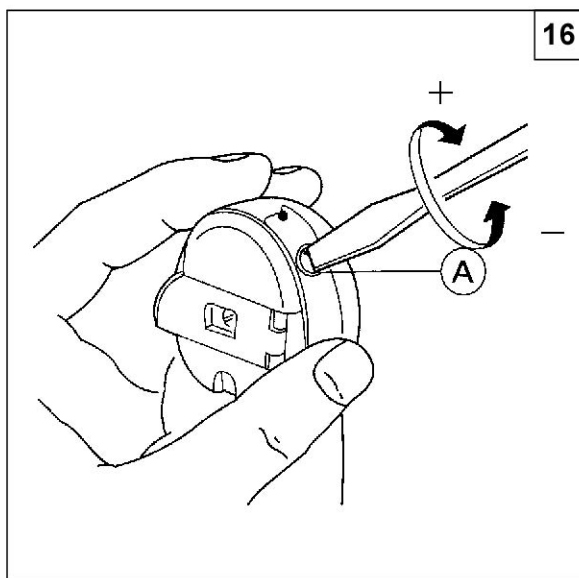
缝线的张力要根据缝料的差别, 缝线的粗细以及其他一些因素变动。

实际使用中, 是根据缝纫出来的线迹, 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)加大或减小底线压力即可。

一般来说, 底线如果用50#涤纶线, 梭心装入梭心套后, 拉出缝线穿过锁芯套线孔, 捏住线头吊起锁芯套, 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础。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, 夹线簧张力及线勾的位置等。

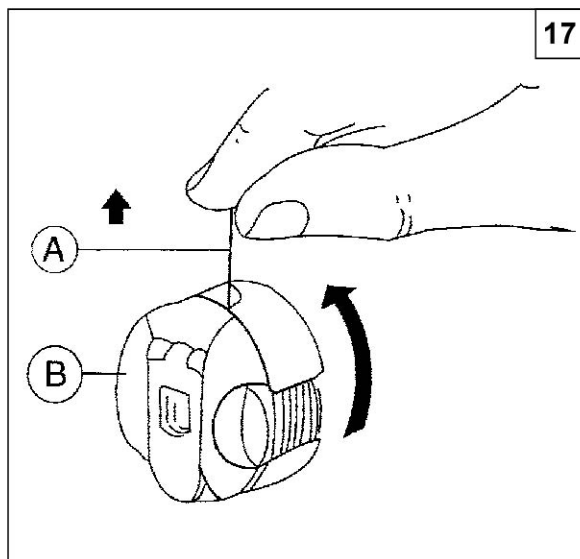


16

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



17

19.挑线簧调节(图18, 19) / ADJUST THREAD TAKE-UP SPRING(Fig.18,19)

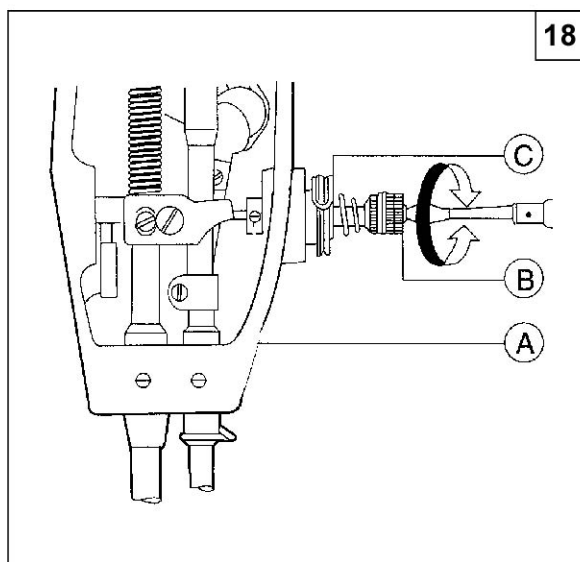
挑线簧摆动幅度为5~8 毫米。缝纫薄的缝料(短针距)则要减弱挑线簧的张力放宽摆动幅度, 缝制特别厚的缝料则反之。

1、挑线簧张力调节

先将松夹线调节座螺钉(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, 最后旋紧夹线调节螺钉座(A)。



18

The normal sewing range of thread take-up spring is 5-8mm. 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 clockwise to make the spring get less tension, After adjustment, Be sure to tight tension stud set screw (A).

The method of adjustment:

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

2. 挑线簧摆动幅度的调节

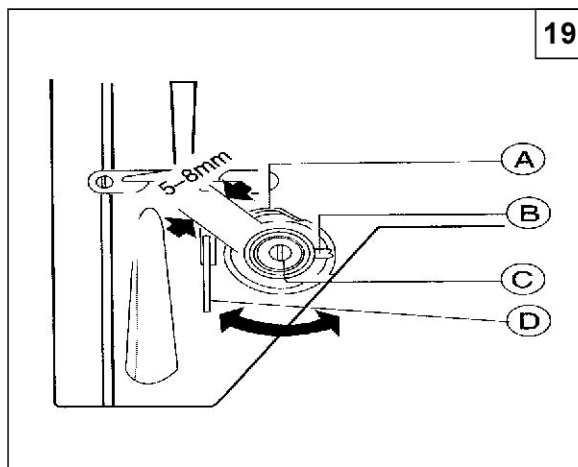
旋松夹线调节座固定螺钉(B)，转动夹线器(C)，调节其摆动幅度，夹线器(C)顺时针转动，摆动幅度增大，反之则减少。

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料时，才需要重新进行调整。

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.



19

20. 底面线张力调节(图20、21、22)/ADJUST THREAD GUIDE AND THREAD TENSION(Fig.20、21、22)

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。

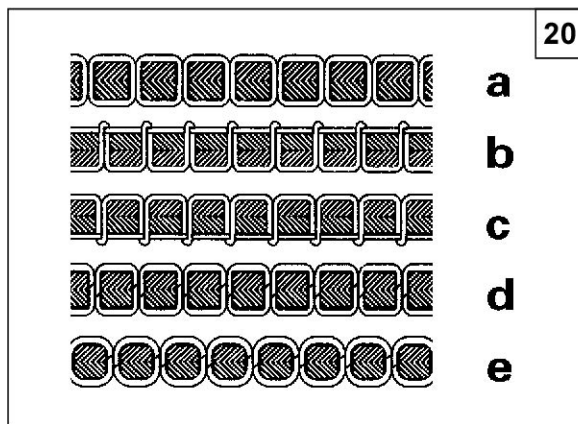
线 勾 位 置	左 侧	中 间	右 侧
缝 料	厚 料	中厚料	薄 料

缝纫机的正常线迹应该如图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。

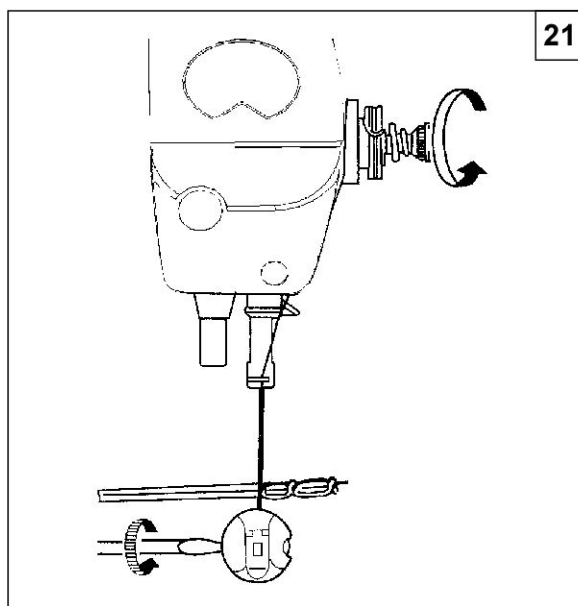
a、如果面线太紧，底线太松，则应逆时针旋转夹线螺母，放松面线的压力。或用小号螺钉起子旋紧梭皮螺钉，加大底线的压力。

b. 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，减少底线的压力。

c. 如出现图d、e的线迹，也可以参加照上述方法加以调节。



20



21

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




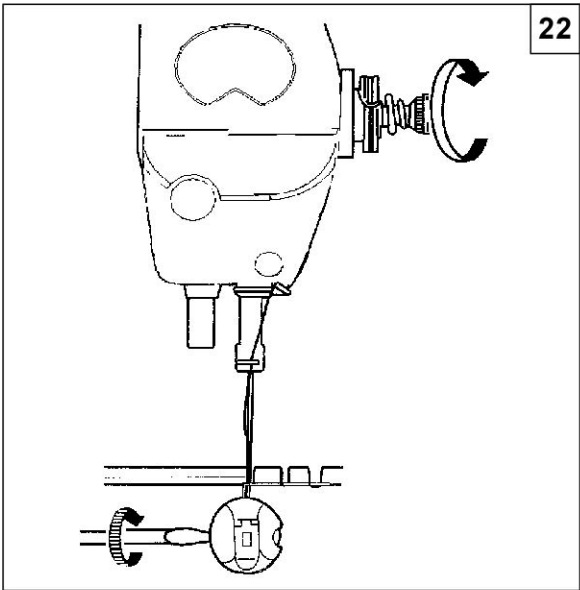
Thread guide position	Leftward	Center	Rightward
			
Material weight	Heavy	Medium	Light

Fig20 shows different stitch forms. Normal stitch form should be as shown in Fig.20(a). When abnormal stitches cause puckering and thread break-age, 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.20(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.21)
- 2) In case needle thread tension is too weak or bobbin thread tension is too strong, as shown in Fig.20(c), turn the thumb nut clockwise to increase the needle thread tension. or loosen the tension spring regulating screw of bobbin case to decrease the bobbin thread tensio.
- 3) In case of the stitch forms as shown in Fig.20(d) and (e), adjustment can be made with reference to the above means.

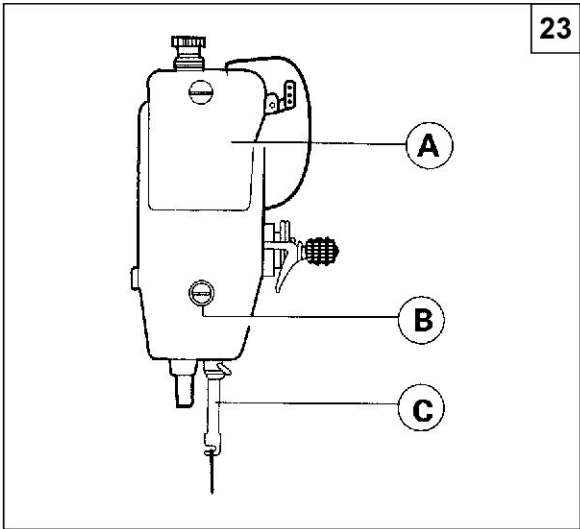
21.机针与旋梭同步调整(图23、 24、 25、 26)/ TIME NEEDLE TO ROTAING HOOK (Fig.23、 24、 25、 26)

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)，初步定出同步位置(针杆的同步位置，当针杆下降至最低位置时，机针线孔的中心(D)应与旋梭内周面(E)在同一位置上。如图24所示位置)。旋紧针杆接头螺钉(B)，塞上橡皮塞即成。

1. Adjusting the needle position (See Fig.23)

- 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 (SeeFig.24) is to align Timing Mark (B) on the needle bar and thebottom 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.



2、旋梭同步的调节：

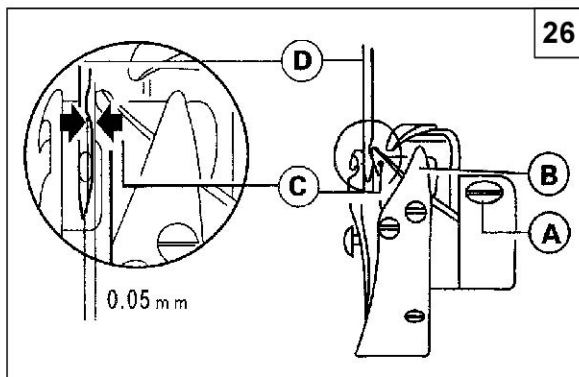
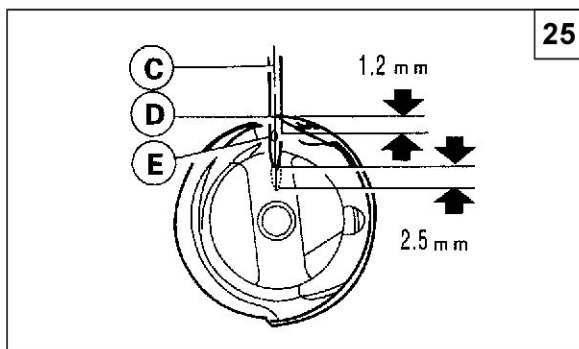
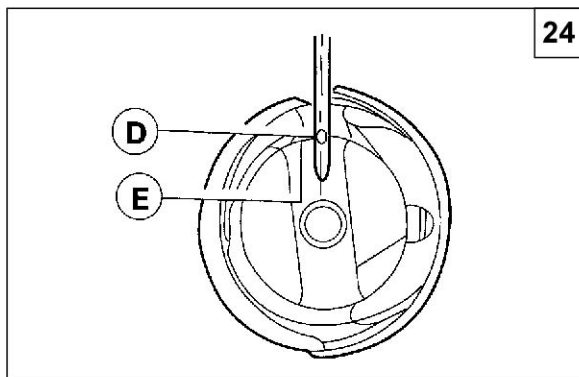
旋梭和机针之间的相互运动关系，对缝纫性能的影响很大。标准的同步关系是：用手转动上轮，使机针向下运动到最低位置后在向上回升2.5毫米，这时旋梭钩线尖(D)，应与机针的中心线(C)一致，在此位置时，钩线(D)应高于机针线孔(E)上边约1.2毫米。

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，底部于旋梭钩线尖(C)的间隙为0.05毫米。

2. 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.25) is to align Hook Point (D) and Needle Centerline (C) when Needle Bar (B) is lifted by 2.2mm from the lower end of its stroke. Besides, Hook Point (D) should be 1.0-1.5mm above the upper end of needle eye (E).

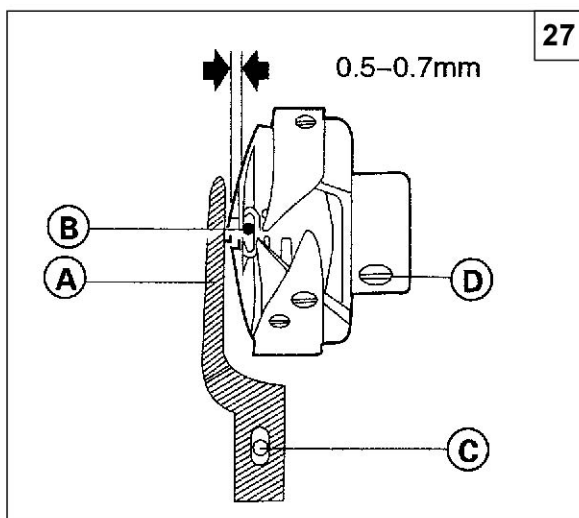
When adjusting the hook point timing, also notice that the clearance between the bottom of needle notch and Hook Point (C) should be approx.0.05mm (See Fig.26)



22.旋梭装卸 (图27) / REPLACE ROTATING HOOK (Fig.27)

先将针杆上升到最高位置，拆下针板，取下机针和梭心套。旋下定位勾螺钉(C)，把旋梭定位勾(A)取下。再旋松旋梭螺钉(D)。使旋梭在它的转动轴上能够自由转动，接着用手转动上轮，使送料牙架走向高处。到此，可以用手去旋转旋梭，使它让过牙架徐徐取出。安装旋梭过程是上述过程的回复。

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。另外其两侧面之间隙为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 Screws (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 0.5-0.7 mm between them.

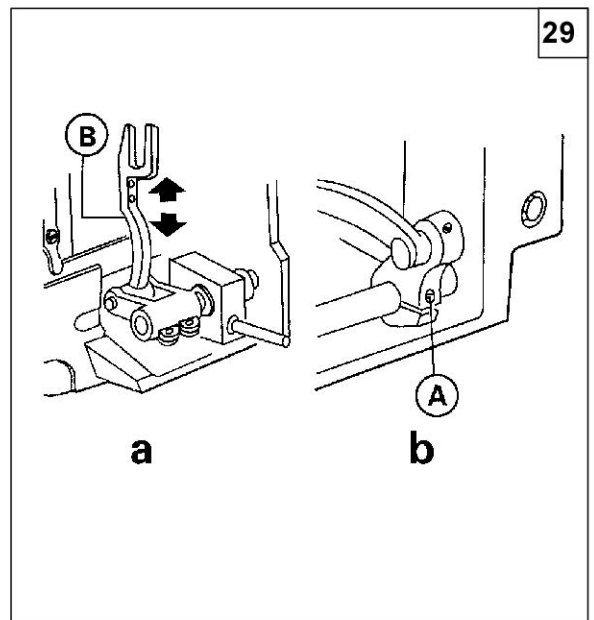
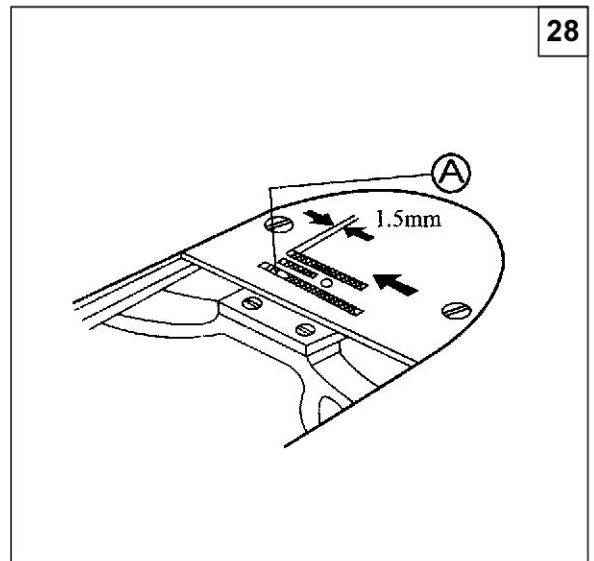
23. 送布牙安装 (图28、 28) / ADJUST THE POSITION OF FEED DOG (Fig.28、 29)

a. 当送布量最大，送布牙(A)前端靠近针板槽前侧时，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。

b. 调节送布牙位置时，先让送布牙运动至针板最前侧停止，然后旋松送布轴曲柄螺钉(A)(见图29b)，将牙架(B)按图29a所示箭头方向移动，以调节位置，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.28.

- 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. 29(b).
- 3) Move Feed Bar (B) in the direction shown by the arrow in Fig. 29 (a) to adjust the feed dog position.
- 4) After the adjustment, be sure to tighten Screw (A).



24.送布牙平面调节 (图30) / Feed dog horizontal Adjustment (Fig 30)

送布牙一般是水平位置。高于针板平面0.8~1.2毫米当缝制条件需倾斜时应调节。

a. 旋松牙架曲柄轴螺钉 (A)。

b. 用螺钉起子压在牙架曲柄偏心轴的槽里, 使偏心轴左右转动。

c. 最后将 (A) 螺钉拧紧。

送布牙前面高时, 可防止布料起缩, 不容易出现空针。

送布牙前面低时, 可防止布料跑偏, 底线不易断。

Feed dog is 0.8~1.2mm above the surface of throat plate horizontally.

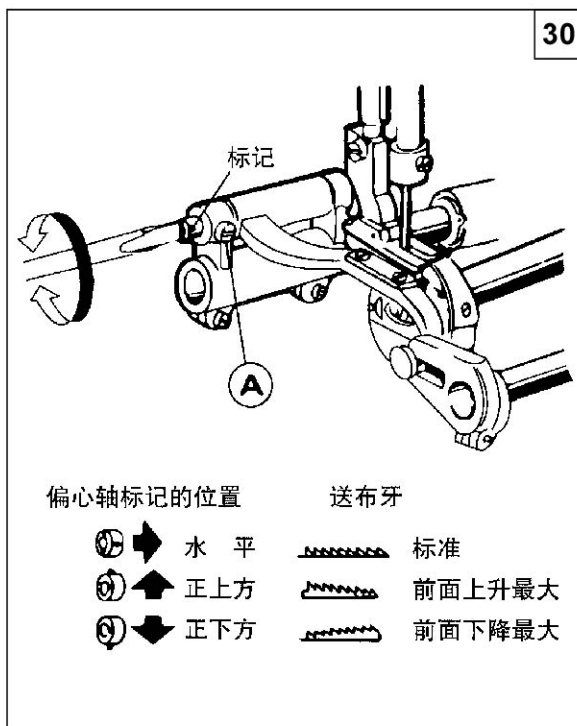
When sewing condition requires tilting, adjust like this:
Loosen screw (A).

Press against the slot of eccentric shaft with a screw driver to turn eccentric shaft left and right.

Tighten screw (A).

The front of feed dog is higher, which can prevent perckering and no skipping.

The front of it is lower, which can prevent maferial sliding and no breakage of bobbin thread.



30

25.针距误差调节 (图31) / Stitch length error adjustment (Fig 31)

旋松螺钉 (A) 转动针距调节凸轮 (B)

顺时针转: ——顺缝针距变大。

倒缝针距变小。

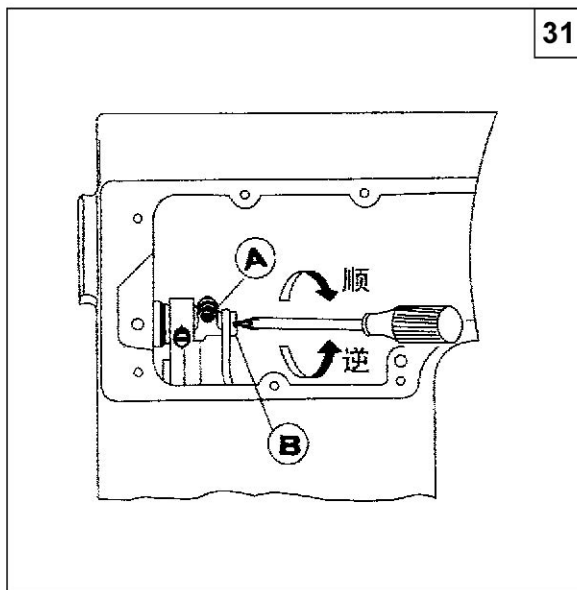
逆时针转: ——顺缝针距变小。

倒缝针距变大。

Loosen screw (A), and turn stitch length adjusting cam (B).

Turn clockwise: forward sewing, stitch length enlarged;
reverse sewing, stitch length shorten.

Turn counter-clockwise: forward sewing stich length shorten; reverse sewing, stich length enlarged.



31

26. 送布同步调节 (图 32、33、34) / Feed timing adjusting (Fig 32 33 34)

1、标准位置

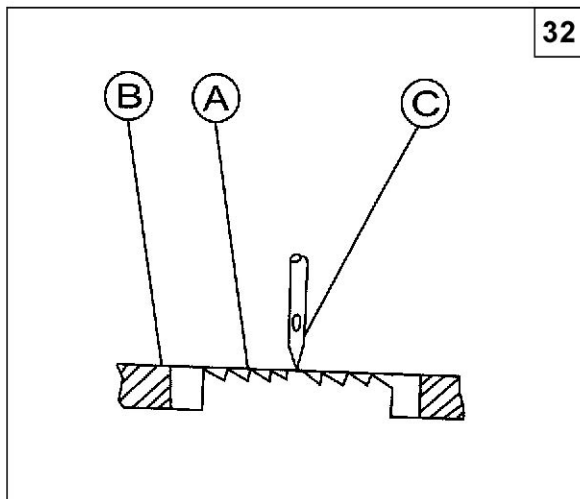
转动上轮，降低送布牙(A)，当和针板表面(B)相平时，机针(C)的针尖应与针板、送布牙表面同在一水平面上。

调整可以通过调节送布凸轮和抬牙凸轮的安装位置进行

1. Standard position

Turn balance wheel to lower Feed dog (A) till it is horizontal with the surface (B) of throat plate, at the moment, the tip of needle (C) should be horizontal with the surfaces of throat plate and feed dog.

Adjustment can be done by adjusting the position of feed cam and feed dog lift cam.

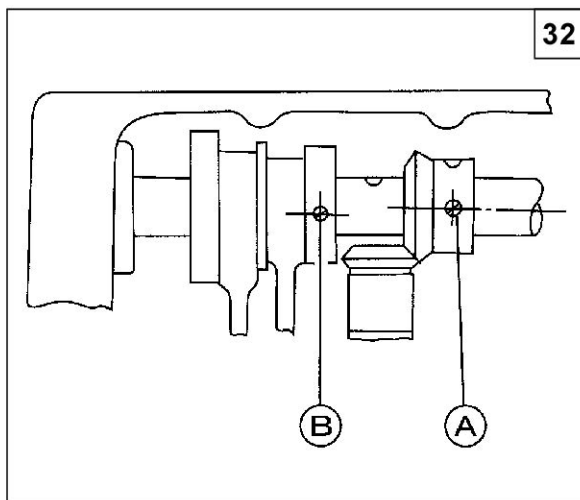


2、抬牙凸轮的安装

打开后盖板，卸下挡油板，用左手逆时针转动上轮，以上轴齿轮第二只固定螺钉(A)为基准，抬牙凸轮的第三只固定螺钉(B)中心，将对齐(A)中心，稍微向下偏一点。

2. Installing feed dog lift cam (See Fig 33)

Open the back side cover, turn balance wheel by left hand counter-clockwise, take screw A as for the standard, the center of screw B is slightly a little lower than the center of screw A.

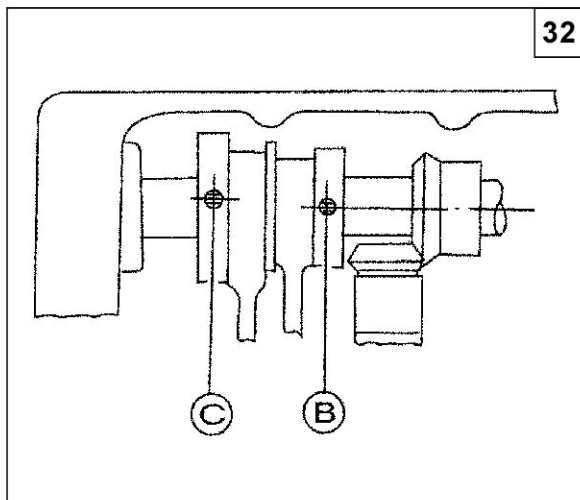


3、送布凸轮的安装

继续逆时针转动上轮，以抬牙凸轮第二只紧固螺钉(B)为基准，送布凸轮的第三只紧固螺钉(C)中心，将对齐(B)中心，稍微向上偏一点(如将两螺孔缺口标记对成一直线亦可)。

3. Installing feed cam (See Fig 34)

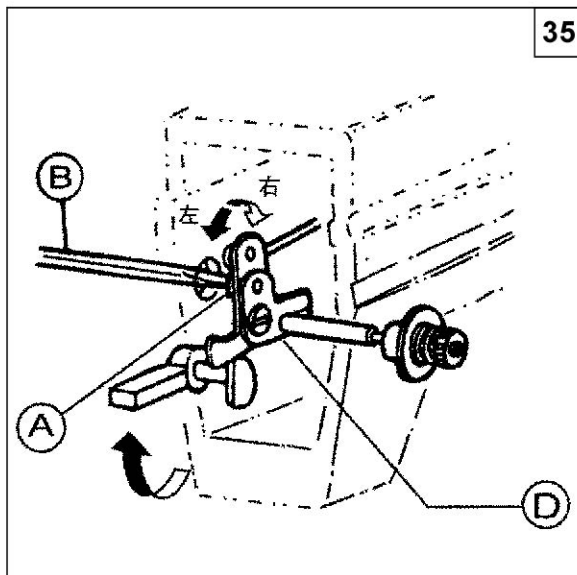
Continuously turn balance wheel, take screw (B) as for standard, the center of screw (C) is slightly a little higher than the center of screw (B).



27. 松线器挺线调节 (图35) / ADJUST OPENING TIME OF THE TENSION DISCS (Fig. 35)

压脚在提升范围内，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擦，用螺丝刀(B)旋松膝控提升杠杆(左)螺钉(A)，这时松线凸轮可以左右转动，往右移挺线慢，往左移挺线快。

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 lifting lever (left), then the tension releasing cam can be moved leftward or rightward when the cam is moved right-ward. it is later to open, otherwise it is earlier to open.



35

28. 上送料机构的调节 (图36) / Adjusting the tension releasing mechanism (Fig 36)

上、下同步送料是该产品的重要性能之一。在缝纫过程中，应根据各种缝料的摩擦系数的不同和缝纫工艺的不同要求，对上送料机构的摆压脚滑块与摆压脚轴的中心距(L)进行调节。

调节方法：

增大中心距L——上送料量增大。

减小中心距L——上送料量减少。

对于某些制品的特殊缝纫要求，如缝件的上层的送料量要求大于(或小于)下层的送料量，也可以根据以上原理在一定范围内调节使用。

During the sewing, the center gauge (L) between the walking foot sliding block and its shaft can be adjusted according to the differences of the friction coefficients of the friction coefficients of materials and the sewing process.

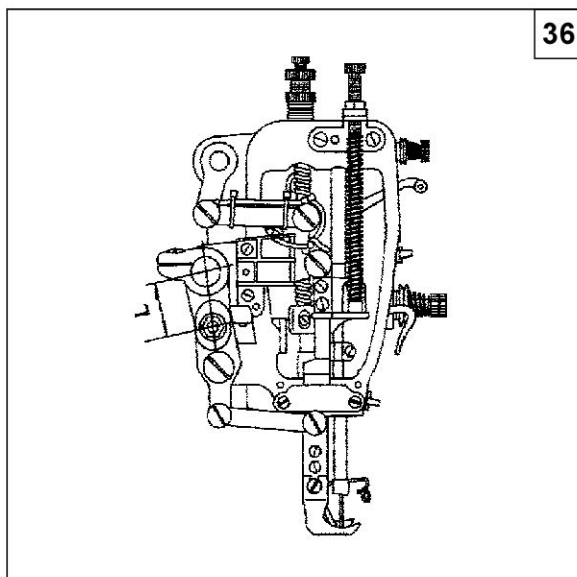
Method: Increase L---the upper feed amount

enlarged

reduce L--- the upper feed amount

shorten

For special sewing requirements, for example, the upper layer of material needs more amount than the lower layer does, in this case, adjustment can be done in the range of above theory for operation.

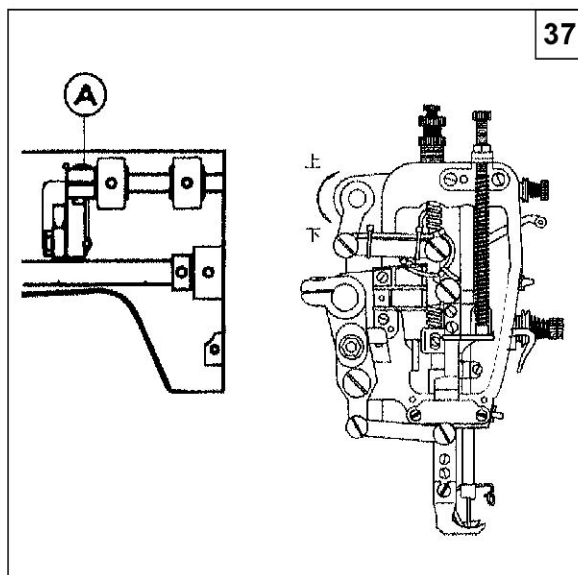


36

29. 压脚交叉提升机构的调节 (图37) / Adjusting presser foot alternate lift mechanism (Fig37)

根据缝料疏松和结实程度的不同，在缝纫中，对摆压脚、小压脚的交叉提升量，可在一定的范围内进行适当的调节。在一般的中厚料缝纫中，摆压脚提升量为5.5mm之内，小压脚提升时为3.5mm左右。当其它机构不变的情况下，两压脚提升量之和基本上是一定值。两提升量的变化近似于按反比定律变化。即：摆压脚的提升量增加，则小压脚的提升量就减少。反之亦然。

调节方法：旋松偏心轮连杆调节曲柄螺钉A，按图示向上转动压脚升降前曲柄，摆压脚的提升量增大，反之，向下转动，小压脚的提升量减少。但其调节量有一定的范围限调，不宜过大。调好后，将螺钉拧紧，用手转动上轮，检查一切正常后方可使用。



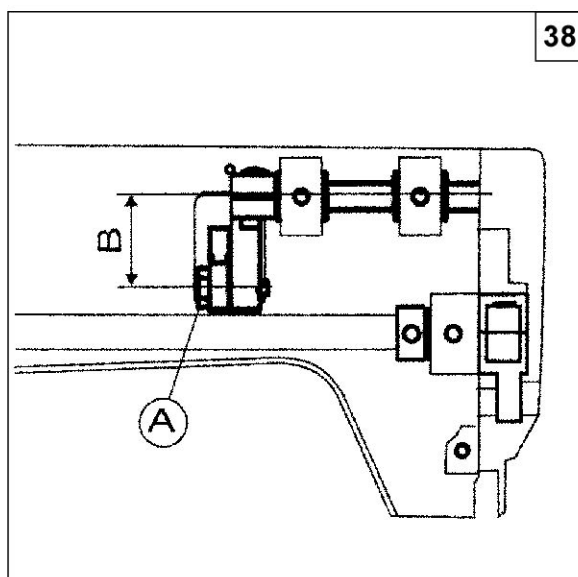
During the sewing, the alternate lift amount can be adjusted according to the nature of material. In general sewing, the amount of walking foot is 5.5mm, and the presser foot lift amount is 3.5mm.

Method: loosen the screw A, turn presser foot front crank up ward to increase the amount of walking foot, turn it downward to reduce the presser foot amount, the range of adjusting amount is not too

30. 摆压脚、小压脚总提升量的调节 (图38) / Adjusting the lift amount of presser foot together with walking foot (Fig 38)

在缝纫过程中，要改变摆压脚、小压脚的提升量，其调节方法是：先将偏心轮连杆螺钉(A)旋松，然后调节该螺钉与压脚升降轴中心距B；如果使摆压脚、小压脚的提升量都增加，则使中心距B调小；反之，则可使提升量都减少。其调节量也有一定的范围，调节幅度不宜过大，调节好后，将螺钉拧紧，慢慢转动上轮，检查有无碰撞现象，一切正常后方可使用。

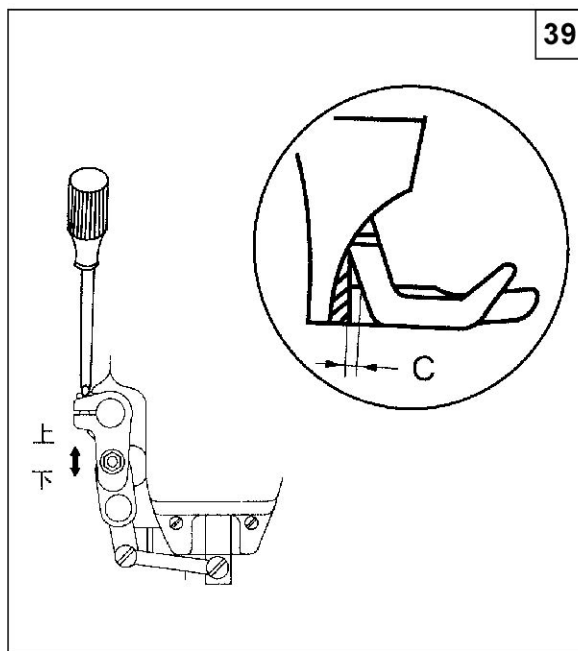
The lift amount of walking presser foot together with presser foot can also be adjusted slightly. When adjusting, loosen screw (A) adjust its center distance B between the screw (A) and the presser foot lift shaft. The lift amount is increased as to shorten the center distance B, and the lift amount is decreased as to widen the center distance B. After adjustment, tighten the nut again.



31. 摆压脚、压脚前后方向间隙的调节(图39)/ Adjusting the clearance between presser foot and walking foot(Fig39)

在缝纫过程中，有时用大针距缝纫，有时用小针距缝纫，在大针距缝纫时，摆压脚前后的行程比较大。反之，就小了。为了在缝纫过程中，使摆压脚槽的前端与小压脚后端面不碰撞，且保证有一定的间隙C(一般取1.5mm左右)。故在小针距缝纫时，需要摆压脚向针杆靠拢点，调节方法：首先旋松摆压脚前曲柄螺钉，然后向上转动压脚摆动轴，则摆压脚就向针杆靠拢，调节时，应该注意间隙C的定值要求。

In sewing operation, for preventing the walking foot from striking on presser foot a proper clearance C of approx. 1.5mm should be maintained between them. When the clearance is too small or too big, necessary to adjust, loosen rear crank screw and turn the rock shaft, then the walking foot moves near the needle bar. When adjust, be sure to note the fixed number of the clearance C.



32. 定期清扫 (图40、42、42) / Periodical cleaning (Fig 40 42 42)

请根据使用程度,定期进行清扫送布牙、旋梭、梭心套和油泵滤网等。

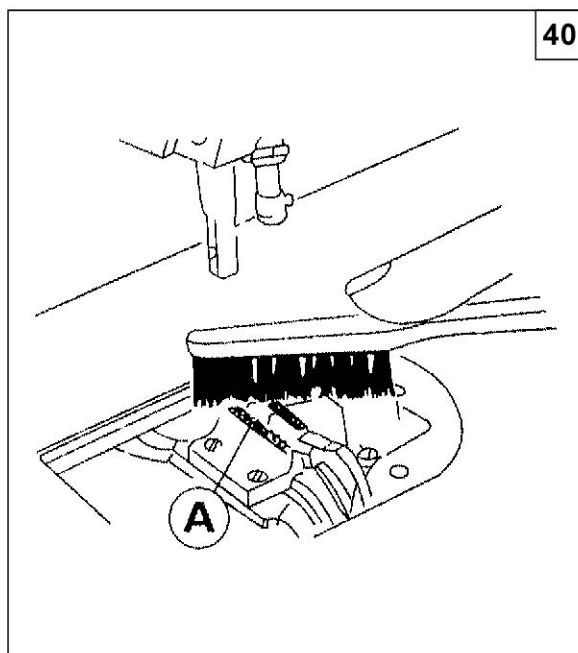
Clean the feed dog, the rotating hook, the bobbin case, the oil pump, filter screen and like perodically according to customer's usage.

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。

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.

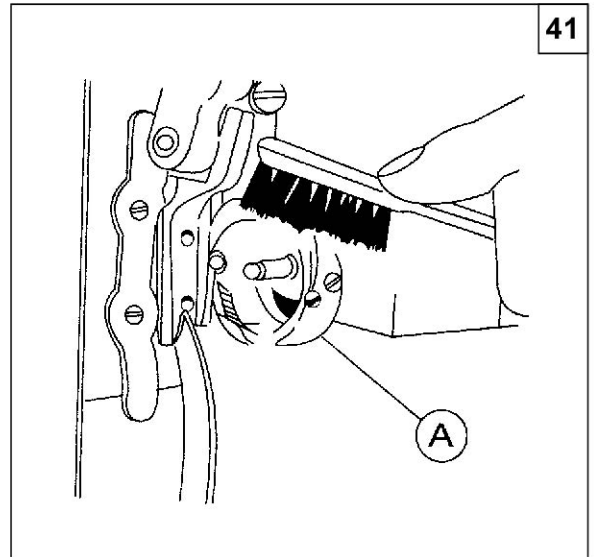


2、旋梭的清扫

清除旋梭(A)周围的尘垢，如图所示，同时用软布试擦梭心套。

2. Cleaning the rotating hook

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



3、油泵滤网的清扫

如图所示，清除滤网(A)上的尘屑。

3. Cleaning the oil filter

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

