

## 1.主要技术规格 MAIN SPECIFICATIONS

适用范围: Sewing material:	中厚料、厚料, (0302CX、粗线、厚料); Leatheroid or thick jean
最高缝速: Max sewing speed:	2000针 / 分; 2000SPM
针距: Stitch length:	0~8毫米; 0~8 mm
压脚提升高度: Presser foot lift:	手动8毫米, 膝控16毫米; 8mm by hand, 16mm by knee
采用机针: Needle:	DP × 17 20# ~ 23#, (0302CX 25#); DP × 17 20# ~ 23#, (0302CX 25#)
供油方式: Lunbrication:	全自动供油; Auto lunbrication.

## 2.操作准备 PREPARATION

### (1) 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,如有应作适当的调整,机器情况正常后才可正式试车。

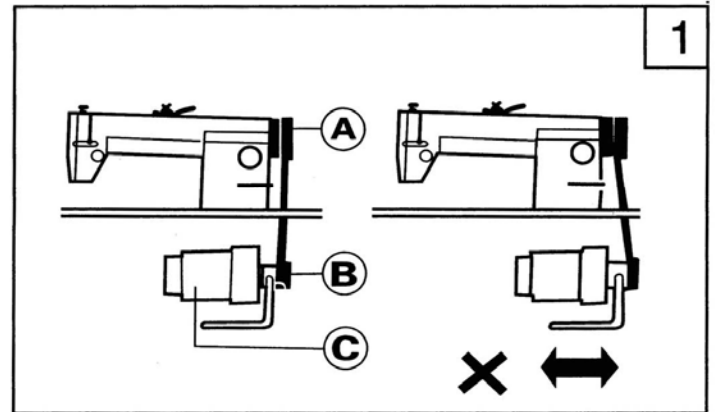
### (1) Examination

Though every machine is confirmed by strict in spection and test before leaving the factory, the machine parts may be loose or deformed after long distance transportation with jolt. Athrough examination must be performed after cleaning the machine. Turn the balance wheel to see if there is running obstuction, 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) 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。

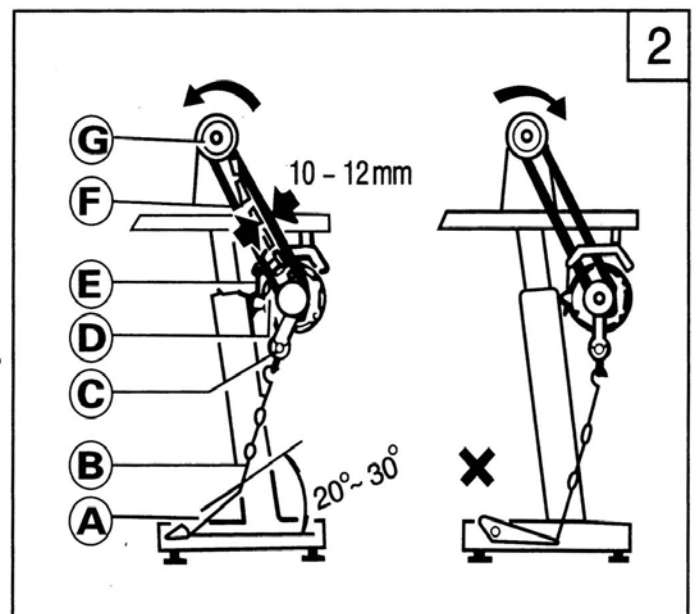
Align machine balance wheel belt groove (A) with motor pulleybelt groove (B) by moving the motor (C) leftward or rinhward. Be sure the belt is not touch with table.



## 4.踏脚板与离合器拉杆连接 (图2) CONNECTION OF THE CLUTCH LEVER WITH THE PEDAL(Fig2)

- 踏脚板安装的倾斜度应与地面成 $20^{\circ} \sim 30^{\circ}$ 角为宜。
- 调整电机离合器,使机架拉杆 (B) 与离合器拉杆连成一直线。
- 缝纫机运转方向,从机头主动轮外侧看,应是逆时针方向。电机的转向应一致,其转向可用电动机插头换转 $180^{\circ}$ 调整转向。
- O型三角皮带 F 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 $10 \sim 12$ 毫米程度即可。

- The optimun tilt angle of pedal is approximately  $20 \sim 30$  deg.
- Adjust the clutch so that the clutch lever (c) align with the draw bar (B) as shown in fig 2 .
- The machine pully should rotate counter clockwise when viewed from the outside of it. The rotating direction of motor pully can be reversed by turning the plug of the motor at  $180$  deg.
- Adjust the tension of O—Belt (F) by moving the motor up and down, the proper tension of the O—Belt is a slack of  $10-12$  mm when the belt is depressed at the center of the belt by finger.

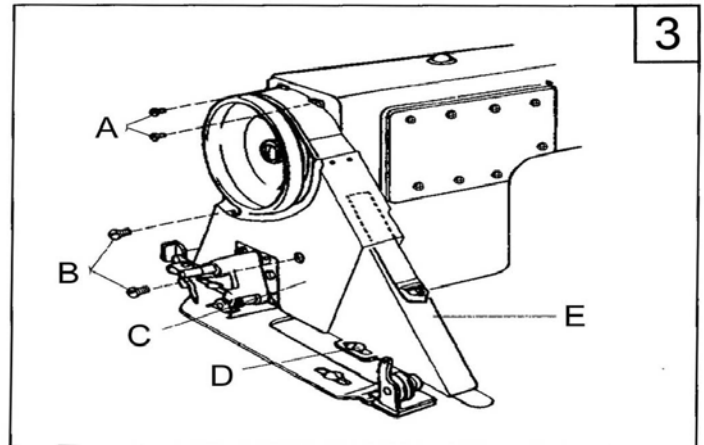


## 5. 安装皮带防护罩 (图3) BELT COVER INSTALLATION (Fig3)

从安全角度考虑, 应安装皮带防护罩。

Install the belt cover for the sake of safety.

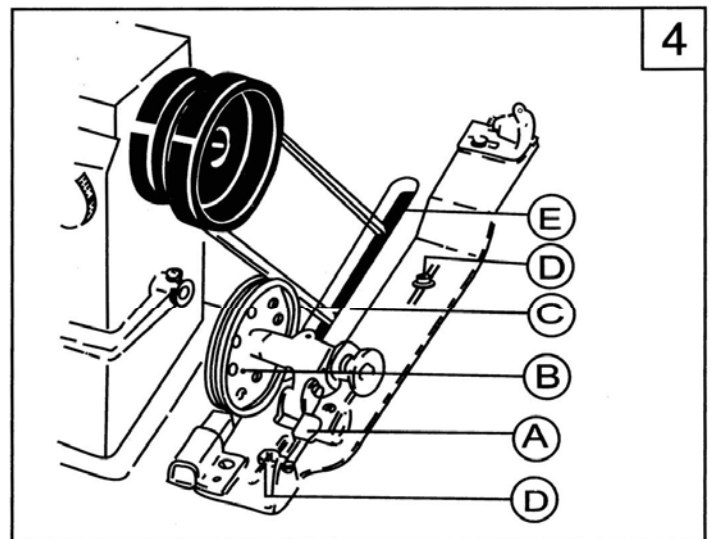
Install belt cover (C) to arm with screw (A) and screw (B), and install belt cover (E) on board with screw (D).



## 6. 安装绕线器 (图4) INSTALL 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, 并保证按下绕线摆杆 (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)。

Install the head and belt, then install the bobbin winder. Put the bobbin wheel(B) to the outside edge of belt(C), keep some gap between the bobbin wheel and belt, make sure when put-down the winder button(A), the wheel can be touched with the belt. When the machine works, the belt runs with the bobbin wheel. Pls note the position of the bobbin winder should be parallel with the belt hole of the table(E), finally fasten the screw(D).



## 7. 润滑 (图5) OIL FILLING (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

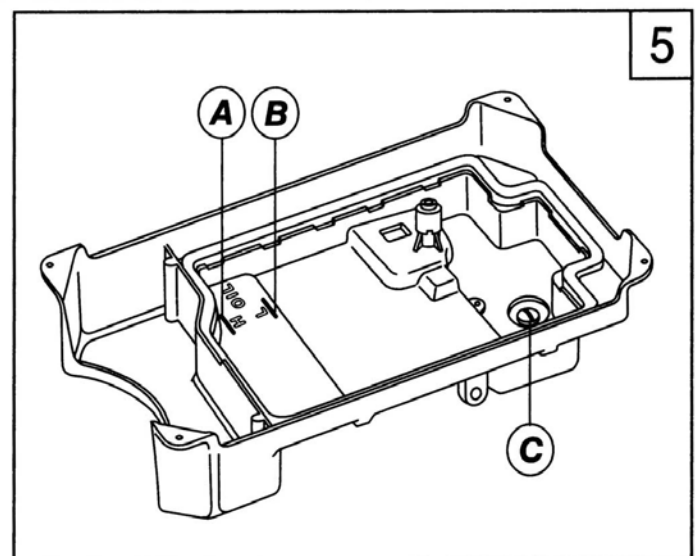
必须使用18# 高速缝纫机油, 运转前油量加至标记 (A)。

### 3. 换油

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。

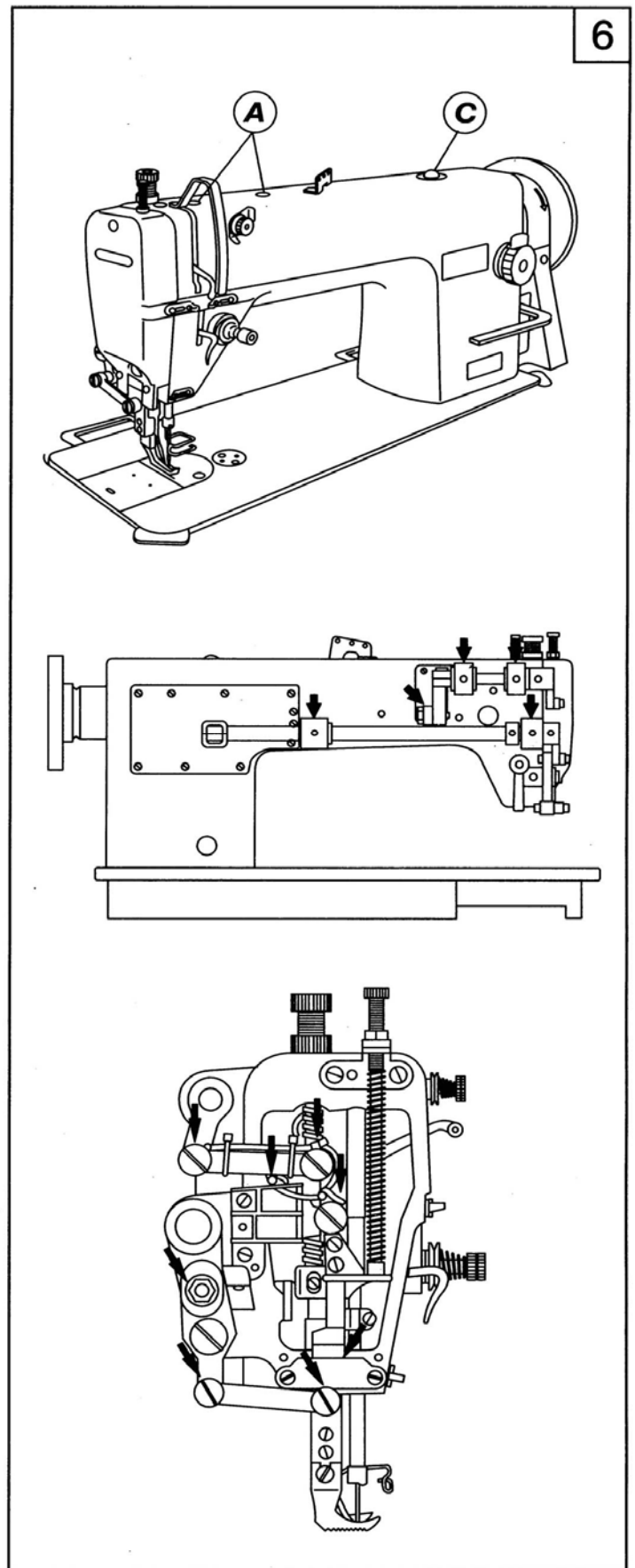
- (1) The oil amount in the oil reservoir is controlled through the reference marks A and B shown in fig5. the mark A indicates the max oil amount level, and the mark B is for the min oil amount level. If the oil amount level is under the mark B, replenish the oil reservoir with oil in time.
- (2) When filling oil, loosen the oil draining screw (c), drain off the remaining oil in the oil reservoir completely, clean the oil reservoir and tighten the oil draining screw (c), then fill the oil reservoir with fresh oil



## 8.试车 (图6) TRIAL RUN (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。

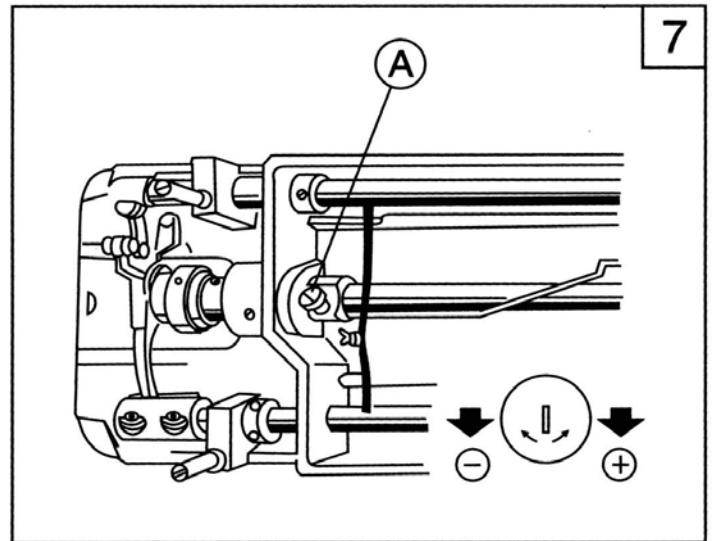
When the machine left out of operation for a quite long time and used again, remove the red rubber plug on top of the machine head, oil it thoroughly, then lift the presser foot and run at a low speed of 1000 - 1500 spm, observe the sparking condition through oil window (C). as the lubrication is normal,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



## 9. 旋梭油量调节 (图7) ROTATING HOOK OIL AMOUNT 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。

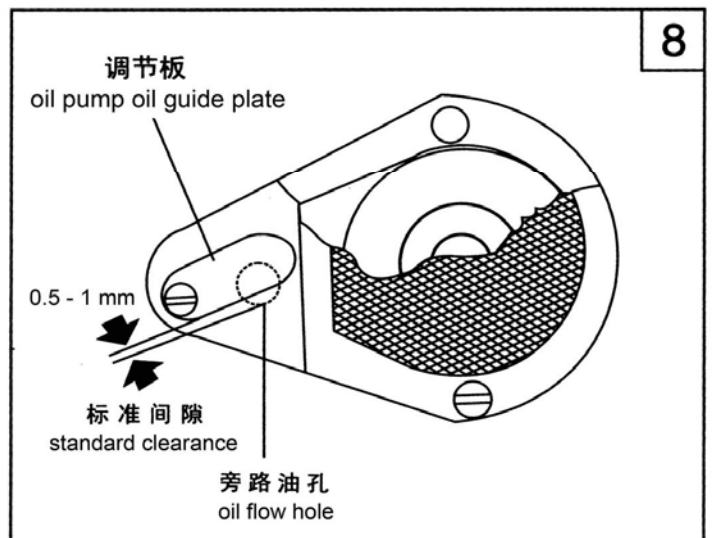
The hook oil amount can be adjusted by screw (A). turn it clockwise “+” to increase amount; counter-clockwise “-” to decrease. the oil amount is adjusted in the range of five turns of screw (A): tightening for more: loosening for less.



## 10. 油泵进油调节 (图8) OIL PUMP 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, 未见喷油现象时, 请合拢间隙。

In the ordinary operation, the adjustment is not required for the oil pump. if the oil splashing does not occur in the oil check window when the machines runs at a low speed, close the clearance of the bypass oil hole.



## 11. 针距、倒顺送料 (图9)

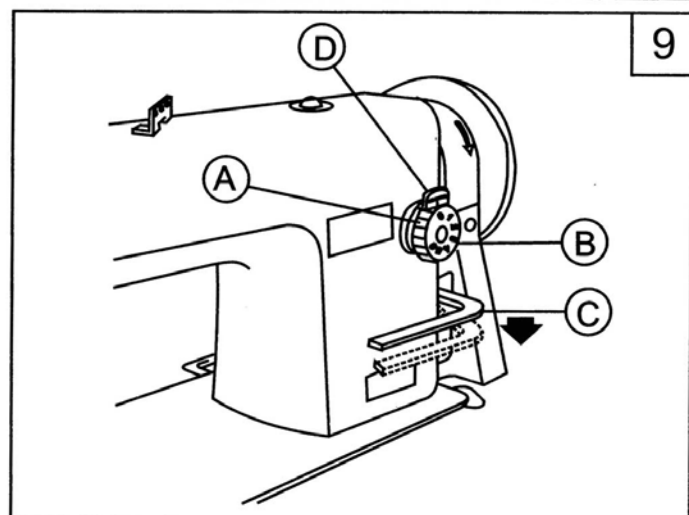
### SETTING THE STITCH LENGTH AND CONTROLLING THE REVERSE SEWING (Fig 9)

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) 往里揞压, 调整后放手复位。

需要倒向送料时, 可以将倒缝操纵杆 (C) 向下揞压, 即能进行倒缝, 手放松后, 倒缝操纵杆 (C) 自动复位, 恢复顺向送料。

Stitch length can be set by turning titch 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.



## 12. 安装机针 (图10) INSTALLING THE NEEDLE ( Fig10)

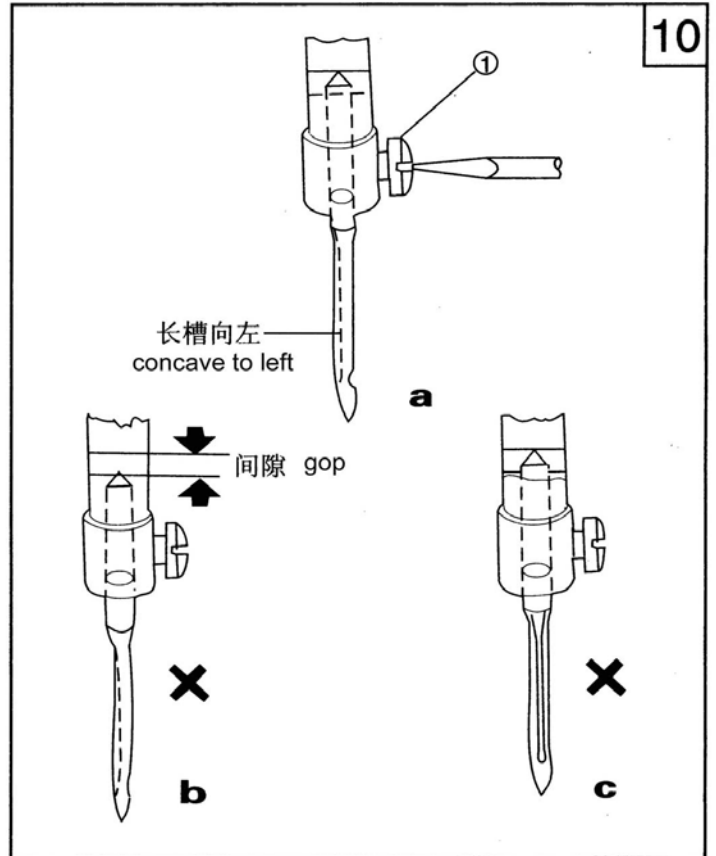
转动上轮, 使机针上升到最高位置, 旋松夹针螺钉 1 将机针的长槽朝向操作者的左面, 然后把针柄插入针杆下部的针孔内, 使其碰到针杆孔的底部为止, 再旋紧夹针螺钉 1 固定机针即可。

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 screw "1", making the needle groove return to the left side of an operator, fully insert the needle shank up to the bottom of needle socket, the tighten needle set screw "1".

Note : Fig 10 (b): insufficient insertion

Fig 10 (c): wrong direction of groove



## 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。

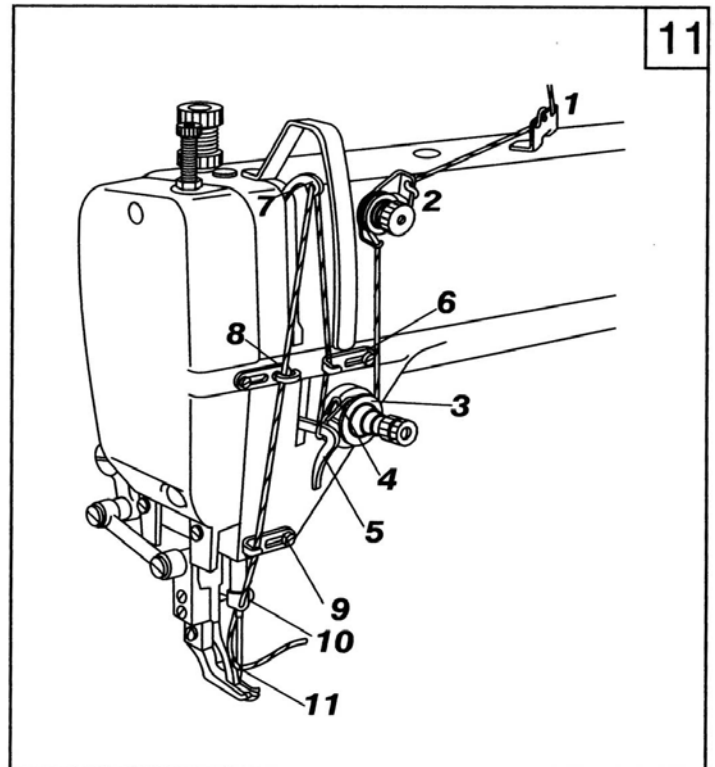
(c) 在夹线座的夹线板③之间通过。

(d) 向上穿过挑线簧④, 经过大线勾⑤和线勾⑥, 向上从右向左穿过挑线杆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, 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 the needle bar to the upper end of its stroke, lead the thread from the spool and perform threading as shown in Fig 11. To draw the bobbin thread, hold the end of the needle thread and turn the balance wheel to lower the needle bar and then lift it to its highest position. Pull the ends of needle thread and bobbin thread forward under presser foot.



## 14. 绕线调节 (图12) WINDING INSTALLATION AND ADJUSTMENT (Fig.12)

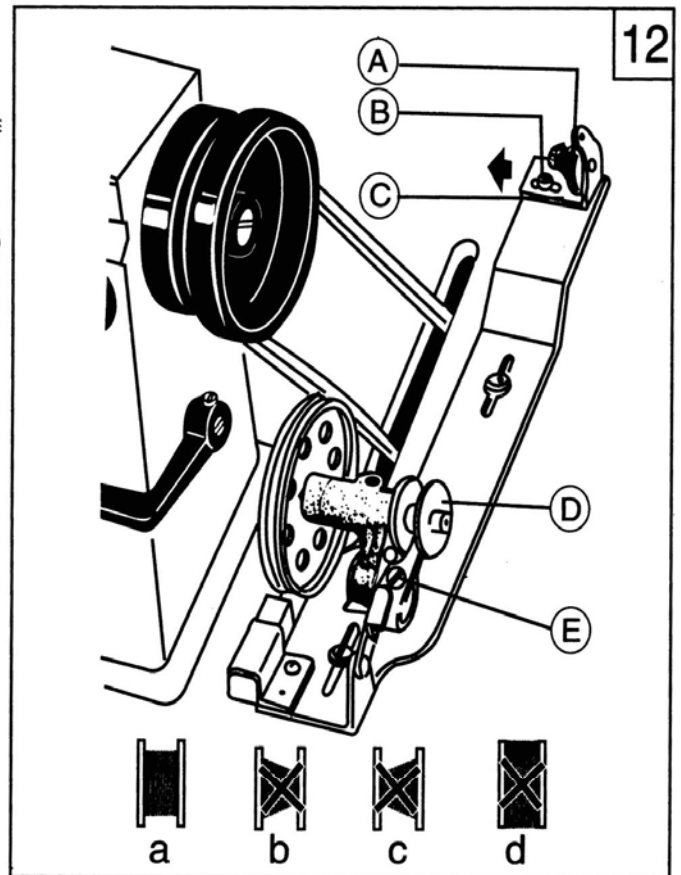
梭心线应排列整齐而紧密。如松浮不紧,可以加大过线架夹板(A)的压力。如排列不齐,则要移动过线架(C)的位置进行调整。调整时,先松开过线架螺钉(B),单边绕线成图十二(b)时,向右移动过线架;单边绕成(c)时向左移动过线架,使之能自动排列整齐成图(a)后,再紧固之。

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。

The bobbin winder pulley should align with the V—belt and there should be some clearance between them. When the bobbin winder stop latch lever is depressed, the V—belt should be in touch with the bobbin winder bulley in order that the bobbin winder pulley can be driven by the V—belt.

The thread wound on the bobbin should be neat and tight if not tight, adjust the winding tension by turning the tension studnut (A) of the bobbin winder tension bracket,when the thread wound on the bobbin does not presser a cylindrical shape as shown in Fig.12 (a), loosen the set screw (B) of the bobbin winder tension bracket and move the bracket (C) leftward or rightward,if the thread is wound as shown in the figure (b),move the bracket leftward or rightward of wound as shown in the figure(c), move it leftward. After positioning the bracket adequately,tighten the set screw (B)

Do not overfit the bobbin, the optimum wound length of the thread will about 80% of the bobbin capacity. This can be adjusted by the screw (E) of the bobbin winder stop latch.



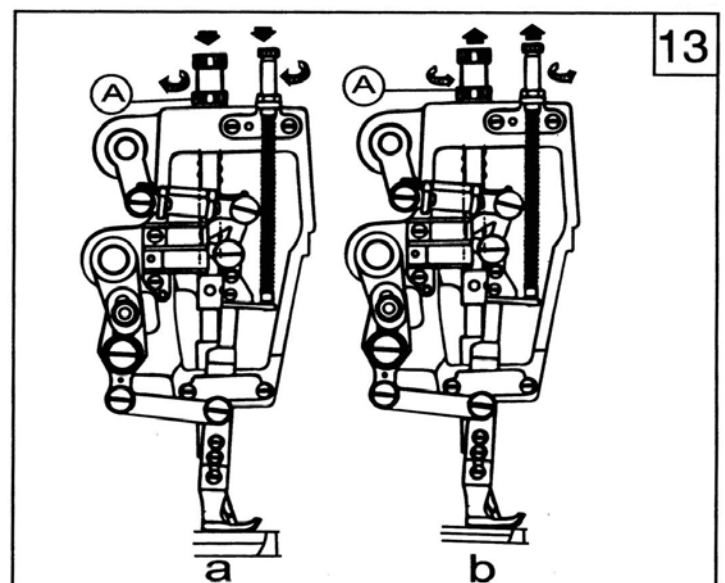
## 16. 压脚压力调节 (图13) ADJUSTING THE PRESSURE OF PRESSER FOOT (Fig 13)

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 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 clockwise as shown fig14 (a) to increase the pressure while light materials to be sewn. turn the pressure regulating thumb screw counter clockwise as shown in fig14 (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 ted normally.



## 17. 缝线张力 (图14、15) ADJUSTING THE THREAD TENSION (Fig 14.15)

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。

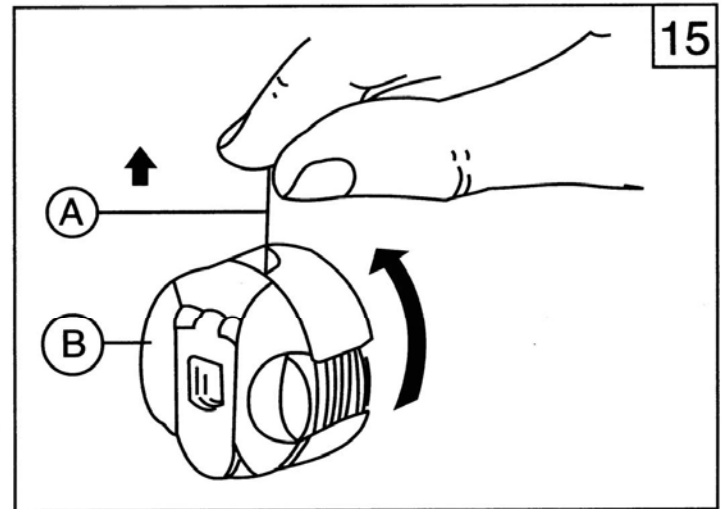
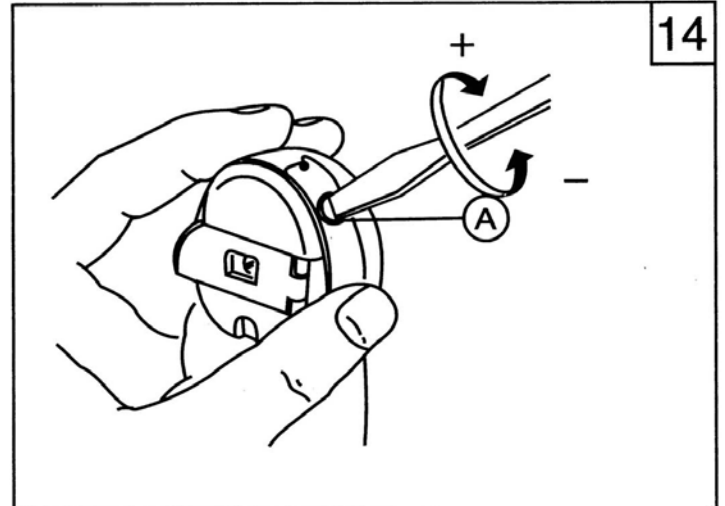
面线张力以底线张力为基础。面线张力调整, 主要变换夹线组件中挑线簧张力, 挑线簧摆动幅度, 夹线簧张力及线勾的位置等。

In general, the thread tension is to be adjusted in accordance with materiale thread and pthers.

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

When adjusting the bobbin thread tension, turn bobbin case tension spring screw (A) clockwise 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 case falls down slowly the proper tension is obtained.



## 18. 挑线簧调节 (图16、17) ADJUSTING THE THREAD TAKE-UP SPRING (Fig 16.17)

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

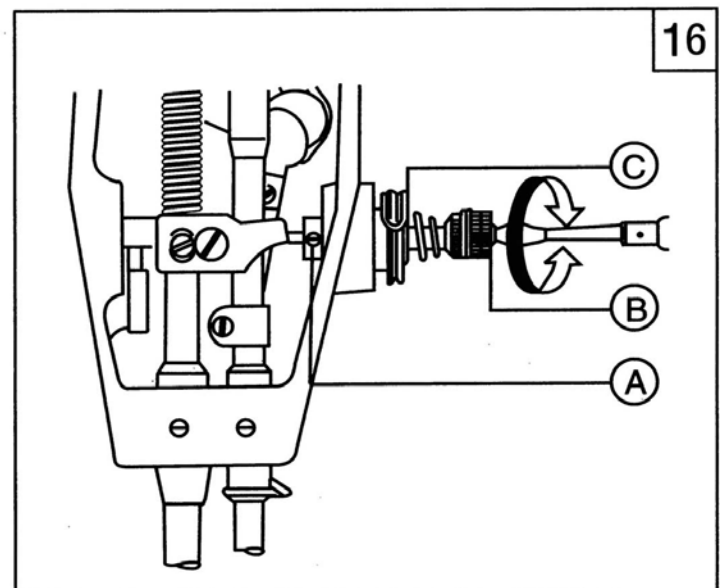
先旋松夹线调节座螺钉 (A), 夹线螺钉 (B) 就能转动, 顺时针转动时张力增加, 反之则减少, 调节好后, 仍将夹线调节座螺钉 (A) 旋紧。

### 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)。

The stroke of the thread take—up spring runs from 5 ~ 8mm, when sewing very thin fabrics, reduce the thread take-up spring

tension: (Fig.16) First loosen the set screw (A). turn the tension stud (B) counter-clockwise to decrease the tension of the thread take-up spring (C) to zero, then turn the tension stud (B) clockwise till the spring (C) comes to the notch of the tension regulating bushing and again turn the tension stud (B) halfway back ( counter clockwise ). After the adjustment, tighten the set screw (A).

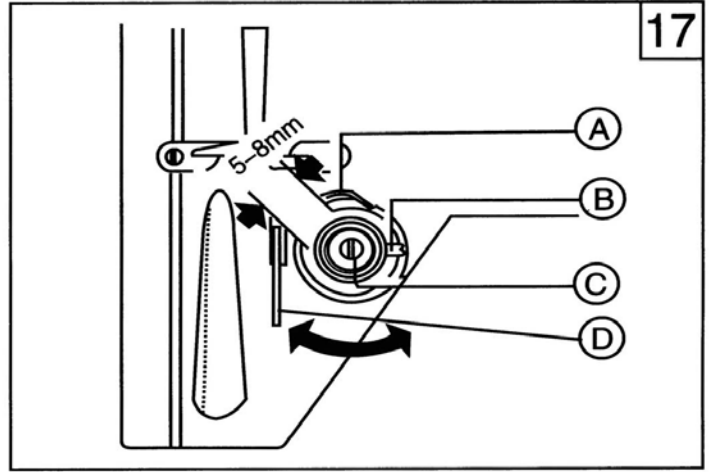


## 2、挑线簧摆动幅度的调节

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线时，才需要重新进行调整。

Adjusting the thread take-up spring stroke; (Fig.17) loosen the set screw (B) turn the stud (C) clockwise to increase the stroke or turn stud (C) counter clockwise to decrease the stroke. After the adjustment, tighten the set screw(B).



## 19.底面线张力调节 (图18、19) ADJUST THREAD GUIDE AND THREAD TENSION (Fig 18. 19)

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。

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

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

缝纫机的正常线迹应该如图a，如果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，也可以参照上述方法加以调节。

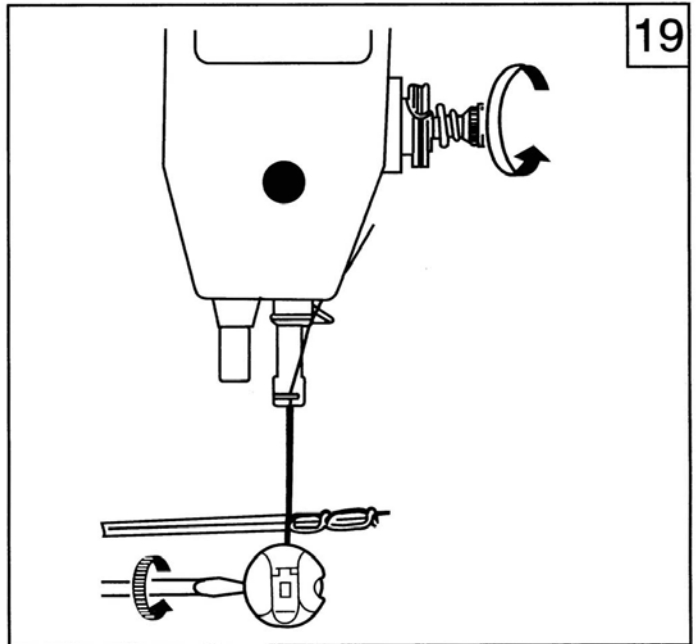
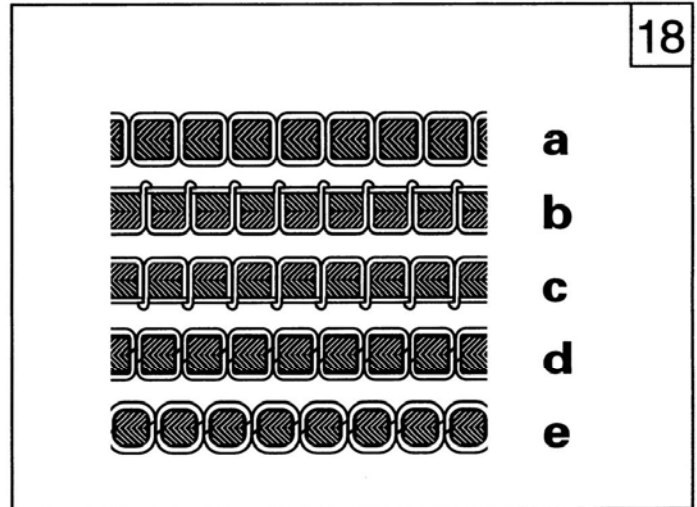
Fig 20 shows the various type of stitch forms.

Normal stitch form should be as show in Fig20-a. when abnormal stitches occur with pucker ring or thread breakage.the tension of needle thread and bobbin thread be adjusted accordingly.

(a) The needle thread tension is too strong or the bobbin thread tension is too weak,turn the tension regulating thumb out counter clockwise to make the needle thread get less tension or tighten the bobbin case tension regulating screw with small plastic screw driver to make the bobbin thread get more tension Fig21.

(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 Fig21.

(c) Other abnormal stitches as shoewn in Fig20-d.-e, adjustment can be made which reference to the above methods.





## 20. 机针与旋梭同步调整 (图20、21、22、23)

### TIMING BETWEEN THE NEEDLE AND THE ROTATING HOOK ( Fig 20. 21. 22. 23 )

#### 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21所示位置)。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2.4mm, 把针杆 (B) 从最低位置上升2.4mm, 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1.0-1.5mm。

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

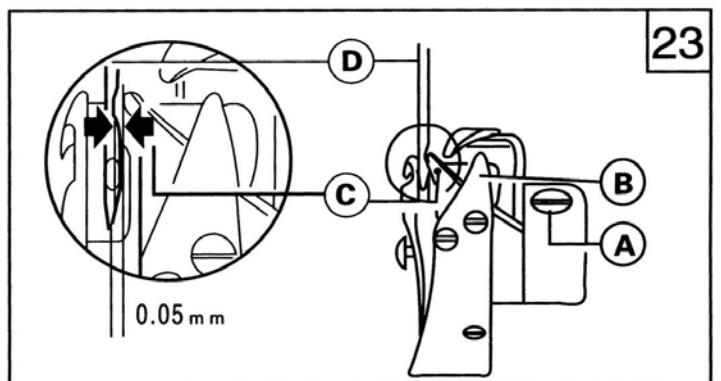
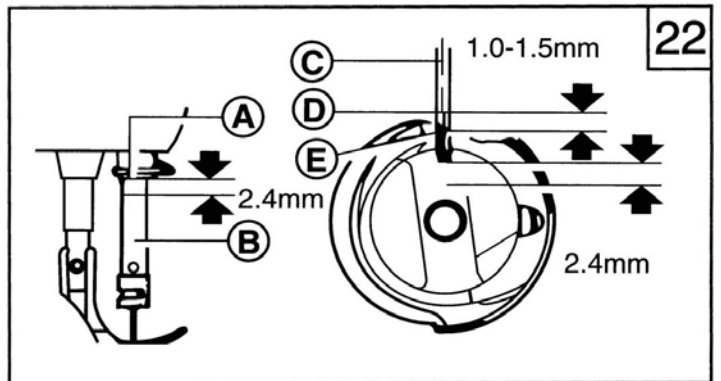
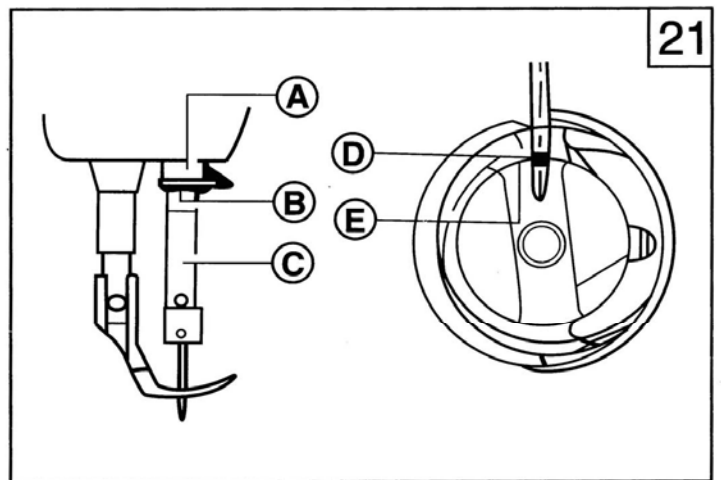
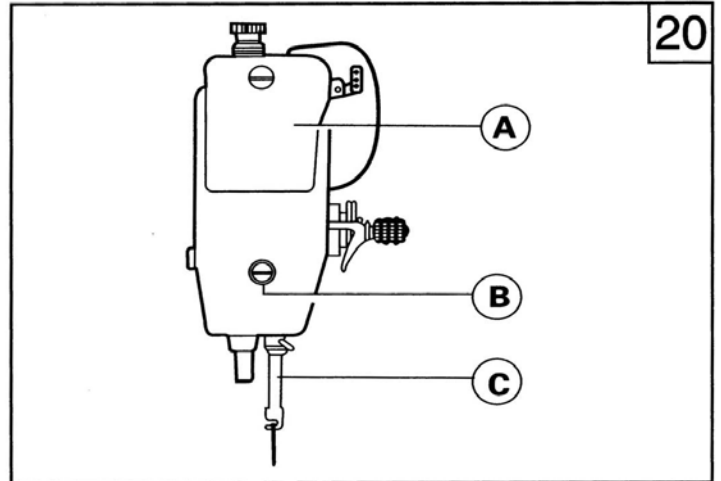
#### 1. Adjusting the position of needle bar

Turn the balance wheel to locate the needle bar (C) at its lowest position. remove the rubber plug in the face pate (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 dar at its lowest position. the center of needle eye ( D ) coincide with inside surfasce (E) of bobbin case holder as shown in Fig 21 ). Tighten clamping screw (B). plug the rubber plug.

#### 2.Adjusting rotating hook point timing with needle

The motive relation between retating hook and needle affests 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 23)



## 21. 旋梭装卸 (图24) REMOVING AND INSTALLING THE ROTATING HOOK (Fig 24)

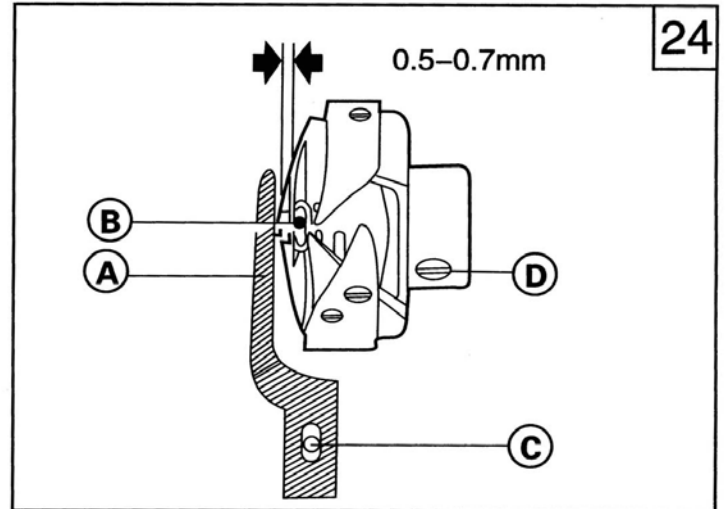
先将针杆上升到最高位置，拆下针板，取下机针和梭心套。旋下定位勾螺钉 (C)，把旋梭定位勾 (A) 取下。再旋松旋梭螺钉 (D)。使旋梭在它的转动轴上能够自由转动，接着用手转动上轮，使送料牙架走向高处。到此，可以用手去旋转旋梭，使它让过牙架徐徐取出。安装旋梭过程是上述过程的回复。

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。

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 abalance 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 support, 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.

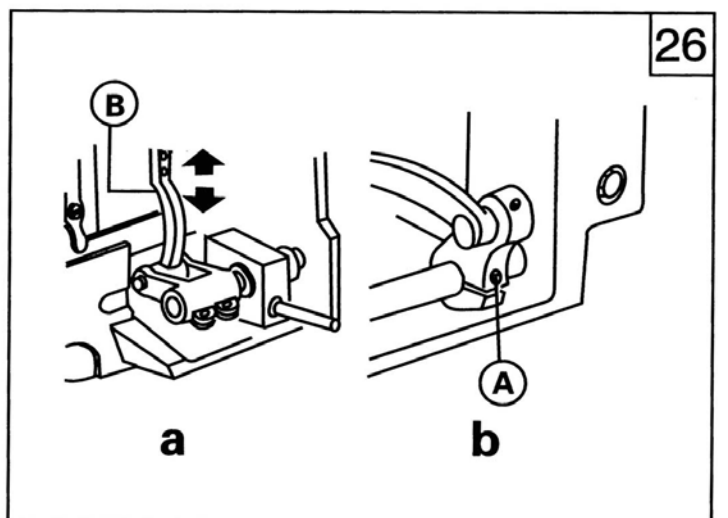
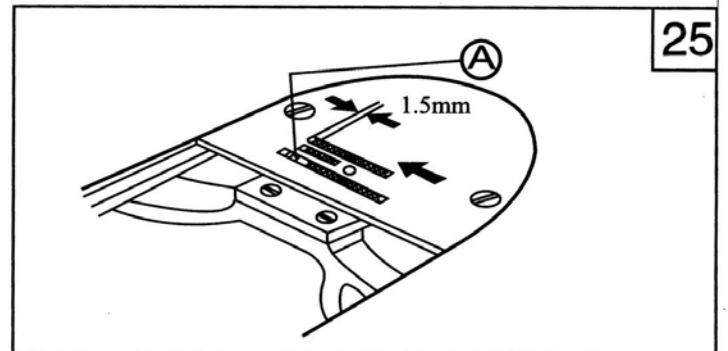


## 22. 送布牙安装 (图25、26) INSTALLING FEED DOG ( Fig 25.26 )

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25b)，将牙架 (B) 按图25a所示箭头方向移动，以调节位置，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.



## 23.送布牙平面调节 (图27) HORIZONTAL ADJUSTMENT OF FEED DOG (Fig 27)

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。

- 旋松牙架曲柄轴螺钉 (A)。
- 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。
- 最后将 (A) 螺钉拧紧。

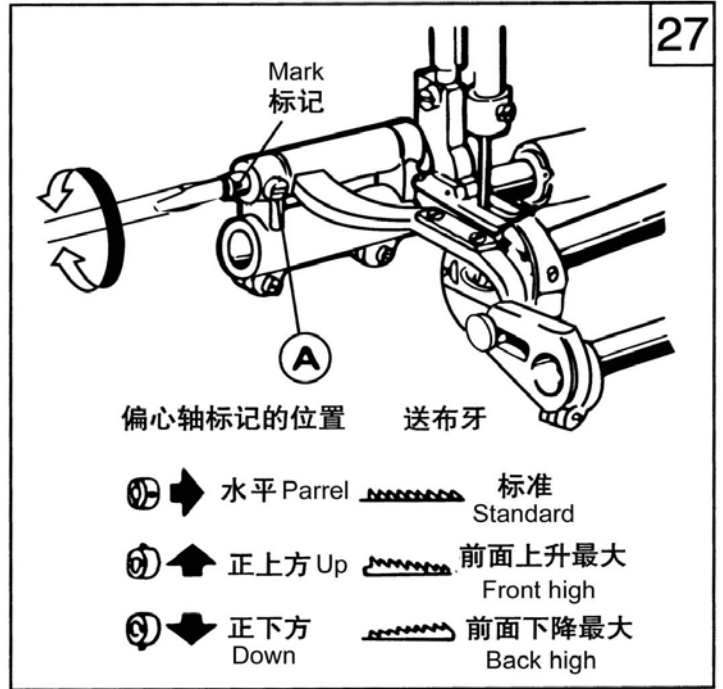
送布牙前面高时,可防止布料起缩,不容易出现空针。送布牙前面低时,可防止布料跑偏,底线不易断。

Generally the position of feed dog is horizon, 0.8-1.2mm higher than the needle plate. It can be adjusted into tilt position when it is needed.

- loose the screw of shaft of feed dog(A).
- press the concave of shaft with srewdriver, turn shaft to left and right.
- Fasten the crew.

When the front feed dog is higher, can protect the material to be shrinked, can avoid skip stitch.

When the back feed dog is higher, can protect the material to be derived, can avoid stitch break.



## 24.针距误差调节 (图28) NEEDLE GAUGE ERROR ADJUSTMENT (Fig 28)

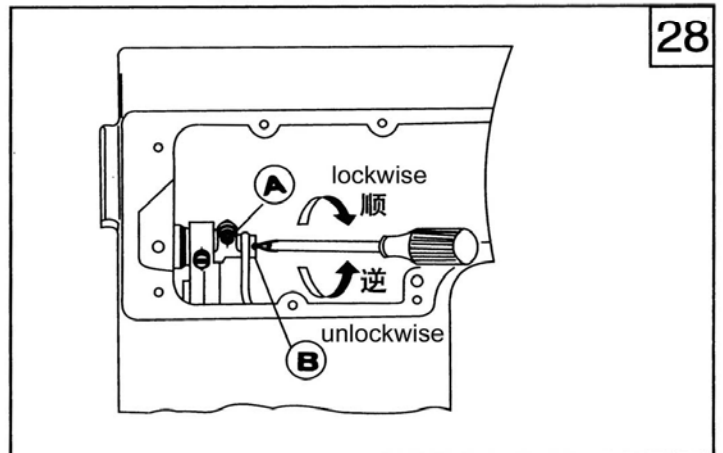
旋松螺钉 (A) 转动针距调节凸轮 (B)。

- 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 the crew (A) and turn the needle gauge adjustment cam (B).

Lockwise: ----- normal sewing needle gauge turn big.  
reverse sewing needle turn small.

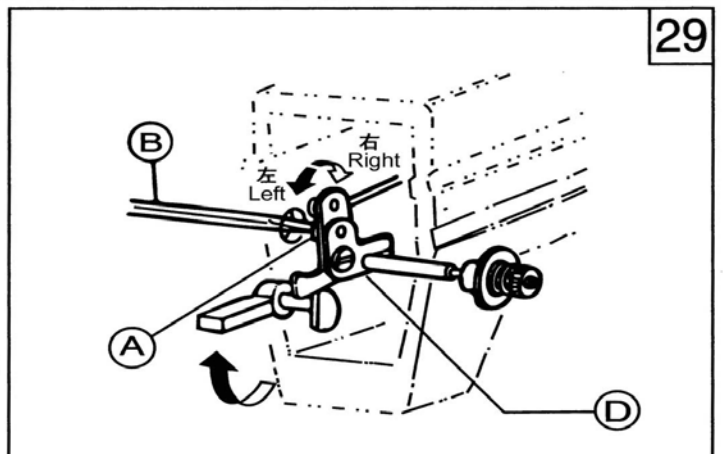
Unlockwise:----- normal sewing needle gauge turn small.  
reverse sewing needle turn big.



## 25.松线器挺线调节 (图29) ADJUSTING THE TENSION RELEASING MECHANISM (Fig 29)

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塞,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移动,往右移挺线慢,往左移挺线快。

The tension discs should be pushsd apart to open when the presser foot is lifted. but the open timing of the tension discs can be adjusted as folloes: remove face plate and the rubber plug at rear side of arm and loosen screw (A) of the knee lititing lever (left), then the tension releasing cam can be moved leftward or rightward when the cam is moved rightward, it is later to open,otherwise it is earlier to open.



## 26. 送布同步调节 (图30、31、32) TIMING BETWEEN THE NEEDLE AND FEED DOG (Fig30.31.32)

### 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。

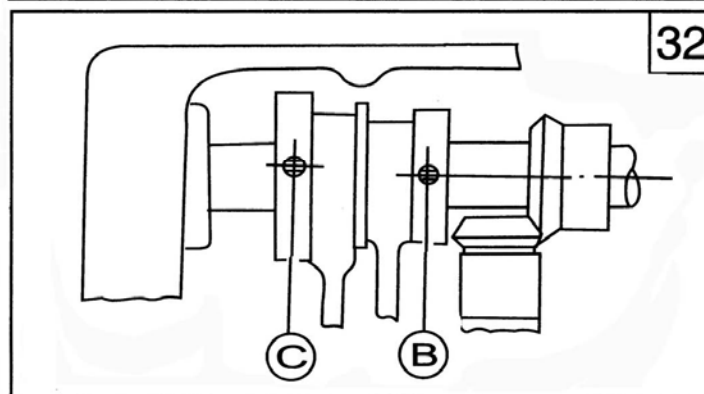
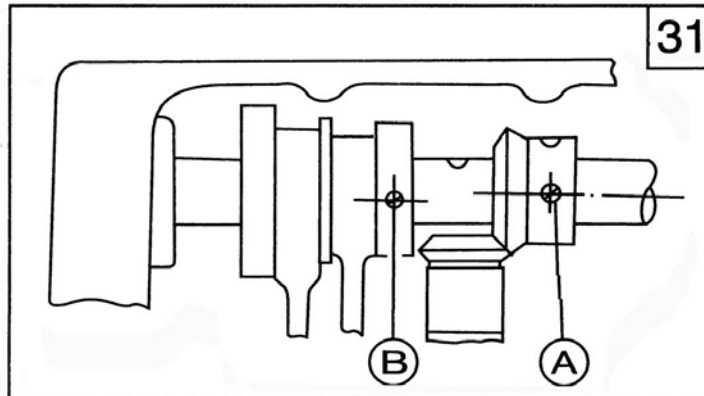
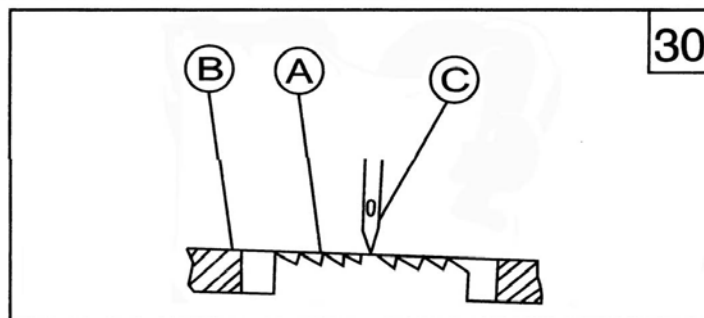
调整可以通过调节送布凸轮和抬牙凸轮的安装位置进行。

### 2、抬牙凸轮的安裝

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。

### 3、送布凸轮的安裝

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,进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)。



### 1. Standard the position

Turn the hand wheel, lower the feed dog(A), when it is parallel with the needle plate(B), the needle point(C) should locates the surface of the needle plate and feed dog.

### 2. installation of dog lift cam

Open the back cover plate, download the oil plate, turn unlockwise the hand wheel with left hand to see the config.

### 3. adjust the catch connector

Turn unlockwise the hand wheel, when adjusting the batane between "B" and "A", a little higher.

## 27. 上送料机构的调节 (图33) ADJUSTING THE TOP-FEEDING MACHNISM ( Fig 33 )

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。

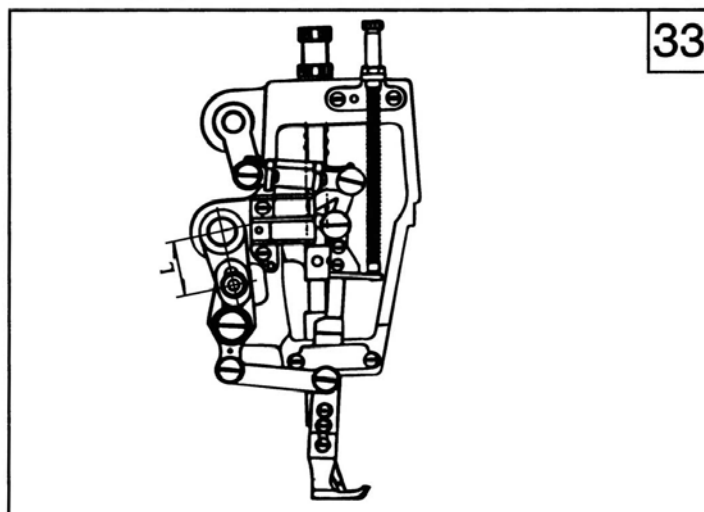
减小中心距L — 上送料量减少。

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。

The main feature of this machine is top-dotton feed. in practice of sewing, the length (L) between the center of walking foot shaft and walking foot sliding assembly should be adjusted according to different fraction ratio of materials and requirements of the workpieces.

Method: The (L) increase - the top feeding increase The (L) decrease - the top feeding decrease

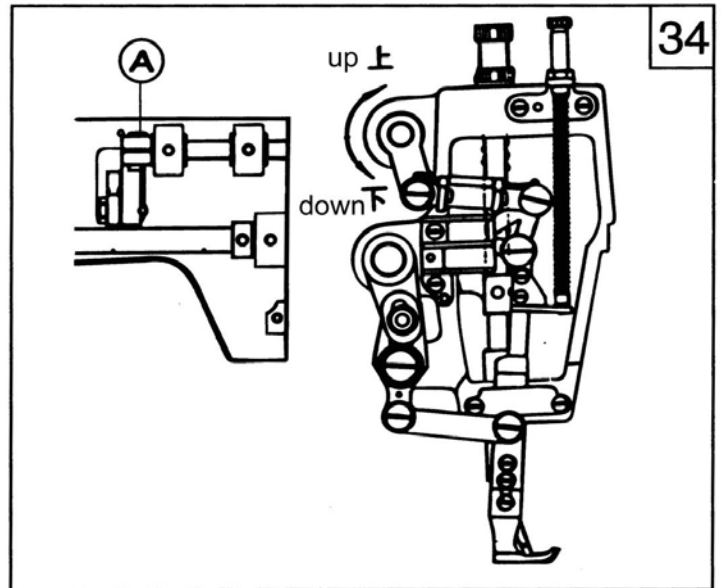
Some workpiece has the special requirement that the top-feeding should be more than the bottom -feeding, which could be realized by the mothod.



## 28. 压脚交叉提升机构的调节 (图34) ADJUSTING WALKING FOOT AND PRESSURE FOOT (Fig34)

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。

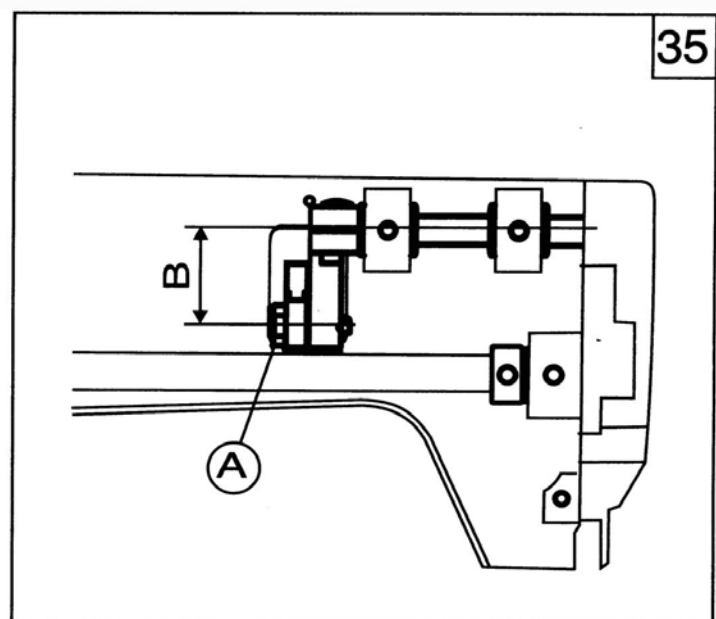


The height of walking foot and pressure foot can be adjusted in a certain demesion according to the density of materials. for the mid-heavy materials, the height of walking foot is  $\leq 5.5\text{mm}$ , and pressure foot  $\leq 3.5\text{mm}$ . the plus of the two height are definite under the circumtance that the other machnism keeps unchanged. the relation between the two heights is negative ratio in general sense, namely, when the height of the walking foot incese the heighe of pressure foot decrease while vice versa. adjusting method: loose the screw A on link adjsting crank and turn the crank upward and the height of the walking foot increase; while turn the crank downward, the height decrease. the turn degree of the crank should not be too much. afterwards, tighten the screw and turn the balance wheel to ensure everything in normal positon.

## 29. 摆压脚、小压脚总提升量的调节 (图35) ADJUSTING THE LIFTING AMOUNT OF THE WALLING FOOT AND PRESSURE FOOT (Fig35)

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。

In practice, in order to adjust the height of walk foot and pressre foot, you can adopt the method: loose the screw (A) on link adjusting crank and adjust the length between the center of the screw and the presser foot lift shaft. if the length decrease, the lifting amout of the two inrease, while vice versa. the adjuting amount is in a certain demension and should not be too much. afterwards, tighten the screw and turn the balance wheel to esure everything in normal coudition.

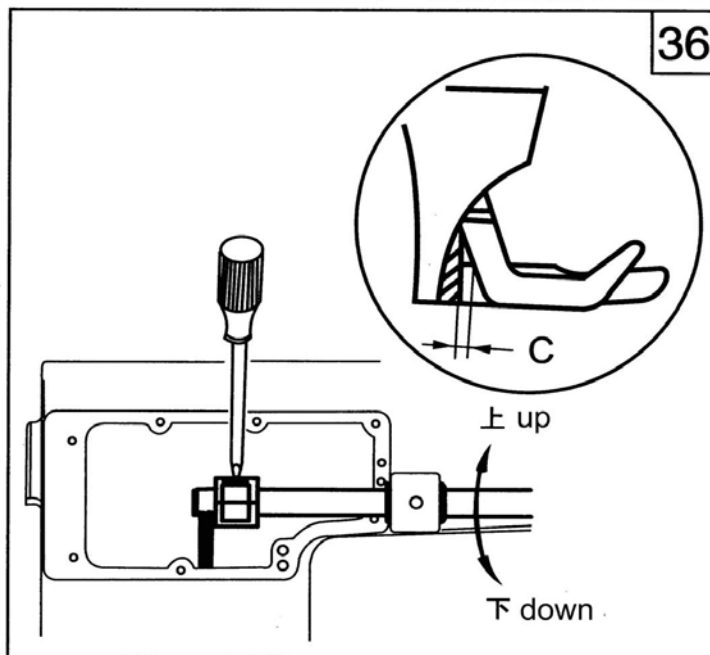


### 30. 摆压脚、压脚前后方向间隙的调节 (图36)

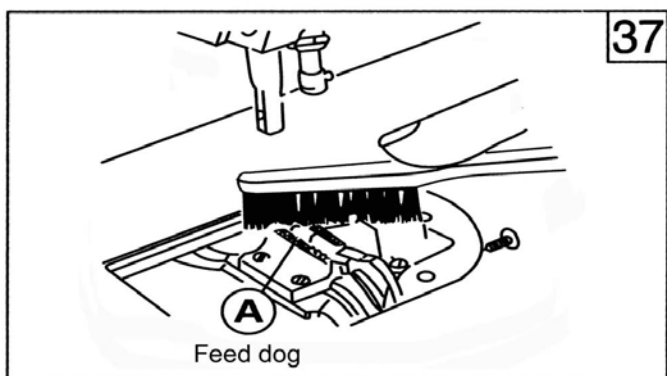
#### ADJUSTING THE CLEARANCE BETWEEN THE WALK FOOT AND PRESSURE FOOT ( Fig 36)

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：首先旋松摆压脚后曲柄螺钉，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 practice, long and short stitch will be utilized alternatively. in long stitch. the moving degree of walking foot is always longer. while vice versa. in order to avoid the hiting between the front cave of the pressure and mean while keep a certain clearance C (generally  $\pm 1.5\text{mm}$ ) so, when in short stitch, the walking foot should be closer to the needle bar. method: loose the screw of the linking adjusting crank and turn the shaft upward to make the malking foot close to the needle. when adjusting, the clearance C must be considered.



### 31. 定期清扫 (图37、38、39) REGULAR CLEANING ( Fig 37. 38. 39 )



#### 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。

#### 3、油泵滤网的清扫

如图所示，清除滤网（A）上的尘屑。

#### 1) Cleaning feed dog

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

#### 2) Cleaning rotating hook

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

#### 3) Cleaning oil pump screen

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

