

直驱高速电脑平缝机

**DIRECT DRIVE COMPUTER-CONTROLLED
HIGH-SPEED LOCKSTITCH SEWING MACHINE**

Sewing
machine

使用说明书/零件手册

Operation instruction/Parts book

IMPORTANT SAFETY INSTRUCTIONS

To get the most out of the many functions of this machine and operate it in safety, it is necessary to use this machine correctly. Please read this instruction Manual carefully before use. We hope you will enjoy the use of your machine for a long time. Please remember to keep this manual in a safe place.

1. Observe the basic safety measures, including, but not limited to the following ones, whenever you use the machine.
2. Read all the instructions, including, but not limited to this Instruction Manual before you use the machine. In addition, keep this Instruction Manual so that you may read it at anytime when necessary.
3. Use the machine after it has been ascertained that it conforms with safety rules/standards valid in your Country.
4. All safety devices must be in position when the machine is ready for work or in operation. The operation without the specified safety devices is not allowed.
5. This machine shall be operated by appropriately-trained operators.
6. For your personal protection, we recommend that you wear safety glasses.
7. For the following, turn off the power switch or disconnect the power plug of the machine from the receptacle.
 - 7-1 For threading needle(s), looper, spreader etc. And replacing bobbin.
 - 7-2 For replacing part(s) of needle, presser foot, throat plate, looper, spreader, feed dog, needle guard, folder cloth guide etc
 - 7-3 For repair work.
 - 7-4 When leaving the working place or when the working place is unattended.
8. If you should allow oil, grease, etc. used with the machine and devices to come in contact with your eyes or skin or swallow any of such liquid by mistake. Immediately wash the contacted areas and consult a medical doctor.

9. Tampering with the live parts and devices, regardless of whether the machine is powered, is prohibited.
10. Repair, remodeling and adjustment works must only be done by appropriately trained technicians or specially skilled personnel. Only spare parts designated by can be used for repairs.
11. General maintenance and inspection works have to be done by appropriately trained personnel.
12. Repair and maintenance works of electrical components shall be conducted by qualified electric technicians or under the audit and guidance of specially skilled personnel. Whenever you find a failure of any of electrical components, immediately stop the machine.
13. Before making repair and maintenance works on the machine equipped with pneumatic parts such as an air cylinder, the air compressor has to be detached from the machine and the compressed air supply has to be cut off. Existing residual air pressure after disconnecting the air compressor from the machine has to be expelled. Exceptions to this are only adjustments and performance checks done by appropriately trained technicians or specially skilled personnel.
14. Periodically clean the machine throughout the period of use.

15. Grounding the machine is always necessary for the normal operation of the machine. The machine has to be operated in an environment that is free from strong noise sources such as high-frequency welder.
16. An appropriate power plug has to be attached to the machine by electric technicians. Power plug has to be connected to a grounded receptacle.

17. The machine is only allowed to be used for the purpose intended. Other uses are not allowed.
18. Remodel or modify the machine in accordance with the safety rules/standards while taking all the effective safety measures. assumes no responsibility for damage by remodeling or modification of the machine.

19. Warning hints are marked with the two shown symbols.

Danger of injury to operator or service staff



Items requiring special attention

FOR SAFE OPERATION

 DANGER	1. To avoid electrical shock hazards, neither open the cover of the electrical box for the motor nor touch the components mounted inside the electrical box.
 CAUTION	1. To avoid personal injury, never operate the machine with any of the belt cover, Finger guard or safety devices removed. 2. To prevent possible personal injuries caused by being caught in the machine, Keep your fingers, head and clothes away from the handwheel, V belt and the motor while the machine is operation. In addition, place nothing around them. 3. To avoid personal injury, never put your hand under the needle when you turn "ON" the power switch or operate the machine. 4. To avoid personal injury, never put your fingers into the thread take-up cover while the machine is in operation. 5. The hook rotates at a high speed while the machine is in operation. To prevent possible injury to hands, be sure to keep your hands away from the vicinity of the hook during operation. In addition, be sure to turn OFF the power to the machine when replacing the bobbin. 6. To avoid possible personal injuries, be careful not to allow your fingers in the machine when tilting/raising the machine head. 7. To avoid possible accidents because of abrupt start of the machine, turn OFF the power to the machine when tilting the machine head. 8. If your machine is equipped with a servo-motor, the motor does not produce noise while the machine is at rest. To avoid possible accidents due to abrupt start of the machine, be sure to turn OFF the power to the machine. 9. To avoid electrical shock hazards, never operate the sewing machine with the ground wire for the power supply removed. 10. To prevent possible accidents because of electric shock or damaged electrical components(s), turn OFF the power switch in prior to the connection/disconnection of the power plug.

BEFORE OPERATION

	CAUTION: To avoid malfunction and damage of the machine, confirm the following.
• Before you put the machine into operation for the first time after the set up, clean it thoroughly. • Remove all dust gathering during transportation and oil it well. • Confirm that the power plug has been properly connected to the power supply. • Never use the machine in the state where the voltage type is different from the designated one. • The direction of rotation of the sewing machine is counterclockwise as observed from the handwheel side. Be careful not to rotate it in reverse direction.	

CONTENS

◆ INSTRUCTION MANUAL

1.SPECIFICATIONS	1
2.INSTALLATION	1
3.ADJUSTING THE HEIGHT OF THE KNEELIFTER	2
4. INSTALLING THE THREAD STAND	3
5. LUBRICATE	3
6.LUBRICATION	3
7.ADJUSTING THE AMOUNT OF OIL(OIL SPLASHES)IN THE HOOK	4
8.ATTACHING THE NEEDLE	5
9. SETTING THE BOBBIN INTO THE BOBBIN CASE	6
10.ADJUSTING THE STITCH LENGTH	6
11. PRESSER FOOT PRESSURE	6
12. HAND UFTER	6
13.ADJUSTING THE HEIGHT OF THE PRESSER BAR	7
14.THREADING THE MACHINE HEAD	7
15.THREAD TENSION	8
16.THREAD TAKE-UP SPRING	8
17.ADJUSTING THE THREAD TAKE-UP STROKE	9
18.NEEDLE-TO-HOOK RELATIONSHIP	9
19.HEIGHT OF THE FEED DOG	10
20.TILT OF THE FEED DOG	11
21.ADJUSTING THE FEED TIMING	11
22.ADJUSTING THE NEEDLE STOP POSTION	12
23.COUNTER KNIFE	13
24.PEDAL PRESSURE AND PEDAL STROKE	14
25.ADJUSTMENT OF THE PEDAL	14
26.PEDAL OPERATION	15
27.ONE-TOUCH TYPE REVERSE FEED STITCHING MECHANISM	15
28.WIPER	16

PARTS BOOK

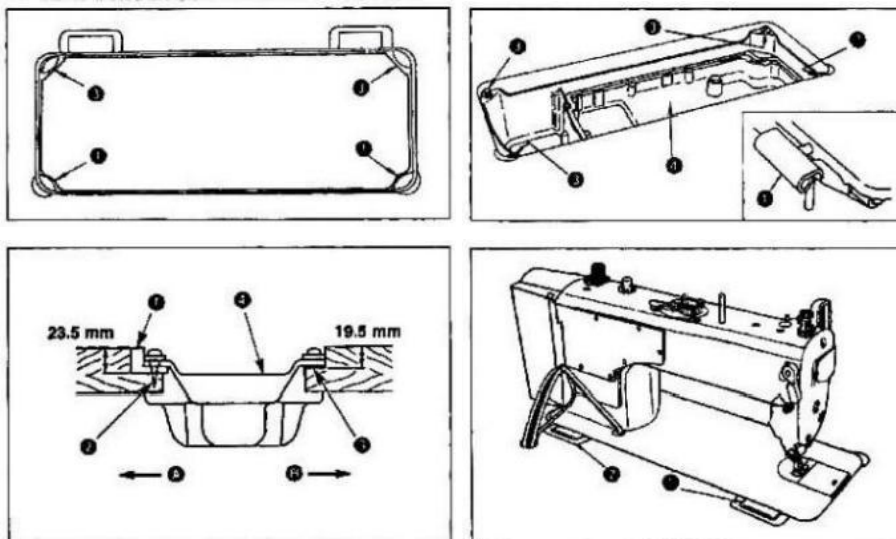
1.MACHINE FRAME&MISCELLANEOUS COVER COMPONENTS	18-21
2.MAIN SHAFT&THREAD-UP LEVER COMPONENTS	22-23
3. IMPACT CONTROLLER SYSTEM	22-23
4. NEEDLE BAR, UPRIGHT SHAFT&HOOK DRIVING SHAFT COMPONENTS	24-25
5. HAND LIFTER COMPONENTS	26-27
6.FEED MECHANISM COMPONENTS	28-31
7.THREAD TRIMMER COMPONENTS	32-33
8.AUTOMATIC REVERSE FEED COMPONENTS	34-35
9.WIPER COMPONENTS	34-35
10.OIL LUBRICATION COMPONENTS	36-37
11.OIL RESERVOIR COMPONENTS	36-37
12.THREAD STAND COMPONENTS	38-39
13.ACCESSORIES	38-39

1. 规格 /SPECIFICATIONS

	标准型	薄料型	厚料型
用途	般布料、薄料、中厚料	一般布料，薄料	中厚料，厚料
缝纫速度	最高4500 rpm	最高4000 rpm	最高3500 rpm
最大针脚长度	4mm		5mm
机针	DBx1#9~#11	DAx1 #9~#11	DBx1 #20~#23
压脚高度(膝动提升)	10mm(标准)13mm(坡大)	9mm(最大)	10mm(标准)13mm(最大)
使用机油	NO. 10白油		

	Medium-weight model	Light-weight model	Heavy-weight mode
Application	General fabrics, light-weight and medium-weight materials	General fabrics, light-weight materials	Medium-weight materials heavy-weight materials
Sewing speed	Max. 4500 rpm	Max. 4000 rpm	Max. 3500 rpm
Max. stitch length	4mm		5mm
Needle	DBx1 #9-#11	DAx1 #9-#11	DBx1 #20~#23
Presser foot lift	10mm (standard) 13mm (Max.)	9mm (Max.)	10mm (standard) 13mm (Max.)
Lubricating oil	Defrix Oil NO. 10		

2. 缝纫机的安装 /INSTALLATION



(1) 底槽的安装

- 1) 把底槽支到机台沟的四角上。
- 2) 用螺钉●把前侧的②2个头部橡胶支座●钉到机台的伸出部，再用螺钉②把铰链侧②的2个头部橡胶支座●钉好固定。然后把底槽①放上去。
- 3) 把铰链●放到机台的孔上，对准台板橡胶支座②，把头部放到四角的机头胶垫●上。

(1)Installing the under cover

- 1)The oil pan should rest on the four comers of the machine table groove.
- 2)Fix two rubber seats O on side(operator's side)using nails as illustrated above.Fix two cushion seats @on side B(hinged side)using a rubber-based adhesive.Then place oil panO on the fixed seats.
- 3)Fit hinge O into the opening in the machine bed,and ft the machine head to table rubber hinge @before placing the machine head on cushions on the four comers.

3. 膝动提升高度的调整ADJUSTING THE HEIGHT OF THE KNEE LIFTER

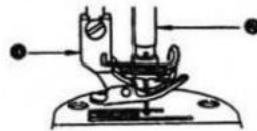
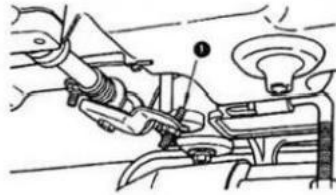


注意

为了防止意外的起动造成的事故，请关掉电源后进行。

WARNING:

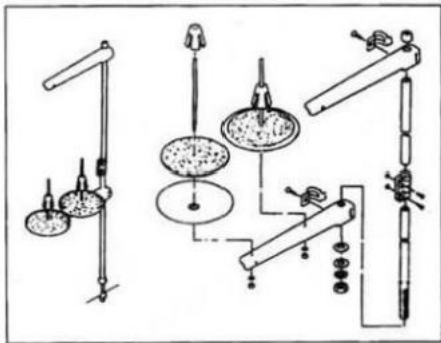
Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



- 1) 膝动提升的压脚标准高度为10mm。
- 2) 调节膝动提升调节螺丝①可以把压脚高度最大调整到13mm。(A 型时最大为9mm。)
- 3) 压脚提升到10mm 以上时，请注意针杆②的前端下降到最底下时，不能碰到压脚●。

- 1)The standard height of the presser foot litted using the kneellter is 10 mm.
- 2)You can adjust the presser foot lit up to 13 mm using knee liter adjust screwO.(Max.9 mm for A type)
- 3)When you have adjusted the presser foot lift to over 10 mm,be sure that the bottom end of needie bar 2 in its lowest position does not hit presser foot @.

4. 线架装置的安装/INSTALLING THE THREAD STAND



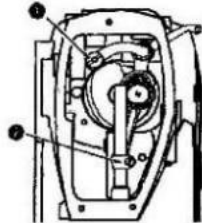
5. 加润滑脂/LIPIN



注意
为了防止意外的启动造成的事故，请关掉电源后进行。

WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



- 1) 请先卸下挑线连杆销●上的小螺钉后，将润滑脂注满挑线连杆销●的小孔内。
- 2) 请先拆下针杆连接柱组件后卸下针杆连接柱●上的小螺钉，将润滑脂注满针杆连接柱●的小孔内。

- 1) Full pore of the thread take-up crank shat O with ipin before dlsassembly small screw of the thread take-up crank shatO
- 2) Disassembly small screw before Disassembly the needle rod holder ASM, then full pore of the needle bar connection ASI ●with lipin

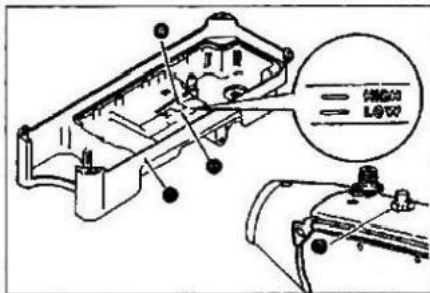
6. 加油ILUBRICATION



注意
为了防止意外的启动造成的事故，请关掉电源后进行。

WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



运转缝纫机前

- 1) 请把机油倒进油槽●里，一直加到HIGH 标记●的位置。
- 2) 油槽的油面降到LOW 标记②以下时，请再次补充机油。
- 3) 加油后运转缝纫机，如果润滑正常时，可以通过油窗②看到油的流动。
- 4) 油流动量的多少，与油量的多少无关。



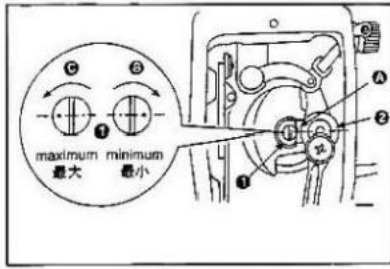
新缝纫机或较长时间没有使用的缝纫机在使用之前，应进行10分钟3,000-3,500 rpm 的磨合运转。

Information on lubrication

- 1) Fill oil pan with Machine Oil up to HIGH mark
- 2) When the oil level lowers below LOW mark, refit the oil pan with the specified oil.
- 3) When you operate the machine after lubrication, you will see splashing oil through oil sight window ● if the lubrication is adequate.
- 4) Note that the amount of the splashing oil is unrelated to the amount of the lubricating oil.



When you first operate your machine after setup or after an extended period of disuse, run your machine at 3,000 to 3,500 rpm. for about 10 minutes for the purpose of break-in.



面部油量的调整

- 1) 调整挑线杆和针杆曲轴部②的油量时，转动雨量调整销①进行调格。
- 2) 调整销刻点A 从图的位置向B 方向转动，转动到接近针杆曲板②时，油量最小。
- 3) 从图1:所示的位置向C 方向转动，当转到与针杆曲柄的正对的位置时，油量最大。

Adjusting the amount of oil supplied to the face plate parts

- 1) Adjust the amount of oil supplied to the thread take-up and needle bar crank ② by turning adjust pin ①.
- 2) The minimum amount of oil is reached when marker dot A is brought close to needle bar crank ② by turning the adjust pin in direction B.

- 3) The maximum amount of oil is reached when marker dot is brought to the position just opposite from the needle bar crank by turning the adjust pin in direction C .

7. 关于旋梭部油量(迹)调整方法/

ADJUSTING THE AMOUNT OF OIL (OIL SPLASHES)IN THE HOOK



注意

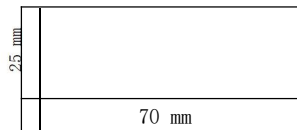
旋梭是以高速运转。为了防止人身事故，调整油量时，请加以充分的注意。

WARNING:

Be extremely careful about the operation of the machine since the amount of oil has to be checked by turning the hook at a high speed.

①油量(迹)确认专用纸

Amount of oil (oil splashes)confirmation paper



2)油量(迹)确认位置

Position to confirm the amount of oil (oil splashes)

mm
3-10

油迹确认专用纸
Oil splashes
confirmation paper

应顶到接油槽壁
Closely fit the paper
against the wall
surface of the bed.

*进行下列2)的作业时，请卸下滑板。同时要充分注意手指不要碰到旋梭。

- 1) 冷机头时，请进行3分钟左右的空运转。(适当的断续运转)

- 2) 油量(迹)确认专用纸在缝纫机转动后的状态下插进去。

- 3) 请确认油量的油面高度应在HIGH和LOW的范围之内。

- 4) 确认油量(迹)所高要的时间为5秒钟。(应看着表)

*When carrying out the procedure described below in 2, remove the side plate and take extreme caution not to allow your fingers to come in contact with the hook.

- 1) If the machine has not been sufficiently warmed up for operation, make the machine run idle for approximately three minutes. (Moderate intermittent operation)

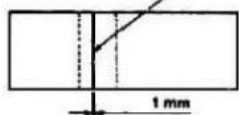
- 2) Place the amount of oil (oil splashes) confirmation paper under the hook while the sewing machine is in operation

- 3) Confirm the height of the oil surface in the oil reservoir is within the range between HIGH and LOW.

- 4) Confirmation of the amount of oil should be completed in five seconds. (Check the period of time with a watch.)

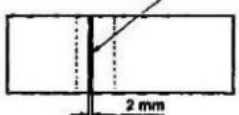
· 油量(油迹)适合标准/Sample showing the appropriate amount of oil

从旋梭飞溅出来的油! Splashes of oil from the hook



油量适当(小)
Appropriate amount of oil (small)

从旋梭飞溅出来的油! Splashes of oil from the hook



油量适当(大)
Appropriate amount of oil (large)

1) 左图标样根据缝制供需需要微调增减, 但注意不要过大增加或减少。

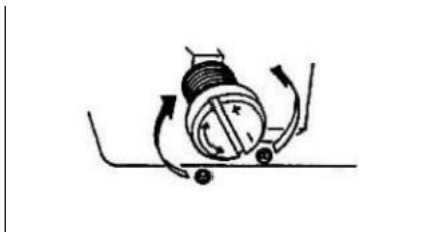
(油量过少时, 会烧坏旋梭(发热)。油量过多时, 会脏污缝制品。)

2) 油量(油迹)应确认3次(3张)均无变化。

1) The amount of oil shown in the samples on the left should be finely adjusted in accordance with sewing processes. Be careful not to excessively increase/decrease the amount of oil in the hook. (If the amount of oil is too small, the hook will be soiled (the hook will be hot). If the amount of oil is too much, the sewing product may be stained with oil.)

2) Adjust the amount of oil in the hook so that the all amount (oil splashes) should not change while checking the oil amount three times (on the three sheets of paper)

● 旋梭油量(迹)调整/Adjusting the amount of oil



1) 把下轴前端金属部件上的油量调节螺丝向“+”的方向(●方向)转动, 油量(迹)变多, 向“-”的方向(②方向)转动, 油量(迹)变少。

2) 油量调节螺丝调整后的油迹, 应空运转30秒钟左右进行油量(迹)的确认。

1) Turning the oil amount adjustment screw attached at the hook driving shaft front bushing in the "+" direction (in direction ●) will increase the amount of oil (oil spots) in the hook, or in the direction (in direction ②) will decrease it.

2) After the amount of oil in the hook has been properly adjusted with the oil amount adjustment screw, make the sewing machine run idle for approximately 30 seconds to check the amount of oil in the hook.

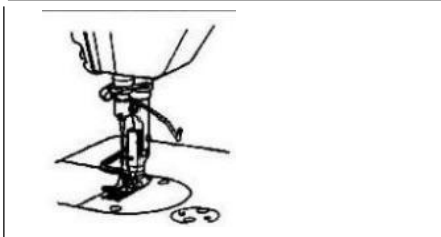
8. 机针的安装/ATTACHING THE NEEDLE



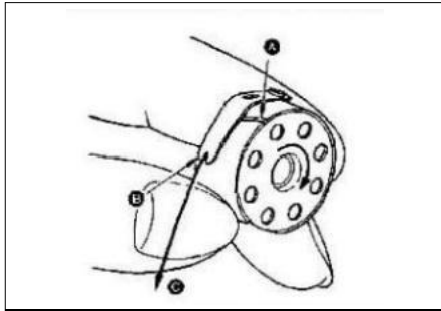
注意
为了防止意外的起动造成的事故, 请关掉电源后进行。

WARNING

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

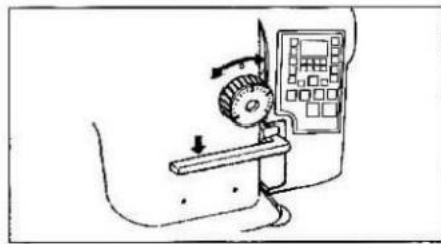


9. 梭心的安装方法/SETTING THE BOBBIN INTO THE BOBBIN CASE

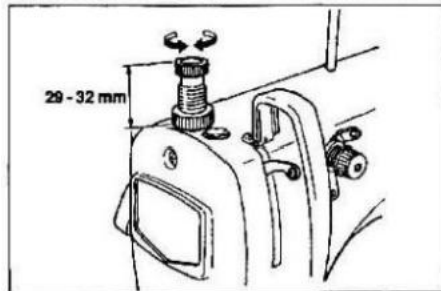


- 1) 把线穿过梭光的穿线口①,然后把线往色方向拉,从线张力弹簧下面的穿线口②拉出来。
By so doing,the thread will pass under the tension spring and come out from notch.
- 2) 拉底线②,确认梭心是否按箭头方向转动。
Check that the bobbin rotates in the direction of the arrow when thread is pulled.

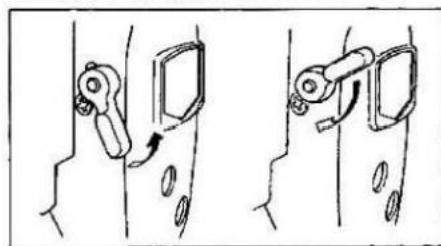
10. 线迹长度的调节/ADJUSTING THE STITCH LENGTH



11. 压脚压力的调节/PRESSER FOOT PRESSURE



12. 关于压脚提升/HAND LIFTER

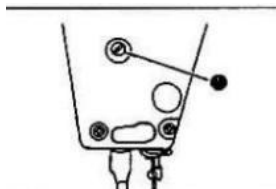


13. 压脚杆高度的调整 | ADJUSTING THE HEIGHT OF THE PRESSER BAR



注意
为了防止意外的启动造成的事故，请关掉电源后进行。

WARNING:
Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



1) 变更压脚杆的高度或压脚的角度时，请拧松压脚杆套管固定螺丝●进行调整。

2) 调整后，拧紧固定螺丝●。

1) Loosen setscrew ●, and adjust the presser bar height or the angle of the presser foot.

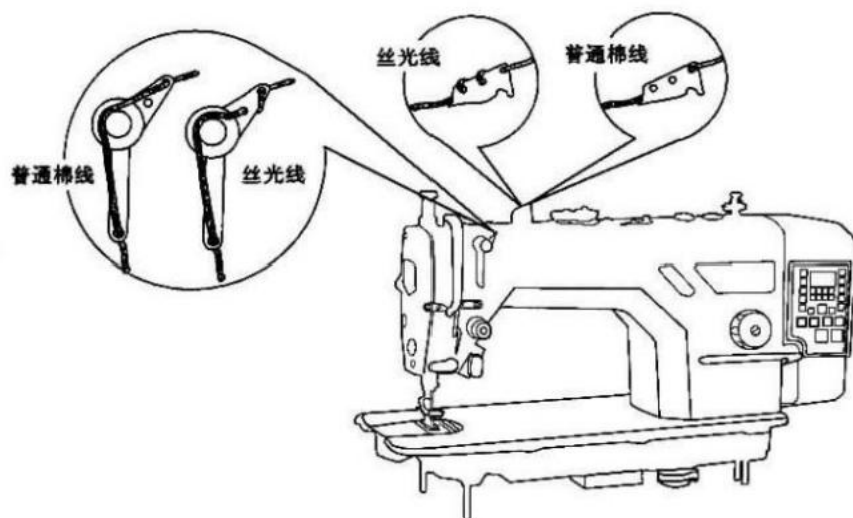
2) After adjustment, securely tighten the setscrew ●.

14. 上线的穿线方法 | THREADING THE MACHINE HEAD

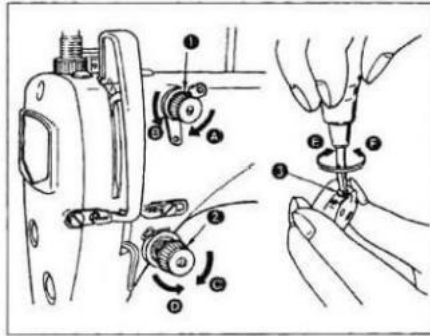


注意
为了防止意外的启动造成的事故，请关掉电源后进行。

WARNING:
Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



15. 线张力器/THREAD TENSION



(1) 上线张力的调整

- 1) 向右⊙的方向转动第一线张力螺母①, 切线后残留在机针上的线长度变短。
- 2) 向左⊙的方向转动, 则长度变长。
- 3) 向右⊙的方向转动第二线张力螺母②, 上线张力变强。
- 4) 向左⊙的方向转动, 则上线张力变弱。

(2) 底线张力的调整

- 1) 向右⊙的方向转动线张力螺丝②, 底线张力变强。
- 2) 向左⊙的方向转动线张力螺丝。则底线张力变弱。

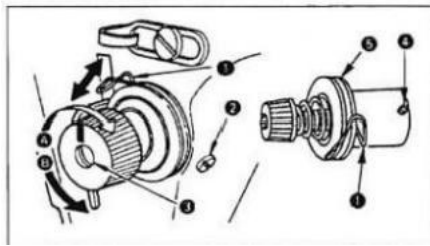
(1) Adjusting the needle thread tension

- 1) As you turn thread tension No.1 nut ① clockwise (in direction ⊙), the thread remaining on the needle after thread trimming will be shorter.
- 2) As you turn nut ① counterclockwise (in direction ⊙), the thread length will be longer.
- 3) As you turn thread tension No 2 nut ② clockwise (in direction ⊙), the needle thread tension will be increased.
- 4) As you turn nut counterclockwise (in direction ⊙), the needle thread tension will be decreased.

(2) Adjusting the bobbin thread tension

- 1) As you turn tension adjust screw ② clockwise (in direction ⊙), the bobbin thread tension will be increased.
- 2) As you turn screw ② counterclockwise (in direction ⊙), the bobbin thread tension will be decreased.

16. 挑线弹簧 I THREAD TAKE-UP SPRING



(1) 挑线弹簧⊙的行程量调整

- 1) 拧松线张力台的固定螺丝②。
- 2) 向右⊙的方向转动线张力杆②, 则行程量变大。
- 3) 向左⊙的方向转动线张力杆②, 则行程量变小。

(2) 挑线弹簧●的压力调整

- 1) 拧松固定螺丝②, 卸下线张力杆⊙
- 2) 拧松线张力杆固定螺丝③进行调整。
- 3) 向右⊙的方向转动线张力杆②则压力变强。
- 4) 向左⊙的方向转动压力则压力变弱。

(1) Changing the stroke of thread take-up spring

- 1) Loosen setscrew ②.
- 2) As you turn tension post ⊙ clockwise (in direction ⊙), the stroke of the thread take-up spring will be increased.
- 3) As you turn the knob counterclockwise (in direction ⊙), the stroke will be decreased.

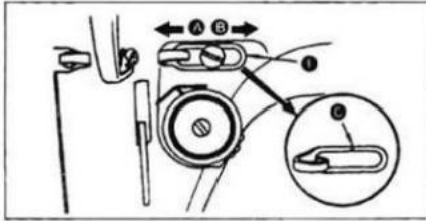
(2) Changing the pressure of thread take-up spring

- 1) Loosen setscrew, and remove thread tension (asm)
- 2) Loosen setscrew ③.
- 3) As you turn tension post clockwise (in direction ⊙), the pressure will be increased.
- 4) As you turn the post ⊙ counterclockwise (in direction ⊙), the pressure will be decreased.

17. 挑线杆挑线量的调整 I ADJUSTING THE THREAD TAKE-UP STROKE

注意
为了防止意外的启动造成的事故，请关掉电源后进行。

WARNING:
Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

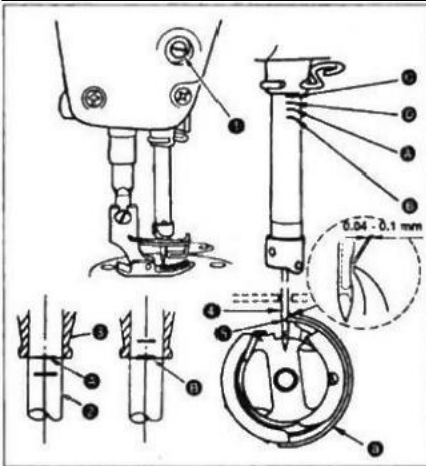


- 1) 缝制厚料时，向左 ① 的方向移动线导向器 ●，则挑线量变多。
 - 2) 缝制薄料时，向右 ② 的方向移动线导向器 ●，则挑线量变少。
 - 3) 线导向器 ● 在刻线 ◎ 对准螺丝的中心时是标准位置。
- 1) When sewing heavy-weight materials, move thread guide ● to the left (in direction ①) to increase the length of thread pulled out by the thread take-up.
 - 2) When sewing light-weight materials, move thread guide ● to the right (in direction ②) to decrease the length of thread pulled out by the thread take-up.
 - 3) Normally, thread guide ● is positioned in a way that marker line ◎ is aligned with the center of the screw.

18. 机针与旋梭的关系 / NEEDLE-TO-HOOK RELATIONSHIP

注意
为了防止突然启动造成人身事故，请关掉电源，确认马达确实停止转动后再进行。

WARNING:
To avoid possible personal injury due to abrupt start of the machine, turn off the power to the machine and check to be sure that the motor has totally stopped rotating in prior.



- (1) 请按如下方法调整机针和旋梭。
- 1) 转动飞轮，让针杆降到最下点，然后拧松针杆套管固定螺丝 ●
 - (决定针杆高度)
 - 2) [DB 针时]
把针杆 ② 的刻线 ▲ 对准针杆下套筒 ② 的下端，然后拧紧针杆套管固定螺丝 ①。
 - [DA 针时]
把针杆 ② 的刻线 ◎ 对准针杆下套筒 ⑧ 的下端，然后拧紧针杆套管固定螺丝 ○。
 - (决定旋梭 ◎ 的安装位置)
 - 3) [DB 针时]
拧松 3 根旋梭固定螺丝，转动飞轮在针杆 ② 上升的方向，把刻线目对准针杆下套筒图的下端。
 - [DA 针时]
拧松 3 根旋梭固定螺丝，转动飞轮在针杆 ② 上升的方向。把刻线 ◎ 对准针杆下套筒 ② 的下端。

- 4) 在此状态下，让旋梭尖 ③ 对准机针 ② 的中心，把机针与旋梭的间隙调整为 0.04~0.1mm (大致)，然后拧紧螺丝。



间隙过小的话，会损伤旋梭尖。间隙过大的话，会跳针

(1)Adjust the timing between the needle and the hook as follows:

1)Turn the handwheel to bring the needle bar down to the lowest point of its stroke,and loosen setscrew₄.

(Adjusting the needle bar height)

2)(For a DB needle)Align marker line **Q** on needle bar with the bottom end of needle bar lower bushing **O**.
thentighten setscrew **O**.

(For a DA needle)Align marker line **O** on needle bar **②** with the bottom end of needle bar lower bushing **②**.
thentighten setscrew **O**.

(Adjusting position of the hook **◎**)

3)(For a DB needle)Loosen the three hook setscrews,turn the handwheel and align marker line **on**
ascending needle bar with the bottom end of needle bar lower bushing **on**.

(For a DA needle)Loosen the three hook setscrews,turn the handwheel and align marker line **on**
ascending needle bar with the bottom end of needle bar lower bushing **②**.

4)After making the adjustments mentioned in the above steps,align hook blade point **O** with the center of needle **O**.Provide a clearance of 0.04 mm to 0.1mm(reference value)between the needle and the hook, then securely tighten setscrews in the hook.



If the clearance between the blade point of hook and the needle is smaller than the ! specified value,the blade point of hook will be damaged.If the clearance is larger,stitch ! skipping will result.

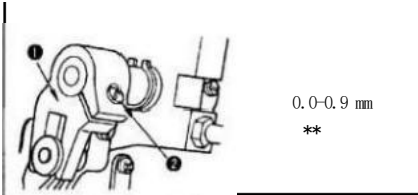
19. 送布牙的高度/ HEIGHT OF THE FEED DOG



注意
为了防止意外的起动造成的事故, 请关掉电源后进行。

WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



0.0-0.9 mm

**

调节送布牙的高度时

- ① 拧松上下送布双叉①的紧固螺丝②
- ② 上下移动送布台进行调节。
- ③ 拧紧固定螺丝②



紧固压力过弱的话, 抬牙叉部的动作则变 | 得不灵活了。

To adjust the height of the feed dog:

- ① Loosen screw **Q** of crank **●**
- ② Move the feed bar up or down to make adjustment
- ③ Securely tighten screw **②**



如果夹紧压力不足;
叉部运动时 I 变得沉重。

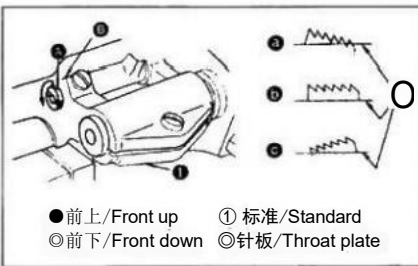
20. 送布牙的倾斜 I TILT OF THE FEED DOG



注意
为了防止意外的起动造成的事故, 请关掉电源后进行。

WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



● 前上/Front up ① 标准/Standard
◎ 前下/Front down ◎ 针板/Throat plate

1) 标准倾斜(水平)度是送布台轴的刻点②和送布台曲柄●的②部一致时的位置。
(的标准倾斜是对②部呈90度水平送布面向轴侧的位置。)

2) 为了防止缝制皱褶, 向前抬起送布牙时, 请拧松固定螺丝。把螺丝刀插入送布台轴。然后沿箭头方向转90度。

3) 为了减少布的偏斜, 向前下降送布牙时。请沿与箭头方向相反方向转90度。



调节了送布牙之后，送布齿的高度会有变化，请再次确认。

- 1)The standard tilt(horizontal)of the feed dog is obtained when marker dot Q on the feed bar shaft is aligned with marker dot O on feed rocker .(the marker dot inclines forward the feed rocker shaft by 90°,as standard).
- 2)To tilt the feed dog with its front up in order to prevent puckering,loosen the setscrew,and turn the feed bar shaft 90°in the direction of the arrow,using a screwdriver.
- 3)To tilt the feed dog with its front down in order to prevent uneven material feed,turn the feed bar shaft 90°in the opposite direction from the arrow.(The standard tilt for.)



Whenever the feed dog tilt is adjusted,the feed dog height will be changed.So,it is necessary to check the height after tilt adjustment.

21. 送布相位的调节 ADJUSTING THE FEED TIMING

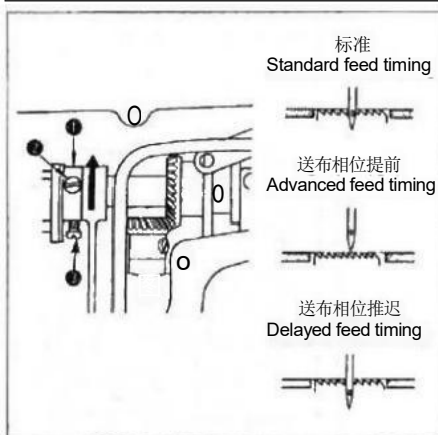


注意

为了防止突然启动造成人身事故，请关掉电源，确认马达确实停止转动后再进行。

WARNING:

To avoid possible personal injury due to abrupt start of the machine,turn off the power to the machine and check to be sure that the motor has totally stopped rotating in prior.



- 1) 拧松送布偏心凸轮●的固定螺丝②、②，朝箭头方向或反箭头方向移动送布偏心凸轮。然后拧紧固定螺丝。
- 2) 标准调节位置是送布牙从针板下落时，送布牙上面与针孔上端对准针板上面的位置。
- 3) 提早送布相位以防止布偏斜时，请向箭头方向移动送布偏心凸轮。
- 4) 为了良好的紧线而推迟相位时，请逆箭头方向移动偏心凸轮。



移动距离过大会发生断针故障。

- 1)Loosen screws ②and ②in feed eccentric cam ,move the feed eccentric cam in the direction of the arrow or opposite direction of the arrow,and firmly tighten the screws.
- 2)For the standard adjustment,adjust so that the top surface of feed dog and the top end of needle eyelet are flush with the top surface of throat plate when the feed dog descends below the throat plate.
- 3)To advance the feed timing in order to prevent uneven material feed,move the feed eccentric cam in the direction of the arrow.
- 4)To delay the feed timing in order to increase stitch tightness,move the feed eccentric cam in the opposite,direction from the arrow.



Be careful not to move the feed eccentric cam too far,or else needle breakage may result.

22. 机针停止位置的调整/ADJUSTING THE NEEDLE STOP POSITION



注意

为了防止意外的启动造成的事故，请关掉电源后进行。

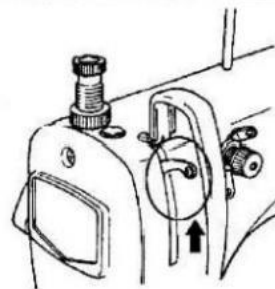
WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

总则：机头标定挑线杆位置

- 1). 打开开关，进入工作模式；
- 2). 按住“圆”键2秒，进入标机头界面；把挑线杆转到离最高点1.5~2mm位置；
- 3). 按住“国”键保存机头位置后系统自动返回到工作界面，蜂鸣器响一下；机头标定完成。

注：如果误进入标机头界面，按“”键返回即可。



挑线杆位置示意图

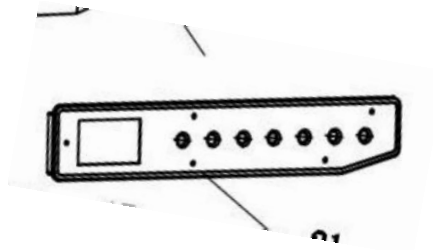
Schematic diagram of thread take-up lever

General principle:

the head is calibrated to thread take-up lever

- 1). Turn on power button, enter work mode;
- 2). Press the "圆" key for 2 seconds, the standard nose interface, the thread take up to the position which is far from the highest position 1.5~2mm;
- 3). Press "国" key to save the head position, the system automatically return to the working interface, buzzer look; nose calibration is complete.

Note: If you mistakenly entered the head of the table interface, press the " " key to return to.



操作盘

Operation panel

23. 固定刀/COUNTER KNIFE

(1) 割线刀凸轮位置的调节

转动缝纫机的皮带轮，当针杆从最低位置上升5毫米时，用手压割线螺旋管使滚轮轴接触割线凸轮①的凹部，然后用定位螺丝②临时固紧，然后把割线螺旋管②返回到原来的位置(离开位置)，同时放松定位螺丝②调节割线凸轮①，使凸轮端面与滚轮轴端面之间的间隙为0.5毫米。(以40公斤一厘米的扭矩拧紧定位螺丝②)。

(2) 移动刀片、固定刀片位置的调整

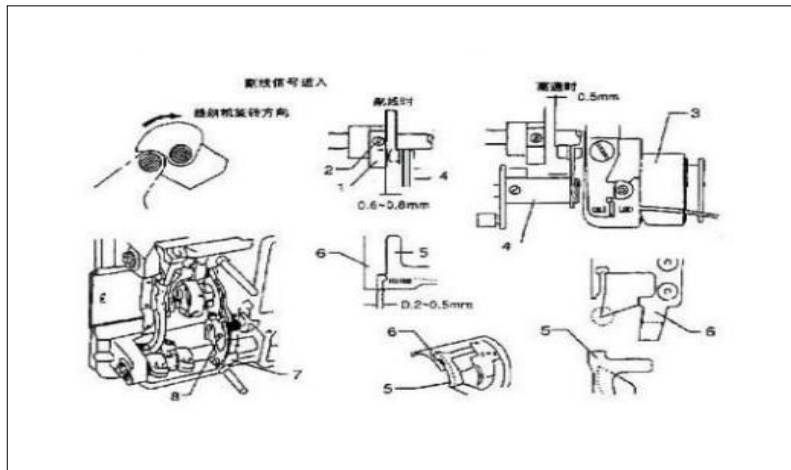
当割线凸轮控制杆④的头部超过割线凸轮时，固定刀片⑥的前端和转移刀片⑤的刀刃部应当啮合0.2-0.5毫米。当不啮合时，在滚轮轴超过制线凸轮①的情况下移动制线控制杆②、使固定刀片 G 的前端和移动刀片 ⑥ 刀刃部相啮合，然后拧紧螺丝 B。

(1) Adjusting the position of thread cutting cam

Turn the wheel of sewing machine. When the needle bar rise by 5mm from the lowest position, press the thread cutting serpentine pipe to make the roller shaft contact the rabbet of the thread cutting cam and the fix with the positioning screw ② temporarily, after that adjust the thread cutting serpentine pipe to the original place. At the same time, loose the positioning screw ② to adjust the thread cutting wheel ①, keeping the clearance between the head face of the cam and the roller shaft to 0.5mm (Fix the positioning screw 2 at a torque moment of 40kg/cm).

(2) Adjusting the place of moving knife and fixed knife

When the head of thread cutting cam controlling lever surpasses the thread cutting cam, the front part of the fixed knife G should mesh with the edge of the moving knife ⑤ in 0.2-0.5mm. When failed to mesh, move the moving thread cutting controlling lever ② under the condition that roller shaft surpasses the thread cutting cam, making the front of the fixed knife G to mesh with the edge of the moving knife and then fix the screw B

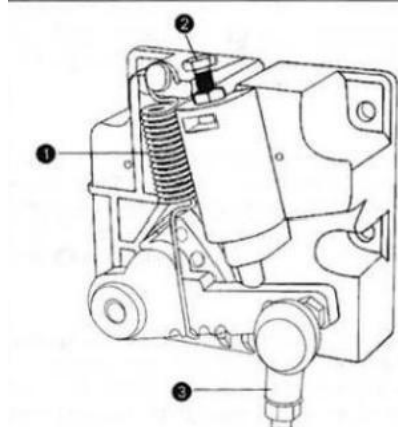


24. 踏板压力和行程/PEDAL PRESSURE AND PEDAL STROKE



注意
为了防止意外的起动造成的事故，请关掉电源后进行。

WARNING:
Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



(1) 踏板踩踏压力的调整

- 1) 换成前踩路弹簧 ● 可以调整。
- 2) 把弹簧挂到左侧之后，压力变轻。
- 3) 挂到右侧之后变重。

(2) 踏板回踩力的调整

- 1) 用踏板回踩压力调节弹簧②可以调整。
- 2) 拧进调节螺丝则压力变大。
- 3) 拧松调节螺丝则压力变小。

(3) 踏板踩踏行程的调整

- 1) 把连杆杆③插到右侧的孔里之后行程变大。

(1) Adjusting the pressure required to depress the front part of pedal

- 1) This pressure can be changed by changing the mounting position of pedaling pressure adjust spring ①
- 2) The pressure decreases when you hook the spring on the left side.
- 3) The pressure increases when you hook the spring on the right side.

(2) Adjusting the pressure required to depress the back part of pedal

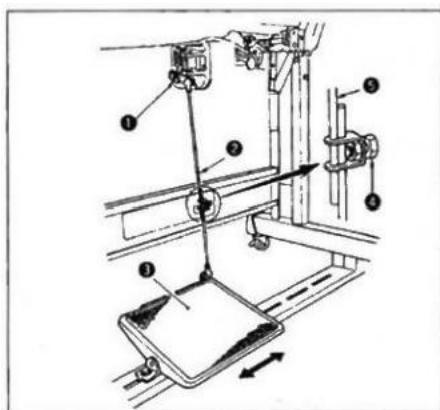
- 1) This pressure can be adjusted using regulator screw ②.
- 2) The pressure increases as you turn the regulator screw in.
- 2) The pressure decreases as you turn the screw out.
- (3) Adjusting the pedal stroke
- 1) The pedal stroke increases when you insert connecting rod ③ into the right hole.

25. 踏板的调整I ADJUSTMENT OF THE PEDAL



注意
为了防止意外的起动造成的事故，请关掉电源后进行。

WARNING:
Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



(1) 连接杆的安装

- 1) 向箭头方向移动踏板调节板②，让踏板拨杆●和连接杆③呈一直线。

(2) 踏板的角度

- 1) 调节连接杆的长度就可以自由地改变踏板的倾斜度。
- 2) 拧松调节螺丝④，拉出插入连接杆③进行调整。

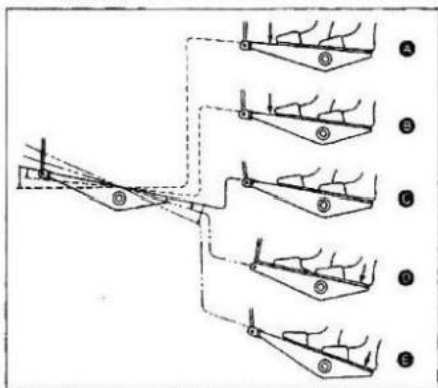
(1) Installing the connecting rod

- 1) Move pedal ② to the right or left as illustrated by the arrow so that motor control lever ● and connecting rod ③ are straightened.

(2) Adjusting the pedal angle

- 1) The pedal tilt can be freely adjusted by changing the length of the connecting rod.
- 2) Loosen adjust screw ④, and adjust the length of connecting rod ③

26. 踏板操作/PEDAL OPERATION



(1) 踏板按4个阶段进行操作。

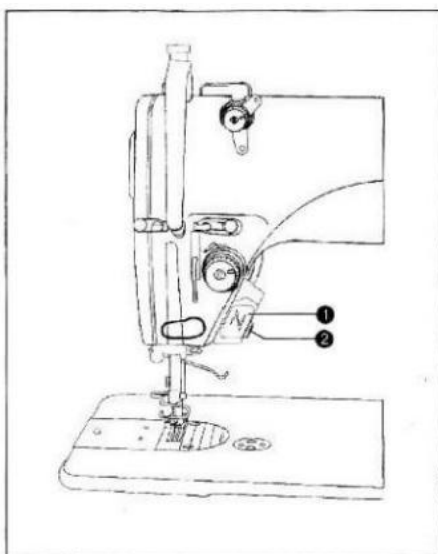
- 1) 向前轻轻踩踏板为低速缝制目。
 - 2) 再用力向前踩踏板则变为高速缝制 ②。
(但是, 开关设定为自动倒缝时, 倒缝结束后进行高速缝制)
 - 3) 把踏板返回到脚轻轻地放到踏板上的位置缝
纫机停止 ③。(机针上停止或下停止位置)
 - 4) 用力向后踩踏板则为切线动作 ④。
- *使用自动压脚提升装置时, 在停止和切线之间增加1级开关。向后轻轻的踩踏板为压脚提升动作 ⑤, 再往后用力踩踏板为切线动作。

(1)The pedal is operated in the following four steps:

- 1)The machine runs at low sewing speed when you lightly depress the front part of the pedal.②
 - 2)The machine runs at high sewing speed when you further depress the front part of the pedal.
(If the automatic reverse feed stitching has been preset,the machine runs at high speed afterit completes reverse feed stitching)
 - 3)The machine stops (with its needle up or down)when you reset the pedal to its original position.
 - 4)The machine trims threads when you fully depress the back part of the pedal.④
- *if your machine is provided with the Auto-lifter an addltion step is given between the machine stop and thread trimming step.The presser foot goes up when you lightly depress the back part of the pedal ⑤,and if you further depress the back part,the thread trimmer is actuated.

27. 触键手动倒缝/LED 照明灯

ONE-TOUCH TYPE REVERSE FEED STITCHING MECHANISM



(1) 使用方法

- 1) 按开关按钮 ●, 缝纫机立即变为倒送, 进行倒缝。
- 2) 按下按钮的时间, 可以进行倒缝。
- 3) 放开按钮, 则立即返回到正缝。

注意

为了防止意外的起动造成的事故
请关掉电源后进行。

(1)How to operate

- 1)The moment button O is pressed,the machine performs reverse feed stitching.
- 2)The machine performs reverse feed stitching as long as the button is held pressed.
- 3)The machine resumes nomal feed stitching the moment the button is released.



WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

(2)LED 照明灯的使用方法

- 1) 向前推动开关②, LED灯亮。
- 2) 向后推动开关②, LED灯灭。

(2)How to operat the LED light

- 1)Push the button ②,LED light be bright.
- 2)Pull the button②,LED light be power off.

零 件 手 册

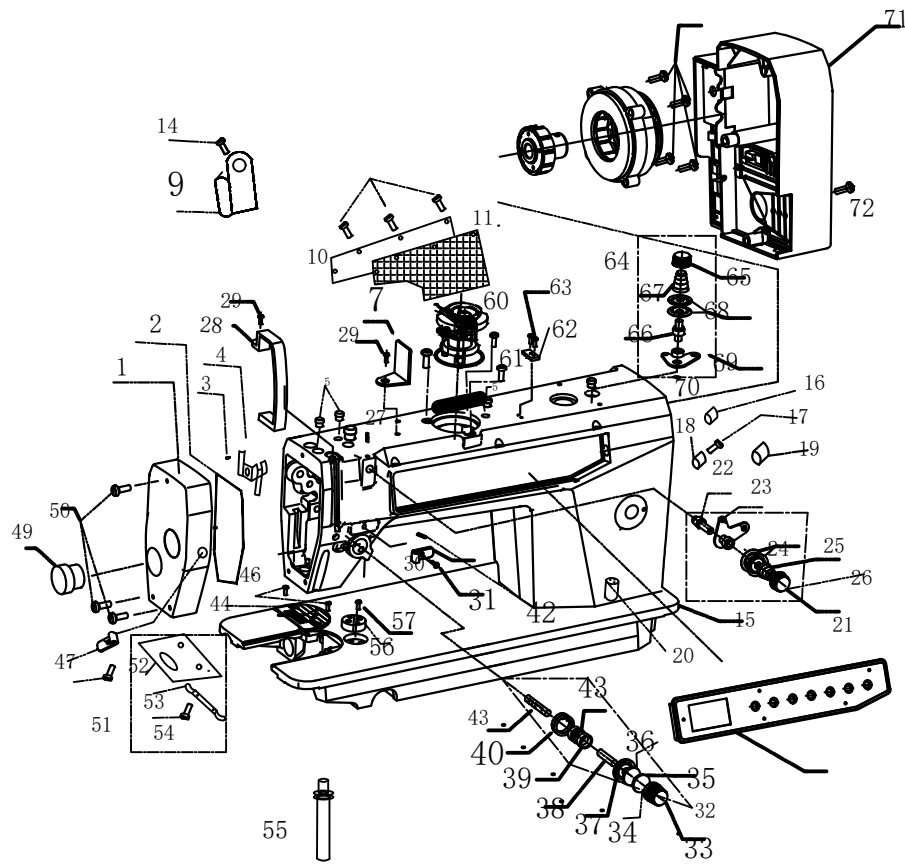
PARTS BOOK

选购零件部件时，请注明序号，件号。

**Please confirm the relative applications Ref.No,part No.
when buying the parts.**

1.机壳 外装部件

MACHINE FRAME&MISCELLANEOUS COVER COMPONENTB

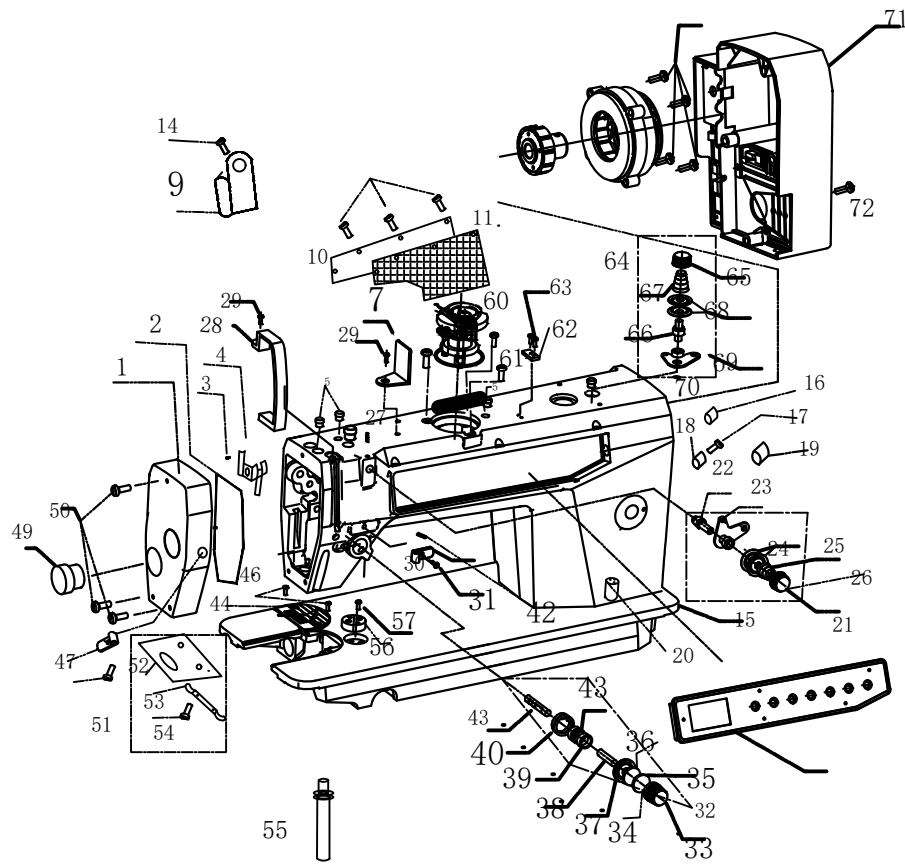


1. 机壳·外装部件

序号 Ref. NO.	件 号 Part NO.	名 称	Description	数 量 Qty	备 注 Note
1		面板	Face plate		
2	GR9890-01	面板垫	Face plate agsket	1	
3	GG544	防油板螺钉	Screw 1/8x44 L=4	1	
4	GR3403	面板防油板部件	Arm oil shifld asm.	1	
5	GR3344	挑线连杆销螺孔塞	Rubber plug	1	
6	GR1463	针杆曲柄螺孔塞	Rubber plug	1	
7	GR9890-42	三孔过线	Three holes thread guide plate	1	
8	GS053	后窗板螺钉	Screw 3/16x28 L=9	11	
9	GR1083-8	导线夹板	Cord holder	1	
10	GK9890-03	后窗板	Side plate	1	
11	GR9890-04	后窗板垫	Gasket	1	
12	GQ277	面板装饰片	Face plate		
13	GQ196	安全指示牌	Safety labe	10	
14	GS053-8	后窗板螺钉	Screw 3/16x28 L=14	1	
15		机壳	Machine cover	1	
16	GR3345	送料调节器孔塞	Rubber plug	1	
17	GS046	倒缝限套紧固螺钉	Screw 3/16x28 L=18	1	
18	G0061-8	倒缝限位套	Reverse feed lever stopper	1	
19	GR1464	下轴盲孔塞	Rubber plug	1	
20	GR1005-8	导线过线套	Magnet cord rubber	1	
21	GR9890-29	调线夹线器组件	Thread tension asm.	1	
22	GR7650	调线夹线螺钉	Thread tension post	1	
23	GR7673	调线过线板	Thread tension guide	1	
24	GR1015-8	小夹线板	Thread tension disk	2	
25	GW233-8	小夹线箭	Thread tension spring	1	
26	GS1750	小夹线螺母	Thread tension nut	1	
27	GS551	小夹线器组件螺钉	Screw 11/64x40 L=6	1	
28	GK240	挑线杆防护罩	Thread take-up lever cover	1	
29	GS551	挑线杆护罩螺钉	Screw 3/16x28 L=6	1	
30	GR3354	右线钩	Arm thread guide Right	1	
31	GS0552	右线钩螺钉	Screw 11/64x40 L=6	1	
32		夹线器组件	Thread tension asm.	1	
33	GL0113	夹线螺母	Tension nut	1	
34	GR1490	夹线制动板	Rotating stopper	1	
35	GW251	夹线簧	Tension spring	1	
36	GR1489	夹线板	Thread tension disk presser	1	
37	GR1488	夹线板	Thread tension disk	2	
38	GS015	夹线螺钉	Tension pos	1	
39	GW250	挑线簧	Take-up spring	1	
40	GR1487	挑线簧调节座	Tension post socket	1	
41	GS016	夹线螺钉紧固螺钉	Screw 9/64x40 L=5.5	1	
42	GS48	夹线器螺钉	Screw 15/64x28 L=7	1	
43	GX567	松线钉	Tension releasing	1	
44	GM202	针板	Throat plate	1	
45	GS044	针板螺钉	Screw 11/64x40 L=6	2	
46	GS044	针板螺钉	Screw 11/64x40 L=6		

1.机壳 外装部件

MACHINE FRAME&MISCELLANEOUS COVER COMPONENTB

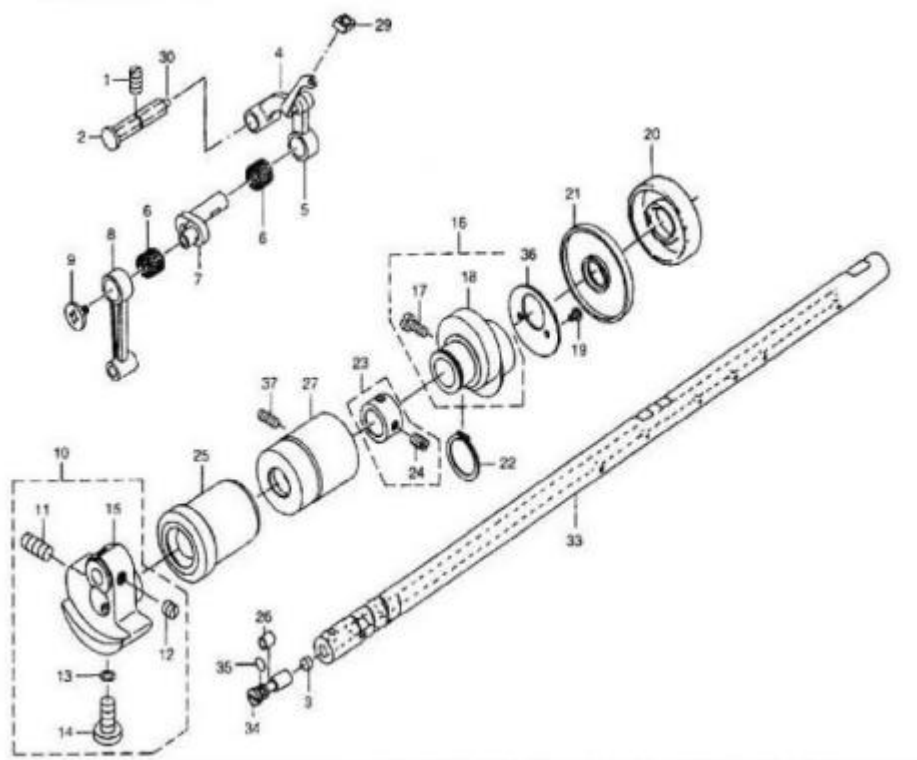


1. 机壳·外装部件

序号 Ref. NO.	件 号 Part NO	名 称	Description	数 量 Qty	备注 Note
47	GR3355	左线钩	Arm thread guide Left	1	
48	GS0551	左线钩螺钉	Screw 11/64x40 L=6	1	
49	GR1458	面板调节螺孔塞	Ribber plug	2	
50	GS053	面板螺钉	Screw 3/16x28 L=9	3	
51	GM340/4	推板部件	Slide plate asm	1	
52	GM204	推板	Slide plate	1	
53	GW434	推板簧	Bed slide spring	1	
54	GS045	推板簧螺钉	Screw 3/32x56 L=2.2	2	
55	GS0548	底板支柱	Bed screw stud	4	
56	GR724	夹边器	Ruler stopper	1	
57	GS373	夹边器螺钉	Screw 11/64x40 L=6	2	
58	GX565	型号牌铆钉	Pole		
59	GQ276-8	型号牌	Model plate		
60	GR9890-40	绕线器组件	Bobbin base	1	
61	GS9890-41	绕线器螺钉	Screw	3	
62	GR9890-26	割线刀	Knife	1	
63	GS226	绕线器割线刀螺钉	Knife screw	2	
64	GR9890-38	夹线器组件	Thread tension asm	1	
65	GR9890-38-1	夹线螺母	Tension nut	1	
66	GR9890-38-2	夹线螺钉	Tension post	1	
67	GR9890-38.3	夹线弹簧	Tension spring	1	
68	GR9890-38-4	夹线板	Thread tension disk presser	2	
69	GR9890-38-5	过线板	Thread tension guide	1	
70	GR9890-38-6	夹线螺母(下)	Tension nut	1	
71	GR9890-46	电机罩壳	Motor cover	1	
72	GS1769	电机罩紧固螺钉	Screw M 5	4	

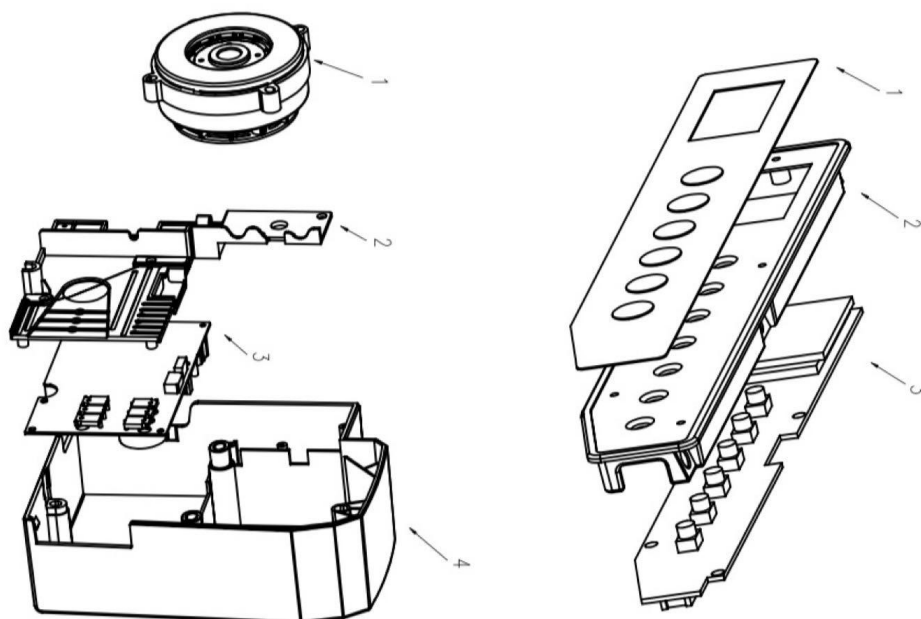
2. 上轴 · 挑线部件

MAIN SHAFT & THREAD-UP LEVER COMPONENTS



3. 一体式电控系统

IMPACT CONTROLLER SYSTEM



2. 上轴 · 挑线部件

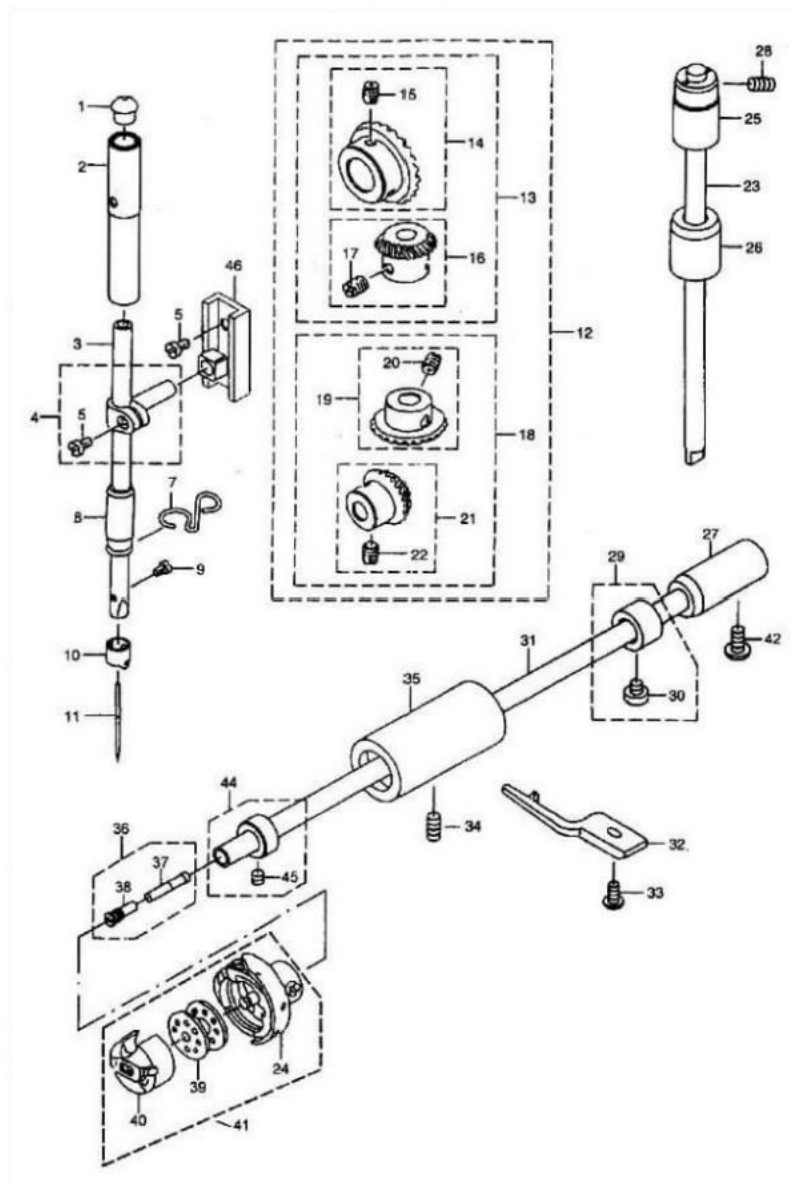
序号 Ref. NO.	件号 Part NO.	名称	DESCRIPTION	数量 Qty	备注 Note
1	02-815281151-1	挑线连杆销螺钉	Screw 1 5/64×28 L=10.5	1	
2	101.02-02	挑线连杆销	Thread take-up crank shaft	1	
3	101.02-03	曲柄油量限制毡	Roller felt	1	
4	101.02-04	挑线连杆	Thread take-up lever	1	
5	101.02-05	挑线连杆分组件	Thread take-up lever asm	1	
6	101.02-06	挑线杆滚针轴承	Needle bearing	2	
7	101.02-07	挑线曲柄部件	Needle bar crank	1	
8	101.02-08	针杆连杆	Needle bar crank rod	1	
9	101.02-09	挑线曲柄左旋螺钉	Left screw 9/64×40 L=4.8	1	
10	102.02-10	针杆曲柄组件	Counter weight asm	1	
11	02-818281651-1	针杆曲柄紧固螺钉	Screw 9/32×28 L=16	1	
12	02-816400611-1	挑线曲柄定位螺钉	Screw 1/4×40 L=6	2	
13	101.02-13	定位螺钉O型圈	Rubber ring	1	
14	02-418281651-1	针杆曲柄定位螺钉	Screw 9/32×28 L=15.5	1	
15	102.02-15	针杆曲柄	Counter weight	1	
16	101.02-16	送料偏心轮组件	Feed drive eccentric cam asm	1	
17	02-516401111-1	送料偏心轮螺钉	Screw 1/4×40 L= 11	2	
18	101.02-18	送料偏心轮	Feed drive eccentric cam	1	
19	02-409400623-1	送料偏心轮盖板螺钉轴承	Screw 9/64×40 L=6	2	
20	102.02-20	上轴油封	Needle bearing	1	
21	102.02-21	抬牙连杆轴挡圈	Oil seal	1	
22	101.02-22	上轴挡圈组件	Snap ring	1	
23	102.02-23	上轴挡圈螺钉	Thrust collar asm	1	
24	02-816400611-1	上轴前轴套	Screw 1/4×40 L=6	2	
25	101.02-25	曲柄油量调节销	Main shaft front bushing asm	1	
26	101.02-26	上轴中轴套	Oil adjusting collar	1	
27	102.02-27	电线夹	Bushing, intermediate	1	
28	101.02-28	橡皮套	Cable band	1	
29	101.02-29	挑线连杆销毛毡	Rubber	1	
30	101.02-30	手轮螺钉	Thread take-up crank shaft felt	1	
31	02-815281051-1	手轮	Screw 15/64×28 L=10	1	
32	102.02-34	上轴	Hand wheel	1	
33	102.02-38	上轴油量调节销	Main shaft	1	
34	101.02-40	上轴油量调节销O型圈	Oil amount adjusting pin	1	
35	101.02-41	送料偏心轮盖板	Rubber ring	1	
36	101.02-42	上轴中轴套螺钉	Thrust collar	1	
37	102.02-43	联轴器 (A)	Screw	1	
38	102.02-44	联轴器橡胶圈	Connect block A	1	
39	102.02-45	联轴器螺钉	Connect rubber A	1	
40	102.02-46	轴承垫	Screw	3	
41	102.02-47	联轴器 (B)	Needle bearing plate	1	
42	102.02-48	联轴器 (B) 固定螺钉	Connect blokB	1	
43	102.02-49	直驱电机组件	Screw	3	
44	102.11-36	电机安装螺钉	Motor asm	4	
45	102.11-37	电机安装螺钉垫片	Screw	4	
46	102.11-38		Washer	4	

3. 一体式电控系统

序号 Ref. NO.	件号 Part NO.	名称	DESCRIPTION	数量 Qty	备注 Note
1		电机	Motor	1	
2		电控背板	Control box rear cover	1	
3		线路板	Circuit board	1	
4		电控外壳	controller cover		
1		面膜	membrane	1	
2		壳体	Cover	1	
3		线路板	Circuit board	1	

4. 针杆·竖轴·下轴部件

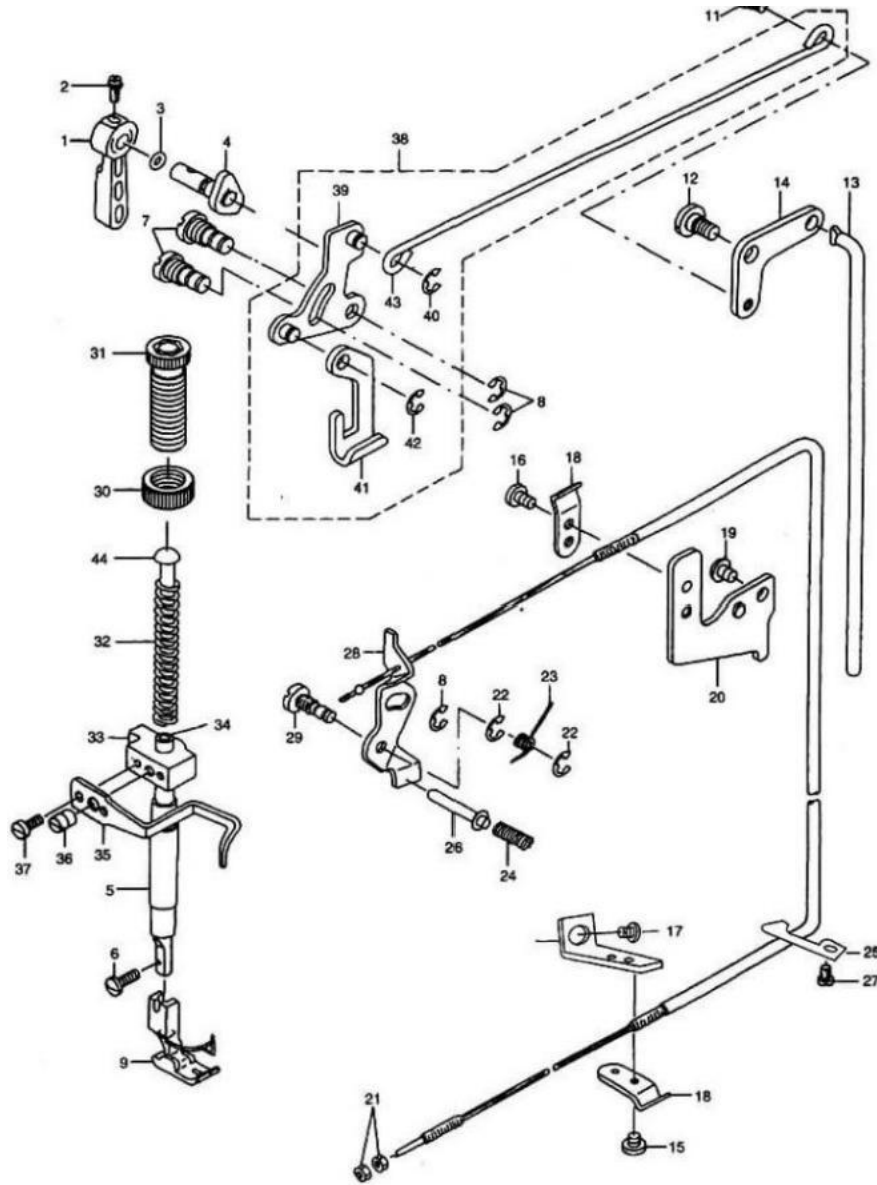
NEEDLE BAR, UPRIGHT SHAFT & HOOK DRIVING SHAFT COMPONENTS



4. 针杆·竖轴·下轴部件

序号 Ref. NO	件 号 Part NO.	名 称	Description	数 量 Qty	备 注 Note
1	GR1479	针杆上孔塞	Cap		
2	G09890-17	针杆上套	Needle bar bushing upper		
3	GZ9890-16	针杆	Needle bar		
4	GR1478	针杆连接柱组件	Needle rod holder asm.		
5	GS011	针杆连接柱螺钉	Screw 9/64x40 L=7.5		
6	GU168	针杆连接柱滑块	Slide block		
7	GR9890-18	针杆下套线钩	Needle bar thread guide		
8	G0272	针杆下套	Needle bar bushing.lower		
9	GS071	机针螺钉	Screw 1/8x44 L=4.8		
10	GR3352	针杆线钩	Needle bar thread guide		
11	GV15	机针	Needle DBX1#14		
12		伞齿轮组件	Gear &pinion asm.		
13		上齿轮组件	Gear &pinion asm.,uppe		
14	GC168	上轴伞齿轮组件	Gear asm.		
15	GS033	伞齿轮螺钉	Screw 1/4x40 L=8		
16	GC167	竖轴上伞齿轮组件	Pinion asm.		
17	GS033	伞齿轮螺钉	Screw 1/4x40 L=8		
18		下齿轮组件	Gcar&pinion asm., lower		
19	GC166	竖轴下齿轮组件	Gcar asm.		
20	GS033	伞齿轮螺钉	Screw 1/4x40 L=8		
21	GC165	下轴伞齿轮组件	Pinion asm.		
22	GS033	伞齿轮螺钉	Screw 1/4x40 L=8		
23	G7435	竖轴	Upright shaft		
24	GN161	旋梭	Hook asm.		
25	G0472	竖轴上轴套	Upright shaft bushing, upper		
26	G0471	竖轴下轴套	Upright shaft bushing.lower		
27	G0470	下轴后轴套	Bushing rear		
28	GS053	竖轴上套紧固螺钉	Screw 3/16x28 L=7		
29	GR1519-8	下轴挡圈组件	Thrust collar asm.		
30	GS082-8	下轴挡圈螺钉	Screw 11/64x40 L=5		
31	GZ434-8	下轴	Lower shaft		
32	GR3371	旋梭定位钩	Bobbin case holder		
33	GS030-8	旋梭定位钩螺钉	Screw 11/64x40 L=9.5		
34	GS0559	下轴前轴套螺钉	Screw 3/16x28 L=7		
35	G01002	下轴前轴套	Lower shaft front metal		
36		下轴限油组件	Oil seal screw asm		
37	GR1515	下轴限油芯	Oil wick		
38	GS031	下轴限油螺钉	Oil scal screw		
39	GN163	梭心	Bobbin		
40	GN162	梭壳	Bobbin case		
41	GN161	旋梭梭壳组件	Hook bobbin case asm		
42	G0053	下轴后轴套螺钉	Screw 3/16x28 L=13		
43	GR0341	针杆连接柱滑块座	Slide block base		
44	GR3372-7	下轴挡油圈组件	Lower shaft oil deflector asm		
45	GS210	挡油圈螺钉	Oil deflector screw 11/64x 40 L=3.5	2	

5. 压杆部件
HAND LIFTER COMPONENTS

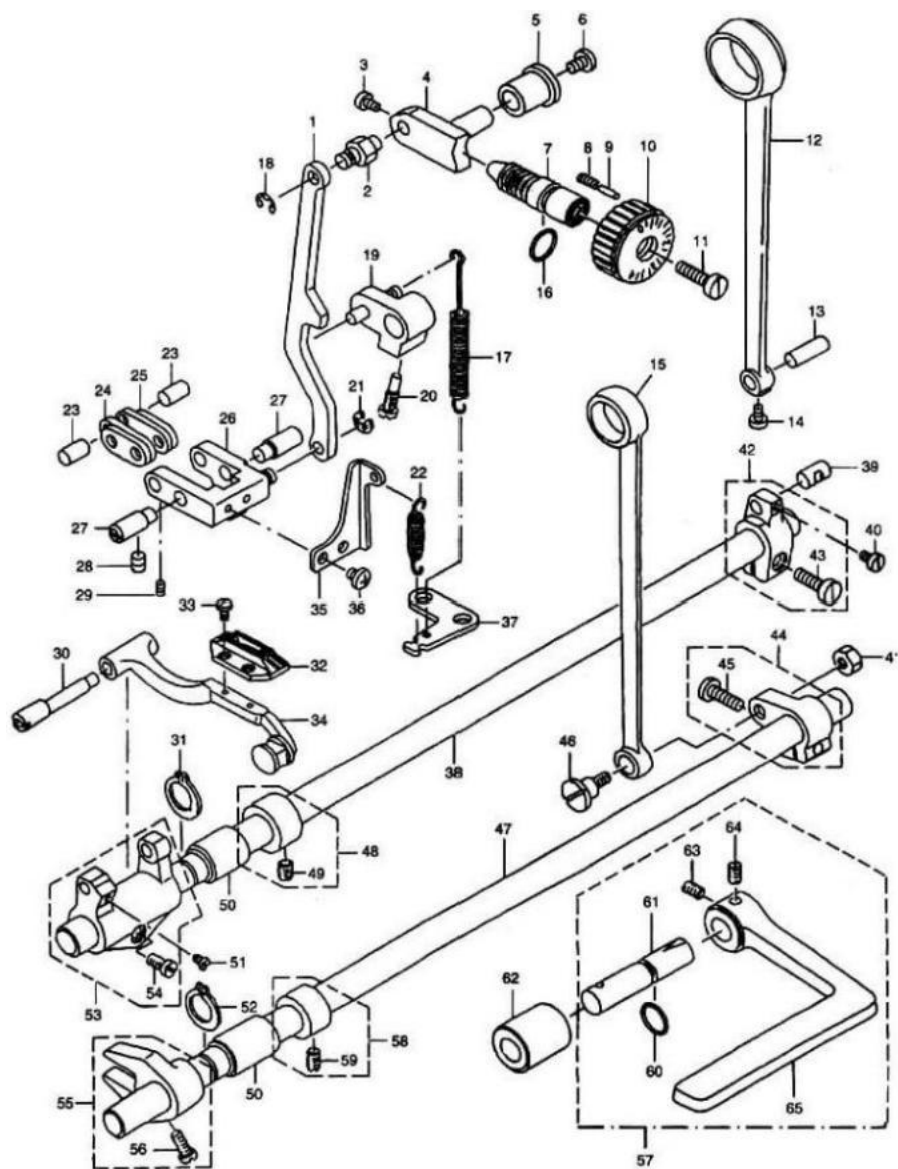


5. 压杆部件

序号 Ref.NO.	件 号 Part NO.	名 称	Description	数 量 Qty	备 注 Note
1	GR3360	压脚扳手	Hand lifter		
2	GS0554	压脚扳手螺钉	Screw 9/64x40 L=10		
3	GR1503	压脚扳手轴Q型圈	Rubber ring		
4	GR336/2	压脚扳手凸轮部件	Hand lifter cam asm.		
5	G0273	压杆轴套	Presser bar bushing lower		
6	GS020	活压脚螺钉	Screw 9/64x40 L=8		
7	GS0555	前杠杆螺纹销	Link shaft		
8	GR1510	螺纹销开口挡圈	E-ring 5		
9	GM200/5	活压脚部件	Presser foot asm.		
10		下压线底板	Wire holder bracket, lower		
11	GS0558	抬压脚拉杆螺钉	Hinge screw		
12	GS0557	后杠杆轴拉螺钉	Hinge screw		
13	GR3370	抬压脚顶杆	Knee lifter connecting rod		
14	GR3369	抬压脚后杠杆	Lifting lever link		
15	GS010	下压板紧固螺钉	Screw 11/64x40 L=5		
16	GS336-8	上压板紧固螺钉	Screw 11/64x40 L=5		
17		下压板组件紧固螺钉	Screw 15/64x28 L=14.5		
18	GR1017-8	拉线活压板	Wire holder		
19	GS310-8	上压板组件紧固螺钉	Screw 3/16x28 L=6		
20	GR1016-8	上压线底板	Wire holder bracket, upper		
21	GL6	拉线钮距调节螺母	Nut 3/16x32		
22	GR1510	螺纹销开口挡圈	E-ring 5		
23	GW433	松线顶板复位簧	Tension release return spring		
24	GW432	松线辅钉弹簧	Thread release pin spring		
25		软管右挡板	Wire cable holder		
26	GX568	松线辅钉	Tension release supporting pin		
27		右挡板紧固螺钉	Screw 3/16x28 L=6		
28	GR9890-50	松线顶板	Thread tension release wire		
29	GS0556	松线顶板螺纹销	Tension release shaft		
30	GL0114	调压螺母	Presser adjusting screw nut		
31	GS0553-8	调压螺钉	Presser spring regulator		
32	GW253	调压簧	Presser adjusting spring		
33	GR3358-8	压杆导架	Presser bar guide bracket		
34	GZ275	压杆	Presser bar		
35	GR9890-56	缓线调节钩	Presser bar thread guide		
36	GS033	压杆导架螺钉	Screw 1/4x40 L=8		
37	GS0100	缓线调节钩螺钉	Screw 9/64x40 L=8		
38		前杠杆组件	Knee lifting cross rod asm		
39	GR3364/3	抬压脚前杠杆部件	Hand lifter link		
40	GR1510	拉杆开口挡圈	E-ring 5		
41	GR3363	压脚升降板	Lifting lever		
42	GR3366	升降板连接开口挡圈	E-ring 5		
43	GR3368	抬压脚拉杆	Knee lifting cross rod		
44	GR1494	调压导杆	Presser guide bar		

6. 送料部件

FEED MECHANISM COMPONENTS

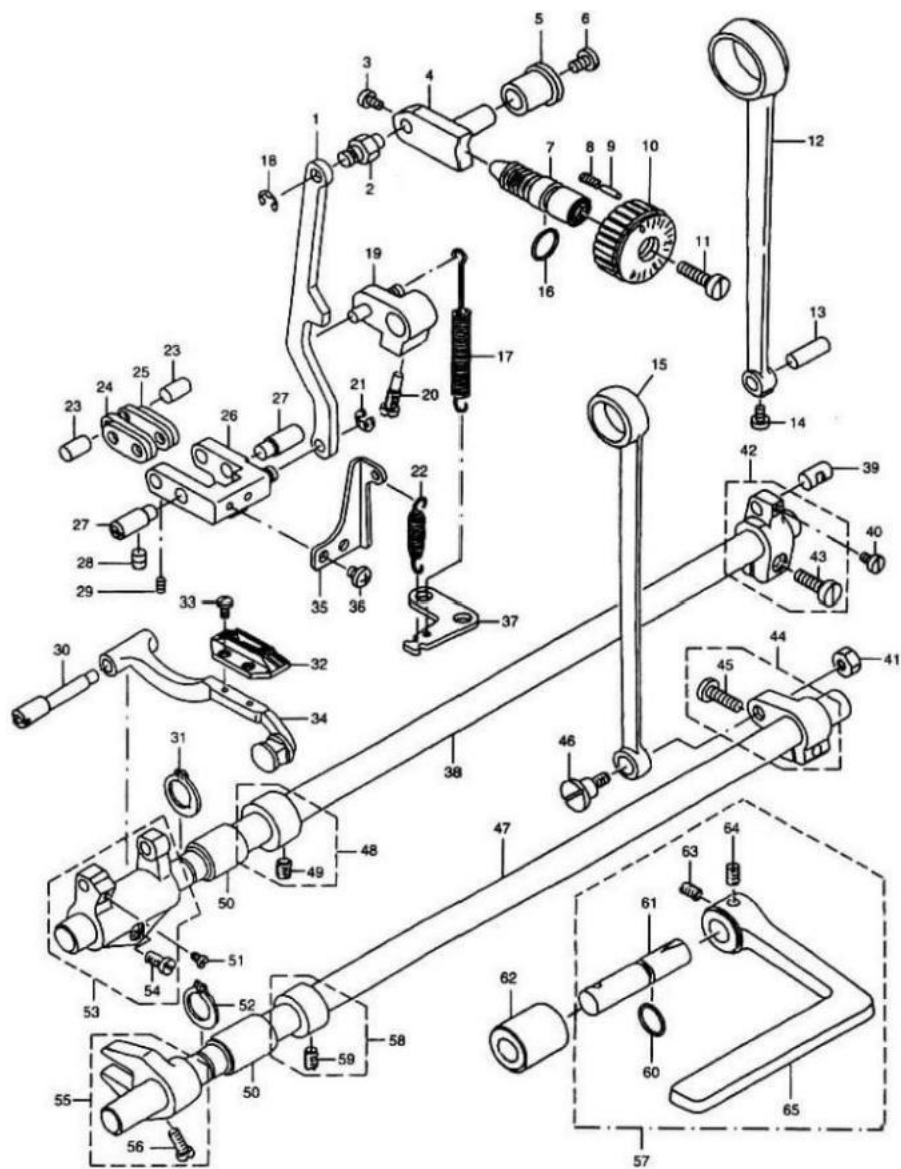


6. 送料部件

序号 Ref. NO.	件 号 Part NO.	名 称	Description	数 量 Qty	备 注 Note
1	GH9890-24	倒送料连杆	Feed adjust rod		
2	GX9890-25	倒送料连杆销	Feed regulator pin		
3	GS011	连杆销螺钉	Scrcw 9/64x40 L=6		
4	GR3384	送料调节器	Feed regulator		
5	G0474	送料调节器轴套	Feed regulator bushing		
6	GS0565	送料调节器紧固螺钉	Screw 3/16x28 L=7		
7	GS9890-23	送料调节螺栓	Feed regulator screw		
8	GW257	送料距锁合簧	Spring		
9	GX576	送料距锁合销	Feed adjust pin		
10	GR3382-8	送料距旋钮	Feed dial		
11	GS0563	送料距旋钮螺钉	Screw 3/16x28 L=18		
12	GH568	送料连杆	Rocker shaft connecting rod		
13	GX570	送料连杆销	Walking foot long pin		
14	GS0560	送料连杆螺钉	Screw 9/64x40 L=4		
15	GH572	抬牙连杆	Connecting rod		
16	GR3383	送料调节螺栓O型圈	Rubber ring		
17	GW436	摆动板座复位簧	Feed reverse spring		
18	GR1510	倒送料连杆销挡医	E-ring 5		
19	GH547/2	倒送料曲柄组件	Feed reverse arm asm.		
20	GS2566	倒送料曲柄螺钉	Screw		
21	GR1510	倒送料连杆挡圈	E-ring 5		
22	GW435	倒送料拉簧	Spring		
23	GX571	短摆动板连接销	Walking foot short pin		
24	GR3374	送料长摆动板	Connecting link long pin		
25	GR3775	送料短摆动板	Connecting link short pin		
26	GR3376/2-8	送料摆动板座组件	Feed adjust link asm.		
27	GX573	送料摆动板座左右销	Adjusting link fulerum shaft		
28	GS48	左右销螺钉	Screw 15/64x28 L=7		
29	GS0560	连杆销螺钉	Screw 9/64x40 L=4		
30	GX575	牙架销	Feed bar shaft		
31	GR1524	送料轴轴用挡圈	Retaining ring		
32	GM201	送料牙	Fedd dog 1		
33	GS072	送料牙螺钉	Screw 1/8x44 L=6		
34	GR3380/5-8	牙架部件	Feed bar asm.		
35	GR3388	摆动板座复位板	Adjusting link spring guide		
36	GS0567	复位板紧固螺钉	Screw 11/64x40 L=5		
37	GR3387	拉簧固定板	Feed spring hood		
38	GZ436	送料轴	Feed rocker shaft		
39	GX571	送料曲柄销	Walking foot middle pin		
40	GS0560	曲柄销螺钉	Screw 9/64x40L=6		
41	GL7	抬牙连杆轴位螺母	Nut 9/32x28		
42	GH569	送料曲柄组件	Feed rocker shaft crank as.		
43	GS0561	送料曲柄螺钉	Screw 3/16x28 L=15.5		
44	GH571	抬牙后曲柄组件	Lifting rocker asm.		
45	GS0561	抬牙后曲柄螺钉	Screw 3/16x28 L=14		
46	GS0562	抬牙连杆轴位螺钉	Hinge screw		

6. 送料部件

FEED MECHANISM COMPONENTS

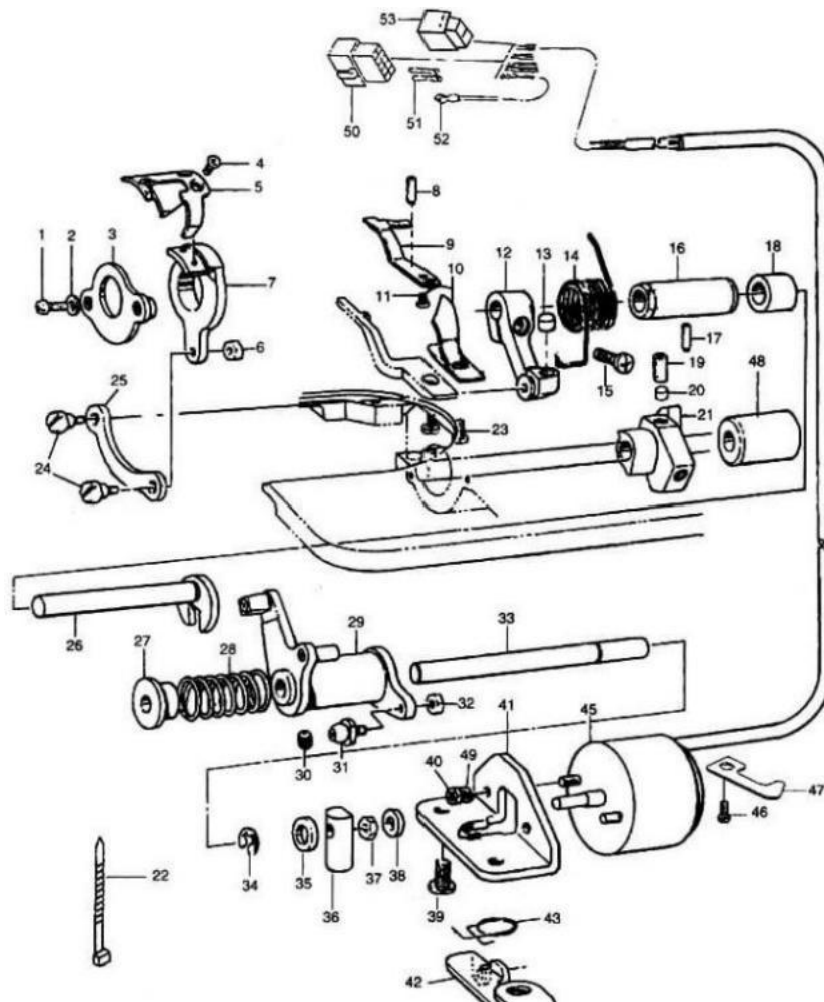


6. 送料部件

序号 Ref.NO	件 号 Part NO.	名 称	Description	数 量 Qty	备 注 Note
47	GZ437	抬牙轴	Feed driving shaft		
48	GR1469	抬牙轴挡圈组件	Thrust collar asm.		
49	GS39	送料轴挡圈螺钉	Screw 1/4x40 L=6		
50	G0473	送料轴前轴套	Feed rocker shaft bushing		
51	GS092	牙架销螺钉	Screw 11/64x40 L=7		
52	GR1524	抬牙轴轴用挡圈	Retaining ring		
53	GR3379-8	牙架座组件	Feed bar crank asm.		
54	GS69	牙架座螺钉	Screw 3/16x28 L=14		
55	GH570	抬牙叉曲柄组件	Driving shaft crank asm.		
56	GS037	抬牙叉曲柄螺钉	Screw 11/64x40 L=10.5		
57	GR3386-8	倒送料扳手组件	Reverse feed control lever asm		
58	GR1469	抬牙轴挡圈	Thrust collar asm.		
59	GS39	抬牙轴挡圈螺钉	Screw 1/4x40 L=6		
60	GR3385	倒送料轴O型圈	Rubber ring		
61	GZ438	倒送料轴	Feed reverse shaft		
62	G09890-57	倒送料轴轴套	Feed lever metal		
63	GS033	倒送料扳手螺钉	Screw 1/4x40 L=8.5		
64	GS050	倒送料扳手定位螺钉	Screw 1/4x40 L=10		
65	GR9890-64	倒送料扳手	Reverse feed control lever		

7. 自动切线 部件

THREAD TRIMMER COMPONENTS

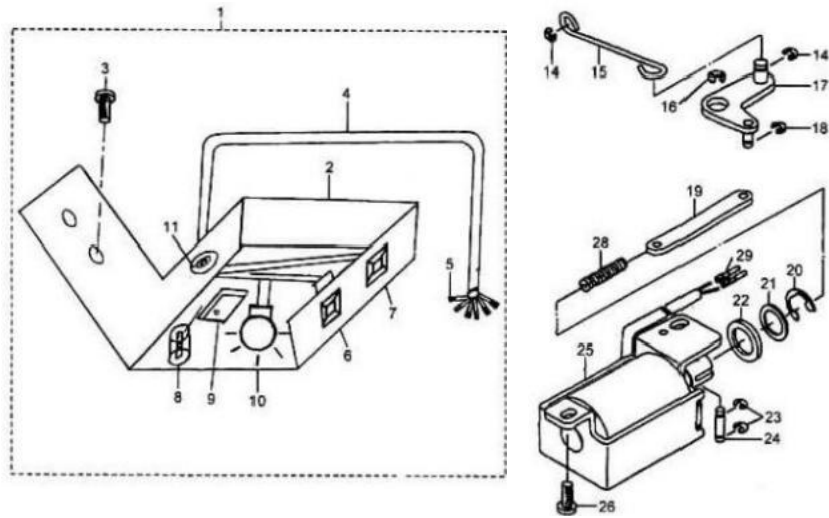


7. 自动切线部件

序号 Ref. NO	件 号 Part NO.	名 称	Description	数 量 Qty	备注 Note
1	GS832	螺钉SM11/64*x40L=12	Screw SM11/64x40 L=12	2	
2	GR7662	牙架座螺钉垫圈	Washer		
3	GR7661	刀架压板组件	Partiality shank asm.		
4	GS175	活动刀固定螺钉	Screw		
5	GR7663	活动刀	Motorial knife		
6	GL650	螺母SM11/64`x40	Nut SM11/64x40		
7	GR7660	剪线刀架	Knife bracket		
8	GS9890-27	定刀调节螺钉	Screw		
9	GR7656	割线刀	Secant knife		
10	GR7658	护针片	Protect needle patch		
11	GS1755	螺钉SM9/64*x40L=4	Screw SM9/64x40 L=4		
12	GH100	曲柄	Thread shear rock arm		
13	GR7664	驱动曲柄止动块	Positioning block		
14	GW951	弹簧	Spring		
15	GS1760	螺钉SM3/16*x32 L=14	Screw SM3/16x32 L=14		
16	G01001	切线轴套	Thread shear cam rock arm assy		
17	GS1761	螺钉SM11/64° x40	Screw SM11/64x40		
18	G01000	驱动曲柄轴衬套	Short bush		
19	GS1754	螺钉SM1/4*x40L=10	Screw SM1/4x40 L=10		
20		凸轮顶柱	Pole		
21	GR7656	凸轮	Thread shear cam		
22		尼龙扎带	Bale band		
23	GS788	螺钉SM9/64° x40L=5	Screw SM9/64x40 L=5		
24	GS1759	连杆螺钉SM11/64*x40L=5. !	Screw SM11/64x40 L=5.5		
25	GH1000	连杆	Knife shaft connecting rod		
26	GZ850	切线凸轮曲柄轴	Thread shear rock arm shaft		
27	GR7667	扣簧端盖	Spring cover		
28	GW952	弹簧	Spring		
29	GR7665	剪线驱动组件	Thread shear rock arm shaft		
30	GS189	螺钉SM11/64*x40	Screw SM11/64x40		
31	G7666	滚柱	Roal shaft assy		
32	GL650	螺母	Nut		
33	GZ851	轴	Thread shear shaft		
34	GR7669	挡圈	Retaining ring		
35	GR7668		Magnetic plug cushion mat		
36	GR7672	电磁铁缓冲垫	Magnetic plug pin		
37	GL652	切线电磁铁顶销	Nut SM1/4x40		
38	GR7671	螺母SM1/4"x40	Washer		
39	GS1763	垫圈	Screw		
40	GKL201-8	油泵安装螺钉	Nut M4		
41	GR7670	螺 母 M 4	Magnetic plug cushion mat		
	GR7677	切线磁铁支架	Thread loose seat		
	GWS953	松线座	Spring		
	GS1764	弹簧	Screw SM1/4x28L=13		
	GQ785	螺钉SM1/4"x28L=13	Magnetic plug		
	GR3400-7	剪线电磁铁组件	Screw SM15/64x28 L=14.5		
	GS525-8	螺钉SM15/64"x28L=14.5	Electrical plug breacker washer		
	G01003	旋校供油管压板	Bushing, lower shaft		
	GKR202	下轴中套	Washer 4.5x8x0.5		
50	GR8800-61	垫圈4.5x8x0.5	14 holes thread connector		
51	GR9890-78	14孔接线器	Conncting terminal		
52	GR8800-60	接线端子	Groundwire terminal		
53	GR9890-70	地线接头	LED light's wire connector		
		LED灯接线器			

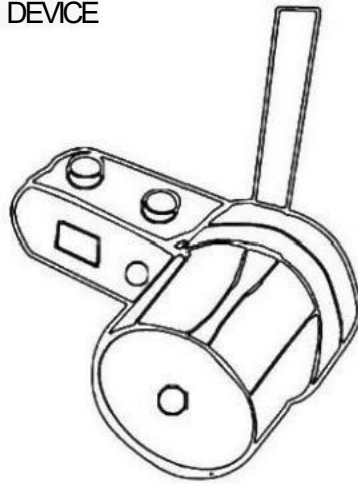
8. 自动倒缝部件

AUTOMATIC REVERSE FEED COMPONENTS



9. 夹线器

THREAD CLAMP DEVICE



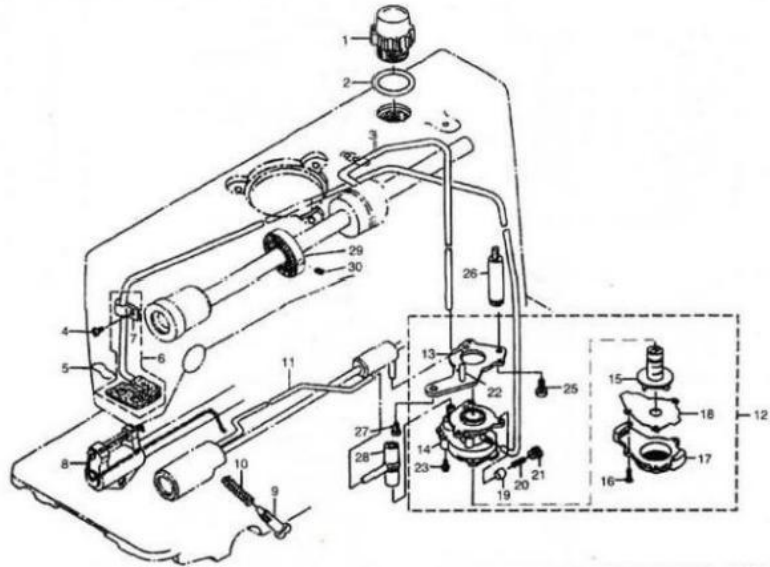
8. 自动倒缝部件

序号 Ref. NO	件 号 Pat NO.	名 称	Description	数 量 Qty	备注 Note
1231	GR9890-33	开关组件	Switch block	1	
	GR9890-51	开关罩壳	Swicth cover	1	
	GS053	螺钉	Screw 3/16x28 L=9	1	
	GR9890-33-1	电线	Wire	1	
5 ₉	GR9890-33-2	接线端子	Connecting terinal	1	
	GR9890-33-3	倒缝按钮	Reverse feed button	1	
7	GR9890-33.4	LED灯按钮	LED light button	1	
8	GR9890-33-5	翻抬开关	Switch	1	
9	GR9890-33-6	电路板	Circuit board	1	
10	GR9890-33-7	LED灯	LED ligh	1	
11	GR9890-33-8	过线胶套	Thread guide cover	1	
12					
13					
14	GR625-8	开口挡刷	E-ring 5		
15	GR7687	自动倒送料拉杆	Reverse feed connecting shaft		
16		开口挡圈	E-ring 9		
17	GH1002	自动倒送料曲柄	Connecting arm asm		
18	GR1028-8	开口挡圈	E-ring 4		
19	GR7691	自动倒送料连杆	Reverse feed connecting link		
20	GR1027-8	开口挡圈	E-ring 12		
21	G0363-8	垫片	Washer 16x 24 x 2.6		
22	G0362-8	橡皮垫片	Rubber plunger		
23	GR1028-8	开口挡圈	E-ring 4		
24	GR7692	连杆销	Plunger arm pin		
25	GQ796	自动倒送料电磁铁	Reverse feed magnet asm.		
26	GS525-8	螺钉	Screw 15/64 x 28 L=12		
27		自动倒送料连杆顶簧	Screw 3/16 L=9		
28		电线插针	Plunger spring		
29		螺钉	Pin contact		
30			Screw 3/16x 28 L=6		

9. 夹线器

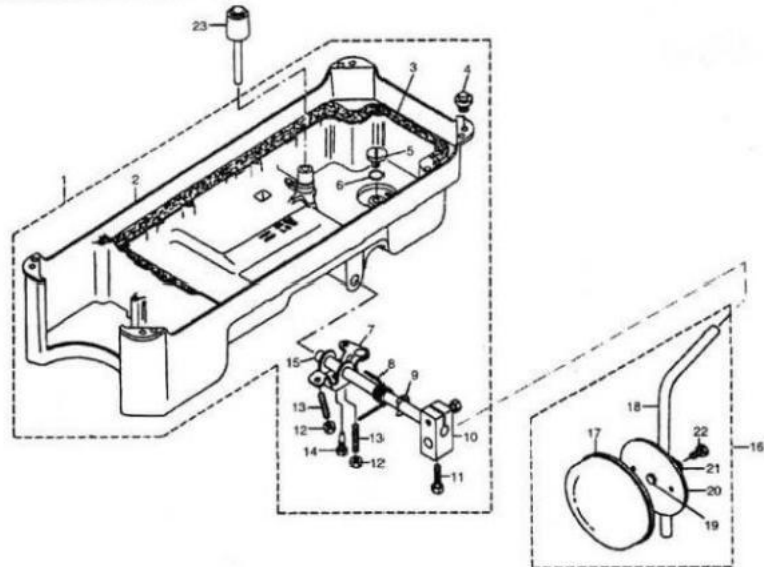
10. 润滑部件

OIL LUBRICATION COMPONENTS



11. 油盘部件

OIL RESERVOIR COMPONENTS



10. 润滑部件

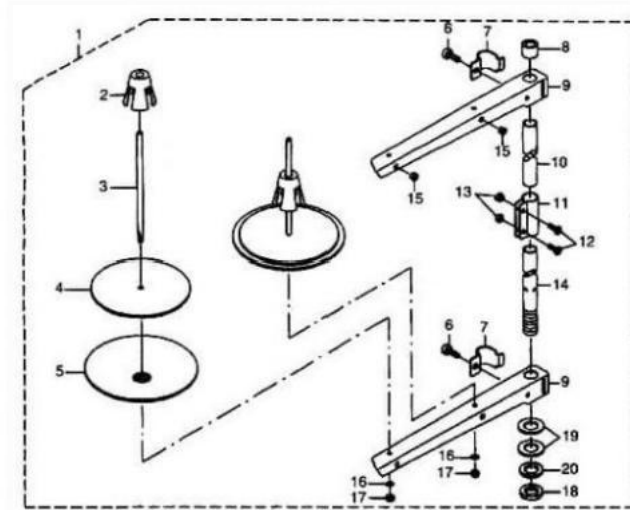
序号 Ref. NO.	件 号 Part NO	名 称	Description	数 量 Qty	备 注 Note
1	GR1561-8	油窗	Oil sight window		
2	GR1562	油窗O型圈	Rubber ring		
3	GR3398	上轴供油管	Main shaft oil tube		
4	GR0551	回油管夹螺钉	Screw 3/16x28 L=6		
5	GR1569	回油毡夹	Oil felt presser		
6	GR3401	回油管组件	Oil return tube asm		
7	GR1566	回油管夹	Holder		
8	GR3378	送料轴油线	Oil wick		
9	GS054-8	旋梭油量调节螺钉	Oil adjusting screw		
10	GW259-8	旋梭油量调节簧	Spring		
11	GR3399-8	旋梭供油管	Oil tube		
12	GR3389/12	油泵部件	Lubricating oil pump asm		
13	GR3390	油泵安装板	Oil pump installing base		
14	GR3391	油泵体	Oil pump		
15	GR3392	油系叶轮	Oil pump impeller		
16	GS554	油泵盖螺钉	Screw D=3 L=10		
17	GR3394	油泵盖	Lubricating oil pump cover		
18	GR3393	油泵叶轮托板	Oil pump impeller cover		
19	GR3396	回油柱塞	Plunger		
20	GW437	柱塞簧	Plunger spring		
21	GS0569	柱塞螺钉	Plunger screw		
22	GR3395	下轴供油管	Hook driving shaft oil tube		
23	GS0568	油泵安装螺钉	Screw M3L=8		
24	GS030	螺柱连接螺钉	Screw 11/64x40 L=9.5		
25	GS0567-8	油系连接螺柱	Oil pump support, large		
26	GS062	油泵螺钉	Screw 15/64x28 L=12		
27	GR3397	供油管接头	Rubber join		
28	GS9890. 39	绕线器驱动轮	Bobbin pulley		
29	GS1761	绕线器驱动轮螺钉	Screw		

11. 油盘部件

1	GR3405/17	油盘部件	Oil reservoir asm		
2	GR3406	油盘	Oil reservoir		
3	GR3407	油盘垫	Oil reservoir gasket		
4	GR3408	机头座垫	Rubber cushion		
5	GS0571	排油孔螺钉	Screw 5/16x24 L=7		
6	GR3409	排油孔螺钉O型腰	Rubber ring		
7	GH576	抬压脚双向曲柄	Knee lifting rotating arm		
8	GW438	双向曲柄扭簧	Spring		
9	GR1583	抬压脚轴开口挡圈	E-ring 10		
10	GR3410	抬压脚操纵杆节头	Vertical shaft fitting arm		
11	GS0573	操纵杆节头螺钉	Screw		
12	GL21	双向曲柄限位调节螺母	Nut M6		
13	GS057	双向曲柄限位调节螺钉	Screw M6 L=30		
14	GS0572	双向曲柄螺钉	Screw M6L=17.5		
15	GZ439	抬压脚轴	Knee press cross shaft		
16	GR3411/6	操纵杆部件	Knee pan plate asm		
17	GKR13	操纵杆软垫	Knee pan plate cover		
18	GR1586	操纵杆	Knee pan upright shaft		
19	GR3413	操纵杆垫	Knee pan plate rubber		
20	GR3412	操纵板	Knee pan plate		
21	GR341	操纵杆节头	Knee pan plate support		
22	GS584	节头螺钉	Screw M6 L=12		
23	GH579	抬压脚顶销	Knee lifter push rod		

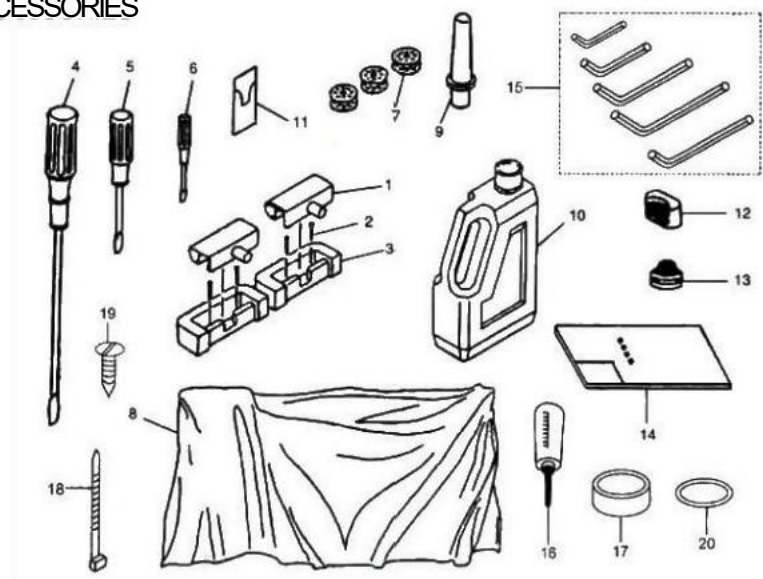
12. 过线架部件

THREAD STAND COMPONENTS



13. 附件

ACCESSORIES



12. 过线架部件

序号 Ref. NO	件 号 Part NO	名 称	Description	数 量 Qty	备 注 Note
1		过线架部件	Thread stand asm.	1	
2	GR1215	线团防送垫	Spool retainer	2	
3	GS067	线盘钉	Spool pin	2	
4	GR750	线盘轮垫	Spool rest cushion	2	
5	GR1811	线盘	Spool rest	2	
6	GS558	线架过线夹螺钉	Screw M6 L=16	2	
7	GR1745	线架过线夹	Thread guide arm joint	2	
8	GR1744	线架杆顶防护橡皮	Spool rest rod rubber cap	1	
9	GR1825	线架过线杆	Spool rest arm	2	
10	GZ316-8	线架杆上节	Spool rest rod, upper		
11	GR1932	线架杆接头	Spool rest rod joint	1	
12	GS401	线架杆接头螺钉	Screw M5 L=14	2	
13	GL158	线架杆接头螺母	Nut M5	2	
14	GZ315-8	线架杆下节	Spool rest rod, lower	1	
15	GR1748	过线圈	Thread guide	2	
16	GR1625	线盘钉弹簧垫	Spring washer	2	
17	GL23	线盘钉螺母	Nut M5	2	
18	GL158	线架杆紧固螺母	Nut M16x 1.5	1	
19	GR1696	线架杆紧固螺母垫圈	Washer 16x30x 2.6	2	
20	GR1751	紧固螺母弹簧的垫圈	Spring washer	1	

13. 附件

序号 Ref. NO	件 号 Part NO	名 称	Description	数 量 Qty	备 注 Note
1	GR1590/2	机头连接钩组件	Machine hinge plate asm.	2	
2	GK241	机头连接钩座钉	Nail	4	
3	GBX105	机头连接钩座	Machine hinge plate	2	
4	GR1610	螺丝刀(大)	Screw driver, large		
5	GR1602	螺丝刀(中)	Screw driver, medium		
6	GR1603	螺丝刀(小)	Screw driver, small		
7	GN163-8	梭心	Bobbin	3	
8	GF424	机头罩	Macgube head cover		
9	GBR148	机头支柱	Macgube rest cover		
10	GR1604/3	油箱部件	Oil reservoir asm.	1	
11	GV15	机针	Needle DBx1#14#16	1包	
12	GR1578-8	防震垫(A)	Quakeproof washer A		
13	GR1579-8	防震垫(B)	Quakeproof washer B	1	
14		说明书	Instruction book	1	
15		内六角扳手(1.5, 2, 2.5, 3, 4)	Cross screw driver (1.5, 2, 2.5, 3, 4)	各1	
16		小油壶	Oiler asm		
17	GR1576	油盘磁铁	Oil reservoir magnet		
18		尼龙扎带	Cable band	5	
19	GBR147	木螺钉	Wood screw	4	
20	GS0574	垫圈	Washer	4	

高速平缝机

Hing Speed Single Needle Lockstitch
Industrial Sewing Machine

850087005550

使用说明 / 零件图册
Operation Manual /Atlas of Parts

使用说明

Operation Manual

开车前的注意事项：

BEFORE OPERATION

1. 油盘内未加油绝不能开车。
2. 机器运转时，从上轮外侧看转向应为逆时针方向。注意，不能倒转。
3. 在第一月中，不要选用大尺寸的电动机皮带轮。
4. 确认电动机标牌上标电压及相位是否正确。

1.Never operate the machine unless its oil pan has been filled with oil.

2. After setting up the machine, check the direction of motor rotation. To check it, turn the handwheel by hand to bring the needle down, and turn the power switch ON while observing the handwheel. (The handwheel should turn counterclockwise as observed from the handwheel side.)

3. Do not use a larger motor pulley for the first one month.

4. Confirm that the voltage and phase (single or 3-phase) are correct by checking them against the ratings shown on the motor nameplate.

使用注意事项：

OPERATION PRECAUTIONS

1. 接通电源开关或机器运转时，请勿将手放到针的下部。
2. 机器运转时，请勿将手指伸入挑线杆护罩内。
3. 机头翻动及拆三角皮带时，一定要切断电机开关。
4. 操作者离开机器时，必须切断电源。
5. 机器运转期间，注意不允许任何人的头或手以及任何东西靠近上轮“V”行皮带、绕线轮和电动机。
6. 装拆皮带罩、防护罩、或者其它保护装置时，请勿开动机器。
7. 不要用香蕉水等油漆稀释剂擦洗机头表面。

1. Keep your hands away from the needle when you turn the power switch ON or while the machine is operating.

2. Do not put your fingers into the thread take-up cover while the machine is operating.

3. Be sure to turn the power switch OFF before tilting the machine head or removing the V belt.

4. When an operator leaves from the machine, make sure to turn off the power.

5. During operation, be careful not to allow your or any other person's head or hands to come close to the handwheel, V belt, bobbin winder or motor. Also, do not place anything close to them. Doing so may be dangerous.

6. If your machine is provided with a belt cover, finger guard or any other protectors, do not operate your machine with any of them removed.

7. Don't clean the face of machine head with thinner.

1. 机器的安装(图1、图2、图3、图4)

1.INSTALLATION (Fig.1, Fig.2, Fig.3, Fig.4)

• 油盘安装:

- 1) 油盘应搁在工作台凸槽四角。
- 2) 如图所示, 将两只油盘支座①用油盘座钉②固定在A一边(朝操作者一边), 将两只油盘座垫③用油盘座钉②固定在B一边(用机头连接钩接合一边), 最后把油盘④放在其上。(图1、图2)
- 3) 将机头连接钩①放入底板孔内, 与台板的机头连接钩座②相嵌合, 再将机头放到四只角的机头座垫③上。(图3、图4)

*Installing the oil pan

- 1) The oil pan should rest on the four corners of the machine table groove.
- 2) Fix two rubber seats ① on side A (operator's side) using nails ② as illustrated above. Fix two cushion seats ③ on side B (hinged side) using nails ②. Then place oil pan ④ on the fixed seats. (Fig.1, Fig.2)
- 3) Fit hinge ① into the opening in the machine bed, and fit the machine head to table rubber hinge ② before placing the machine head on cushions ③ on the four corners. (Fig.3, Fig.4)

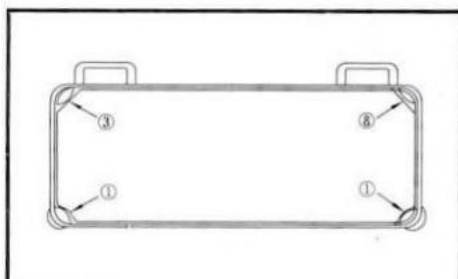


图1 Fig.1

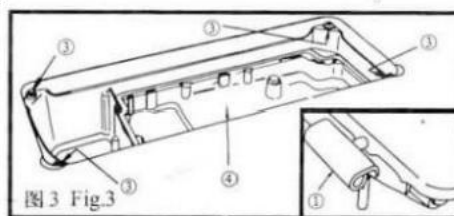


图3 Fig.3

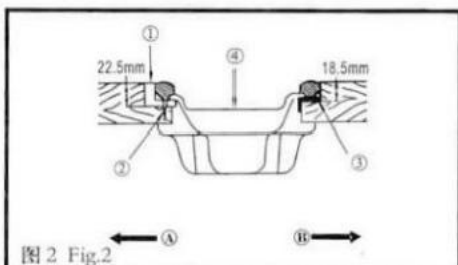


图2 Fig.2

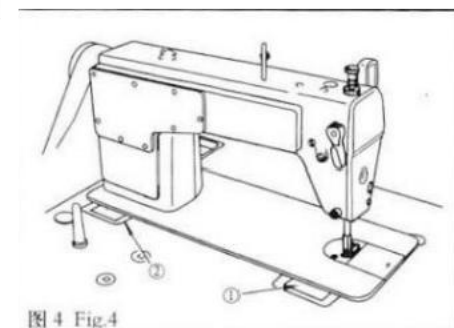


图4 Fig.4

2. 机器的润滑 (图5、图6)

2.LUBRICATION(Fig.5, Fig.6)

1. 润滑须知: (图5)

• 开车前:

- 1) 向油盘①内加缝纫机油 (10号白油) 至HIGH记号部位A。(图5)
- 2) 当油面低于LOW记号B, 应再加油。
- 3) 加油后, 开动机器, 应看到油液飞溅到油窗②上, 说明润滑正常。
- 4) 至于飞溅的油量多少与总润滑油量多少无关。

• 注意:

使用新机器或者长期未使用过的机器时, 应在每分钟3000~3500针的状态下使机器进行十分钟左右的适应性运转。

2. 调节面部油量: (图6)

- 1) 转动油量调节销①, 可以调节挑线曲柄②的供油量。
- 2) 油量调节销朝B方向转动, 刻点A靠近挑线曲柄时, 油量达到最小值。
- 3) 油量调节销朝C方向转动, 刻点A背离挑线曲柄时, 油量达到最大值。

1.Information on lubrication (Fig.5)

*Before starting the machine

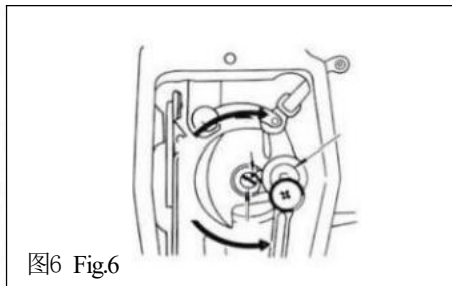
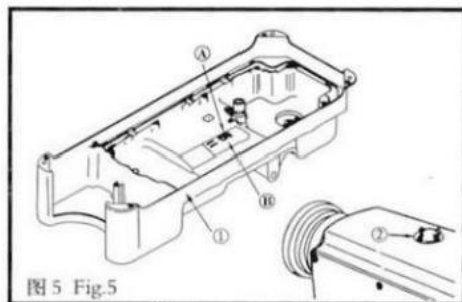
- 1) Fill oil pan ① with sewing machine oil (10 white oil) up to HIGH mark A.
- 2) When the oil level lowers below LOW mark B, refill the oil pan with the specified oil.
- 3) When you operate the machine after lubrication, you will see splashing oil through oil sight window ② if the lubrication is adequate.
- 4) Note that the amount of the splashing oil is unrelated to the amount of the lubricating oil.

*Precaution

When you first operate your machine after set up or after an extended period of disuse, run your machine at 3,000 s.p.m. to 3,500 s.p.m. for about 10 minutes for the purpose of break_in.

2. Adjusting the amount of oil supplied to the face plate parts (Fig.6)

- 1) Adjust the amount of oil supplied to the thread take-up and needle bar crank ② by turning adjust pin ①.
- 2) The minimum amount of oil is reached when marker dot A is brought close to needle bar crank ② by turning the adjust pin in direction B.
- 3) The maximum amount of oil is reached when marker dot A is brought to the position just opposite from the needle bar crank by turning the adjust pin in direction C.



3. 旋梭油量的调节 (图7、图8、图9) 3.ADJUSTING THE AMOUNT OF OIL SUPPLIED TO THE HOOK (Fig.7, Fig.8, Fig.9)

1) 未使用的机器应进行约3分钟的空转 (适当的断续运转)。(图7)

2) 油量纸必须在机器运转状态下插入。

3) 确认油盘内的油面高度处在HI 和 LOW范围内。

4) 油量确认时间需5秒钟 (请用秒表计时)。

*适量的油量标样: (图8)

1) 下图标样根据不同的缝制工序需进行增或减的微调整, 但应注意不要增加或减少得过多。

· 油量过少会引起旋梭发热, 油量过多会油污缝料。

2) 用油量纸试用三次, 当纸上油迹不发生变化时, 就不需再调节了。

· 调节旋梭油量: (图9)

1) 将下轴前轴套上的油量调节螺钉朝+方向A旋转时, 油量将增大。当油量调节螺钉朝一方向B转动时, 油量将减小。

2) 调整后应进行约30秒钟的空转, 以确认油量的状态。

1) After cooling, the machine may be idling for three minutes (operating continued properly). (Fig 7)

2) The amount of oil confirmed paper must be inserted in the state when the machine is operating

3) Oil in the oil pan is confirmed within HI and LoW.

4) The amount of oil confirmed is for five seconds (please use the clock with the second)

***The proper amount of oil manual (Fig 8)**

1) The amount of oil can be adjusted according to the different sewing process but it must be suitable amount.

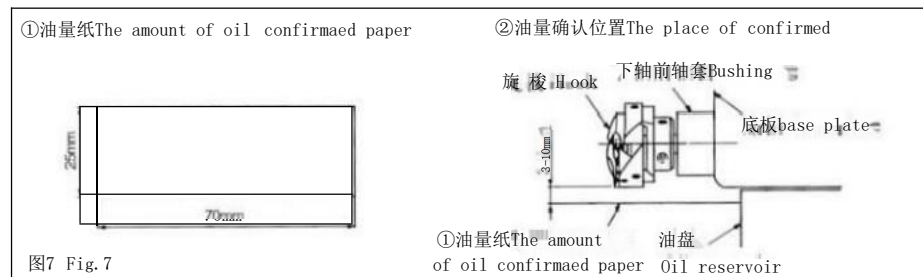
· Otherwise the hook will generate heat or the sewing material will be contaminated.

2) Use the amount of confirmed paper for three times to observe the amount of oil. Adjust the screw until the mark on the paper hasn't changed.

***Adjusting the amount of oil supplied to the hook (Fig9)**

1) More oil is supplied as oil amount adjust screw mounted on the hook driving shaft is turned toward + in direction A. As the oil amount adjust screw is turned toward - in direction B, the amount of oil supplied will be decreased.

2) After adjusted, the machine must be idling for thirty seconds. It can be confirmed the state of oil supplied.



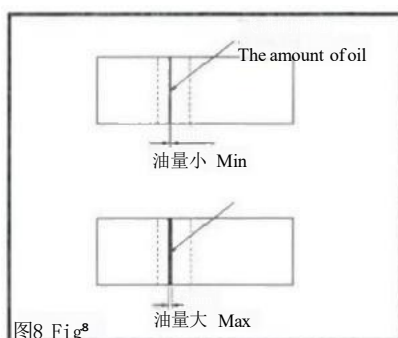


图8 Fig.8

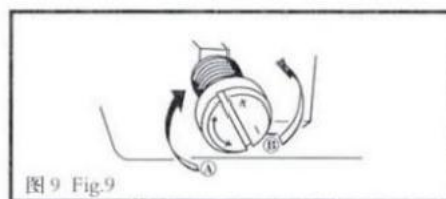


图9 Fig.9

4. 机针的装法 (图10)

4. ATTACHING THE NEEDLE (FIG.10)

· 在装机针前，必须切断电动机电源。

标准用针为DBx 14。机针有各种编号，根据所用线的粗细和缝料来选择适当的机针。

- 1) 转动上轮使针杆上升到最高位置。
- 2) 旋松支针螺钉①，使机针的凹弧部分A 正对右方向B。
- 3) 将机针朝箭头方向插入针孔的底部，直至插不进为止。
- 4) 旋紧支针螺钉②。
- 5) 务必使机针的长槽C 正对左方向D。

***Turn the motor power OFF before starting to attach the needle.**

A needle of DBx1*14 should be used. Select a proper needle size according to the count of thread and the type of material used.

- 1) Turn the handwheel until the needle bar reaches the highest point of its stroke.
- 2) Loosen screw ①, and hold needle ① with its indented part A facing exactly to the right in direction B.
- 3) Insert the needle in the direction of the arrow until it will go no further.
- 4) Securely tighten screw ②.
- 5) Check that long groove C of the needle is facing exactly to the left in direction D.

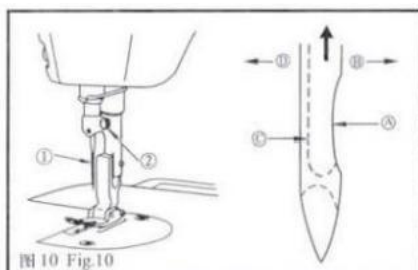


图10 Fig.10

5. 梭心的装法 (图11)

5. SETTING THE BOBBIN INTO THE BOBBIN CASE (Fig.11)

- 1) 拿住梭子，将梭心装入梭子内。
- 2) 把线从梭子上的线槽A中穿过，朝B 方向拉出。这样，线通过夹线簧下从线孔B 处引出。
- 3) 拉底线C 时，梭心应按箭头方向转动。

- 1) Hold the bobbin in a way that the thread open end is directed to the left as observed from you, and set the bobbin into the bobbin case.
- 2) Pass the thread through thread slit A, and pull the thread in direction B. By so doing, the thread will pass under the tension spring and come out from notch B.
- 3) Check that the bobbin rotates in the direction of the arrow when thread C is pulled.

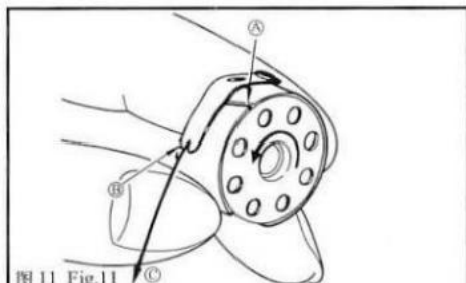


图 11 Fig.11

6. 面线的穿法 (图12)

6.THREADING THE MACHINE HEAD(Fig.12)

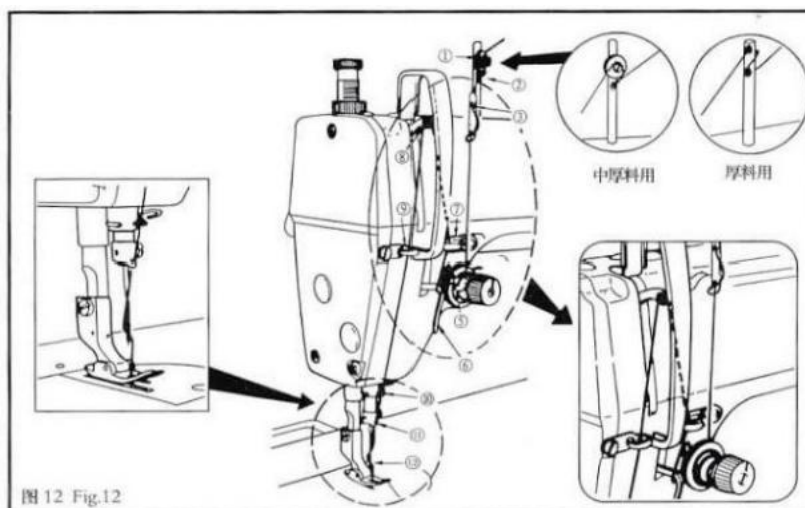


图 12 Fig.12

7. 针距的调节 (图13)

7.ADJUSTING THE STITCHLENGTH (Fig.13)

- 1) 将送料距旋钮①朝箭头方向转动, 旋至所需数字对准机壳上的刻点A。
- 2) 旋钮上的刻度数定用毫米表示。
- 3) 当你想缩短线迹长度时, 把倒送料扳手②朝箭头方向压的同时, 转动送料距旋钮。
- 1) Turn stitch length dial ① in the direction of the arrow, and align the desired number to marker dot A on the machine arm.
- 2) The dial calibration is in millimeters.
- 3) When you want to decrease the stitch length, turn stitch length dial ① while pressing feed lever ② in the direction of the arrow.



8. 缝线张力 (图14) 8.THREAD TENSION(Fig.14)

1. 面线张力的调节:

- 1) 根据不同的缝制条件, 用夹线螺母来调整面线张力。
- 2) 若把螺母①按顺时针方向 (即A 方向) 转动时, 面线张力将增大。
- 3) 若把螺母①按逆时针方向 (即B 方向) 转动时, 面线张力将减小。

2. 底线张力的调节:

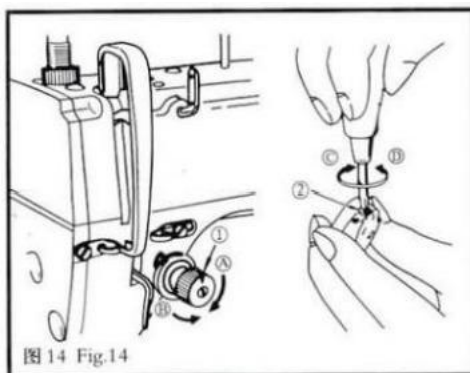
- 1) 将夹线螺钉②朝顺时针方向 (即C 方向) 转动时, 底线张力将增大。
- 2) 将夹线螺钉②朝逆时针方向 (即D 方向) 转动时, 底线张力将减小。

1.Adjusting the needle thread tension

- 1) Adjust the needle thread tension using tension adjust nut ① according to the sewing specifications.
- 2) As you turn nut ① clockwise (in direction A), the needle thread tension will increase.
- 3) As you turn nut ① counterclockwise (in direction B), the tension will decrease.

2.Adjusting the bobbin thread tension

- 1) As you turn tension adjust screw ② clockwise (in direction C), the bobbin thread tension will increase.
- 2) As you turn screw ② counterclockwise (in direction D), the bobbin thread tension will decrease.



9.挑线簧(图15)

9.THREAD TAKE UP SPRING (Fig.15)

1. 改变挑线簧①的摆动量:

1) 旋松定位螺钉②。

2) 把夹线螺钉③朝顺时针方向(即A方向)转动时,挑线簧的摆动量将增大。

3) 把夹线螺钉朝逆时针方向(即B方向)转动时,挑线簧的摆动量将减小。

2. 改变挑线簧①的张力:

1) 旋松定位螺钉②,取出夹线器(组件)⑤。

2) 旋送定位螺钉④,并转动夹线螺钉③。

3) 把夹线螺钉③朝顺时针方向(即A方向)转动时,挑线簧的张力将增大。

4) 把夹线螺钉③朝逆时针方向(即B方向)转动时,挑线簧的张力将减小。

1.Changing the stroke of thread take-up spring ①

1) Loosen setscrew ②.

2) As you turn tension post ③ clockwise (in direction A), the stroke of the thread take-up spring will be increased.

3) As you turn the knob counterclockwise (in direction B), the stroke will be decreased.

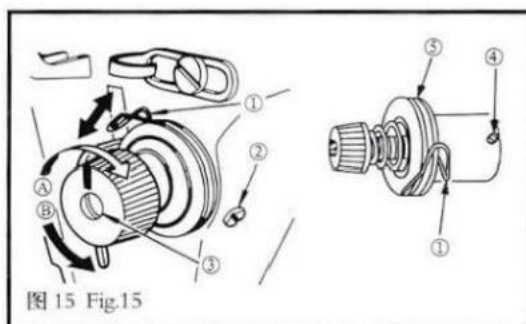
2.Changing the pressure of thread take-up spring ①

1) Loosen setscrew ②, and take out tension asm ⑤.

2) Loosen setscrew ④, and remove tension post ③.

3) As you turn tension post ③ clockwise (in direction A), the pressure will be increased.

4) As you turn the post counterclockwise (in direction B), the pressure will be decreased.



10. 压脚扳手(图16)

10.HAND LIFTER(Fig.16)

1) 停车后,将压脚扳手①朝A方向转动,使压脚抬起。

2) 压脚的抬起量约5.5毫米。

3) 当压脚扳手①朝B方向转动时,压脚将放回原来位置。

4) 对膝提压脚而言,压脚的抬起量约为10毫米,最大抬起量约为13毫米。

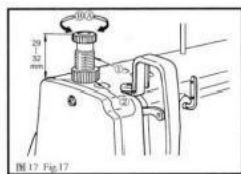
- 1)To stop the machine with is preserfoot up,turn hand lifter ①in direction A.
- 2)The preser foot will go up about 5.5 mm and stop.
- 3)The preser fowt will go back to its original position when hand lifter ①is turned down in direction B.
- 4)Using the knee lifier,you can get the standard presser foot lift of about 10 mm and a maximaum lit of about 13 mm.



11 压脚压力的调节 (图17)

11.PRESSER FOOT PRESSURE (Fig.17)

- 1)旋松压脚螺母②。顺向(即A方向)转动压脚调节螺钉,压力将增强。
- 2)逆向(即B方向)转动压脚调节螺钉。压力将减扇。
- 3)调节后,旋紧压脚螺母②。
- 4)对一般布料而言,压脚调节螺钉的标准高度为29-32毫米(5公斤)左右。(DDL-5520 为 7kg)
- 1)Loosen nut ②.As you turn presser spring regulator ①clockwise (in direction A),the presser foot pressure will be increased.
- 2)As you turn the presser spring regulator counterclockwise (in direction B),the pcessure will be decreased.
- 3)After adjustment,tighten nut ②.
- 4)For general fabrics,the standard height of the presser spring regulator is 29 to 32 mm (5kg)(For the model DDL -5520 it is 7kg)



-10-

12 . 送料相位的调节 (图18)

12.ADJUSTING THE FEED TIMING (Fig.18)

- 1)旋松送料偏心凸轮①上的定位螺钉②和③,将送料偏心凸轮①调到适当的位置,然后拧紧定位螺钉。
- 2)在标准相位情况下,当送料牙从针板下降时,送料牙上端,针孔上端和针板上端面对齐。
- 3)为了防止缝料的带移,要加快送料相位,可将送料偏心凸轮箭头方向调整。
- 4)为了增大线迹的紧密度,要减慢送料相位,可将送料偏心凸轮箭头反方向移动。

*注意

若送料偏心轮移动过多,则会引起断针。

- 1)Loosen two setscrews ②and ③on feed eccentric cam ①,properly position the eccentric cam.Then retighten the setscrews.
- 2)To obatin the sandand fed tining,when when the fed dog is dropping from thout plate,align the top of the feed dog with the top of the hole on the needle and the top of the throat plate.
- 3)To advance the fesd timing in onder to prevent uneven material feed,move the fesd eccentric cam in the direction of the arrow.
- 4)To delay the feed timing in order to increase stitch tightness,move the feed eccentric cam in the opposite direction from the arrow.

***If moving the feed eccentric cam to far,the needle will be break.**

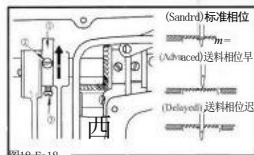


图18-Fe18

13 送料牙的高度 (图19)

13.HEIGHT OF THE FEED DOG(Fig.19)

- 1)送料牙应比针板高出0.8-0.9毫米。型为0.95°1.05mm。
- 2)在缝薄料的情况下,如果送料牙过分凸出会导致缝料起皱。(推荐送料牙突出量:0.7-0.8毫米)
- 3)调节送料牙的高度:
 - ①旋松拾牙叉形曲柄①的紧固螺钉②。
 - ②上下移动牙架进行调节。
 - ③旋紧曲柄螺钉②。
- 注意:
 - 若曲柄螺钉紧固压力太小,会使拾牙叉形曲柄磨损。
- a 送料牙 b 针板

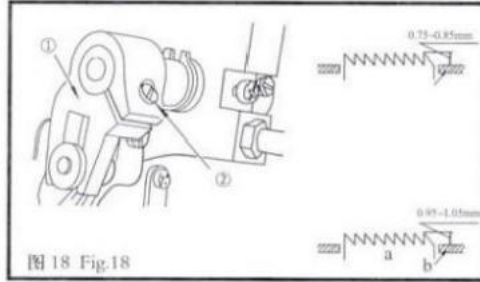
-11-

- 1)The feed dog is factory-adjusted so that it just out from the throat plate surface 0.8 mm to 0.9 mm.For the ,0.95 mm to 1.05 mm.
- 2)If the feed dog juts out too much,puckering may result when sewing light-weight materials.(Recommended protrusion:0.7 mm to 0.8 mm)
- 3)To adjust the height of the feed dog:
 - (1)Loosen screw ②of crank ①,
 - (2)Move the feed bar up or down to make adjustment.
 - (3)Securely tighten screw ②.

***Precaution**

If the screw is tighten too securely,the crank will be abraded.

a.Feed dog b.Throat plate



14. 针与旋梭的关系 (图 20)

14.NEEDLE-TO-HODK RELATIONSHIP(Fig.20)

1. 针与旋梭的关系应配合如下:

- 1)转动上轮, 使针杆位于最低点, 再旋松针杆连接柱定位螺钉①。

***针杆高度的确定**

- 2)(使用DB针时)使针杆②上的刻线A对准针杆下轴套③的下端, 然后旋紧针杆连接柱定位螺钉①。

(使用DA针时)使针杆②上的刻线C对准针杆下轴套③的下端, 然后旋紧针连接柱定位螺钉①。

• 旋梭位置的确定

- 3)(使用DB针时)旋松三只旋梭定位螺钉, 并转动上轮, 使针杆②上的刻线B对准针杆下轴套③的下端。

(使用DA针时)旋松三只旋梭定位螺钉, 并转动上轮, 使针杆②上的刻线D对准针杆轴套③的下端。

- 4)在上述状态下, 使旋核的勾线尖⑤对准机针④的中心, 针与旋梭的间隙为0.04-0.1mm,然后拧紧旋梭紧固螺钉,

• 注意

若间隙大小, 会磨损梭尖, 若间隙太大, 则会引起跳针。

• 旋梭原来用什么型号, 调换后, 也请使用原来的型号。

1.Adjust the timing between the needle and the hook as follows:

- 1)Turn the handwheel to bring the needle bar down to the lowest point of its stroke, and loosen setscrew ①.

***Adjusting the needle bar height**

- 2)When using the needle of DBX1,align marker line A on needle bar ②with the bottom end of needle bar lower bushing ③,then tighten setscrew ①.

When using the needle of DAX1,align marker line B with it,then tighten setscrew ①.

***Adjusting positiona of the hook**

3)When using the needle of DBX1 loosen the three hook setscrews,turn the handwheel, and align marker line B on the needle bar ②with the bottom end of needle bar lower bushing ③.

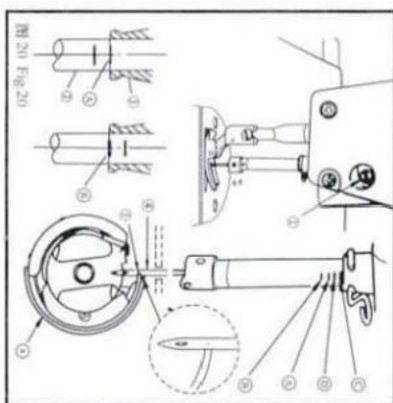
When using the needle of DAX1,align marker line D with the bottom end of needle bar lower bushing ③.

4)After making the adjustments mentioned in the above steps align hook blade point ⑤ with the center of needle ④.Provide a clearance of 0.04 mm to 0.1 mm between the needle and the hook,then securely,tighten the hook setscrews.

***Precaution**

If the clearance is too small,the tip of the hook will be abraded.If it is too big, it will lead to skip over.

***Note that the type of hook to be substituted for,when replacing the hook, shall be in conformity with the very type of the hook installed in the sewing machine of original assemblage.**



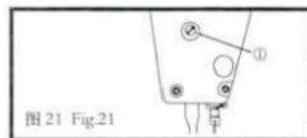
15. 压杆高度的调节(图21)

15.ADJUSTING THE HEIGHT OF THE PRESSER BAR (Fig.21)

1) 旋松压杆导架紧固螺钉①, 调节压杆高度与压脚角度。
2) 调节后, 拧紧紧固螺钉。

1)Loosen setserew ①,and adjust the presser bar height and the angle of the presser foot.

2)After adjustment,securely tighten the setscrew.



16. 挑线杆线量的调节(图22)

16.ADJUSTING THE THREAD TAKE-UP STROKE (Fig.22)

1)缝制厚料时, 应将右线钩①朝左方向A 移动, 以增大挑线量。

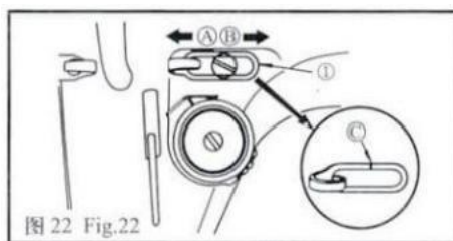
2)缝制薄料时, 应将右线钩①朝右方向B 移动, 以减小挑线量。

3)右线钩①上的刻线C 与螺钉中心一致时为标准位置。

1)When sewing heavy-weight materials,move thread guide ①to the left in direction A to increase the length of thread pulled out by the thread take-up.

2)When sewing light-weight materials,move thread guide ①to the right in direction B to decrease the length of thread pulled out by the thread take-up.

3)When the marker line C on the thread guide ①is aligned with the center of the screw,it is standard.



17. 皮带罩绕线器的装法 (图23、图24、图25)

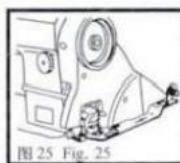
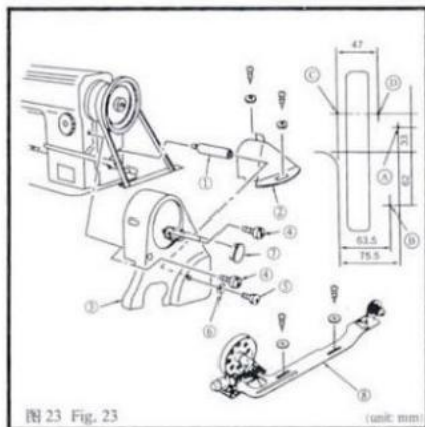
17.INSTALLING THE BELT COVER AND THE BOBBIN WINDER (Fig.23, Fig.24, Fig.25)

1. 安装程序:

- 1) 在台板上钻四只木螺钉导孔A、B、C、D。
- 2) 将罩壳支柱①装入机壳的螺孔内。
- 3) 将上轮前罩壳③从后斜方装入，使上轮套进上轮前罩壳③的孔内。
- 4) 将上轮后罩壳②放置在导孔C D上。
- 5) 用螺钉和垫圈④⑤⑥，将上轮前罩壳③固定在车壳上，此时的螺钉紧固扭矩请控制在螺钉④为30kgfcm、螺钉⑤为25kgfcm，即使紧固扭矩超过以上程度，也无效果。
- 6) 盖上上轮前罩盖板⑦。
- 7) 将上轮后罩壳②向后方移动，在上轮后罩壳②的橡胶部分碰到上轮前罩壳③时，再移动0.5-1mm，将其用木螺钉和垫圈固定。
- 8) 用木螺钉将绕线器⑧固定地导孔A和B上。

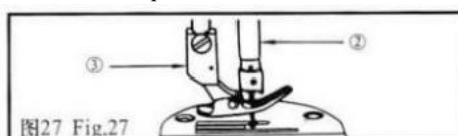
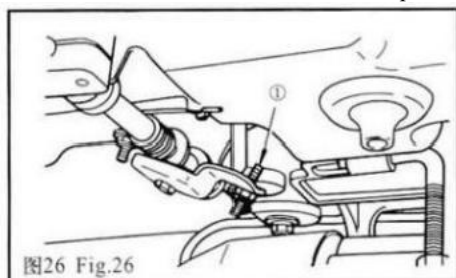
1.Installing procedure

- 1) Drill four wooden screw guide holes A,B,C and D in the machine table.
- 2) Insert support ① in the tapped hole in the arm.
- 3) Install the front belt cover ③, get the hand wheel in the middle of the hole.
- 4) Install the back belt cover ② at C and D.
- 5) Using the screws ④, ⑤ and washer ⑥ fix the front belt cover ③ on the support the tightening torque for the screw ④ is about 30 kgfcm, for the screw ⑤ is about 25 kgfcm.
- 6) Fix the cover ⑦.
- 7) Move the back belt cover ② backward until its rubber touches the front belt cover ③, then move further more 0.5-1 mm, fix it using the wooden screws and washers.
- 8) Fix bobbin winder ⑧ at A and B using the wooden screws.



18. 膝提高度的调节 (图26、27图)
18.ADJUSTING THE HEIGHT OF THE KNEE LIFTER(Fig.26.Fig.27)

- 1)用膝提时的标准压脚高度是10毫米。
 - 2)用膝提调整螺钉①可以调节压脚提升量至13毫米。
 - 3)当压脚提升量超过10毫米时，不能使处于最低位置的针杆②的底端与压脚③相碰。
- 1)The standard height of the presser foot lifted using the knee lifter is 10 mm.
 - 2)You can adjust the presser foot lift up to 13 mm using knee lifter adjust screw ①.
 - 3)When you have adjusted the presser foot lift to over 10 mm,be sure that bottom end of needle bar ②in its lowest position does not hit presser foot ③.



19. 规格
19.SPECIFICSTIONS

	Model	Model	Model
缝 料	中厚料用	厚料用	厚料大旋梭
缝速	最高每分钟5500针	最高每分钟3500针	最高每分钟3000针
线迹长度	5mm	5mm	7mm
压脚提升高度 (膝提)	10mm(标准) 13mm(最大)	10mm(标准) 13mm(最大)	10mm(标准) 13mm(最大)
机针	DB ×1"9~18	DB ×1"18~*22	DB ×1"18~*23
润滑油	10号白油		

	Model	Model	Model
Application	For medium-weight materials	For medium-weight materials	For heavy-weight materials
Sewing speed	Max. 5,500 s. p. m	Max. 3,500 s. p. m	Max. 3,000 s. p. m.
Stitch length	Max. 5mm	Max. 5mm	Max. 7mm
Presser foot lift (by knee lifter)	10mm(standara) 13mm(max.)	10mm(standara) 13mm(max.)	10mm(standara) 13mm(max.)
Needle	DB ×1"9~18	DB ×1"18~*22	DB×1"18~*23
Lubricating oil	10 white oil		

厚 料 用

For Heavy Weight Materials

序 号	件 号	名 称	数 量
Ref.No.	Part No.	Description	Amt
1	GH579/3	挑线杆部件 Linkthreadtake-upleverasm....	1
2	GH580	挑线杆曲柄 NeedlebarcrankH.....	(1)
3	GR1644	过线钉 Threadguidepin.....	1
4	G0288	针杆下轴套 Needlebarbushing,lower.....	1
5	GR1632	针杆下轴套线钩 Needlebarthreadguide.....	1
6	GZ441	针杆 Needle bar	1
7	GR3431	针杆线钩 Needlebarthreadguide.....	1
8	GV17	机针 (DB×1'21) Needle(DB×1*21).....	1
9	GW269	调压簧 Presserspring.....	1
10	GR3433/10	夹线器部件 Threadtensionasm.....	1
11	GW268	夹线簧 Tensionspring.....	1
12	GR3432	右线钩 Armthreadguide(HA).....	1
13	GW440	摆动板座复位黄 Adjustlinkspring.....	1
14	GR3434	旋梭定位钩 Positioningfinger.....	1
15	GM210	针板 Throatplate(H).....	1
16	GM209	送料牙 Feed dog(H)	1
17	GM208/5	活压脚板部件 Hingedpresserfootasrm.....	1
18	GR1646	活压脚板 Presserfoot.....	1
19	GN197	旋梭 Lubricatingbobbinastr.....	1
20	GS069	防油板螺钉 1/8-44L2.5 Screw 1/8-44L=25	1
21	GR3435	拉簧固定板 feedspringhook.....	1

零件样本
Parts Book

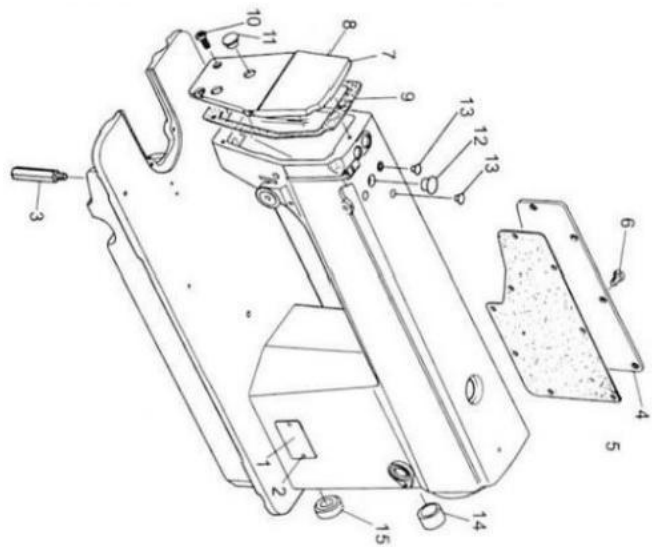
中厚料用

For Medium Heavy Materials

1. 机壳分组件

1. Arm bed components

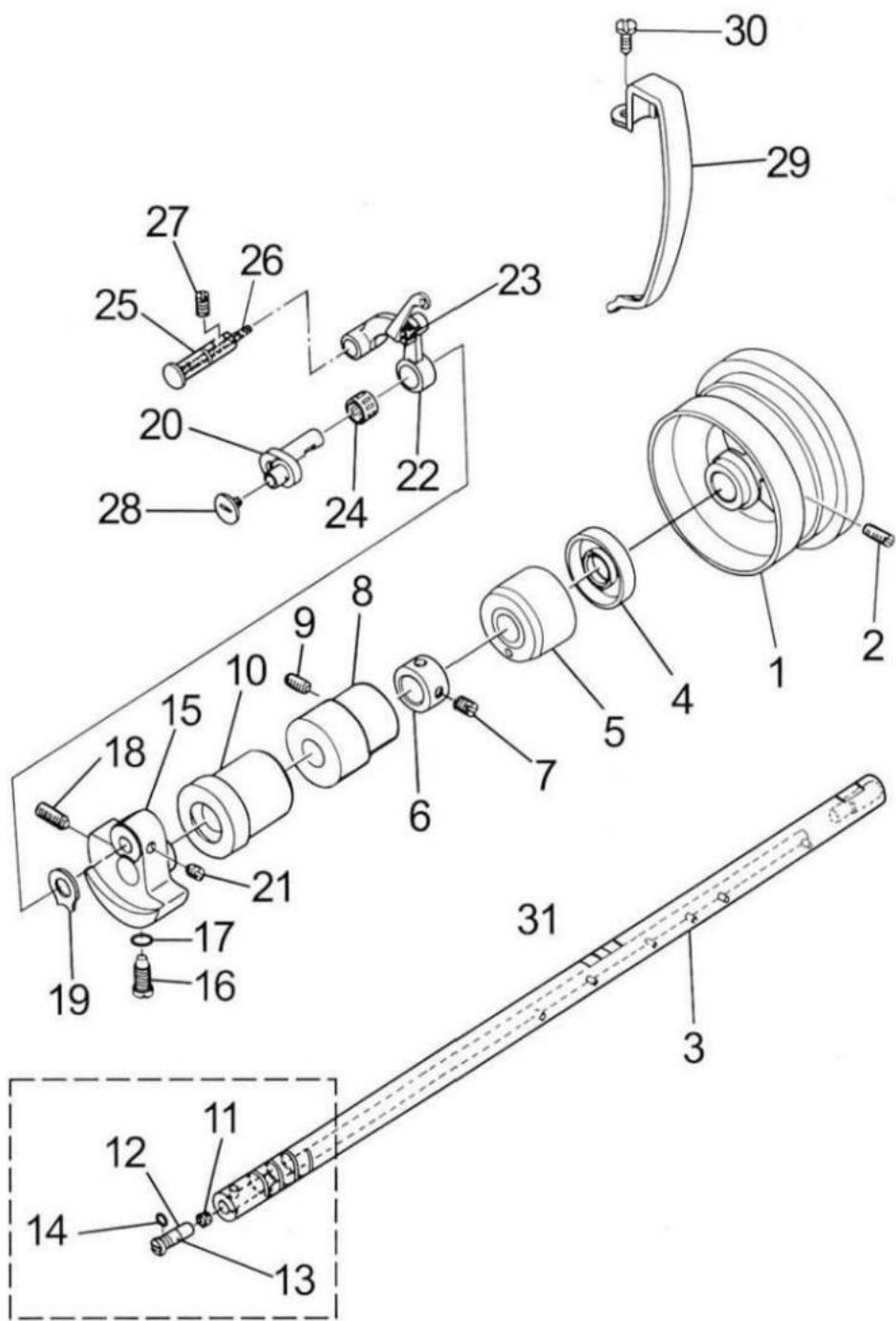
序号	件号	名称	数量
Ref.No.	Part No.	Description	Amt.
1	G Q 2 7 6 型 号 牌	Modelplate	1
2	GX5 6 5 型 号 牌 铆 钉	Modelplaterivet	2
3	GS0548 底板支柱	Bedscrewstud	4
4	GK239后窗板	Side plate	1
5	GR3340 后窗板垫	Gasket	1
6	GS053后窗板螺钉12/64-28 L=9	Screw 12/64-28L=9	8
7	GR3342 面板	Faceplatearn	1
8	GQ277面板装饰板	Decorative plate	1
9	GR3343 面板垫	Gasket	1
10	GS053面板螺钉12/64-28L=9	Screw 12/64-28 L=9	3
11	GR1458 面板调节螺孔塞	Rubber plug	2
12	GR1463 针杆曲柄螺孔塞	Rubber plug	1
13	GR3344 挑线连杆销螺孔塞	Rubber plug	2
14	GR3345 送料调节器孔塞	Rubber plug	1
15	GR1464 下轴盲孔塞	Rubber plug	1



2. 上轴、挑线分组件

2. Main shaft & thread take-up components

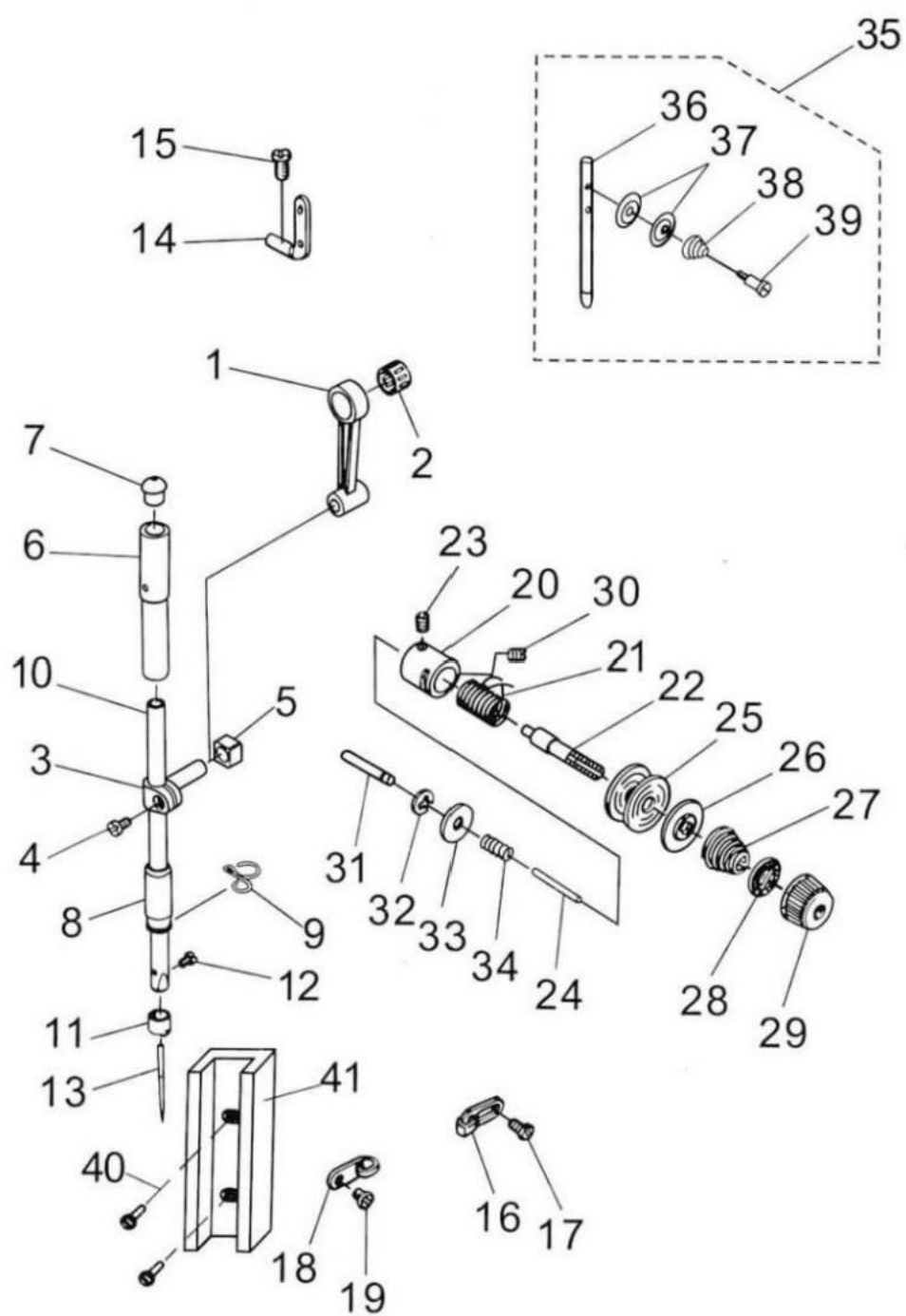
序号	件号	名称	数量
Ref.No.	Part No.	Description	Amt.
1	GP166	上轮..... Handwheel.....	1
2	GS03	上轮螺钉15/64-28L=15..... Serew 15/64-28L=15	2
3	GZ431	上轴..... Main shaft	1
4	GR3346	上轴油封..... Main shaft	1
5	G0462	上轴后轴套..... Mainshaftbushing.rear.....	1
6	GR1469	上轴挡圈..... Thrustcollarastn.....	1
7	GS39	上轴挡圈螺钉1/4-40L=6..... Screw 1/4-40 L=6	2
8	G0463	上轴中轴套..... Bushing,intermediate.....	1
9	GS0549	上轴后轴套螺钉..... Screw	1
10	G0464	上轴前轴套..... Mainshaftbushing.front.....	
11	GR1470	曲柄油量限制毡..... Roller felt	1
12	GX334	曲柄油量调节销..... Oilamountadjustingpinasm...1	
13	G0269	曲柄油量调节销套..... Rubberpushinb...1	
14	GR1471	曲柄油量调节销O形圈..... Rubber ring	1
15	GH561	一针杆曲柄..... Counterweight.....	1
16	GS06	针杆曲柄定位螺钉1/4-40L=6..... Screw 1.4-40L=6	1
17	GR1472	定位螺钉O形圈..... Rubber ring	1
18	GS0550	针杆曲柄紧固螺钉9/32-28L=16... Screw 9/32-28 L=16	1
19	GR1473	针杆曲柄护板..... Counterweightprotectingplate...1	
20	GH402/2	挑线曲柄部件..... Needlebarcrankasm.....	1
21	GS39	挑线曲柄定位螺钉1/4-40L=6..... Screw 1/4-40L=6	2
22	GH564/4	挑线杆分部件..... Threadtake-upleverasm.....	1
23	GR3349	挑线杆防油套..... Rubber	1
24	G0270	挑线杆滚针轴承..... Needlebearing.....	1
25	GX566	挑线连杆销..... Threadtake-upcrankshaf.....	1
26	GR3350	挑线连杆销油线..... Oiling wick	1
27	GS04	挑线连杆销螺钉15/64-28 L=10.5. Screw 15/64-28 L=10.5	1
28	GS09	挑线曲柄左旋螺钉9/64-40 L=4.8. Screw (lefttwist)9/64-40 L=4.8	1
29	GK240	挑线杆护罩..... Threadtake-uplevercover.....	1
30	GS551	挑线杆护罩螺钉3/16-28L=6..... Screw 3/16-28 L=6	1
31	GR0231	上轴孔塞..... Rubberplug.....	1



3. 针杆、夹线分组件

3. Needle bar & thread tension components

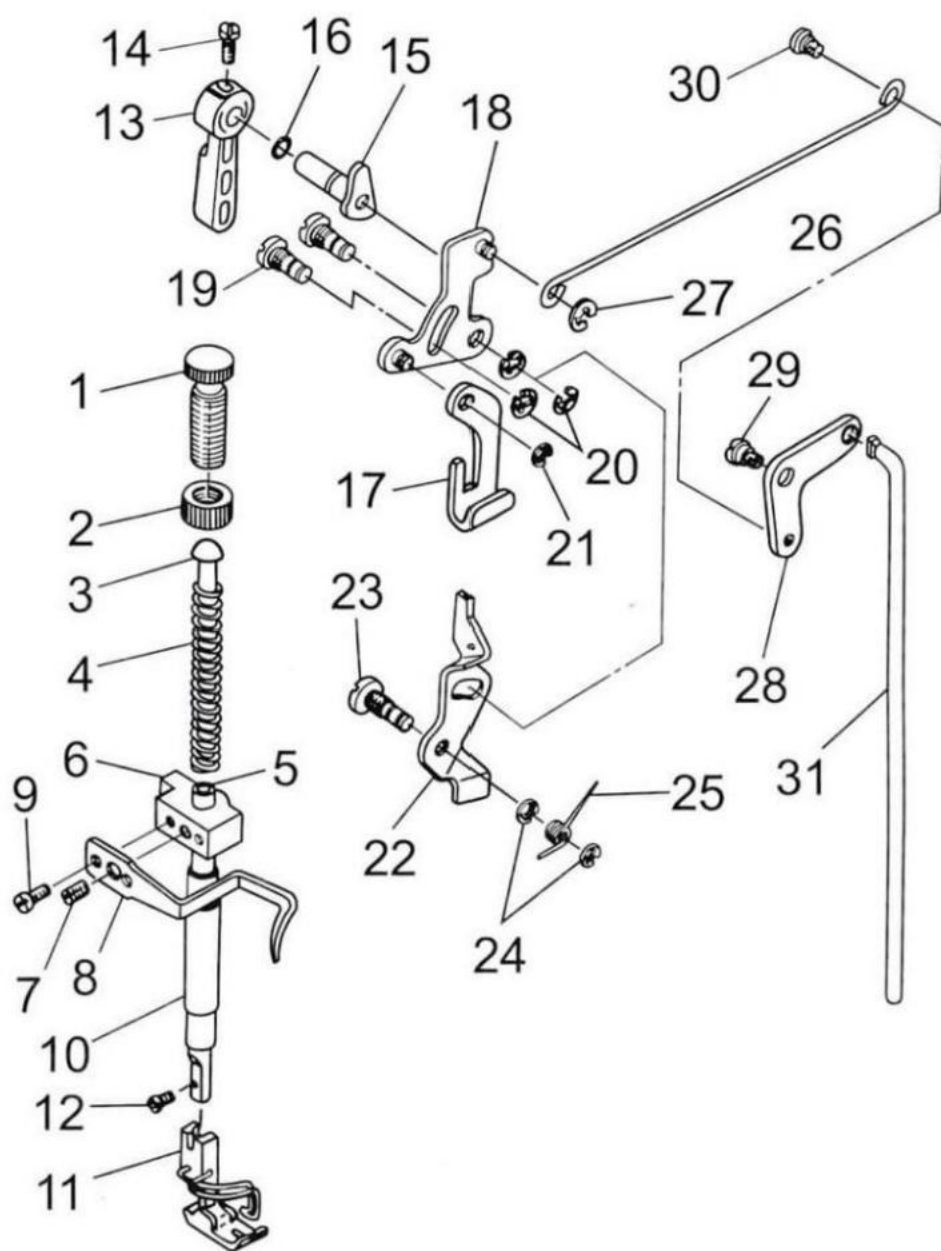
序号	件号	名称	数量
Ref.No.	Part No.	Description	Amt.
1	GH334	针杆连杆..... Needlebarcrankrod...	
2	G0270	针杆连杆滚针轴承..... Needlebearing.....	
3	GR1478	针杆连接柱..... Needlebarconnectionasm.....	
4	GS011	针杆连接柱螺钉9/64-40L=6..... Screw9/64-40L=6.....	
5	GU168	针杆连接柱滑块..... Slideblock.....	
6	G0271	针杆上轴套..... Needlebarbushing,upper1	
7	GR1479	针杆上轴套孔塞..... Cap.....1	
8	G0272	针杆下轴套..... Needlebarbushing,lower.....	
9	GR3351	针杆下轴套线钩..... Needlebarthreadguide.....	
10	GZ432	针杆..... Needlebar.....1	
11	GR3352	针杆线钩..... Needlebarthreadguide.....	
12	GS071	支针螺钉1/8-44L=4.5..... Screw 1/8-44L=4.5.....1	
13	GV15	机针 (DB ×114)..... Needle (DB ×114).....	
14	GR3353	二眼线钩..... Two-holethreadeyele.....	
15	GS0551	二眼线钩螺钉3/16-28L=6..... Screw 3/16-28L=6.....	
16	GR3354	右线钩..... Framethreadguide,right.....	
17	GS0552	右线钩螺钉11/64-40L=6..... Screw11/64-40L=6.....	
18	GR3355	左线钩..... Famethreadguide,left.....	
19	GS0551	左线钩螺钉11/64-40L=6..... Screw11/64-40L=6.....1	
20	GR1487	挑线簧调节座..... Tensionpostsocket.....	
21	GW250	挑线簧..... Take-upspring.....1	
22	GS015	夹线螺钉..... Screw.....	
23	GS016	夹线螺钉紧固螺钉9/64-40 L=5.5..... Set screw 9/64-40L=5.5.....	
24	GX567	松线钉..... Threadreleasepin.....	
25	GR1488	夹线板..... Tensiondisc.....2	
26	GR1489	松线板..... Tensiondischolder.....	
27	GW251	夹线簧..... Tensionspring.....	
28	GR1490	夹线制动板..... Tensiondisestopper.....1	
29	GL0113	夹线螺母..... Tensionnut.....1	
30	GS48	夹线器螺钉15/64-28L=7..... Screw 15/64-28L=7.....1	
31	GX568	松线辅钉..... Tensionreleasesupportingpin.....1	
32	GR1717	松线辅钉挡圈..... Snap ring.....1	
33	GR3357	松线辅钉垫片..... Washer plate.....1	
34	GW432	松线辅钉弹簧..... Tensionreleasepinspring.....1	
35	GR1491/5	过线器部件..... Needlethreadguidepinasm.....1	
36	GR1492	过线柱..... Needlethreadguidepin.....(1)	
37	GR1493	过线夹线板..... Tensiondisc.....(2)	
38	GW252	过线夹线簧..... Tensionspring.....(1)	
39	GS017	过线夹线螺钉..... Hingescrew.....(1)	
40	GS0340	滑块槽螺钉..... Slideblock.....2	
41	GR0341	针杆滑块槽..... Needlebartrough.....1	



4. 压料分组件

4. Presser bar components

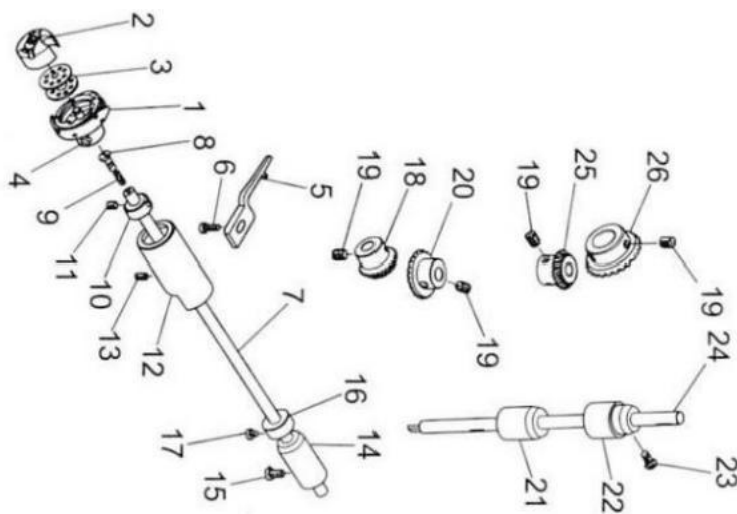
序 号	件 号	名 称	数 量
Ref.No.	Part No.	Description	Amt.
1	GS0553	调压螺钉.....Presserspringregulator.....	1
2	GL0114	调压螺母.....Nut	1
3	GR1494	调压导杆.....Presserguidebar.....	1
4	GW253	调压簧.....Presserspring.....	1
5	GZ275	压杆.....Presserbar.....	1
6	GR3358	压杆导架.....Needlebarguidebracket.....	1
7	GS033	压杆导架螺钉1/4-40L=8.....Screw 1/4-40 L=8	1
8	GR3359	缓线调节钩.....Presserbarthreadguide.....	1
9	GS0100	缓线调节钩螺钉9/64-40L=8.5.....Screw 9/64-40 L=8.5	2
10	G0273	压杆轴套.....Presserbarbushinglower.....	1
11	GM200/5	活压脚部件.....Presserfootasm.....	1
12	GS020	活压脚螺钉9/64-40 L=10.5.....Screw 9/64-40 L=10.5	1
13	GR3360	压脚扳手.....Handlifter.....	1
14	GS0554	压脚扳手螺钉.....Screw	1
15	GR3361/2	压脚扳手凸轮部件.....	
16	GR1503	压脚扳手轴O形圈.....bbbbbbbbbb	
17	GR3363	压脚升降板.....Lifting lever	1
18	GR3364/3	抬压脚前杠杆部件.....Hand lifter link asm	1
19	GS0555	前杠杆螺纹销.....Link shaft	2
20	GR1510	螺纹销开口挡圈.....Snap ring.....	3
21	GR3366	升降板连接特制开口挡圈.....Lifting lever ring	1
22	GR3367	松线顶板.....Tensionreleaseplate.....	1
23	GS0556	松线顶板螺纹销.....Tension release shaft	1
24	GR1510	螺纹销开口挡圈.....	2
25	GW433	松线顶板复位簧.....Tensionreleasereturnspring.....	1
26	GR3368	抬压脚拉杆.....Liftingleverconnectingrod.....	1
27	GR1510	拉杆开口挡圈.....Snap ring	1
28	GR3369	抬压脚后杠杆.....Liftingleverlink.....	1
29	GS0557	后杠杆轴位螺钉.....Hingescrew.....	1
30	GS0558	抬压脚拉杆螺钉.....Hinge screw	1
31	GR3370	抬压脚顶杆.....Connectingrodvertical.....	1



5. 勾线分组件

5. Hook driving shaft compinents

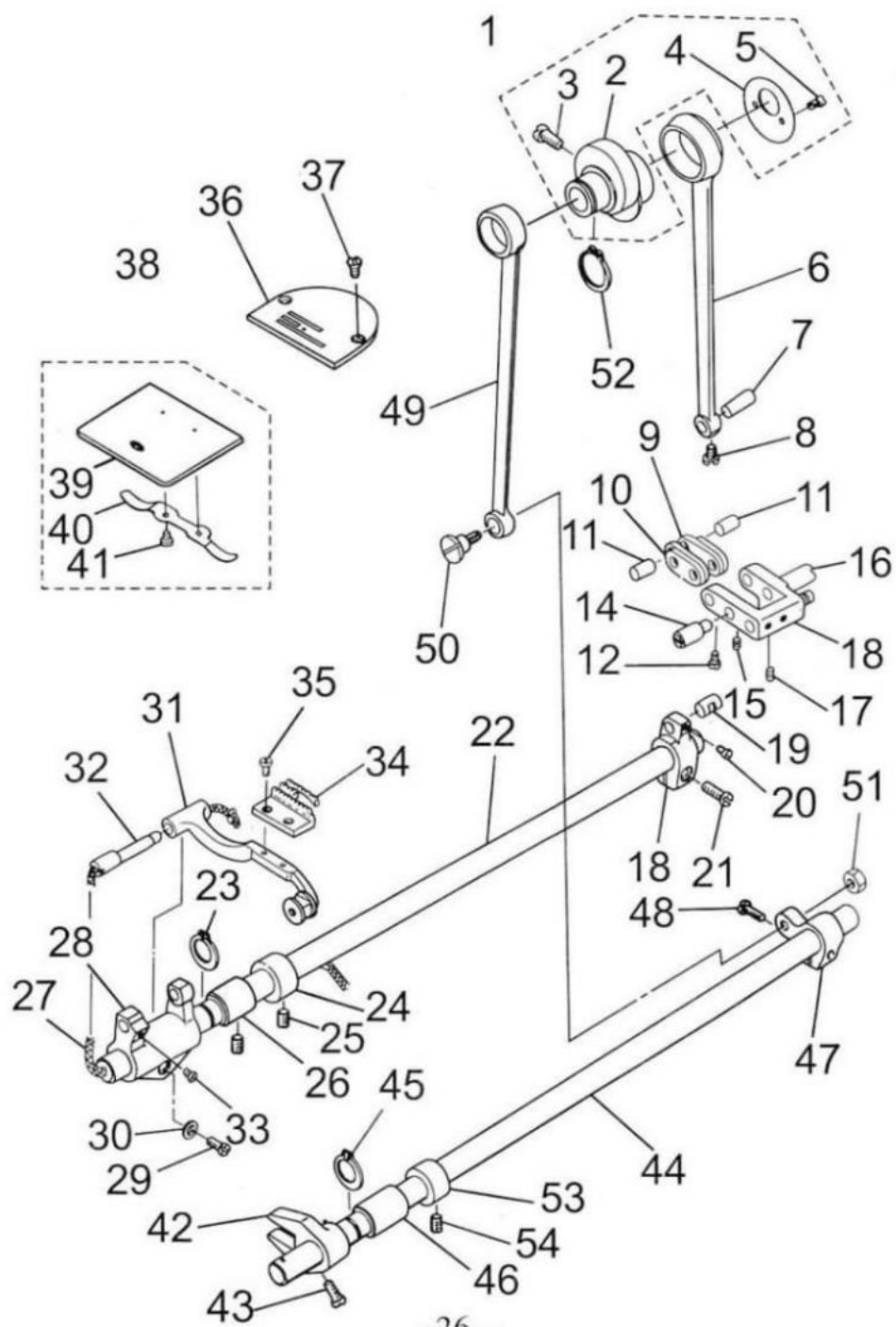
序号	件号	名称	数量
Ref.No.	Part No.	Description	Amt.
1	GN161	旋梭..... Hookasm.....	
2	GN162	梭子..... Bobbincaseasm.....	1
3	GN163	梭心..... Bobbin.....	1
4	GS029	旋梭紧固螺钉..... Screw.....	2
5	GR3371	旋梭定位钩..... Positioningfinger.....	1
6	GS030	旋梭定位钩螺钉11/64-40L=9.5..... Screw 11/64-40L=9.5.....	
7	GZ434	下轴..... Hookdrivingshaf.....	1
8	GS031	下轴限油螺钉..... Oilsealscrew.....	
9	GR1515	下轴限油芯..... Oilwick.....	
10	GR3372	下轴挡油圈..... Thustcollar.....	
11	GS032	下轴挡油圈螺钉11/64-40L=3.5..... Screw 11/64-40L=3.5.....	
12	G0331/3	下轴前轴套部件..... Bushingasmfront.....	1
13	GS059	下轴前轴套螺钉..... Screw.....	
14	G0470	下轴后轴套..... Bushingrear.....	
15	GS053	下轴后轴套螺钉12/64-28L=9..... Screw 12/64-28L=9.....	
16	GR1519	下轴挡圈..... Thrustcollarasm.....	
17	GS082	下轴挡圈螺钉11/64-40 L=4.8..... Screw11/64-40L=4.8.....	2
18	GC165	下轴伞齿轮(小)..... Pinionasm.....	
19	GS033	伞齿轮螺钉1/4-40 L=8..... Screw1/4-40L=8.....	
20	GC166	竖轴下伞齿轮(大)..... Gear asm. large.....	
21	GO471	竖轴下轴套..... Uprightshaftbushing,ower.....	
22	GO472	竖轴上轴套..... Bushingupper.....	
23	GS053	竖轴上轴套螺钉12/64-28 L=9.5..... Screw 12/64-28 L=9.5.....	
24	GZ435	竖轴..... Uprightshaft.....	1
25	GC167	竖轴上伞齿轮(小)..... Pinion asm.....	1
26	GC168	上轴伞齿轮(大)..... Gear asm.....	1



6. 送料分组件

6. Feed mechanism components

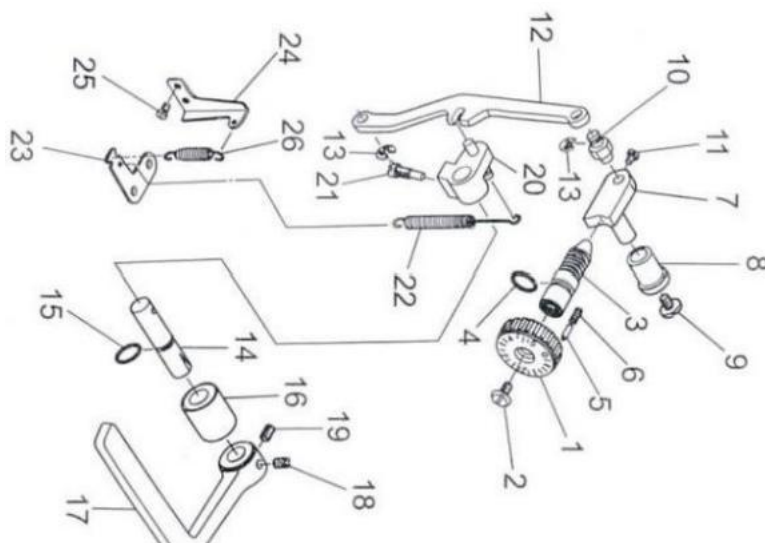
序号 Ref.No.	件号 Part No.	名称 Description	数量 Amt.
		送料偏心轮部件..... Feeddriveeccentriccamsm.....	1
2	GT198	送料偏心轮..... Feeddriveeccentriccam.....	(1)
3	GS034	送料偏心轮螺钉1/4-40L=11..... Screw 1/4-40L=11.....	(2)
4	GR3373	送料偏心轮盖板..... Thustcl(1)	
5	GS011	偏心轮盖板螺钉9/64-40L=6..... Screw 9/64L=6.....	(2)
6	GH568	送料连杆..... Rockershaftconnectingrod...	
7	GX570	送料连杆销..... Walkingfootpin	
8	GS0560	送料连杆销螺钉9/64-40L=6..... Scrw 9/64-40L=6.....	1
9	GR3374	送料长摆动板..... Walkingfootlink...2	
10	GR3375	送料短摆动板..... Connectinglink2	
11	GX571	短摆动板连接销..... Walkingfootpin.....	2
12	GS0560	连接销螺钉9/6440L=6..... Scrw 96440 L=6.....	
13	GR3376/2	送料摆动板座部件..... Walkingfootadjustinglink.....	
14	GX573	送料摆动板座右销..... Adjustinglinkfulcrumshaft.....	
15	GS48	左销螺钉15/64-28L=7..... Screw15/64-28L=7.....	
16	GX573	送料摆动板座右销..... Adjustinglinkfulcrumshaft.....	
17	GS48	右销螺钉15/64-28L=7... Scrw 15/64-28L=7.....	
18	GH569	送料曲柄..... Feedrockershafterankas.....	
19	GX571	送料曲柄销..... Walkingfootpin.....	
20	GS0560	曲柄销螺钉9/64-40L=6..... Screw9/64-40L=6.....	
21	GS0561	送料曲柄销螺钉3/16-28L=14..... Screw3/16-28L=14.....	
22	GZ436	送料轴..... Feedrockershaft	
23	GR1524	送料轴轴用挡圈... etaining ring.....	
24	GR1469	送料轴挡圈..... Thrustcollarastm.....	
25	GS39	送料轴挡圈螺钉1/4-40L=6..... Screw 1/4-40L=6.....	
26	G0473	送料轴前轴套..... Feedrockershaftbushing.....	
27	GR3378	送料轴油线..... Oilwick.....	
28	GR3379	牙架座..... Feedrockcrasm.....	
29	GS69	牙架座螺钉3/16-28L=14..... Screw3/16-28L=14.....	
30	GR1528	牙架座螺钉垫圈..... Washer.....	
31	GR3380/5	牙架部件..... Feedbarasm.....	
32	GX575	牙架销..... Feedbarshaf.....	
33	GS092	牙架销螺钉11/64-40L=7..... S'16440L=.....	
34	G M 2 0 1	送料牙..... Feeddog.....	
35	GS072	送料牙螺钉1/8-44L=6..... Screw1/8-44L=6.....	
36	G M 2 0 2	针板..... Throatplate.....	
37	GS044	针板螺钉11/64-40L=8.5..... Screw 11/64-40L=8.5.....	2
38	GM340/4	推板部件..... Bedslideasn.....	1
39	G M 2 0 4	推板..... Slidepla.....	(1)
40	G W 4 3 4	推板簧..... Bedslidespring.....	(1)
41	GS045	推板簧螺钉3/32-56L=1.9..... Screw3/32-56L=1.9.....	(2)
42	GH570	抬牙叉形曲柄..... Drivingshaftcrankasm.front.....	
43	GS037	抬牙叉形曲柄螺钉11/64-40L=10.5..... Screw 11/64-40L=10.5.....	
44	GZ437	抬牙轴..... Feeddrivingshaft.....	
45	GR1524	抬牙轴轴用挡圈..... Retainingring.....	
46	G0336	抬牙轴前轴套..... Feedrkershaftbushing...	
47	GH571	抬牙后曲柄..... Rearcrankasm.....	
48	GS0561	抬牙后曲柄螺钉3/16-28L=12..... Screw3/16-28L=12.....	
49	G H 5 7 2	抬牙连杆..... Connectingrod.....	
50	GS0562	抬牙连杆轴位螺钉..... Hingescrew.....	
51	GL7	抬牙连杆轴位螺母9/32-28..... N 9/32-28.....	
52	GR1535	抬牙连杆轴用挡圈..... Snap ring.....	
53	GR1469	抬牙轴挡圈..... hrstcolarasn	
54	GS39	抬牙轴挡圈螺钉1/4-40L=6..... Sxrew 1/4-40L=...6.....	2



7. 送料调节分组件

7. Feed regulating components

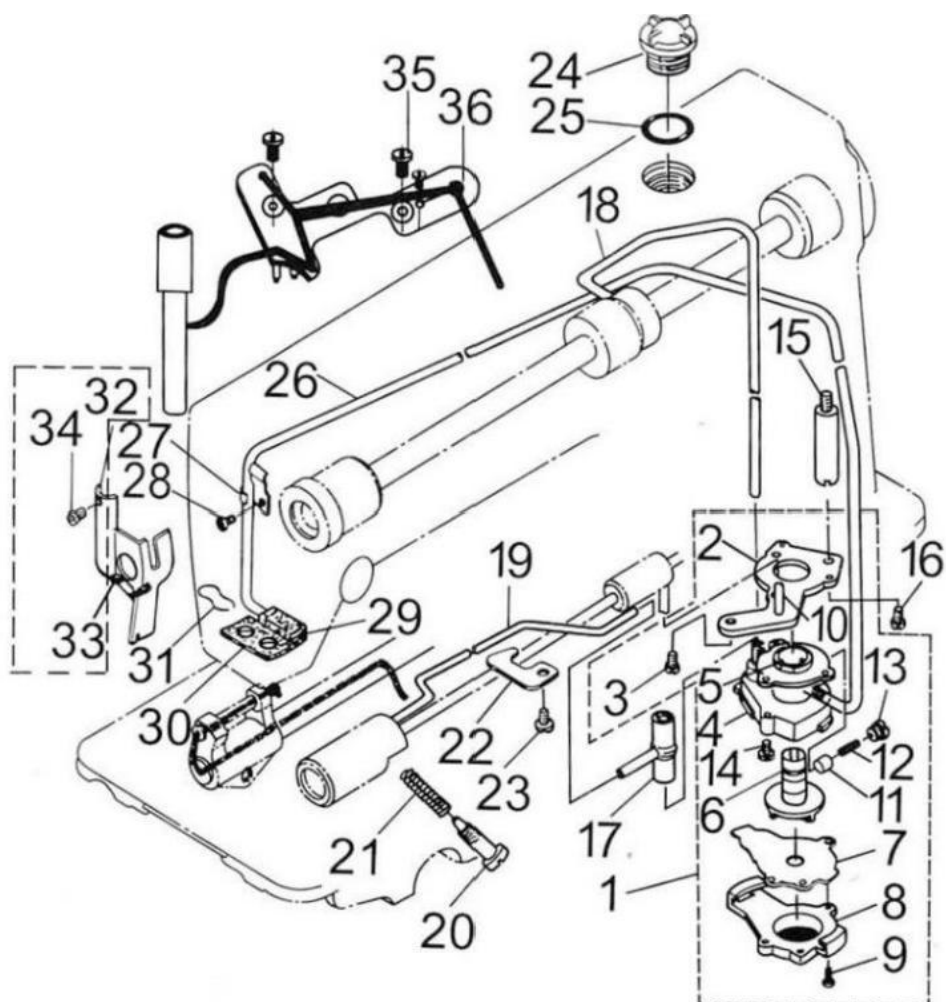
序号	件号	名称	数量
Ref.No.	Part No.	Description	Amt.
1	GR3382	送料距旋钮..... Feed dial.....	1
2	GS0563	送料距旋钮螺钉..... Screw.....	1
3	GS0564	送料调节螺柱..... Feedregulatorscrew.....	1
4	GR3383	送料调节螺柱 O形圈..... Rubber ring.....	1
5	GX576	送料距锁合销..... Pin.....	1
6	GW257	送料距锁合簧..... Spring.....	1
7	GR3384	送料调节器..... Feedregulator.....	1
8	GO474	送料调节器轴套..... Feedregulatorbushing.....	1
9	GS0565	送料调节器轴端螺钉..... Screw.....	1
10	GX577	倒送料连杆销..... Feedregulatorpin.....	1
11	GS011	连杆销螺钉9/64-40L-6..... Screw9/64-40L=6.....	2
12	GH573	倒送料连杆..... Feedregulatorconnectingrod.....	1
13	GR1510	倒送料连杆挡圈..... Snapring.....	2
14	GZ438	倒送料轴..... Feedreverseshaf.....	1
15	GR3385	倒送料轴O形圈..... Rubberring.....	1
16	GO475	倒送料轴轴套..... Feedlevermetal.....	1
17	GR3386	倒送料扳手..... Reversefeedcontrollever.....	1
18	GS050	倒送料扳手定位螺钉1/4-40L-10..... Screw 1/4-40L-10.....	1
19	GS033	倒送料扳手螺钉1/4-40L-8..... Screw1/4-40L-8.....	1
20	GH574/2	倒送料曲柄部件..... Feedreversearmasm.....	1
21	GS0566	倒送料曲柄螺钉..... Feedreversearmscrew.....	1
22	GW435	倒送料拉簧..... Feedreversespring.....	1
23	GR3387	拉簧固定板..... Feedspringhook.....	1
24	GR3388	摆动板座复位板..... Adjustinglinkspringguide.....	1
25	GS0567	复位板螺钉11/64-40L-5..... Screw11/64-40L=5.....	2
26	GW436	摆动板座复位簧..... Adjustinglinkspring.....	1



8. 润滑分组件

8. Lubrication components

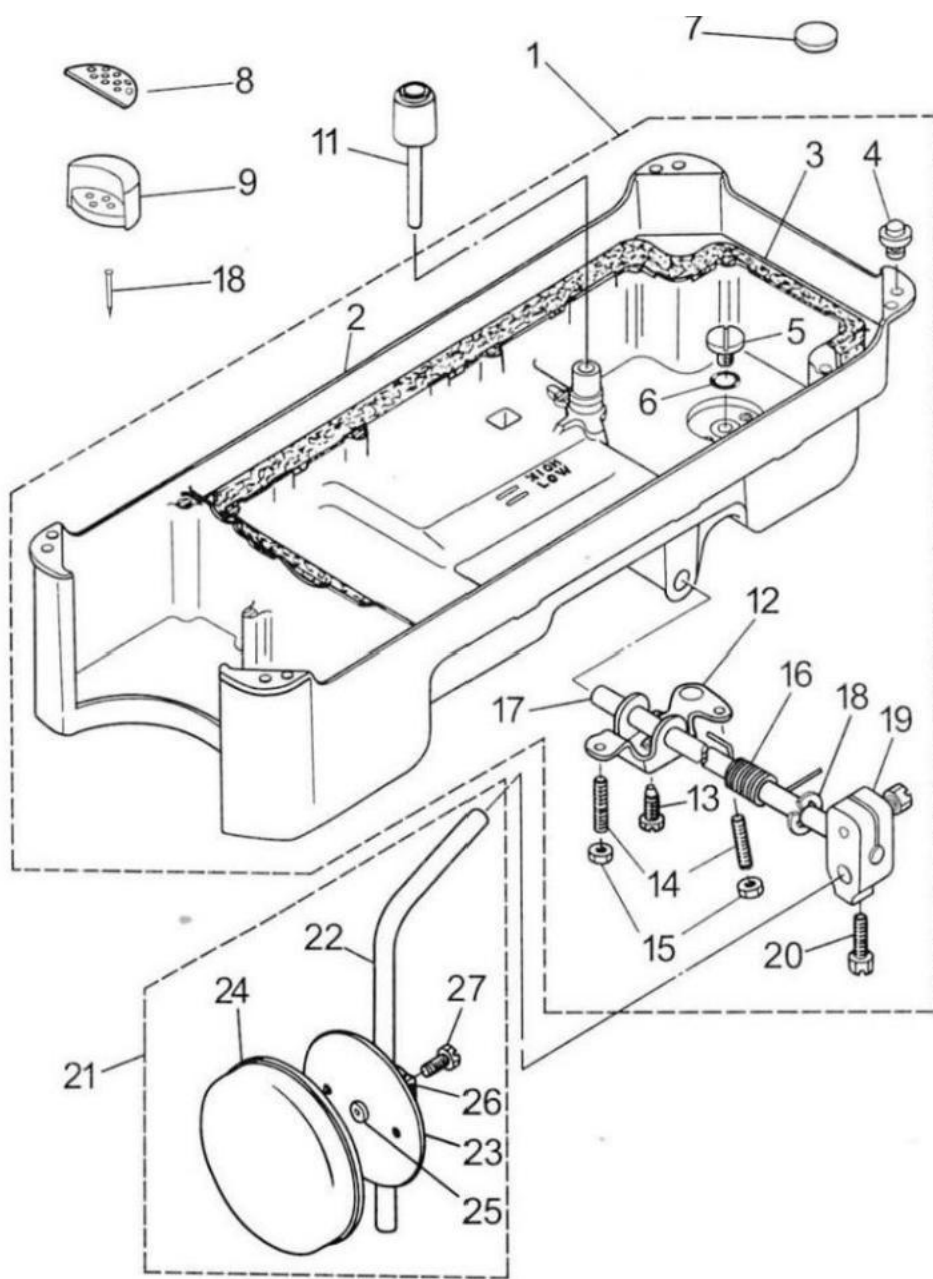
序号	件号	名称	数量
Ref.No.	Part No	Description	Amt.
1	GR3389/12	油泵部件	1
2	GR3390	油泵安装板	(1)
3	GS0568	油泵安装螺钉 15/64-28L=9	(3)
4	GR3391	油泵体	(1)
5	G 0 4 7 6	油泵体衬套	(1)
6	GR3392	油泵叶轮	(1)
7	GR3393	油泵叶轮托板	(1)
8	GR3394	油泵盖	(1)
9	G S 5 5 4	油泵盖螺钉	(3)
10	GR3395	下轴供油管	(1)
11	GR3396	回油柱塞	(1)
12	G W 4 3 7	柱塞簧	(1)
13	GS0569	柱塞螺钉	(1)
14	G S 0 6 2	油泵螺钉	(1)
15	GS0567	油泵连接螺柱	1
16	GS030	螺柱连接螺钉 11/64-40L=9.5	1
17	GR3397	供油管接头	1
18	GR3398	上轴供油管	1
19	GR3399	旋梭供油管	1
20	GS054	旋梭油量调节螺钉	1
21	GW259	旋梭油量调节簧	1
22	GR3400	旋梭供油管压板	1
23	GS062	压板螺钉 15/64-28L=9	1
24	G R 1 5 6 1	油窗	1
25	GR1562	油窗O形圈	1
26	GR3401	回油管	1
27	GR1566	回油管夹	1
28	GS0551	回油管夹螺钉 3/16-28L=6	1
29	GR1567	回油除尘毡	1
30	GR1568	回油毡	1
31	GR1569	回油毡夹	1
32	GR3403	面部防油板	1
133	GR3404	防油板油线	1
134	GS44	防油板螺钉 1/8-44L=4	1
35	GS0835	油线固定板螺钉	2
36	GR0836	油线固定板组件	1



9. 油盘、膝抬压脚部分组件

9. Oil reservoir & knee lifter components

序 号	件 号	名 称	数 量
Ref.No.	Part No.	Description	Amt.
1	GR3405/17	油盘部件..... Oilreservoirasm.....	1
2	GR3406	油 盘 Oilreservoir.....	(1)
3	GR3407	油盘垫 Gasket.....	(1)
4	GR3408	机头座垫 Rubbrcushion.....	(4)
5	GS0571	排油孔螺钉 Screw.....	(2)
6	GR3409	排油孔螺钉O 型 圈 Rubberring.....	(2)
7	GR1576	油盘磁铁 Oilreservoirmagnet.....	
8	GR1578	油盘座垫 Oilreservoirfeltcushion.....	2
9	GR1579	油盘支架 Oilreservoirrubbercushion...	2
10	GBX 108	油盘座钉 Nail.....	4
11	G H 5 7 9	抬 压 脚 顶 销..... Knee presslifterrod.....	1
12	GH576	抬压脚双向曲柄 Connectingrod,vertical.....	1
13	GS0572	双向曲柄螺钉 Screw	1
14	GS057	双向曲柄限位调节螺钉156428L=30..... Screw 15/64-281=30.....	2
15	GL21	双向曲柄限位调节螺母15/64-28 Nut 15/64-28.....	2
16	GW438	双向曲柄扭簧 Spring.....	1
17	G Z 4 3 9	抬 压 脚 轴..... Knee pressrod.....	1
18	GR1583	抬压脚轴开口挡圈..... Snap ring	1
19	GR3410	抬压脚操纵杆节头 Bearingbracket.....	1
20	GS0573	操纵杆节头螺钉9/32-20L=20..... Screw 9/32-201=20.....	2
21	GR3411/6	操纵杆部件 Knee pressplateasm.....	1
22	GR1586	操纵杆 Kneelifterplaterod.....	1
23	GR3412	操纵板 Knee pressplate.....	1
24	GKR 13	操纵板软垫 Knee pressplatecover.....	1
25	GR3413	操纵杆垫 Rubber	1
26	GR3414	操纵杆节头 Knee pressplateholder.....	1
27	GS584	节头螺钉15/64- 28L=15 Screw15/64-281=15.....	1



10. 机头附件 (1)

10. Machine head accessories (1)

序号	件号	名称	数量
Ref.No.	Part No.	Description	Amt.
1	GR1590/2	机头连接钩部件.....	Machinehingeplateasm.....2
2	GBX 105	机头连接钩座.....	Machinehingeplate.....2
3	GK241	机头连接钩座钉.....	Nail4
4	GR3415	上轮前罩壳.....	Beltcover,A.....1
5	GK242/3	前罩壳安装架.....	Beltcaver,Acap.....1
6	GK243	上轮后罩壳部件.....	Beltcover,Basn.....1
7	GK242/2	上轮后罩壳.....	Beltcover,B.....1
8	GBS 120	后罩壳盖部件.....	Beltcover,Bcoverastn.....1
9	GBR 147	后罩壳安装木螺钉.....	WoodserewD-4.5L-20.....2
10	GS0574	木螺钉垫圈.....	Washer.....2
11	GS0575	前罩壳紧固螺钉.....	Beltcover,Aserew.....2
12	GS0576	后罩壳支柱.....	Beltcoversuppor.....
13	GS0576	支柱螺钉.....	Screw3/16-28L=14.....1
14	GR3417	螺钉垫圈.....	Washer.....1
15	GV15	机针.....	N e e d l e1 包
16	GR1610	螺丝刀 (大).....	Screwdriver,large.....1
17	GR1602	螺丝刀 (中).....	Screwdriver,mendiun...1
18	GR1603	螺丝刀 (小).....	Screwdriver,smal.....1
19	GN163	梭心.....	Bobbin...3
20	GF424	机头罩.....	Machineheadcover....1
21	GBR 148	机头支柱.....	Machinerestpin.....1
22	GR1604/3	油箱部件.....	Oilreservoirasm.....

