



GEMSY®



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ISO9001:2000



高速单针平缝机

HIGH SPEED SINGLE NEEDLE LOCKSTITCH SEWING MACHINE

GEM8700/5590 series

使用说明书 & 零件样本
Operation instruction & Parts Book

浙江宝石缝纫机股份有限公司
ZHEJIANG GEMSY SEWING MACHINE CO., LTD

重要安全事項

此縫紉機在有的國家（設置場所）由於該國的安全規定而被禁止使用。同時，技術服務也同樣被禁止。

1. 使用此縫紉機時，必須遵守包括如下項目的基本安全措施。
2. 使用此縫紉機之前，請閱讀本使用說明書在內的所有指示文件。同時應將此使用說明書妥善保管，以便能夠隨時查閱。
3. 此縫紉機應與貴國的有關安全規定一起使用。
4. 使用此縫紉機和縫紉機動作中，所有的安全裝置應安裝到規定的位置。沒有安裝規定的安全裝置的縫紉機禁止使用。
5. 此縫紉機應由接受過培訓的操作人員來操作。
6. 使用縫紉機時，建議戴安全防護眼鏡。
7. 發生下列情況時，應立即關掉電源開關，或拔下電源線插頭。
 - 7-1 機針、分離器等穿線和更換旋梭時。
 - 7-2 更換機針、壓腳、針板、分離器、送布牙、護針器、支架、布導向器等時。
 - 7-3 修理時。
 - 7-4 工作場所無人了或離開工作場所時。
 - 7-5 使用離合馬達時，請等待馬達完全停止之后再進行。
8. 縫紉機以及附屬裝置使用的機油、潤滑脂等液體流入眼睛或沾到皮膚上時，或被誤飲時，應立即清洗有關部份並去醫院治療。

9. 禁止用手觸摸打開了縫紉機開關通電的零件或裝置。
10. 有關縫紉機的修理、改造、調整應由愛過專門訓練的技術人員或專家來進行。
11. 一般的維修保養應由愛過訓練的人員來進行。
12. 有關縫紉機的電氣方面的修理、維修應由有資格的電氣技術人員或專家的監督和指導下進行。
13. 修理、保養有關空氣、氣缸等壓縮空氣的零件時，應切斷空氣壓縮機供氣源后再進行。如有殘留壓縮空氣時，應放掉壓縮空氣。但，受過相當訓練的技術人員或專家進行有關調整或確認動作時除外。
14. 縫紉機的使用期間應定期進行清掃。

15. 爲了正常安全運轉，應安裝地線。同時應在不受高頻焊接機等強口音源影響的環境下使用。
16. 電源插頭應用具有電氣專門知識的人來安裝。電源插頭必須連接到接地插座上。

17. 縫紉機指定用途以外不能使用。
18. 對縫紉機的改造、變更應符合安全規格，並采取有效的安全措施。另外，對於有關改造和變更，本公司概不負責。

19. 本使用說明書上采用以下2個警告符號。



有損傷操作人員、維修人員的危險。



安全上需要特別加以注意的事項。

爲了安全地使用縫紉機的注意事項

 危險	1. 爲了防止發生觸電事故，請不要在打開電源的狀態下，打開電氣箱蓋及觸摸電氣箱內的零件。
 注意	1. 爲了防止人身事故的發生，請不要在卸下皮帶防護罩、手指防護器等安全裝置的狀態下運轉縫紉機。 2. 爲了防止被卷入機器的人身事故，縫紉機運轉中請不要將手指、頭髮、衣服靠近皮帶輪、V形皮帶、馬達，也不要將東西放到機器上面。 3. 爲了防止人身事故的發生，批開電源時以及縫紉機運轉中，請不要把手指放到機針的附近。 4. 爲了防止人身事故的發生，縫紉機運轉中請不要把手指放到挑線杆外罩內。 5. 縫紉機操作中，旋梭高速地旋轉。爲了防止手受到傷害，運轉中請絕對不要把手靠近旋梭。 6. 爲了防止人身事故的發生，放倒縫紉機或返回原來位置時，要注意不要夾住手。 7. 爲了防止突然的起動造成人身事故，放倒縫紉機時，或卸皮帶罩和V形皮帶時，請一定關掉電源。 8. 使用伺服馬達時，縫紉機停止馬達無聲音。爲了防止意外的起動造成人身事故，請注意不要忘記關電源。 9. 爲了防止觸電事故，卸下電源地線的狀態，請不要運轉縫紉機。 10. 爲了防止觸電的損壞電氣零件，拔電源的插頭時，請先關掉機器電源開關。

IMPORTANT SAFETY INSTRUCTIONS

Putting sewing systems into operation is prohibited until it has been ascertained that the sewing systems in which these sewing machines will be built into, have conformed with the safety regulations in your country. Technical service for those sewing systems is also prohibited.

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), spreader etc. and replacing bobbin.
 - 7-2 For replacing part(s) of needle, presser foot, throat plate, 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.
 - 7-5 When using clutch motors without applying brake, it has to be waited until the motor stopped totally.
8. If you should allow oil, grease, etc. use 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 our company 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. It assumes no responsibility for damage caused 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

	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.
	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 or removing the belt cover and the V belt. 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 of damaged electrical component(s), turn OFF the power switch in prior to the connection/disconnection of the power plug.

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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.确认电动机标牌上所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 on 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”形皮带、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 operation 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 heads 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) 油盘应搁在工作台凹槽四角。
- 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 seats① on side A (operator's side) using nails② as illustrated above. Fix two cushion seats③ on side B (hinger side) using nails②. Then place oil pan④ on the fixed seats.(Fig.1, Fig.2)
- 3) Fix hinge① into the opening in the machine bed, and fit the machine head to table rubber hinge② before placing the machine head on cushions③ on the four corners.(Fig.3, Fig.4)

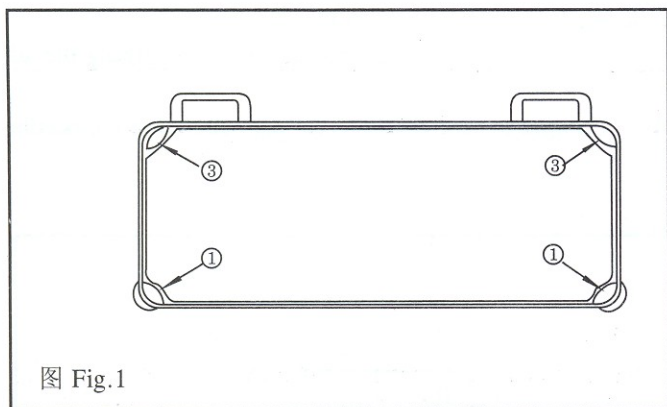


图 Fig.1

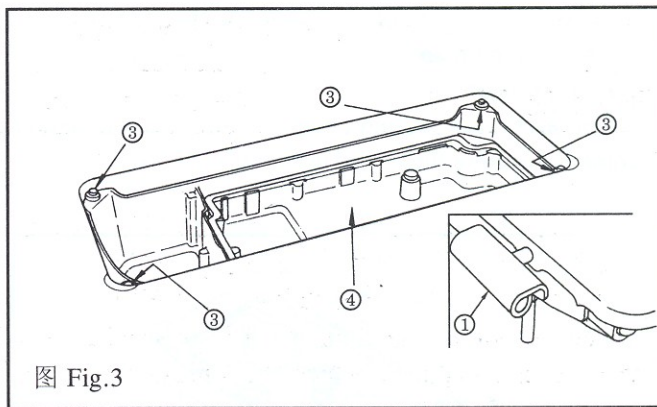


图 Fig.3

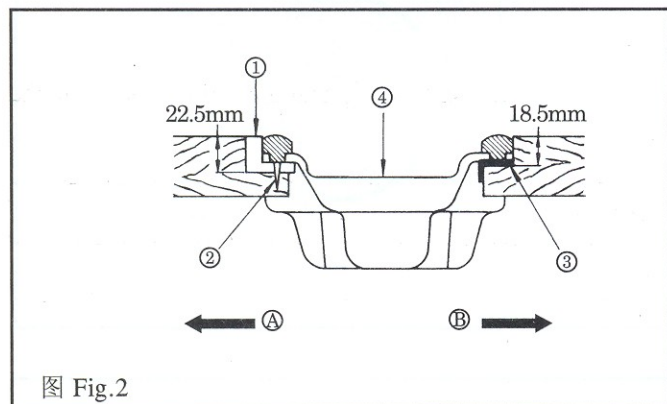


图 Fig.2

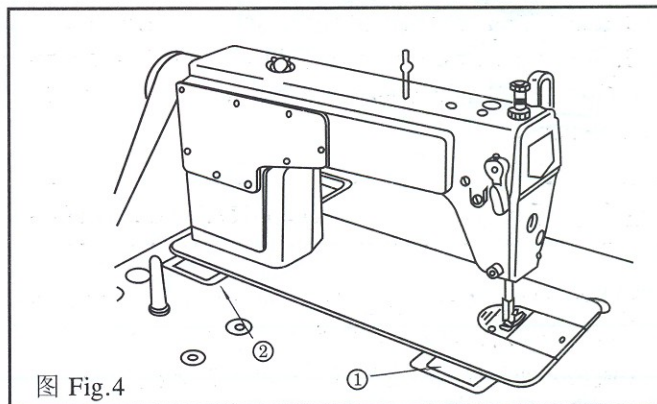


图 Fig.4

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(7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, 应看到油夜飞溅到油窗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 (7white 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 3,000s.p.m. to 3,500s.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.

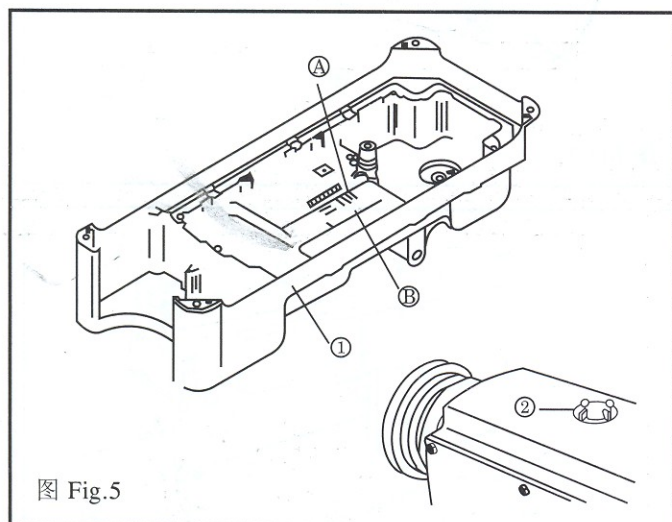


图 Fig.5

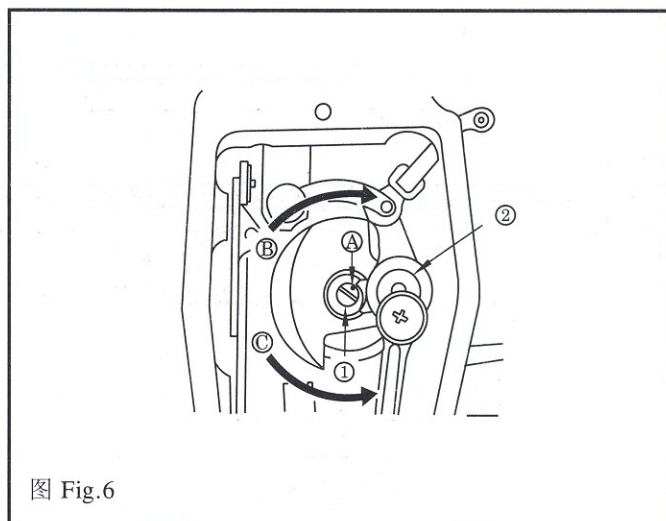


图 Fig.6

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 HIGH 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, 就不需要调节了。

*** 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转动时, 油量将增大。当油量调节螺钉朝-方向B转动时, 油量将减小。

2) 调整后应进行约30秒的空转, 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 HIGH 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 (Fig 9)**

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.

①油量纸 The amount of oil confirmed paper

②油量确认位置 The place of confirmed

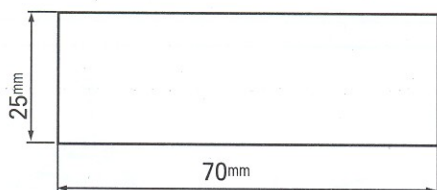


图 Fig.7

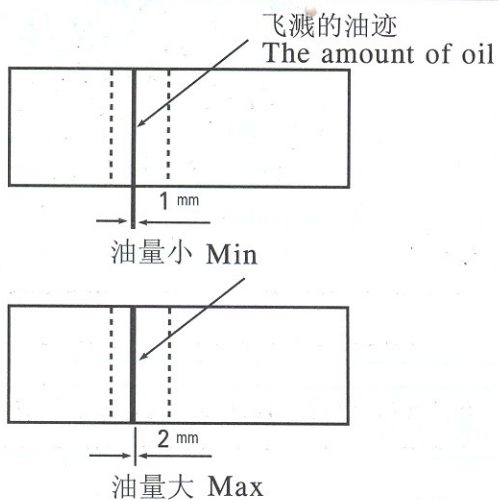
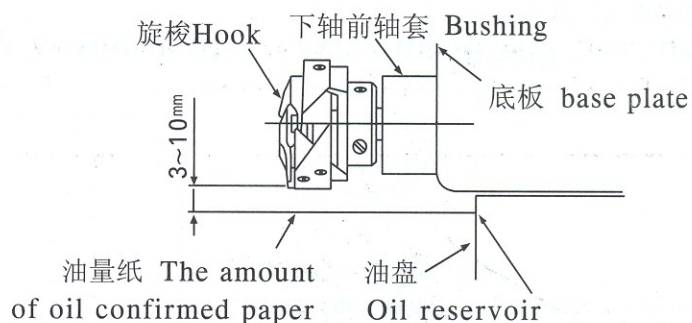


图 Fig.8

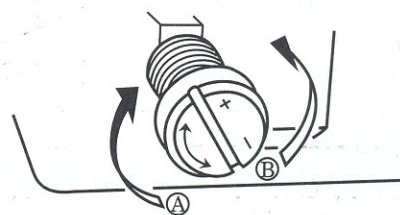


图 Fig.9

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 DB x 1# 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 ②，使机针 ① 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 DBx 1# 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 ②, and hole 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 on further.
- 4) Securely tighten screw ②.

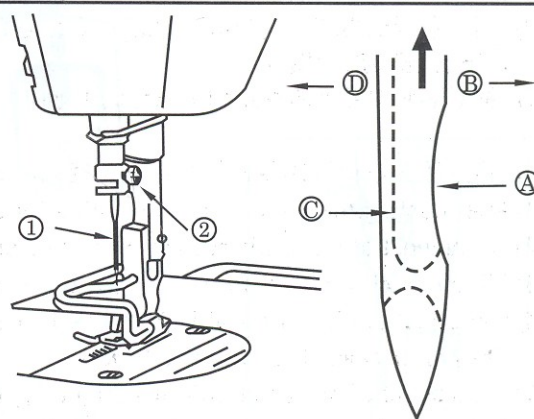


图 Fig.10

5) Check that long groove C of the needle is facing exactly to the left in direction D.

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.

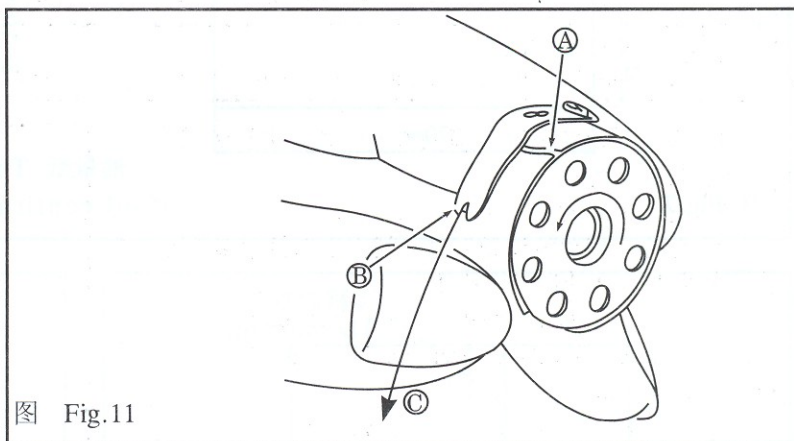


图 Fig.11

6. 面线的穿法 (图 12)

6.THREADING THE MACHINE HEAD (Fig.12)



注意: 为了防止意外的起动造成的事故, 请关掉电源后再进行。



WARNING:

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

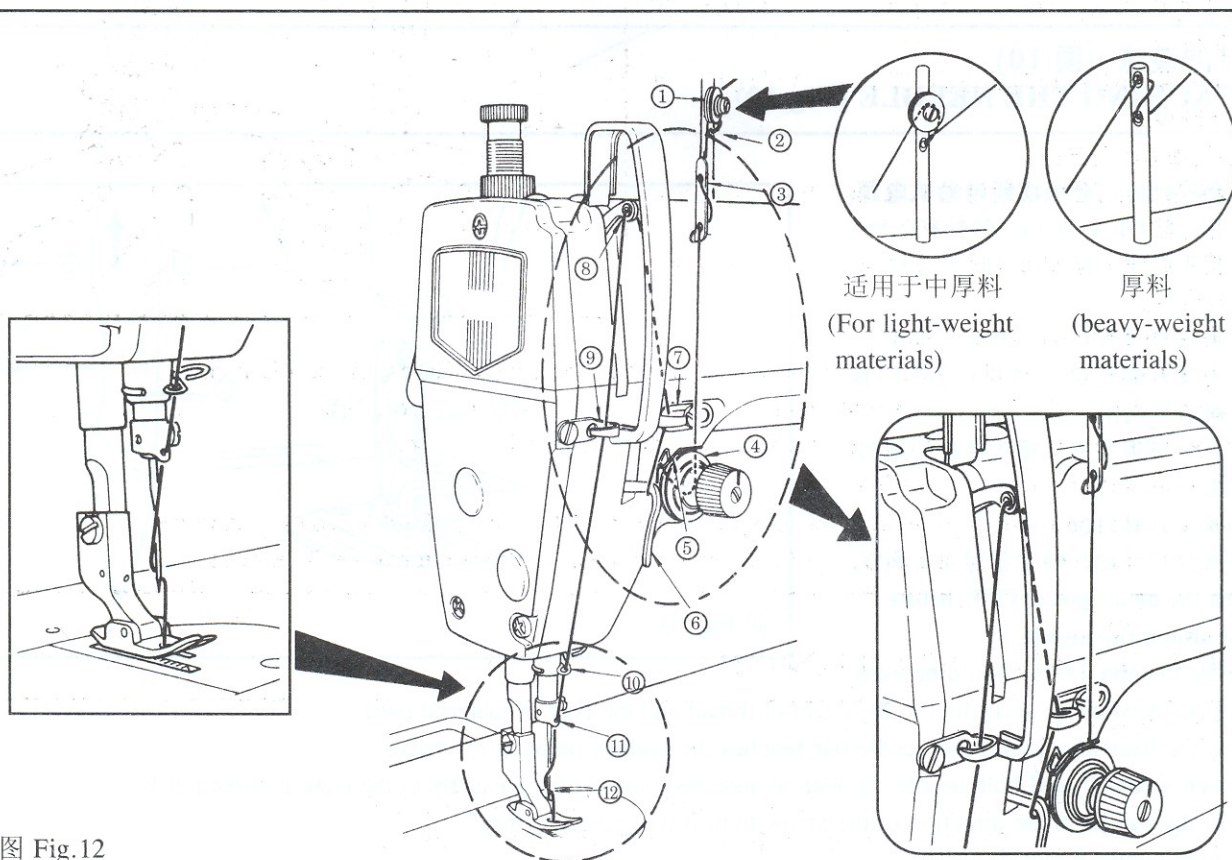


图 Fig.12

7. 针距的调节 (图 13)

7. ADJUSTING THE STITCH LENGTH (Fig.13)



注意：为了防止意外的起动造成的事故，请关掉电源后再进行。



WARNING:

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

1) 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) 旋钮上的刻度数字用毫米表示。

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.

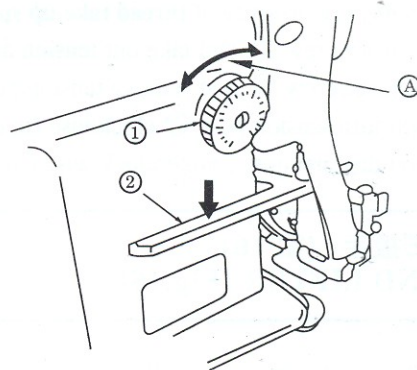


图 Fig.13

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，面线张力将减少。

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，底线张力将减少。

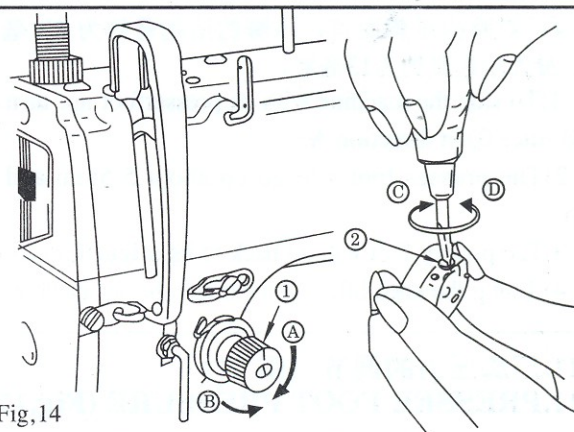


图 Fig.14

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少。

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) 旋松定位螺钉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，挑线簧的张力将减少。

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.

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.

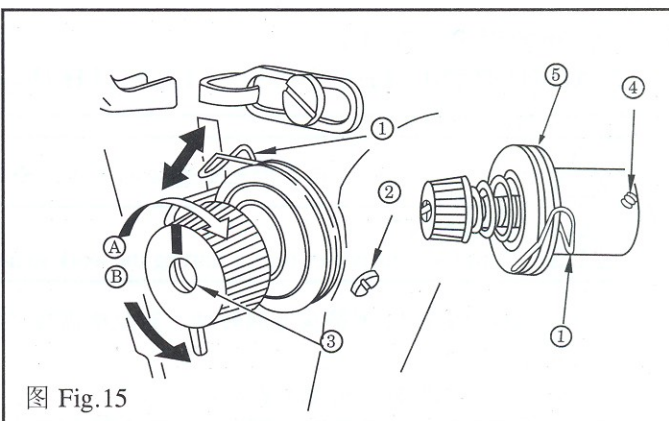


图 Fig.15

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 its presserfoot up, turn hand lifter ① in direction A.

- 2) The presser foot will go up about 5.5mm and stop.

- 3) The presser foot will go back to its original position when hand lifter ① is turned down in direction B.

- 4) Using the knee lifter, you can get the standard presser foot lift of about 10 mm and a maximum lift of about 13 mm.

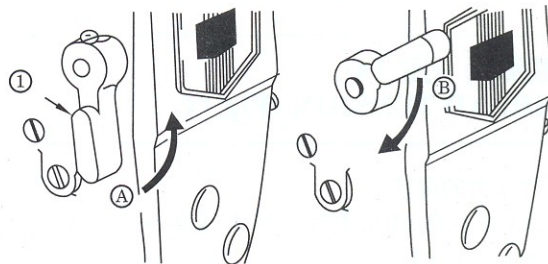


图 Fig.16

11.压脚压力的调节 (图 17)

11.PRESSER FOOT PRESSURE (Fig.17)

- 1) 旋松调压螺母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，压力将减弱。

- 3) 调节后，旋紧调压螺母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。(特殊的7公斤)

- 1) Loosen nut ②. As you turn presser spring regulator ① clockwise (in direction A), the presser foot pressure will be increased.

- 2) As you turn the presser spring regulator counterclockwise (in direction B), the presser will be decreased.

- 3) After adjustment, tighten nut ②.

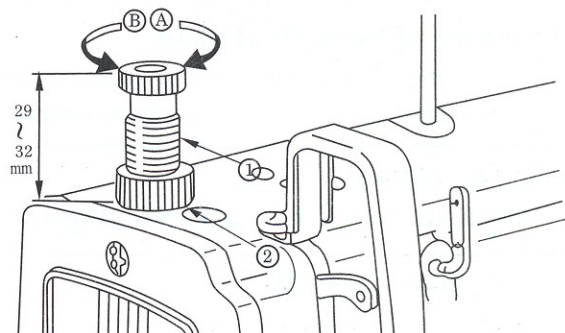


图 Fig.17

4) For general fabrics, the standard height of the presser spring regulator is 29 to 32mm (5kg). (For the model it is 7kg.)

12.送料相位的调节 (图 18)

12.ADJUSTING THE FEED TIMING (Fig.18)



注意：为了防止意外的起动造成的事故，请关掉电源后再进行。



WARNING:

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

1) 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，当送料牙从针板面下降时，送料牙上端，针孔上端和针板上端面对齐。

3) 为了防止缝料的潜移，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，在减慢送料相位，可将送料偏心凸轮箭头相反方向移动。

* 注意：

若送料偏心轮移动过多，则会引起断针。

1) Loosen two setscrews ② and ③ on feed eccentric cam ①, properly position the eccentric cam. Then retighten the setscrews.

2) To obtain the top of the feed dog with the top of the hole on the needle and the top of the thread 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.

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

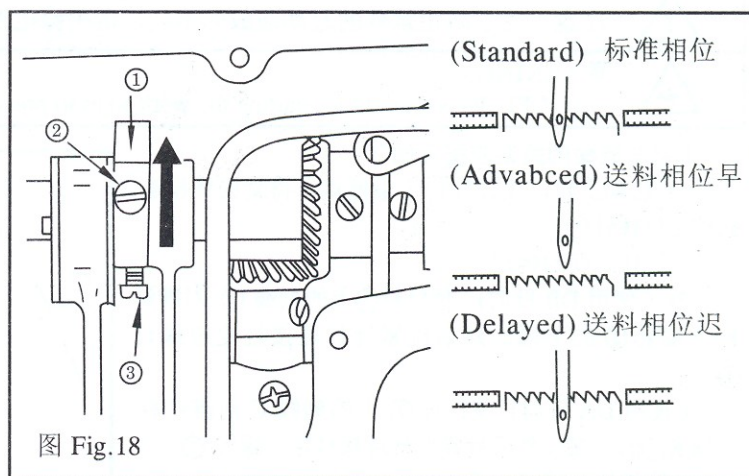


图 Fig. 18

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。对厚料而言，其高出为0.95-1.05毫米。

2) 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旋松抬牙叉形曲柄①的坚固螺钉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，会使抬牙叉形曲柄磨损。

④送料牙⑤针板

1) The feed dog is factory-adjusted so that it juts out from the throat plate surface 0.8mm to 0.9mm. For heavy-weight materials out 0.95mm to 1.05mm.

2) If the feed dog juts out too much, puckering may result when sewing light-weight materials. (Recommended protrusion: 0.7mm to 0.8mm)

3) To adjust the height of the feed dog:

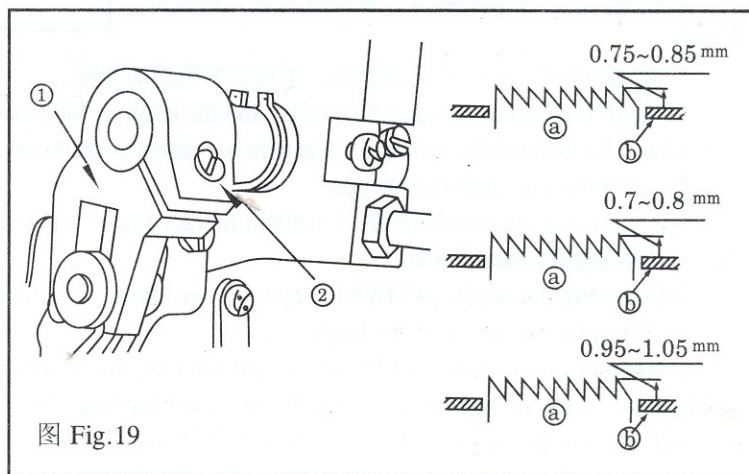


图 Fig. 19

(1) Loosen screw ② of 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 secutrly, the crank will be a braded.

③ Feed dog, ⑥ Throat plate.

14. 针与旋梭的关系 (图 20)

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



注意：为了防止意外的起动造成的事故，请关掉电源后再进行。



WARNING:

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

1. 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，然后旋紧针杆连接柱定位螺钉 ①。

*** 旋梭位置的确定 a**

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 对准针杆下轴套 ③ 的下端。

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

*** 注意：**

若间隙太小，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 DBX 1, align marker line A on needle bar ② with 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 position a of the hook**

2) When using the needle of DBX1 loosen the three hook setscrews, turn the handwheel, and align marker line B on the needle bar ② with 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 0.04mm to 0.1mm between the needle and the hook, then securely, tighten the hook setscrew.

*** 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.**

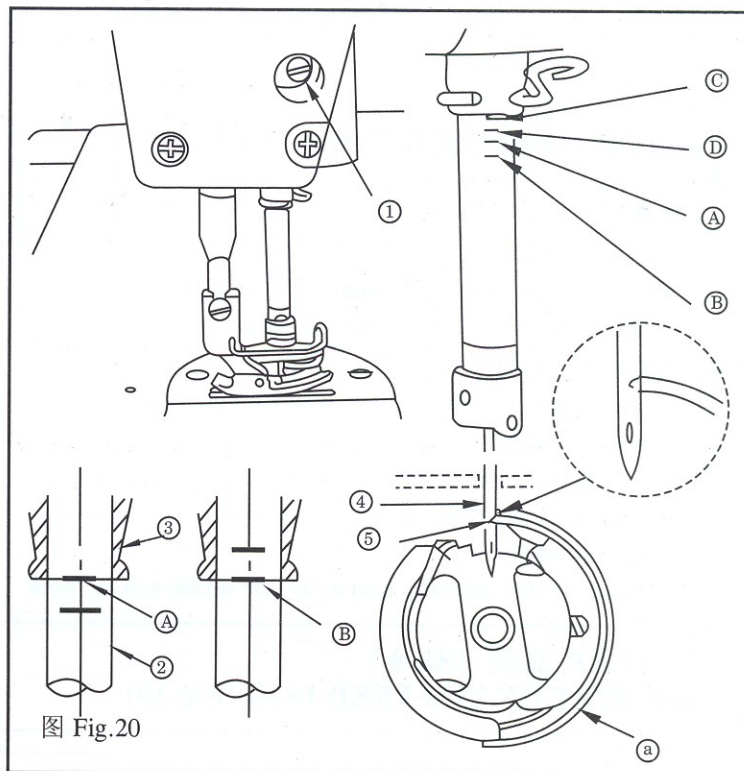


图 Fig.20

15. 压杆高度的调节(图 21)

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



注意：为了防止意外的起动造成的事故，请关掉电源后再进行。



WARNING:

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

- 1) 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 setscrew ①, and adjust the presser bar height and the angle of the presser foot.
- 2) After adjustment, securely tighten the setscrew.

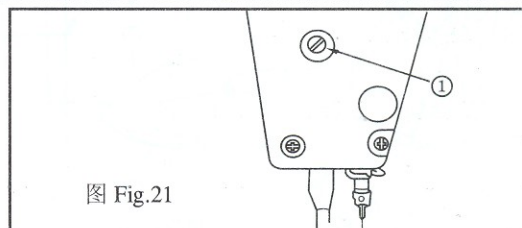


图 Fig.21

16. 挑线杆挑线量的调节(图 22)

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



注意：为了防止意外的起动造成的事故，请关掉电源后再进行。



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，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 ① to 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 ① to 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 ① is aligned with the center of the screw, it is standard.

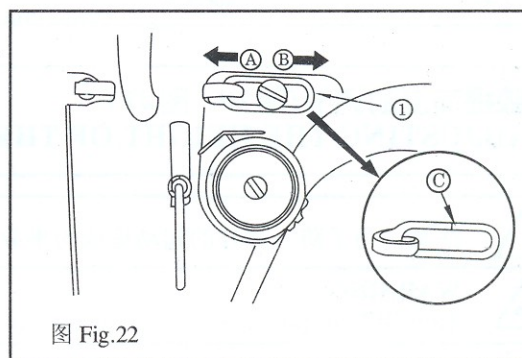


图 Fig.22

17. 皮带罩和绕线器的装法(图 23、图 24、图 25)

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



注意：为了防止意外的起动造成的事故，请关掉电源后再进行。



WARNING:

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

1. 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 CD 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) 盖上上轮前罩壳盖板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固定在导孔 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 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 from belt cover ③, then move further more 0.5-1mm, fix it using the wooden screws and washers.

8) Fix bobbin winder ⑧ at A and B using the wooden screws.

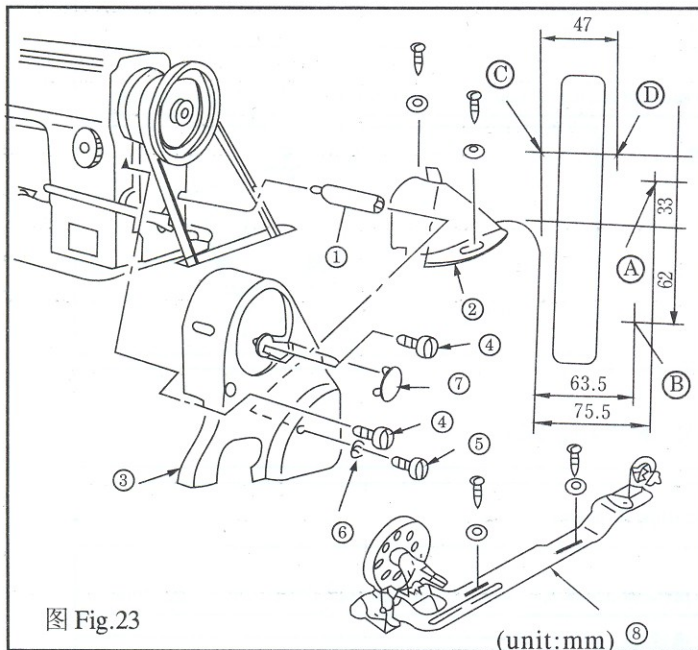


图 Fig.23

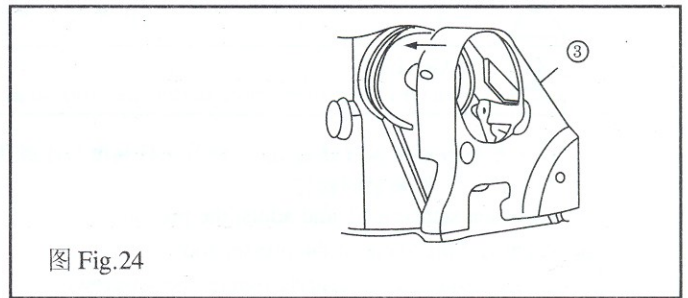


图 Fig.24

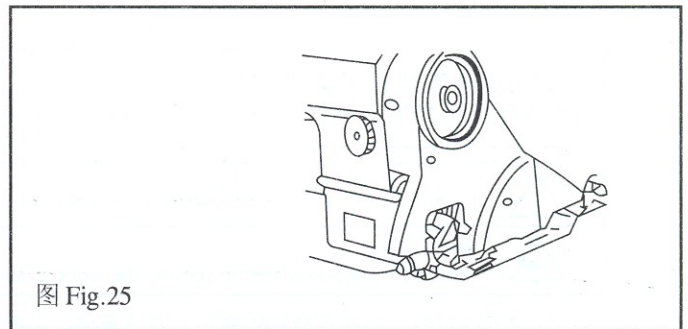


图 Fig.25

18. 膝提高度的调节 (图 26、图 27)

18. ADJUSTING THE HEIGHT OF THE KNEE LIFTER (Fig.26, Fig.27)



注意：为了防止意外的起动造成的事故，请关掉电源后再进行。



WARNING:

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

1) 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。(压脚最大提升量为 9 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 10mm.

2) You can adjust the presser foot lift up to 13 mm using knee lifter adjust screw ①. (The max. lift should be 9 mm for type)

3) When you have adjusted the presser foot lift to over 10mm, be sure that the bottom end of needle bar ② in its position does not hit presser foot ③.

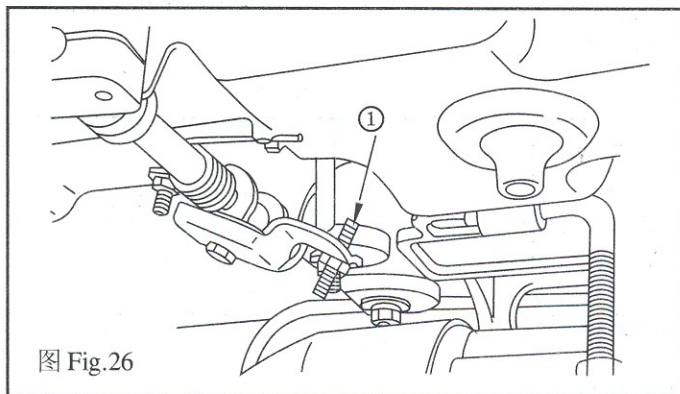


图 Fig.26

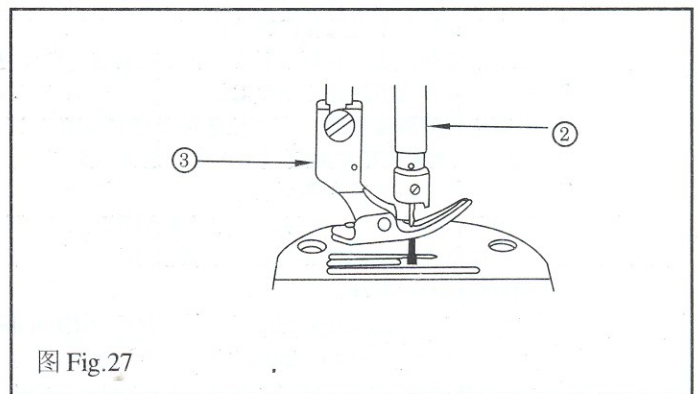


图 Fig.27

19.规格
19.SPECIFICATIONS

缝料 Application	中厚料 For medium-weight materials	厚料 For heavy-weight materials	超厚料 For over heavy-weight materials
缝速 Sewing speed (max)	5000RPM	4000RPM	3500RPM
最大针距 Stitch length (max)	4	4	8
针距行程 Needle bar store	30.6	30.6	35
压脚升程 Presser foot lifter	手提 Hand lifter	5.5	7
	膝提 Knee lifter	13	13
机针 Needle	DB X 1 14 #	DB X 5 18 #	DB X 1 21 #
润滑油 Lubricating	10 # 白油(oil)		
电机功率 Motor power	370W		

(1) 马达使用标准输出370W (1/2 马力) 的离合马达。

(2) 皮带使用M型V形皮带。

(3) 马达皮带轮和皮带、缝纫机的转速关系如下表所示。

(1) A clutch motor with 370W output (1/2 HP) is used as the standard motor.

(2) An M-type V belt should be used.

(3) The relationship between the motor pulleys, belt lengths and sewing speeds is shown in the following table:

马达皮带轮的外径 Motor pulley O.D. (mm)	皮带轮货号 Motor pulley part No.	转 速 Sewing speed (s.p.m.)		皮带长度 (英吋) Belt length (in.)	皮带货号 Belt part No.
		50 Hz	60 Hz		
125	MTKP0120000	5,060		44"	MTJVM004400
120	MTKP0115000	4,850		43"	MTJVM004300
115	MTKP0110000	4,630			
110	MTKP0105000	4,440			
105	MTKP0100000	4,250	5,040	42"	MTJVM004200
100	MTKP0095000	4,000	4,780		
95	MTKP0090000	3,820	4,540		
90	MTKP0085000	3,610 *	4,320		
85	MTKP0080000	3,390 *	4,000	41"	MTJVM004100
80	MTKP0075000	3,160 *	3,790		
75	MTKP0070000	2,950 *	3,520 *		
70	MTKP0065000	2,740 *	3,260 *		

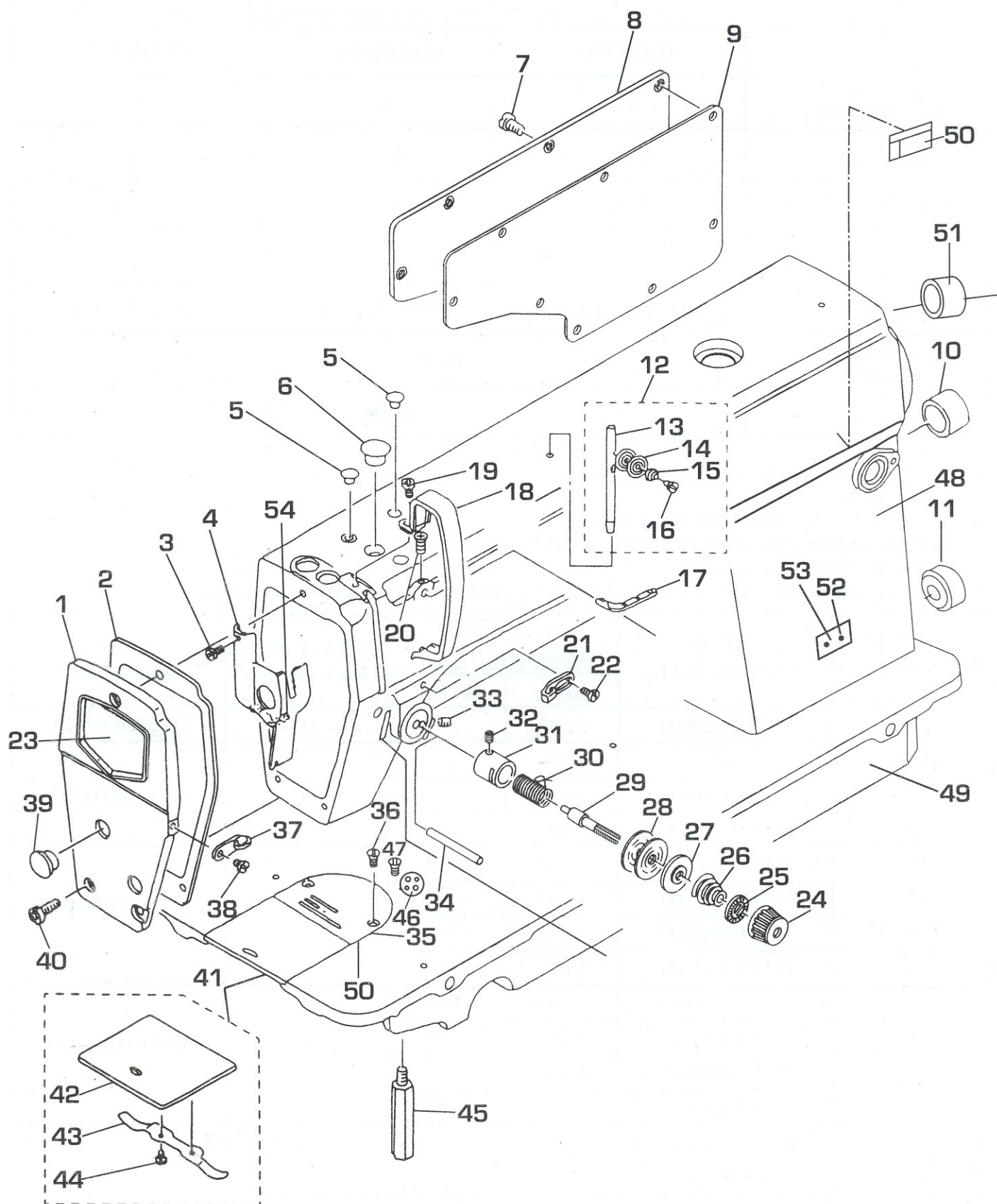
● 马达皮带轮的有效直径为外径减5mm。

● 马达的转动方向从皮带轮侧看为逆时针。请注意不要让缝纫机反转。

● The effective diameter of a motor pulley is equivalent to the outside diameter minus 5 mm.

● The motor should rotate counterclockwise as observed from the handwheel side. Be careful not to allow the motor to rotate in the reverse direction.

1. 机壳分组件 ARM BED COMPONENTS

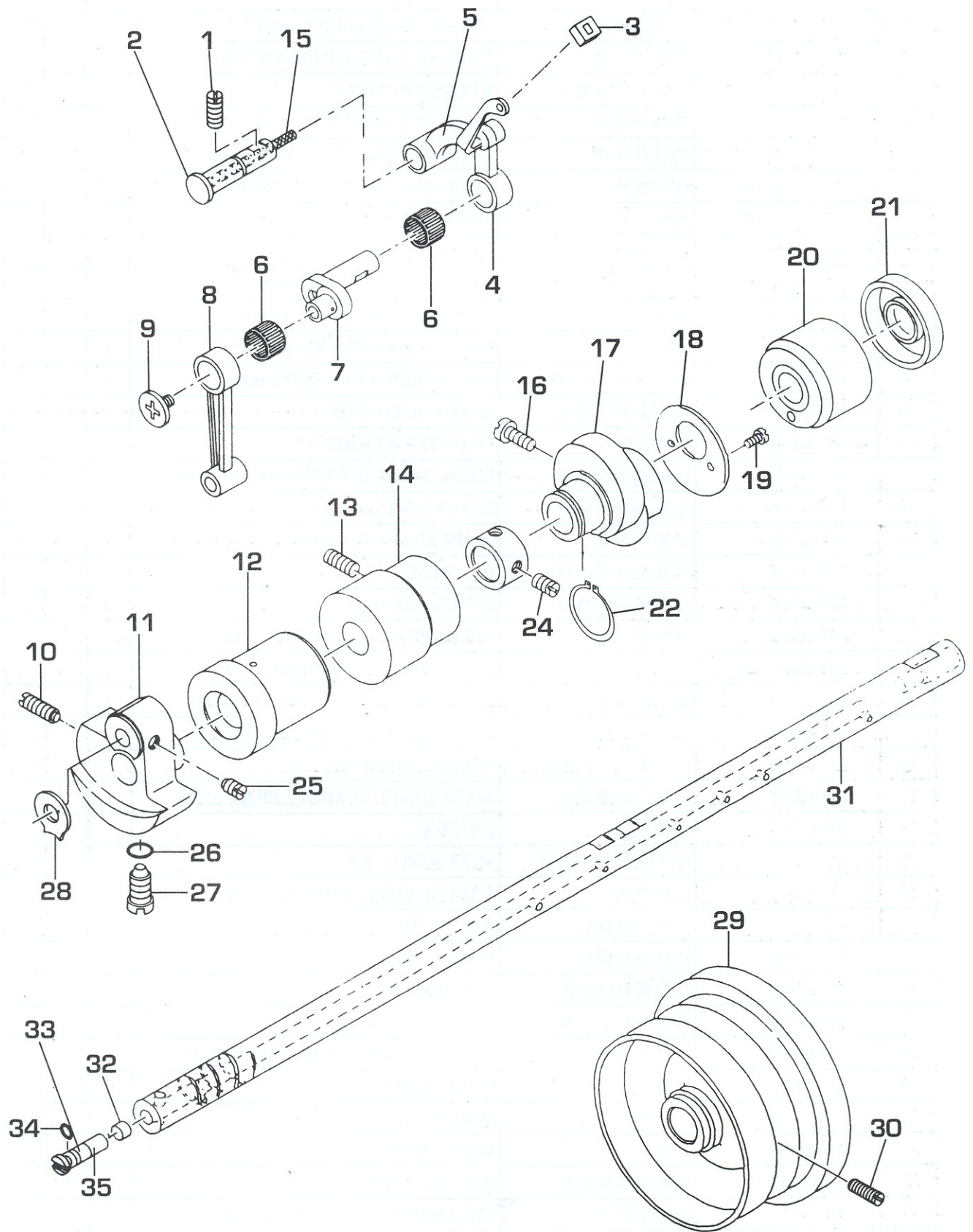


一、机壳分组件 ARM BED COMPONENTS

序号 NO	图 号	名 称	DESCRIPTION	数量(AMT)		
				M	H	XH
1	101-01-07	面板 (方、圆)	FACE PLATE ARM	1	1	1
2	101-01-09	面板垫	BRAND PLATE GASKET	1	1	1
3	101-08-36	面部防油板螺钉	SCREW SM1/8x44 L=4	1	1	
	101-08-36XH	面部防油板螺钉	SCREW SM1/8x44 L=2.5			1
4	101-08-34	面部防油板	ARM OIL SHIELD ASM.	1	1	1
5	101-01-12	挑线连杆销螺孔塞	REBBER PLUG	2	2	2
6	101-01-11	针杆曲柄螺孔塞	RUBBER PLUG	1	1	1
7	101-01-06	后窗板螺钉	SCREW SM3/16x28 L=9	8	8	8
8	101-01-04	后窗板	SIDE PLATE	1	1	1
9	101-01-05	后窗板垫	SIDE PLATE GASKET	1	1	1
10	101-01-20	针距座支承孔塞	RUBBER PLUG	1	1	1
11	101-01-02	送料调节器孔塞	RUBBER PLUG	1	1	1
12	101-03-34-00	过线器组件图	NEEDLE THREAD GUIDE PIN ASM	1	1	
	101-03-34-00XH	过线器组件图	NEEDLE THREAD GUIDE PIN ASM			1
13	101-03-35	过线柱	NEEDLE THREAD GUIDE PIN	1	1	
14	101-03-36	过线夹线板	TENSION DISC	2	2	2
15	101-03-37	过线夹线簧	TENSION SPRING	1	1	1
16	101-03-38	过线夹线螺钉	HINGE SCREW SM3/32x56 L=4	1	1	1
17	101-03-14	三眼线勾	THREE-HOLE THREAD EYELET	1	1	1
18	101-02-29	挑线杆护罩	THREAD TAKE-UP LEVER COVER	1	1	1
19	101-02-30	挑线杆护罩螺钉	SCREW SM3/16x28 L=6	1	1	1
20	101-02-30	三眼线勾螺钉	SCREW SM15/64x28	1	1	1
21	101-03-16	右线勾	ARM THREAD GUIDE A	1	1	1
22	101-03-17	右线勾螺钉	SCREW SM11/64x40	1	1	1
23	101-01-08	商标牌	BRAND PLATE	1	1	1
24	101-03-28	夹线器螺母	TENSION NUT	1	1	1
25	101-03-27	夹线制动板	TENSION DISC STOPPER	1	1	1
26	101-03-26	夹线簧	TENSION SPRING	1	1	
	101-03-26XH	夹线弹簧	TENSION SPRING			1
27	101-03-25	松线板	TENSION DISC HOLDER	1	1	1
28	101-03-24	夹线板	TENSION DISC	2	2	2
29	101-03-21	夹线螺钉(柱)	TENSION POST	1	1	1
30	101-03-20	挑线簧	TAKE-UP SPRING	1	1	1
31	101-03-19	挑线簧调节座	TENSION POST SOCKET	1	1	1
32	101-03-22	夹线座紧固螺钉	SCREW SM19/64x40 L=5.5	1	1	1
33	101-03-29	夹线器螺钉	SCREW SM15/64x28 L=7	1	1	1
34	101-03-30	松线辅钉	THREAD RELEASE PIN	1	1	1
35	101-06-36	针板	THROAT PLATE	1	1	

	101-06-36H	针板	THROAT PLATE		1	
	101-06-36XH	针板	THROAT PLATE			1
36	101-06-37	针板螺钉	SCREW SM11/64x40 L=85	2	2	2
37	101-03-18	左线勾	ARM THREAD GUIDE B	1	1	1
38	101-03-17	左线勾螺钉	SCREW SM11/64x40 L=6	1	1	1
39	101-01-10	面板调节螺孔塞	RUBBER PLUG	2	2	2
40	101-01-06	面板螺钉	SCREW SM3/16x28 L=9	3	3	3
41	101-06-39	推板组件	BED SLIDE ASM	1	1	1
42	101-06-39-1	推板	SLIDE PLATE	1	1	1
43	101-06-40	推板簧	SLIDE PLATE SPRING	1	1	1
44	101-06-41	推板簧螺钉	SCREW SM3/32x56 L=1.9	2	2	2
45	101-01-15	底板支座	BED SCREW STUD SM15/64x28	4	4	4
46	101-01-17	安装板	CONNECTING ROD	1	1	1
47	101-01-16	安装板定位螺钉	SCREW SM11/64x40 L=5.5	2	2	2
48	101-01-01-02	机壳	ARM	1	1	1
49	101-01-01-01	底板	BED	1	1	1
50	101-01-18	安全指示牌	SAFETY-INDICATING PLATE	1	1	1
51	101-12-23	上轴保护套	MAIN SHAFT BUSHING	1	1	1
52	101-01-14	型号牌铆钉	MODEL PLATE RIVET	2	2	2
53	101-01-13	型号牌	MODEL PLATE	1		
	101-01-13H	型号牌	MODEL PLATE		1	
	101-01-13XH	型号牌	MODEL PLATE			1
54	101-08-35	面部防油板油线	OIL WICK	1	1	1

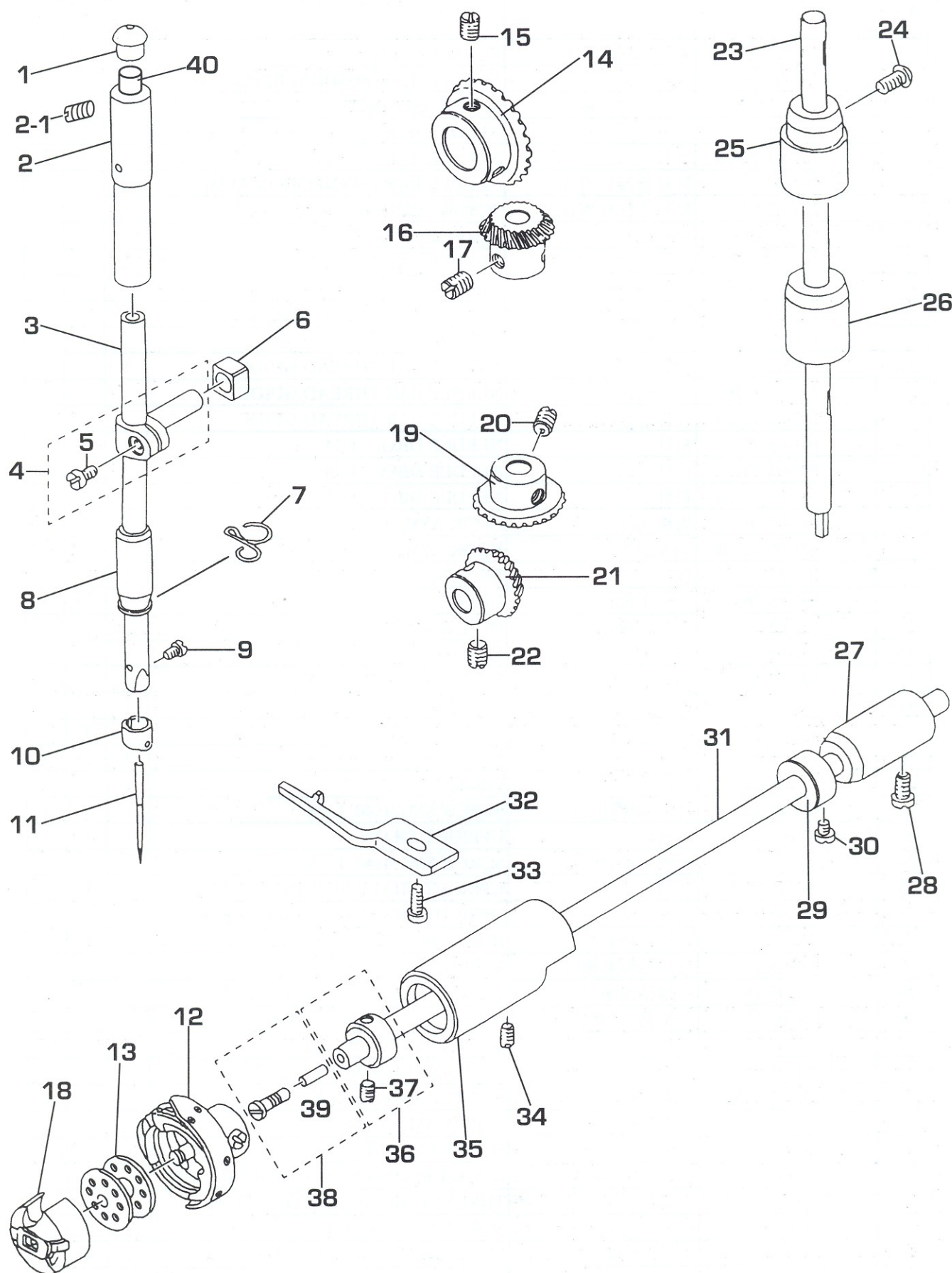
2. 上轴及挑线杆分组件 MAIN SHAFT & THREAD TAKE-UP LEVER COMPONENTS



二、上轴及挑线杆分组件(MAIN SHAFT & THREAD TAKE-UP LEVER COMPONENTS)

序号 NO	图 号	名 称	DESCRIPTION	数量(AMT)		
				M	H	XH
1	101-02-27	挑线连杆销螺钉	SCREW SM15/64X28 L=0.5	1	1	1
2	101-02-25	挑线连杆销	THREAD TAKE-UP LEVER PIN	1	1	1
3	101-02-23	挑线杆防油套	RUBBER BUSHING	1	1	1
4	101-02-22	挑线杆组件	THREAD TAKE-UP LEVER ASM	1	1	
	101-02-22-00X	挑线杆组什	THREAD TAKE-UP LEVER ASM			1
5	101-02-22-05	挑线连杆	THREAD TAKE-UP CRANK ROD	1	1	
	101-02-22-05X	挑线连杆	THREAD TAKE-UP CRANK ROD			1
6	101-02-24	滚针轴承	NEEDLE BEAR ING B	2	2	2
7	101-02-20-00	挑线曲柄组件	NEEDLE BAR CRANK ASM	1	1	
	101-02-20-00X	挑线曲柄组件	NEEDLE BAR CRANK ASM			1
8	101-03-01	针杆连杆	NEEDLE BAR CRANK ROD	1	1	1
9	101-02-28	挑线曲柄左旋螺钉	END SCREW LEFT SM9/64x40	1	1	1
10	101-02-18	针杆曲柄紧固螺钉	SCREW SM9/32x28	1	1	1
11	101-02-15	针杆曲柄	COUNTERWEIGHT	1	1	1
12	101-02-10	上轴前轴套组件	MAIN SHAFT BUSHING FRONT ASM	1	1	1
13	101-02-09	上轴中轴套螺钉	SCREW SM15/64x28	1	1	1
14	101-02-08	上轴中轴套	MAIN SHAFT BUSHING INTERMEDIAT	1	1	1
15	101-02-26	挑线连杆销油线	OIL WICK	1	1	1
16	101-06-03	送料偏心轮螺钉	SCREW SM1/4x40	2	2	2
17	101-06-02	送料偏心轮	FEED DRIVE ECCENTRIC CAM	1	1	
	101-06-02XH	送料偏心轮	FEED DRIVE ECCENTRIC CAM			1
18	101-06-04	送料偏心轮盖板	FEED DRIVE ECCENTRIC COVER	1	1	
	101-06-04XH	送料偏心轮盖板	FEED DRIVE ECCENTRIC COVER			1
19	101-06-05	送料偏心轮盖板螺钉	SCREW SM9/64x40 L=6	2	2	2
20	101-02-05	上轴后轴套组件	MAIN SHAFT BUSHING BEAR ASM	1	1	1
21	101-02-04	上轴油封	OIL SEAL	1	1	1
22	101-06-52	拾牙连杆轴用挡圈	SNAP RING 18.5	1	1	1
23	101-02-06	上轴挡圈	THRUST COLLAR D=14.72 W=12	1	1	1
24	101-02-07	上轴挡圈螺钉	SCREW SM1/4x40 L=6	2	2	2
25	101-02-07	针杆曲柄螺钉	SCREW SM1/4x40 L=6	2	2	2
26	101-02-17	定位螺钉O形圈	RUBBER RING	1	1	1
27	101-02-16	针杆曲柄定位螺钉	SCREW SM9/32x28 L=6	1	1	1
28	101-02-19	针杆曲柄护板	COUNTERWEIGHT PROTECTING PLATE	1	1	1
29	101-02-01	上轮	HAND WHEEL	1	1	1
30	101-02-02	上轮螺钉	SCREW SM15/64x28 L=15	2	2	2
31	101-02-03	上轴	MAIN SHAFT	1	1	1
32	101-02-11	曲柄油量限制垫	ROLLER FELT	1	1	1
33	101-02-12	曲柄油量调节销	OIL AMOUNT ADJUSTING PIN	1	1	1
34	101-02-14	曲柄油量调节销O形圈	RUBBER RING	1	1	1
35	101-02-13	曲柄油量调节销套	SLEEVE OF OIL AMOUNT ADJUSTING PIN	1	1	1

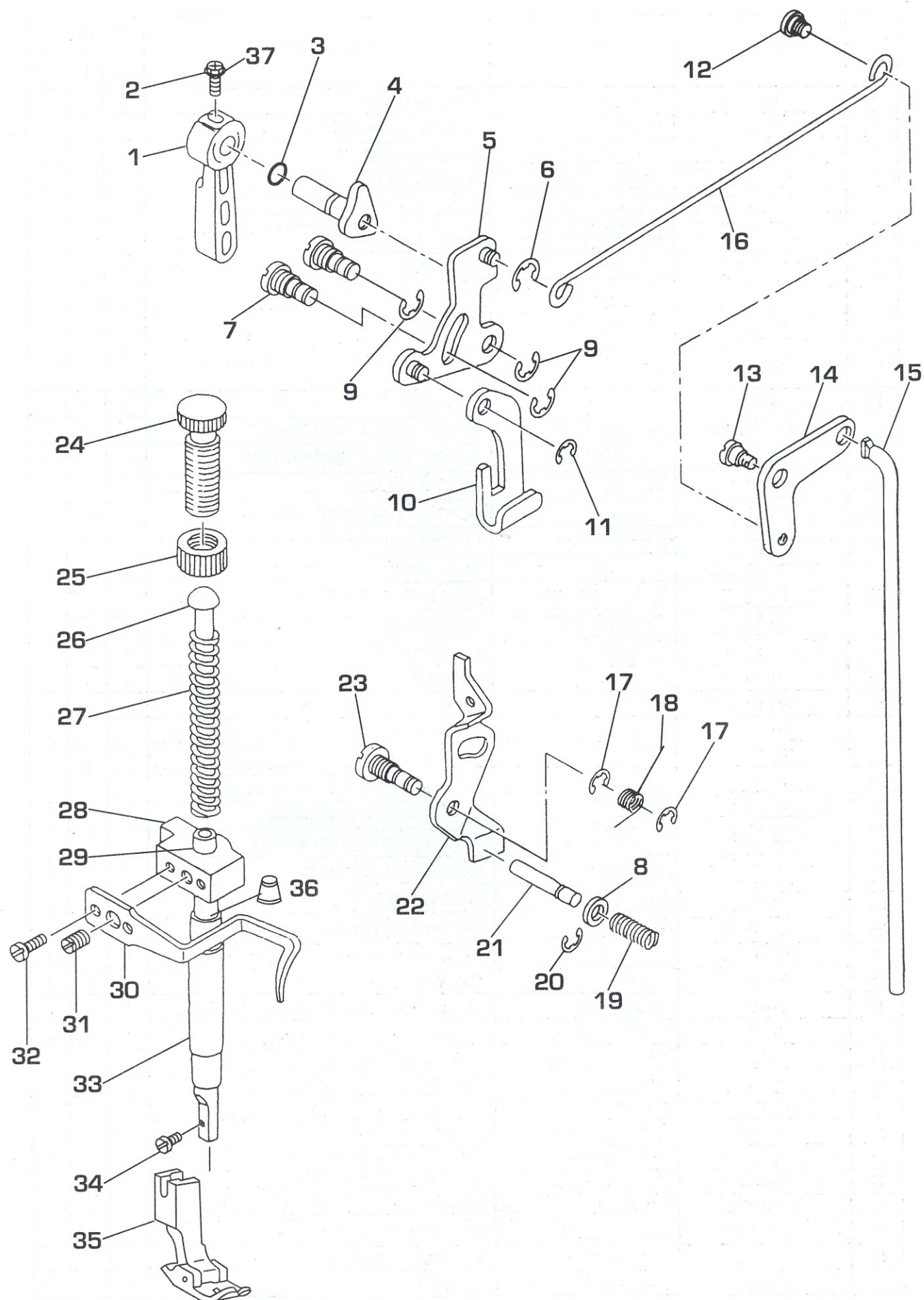
3. 针杆、传动轴分组件 NEEDLE BAR & HOOK DRIVING SHAFT COMPONENTS



三、针杆、传动轴分组件(NEEDL BAR &HOOK DRIVING SHAFT COMPONENTS)

序号 NO	图 号	名 称	DESCRIPTION	数量(AMT)		
				M	H	XH
1	101-03-07	针杆上衬套孔塞	RUBBER PLUG	1	1	1
2	101-03-06	针杆上衬套	NEEDLE BAR BUSHING RPPER	1	1	1
3	101-SM524	针杆上衬套螺钉	SCREW SM3/16x28/5	1	1	1
	101-03-10	针杆	NEEDLE BAR	1	1	1
	101-03-10XH	针杆	NEEDLE BAR		1	1
4	101-03-03	针杆连接柱组件	NEEDLE BAR CONNECTION ASM.	1	1	1
5	101-03-04	针杆连接柱螺钉	SCREW SM9/64x40 L=6	1	1	1
6	101-03-05	针杆连接柱滑块	SLIDE BLOCK	1	1	1
7	101-03-09	针杆下轴套线勾	NEEDLE BAR THREAD GUIDE	1	1	
	101-03-09XH	针杆下轴套线勾	NEEDLE BAR THREAD GUIDE			1
8	101-03-08	针杆下轴套	NEEDLE BAR BUSHING LOWER	1	1	1
9	101-03-12	支针螺钉	SCREW SM1/8x44	1	1	1
10	101-03-11	针杆过线环	NEEDLE BAR THREAD GUIDE	1		
	101-03-11H	针杆过线环	NEEDLE BAR THREAD GUIDE		1	
	101-03-11XH	针杆过线环	NEEDLE BAR THREAD GUIDE			1
11	101-03-13	机针	NEEDLE DBx1 # 14	1		
	101-03-13H	机针	NEEDLE DBx5 # 18		1	
	101-03-13XH	机针	NEEDLE DBx1 # 21			1
12	101-05-01	旋梭组件	HOOK ASM	1	1	
	101-05-01XH	旋梭组件	HOOK ASM			1
13	101-05-03	梭心	BOBBIN	1	1	1
14	101-05-26	上轴伞齿轮	GEAR	1	1	1
15	101-05-19	伞齿轮螺钉	SCREW SM1/4x40 L=8	2	2	2
16	101-05-25	竖轴上伞齿轮	PINION	1	1	1
17	101-05-19	伞齿轮螺钉	SCREW SM1/4x40 L=8	2	2	2
18	101-05-02	梭心套	BOBBIN CASE ASM	1	1	1
19	101-05-20	竖轴下伞齿轮	GEAR LARGE	1	1	1
20	101-05-19	伞齿轮螺钉	SCREW SM1/4x40 L=8	2	2	2
21	101-05-18	下轴伞齿轮	PINION	1	1	1
22	101-05-19	伞齿轮螺钉	SCREW SM1/4x40 L=8	1	1	1
23	101-05-24	竖轴	UPRIGHT SHAFT	1	1	1
24	101-05-23	竖轴上轴套螺钉	SCREW SM1/4x40 L=9	1	1	1
25	101-05-22	竖轴上轴套	UPRIGHT SHAFT BUSHING UPPER	1	1	1
26	101-05-21	竖轴下轴套	UPRIGHT SHAFT BUSHING LOWER	1	1	1
27	101-05-14	下轴后轴套	HOOK DRIVING SHAFT BUSHING REAR	1	1	1
28	101-05-15	下轴后轴套螺钉	SCREW SM3/16x28 L=9	1	1	1
29	101-05-16	下轴挡油圈	THRUST COLLAR ASM D=7.94 W=10	1	1	1
30	101-05-17	下轴挡油圈螺钉	SCREW SM11/64x40 L=4.8	2	2	2
31	101-05-07	下轴	HOOK DRIVING SHAFT	1	1	1
32	101-05-05	旋梭定位钩	POSITIONING FINGER	1	1	
	101-05-05XH	旋梭定位钩	POSITIONING FINGER			1
33	101-05-06	旋梭定位钩螺钉	SCREW SM11/64x40	1	1	1
34	101-05-13	下轴前轴套螺钉	SCREW SM15/64x28	1	1	1
35	101-05-12	下轴前轴套组件	HOOK DRIVING SHAFT BUSHING ASM.	1	1	1
36	101-05-10	下轴挡油圈	THRUST COLLAR ASM D=7.94 W=7	1	1	1
37	101-05-11	下轴挡油圈螺钉	SCREW SM11/64x40 L=3.5	2	2	2
38	101-05-08	下轴限位螺钉	OIL SEAL SCREW ASM SM13/16x32	1	1	1
39	101-05-09	下轴限油芯	OIL WICK	1	1	1
40	101-08-40	上轴轴套毡塞	FELT PLUG	1	1	1

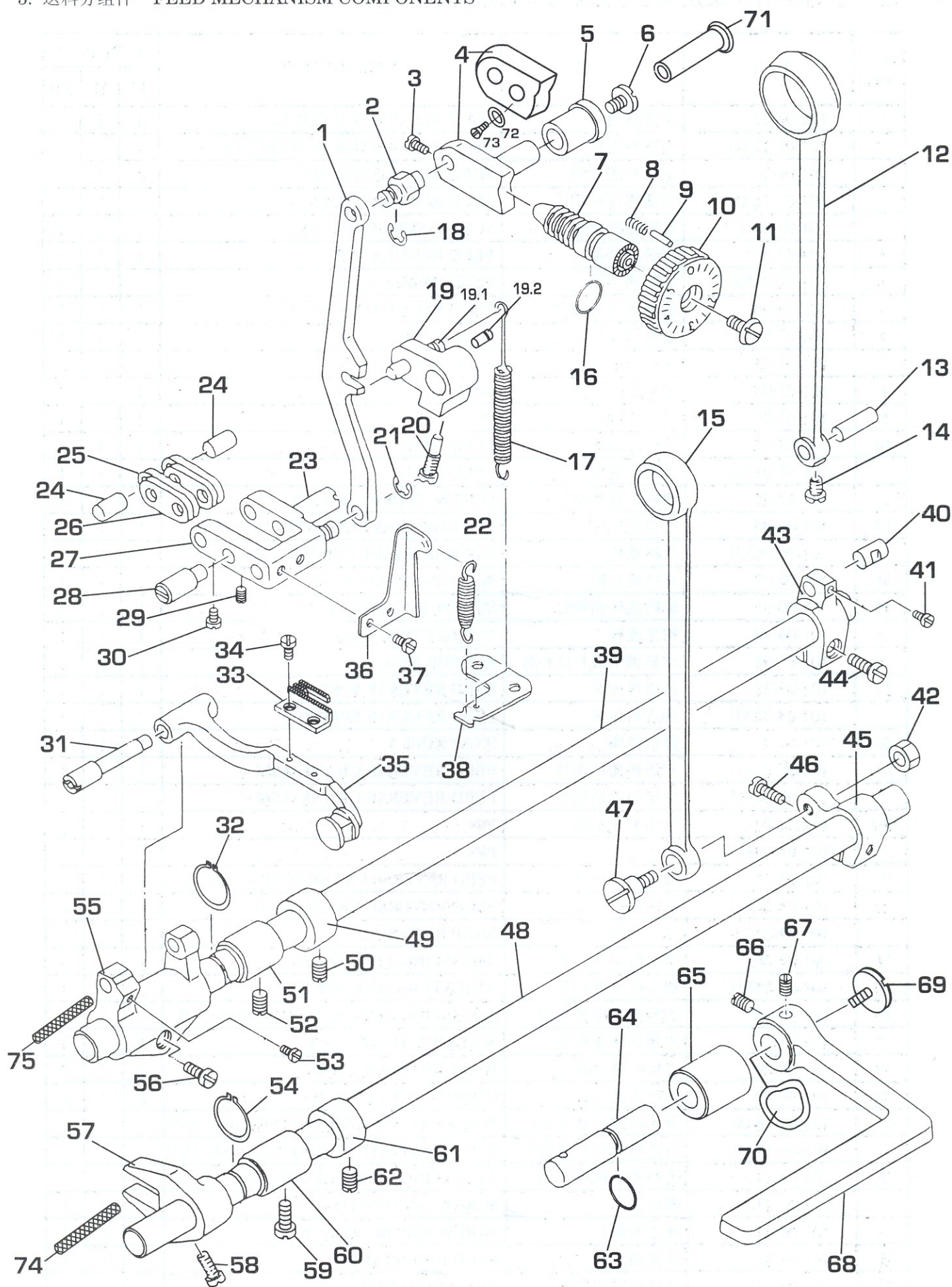
4. 提压脚分组件 HAND LIFTER COMPONENTS



四、提压脚分组件(HAND LIFTER COMPONENTS)

序号 NO	图 号	名 称	DESCRIPTION	数量(AMT)		
				M	H	XH
1	101-04-13	压脚扳手	HAND LIFTER	1	1	1
2	101-04-14	压脚扳手螺钉	SCREW SM9/64x40	1	1	1
3	101-04-17	压脚扳手轴O形圈	RUBBER RING	1	1	1
4	101-04-16-00	压脚扳手凸轮组件	HAND LIFTER CAM ASM	1	1	
	101-04-16-00X	压脚扳手凸轮组件	HAND LIFTER CAM ASM			1
5	101-04-19-00	抬压脚前杠杆组件	HAND LIFTER LINK	1	1	1
6	101-04-22	开口挡圈	SNAP RING 5	1	1	1
7	101-04-20	前杠杆螺纹销	LINK SHAFT SM15/16x24	2	2	2
8	101-03-32	松线铺钉垫片	WASHER PLATE	1	1	1
9	101-04-22	开口挡圈	SNAP RING 5	3	3	3
10	101-04-18	压脚升降板	LIFTING LEVER BOARD	1	1	1
11	101-04-22	开口挡圈	SNAP RING	1	1	1
12	101-04-32	抬压脚拉杆螺钉	HINGE SCREW SM3/16x32	1	1	1
13	101-04-31	后杠杆轴位螺钉	HINGE SCREW SM15/64x28	1	1	1
14	101-04-30	抬压脚后杠杆	LIFTING LEVER	1	1	1
15	101-04-33	抬压脚顶杆	CONNECTING ROD VERTICAL	1	1	1
16	101-04-28	抬压脚拉杆	LIFTING LEVER CONNECTING ROD	1	1	1
17	101-04-22	开口挡圈	SNAP RING 5	2	2	2
18	101-04-27	松线顶板复位簧	TENSION RELEASE RETURN SPRING	1	1	1
19	101-03-33	松线铺钉弹簧	TENSION RELEASE PIN SPRING	1	1	1
20	101-03-31	松线铺钉开口挡圈	SNAP RING 4	1	1	1
21	101-03-30	松线铺钉	TENSION RELEASE SUPPORTING PIN	1	1	1
22	101-04-24	松线顶板	TENSION RELEASE PLATE	1	1	1
23	101-04-25	松线顶板螺纹销	TENSION RELEASE SHAFT SM5/16x24	1	1	1
24	101-04-01	调压螺钉	PRESSER REGULATOR SCREW	1		1
	101-04-01H	调压螺钉	PRESSER REGULATOR SCREW		1	
25	101-04-02	调压螺母	PRESSER REGULATOR NUT	1		1
	101-04-02H	调压螺母	PRESSER REGULATOR NUT		1	
26	101-04-03	调压导杆	PRESSER GUIDE BAR	1	1	1
27	101-04-04	调压簧	PRESSER SPRING	1	1	1
	101-04-04XH	调压簧	PRESSER SPRING			1
28	101-04-06	压杆导架	PRESSER BAR GUIDE BRACKET	1	1	1
29	101-04-05	压杆	PRESSER BAR	1	1	1
30	101-04-08	缓线调节钩	PRESSER BAR THREAD GUIDE	1	1	1
31	101-04-07	压杆导架螺钉	SCREW SM1/4x40 L=8	1	1	1
32	101-04-09	缓线调节钩螺钉	SCREW SM9/64x40 L=8.5	2	2	2
33	101-04-10	压杆衬套	PRESSER BAR BUSHING LOWER	1	1	
	101-04-10XH	压杆衬套	PRESSER BAR BUSHING LOWER			1
34	101-04-12	活压脚螺钉	SCREW SM9/64x40 L=10.5	1	1	1
35	101-04-11-00	活压脚组件	PRESSER FOOT ASM.	1		
	101-04-11-00H	活压脚组件	PRESSER FOOT ASM.		1	
	101-04-11-00X	活压脚组件	PRESSER FOOT ASM.			1
36	101-04-34	压杆轴套锥形防油套	RUBBER BUSHING	1	1	1
37	101-04--15	压脚扳手螺钉垫圈	WASHER	1	1	1

5. 送料分组件 FEED MECHANISM COMPONENTS

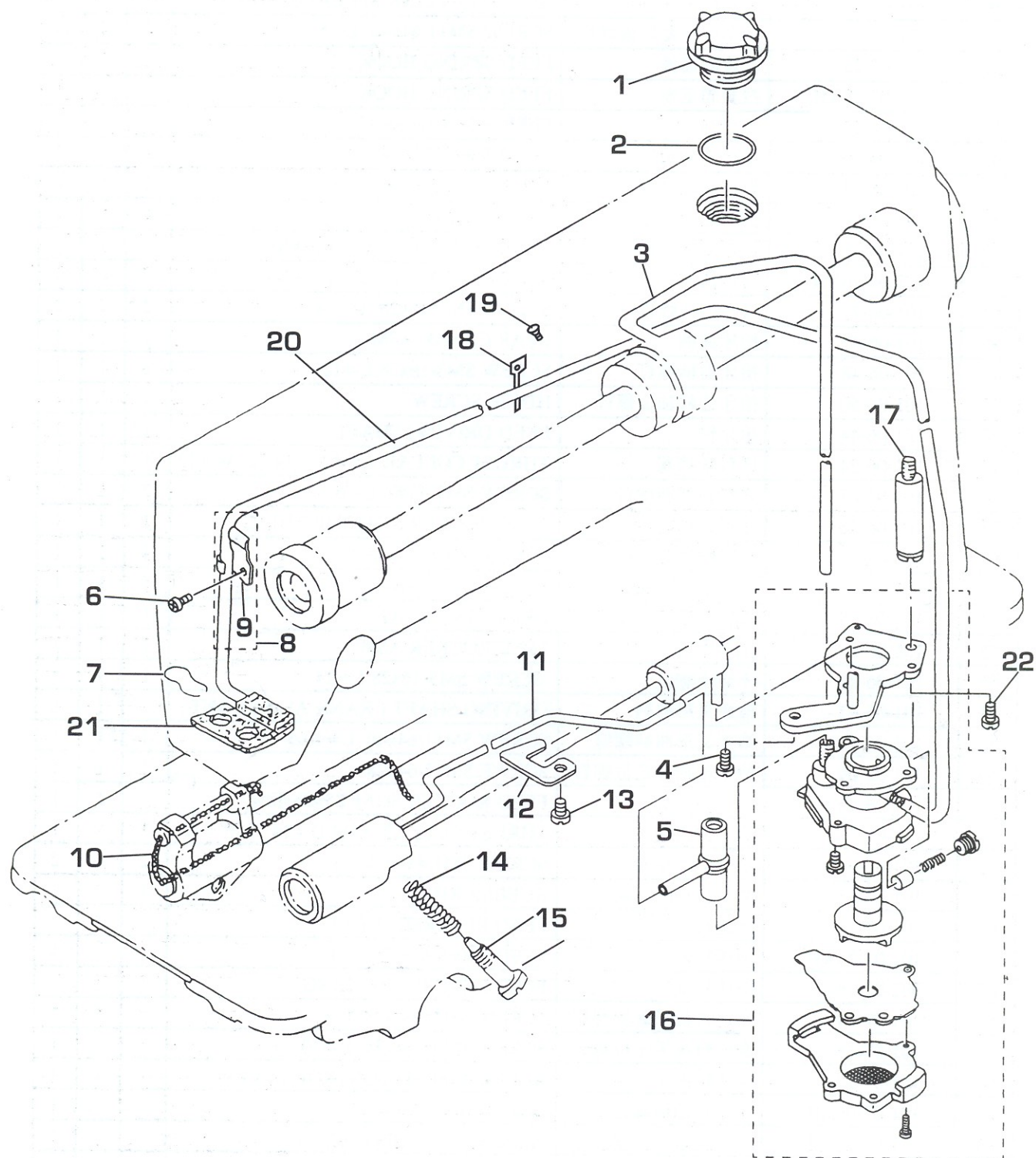


五、送料分组件(FEED MECHANISM COMPONENTS)

序号 NO	图 号	名 称	DESCRIPTION	数量(AMT)		
				M	H	XH
1	101-07-12	倒送料连杆	FEED REGULATOR CONNECTING ROD	1	1	
	101-07-12XH	倒送料连杆	FEED REGULATOR CONNECTING ROD			1
2	101-07-10	倒送料连杆销	FEED REGULATOR PIN	1	1	
	101-07-10XH	倒送料连杆销	FEED REGULATOR PIN			1
3	101-06-05	送料连杆销螺钉	SCREW SM9/64x40 L=6	2	2	2
4	101-07-07	送料调节器	FEED REGULATOR	1	1	
	101-07-07XH	送料调节器	FEED REGULATOR			1
5	101-07-08	送料调节器轴套	FEED REGULATOR BUSHING	1	1	1
6	101-07-09	送料调节座轴端螺钉	SCREW SM3/16x28	1	1	1
7	101-07-03	送料调节螺柱	FEED REGULATOR SCREW	1	1	1
8	101-07-06	送料距锁合簧	SPRING	1	1	1
9	101-07-05	送料距锁合销	PIN	1	1	1
10	101-07-01	送料距旋钮	FEED DIAL	1	1	
	101-07-01XH	送料距旋钮	FEED DIAL			1
11	101-07-02	送料距旋钮螺钉	SCREW SM3/16x28 L=9	1	1	1
12	101-06-06	送料连杆	ROCKER SHAFT CONNECTING ROD	1	1	
	101-06-06XH	送料连杆	ROCKER SHAFT CONNECTING ROD			1
13	101-06-07	送料连杆销	WALKING FOOT PIN C	1	1	1
14	101-06-05	送料连杆销螺钉	SCREW SM9/64x40 L=6	1	1	1
15	101-06-49	抬牙连杆	CONNECTING ROD	1	1	1
16	101-07-04	送料调节螺柱O形圈	RUBBER RING	1	1	1
17	101-07-22	倒送料拉簧	FEED REVERSE SPRING	1	1	
	101-07-22XH	倒送料拉簧	FEED REVERSE SPRING			1
18	101-04-22	开口挡圈	SNAP RING 5	1	1	1
19	101-07-20-00	倒送料曲柄组件	FEED REVERSE CRANK ASM	1	1	
	101-07-20-00X	倒送料曲柄组件	FEED REVERSE CRANK ASM			1
19.1	101-07-20-02	倒送料曲柄销	PIN	1	1	1
19.2	101-07-20-03X	销子	PIN			1
20	101-07-21	倒送料曲柄螺钉	FEED REVERSE CRANK SCREW SM1/4x40	1	1	
	101-07-21XH	倒送料曲柄螺钉	FEED REVERSE CRANK SCREW			1
21	101-04-22	开口挡圈	SNAP RING 5	1	1	1
22	101-07-26	摆动板座复位簧	ADJUSTING LINK SPRING	1	1	
	101-07-26XH	摆动板座复位簧	ADJUSTING LINK SPRING			1
23	101-06-16	送料摆动板座右销	ADJUSTING LINK FULCRUM SHAFT B	1	1	1
24	101-06-11	短摆动座连接销	WALKING FOOT PIN A	2	2	2
25	101-06-09	送料长摆动板	WALKING FOOT LINK	2	2	2
26	101-06-10	送料短摆动板	CONNECTING LINK A	2	2	2
27	101-06-13-00	倒送料摆动板座组件	WALKING FOOT ADJUSTING LINK ASM	1	1	
	101-06-13-00X	倒送料摆动板座组件	WALKING FOOT ADJUSTING LINK ASM			1
28	101-06-14	送料摆动板座左销	ADJUSTING LINK FULCRUM SHAFT A	1	1	1
29	101-02-27	螺钉	SCREW SM15/64x28 L=7	2	2	2
30	101-06-05	连接销螺钉	SCREW SM9/64x40 L=6	2	2	2
31	101-06-32	牙架销	FEED BAR SHAFT	1	1	1
32	101-06-23	送料轴轴用挡圈	RETAINING RING	1	1	1

33	101-06-34	送料牙	FEED DOG A	1		
	101-06-34H	送料牙	FEED DOG A		1	
	101-06-34XH	送料牙	FEED DOG A			1
34	101-06-35	送料牙螺钉	SCREW SM1/8x 44 L=6	2	2	2
35	101-06-31-00	牙架组件	FEED BAR ASM	1	1	1
36	101-07-24	摆动板座复位板	ADJUSTING LINK SPRING GUIDE	1	1	
37	101-07-25	摆动板座复位板螺钉	SCREW SM11/64x40 L=5	2	2	
38	101-07-23	拉簧固定板	FEED SPRING HOOK	1	1	
	101-07-23XH	拉簧固定板	FEED SPRING HOOK			1
39	101-06-22	送料轴	FEED ROCKER SHAFT	1	1	1
40	101-06-19	送料曲柄销	WALKING FOOT PIN B	1	1	1
41	101-06-05	送料曲柄销螺钉	SCREW SM9/64x40 L=6	1	1	1
42	101-06-51	抬牙连杆轴位螺母	NUT 9/32x28	1	1	1
43	101-06-18	送料曲柄	FEED ROCKER SHAFT CRANK	1	1	
	101-06-18XH	送料曲柄	FEED ROCKER SHAFT CRANK			1
44	101-06-21	送料曲柄螺钉	SCREW SM3/16x28 L=14	2	2	2
45	101-06-47	抬牙曲柄	REAR CRANK ASM	1	1	1
46	101-06-48	抬牙曲柄螺钉	SCREW SM3/16x28 L=12	1	1	1
47	101-06-50	抬牙连杆轴位螺钉	HINGE SCREW	1	1	1
48	101-06-44	抬牙轴	FEED DRIVING SHAFT	1	1	1
49	101-06-24	送料轴挡圈	THRUST COLLAR ASM D=14.72 W=12	1	1	1
50	101-02-07	送料轴挡圈螺钉	SCREW SM1/4x40 L=6	2	2	2
51	101-06-26	送料轴轴套	FEED ROCKER SHAFT BUSHING	1	1	1
52	101-06-09	送料轴轴套定位螺钉	SCREW SM15/64x28	1	1	1
53	101-06-33	牙架轴紧固螺钉	SCREW SN11/64x40 L=7	1	1	1
54	101-06-45	抬牙轴轴用挡圈	RETAINING RING	1	1	1
55	101-06-28	牙架座	FEED ROCKER ASM	1	1	1
56	101-06-21	牙架座螺钉	SCREW SM3/16x28 L=14	1	1	1
57	101-06-42	抬牙叉形曲柄	DRIVING SHAFT CRANK ASM,FRONT	1	1	1
58	101-06-43	抬牙叉形曲柄螺钉	SCREW SM11/64x40 L=10.5	1	1	1
59	101-02-09	抬牙轴轴套定位螺钉	SCRWE SM15/64x28	1	1	1
60	101-06-26	抬牙轴轴套	FEED ROCKER SHAFT BUSHING	1	1	1
61	101-06-24	抬牙轴挡圈	THRUST COLLAR ASM D=14.72 W=12	1	1	1
62	101-02-07	抬牙轴挡圈螺钉	SCREW SM1/4x40 L=6	2	2	2
63	101-07-15	倒送料轴O形圈	RUBBER RING	1	1	1
64	101-07-14	倒送料轴	FEED REVERSE SHFAT	1	1	
	101-07-14XH	倒送料轴	FEED REVERSE SHAFT			1
65	101-07-16	倒送料轴套	FEED REVERSE BUSHING	1	1	1
66	101-07-19	倒送料扳手紧固螺钉	SCREW SM15/64x28 L=7	1	1	1
67	101-07-18	倒送料扳手定位螺钉	SCREW SM15/64x28 L=10	1	1	1
68	101-07-17	倒送料扳手	REVERSE FEED CONTROL LEVER	1	1	1
69	101-07-09XH	倒送料轴端螺钉	SCREW SM3/16x32			1
70	101-07-27XH	三波浪形弹性垫圈	WASHER GB955-87 12			1
71	101-07-28XH	送料调节器轴	FEED ADJUSTING SHAFT			1
72	101-07-29XH	送料调节器轴垫圈	WASHER			1
73	101-07-30XH	送料调节器轴螺栓	SCREW SM1/4x40 L=9.2			1
74	101-08-38	油线	OIL WICK	1	1	1
75	101-08-39	油线	OIL WICK	1	1	1

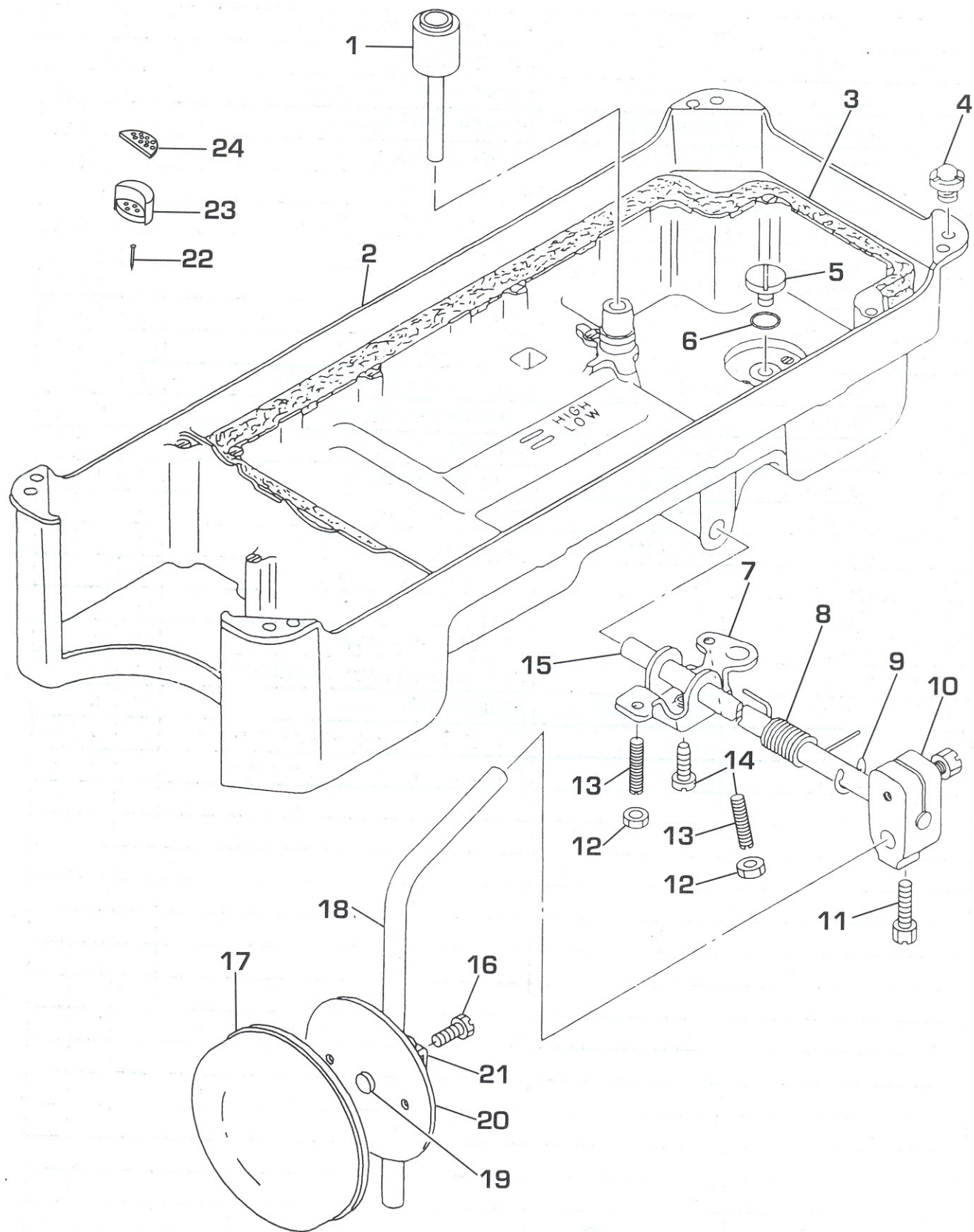
6. 润滑分组件 OIL LUBRICATION COMPONENTS



六、润滑分组件(OIL LUBRICATION COMPONENTS)

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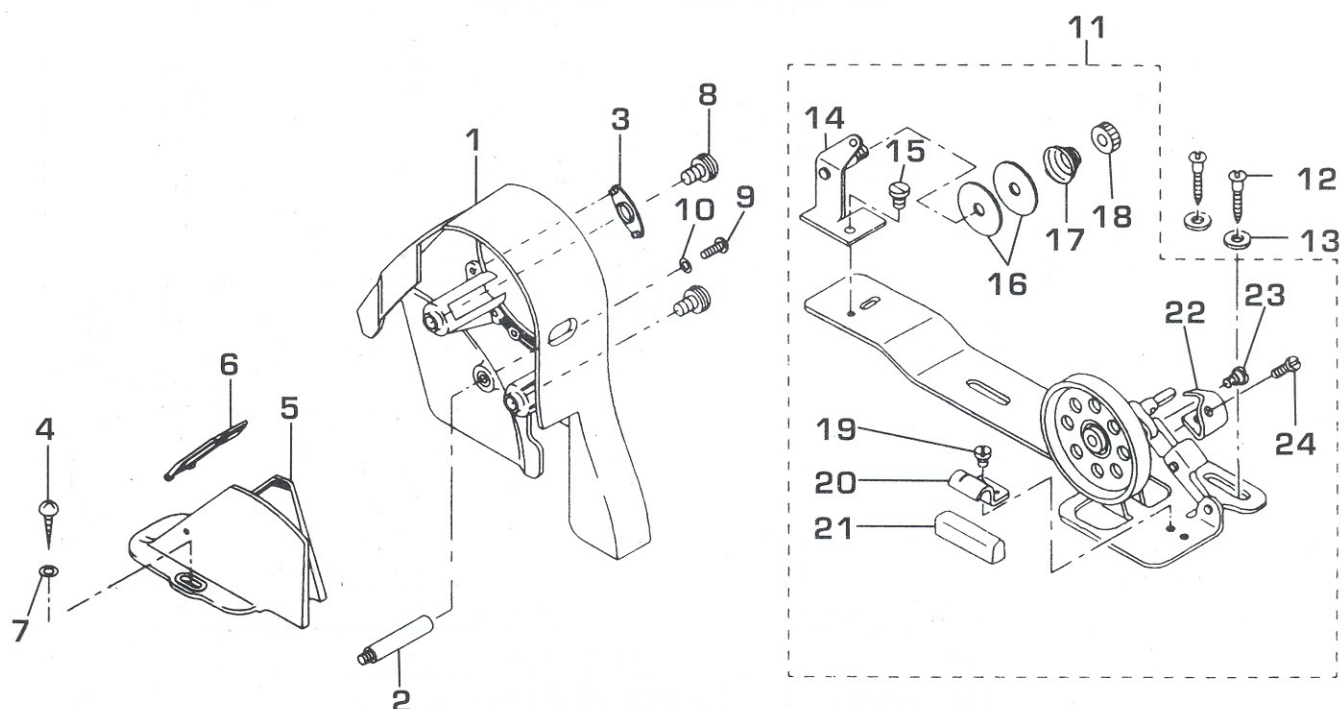
7. 油盘分组件 OIL RESERVOIR COMPONENTS



七、油盘分组件(OIL RESERVOIR COMPONENTS)

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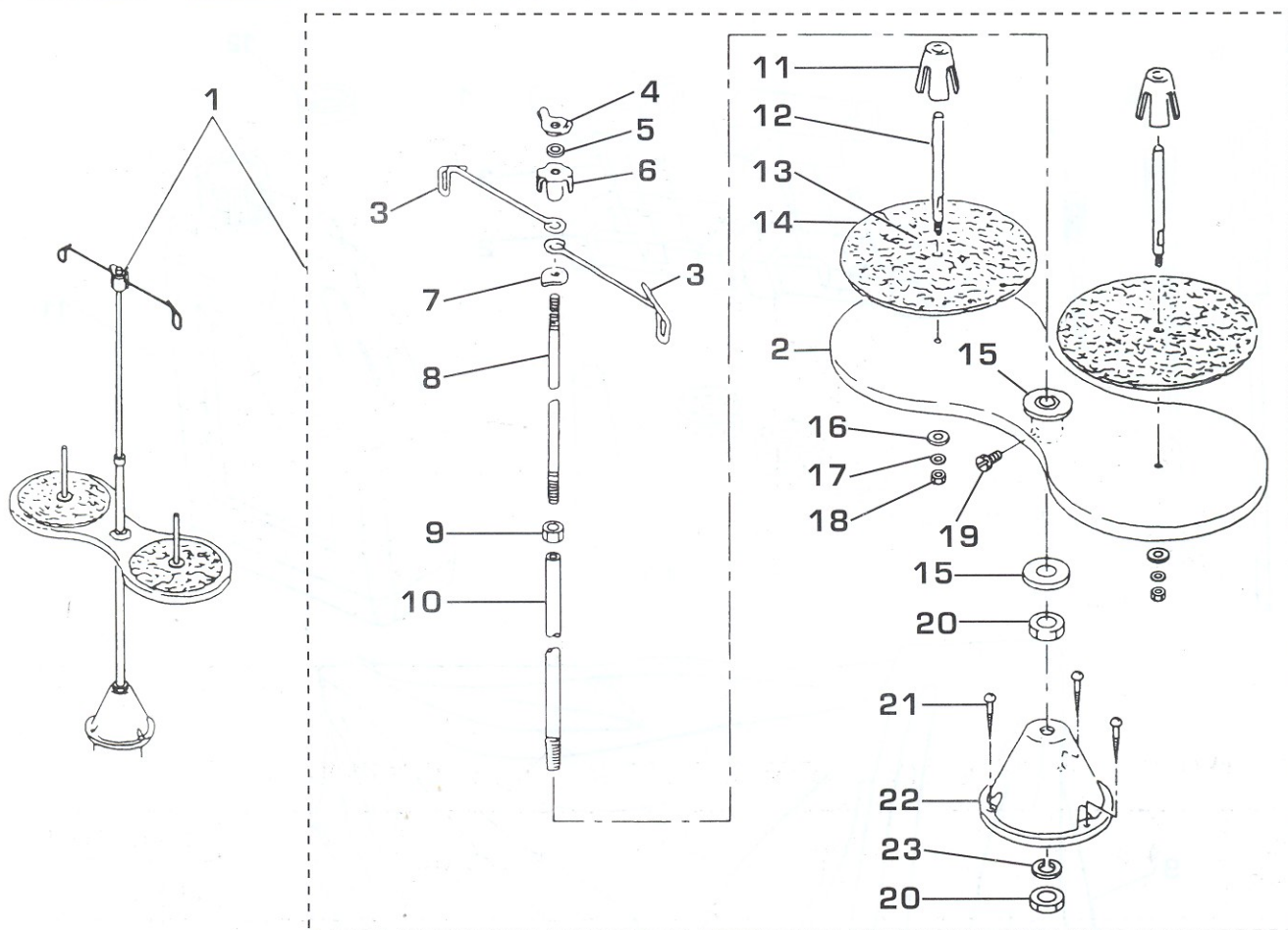
8. 绕线器、皮带罩分组件 BELT COVER BOBBIN WINGER COMPONENTS



八、绕线器、皮带罩分组件(BELT COVER BOBBIN WINGER COMPONENTS)

序号 NO	图 号	名 称	DESCRIPTION	数量(AMT)		
				M	H	XH
1	101-12-04	带轮前罩壳	BELT COVER ,A	1	1	1
2	101-12-11	后罩壳支柱	BELT COVER SUPPORT	1	1	1
3	101-12-05	前罩壳安装架	BELT COVER, A CAP	1	1	1
4	101-10-24	木螺钉	WOOD SCREW D=4.1 L=20	2	2	2
5	101-12-06	上轮后罩壳	BELT COVER ,B	1	1	1
6	101-12-07	上轮后罩壳盖板	BELT COVER ,B COVER ASM	1	1	1
7	101-10-25	木螺钉垫圈	WASHER 4.5x10x0.8	2	2	2
8	101-12-10	前罩壳紧固螺钉	BELT COVER,A SCREW SM5/16x24 L=1	2	2	2
9	101-12-12	支柱螺钉	SCREW SM3/16x28 L=14	1	1	1
10	101-12-13	螺钉垫圈	WASHER 5x10.5x1	1	1	1
11	101-10-01-00	绕线器组件	BOBBIN WINDER ASM	1	1	1
12	101-10-24	木螺钉	WOOD SCREW D=4.1 L=20	2	2	2
13	101-10-25	木螺钉垫圈	WASHER 4.5x10x0.8	2	2	2
14	101-10-18	过线架座	THREAD TENSION ASM	1	1	1
15	101-10-23	过线架座紧固螺钉	SCREW SM11/64x40 L=7.8	1	1	1
16	101-10-20	过线夹线板	THREAD TENSION DISK	2	2	2
17	101-10-21	过线夹线簧	THREAD TENSION SPRING	1	1	1
18	101-10-22	过线夹线螺母	TENSION NUT	2	2	2
19	101-10-15	制动垫夹螺钉	SCREW SM11/64x40 L=3	1	1	1
20	101-10-14	制动垫夹	PRESSER PLATE	1	1	1
21	101-10-13	绕丝轮制动垫	RUBBER BRAKE	1	1	1
22	101-10-16	满线跳板簧	POSITIONING FINGER	1	1	1
23	101-10-10	绕线连杆轴位螺钉	HINGE SCREW D=4.9 H=2.6	1	1	1
24	101-10-17	满线跳板簧螺钉	SCREW SM1/8x44 L=12.5	1	1	1

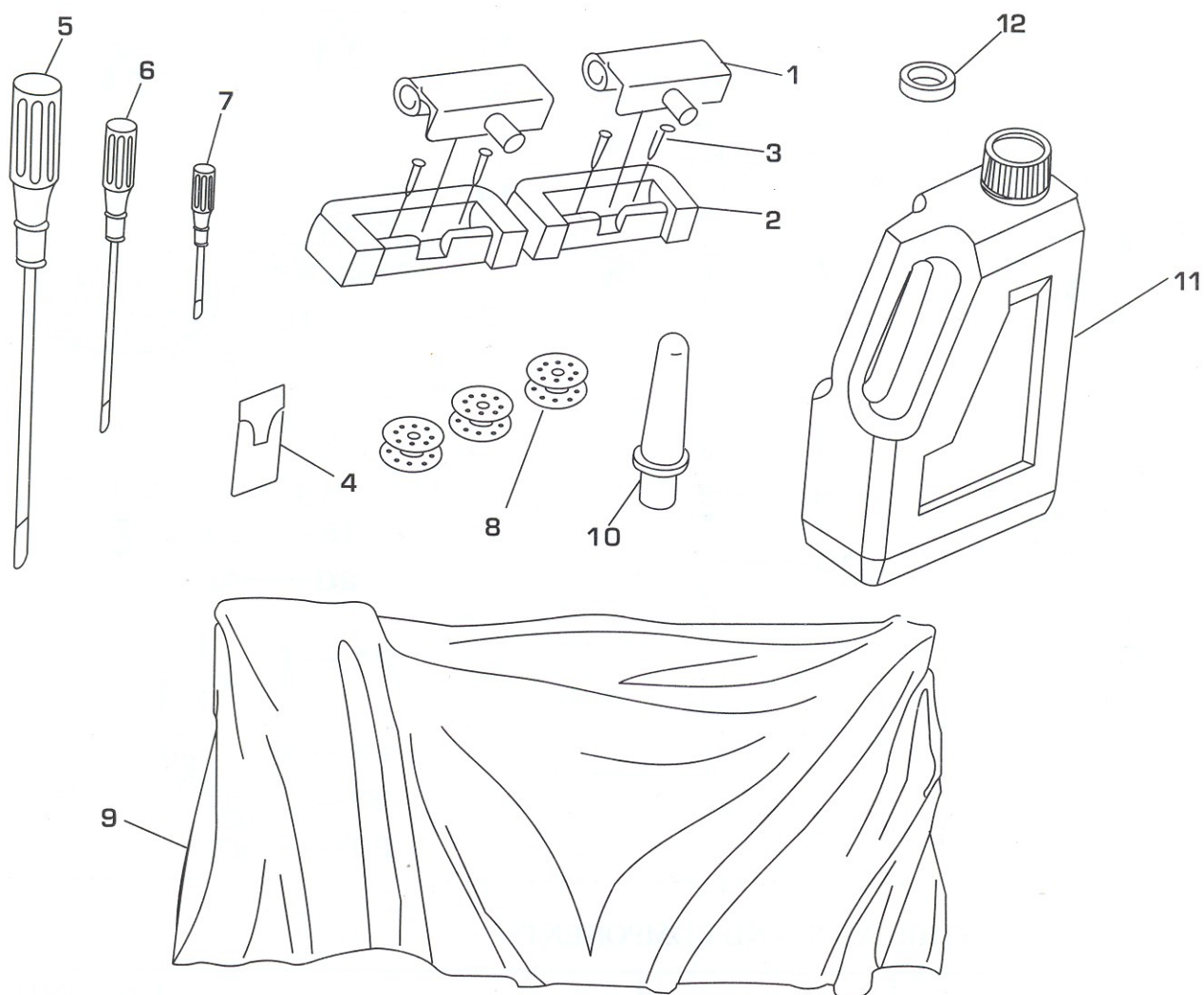
9. 线架分组件 THREAD STAND COMPONENTS



九、线架分组件 (THREAD STAND COMPONENTS)

序号 NO	图 号	名 称	DESCRIPTION	数量(AMT)		
				M	H	XH
1	101-11-01-00	线架组件	THREAD STAND ASM	1	1	1
2	101-11-02	线盘托架	SPOOL REST ASM	1	1	1
3	101-11-03	导线架	THREAD GUIDE	2	2	2
4	101-11-04	调节螺钉	POSITION CUP SET SCREW	1	1	1
5	101-11-05	垫圈	SPRING WASHER 6.4x11.9x1.5	1	1	1
6	101-11-06	定位环	POSITION CUP	1	1	1
7	101-11-07	垫圈	ROD WASHER	1	1	1
8	101-11-08	上线架管	SPOOL ROD	1	1	1
9	101-11-09	螺母	NUT M6	1	1	1
10	101-11-10	下线架管	SPOOL REST ROD	1	1	1
11	101-11-11	线团定芯	SPOOL RETAINER	2	2	2
12	101-11-12	线架钉	SPOOL PIN	2	2	2
13	101-11-13	线塔托盘垫	SPOOL REST CUSHION	2	2	2
14	101-11-14	线塔托盘	SPOOL REST	2	2	2
15	101-11-15	垫圈	WASHER	2	2	2
16	101-11-16	垫圈	WASHER 5.6x12x0.8	2	2	2
17	101-11-17	弹簧垫圈	SPRING WASHER 5.3x8.3x1	2	2	2
18	101-11-18	螺母	NUT SM3/16x28	2	2	2
19	101-11-19	螺钉	SCREW M6 L=10	1	1	1
20	101-11-20	螺母	NUT M10	2	2	2
21	101-11-21	木螺钉	WOOD SCREW D=4.5 L=20	3	3	3
22	101-11-22	线架底座	THREAD STAND	1	1	1
23	101-11-23	弹性垫圈	SPRING WASHER	1	1	1

10. 附件 ACCESSORIES



十、附件 (ACCESSORIES)

序号 NO	图 号	名 称	DESCRIPTION	数量(AMT)		
				M	H	XH
1	101-12-01	机头连接钩部件	HEAD CONNECTING HOOK	2	2	2
2	101-12-02	机头连接钩座	HEAD CONNECTING HOOK SOCKET	2	2	2
3	101-12-03	机头连接钩座钉	HEAD CONNECTING HOOK NAIL	4	4	4
4	101-12-14	机针 14 # DBx1	NEEDLES 1 BAG	1包		
	101-12-14H	机针 18 # DBx5	NEEDLES 1 BAG		1包	
	101-12-14XH	机针 21 # DBx1	NEEDLES 1 BAG			1包
5	101-12-15	螺丝刀 (大)	SCREW DRIVER (L)	1	1	1
6	101-12-16	螺丝刀 (中)	SCREW DRIVER (M)	1	1	1
7	101-12-17	螺丝刀 (小)	SCREW DRIVER (S)	3	1	1
8	101-12-18	梭心	BOBBIN	1	3	3
9	101-12-19	机头罩	HEAD COVER	1	1	1
10	101-12-20	机头支柱	HEAD POLE	1	1	1
11	101-12-21	油箱	OIL BOTTLE WITH OIL	1	1	1
12	101-09-22	油盘磁铁	OIL RESERVOIR MAGNET	1	1	1

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中国浙江台州市东环大道638号

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TEL:0086-576-8201479 8202347 8201401

FAX:0086-576-8202667 8203211

Http://www.gemsy.com

E-mail: gemsy@gemsy.com P.C:318000