

## 花样缝电脑平缝机

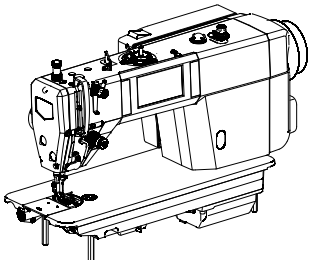
JS-9000DTS Series Computerized special stitch pattern lockstitch sewing machine

## 使用说明书

### OPERATION MANUAL

## 零件手册

### PARTS BOOK



### 安全操作事项 FOR SAFE OPERATION

- 为避免触电,请不要打开电机的电箱盖,也不要触摸电机内部组件。  
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.
- 为避免人身伤害,移动防护罩、护手或安全装置时,请不要启动机器。  
2. To prevent possible personal injuries caused by being caught in the machine. Keep your fingers, head and clothes away from the handwheel, cover and the motor while the machine is in operation. In addition, place nothing around them.
- 为避免人身伤害,当您打开电源开关或操作机器时,切勿将手放在机针下方。  
3. To avoid personal injury, never put your hand under the needle when you turn ON the power switch or operate the machine.
- 为避免人身伤害,机头运转时,切勿将手放入挑线杆防护罩内。  
4. To avoid personal injury, never put your fingers in the thread take-up cover while the machine is in operation. In addition, place nothing around them.
- 旋转运转时,切勿将手指放在旋梭附近。另外,换梭芯时,请关掉机器电源开关。  
5. When rotating, never put your fingers near the shuttle. In addition, when changing the bobbin, please turn off the power to the machine when replacing the bobbin.
- 为避免人身伤害,当机器抬起机头时,切勿将手指放入机器内部。  
6. To avoid possible personal injuries, be careful not to allow your fingers in the machine when tilting/raising the machine head.
- 为尽可能避免机器的突然启动所造成的事故,抬起机头时,请关掉机器的电源。  
7. To avoid possible accidents because of abrupt start of the machine, turn OFF the power to the machine when tilting the machine head.
- 机器配有电机,机器未运转时,电机无噪音;为避免机器的突然启动所造成的事故,请关掉机器的电源开关。  
8. If your machine is equipped with a serve-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.
- 为尽可能避免触电或电器组件受损,在插上或拔下插头之前,请关掉电源开关。  
9. To prevent possible accidents because of electric shock or damaged electrical component(s), turn OFF the power switch in prior to the connection /disconnection of the power plug.

### 重要安装事项

为使您正确使用本机,须了解基本的安全事项,包括但不限于下列事项。  
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.

- 无论您何时使用本机,须了解基本的安全事项,包括但不限于下列事项。
- 阅读所有说明,并保存好使用说明书。如果需要,请随时翻阅。
- 使用本机前,必须弄清与本机有关安全规定。标准在您的国家是否适用。
- 使用本机前或使用本机时,所有安全装置必须配备齐全。机器运转时,无安全装置属违章操作,决不允许。
- 操作人员必须经过适当的培训。
- 为了您的人身安全,我们建议您戴上防护眼镜。
- 下列情况下,请关闭电源开关或拔下电源插头:
  - 1-1 机针穿线及梭芯时;
  - 1-2 更换机针、压脚、针板、送料牙、布料导板等;
  - 1-3 进行维修时;
  - 1-4 操作区无人时。
- 在机器加油前时,若不小心让油接触眼睛、皮肤或咽下机油或润滑油,请立即清洗被污染部位或去医院检查。
- 无论机器运转与否,严禁乱动机器零部件和配套装置。
- 机器的维修、改造和调整等工作必须由专业技术人员进行。
- 应由专业受训人员进行一般的维修和检查工作。
- 必须在专业电器人员或专业技术人员的指导下进行有关电器部件的维修。任何电器部件一经发现受损,应立即停止机器运转。
- 使用期间要定期全面彻底清洗机器。
- 正常操作本机时,必须进行试运行,工作环境远离强噪音源,如高频电焊机等。
- 由电气人员选择合适的插头和有地线的插座。
- 若需要改造或改进本机,请采用有效可行的安全措施。本公司对此而产生的伤害不承担责任。
- 本机只适用于专业缝纫。
- 19种警告提示符:

- ⚠ 操作人员或维修人员请注意
- ⚠ 特别注意事项

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### 开机前的注意事项 Precautions Prior to Startup

1. 机头装箱前为了防止机头生锈,在部分涂有较厚的防锈油脂,同时机头装箱后还可能在较长的贮藏和长途运输阶段造成油脂硬化和在机器表面积累灰尘,所以必须将表面的油脂和灰尘用汽油和洁净的软布擦拭干净。
2. 机器出厂时,虽经过周密的检查和试验,但在长途运输中也可能受到强烈的震动或机械件松动或弯曲,所以应做第一次启动试验。将手转动上轮,机头应无异常响声,连续现象或其它不均匀的阻力,不正常的声响,如有应作适当的调整。机器状态正常后方可正式试车。
3. 油箱内机油油面高度没有在正常范围内也不能开车。
4. 机器运转时,上轮转向应该是逆时针方向(从上方左侧面)。
5. 确认电机铭牌上所列电压及相位是否正确。
6. 生产日期应合格证。
1. The machine head is coated with a thick layer of rust-prevention grease before encasement, and the encased machine head may possibly be subjected to grease hardening and dust buildup on the machine surface in process of long storage and long-haul freight; therefore, take care to remove the grease and dust from the surface using soft cloth and gasoline.
2. Though the machine was inspected and tested with care before factory leaving, it might be affected by violent vibration resulting in looseness or distortion of the machine parts; therefore the operator shall thoroughly check the machine, turn the upper wheel by hand and check it for difficulty in free rotation, slight impact, and other uneven resisting force or abnormal noises, and make appropriate adjustment if any to restore the machine state before formal trial run.
3. Never start up the machine if the oil liquid level in the oil box falls outside the normal range.
4. The upper wheel shall rotate counterclockwise (when it is viewed from the lateral surface of the upper wheel) when the machine is operating.
5. Check whether the voltage and phases indicated on the electric-control data plate are correct.
6. The date of manufacture is indicated on the certificate of conformity.

### 使用注意事项 Precautions for Use

1. 当接通电源或机器运转时,请勿将手与机针接触。
2. 机器运转时,请勿将手指伸入挑线杆防护罩内。
3. 操作者用手送料时,请勿将手指伸入护针架。
4. 机头启动及折手面时,一定要切断电源。
5. 操作者离开机器时,必须切断电源。
6. 机器运转时,若不小心头部或手以及任何东西靠近上轮、线轴器。
7. 只有在停机时,才能拆卸防护罩或其它保护装置。
8. 不能用香蕉水等油漆稀释剂擦拭机头表面。
1. Never touch the needle by hand when the machine is powered on or while it is operating.
2. Never put your finger into the protection cover of take-up lever during operation of the machine.
3. The operator must not put his finger into the needle guard bracket when he feeds the sewing materials by hand.
4. Operator must trim off the electricity supply before he turns over the machine head or removes the hand cover.
5. The operator must trim off the electricity supply before he gets away from the machine.
6. Prohibit the head, hands and anything to approach the upper wheel and bobbinwinder while the machine is operating.
7. Never remove or mount the protection cover or other protection devices before the machine is stopped.
8. Never wipe up the surface of machine head using paint thinner such as acetone.

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### 3. 加油方法 Lubrication

#### 注意 CAUTION

- 在加油未完成前,请勿插上电源。
- 当误按下脚踏板时,缝制机运行会导致人员受伤。
- 使用润滑油时,请务必戴好防护眼镜和防护手套等,以防润滑油落入眼中或沾在皮肤上,这是引起发炎的原因。
- 另外,润滑油不能饮用,否则会引起呕吐和腹泻。
- 将油放在儿童拿不到的地方。
- 在剪去油箱的油隔口时,请一定要拿住油箱的根部。
- 如果拿油隔口部位,剪刀容易伤到手,成为受伤的原因。
- Do not connect the power cord until lubrication has been completed, otherwise the machine may operate if the treadle is depressed by mistake. Which could result in injury.
- Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin, otherwise inflammation can result. Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea.
- Keep the oil out of the reach of children.
- When cutting the nozzle of the oil tank, hold the base of the nozzle securely. If you hold the end of the nozzle, injury to the scissors may result.

- 初次使用缝制机前需添加润滑油以保证机器各部件的润滑,以延长机器寿命。
- 将油孔盖打开。
- 将白油注入机头加油孔中。
- 加油过程中观察测量视窗②,使油量③稳定在上下基线之间。
- 注意:
  - (1) 油量③不可超过视窗上基线
  - (2) 如油量③低于下基线,则必须加满油
- Before the first time use this machine, you need to add oil to ensure the lubrication of the mechanical parts of the machine to prolong the service life of the machine.
- Open the oil rubber ②
- add oil into the machine
- look at the oil window ② during adding oil, to make the oil gauge ③ is steable between the top and bottom baselines.

- NOTE:
- (1) The oil gauge can not be over the top baseline in the window.
  - (2) If the oil gauge ③ is lower than the bottom baseline, machine must be added oil.

### IMPORTANT SAFETY INSTRUCTIONS

To get the most out of the many functions of this machine and operate it safely, 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 any-time 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) and replacing bobbin.
  - 7-2 For replacing part(s) of needle, presser foot, throat plate, feed dog, cloth guide etc.
  - 7-3 For repair work.
  - 7-4 For when leaving the working place of 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. Repairing, reforming and adjustment works must only be done by appropriately trained technicians or specially skilled personnel.
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. Periodically clean the machine throughout the period of use.
14. 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.
15. An appropriate power plug has to be attached to the machine by electric technicians. Power plug has to be connected to grounded receptacle.
16. Remodel or modify the machine in accordance with the safety rules/standards while taking all the effective safety measures. We assumes no responsibility for damage caused by reforming or modification of the machine.
17. The machine is only allowed to be used for the posed intention. Other used are not allowed.
18. Warning hints are marked with the two shown symbols.

- ⚠ Danger of injury to operator or service staff
- ⚠ Items requiring special attention

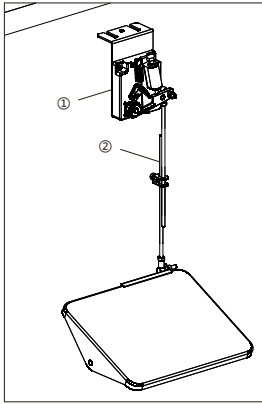
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### 1. 缝制机规格 MACHINE SPECIFICATIONS

	620	620M	620H
用途 USE	薄料、中厚料	中厚料	厚料
MAX. Sewing speed	5000sti/min	4000sti/min	
最大行程			
MAX. Stitch length	5mm	7mm	7mm
压脚高度 手抬 lifting lever		5.5mm	
Presser foot height 膝抬 knee lifter		13mm	
送料牙	1.0mm	9.5mm	
机针 Needle	DBx1 9#-18#	DPx5 18#-22#	
润滑油	15号白油 NO.10 White oil		

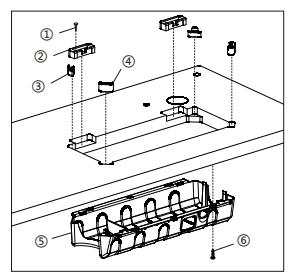
### 2-1. 安装方法 Installation

- ①. 调速器
- ②. Speed controller
- ③. 连杆
- ④. Connecting rod



### 2-2. 安装 Installation

- ①. 鞋钉 (8个)
- ②. 机头连接钩座 (2个)
- ③. 头部防震垫小 (2个)
- ④. 头部防震垫大 (2个)
- ⑤. 托盘 (1个)
- ⑥. 螺钉 (6个)
- ⑦. Nail (8pcs)
- ⑧. Rubber cushions (2pcs)
- ⑨. Head cushions (small) (2pcs)
- ⑩. Head cushions (big) (2pcs)
- ⑪. Tray (1pcs)
- ⑫. Screw (6pcs)



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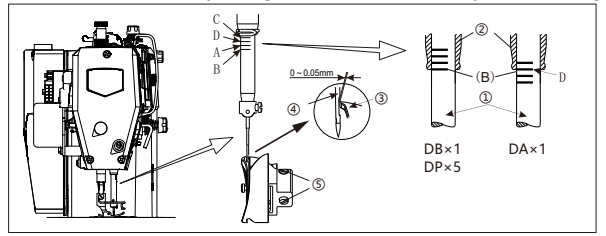
### 4. 面线的穿法 Threading the upper thread

#### 注意 CAUTION

- 在穿线过程中,请切断电源。当误按启动开关时,缝制机工作会导致人员受伤。
- Turn off the power switch before threading the upper thread. The machine may operate if the treadle is depressed by mistake, which could result in injury.

- 在穿引面线之前转动手轮,抬高挑线杆①,这样会使穿线更加容易,并防止面线在缝制开始时脱落。
- Turn the machine pulley and raise the thread take-up ① before threading the upper thread. This will make threading easier and it will prevent the thread from coming out at the sewing start.

### 5. 机针和旋梭的同步 Adjusting the needle and rotary hook timing



当机针①从最低位置向上移动1.8mm (2.2mm用于M和H规格),到达基线B与针杆轴套②下端对齐的位置时,旋梭尖③应位于中心点C对齐。如图示。使机针①上边缘与旋梭尖③的距离为0.5-0.7mm。

1. 转动缝制机手轮,使机针①从最低位置上升如图面所示的基线B与针杆轴套②的下端保持对齐为止。
2. 旋梭固定螺钉③拧紧,使机针①与机针④的中心一致。此时旋梭尖③与机针④之间的间隙为0-0.05mm。
3. 拧紧旋梭螺钉⑤。
1. Turn the machine pulley to raise the needle bar ① from its lowest position until reference line B is aligned with the lower edge of the needle bar bush ② as shown in the illustration.
2. Loosen the set screws ③, and then align the tip of the rotary hook ③ with the center of the needle ④. The distance between the tip of the rotary hook ③ and the needle ④ should be approximately 0-0.05mm.
3. Securely tighten the set screws ⑤.

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### 6. 踏板的调整 Adjustment of the pedal

#### 注意 CAUTION

- 为了防止意外启动造成的事故,请关掉电源后进行。
- Turn off the power switch before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

1. 踏板角度的调整  
1) 调节踏板送料杆长度以调节踏板的角度。旋松螺钉①,上下移动上盖螺钉②和下盖螺钉③以调节踏板送料杆的长度。
2. 调节完成后拧紧螺钉③。
2. 旋梭旋力调整  
将脚踏板向上并向右侧轻轻倾斜时,缝制机进行低速缝制。如感旋梭旋力比较轻时,将旋梭力调大;反之亦然。
3. 旋梭旋力的调整  
1) 松开螺钉①,逆时针旋转②调节旋梭旋力;拧紧螺钉①则旋梭旋力将增大。大时旋梭旋力将减小。
- 2) 调节旋梭旋力后,请拧紧螺钉②。

1. Adjusting the angle of treadle  
1) Adjust the angle of treadle only by adjusting the length of treadle connecting rod unscrew screw ①, and adjust the length of treadle connecting rod by moving upward/downward the upper connecting rod ② and lower connecting rod ③.
- 2) Screw down screw ③ when adjustment is over.
2. Adjustment of the strength of pedal  
The sewing machine run at a low speed when step forth on the pedal slightly. If the strength is insufficient, hang the stepping adjustment spring ② on the panel spiral arm driving lever ① in order to adjust strength. Is is the minimum stepping strength. Is, c, d increase gradually.
3. Adjustment of stepping return strength  
1) Loosen nut ④ and turn bolt ⑤ to adjust stepping return strength: tighten bolt ⑤, the strength increases/loosen bolt ⑤, the strength decreases.
- 2) Tighten nut ④ after adjusting stepping return strength.

### 踏板操作 Pedal operation

1. 踏板有四种操作:
  - 1) 向前踩踏板为低速缝制(如图A)。
  2. 再用力向前踩踏板则为高速缝制(如图A)。
  3. 当脚不向踏板用力,则踏板回至原高度时,缝制机停止运转(如图在上图中踩下图中C)。
  4. 再用力向后踩踏板为反向缝制(如图E)。
5. 使用自动回弹装置并设置时,在停止和启动之间加上一级开关D,回后后踏板能有力压脚并启动,缝制后当踏板回至原高度时,压脚下降进行切线动作,再次进行压脚提升动作。
1. The treadle has 4 operation levels:  
1) The machine runs at low sewing speed when you lightly depress the front part of the pedal (as show in the picture A).  
2) The machine runs at high sewing speed when you further depress the front of the pedal (as show in the picture B).  
3) pedal back to the initial position when stop stepping on it and the machine stop working (needle in the upper or down position) (as show in the picture C).  
4) The machine turns threads when you fully depress the back part of the pedal (as show in the picture A).  
5) When the auto-lift is used one more operating which is provided between the sewing machine stop switch and thread turning switch. The presser foot goes up when you lightly depress the back part of the pedal (D) and if you further depress the back part the thread trimmer is actuated.

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### 7-2. 送料牙倾斜的调节 Adjust the lean of feed dog

1. 转动手轮,将送料牙④开到到踏板的最高位置。
2. 将缝制机放倒,并支到机头支柱上。
3. 旋松牙架座①上的紧固螺钉②。
4. 用螺丝刀转动偏心销③进行调节:将偏心销③向A方向转动,送料牙前缘放下;向B方向转动,送料牙前缘抬起(当送料牙开到到踏板的最高位置时,送料牙前缘倾斜为偏心销③上的刻点C与牙架座①上的销孔D对齐,送料牙与针板平行)。
5. 调节完成后拧紧牙架座①上的紧固螺钉②。
1. Turn the pulley until the feed dog ④ rises to the highest position.
2. Turn over the sewing machine head on the supporting bar.
3. Unscrewing the tightening screw ② in the teeth pedestal ①.
4. Adjust the eccentric pin ③ by screw driver: Fall front side of tooth feed when moving the eccentric pin ③ towards A, and raising it when move towards B. When raising the tooth feed to the highest position, The standard lean position of feed dog is that mark C on eccentric pin ③ should be at the same level D with mark on the teeth pedestal ① and the feed dog should be parallel with needle plate.)
5. Reuse is tighten the tightening screw ② in the teeth pedestal ① after adjusting.

- 为了防止起皱,可降低送料牙前缘。
- 为了防止在重缝制时布料不一致(缝线不合),可提高送料牙前缘。
- 调节送料牙的倾斜度后,送料牙的高度也会发生改变,因此重新调节送料牙的高度。
- In order to prevent puckering, lower the front of the feed dog.
- In order to prevent the material from slipping, raise the front of the feeddog.
- The height of the feed dog will change after the angle has been adjusted, so it will be necessary to readjust the height of the feed dog.

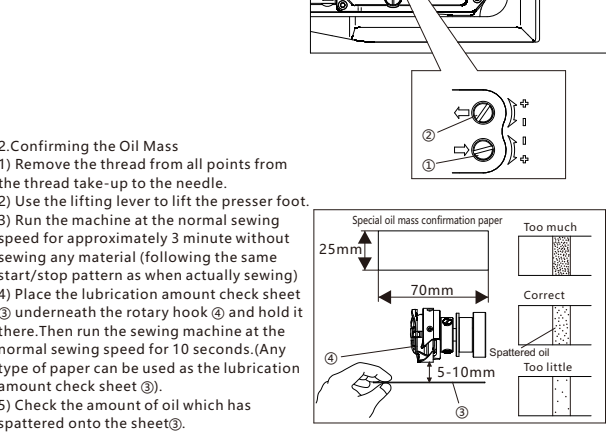
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### 9. Oil mass Adjustment of Rotating Hook

#### 注意 CAUTION

- Be careful not to touch your fingers or the lubrication amount check sheet against moving parts such as the rotary hook or the feed mechanism when checking the amount of oil supplied to the rotary hook. If care is not taken, injury may result.
- Use the following procedure to check the amount of oil being supplied to the rotary hook or when changing the sewing speed.

1. Adjustment method  
1) Adjust the oil mass of rotating hook using adjusting screw ① or screw ②: Screw down (turn it to the right) adjusting screw ① or unscrew (turn it to the left) the adjusting screw ② to raise the oil mass otherwise to lower the oil mass. Amount repeatedly until the lubrication amount is correct.
- 2) Check the lubrication amount again after the sewing machine has been used for approximately two hours.



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### 7-1. 标准调整 Standard adjustment

#### 注意 CAUTION

- 只有经过训练的专业人员才能进行缝制机的维修、保养和检查。
- Maintenance and inspection of the sewing machine should only be carried out by a qualified.
- 与电气有关的维修、保养和检查请委托购买商店或电气专业人员进行。
- Ask your dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.
- 取下安全保护装置,再次安装时,请务必安装在原位上,并检查能否正常地发挥作用。如果安全保护装置已被移除,请务必重新安装到其原始位置并检查它们是否正确地在缝制机之前安装。
- 取下安全保护装置,再次安装时,请务必安装在原位上,并检查能否正常地发挥作用。如果安全保护装置已被移除,请务必重新安装到其原始位置并检查它们是否正确地在缝制机之前安装。
- 发生下列情况时,请关闭电源,并拔下电源插头,否则误踩下踏板时,缝制机运作会导致受伤。
- 检查、调整和维修
- 更换旋梭、切刀等易损零部件
- Turn off the power switch and disconnect the power cord from the wall outlet at the following times. Otherwise the machine may operate if the treadle is depressed by mistake, which could result in injury.
- When carrying out inspection, adjustment and maintenance
- When replacing consumable parts such as the rotary hook and knife.

### 7-1. 调线量的调整

1. 旋松螺钉①。
2. 移动右线钩②进行调节:朝左方向(即A方向)移动,挑线量将会增加;反之朝右方向(即B方向)移动,挑线量将会减少。(在线钩上的刻线C与螺钉中心一致时为标准位置)。
3. 调节完成后拧紧螺钉①。
1. Unscrewing the screw ①.
2. Move the right thread hook ② to adjust: the thread amount of thread take-up lever will increase if turned it towards left (A direction), while turning it to the right (direction B) and the thread amount of thread take-up lever will decrease accordingly. (The standard position is obtained when graduation line C on right thread hook is aligned to screw center).
3. Remember to tight the screw ① after adjusting.

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### 8. 线张力的调节 Adjusting the Tension of Stitch Thread

#### 注意 CAUTION

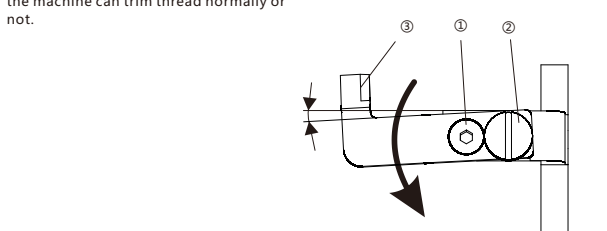
- 取出梭芯套时,请关电源。
- 当误踩下踏板时,缝制机工作会导致人员受伤。
- Turn off the power switch before removing or inserting the bobbin case. The machine may operate if the treadle is depressed by mistake, which could result in injury.

- 面线 Upper thread
- 底线 Lower thread
- 面线张力过小或底线张力过大。  
Upper thread tension too weak or Lower thread tension too strong
- 面线张力过大或底线张力过小。  
Upper thread tension too strong or Lower thread tension too weak
1. 底线张力的调节  
拉住在梭芯套中露出的线头,旋转调节螺钉①进行调节:旋紧调节螺钉①则底线张力变大,反之则底线张力变小。
2. 面线张力的调节  
在底张力调节之后,调节面线张力以使针脚均匀平整。
1. Adjusting the tension of bobbin thread: Hold the end of a thread which hanging from the bobbin case and use the adjusting rotating screw ① to regulate. The tension of the bottom thread is become strong by tight the screw ①, loose the screw to make it weak.
2. Adjusting the tension of needle thread  
After the lower thread tension has been adjusted, adjust the upper thread tension so that a good, even stitch is obtained.
- 1) Lower the presser foot by using the lifting lever.
- 2) Adjust by turning the tension nut ②: The tension of the upper thread will become strong when turning toward the clockwise (A), otherwise weak when toward anti-clockwise (B).

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### 10. 切线 Thread trimming

1. 使用粗线或不能切线时,将螺钉①和螺钉②松开,调整上动力③角度。
2. 上动力③向内侧倾斜时,刀面压力下降,向外侧倾斜时,刀面压力上升。
3. 调整好上动力③的角度后重新拧紧螺钉①和螺钉②。
4. 调整后请手动上下刀架,确认是否可以正常切线。
1. When use thick thread or not trim, loosen the screw ① and ②, adjust the moving knife ③ angle.
2. Knife ③ tilted to the inside, the knife surface pressure drop.
3. Adjust the knife ③ angle, then retighten the screw and screw ②.
4. After adjustment, manually move up and down the knife holder to confirm whether the machine can trim thread normally or not.



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### 7-2. 送料牙的高度 Adjustment of the Height of feed dog

1. 转动手轮,将送料牙升到针板的最高位置。
2. 将缝制机放倒,并支到机头支柱上。
3. 转动送料牙变形曲柄①进行调节:将送料牙变形曲柄①向A方向转动,送料牙高度增高;反之向B方向转动,送料牙将变低(当送料牙升到针板的最高位置时,中厚料机型送料牙变形曲柄的标准高度为0.8-1.0mm,厚料机型的送料牙变形曲柄的标准高度为1.1-1.3mm)。
5. 调节完成后拧紧送料牙变形曲柄①上的紧固螺钉②。
1. Turn the pulley until the feed dog rises to the highest position.
2. Turn over the sewing machine head on the supporting bar.
3. Unscrewing the tightened screw ② in the feed lifting crank ①.
4. Rotating the feed lifting crank ① to make adjustment: the feed dog will be higher when the feed lifting crank ① is turn towards A direction; turn towards B direction the feed dog will be lower. (When the feed dog in the highest position, the standard height of the type of medium-heavy machine is 0.8-1.0mm and standard height of the heavy duty machine is 1.1-1.3mm).
5. Remember to tighten the tightening screw ② in the feed lifting crank ① after adjusting.

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### 9. 旋梭供油量的调整

#### 注意

- 在检查旋梭供油量时,手指和油量测试纸不能碰到旋梭和送料机构等运动部件。这是导致人员受伤的原因。
- 如果更换了旋梭或要变更缝制速度时,请按下述步骤重新调整旋梭的供油量。

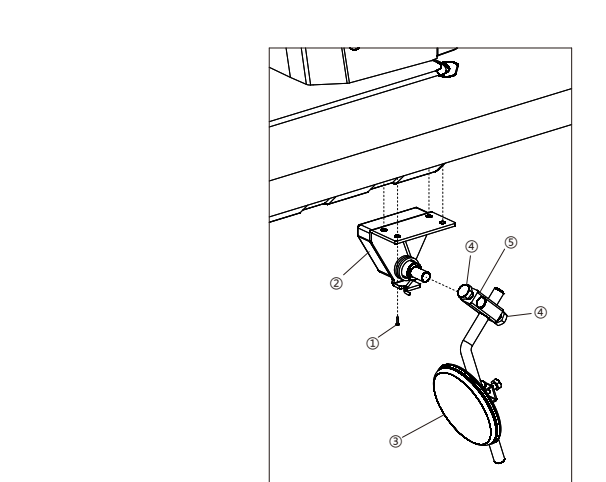
1. 调节方法  
1) 旋梭的油量是用旋梭油量调节螺钉①和螺钉②来调节:拧紧(向右转动)旋梭油量调节螺钉①或拧松(向左转动)旋梭油量调节螺钉②旋梭油量将增多,反之旋梭油量将减少,直至获得适当的油量为止。
- 2) 将油量后缝制机在进行约2小时的缝制后,再次检查以确认供油量。
2. 油量的确认方法  
1) 拆去挑线杆针架上的面线。
- 2) 将挑线杆手柄抬起并压脚。
- 3) 以缝制机实际缝制时的转速进行约3分钟的空运转(适度的连续运转)。
- 4) 将油量测试纸④插入旋梭③的下面并摆正,以缝制机实际进行缝制时的转速使缝制机运转10秒钟,对油量测试纸④的底纸没有什么特别的要务)。
- 5) 确认飞翼测试纸④上的油量。



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### 11. 膝控的安转 Knee control installation

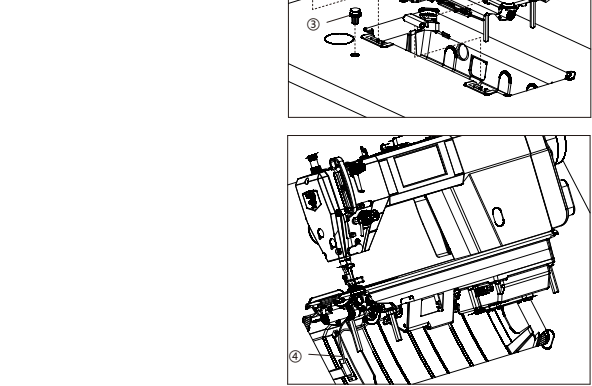
1. 将电子膝控组件②固定在台板上,旋紧固定螺钉①。
2. 将膝控组件③与膝控接头④、电子膝控组件②连接。
3. 拧紧螺钉⑤。
4. 安装后检查膝控部件是否灵活。
1. The electronic knee assembly ② is fixed on the plate and the fixed screw ① is tightened.
2. Connect the knee control assembly ③ with the knee control joint ④ and the electronic knee assembly ②.
3. Tighten the screw ⑤.
4. Check whether the knee control is flexible after installation.



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### 2-3. 机头 Machine head

- ①. 机头
- ②. 机头较轴 (2pcs)
- ③. 机头支柱
- ④. 面油附件
- ⑤. Machine head
- ⑥. Hinges (2pcs)
- ⑦. Frame support bar
- ⑧. Oil tube

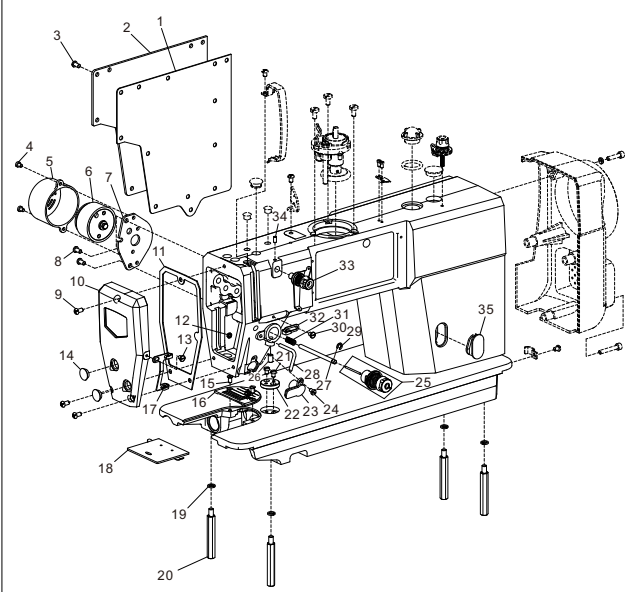


### 2-4. 线架 Cotton stand

- ①. 线架
  - ②. Cotton stand
- 注意: 将螺母③拧紧以便将两个橡胶垫圈②和垫圈③夹紧,使线架①固定。
- NOTE:
- Securely tighten the nut ③, so that the two rubber

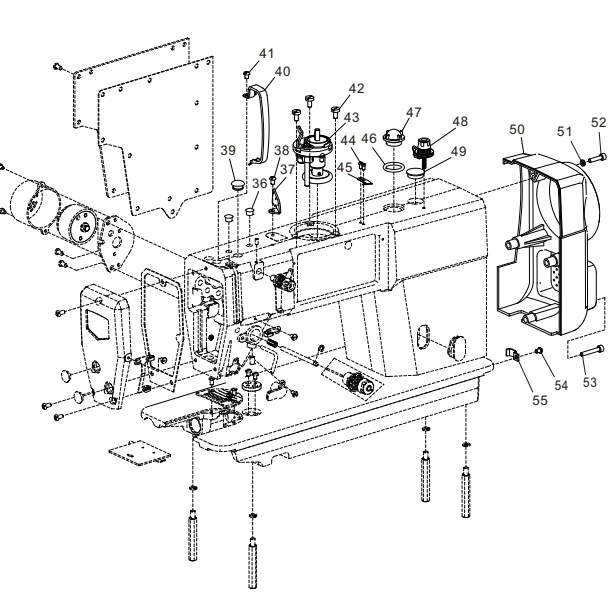


1. 机壳分组件/Machine frame&miscellaneous cover components



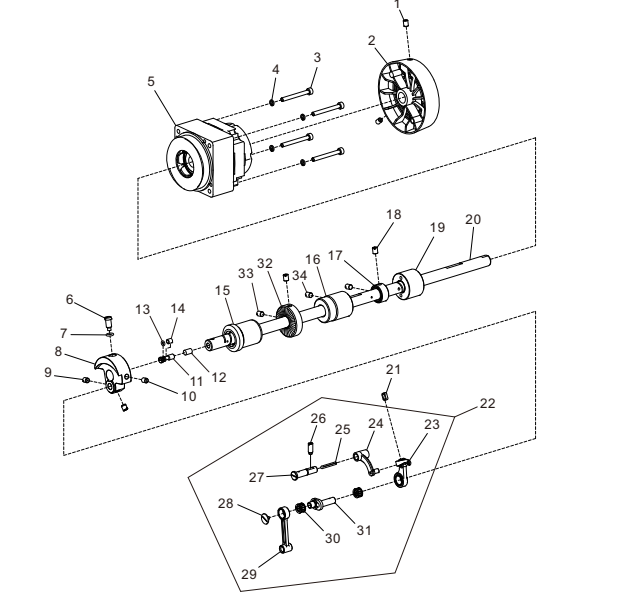
序号 Ref.No.	物料号 Part.No.	名称	Description	数量 Qty	备 注 Remark
1	29.07.005	后面板垫	Side plate gasket	1	
2	29.07.063	后面板	Side plate	1	
3	02.09.033	螺钉	Screw	10	
4	29.02.115	螺钉	Screw	2	
5	29.07.035	松线电磁铁罩	Cover Piece	1	
6	29.07.055HL	松线电磁铁部件	Electromagnes	1	
7	29.07.010	电磁铁固定板	Mount plate	1	
8	02.09.007	螺钉	Screw	2	
9	02.09.033	螺钉	Screw	3	
10	29.07.064	面板	Face plate	1	
11	29.07.004	面板垫	Face plate gasket	1	
12	29.01.204-1	六角螺母	Nut	1	
13	02.09.010	螺钉	Screw	1	
14	02.05.016	面板塞	Rubber plug	2	
15	02.09.026	螺钉	Screw	2	
16	29.01.114	针板	Needle plate	1	
18	05.01.028	针板	Needle plate	1	H
17	29.07.011	左线钩	Arm thread guide left	1	
18	02.06.001	推板部件	Side plate ASM.	1	
19	23.302	弹簧垫圈	Washer	4	
20	01.01.001	底板支柱	Bed screw stud	4	
21	02.09.033	螺钉	Screw	2	
22	02.05.003	尺规底座	Ruler plate	1	
23	29.07.056HL	电子失线器部件	Electromagnet	1	
24	11.05.099	螺钉	Screw	1	
25	02.02.021BZ	失线器部件	Thread take-up device	1	
25	02.02.021BZ	失线器部件	Thread take-up device	1	H
26	02.09.035	螺钉	Screw	1	
27	29.07.018	松线螺钉	Tension release supporting pin	1	
28	29.01.204	侧板钩	Side plate gasket	1	
29	23.300	开口挡圈	Screw	1	
30	02.09.010	螺钉	Screw	1	
31	29.01.199	松线螺钉弹簧	Spring	1	
32	02.07.012	右线钩	Arm thread guide right	1	
33	29.01.053BZ	上失线器	Thread take-up device	1	
34	29.02.108	螺钉	Screw	1	
35	29.07.034	油杯窗	Oil window	1	

1. 机壳分组件/Machine frame&miscellaneous cover components



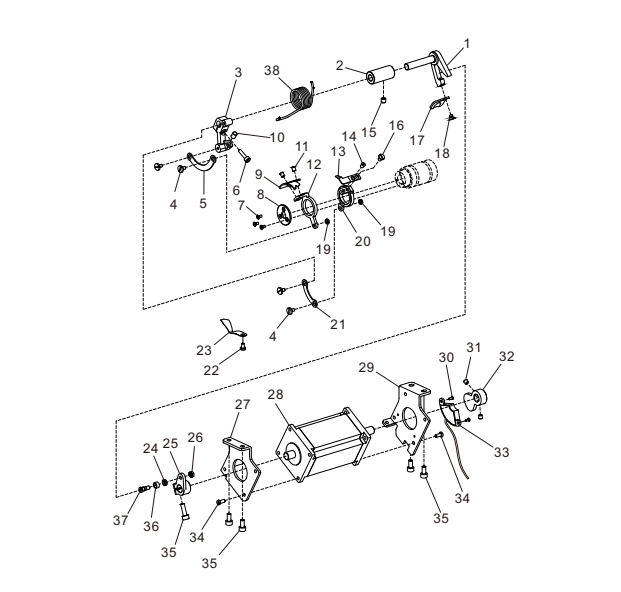
序号 Ref.No.	物料号 Part.No.	名称	Description	数量 Qty	备 注 Remark
36	02.05.017	橡胶塞	Rubber plug	1	
37	29.01.179	三根过线板	Thread tension guide	1	
38	02.09.007	螺钉	Screw	1	
39	02.05.013	橡胶塞	Rubber plug	1	
40	29.07.084	螺纹杆护罩	Thread take-up lever cover	1	
41	02.09.007	螺钉	Screw	1	
42	29.02.005	螺钉	Screw	3	
43	29.07.082	挑线器部件	Bobbin wider ASM.	1	
44	29.02.086	螺钉	Screw	2	
45	29.01.017	挑线切刀	Thread cutter	1	
46	02.05.005	O形圈	O-ring	1	
47	02.05.006	油窗	Oil window	1	
48	29.01.053BZ	挑线失线器部件	Thread take-up device	1	
49	29.01.109	橡胶塞	Rubber plug	1	
50	30.01.096	电机罩壳	Cover Piece	1	
51	0000	螺钉	Screw	1	
52	29.02.097	螺钉	Screw	3	
53	0000	螺钉	Screw	1	
54	02.09.007	螺钉	Screw	1	
55	05.05.016	电线夹	Cable clip	1	

2. 上轴、挑线分组件/Main shaft&thread take-up components



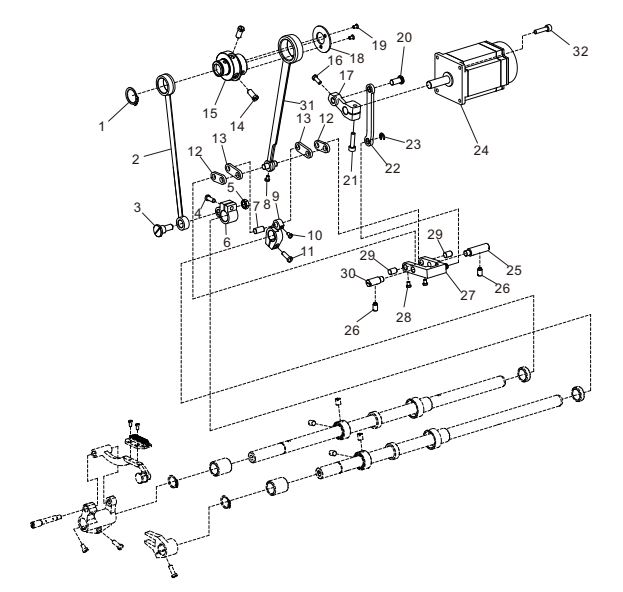
序号 Ref.No.	物料号 Part.No.	名称	Description	数量 Qty	备 注 Remark
1	29.02.103	螺钉	Screw	2	
2	29.07.083	上轮	Head wheel	1	
3	29.07.067	螺钉	Screw	1	
4	23.303	弹簧垫圈	washer	4	
5	30.01.094	上轴电机	Motor	1	
6	02.09.004	螺钉	Screw	1	
7	01.03.012	O形圈	O-ring	1	
8	29.01.151	针杆曲柄	Counter weight	1	
9	29.06.003	螺钉	Screw	2	
10	02.09.003	螺钉	Screw	1	
11	02.07.013	曲柄油量调节阀	Adjusting pin	1	
12	23.81	曲柄油量限制毡	Felt	1	
13	02.05.018	O形圈	O-ring	1	
14	02.07.014	曲柄油量调节阀套	Sleeve of adjusting pin	1	
15	29.07.076	上轴前轴套	Bearing support	1	
16	02.09.010	上轴中轴套	Bearing support	1	
17	29.07.019	上轴挡圈	Thrust collar	1	
18	01.10.039	螺钉	Screw	2	
19	29.04.040	上轴后轴套	Bearing support	1	
20	29.07.050	上轴	Main shaft	1	
21	02.07.029	挑线杆防油套	Oil resistant cover	4	
22	02.04.015	挑线杆部件	Thread take-up lever Asm.	1	
22	02.04.015H	挑线杆部件	Thread take-up lever Asm.	1	H
23	02.04.019	挑线杆	Electromagnet	1	
23	02.04.019H	挑线杆	Thread take-up lever	1	H
24	02.04.018	挑线连杆	Thread take-up bar	1	
25	23.76	油线	Oil thread	1	
26	02.09.005	螺钉	Screw	1	
27	02.04.020	挑线连杆销	Thread take-up crank shaft	1	
28	02.04.021	螺钉	Screw	1	
29	02.04.019	针板连杆	Needle bar crank rod	1	
30	01.04.030	滚针轴承	Bearing	2	
31	02.04.016	挑线曲柄	Needle bar crank	1	
31	02.04.016H	挑线曲柄	Needle bar crank	1	H
32	29.04.014	挑线主动轮	Wheel	1	
33	29.02.039	螺钉	Screw	2	
34	01.10.040	螺钉	Screw	2	

5. 剪线分组件/Thread Trimmer Components



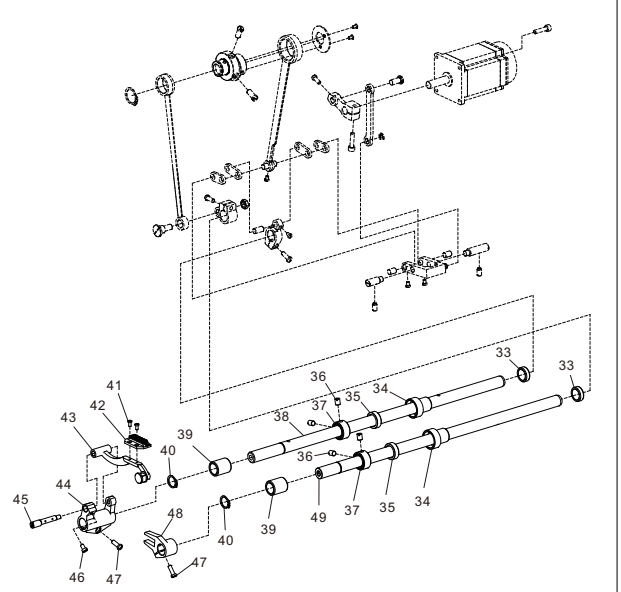
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1	29.07.027	切线凸轮轴	Camshaft	1	
2	29.07.022	切线轴套	Bearing support	1	
3	29.06.016	切线曲柄	Trimming crank	1	
4	29.06.033	螺钉	Screw	4	
5	29.06.013	长连杆	Knife shaft crack rod	1	
6	29.02.134	螺钉	Screw	1	
7	29.02.104	螺钉	Screw	3	
8	29.06.020	刀架压板	Knife holder	1	
9	29.06.003	大动刀	Round knife	1	
10	29.06.016-2	缓冲垫	Block	1	
11	29.02.012	螺钉	Screw	2	
12	29.06.010	大动刀架	Round knife bracket	1	
13	29.06.002	小动刀	Round knife	1	
14	29.02.012	螺钉	Screw	1	
15	02.09.008	螺钉	Screw	1	
16	02.09.010	螺钉	Screw	1	
17	29.07.015	切线凸轮轴手柄	Hand shank	1	
18	01.10.006	螺钉	Screw	1	
19	29.06.032	六角螺母	Nut	2	
20	29.06.011	小动刀架	Round knife bracket	1	
21	29.06.014	短连杆	Knife shaft crack rod	1	
22	02.09.034	螺钉	Screw	1	
23	29.06.017	分梳片	Dispart	1	
24	29.07.044-1	垫圈	Washer	1	
25	29.07.044-2	切线驱动曲柄	Trimming shaft	1	
26	29.07.044-3	六角螺母	Nut	1	
27	29.07.016	剪线电机前支架	Mounting plate	1	
28	30.01.093	剪线电机	Motor	1	
29	29.07.017	剪线电机后支架	Mounting plate	1	
30	01.10.006	螺钉	Screw	2	
31	30.01.093-2	针板	Needle bar	2	
32	30.01.093-3	感压片	Plate	1	
33	29.07.068	剪线电机传感器	Sensor	1	
34	11.05.070	螺钉	Screw	8	
35	29.02.134	螺钉	Screw	5	
36	29.07.044-4	滚珠	Roller bearing	1	
37	29.07.044-5	螺钉	Screw	2	
38	29.07.074	复位弹簧	Spring	1	

6. 送料分组件/Feed Mechanism Components



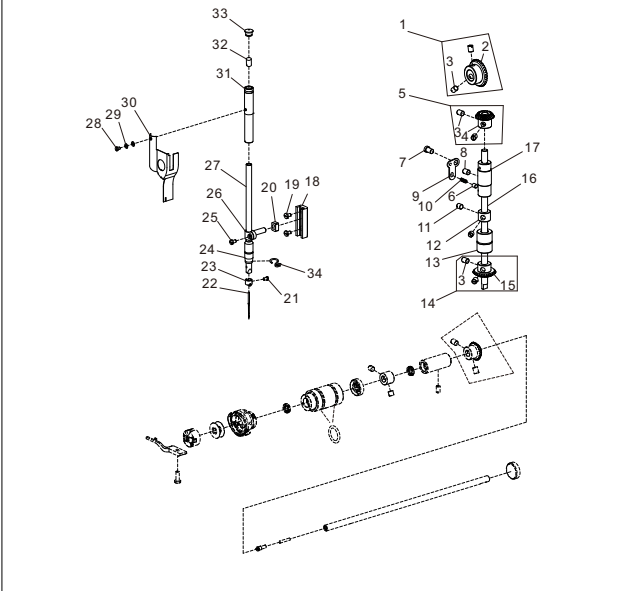
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1	23.301	轴用挡圈	Snap ring	1	
2	02.07.016	抬牙连杆	Connecting rod	1	
3	02.09.025	螺钉	Screw	1	
4	29.02.113	螺钉	Screw	1	
5	02.09.041	六角螺母	Nut	1	
6	02.07.023	抬牙后曲柄	Lifting rocker	1	
7	02.07.007	销	Pin	1	
8	02.09.011	螺钉	Screw	1	
9	02.07.020	送布曲柄	Feed rocker	1	
10	02.07.020H	送料牙	Feed dog	1	H
10	02.09.011	螺钉	Screw	1	
11	01.10.023	螺钉	Screw	1	
12	02.07.008	短摆动板	Short link	2	
12	02.07.008H	短摆动板	Short link	2	H
13	02.07.009	长摆动板	Long link	2	
14	02.09.011	螺钉	Screw	2	
15	02.07.022	送料偏心轮	Feed drive eccentric cam	1	
15	02.07.022H	送料偏心轮	Feed drive eccentric cam	1	H
16	29.02.101	螺钉	Screw	1	
17	29.07.038	针距曲柄	rocker	1	
18	02.07.011	偏心轮盖板	Thrust cover	1	
19	29.02.104	螺钉	Screw	2	
20	29.07.039	针距曲柄销	Pin	1	
21	29.02.133	螺钉	Screw	1	
22	29.07.030	针距连杆	Link	1	
23	23.308	开口挡圈	Snap ring	1	
24	30.01.092	针距电机	Motor	1	
25	02.03.005	右销	Pin	1	
26	02.09.005	螺钉	Screw	2	
27	29.07.089	摆动板座部件	Feed adjusting ASM.	1	
28	02.09.011	螺钉	Screw	2	
29	02.07.010	销	Pin	2	
30	02.03.006	左销	Pin	1	
31	0000	送料连杆	Connecting rod	1	
32	0000	螺钉	Screw	4	

6. 送料分组件/Feed Mechanism Components



序号 Ref.No.	物料号 Part.No.	名称	Description	数量 Qty	备 注 Remark
33	0000	橡胶塞	Rubber plug	2	
34	29.01.036	送料轴前轴套	Bearing support	2	
35	0000	油封	Oil seal	2	
36	0000	螺钉	Screw	4	
37	0000	送料轴挡圈	Thrust collar	2	
38	29.07.053	送料轴	Feed rocker shaft	1	
39	29.01.036	抬牙送料轴前轴套	Bearing support	2	
40	23.301	轴用弹性挡圈	Snap ring	2	
41	02.09.029	螺钉	Screw	2	
42	29.01.093	送料牙	Feed dog	1	H
43	29.01.092	牙架部件	Feed bar ASM.	1	
44	29.01.092-1	牙架曲柄	Feed bar driving crank	1	
45	29.01.092-2	牙架销	Pin	1	
46	29.01.092-3	螺钉	Screw	1	
47	29.01.092-4	螺钉	Screw	2	
48	29.01.092-6	抬牙叉形曲柄	Lifting fork	1	
49	29.07.052	抬牙轴	Feed driving shaft	1	

3. 针杆、勾线分组件/Needle bar &Hook of driving shaft components



序号 Ref.No.	物料号 Part.No.	名称	Description	数量 Qty	备 注 Remark
1	29.01.190	上轴伞齿轮部件	Gear	1	
2	29.01.190-1	上轴伞齿轮	Gear	1	
3	29.01.190-2	螺钉	Screw	8	
4	29.01.189-1	竖轴上伞齿轮	Gear	1	
5	29.01.189	竖轴上伞齿轮部件	Gear	1	
6	01.05.009	柱塞	Plunger	1	
7	12.06.036	螺钉	Screw	1	
8	01.10.040	螺钉	Screw	1	
9	29.07.014	柱塞压板	Plunger holder	1	
10	01.05.010	弹簧	Spring	1	
11	01.10.039	螺钉	Screw	2	
12	29.07.020	挡圈	Thrust collar	1	
13	29.07.080	竖轴下轴套	Bearing support	1	
14	29.01.191	竖轴下伞齿轮部件	Gear	1	
15	29.01.191-1	竖轴下伞齿轮	Gear	1	
16	29.07.029	竖轴	Upright shaft	1	
17	29.07.023	竖轴上轴套	Bearing support	1	
18	02.04.014	滑块槽	Guide rail	1	
19	02.09.034	螺钉	Screw	2	
20	02.04.014	针杆连接柱滑块	Needle bar thread guide	1	
21	01.10.006	螺钉	Screw	1	
22	01.04.029	DBx1 14#机针	Needle DPx5 18#	1	H
23	02.04.011	针杆线钩	Needle bar thread guide	1	
24	02.01.011	针杆下轴套	Bearing support	1	
24	02.01.020	针杆下轴套	Bearing support	1	H
25	02.04.017-2	螺钉	Screw	1	
26	02.04.017	针杆连接柱	Needle bar holder	1	
27	02.04.008	针杆	Needle bar	1	H
27	02.04.008H	针杆	Needle bar	1	
28	02.09.037	螺钉	Screw	1	
29	23.309	垫圈	Washer	2	
30	02.05.020	面部防油板	Oil stopper	1	
31	02.04.012	针杆上轴套	Bearing support	1	
32	0000	毛毡	Wool felt	1	
33	02.05.014	橡胶塞	Rubber plug	1	
34	02.04.007	针杆下轴套线钩	Needle bar thread guide	1	

3. 针杆、勾线分组件/Needle bar &Hook of driving shaft components

