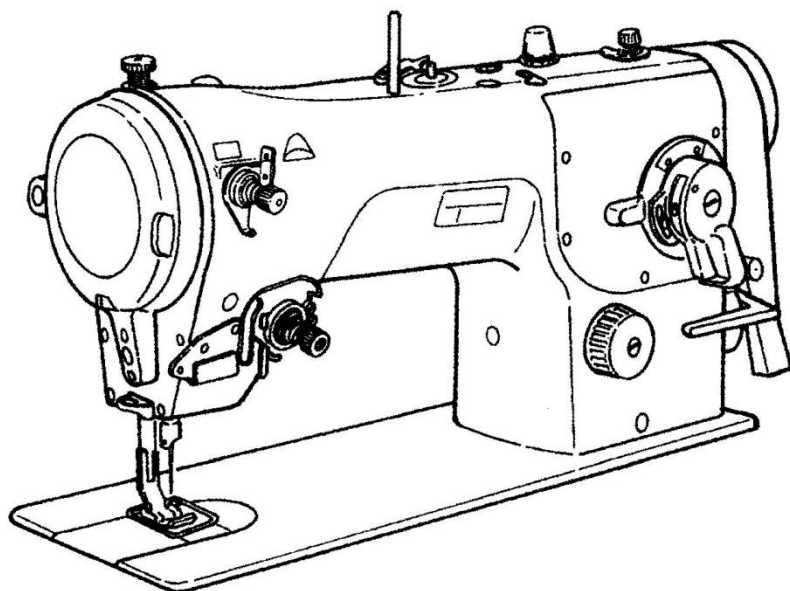


2280 系列

高速曲折缝纫机

ZIGZAG SEWING MACHINE SERIES



使用说明书
INSTRUCTION MAUNAL

零件图册
PARPS LIST

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), 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.
 - 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. 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 OEM manufacture 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. The company 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

重要安全事项

此缝纫机在有的国家（设置场所）由于该国的安全规定而被机智的使用。同时，在技术服务也同样被禁止。



1. 使用此缝纫机时，必须遵守包括如下项目的基本安全措施。
2. 使用此缝纫机之前，请阅读本使用说明书在内的所有指示文件。
3. 此缝纫机应与贵国的有关安全规定一起使用。
4. 使用此缝纫机和缝纫机动作中，所有的安全装置应安装到规定的位置。
没有安装规定的安全装置的缝纫机禁止使用。
5. 此缝纫机应由接受过培训的操作人员来操作。
6. 使用缝纫机时，建议戴安全防护眼镜。
7. 发生下列情况时，应立即关掉电源开关，或拔下电源线插头。
 - 7-1 机针、弯针、分离器等穿线和更换旋梭时。
 - 7-2 更换机针、压脚、针板、弯针、分离器、送布牙、护针器、支架、布导向器等时。
 - 7-3 修理时。
 - 7-4 工作场所无人了或离开工作场所时。
 - 7-5 使用离合马达时，请等待马达完全停止之后再行。
8. 缝纫机以及附属装置使用的机油、润滑脂等液体流入眼睛或沾到皮肤上时，或被误饮时，应立即清洗有关部分并去医院治疗。
9. 禁止用手触摸打开了缝纫机开关通电的零件或装置。
10. 有关缝纫机的修理、改造、调整应由受过专门训练技术人员或专家来进行。
11. 一般的维修保养由受过训练的人员来进行。
12. 有关缝纫机的电气方面的修理、维修应由有资格的电器技术人员或专家的监督和指导下进行。
13. 修理、保养有关空气、气缸等压缩空气时，应切断空气压缩机供气源后再进行。
如有残留压缩空气时，应放掉压缩空气。
但，受过相当训练的技术人员或专家进行有关调整或确认动作时除外。
14. 缝纫机的使用其间应定期清扫。
15. 为了正常安全运转，应安装地线。同时应在不受高频焊接机等强噪音源影音的环境下使用。
16. 电源插头应用具有电器专门知识的人来安装。电源插头必须连接到接地插座上。
17. 缝纫机指定用途以外不能使用。
18. 对缝纫机的改造、变更应符合安全规格，并采取有效的安全措施。
另外，对于有关改造和变更，公司概不负责。
19. 本使用说明书上采用以下2个警告符号。





有损伤操作人员、维修人员的危险。



安全上需要特别加以注意的事项。

	<p>1.To prevent accident caused by electric shock,never open the control box cover or touch the components inside the control box while the power switch is ON.</p>
	<p>1.To prevent accidents caused by electric shock,never open the control box cover or guard,eye guard or safety devices removed.</p> <p>2.To avoid personal injuries,never bring your fingers,hair or clothes close to or place anything on the handwheel,V-belt or motor while the machine is running.</p> <p>3.To avoid personal injuries,never bring your fingers under or near the needle when the power switch is turned ON or while the machine is running.</p> <p>4.To avoid personal injuries,never bring your fingers into the needle bar cover while the machine is running.</p> <p>5.To avoid personal injuries,be careful not to allow your fingers to be caught when tilting or re-setting of the machine is performed.</p> <p>6.To prevent accidents caused by abrupt start of the sewing machine,turn OFF the power switch when the machine is tilted or the belt cover and the V-belt are removed.</p> <p>7.The motor does not produce the noise while the machine is stopped.To prevent accidents caused by abrupt start of the sewing machine,be sure to turn OFF power switch when you stop the machine.</p> <p>8.To prevent accidents caused by electric shock, do not operate the machine with the ground wire removed.</p> <p>9.To prevent accidents caused by electric shock and damage of the electrical components,turn OFF the power switch in advance in case of inserting or removing the power plug.</p>

运转缝纫机前的注意事项

	<p>1. 为了防止发生触电事故，请不要在打开电源的状态下，打开电气箱盖以及触摸电气箱内的零件。</p>
	<p>1. 为了防止人身事故的发生，请不要在卸下手指防护器等安全装置的状态运转缝纫机。</p> <p>2. 为了防止卷入机器的人身事故，缝纫机运转中，请不要把手指、头发、衣服靠近飞轮，也不要物品放到缝纫机上。</p> <p>3. 为了防止人身事故的发生，打开电源时以及缝纫机运转中，请不要把手指放到机针的附近。</p> <p>4. 为了防止人身事故的发生，缝纫机运转中请不要把手指放到挑线杆外罩内。</p> <p>5. 缝纫机操作中，旋梭高速地旋转。为了防止手受到伤害，运转中请绝对不要把手靠近旋梭。。</p> <p>6. 为了防止人身事故的发生，放倒缝纫机或返回原来位置时，要注意不要夹住手。</p> <p>7. 为了防止突然的启动造成的事故，放倒缝纫机时或更换零件、调整等时请关掉电源。</p> <p>8. 缝纫机停止时马达没有声音。为了突然的启动造成的事故，请注意不要忘记关掉电源。</p> <p>9. 为了防止触电事故，卸下电源地线的状态，请不要运转缝纫机。</p> <p>10. 为了防止触电和损坏电气零件，拔电源的插头时，请先关掉机器电源开关。</p>

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CAUTION BEFORE OPERATION



WARNING:

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 the transportation and oil it well.
- Confirm that the voltage has been correctly set.
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 sewing machine must rotate counterclockwise as viewed from the pulley. Take care not to allow the sewing machine to rotate in the reverse direction.
- Do not run the machine before filling the oil reservoir with the prescribed lubricating oil.
- Before starting a test run, remove the bobbin case and the needle thread from the machine.
- For the first month after the set-up, use the machine at a reduced sewing speed, 2,800 rpm or less.
- Operate the handwheel after the sewing machine has totally stopped.
- Do not allow your fingers to come close to the face plate since the thread take-up knife is attached to the face plate.
- Do not open the thread take-up cover while the machine is operating.





运转缝纫机前的注意事项



为了防止机械的错误动作或者损伤，请确认如下项目：





- 最初使用缝纫机之前，请把机器打扫干净，清除运输途中积存的灰尘和污垢，并加油。
- 请确认电压设置是否正确，并确认电源插头是否正确连接。
- 电压规格不同时，请绝对不要使用。
- 缝纫机的运转方向，从皮带轮侧看应该为逆时针方向，请注意不要反转缝纫机。
- 机头部没有加油时，请绝对不要运转缝纫机。
- 试运转时，请把旋梭和上线卸下。
- 缝纫机开始使用的最初一个月，请降低缝纫速度，将缝纫速度控制到2,800rpm以下。
- 待缝纫机确认停止之后再转动手轮。
- 面板上安装有切刀，请不要把手指放到附近。
- 缝纫机运转中，请不要打开调线杆防护罩。

1.SPECIFICATIONS

Model	LJ-2280N	LJ-2280N -7	LJ-2286N	LJ-2286N -7	LJ-2281N	LJ-2281N -7	LJ-2288N	LJ-2288N -7	LJ-2285N
Type of zigzag	Standard zigzag		3-step zigzag		Wide-width zigzag		Cam-replacement type zigzag		Fagoting
Stitch diagram							By means of pattern cam (Refer to P.8.)		
Sewing speed (Maximum) rpm	~3,500		~15,000		5,000		~2,500		4,000
Zigzag width (Maximum) mm	5		10(Standard 8 at the time of delivery)		A type 5 B type 8		8 (Depending on pattern cam. Refer to P.8.)		8(Standard 6 at the time of delivery)
Feed pitch(Maximum) mm	2.5		2		A type 2.5 B type 5		2 (By means of replacement of cam:2.5)		2.2
Needle	SCHMETZ 134SUK,438:#65 to #90,ORGAN DPX5:#9 to #14								SCHMETZ 438SUK #75 to #90
Oil used	New Defrix Oil No.1								
Noise	Workplace-related noise at sewing speed n=4,550/min:L _{PA} ≤ 84dB(A) Noise measurement according to DIN 45635-48-A-1.								




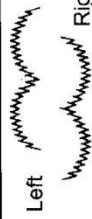
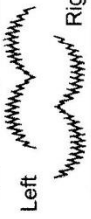
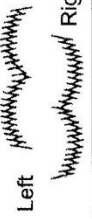
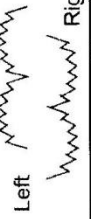




- * 1.If you wish to set the zigzag width to a value larger than 8mm,the sewing speed is limited to 4,000 rpm.
- * 2.For standard zigzag stitches and blind stitches of which zigzag width exceeds 5 mm,the sewing speed is limited to 4,200 rpm.
Set the sewing speed properly in accordance with the sewing products and process.
- * 3.When the SC-800 is used,the sewing speed is limited to 5,000 rpm.

1. 规格

型号	LJ-2280N	LJ-2280N -7	LJ-2286N	LJ-2286N -7	LJ-2281N	LJ-2281N -7	LJ-2288N	LJ-2288N -7	LJ-2285N
缝纫形式	标准曲折缝		4点曲折缝		宽幅曲折缝		更换凸轮式曲折缝		花性针迹
缝迹图							根据图案凸轮(参照P. 13)		
最高缝纫速度 (rpm)	~3,500		~15,000		5,000		~2,500		4,000
最大摆幅宽度 (mm)	5		10(出货时标准为8)		A 型为 5 B 型为 8		8(根据凸轮而不同)		8(出货时 标准为6)
最大送布量 (mm)	2.5		2		A 型为 2.5 B 型为 5		2(更换针板可以2.5)		2.2
使用机针	精密牌134SUK、438：#65 - #90。风琴牌 DPx5：#9 - #14								精密牌 438 SUK #65 - #90
使用机油	No. 1 新机油								




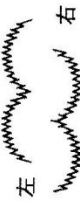
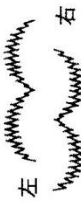

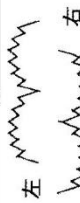
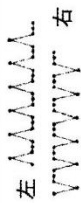

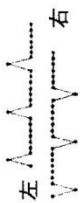

- * 1. 摆动幅度超过8 mm以上时，速度为4,000 rpm.
- * 2. 摆动幅度超过5 mm的2点曲折缝和钉标牌缝时的速度为4,200 rpm.
请根据缝制物和工序适当的设定转速.
- * 3. 使用SC-800时为5,000 rpm.

PATTERN CAM TABLE FOR LJ-2288N AND LJ-2288N-7

Name of pattern	Part No.	Description	Max.zigzag width	Max.pattren width	Number of stitches for pattern	Stitch pattern
Standard zigzag stitch	22568851	Needle rocking cam A	6.0	-----	2	
3-step zigzag stitch	22568950	Needle rocking cam B	8.0	-----	6	
2-step zigzag stitch	22569057	Needle rocking cam C	8.0	-----	4	
Standard scallop	22569156	Needle rocking cam D	8.0	2.4	24	
Crescent scallop	22568255	Needle rocking cam E	8.0	3.6	24	
Equal-width scallop	22569354	Needle rocking cam F	8.0	3.4	24	
Equal-width scallop	22569453	Needle rocking cam G	8.0	2.4	12	
Blind stitch	22569552	Needle rocking cam H	6.0	-----	4	
Blind stitch	22569651	Needle rocking cam J	6.0	-----	6	
Blind stitch	22569750	Needle rocking cam K	6.0	-----	8	
Blind stitch	22569859	Needle rocking cam L	6.0	-----	12	

* The max. number of revolutions(number of stitches)is 4,200 s.p.m for standard zigzag stitches and blind stitches of which zigzag width exceeds 5 mm.

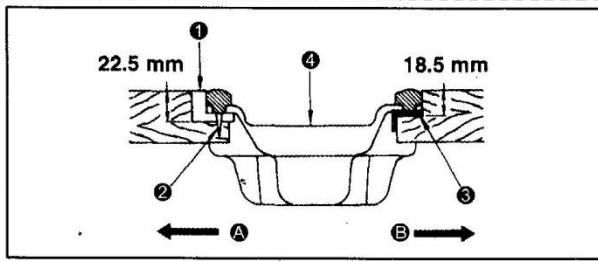
LJ-2288N, 2288N-7花样凸轮一览表

花样名称	货号	品名	最大针摆幅度	最大花样宽度	图案针数	针迹图案
2点曲折	22568851	针摆动凸轮 A	6.0	----	2	
4点曲折	22568950	针摆动凸轮 B	8.0	----	6	
3点曲折	22569057	针摆动凸轮 C	8.0	----	4	
标准荷叶边	22569156	针摆动凸轮 D	8.0	2.4	24	
三日月荷叶边	22568255	针摆动凸轮 E	8.0	3.6	24	
等宽荷叶边	22569354	针摆动凸轮 F	8.0	3.4	24	
等宽荷叶边	22569453	针摆动凸轮 G	8.0	2.4	12	
暗缝针迹	22569552	针摆动凸轮 H	6.0	----	4	
暗缝针迹	22569651	针摆动凸轮 J	6.0	----	6	
暗缝针迹	22569750	针摆动凸轮 K	6.0	----	8	
暗缝针迹	22569859	针摆动凸轮 L	6.0	----	12	

* (注意) 摆动幅度超过5 mm的2点曲折缝和缝针迹时的最高转速为4,200 rpm.

2. SETTING UP THE SEWING MACHINE

缝纫机的安装

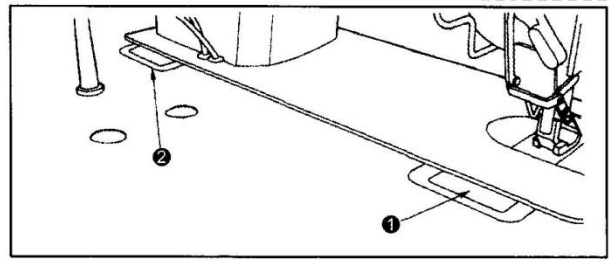


(1) Attaching the oil pan

Hammer the nails ② on the two support rubber seats ① of the machine head on operators' side A of the protruding section of the table, and fix the two cushion seats ③ of the machine head on hinge side B with rubber adhesive agent. Now, put the oil pan ④ on the cushions.

(1) 油槽的安装

用螺钉②把前侧①的2个头部橡胶支座A钉到机台的伸出部，用黏接剂黏接固定好铰链侧③的2个头部胶垫座B，然后把油槽④放上去。



(2) Attaching the hinge

Fit the hinge ① in the hole in the bed and engage it with the rubber hinge ② of the table. Put the machine head down on the cushions located at the four corners.

(2) 铰链的安装

把铰链①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。

3. ATTACHING THE BELT COVER

皮带防护罩的安装

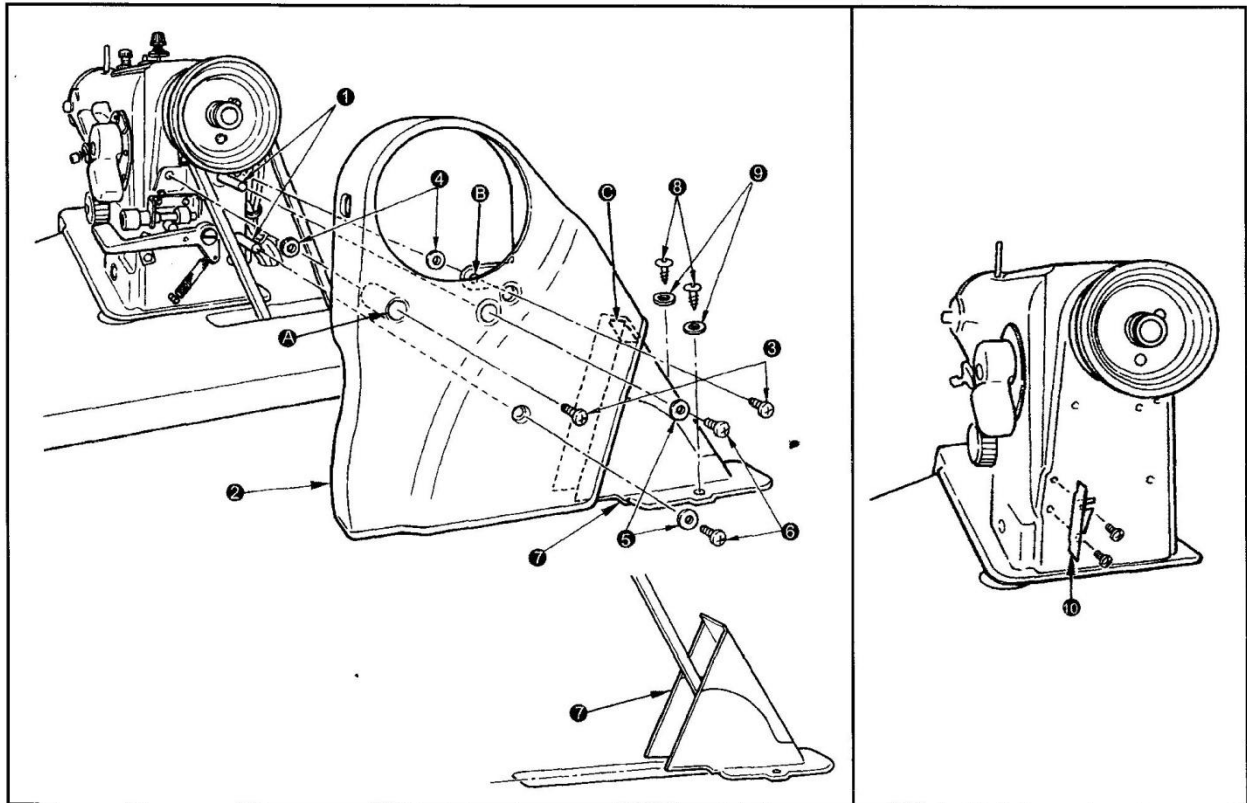


WARNING:

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注意:

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- 1) Securely attach two belt cover studs ① to the screw holes in the machine arm.
- 2) Put setscrews ③ in hole A of belt cover ② and section ⑤, and fix them with setscrew washers ④.
- 3) Attach belt cover A ② to the machine arm from the slanted rear side so that it covers the belt.
- 4) Fix setscrews ③ to the screw holes in the machine arm, and washers ⑤ and setscrews ⑥ to the belt cover supports.
- 5) Insert belt cover B asm. ⑦ from the rear of belt cover A ② and fix it at the position where rubber section ⑧ of belt cover B asm. ⑦ lightly comes in contact with the belt cover A. At this time, attach the belt cover B asm. at the position where the light and left sides are equal in terms of the long hole of the table with wood screw ⑨ and washer ⑩.

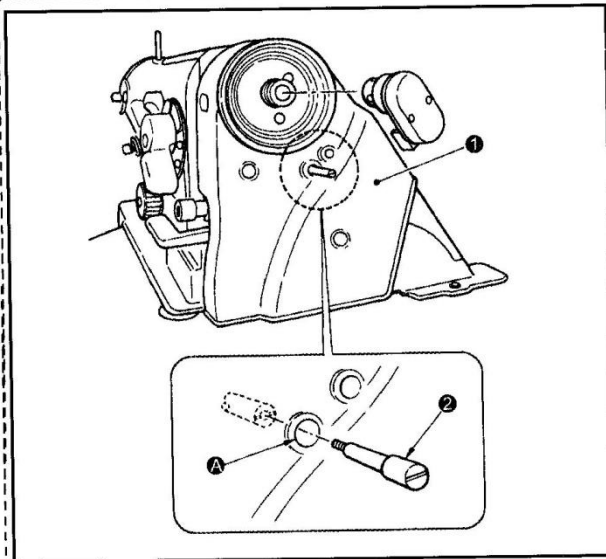


In case of LJ-2285N, attach belt cover A ② and belt cover B asm. ⑦ after attaching belt cover C ⑩ first.

- 1) 把皮带护罩的3根支柱 ① 牢牢地安装到机架的螺丝孔上。
- 2) 把固定螺丝 ③ 插到皮带护罩A ② 的孔 A 和 ⑤ 部, 然后用固定螺丝垫片 ④ 固定。
- 3) 倾斜皮带护罩A ②, 从后方把皮带安装到机架上。
- 4) 把固定螺丝 ③ 插到机臂的螺丝孔里, 然后把垫片 ⑤ 和固定螺丝 ⑥ 固定到皮带护罩支柱。
- 5) 把皮带护罩B连接器 ⑦ 从皮带护罩A ② 的后方插入, 在皮带护罩B连接器 ⑦ 的橡胶部 ⑧ 轻轻顶住的位置固定好。此时, 把大螺丝 ⑨、垫片 ⑩ 安装到机台长孔的左右均等的位置。



LJ-2285N时, 首先安装皮带护罩C ⑩, 然后安装皮带护罩A ②、B连接器 ⑦。



机针如果一定在布的上方停止的话, 缝纫效率就会大大提高。这时需要使用机针夹具。请把机针夹具如图所示安装起来。指示灯支架 ① (特别是定制品) 请拧到皮带防护罩支柱的螺丝孔上固定起来。拧松皮带护罩 A ① 的 4 个固定螺丝, 临时固定。卸下 4 个固定螺丝中的 A 孔的固定螺丝把信号灯支架 ② 固定到皮带护罩支柱上之后再正式地拧紧皮带护罩的所有固定螺丝。

■ In case of using a market-available needle positioner / 使用市场出售机针的夹具

Adjust so that the needle always stops at the position higher than the cloth to make the sewing work very effective.

In this case the needle positioner can be used.

Attach the synchronizer of the needle positioner as shown in the figure on the left.

Fix tightly the synchronizer support ① (optional) into the screw hole of the belt cover stud instead of a screw. Loosen four setscrews in belt cover A ① and temporarily tighten them.

Remove the setscrew in hole A among the four setscrews and fix synchronizer support ② to the belt cover stud. Then perform final tightening of the setscrews of the whole belt cover.

The synchronizer support ① is exclusively used for LJ-2280N series.



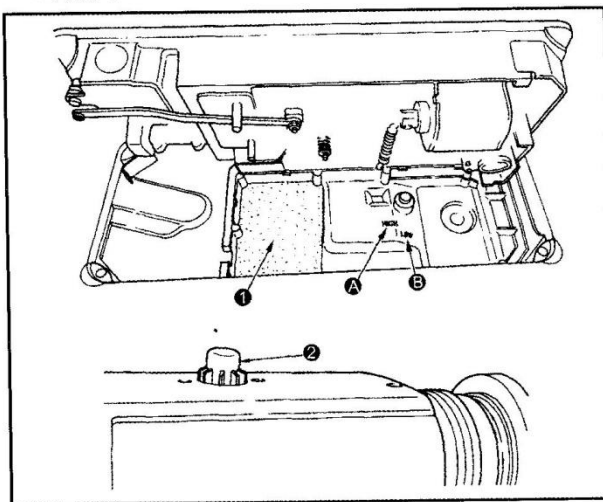
Part No. is 22535462: Synchronizer support asm. Specify this number in case of replacement.



指示灯支架 ① 是 LJ-2280N 系列专用, 货号为 22535462, 更换时请指定货号。

4. LUBRICATION

给油



- 1) Fill the oil pan with New Defrix Oil No.15 upto the level of "HIGH" mark A.
- 2) Add the oil as soon as the oil level comes down to "LOW" mark B or lower.
- 3) Run the sewing machine after the lubrication. As long as the machine is lubricated normally, the oil splash is seen through the oil sight window ②.
- 4) The amount of the oil splash has no connection with the oil amount in the oil pan. So, do not worry about the amount of the oil splash.
- 5) Put foamed polyurethane pad ① in the oil pan. When replacing the oil, squeeze the sponge and remove dust accumulated in the oil pan.



Before operating a newly installed machine or a machine which has not been used for a relatively long period of time, let the machine run idle for approximately ten minutes at 3,000 to 3,500 rpm.

- 1) 把NO.15新机油加入到油槽，加到HIGH标记的 **A** 位置。
- 2) 如果油面降到LOW标记 **B** 以下时，请再次把油加满。
- 3) 加油后运转缝纫机，润滑正常时应能看到油窗 **2** 里油面跳动。
- 4) 油的跳动量的大小跟油量的多少无关，因此不用担心。
- 5) 请把泡沫塑料 **1** 放到油槽中。

更换缝纫机油时，请用手拧泡沫塑料除去积在里面的污垢。



使用新缝纫机或长期没有使用过的缝纫机时，请进行约10分钟3,000 - 3,500的空载运转。

5. ADJUSTING THE AMOUNT OF OIL IN THE HOOK 旋梭的油量调整

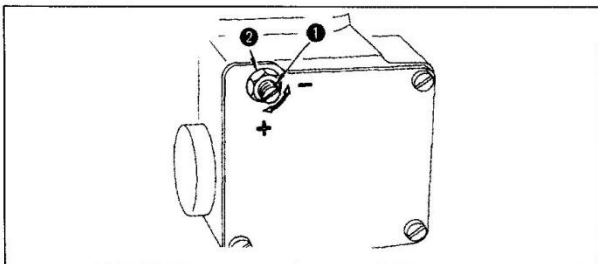


WARNING:

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注意:

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- 1) Tilt the machine head, and adjust the amount of oil in the hook by turning the adjusting screw **1** mounted on the hook driving shaft gear box. Loosen the nut **2**, then turn the adjusting screw **1**.
Turn the adjusting screw in the "+" direction (clockwise) to increase the amount of oil in the hook.
Turn the adjusting screw in the "-" direction (counterclockwise) to decrease it.
- 2) After the adjustment, fix the adjusting screw by tightening the nut **2**.

* For LJ-2284C-7, see p.44



After the adjustment, check the amount of oil in the hook after running the sewing machine at a speed of 3,000 to 3,500 rpm for approximately 10 minutes.

- 1) 向后倒放缝纫机，转动旋梭轴齿轮箱上的调整螺丝 **1** 进行调整。请拧松螺母 **2** 后转动调整螺丝 **1**。
向 "+" 的方向转动.....变多
向 "-" 的方向转动.....变少
- 2) 请调整，请把螺母 **2** 拧松固定。

*有关LJ-2284C-7，请参照P44页说明。



请调整，用3,000 rpm - 3,500 rpm 的速度运转约10分钟，确认油量。

6. INSERTING THE NEEDLE/ 机针的安装方法

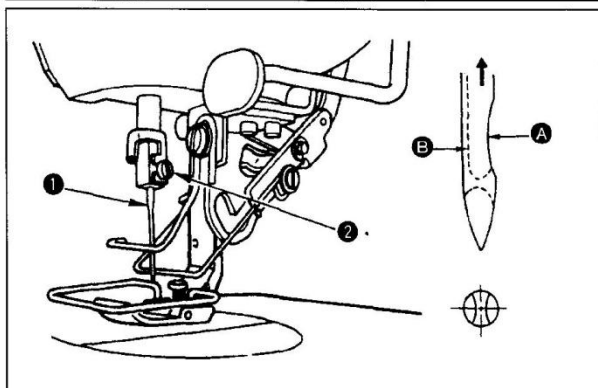


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- 1) Turn the handwheel by hand to raise the needle bar to the highest point.
 - 2) Loosen the needle clamp screw **2**. Hold the needle **1** so that the long groove **B** on the needle is facing exactly toward you.
 - 3) Insert the needle deep into the hole of the needle bar in the direction of the arrow until it will go no further.
 - 4) Securely tighten the screw **2**.
 - 5) Confirm that the long groove **B** on the needle faces toward you.
- 1) 转动手轮，把针杆上升到最高位置。
 - 2) 拧松机针固定螺丝 **2**，手拿机针让机针 **1** 长满部 **B** 朝向前方。
 - 3) 沿箭头方向把机针插到针杆孔的最深处。
 - 4) 把机针固定螺丝 **2** 拧紧
 - 5) 确认机针的长满 **B** 是否朝向前方。

7. WINDING THE BOBBIN THREAD

底线的卷绕办法

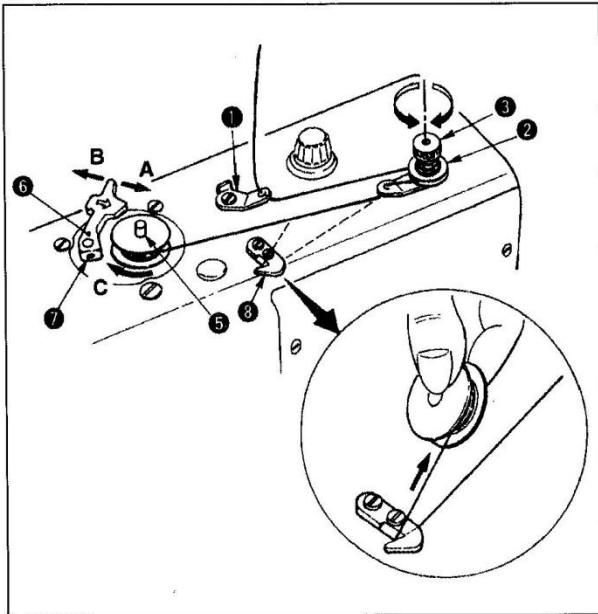


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注意:

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- 1) Insert the bobbin deep into the bobbin winder spindle ⑤ until it will go on further.
- 2) Pass the bobbin thread pulled out from the spool rested on the right side of the thread stand following the order as shown in the figure on the left. Then, wind the end of bobbin thread on the bobbin several times.
- 3) Press the bobbin winder trip latch ⑥ in the direction of A and start the sewing machine. The bobbin rotates in the direction of C and the bobbin thread is wound up. The bobbin winder spindle ⑤ will automatically stop as soon as the winding is finished.
- 4) Remove the bobbin and cut the bobbin thread with the thread cut retainer ⑧.

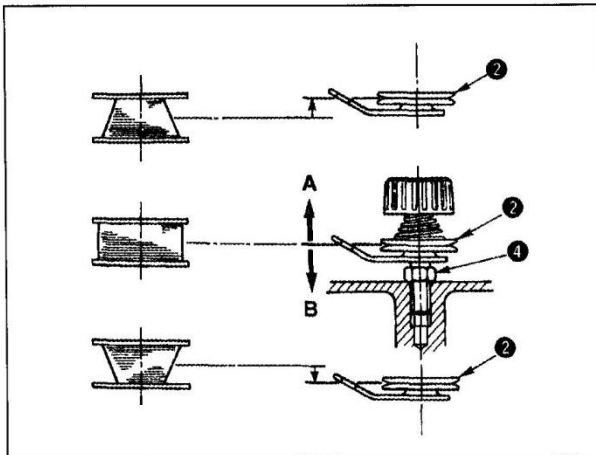
- 5) To adjust the winding amount of the bobbin thread, loosen the setscrew ⑦ and move the bobbin winder trip latch ⑥ to the direction A and B. Then, tighten the setscrew ⑦.

To the direction A: Decrease
To the direction B: Increase

- 1) 把梭心推到卷线轴 ⑤ 的最里面。
- 2) 把线架右侧的卷线如图穿线, 并把线端在梭心上卷线几圈。
- 3) 把卷线拨杆 ⑥ 推到A方向, 转动缝纫机, 梭心向C方向转动, 线被绕到心上, 卷线结束后卷线轴 ⑤ 自动停止。

- 4) 取下梭心, 用切线保持板 ⑧ 切断机线。

- 5) 调整底线卷线量时, 请拧松固定螺丝 ⑦, 把卷线拨杆 ⑥ 移动到向A方向或B方向, 然后拧紧固定螺丝 ⑦。



- 6) In case that the bobbin thread is not wound evenly on the bobbin, loosen the nut ④ and turn the bobbin thread tension to adjust the height of the thread tension disk ②.

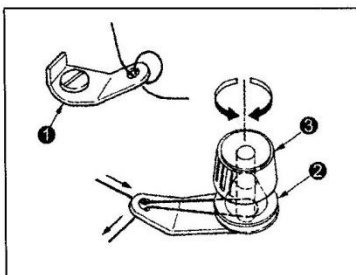
- It is the standard that the center of the bobbin is as high as the center of the thread tension disk.
- Move the position of the thread tension disk ② to the direction A as show in the figure on the left when the winding amount of the lower part of the bobbin is excessive and to the direction B as shown in the figure on the left when the winding amount of the bobbin thread on the upper part of the bobbin is excessive.

After the adjustment, tighten the nut ④.

- 6) 如果线不能平绕梭心时, 拧松螺母 ④, 转动卷线张力器, 调整线张力盘 ② 的高度。

- 旋梭中心和线张力盘中心高度一样时为标准位置。
- 下多卷时, 如图的A方向, 上多卷时, 如图的B方向移动线张力盘 ② 的位置。

调整后, 把固定螺母 ④ 拧紧。



- 7) Turn the thread tension nut ③ to adjust the tension of the bobbin thread winder.

- 8) In case of using the decorative thread of the bobbin thread, it is likely to be difficult to wind the bobbin thread as the decorative thread comes off the thread tension disk ②. In this case, this problem will be improved by passing the bobbin thread two times through the thread tension guide ① or passing the bobbin thread once through the bobbin thread tension rod (asm.) and again passing the bobbin thread through the bobbin thread tension rod (asm.) after passing the bobbin thread through the thread tension disk ②.

- 7) 调整底线卷线张力时, 请转动线张力螺母 ③ 进行调整。

- 8) 底线使用装饰线时, 有可能从底线绕线的线张力盘 ② 脱线, 卷线困难。这时, 把线往卷线线张力导向器 ① 上穿2次线, 或往卷线张力杆 (结合) 上穿1次线, 过线张力盘 ②, 再次穿过卷线张力杆 (结合), 来改善卷线。

8.THREADING THE MACHINE HEAD

梭心的安装方法

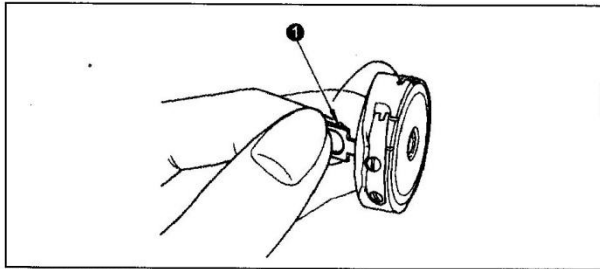


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注意:

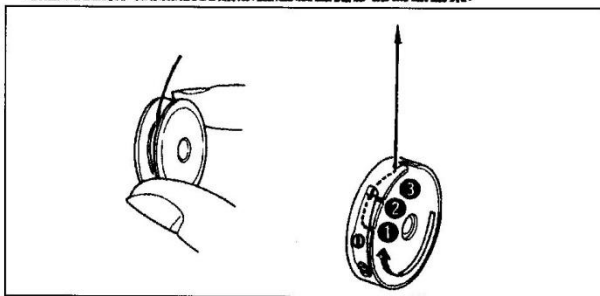
为了防止突然启动造成人身事故, 请关掉电源, 请确认马达确实停止转动后再运行。



梭套的取出安装

1) 转动手轮, 让机针到达最高位置。2) 如图所示, 搬起梭套的把手 ①。3) 从油槽的下方伸进手, 插到旋梭轴上。4) 确实的扣好梭套把手。

* 取出时安装时相反的顺序拉起梭套把手即可取出来。



Inserting and removing the bobbin case

- 1) Turn the handwheel by hand to raise the needle to the highest point.
- 2) Raise the bobbin case latch ① and hold it between your two fingers as shown in the figure on the left.
- 3) Insert the bobbin case as it is being held into the sewing hook shaft as it will go by putting your hand from the under of the oil reservoir.
- 4) Release the bobbin case latch to let it steadily rest in the closing position.

* Reverse the above procedures when removing the bobbin case.

Placing a bobbin into bobbin case

- 1) Take a bobbin by your right hand with the thread drawn out about 5 cm and place it into the bobbin case as illustrated.
- 2) Thread the bobbin case in the order of the numbers and pull it out through the thread path as illustrated.
- 3) Make sure that the bobbin rotates in the bobbin case in the direction shown by arrow.

梭心的插入方法

- 1) 把梭心上的线头拉出5 cm左右, 如图所示插入梭套。
- 2) 把线按槽沟的号码顺序穿过, 把线从穿线口拉出。
- 3) 手拉底线, 梭心如箭头方向旋转。

9.THREADING THE MACHINE HEAD

上线的穿线方法

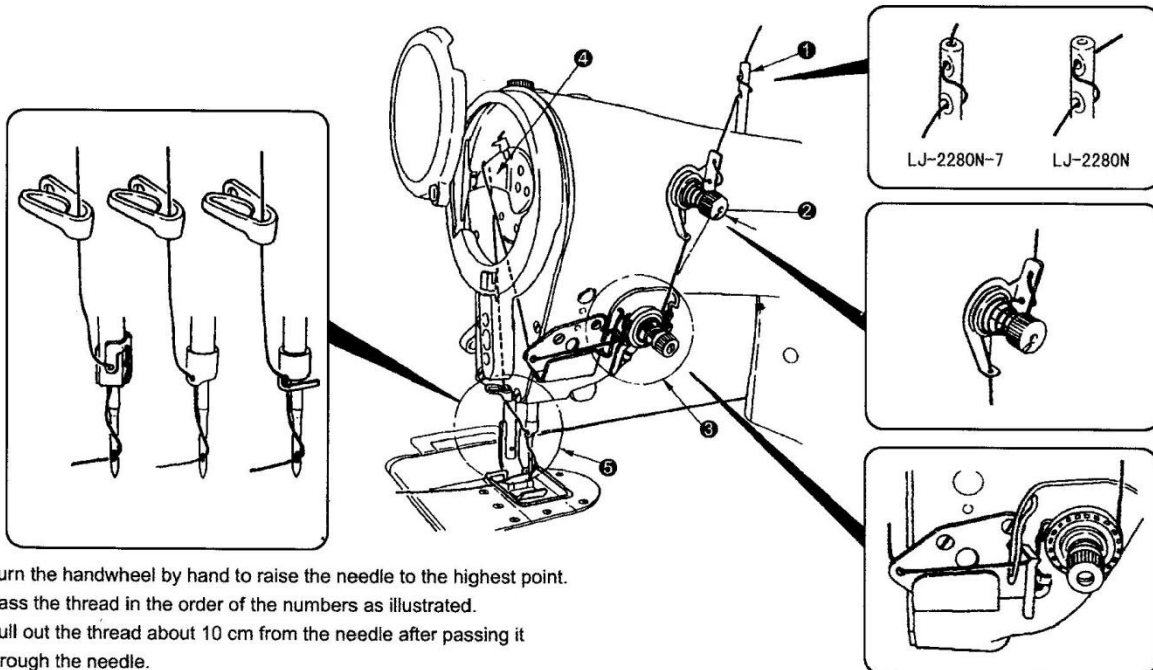


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注意:

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- 1) Turn the handwheel by hand to raise the needle to the highest point.
 - 2) Pass the thread in the order of the numbers as illustrated.
 - 3) Pull out the thread about 10 cm from the needle after passing it through the needle.
- 1) 转动手轮, 把机针升到最高位置。2) 如图所示的号码穿线。3) 把穿过针的缝线拉出10cm左右。

10. ADJUSTING THE THREAD TENSION

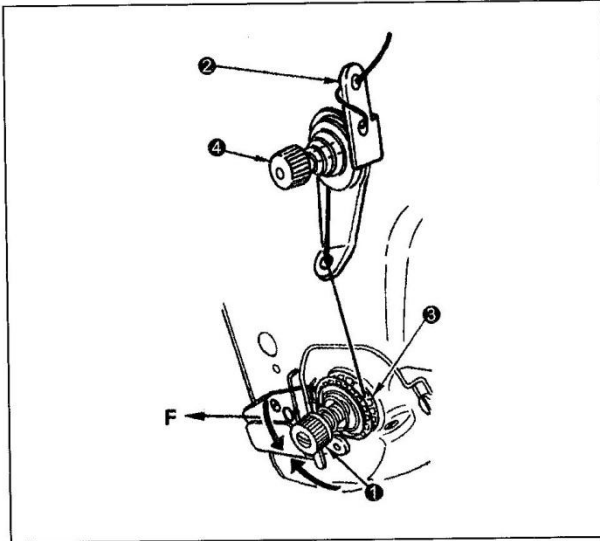
线张力的调整方法



WARNING:

In case of thread-breakage, it may occur that the thread tangles on the thread take-up lever. In this case remove the thread tangling around the thread take-up lever by raising the thread take-up cover. At this time, be careful not to cut your fingers with the knife.

注意：发生断线时，有时拨线杆上会绕线。这时，请打开挑线杆防护罩取下卷线的机线。此时，请注意不要被刀切伤。



(1) 上线张力的调整

1) 上线张力用线张力螺母 ① 调整。

向右转动.....变强 向左转动.....变弱



1) 线张力器 ② 过紧的话，转盘张力 ③ 变小有时线会打滑。请注意张力的适度，用张力调整螺母 ④ 进行调整。

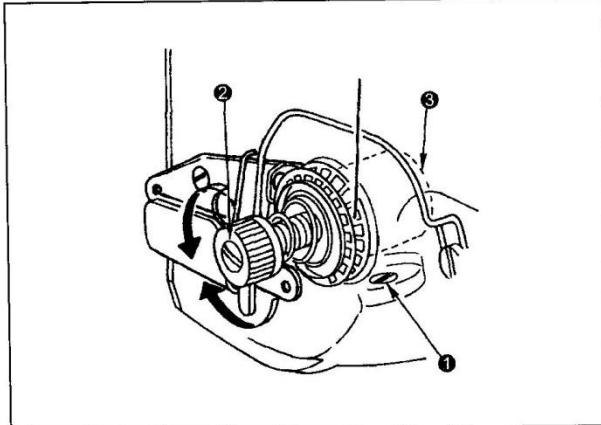
2) 设定了上线张力之后，把线向F方向拉出，确认张力器 ② 木刀消线可以顺利转动。如果滑出时，请拧紧张力调整螺母 ④。

(1) Adjusting the needle thread tension

1) Adjust the needle thread tension using the tension nut ①. Turning the tension nut clockwise increases the needle thread tension, or counterclockwise decrease it.

1. If the thread tension of the pretension disc ② is too low, the thread may slip out of the rotary tension ③. Adjust the thread tension of the pretension, using the pretension adjusting nut ④ taking care of tension balance between the pretension and the rotary tension.

2. After adjusting the needle thread tension, draw the thread in the direction F to check that the rotary tension ③ smoothly rotates with no thread slippage. If the thread slips out of rotary tension, tighten the pretension adjusting nut ④.



(2) 挑线弹簧的调整

1) 改变挑线弹簧的强度时，请把线张力棒固定螺丝 ① 拧紧，把螺丝刀插入线张力杆 ② 的沟槽进行调整。

向右转动.....变强 向左转动.....变弱

2) 改变挑线弹簧的挑线量时，请拧松线张力杆固定螺丝 ①，转动线张力杆座 ③。挑线量范围..... 6 - 10 mm

(2) Adjusting the thread take-up spring

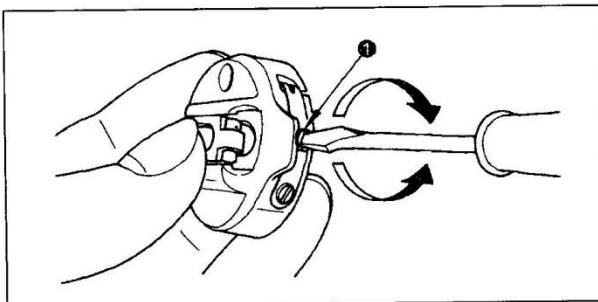
1) To change the tension of the thread take-up spring, firmly tighten the screw ① which fastens the tension post socket to the machine arm and insert the blade of a screwdriver into the slot in the tension post ② to adjust the tension of the thread take-up spring.

Turn it clockwise to increase.

Turn it counterclockwise to decrease.

2) To change the amount of thread taken by the thread take-up spring, loosen the clamping screw ① of the tension post socket and turn tension post socket ③.

Adjustable range of the amount of thread taken by the thread take-up spring..... 6 to 10 mm



(3) Adjusting the bobbin thread tension

1) The tension of the bobbin thread is adjusted by turning the tension adjusting screw ①.

Turn it clockwise to increase.

Turn it counterclockwise to decrease.

(3) 底线张力的调整

1) 底线张力请转动梭套的线张力螺丝 ① 进行调整。

向右转动.....变强

向左转动.....变弱

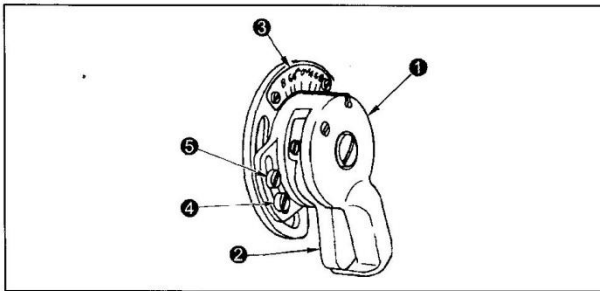
11. ADJUSTING THE ZIGZAG WIDTH

针摆动幅度的调整



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.

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



(1) Adjusting the zigzag width

The zigzag width is adjusted by the knob ①

- 1) Push the lever ② with your finger.
- 2) Turn the knob as you are pushing the lever and set the pointing line to a desired zigzag width which is indicated by the zigzag width scale ③ in mm.
- 3) Release the lever, and the knob will be locked up in the given position.

* For the LJ-2281NA (narrow width type), the max. zigzag width has been factory-limited to 5 mm and for the LJ-2281NB (wide width type) to 8 mm. However, LJ-2281NA can be converted to LJ-2281NB and LJ-2281NB to LJ-2281NA by replacing following parts and changing the position of the stopper (changing the zigzag width and the position of the needle).

	A type	B type
Presser foot	22548663	22580369
Throat plate	22548010	22581409
Feed dog	22548119	22540009

When replacing the gauges, adjust the zigzag width and the feeding amount in accordance with the shape of the gauge.

(1) 摆动幅度的调整

摆动幅度用摆动幅度旋钮 ① 来进行调整。

- 1) 用手按旋钮柄 ②。
- 2) 按住旋钮柄的状态下转动旋钮, 把指示线对准刻度板 ③ 的数字 (mm)。
- 3) 手松开旋钮柄, 即被固定到其刻度位置。

* LJ-2281NA (窄型机) 出厂时, 最大摆动幅度固定为 5mm, LJ-2281NB (宽型机) 规定为 8mm。但是, 更换成以下零件和变更止动器位置 (变更针摆动幅度和针位置) 之后, LJ-2281NA 可以改造为 B 型机, 同样也可以把 LJ-2281NB 型机* 单独改造 A 型机。

改成其他派生机种时, 请根据图案的形状调整摆动幅度和送布景。

	A 规格	B 规格
压脚	22548663	22580369
针板	22548010	22581409
送布牙	22548119	22540009

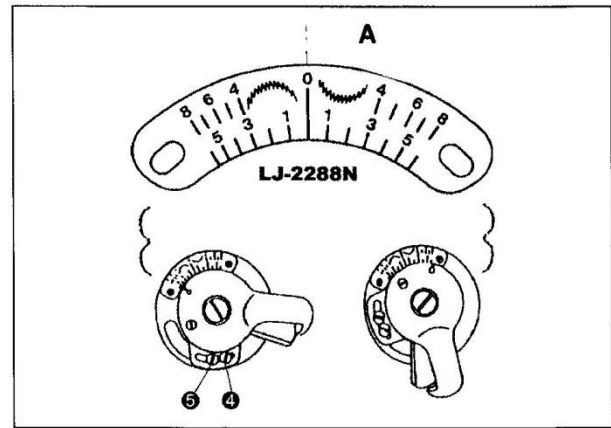
* For the LJ-2286N model of sewing machine, the zigzag width has been factory-set to 8 mm. However, the zigzag width can be adjusted up to the maximum of 10 mm by replacing the presser foot, throat plate and feed dog and changing the position of the stopper, in this case, adjust the height of the needle bar so that the blade point of the hook passes the upper end of

the needle eyelet when the needle throws to the leftmost end of its zigzag stroke, if the zigzag width is set to 10 mm, run the machine at the speed of 4,000 rpm or less.

Presser foot	22580369
Throat plate	10041010
Feed dog	10047017

* LJ-2286N 出厂时摆动幅度规定为 8mm, 但是更换下列的压脚、针板、送布齿以及变更止动器的位置, 最大可以调整到 10mm。左摆时, 调整针杆高度, 让旋梭尖穿过孔上端。但是, 调整到 10mm, 转速到 10mm 后, 转速控制在 4,000rpm 以下。

压脚	22580369
针板	10041010
送布牙	10047017



A side is normally used

* For the LJ-2285N model of sewing machine, the zigzag width has been factory-limited to 6 mm.

However, the zigzag width can be adjusted up to the maximum of 8 mm by changing the position of the stopper.



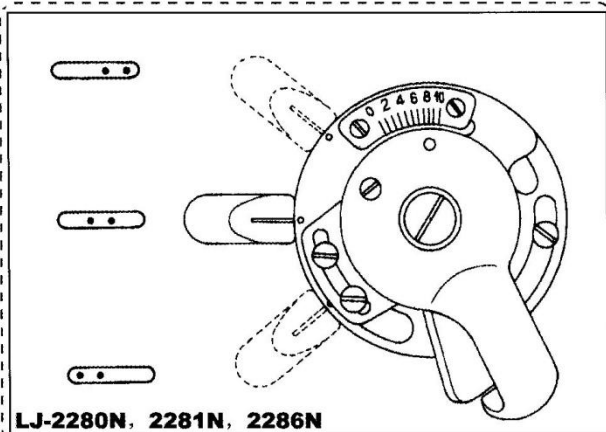
Take care not to tighten the screws ④ and ⑤ too firm causing the breakage of the knob.

通常使用A侧

LJ-2285N 出厂时摆动幅度规定为 6mm, 但是改变止动器的位置, 可以最多调整到 8mm。



固定螺丝 ④、⑤ 拧的过紧的话, 摆动幅度调节钮会被拧破, 请注意。



LJ-2280N, 2281N, 2286N

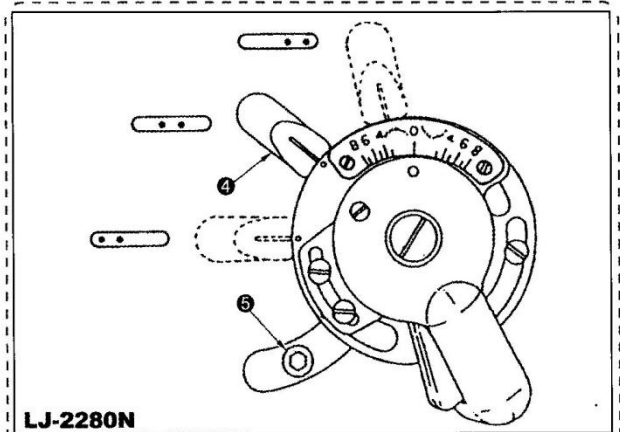
(2) Changing the needle position

★ The models LJ-2280N,-2281N,-2286N and -2288N have the needle position changing lever by which the needle position can be changed as desired.

When changing the position of needle entry,move the needle position changing lever as shown in the figure on the left.

(2) 变更针位置

★ LJ-2280, 2281N, 2286N, 2288N上带有机针位置变更杆。变更落针位置时, 请如图所示那样移动变更针位置手柄。



LJ-2280N

Loosen screw ④ with a 4 mm hexagon wrench key supplied with the and change the position of needle entry by moving needle position changing lever ⑤.



1. When operating the machine, screw has to be tightened without fall.
2. When sewing an inverse pattern, the lever has to be positioned at the center of its adjustment range.

用附属的4mm六角扳手拧松螺丝 ④, 移动机针位置变更杆 ⑤, 可以变更机针的落针位置。



1. 运转时, 请一定要拧紧螺丝。
2. 反转花样时, 一定把拉杆放到中央。

12. ADJUSTING PRESSURE OF THE PRESSER FOOT 压脚压力的调整

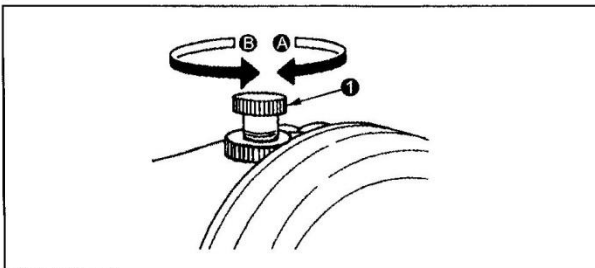


WARNING:

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注意:

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



- 1) Turn the presser spring regulator ① clockwise A to increase the pressure given by the presser foot.
- 2) Turn the presser spring regulator counterclockwise B to decrease it.

* Refer to page 22 for the pressure of the presser foot of the LJ-2285N model of sewing machine.

- 1) 向右方向 A 转动压脚调节螺丝 ①, 压力变大。
- 2) 向左方向 B 转动压力变小。

* LJ-2285N机请参照P. 22

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

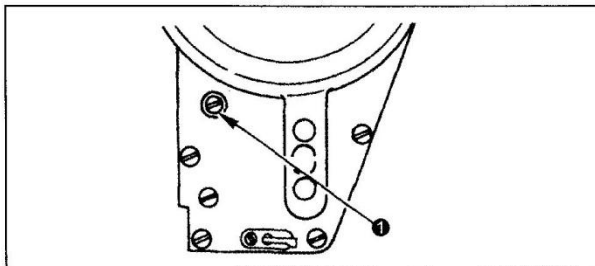


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- 1) To change the height of the presser bar or the inclination of the presser foot, loosen the presser bar connection screw ① and perform the adjustment properly.
- 2) After the adjustment, securely tighten the screw.

- 1) 变更压脚杆高度和压脚角度时, 拧松压脚轴套固定螺丝 ① 进行调整
- 2) 调整后, 把固定螺丝拧紧。

14. ADJUSTING THE MICRO-LIFTING MECHANISM OF THE PRESSER FOOT 压脚微量浮起调整

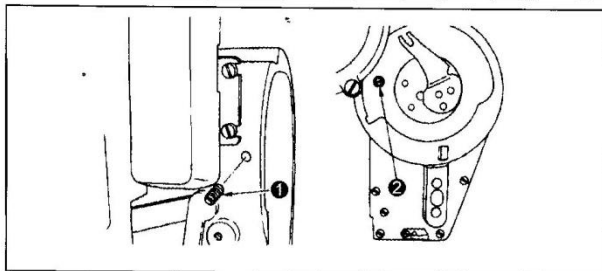


WARNING:

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注意:

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根据缝制材料的需要, 浮起压脚进行缝制参照下列调整方法。

- 1) 拧松压脚浮起固定螺丝 ①。
- 2) 从机台的孔部, 向右方向转动压脚浮起螺丝 ②, 把压脚升到需要的高度后拧紧固定螺丝 ①。



不使用时, 请把压脚浮起螺丝 ② 返回到原来位置。

Some type of material needs to be sewn with the presser foot slightly lifted.

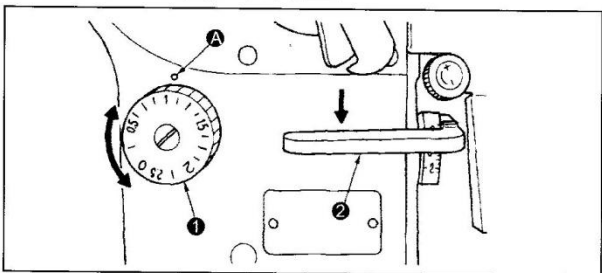
In this case, perform this adjustment following the procedure described below.

- 1) Loosen the setscrew ① in the presser foot micro-lifter.
- 2) Turn the presser foot micro-lifting screw ② clockwise through the hole in the face plate until the presser foot is raised as desired. Then, tighten the screw ①.



If you do not use the micro-lifting mechanism of the presser foot, fully return the presser foot micro-lifting screw ② to its home position.

15. ADJUSTING THE STITCH LENGTH 送布长度的调整



- 1) 顺箭头方向转动送布调节刻度盘 ①, 把希望的数字对准机臂刻度点 A。
- 2) 刻度的数字为mm。
- 3) 从大向小变更送布刻度时, 顺箭头方向按住送布杆 ②, 同时转动送布调节盘 ①。

倒缝时, 向下压倒缝送布杆 ②, 在压下的瞬间, 可以倒缝。手松开后, 倒缝送布杆返回原来位置, 缝纫机恢复为正方向送布。

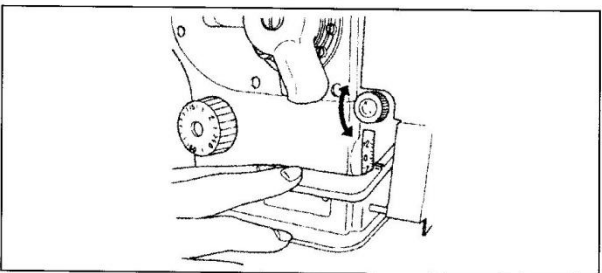
- 1) Turn the stitch length dial ① in the direction of the arrow so that the number corresponding to the desired stitch length meets the marker dot A engraved on the machine arm.

- 2) Numbers on the stitch length dial are calibrated in "mm".

- 3) To change the stitch length from a larger value to a small value, turn the stitch length dial ① while pressing the feed lever ② in the direction of arrow.

To perform reverse feed stitching, press down the feed lever ②. The sewing machine performs reverse feed stitching as long as you keep the feed lever held pressed. The feed lever will return to its home position and the sewing machine will run in the normal stitching direction when you release the feed lever.

16. ADJUSTING THE DENSER STITCHING 压缩针脚的调整



开始缝纫和缝纫结束时让针迹的间距缩短, 以及缝纫终止时等进行加固时使用。

- 1) 按下倒缝送布杆的同时转动拨盘, 倒缝送布杆便移动, 把刻度对准送布杆上的面调整密缝针迹。

- 2) 向+方向转动刻度盘, 倒缝的针迹缩小 (正送布的附件)。

+2表示 (正送布2mm), -2表示 (送布2mm)。

- 3) 密缝调整 (让倒缝按键动作, 不进行倒缝, 让正送的针迹变小) 也可以进行。

* 刻度值最大概的数字, 请边缝边调整。

Stitch length can be reduced at the start or end of sewing. This feature is used for fastening stitch.

- 1) If you turn the dial with the feed lever held pressed down, the feed lever will move. Adjust the stitch length for denser stitching taking the graduation which meets the top surface of the feed lever reference.

- 2) Turn the dial in the "+" direction to reduce the reverse feed stitch length (i.e. the feeding direction gradually changes to the normal one). "+" means "normal feed stitch length is 2 mm" and "-1" means "reverse feed stitch length is 2 mm".

- 3) The denser stitching can be adjusted under the normal stitching mode (when the one-touch type reverse feed switch is actuated, the feed will not move in the reverse direction but the normal feed stitch length will be reduced).

17. HEIGHT AND INCLINATION OF THE NEEDLE DOG 送布牙的高度、倾斜度

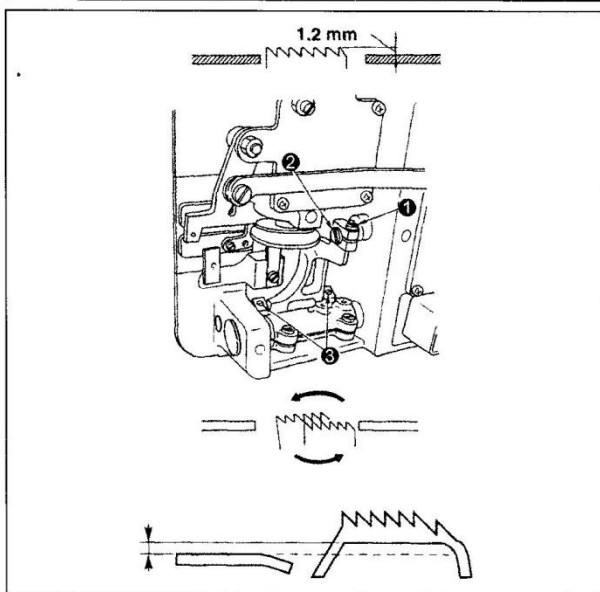


WARNING:

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注意:

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



(1) Height of the feed dog

- 1) To adjust the height of the feed dog, loosen the screw ① and turn the feed driving link pin ② using a screwdriver.
- 2) The standard height of the feed dog is 1.2mm. (in case of LJ-2285N 0.9mm)
- 3) To adjust the inclination of the feed dog, loosen the two screw ③ and turn the eccentric shaft inserting a screwdriver through the adjustment hole in the machine bed.
- 4) For the machine with a thread trimmer, there can be no space between the counter knife and the underside of the feed dog when adjusting the feed mechanism (change in height and timing) or using a commercially-available feed dog.

(2) Inclination of the feed dog

The standard inclination of the feed dog is obtained by adjusting the feed dog so that it becomes horizontal when it rises above the top surface of the throat plate.

* For LJ-2284C-7, see P.45

(1) 送布牙的高度

- 1) 调整送布牙高度时, 如图所示拧松上下送布环轴的固定螺丝 ①, 用螺丝刀转动上下送布环轴 ②。

2) 送布牙的标准高度为 1.2mm, LJ-2285N 为 0.9mm。

3) 送布牙与护针器的倾斜度调整, 如图所示拧松 2 根送布台轴固定螺丝 ③, 把螺丝刀穿过机座上的孔转动送布台轴。

4) 切线规格機種进行了送布调整(变更高度、同步等), 或使用市场出售的送布牙时, 有可能固定刀和送布牙下面的空间没有了, 这时, 可以往送布台下面的垫上送布台垫片(货号10025906)和在护针器下面垫上护针器垫片(货号22503908)以确保空间。

(2) 送布牙的倾斜度

送布牙的标准倾斜度为针板与送布牙出来时呈水平状态。

* 有关 LJ-2284NC-7, 请参照 P45 的说明。

18. ATTACHING/REMOVING THE HOOK 旋梭的安装与拆卸

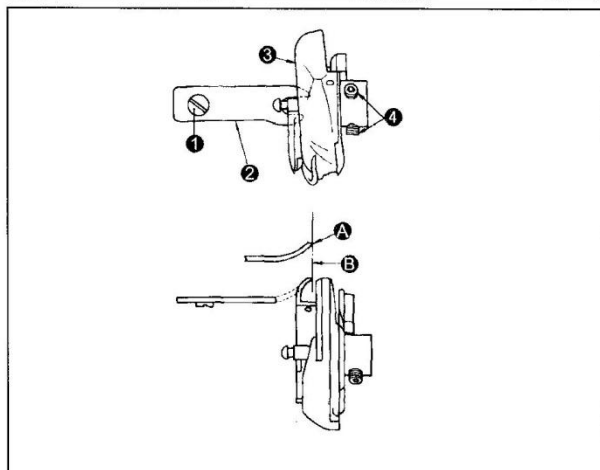


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When you replace the sewing hook, remove it in the following procedures:

- 1) Turn the handwheel until the needle reaches to its highest position.
- 2) Remove the needle, presser foot, throat plate, feed dog and bobbin case from the machine.
- 3) Remove the setscrew ① and take out the bobbin case positioning finger ②.
- 4) Loosen the two screws ④ and remove the sewing hook ③.

* Reverse the above procedures when inserting the sewing hook.

At this time, make sure that top end A of the bobbin case positioning finger is aligned with line B as shown in the figure on the left. Never let A protrude from line B.



The hook is exclusively designed to the LJ-2280N Series model of sewing machine. When placing an order for the hook in case of replacement or the like, designate it with its part number.

Hook: 22525851

更换旋梭时, 请按照以下的顺序进行。

- 1) 转动手轮, 把机针升到最高位置; 2) 卸下机针、压脚、针板、送布牙、梭套; 3) 卸下内旋梭固定螺丝 ①, 取下内旋梭挡块 ②; 4) 拧松 2 根送布梭 ④ 固定螺丝 ④, 取出旋梭。* 安装旋梭时, 请安与此相反的顺序进行。这时, 应让内旋梭前端 A 与图的 B 线基本一致, 但是, 前端不能从 B 线的右侧出来。

19. ADJUSTING HEIGHT OF THE NEEDLE BAR

针杆高度的调整

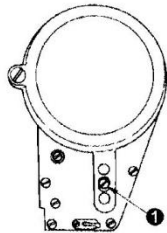
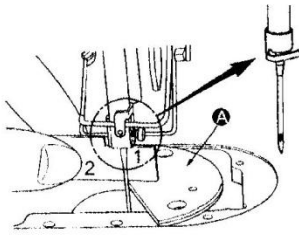


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- 1) 把摆动宽度设为0, 针的位置应在中央。
- 2) 卸下压脚、针板、月牙板、送布板。
- 3) 把半月牙A放到机座上, 如图所示拧松固定螺丝 ①, 把月牙板的上面到针杆的下端的高度调整成与同步板1相同的高度。



1. 因针板和月牙板的厚度不同, 所以调整时一定要使用月牙板。(调整时, 必须将摆幅调整为0, 在基准中心调整)。

2. LJ-2280N、LJ-2282N请使用带有D刻印的同步板, 其他机种(LJ-2285N、LJ-2286N、LJ-2281N、LJ-2288N、LJ-2284N、LJ-2284NU)请使用带有E刻印的同步板。

- 1) Set the zigzag width to "0", Bring the needle to the center of the zigzag stroke.
- 2) Remove the presser foot, throat plate, semicircle plate and feed dog.
- 3) Place a semicircle plate on the plane, to which the throat plate is to be attached, of the bed. Loosen the screw ①, and adjust so that a height difference of timing gauge 1 is provided between the lowest end of the needle bar and the top surface of the semicircle plate.



1. Thickness of the semicircle plate is different from that of the throat plate. So, be sure to use the semicircle plate when adjusting the height of the needle bar.

Be sure to perform the adjustment with zigzag width set to zero and with the needle positioned at the center of the zigzag stroke.

2. For the LJ-2280N and LJ-2282N, use the timing gauge on which the indication "D" is engraved. For the other types of models (LJ-2285N, LJ-2286N, LJ-2281N, LJ-2288N, LJ-2284N and LJ-2284NU), use the timing gauge on which the indication "E" is engraved.

20. ADJUSTING THE NEEDLE-TO-HOOK TIMING AND THE NEEDLE GUARD

针和旋梭的同步以及针板的调整

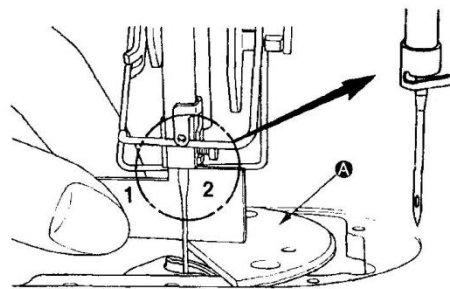


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(1) 旋梭位置的调整

- 1) 调整完针杆高度后, 在同步板2的高度, 让旋梭尖正好对准针的中央。
- 2) 此时, 护针器不要碰到机针, 让旋梭尖轻轻与机针相碰。

(2) 确认

最大摆幅度时 (标准为LJ-2280N: 5mm, LJ-2286N: 8mm) 的左摆, 针孔上端和旋梭尖头的距离应为0.2-0.5mm。

* 摆动宽度10mm时, 针杆高度不同时, 请再次调整针杆高度。

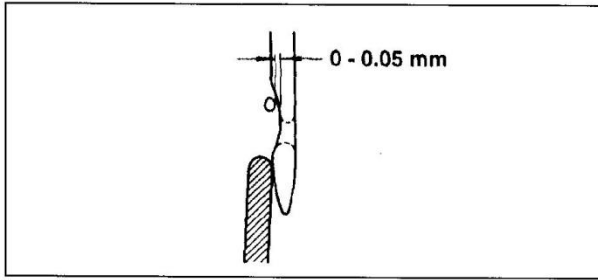
(1) Positioning the hook

- 1) After the completion of the adjustment of the needle bar height, adjust the hook using timing gauge 2 so that the blade point of the hook is aligned with the center of the needle.
- 2) At this time, the blade point of the hook should slightly come in contact with the needle when the needle guard does not touch the needle.

(2) Confirmation

Maximize the zigzag width (standard zigzag width of LJ-2280N: 5mm, standard zigzag width of LJ-2286N: 8mm). Bring the needle to the leftmost position of the zigzag stroke. Now, confirm that the top end of the needle eyelet is spaced 0.2 to 0.5mm away from the blade point of the hook.

- If the zigzag width is set to 10mm or the needle bar height is different from the standard one, re-adjust the height of the needle bar.



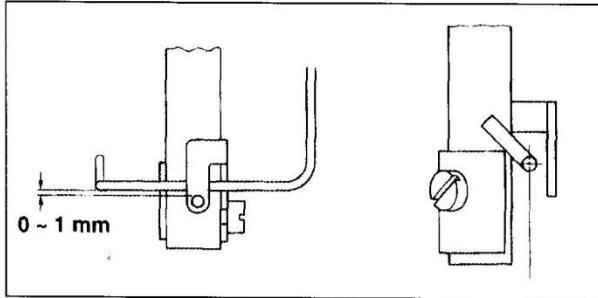
(3) 针板调整

- 1) 把摆动把宽度设置为最大，左右调整护针器，在左右位置都不使针和旋梭相碰。此时，针和旋梭尖的间隙为0-0.05mm。
- 2) 护针器是防止旋梭尖和针相碰损伤梭尖的装置，因此更换旋梭后一定要调整护针器的位置。

(3) Adjusting the needle guard

- 1) Maximize the zigzag width. Bend the needle guard to adjust so that the needle does not come into contact with the blade point of the both at the leftmost and rightmost positions of the zigzag stroke. At this time, adjust the clearance provided between the needle and the blade point of the hook to 0 to 0.05mm.
- 2) The needle guard functions to keep the needle away from the blade point of the hook, thereby preventing damage to the blade point of the hook, whenever you have replaced the hook with a new one, be sure to adjust the position of the needle guard.

21. AUXILIARY THREAD TAKE-UP LEVER 辅助挑线杆



LJ-2280N系列有的出口装有辅助挑线杆。

标准安装尺寸如左图所示。一般不需要调整，同时也请不要卸下来。

标准值为针杆在最下方时，针杆线孔上端离线簧0-1mm。

(最适值应根据线的种类不同)

The LJ-2280N series model of sewing machine is equipped with an auxiliary thread take-up lever in accordance with the destination to be delivered.

The standard dimensions for installing the auxiliary thread take-up lever are shown in the figure on the left. For the normal operation of the sewing machine, it is not necessary to adjust the auxiliary thread take-up lever. Be sure not to remove it.

Position the auxiliary thread take-up lever so that the wire is spaced approximately 0 to 1 mm away from the top end of the thread eyelet of the needle bar when the needle bar is in the lowest position of its stroke.

(The optimum value of the distance between the wire and the thread eyelet of the needle bar slightly varies in accordance with the type of thread to be used.)

22. INSTALLING THE CONTROL PANEL 控制盘的安装

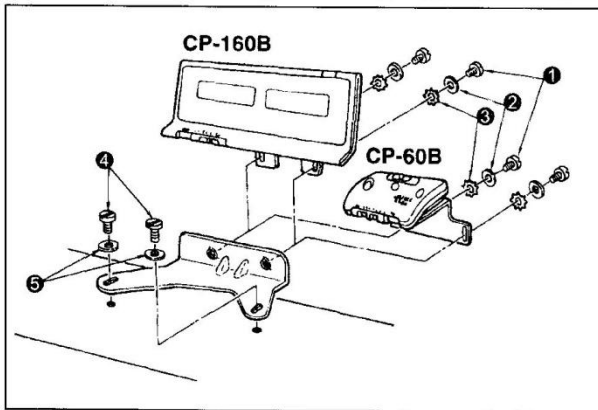


WARNING:

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.

注意:

为了防止突然启动造成人身事故，请关掉电源，请确认马达确实停止转动后再进行。



- ① SS7110840SP
- ② WP0450801SD
- ③ WT0530002KS
- ④ SS7120910SP
- ⑤ WP0531001SC

23. ADJUSTING THE PEDAL

踏板的安装

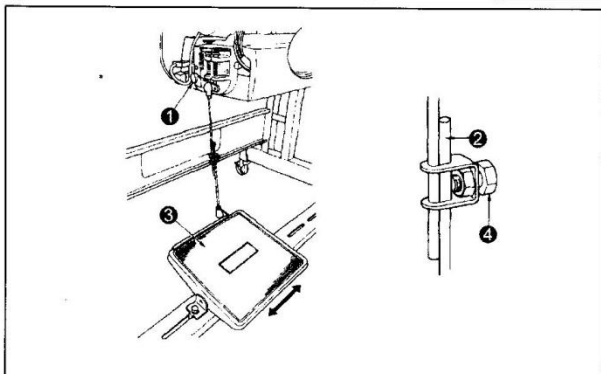


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(1) Attaching the connecting rod

- 1) Move the pedal adjusting plate (3) in the direction of the arrow to make the motor control lever (1) and the pedal connecting rod (2) straight.

(2) Inclination of the pedal

- 1) Inclination of the pedal can be adjusted by changing the length of the pedal connecting rod.
- 2) Loosen the adjusting screw (4), and move up or down the connecting rod (2) to change its length as desired.

(1) 连接杆的安装

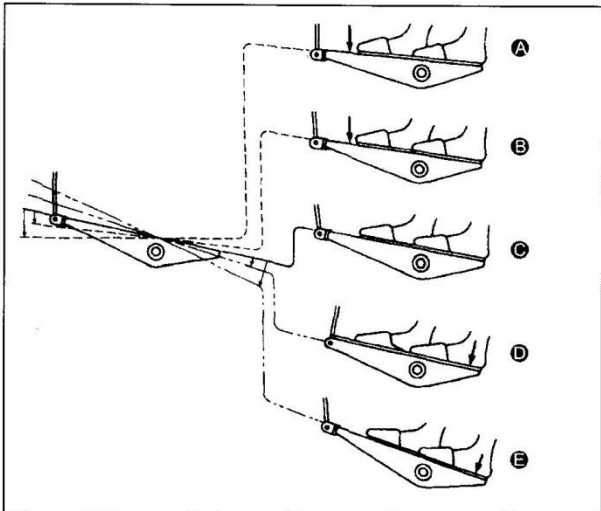
- 1) 向箭头方向移动踏板调节板 (3)，让马达控制杆 (1) 和连接杆 (2) 成一直线。

(2) 踏板的角度

- 1) 调节连接杆的长度既可以改变踏板的角度。
- 2) 拧松调节螺丝 (4)，移动连接杆 (2) 进行调节。

24. HOW TO OPERATE THE PEDAL

踏板的操作



The pedal is operated in four stages.

- 1) Lightly depress the front part of the pedal for low-speed (B).
- 2) Further depress the front part of the pedal for high-speed operation (A). (Note that the sewing machine will enter the high-speed operation mode after the completion of reverse feed stitching if the automatic reverse feed stitching function is specified with the corresponding switch.)
- 3) Bring the pedal back to its neutral position, and the sewing machine will stop running (C). (The needle stops in the highest/lowest position.)
- 4) Strongly depress the back part of the pedal, and the thread trimmer will be actuated (D).
* Lightly depress the back part of the pedal, and the presser foot will go up (E). Further depress the back part of the pedal, and the thread trimmer will be actuated.

踏板有4级操作。

- 1) 向前轻轻踩踏板为低速缝纫 (B)；
- 2) 在继续往前踩踏板为高速缝纫 (A)；(但是，设定了自动倒缝开关后，倒缝结束之后为高速缝纫)；

3) 轻轻踩踏板然后返回缝纫机停止 (C) (机针为上停止或下停止)；4) 向后踩踏板为切线动作 (D)。* 向后轻轻踩踏板，为压脚提升动作 (E)，在继续踩踏板为切线动作。

25. ADJUSTING THE STOP POSITION OF THE NEEDLE

机针停止位置的调整

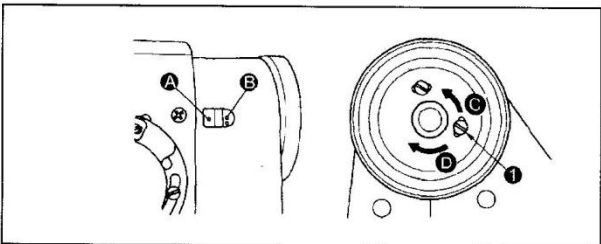


WARNING:

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(1) Stop position of the needle after thread trimming

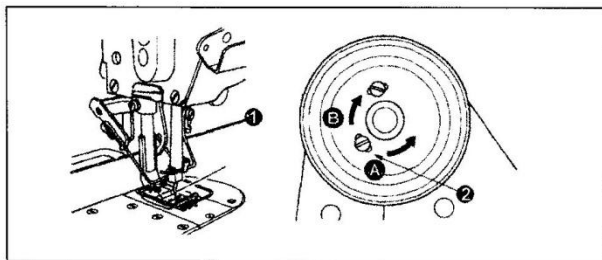
- 1) The needle stops at the standard stop position when red marker dot (A) engraved on the machine arm is aligned with white marker dot (B) engraved on the handwheel.
- 2) Stop the needle at the highest position of its stroke, loosen the screw (1), and adjust the stop position of the needle after thread trimming by moving the screw (1) within the slot.
① Move the screw in the direction (C) to advance the timing to

make the needle stop.

- ② Move the screw in the direction ① to retard the timing to make the needle stop.



Do not operate the sewing machine with the screw ① loosened. Only loosen the screw ① and do not remove it.



(2) 下停止位置

- 1) 踏板从前踩踏为中立时的机针下停止位置与上停止同样，让机针 ① 下停止之后拧松螺丝 ②，在长孔范围内进行调整。向 A 方向移动机针停止位置提前，向 B 方向移动机针停止位置推移。



拧松螺丝 ② 状态下能不要运转缝纫机。此螺丝只能拧松不能拧下来。

(1) 切线后的停止位置

- 1) 标准的机针停止位置是机架的刻点 A 和飞轮的白刻点 B 对齐的位置。
- 2) 让机针上升到停止位置，拧松螺丝 ①，在长孔范围进行调整。

- ① 向 C 方向移动机针停止提前。
- ② 向 D 方向移动机针停止推移。



拧松螺丝 ① 状态下请不要运转缝纫机。此螺丝只能拧松而不能拧下来。

(2) The lowest stop position of the needle

When you return the pedal to its neutral position after having depressed the front part of it, the needle stops at the lowest stop position. As in the case of the adjustment of the highest stop position of the needle, stop the needle ① in the lowest position of its stroke, loosen the screw ②, and adjust the lowest stop position of the needle by moving the screw ② within the slot. Move the screw in the direction A to advance the timing to make the needle stop or in the direction B to retard it.



Do not operate the sewing machine with the screw ② loosened. Only loosen the screw ② and do not remove it.

26. ONE-TOUCH TYPE REVERSE FEED SWITCH LEVER

触键手动倒缝

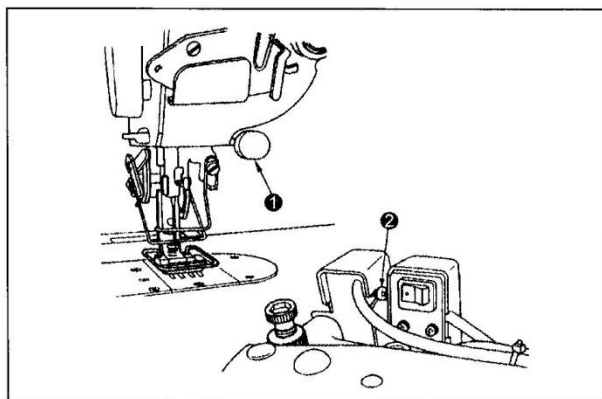


WARNING:

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注意:

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(1) How to use the reverse feed switch lever

- 1) Press down the swith lever ①, and the machine will immediately run in the reverse direction.
- 2) Reverse stitching is performed as long as you keep the lever held pressed down.
- 3) Release the swith lever, and the machine will immediately run in the normal direction.

(1) 使用方法

- 1) 按开关拨杆 ①，缝纫机立即变为倒送，进行倒缝。
- 2) 按下拨杆的时间，可以进行倒缝。
- 3) 放开拨杆，则立即返回正缝。

(2) Height of the reverse feed switch lever

- 1) Adjust the height of the switch lever ① for your convenience.
- 2) Loosen the screw ②, and adjust the height of the switch lever as desired by moving it up or down.

(2) 开关拨杆的高度

- 1) 请把开关拨杆 ① 的高度调整到使用方便的位置。
- 2) 拧松螺丝 ②，上下移动就可以调整高度。

27. ADJUSTING THE THREAD TRIMMER

切线的调整

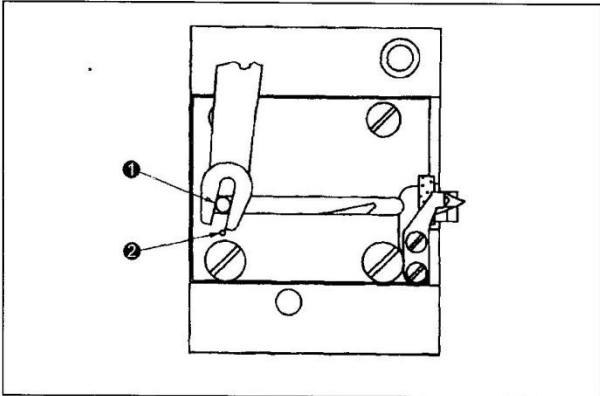


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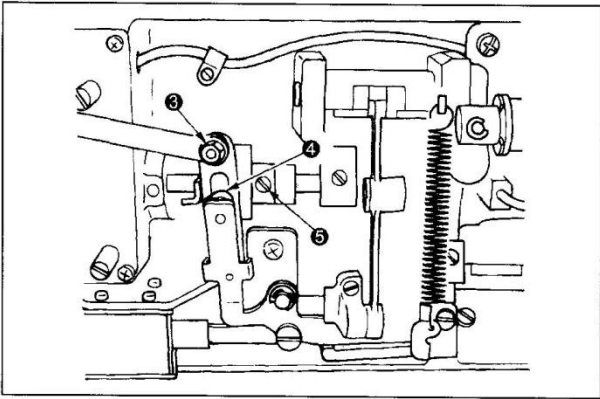


(1) Initial position of the moving knife

When the moving knife is in its initial position, the moving knife pin ① should be aligned with the engraved marker dot ② as shown in the figure on the left.

(1) 移动刀的初期位置

移动刀的初期位置如图所示，让移动刀销钉 ① 与刻点 ② 一致。



* If the initial position of the moving knife is not correct

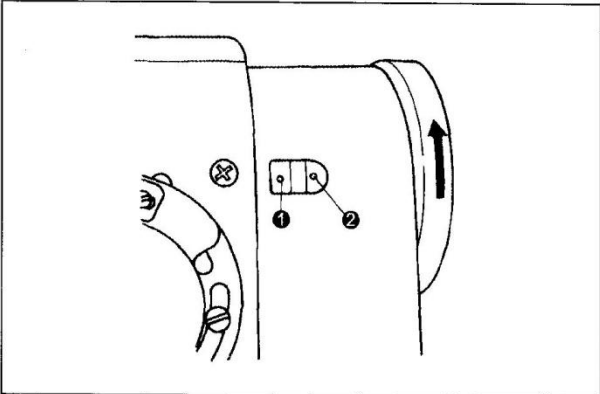
Loosen the nut ③, and move the moving knife to the right or left until the pin ① meets the marker dot ②.

Then, tighten the nut ③.

* 初期位置不正确时

拧松螺母 ③，左右移动，调整 ① - ②。

在适合的位置拧紧螺母 ③。



(2) Adjusting the thread trimming timing

Put the roller ④ in the cam groove. Now, gradually turn the handwheel in the reverse direction. The handwheel will go no further when the red marker dot ① engraved on the machine arm is aligned with the red marker dot ② engraved on the handwheel.

To adjust the thread trimming cam, align the red marker dot on the machine arm with the red marker dot on the handwheel, put the roller in the groove of the thread trimming cam, and turn the handwheel in the direction opposite to the direction of rotation of the hook driving shaft until it will go no further. Now, tighten the two screws ⑤.

(2) 切线同步的调整

把凸块 ④ 嵌入凸轮槽的状态，静静的逆转飞轮时，机架的刻点 ① 和飞轮的红刻点 ② 对准的位置，飞轮不能转动。

调整切线凸轮时，机架罩和飞轮的红刻点对齐，凸轮嵌入凸轮槽的状态下，慢慢向与下轴转动相反的方向转，在停止的位置把螺丝 ⑤ 固定起来。

28. NEEDLE THREAD FEEDING DEVICE

切线的调整

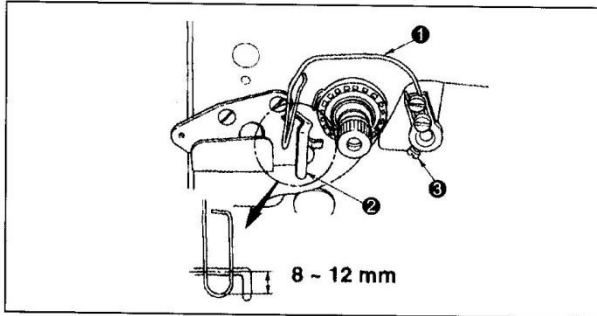


WARNING:

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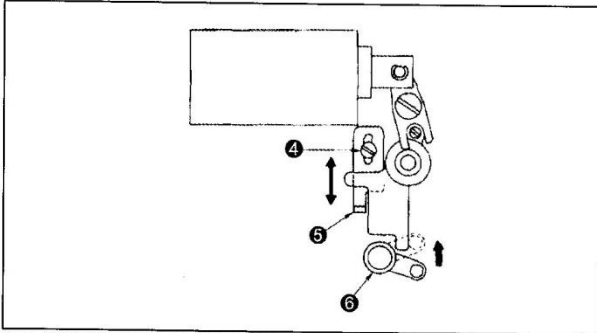


(1) Position of the feeding wire

Adjust the installing position of the feeding wire ① so that a distance of 8 to 12 mm is provided between the guide portion ② of the thread guide A and the top end of the wire. Then, tighten the two screw ③.

(1) 拉线钢丝的位置

安装拉线钢丝 ① 时, 请把挑线杆导向器 A ② 和钢丝前端的距离调整为 8-12mm, 然后固定好固定螺丝 ③ (2个)。



(2) Adjusting the stroke of the feeding wire

- 1) Increase the feeding amount of the needle thread if the needle thread fails to interlace with the bobbin thread or is likely to slip out of the needle eyelet at the start of sewing.
- 2) To increase the feeding amount of the needle thread, loosen the screw ④ in the feeding stopper ⑤ and move down the stopper.



If the feeding amount of the needle thread is excessive, the thread will be likely to break.

* When the feeding wire is not used

Pull up the stopper knob ⑥, turn it counterclockwise and fit the top end of the knob in the hole located above the knob.

(1) 拉线钢行程的调整

- 1) 开始缝, 如有针迹松脱或线容易拔出时, 请把拉线量增大。
- 2) 把拉线量增大时, 请拧松拉线挡块 ⑤ 的固定螺丝 ④, 向下移动调整。



拉线量过大时, 会容易发生短线现象

* 拉线钢丝不能动时

向上拉挡块旋钮 ⑥, 左右转动让其前端进入上方的孔内。

29. POSITION OF THE WIPER

拨线器的位置

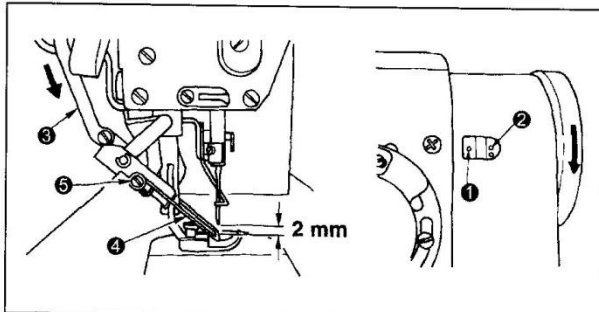


WARNING:

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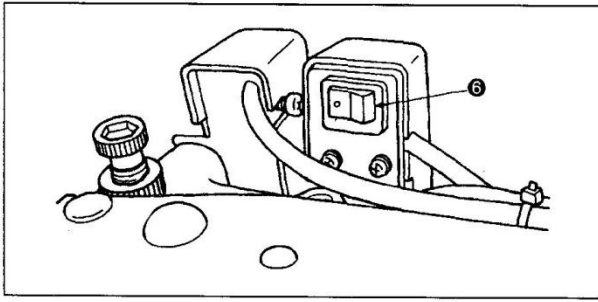
注意:

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



- 1) Align the red marker dot ① engraved on the machine arm with the white marker dot ② engraved on the handwheel (the 2nd white marker dot in terms of the direction of rotation of the sewing machine).
- 2) Move the rod ③ in the direction of the arrow, and adjust the clamping screw ⑤ so that an approximate 2 mm clearance is provided between the top end of the needle and the wiper ④.

- 1) 把机臂的红刻点 ① 对准手轮的白刻点 ② (缝纫机旋转方向的第二个白刻点)。
- 2) 沿箭头方向转动杆 ③, 把针前端和拨线杆 ④ 的间隙调整为 2mm 左右, 然后再拧紧固定螺丝 ⑤。



- If you do not use the wiper, turn OFF the seesaw switch ⑥ of the wiper.
- 不需要使用拨线杆时，请关掉拨线开关 ⑥。

30. REMPLACING THE PATTERN CAM FOR LJ-2288N LJ-2288N花样凸轮的更换

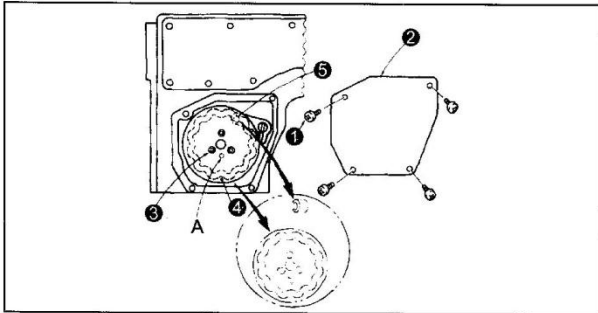


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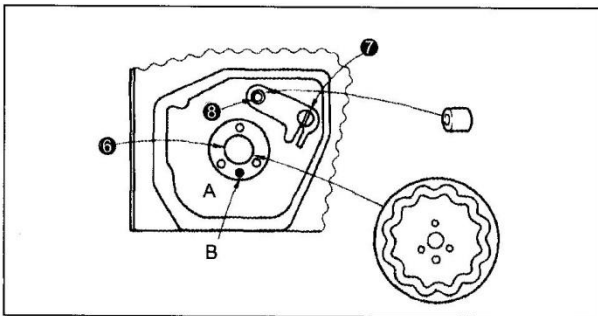


1) Replacing the pattern cam

- Remove the four screws ① and remove the cover ②.
- Remove the three screws ③ with a 4 mm hexagon wrench. Key supplied with the machine. Then, remove the cam ④ and the roller ⑤.

(1) 花样凸轮的拆卸方法

- 卸下4个固定螺丝 ①，再卸下防护罩 ②。
- 用附属的4mm扳手卸下3个固定螺丝 ③，然后再卸下凸轮 ④ 和凸块 ⑤。



2) Attaching procedure of the pattern cam

- Attach a new roller to the pin ⑧, put the cam over the shaft ⑥ and press the cam until it comes in contact with the roller.
- Turning the cam by means of the slot in ⑦, thrust the roller in the groove on the cam.
- Then, lightly turn the cam by hand to make the hole A to be aligned with the pin B and fit the pin in the hole. (The shaft protrudes from the cam by approximately 2mm.)
- Tighten the screws and attach the cover in position.



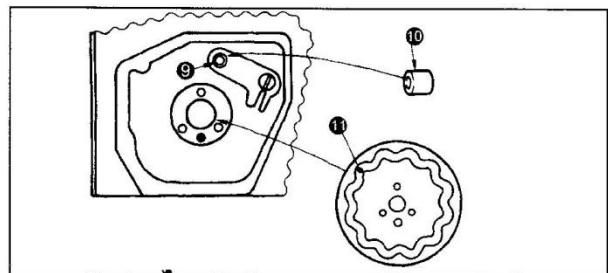
The cam and roller have to be always replaced together.

(2) 花样凸轮的安装方法

- 把新的凸块安装到销钉 ⑧ 上，把凸轮穿到轴 ⑥ 上并顶到凸块。
- 用 ⑦ 的叉口转动，把凸块压进凸轮的里面。
- 用手轻轻的转动凸轮，孔A对准销钉B，压进去。(轴比凸轮突出约2mm)
- 拧紧固定螺丝，安装好防护罩。



请一定要更换凸轮和凸块。



(3) Application of grease

- When replacing a cam or periodically once every six months, replenish grease to the cam components.
- Apply grease to pin ⑨, roller ⑩ and inside cam groove ⑪.
- Use Lithium-based grease.

Lithium-based grease No.2

Manufacturers	Name of grease
ESSO	Listan 2, Beacon 2
SHELL	Alibania
NIPPON SEKIYU	Multinock 2, Epinock 2
KYODO SEKIYU	Rezonix 2
IDEMITSU KOSAN	Koronex 2

(3) 润滑脂的加油

- 更换凸轮后和每半年更换一次润滑脂。
- 润滑脂加油地点有：销钉 ⑨、凸块 ⑩、凸轮沟 ⑪。
- 请使用锂系润滑脂。

锂系2号润滑脂

厂家名称	品名
EESO	Listan 2, Bescon 2
壳牌石油	Albania
日本石油	Multinock 2, Epinock 2
共同石油	Rezonix 2
山光兴产	Koronex 2

31. ADJUSTING LJ-2285N MODEL OF SEWING MACHINE

LJ-2285N的调整

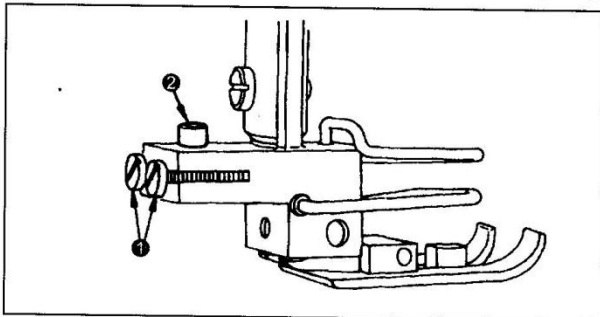


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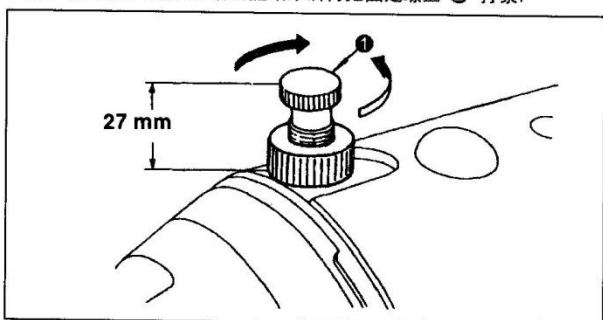


(1) Adjusting uneven material feed of the right and left wings of the presser foot of the LJ-2285N

1) If the right and left wings of the presser foot fail to feed the material uniformly, loosen the clamp screw ② and tighten or loosen the pressure adjusting screws ① of the wing of which pressure is lower than the other wing so that both wings of the presser foot evenly apply pressure to the material. Note that this adjustment will be invalid when the presser spring regulator has been excessively tightened. After the completion of the adjusting, tighten the clamp screw ②.

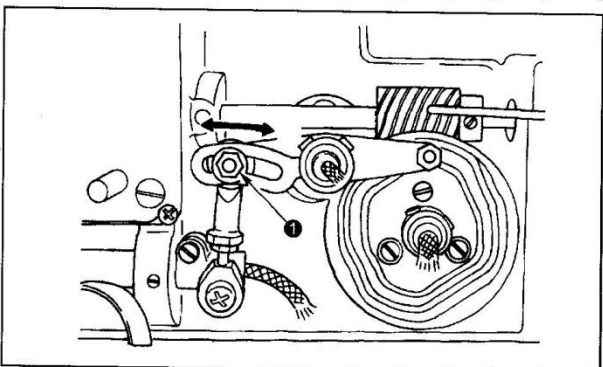
(1) 左右送布不同的调整

1) 左右送布不同时, 请拧松压脚压力固定螺丝 ②, 把送布力弱的压脚压力调整螺丝 ① 拧紧, 把压力强的调整螺丝拧松。但是要注意压力过强的话, 有可能不能调整。请调整结束后再把固定螺丝 ② 拧紧。



2) For LJ-2285N model of sewing machine, uneven material feed caused by a pressure difference between the right and left wings of the presser foot cannot be adjusted when the pressure of the presser foot has been excessively increased. The standard pressure (approximately 24.5N) is obtained when the top end of the presser spring regulator rises above the seat by 27 mm.

2) LJ-2285N压脚压力过大的话, 左右送布就不能调整。标准为底座到调整螺丝上端的距离为27mm。



(2) Adjusting the stitch length

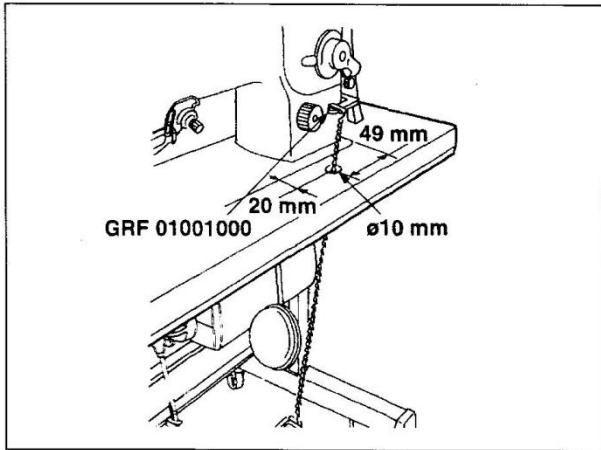
- 1) Tilt the machine head away from you.
- 2) Loosen the nut ①.
- 3) Move the rod to the left to increase the stitch length or to the right to decrease it.
- 4) Securely tighten the nut ①.
- 5) Lift the machine head properly.

(2) 缝距的调整

- 1) 把缝纫机向后方放倒。
- 2) 拧松螺母 ①。
- 3) 弄长缝距时, 向左移动杆, 弄短缝距时, 向右移动杆。
- 4) 把螺母 ① 拧紧。
- 5) 缝纫机放回原有位置。

32. PEDAL-OPERATED REVERSE FEED DEVICE (RF-1)

踏板倒缝装置(RF-1) [选购品]



When you sew bulky materials, it is not easy to operate the feed lever with your right hand to make the machine perform reverse feed stitching.

In this case, attach the RF-1 device to your sewing machine. This device allows you to reverse the sewing directions as desired with your foot instead of your right hand.

The figure on the left shows the device installed on the sewing machine. When using the device, be sure to replace the feed lever tension spring (MAT80117S00) supplied with the RF-1.

为了方便使用双手来操作, 请使用RF-1装置. 此装置可以不用右手便可方便地进行倒缝.

如图所示, 安装时必须同时把送布杆弹簧 (B1646555000). 换成RF-1附属的弹簧 (MAT80117S00).

33. MOTOR PULLEY AND BELT

马达皮带轮和皮带

(1) For the sewing machine without a thread trimmer

- 1) The driving motor of this machine is a 400 watts(2P) clutch motor.
- 2) Use the M type V belt.
- 3) The attainable sewing speeds are determined by the diameter of the motor pulley and the length of the belt as listed below.

Outer diameter of motor pulley mm.	Motor pulley part No.	Sewing speed(rpm)		Belt length mm(inch)	Belt Part No.
		50Hz	60Hz		
135	MTKP0130000	5480	----	1168(46)	MTJVM00460A
130	MTKP0125000	5270	----		
125	MTKP0120000	5060	----	1143(45)	MTJVM00450A
120	MTKP0115000	4850	----		
115	MTKP0110000	4630	----		
110	MTKP0105000	4440	5330	1118(44)	MTJVM00440A
105	MTKP0100000	4250	5040		
100	MTKP0095000	4000	4780		
95	MTKP0090000	3820	4540		
90	MTKP0085000	3610	4320	1092(43)	MTJVM00430A
85	MTKP0080000	3390	4000		
80	MTKP0075000	3160	3790		
75	MTKP0070000	2950	3520		
70	MTKP0065000	2740	3260		
65	MTKP0060000	2530	3020	1067(42)	MTJVM00420A
60	MTKP0055000	2320	2760		

(1) 无切线时

- 1) 请使用输出功率400W (2P) 的离合马达.
- 1) 请使用M型V型皮带
- 1) 马达皮带轮和皮带长度、缝纫机转速的关系如下表所示.

马达皮带轮外径 (mm)	精密牌带轮的货号	风速(rpm)		皮带长度 mm(inch)	皮带货号
		50Hz	60Hz		
135	MTKP0130000	5480	----	1168(46)	MTJVM00460A
130	MTKP0125000	5270	----		
125	MTKP0120000	5060	----	1143(45)	MTJVM00450A
120	MTKP0115000	4850	----		
115	MTKP0110000	4630	----		
110	MTKP0105000	4440	5330	1118(44)	MTJVM00440A
105	MTKP0100000	4250	5040		
100	MTKP0095000	4000	4780		
95	MTKP0090000	3820	4540		
90	MTKP0085000	3610	4320	1092(43)	MTJVM00430A
85	MTKP0080000	3390	4000		
80	MTKP0075000	3160	3790		
75	MTKP0070000	2950	3520		
70	MTKP0065000	2740	3260		
65	MTKP0060000	2530	3020	1067(42)	MTJVM00420A
60	MTKP0055000	2320	2760		

(2) For the sewing machine with a thread trimmer

- 1) Be sure to use the motor in combination with an SC-1. Use the motor pulley of which outside diameter is 70 mm.
- 2) Use the proper exclusive HM type V belt of 1016 mm (MTJVH00430A).

(2) 带切线时

- 1) 请一定使用SC-800 马达，马达皮带轮的外径为70 mm.
- 2) 请使用专用的HM型V型皮带1016mm (MTJVH00400A).

34.TROUBLES AND CORRECTIVE MEASURES

Trouble	Cause	Corrective measures	See page
Thread breakage	1 When the thread gets entangled in the thread take-up lever.	Remove the entanglement.	9
	2 When the needle thread is threaded in a wrong way.	Thread it correctly.	9
	3 When the thread gets entangled in the sewing hook.	Remove the entanglement.	15
	4 When the needle thread is excessively tight or loose.	Adjust the thread tension.	10
	5 When the needle thread slips in the rotary tension.	Increase the tension of the pretension disk.	10
	6 When the tension of the thread take-up spring is excessively high or low.	Adjust the tension of the take-up spring.	10
	7 When the stroke of the thread take-up spring is excessively large or small.	Adjust the stroke of the take-up spring. (8 to 12 mm)	15
	8 When the timing of the sewing hook and the needle is not matched.	Adjust the timing.	15
	9 When there is a scratch on the thread path of hook.	Remove such a scratch or replace the component.	
	10 When the thread is not suitable. a The quality of the thread is poor. b The thread is too thick for the needle. c The thread is broken by heat.	Use a thread of good quality. Use a suitable thread or needle. Use silicone Oil Lubricant unit.	
	11 When the stitch is skipped.	Refer to the following paragraphs,Stitch skipping.	
Stitch SKIPPED	1 When the needle is inserted in a wrong way. a The needle is not entirely inserted into the needle bar b The needle eye is not facing straight to the operator. c The needle is facing backwards.	Fully insert the needle Let the needle eye face straight to the operator. Let the long groove on the needle face to the operator.	7 7 7
	2 When the needle itself is not suitable. a The needle is bent. b The quality of the needle is not good. c The needle is too thin for the thread. d Bunt needle is used.	Replace it with a new needle. Use a needle of good quality. Use a suitable needle or thread. Replace it with a new needle. Resharpen the hook or replace it.	7
	3 When the hook blade point is not sharp enough or damaged.		
	4 When the timing of the sewing hook and the needle is not matched.	Adjust the timing properly.	15
	5 When the height of the needle bar is not correct.	Adjust the height of the needle bar.	15
	6 When the clearance between the needle and the sewing hook is too great.	Adjust the clearance.	16
	7 The position of the auxiliary thread take-up lever is wrong.	Adjust the position of the auxiliary thread take-up lever properly.	
Loose STITCH	1 When the needle thread tension is too low.	Increase the needle thread tension.	10
	2 When the tension of the thread take-up spring is too low.	Increase the tension of the spring.	10
	3 When the tension of the bobbin thread is too high.	Decrease the bobbin thread tension.	10
	4 When the timing of the sewing hook and the needle is not matched.	Adjust the timing correctly.	51
	5 When the thread is too thick for the needle.	Use a suitable needle or thread.	
	6 Thread slips out of the rotary tension.	Increase the tension of the pretension disk.	10
Irregular STITCH tightness	1 When the bobbin thread tension is too low.	Increase the bobbin thread tension.	10
	2 When the bobbin thread is not wound correctly.	Wind up the bobbin thread evenly.	8
	3 When there is a scratch on the thread path of the sewing hook bobbin case,thread take-up lever or any other parts.	Remove such a scratch or replace the component	
Needle PROBLEMS	1 When the needle is bent.	Replace it with a new needle.	
	2 When the quality of the needle is not good.	Use a needle of good quality.	
	3 When the needle is not entirely inserted into the needle bar	Insert the needle into the needle bar as far as it will go..	7
	4 When the needle hits the sewing hook.	Adjust the timing and clearance between the needle and the sewing hook and also the position of the needle guard.	15
	5 The needle is too thin for the sewing material and thread.	Replace a suitable needle.	
	6 The needle hole in the throat plates is too narrow.		
	7 The needle hits against the throat plate.		
	8 The needle hits against the presser foot.		

34. 缝制不良的原因和解决方法

现象	原因	处理方法	参考页
断线	<ol style="list-style-type: none"> 1、挑线杆上绕线 2、上线的穿线方法不对 3、旋梭上绕线了 4、上线张力过强或过弱 5、张力弱，线打滑 6、挑线弹簧张力过强，或过弱 7、挑线弹簧的工作范围过大或过小 8、机针和旋梭的同步不好 9、旋梭，梭壳、挑线杆等等轨道上有伤痕 10、线有问题 <ol style="list-style-type: none"> a. 线的质量不好 b. 线比针粗 c. 洗受热溶解 11、跳针 	拆除卷绕的线 正确的穿线 拆除卷绕的线 把张力调整到适当 加强张力 把张力调整到适当 调整到适当的动作范围（8-12mm） 调整同步 修正伤害，或更换新品 换成质量好的线 使用适当的针活适当的线 安装线冷却装置 参照下一项目跳针	9 9 15 10 10 10 10 15
跳针	<ol style="list-style-type: none"> 1、机针的安装方法不正确 <ol style="list-style-type: none"> a. 没有完全插入针杆 a. 针孔没有对正 a. 针装反了 2、机针有问题 <ol style="list-style-type: none"> a. 针弯了 a. 针的质量不好 a. 针鼻线细 a. 针尖豁了 3、旋转尖弯曲和折断 4、机针和旋梭的同步不好 5、针杆的高度不适当 6、针和旋梭的间隙过大 7、辅助挑线杆的位置不正确 	把针插到针杆的深处 把针安装到正面 插到针杆的里面 换新针 换质量好的针 换合适的针或合适的线 换新针 修理旋梭尖，或换新品 调整同步 调整针杆高度 调整间隙调整辅助挑线杆的位置	7 7 7 7 15 15 15 16
紧线不良	<ol style="list-style-type: none"> 1、上线张力过弱 2、挑线弹簧的张力过弱 3、底线张力过强 4、机针和旋梭的同步不好 5、与针相比线过粗 6、张力弱，线打滑 	增强张力 增强张力 增强张力 调整同步 使用适当得当针或适当的线 增加皮带张力	10 10 10 15 10
紧线不匀	<ol style="list-style-type: none"> 1、底线张力过弱 2、底线绕线不好 3、旋梭、梭壳、挑线杆等轨道有伤痕 	增强张力 正确绕线 修理伤痕，或更换新品	10 8
断针	<ol style="list-style-type: none"> 1、机针弯曲了 2、针的质量不好 3、针没有完全插入针杆 4、针与旋梭相碰 5、与缝制物的线相比针过细 6、针板的针孔过细 7、针和针板相碰 8、针和压脚相碰 	换新针 换质量好的针 插到针杆的里面 调整针和旋梭的同步，间隙，针座的位置 换合适的针	7 15

LJ-2282N LJ-2282-7

High-speed,1-needle,Lockstitch,Standard Zigzag Stitching Machine with Lower Knife
高速单针平缝2点曲折缝缝纫机（带下切刀）



CAUTION:

Instructions described in these pages are for LJ-2282N,2282N-7 only.

Instructions other than those described there are the same as those for LJ-2280N,2280N-7

注意:

本书只记述有关LJ-2282N, 2282N-7系列的说明, 本书以外的有关项目与LJ-2280N, 2280N-7相同.

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I . SPECIFICATIONS

规格

Type	LJ-2282N	LJ-2282N-7	Remarks
Stitch system	Standard zigzag		
Stitch diagram			
Max.sewing speed	5000(rpm)		Depending on the type of material and process
Max.needle throw	3(mm)		
Max.feeding amount	2.5 mm*Factory-set to 1.5 mm at the time of delivery		
Needle	SCHMETZ134SUK,438:#65 to #90,ORGAN DPx5:#9 to #14		
Cutting allowance	1.5(mm)		For straight stitching
Max.lift of the persser foot	10(mm)		7 mm for the presser foot provided with a wiper
Lubricating oil	No.15		


型号	LJ-2282N	LJ-2282N-7	备注
缝纫形式	标准曲折缝		
线迹显示			
最高转速	5000 (rpm)		根据布料和工序
最大摆动宽度	3 (mm)		
最大送布量	2.5 (mm) *标准出货为1.5 mm		
使用机针	精密牌134 SUK, 438: #65-#90, 风琴牌DPx5: #9-#14		
切边宽度	1.5 (mm)		直线缝纫时
最大压脚提升量	10 (mm)		安装拨线杆时7 mm
使用机油	No. 15		

II . INSTALLATION

安装

1.checking of setting the supply voltage

确认电源电压的设定

	<p>WARNING: * Be sure to set the supply voltage before installing the electrical box on the sewing machine table.</p> <p>* Be sure to set the supply voltage before connecting the power cable to the power switch.</p> <p>* Detach the power plug of the ewing machine from the receptacle before starting the work.</p> <p>注意: * 请在缝纫机机台安装前进行.</p> <p>* 打开电源开关之前, 请连接好电源线.</p> <p>* 请把缝纫机的电源插头从插座上拔下之后再进行设定.</p>
---	--

(1) Checking the supply voltage established

Checking the supply voltage you have set against the supply voltage given on the supply voltage label adhered on the power cable of the electrical box.Make sure that the voltage matches the supply voltage to be actually used.

If the voltage dose not match the supply voltage to be actually used,see the next item"(2)Changing the supply voltage".



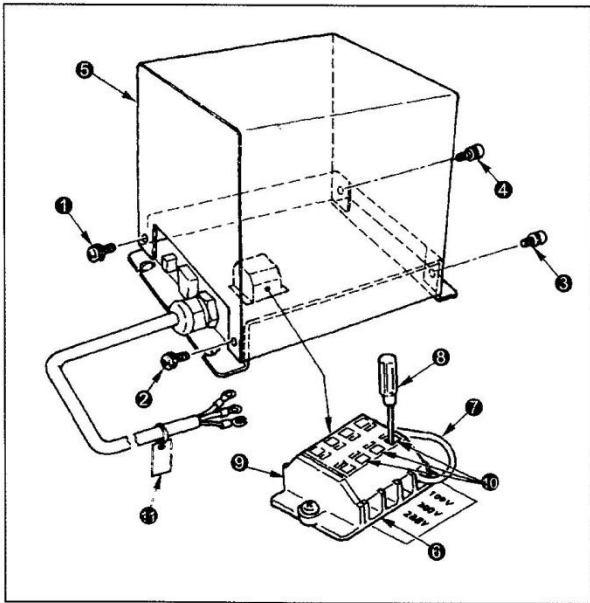
The supply voltage can be changed over among 100 V,200 V and 230 V.

(1) 电源电压的设定确认

电源电压标志在电气箱的电源线上. 请确认使用的电压是否符合要求. 如果不同时请参阅下面的[(2) 电源电压设定的变更].



100 V,200 V,300 V 可以转换.



(2) Changing the supply voltage

If the supply voltage you have set does not match the supply voltage to be used, appropriately change the setting of the supply voltage.

- 1) Remove screws ① to ④ shown in the illustration and detach cover ⑤.
- 2) Pressing portion ⑩ on terminal block ⑥ with small slotted screwdriver ⑧, draw out brown cord ⑦.
- 3) Pressing portion ⑩ corresponding to the supply voltage to be used with small slotted screwdriver ⑧, insert brown cord ⑦ into the ⑧ supply voltage slot. Then, release the screwdriver from the portion.



Slightly pull brown cord ⑦ to check to be sure that the cord will not come off.

- 4) Place cover ⑤ and fix it with screws ① to ④.
- 5) Appropriately correct the indication of the supply voltage given on supply voltage label ①.

(2) 电源电压的变更

如果使用的电源与设定电压不同时，请按照以下顺序变更设定。

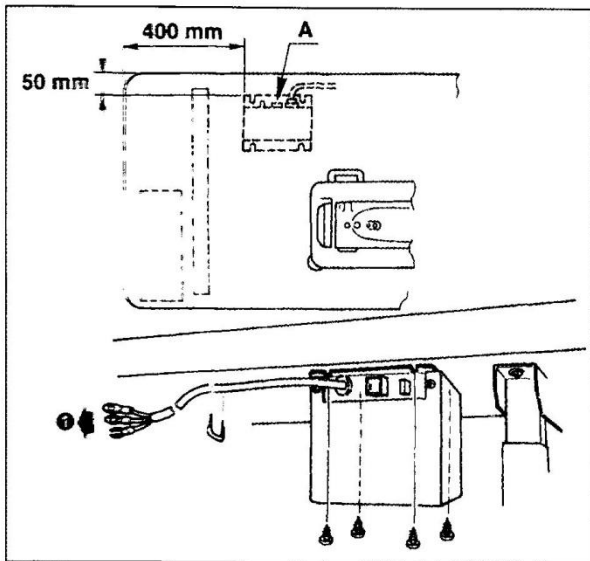
- 1) 卸下图中 ① - ④ 的螺丝，再卸下外罩 ⑤。
- 2) 用小一字螺丝刀 ⑧ 从上方向下按端子台 ⑥ 上的 ⑩ 部分，拔下绿色电线 ⑦。
- 3) 用小一字螺丝刀 ⑧ 按下使用电压的 ⑩ 部分，然后把绿色电线 ⑦ 插进去，再拔下螺丝刀 ⑧。



请轻轻拉绿色电线 ⑦，确认是否连接牢固拔不下来。

- 4) 盖上外罩 ⑤，用螺丝 ① - ④ 固定。
- 5) 请修正电压设定值 ① 上的表示。

2. Installing the electrical box 电器箱的安装



Fix the electrical box (MC-150) on the underside of the table at the location illustrated with four wood screws. At this time, position the electrical box so that power cable and the fuse box are placed on A side. Connect power cable ① to the power switch.

用木螺丝 (4) 处把电气箱 (MC-150) 固定到机台背面如图所示的位置。此时，请把电源线\保险丝箱连接到A侧。

- ① 连接电源开关。

3. Connecting the power cable 电源线的连接

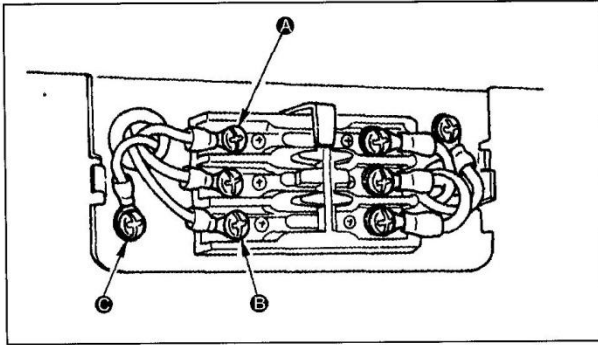


WARNING:

Be sure to connect the power cable with the power plug removed from the receptacle.

注意:

请一定把电源插座插头从插座上拔下之后再连接。



- 1) Detach the cover of the power switch for sewing machine motor.
- 2) The power cable coming from the electrical box contains three different cords. Connect the brown cord to portion **A**, light blue cord to portion **B** and green/yellow cord to portion **C** (FG) of the power switch.

- 1) 卸下缝纫机马达用的电源开关。
- 2) 把从电气箱出来的褐色电源线连接到电源开关的 **A** 部，把天蓝色线连接到 **B** 部，把绿色/黄色电线连接到 **C** 部 (FG)。
- 3) 安装上电源开关外罩。

4. Connecting the cords 电线的连接

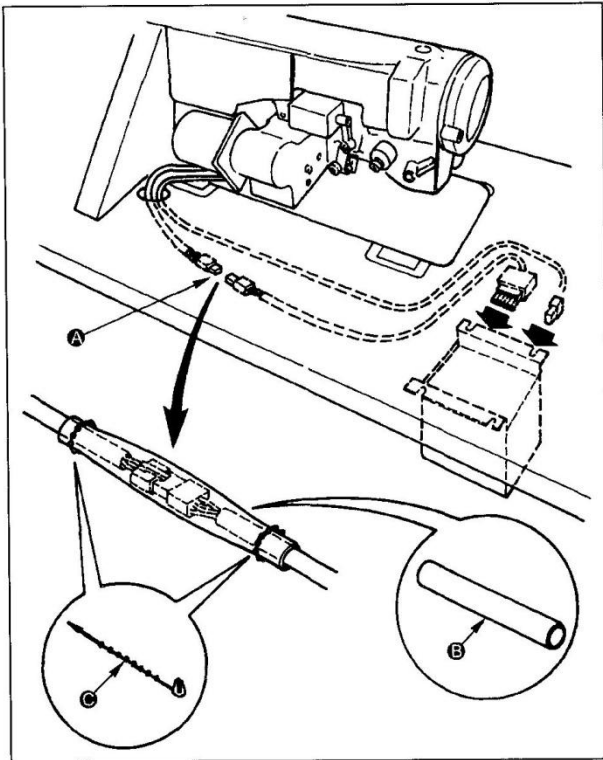


WARNING:

Be sure to connect the power cable with the power plug removed from the receptacle.

注意:

请一定把电源插座插头从插座上拔下之后再连接。



Connect the cords coming from the machine head to the electrical box (MX-150). THE 6P cord requires a junction cord. Put tube **B** supplied with the machine as an accessory over connected portion **A** of the junction cord and fix both ends of the tube **B** with two bead bands **C** with the connector inside the tube placed at the center of the tube to secure safety.

把从机头来的电线连接到电气箱 (MC-150)。6P 的电缆使用接线电缆，但是为了保证接线电缆连接部 **A** 的安全，请插入附属品软管 **B**，把接头弄到软管 **B** 的中央，然后用附属品扎线带 (2个) **C** 固定好软管的两端。

III. PERPARATION OF THE MACHINE

缝纫机的准备

1.Changing the knife height

切刀高度的调整



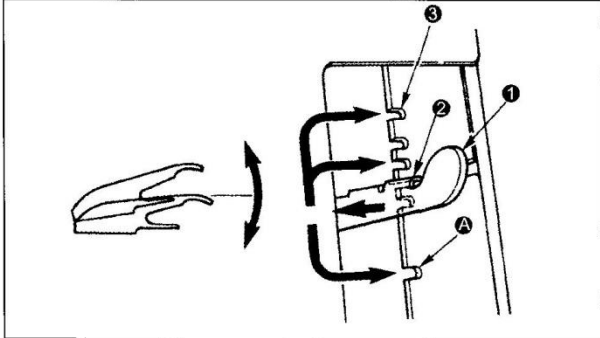
WARNING:

Turning ON the power switch with the foot pedal depressed is very dangerous since the knife operation. Do not place your foot or anything on the foot pedal when truning ON the power switch,

注意:

踩住踏板打开电源的话, 切刀会动作, 非常危险.

打开电源的时候, 请不要把脚放在踏板上.



1) Lightly press knife adjusting lever ① to the left until clwa ② of the lever comes off notch ③ .

2) Adjust the height of the knife by shifting the lever up or down. The knife height will be increase by shifting the lever up or decreased by shifting it down.



In the case where the lever is set in notch A , the knife height will be 0 (zero) and the knife driving motor switch will be turned off.

1) 把切刀调节杆 ① 轻轻往左按, 把拨杆爪 ② 从缺口 ③ 上卸下来.
2) 上下移动拨杆, 向上移动拨杆切刀高度变大, 向下移动拨杆切刀高度变小.



设定到缺口 A 部后, 切刀高度为0, 切刀驱动马达开关关闭 (OFF).

2.Adjusting the knife pessure

切刀压力的调整

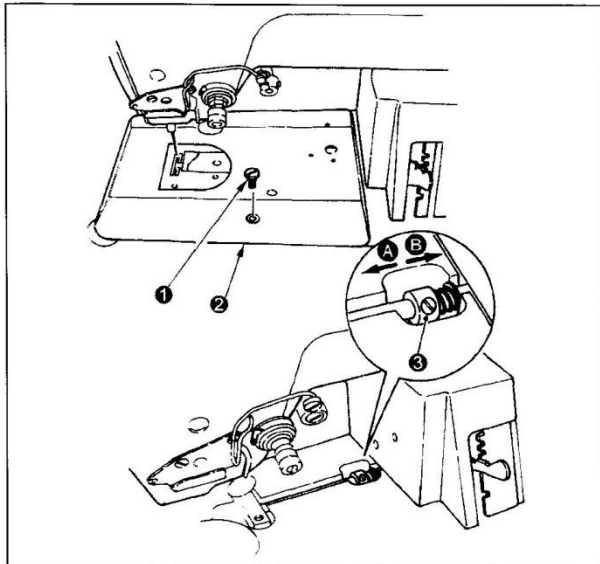


WARNING:

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 motor has totally stopped rotating in prior.

注意:

为了防止突然启动造成人身事故, 请关掉电源, 确认马达停止后转动后再进行.



1) Loosen setscrew ① and detach bed plate ② .

2) Loosen the screw in thrust pad ③ and shift the thrust pad in direction A to decrease the knife pressure or in direction B to increase it.The standard position of the thrust pad is the center of the groove.



In the case where the knife pressure is increase,the sharpnes of the knife will be enhanced,however,the service life of the knife can be shortened.

1) 拧松 ① 的固定螺丝, 把机台板 ② 卸下来.
2) 拧松滑块 ③ 螺丝, 向 A 方向移动切换到压力变小, 向 B 方向移动切刀压力变大.

标准位置的滑块的槽的中央位置.



切刀压力本切刃快, 但是切刀寿命变短.

3.Adjusting the installation of the knife start switch 切刀启动开关的安装调整

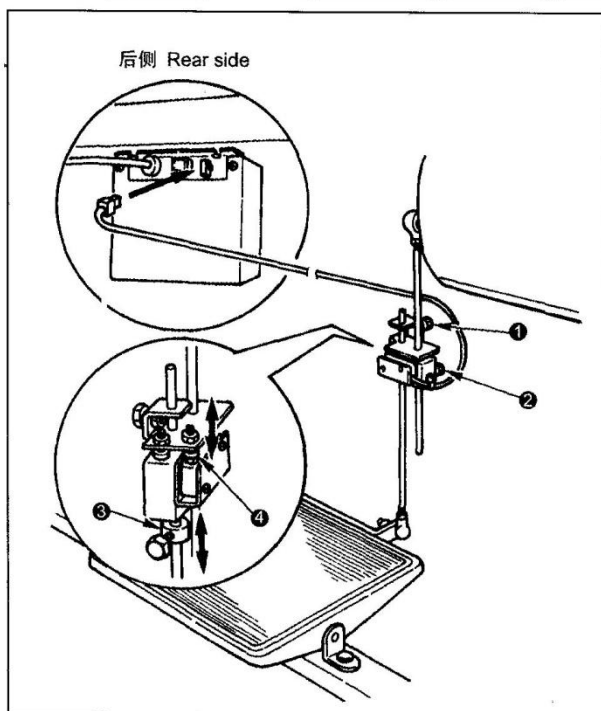


WARNING:

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.

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。



Attach the knife start switch(asm.) to the portion locating between the lever of the electrical box for the sewing machine and the pedal .At this time,try to position the start switch(asm.) so that the connecting rod is vertical.

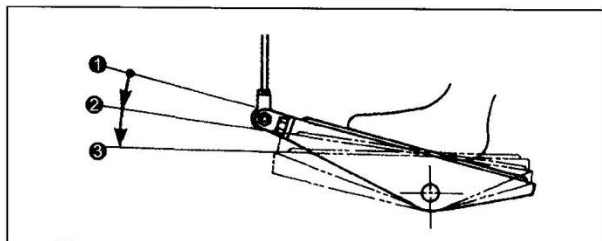
Connect the switch cord to the MC-150.Adjust the height and inclination of the pedal using screws ① and ② .Adjust the depressing depth of the pedal by shifting stopper ③ up or down.Adjust the sensitivity of the knife start switch by shifting stopper ④ up or down.At this time,be careful so that stopper ④ does not come in contact with the knife start switch main nut.

把启动开关(组件)安装到缝纫机马达用电气箱的拨杆和踏板之间, 此时, 尽量让连接杆垂直. 开关的电源插进MC-150.

踏板的高度和倾斜的调整用 ① 和 ② 的螺丝进行. 踏板的踩下量的调整请把挡块 ③ 上下移动来调整.

启动开关的灵敏度是通过上下移动上下移动挡块 ④ 来调整的. 调整时请注意不要让挡块 ④ 碰到启动开关本身.

IV.PEDAL OPERATION 踏板操作



① 这是踏板的中立位置, 缝纫机和切刀均停止.

② 从中立位置向前踏板, 切刀开始动作.

③ 切刀开始动作之后, 再往前踩踏板, 缝纫机开始动作.

缝纫结束时, 为与上述相反方向 ③ → ② → ①, 缝纫机低速 ↔ 高速转动、自动切线等操作与一般缝纫机相同.

① This is the neutral position of the pedal at which both the sewing machine and the knife are at rest.

② Slightly depress the front part of the pedal from the neutral position ,and the knife will actuate.

③ Further depress the front part of the pedal from the position at which the knife has actuated,the sewing machine will start.

At the end of sewing, follow the aforementioned steps ③ to ① in the reverse order.

Follow the same steps with the conventional LJ models to change over the sewing speed of the machine between the low-speed and the high-speed or to actuate the automatic thread trimmer.

V. MAINTENANCE

维修

1. Replacing the knives

切刀的更换

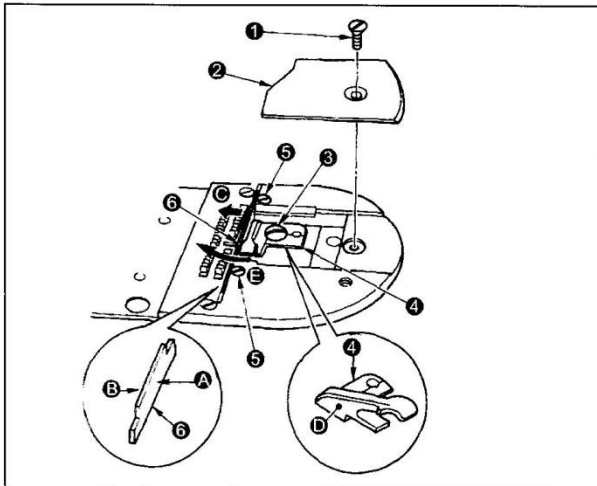


WARNING:

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.

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。



<拆卸>

- 1) 按照III-2项的顺序, 把切刀压力设为0。
- 2) 拧松固定螺丝 ①, 拆下切刀外罩 ②。
- 3) 拧松固定螺丝 ③, 切布刀 ④。
- 4) 拧松固定螺丝 ⑤ (2个), 针板刀 ⑥ 可以拆卸。



针板刀 ⑥ 两面 (A, B) 可以使用。

<Removal>

- 1) Follow the steps of procedure given in III-2 to set the knife pressure to 0 (zero).
- 2) Loosen setscrew ① and detach knife cover ②.
- 3) Loosen setscrew ③, and cloth cutting knife ④ will come off.
- 4) Loosen two setscrews ⑤, and throat plate knife ⑥ will come off.



Throat plate knife ⑥ is a double-sided (A and B) knife.

<Installation>

- 1) Pressing throat plate knife ⑥ in direction ⑥, tighten setscrews ⑤.
- 2) Fix cloth cutting knife ④ using setscrew ③ so that its surface ① is in parallel to throat plate knife ⑥. To enhance sharpness, tilt cloth cutting knife ④ slightly to direction ②. It should be remembered, however, the excessively tilted knife can wear easily.
- 3) Attach knife cover ② in position and appropriately adjust the knife pressure.

<安装>

- 1) 把切布刀 ④ 往 ② 方向按, 拧紧固定螺丝 ⑤。
- 2) 把切布刀 ④ 的 ① 面调整得与针板刀 ⑥ 平行, 然后用固定螺钉 ③ 固定。如果要让切刀时切布紧, 请把切布刀 ④ 稍稍向 ② 布倾斜。倾斜过大的话, 切刀的损坏变的厉害。
- 3) 安装上切刀外罩 ②, 调整切刀压力。

2. Replacing the power fuse

电源保险丝的更换

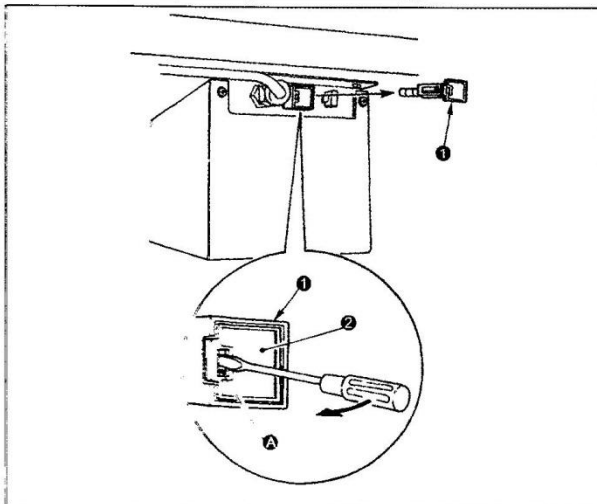


WARNING:

To prevent personal injuries caused by electric shock hazards or abrupt start of the sewing machine, carry out the work after turning OFF the power switch and ascertaining that the motor has completely stopped. To prevent personal injuries, when a fuse has blown out, be sure to replace it with a new one with the same capacity after turning OFF the power switch and removing the cause of the blown-out of the fuse.

注意:

为了防止触电、意外的启动造成的事故, 请关掉电源, 确认马达确实停止转动后再进行。为了防止人身事故, 保险丝断后, 请一定要关掉电源排除掉保险丝烧断的原因之后, 再更换成相同容量的保险丝。



- 1) To remove cap ② from fuse holder ①, insert a slotted screwdriver into slit A and move the screwdriver in the direction of the arrow shown in the illustration.



Do not move the screwdriver excessively but move it lightly.

- 2) Replace the fuse with a new one and press in the fuse until cap ② is locked.

Fuse to be used: 1.6 A, 250 V

- 1) 把一字螺丝刀插进槽 A, 沿图的箭头方向转动, 从保险丝架 ① 夹簧的形状 ②。

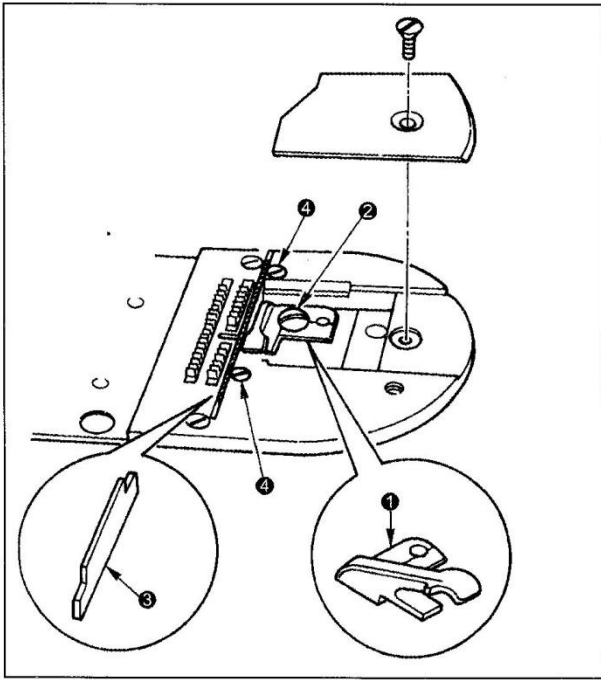


转动螺丝刀时, 请轻轻转动, 不要用过强的力量。

- 2) 更换完的新的保险丝后, 把盖子 ② 盖好。

使用保险丝: 1.6 A, 250V

VI. SPARE PARTS 备用零件



❶ Parts No./货号: 23506009

❷ Parts No./货号: SS5090610SP

❸ Parts No./货号: 23506108

❹ Parts No./货号: SS6080360SP

LJ-2280NU,2280NU-7 LJ-2286NU,2286NU-7 LJ-2288NU,2288NU-7

High-speed,1-needle,Lockstitch,Zigzag Stitching Machine with an Material Slippage Preventing Function

高速单针平缝曲折缝缝纫机（带防止布偏斜功能）



CAUTION:

Instructions described in these pages are for LJ-2280NU series only.
Instructions other than those described there are the same as those for LJ-2280N series.

注意:

本书只记述有关LJ-2280NU系列的说明，本书以外的有关项目与LJ-2280N系列相同。

1.SPECIFICATIONS

规格

	LJ-2280NU(-7)	LJ-2286NU(-7)	LJ-2288NU(-7)
Type of zigzag	Standard zigzag	3-step zigzag	cam-replacement type zigzag
Stitch diagram			Standard zigzag to scallop, etc. by means of pattern cam
Sewing speed	Max.4,500 rpm		
Max.zigzag width	5 mm	10mm(Standard 8 at the time of delivery)	8mm(Standard zigzag:6mm)
Max.zigzag length	2.5mm	2mm	
Needle	SCHMETZ 134SUK,438; #65 to #90,DP *5; #9 to #14		
Lift of the presser foot	By the hand lifter 5.5 mm,by the knee lifter 10mm		
oil used	New Defrix oil No.1		

	LJ-2280NU(-7)	LJ-2286NU(-7)	LJ-2288NU(-7)
缝纫形式	标准2点曲折缝	4点曲折缝	凸轮更换式
线迹图示			更换花样凸轮，可变换2点—荷叶边等
缝纫速度	Max. 4, 5000 rpm		
最大摆动幅度	5mm	10 mm(标准出货为 8mm)	8 mm(2点时为 6mm)
最大针迹长度	2.5mm	2mm	
使用机针	精密牌134 SUK, 438; #65-#90, DPx5; #9-#14		
压脚高度(膝动提升)	挑线杆时5.5mm, 膝动提升时10mm		
使用机油	No.1 新机油		

2.HEIGHT AND INCLINATION OF THE NEED DOG

送布牙的高度、倾斜

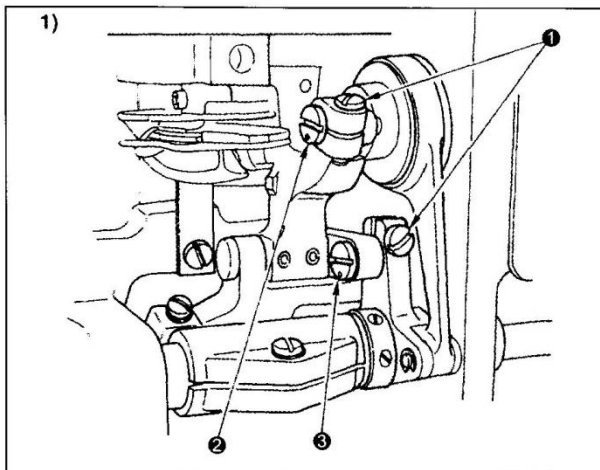


WARNING:

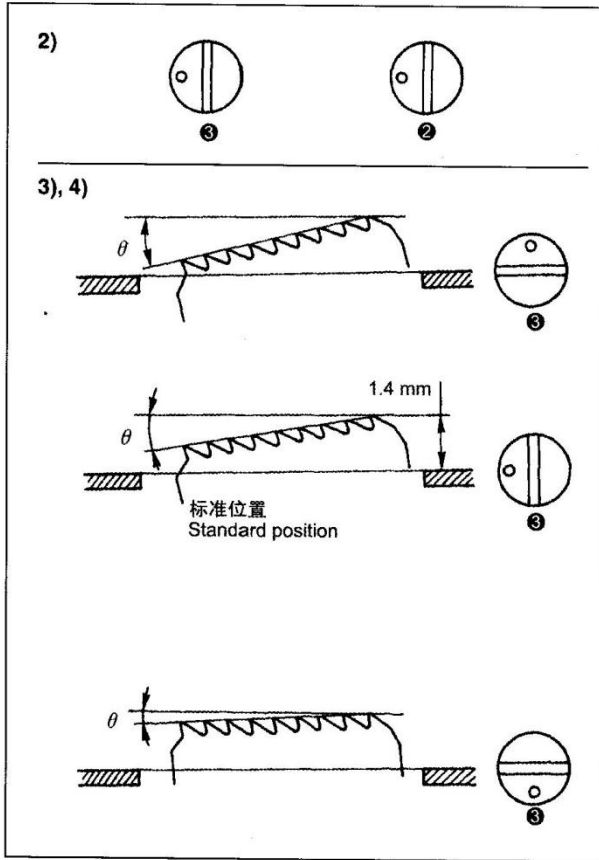
To avoid possible personal injury due to abrupt start of the machine,turn off the power to the machine and check to be sure that the motor has totally stopped rotating in prior.

注意:

为了防止突然启动造成人身事故，请关掉电源，请确认马达确实停止转动后再运行。



- 1) To adjust the height and inclination of the feed dog,loosen setscrew ① in the feed driving link pin in the figure,and turn feed driving link pins ② and ③ suing a screwdriver.
- 2) Standard inclination fo the feed dog is the position where the engraved dot of feed driving link pin ② is in the direction of 9 o'clock,and the engraved dot fo feed driving link pin ③ is in the direction of 9 o'clock.
- 3) Standard height of the feed dog is 1.4mm.
- 4) To adjust the cloth-slip,mainly adjust feed driving link pin ③ .The cloth-slip can be corrected in accordance with the amount of inclined angel "θ" of the feed dog.
- 5) The sewing machine equipped with the thread trimmer only has been factory-set a spacer in between the throat plate and the feed dog.



- 1) 调整送布牙的高度和倾斜时, 请拧松图上所示的上下送布环轴固定螺丝 ①, 再用螺丝刀转动上下送布环轴 ②、③。
- 2) 标准的倾斜是上下送布环轴 ② 的刻点为钟表9时的方向, 上下送布环轴 ③ 的刻点为钟表9时的方向。
- 3) 送布牙高度的标准是1.4mm。
- 4) 调整布跑偏时, 请上下送布环轴 ③ 为主进行调整. 调整送布牙倾斜角的大小, 可以修正布跑偏。
- 5) 只有带切线的缝纫机可以在针板和送布牙之间安装垫片。

LJ-2284N,2284N-7 LJ-2284NU,2284NU-7

**High-speed,1-needle,Lockstitch,Zigzag Stitching Machine with Standard Zigzag/
3-step Zigzag Pattern Changeover Function**

高速单针平缝曲折缝缝纫机（带2点、4点图案转换功能）



CAUTION:



Instructions described in these pages are for LJ-2284N series only.
Instructions other than those described there are the same as those for LJ-2280N/2280NU series.

注意:

本书只记述有关LJ-2284N系列的说明，本书以外的有关项目与LJ-2280N/2280NU系列相同。

1.SPECIFICATIONS





规格



Model	LJ-2284N LJ-2284N-7	LJ-2284NU LJ-2284NU-7
Type of zigzag	Standard zigzag/3-step zigzag	
Stitch diagram		
Max.sewing speed	5,000 rpm*1	4,500 rpm*2
Max.needle throw	10 mm(Factory-set to 8 mm at the time of delivery)	
Max.feeding amount	2.5 mm(3-step zigzag:2mm)	
Needle	SCHMETZ 134 SUK,438:#65 to #90,ORGAN DPx5:#9 to #14	
Lift of the presser foot	By the hand lifter 5.5 mm,by the knee lifter 10 mm	
Lubricating oil	No.15	

* 1:Type and max. sewing speed depending on zigzag width conform to Table 1.

* 2:Standard zigzag exceeding zigzag width of 6 mm or more and 3-step zigzag exceeding needle throw of 8 mm or more conform to Table 1.

Table 1.





Model	LJ-2284N(-7)		LJ-2284NU(-7)	
Stitch diagram				
Zigzag width				
0 to 5 mm	5,000 rpm	5,000 rpm	4,500 rpm	4,500 rpm
6 mm	4,500 rpm	5,000 rpm	4,500 rpm	4,500 rpm
Over 6 mm to 8 mm	4,000 rpm	5,000 rpm	4,000 rpm	4,500 rpm
Over 8 mm to 10 mm	3,000 rpm	4,000 rpm	3,000 rpm	4,000 rpm

形式	LJ-2284N LJ-2284N-7	LJ-2284NU LJ-2284NU-7
线迹形式	标准2点曲折缝/4点曲折缝	
线迹图示		
最高转速	5,000 rpm * 1	4,500 rpm * 2
最大摆动幅度	10 mm (标准出货为8 mm)	
最大送布量	2.5 mm (4点曲折缝为2 mm)	
使用机针	精密牌 134 SUK, 438: #65-#90, 风琴牌DPx5: #9-#14	
压脚高度	挑线杆时5.5 mm, 膝动提升时10 mm	
使用机油	No. 15	


* 1. 不同缝纫形式和摆动宽度的最高转速如表1所示。

* 2. 摆动宽度超过6 mm以上的2点曲折缝、超过8 mm的4点曲折缝如表1所示。

表1

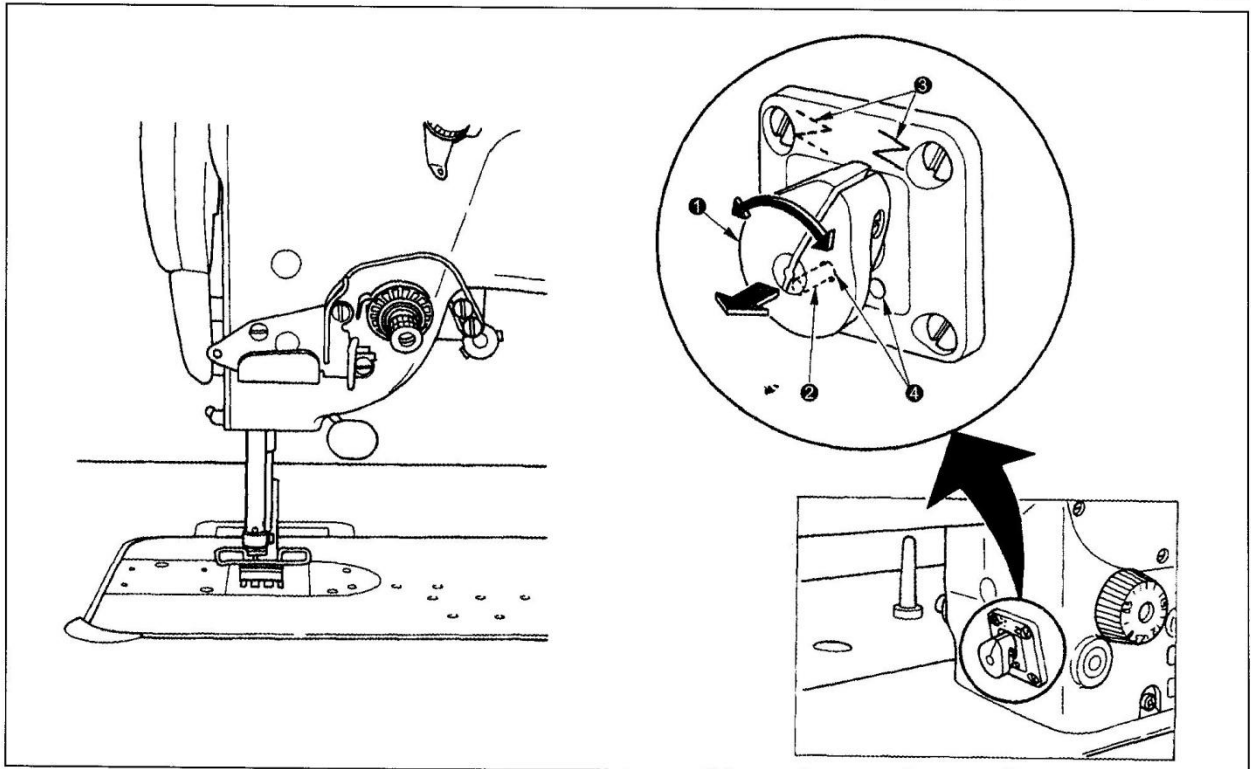
形式	LJ-2284N(-7)		LJ-2284NU(-7)	
线迹图				
摆动宽度				
0-5 mm	5,000 rpm	5,000 rpm	4,500 rpm	4,500 rpm
6 mm	4,500 rpm	5,000 rpm	4,500 rpm	4,500 rpm
6 mm以上-8 mm	4,000 rpm	5,000 rpm	4,000 rpm	4,500 rpm
8 mm以上-10 mm	3,000 rpm	4,000 rpm	3,000 rpm	4,000 rpm

2.CHANGEOVER OF STANDARD ZIGZAG/3-STEP ZIGZAG 2点曲折缝/4点曲折缝



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.

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





In principle, the changeover point can be obtained in the ratio of one time to three stitches.

- 1) Turn handwheel by hand to bring needle to its lowest position.
- 2) Pull changeover lever ❶ toward this side and pull out lock pin ❷ from positioning hole ❹.
- 3) Turn changeover lever ❶ while pulling it and adjust it to zigzag mark ❸ you desire. At this time, securely place lock pin ❷ in positioning hole ❹ and set it.

Make sure that lock pin ❷ is securely placed in positioning hole ❹.



In addition, never operate the sewing machine in the state that lock pin ❷ is not placed in positioning hole ❹ (on the way of changeover).

It will cause the trouble of the sewing machine.

- 4) When changeover lever ❶ cannot be turned, perform again the work of steps 1) to 3) after manually turning the handwheel by one turn (360°). Perform repeatedly until changeover work can be completed.



基本的转换点可以以1次3针的比例进行转换。

- 1) 用手转动皮带轮，把机针降到最下方。
- 2) 把转换拨杆 ❶ 拉到面前，把锁定销 ❷ 从定位孔 ❹ 拔出来。
- 3) 拉出转换拨杆 ❶ 转动，对准希望的曲折缝标记 ❸。此时，把锁定销 ❷ 确实的插到定位孔 ❹ 中。



请确认锁定销 ❷ 不能转动时，确实地插到定位孔 ❹ 中。

另外，软盘 ❷ 没有进入到定位孔 ❹ 的情况(转换途中)时，请绝对不要让缝纫机转动。如果缝纫机转动了有可能发生故障。

- 4) 转动拨杆 ❶ 不能转动时，用手转动皮带轮1圈(360°)之后再按1)-3)步骤进行操作。反复进行直至可以进行转换操作。

LJ-2284C-7

High-speed,Cylinder-bed,1-needle,Lockstitch,Zigzag Stitch Machine with Standard Zigzag/3-step Zigzag Pattern Changeover Function

高速柱型机头单针平缝曲折缝缝纫机(带2点/4点图案转换功能)



CAUTION:

Instructions described in these pages are for LJ-2284C-7 only. Instructions other than those described there are the same as those for LJ-2280N/2280NU or LJ-2284N/2284NU.

注意:

本书只记述有关LJ-2284C-7系列的说明. 本书以外的有关项目, LJ-2280N/2280NU系列和LJ-2284N/2284NU相同.

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I. SPECIFICATIONS

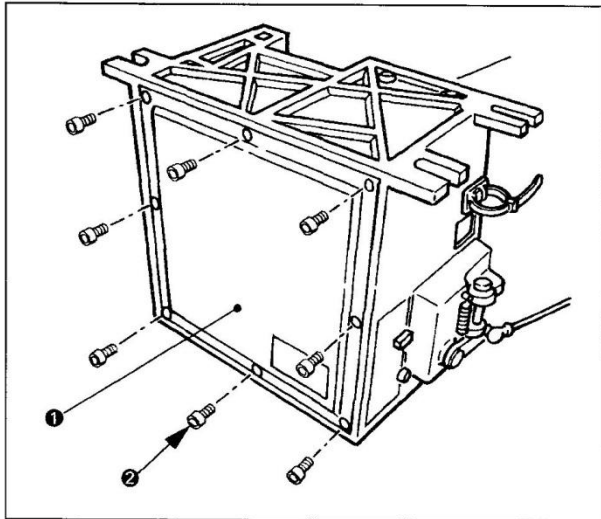
规格

Specifications are the same as those for LJ-2284N-7. see p.
规格与LJ-2284N-7相同, 请参照 页.

II. INSTALLATION

安装

1. Replacing the control box cover setscrews 控制箱护罩固定螺丝的更换

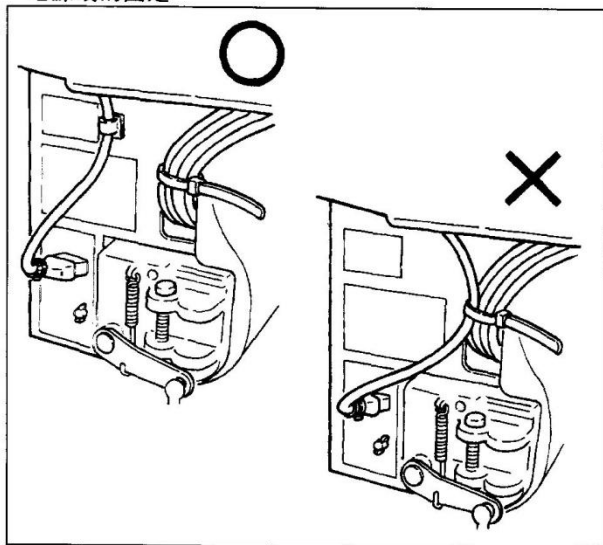


when installing control box(SC-800) ❶ on the proper exclusive table /stand, it is not possible to remove control box cover setscrews ❷ . Replace 8 setscrews shown in the figure with hexagon socket head bolts which have been supplied as accessories with the machine head before installing the control box on the table/stand.

把控制箱 (SC-800) ❶ 安装到专用台板时, 护罩的固定螺丝 ❷ 拆卸不了。

安装到脚桌之前, 请把图中的6个螺栓更换成附属品的六角孔螺栓。

2. Fixing the power cable 电源线的固定



Fix the power cable to the control box with the nylon clamp which has been supplied as accessories with the machine head since it is dangerous when the power cable protrudes from the table/stand.

Caution Do not bundle the power cable with other cables. Malfunction will be caused.

电源线从脚桌里露出来的话, 十分危险, 因此请用机头附属品的尼龙夹固定到控制箱上。

注意 请不要把电源线和其他电缆捆扎到一起, 以免发生误动作。

3. Fixing the hinge of the machine head 缝纫机头铰链的固定

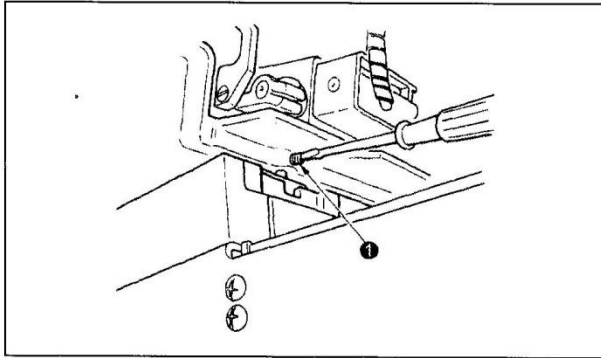


WARNING:

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.

注意:

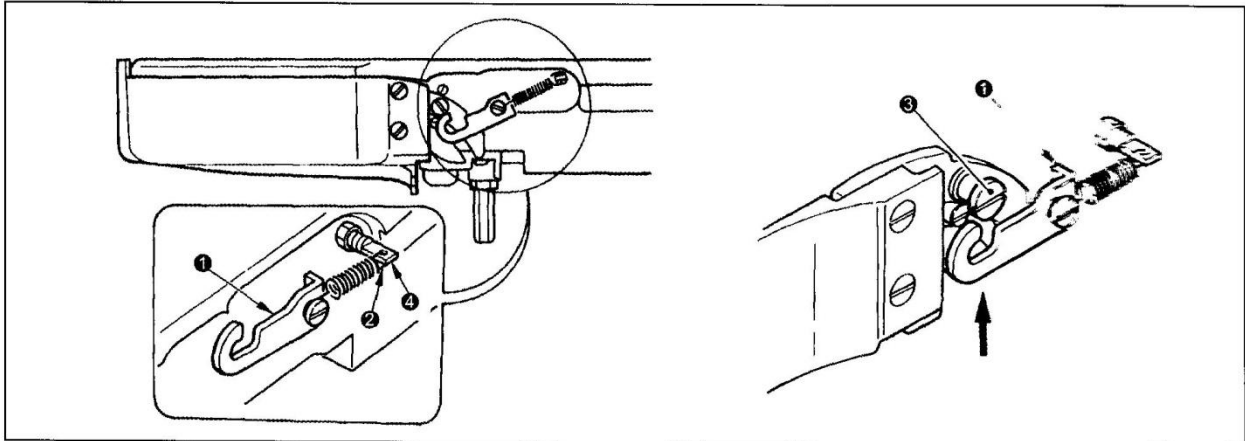
为了防止突然启动造成人身事故, 请关掉电源, 请确认马达确实停止转动后再运行。



- 1) Tilt the machine head after attaching the hinge to the machine head and putting the machine head on the table
- 2) Fix the hinge located to the face plate (see "ATTACHING OF HEAD" (L=4.5))
① which has been supplied as accessories.

- 1) 把铰链安装到机头, 放到机台上, 然后倾斜机头。
- 2) 用附属的固定螺丝 (L=4.5) ① 固定靠近面板的铰链。

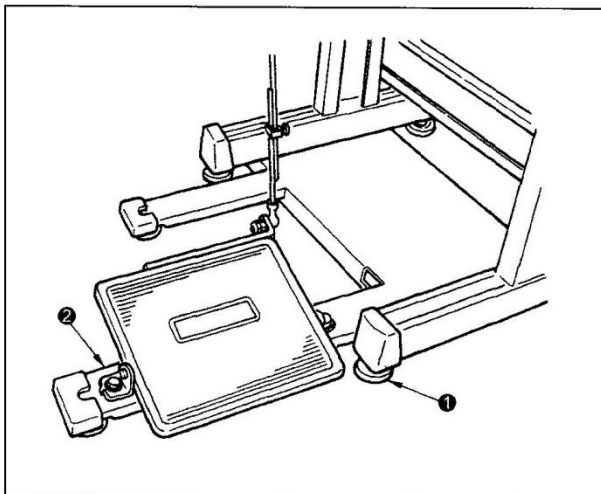
4. Installing the hook cover guide stopper 旋梭护罩导向止动器的安装



- 1) Put hook section ② of the spring of hook cover guide stopper ① supplied as accessories to spring rack ④.
- 2) Insert notch of hook cover guide stopper ① from the under side upward to hinge screw ③ to complete the installation.

- 1) 附属品中的旋梭护罩导向止动器 ① 的弹簧钩 ② 挂到弹簧座 ④ 上。
- 2) 把旋梭护罩导向止动器 ① 的缺口部从下侧向上镶嵌到平头螺丝 ③ 上, 全部安装结束。

5. Adjusting the lever adjuster 水平调节器的调整



When using proper exclusive table/stand, fully perform the adjustment of the height of level adjusters (6 places) ① so that vibration or torsion of the whole table/stand does not become large.

In addition, take care not to apply a load to the top end of each support base ② in case of moving or the like. It may be bent.

使用专用台板时, 请充分的调节水平调节器 6处 ① 的高度, 以避免振动或倾斜。另外, 移动时, 请注意不要在踏板支架 ② 顶部放置物品, 有可能发生弯曲变形。

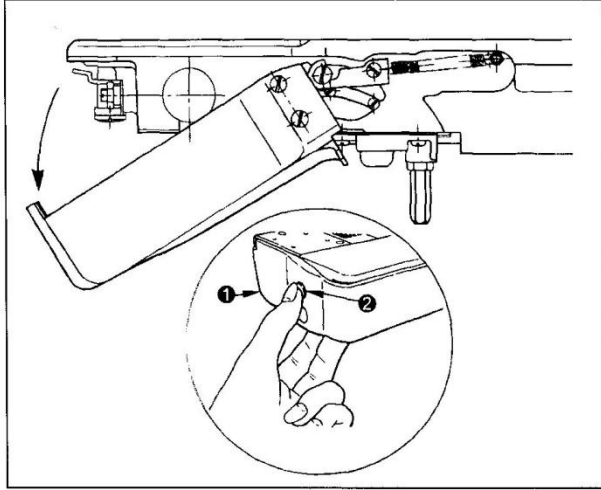
III. OPERATING PROCEDURE

使用方法

1. Changeover of standard zigzag/3-step zigzag 2点曲折/4点曲折的转换

Operating procedure is the same as that for LJ-2284(-7). See p.
操作方法与LJ-2284(-7)相同. 请参照 页.

2. How to open the hook cover 旋梭护罩的打开方法



Putting your finger in the hollow of the bottom of hook cover ①, press button ② to open the hook cover downward.

■ Do not press the hook cover ① from the upper side in the state that the hook cover ① is opened. Guide metal fittings may be broken.



■ Periodically clean the inside of the hook cover ① so that it is not covered with material dust or the like. Troubles such as material dust is rolled in the hook and the like will occur.

用手指按着旋梭护罩 ① 底部的凹部, 按按钮 ②, 向下侧打开.

在打开旋梭护罩 ① 的状态, 请不要从上方按压旋梭护罩 ①, 有可能损坏导引金属部件.



旋梭护罩 ① 内部, 应定期进行清扫, 不要堆积布屑灰尘. 布屑堆积到旋梭里时, 会发生故障.

IV. MAINTENANCE

维修保养

1. Removing the hook cover 旋梭护罩的拆卸方法

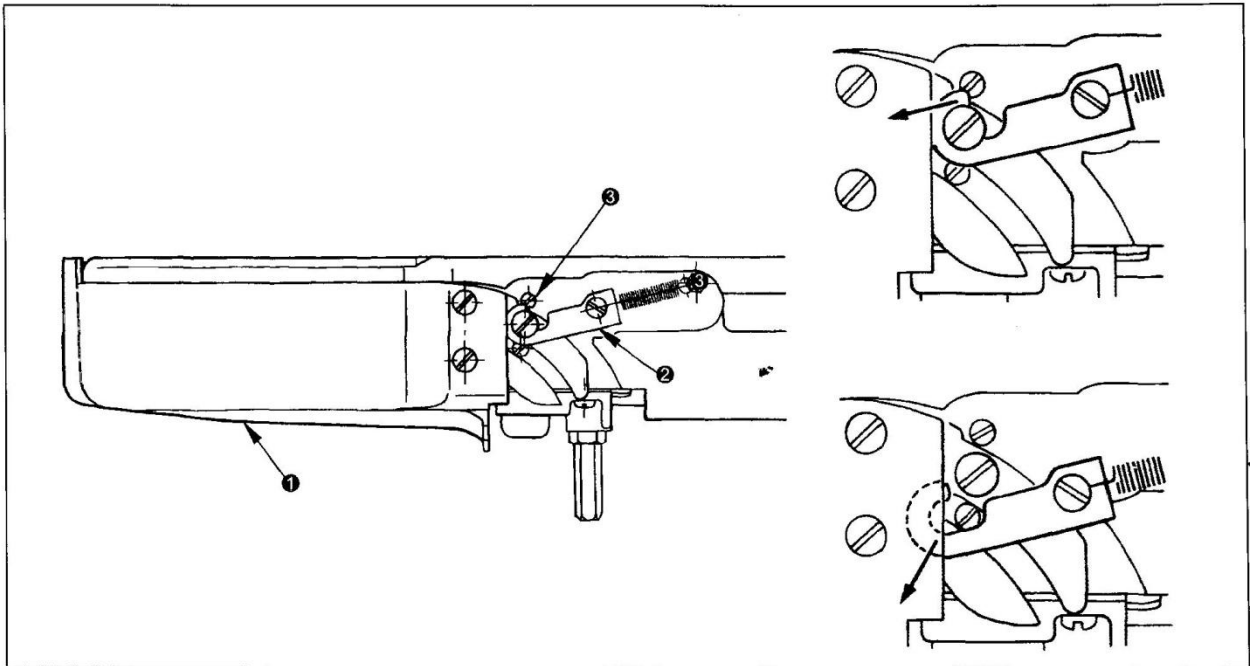


WARNING:

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.

注意:

为了防止突然启动造成人身事故, 请关掉电源, 请确认马达确实停止转动后再运行.



1) Tilt the machine head.

2) Remove the hook section of hook cover guide stopper ② the state that hook cover ① is closed.


3) Open hook cover ① to remove it from the sewing machine.

4) After removing hook cover ①, put the hook section of hook cover guide stopper ② to hook cover guide stopper pin ③.

- 1) 放倒机头。
- 2) 在关闭旋梭护套 ① 的状态，卸下旋梭护罩导向止动器 ② 的钩部。

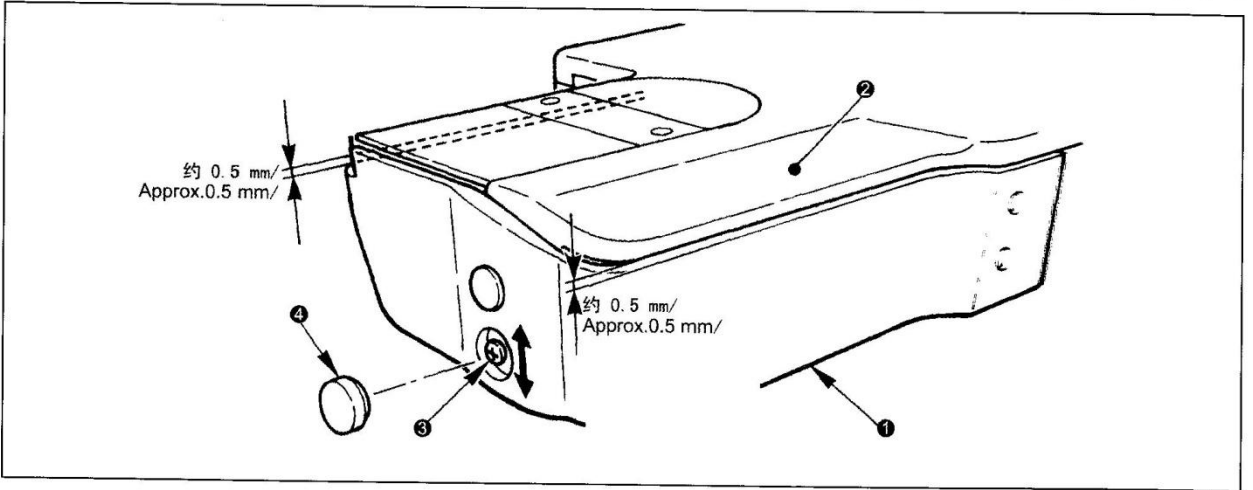
- 1) 打开旋梭护罩 ① 之后，可以从缝纫机卸下旋梭护罩。
- 1) 卸下旋梭护罩 ① 之后，请挂到旋梭护罩向上止动器 ② 的钩部和旋梭护罩导向器 ③ 上。

2. Adjusting clearance between the hook cover and the machine bed 旋梭护罩和机台的间隙调整




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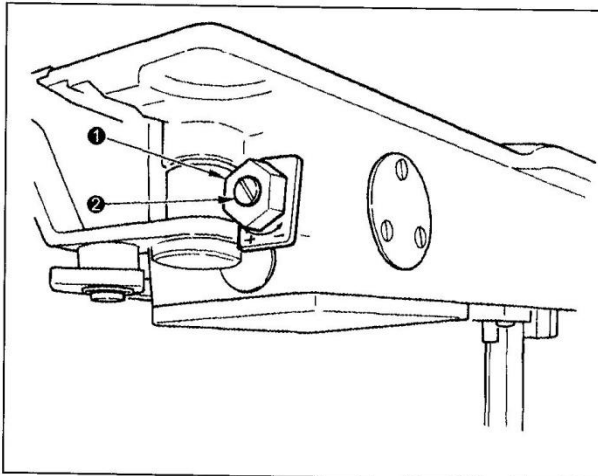
- 1) Remove rubber plug ④.
- 2) Move setscrew ③ up or down to adjust so that the clearance between hook cover ① and machine bed ② is approximately 0.5 mm. Then fix the setscrew.
- 1) 卸下橡胶栓 ④。
- 1) 上下移动固定螺丝 ③，把旋梭护罩 ① 和机台 ② 的间隙调整为约 0.5mm，然后固定好螺丝。

3. Adjusting the amount of oil in the hook 旋梭油量调整



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注意:
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- 1) Tilt the machine head and open the hook cover. (See p. 43)
- 2) Loosen nut ①, then turn adjusting screw ②.
Turn the adjusting screw in the "+" direction clockwise to increase the amount of oil.
Turn the adjusting screw in the "-" direction counterclockwise to decrease it.
- 3) After the adjustment, fix the adjusting screw by tightening nut ②.

Caution After the adjustment, check the amount of oil after using the machine for approximately 10 minutes.

- 1) 放倒缝纫机，打开旋梭护罩。(参照P43页的说明)
- 1) 拧松螺母 ①，转动调节螺丝 ②
向“+”方向转动之后……变多
向“-”方向转动之后……变少
- 1) 调整完之后，把螺母 ② 固定好

注意 调整后，约转动10分钟，确认油量。

4.Height and inclination of the feed dog 送布牙的高度、倾斜度

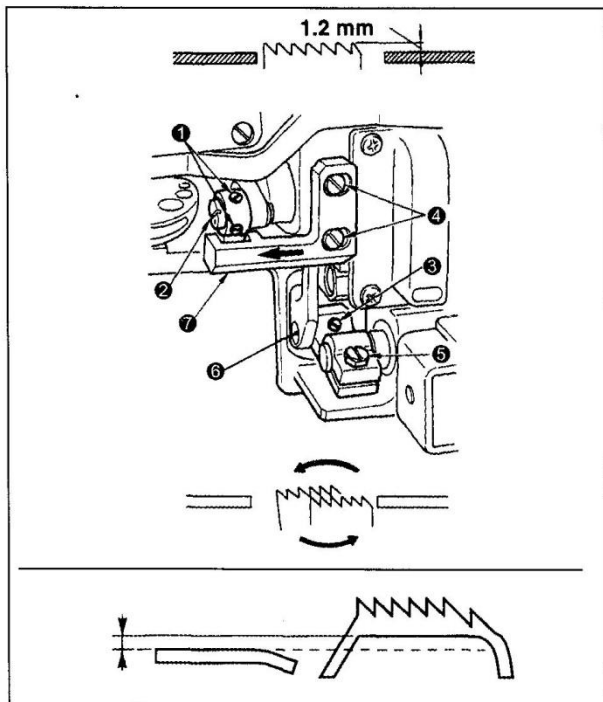


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注意:

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(1) Height of the feed dog

- 1) Remove the hook cover.(see P. 43)
- 2) To adjust the height of the feed dog,loosen setscrew ① and turn feed driving link pin ② using a screwdriver.
- 3) The standard height of the feed dog is 1.2mm.
- 4) To adjust the inclination of the feed dog in terms of the throat plate, loosen setscrew ③ in the eccentric shaft shown in the figure and turn eccentric shaft ⑥ using a screwdriver.
- 5) There can be no space between the counter knife and the underside of the feed dog when adjusting the feed mechanism(change in height and timing)or using a commercially-available feed dog.In this case, place a feed bar spacer(part number:10025906) under the feed mechanism and a throat plate spacer(part number:22503908)under the throat plate so as to secure a space between the counter knife and the underside of the feed dog.
- 6) When the feed dog is replaced,the position of the feed dog in terms of the throat plate may not be obtained,At this time,loosen feed bar guide serscrews ④ and feed bar arm clamp screw ⑤ ,then adjust the position of the feed dog.

When attaching feed bar guide ⑦ ,lightly pressing feed bar guide ⑦ in the direction of the arrow mark,tighten feed bar guide setscrew ④ .Then check that the handwheel smoothly turns.The standard inclination of the feed dog is obtained by adjusting the feed dog so that it becomes horizontal when it rises above the top surface of the throat plate.

(2) Inclination of the feed dog

The standard inclination of the feed dog is obtained by adjusting the feed dog so that it becomes horizontal when it rises above the top surface of the throat plate.

(1) 送布牙的高度

- 1) 卸下旋梭护罩。(参照P43页的说明。)
- 2) 调整送布牙的高度。如图所以, 拧松上下送布环轴固定螺丝 ①, 用螺丝刀转动上下送布轴 ②。
- 3) 送布牙的标准高度为1.2mm。
- 4) 调整送布牙和针板的倾斜时, 请拧松图中的送布台轴固定螺丝 ③之后, 用螺丝刀转动送布台轴 ⑥。
- 5) 进行了送布调整(变更高度、同步等), 或使用市场出售的送布牙时, 又可能固定刀和送布牙下面的空间没有了。这时, 可以往送布台下面垫上送布台垫片(货号: 10025906)和在变针器下面垫上护针器垫片(货号: 22503908)以确保空间。
- 6) 更换送布牙后, 有可能送布牙与针板的位置变的不正确。然后, 拧松送布导向固定螺丝 ④和送布台固定螺丝 ⑤, 调整送布牙的位置。安装送布台导向器 ⑦时, 请轻轻地向箭头方向按压送布台导向器 ⑦, 同时拧紧送布台导向器固定螺丝 ④, 然后确认飞轮的转动是否顺畅。

(1) 送布牙的倾斜度

送布牙的标准倾斜度为针板与送布牙出来时呈水平状态。

5. When replacing the hook cover guide pin 更换旋梭护罩导向销时

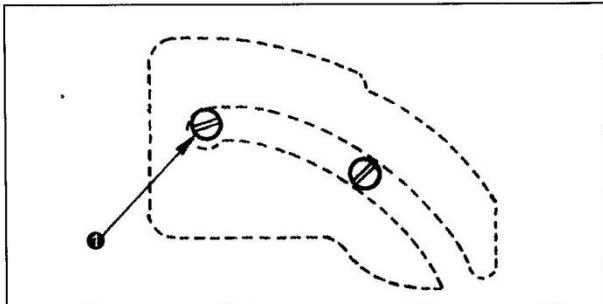


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When replacing hook cover guide pin ①, assemble it after applying SCREW LOCK (for medium strength) to the pin.

更换了旋梭护罩导向销 ① 后, 请在销上涂螺丝固定漆胶 (中强度用)

V. SEWING MACHINE TABLE

关于缝纫机机台

1. When making the table 制作机台时

When the exclusive table is not used, make a table referring to the main dimensions as shown in this drawing.

Thickness of the table has to be 48 to 50 mm so as to secure enough strength.

In addition, when the table support (40005532) is used, the sewing machine head is not leveled if the thickness of the table differs. Be sure to prepare one of 48 to 50 mm thick.

不使用专用机台时, 请按照本图所示的主要尺寸进行制作。

为了确保机台厚度具有充分的强度, 请使用48-50mm厚的材料。

另外, 使用机台支架 (40005532) 时, 如果机台厚度不正确, 缝纫机机头便不能保持水平, 请一定使用48-50mm的材料。

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20.2280系列直驱专用零件.....89

Direct-drive Exclusive parts for 2280 Series

How to make use of this parts list

1.Explanation of codes

1)"*" make..... means this part is changed form the previous parts book.

AS to the details the change,refer to "list for information of change".

2)"01"..... refer to "Note" explanation at botton of page.

2.Codes on the "Qty" column"

.Each numeral indicates the number of parts required.

."0.1|"and "2.5" indicate the length(in meters)of the respective parts.

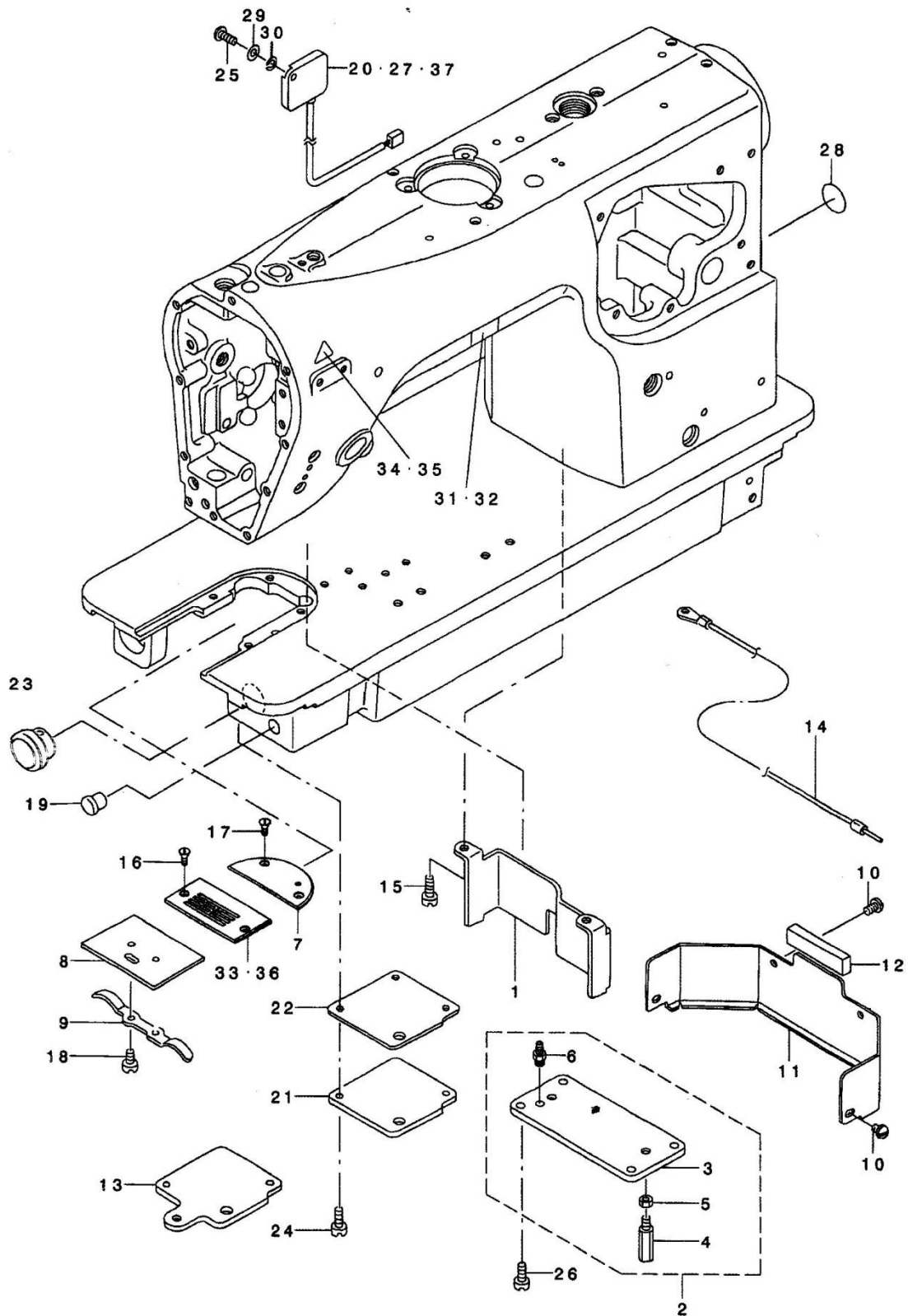
3.Parentheses mean that the corresponding part is a subpart that constructs an assembly part

4.Dotted lines on the Figures indicate assembly parts.

序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ1001	右侧盖板组件	Arm side cover compl.	1
2	LJQZ1002	右侧盖板垫片	Gasket	1
3	LJQZ1003	面板组件	Face plate compl.	1
4	LJQZ1004	面板垫片	Gasket	1
5	LJQZ1005	小盖板	Tension release window plate	1
6	LJQZ1006	小盖板垫片	Gasket	1
7	LJQZ1007	挑线杆防护罩	Balance cover base	1
8	LJQZ1008	挑线杆防护罩板	Balance cover	1
9	LJQZ1009	弹簧	Spring guard	1
10	JQZ1010	线勾	Balance thread guide A	1
11	LJQZ1011	线勾	Rubber plug	1
12	LJQZ1012	螺钉	Screw 11/64-40 L=8	2
13	LJQZ1013	过线销	Thread guide pin	1
14	LJQZ1014	线勾	Spring guard	1
15	LJQZ1015	机壳防油板	Arm oil shield	1
16	LJQZ1016	橡皮塞	Rubber plug	1
17	LJQZ1017	挑线切刀	Take-up thread cutter	1
18	LJQZ1018	后盖板	Side plate	1
19	LJQZ1019	后盖板垫片	Gasket	1
20	LJQZ1020	油窗	Oil sight window	1
21	LJQZ1021	橡胶垫	Rubber stopper	1
22	LJQZ1022	橡皮塞	Plug D=8 L=4.5	1
23	LJQZ1023	橡皮塞	Rubber plug	2
24	LJQZ1024	螺钉	Screw 3/16-28 L=10	1
25	LJQZ1025	波形弹性垫圈	Toothed washer D=5.3	1
26	LJQZ1026	螺钉	Screw 3/16-28 L=14	5
27	LJQZ1027	螺钉	Screw 11/16-40 L=8	7
28	LJQZ1028	螺钉	Screw 1/8-44 L=3.8	1
29	LJQZ1029	轴位螺钉	High screw D=6.35 H=7.5	1
30	LJQZ1030	弹性垫圈	Waved washer 6.4x11x0.3	1
31	LJQZ1031	垫圈	Washer 6.5x11x1	1
32	LJQZ1032	螺钉	Screw 11/64-40 L=9	2
33	LJQZ1033	螺钉	Screw 9/64-40 L=7	1
34	LJQZ1034	螺钉	Screw 3/16-28 L=6	4
35	LJQZ1035	螺钉	Screw 3/16-28 L=6	1
36	LJQZ1036	橡皮塞	Driving stopper rubber	2
37	LJQZ1037	橡皮塞	Rubber plug	1
38	LJQZ1038	橡皮塞	Plug	1
39	LJQZ1039	松线销	Thread release	1
40	LJQZ1040	过线勾	Balance thread guide T	1
41	LJQZ1041	螺钉	Screw 3/46-28 L=10	8
42	LJQZ1042	橡皮塞	Rubber plug	1
43	LJQZ1043	螺钉	Screw 9/64-40 L=3.5	1
44	LJQZ1044	电线夹头	Cable clip C	1
45	LJQZ1045	电线夹头	"Cord holder,large"	2
46	LJQZ1046	夹头	Cable holder	1
47	LJQZ1047	螺钉	Screw 3/16-28 L=10	1
48	LJQZ1048	线器组件	Thread tension asm.	1
49	LJQZ1049	夹线器组件	Thread tension asm.	1
50	LJQZ1050	夹线板组件	Thread tension disk compl.	(1)
51	LJQZ1051	夹线调节座	Thread tension rod asm.	(1)
52	LJQZ1052	挑线簧	Take-up spring	(1)
53	LJQZ1053	夹线螺钉	Thread tension post asm.	(1)
54	LJQZ1054	羊毛毡	Felt	(2)
55	LJQZ1055	松线板	Thread disc holder	(1)
56	LJQZ1056	松线销组件	Thread tension pin asm.	(1)
57	LJQZ1057	夹线簧	Tension spring	(1)
58	LJQZ1058	夹线簧	Tension spring	(1)
59	LJQZ1059	夹线螺母	Tension nut	(1)
60	LJQZ1060	夹线调节座螺钉	Screw 9/64-40 L=5.5	(1)
61	LJQZ1061	夹线螺母止动板	Rotating stopper	(1)
62	LJQZ1062	夹线勾	Support balance	1
63	LJQZ1063	夹线勾安装台	Support balance base	1
64	LJQZ1064	夹线勾安装座	Mounting base	1
65	LJQZ1065	小夹线组件	Pre-tension controller asm.	1
66	LJQZ1066	螺钉	Screw 11/64-40 L=6.5	1
67	LJQZ1067	使用说明标签	Operation seal	1
68	LJQZ1068	螺钉	Screw 11/64-40 L=5.0	1
69	LJQZ1069	螺钉	Screw 1/8-40 L=7	2
70	LJQZ1070	垫圈	Washer 3.3x6x0.5	2
71	LJQZ1071	螺钉	Screw 11/64-40 L=9	2
72	LJQZ1072	橡皮塞	Rubber plug	1
73	LJQZ1073	过线销	Thread guide bar	1
74	LJQZ1074	定位块	Timing gaug D	1
75	LJQZ1075	使用说明标签	Operation seal	1
76	LJQZ1076	注意事项标签	Attention seal	1

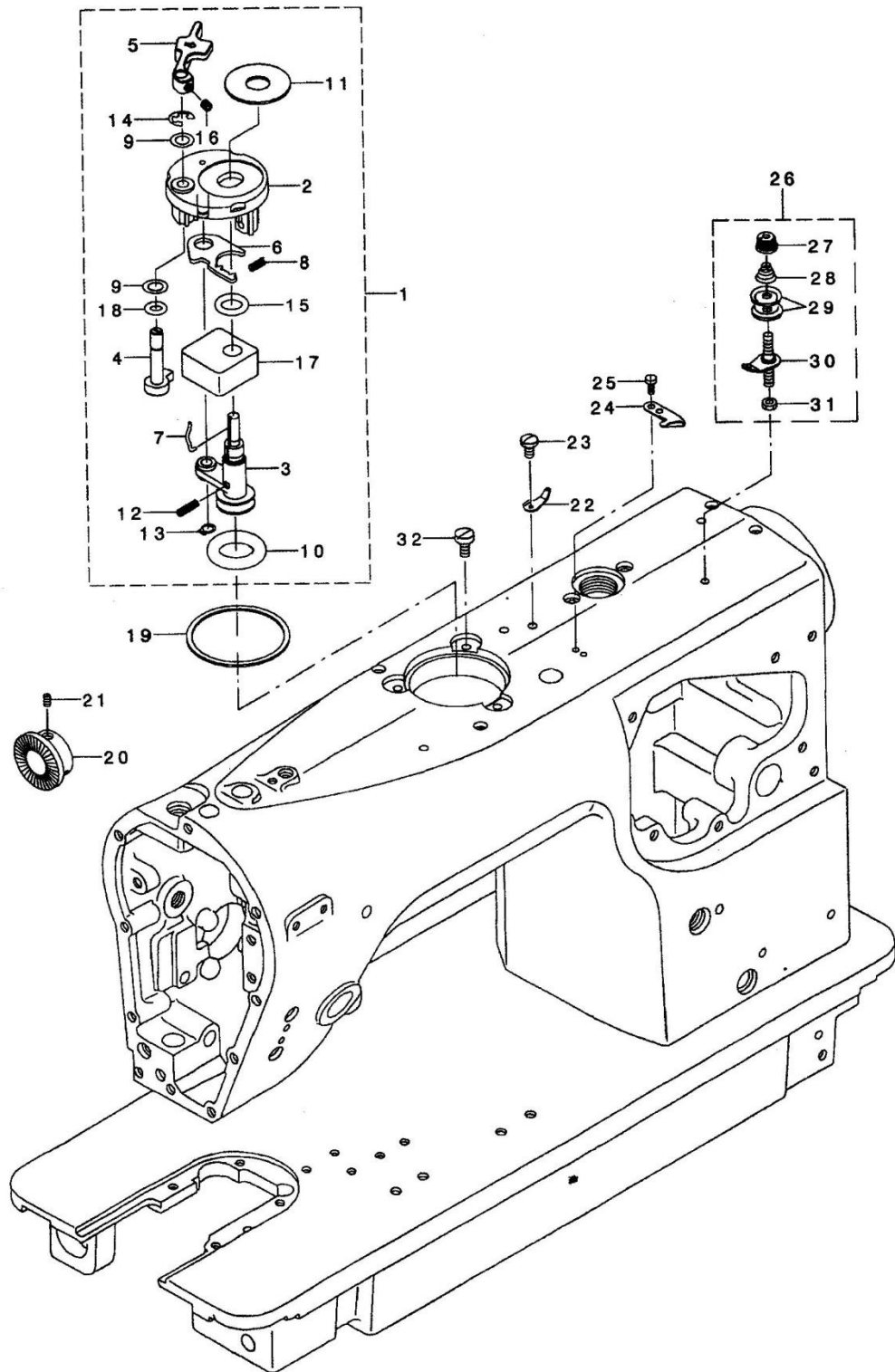
2.机壳部件 (2)

Frame & Miscellaneous cover components(2)



3.机壳部件 (3)

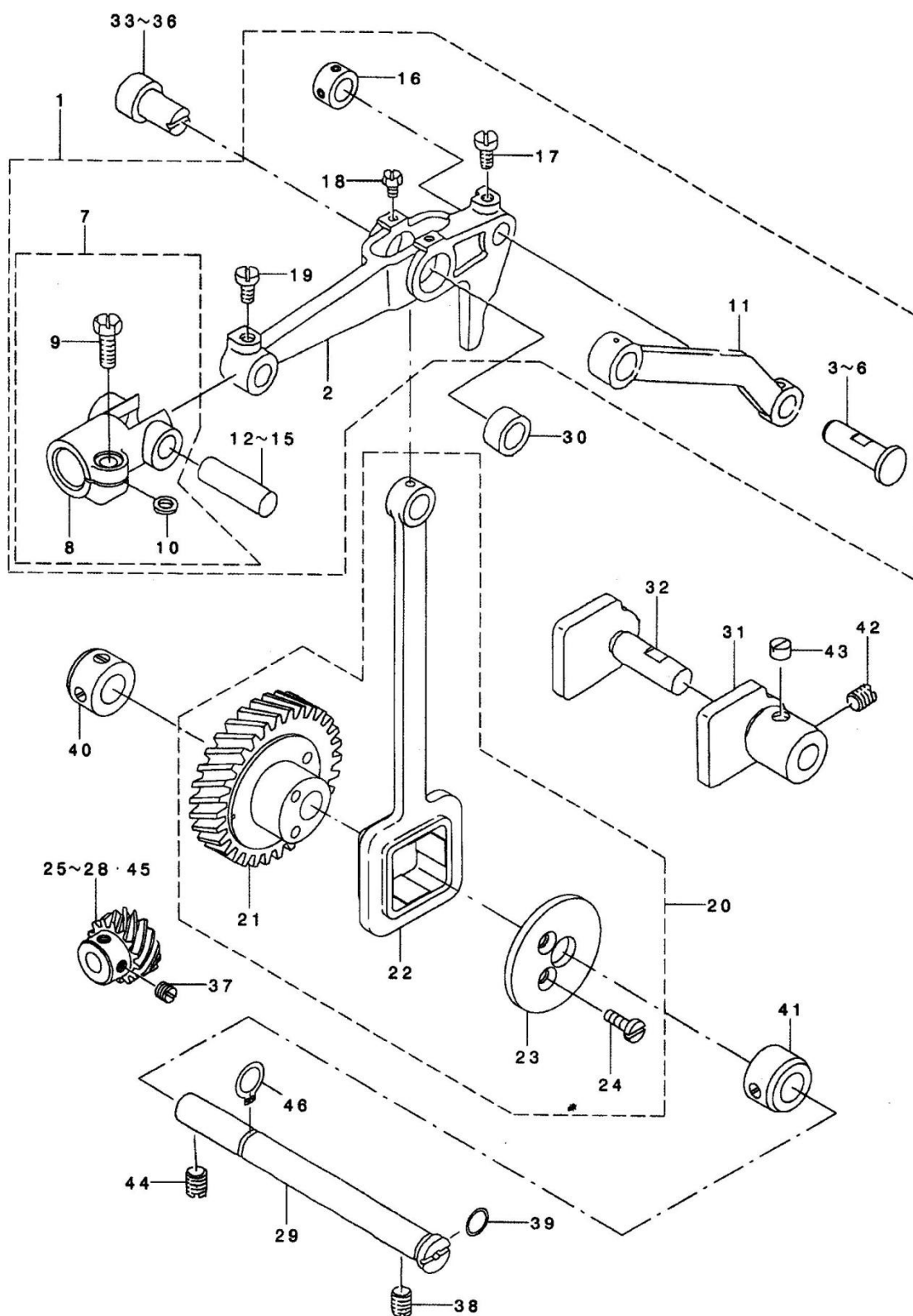
Frame & Miscellaneous cover components(3)



序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ4001	上轴	Main shaft	1
2	LJQZ4002	轴承衬套组件	Thrust collar asm.	1
3	LJQZ4003	轴承衬套	Thrust collar asm.	(1)
4	LJQZ4004	轴承	Bearing D=20X47	(1)
5	LJQZ4005	螺钉	Screw 1/4-40 L=6	(2)
6	LJQZ4006	油封挡圈	Oil seal collar	1
7	LJQZ4007	同步带轮(上)	Sprocket	1
8	LJQZ4008	主动轮	Hand wheel	1
9	LJQZ4009	挑线杆	Balance	1
10	LJQZ4010	上轴前套	"Main shaft bushing,front"	1
11	LJQZ4011	上轴中套	"Main shaft bushing,intermedia"	1
12	LJQZ4012	油封	Oil seal	1
13	LJQZ4013	针杆曲柄	Counterweight	1
14	LJQZ4014	针杆曲柄防护板	Counterweight protecting plate	1
15	LJQZ4015	挑线曲柄轴	Needle bar crank	1
16	LJQZ4016	挑线曲柄组件	Take-up counterweight asm.	1
17	LJQZ4017	同步带	Timing belt	1
18	LJQZ4018	针杆曲柄销	Pin	1
19	LJQZ4019	油线	Oil wick	1
20	LJQZ4020	O型圈	Rubber ring	1
21	LJQZ4021	螺钉	Screw 15/64-28 L=10.5	1
22	LJQZ4022	螺钉	Screw 15/64-28 L=11	1
23	LJQZ4023	O型圈	Rubber ring	1
24	LJQZ4024	主动轮螺钉	Screw 15/64-28 L=15	2
25	LJQZ4025	同步带轮螺钉	Screw 1/4-40 L=6	2
26	LJQZ4026	针杆曲柄定位螺钉	Screw 9/32-28 L=16	1
27	LJQZ4027	O型圈	Rubber ring	1
28	LJQZ4028	O型圈	Rubber ring	1
29	LJQZ4029	螺钉	Screw 1/4-40 L=6	2
30	LJQZ4030	螺钉	Screw 1/4-40 L=6	2
31	LJQZ4031	螺钉	Screw 9/64-40 L=8.6	3
32	LJQZ4032	上轴挡圈组件	Thrust collar asm. D=14.72 W=12	1
33	LJQZ4033	主动轮组件	Hand wheel asm.	1
34	LJQZ4034	主动轮	Hand wheel compl.	(1)
35	LJQZ4035	检测器磁铁组件	(B) Magnet fitting base b asm.	(1)
36	LJQZ4036	检测器磁铁组件	(A) Magnet fitting base a asm.	(1)
37	LJQZ4037	螺钉	Screw 15/64-28 L=15	(2)
38	LJQZ4038	螺钉	Screw 11/64-40 L=12	2
39	LJQZ4039	垫圈	Washer 4.5x10x0.8	2
40	LJQZ4040	检测器组件	Dynamo stator	1
41	LJQZ4041	螺钉	Screw	2
42	LJQZ4042	针杆连杆	Needle bar crank rod asm.	1
43	LJQZ4043	针杆接头	Needle bar connection	1
44	LJQZ4044	线勾	Thread rack	1
45	LJQZ4045	针杆	Needle rod	1
46	LJQZ4046	针杆接头导向块	Needle bar connection guide	1
47	LJQZ4047	针杆连杆导向块	Crank rod guide	1
48	LJQZ4048	轴承	"Needle bearing,a"	1
49	LJQZ4049	轴承	Needle bearing	1
50	LJQZ4050	轴承	Needle bearing	1
51	LJQZ4051	轴承	Needle bearing	1
52	LJQZ4052	机针	Needle 438 #75	1
53	LJQZ4053	螺钉	Screw 1/8-44 L=4.9	1
54	LJQZ4054	螺钉	Screw 9/64-40 L=8.5	1
55	LJQZ4055	螺钉	Screw 11/64-40 L=9	2
56	LJQZ4056	螺钉	Screw 11/64-40 L=7	2
57	LJQZ4057	螺钉	Screw 3/32-56 L=3	1
58	LJQZ4058	针杆移动架组件	Needle bar yoke asm.	1
59	LJQZ4059	针杆移动架	Needle bar yoke	(1)
60	LJQZ4060	针杆移动架轴	Shaft	(1)
61	LJQZ4061	针杆上轴套	"Needle bar bushing ,upper D=7"	(1)
62	LJQZ4062	针杆下轴套	"Needle bar bushing ,lower D=7"	(1)
63	LJQZ4063	弹性圆柱销	Spring pin	(1)
64	LJQZ4064	针杆移动架轴套(前)	Feed rocker shaft bushing	1
65	LJQZ4065	调节销	Needle bar yoke presser	1
66	LJQZ4066	螺钉	Screw	1
67	LJQZ4067	导向销	Guide pin	1
68	LJQZ4068	针杆移动架轴套(后)	"Shaft bushing,rear"	1
69	LJQZ4069	螺钉	Screw 3/16-28 L=7	1
70	LJQZ4070	油线	Oil wick	0.1
71	LJQZ4071	挑线杆	Balance V	1
72	LJQZ4072	机针	Needle 134suk 70	1
73	LJQZ4073	机针	Needle DPX5 #10	1
74	LJQZ4074	针杆	Needle rod	1
75	LJQZ4075	针杆过线环	Needle rod thread rack	1

5.针杆调节部件 (1)

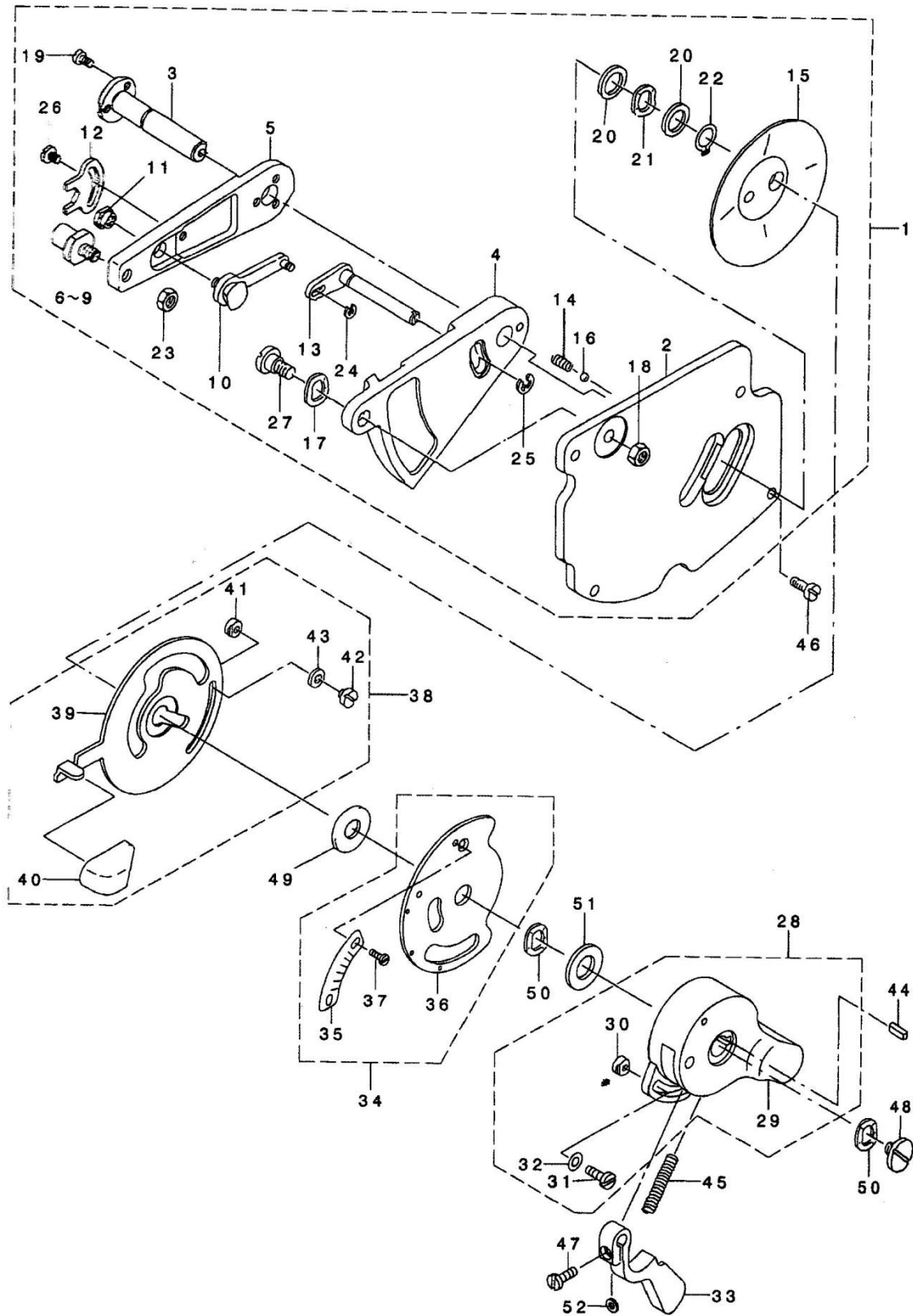
Needle vibrator & Adjustment components(1)



序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ5001	针杆调节大组件	Drive link asm.	1
2	LJQZ5002	针杆驱动连杆	Drive link	(1)
3	LJQZ5003	连杆销	Link	(1)
4	LJQZ5004	连杆销	Shaft	(1)
5	LJQZ5005	连杆销	Shaft	(1)
6	LJQZ5006	连杆销	Shaft	(1)
7	LJQZ5007	针杆驱动接头组件	Shaft connection asm.	(1)
8	LJQZ5008	针杆驱动接头	Shaft connection asm.	(1)
9	LJQZ5009	螺钉	Screw 3/16-28 L=14	(1)
10	LJQZ5010	垫圈	Washer 5.1x7.5x0.5	(1)
11	LJQZ5011	连杆	Link	(1)
12	LJQZ5012	销	Pin D	(1)
13	LJQZ5013	销	Pin	(1)
14	LJQZ5014	销	Pin B	(1)
15	LJQZ5015	销	Pin C	(1)
16	LJQZ5016	挡圈	Thrust collar asm.	(1)
17	LJQZ5017	螺钉	Screw 11/64-40 L=8.5	(1)
18	LJQZ5018	螺钉	Screw 9/64-40 L=5.5	(2)
19	LJQZ5019	螺钉	Screw 11/64-40 L=8.5	(1)
20	LJQZ5020	针杆驱动凸轮组件	Needle vibrating cam asm.	1
21	LJQZ5021	针杆驱动凸轮	Needle vibrating cam	(1)
22	LJQZ5022	针杆驱动凸轮连杆	Needle vibrating rod	(1)
23	LJQZ5023	凸轮挡板	Cam cover	(1)
24	LJQZ5024	螺钉	Screw 11/64-40 L=8.5	(2)
25	LJQZ5025	齿轮	A Screw gear A	1
26	LJQZ5026	齿轮	B Screw gear B	1
27	LJQZ5027	齿轮	C Screw gear C	1
28	LJQZ5028	齿轮	D Screw gear D	1
29	LJQZ5029	针杆驱动凸轮轴	Needle vibrating cam shaft	1
30	LJQZ5030	挡圈	Bushing	1
31	LJQZ5031	驱动连杆导向块	(A) Drive link guide A	1
32	LJQZ5032	驱动连杆导向块	(B) Drive link guide B	1
33	LJQZ5033	调节销	(A) Pin A	1
34	LJQZ5034	调节销	(B) Pin B	1
35	LJQZ5035	调节销	(C) Pin B	1
36	LJQZ5036	调节销	(D) Pin D	1
37	LJQZ5037	螺钉	Screw 1/4-40 L=6	2
38	LJQZ5038	螺钉	Screw 1/4-40 L=8.5	1
39	LJQZ5039	O型圈	Rubber ring	1
40	LJQZ5040	挡圈组件	Thrust collar asm. D=10.32 W=1	1
41	LJQZ5041	挡圈组件	Thrust collar asm. D=10.32 W=1	1
42	LJQZ5042	螺钉	Screw 15/64-28 L=7	1
43	LJQZ5043	螺钉	Screw 1/4-40 L=4.2	1
44	LJQZ5044	螺钉	Screw 1/4-40 L=8	1
45	LJQZ5045	齿轮	E Screw gear E	1
46	LJQZ5046	挡圈	Snap ring M10	1

6. 针杆调节部件 (2)

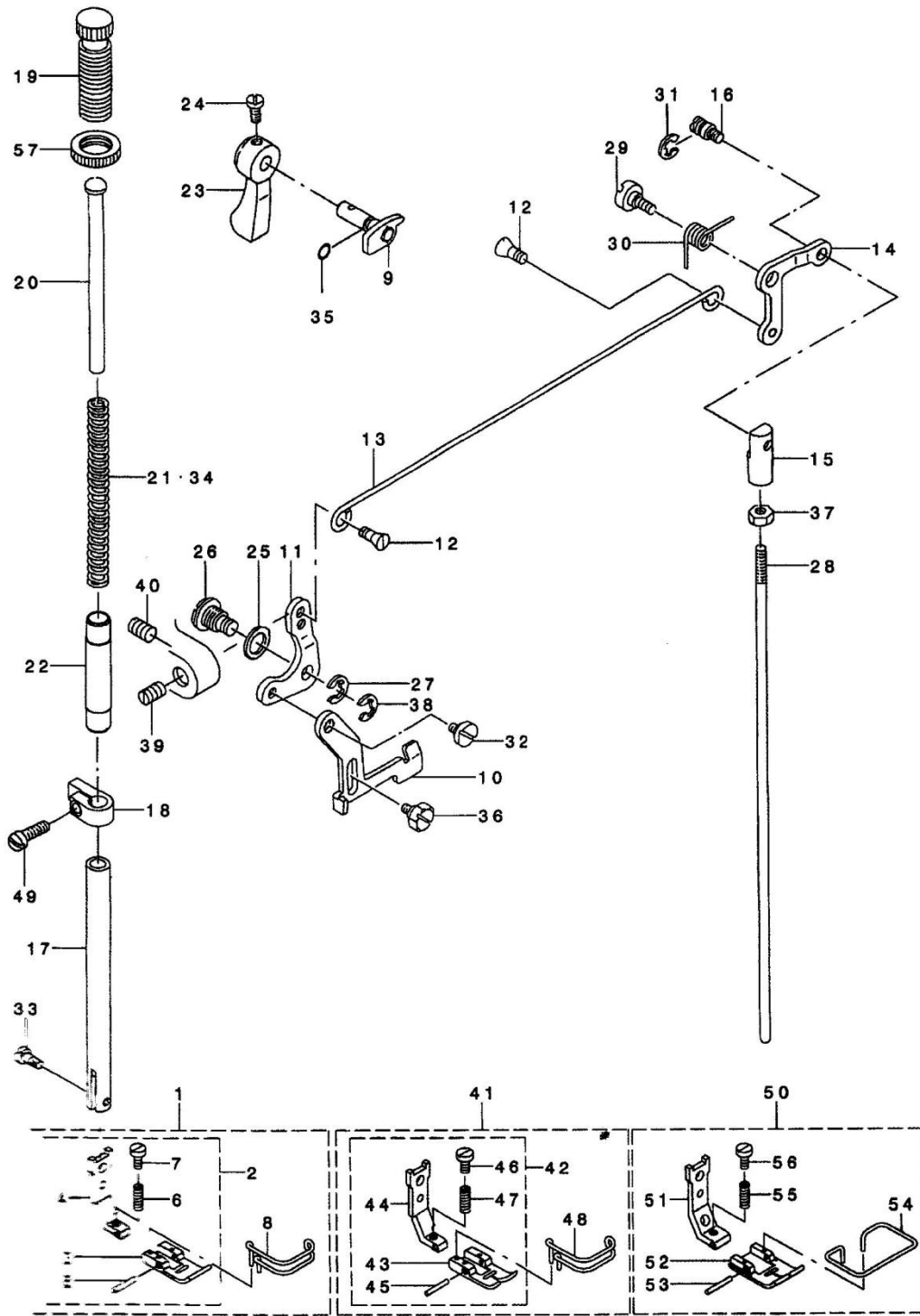
Needle vibrator & Adjustment components(2)



序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ6001	针幅标盘组件	Base asm.	1
2	LJQZ6002	标盘安装板	Base mounting plate	(1)
3	LJQZ6003	导向小轴	Shaft	(1)
4	LJQZ6004	机针位置调节板	Needle position adjusting base	(1)
5	LJQZ6005	调节连杆	arm	(1)
6	LJQZ6006	轴位螺钉	Shaft	(1)
7	LJQZ6007	轴位螺钉	Shaft	(1)
8	LJQZ6008	轴位螺钉	Shaft	(1)
9	LJQZ6009	轴位螺钉	Shaft	(1)
10	LJQZ6010	限位块组件	Stopper asm.	(1)
11	LJQZ6011	螺母	Nut	(1)
12	LJQZ6012	螺母限位板	Nut stopper	(1)
13	LJQZ6013	驱动连杆组件	Lever asm.	(1)
14	LJQZ6014	螺钉	Spring	(1)
15	LJQZ6015	防油垫	Oil shield	(1)
16	LJQZ6016	钢球	Hand stop crank shaft ball	(1)
17	LJQZ6017	波型垫圈	Waved washer 8.5x12.5x0.3	(3)
18	LJQZ6018	螺母	Nut 15/64-28	(1)
19	LJQZ6019	螺钉	Screw 9/64-40 L=6	(3)
20	LJQZ6020	垫圈	Washer	(2)
21	LJQZ6021	波型垫圈	Waved washer	(1)
22	LJQZ6022	挡圈	Snap ring M10	(1)
23	LJQZ6023	螺母	Nut 15/64-28	(1)
24	LJQZ6024	开口挡圈	E-ring	(1)
25	LJQZ6025	开口挡圈	E-ring 4	(1)
26	LJQZ6026	螺钉	Screw 9/64-40 L=5.0	(1)
27	LJQZ6027	轴位螺钉	Hinge screw D=8 H=4	(1)
28	LJQZ6028	调节旋钮组件	Knob asm.	1
29	LJQZ6029	调节旋钮	Knob asm.	(1)
30	LJQZ6030	限位块	Lever stopper	(2)
31	LJQZ6031	螺钉	Screw 9/64-40 L=6	(2)
32	LJQZ6032	垫圈	Washer 3.7x8x1	(2)
33	LJQZ6033	调节扳手	Lever	1
34	LJQZ6034	针幅标盘组件	Scale plate asm.	(1)
35	LJQZ6035	针幅标盘	Scale plate	(1)
36	LJQZ6036	标盘安装板小组件	Scale mounting base compl	(1)
37	LJQZ6037	螺钉	Screw 1/8-44 L=2.5	(2)
38	LJQZ6038	针位置调节板组件	Lever asm.	1
39	LJQZ6039	针位置调节板	Lever	(1)
40	LJQZ6040	针位置调节把手	Knob	(1)
41	LJQZ6041	限位块	Lever stopper	(2)
42	LJQZ6042	螺钉	Screw 9/64-40 L=3.5	(2)
43	LJQZ6043	垫圈	Washer 3.7x8x1	(2)
44	LJQZ6044	平键	Key	1
45	LJQZ6045	弹簧	Spring	1
46	LJQZ6046	螺钉	Screw 3/16-28 L=10	4
47	LJQZ6047	螺钉	Screw 9/64-40 L=8.5	1
48	LJQZ6048	螺钉	Screw 3/16-32 L=6.5	1
49	LJQZ6049	垫圈	Washer	1
50	LJQZ6050	波型垫圈	Waved washer	1
51	LJQZ6051	垫圈	Washer	1
52	LJQZ6052	垫圈	Washer 3.7x6x1	1

7.压脚部件

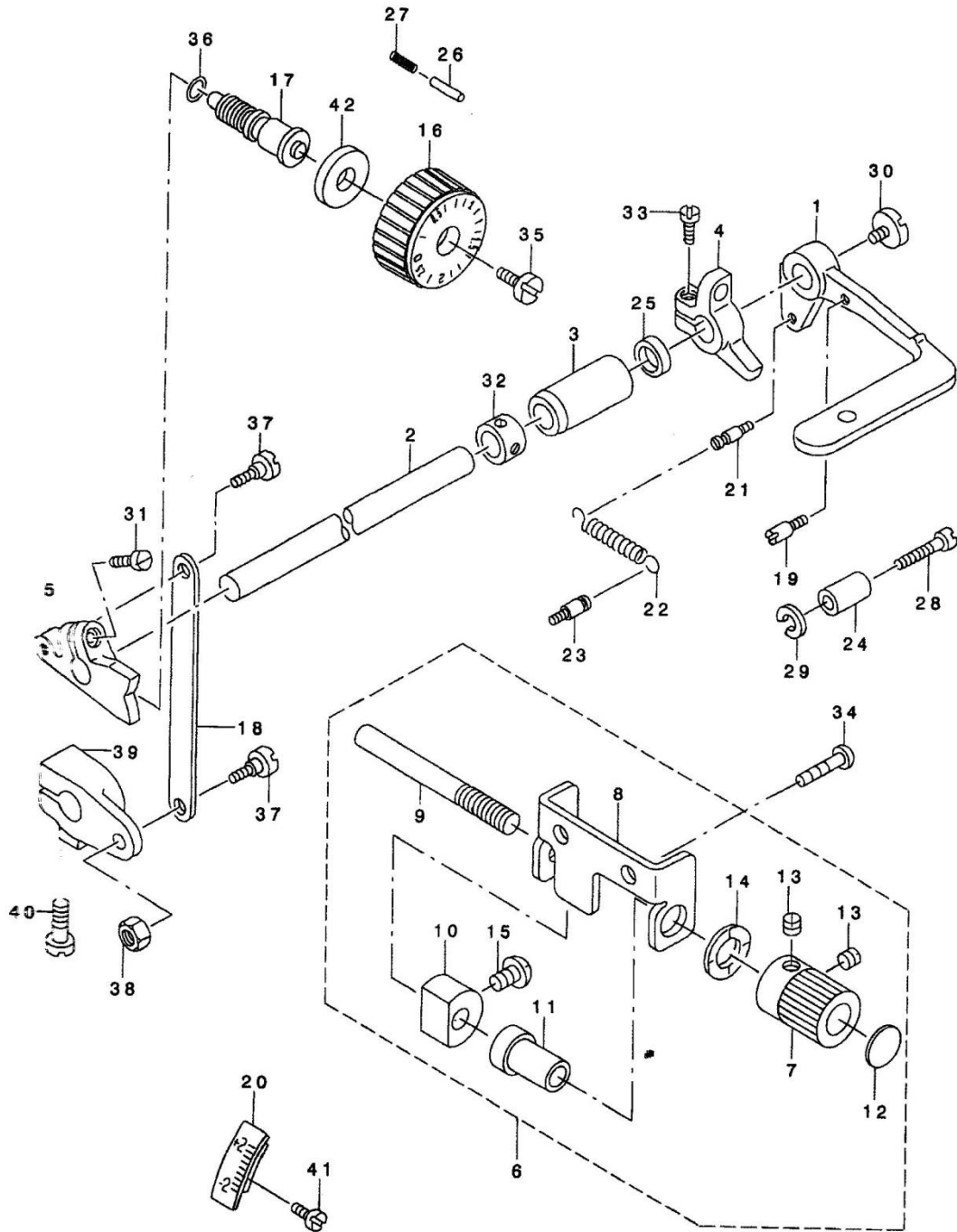
Presser bar & Feed regulator components



序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ7001	压脚大组件	Presser foot asm.	1
2	LJQZ7002	压脚组件	Presser foot asm.	(1)
3	LJQZ7003	压脚底板	Presser foot(lower)	(1)
4	LJQZ7004	压脚柄	Presser foot(upper)	(1)
5	LJQZ7005	压脚销	Presser pin	(1)
6	LJQZ7006	压脚弹簧	Spring	(1)
7	LJQZ7007	压脚螺钉	Screw 9/64-40 L=7.5	(1)
8	LJQZ7008	压脚防护罩	Finger cover	(1)
9	LJQZ7009	压脚提升凸轮组件	Hand lifter cam compl	1
10	LJQZ7010	松线凸轮	Lifting lever	1
11	LJQZ7011	膝控提升杠杆(左)	Lifting lever link	1
12	LJQZ7012	螺钉	Hinge screw	2
13	LJQZ7013	膝控提升拉杆	Lifting lever connecting rod	1
14	LJQZ7014	膝控提升杠杆(右)	Lifting lever link arm	1
15	LJQZ7015	膝控提升杠杆接头	Swivel	1
16	LJQZ7016	接头螺钉	Connecting rod hinge screw	1
17	LJQZ7017	压紧杆	Presser bar	1
18	LJQZ7018	压紧杆导架	Presser bar guide bracket	1
19	LJQZ7019	调压螺钉	Presser spring regulator	1
20	LJQZ7020	压紧杆弹簧导柱	Presser guide bar	1
21	LJQZ7021	压紧杆弹簧	Presser spring	1
22	LJQZ7022	压紧杆轴套	"Presser bar bushing,lower"	1
23	LJQZ7023	压脚扳手	Hand lifter	1
24	LJQZ7024	压脚扳手螺钉	Screw	1
25	LJQZ7025	提升杠杆(左)螺钉垫圈	Lifting lever gasket	1
26	LJQZ7026	提升杠杆(左)螺钉	Hinge pin	1
27	LJQZ7027	开口挡圈	snap ring	1
28	LJQZ7028	压脚提升顶杆	"Connecting rod,vertical"	1
29	LJQZ7029	膝控提升杠杆(右)螺钉	Knee lifting link step-screw	1
30	LJQZ7030	提升杠杆(右)复位簧	Knee lifting link spring	1
31	LJQZ7031	开口挡圈	E-ring	1
32	LJQZ7032	螺钉	Hinge screw D=6.35 H=3	1
33	LJQZ7033	压脚螺钉	Screw 9/64-40 L=8.5	1
34	LJQZ7034	压紧杆弹簧	Presser spring T	1
35	LJQZ7035	O型圈	Rubber ring	1
36	LJQZ7036	轴位螺钉	Hinge screw D=6.35 H=2.7	1
37	LJQZ7037	螺母	Nut 3/16-32	1
38	LJQZ7038	卡圈	E-ring 6	1
39	LJQZ7039	螺钉	Screw	1
40	LJQZ7040	螺钉	Screw 15/64-28 L=4.7	1
41	LJQZ7041	压脚大组件	Presser foot asm.	1
42	LJQZ7042	压脚组件	Presser foot asm.	(1)
43	LJQZ7043	压脚底板	Presser foot asm.(lower)	(1)
44	LJQZ7044	压脚柄	Presser foot asm.(upper)	(1)
45	LJQZ7045	压脚销	Presser pin	(1)
46	LJQZ7046	压脚螺钉	Screw 9/64-40 L=7.5	(1)
47	LJQZ7047	压脚弹簧	Spring	(1)
48	LJQZ7048	压脚防护罩	Finger cover	(1)
49	LJQZ7049	压紧杆导架螺钉	Screw 11/64-40 L=10.5	1
50	LJQZ7050	压脚组件	Presser asm.	1
51	LJQZ7051	压脚柄	Presser foot(upper)	(1)
52	LJQZ7052	压脚底板	Presser foot(lower)	(1)
53	LJQZ7053	压脚销	Presser pin	(1)
54	LJQZ7054	压脚防护罩	Safety cover	(1)
55	LJQZ7055	压脚弹簧	Spring	(1)
56	LJQZ7056	压脚螺钉	Screw 9/64-40 L=7.5	(1)
57	LJQZ7057	螺母	Nut	1

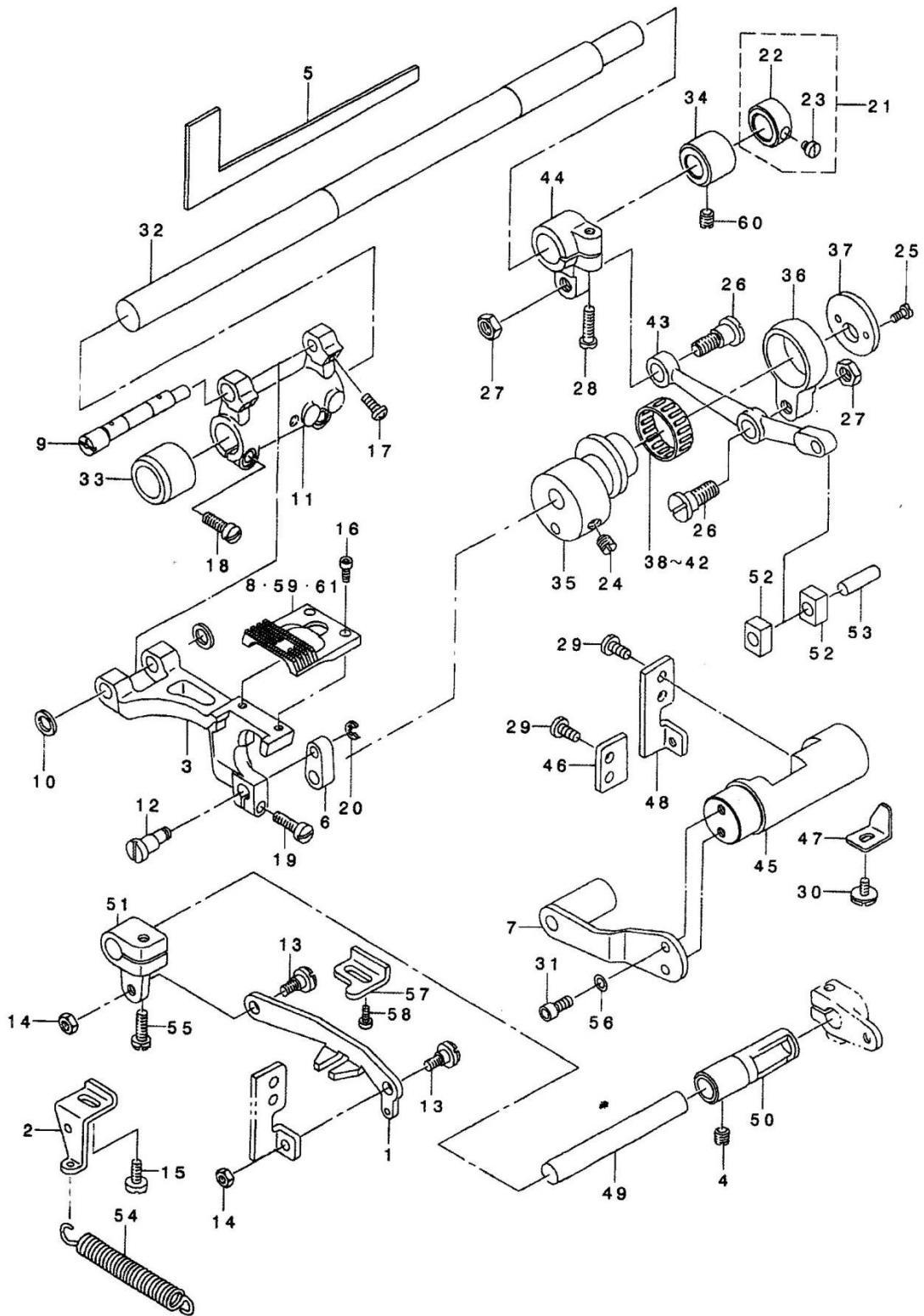
8.倒缝部件

Feed mechanism & Condense components



9.送布部件

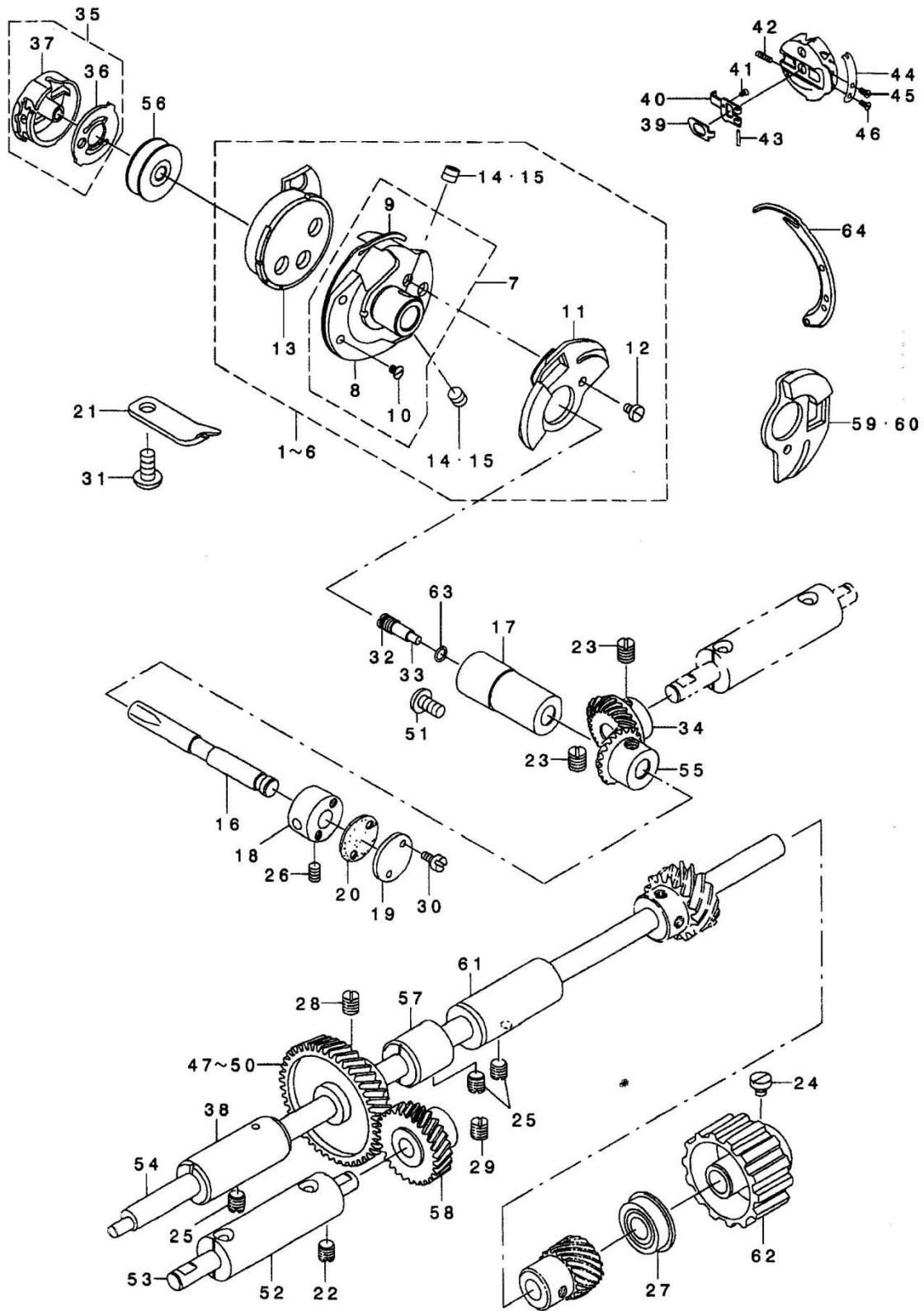
Feed mechanism components



序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ9001	送布连杆	Feed reversal link	1
2	LJQZ9002	拉簧架	Tension spring rack	1
3	LJQZ9003	牙架	Feed base	1
4	LJQZ9004	螺钉	Screw 15/64-28 L=4.7	1
5	LJQZ9005	羊毛毡	Felt	1
6	LJQZ9006	送布交换曲柄	Link	1
7	LJQZ9007	平衡块组件	Balance weight compl.	1
8	LJQZ9008	送布牙	Feed dog	1
9	LJQZ9009	牙架曲柄轴	Feed base shaft	1
10	LJQZ9010	垫圈	Spacer	2
11	LJQZ9011	牙架曲柄	Feed rocker	1
12	LJQZ9012	抬牙短轴	Link shaft	1
13	LJQZ9013	轴位螺钉	Hinge screw D=6 H=3.2	2
14	LJQZ9014	螺母	Nut 3/16-28	2
15	LJQZ9015	螺钉	Screw 11/64-40 L=11	1
16	LJQZ9016	送布牙螺钉	Screw 1/8-40 L=7	2
17	LJQZ9017	牙架曲柄轴螺钉	Screw 3/16-28 L=9	2
18	LJQZ9018	牙架曲柄螺钉	Screw 3/16-28 L=14	2
19	LJQZ9019	螺钉	Screw 3/16-28 L=14	1
20	LJQZ9020	开口挡圈	E-ring 3	1
21	LJQZ9021	挡圈组件	Thrust collar asm.D=11.11 W=1	1
22	LJQZ9022	挡圈	Thrust collar D=11.1 W=1	(1)
23	LJQZ9023	螺钉	Screw 1/4-40 L=7	(1)
24	LJQZ9024	螺钉	Screw 1/4-40 L=8	2
25	LJQZ9025	螺钉	Screw 1/8-44 L=6.4	2
26	LJQZ9026	轴位螺钉	Hinge screw D=9 H=7	2
27	LJQZ9027	螺母	Nut 9/32-28	2
28	LJQZ9028	螺钉	Screw 3/16-28 L=15.5	1
29	LJQZ9029	螺钉	Screw 11/64-40 L=8.5	4
30	LJQZ9030	螺钉	Screw 11/64-40 L=7	1
31	LJQZ9031	螺钉	Screw	2
32	LJQZ9032	送布轴	Feed rocker shaft	1
33	LJQZ9033	送布轴轴套 (左)	"Bushing,front"	1
34	LJQZ9034	送布轴轴套 (右)	"Feed rocker shaft bushing,fro"	1
35	LJQZ9035	送布凸轮	Eccentric cam	1
36	LJQZ9036	送布凸轮连杆	Rod	1
37	LJQZ9037	送布凸轮端盖	Side disc plate	1
38	LJQZ9038	滚针轴承	Bushing	1
39	LJQZ9039	滚针轴承	Needle bearing	1
40	LJQZ9040	滚针轴承	Bearing	1
41	LJQZ9041	滚针轴承	Bearing	1
42	LJQZ9042	滚针轴承	Bearing	1
43	LJQZ9043	送布连杆	Connecting rod	1
44	LJQZ9044	送布曲柄 (右)	Feed rocker shaft crank	1
45	LJQZ9045	倒缝台	Feed driving rocker	1
46	LJQZ9046	导向板 (左)	Plate A	1
47	LJQZ9047	倒缝台挡板	Stopper plate	1
48	LJQZ9048	导向板 (右)	Plate B	1
49	LJQZ9049	抬牙轴	Feed variable shaft	1
50	LJQZ9050	抬牙轴轴套	Bushing	1
51	LJQZ9051	抬牙曲柄	Feed variable arm C	1
52	LJQZ9052	送布连杆滑块	Feed dricing rocker block	2
53	LJQZ9053	送布连杆滑块轴	Pin	1
54	LJQZ9054	拉簧	Tension spring	1
55	LJQZ9055	螺钉	Screw 3/16-28 L=14	1
56	LJQZ9056	垫圈	Washer	2
57	LJQZ9057	倒缝限位板	Reverse feed limiter	1
58	LJQZ9058	倒缝限位板螺钉	Screw 11/64-40 L=11	1
59	LJQZ9059	送布牙	Feed dog	1
60	LJQZ9060	螺钉	Screw 15/64-28 L=7	2
61	LJQZ9061	送布牙	Feed dog	1

10. 下轴部件

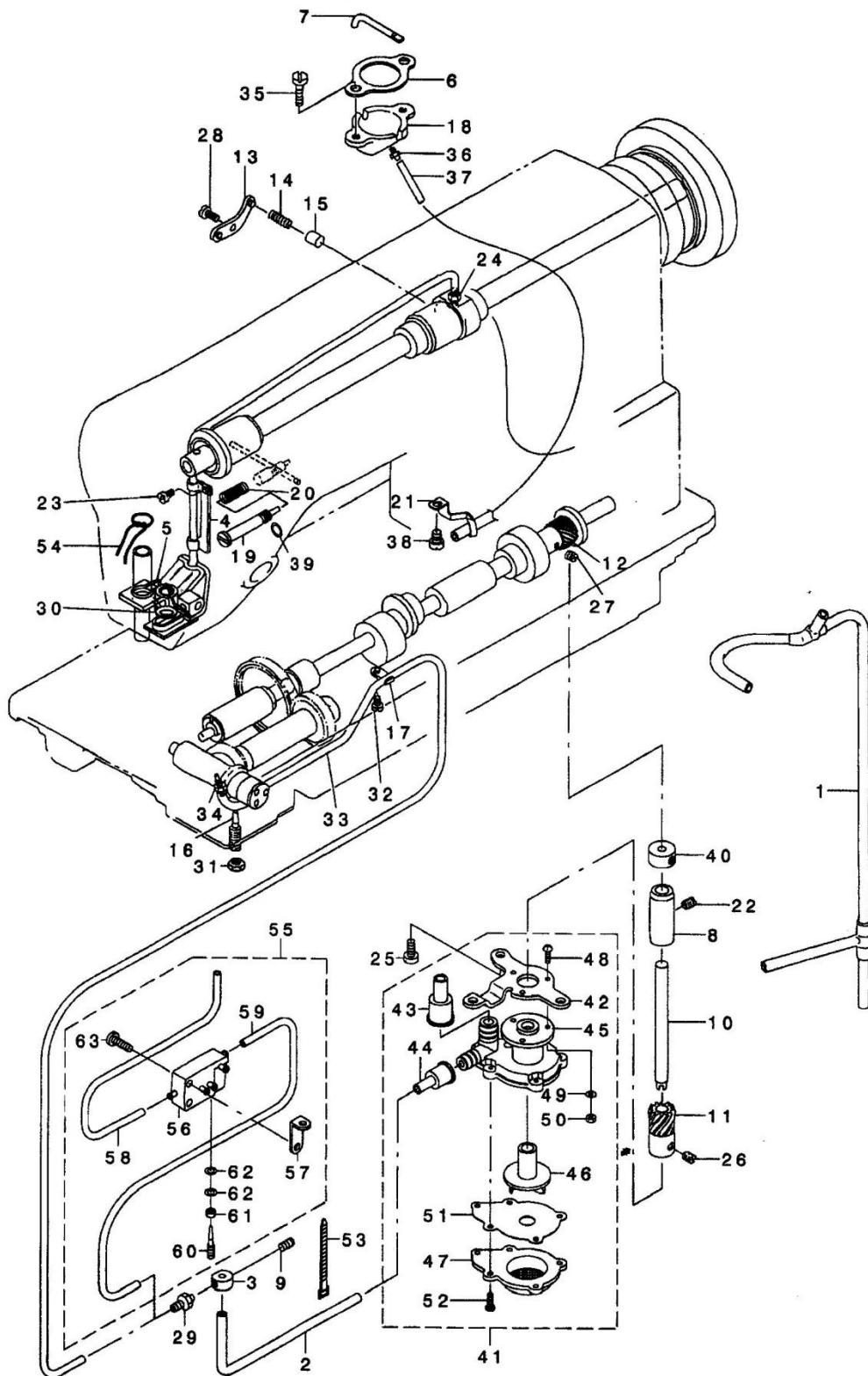
Hook driving shaft & Hook components



序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ10001	旋梭大组件	"Hook compl.,right"	1
2	LJQZ10002	旋梭大组件	Hook compl.V	1
3	LJQZ10003	旋梭大组件	Hook compl.V(plastic hook)	1
4	LJQZ10004	旋梭大组件	Hook compl.V(hard point)	1
5	LJQZ10005	旋梭大组件	Hook combination(hard point)	1
6	LJQZ10006	旋梭大组件	Hook asm.(plastic)	1
7	LJQZ10007	旋梭组件	Rotating hook V asm.	(1)
8	LJQZ10008	旋梭	Outer hook V	(1)
9	LJQZ10009	旋梭压板	Inner hook presser v-s	(1)
10	LJQZ10010	旋梭螺钉	Hook gib screw	(2)
11	LJQZ10011	旋梭盖板	Reverse plate V	(1)
12	LJQZ10012	盖板螺钉	Hook counter balance screw	(1)
13	LJQZ10013	内旋梭	Inner hook V	(1)
14	LJQZ10014	旋梭螺钉	Screw 11/64-40 L=4	(2)
15	LJQZ10015	旋梭螺钉	Screw 11/64-40 L=4.5	(2)
16	LJQZ10016	旋梭轴	Hook shaft	1
17	LJQZ10017	旋梭轴轴套(长)	Hook shaft bushing	1
18	LJQZ10018	旋梭轴轴套(短)	Hook shaft bushing	1
19	LJQZ10019	旋梭轴套盖板	Bushing gap	1
20	LJQZ10020	旋梭轴套盖板垫片	Gasket	1
21	LJQZ10021	旋梭定位勾	Inner hook stopper	1
22	LJQZ10022	螺钉	Screw 15/64-28 L=7	1
23	LJQZ10023	螺钉	Screw 1/4-40 L=8	4
24	LJQZ10024	螺钉	Screw 1/4-40 L=7	2
25	LJQZ10025	螺钉	Screw 15/64-28 L=7	3
26	LJQZ10026	螺钉	Screw 15/64-28 L=8	1
27	LJQZ10027	轴承	Bearing D=9.52x22.22	1
28	LJQZ10028	螺钉	Screw 1/4-40 L=8	2
29	LJQZ10029	螺钉	Screw 1/4-40 L=8	2
30	LJQZ10030	螺钉	Screw 1/8-44 L=6	2
31	LJQZ10031	旋梭定位勾螺钉	Screw 11/64-40 L=9	1
32	LJQZ10032	油量调节螺钉	Oil seal screw	1
33	LJQZ10033	油线	Oil wick	1
34	LJQZ10034	旋梭伞齿轮(大)	Gear asm.large	1
35	LJQZ10035	梭芯套组件	Bobbin case asm.	1
36	LJQZ10036	梭芯套弹簧	Bobbin case spring	(1)
37	LJQZ10037	梭芯套	Bobbin case compl.	(1)
38	LJQZ10038	下轴轴套(左)	"Bushing,front"	1
39	LJQZ10039	梭芯套锁扣按钮	Lc-601-1/Latch lever	1
40	LJQZ10040	按钮座	Lc-602-2/Latch	1
41	LJQZ10041	螺钉	Sms-801-B/Setscrew pick-up	1
42	LJQZ10042	弹簧	Lsp-4/Latch spring	1
43	LJQZ10043	按钮销	Lsp-1/Latch pin	1
44	LJQZ10044	弹簧片	Tsp-604-B/Tension spring	1
45	LJQZ10045	螺钉	Sms-608-B/Tension screw	1
46	LJQZ10046	螺钉	Sms-609-B/Setscrew tension sp	1
47	LJQZ10047	旋梭齿轮(大)	"Helical gear A,A"	1
48	LJQZ10048	旋梭齿轮(大)	"Helical gear A,B"	1
49	LJQZ10049	旋梭齿轮(大)	"Helical gear A,C"	1
50	LJQZ10050	旋梭齿轮(大)	"Helical gear A,D"	1
51	LJQZ10051	螺钉	Front screw	1
52	LJQZ10052	旋梭驱动轴套	Bushing	1
53	LJQZ10053	旋梭驱动轴	Shaft	1
54	LJQZ10054	下轴	Hook driving shaft	1
55	LJQZ10055	旋梭伞齿轮(小)	Pinion asm.	1
56	LJQZ10056	梭芯	Bobbin S	1
57	LJQZ10057	下轴轴套(中)	"Bushing,intermediate"	1
58	LJQZ10058	旋梭伞齿轮(小)	Helical gear B	1
59	LJQZ10059	反向板	Reverse plate	1
60	LJQZ10060	反向板	V Reverse plate V	1
61	LJQZ10061	下轴轴套(右)	"Bushing,rear"	1
62	LJQZ10062	同步带轮(下)	Hook driving shaft sprocket	1
63	LJQZ10063	O型圈	Rubber ring	1
64	LJQZ10064	旋梭保护勾	Inner presser V-S4	1

11. 供油部件

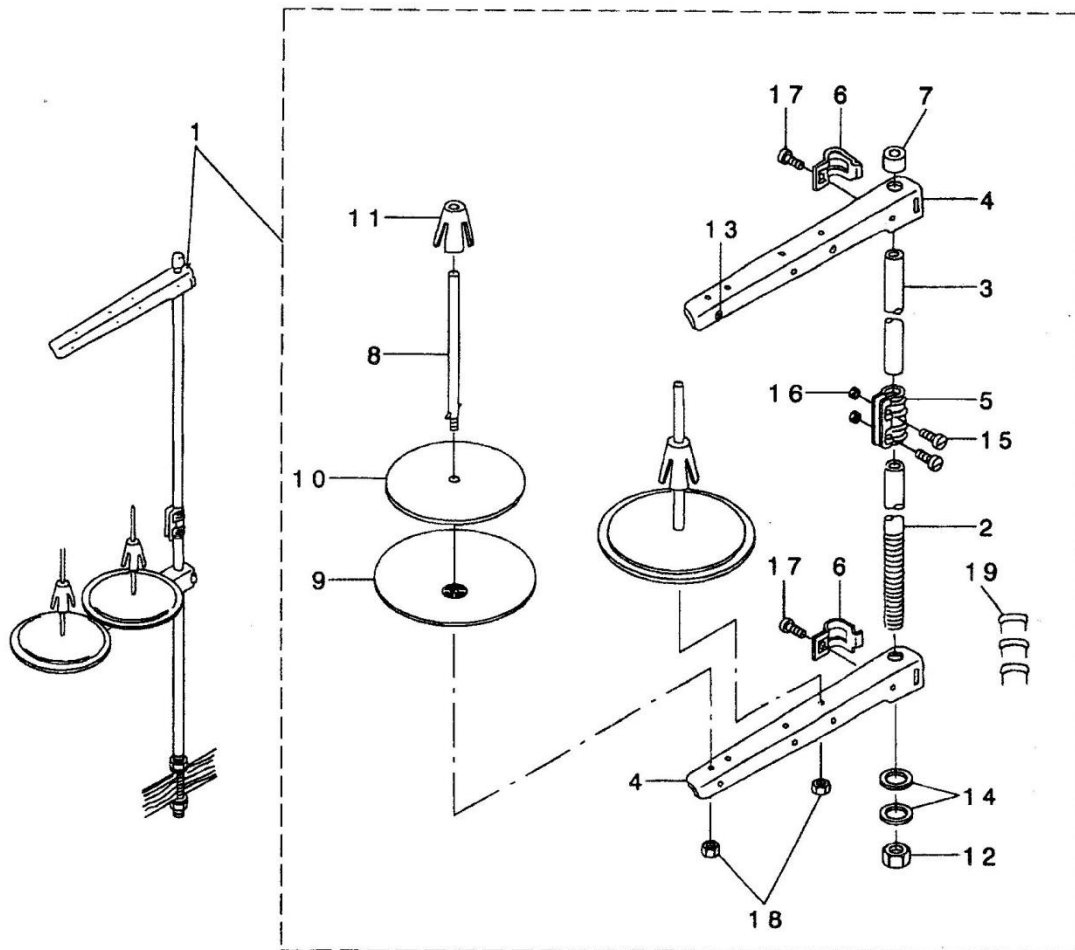
Lubrication components



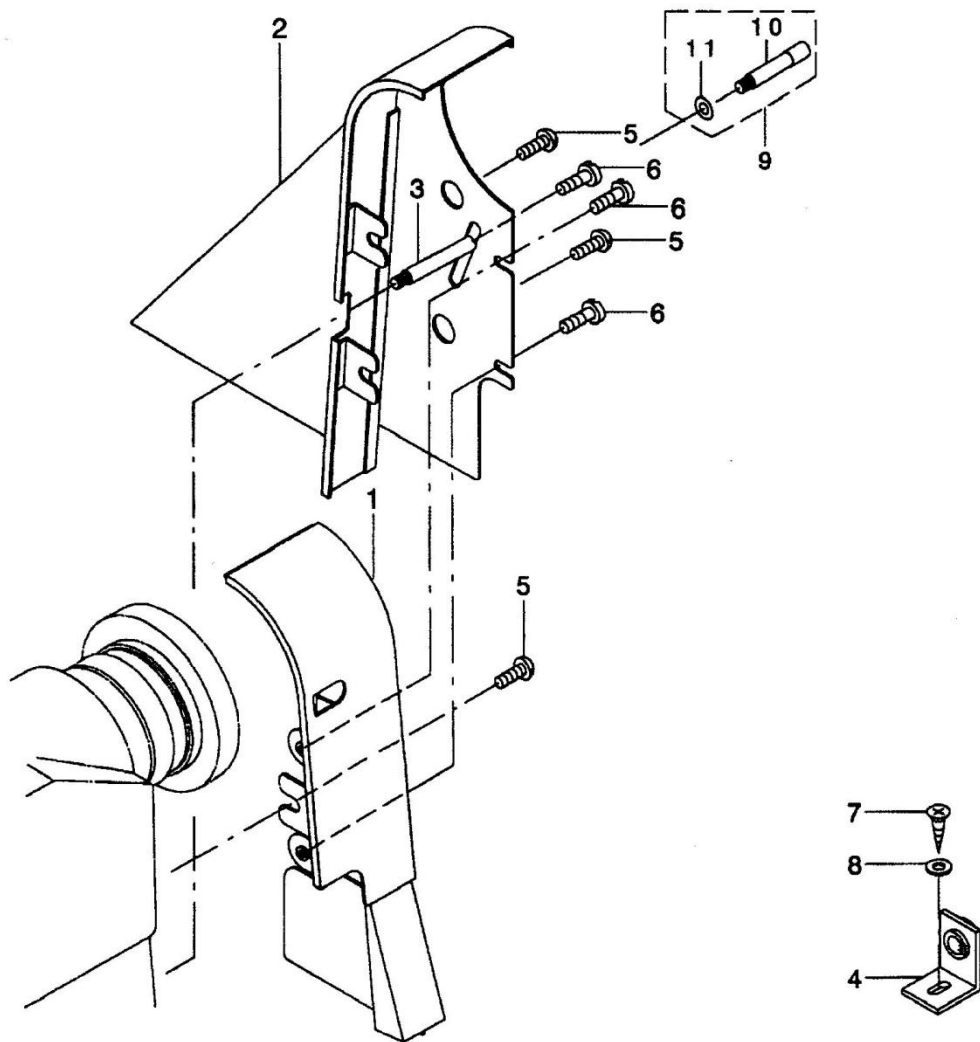
序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ11001	供油管组件	Oil supply pipe asm.	1
2	LJQZ11002	供油管	Oil supply pipe	1
3	LJQZ11003	接头	Distributor	1
4	LJQZ11004	羊毛毡组件	Felt asm.	1
5	LJQZ11005	回油毡弹簧夹	Felt presser	1
6	LJQZ11006	储油槽垫片	Gasket	1
7	LJQZ11007	油管	Oil tube	1
8	LJQZ11008	油泵轴套	Bushing	1
9	LJQZ11009	螺钉	Screw 11/64-40 L=5	1
10	LJQZ11010	油泵轴	Upright shaft	1
11	LJQZ11011	油泵齿轮	Pump driving screw	1
12	LJQZ11012	油泵驱动齿轮	Pump driving gear A	1
13	LJQZ11013	柱塞压板	Plunger thrust plate	1
14	LJQZ11014	柱塞弹簧	Plunger spring	1
15	LJQZ11015	柱塞	Plunger	1
16	LJQZ11016	油量调节螺钉	Oil regulating screw	1
17	LJQZ11017	油管夹头	Oil return tube holder	1
18	LJQZ11018	储油槽	Oil tank	1
19	LJQZ11019	油量调节螺钉	Oil regulating screw	1
20	LJQZ11020	油量调节弹簧	Spring	1
21	LJQZ11021	油管夹头	Oil felt guide	1
22	LJQZ11022	螺钉	Screw 15/64-28 L=7	1
23	LJQZ11023	螺钉	Screw 11/64-40 L=7	1
24	LJQZ11024	油管接头	Connecting screw	1
25	LJQZ11025	螺钉	Screw 11/64-40 L=11	2
26	LJQZ11026	螺钉	Screw 1/4-40 L=4.5	2
27	LJQZ11027	螺钉	Screw 1/4-40 L=4.5	2
28	LJQZ11028	螺钉	Screw 11/64-40 L=7	1
29	LJQZ11029	油管接头	Connecting screw	1
30	LJQZ11030	油线	Oil wick	0.2
31	LJQZ11031	螺母	Nut 15/64-28	1
32	LJQZ11032	螺钉	Screw 11/64-40 L=5	1
33	LJQZ11033	油管	Oil tube	3.33
34	LJQZ11034	油管接头	Connecting screw	2
35	LJQZ11035	螺钉	Screw 11/64-40 L=14	2
36	LJQZ11036	油管接头	Connecting screw	1
37	LJQZ11037	油管	Oil tube	0.3
38	LJQZ11038	螺钉	Screw 11/64-40 L=5	1
39	LJQZ11039	O型圈	Rubber ring	1
40	LJQZ11040	挡圈组件	Thrust collar asm.	1
41	LJQZ11041	油泵组件	Lubricating oil pump asm.	1
42	LJQZ11042	油泵安装板	Oil pump installing base	(1)
43	LJQZ11043	上部供油接头	Rubber joint	(1)
44	LJQZ11044	下部供油接头	Rubber joint	(1)
45	LJQZ11045	油泵体	Lubricating oil pump	(1)
46	LJQZ11046	油泵体叶轮	Oil pump impeller	(1)
47	LJQZ11047	油泵过滤网组件	Oil pump impeller cover	(1)
48	LJQZ11048	油泵体连接螺钉	Screw m3x0.5 L=10	(3)
49	LJQZ11049	油泵体垫片	Washer	(3)
50	LJQZ11050	六角螺母	Nut m3x0.5	(3)
51	LJQZ11051	油泵体垫片	Lubricating Oil pump cover	(3)
52	LJQZ11052	螺钉	Screw	(5)
53	LJQZ11053	油管包扎带	Cable band	1
54	LJQZ11054	油线	Oil wick	0.2
55	LJQZ11055	油量调节器组件	Oil regulating valve asm.	1
56	LJQZ11056	油量调节器	Oil regulating valve	(1)
57	LJQZ11057	油量调节器安装板	Wiper link joint	(1)
58	LJQZ11058	油管	Oil tube	(0.18)
59	LJQZ11059	油管	Oil tube	(0.14)
60	LJQZ11060	油量调节螺钉	Oil adjusting screw	(1)
61	LJQZ11061	油量调节螺母	Nut 11/64-40	(1)
62	LJQZ11062	垫圈	Washer	(2)
63	LJQZ11063	螺钉	Screw 11/64-40 L=14	(1)

12. 线架部件

Thread stand components

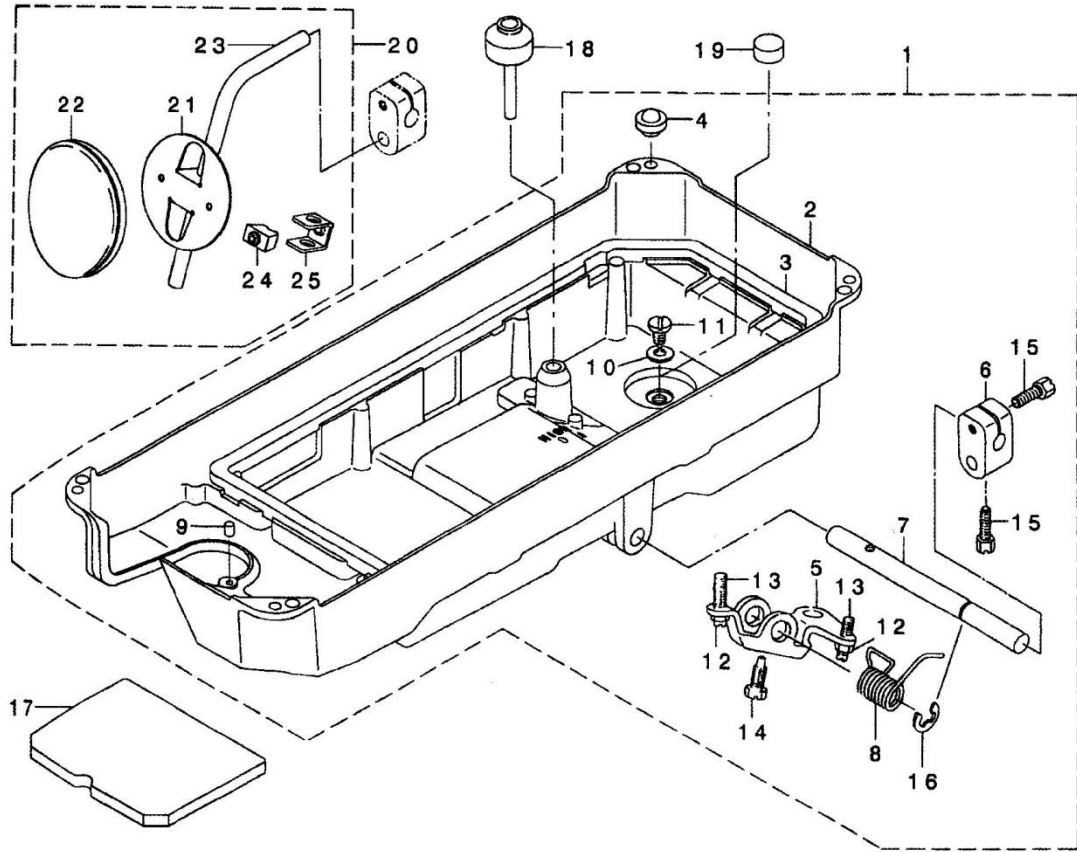


13.皮帶罩部件
Belt cover components



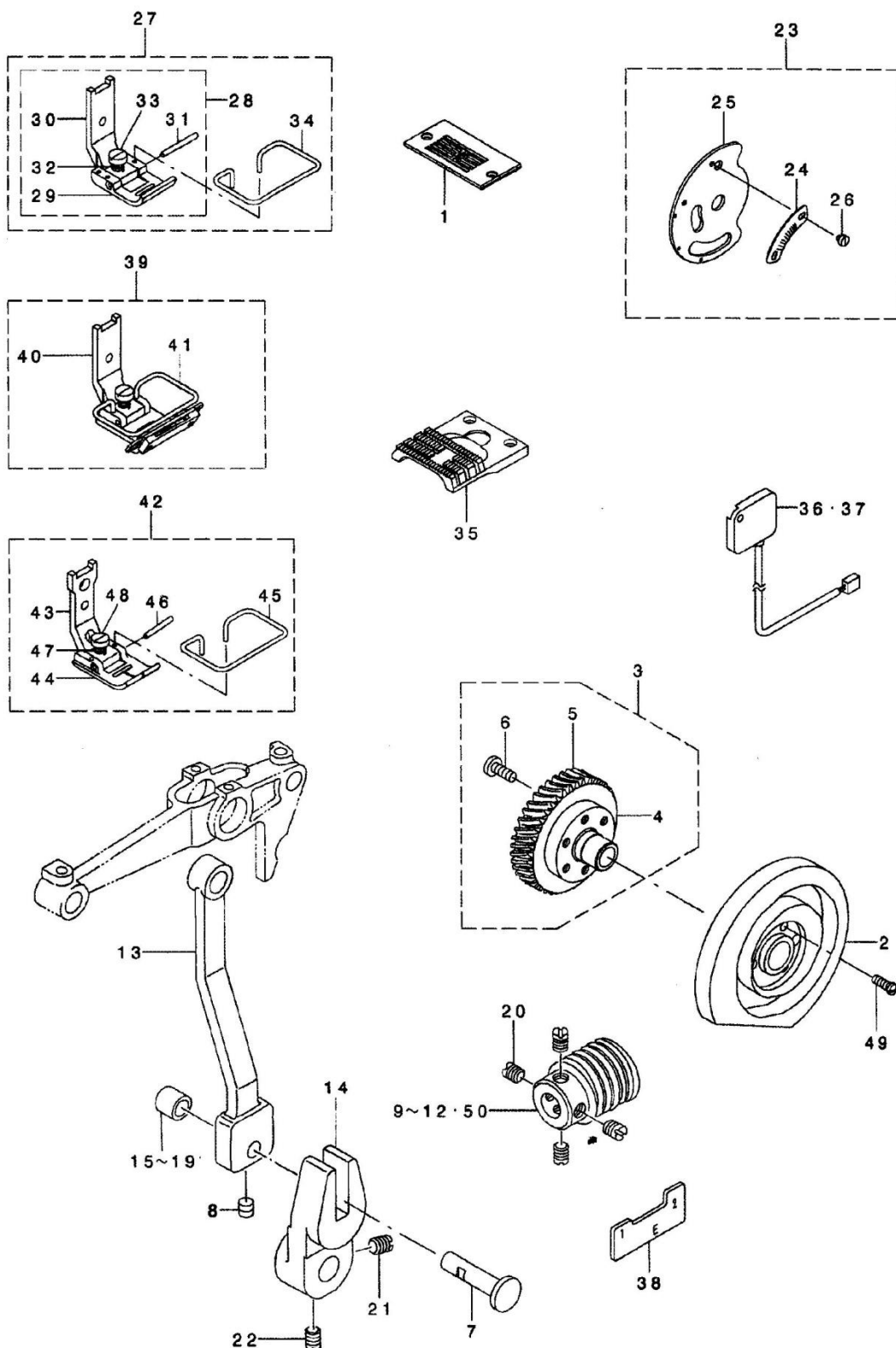
14.油盘部件

Oil reservoir & Knee lifter components



15.LJ-2286N专用零件

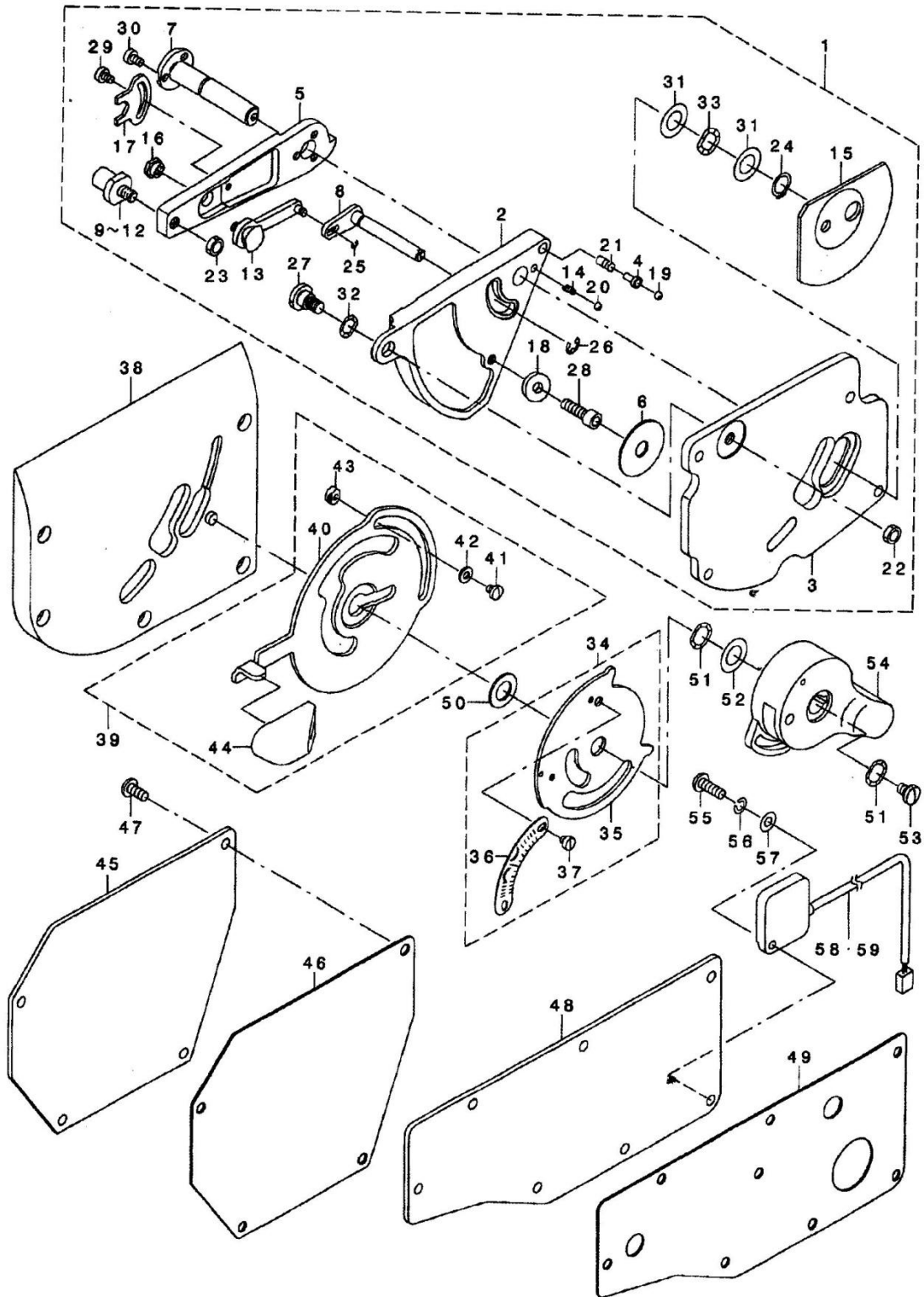
Exclusive parts for LJ-2286N



序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ20001	针板	Needle plate	
2	LJQZ20002	凸轮	Needle vibrating cam A	
3	LJQZ20003	蜗轮组件	Worm wheel compl.	
4	LJQZ20004	蜗轮芯轴	Worm wheel hub	
5	LJQZ20005	蜗轮	Worm wheel	
6	LJQZ20006	蜗轮螺钉	Screw 11/64-40 L=10.5	
7	LJQZ20007	轴销	Shaft	
8	LJQZ20008	螺钉	Screw 11/64-40 L=4	
9	LJQZ20009	蜗杆A	Worm A	
10	LJQZ20010	蜗杆B	Worm B	
11	LJQZ20011	蜗杆C	Worm C	
12	LJQZ20012	蜗杆D	Worm D	
13	LJQZ20013	针杆摆动连杆	Needle vibrating rod	
14	LJQZ20014	曲柄	Rod guide	
15	LJQZ20015	滚柱A	Feed cam roller	
16	LJQZ20016	滚柱B	Feed cam roller	
17	LJQZ20017	滚柱C	Feed cam roller	
18	LJQZ20018	滚柱D	Feed cam roller	
19	LJQZ20019	滚柱E	Feed cam roller	
20	LJQZ20020	螺钉	Screw 1/4-40 L=6	
21	LJQZ20021	螺钉	Screw 1/4-40 L=8	
22	LJQZ20022	螺钉	Screw 1/4-40 L=8.5	
23	LJQZ20023	针幅调节标盘组件	Swing wide graduation as	
24	LJQZ20024	刻度盘	Swing wide graduation	
25	LJQZ20025	针幅调节标盘	Scale mounting base	
26	LJQZ20026	螺钉	Screw 1/8-44 L=2.5	
27	LJQZ20027	压脚大组件	Presser asm.	
28	LJQZ20028	压脚组件	Presser a asm.	
29	LJQZ20029	压脚底板	Presser lower A	
30	LJQZ20030	压脚柄	Presser upper	
31	LJQZ20031	压脚销	Presser pin A	
32	LJQZ20032	压脚弹簧	Spring	
33	LJQZ20033	压脚螺钉	Screw 9/64-40 L=7.5	
34	LJQZ20034	压脚防护罩	Safety cover	
35	LJQZ20035	送布牙	Feed dog	
36	LJQZ20036	电线组件	Resistance pack a asm.	
37	LJQZ20037	电线组件	Resistance pack af asm.	
38	LJQZ20038	定位块	Timing gauge E	
39	LJQZ20039	压脚大组件	Taping foot	
40	LJQZ20040	压脚柄	Taping presser asm.	
41	LJQZ20041	压脚防护罩	Safety cover	
42	LJQZ20042	压脚大组件	Presser foot asm.	
43	LJQZ20043	压脚柄	Presser foot(upper)	
44	LJQZ20044	压脚底板	Presser foot(lower)	
45	LJQZ20045	压脚防护罩	Safety cover	
46	LJQZ20046	压脚销	Presser pin	
47	LJQZ20047	压脚弹簧	Spring	
48	LJQZ20048	压脚螺钉	Screw 9/64-40 L=7.5	
49	LJQZ20049	压脚螺钉	Screw 11/64-40 L=14	

16.LJ-2288N专用零件 (1)

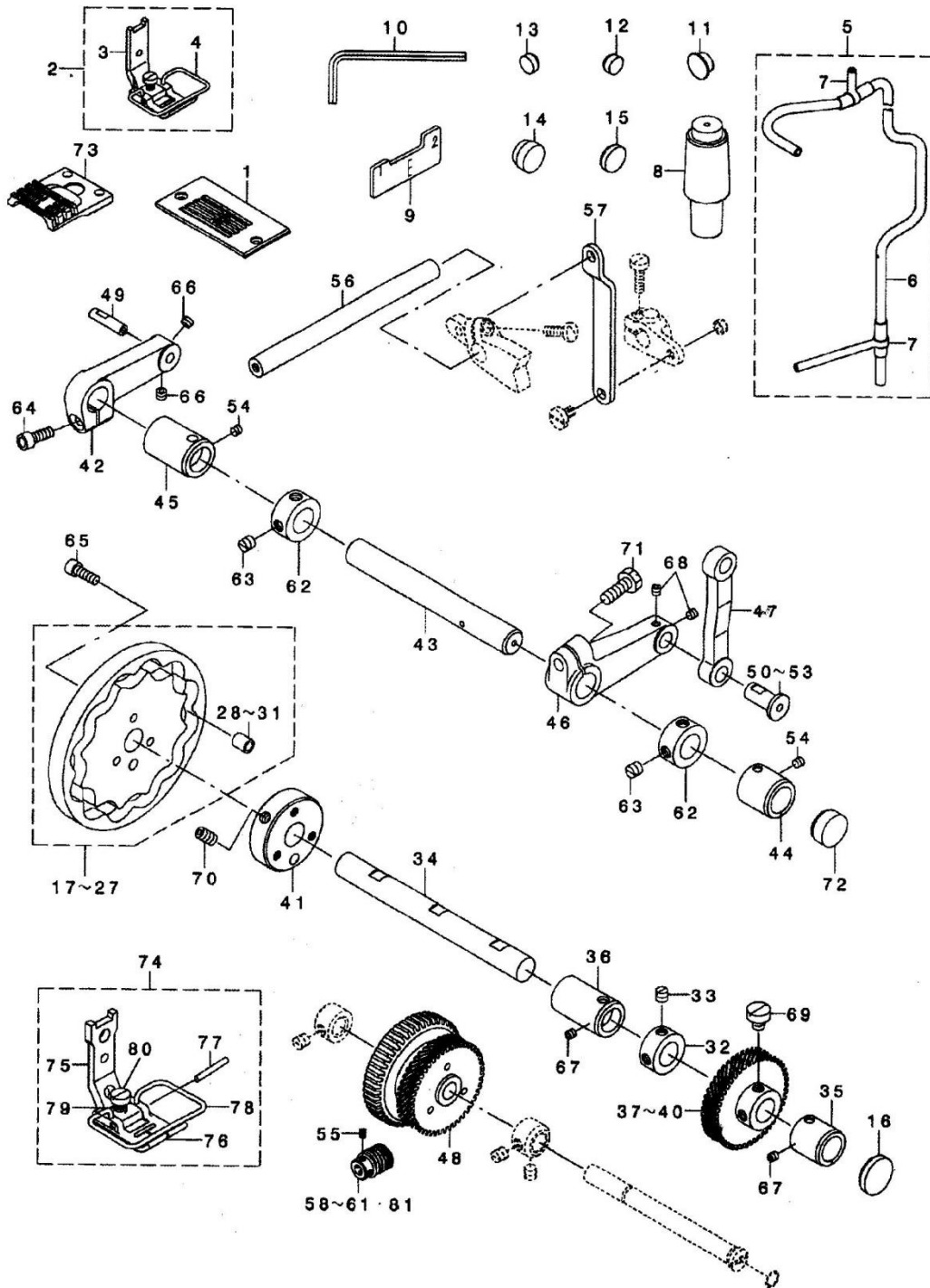
Exclusive parts for LJ-2288N(1)



序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ24001	针位置调节组件	Position change base asm.	1
2	LJQZ24002	针位置调节座	Needle position change base	(1)
3	LJQZ24003	安装板	Fitting plate	(1)
4	LJQZ24004	调节销	Chaning stopper	(1)
5	LJQZ24005	调整曲柄	Adjusting arm	(1)
6	LJQZ24006	垫片	Packing	(1)
7	LJQZ24007	轴	Shaft	(1)
8	LJQZ24008	曲柄轴组件	Lever asm.	(1)
9	LJQZ24009	轴位螺钉A	Shaft	(1)
10	LJQZ24010	轴位螺钉B	Shaft	(1)
11	LJQZ24011	轴位螺钉C	Shaft	(1)
12	LJQZ24012	轴位螺钉D	Shaft	(1)
13	LJQZ24013	限位块组件	Stopper asm.	(1)
14	LJQZ24014	弹簧	Spring	(1)
15	LJQZ24015	防油板	Oil shield	(1)
16	LJQZ24016	螺母	Nut	(1)
17	LJQZ24017	限位块	Nut stopper	(1)
18	LJQZ24018	滚柱	Roller	(1)
19	LJQZ24019	钢球	Hand stop crank shaft ball	(1)
20	LJQZ24020	钢球	Hand stop crank shaft ball	(1)
21	LJQZ24021	弹簧	Spring	(1)
22	LJQZ24022	螺母	Nut 15/64-28	(1)
23	LJQZ24023	螺母	Nut 15/64-28	(1)
24	LJQZ24024	挡圈	Snap ring M10	(1)
25	LJQZ24025	开口挡圈	E-ring	(1)
26	LJQZ24026	开口挡圈	E-ring 4	(1)
27	LJQZ24027	轴位螺钉	Hinge scew D=8 H=4	(1)
28	LJQZ24028	螺钉	Screw M5x0.8 L=16	(1)
29	LJQZ24029	螺钉	Screw 9/64-40 L=5.0	(1)
30	LJQZ24030	螺钉	Screw 9/64-40 L=6	(3)
31	LJQZ24031	垫圈	Washer	(2)
32	LJQZ24032	波型垫圈	Waved washer 8.5x12.5x0.3	(3)
33	LJQZ24033	波型垫圈	Waved washer	(1)
34	LJQZ24034	针幅调节板组件	Scale mounting asm.	1
35	LJQZ24035	针幅调节板	Scale position change lever	(1)
36	LJQZ24036	刻度盘	Scale	(1)
37	LJQZ24037	螺钉	Screw 1/8-44 L=2.5	(2)
38	LJQZ24038	右侧盖板	Side cober asm.	1
39	LJQZ24039	调节连杆组件	Changing lever asm.	1
40	LJQZ24040	调节连杆	Needle position change lever	(1)
41	LJQZ24041	螺钉	Screw 9/64-40 L=3.5	(2)
42	LJQZ24042	垫圈	Washer 3.7x8x1	(2)
43	LJQZ24043	螺母	Lever stopper	(2)
44	LJQZ24044	手柄	Knob	(1)
45	LJQZ24045	凸轮盖板	Cam cover	1
46	LJQZ24046	垫片	Cam cover packing	1
47	LJQZ24047	螺钉	Screw 3/16-28 L=10	4
48	LJQZ24048	盖板	Window plate	1
49	LJQZ24049	垫片	Window plate packing	1
50	LJQZ24050	垫圈	Washer	1
51	LJQZ24051	波型垫圈	Waved washer	2
52	LJQZ24052	垫圈	Washer	1
53	LJQZ24053	螺钉	Screw 3/16-32 L=6.5	1
54	LJQZ24054	手柄	Knob	1
55	LJQZ24055	螺钉	Screw 3/16-28 L=14	1
56	LJQZ24056	弹簧垫圈	Spring washer 5.1x9.2x1.3	1
57	LJQZ24057	垫圈	Washer 5x10.5x1	1
58	LJQZ24058	电线组件	Resistance pack al asm.	1
59	LJQZ24059	电线组件	Resistance pack al asm.	1

17.LJ-2288N专用零件 (2)

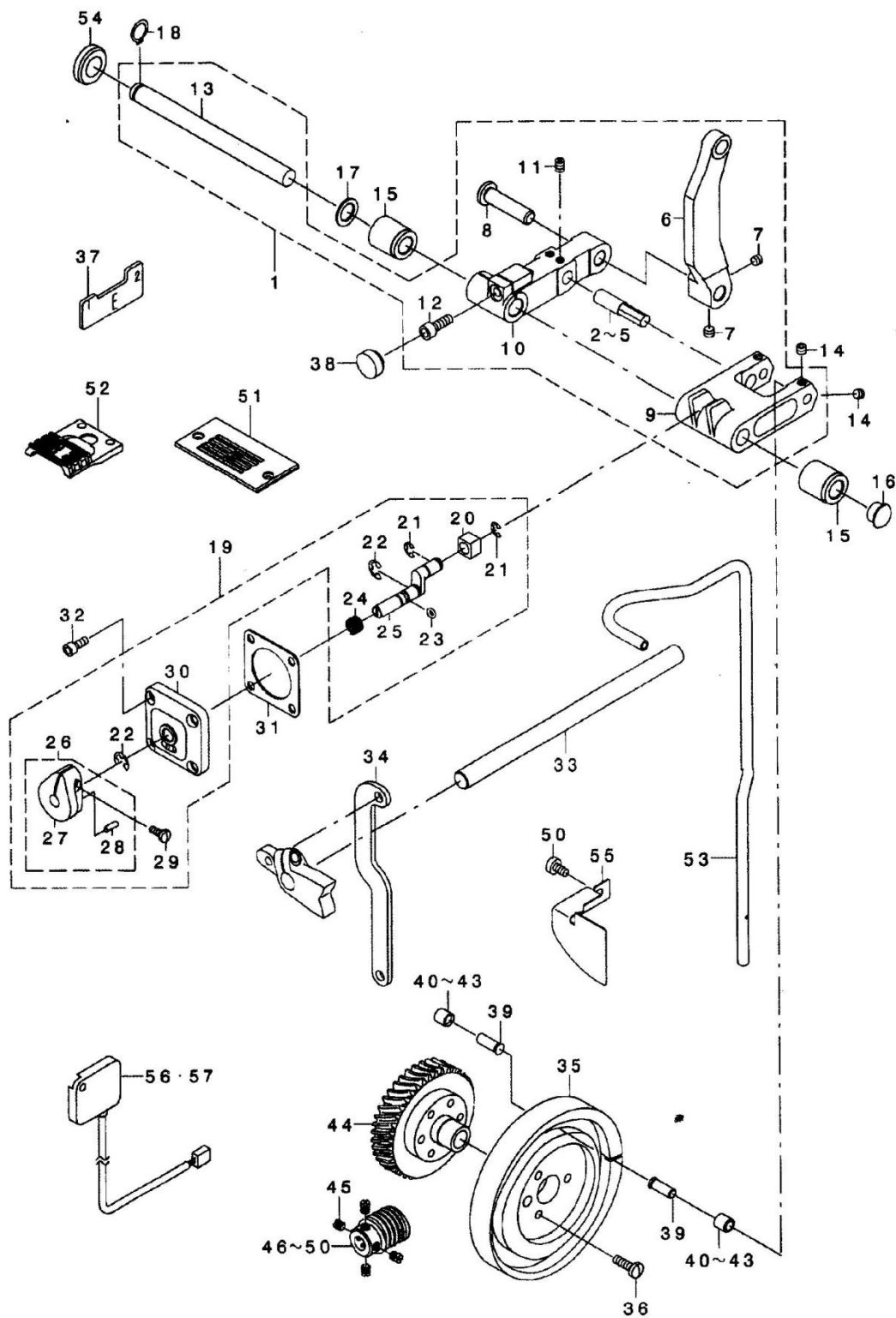
Exclusive parts for LJ-2288N(2)



序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ25001	针板	Needle plate	
2	LJQZ25002	压脚组件	Presser asm.	1
3	LJQZ25003	压脚柄	Presser foot asm.	1
4	LJQZ25004	压脚防护罩	Safety cover	(1)
5	LJQZ25005	油管组件	Arm shaft oil pipe asm.	(1)
6	LJQZ25006	油管	Arm shaft oil pipe	1
7	LJQZ25007	油管接头	Rubber joint	(1)
8	LJQZ25008	机头支撑杆	Head support rod asm.	(2)
9	LJQZ25009	定位块	Timing gauge e	1
10	LJQZ25010	内六角扳手	Socket screw keys	1
11	LJQZ25011	橡皮塞	Rubber plug	1
12	LJQZ25012	橡皮塞	Rubber plug	1
13	LJQZ25013	橡皮塞	Rubber plug	3
14	LJQZ25014	橡皮塞	Rubber plug	2
15	LJQZ25015	橡皮塞	Plug	2
16	LJQZ25016	橡皮塞	Rubber plug D=17.5 L=5	1
17	LJQZ25017	橡皮塞	Rubber plug	1
18	LJQZ25017	凸轮组件	Needle driving cam a asm.	1
19	LJQZ25018	凸轮组件	Needle driving cam b asm.	1
20	LJQZ25019	凸轮组件	Needle vibrating cam asm .c	1
21	LJQZ25020	凸轮组件	Needle driving cam d asm.	1
22	LJQZ25021	凸轮组件	Needle driving cam e asm.	1
23	LJQZ25022	凸轮组件	Needle vibrating cam asm .f	1
24	LJQZ25023	凸轮组件	Needle vibrating cam asm .g	1
25	LJQZ25024	凸轮组件	Needle vibrating cam asm .h	1
26	LJQZ25025	凸轮组件	Needle vibrating cam asm .j	1
27	LJQZ25026	凸轮组件	Needle vibrating cam asm .k	1
28	LJQZ25027	凸轮组件	Needle vibrating cam asm .l	1
29	LJQZ25028	滚柱A	"Cam roller,a"	(1)
30	LJQZ25029	滚柱B	"Cam roller,b"	(1)
31	LJQZ25030	滚柱C	"Cam roller,c"	(1)
32	LJQZ25031	滚柱D	"Cam roller,d"	(1)
33	LJQZ25032	挡圈	Thrust collar D=14 W=10.5	1
34	LJQZ25033	螺钉	Screw 1/4-40 L=7	2
35	LJQZ25034	凸轮轴	Cam shaft	1
36	LJQZ25035	轴套A	"Bushing,a"	1
37	LJQZ25036	轴套B	"Bushing b"	1
38	LJQZ25037	齿轮A	Cam shaft gear a	1
39	LJQZ25038	齿轮B	Cam shaft gear b	1
40	LJQZ25039	齿轮C	Cam shaft gear b	1
41	LJQZ25040	齿轮D	Cam shaft gear d	1
42	LJQZ25041	挡圈	Cam folder asm.	1
43	LJQZ25042	曲柄	Cam arm	1
44	LJQZ25043	曲柄轴	Driving shaft	1
45	LJQZ25044	轴套A	Drving shaft metal a	1
46	LJQZ25045	轴套B	"Bushing ,b"	1
47	LJQZ25046	驱动曲柄	Driving arm	1
48	LJQZ25047	驱动连杆	Driving rod	1
49	LJQZ25048	蜗轮组件	Worm wheel compl.	1
50	LJQZ25049	小轴	Cam roller shaft	1
51	LJQZ25050	驱动销A	"Driving pin ,a"	1
52	LJQZ25051	驱动销B	"Driving pin ,b"	1
53	LJQZ25052	驱动销C	"Driving pin ,c"	1
54	LJQZ25053	驱动销D	"Driving pin ,d"	1
55	LJQZ25054	螺钉	Screw 11/64-40 L=4	2
56	LJQZ25055	螺钉	Screw 1/4-40 L=6	4
57	LJQZ25056	连杆轴	Feed lever shaft	1
58	LJQZ25057	连杆	"Feed changing link,a"	1
59	LJQZ25058	蜗杆A	Worm asm.a	1
60	LJQZ25059	蜗杆B	Worm b	1
61	LJQZ25060	蜗杆C	Worm	1
62	LJQZ25061	蜗杆D	Worm	1
63	LJQZ25062	挡圈	Thrust collar D=14 W=10.5	2
64	LJQZ25063	螺钉	Screw 1/4-40 L=6	(4)
65	LJQZ25064	螺钉	Screw m5x1.8 L=14	1
66	LJQZ25065	螺钉	Screw m5x1.8 L=14	3
67	LJQZ25066	螺钉	Screw m5x6	2
68	LJQZ25067	螺钉	Screw 11/64-40 L=4	2
69	LJQZ25068	螺钉	Screw 11/64-40 L=4	2
70	LJQZ25069	螺钉	Screw 1/4-40 L=7	2
71	LJQZ25070	螺钉	Screw	2
72	LJQZ25071	螺钉	Screw 15/64-28 L=17	1
73	LJQZ25072	橡皮塞	Plug	1
74	LJQZ25073	送布牙	Feed dog	1
75	LJQZ25074	压脚组件	Presser foot asm.	1
76	LJQZ25075	压脚柄	Presser foot (upper)	(1)
77	LJQZ25076	压脚底板	Presser foot (lover)	(1)
78	LJQZ25077	压脚销	Presser pin	(1)
79	LJQZ25078	压脚防护罩	Safety cover	(1)
80	LJQZ25079	压脚弹簧	Spring	(1)
81	LJQZ25080	螺钉	Screw 9/64-40 L=7.5	(1)
82	LJQZ25081	蜗杆E	Worm E	1

18.LJ-2284N(-7),2284C-7专用零件(1)

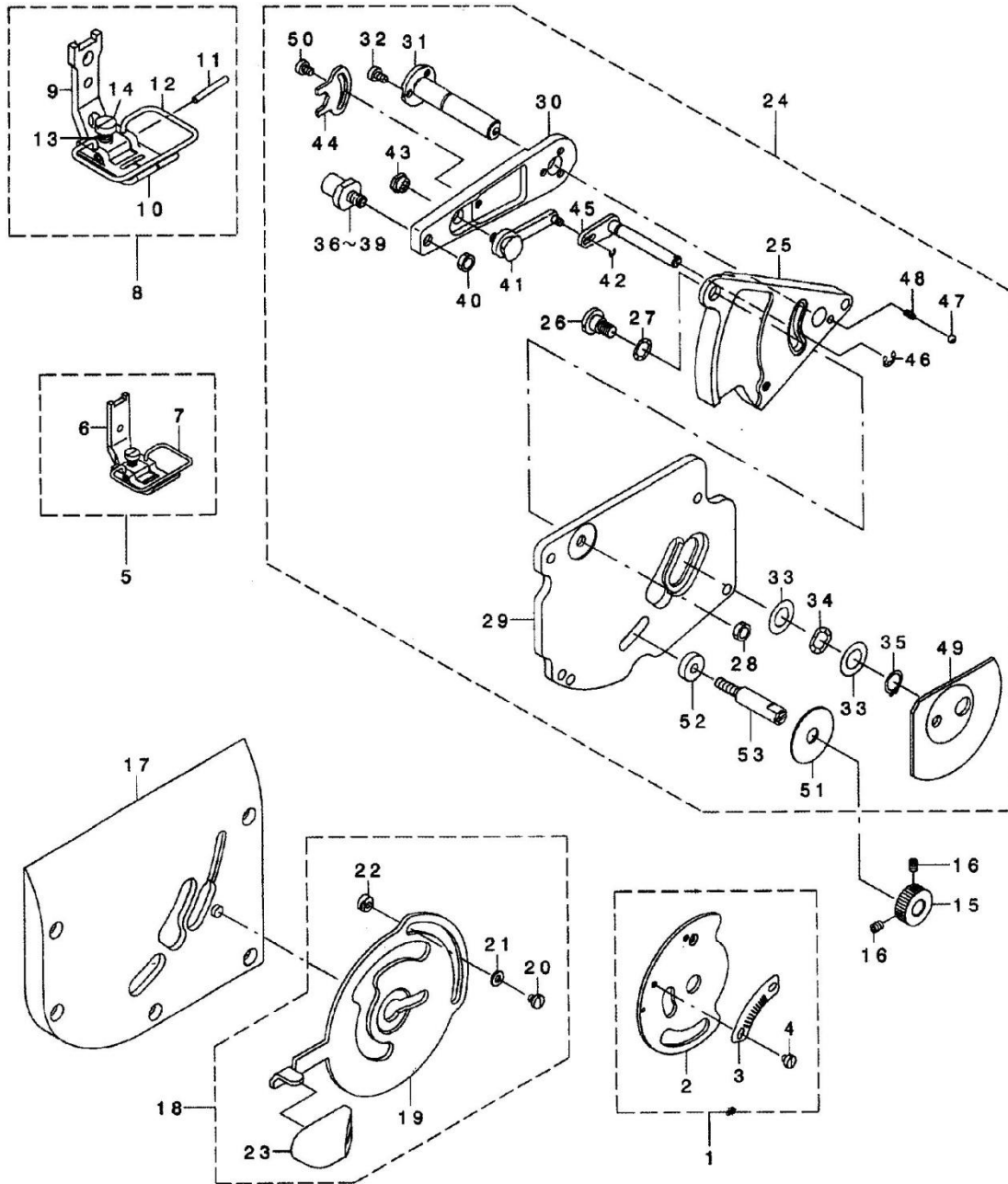
Exclusive parts for LJ-2284N(-7),2284C(-7)(1)



序号	零件代号	名称	DESCRIPTIPN	数量
1	LJQZ29001	针杆驱动曲柄组件	Needle driving arm asm.	1
2	LJQZ29002	销A	Dia pin a	(1)
3	LJQZ29003	销B	Dia pin b	(1)
4	LJQZ29004	销C	Dia pin c	(1)
5	LJQZ29005	销D	Dia pin d	(1)
6	LJQZ29006	驱动曲柄	Needle driving rod	(1)
7	LJQZ29007	螺钉	Screw M5 L=4	(2)
8	LJQZ29008	销	Thread trimmer shaft	(1)
9	LJQZ29009	连接曲柄	Needle cam arm	(1)
10	LJQZ29010	驱动连杆	Needle driving arm	(1)
11	LJQZ29011	螺钉	Screw M5X6	(2)
12	LJQZ29012	螺钉	Screw M5X0.8 L=14	(1)
13	LJQZ29013	驱动轴	Needle driving shaft	(1)
14	LJQZ29014	螺钉	Screw M5 L=4	4
15	LJQZ29015	轴套 (前)	"Metal,front"	2
16	LJQZ29016	橡皮塞	Plug	1
17	LJQZ29017	垫圈	Washer	1
18	LJQZ29018	挡圈	Snap ring M10	1
19	LJQZ29019	切换台组件	Change over basis asm.	1
20	LJQZ29020	滑块	Roller	(1)
21	LJQZ29021	开口挡圈	E-ring 4	(2)
22	LJQZ29022	开口挡圈	E-ring	(2)
23	LJQZ29023	垫圈	Rubber ring	(1)
24	LJQZ29024	弹簧	Spring	(1)
25	LJQZ29025	曲轴	Change over slide shaft	(1)
26	LJQZ29026	曲柄组件	Change over lever asm.	(1)
27	LJQZ29027	曲柄	Change over lever	(1)
28	LJQZ29028	销	Pin	(1)
29	LJQZ29029	螺钉	Screw 9/64-40 L=8.5	(1)
30	LJQZ29030	切换台	Change over basis	(1)
31	LJQZ29031	垫片	Gasket	1
32	LJQZ29032	螺钉	Screw	4
33	LJQZ29033	轴	Feed lever shaft	1
34	LJQZ29034	连杆	Feed change link a	1
35	LJQZ29035	凸轮	Needle cam	1
36	LJQZ29036	螺钉	Screw 11/64-40 L=14	3
37	LJQZ29037	定位块	Timing Gauge e	1
38	LJQZ29038	橡皮塞	Rubber plug	1
39	LJQZ29039	滚柱轴	Needle cam roller shaft	2
40	LJQZ29040	滚柱A	Needle cam roller A	2
41	LJQZ29041	滚柱B	Needle cam roller B	2
42	LJQZ29042	滚柱C	Needle cam roller C	2
43	LJQZ29043	滚柱D	Needle cam roller D	2
44	LJQZ29044	蜗轮组件	Worm wheel compl.	1
45	LJQZ29045	带轮	Screw 1/4-40 L=6	4
46	LJQZ29046	蜗杆A	Worm A	1
47	LJQZ29047	蜗杆B	Worm B	1
48	LJQZ29048	蜗杆C	Worm C	1
49	LJQZ29049	蜗杆D	Worm D	1
50	LJQZ29050	蜗杆E	Screw 11/64-40 L=8	1
51	LJQZ29051	针板	Needle plate	1
52	LJQZ29052	送布牙	Feed dog	1
53	LJQZ29053	油管	Arm shaft oil pipe	1
54	LJQZ29054	橡皮圈	Rubber plug	1
55	LJQZ29055	防油板	Oil shield	1
56	LJQZ29056	电线组件	Resistance pack al asm.	1
57	LJQZ29057	电线组件	Resistance pack al asm.	1

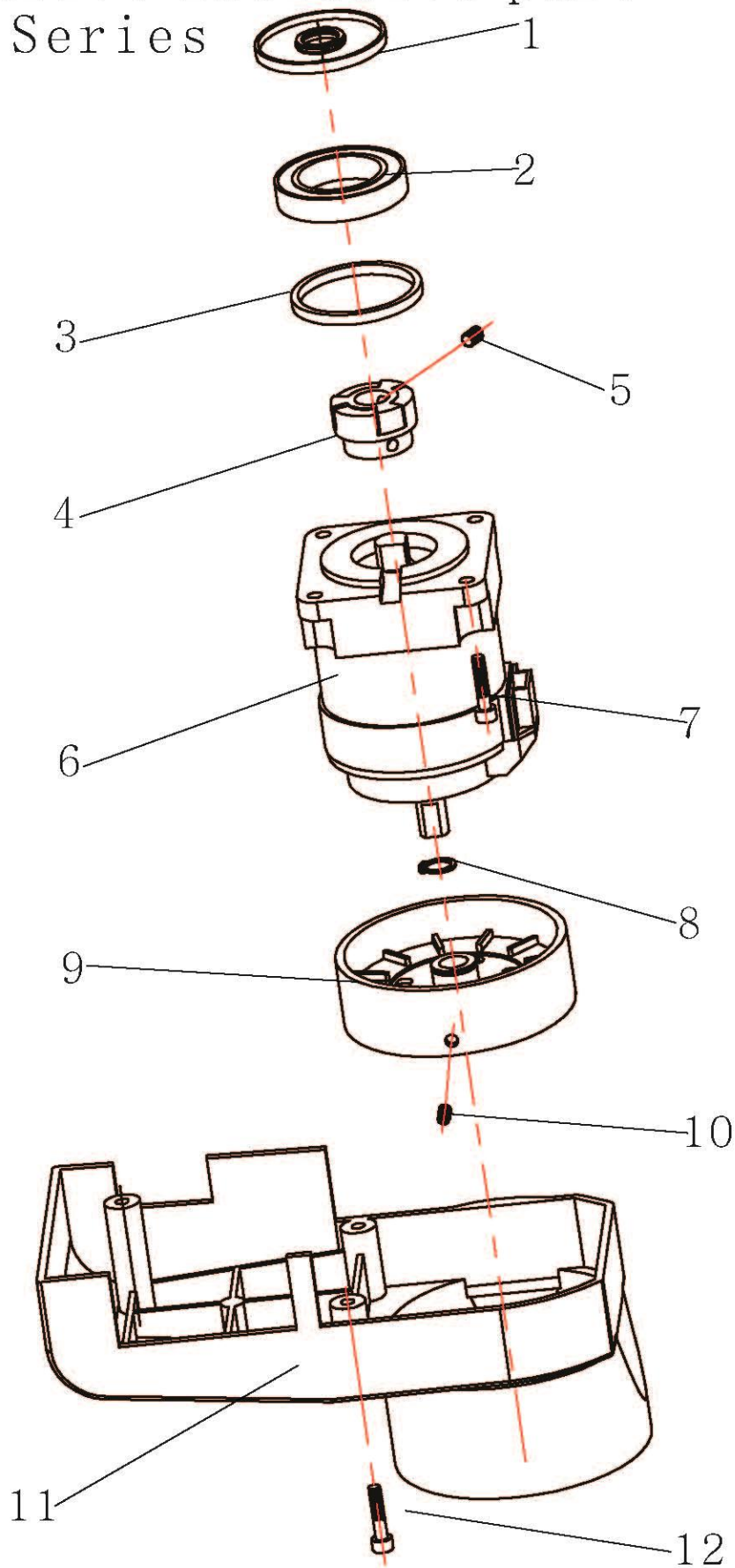
19.LJ-2284N(-7),2284C-7专用零件(2)

Exclusive parts for LJ-2284N(-7),2284C(-7)(2)



20.2280系列直驱专用零件

Direct-drive Exclusive part
for 2280 Series



序号	零件代号	名称	DESCRIPTION	数量
1		挡油封	OIL SEAL	1
2		滚珠轴承	BALL BEARING	1
3		挡圈	COLLAR	1
4		联轴器组件	COUPLING	1
5		上轴连接块螺钉	SCREW (M6-1X8)	6
6		伺服马达	SERVO MOTOR	1
7		伺服马达螺钉	SCREW (M5-0.8X16)	4
8		卡簧	RING	1
9		上轮	HAND WHEEL	1
10		上轮紧固螺钉	SCREW (M5-0.8X10)	2
11		电机罩壳	SERVO MOTOR COVER	1
12		电机罩壳螺钉	SCREW (M5-0.8X20)	3