



JK-58420J/B系列
产品使用说明书&产品零件图册
Manual book & parts book

JACK 杰克

开头语

衷心感谢您购买本公司产品！使用缝纫机之前，请认真阅读此说明书。本说明书介绍了缝纫机日常使用、维护与安全的有关注意事项。请您仔细加以保管，以便日后查阅。如产品规格或外观经过改良可能会与说明书略有不同，恕不另行通知。

PROLOGUE

Thanking you for your purchase our products sincerely, please reading the manual book before operation, the book introduce some points how to operate, maintenance, and safe. Please keep it carefully for reading in the further; you will be not informed if the file has been revised. Please set sample as standard.

工业缝纫机安全使用注意事项：

- 1.必须遵守基本措施；
- 2.必须经过专业培训，对缝纫机设备性能、
- 3.使用前应检查所有安全装置；
- 4.在安装机针、更换机针、压脚、针板、送布牙、弯针、旋梭或修理时，应立即关闭电源；
- 5.离开缝纫机或工作场所时应关闭电源；
- 6.使用离合马达时，要等待马达完全停止后再进行；
- 7.缝纫机及附属装置使用的机油，润滑油等液体流入眼睛或沾到皮肤上应立即清洗；
- 8.禁止用手触摸缝纫机通电时的零件或装置；
- 9.有关工业用平缝机与包缝机的修理、改造、主要机构的调整由专门技术人员来进行；
- 10.一般的维修保养由专人进行；
- 11.在电气方面的修理应在电气技术员的监督和指导下进行；
- 12.缝纫机使用期间应定期清扫；
- 13.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声源影响的环境下使用；
- 14.电源插头应由专人安装；
- 15.工业用平缝机、包缝机在指定用途以外不能使用。

环保要求：

- 1、使用过程中产生的废油及其他废弃物请根据当地环保的要求进行合理的处置。
- 2、请在使用完后及时关闭电源，减少电能的消耗。
- 3、请在说明书要求的电压及环境下使用，已延长产品的使用寿命，减少废弃物的产生。
- 4、机器报废后请勿将本机器及其附件作为普通的生活垃圾处理。请遵守本设备及其附件处理的本地法令，并支持回收行动。

Notes for safe use of industrial sewing machines :

1. Basic measures must be observed.
2. Pass the specialized training and master sewing machine equipment performance.
3. All safety devices should be checked before use.
4. When installing needle, and changing needle, presser foot, plate, feed dog , bent needle, hook or repairing, the power supply should be turned off immediately.
5. Power should be turned off when leaving the sewing machine or workplace.
6. When using the clutch motor, please wait until the motor stops completely.
7. The machine oil and other liquids used in sewing machines and ancillary devices should be cleaned immediately when they are put into eyes or touch skin.
8. Do not touch the parts or devices when the machine is powered by hand.
9. The repair, renovation and adjustment of the main mechanisms of the relevant industrial sewing machines and overseers shall be carried out by specialized technicians.
10. General maintenance is carried out by specially-assigned persons.
11. Electrical repairs should be performed under the supervision and direction of the electrical technician.
12. The machine should be cleaned regularly during operation.
13. In order to operate normally and safely, ground lines should be installed, and they should be used in an environment free from strong noise sources such as high frequency welding machine.
14. Power plug should be installed by specially-assigned person.
15. Industrial lockstitch sewing machine and overlock sewing machine can not be used except the designated use.

Environmental requirements :

Please dispose the waste oil and other waste products properly according to local environmental protection requirements.

Please turn off the power after use to reduce power consumption.

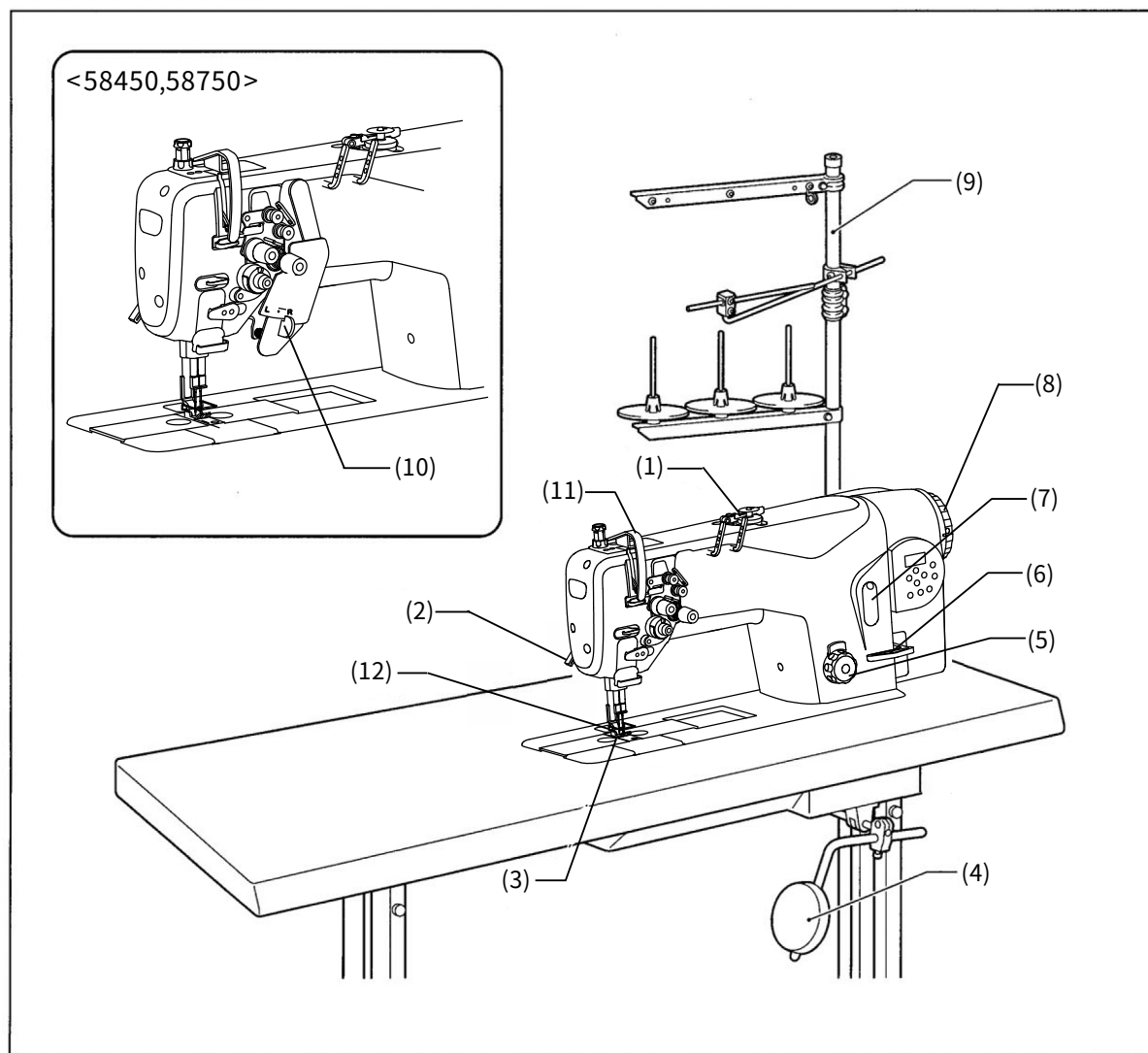
Please use under the voltage and environment required in the manual to extend the service life of the product and reduce waste generation.

4、 Do not treat the machine and its accessories as ordinary household garbage after being scrapped. Please comply with local laws governing the disposal of the equipment and its accessories and support recycling operations.

目 录

1. 各部件名称	1	5-9. 活动刀位置的调整方法	20
2. 缝纫机规格	1	6. 缝纫	21
3. 关于台板	3	6-1. 缝纫	21
4. 安装方法	4	6-2. 倒缝加固的方法	21
4-1. 安装方法	5	6-3. 倒缝密针的方法	22
4-2. 加油方法	8	7. 缝纫效果	23
4-3. 操作测试	10	7-1. 调节线张力	23
5. 缝纫前准备	11	7-2. 调节压脚压力	24
5-1. 机针的安装方法	11	7-3. 挑线量的调节	25
5-2. 锁芯的装拆方法	12	8. 保养	26
5-3. 底线的绕线方法	13	8-1. 日常清洁程序	26
5-4. 锁芯的装取方法	14	8-2. 给油盖添加机油(每隔6个月)	27
5-5. 面线的穿法	16	9. 旋梭供油量的调整	28
5-6. 针距的调节方法	18	10. 故障检修	29
5-7. 膝控碰块的使用方法	18		
5-8. 角缝制方法(58450, 58750)	19		
5-8-1. 针杆(左、右)的停止方法	19		
5-8-2. 针数速查表	19		

1. 各部件名称



(1) 梭芯绕线装置

(3) 压脚

(5) 针距旋钮

(7) 油量计视窗

(9) 线架

(2) 压脚扳手

(4) 膝控碰块

(6) 倒缝扳手

(8) 缝纫机手轮

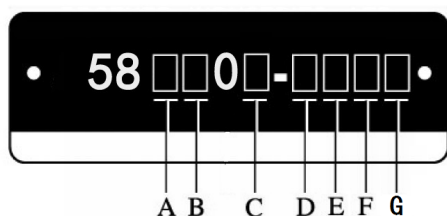
(10) 定位杆 (58450,58750)

安全保护装置

(11) 挑线杆防护罩

(12) 护指器

2. 缝纫机规格



2. 缝纫机规格

A		4	7	
	旋梭	标准旋梭	大旋梭	
B		2	5	
	缝制类型	标准	角缝	
C		B	J	
	驱动公式	简易直驱一体机	电脑一体机	
D		0	1	4
	倒缝装置	—	o	o
	扫线装置	—	—	o
	切线装置	—	o	o
	抬压脚装置	—	o	o
	电子夹线器装置	—	o	—
E		0	1	
	针杆自动分离装置	—	o	
F		3	5	
	用途	适用于较薄的和中厚的面料	适用于较厚的面料	
G		—	C	
	旋梭种类	进口	国产	

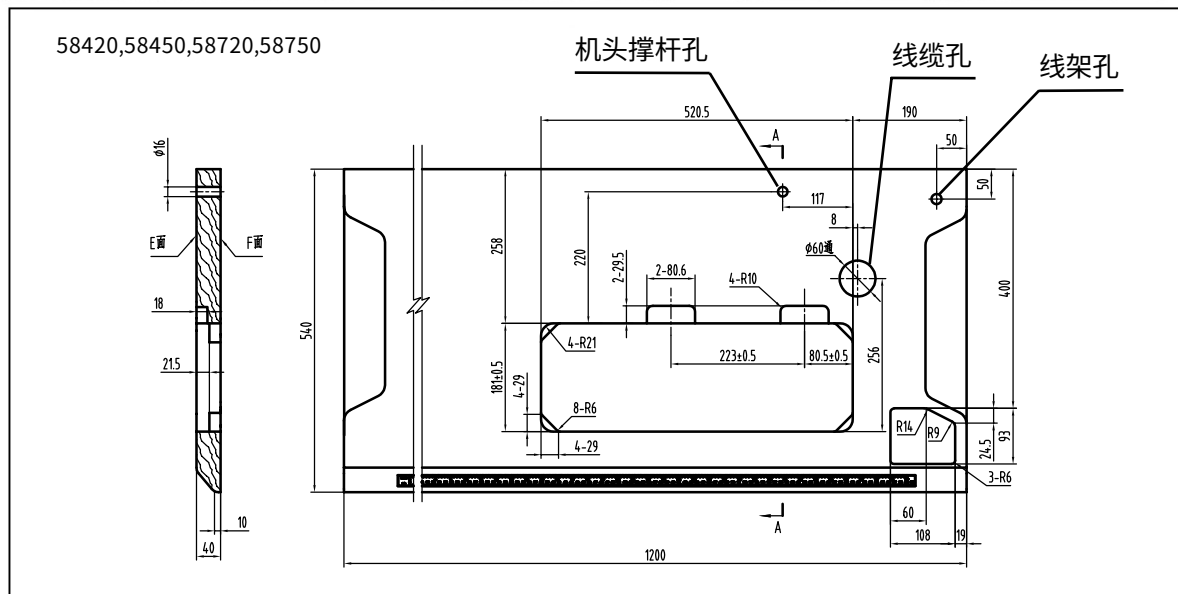
机器规格

型号	最高转速 (rpm)	最大针距	压脚高度		送布牙高度	机针 (DP×5)
			扳手	膝控		
58420B-003C	3000	4	7	13	1	#11-#16
58420B-005C	3000	5	7	13	1	#14-#22
58450B-003C	3000	5	7	13	1	#11-#16
58450B-005C	3000	5	7	13	1	#14-#22
58720B-003C	3000	7	7	13	1	#11-#16
58720B-005C	3000	7	7	13	1	#14-#22
58750B-003C	3000	7	7	13	1	#11-#16
58750B-005C	3000	7	7	13	1	#14-#22
58420J-403	3000	4	7	13	1	#11-#16
58420J-405	3000	5	7	13	1	#14-#22
58450J-403	3000	5	7	13	1	#11-#16
58450J-405	3000	5	7	13	1	#14-#22
58720J-403	3000	7	7	13	1	#11-#16
58720J-405	3000	7	7	13	1	#14-#22
58750J-403	3000	7	7	13	1	#11-#16
58750J-405	3000	7	7	13	1	#14-#22
58450J-413	3000	5	7	13	1	#11-#16
58450J-415	3000	5	7	13	1	#14-#22
58750J-413	3000	7	7	13	1	#11-#16
58750J-415	3000	7	7	13	1	#14-#22

3. 关于台板

A. 台板加工图

- 台板的厚度应达 40mm，能够承受缝纫机的重量，并起的起缝纫机的震动。
- 请在如图所示位置上钻孔。



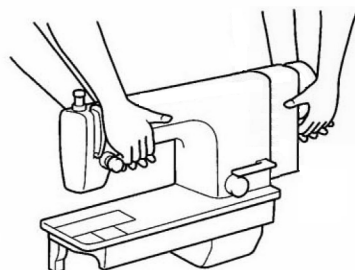
4. 安装方法

⚠ 注意

- ⊘ 请让受过培训的技术人员来安装缝纫机。
- ⊘ 在安装完成前，请不要连接电源，如果误按起动开关，缝纫机动作会导致受伤。
- ❗ 请委托购买商店或电气专业人员进行电气配线。
- ⚠ 缝纫机头倒下或竖起时，请用双手进行操作。单手操作时因缝纫机的重量万一滑落易导致受伤。
- ❗ 缝纫机重量约 53Kg，安装工作必须由两人以上来完成。
- ⚡ 必须接地。
接驳地线不牢固，是造成触电或误动作的原因。

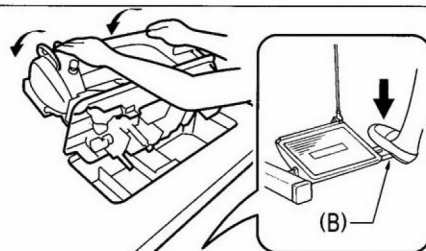
搬运缝纫机

- 用手托住手轮下部马达盖凹部。
- * 请注意不要手轮转动。



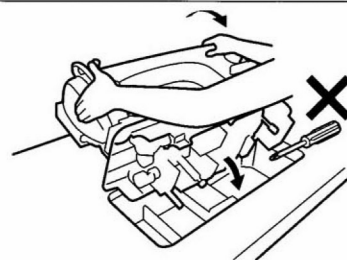
向后倾斜缝纫机头部

- 用脚踏住(B)部分，不让台板移动，然后用双手推动机壳本体使缝纫机头部后倾。

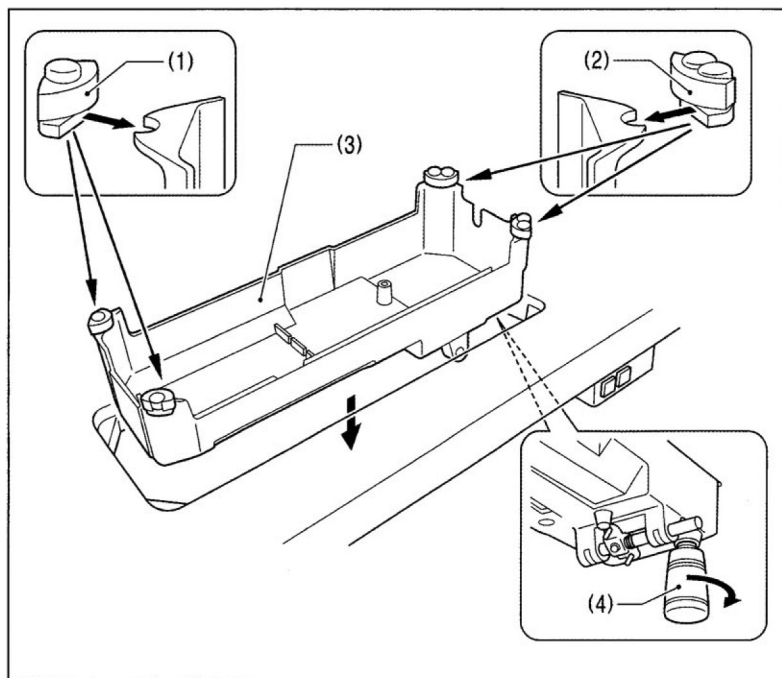


将缝纫机头部返回至直立的位置

1. 清除台板开孔附近的所有工具等物件。
2. 用左手扶住面板，用右手轻轻地将缝纫机头部返回至直立的位置。

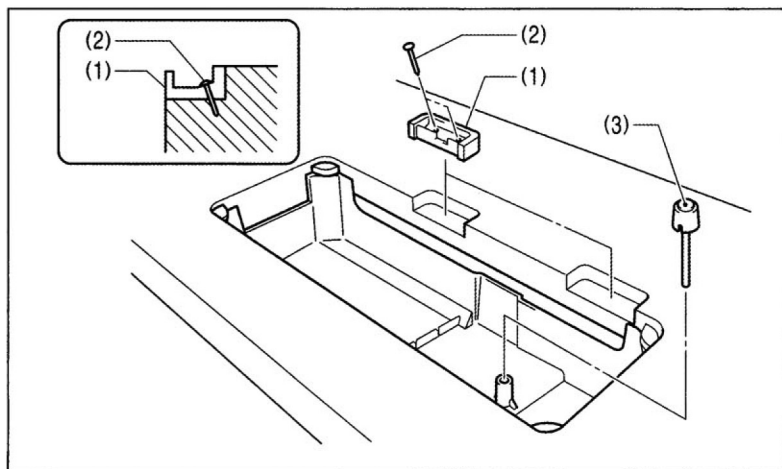


4-1. 安装方法



1. 油盘

- (1) 头部防震垫块 (左) (2 个)
- (2) 头部防震垫块 (右) (2 个)
- (3) 油盘
- (4) 注油器

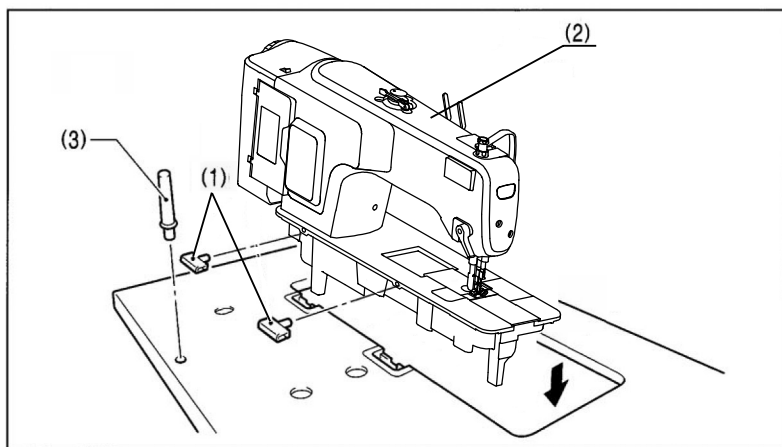


2. 机壳铰链

- (1) 机壳铰链套 (2 个)
- (2) 钉 (4 个)

3. 膝控提升顶杆

- (3) 膝控提升顶杆

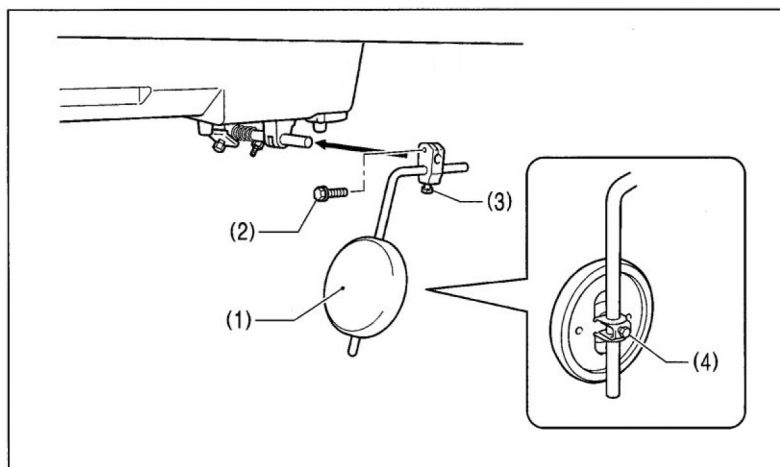


4. 缝纫机头部

- (1) 机壳铰链 (2 个)
- (2) 缝纫机头部
- (3) 机头撑杆

注意:

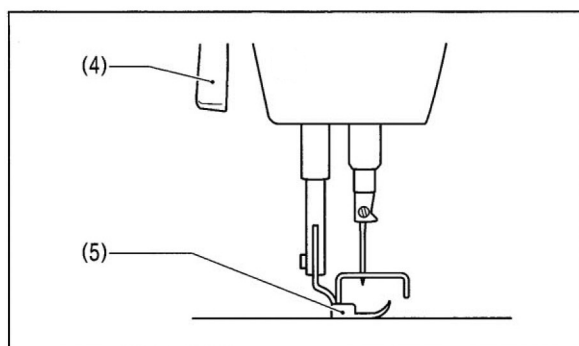
- 将机头撑杆 (3) 安全, 稳定地插入台板开孔。如果机头撑杆 (3) 未被插入到位, 则缝纫机头部在向后倾斜时因不够稳定而发生危险。



5. 膝控碰块

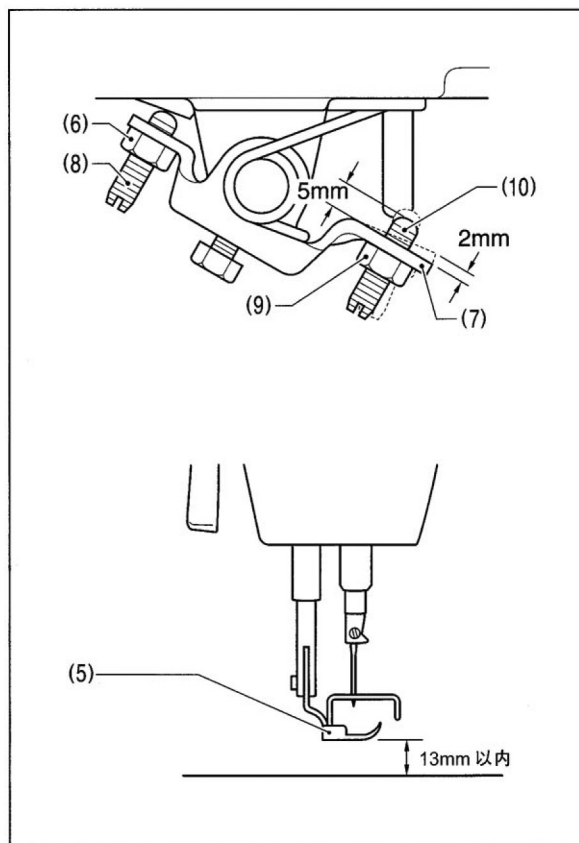
- (1) 膝控碰块
(2) 螺栓

* 松开螺栓 (3) 和螺栓 (4)，将膝控碰块 (1) 移至易于使用的位置。

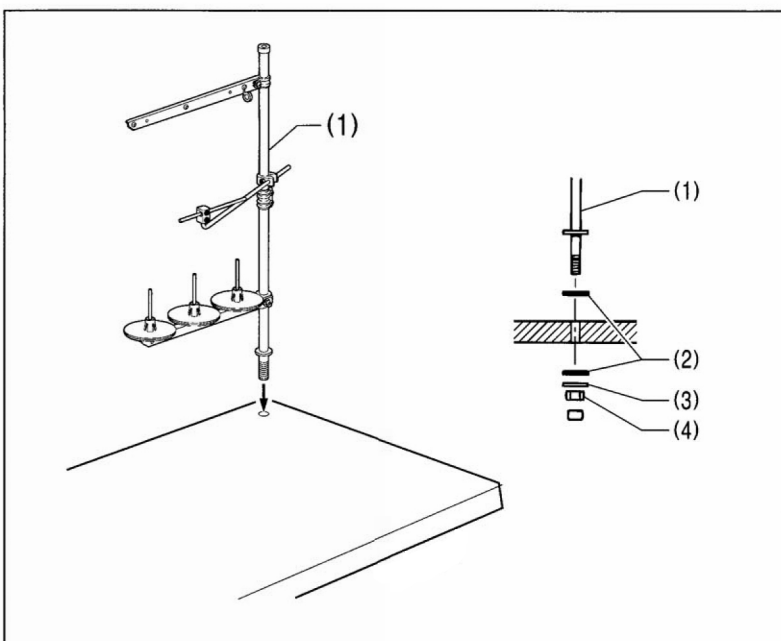


<调整抬压杠杆>

1. 转动手轮以便送布牙处于针板的下方。
2. 用压脚扳手 (4) 放下压脚 (5)。



3. 松开螺母 (6)。
4. 转动螺钉 (8) 进行调节，以便用手在轻压膝控碰块 (1) 时抬压杠杆 (7) 游隙量约为 2mm。
5. 拧紧螺母 (6)。
6. 松开螺母 (9)。
7. 转动螺钉 (10) 直至螺钉头与抬压杠杆 (7) 的间距约为 5mm。
8. 转动调节螺钉 (10) 进行调节，以便在完全压下膝控碰块 (1) 时，压脚 (5) 处在针板上方 13mm 范围内的位置。
9. 完成调节后，将螺母 (9) 拧紧。



6. 线架

(1) 线架

注意:

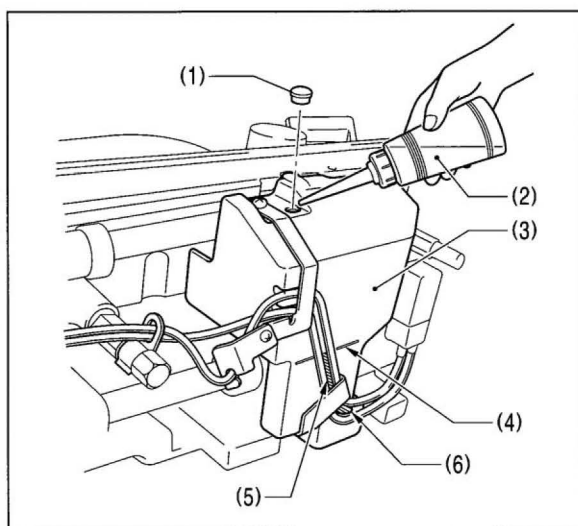
将螺母 (4) 拧紧以便将两个机壳
铰链套 (2) 和垫圈 (3) 夹紧, 使
线架 (1) 不会移动。

4-2. 加油方法

⚠ 注意

- ❌ 在加油未完成前，请勿插上电源。
当误按动起动开关时，缝纫机动作会导致人员受伤。
- ❌ 使用润滑油和黄油时，务必戴好保护眼镜和保护手套等，以防润滑油落入眼中或沾在皮肤上，这是引起发炎的原因。
另外，润滑油或黄油不能饮用，否则会引起呕吐和腹泻。
将油放在小孩拿不到的地方。

- 必须经常润滑缝纫机，第一次使用缝纫机或长时间未使用缝纫机时，要补充机油。
- 请使用本公司指定的[HIGH SPEED SEWING MACHINE OIL] (ISO 粘度与VG10 相同)。



<给油盖添加机油>

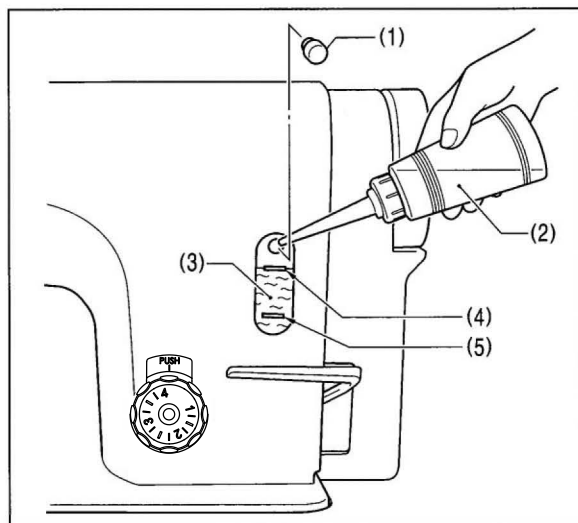
1. 向后倾斜缝纫机头部。
2. 拆下橡皮塞(1)。
3. 用随带的油壶(2)给油盖(3)添加润滑油，直至液位达到基准线(4)位置。

注意：

添加润滑油时请不要超过基准线(4)。否则当缝纫机头部倒下时，润滑油可能会溢出。

4. 将橡皮塞(1)装回原处。
5. 将缝纫机头部返回至原位。

* 当润滑油的液位下降到油量表视窗(5)的下部(6)以下时，请务必补充润滑油。



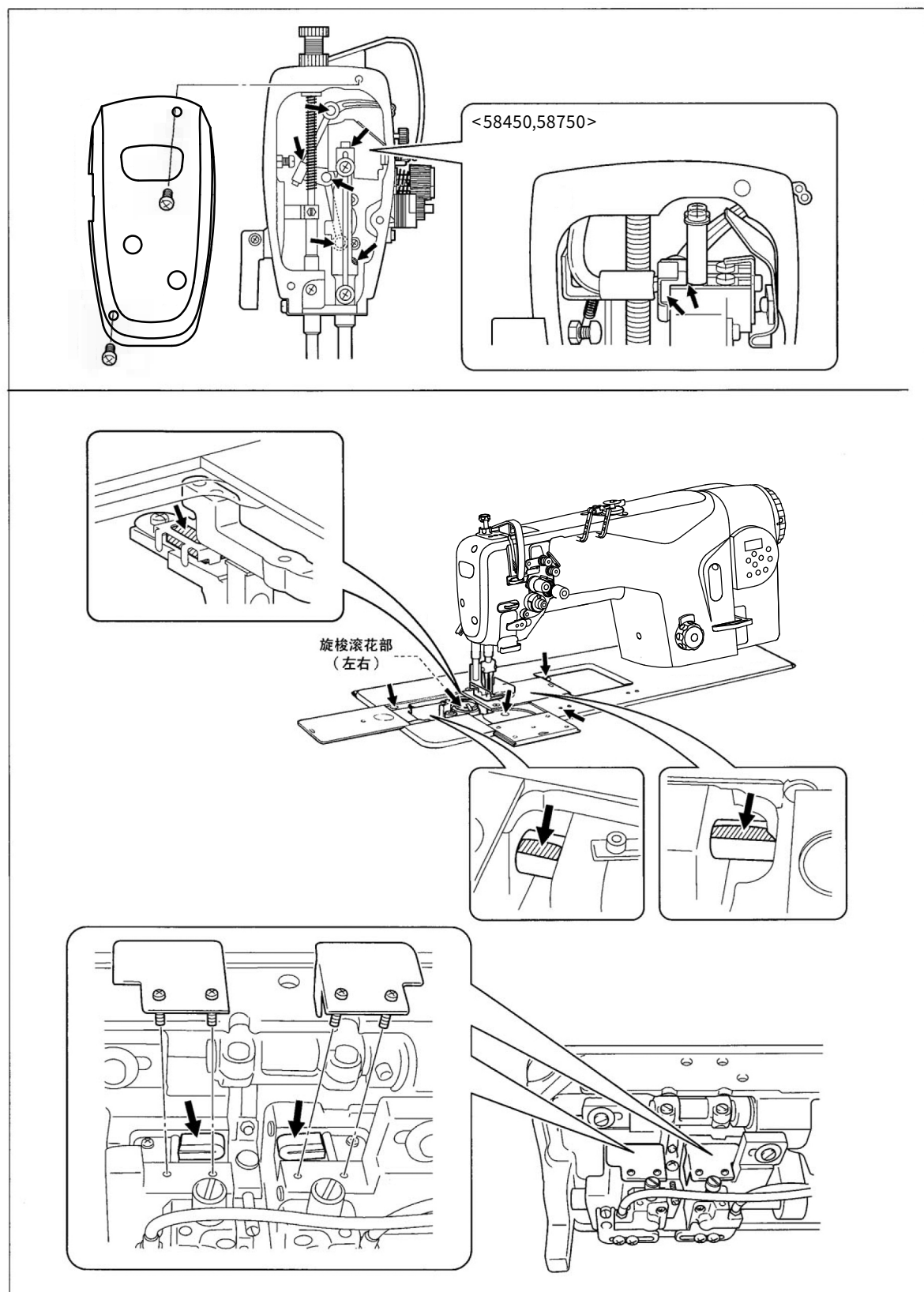
<给油箱添加机油>

1. 拆下橡皮塞(1)。
2. 用随带的油壶(2)添加润滑油，直至液位达到油量表视窗(3)的上基准线(4)位置。
3. 将橡皮塞(1)装回原处。

* 当润滑油的液位下降到下基准线(5)以下时，请务必补充润滑油。

■注油

在每个箭头标记处注入 1~2 滴润滑油。

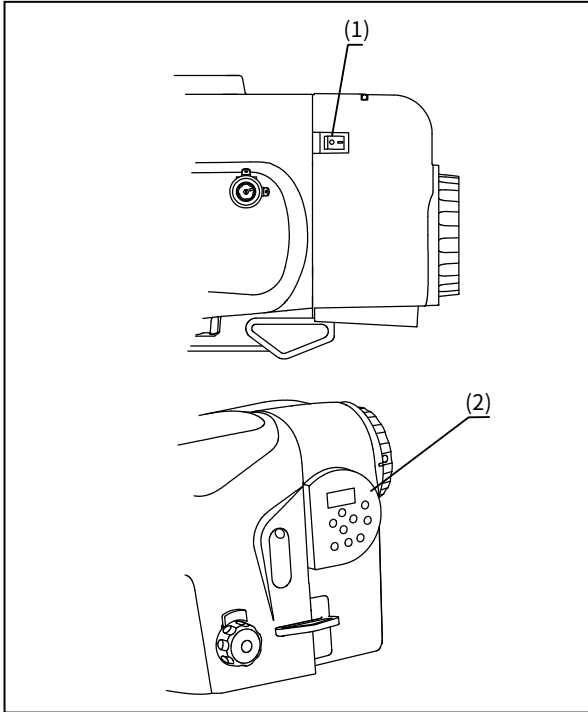


4-3. 操作测试（脚踏板的操作方法）

! 注意

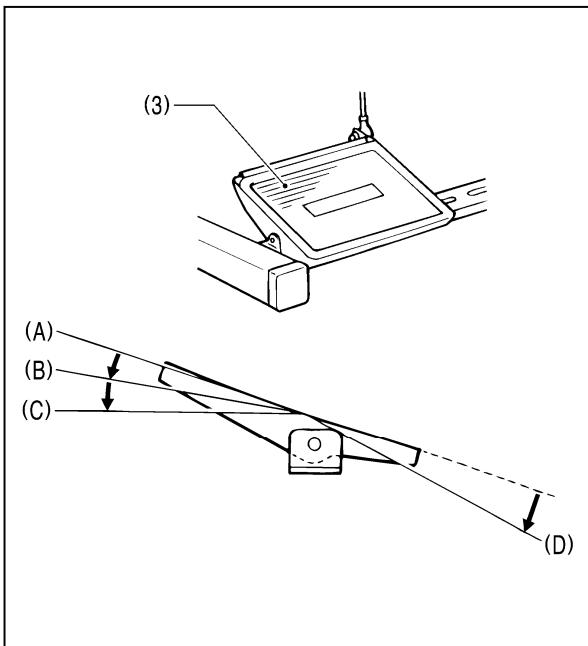


缝纫过程中，不要触摸任何运动部件或将物件靠在运动部件上，因为这会导致人员受伤或缝纫机损坏。



<打开电源>

按 1 (打开) 电源开关 (1)。
操作面板 (2) 屏幕亮起。
转动手轮无明显卡点。



<操作测试>

1. 检查将脚踏板 (3) 轻压到位置 (B) 时缝纫机的低速缝纫状态。
2. 更进一步将脚踏板 (3) 轻压到位置 (C) 时缝纫机的高速缝纫状态。
3. 向前压下脚踏板 (3) 后，检查在脚踏板 (3) 返回到空挡位置 (A) 时机针是否降至针板下。（当已设置机针向下位置时。）
4. 如果将脚踏板 (3) 压到位置 (D)（如果备有剪线功能则在剪线后），随后机针升至针板上方并停止。

5. 缝纫前的准备

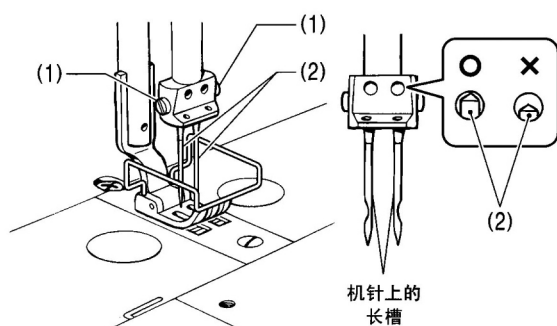
5-1. 机针的安装方法

⚠ 注意



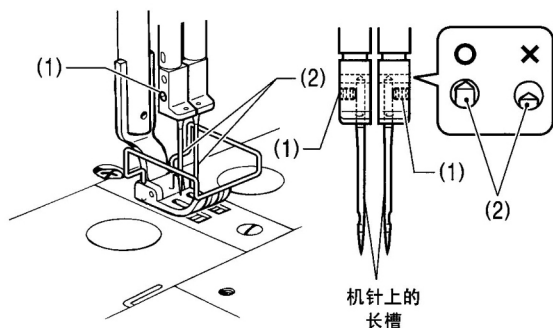
安装机针时，请切断电源。但在切断电源后，马达在稍后的一段时间内因惯性仍会继续转动，请在马达完全停止后，再进行作业。
当误按动起动开关时，缝纫机动作会导致人员受伤。

<58420,58720>



1. 转动缝纫机手轮，将针杆移至最高位置。
2. 松开螺钉（1）。
3. 将机针（2）上的长槽朝着内侧，笔直插到底并拧紧止动螺钉（1）。

<58450,58750>



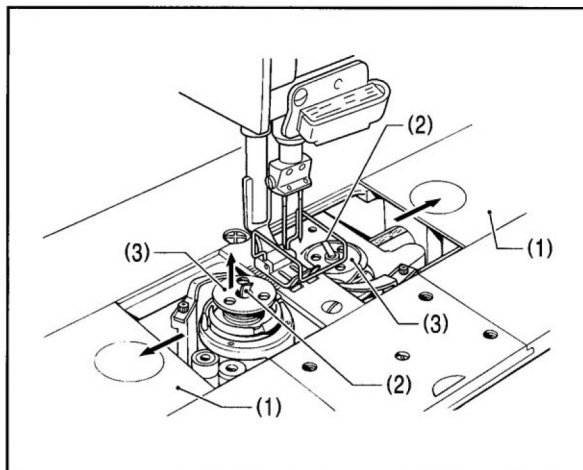
5-2. 梭芯的装拆方法

⚠ 注意



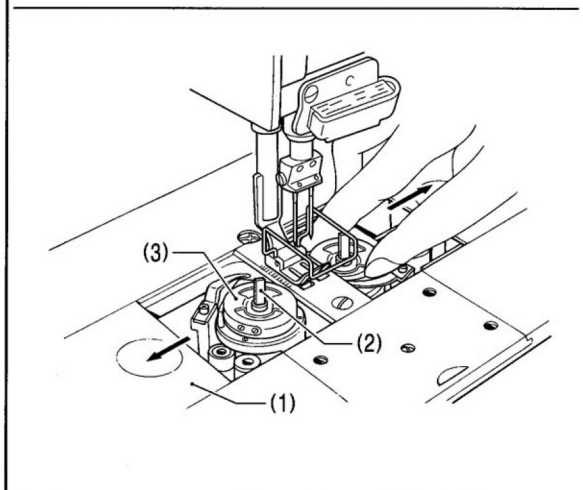
取出梭芯时，请切断电源。但在切断电源后，马达在稍后的一段时间内因惯性仍会继续转动，请在马达完全停止后，再进行作业。

当误按动启动开关时，缝纫机动作会导致人员受伤。



<挂钩式>

1. 将滑板(1)左右分开。
2. 将旋梭的握手(2)提起之后，取出梭芯(3)。



<梭芯套式>

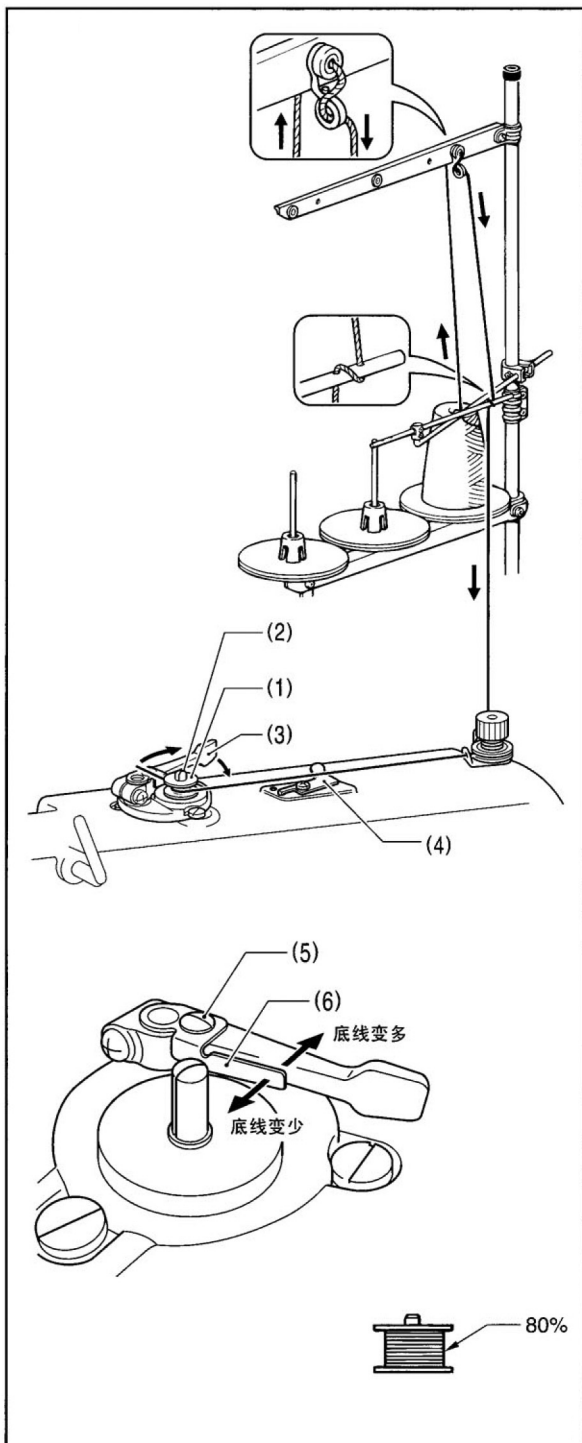
1. 将滑板(1)左右分开。
2. 将旋梭的握手(2)提起之后，取出梭芯套(3)。
3. 取出梭芯。

5-3. 底线的绕线方法

注意



在卷线过程中，不要触摸任何运动部件或将物件靠在运动部件上，因为这会导致人员受伤或缝纫机损坏。



1. 打开电源开关。
2. 将梭芯(1)置于梭芯卷线轴(2)上。
3. 按箭头所示的方向将线在梭芯(1)上卷绕几次。
* 请确认各部分的机线应没有松弛。
4. 将梭芯压臂柄(3)推向梭芯(1)。
5. 用压脚扳手将压脚抬起。
6. 踏下脚踏板，随即开始卷绕底线。
7. 底线卷绕一旦完成，梭芯压臂柄(3)将自动返回。
8. 底线卷绕之后，将梭芯拆下，用切刀(4)将线剪断。

* 松开螺钉(5)，移动梭芯压杆(6)调节卷绕在梭芯上的底线量。

注意：

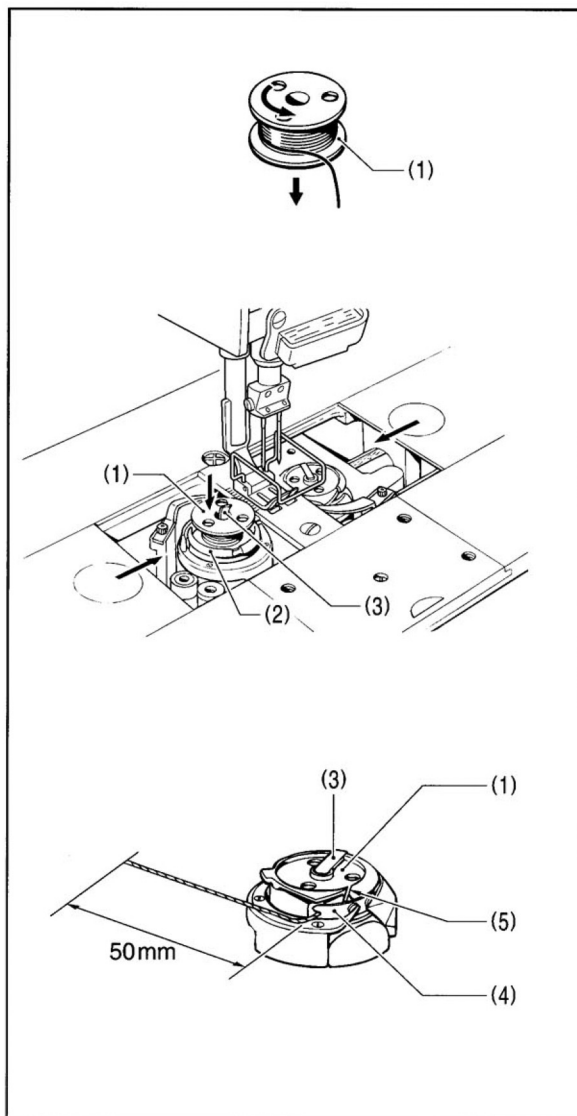
卷绕在梭芯上的底线量最多应为梭芯容量的80%。

5-4. 梭芯的装取方法

⚠ 注意



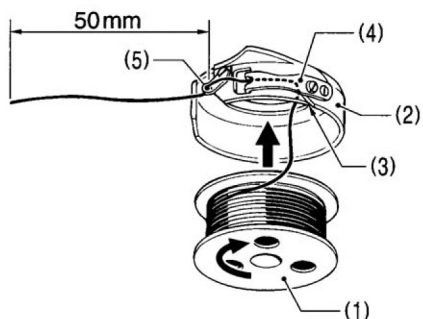
取出梭芯时，请切断电源。但在切断电源后，马达在稍后的一段时间内因惯性仍会继续转动，请在马达完全停止后，再进行作业。
当误按动起动开关时，缝纫机动作会导致人员受伤。

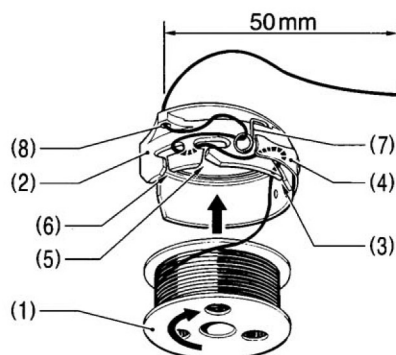


<挂钩式>

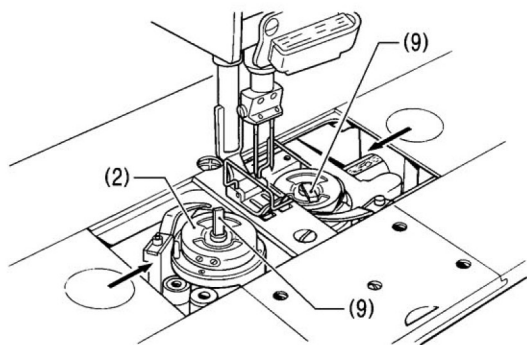
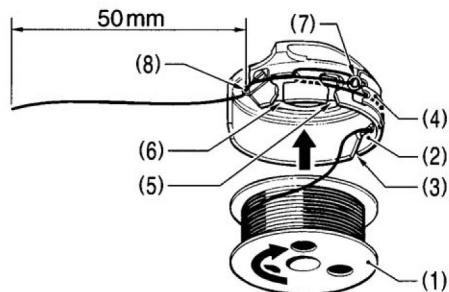
1. 将线的绕向置于如图所示的方向，然后将梭芯（1）放入旋梭（2）内。
2. 将旋梭的捏手（3）倒下。
3. 转动缝纫机的皮带轮，使旋梭（2）转到能见到张力弹簧（4）的位置。
4. 将线穿过旋梭的线槽（5），使它通过张力弹簧（4）的下面。
5. 将线拉出约 50mm。
6. 关闭滑板。

<A>





<C>



<梭芯套式>

1. 将线的绕向置于如图所示的方向，然后将梭芯(1)放入梭芯套(2)内。
2. 梭芯套(2)有<A>、、<C>三种。
请根据所使用的梭芯套(2)的形状，按下述进行穿线。

<A>

- 1) 将线穿过线槽(3)，使它通过张力弹簧(4)的下面。
- 2) 将线穿过线孔(8)，并拉出约50mm。

 <C>

- 1) 将线穿过线槽(3)，使它通过张力弹簧(4)的下面。
- 2) 将线穿过线槽(5)、(6)，使它钩在底线张力弹簧(7)上。
- 3) 将线穿过线孔(8)，并拉出约50mm。

3. 将梭芯套(2)放入旋梭内。

4. 将旋梭的捏手(9)倒下。

5. 关闭滑板。

5-5. 面线的穿法

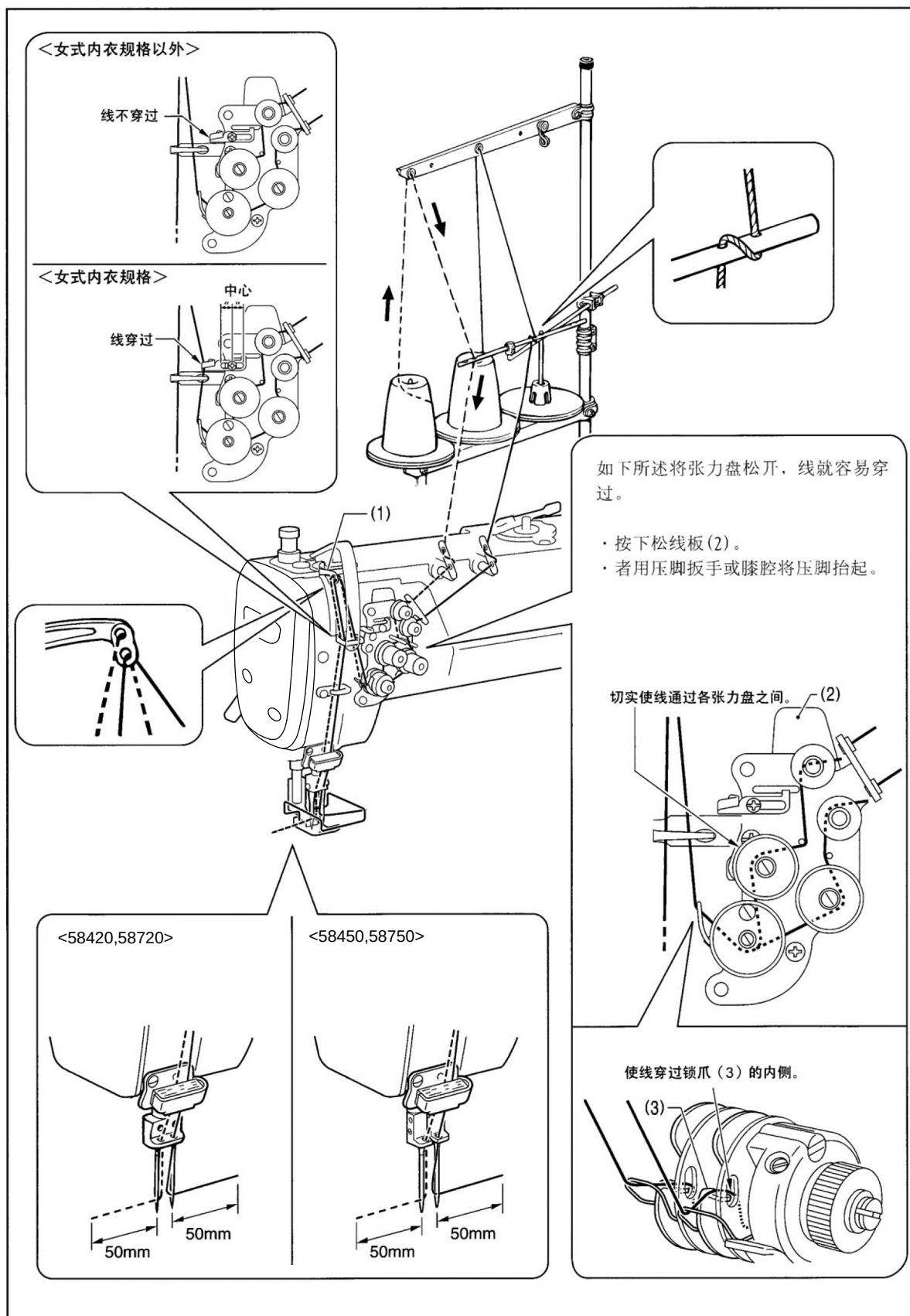
注意



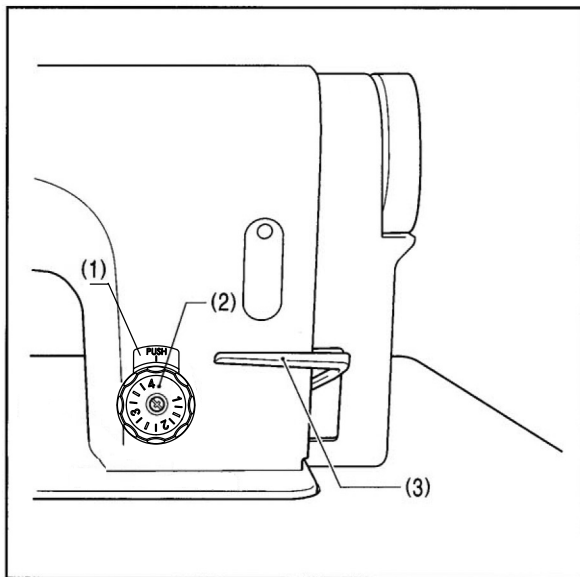
在穿线过程中，请切断电源。但在切断电源后，马达在稍后的一段时间内因惯性仍会继续转动，请在马达完全停止后，再进行作业。

当误按动起动开关时，缝纫机动作会导致人员受伤。

- 在穿引面线之前转动手轮，抬高挑线杆（1）。这样会使穿引更加容易，并防止面线在缝纫开始时脱落。
- 先穿左侧的线。

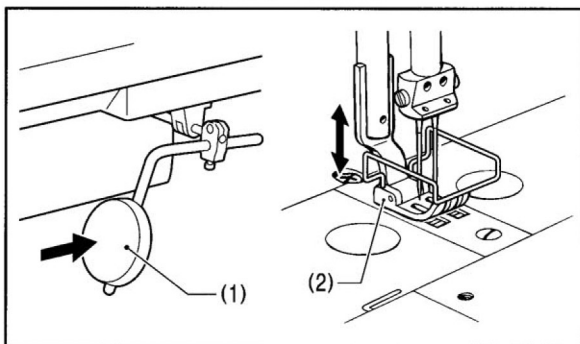


5-6. 针距的调节方法



1. 按压标盘锁按键(1)以解除锁定。
 2. 顺时针或逆时针转动针距旋钮(2)，使所需针距处于旋钮最上端的位置。
 - 数字越大，针距越长。
 - (旋钮上的数字用于参考值。实际的针距视缝纫面料的种类和厚度而定。在观察缝纫好的针距的同时进行调节。)
 - 按设定值从大到小的方向转动针距旋钮(2)时，如果将倒缝扳手(3)推至中央位置，会使旋钮转动更加容易。
 3. 将标盘锁按键(1)释放予以锁定。
- * 确认针距旋钮(2)不能转动。

5-7. 膝控碰块的使用方法

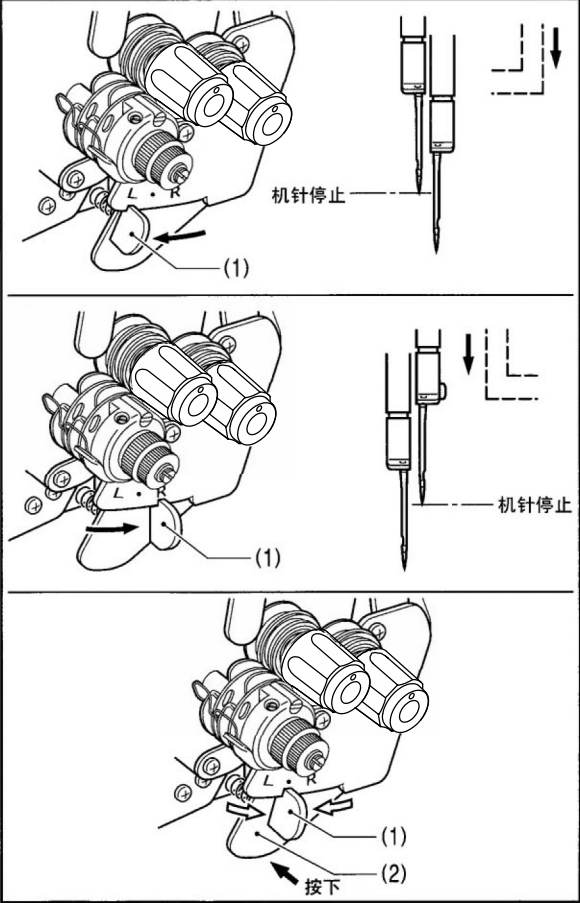


按动膝控碰块(1)可抬高压脚(2)。

5-8. 角形缝制方法 (58450,58750)

注意：
要将本缝纫机作为单针缝纫机使用时，请把不使用一侧的机针拆掉后再进行缝纫。请不要使用下述的针杆停止方法。否则可能会导致缝纫机损坏。

5-8-1. 针杆（左、右）的停止方法



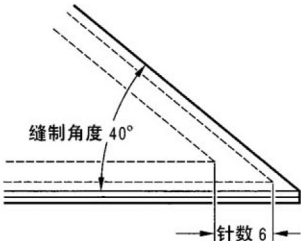
- 请在机针扎在布上的位置停止后再操作定位杆。
- 当一侧的机针已停止时，请将缝纫速度控制在 1000rpm 以下。

〈左侧针杆的停止操作〉
将定位杆（1）置于 L 位置。

〈右侧针杆的停止操作〉
将定位杆（1）置于 R 位置。

〈要恢复双针缝纫时〉
将压杆（2）按下。
定位杆（1）将自动返回到原来的位置。

5-8-2. 针数速查表



缝制角度 针数	30°	40°	50°	60°	70°	80°	90°	100°	110°	120°	130°	140°
2					4.6	3.8	3.2	2.7	2.2	1.8	1.5	1.1
3			4.6	3.5	3.0	2.5	2.1	1.8	1.5	1.2		
4		4.4	3.4	2.8	2.3	1.9	1.6	1.3				
5	4.8	3.5	2.7	2.2	1.8	1.5	1.3					
6	4.0	2.9	2.3	1.9	1.5	1.3						
7	3.7	2.5	2.0	1.6								
8	3.0	2.2	1.7									

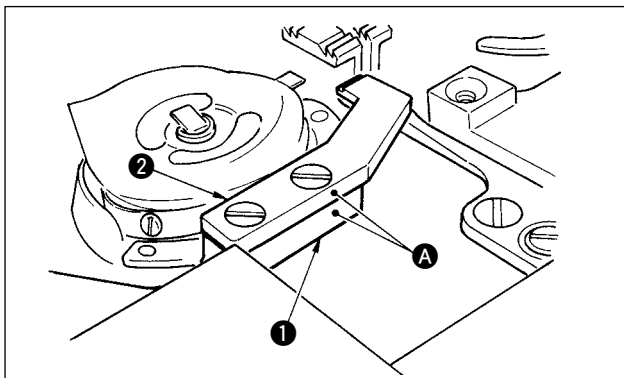
〈针宽 1/4 的情况〉
为了缝制出美丽的角形，请根据上表决定针迹长度。
此外，通过决定缝制角度和针迹长度，就可知道外侧 1 根针缝制的针数。

[例] 如果缝制角度为 40°，针迹长度为 2.9mm，那么针数就是 6 针。

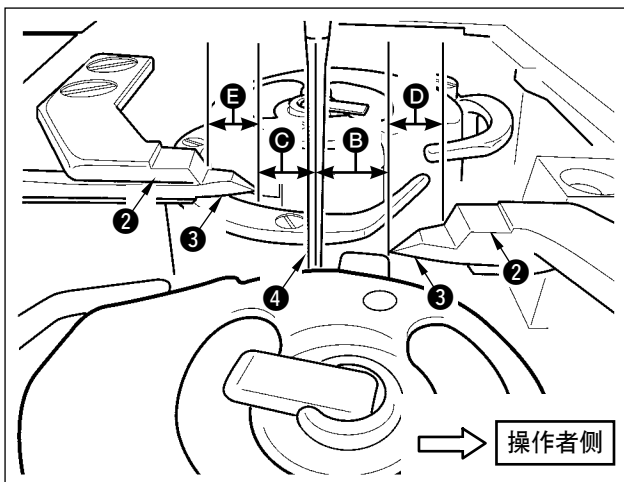
5-9. 活动刀位置的调整方法

**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。

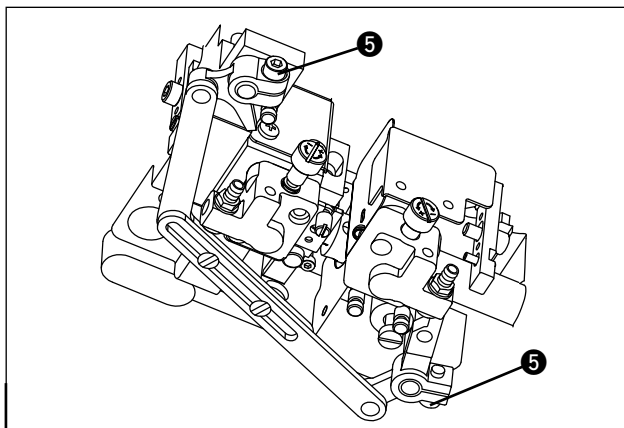


1) 让固定刀座 ① 和固定刀 ② 的 A 面对齐。

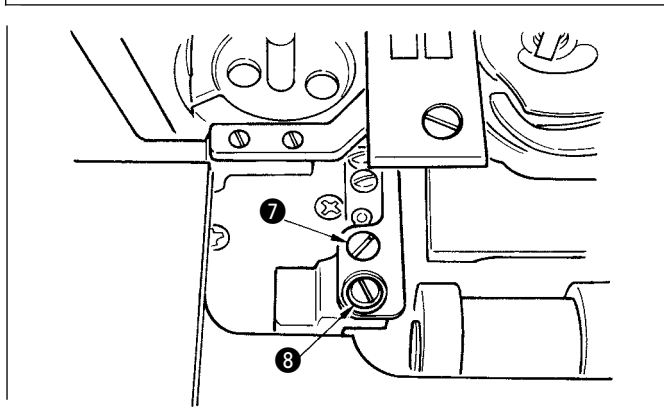
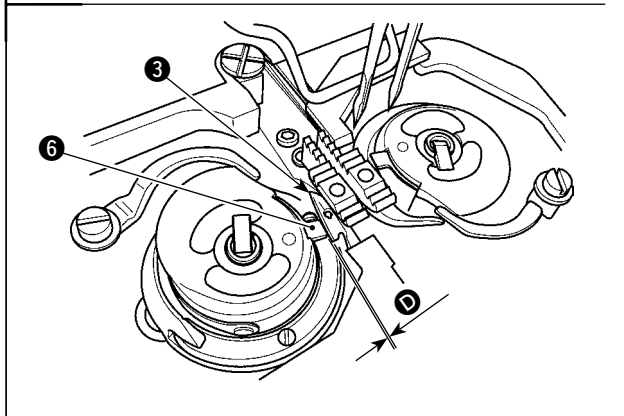


2) 拧松机台背面的套筒螺丝 ⑤, 在送布间距最小, 同时机针 ④ 在下死点时和待机时的活动刀 ③ 的前端、机针 ④ 的距离 B 以及 C 调整成下表中的尺寸。

	左切刀		右切刀	
	B	(D 参考值)	C	(E 参考值)
JK-58420J	6.2	(3.5)	7.5	(2.7)
JK-58450J				
JK-58720J	7.3	(4.1)	8.9	(3.1)
JK-58750J				



3) 把动作时的活动刀 ③ 和中旋梭凸起部 ⑥ 的间隙 D 调整为 $0.3 \pm 0.1\text{mm}$ 。请拧松活动刀固定螺丝 ⑦、⑧ 进行调整。



6. 缝纫

! 注意



为了安全起见，在使用本缝纫机之前，请安装保护装置。
如果未安装这些安全装置就使用缝纫机，会造成人身伤害及缝纫机损坏。



发生下列情况时，请切断电源。但在切断电源后，马达在稍后的一段时间内因惯性仍会继续转动，请在马达完全停止后，再进行作业。

否则误按动起动开关，缝纫机动作会导致受伤。

- 机针穿线时
- 更换机针或梭芯时
- 缝纫机不使用，或人离开缝纫机时。



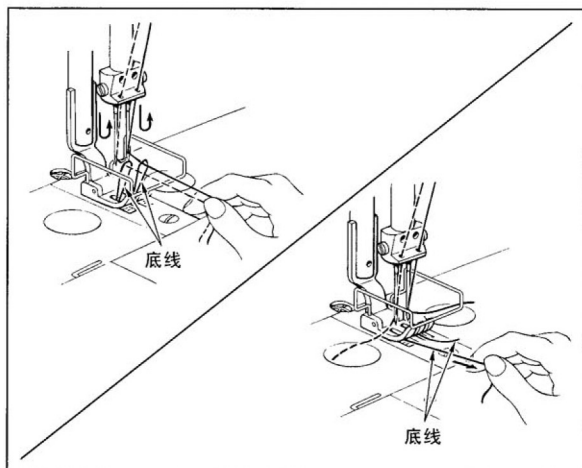
缝纫过程中，不要触摸任何运动部件或将物件靠在运动部件上，因为这会导致人员受伤或缝纫机损坏。



缝纫机头倒下或竖起时，请用双手进行操作。

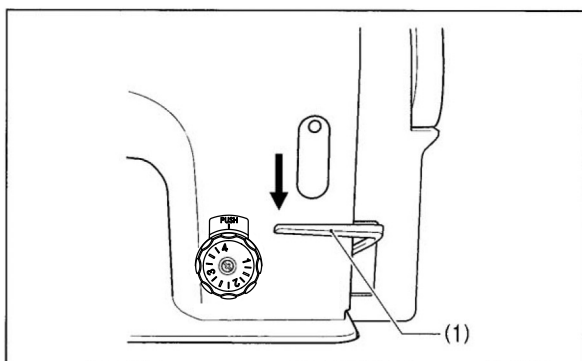
单手操作时因缝纫机的重量万一滑落易导致受伤。

6-1. 缝纫



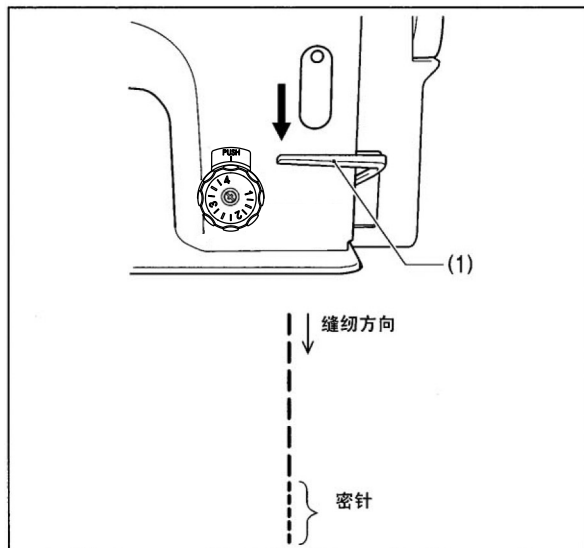
1. 一边用手指握住面线〔2根〕一边用手把缝纫手轮朝自己身边方向转动，以将底线拉到送布齿的上面。
2. 将底线朝自己身边方向拉，确认底线应能平稳地伸出。
3. 打开电源开关。
4. 踏下脚踏板开始缝纫。

6-2. 倒缝加固的方法

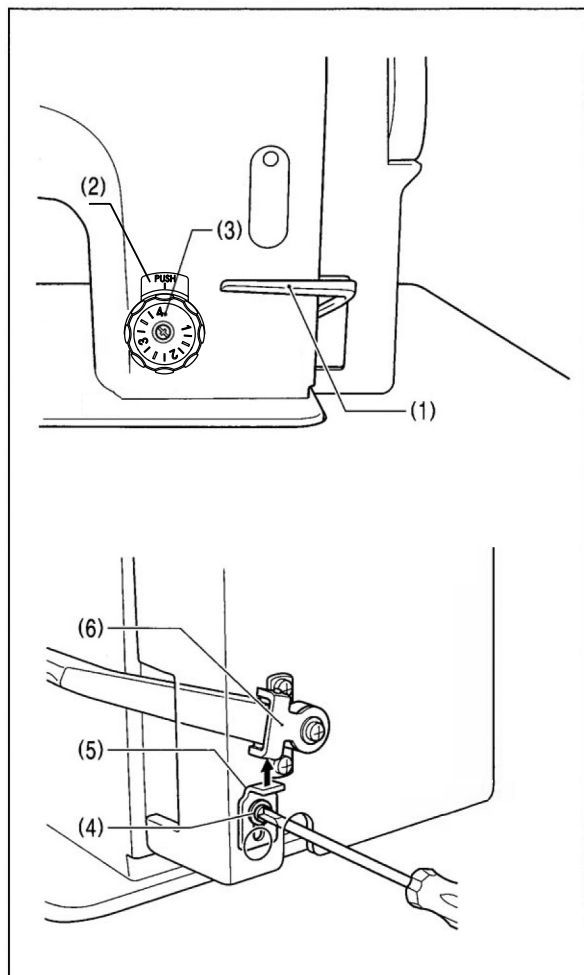


在缝纫中，如果按下倒缝扳手（1）布料就被倒送，一放开扳手又恢复正送布状态。

6-3. 缝纫密针的方法



- 在缝纫中，如果按下倒缝扳手（1）就能以密针的针迹长度进行缝纫（前进方向）。
- 在缝纫前，如下所述为密针设定针迹长度。



<设定>

1. 按压标盘锁按键(2)以进行解锁。
2. 把针距旋钮(3)转到将用于密针的针迹长度。
3. 松开固定螺钉(4)，抬起手轮制动器(5)直至碰到倒缝扳手板(6)为止。
4. 拧紧固定螺钉(4)，并固定手轮制动器(5)。

<缝纫>

1. 把针距旋钮(3)恢复到正常缝纫的针迹长度。
2. 释放标盘锁按键(2)予以锁定。
3. 开始缝纫。
4. 在要进行密针缝纫的开始位置，按下倒缝扳手(1)。（在按着期间，将进行密针缝纫。）

* 要停止密针缝纫，返回到倒缝功能时，请降下手轮制动器(5)直至碰不到倒缝扳手板(6)为止。

7. 缝纫效果

7-1. 调节线张力

正确的针迹



面线张力过小或底线张力过大。

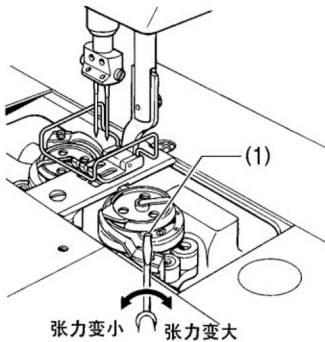
增大面线张力。
减小底线张力。



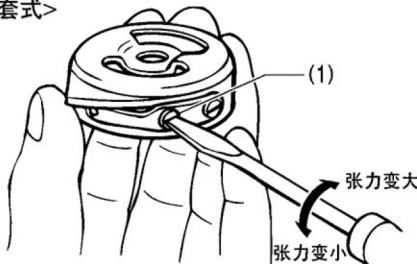
面线张力过大或底线张力过小。

减小面线张力。
增大底线张力。

<挂钩式>



<梭芯套式>



<底线张力>



注意



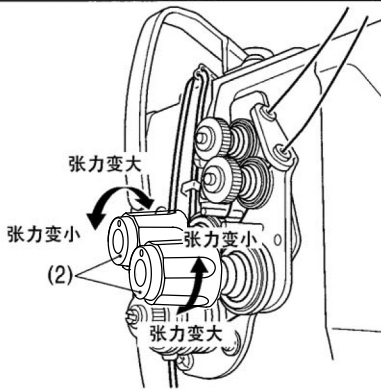
在进行底线的张力调整前先关闭电源开关。
但在切断电源后, 马达在稍后的一段时间内因惯性仍会继续转动, 请在马达完全停止后, 再进行作业。如果误踩下踏板, 缝纫机动作会导致人员受伤。

转动底线张力螺钉 (1) 进行调节。

<面线张力>

在底线张力调节之后, 调节面线张力以使针脚均匀平整。

1. 降下压脚。
2. 转动夹线螺母 (2) 进行调节。



7-2. 调节压脚压力

正确的针迹



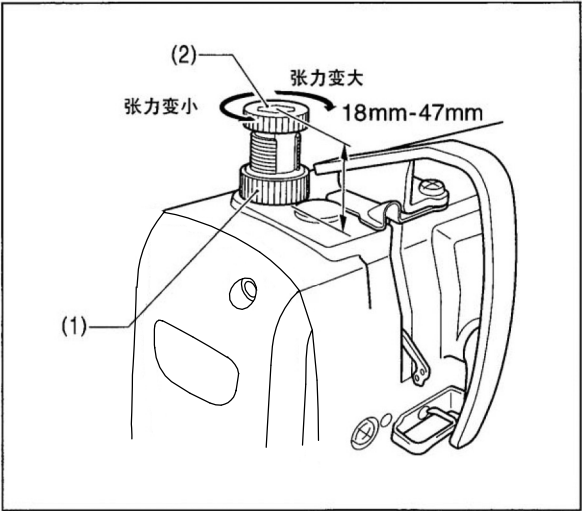
出现跳针

针距不均

增加压力

针脚起皱

减小压力



应尽可能减小压脚压力，但须有足够压力使面料不致滑动。

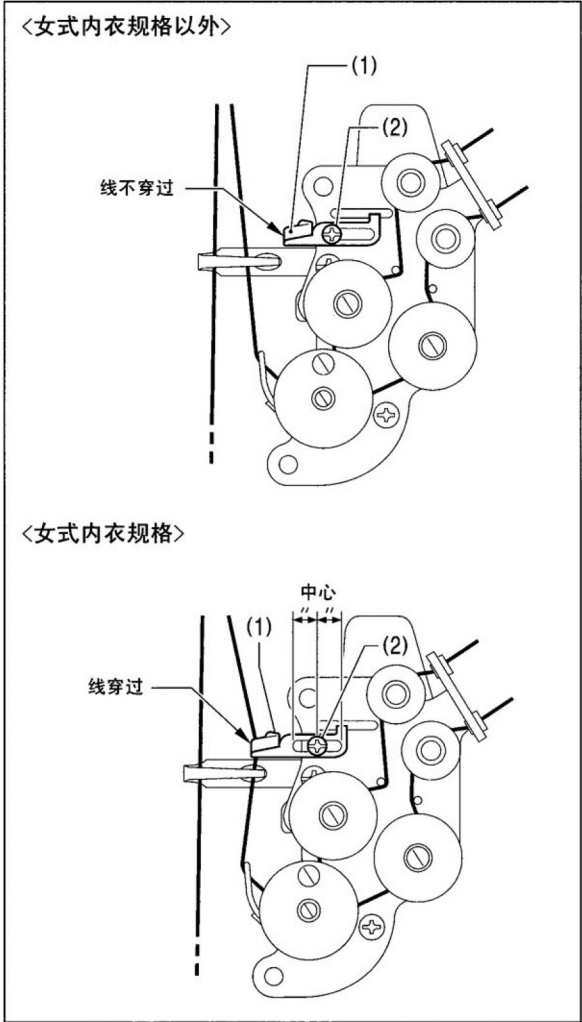
(以下表的“压脚调节螺钉高度”为大致标准进行调节。)

1. 松开调节螺母 (1)。
2. 转动压力调节螺栓 (2) 以调节压脚压力。
3. 拧紧调节螺母 (1)。

参考值

用途	压脚调节螺栓高度
女式内衣用	约 34mm
适用于较薄的和中厚的面料	约 34mm
适用于较厚的面料	约 29mm

7-3. 挑线量的调节



采用向线量调整器（1）穿过线的方法来调节挑线量。

<标准线量调整器（1）的使用方法>

女式内衣规格以外

使线不穿过线量调整器（1）。松开固定螺钉（2），将线量调整器（1）移向右侧。

女式内衣规格

使线穿过线量调整器（1）。固定螺钉（2）被置于调整范围的中间状态时，就是线量调整器（1）的标准位置。

<挑线量的调节>

使线穿过线量调整器（1）进行调节，越将线量调整器（1）向右移则挑线量越少。

使线不穿过线量调整器（1）为较好的情况

- 用女式内衣规格的缝纫机缝制厚布料时
- 要加长针迹等而挑线量不够时

使线穿过线量调整器（1）为较好的情况

- 使用帝特纶等易滑的机线时
- 缝制薄的布料时
- 以 2mm 以下的针迹长度进行缝纫时
- 在以上述 3 种条件进行缝纫的情况下，为了防止发生跳线、毛巾针迹等机线松紧不良和断线时

8. 保养

! 注意



在开始清洁作业前，请切断电源。但在切断电源后，马达在稍后的一段时间内因惯性仍会继续转动，请在马达完全停止后，再进行作业。

当误按动起动开关时，缝纫机动作会导致人员受伤。



使用润滑油和黄油时，务必戴好保护眼镜和保护手套等，以防润滑油落入眼中或沾在皮肤上，这是引起发炎的原因。

另外，润滑油或黄油不能饮用，否则会引起呕吐和腹泻。

将油放在小孩拿不到的地方。

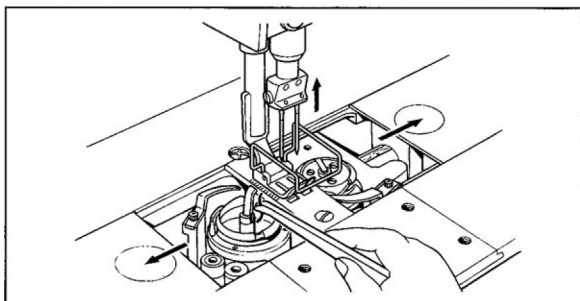


缝纫机头倒下或竖起时，请用双手进行操作。

单手操作时因缝纫机的重量万一滑落易导致受伤。

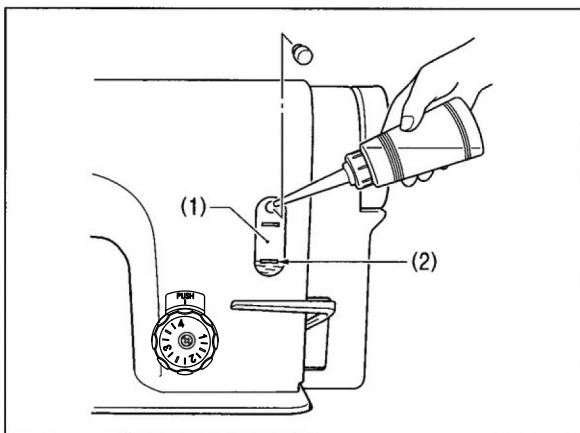
8-1. 日常清洁程序

为了保持缝纫机的机能，而且能长久的使用，请每天保养。另外，缝纫机如果长时间未使用，请在进行了如下的保养后再使用。



<保养>

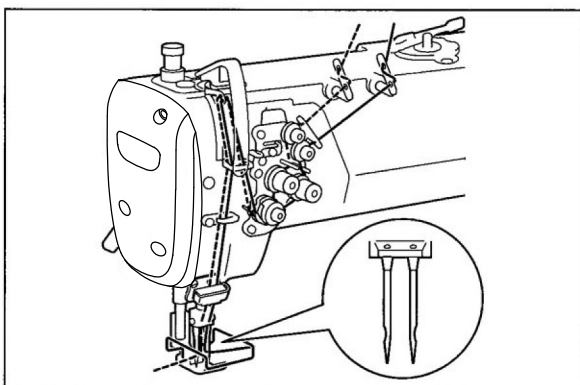
1. 转动缝纫机的皮带轮，将机针置于最高位置。
2. 将滑板左右分开。
3. 取出梭芯。
4. 清除旋梭内的线头等。
5. 安装梭芯（和梭芯套）。



<给油箱添加机油>

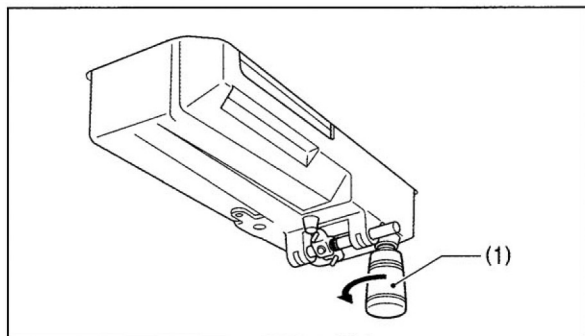
只使用本公司规定的润滑油。

1. 当润滑油的液位下降到油量表视窗(1)的下基线(2)以下时，应添加润滑油（参照第 8 页）。



<检查>

1. 如果机针弯曲或针尖断裂，应予以更换。
2. 检查上线是否穿引正确。（参阅第 16 页。）
3. 进行试缝。

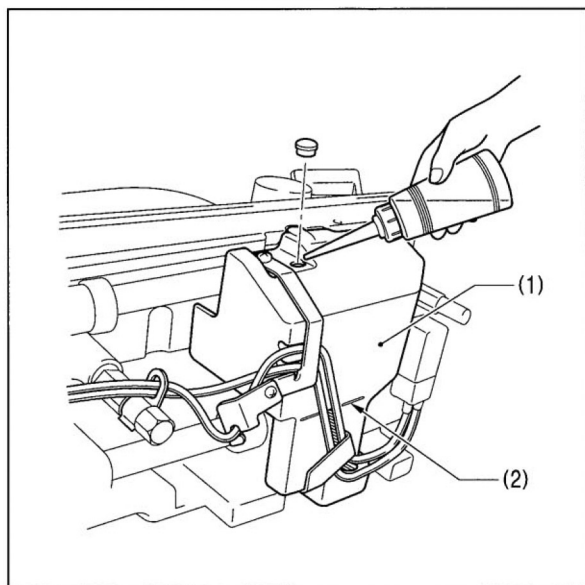


<废油>

1. 当注油器 (1) 内积满了润滑油时, 请拧松注油器 (1) 将它拆下, 倒掉润滑油。
2. 将注油器 (1) 拧入油盘。

* 请按照法律规定, 正确地处理废油。

8-2. 给油盖添加机油 (每隔 6 个月)



只使用本公司规定的润滑油。

1. 将缝纫机头部倒下。
2. 给油盖 (1) 添加润滑油, 直至液位达到基准线 (2) 位置。(参照第 8 页)
3. 将缝纫机头部返回原位。

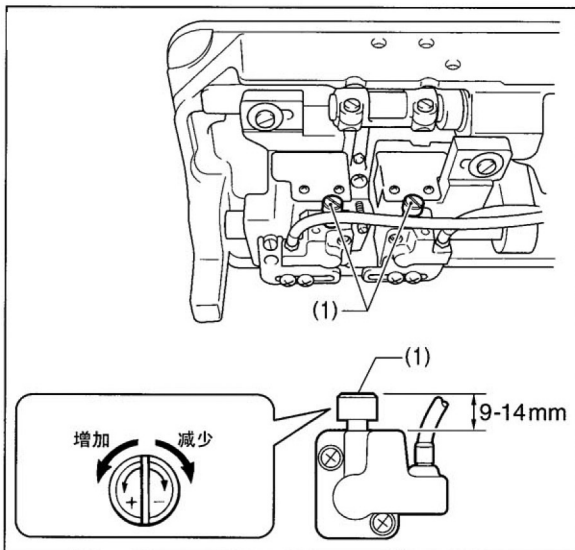
9. 旋梭供油量的调整

! 注意



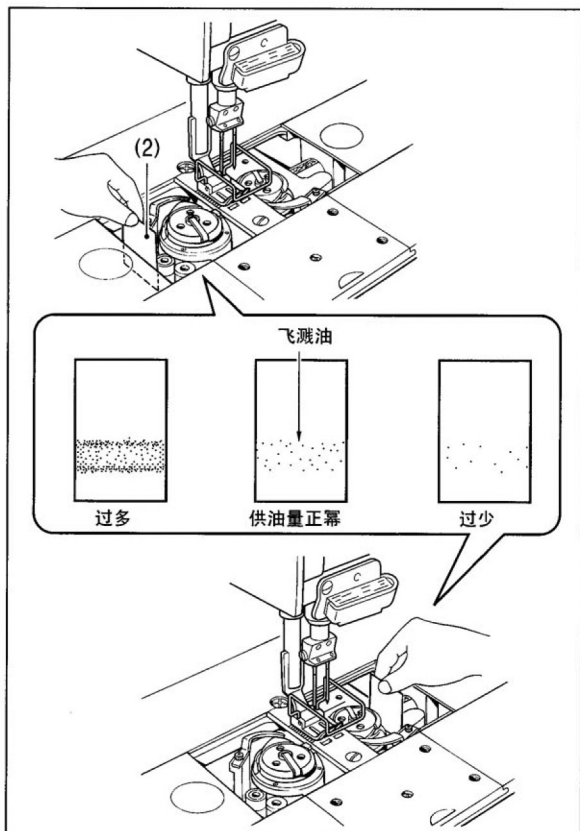
在检查旋梭供油量时,手指和油量测试纸不能碰到旋梭和送布机构等运动零部件。是导致人员受伤的原因。

如更换了旋梭或要变更缝纫速度时,请按下述步骤调整旋梭的供油量。



<供油量调整的大致标准>

1. 将缝纫机头部倒下。
2. 转动油量调节螺钉(1), 将其高度调整到 9~14mm。



<供油量的确认>

1. 切断电源开关。
2. 拆去挑线杆至机针上的线。
3. 取下机针和梭芯。
4. 用抬压脚扳手抬起压脚。
5. 接通电源开关。
6. 以缝纫机实际缝纫时的转速进行约 1 分钟的空运转(适度的断续运转)。
7. 将油量测试纸(2)插入旋梭的左侧(右侧是指旋梭的右侧)并握住, 以实际缝纫时的缝纫机转速使缝纫机运转 8 秒钟。(对油量测试纸(2)的纸质没有什么要求。)
8. 确认飞溅到测试纸上的油量

<供油量的调整>

1. 将缝纫机头部倒下。
2. 转动油量调整螺钉(1), 调整供油量。
 - 向左转动油量调整螺钉(1), 供油量增加。
 - 向右转动油量调整螺钉(1), 供油量减少。
3. 参照上述[供油量的确认]所述来检查供油量。
 - * 请反复进行油量调整螺钉的调整及供油量的确认, 直到获得适当的供油量为止。
4. 在进行了约 2 小时的缝纫后, 请再次检查供油量。

10. 故障检修

- 您在要求维修或服务前，先检查以下各点。
- 如果以下方法仍然不能解决问题，关闭电源开关，向受过训练的技术人员或经销商咨询。

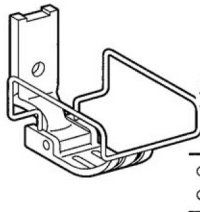
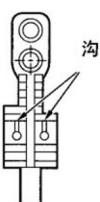
⚠ 注意

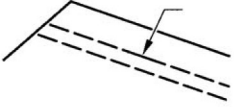
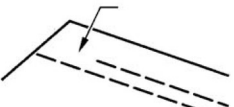


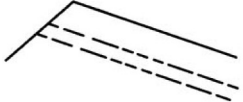
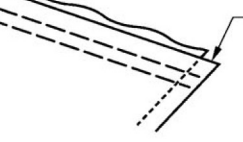
在进行故障查寻之前，请先关闭电源开关并断开电源线。但在切断电源后，马达在稍后的一段时间内因惯性仍会继续转动，请在马达完全停止后，再进行作业。

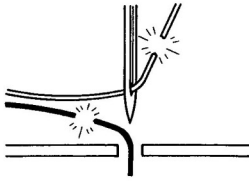
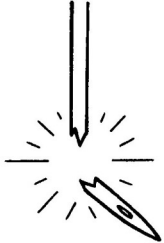
否则如果误按启动开关，缝纫机会动作，导致人身伤害。

“页码”栏目中带有“*”记号的只能由合格的技术人员进行检查。

现象	检查及调整	参照页
1 打开电源并踩下脚踏板时，缝纫机不工作。	- 断路器或保险丝是否已断开？ - 电源线是否已脱开？	*
2 面线不够紧密  底线不够紧密 	- 缝纫机线是否穿引正确？ 如果穿引不正确，应正确穿引机线。 - 面线张力或底线张力是否太弱？ 调节面线张力或底线张力。 - 取线弹簧的动作范围是否太小？ 降低取线弹簧止动器的位置。 当使用中厚布料规格的缝纫机时，根据布料种类等的不同可能会出现缝线不够紧密的情况。 在此情况下，请换上后面有间隙的压脚。或者换上带沟的送布牙齿。  	14~17 23 *
3 布料下出现环结等不良 	- 线路是否不够光滑？ 用细粒锉刀或砂纸将线路打磨光滑。 - 梭芯是否旋转流畅？ 拉出底线检查机线张力是否松弛，或更换梭芯或梭芯套。 - 挑线量是否过多？ 调整挑线量。	25

	现象	检查及调整	参照页
4	缝纫时出现跳针 	- 机针是否弯曲？针尖是否钝化？ 如果针尖弯曲或断裂，应予以更换。 - 机针是否安装正确？ 如果机针安装不正确，应正确加以安装。 - 缝纫机线是否穿引正确？ 如果穿引不正确，应正确穿引机线。 - 压脚压力是否过小？ 调整压脚压力。 - 机针是否太细？ 更换大一号的机针。 - 压脚是否太高？ 调整压脚高度。 - 挑线簧是否太弱？ 调整挑线簧的张力。 - 挑线量是否过多？ 调整挑线量。	11 14~17 24 * * 25
5	缝纫开始时出现跳针 缝纫开始时出现脱线 	- 挑线簧张力是否过大？ 减小挑线簧张力。 - 挑线簧工作范围是否过大？ 升高取线弹簧止动器的位置。 - 缝纫开始时，挑线杆是否在最高位置？ 缝纫开始时，请将挑线杆置于最高位置。 - 从机针引线孔伸出的线头是否太短？ 缝纫开始时，请从引线孔将线头拉出约 50mm。 - 机针是否过粗？ 使用比现有机针小一号的机针。 - 在缝制薄的布料、中厚布料时，是否使用了后面有间隙的压脚或带沟的送布牙齿？ 应使用后面无间隙的压脚。 应使用不带沟的送布牙齿。 	* * 16 17

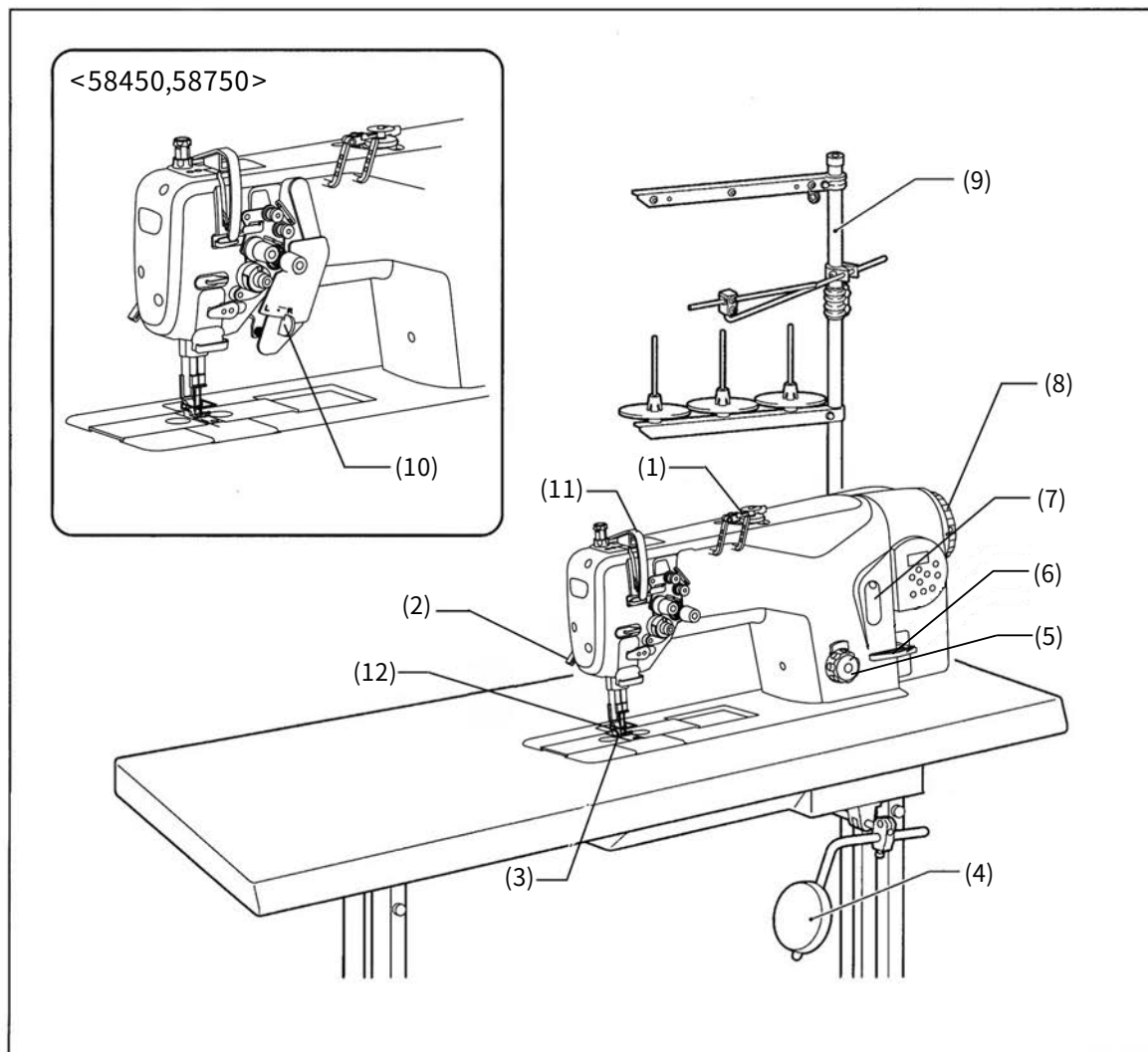
	现象	检查及调整	参照页
6	线缝不平整 	- 压脚压力是否过小？ 调整压脚压力。 - 送布牙高度是否太低？ 调整送布牙高度。 - 梭芯是否有划痕？ 如果梭芯受损，用油磨石打磨光滑，或予以更换。	24 *
7	大量的皱褶（张力过大） 	- 面线张力是否过大？ 尽量减小面线张力。 - 底线张力是否过大？ 尽量减小底线张力。 - 挑线簧张力是否过大？ 尽量减小挑线簧张力。 - 挑线簧工作范围是否过大？ 尽量升高取线弹簧止动器的位置。 - 压脚压力是否过大？ 调整压脚压力。 - 挑线量是否过少？ 调整挑线量。	23 23 * * 24 25
8	线缝不合 	压脚压力是否过大？ 调整压脚压力。	24
9	在缝纫开始时底线纠结缠绕。 	- 拉出底线时，梭芯旋转方向是否正确？ 安装梭芯，使其朝旋梭相反的方向旋转。 - 梭芯上卷绕的机线是否过多？ 梭芯卷绕量不应超过80%。 - 梭芯转动是否流畅？ 如果梭芯转动不流畅，应更换梭芯。 - 是否使用了除 Brother 规定的轻合金梭芯以外的其他梭芯？ 仅使用 Brother 规定的梭芯。 	14~15 13 14~15

	现象	检查及调整	参照页
10	面线和底线断裂。 	- 机针是否弯曲或针尖是否断裂？ 如果机针弯曲或断裂，应予以更换。 - 机针是否安装正确？ 如果机针安装不正确，应正确加以安装。 - 缝纫机线是否穿引正确？ 如果穿引不正确，应正确穿引机线。 - 是否已给油箱添加了机油？ 如果润滑油的液位下降到油量计视窗的下基线以下，应添加机油。 - 面线或底线张力是否过小或过大？ 调整面线或底线张力。 - 旋梭部分是否沾有灰尘或线头？ 进行旋梭的清洁。 - 面线是否因挑线簧工作范围太小而松动？ 调整取线弹簧止动器的位置。 - 旋梭、送布牙或其他部件是否受损？ 如果这些部件受损，用油磨石打磨光滑，或更换受损部件。 - 线路是否受损？ 如果线路受损，用砂纸打磨光滑或更换受损部件。 - 挑线量是否适当？ 调整挑线量。	11 14~17 8 23 26 * * * 25
11	断针。 	- 缝纫过程中是否在送入或拉出面料时用力过度？ - 机针是否弯曲？针尖是否断裂或针孔是否被堵住？ 更换机针。 - 机针是否在送布牙齿的机针孔中心上下运动？ 确认机针的下落情况。如果机针不在送布牙齿的机针孔中心上下运动，应重新安装送布牙齿。 在针杆旋转时，转动针杆将它调整到正确的位置。 注意 - 如果断针不慎掉入缝纫衣物中，会有很大的危险。请尽可能找出机针的残骸，直至找齐整枚机针。 - 另外，请保留机针的记录，我们推荐以制造者责任法进行机针管理。	11 * *

CONTENTS

1. NAMES OF MAJOR PARTS	1	• • 20
2. MACHINE SPECIFICATIONS	1	21
3. TABLE AND MOTOR	3	21
4. INSTALLATION	4	21
4-1. Installation	5	22
4-2. Lubrication	8	23
4-3. operational testing	10	24
5. PREPARATION BEFORE SEWING	11	25
5-1. Installing the needle	11	26
5-2. Removing the bobbin	12	27
5-3. Winding the lower thread	13	28
5-4. installing the bobbin	14	29
5-5. Threading the upper thread	16	
5-6. Adjusting the stitch length	18	
5-7. Using the knee lifter	18	
5-8. Corner sewing method (58450, 58750)	19	
5-8-1. To stop the needle bars		
(right and left)	19	
5-8-2. Number of stitches: quick-reference		
guide	19	
6. SEWING	21	
6-1. Sewing	21	
6-2. Backtacking	21	
6-3. Sewing condensed stitches	22	
7. THREAD TENSION	23	
7-1. Adjusting the thread tension	23	
7-2. Adjusting the presser foot pressure	24	
7-3. Adjusting the thread take-up amount	25	
8. CLEANING	26	
8-1. Daily cleaning procedures	26	
8-2. Lubricating via the oil cover		
(every 6 months)	27	
9. ADJUSTING THE ROTARY HOOK		
LUBRICATION AMOUNT	28	
10. TROUBLESHOOTING	29	

1. NAMES OF MAJOR PARTS



- (1) Bobbin winder
- (3) Presser foot
- (5) Stitch length dial
- (7) Oil gauge window
- (9) Cotton stand

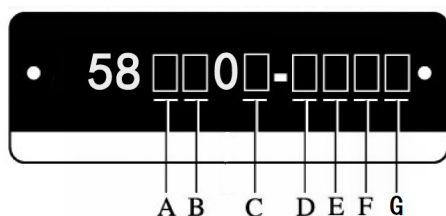
- (2) Lifting lever
- (4) Knee lifter assembly
- (6) Reverse lever
- (8) Machine pulley
- (10) Stop lever (58450,58750)

Safety devices

(11) Thread take-up cover

(12) Finger guard

2. MACHINE SPECIFICATIONS



A		4	7	
	Rotary hook	Standard hook	Large kook	
B		2	5	
	Stitch function	Fixed needle bar	Split needle bar	
C		B	J	
	Drive fashion	Direct drive double needle lockstitch	Computerized double needle lockstitch	
D		0	1	4
	Quick reverse	—	o	o
	Thread wiper	—	—	o
	Thread trimmer	—	o	o
	Auto lifter components	—	o	o
	Nest less e-edvice	—	o	—
E		0	1	
	Needle bar rocking mechanism	—	o	
F		3	5	
	USE	For foundation	Semidry	
G		—	C	
	Rotary hook type	Imported	Domestic	

Machine specifications

Model	Max. speed (rpm)	Max. stitch length	presser foot height		Feed dog height	Needle (DP×5)
			lifting lever	Knee lifter		
58420B-003C	3000	4	7	13	1	#11-#16
58420B-005C	3000	5	7	13	1	#14-#22
58450B-003C	3000	5	7	13	1	#11-#16
58450B-005C	3000	5	7	13	1	#14-#22
58720B-003C	3000	7	7	13	1	#11-#16
58720B-005C	3000	7	7	13	1	#14-#22
58750B-003C	3000	7	7	13	1	#11-#16
58750B-005C	3000	7	7	13	1	#14-#22
58420J-403	3000	4	7	13	1	#11-#16
58420J-405	3000	5	7	13	1	#14-#22
58450J-403	3000	5	7	13	1	#11-#16
58450J-405	3000	5	7	13	1	#14-#22
58720J-403	3000	7	7	13	1	#11-#16
58720J-405	3000	7	7	13	1	#14-#22
58750J-403	3000	7	7	13	1	#11-#16
58750J-405	3000	7	7	13	1	#14-#22
58450J-413	3000	5	7	13	1	#11-#16
58450J-415	3000	5	7	13	1	#14-#22
58750J-413	3000	7	7	13	1	#11-#16
58750J-415	3000	7	7	13	1	#14-#22

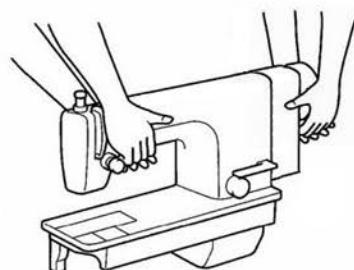
4. INSTALLATION

CAUTION

-  Machine installation should only be carried out by a qualified technician.
-  Contact your Brother dealer or a qualified electrician for any electrical work that may need to be done.
-  The sewing machine weighs approximately 53 kg. The installation should be carried out by two or more people.
-  Do not connect the power cord until installation is complete. The machine may operate if the treadle is depressed by mistake, which could result in injury.
-  Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.
-  Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.

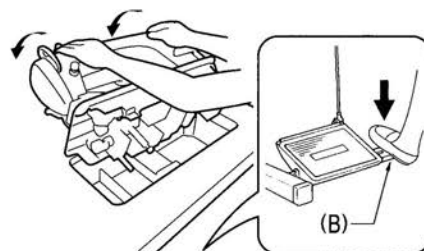
Carrying the machine

- Hold the lower part of the handwheel with your hand
- * Make sure that the machine pulley does not turn.



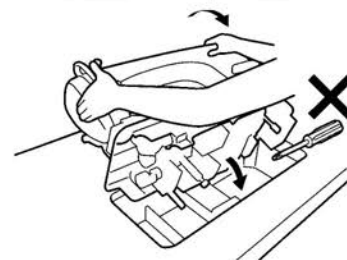
Tilting back the machine head

- Hold section (B) with your foot so that the table does not move, and then push the arm with both hands to tilt back the machine head.

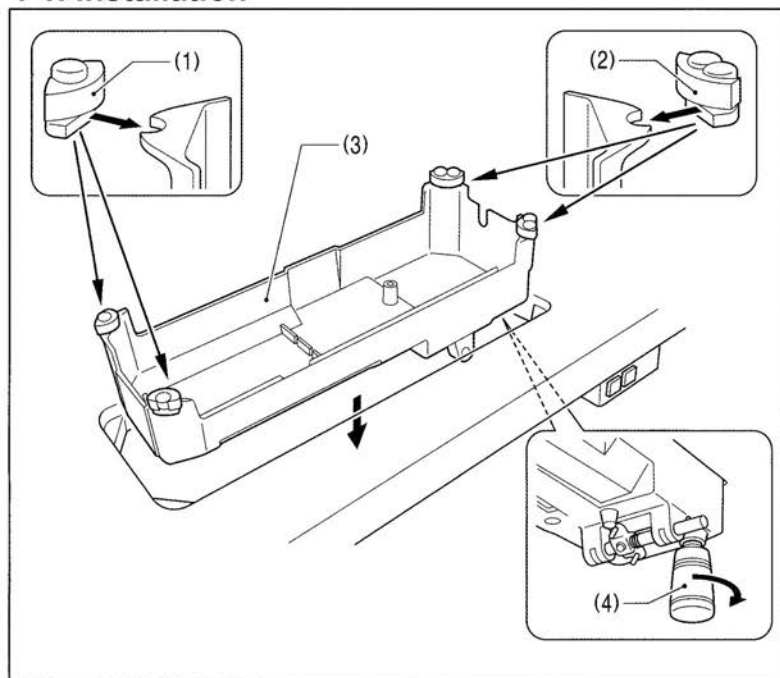


Returning the machine head to the upright position

1. Clear away any tools, etc. which may be near the table holes.
2. While holding the face plate with your left hand, gently return the machine head to the upright position with your right hand.

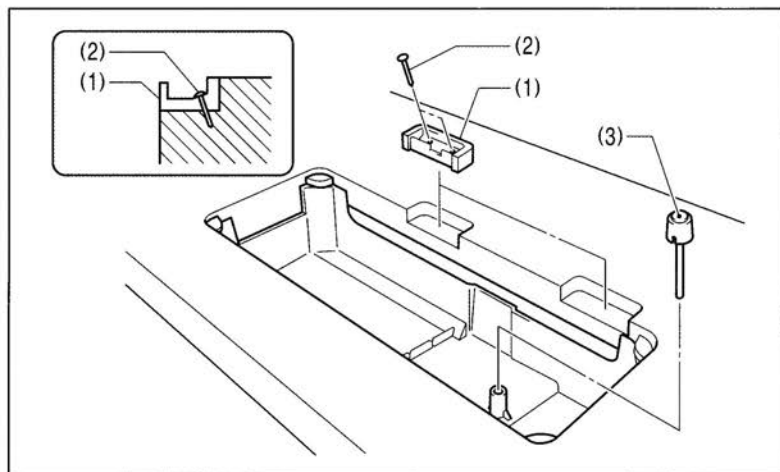


4-1. Installation



1. Oil pan

- (1) Head cushions (left) [2 pcs]
- (2) Head cushions (right) [2 pcs]
- (3) Oil pan
- (4) Oiler

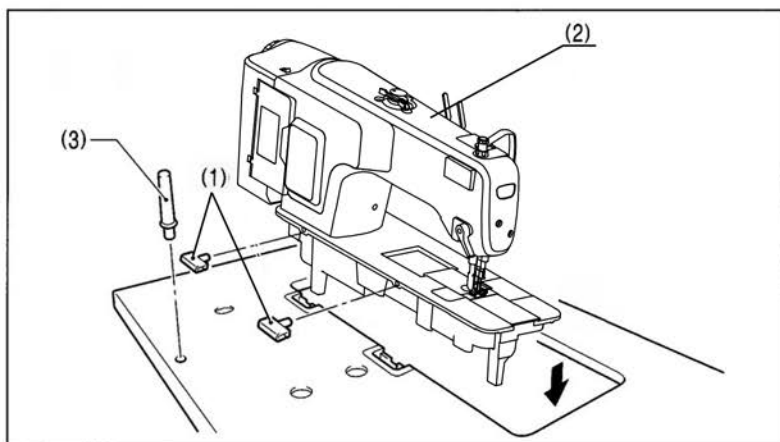


2. Rubber cushions

- (1) Rubber cushions [2 pcs]
- (2) Nails [4 pcs]

3. Knee lifter complying bar

- (3) Knee lifter complying bar



4. Machine head

- (1) Hinges [2 pcs]
- (2) Machine head
- (3) Head rest

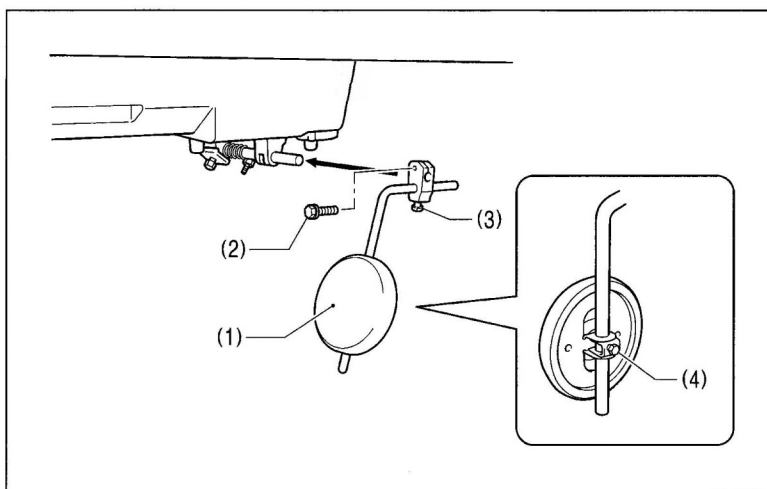
NOTE:

Tap the head rest (3) securely into the table hole. If the head rest (3) is not pushed in as far as it will go, the machine head will not be sufficiently stable when it is tilted back.

5. Knee lifter plate

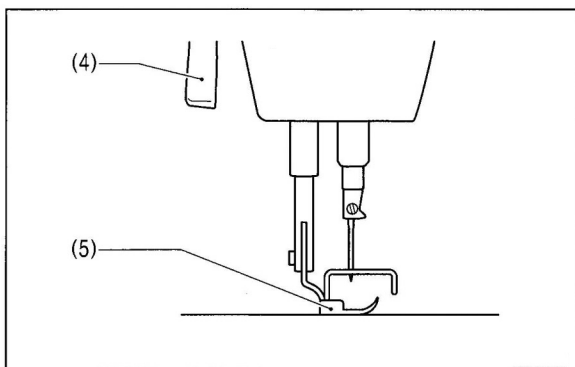
- (1) Knee lifter plate
(2) Bolt

* Loosen the bolt (3) and the bolt (4), and move the knee lifter plate (1) to a position where it is easy to use.

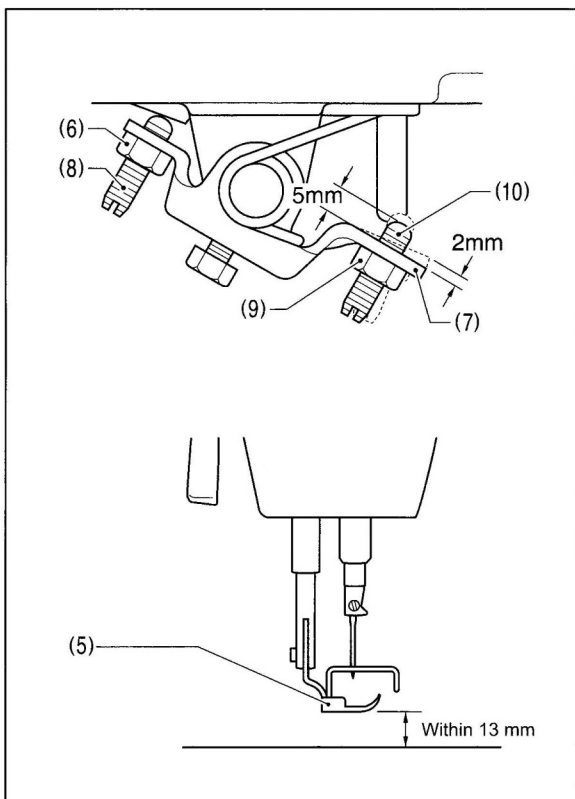


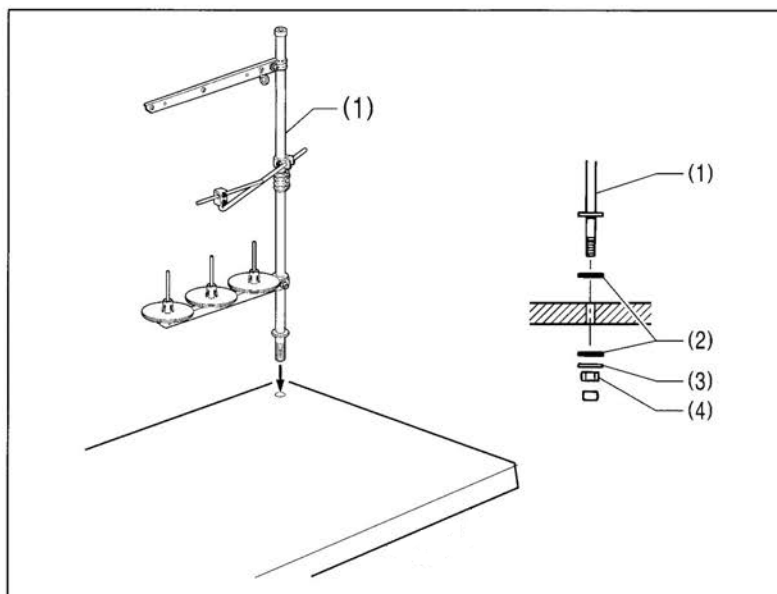
<Knee lifter adjustment>

1. Turn the machine pulley so that the feed dog is below the top of the needle plate.
2. Lower the presser foot (5) by using the lifting lever (4).



3. Loosen the nut (6).
4. Turn the screw (8) to adjust so that the amount of play in the knee lifter (7) is approximately 2 mm when the knee lifter plate (1) is gently pressed.
5. Securely tighten the nut (6).
6. Loosen the nut (9).
7. Turn the screw (10) until the distance between the end of the screw (10) and the knee lifter (7) is approximately 5 mm.
8. Turn the adjusting screw (10) to adjust so that the presser foot (5) is at the desired position within a distance of 13 mm of the needle plate when the knee lifter plate (1) is fully pressed.
9. After adjustment is completed, securely tighten the nut (9).





14. Cotton stand

(1) Cotton stand

NOTE:

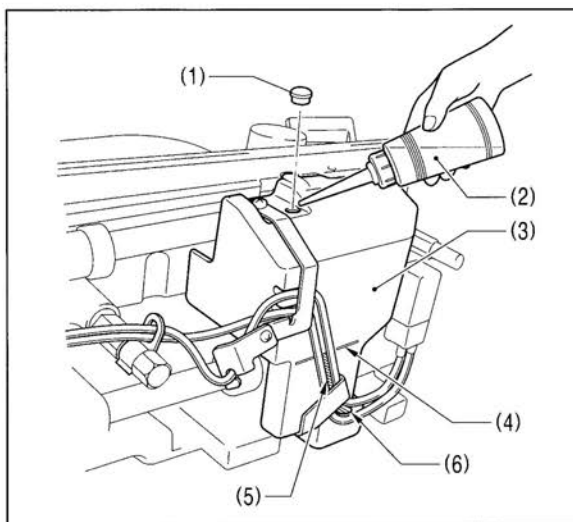
Securely tighten the nut (4) so that the two rubber cushions (2) and the washer (3) are securely clamped and so that the cotton stand (1) does not move.

4-2. Lubrication

CAUTION

-  Do not connect the power cord until lubrication has been completed, otherwise the machine may operate if the treadle is depressed by mistake, which could result in injury.
-  Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin, otherwise inflammation can result. Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea. Keep the oil out of the reach of children.

- The sewing machine should always be lubricated and the oil supply replenished before it is used for the first time, and also after long periods of non-use.
- Use only the lubricating oil.



<Lubricating via the oil cover>

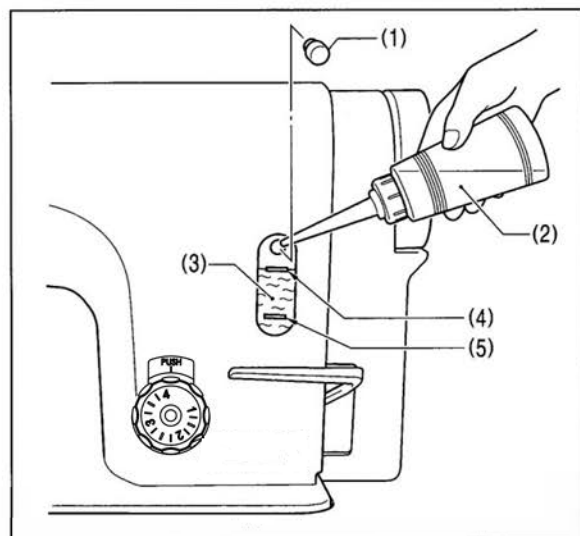
1. Tilt back the machine head.
2. Remove the rubber cap (1).
3. Use the accessory oiler (2) to pour lubricating oil into the oil cover (3) until the oil level reaches the reference line (4).

NOTE:

Do not fill with lubricating oil past the reference line (4). If you pour in too much lubricating oil, it may spill out when the machine head is tilted back.

4. Replace the rubber cap (1).
5. Return the machine head to its original position.

* If the lubricating oil level drops below the bottom (6) of the oil gauge window (5), be sure to add more oil.



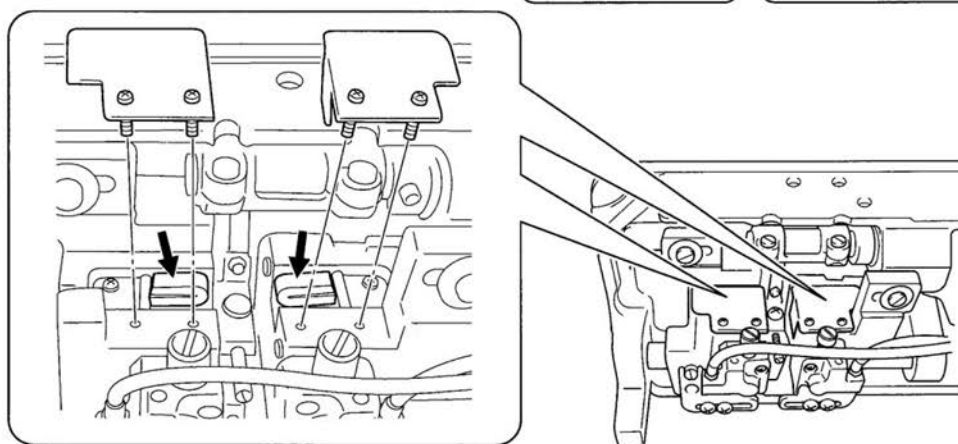
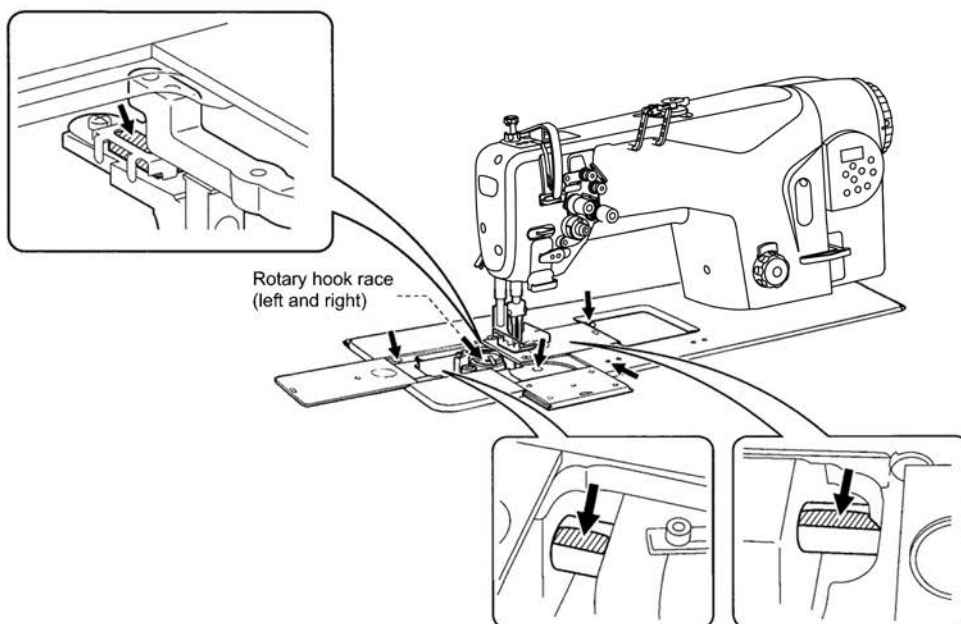
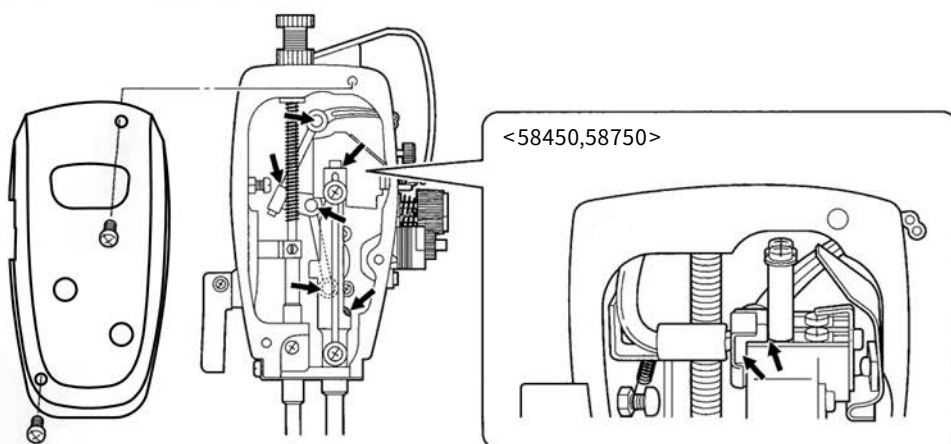
<Lubricating via the oil tank>

1. Remove the rubber cap (1).
2. Use the accessory oiler (2) to pour in lubricating oil until the oil level reaches the top reference line (4) of the oil gauge window (3).
3. Replace the rubber cap (1).

* If the lubricating oil level drops below the bottom reference line (5), be sure to add more oil.

■ Lubrication

Apply 1 - 2 drops of oil to the places indicated by the arrows.

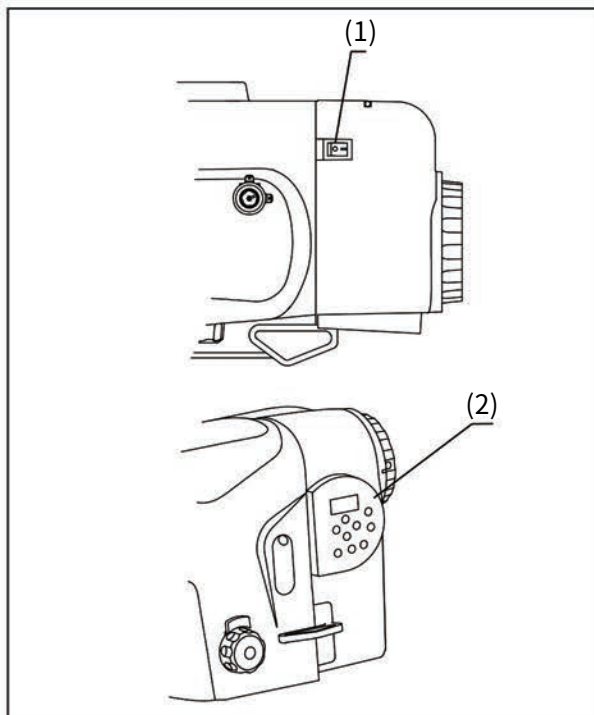


4-3. operational testing(pedal operation)

! CAUTION



Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.

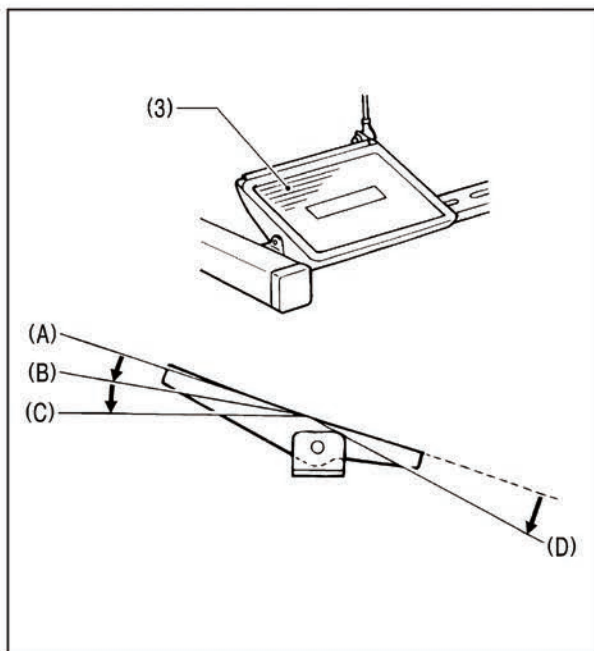


<Turn on power>

Turn on power switch(1), power

The operation panel screen lights up.

Panel light (2) on, handwhell rolls smoothly.



<Operational testing>

1. Press pedal(3) to position(B) to check the low-speed operation of the sewing machine.

2. Press pedal(3) further to position(C) to check the high-speed operation of the sewing machine.

3. Press pedal(3) and then release, pedal(3) will come to neutral position(A), then check the needle to see whether it has descended under the needle plate(on condition it has been set to position the needle under the needle plate when thr machine stops).

4. Press pedal(3) to position(D) (for machine with auto trimming, this function is after trimming), the needle will ascend and stop above the needle plate.

5. PREPARATION BEFORE SEWING

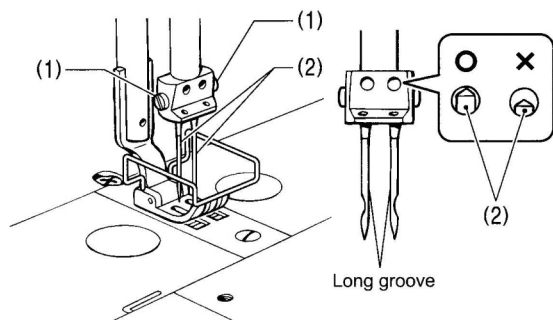
5-1. Installing the needle

! CAUTION



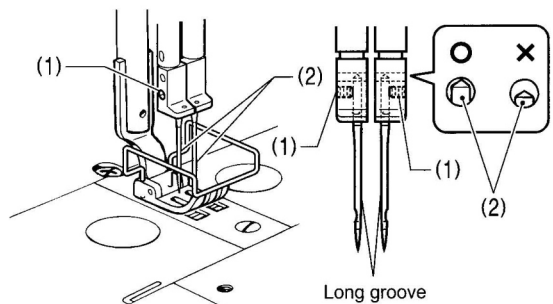
Turn off the power switch before installing the needle. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.
The machine may operate if the treadle is depressed by mistake, which could result in injury.

<58420,58720>



1. Turn the machine pulley to move the needle bar to its highest position.
2. Loosen the screws (1).
3. Insert the needle (2) straight in as far as it will go so that the long groove is facing inward, and then securely tighten the screws (1).

<58450,58750>

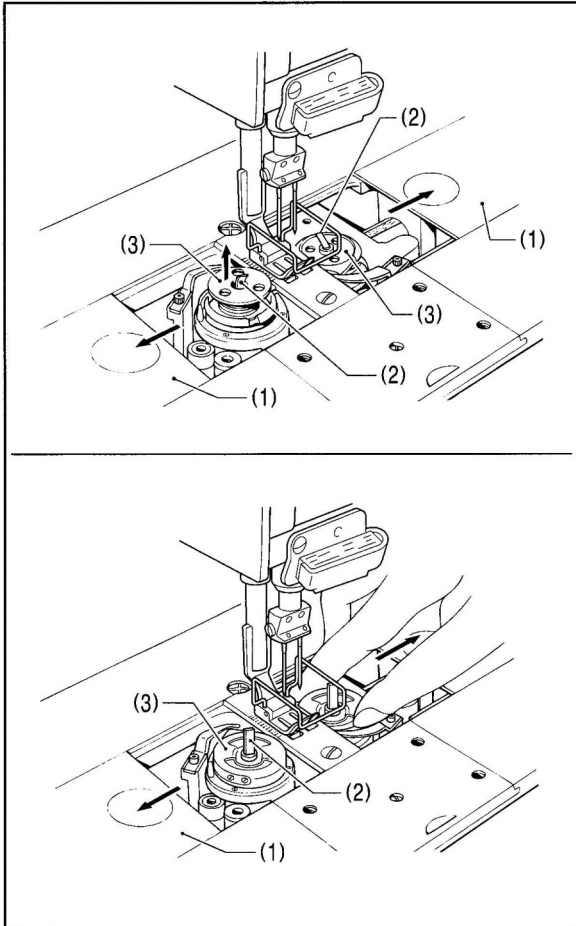


5-2. Removing the bobbin

CAUTION



Turn off the power switch before removing the bobbin. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.
The machine may operate if the treadle is depressed by mistake, which could result in injury.



<Latch type>

1. Open the slide plates (1) by moving them to the right and left.
2. Pull the rotary hook latches (2) upward, and then remove the bobbins (3).

<Bobbin case type>

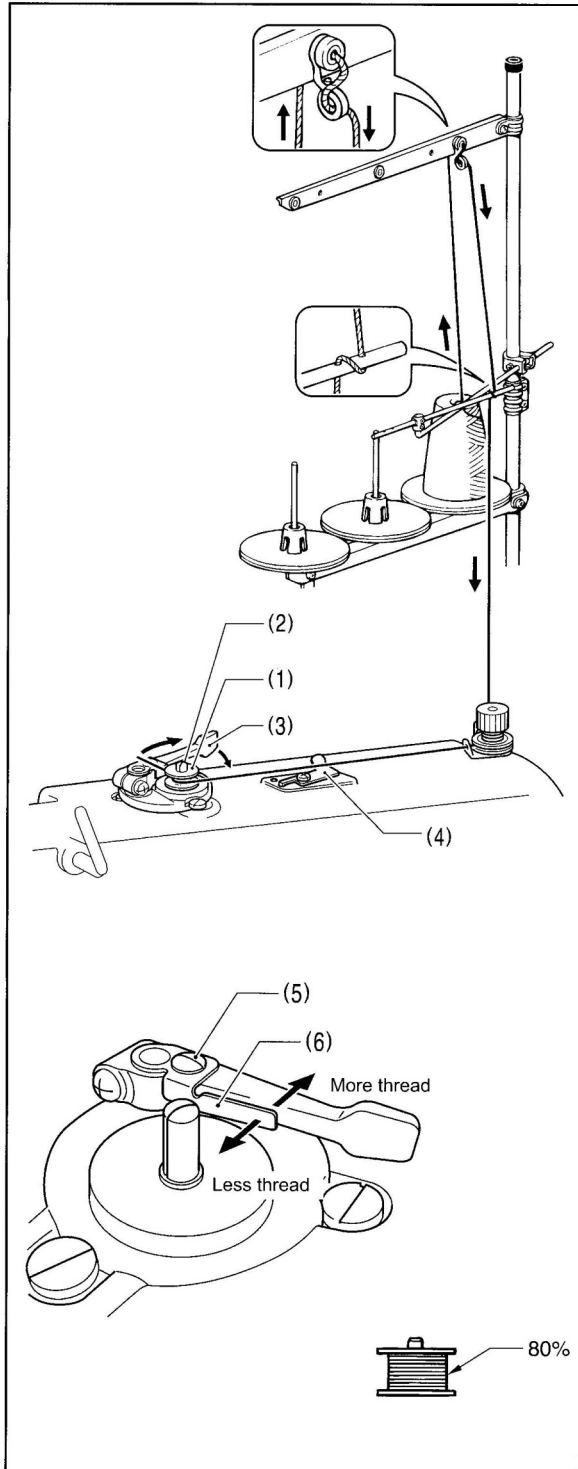
1. Open the slide plates (1) by moving them to the right and left.
2. Lift up the latch (2) of the rotary hook, and then remove the bobbin case (3).
3. Remove the bobbin.

5-3. Winding the lower thread

CAUTION



Do not touch any of the moving parts or press any objects against the machine while winding the lower thread, as this may result in personal injury or damage to the machine.



1. Turn on the power switch.
2. Place the bobbin (1) onto the bobbin winder shaft (2).
3. Wind the thread several times around the bobbin (1) in the direction indicated by the arrow.
 - * Check that the thread is not loose anywhere along the thread path.
4. Push the bobbin presser arm (3) toward the bobbin (1).
5. Raise the presser foot with the lifting lever.
6. Depress the treadle. Lower thread winding will then start.
7. Once winding of the lower thread is completed, the bobbin presser arm (3) will return automatically.
8. After the thread has been wound on, remove the bobbin and cut the thread with the knife (4).

- * Loosen the screw (5) and move the bobbin presser (6) to adjust the amount of thread wound onto the bobbin.

NOTE:

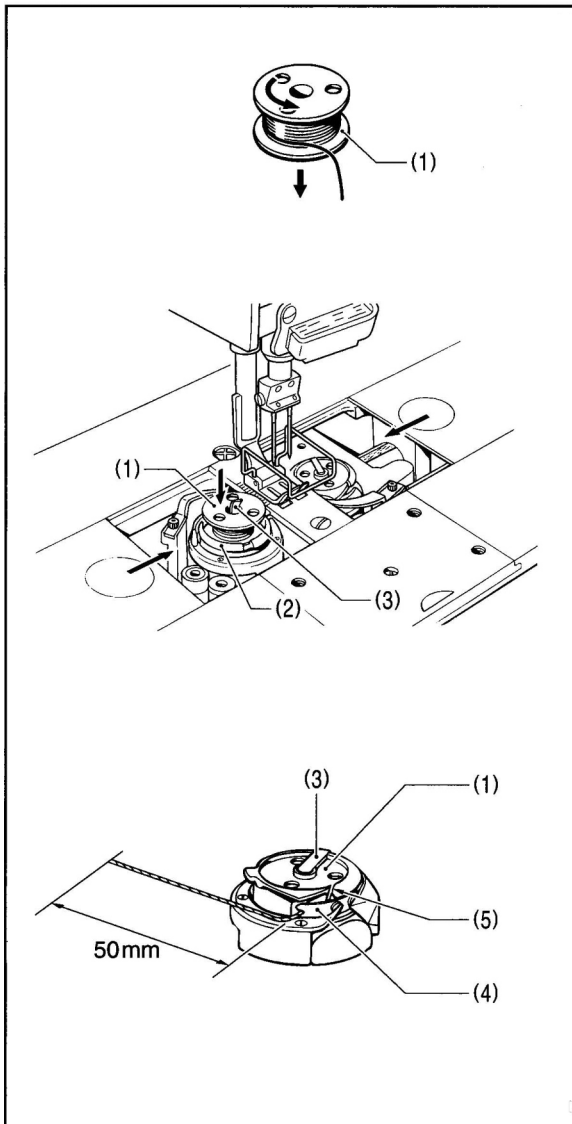
The amount of thread wound onto the bobbin should be a maximum of 80 % of the bobbin capacity.

5-4. Installing the bobbin

! CAUTION



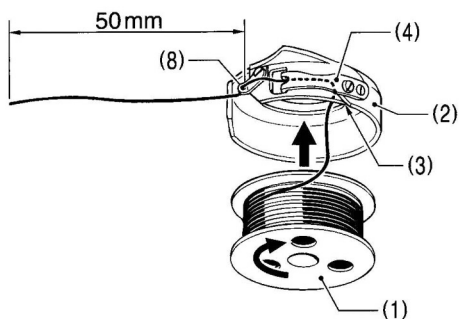
Turn off the power switch before installing the bobbin. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.
The machine may operate if the treadle is depressed by mistake, which could result in injury.

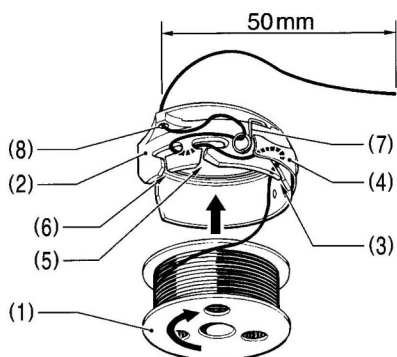


<Latch type>

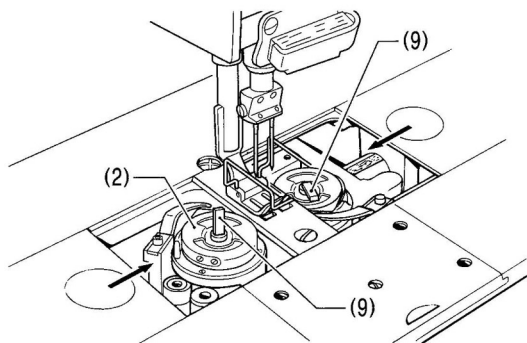
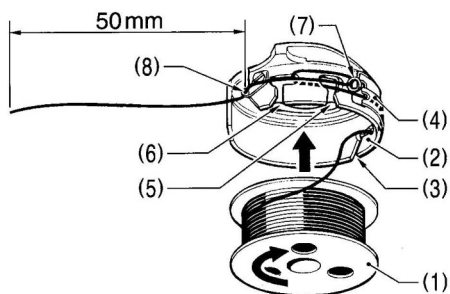
1. Insert the bobbin (1) into the rotary hook (2) so that the winding direction is as shown in the illustration.
2. Return the rotary hook latch (3) to its original position.
3. Turn the machine pulley to rotate the rotary hook (2) until the tension spring (4) is visible.
4. Pass the thread through slit (5) in the rotary hook and then pass it under the thread tension spring.
5. Pull out the thread to a length of approximately 50 mm.
6. Close the slide plates.

<A>





<C>



<Bobbin case type>

1. Insert the bobbin (1) into the bobbin case (2) so that the winding direction is as shown in the illustration.
2. There are three types of cap (2) (<A>, and <C>). Thread the thread by one of the following methods in accordance with the shape of the bobbin case (2) being used.

<A>

- 1) Pass the thread through slot (3) and under the thread tension spring (4).
- 2) Pass the thread through the thread hole (8) and pull out about 50 mm.

 <C>

- 1) Pass the thread through slot (3) and under the thread tension spring (4).
- 2) Pass the thread through slots (5) and (6), and then through the spring (7).
- 3) Pass the thread through the thread hole (8) and pull out about 50 mm.

3. Insert the bobbin case (2) into the rotary hook.
4. Push latch (9) of the rotary hook flat.
5. Close the slide plates.

5-5. Threading the upper thread



CAUTION

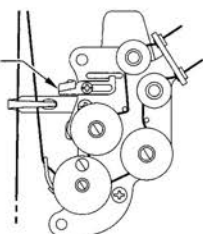


Turn off the power switch before threading the upper thread. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.
The machine may operate if the treadle is depressed by mistake, which could result in injury.

- Turn the machine pulley and raise the thread take-up (1) before threading the upper thread.
This will make threading easier and it will prevent the thread from coming out at the sewing start.
- Thread the left-side thread first.

<For non-foundation specifications>

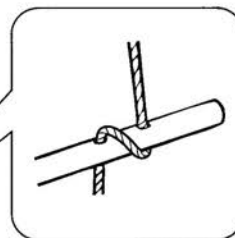
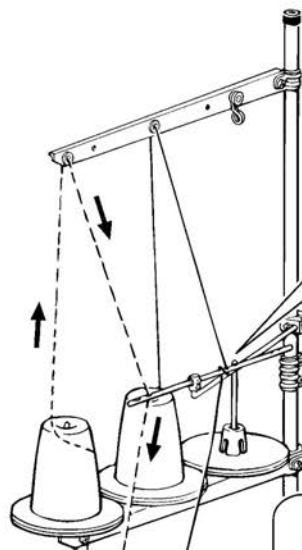
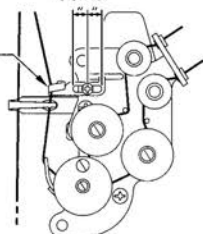
Do not pass the thread through.



<For foundation specifications>

Center

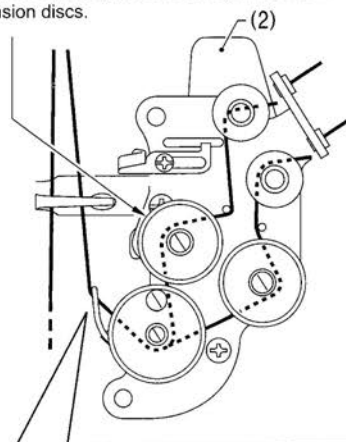
Pass the thread through.



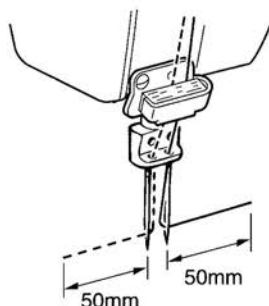
If the tension discs are opened as follows, the thread will become easier to thread.

- Press the tension release plate (2).
- Operate the lifting lever or the knee lifter to raise the presser foot.

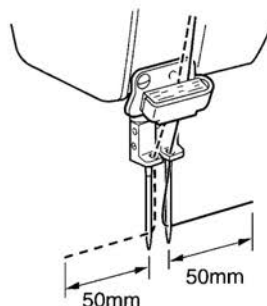
The thread can be passed securely in between the tension discs.



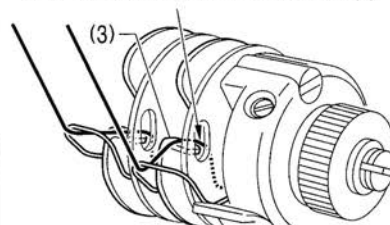
<58420,58720>



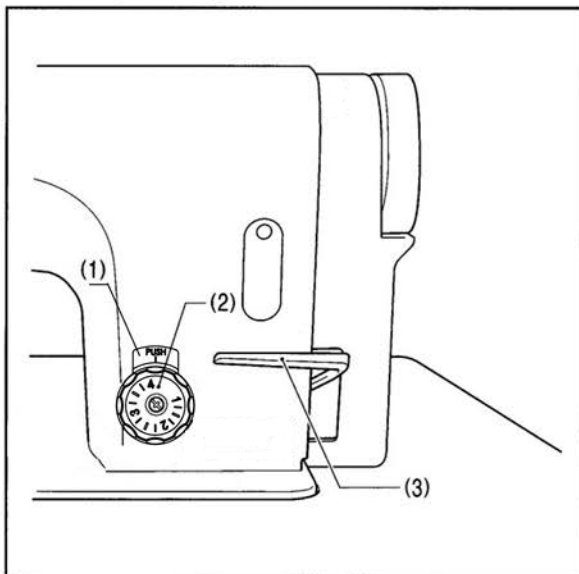
<58420,58720>



Pass the thread on the inside of the tab (3).

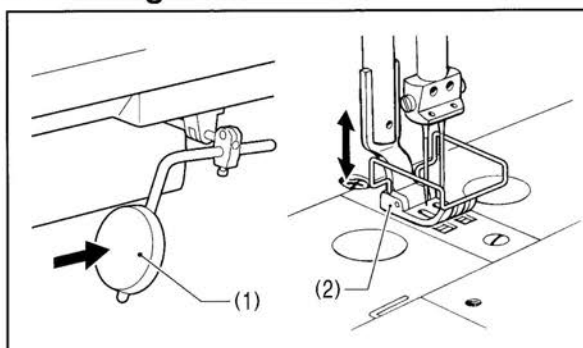


5-6. Adjusting the stitch length



1. Unlock the stitch length dial by press "Push" (1).
 2. Turn the stitch length dial (2) clockwise or counterclockwise so that the desired stitch length is at the uppermost position on the dial.
 - The larger the number, the longer the stitch length will be. (The numbers on the dial are for use as a guide. The length of the finished stitches may vary depending on the type and thickness of material being sewn. Adjust while looking at the finished stitches.)
 - When turning the stitch length dial (2) from a larger setting to a smaller setting, it will be easier to turn the dial if the reverse lever (3) is pushed to the halfwaydown position.
 3. Lock the stitch length dial by loose "Push" (1).
- * Check that the stitch length dial (2) does not rotate.

5-7. Using the knee lifter



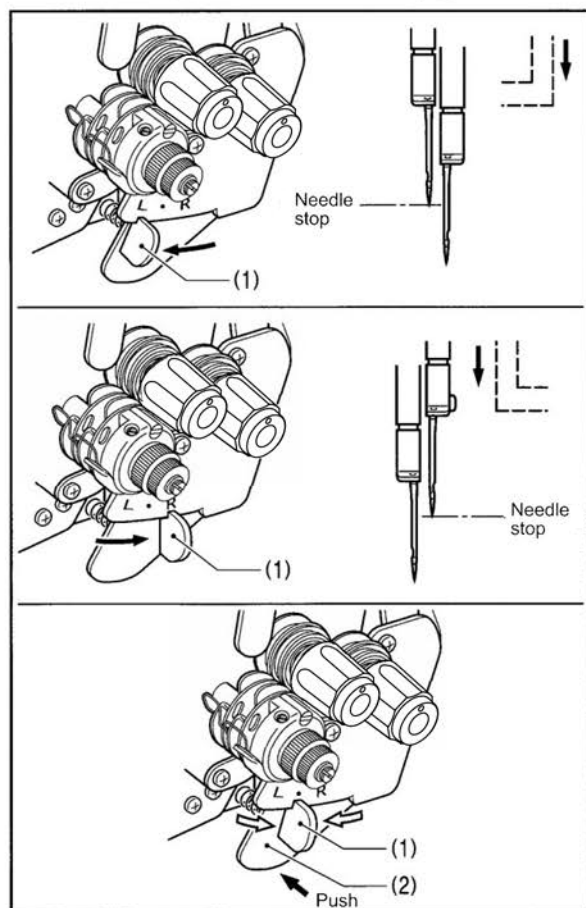
The presser foot (2) can be raised by pressing the knee lifter plate (1).

5-8. Corner sewing method (58450,58750)

NOTE:

If using this machine in place of a single-needle machine, remove the needle which is not being used. In such cases, do not use the procedures given below to stop the unused needle bar from moving, otherwise damage to the machine may result.

5-8-1. To stop the needle bars (right and left)



- Operate the stop lever after the needle has penetrated the material and has stopped moving.
- Do not sew at speeds of over 1,000 rpm while one of the needle bars has been stopped.

<To stop operation of the left needle bar>

Move the stop lever (1) to the "L" position.

<To stop operation of the right needle bar>

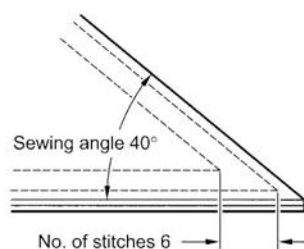
Move the stop lever (1) to the "R" position.

<To resume twin-needle sewing>

Press the push lever (2).

The stop lever (1) will then return to its original position automatically.

5-8-2. Number of stitches: quick-reference guide



Sewing angle No. of Stitches	30°	40°	50°	60°	70°	80°	90°	100°	110°	120°	130°	140°
2					4.6	3.8	3.2	2.7	2.2	1.8	1.5	1.1
3			4.6	3.5	3.0	2.5	2.1	1.8	1.5	1.2		
4		4.4	3.4	2.8	2.3	1.9	1.6	1.3				
5	4.8	3.5	2.7	2.2	1.8	1.5	1.3					
6	4.0	2.9	2.3	1.9	1.5	1.3						
7	3.7	2.5	2.0	1.6								
8	3.0	2.2	1.7									

<For 1/4" needle width>

Determine the stitch length from the chart above to make beautiful corner stitching.

The number of stitches of the outer needle varies according to the combination of sewing angle and stitch length.

[Example]

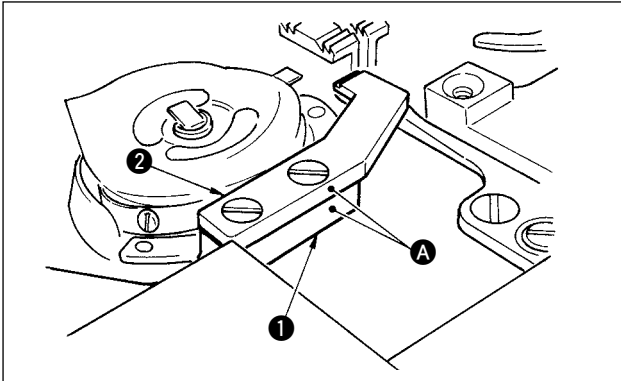
For a sewing angle of 40° and a stitch length of 2.9 mm, the number of stitches becomes 6.

5-9. Adjusting the position of the moving knife

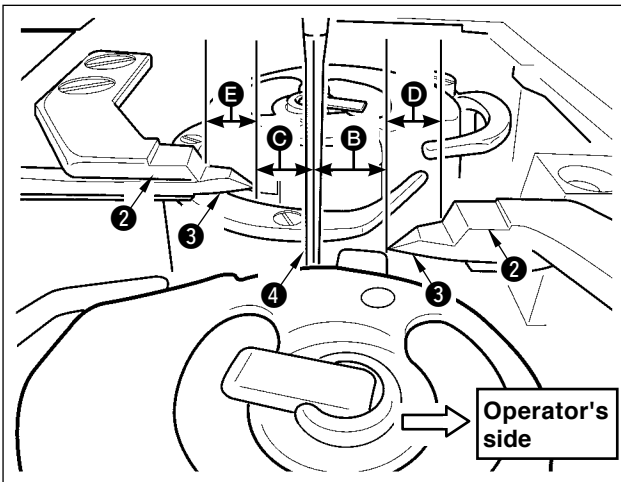


WARNING :

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.

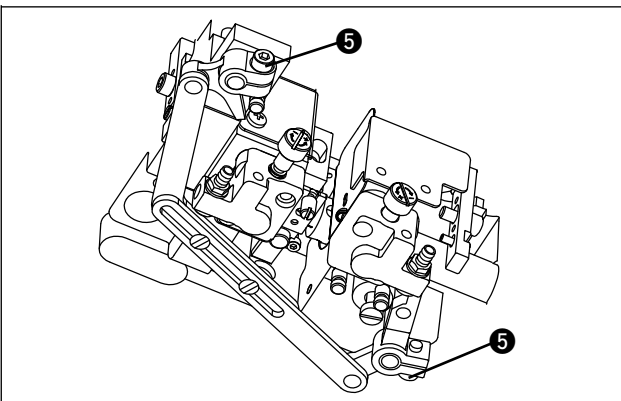


- 1) Align counter knife base **1** with plane **A** of counter knife **2**.

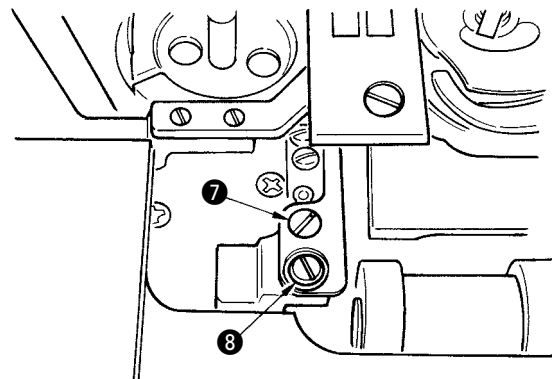
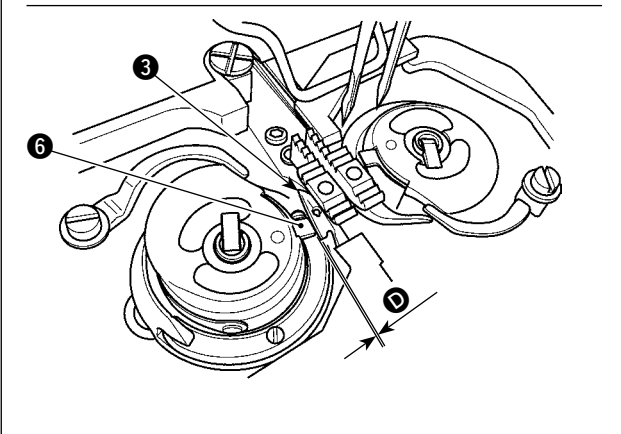


- 2) Loosen clamp screw **5** in the rear of machine bed and adjust so that the distances **B** and **C** between the top end of moving knife **3** and the center of needle **4** at the time of waiting become the dimensions as shown in the list below when the feed pitch is minimum and needle **4** is in the lower dead point.

	Left knife		Right knife	
	B	(D Reference value)	C	(E Reference value)
JK-58420J	6.2	(3.5)	7.5	(2.7)
JK-58450J				
JK-58720J	7.3	(4.1)	8.9	(3.1)
JK-58750J				



- 3) Set clearance **D** between moving knife **3** and protrusion **6** of the inner hook to 0.3 ± 0.1 mm. Loosen moving knife setscrews **7** and **8**, and adjust the clearance.



6. SEWING

CAUTION



Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.



Turn off the power switch at the following times. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.

The machine may operate if the treadle is depressed by mistake, which could result in injury.

- When threading the needle
- When replacing the bobbin and needle
- When not using the machine and when leaving the machine unattended

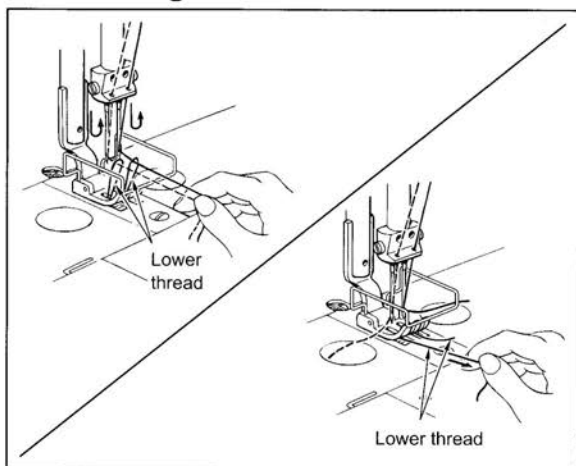


Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.



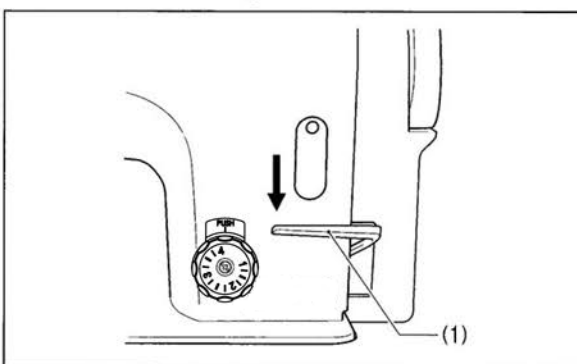
Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.

6-1. Sewing



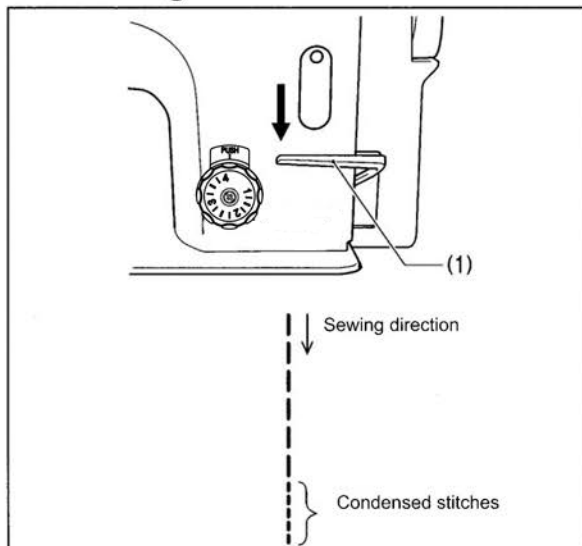
1. While holding the two upper threads with your fingers, turn the machine pulley by hand toward you until the lower threads come out onto the feed dog.
2. Pull the lower threads toward you and check that they pull out smoothly.
3. Turn on the power switch.
4. Depress the treadle to start sewing.

6-2. Backtacking

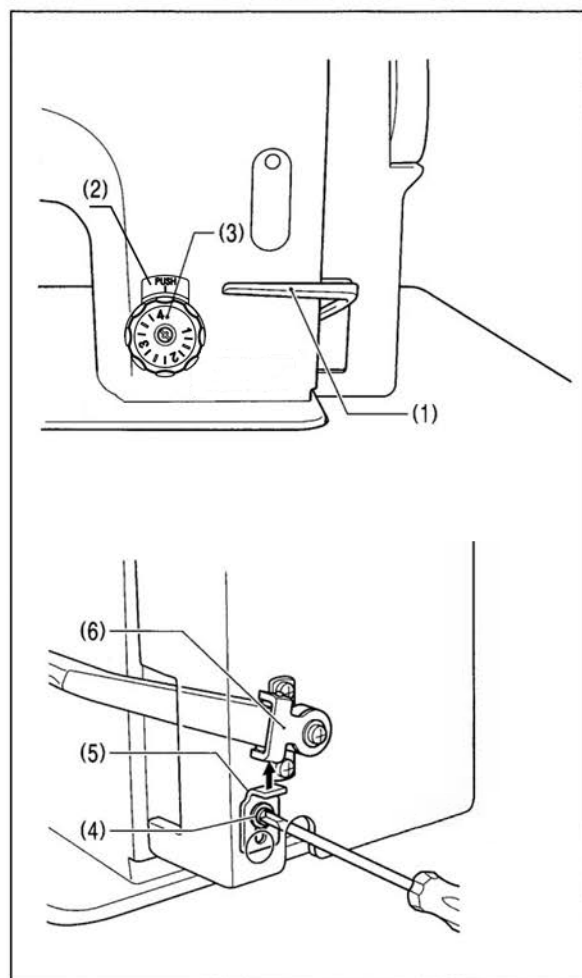


When the reverse lever (1) is pressed during sewing, the feed direction will be reversed. When it is released, the feed direction will return to normal.

6-3. Sewing condensed stitches



- If you press the reverse lever (1) while sewing is in progress, you can sew stitches (forward direction) with small stitch lengths.
- Before carrying out sewing, set the stitch length for condensed stitches as follows.



<Setting>

1. Unlock the stitch length dial by press "Push" (2).
2. Turn the stitch length dial (3) to the stitch length to be used for condensed stitches.
3. Loosen the screw (4) and lift up the stopper (5) until it touches the reverse stitching lever plate (6).
4. Tighten the screw (4) to secure the stopper (5).

<Sewing>

1. Return the stitch length dial (3) to the stitch length for normal sewing.
2. lock the stitch length dial by loose "Push" (2).
3. Start sewing.
4. At the position where you would like to start sewing condensed stitches, press the reverse lever (1). (Condensed stitches are sewn while the reverse lever (1) is being pressed.)

- * To stop sewing condense stitches and return to using the backtack function, lower the stopper (5) so that it does not touch the reverse stitching lever plate (6).

7. THREAD TENSION

7-1. Adjusting the thread tension

Good even stitches



Upper thread tension too weak or lower thread tension too strong

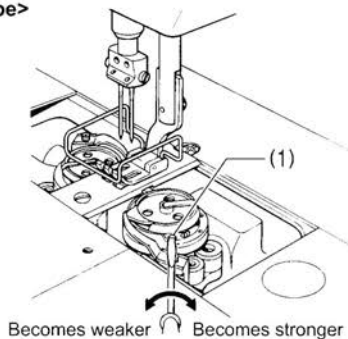
→ Increase the upper thread tension.
Decrease the lower thread tension.



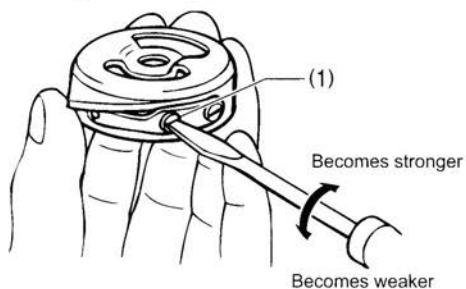
Upper thread tension too strong or lower thread tension too weak

→ Decrease the upper thread tension.
Increase the lower thread tension.

<Latch type>



<Bobbin case type>



<Lower thread tension>

CAUTION



Turn off the power switch before adjusting the lower thread tension. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.

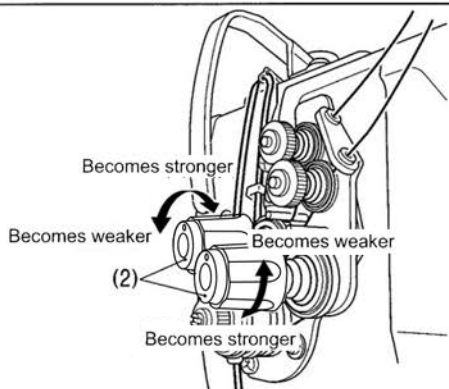
The machine may operate if the treadle is depressed by mistake, which could result in injury.

Turn the adjusting screw (1) to adjust.

<Upper thread tension>

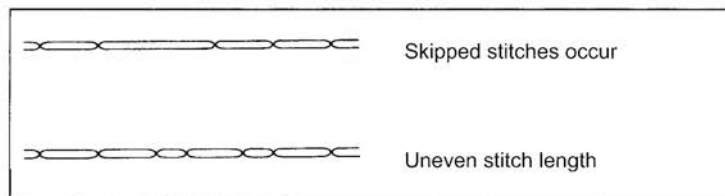
After the lower thread tension has been adjusted, adjust the upper thread tension so that a good, even stitch is obtained.

1. Lower the presser foot.
2. Adjust by turning the tension nut (2).

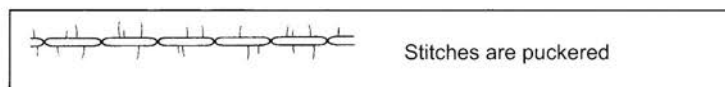


7-2. Adjusting the presser foot pressure

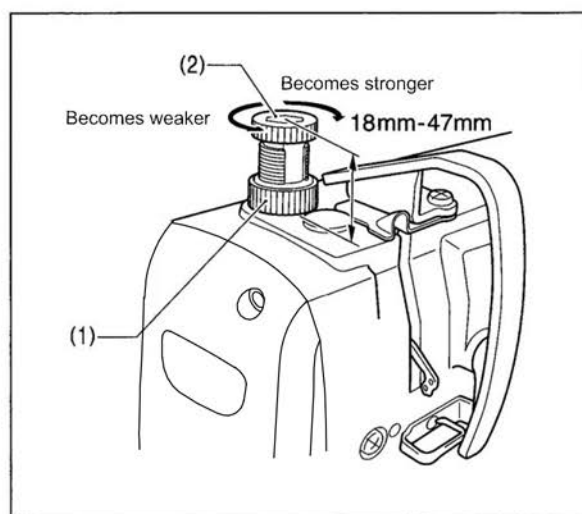
Correct stitches



→ Increase the pressure.



→ Decrease the pressure.



The presser foot pressure should be as weak as possible, but strong enough so that the material does not slip. (Refer to "Adjusting screw height" in the table below as a guide to adjustment.)

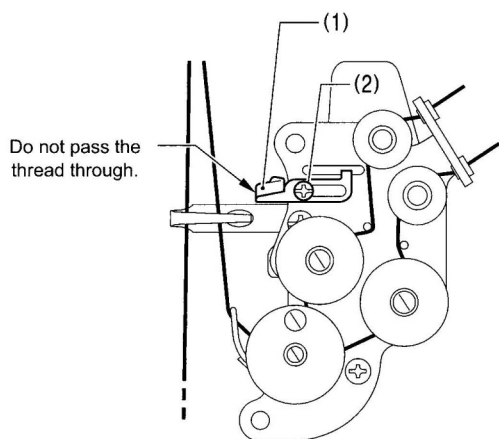
1. Loosen the adjusting nut (1).
2. Turn the presser adjusting screw (2) to adjust the presser foot pressure.
3. Tighten the adjusting nut (1).

Reference values

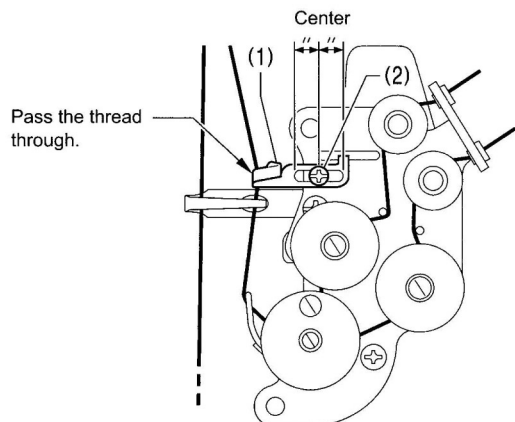
Use	Adjusting screw height
For foundation	Approx. 34mm
For light-weight and medium-weight materials	Approx. 34mm
For heavy-weight materials	Approx. 29mm

7-3. Adjusting the thread take-up amount

<For non-foundation specifications>



<For foundation specifications>



The thread take-up amount is adjusted by how the thread is passed through the thread amount adjuster (1).

<Using the standard thread amount adjuster (1)>

For non-foundation specifications

Do not pass the thread through the thread amount adjuster (1). Loosen the screw (2) and slide the thread amount adjuster (1) to the right-side position.

For foundation specifications

Pass the thread through the thread amount adjuster (1).

The standard position of the thread amount adjuster (1) is when the screw (2) is in the center of the adjustment range.

<Adjusting the thread take-up amount>

When the thread has been passed through the thread amount adjuster (1), the thread take-up amount becomes less when the thread amount adjuster (1) is moved to the right.

It is better not to pass the thread through the thread amount adjuster (1):

- When sewing heavy materials using a sewing machine with foundation specifications
- When the thread take-up amount is not enough, such as when the stitch length is increased

It is better to pass the thread through the thread amount adjuster (1):

- When sewing with slippery threads such as synthetic yarns
- When sewing light materials
- When sewing with a stitch length of 2 mm or less
- When sewing under any of the above three conditions and you would like to prevent skipped stitches, thread tightening problems such as looping, or thread breakages

8. CLEANING

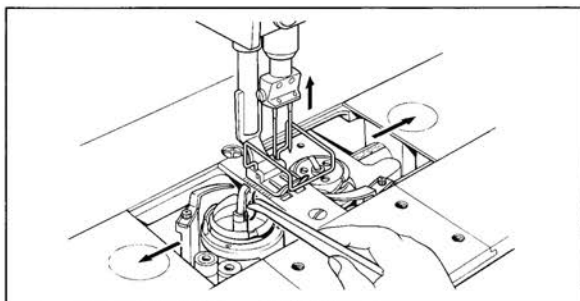
⚠ CAUTION

-  Turn off the power switch before carrying out cleaning. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.
The machine may operate if the treadle is depressed by mistake, which could result in injury.
-  Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin, otherwise inflammation can result.
Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea.
Keep the oil out of the reach of children.
-  Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.

8-1. Daily cleaning procedures

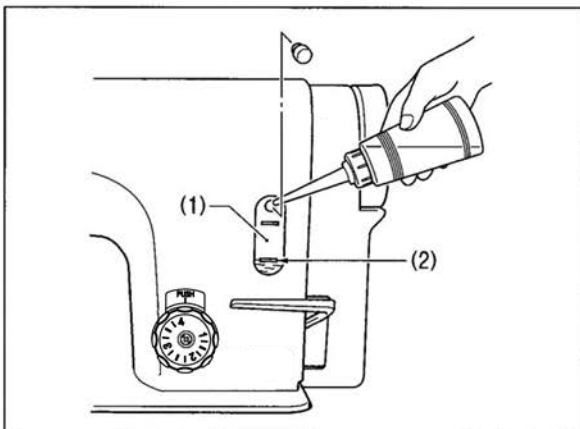
The following cleaning operations should be carried out each day in order to maintain the performance of this machine and to ensure a long service life.

Furthermore, if the sewing machine has not been used for a long period of time, carry out the following cleaning procedures before using it again.



<Cleaning>

1. Turn the machine pulley to move the needle to the needle up stop position.
2. Open the slide plates at the left and right.
3. Remove the bobbin.
4. Clean the thread scraps from the rotary hook.
5. Install the bobbin (and the bobbin case).

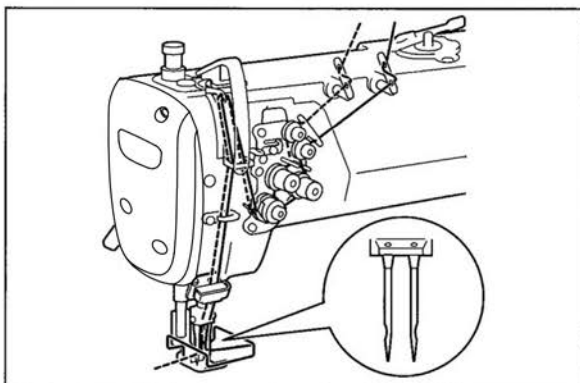


<Filling the oil tank>

Use only the lubricating oil (Nisseki Mitsubishi Sewing Lube 10N; VG10).

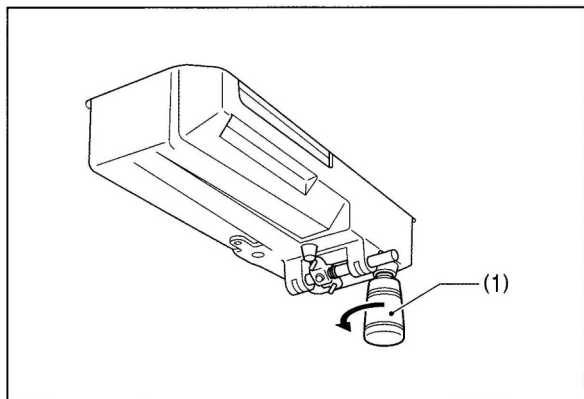
* If this type of lubricating oil is difficult to obtain, the recommended oil to use is <Exxon Mobil Essotex SM10; VG10>.

1. If the lubricating oil level drops below the bottom reference line (2) of the oil gauge window (1), be sure to add more oil. (Refer to p. 8.)



<Checking>

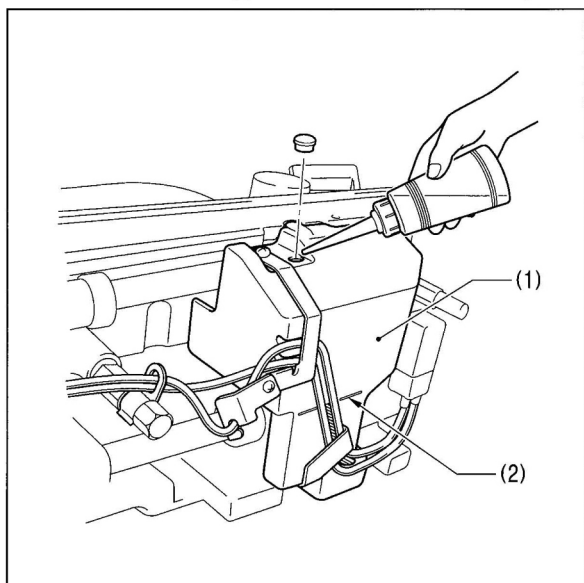
1. Replace the needle if it is bent or if the tip is broken.
2. Check that the upper threads have been threaded correctly. (Refer to page 16.)
3. Carry out a test sewing.



<Draining lubricating oil>

1. If the oiler (1) has filled with oil, unscrew the oiler (1) and dispose of the oil inside it.
2. Screw the oiler (1) back into the oil pan.

8-2. Lubricating via the oil cover (every 6 months)



Use only the lubricating oil (Nisseki Mitsubishi Sewing Lube 10N; VG10).

* If this type of lubricating oil is difficult to obtain, the recommended oil to use is <Exxon Mobil EssoTex SM10; VG10>.

1. Tilt back the machine head.
2. Pour lubricating oil into the oil cover (1) until the oil level reaches the reference line (2). (Refer to p. 8 .)
3. Return the machine head to its normal position.

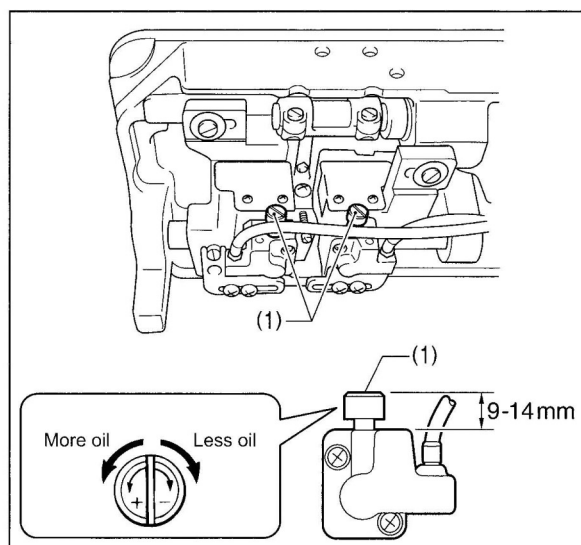
9. ADJUSTING THE ROTARY HOOK LUBRICATION AMOUNT

! CAUTION



Be careful not to touch your fingers or the lubrication amount check sheet against moving parts such as the rotary hook or the feed mechanism when checking the amount of oil supplied to the rotary hook, otherwise injury may result.

Use the following procedure to check the amount of oil being supplied to the rotary hook when replacing the rotary hook or when changing the sewing speed.



<Guide to lubrication adjustment>

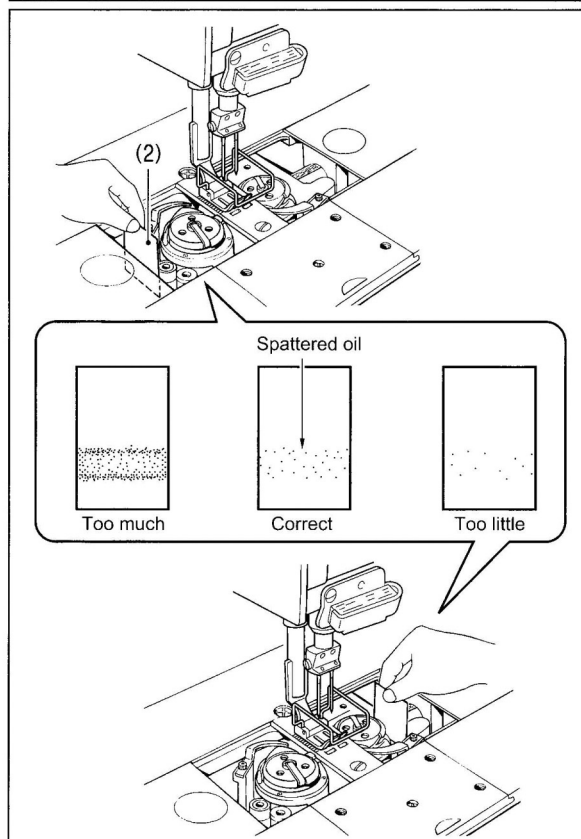
1. Tilt back the machine head.
2. Turn the oil adjusting screw (1) to adjust the height to within 9-14 mm.

<Checking the lubrication amount>

1. Turn off the power switch.
2. Remove the thread from all points from the thread take-up to the needle.
3. Remove the needle and the bobbin.
4. Use the lifting lever to lift the presser foot.
5. Turn on the power switch.
6. Run the machine at the normal sewing speed for approximately 1 minute without sewing any material (following the same start/stop pattern as when actually sewing).
7. Place the lubrication amount check sheet (2) to the left of the rotary hook (the right side is the right side of the rotary hook), and hold it in place while running the sewing machine at the normal sewing speed for approximately 8 seconds. (Any type of paper can be used as the lubrication amount check sheet (2).)
8. Check the amount of oil which has splattered onto the sheet.

<Adjusting the lubrication amount>

1. Tilt back the machine head.
2. Turn the adjusting screw (1) to adjust the lubrication amount.
 - If the rotary hook adjusting screw (1) is turned counterclockwise, the lubrication amount becomes greater.
 - If the rotary hook adjusting screw (1) is turned clockwise, the lubrication amount becomes smaller.
3. Check the lubrication amount again according to the procedure given in "Checking the lubrication amount" above.
 - * Turn the adjusting screw (1) and check the lubrication amount repeatedly until the lubrication amount is correct.
4. Check the lubrication amount again after the sewing machine has been used for approximately two hours.



10. TROUBLESHOOTING

- Please check the following points before calling for repairs or service.
- If the following remedies do not fix the problem, turn off the power switch and consult a qualified technician or the place of purchase.

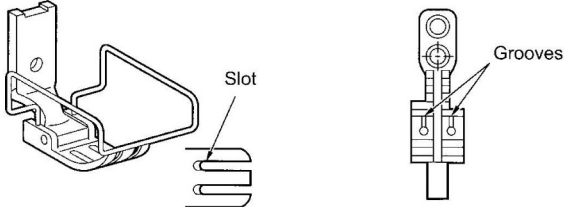
CAUTION

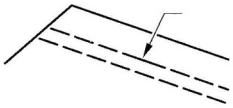
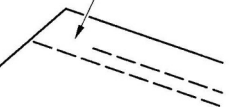
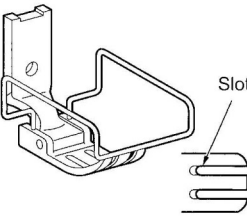
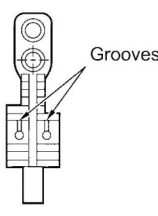


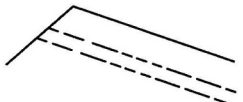
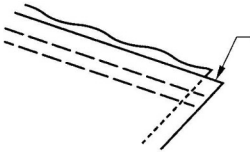
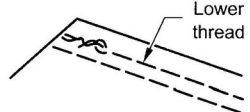
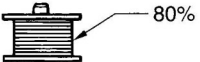
Turn off the power switch and disconnect the power cord before carrying out troubleshooting. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.

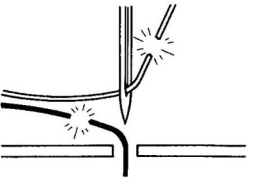
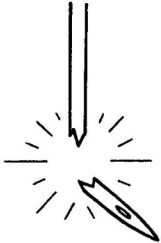
The machine may operate if the treadle is depressed by mistake, which could result in injury.

Items with a "*" in the "Page" column should only be checked by a qualified technician.

	Problem	Possible cause	Page
1	Machine does not operate when power is turned on and treadle is pressed.	• Is a breaker or fuse blown? • Is the power cord disconnected?	*
2	Upper thread is not tight.  Lower thread is not tight. 	• Has the thread been threaded incorrectly? If the thread is threaded incorrectly, thread it correctly. • Is the upper thread tension or lower thread tension too weak? Adjust the upper thread tension or lower thread tension. • Is the thread take-up spring operating range too small? Lower the position of the stopper. If using a sewing machine with medium-weight material specifications, poor thread tightening may occur depending on the type of material being sewn. In such cases, replace the presser foot with one that has slots on the underside, or replace the feed dog with a grooved feed dog. 	14~19 23 *
3	Loops appear in seam. 	• Is the thread path not smooth enough? Use a file with a fine grain or sandpaper to polish smooth the thread path. • Is the bobbin not turning smoothly? Pull out the lower thread to check that there is no slackness in the thread tension, or replace the bobbin or bobbin case. • Is the thread take-up amount too large? Adjust the thread take-up amount.	25

	Problem	Possible cause	Page
4	Skipped stitches occur while sewing 	• Is the needle tip bent? Is the needle tip blunt? If the needle tip is bent or broken, replace the needle. • Is the needle properly installed? If it is incorrect, install the needle correctly. • Is the machine properly threaded? If it is incorrect, thread the thread correctly. • Is the presser foot pressure too weak? Adjust the presser foot pressure. • Is the needle too thin? Replace the needle with a needle that is one rank thicker. • Is the presser foot too high? Adjust the height of the presser foot. • Is the thread take-up spring too weak? Adjust the tension of the thread take-up spring. • Is the thread take-up amount too large? Adjust the thread take-up amount.	11 14~17 24 * * 25
5	Skipped stitches at sewing start Thread unravelling at sewing start 	• Is the thread take-up spring tension too strong? Reduce the tension of the thread take-up spring. • Is the thread take-up spring operating range too large? Raise the position of the stopper. • Is the thread take-up at its highest position at the sewing start? Set the thread take-up to its highest position at the sewing start. • Is the length of the upper thread trailing from the needle hole too short? Pull about 50 mm of thread through the needle hole at the sewing start. • Is the needle too wide? Try using a needle with a count that is one lower than the current needle. • If sewing light or medium-weight materials, is a presser foot with slots on the underside or grooved feed dog being used? Use a presser foot without slots. Use a feed dog without grooves.  	* * 16 17

	Problem	Possible cause	Page
6	Uneven seam 	- Is the presser foot pressure too weak? Adjust the presser foot pressure. - Is the feed dog too low? Adjust the feed dog height. - Is the bobbin scratched? If the bobbin is damaged, smooth it with an oiled grindstone or replace it.	24 *
7	Large degree of puckering (excess tension) 	- Is the upper thread tension too strong? Make the upper thread tension as weak as possible. - Is the lower thread tension too strong? Make the lower thread tension as weak as possible. - Are the thread take-up spring tensions too strong? Make the thread take-up spring tension as weak as possible. - Is the thread take-up spring operating range too large? Move the stopper to as high a position as possible. - Is the presser foot pressure too strong? Adjust the presser foot pressure. - Is the thread take-up amount too small? Adjust the thread take-up amount.	23 23 * * 24 25
8	Material slippage 	Is the presser foot pressure too strong? Adjust the presser foot pressure.	24
9	Lower thread is tangled at the sewing start. 	- Is the bobbin spinning direction correct when the lower thread is being pulled? Set the bobbin so that it turns in the opposite direction to the rotary hook. - Is there too much thread wound onto the bobbin? The bobbin winding amount should not be more than 80%. - Is the bobbin turning smoothly? If the bobbin is not turning smoothly, replace the bobbin. - Is a bobbin other than the light-alloy bobbins specified by Brother being used? Use only bobbins which are specified by Brother. 	14~15 13 14~15

	Problem	Possible cause	Page
10	Upper and lower threads are breaking. 	- Is the needle bent or is the needle tip broken? Replace the needle if it is bent or broken. - Is the needle properly installed? If it is incorrect, install the needle correctly. - Is the machine properly threaded? If it is incorrect, thread the thread correctly. - Is the oil tank filled with lubricating oil? If the level of lubricating oil is below the bottom reference line, add more oil. - Is the upper or lower thread tension too weak or too strong? Adjust the upper thread or lower thread tension. - Is the rotary hook blocked with dust or thread scraps? Clean the rotary hook. - Is the upper thread may be loose because the thread take-up spring operating range is too small? Adjust the position of the stopper. - Is the rotary hook, feed dog or other part damaged? If they are damaged, smooth them with an oiled grindstone or replace the damaged parts. - Is the thread path damaged? If the thread path is damaged, smooth it with sandpaper or replace the damaged part. - Is the thread take-up amount correct? Adjust the thread take-up amount.	11 14~17 8 23 26 * * * 25
11	Broken needles 	- Is the material being pushed or pulled with excessive force during sewing? - Is the needle bent, is the needle tip broken, or is the needle hole blocked? Replace the needle. - Does the needle drop into the center of the needle hole in the feed dog? Check the needle drop position. If the needle does not drop into the center of the needle hole in the feed dog, reinstall the feed dog. If the needle bar has rotated, rotate the needle bar to the correct position. Caution - It is extremely dangerous to leave any pieces of broken needle sticking in the material. If the needle breaks, search for all pieces until the whole of the needle is found again. - Furthermore, we recommend we recommend that through steps be taken to account for such needles to comply with product liability regulations.	11 * *

58420B 电控使用说明书

58420B Electronic
Control Instructions

58420B电控使用说明书

安全事项

- 在使用本产品之前，请先阅读《产品说明书》及所搭配的缝纫机机械说明书。
- 本产品必须由接受过专业培训的人员来安装或操作。
- 请尽量远离电弧焊接设备，以免产生的电磁波干扰本控制器而发生误动作。
- 请不要在室温 45°以上或者 0°以下的场所使用。
- 请不要在湿度 30%以下或者 95%以上或者有露水和酸雾的场所使用。
- 安装控制箱及其他部件时，请先关闭电源并拔掉电源插头。
- 为防止干扰或漏电事故，请做好接地工程，电源线的接地线必须牢固的与大地有效连接。
- 所有维修用的零部件，须由本公司提供或认可，方可使用。
- 在进行任何保养维修动作前，必须关闭电源并拔掉电源插头。控制箱里有高压危险，必须关闭电源五分钟后方可打开控制箱。

1 产品安装

1.1 产品规格

产品型号	58420B	电源电压	AC 220±20% V
电源频率	50Hz/60Hz	最大输出功率	750W

1.2 接口插头的连接

将脚踏板及机头的各连接插头安插到控制器后面对应的插座上，各插座名称如图 1-2-2 所示。连接好，请检查插头是否插牢。

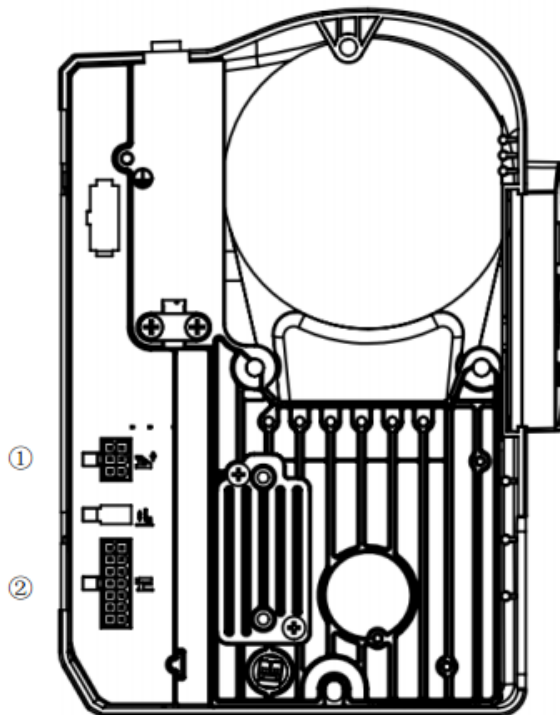


图 1-2-1 58420B 控制器图

①脚踏板&升级插座；②LED 灯及机头按键插座。

脚踏板、升级接口（5569-6A）			
	1	GND	脚踏地
	2	-	空脚
	3	5V	脚踏电源
	4	RX	UART通信接收
	5	TX	UART通信发送
	6	SPEED	脚踏模拟信号

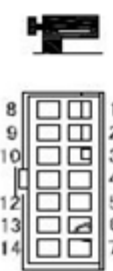
LED灯、补针接口（5569-14A）			
	1	-	空脚
	2	DGND	预留霍尔地
	3	L5V	机头灯输入正
	4	DGND	机头灯输入负
	5	DGND	补针地
	6	-	空脚
	7	-	空脚
	8	-	空脚
	9	HALL	预留霍尔信号
	10	L5V	预留霍尔电源
	11	-	空脚
	12	BZ	补针信号
	13	-	空脚
	14	-	空脚

图 1-2-2 控制器接口定义

注：使用正常力量插不进去时，请检查插头与插座是否匹配，插入方向或针的方向是否正确！

1.3 接线与接地

必须要做好系统的接地工程，请合格的电气工程人员予以施工。产品通电及投入使用前，必须确保电源插座 AC 输入端已安全可靠的接地。系统的接地线为黄绿线，该地线请务必可靠连接至电网安全保护接地上，以保证安全使用，并可防止出现异常情况。

注：所有电源线、信号线、接地线等接线时不要被其它物体压到或过度扭曲，以确保使用安全。

2 操作面板使用说明

2.1 操作面板的显示说明

根据系统工作状态，操作面板的数码管将显示当前的缝纫状态 (包含停针位指示)。操作面板外观如下所示。



图 2-1 操作面板外观界面

2.2 按键各按键功能说明

序号	外观	名称	功能描述
1		进入参数区功能键	参数功能进入键
2		参数查看保存键	对所选参数号内容进行查看和保存
3		参数加键（速度加）	在进入参数功能参数号/值加，初始待机下速度加
4		参数减键（速度减）	在进入参数功能参数号/值减，初始待机下速度减
5		左移键	参数设定中，向左选择参数范围
6		右移键	参数设定中，向右选择参数范围
7		恢复出厂设置键	长按 3S 后恢复出厂设置
8		停针位选择键	上/下停针位选择键 注：设置为上停针时，操作面板上第二位数码管上的小数点亮，设置为下停针时，操作面板上第二位数码管上的小数点灭。

3 参数调节

3.1 进入操作员参数模式及保存

空闲模式下，长按  键进入操作员参数号，再短按  键进入参数值。按  或  键选择数据位，相应位数值闪烁，再按  或  修改该位数值。在参数值界面如果参数未修改，按  键返回参数号显示界面；如果参数已经修改，按  键保存参数并显示 ok 后返回参数号显示界面。如果按  键则退出参数模式。

3.2 进入技术员参数模式及保存

长按  +  键开机进入技术员参数模式。参数调节方式同操作员参数调节方式。

3.3 速度调节

在空闲模式下，按  或  键增加或减小速度。每按一次调整数值 50，可以连续按。

3.4 恢复出厂设置

长按  恢复出厂设置，作为恢复出厂设置的快捷方式。

3.5 进入监控模式

在空闲模式下按  +  键显示监控参数号，按  或  键选择数据位，相应位数值闪烁，再按  或  增加或减小监控参数号显示，按  键进入监控参数项对应的参数值，再次按下  键返回监控参数号显示。（若为 24、25、26、28 项，显示参数值时短按  键返回监控参数号显示，长按  键保存当前监控值，若保存成功显示 ok，短按键  退出监控模式）

注：上停针位置设置：进入监控参数项 24，将手轮调整至上停针（参数会随着手轮位置而变化），短按  键进入上停针位置值显示，再次长按  键保存参数（保存后，下针位会自动进行相应调整），按  键退出监控模式。

3.6 参数表

3.6.1 操作员参数(开机后长按 P 键进入)

参数项	中文说明	初始值	范围	内容值名称说明与备注
P00	起缝速度(r/min)	200	100-800	缝纫时的最低速度设定
P01	最高转速 (r/min)	2700	200-3000	车缝时的最高转速设定
P03	针停定位选择	1	0/1	0: 上停针 1: 下停针
P07	慢速起缝速度(r/min)	550	100-2000	慢速起缝时的速度设定
P08	慢速起缝针数	1	1-9	慢速起缝时的针数设定
P09	慢速起缝开关	1	0-1	1: 慢速启动功能开启 0: 慢速启动功能关闭
P12	补半针延迟时间(ms)	150	1-180	
P13	补一针延迟时间(ms)	180	150-250	
P14	补针速度(r/min)	200	100-500	补针时的速度
P15	补针方式	0	0-2	0: 按时间补针 1: 补半针 2: 补一针
P23	脚踏板控速曲线模式	0	0-3	脚踏板控速曲线模式 0: 直线 1: 两段斜率 2: 曲线（平方、开方） 3: S 曲线
P24	脚踏板倒踩回针电压值	840	0-4095	
P29	幂次控速曲线辅助参数 0: 平方 1: 开方	1	0-1	

3.6.2 技术员参数表（按 P 键+S 键开机进入）

参数项	中文说明	初始值	范围	内容值名称说明与备注
P56	通电后自动找上定位	1	0-1	0: 不找 1: 找
P58	上停针调整角度	64	0-359	上定位调整，数值减少时会提前停针，数值增加时会延迟停针
P59	下定位调整角度	165	0-359	下定位调整，数值减少时会提前停针，数值增加时会延迟停针
P60	测试速度(r/min)	2700	200-3000	设置测试速度
P61	老化运行时间(s)	3	1-255	
P62	运行模式	0	0-3	0: 正常 1: 简易缝 2: 初始角测试

参数项	中文说明	初始值	范围	内容值名称说明与备注
				3: 自动测试模式(电机停止时按 S 键退出)
P63	老化停止时间(s)	2	1-255	
P66	机头保护开关检测	1	0-1	0: 机头倾倒时不保护 1: 机头倾倒时保护
P68	最高限速(r/min)	2700	200-3000	机头最高运行速度限制
P72	踏板前踩运行开始位置 (相对于回中位置)	150	0-4095	
P73	踏板低速运行结束位置 (相对于回中位置)	340	0-4095	
P74	踏板模拟量最大值	3700	0-4095	
P75	踏板回中位置设定	1340	0-4095	
P77	电机方向	0	0-1	0: 正转 1: 反转
P84	安全开关报警确认时间 (ms)	300	1-500	
P85	安全开关报警恢复时间 (ms)	50	1-500	
P86	两段斜率转折点速度 (r/min)	1500	0-4000	
P87	两段斜率中间模拟量	2700	0-4095	

3.6.3 监控参数表

待机界面，长按 P 键+停针位键，进入监控模式		
参数项	中文说明	内容值名称说明与备注
M18	控制器软件版本号	显示控制器软件版本号（与开机时显示版本号一致）
M19	控制器软件修复版本号	显示控制器软件修复版本号
M20	母线电压	显示实时母线电压
M21	机头速度	显示实时速度
M23	初始角度	显示初始角度
M24	机械角度	显示机械角度
M25	踏板前踩模拟量最大值	显示踏板前踩 AD 最大值
M26	踏板回中模拟量采样值	显示踏板回中 AD 值
M28	踏板倒踩模拟量采样值	显示踏板倒踩 AD 最小值
M30-M37	历史故障代码	显示历史故障代码（倾倒错误 E7 不做记录，只显示最新的 8 个，无故障代码时显示 00）

4 错误代码

4.1 故障代码表

若系统出现报错或报警，请首先检查如下项：

- 1 先确认机器的连接线是否连接完好；
- 2 确认电控和机头是否匹配；
- 3 确认恢复出厂是否准确。

故障代码	代码含义	解决措施
Err-01	硬件过流	关闭系统电源，30 秒后重新接通电源，控制器若仍不能正常工作，请更换控制器并通知厂方。
Err-02	软件过流	
Err-03	系统欠压	断开控制器电源，检查输入电源电压是否偏低（低于 154V）。若电源电压偏低，请在电压恢复正常后重新启动控制器。若电压恢复正常后，启动控制器仍不能正常工作，请更换控制器并通知厂方。
Err-04	停机时过压	断开控制器电源，检查输入电源电压是否偏高（高于 264V）。若电源电压偏高，请在电压恢复正常后重新启动控制器。若电压恢复正常后，启动控制器仍不能正常工作，请更换控制器并通知厂方。
Err-05	运行时过压	
Err-07	电流检测回路故障	关闭系统电源，30 秒后重新接通电源观察是否能正常工作。重试几次，若该故障频繁出现，请更换控制器并通知厂方。
Err-08	电机堵转	断开控制器电源，检查电机电源输入插头是否脱落、松动、破损，是否有异物缠绕在机头上。排除后重启系统仍不能正常工作，请更换控制器并通知厂方。
Err-12	电机初始角度检测故障	请断电后再尝试 2-3 次，若仍报故障，请更换控制器并通知厂方。
Err-13	电机光编码器信号丢失故障	关闭系统电源，检查电机传感器接头是否松动或脱落，将其恢复正常后重启系统。若仍不能正常工作，请更换控制器并通知厂方。
Err-14	主板读写 EEPROM 故障	关闭系统电源，30 秒后重启系统，若仍不能正常工作，请更换控制器并通知厂方。
Err-15	电机超速保护	
Err-16	电机反转	

4.2 安全报警表

报警代码	代码含义	解决措施
A-UP	翻抬开关报警	摆正机头，确保翻抬开关复原

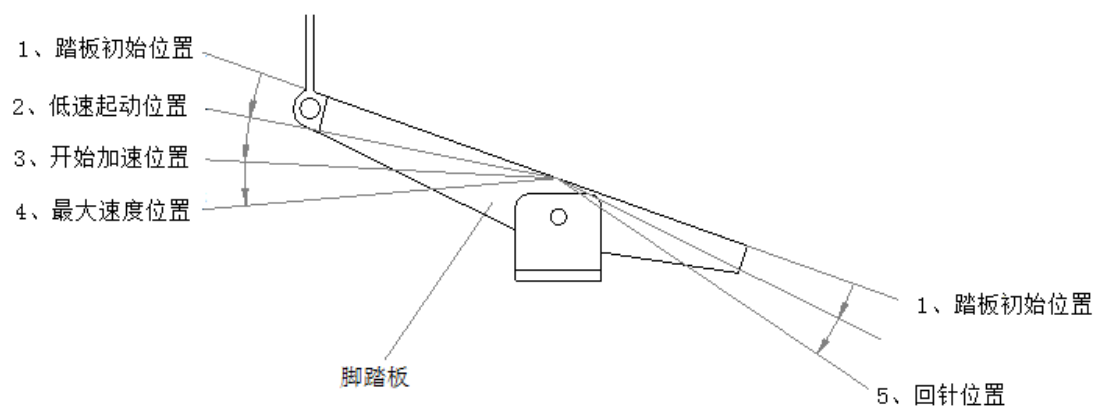
5 脚踏板灵敏度调整

1) 脚踏板动作由初始位置①（75 号参数）开始，缓慢向前踩至②（72+75 号参数）开始低速缝纫，继续前踩至③（75+73 号参数）开始加速，再深踩至④（74 号参数）达到最高速度。②③段之间维持起缝速度，③④段之间为无级调速过程；

2) 当脚踏板由初始位置①（75 号参数）开始，缓慢后踩至⑥（24 号参数）时自动完成回到上停针动作；

3) 各参数数值设置需保证（24 号参数）<（75 号参数）<（75+72 号参数）<（75+73 号参数）<（74 号参数）；

4) 可通过监控模式下 025、026、028 号参数实时监测踏板模拟量最大值、踏板回中电压采样值、踏板倒踩电压采样值，操作方式同上停针位置设置方式，不同位置下的踏板采样数值作为各参数的参考值。如前踩很大距离机器还没有运转，可适当减小 72 参数（72+75 号参数应大于回中位置参数 75），即可提高前踩的灵敏度；若机器过于灵敏，轻触踏板机器就开始运行，可适当加大 72 参数；若不容易补针，稍微前踩，速度就迅速提高造成前冲多针，可适当增大 73 参数或减小 72 参数（即增大脚踏板低速范围），也可以适当降低初始起缝速度（00 号参数）。



58420B Product Manual

Safety Precautions

- Before using this product, please read the Product Manual and the mechanical instructions of the sewing machine.
- This product must be installed or operated by a professionally trained person.
- Please keep away from the arc welding equipment as far as possible so as to avoid electromagnetic interference to the controller and the malfunction.
- Do not use it at a room temperature higher than 45° or somewhere lower than 0°.
- Do not use it in places with humidity below 30% or higher than 95% or where there is dew and acid mist.
- When installing the control box and other parts, please turn off the power and unplug the power plug at first.
- To prevent interference or leakage, please do a good job of grounding. The ground wire of the power cord must be firmly connected to the earth.
- All repair parts must be provided or approved by the company before they can be used.
- Before any maintenance work, the power must be turned off and the power plug must be unplugged. There is a danger of high voltage in the control box. You must turn off the power for five minutes before opening the control box.

1 Product installation

1.1 Product Specifications

Product Type	58420B	voltage	AC 220±20% V
Power frequency	50Hz/60Hz	Maximum output power	750W

1.2 Interface plug connection

Connect the pedal and the connectors of the head to the corresponding socket on the back of the controller. The name of each socket is shown in Figure 1-2-2. After connecting, please check if the plug is inserted firmly or not.

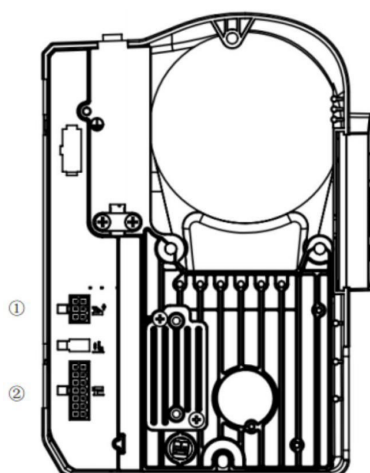
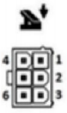


Figure 1-2-1 58420B Controller Diagram

① Pedal & Upgraded Sockets ②LED light and head button socket

Pedal & Upgraded Sockets			
	1	GND	Pedal
	2	—	Empty foot
	3	5V	Foot power
	4	RX	Communication reception
	5	TX	Communication sending
	6	SPEED	Foot Analog Signal

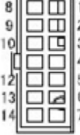
LED light and head button socket			
	1	—	Empty foot
	2	DGND	reserved hall ground strap
	3	1.5V	Positive Headlight Input
	4	DGND	Negative Headlight Input
	5	DGND	half stitch
	6	—	Empty foot
	7	—	Empty foot
	8	—	Empty foot
	9	HALL	reserved hall signal
	10	1.5V	reserved hall power
	11	—	Empty foot
	12	BZ	stitch by stitch signal
	13	—	Empty foot
	14	—	Empty foot

Figure 1-2-2 Controller Interface Definition

Note: When we can't use normal power to plug in, please check whether the plug and socket match, and whether the direction of insertion or pole is correct!

1.3 Wiring and Grounding

System grounding must be done well. Qualified electrical engineers are required to perform the construction. Before the product is powered on and put into operation, it must be ensured that the AC inlet of the power outlet has been safely grounded. The ground wire of the system is the yellow-green wire. The ground wire must be reliably connected to the safety protection ground of the power grid to ensure safe use and prevent abnormal conditions.

Note: When connecting all power cables, signal cables, ground cables, etc., do not press or twist excessively with other objects to ensure safety.

2 Operation panel instructions

2.1 Display Panel Instructions

According to the working status of the system, the digital tube of the operation panel will display the current sewing status (including the needle position indication). The appearance of the operation panel is as follows.



Figure 2-1 Operation panel appearance interface

2.2 Keys Function Description

SERIAL NO	APPEARANCE	NAME	FUNCTION DESCRIPTION
1		Enter the parameter area function key	Parameter function enter key
2		Parameter View Save Button	View and save the contents of the selected parameter number
3		Parameter plus key (speed up)	After entering the parameter function parameter number/value plus, increase the initial standby speed
4		Parameter minus key (speed down)	Enter the parameter function parameter number / value minus, reduce the initial standby speed
5		Left shift key	In the parameter setting, select the parameter range to the left
6		Right shift key	In the parameter setting, select the parameter range to the right
7		Reset	Press 3S to restore factory settings
8		Needle position selection key	Note: When the needle is set to stop at up position, the decimal point light on the second digital tube of the operation panel goes on, when to the down position, the decimal point light on the second digit of the operation panel goes off.

3 Parameter adjustment

3.1 Enter operator parameter mode and save

In the free model, long press the key of  to enter the operator parameter, then short press the key of  to enter the parameter. Press the key of  or  to choose the data, the corresponding data flashes, then press the key of  or  to revised the data. On the parameter interface, if the parameter is not modified, press the key of  to return back to the parameter number display interface; if the parameter is modified, press the key of  to save the parameter and when it is ok, just return back to the parameter number display interface. If we press the key of , it means to exit parameter mode.

3.2 Technician parameter mode

Long press the key of  and  to open and enter the technician parameter mode. The parameter adjustment method is the same as the operator parameter adjustment method.

3.3 Speed adjustment

In the free model, press the key of  or  to increase or decrease the speed. Each time you press can adjust the value of 50, you can press it continuously.

3.4 Reset

Long press the  button to reset, as a shortcut to restore factory settings.

3.5 Entering Monitoring Mode

Press the key of  and  to display the monitoring parameter number in idle mode, press  or  to select the data bit, when the corresponding bit value flashes, then press  or  to increase or decrease the monitoring parameter number display, press key of  to enter the parameter value corresponding to the monitoring parameter item, press again to return to the parameter number display. (If item is 24, 25, 26, and 28, short press the key of  to return to the monitoring parameter number display when the parameter value is displayed, long press  to save the current monitoring value. If ok is displayed, it is saved successfully, then short press the key of  to exit the monitoring mode.)

Note: Up needle position setting: enter the monitoring parameter item 24, adjust the handwheel to the up needle (the parameter will change with the handwheel position), short press the key of  to enter the needle position value display, and long press the key of  again to save the parameter (after saving , down needle position will automatically adjust accordingly), then press  to exit monitoring mode.

3.6 Parameter Table

3.6.1 Operator Parameter(Long press the key of P to enter)

Parameter item	Instruction	Initial Value	range	Content Name Description and Reamarks
P00	Starting speed(r/min)	200	100-800	Setting the min speed when sewing
P01	Max speed (r/min)	2700	200-3000	Setting the max speed when sewing
P03	Stop needle position choose	1	0/1	0: up needle position 1: down needle position
P07	Slow starting speed (r/min)	550	100-2000	Setting sewing speed of slow starting
P08	Slow stitches	1	1-9	Setting stitches of slow starting
P09	Slow sewing switch	1	0-1	1: Slow sewing switch on 0: Slow sewing switch off
P12	Half stitch delay time (ms)	150	1-180	
P13	One stitch delay time (ms)	180	150-250	
P14	Stitches speed (r/min)	200	100-500	Speed when have stitches
P15	Stitch method	0	0-2	0: have stitches according to time 1: half stitch 2: one stitch
P23	Foot control speed curve mode	0	0-3	Foot control speed curve mode 0: straight line 1: two slopes 2: curve (square、extraction of a root) 3: S curve line
P24	pedal reverse step needle voltage value	840	0-4095	
P29	Power Control Curve Auxiliary Parameters 0: square 1: extraction of a root	1	0-1	

3.6.2 Operator parameter table(press the key of P and S to start to enter)

Parameter item	Instruction	Initial Value	range	Content Name Description and Reamarks
P56	Automatically find the up position when start	1	0-1	0: no 1: yes
P58	Up needle position adjusting angles	64	0-359	On the up position adjustment, when the value decreases, the needle will be stopped in advance. When the value

				increases, the needle will be delayed to stop.
P59	down needle position adjusting angles	165	0-359	On the down position adjustment, when the value decreases, the needle will be stopped in advance. When the value increases, the needle will be delayed to stop.
P60	Testing speed(r/min)	2700	200-3000	setting the test speed
P61	Aging running time(s)	3	1-255	
P62	Operation mode	0	0-3	0: normal 1: easy sewing 2: initial angle test 3: automatic test mode (when motors stop, press the key of S to exit)
P63	Aging stop time(s)	2	1-255	
P66	Machine head protection switch test	1	0-1	0: not protecting when machine head falls down 1: protecting when machine head falls down
P68	Max speed limited (r/min)	2700	200-3000	machine head max speed limited
P72	Pedal forward step operation starting position (compare with the back to middle position)	150	0-4095	
P73	Pedal slow-speed operation stop position (compare with the back to middle position)	340	0-4095	
P74	Pedal analog quantity max value	3700	0-4095	
P75	Pedal back to middle position setting	1340	0-4095	
P77	Motor direction	0	0-1	0: forward 1: reversal
P84	Safety switch alarm confirming time (ms)	300	1-500	
P85	Safety switch alarm recovering time (ms)	50	1-500	
P86	Two slopes turning point speed (r/min)	1500	0-4000	
P87	Two slopes middle analog quantity	2700	0-4095	

3.6.3 Monitoring parameter table

in the standby interface, long press the key of P and needle position to enter into the monitoring mode		
Parameter item	Instruction	Content Name Description and Reamarks
M18	Controller software version No.	Display the controller software version No (same as the one when opening)
M19	Controller software fixed version no	Display the controller software fixed version No
M20	Bus voltage	display real-time bus voltage
M21	Machine head speed	display real-time speed
M23	Initial angle	Display initial angle
M24	Mechanical angle	Display mechanical angle
M25	Pedal forward step max analog quantity	Dilay pedal forward step AD max value
M26	Pedal back to middle analog quantity sample value	display pedal back to middle position AD value
M28	Pedal reverse step analog quantity sample value	display pedal reverse step AD min vale
M30-M3	Historical fault code	display historical fault code(Error E7 don't make record, just show the newest eight No, showing 00 when no fault code)

4 Fault code

4.1 Fault code table

If the system alarms, please firstly check the followings:

First, you must confirm if the connecting line is well connected or not; 2. Confirm that if the control box is well matched with machine head; 3. Confirm that if the reset is true or not.

Fault code	Meaning	Solutions
Err-01	Hardware overcurrent	Turn off the system power. After 30 seconds, turn on the power again. If the controller still does not work, please replace the controller and inform the factory.
Err-02	Software overcurrent	
Err-03	System undervoltage	Disconnect the controller and check if the input supply voltage is low (below 154V). If the power supply voltage is low, restart the controller after the voltage returns to

		normal. If the controller still can't start to work after the voltage is restored, replace the controller and inform the factory.
Err-04	Machine stop overvoltage	Disconnect the controller and check if the input supply voltage is high (higher than 264V). If the power supply voltage is high, restart the controller after the voltage returns to normal. If the controller still can't start to work after the voltage is restored, replace the controller and inform the factory.
Err-05	Operation overvoltage	
Err-07	Electric current test detection circuit failure	Turn off the system power. After 30 seconds, turn on the power again and observe whether it can work normally. Retry several times. If the fault occurs frequently, replace the controller and inform the factory.
Err-08	Motor jammed	Disconnect the power supply from the controller and check if the motor power input plug is disconnected, loosened or damaged. Whether there is foreign matter on the machine head or not. After rebooting the system, it still does not work, please replace the controller and notify the factory.
Err-12	Motor initial angle test fault	Please try again 2-3 times after power off. If the fault is still reported, please replace the controller and inform the factory.
Err-13	Motor optical encoder signal loss fault	Turn off the system power and check if the motor sensor connector is loose or detached. Return it to normal and restart the system. If it still does not work, replace the controller and inform the factory.
Err-14	Main board reading and writing EEPROM fault	Turn off the system power and restart the system after 30 seconds. If it still does not work, replace the controller and inform the factory.
Err-15	Motor over speed protection	
Err-16	Motor reversal	

4.2 safety alarm table

Alarm code	Code meaning	Solutions
A-UP	Lift switch alarm	Straighten the machine head to ensure that the lift switch is restored

5. pedal sensitivity adjustment

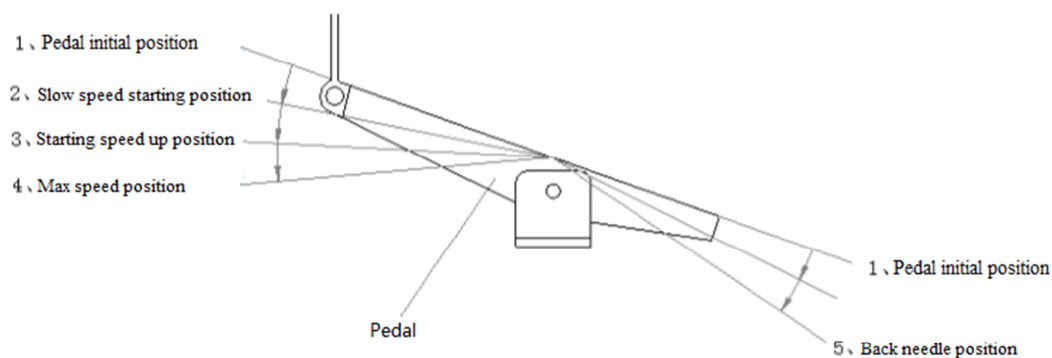
1) Start the foot pedal movement from the initial position ①(parameter No. 75), slowly step forward to ② (parameter 72+75) to begin sewing at a low speed, and before stepping on, proceed to ③(parameter 75+73) to accelerate. Step deep to ④(parameter 74) to reach maximum speed.

The speed of cracking is maintained between ②③stages, and the stepless speed regulation process is performed between ③④stages.

2) When the foot pedal starts from the initial position ①(parameter No. 75), it will automatically return to the upper stop needle action when it is slowly pressed to ⑥(parameter No.24).

3) The parameter settings must be guaranteed (24 parameters) <(75 parameters) <(75+72 parameters) <(75+73 parameters) < (74 parameters).

4) The maximum values of pedal analog value, pedal mid-back voltage sample value and pedal reverse voltage sampling value can be monitored in real time through monitoring mode parameters 025, 026 and 028. The operation mode is the same as the up needle position setting mode. The sampled value serves as a reference for each parameter. If the machine is stepped on a large distance and the machine is not running yet, 72 parameters can be properly reduced (72+75 parameter should be larger than the centering parameter 75), which can increase the sensitivity of the front pedal; if the machine is too sensitive, tightly touch the pedal machine can start operation and we can properly increase the 72 parameters; if you do not easily have needle stitches, slightly step forward, the speed will quickly increase and lead to multi-needle. You can be appropriate to increase the 73 parameters or reduce the 72 parameters (that is, increase the pedal low speed range), it is also possible to appropriately reduce the initial sewing speed (parameter No. 00).



58420J 电控使用说明书

58420J Electronic
Control Instructions

安全事项

- 在使用本产品之前，请先阅读《操作手册》及所搭配的缝纫机机械说明书。
- 本产品必须由接受过专业培训的人员来安装或操作。
- 请尽量远离电弧焊接设备，以免产生的电磁波干扰本控制器而发生误动作。
- 请不要在室温 45℃以上或者 0℃以下的场所使用。
- 请不要在湿度 30%以下或者 95%以上或者有露水和酸雾的场所使用。
- 安装控制箱及其他部件时，请先关闭电源并拔掉电源插头。
- 为防止干扰或漏电事故，请做好接地工程，电源线的接地线必须牢固的方式与大地有效连接。
- 所有维修用的零部件，须由本公司提供或认可，方可使用。
- 在进行任何保养维修动作前，必须关闭电源并拔掉电源插头。控制箱里有高压危险，必须关闭电源五分钟后方可打开控制箱。
- 本手册中标有  符号之处为安全注意点，必须注意并严格遵守，以免造成不必要的损害。

第1章 产品安装

1.1 产品规格

产品型号	AHE59	电源电压	AC 220±20% V
电源频率	50Hz/60H Z	最大输出功率	750W

1.2 接口插头的连接

将脚踏板及机头的各连接插头安插到控制器后面对应的插座上，各插座名称如图 1-2 所示。连接好，请检查插头是否插牢。

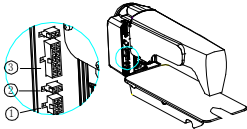


图 1-1 AHE 系列控制器图

- ① 踏板插座；②抬压脚电磁铁插座；③自动电磁铁插座；

：使用正常的力量插不进去时，请检查插头与插座是否匹配，插入方向或针的方向是否正确！

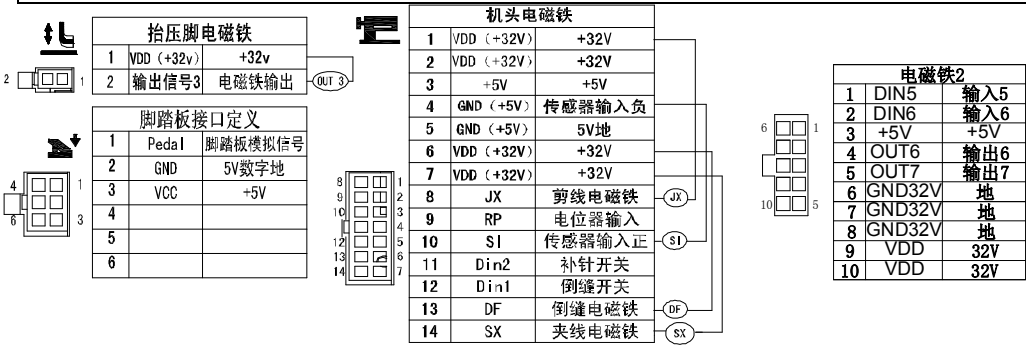


图 1-2 控制器接口定义

：所有电源线、信号线、接地线等接线时不要被其它物体压到或过度扭曲，以确保使用安全！

1.3 接线与接地

必须要做好系统的接地工程，请合格的电气工程人员予以施工。产品通电及投入使用前，必须确保电源插座 AC 输入端已安全可靠的接地。系统的接地线为黄绿线，该地线请务必可靠连接至电网安全保护接地上，以保证安全使用，并可防止出现异常情况。

第 2 章 操作面板使用说明

2.1 操作面板的显示说明

根据系统工作状态，操作面板的液晶屏模块将显示当前的缝纫模式、各种参数、前/后固缝设置，以及抬压脚、停针位、剪线、慢速起缝等液晶字符。操作面板上的功能图标显示说明如下所示。

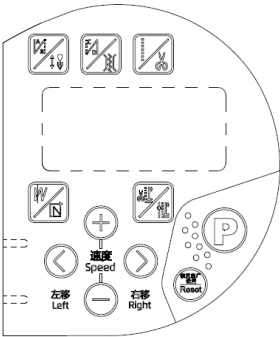


图 2-1 操作面板外观界面

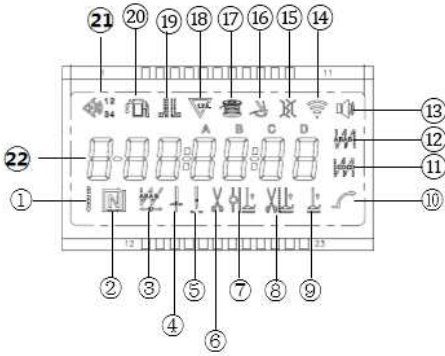


图 2-2 操作面板液晶显示屏图示

索引	图标	描述	索引	图标	描述
①		自由缝	②		后加固缝
②		多段缝	③		语音播报
③		W 缝	④		多段缝触发
④		中间停针下停针	⑤		夹线器
⑤		中间停针上停针	⑥		拨线器
⑥		自动剪线功能	⑦		记针数
⑦		中间停针抬压脚	⑧		记切线次数

⑧		剪线后抬压脚	⑪		拐角
⑨		抬压脚	⑫		油量检测
⑩		软启动功能	⑬		感应自动抬压脚
⑪		前加固缝	⑭	88888888	计数/参数值显示

2.2 操作面板各按键功能说明

序号	外观	名称	功能描述
1		参数进入及返回键	在开机状态下，长按  键进入参数模式。修改参数后按一下  键储存，再长按  键退出参数模式。
2		抬压脚键	在正常缝绉模式下,按  键，循环切换缝绉中途停车时抬压脚与缝绉结束后自动切线抬压脚。
3		前加缝键	前固缝选择键，每短按动一次，设置前固缝  、前双固缝  、关闭之间循环选择，对应液晶屏图标点亮。选择对应的键可设置 A、B 段的针数，默认针数范围 0~F 对应 0~15 针。
4		后加固缝及停针位键	1、短按  键，每短按动一次，设置后固缝  ；后双固缝  ；后固缝关闭之间循环选择，对应液晶屏图标点亮。选择对应的键可设置 C、D 段的针数，默认针数范围 0~F 对应 0~15 针。 2、长按  键，设置上停针位、下停针位。
5		夹线键及压脚感应器键	1、短按  键，液晶屏夹线图标  亮，夹线功能开启，再短按一次，夹线功能关闭。 2、长按  键，液晶屏压脚感应器图标  亮，打开压脚感应器功能，再长按一次，压脚感应器功能关闭。
6		自由缝及剪线键	1、短按  键，选择自由缝模式。 2、长按  键，液晶屏剪线图标  亮，自动剪线功能开启，再长按  键，自动剪线功能关闭。
7		W 缝/多段缝键	1、短按  键，液晶屏  图标亮，表示当前是 W 缝模式。 2、长按  键，液晶屏  图标亮，表示当前是多段缝模式。
8		参数递增键	参数设定中，参数值递增键。
9		参数递减键	参数设定中，参数值递减键。
10		向左选择键	参数设定中，向左选择参数范围。（在多段缝模式下，长按该键，触发指示灯点亮，即触发模式开启；再长按该键，触发指示灯熄灭，触发功能关闭）
11		向右选择键	参数设定中，向右选择参数范围。
12		恢复出厂设置	长按 5s 恢复出厂设置。

第 3 章 系统参数设置说明

3.1 参数模式

1、 待机状态下，按  键进入参数模式； 2、 按   键和   键修改相对应的参数。 3、 当参数值有修改时，参数界面闪烁。此时，短按  键，保存修改后的参数，再长按  键退出参数界面，返回待机页面。			
参数编号	参数范围	出厂值	参数描述
P99	0~12	1	语音选择 0：语音关闭;1：中文 2：英文 3：波斯语 4：越南语 5：俄语 6：波兰语 7：葡萄牙 8：西班牙语 9：土耳其 10：阿拉伯 11：印尼语 12：孟加拉 默认 1 中文
P01	200~3000	2700	自由缝最高速（全局最高限速）
		2700	
P03	0/1	1	上下停针选择 （0：为上停针；1：为下停针）
P04	200~3000	1800	前固缝速度
P05	200~3000	1800	后固缝速度
P06	200~3000	1800	连续回缝速度（W 缝）
P09	0/1	0	慢速起缝开关(0 为关闭，1 开启)
P15	0~2	0	按钮补针模式: 0:按下时间控制；1：补半针；2：补一针
P18	1~120	70	前固缝针迹补偿 1（吸合补偿）
P19	1~120	10	前固缝针迹补偿 2（释放补偿）
P22	0-50	8	补针时倒缝关闭阈值
P24	0~1024	80	踏板剪线位置
P25	1~120	54	后固缝针迹补偿 1
P26	1~120	12	后固缝针迹补偿 2
P30	0~31	0	电机低速加力功能开关：0：正常功能 1~31：低速加力过厚能力档位
P31	10~199	50	剪线加力系数(电机加力)
P32	1~500	400	夹线电磁铁全出力时间 ms
P33	0~100	0	夹线电磁铁每周期关闭时间 ms
P37	0~100	0	夹线电磁铁每周期开通时间 ms（夹线力度）
P45	0~100	1	倒缝电磁铁每周期开通时间 ms
P46	0~100	2	倒缝电磁铁每周期关闭时间 ms
P47	200~360	360	剪线后反拉（可实现剪线回拉功能）
P49	100~500	200	剪线速度
P50	1~500	150	抬压脚电磁铁全出力时间 ms
P51	0~100	3	抬压脚电磁铁每周期开通时间 ms
P52	1~800	100	放压脚延迟时间（ms）
P53	0/1	1	抬压脚开关： 0：不抬 1：抬

P54	0~100	8	抬压脚电磁铁每周期关闭时间 ms
P56	0/1	1	上电自动找上针位： 0：不找 1：找
P57	0~600	100	抬压脚电磁铁保护时间 100ms
P60	200~3000	2700	定长缝最高速（自动测试速度）
P62	0~4	0	特殊运行模式： 0：操作工选择（正常）； 1：简易缝模式； 2：测电机初始角（不再需要取下皮带）； 3：计算传动比模式（需要有停针传感器，且不能取下皮带）； 4:自动测试模式 1（带停针位的自动测试，运行 5S，停止 5S）。
P66	0/2	2	2:打开安全开关功能；0：关闭
P71	0~50	2	缓放压脚级别调整，数值越小放的越快；（超频打开时间）
P76	1~500	60	倒缝电磁铁全出力时间 ms
P78	1~359	120	钳线开始角度
P79	0~359	320	钳线结束角度
P98	0~4	4	语音音量大小
PA2	0-1	0	语音开关
PA5	0-2	0	0 开机语音和按键语音 1 仅为开机语音 2 仅为按键语音
PA6	1~100	1	stitch 计数器功能比例值设定
PA7	1~9999	1	stitch 计数值设定
			开机+P 165 参数改为 2007 恢复出厂设置
PA8	0~6	0	stitch 计数器模式选择： 0：不计数； 1：依针数往上计数，数完设定值后自动重新计数； 2：依针数往下计数，数完设定值后自动重新计数； 3：依针数往上计数，数完设定值后，马达自动停止，须由 S4 [152.INI] =CRS 设定或面板上的 A 键来启动重新计数； 4：依针数往下计数，数完设定值后，马达自动停止，须由 S4 [152.INI] =CRS 设定或面板上的 A 键来启动重新计数； 5:依针数往上计数，数完设定值后,报错，马达不停止。当后踩脚踏板后，马达停止停止，须由 S4 [152.INI] =CRS 设定或面板上的 A 键来启动重新计数； 6：依针数往下计数，数完设定值后，报错，马达不停止。当后踩脚踏板后，马达停止，须由 S4 [152.INI] =CRS 设定或面板上的 A 键来启动重新计数。
PA9	1~100	1	Trimming 计数器功能比例值设定
PAA	1~9999	1	Trimming 计数值设定
PAB	0~4	0	Trimming 计数器模式选择： 0：不计数； 1：Trimming 数往上计数，数完设定值后自动重新计数； 2：Trimming 数往下计数，数完设定值后自动重新计数； 3：Trimming 数往上计数，数完设定值后，马达自动停止，须由 S4 [152.INI] =CRS 设定或面板上的 A 键来启动重新计数； 4：Trimming 数往下计数，数完设定值后，马达自动停止，须由 S4 [152.INI] =CRS 设定或面板上的 A 键来启动重新计数；

3.2 监控参数表

参数编号	参数描述	参数编号	参数描述
010	针数计数	025	踏板电压采样值
011	计件数	026	机头传动比实际值
012	机头实际速度	027	电机累计运行时间（ Hour ）
013	霍尔状态	028	机头交互量电压采样值
020	母线电压	029	DSP 软件版本号
021	机头速度	02A	模拟输入 1 采样值
022	相电流	02B	模拟输入 2 采样值
023	初始角度	02C	错误计数器
024	机械角度	030-037	历史故障代码

3.3 安全报警表

报警代码	代码含义	解决措施
ALA-2	计针数报警	表示计针数已达所设上限，按 P 键可取消报警并重新计数
ALA-3	计剪线数报警	表示计剪线数已达所设上限，按 P 键可取消报警并重新计数
ALA-6	底线报警	表示底线即将用完,请更换底线,按 P 键可恢复
PowerOFF	断电提醒	请等候 30 秒再重新打开电源开关
ArrestUP	翻台开关报警	摆正机头，确保翻台开关复原

3.4 故障代码表

若系统出现报错或报警，请首先检查如下项：

1、先确认机器的连接线是否连接完好；2、确认电控和机头是否匹配；3、确认恢复出厂是否准确。

故障代码	代码含义	解决措施
Err-01	硬件过流	关闭系统电源，30 秒后重新接通电源，控制器若仍不能正常工作，请更换控制器并通知厂方。
Err-02	软件过流	
Err-03	系统欠压	断开控制器电源，检查输入电源电压是否偏低（低于 176V）。若电源电压偏低，请在电压恢复正常后重新启动控制器。若电压恢复正常后，启动控制器仍不能正常工作，请更换控制器并通知厂方。
Err-04	停机时过压	断开控制器电源，检查输入电源电压是否偏高（高于 264V）。若电源电压偏高，请在电压恢复正常后重新启动控制器。若电压恢复正常后，启动控制器仍不能正常工作，请更换控制器并通知厂方
Err-05	运行时过压	
Err-06	电磁铁回路故障	关闭系统电源，检查电磁铁连线是否正确，是否有松动、破损等现象。若有则及时更换。确认无误后重启系统，若仍不能工作，请更换控制器并通知厂方。
Err-07	电流检测回路故障	关闭系统电源，30 秒后重新接通电源观察是否能正常工作。重试几次，若该故障频繁出现，请更换控制器并通知厂方。
Err-08	电机堵转	断开控制器电源，检查电机电源输入插头是否脱落、松动、破损，是否有异物缠绕在机头上。排除后重启系统仍不能正常工作，请更换控制器并通知厂方。
Err-09	制动回路故障	关闭系统电源，检查电源板上白色的制动电阻接头是否松动或脱落，将其插紧后重启系统。若仍不能正常工作，请更换控制器并通知厂方。
Err-10	HMI 通讯故障	检查控制面板与控制器的连线是否脱落、松动、断裂，将其恢复正常后重启系统。若仍不能正常工作，请更换控制器并通知厂方。

Err-11	机头停针 信号故障	检查机头同步信号装置与控制器的连线是否松动，将其恢复正常后重启系统。若仍不能正常工作，请更换控制器并通知厂方。
Err-12	电机初始角度检测故障	请断电后再尝试 2-3 次，若仍报故障，请更换控制器并通知厂方。
Err-13	电机 HALL 故障	关闭系统电源，检查电机传感器接头是否松动或脱落，将其恢复正常后重启系统。若仍不能正常工作，请更换控制器并通知厂方。
Err-14	DSP 读写 EEPROM 故障	关闭系统电源，30 秒后重启系统，若仍不能正常工作，请更换控制器并通知厂方。
Err-15	电机超速保护	
Err-16	电机反转	
Err-17	HMI 读写 EEPROM 故障	
Err-18	电机过载	
Err-23	电机堵转编码器故障	断开控制器电源，检查电机电源输入插头是否脱落、松动、破损，是否有异物缠绕在机头上。排除后重启系统仍不能正常工作，请更换控制器并通知厂方。

第 4 章 脚踏板灵敏度调整

脚踏板动作由初始位置①（136 号参数）开始，缓慢向前踩至②（137 号参数）开始低速缝纫，继续前踩至③（138 号参数）开始加速，再深踩至④（139 号参数）达到最高速度。②③段之间维持起缝速度，③④段之间为无级调速过程；

- 1、当脚踏板由初始位置①（136 号参数）开始，缓慢后踩至⑤（135 号参数）时抬压脚自动抬起；
- 2、当脚踏板由初始位置①（136 号参数）开始，缓慢后踩至⑥（134 号参数）时自动完成剪线动作。
- 3、各参数数值设置需保证（134 号参数）<（135 号参数）<（136 号参数）<（137 号参数）<（138 号参数）<（139 号参数）
- 4、可通过监控模式下 025 号参数实时监测 不同位置下的踏板采样数值作为各参数的参考值。

调整对应参数，抬压脚和前踩或后踩的动作位置也随之改变。如前踩很大距离机器还没有运转，可适当减小 137 参数（不能小于回中位置参数 136），即可提高前踩的灵敏度；若机器过于灵敏，轻触踏板机器就开始运行，可适当加大 137 参数；若不容易补针，稍微前踩，速度就迅速提高造成前冲多针，可适当增大 138 参数或减小 137 参数（即增大脚踏板低速范围），也可以适当降低初始起缝速度（100 ）。

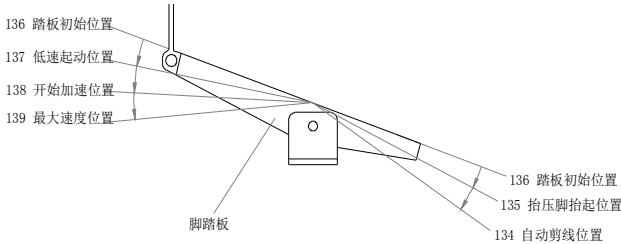


图 4-1 踏板动作各位置参数示意图

Safety Instruction

- Please read this manual carefully, also with related manual for the machinery before use the controller.
- For installing and operating the controller properly and safely, qualified personnel are required.
- Please try to stay away from arc welding equipment, in order to avoid electromagnetic interference and malfunction of the controller.
- Keep in room bellow 45°C and above 0°C
- Do not use in humidity below 30% or above 95% or dew and mist of places.
- Install the control box and other components, turn off the power and unplug the power cord.
- To prevent interference or leakage accidents, please do the ground work; the power cord ground wire must be securely connected to an effective way to earth..
- All parts for the repair provided by the Company or approved before use.
- Performing any maintenance action, you must turn off the power and unplug the power cord. There are dangerous high voltage control box, you must turn the power off after one minute before opening the control box.
- This manual marked with the symbol  of the Department of Safety Precautions must be aware of and strictly adhered to, so as not to cause unnecessary damage.

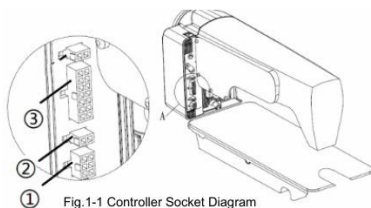
1 Installation Instructions

1.1 Product specifications

Product Type	AHE59	Supply Voltage	AC 220±20% V
Power frequency	50Hz/60Hz	Maximum output power	750W

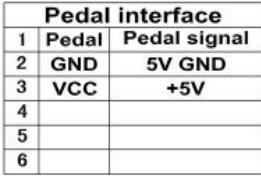
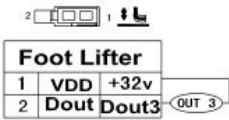
1.2 Interface plug connections

The pedals and the machine head of the connector plug are mounted to the corresponding position in the controller back of socket, as shown in Figure 1-2. Please check if the plug is inserted firmly



① Pedals socket; ② Foot lifter solenoid socket ; ③ Machine head solenoid socket;

:The use of the normal force are not inserted into the plug and socket, please check whether the matching, direction or needle insertion direction is correct!



Machine Head Solend		
1	VDD (+32V)	+32V
2	VDD (+32V)	+32V
3	+5V	+5V
4	GND (+5V)	5V GND
5	GND (+5V)	5V GND
6	VDD (+32V)	+32V
7	VDD (+32V)	+32V
8	JX	Trimming
9	DWQ	RP input
10	SI	Senor input
11	Din2	Fill needle SW.
12	Din1	BT SW.
13	DF	Back tack
14	SX	Nipping

Machine Head Solend		
1	DIN5	INPUT 5
2	DIN6	INPUT 6
3	+5V	+5V
4	OUT6	OUTPUT 6
5	OUT7	OUTPUT 7
6	GND32V	LAND
7	GND32V	LAND
8	GND32V	LAND
9	VDD	32V
10	VDD	32V



All power lines, signal lines, ground lines, wiring not to be pressed into other objects or excessive distortion, to ensure safe use!

1.3 Wiring and Grounding

We must prepare the system grounding project, please a qualified electrical engineer to be construction. Product is energized and ready for use; you must ensure that the power outlet the AC input is securely grounded. The grounding wire is yellow and green lines, it must be connected to the grid and reliable security protection on the ground to ensure safe use, and prevent abnormal situation.

2 Operation Panel Instructions

2.1 Operation Panel Display Instruction

According to the system working state, the LCD module of operation panel will display the current sewing patterns, various parameters, start / end back tacking, and presser foot, needle stop position, trimming, Slow up start sewing ect icon. The operation panel of the function icon shows as follows.

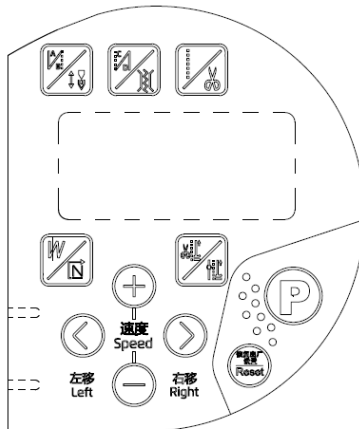


Fig. 2-1 Operation Panel

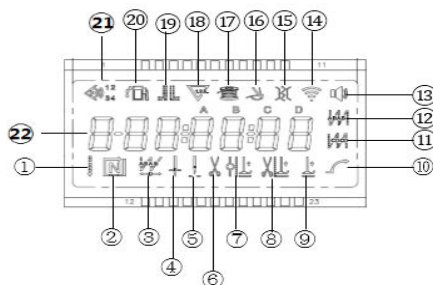


Fig. 2-2 Operation Panel

Index	Icon	Description	Index	Icon	Description
①		Free sewing	⑫		End back tacking
②		Multi-section constant-stitch sewing	⑬		Voice broadcast
③		W bar tacking sewing	⑭		Communication system
④		Position down	⑮		Tension device
⑤		Position up	⑯		Wipe device
⑥		Automatic trimming	⑰		Count needle number
⑦		Foot lifting at seam End	⑱		Count number of times
⑧		Foot lifting after trimming	⑲		Turning
⑨		Presser foot lifting	⑳		Oil testing
⑩		Soft start sewing	㉑		Induction automatic presser foot lifting
⑪		Start bar tact	㉒	8 8 8 8 8 8 8 8	Number display

2.2 Key Functions

No	Key	Name	Description
1		Parameter setting key	In the boot state, long press key to enter the parameter modes. After modify the parameters, press key to storage. Then long press key to exit this mode.
2		Presser foot key	In the normal sewing mode, press key , switch between cycle sewing midway parking presser foot and sewing after the end of automatic trimming presser foot.

No	Key	Name	Description
3		Start back tacking setting key	Switch during all start tacking type when pressing. (No tacking, single tacking  , double tacking ). The icon of LCD is lit. The number of needle selecting the corresponding keys can be set to A, B segment, default needle number 0`F corresponds to the 0`15 stitch.
4		End back tacking setting key	1, Switch during all end tacking type when pressing. (No tacking, single tacking  , double tacking ). The icon of LCD is lit. The number of needle selecting the corresponding keys. can be set to A, B segment, default needle number 0`F corresponds to the 0`15 stitch. 2, Long press  key, it can shift the needle up and down stop position.
5		Thread clamp/ Induction automatic presser foot lifting key	1, Short press key  , the icon  of LCD is lit, the thread clamp function turns on. Then short press key, the thread clamp function turns off. 2, Long press  key, the icon  of LCD is lit, the induction automatic presser foot function turns on. Then long press key, the induction automatic presser foot function turns off.
6		Free sewing/ trimming key	1, Short press key  , the free sewing mode is selected. 2, Long press key  , the icon  of LCD is lit, the automatic trimming function turns on. Then long press key  , the automatic trimming function turns off.
7		W bar tacking / Multi-section constant-stitch sewing	1, Short press key  , the icon  of LCD is lit, W seam marking function turns on. 2, Long press key  , the icon  of LCD is lit, the multi-section constant-stitch sewing function turns on.
8		The parameter increment setting key	Parameter value increment key.
9		The parameter Decrease setting	Parameter value decrease key.
10		The left selection key	Parameters selection toward to left key.
11		The right selection key	Parameters selection toward to right key.
12		Factory reset	press for 5s.

3 System parameters setting list

3.1 Parameter mode

- 1、In the standby state,press key  to enter the parameter modes.
- 2、Press corresponding to key   and key , the parameter value is changed.
- 3、When the parameter values have increased and decreased, parameter interface flash.Short press  key to save the modified parameters.Long press key  to exit parameter interface,return to standby panel model.

NO	RANGE	DEFAULT	Description
P99	0~12	1	Voice selection 0: OFF;1: Chinese 2: English 3: Persian4: Vietnamese 5: Russian 6:Polish 7: Portuguese 8: Spanish 9: Turkish 10: Arabic 11: Indonesian 12: Bangladesh Original setting: Chinese
P01	200~3000	2700	the maximum speed of free sewing (the global maximum speed)
		2700	
P03	0/1	1	Needle stop position selection (0:up; 1: down)
P04	200~3000	1500	Start back tacking speed
P05	200~3000	1500	End back tacking speed
P06	200~3000	1500	Continuous back sewing speed (W sewing)
P09	0/1	0	Soft start switch(0:off; 1: on)
P15	0~2	0	Mode of stitch correction 0: continuous; 1:half stitch; 2:one stitch
P18	1~120	70	Stitch balance for start back tacking No.1(Pull in compensation)
P19	1~120	10	Stitch balance for start back tacking No.2(Release of compensation)
P22	0-50	8	back sewing valve when stitch addition
P24	0~1024	80	Trimming point of pedal
P25	1~120	54	Stitch balance for end back tacking No.1
P26	1~120	12	Stitch balance for end back tacking No.2
P30	0~31	0	Feed forward torque of motor: 0: normal functions 1-31: feed forward torque level
P31	10~199	50	Trimming afterburner coefficient (motor afterburner)
P32	1~500	400	tension device solenoid working duration time ms
P33	0~100	0	Tension device solenoid per cycle closing time (ms)
P37	0~100	0	Tension device solenoid per cycle opening time (ms)
P45	0~100	1	Back stitch electromagnet per cycle opening time (ms)
P46	0~100	2	Back stitch electromagnet per cycle closing time (ms)
P47	200~360	360	After trimming anti pull (It realizes trimming is pulled back function)
P49	100~500	200	Trimming speed
P50	1~500	150	Presser foot lifting electromagnet full output time ms

P51	0~100	3	Presser foot lifting electromagnet per cycle opening time (ms)
P52	1~800	100	Running delay time when presser footer comes down (ms)
P53	0/1	1	Presser foot lifting function selection 0: no action 1: action
P54	0~100	8	Presser foot lifting electromagnet per cycle closing time (ms)
P56	0/1	1	Run to up needle position after Power on: 0: no action 1: action
P57	0~600	100	Presser foot lifting electromagnet protection time 100ms
P60	200~3000	2700	The maximum speed of constant sewing (Automatic test speed)
P62	0~4	0	Special mode: 0: normal Mode 1: simply sewing mode 2: motor initial angle measurement (Do not remove the belt) 3: Automatically setting the pulley ratio by the CPU. (Synchronizer is necessary and the belt not removed) 4: automatic test model 1 (It has needle stop position of automatic test, running and stopping 5S)
P66	0/2	2	2:open safety switch function; 0: close
P68	200~3000	2700	The maximum speed limit of the machine head
P71	0~50	2	Slow release lifter level adjustment, the smaller values and the faster quickly (OC open time)
P76	1~500	60	Back sewing electromagnet full output time ms
P78	1~359	120	Start angle
P79	0~359	320	End angle
P98	0~4	4	Voice volume
PA2	0-1	0	Voice on or off
PA5	0-2	0	0:machine start voice and press voice 1 machine start voice only 2 press voice only
PA6	1~100	1	Stitch count function proportion setting
PA7	1~9999	1	Stitch count set
PA8	0~6	0	Stitch count function mode: 0: off 1:stitch count up, recounting after over the setting value; 2: stitch count down, recounting after over the setting value; 3: stitch count up, motor stop after over the setting value(use S4 [152.INI] =CRS, or Key A to recount) 4: stitch count down, motor stop after over the setting value(use S4 [152.INI] =CRS, or Key A to recount) 5: stitch count up, show error but motor not stop after over the setting value(use S4 [152.INI] =CRS, or Key A to recount) 6: stitch count down, show error but motor not stop after over the setting value(use S4 [152.INI] =CRS, or Key A to recount)
PA9	1~100	1	Trimming count function proportion setting

PAA	1~9999	1	Trimming count set
PAB	0~4	0	Trimming Stitch count function mode: 0: off 1: Trimming count up, motor stop after over the setting value(use S4 [152.INI] =CRS, or Key A to recount; 2: Trimming count down, motor stop after over the setting value(use S4 [152.INI] =CRS, or Key A to recount; 3: Trimming count up, motor stop after over the setting value(use S4 [152.INI] =CRS, or Key A to recount) 4: Trimming count down, motor stop after over the setting value(use S4 [152.INI] =CRS, or Key A to recount)

3.2 Monitor mode

No	Description	No	Description
010	Count needle number	025	The sampling voltage of pedal
011	Counter for sewing pieces	026	The ratio between motor and machine
012	The head of really speed	027	The total used time(hours) of motor
013	State of encoder	028	The sampling voltage of interaction
020	DC voltage	029	Software version
021	Machine speed	02A	Simulate input 2 simple value
022	The phase current	02B	Simulate input 2 simple value
023	Initial electrical angle	02C	Error counting
024	Mechanical angle	030-037	Error code record

3.3 The warning message

Alarm code	Description	Corrective
ALA-2	Count over for stitches	The counter reaches the limit. Press P key to reset the counter.
ALA-3	Count over for sewing pieces	The counter reaches the limit. Press P key to reset the counter.
ALA-6	Bottom line alarm	Change bobbin, press P to recover
POW OFF	Power is off	Please wait for 30 seconds, then turn on the power switch
ARN UP	Safety switch alarm	Adjust the machine to the correct position.

3.4 Error mode

If the error code appears, please check the following items first:

1. Make sure the machine has been connected correctly; 2. Reload the factory setting and try again.

Error Code	Description	Solution
Err-01	Hardware over-current	Turn off the power switch, and restart after 30 seconds. If the controller still does not work, please replace it and inform the manufacturer.
Err-02	Software over-current	
Err-03	Under-voltage	Disconnect the controller power and check if the input voltage is too LOW (lower than 176V). If yes, please restart the controller when the normal voltage is resumed. If the controller still does not work when the voltage is at normal level, please replace the controller and inform the manufacturer.
Err-04	Over-voltage when the machine is off	Disconnect the controller power and check if the input voltage is too high (higher than 264V). If yes, please restart the controller when the normal voltage is resumed.
Err-05	Over-voltage in operation	If the controller still does not work when the voltage is at normal level, please replace the controller and inform the manufacturer.
Err-06	Short circuit of solenoid	-Take plug out, if error continues, replace control box.
Err-07	Motor current measuring failure	Turn off the system power, restart after 30 seconds to see if it works well. If such failure happens frequently, seek technical support.
Err-08	Sewing motor blocked	- Eliminate sluggish movement in the sewing machine - Replace encoder - Replace sewing motor
Err-09	Brake circuit failure	Check the brake resistor plug on the electric board. Replace the control box
Err-10	Communication failure	Check the connection and if necessary plug in. Replace the control box.
Err-11	Machine head needle positioning failure	Check if the connection line between machine head synchronizer and controller is loose or not, restore it and restart the system. If it still does not work, please replace the controller and inform the manufacturer.
Err-12	Initial motor electrical angle Failure	- Try 2 to 3 more times after power down - if it still does not work, please replace the controller and inform the manufacturer.
Err-13	Motor HALL failure	turn off the system power, check if the motor sensor plug is loose or dropped off, restore it and restart the system. If it still does not work, please replace the controller and inform the manufacturer.。
Err-14	DSP Read/Write EEPROM Failure	Turn off the system power, restart the system after 30 seconds, if it still does not work, please replace the controller and inform the manufacturer.
Err-15	Motor over-speed protection	
Err-16	Motor reversion	
Err-17	HMI Read/Write EEPROM failure	
Err-18	Motor overload	
Err-23	Sewing motor blocked encoder failure	- Eliminate sluggish movement in the sewing machine - Replace encoder - Replace sewing motor

4 Pedal sensitivity adjustment

Pedal starts moving from the initial position ①(p.136) where the motor stops, slowing forward to the low speed point② (p.137)

where the motor run as the minimum speed , continuing to the accelerated point (p.138) where the motor start to speed up, until the max speed point (p.139) where the motor run up to the maximum speed. ②③ keep start sewing speed, ③④ is free adjust process.

1; Pedal starts moving from the initial position ①(p.136), And when the pedal steps back to the foot lifter position ⑤(p.135), the presser foot lift.

2: Pedal starts moving from the initial position ①(p.136),Continuing back to the auto trimming position ⑥ (p.134), the line is cut.

3. all the parameter should confirm(p.134) < (p.135) < (p.136) < (p.137) < (p.138) < (p.139)

4. It can be monitored in real time under the monitoring p.025 parameter, and the pedal sampling value at different locations is the reference value of each parameter.

Adjusting the corresponding parameters, the action position of presser foot and front step or back step is also changed. If the machine is not running before stepping on a large distance, the 137 parameter can be reduced appropriately (Cannot less than parameter 136). It can improve the sensitivity of the front step; if the machine is too sensitive, the light touch pedal machine starts to run, and the 137 parameters can be increased properly; if it is not easy to fill the needle and step forward slightly, The speed increases rapidly to lead multiple needles, which can be properly increased by 138 parameters or reduced by 137 parameters (that is to increase the low speed range of the foot pedal), and the initial slit speed (100) can be properly reduced.

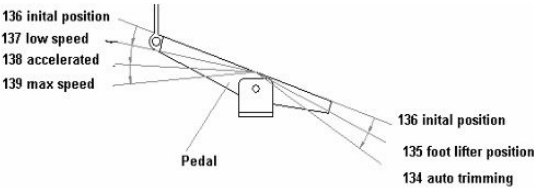


Fig. 4-1 pedal movement of each position parameter

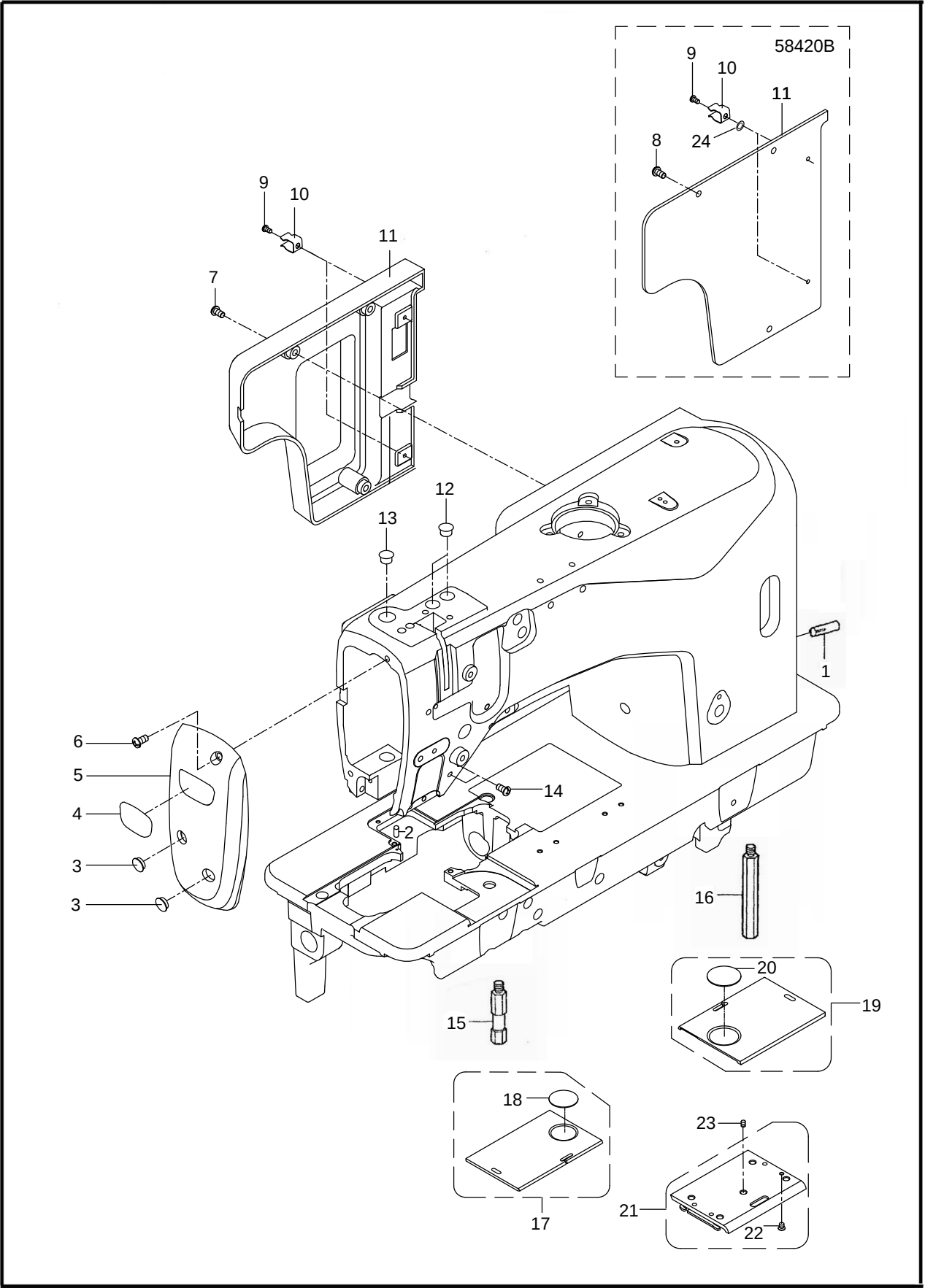
零件样本

PARTS BOOK

零件样本/Parts Book

A.机体部件/Machine body	1
B.上轴部件/Upper shaft mechanism.....	3
C1.针杆摆动部件/Needle bar rocking mechanism(58420、 58720)	5
C2.针杆摆动部件/Needle bar rocking mechanism(58450、 58750)	7
D.针杆切换部件/Needle bar flip-up mechanism(58450、 58750)	9
E.压脚部件/Presser foot mechanism.....	11
F.送布部件/Feed mechanism.....	13
G.送布轴部件/Feed shaft mechanism.....	17
H.针位部件/Gauge parts	19
I.下轴部件/Lower shaft mechanism	19
J1.旋梭部件/Rotary hook mechanism(58□□0B).....	21
J2.旋梭部件/Rotary hook mechanism(58□□0J).....	25
K.供油润滑部件/Lubrication	29
L.穿线部件/Thread Mechanism	33
N.卷线部件/Bobbin Winder Mechanism	35
O.切线部件/Thread trimmer mechanism.....	37
P.扫线部件/Thread wiper mechanism.....	41
Q.倒缝部件/Quick reverse mechanism	43
R.电机与电控部件/Motor and Electronic control box mechanis	45
S.倒缝开关分部件/Quick reverse switch mechanism.....	47
T.自动抬压脚部件/Auto lifter components.....	49
Z.附件/Accessories	51
针位组零件/Gauge parts list.....	53

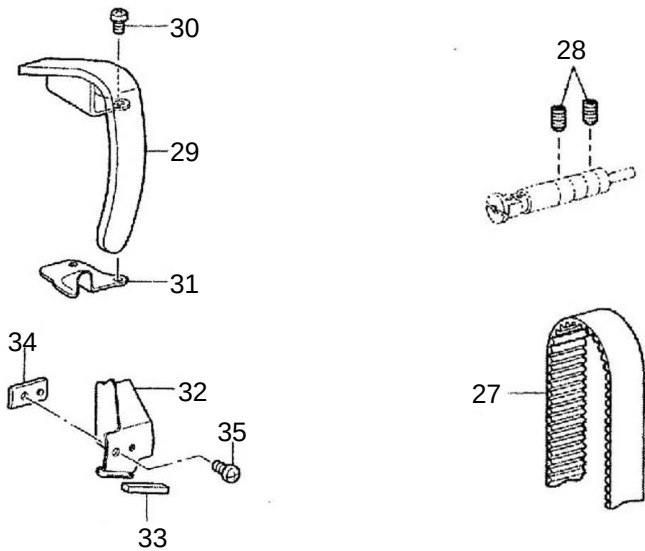
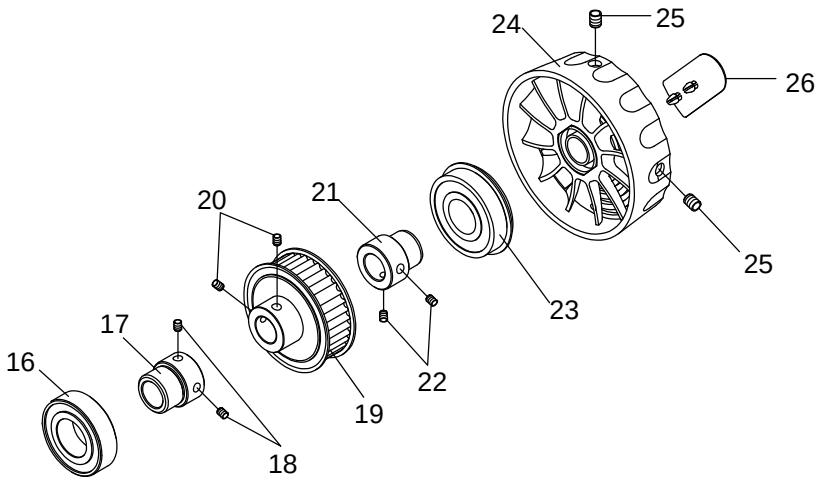
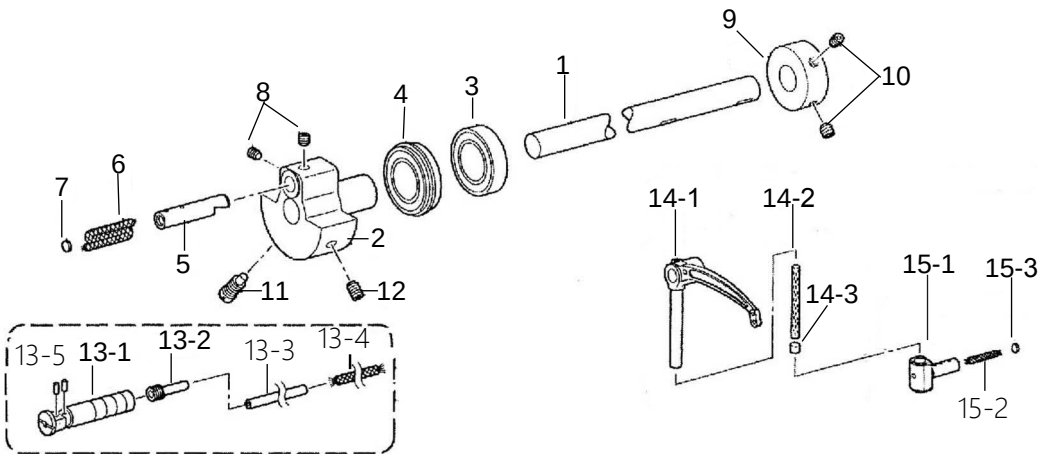
A.机体部件/Machine body



A.机体部件/Machine body

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	12926001	140063001	带槽销	Dowel pin	1	1	58□□0J
	12926001	140063001	带槽销	Dowel pin	2	2	58□□0B
2	12926002	SA3924001	定位销	Positioning pin	1	1	
3	12922001	SA2929001	橡皮塞 12.5	Rubber cap,12.5	2	2	
4	13837002		商标牌	Plate with trademark	1	1	
5	304030		面板	Face plate	1	1	58420/58720
	304031		面板	Face plate	1	1	58450/58750
6	S04032	062501416	螺钉 M5×14	Screw,pan M5×14	2	2	
7	S04032	062501416	螺钉 M5×14	Screw,pan M5×14	3	3	58□□0J
8	S04029	062501216	螺钉 M5×12	Screw,pan M5×12	3	3	58□□0B
9	S04021		螺钉M4×4	Screw M4×4	2	2	
10	13812007		卡簧	Buckle	2	2	
	13812007		卡簧	Buckle	1	1	58□□0B
11	304032		后窗板	Rear cover	1	1	58□□0J
	304258		后窗板	Rear cover	1	1	58□□0B
12	12922001	SA2929001	橡皮塞 12.5	Rubber cap,12.5	2	2	
13	12922001	SA2929001	橡皮塞 12.5	Rubber cap,12.5	1	1	58420/58720
14	S04028	062500816	螺钉 M5×8	Screw,pan M5×8	2	2	58450/58750
15	129S30002	SA2445101	脚柱 S	Bed leg,S	1	1	
16	129S30001	SA2444101	脚柱 L	Bed leg,L	1	1	
17	1231500100		左推板组件	Slide plate,L assy	1	1	58□□0J
	12915005	SA2447001	左推板组件	Slide plate,L assy	1	1	58□□0B
18	12911001	SA2479001	推板窗	Bobbin window	1	1	
19	1231500200		右推板组件	Slide plate,R assy	1	1	58□□0J
	12915006	SA2449001	右推板组件	Slide plate,R assy	1	1	58□□0B
20	12911001	SA2479001	推板窗	Bobbin window	1	1	
21	1231500300		前推板组件	Slide plate f assy	1	1	58□□0J
	1291500300	S36663051	前推板组件	Slide plate f assy	1	1	58□□0B
22	129S15001	S34438051	螺钉SM1/8"×40 L=4	Screw,flat SM1/8"×40 L=4	4	4	
23	129S17001		螺钉SM13/64"×32 L=4	Screw,flat SM13/64"×32 L=4	1	1	
24	12928008		垫片	Washer,plain	1	1	58□□0B

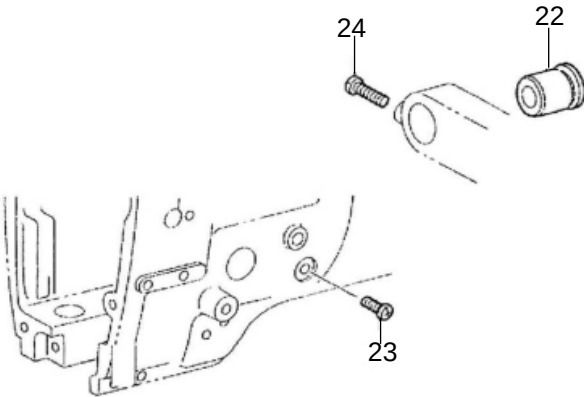
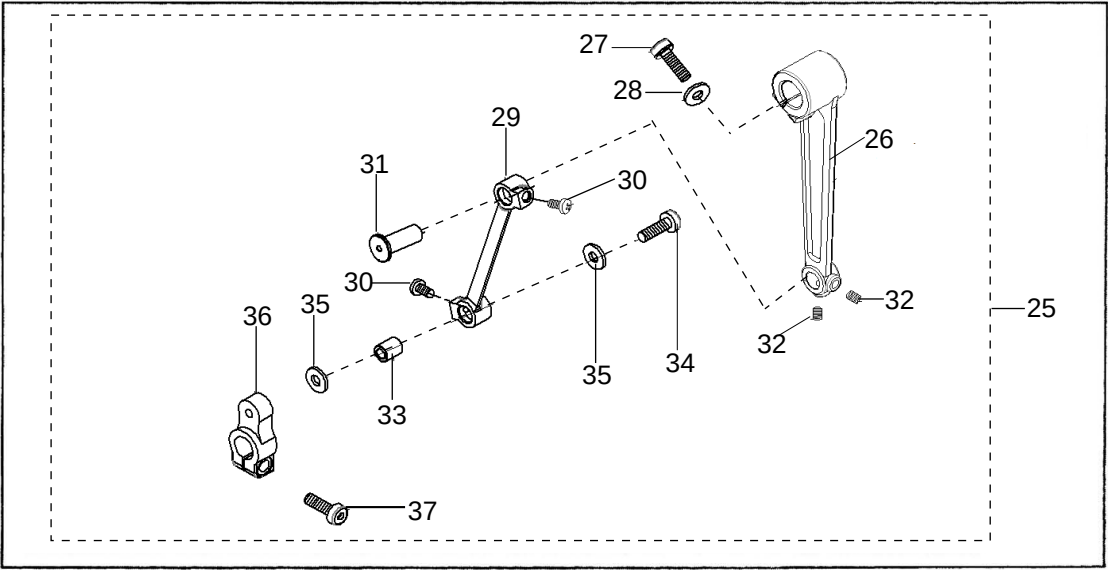
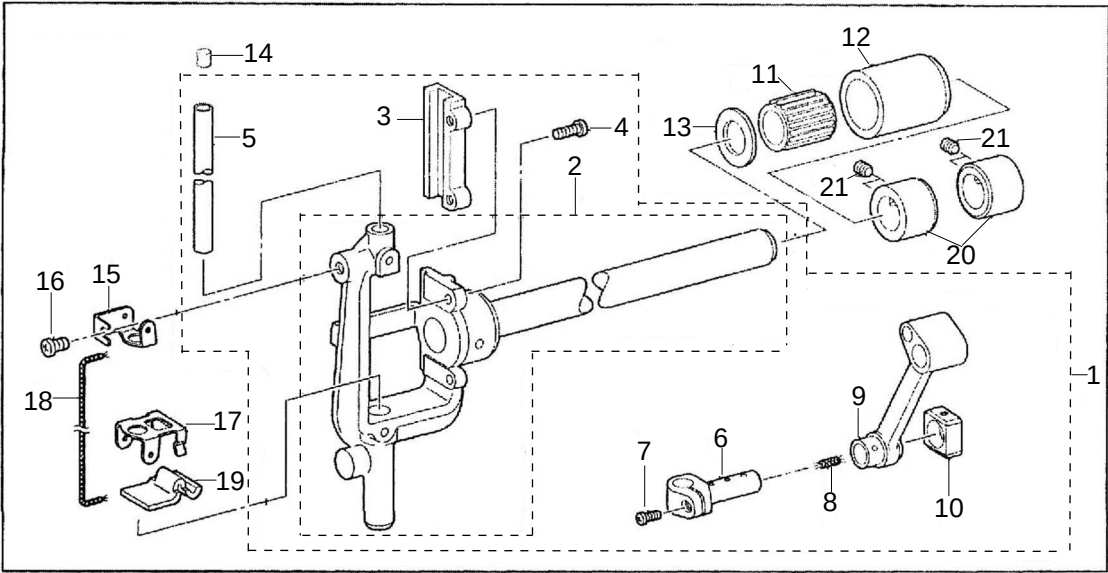
B.上轴部件/Upper shaft mechanism



B.上轴部件/Upper shaft mechanism

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	12302001		上轴	Upper shaft	1	1	
2	12904001	SA4089001	挑线杆曲柄	Thread takeup crank	1	1	58420/58720
	12904006	SA4373001	挑线杆曲柄	Thread takeup crank	1	1	58450/58750
3	B04022	S25234001	球轴承 6004ZZ	Ball bearing,6004ZZ	1	1	
4	B10002	S38707001	球轴承 6004ZZNR	Ball bearing,6004ZZNR	1	1	
5	12926201	SA6166001	针杆曲柄轴	Crankshaft,NBAR	1	1	
6	12923050		油线 φ2.5 L=60	Wick,φ2.5 L=60	1	1	
7	11626003	113014000	油线盖	Wick cap	1	1	
8	S10017	S25260001	固定螺钉 M6×0.75 L=5	screw M6×0.75 L=5	2	2	
9	12308001		绕线轮驱动轮	Bobbin winder driving wheel	1	1	
10	S10019		紧定螺钉 M6×6	Set screw,socket(ft)M6×6	2	2	
11	129S30005	S25235001	螺钉 M8×6	Screw M8×6	1	1	
12	S09017	S25236001	螺钉 M6×0.75 L=10	screw M6×0.75 L=10	1	1	
13-1	12938003		挑线架销	Hinge Pin For Thread Take Up Lever	1	1	
13-2	12938002	SA2861001	挑线杆支撑轴接头	Thread takeup s-shaft unit	1	1	
13-3	12921002		维尼龙油管L=190	Oil tube,L=190	0.19	0.19	
13-4	12923018		油线 L=400	Wick, L=400	0.4	0.4	
13-5	20123021		油线 L=30	Wick, L=30	0.03	0.03	
14-1	12938006	SA2935101	挑线杆-3	Thread takeup lever assy,s3	1		58420-003
	12938007	SA2936101	挑线杆-5	Thread takeup lever assy,s5	1	1	58420-005/58450
	12938202	SA2937101	挑线杆-7	Thread takeup lever assy,s7	1	1	58720/58750
14-2	12923031		油线 4×4 L=40	Wick,4×4 L=40	1	1	
14-3	12922015		橡皮塞	Rubber cap	1	1	
15-1	11626004	S13160001	挑线杆连接柱	Ttakeup slide block assy,2	1	1	
15-2	12923012		油线 L=17	Wick, L=17	1	1	
15-3	12926016		油线盖φ4	Wick capφ4	1	1	
16	B04021	076023800	R球轴承 60/22ZZ	Ball bearing,radial 60/22ZZ	1	1	
17	12908002	SA2748001	轴承套座	Ball bearing bush	1	1	
18	S10018	S23651001	紧定螺钉M6×0.75 L=6	Screw M6×0.75 L=6	2	2	
19	12935002	SA2720001	同步轮UST组件	Timing pulley assy,U ST	1	1	
20	S10018	S23651001	紧定螺钉M6×0.75 L=6	screw M6×0.75 L=6	2	2	
21	12303002		上轴后轴承衬套	Ball bearing bush	1	1	
22	S10018	S23651001	紧定螺钉M6×0.75 L=6	screw M6×0.75 L=6	2	2	
23	B10009	S38710001	球轴承 6204ZZNR	Ball bearing,6204ZZNR	1	1	
24	304034		手轮	Pully	1	1	
25	S10019		螺钉 M6×6	Set screw,socket(ft)M6×6	2	2	
26	13811021		手轮贴条	Handwheel lable	1	1	
27	12935003	SA2463001	同步皮带	Timing belt	1	1	
28	S10024	012061036	螺钉 M6×10	Set screw,socket(ft)M6×10	2	2	
29	12312012	SA2469001	挑线杆防护罩	Thread takeup lever cover	1	1	
30	S04028	062500816	螺钉 M5×8	Screw,pan M5×8	2	2	
31	12912005	SA4537001	防尘盖	Dust cover	1	1	
32	1291207900	SA3058101	遮掩板	Shelter plate	1	1	58420/58720
	12912082	SA4376101	遮掩板	Shelter plate	1	1	58450/58750
33	12923001	SA3065001	油毡	Felt	1	1	
34	12912006	SA3059101	遮掩板支座	Holder,shelter plate	1	1	
35	S04028	062500816	螺钉 M5×8	Screw,pan M5×8	1	1	

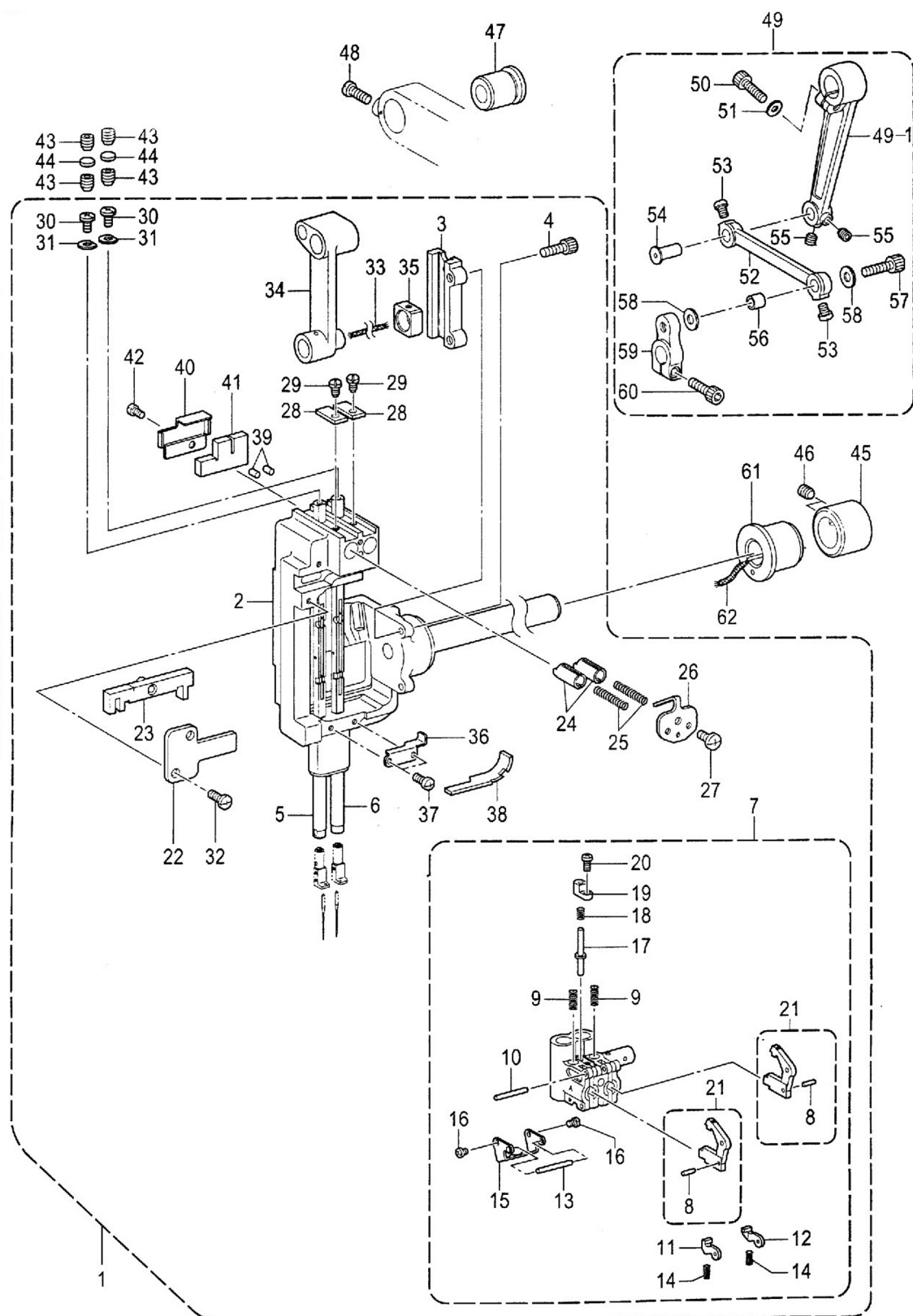
C1.针杆摆动部件/Needle bar rocking mechanism(58420、58720)



C1.针杆摆动部件/Needle bar rocking mechanism(58420、58720)

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	1290200200	SA4124301	针杆摆动轴组件	Needle bar rocker shaft assy	1	1	
2	1290100100	SA3854001	针杆台组件	Needle bar base assy	1	1	
3	12909001	SA2474201	角滑块槽	Slide block slider	1	1	
4	S05058	018401036	螺钉M4×10	Screw,pan M4×10	2	2	
5	12902003	SA2475101	针杆	Needle bar	1	1	
6	12905002	SA3710001	针杆抱箍	Needle bar clamp	1	1	
7	129S30021	062350816	螺钉M3.5×8	Screw,pan M3.5×8	1	1	
8	12923023		油线 2.5×4.5 L=40	Wick,2.5×4.5 L=40	1	1	
9	12905003	SA3711101	针杆曲柄连杆	Crank rod,nbar Slide	1	1	
10	12909002	SA3712001	角滑块	block Needle bearing	1	1	
11	12924001	SA2482001	滚针轴承	Case	1	1	
12	12903001	SA2483001	轴承套	Washer,plain Cap,nbar	1	1	
13	12928015	SA2484001	垫圈	Flat support,U	1	1	
14	12923002	148394000	针杆塞	Screw,pan M5×6 Flat	1	1	
15	12912007	SA4007001	油毡上支架U	support,D Wick,L=200	1	1	
16	S04030	062500616	螺钉M5×6		1	1	
17	12912008	SA3848001	油毡下支架D		1	1	
18	12923021	S07465000	油线 L=200		1	1	
19	12923003	SA3852001	油毡	Flat	1	1	
20	12908003	SA2485001	紧圈	Set screw collar	2	2	
21	S10063		固定螺钉 M6×0.75 L=5	Set screw,socket(ft)M6×5 L=5	4	4	
22	12903002	SA2486101	摆动轴轴套R	Bush,R	1	1	
23	S04028	062500816	螺钉M5×8	Screw,pan M5×8	1	1	
24	S04031	062061616	螺钉M6×16	Screw,pan M6×16	1	1	
25	1290501500		针杆摆动组件	Needle bar rocker lever assy	1	1	
26	12905004	SA2489001	针杆摆动连杆	Needle bar rocker lever	1	1	
27	S05078	018062032	螺栓M6×20	Bolt,socket M6×20	1	1	
28	20128033	118735002	垫圈	Washer	1	1	
29	12905005	SA2490101	针杆摆动杆	Rocker link,NBAR	1	1	
30	S04034	S23460001	螺钉M6×5	Screw,pan M6×5	2	2	
31	12926005	SA4117001	摆动杆轴P	Link shaft,NBAR rocker P	1	1	
32	S10019	012060636	螺钉 M6×6	Set screw,socket(ft)M6×6	2	2	
33	12903003	SA4118001	摆动杆轴套P	Zigzag link bush,P	1	1	
34	S05016	018062532	内六角螺栓M6×25	Bolt,socket M6×25	1	1	
35	12928002	SA2493001	垫圈	Washer,plain	2	2	
36	12901010	SA2494001	针杆摆动臂	Needle bar rock arm	1	1	
37	S05078	018062032	螺栓M6×20	Bolt,socket M6×20	1	1	

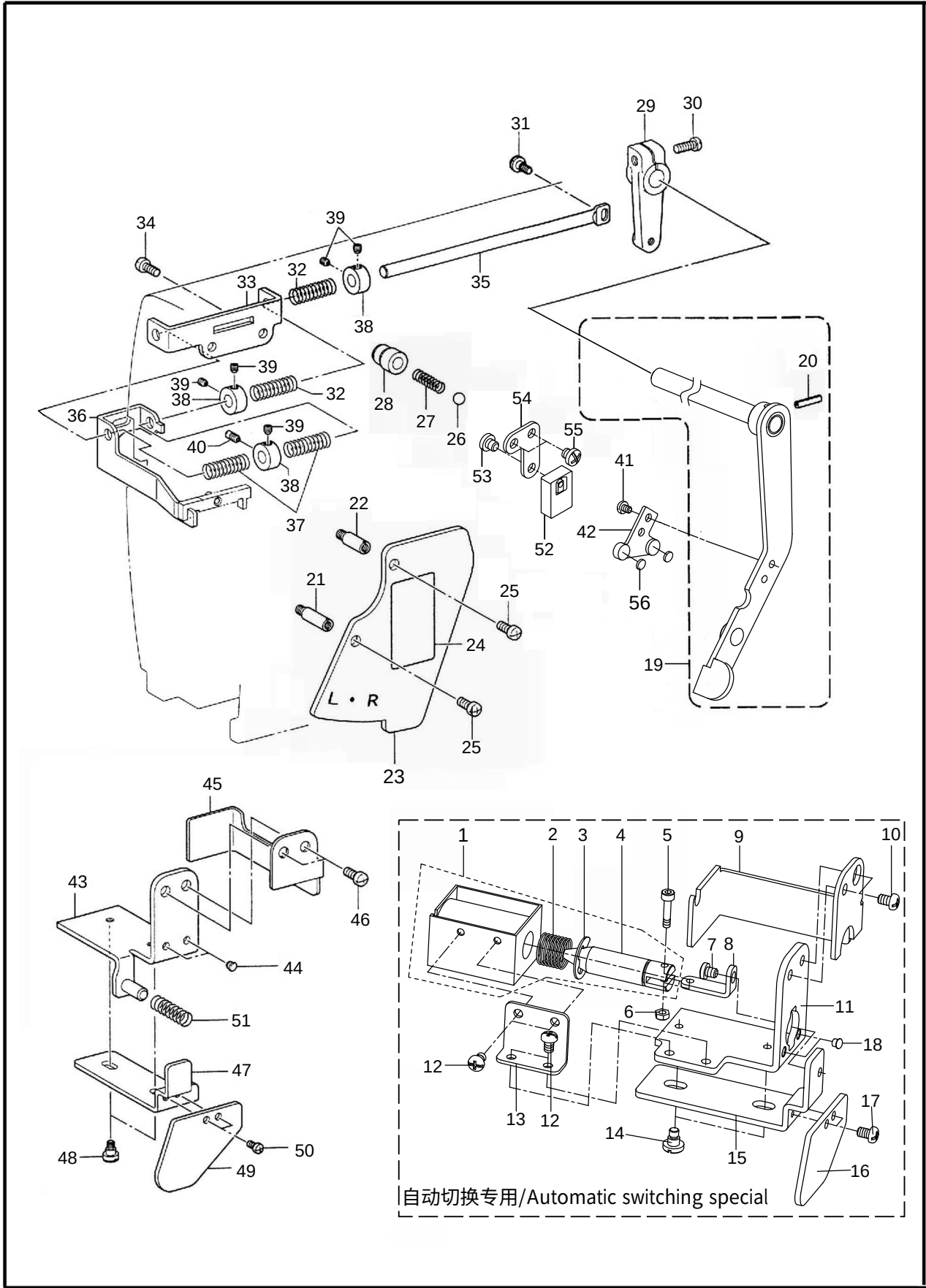
C2.针杆摆动部件/Needle bar rocking mechanism(58450、58750)



C2.针杆摆动部件/Needle bar rocking mechanism(58450、58750)

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	1290201400	SA4377001	针杆摆动轴组件	Needle bar rocker shaft assy	1	1	
2	1290100600	SA4378001	针杆台组件	Needle bar base assy	1	1	
3	12909001	SA2474201	角滑块槽	Slide block slider	1	1	
4	S05058	018401036	螺钉M4×10	Bolt socket M4×10	2	2	
5	12902015	SA4382001	针杆组件L	Needle bar assy,L	1	1	
6	12902016	SA4385001	针杆组件R	Needle bar assy,R	1	1	
7	12902017	SA4387001	针杆抱箍组件	Needlee bar clamp assy	1	1	
8	11726003	149604001	销 1.5×5.8	Pin 1.5×5.8	2	2	
9	12927019	149605001	离合器摆杆弹簧	Spring,clutch lever	2	2	
10	11726004	149827001	销 2×15.8	Pin 2×15.8	1	1	
11	12912102	S34561101	止动块 L	Clutch stopper,L	1	1	
12	12912066	S34562101	止动块 R	Clutch stopper,R	1	1	
13	11726005	149608001	销 2×17.8	Pin 2×17.8	1	1	
14	11727002	112609001	推动板止动簧	Spring	1	1	
15	12912067	SA4391001	弹簧支架	Spring holding	1	1	
16	129S3029	062260316	螺钉M2.6×3	Screw,pan M2.6×3	2	2	
17	11726006	149610001	销	Pin	1	1	
18	11727003	149611101	离合销弹簧	Spring,release pin	1	1	
19	12901009	SA4392001	离合销盖	Pin cover	1	1	
20	129S30030	062260516	螺钉M2.6×5	Screw,pan M2.6×5	1	1	
21	12912068	SA4389101	离合器摆杆组件	Clutch lever assy	2	2	
22	12912070	SA4395001	角滑块导向板	Slide block guide plate	1	1	
23	12909013	S07575000	滑块组件	Slide block assy	1	1	
24	12912071	SA4583001	针杆定位	Stopper,Nbar	2	2	
25	11727004	149622001	针杆止动器弹簧	Spring,Nbar stopper	2	2	
26	12912072	SA4396001	弹簧盖	Spring cover	1	1	
27	S04016	060350616	螺钉M3.5×6	Screw bind M3.5×6	1	1	
28	12912073	SA4397001	针杆定位块	Rotate stopper,NBar	2	2	
29	129S20005	SA4398001	螺钉SM3.5	Screw SM3.5	2	2	
30	S04016	060350616	螺钉M3.5×6	Screw bind M3.5×6	2	2	
31	W01001	SA4399001	垫圈	Washer,plane	2	2	
32	129S30021	062350816	螺钉M3.5×8	Screw pan M3.5×8	1	1	
33	12923021	112728001	油线 2×2 L=50	Wick,2×2 L=50	1	1	
34	12905016	SA4393001	针杆曲柄连杆	Crank rod,Nbar	1	1	
35	12909010	SA4394001	角滑块	Slide block	1	1	
36	12912074	SA4401001	油毡下支架D	Felt support,D	1	1	
37	S04016	062350616	螺钉M3.5×6	Screw bind M3.5×6	2	2	
38	12923027	SA4400001	油毡	Felt	1	1	
39	10123002	107155001	针杆上毡塞	Felt	2	2	
40	12912101	SA5155001	油毡上支架U	Felt support,U	1	1	
41	12923029	SA5237101	油毡	Felt	2	2	
42	S04041	062350516	螺钉M3.5×5	Screw pan M3.5×5	1	1	
43	S10025	014080831	紧定螺钉 M8×8	Set screw,socket(CP)M8×8	4	4	
44	12928021	154567000	衬垫5,3	Spacer,5,3	2	2	
45	12908003	SA2485001	紧圈	Set screw collar	1	1	
46	S10063		固定螺钉 M6X0.75 L=5	Set screw,socket(ft)M6×5 L=5	2	2	
47	12903002	SA2486101	摆动轴轴套R	Bush,R	1	1	
48	S04031	062061616	螺钉M6×16	Screw pan M6×16	1	1	
49	1290501500		针杆摆动组件	Needle bar rocker lever assy	1	1	
49-1	12905004	SA2489001	针杆摆动连杆	Needle bar rocker lever assy	1	1	
50	129S13004	018062032	螺栓M6×20	Bolt socket M6×20	1	1	
51	20128033	118735002	垫圈6	Washer	1	1	
52	12905005	SA2490101	针杆摆动杆	Rocker link,NBar	1	1	
53	S04034	S23460001	螺钉M6×5	Screw pan M6×5	2	2	
54	12926005	SA4117001	摆动杆轴P	Link shaft,Nbar rocker P	1	1	
55	S10019	012060636	螺钉 M6×6	Set screw,socket(ft)M6×6	2	2	
56	12903003	SA4118001	摆动杆轴套P	Zigzag link bush,P	1	1	
57	S05016	018062532	螺栓M6×25	Bolt socket M6×25	1	1	
58	12928002	SA2493001	垫圈	Washer,plain	2	2	
59	12901010	SA2494001	针杆摆动臂	Needle bar rock arm	1	1	
60	S05078	018062032	螺栓M6×20	Bolt socket M6×20	1	1	
61	12903018	SA5332001	轴套L	Bush,L	1	1	
62	12923018	SA8204000	油线4×4 L=150	Wick,4×4 L=150	1	1	

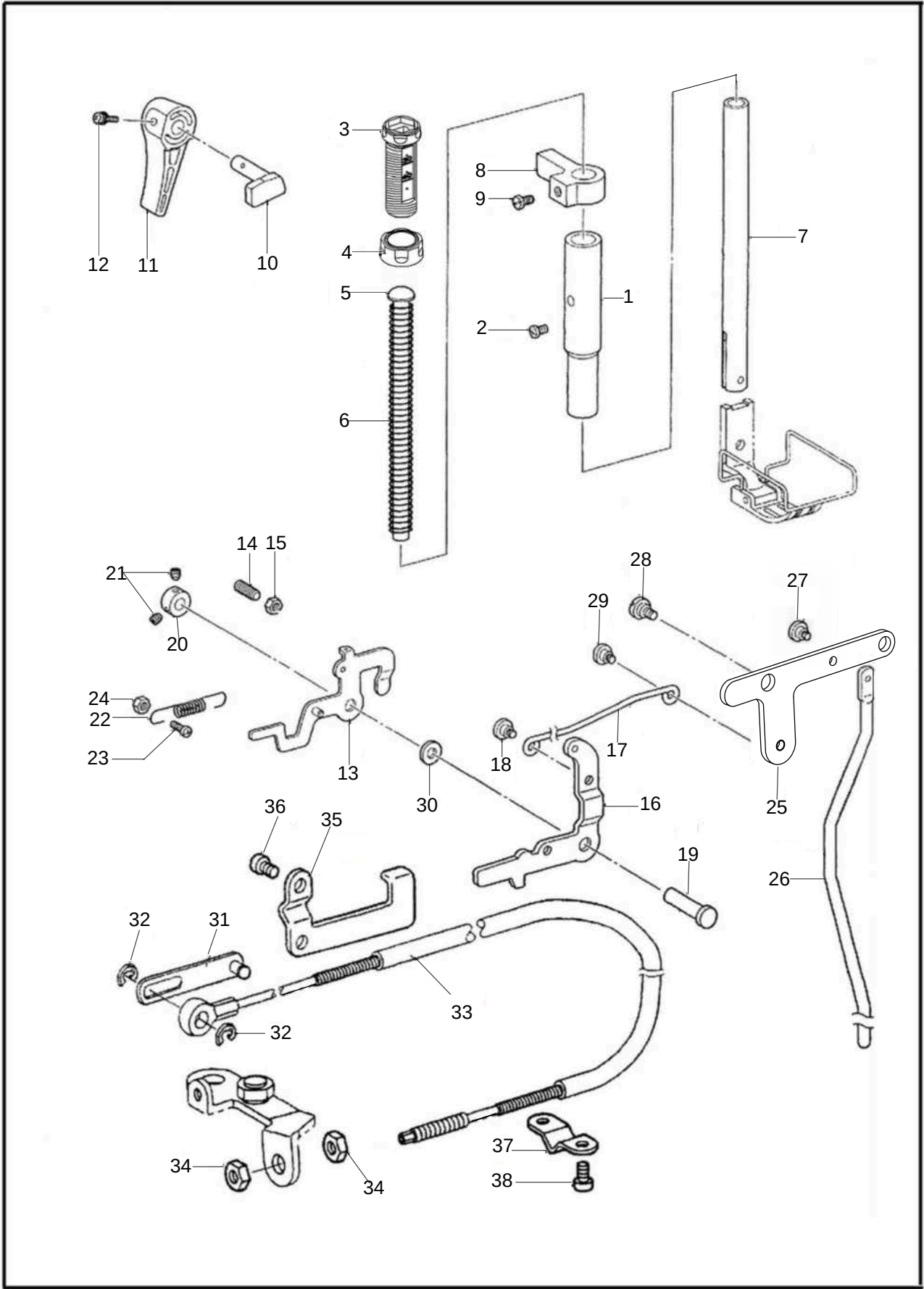
D.针杆切换部件/Needle bar flip-up mechanism(58450、58750)



D.针杆切换部件/Needle bar flip-up mechanism(58450、58750)

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	1233000800		针杆复位电磁铁	Needle bar reset solenoid	1	1	-□1□
2	12327005		电磁铁复位弹簧	solenoid reset spring	1	1	-□1□
3	H05011		限位挡圈9	Retaining ring,9	1	1	-□1□
4	12330009		限位电磁铁铁芯	Solenoid core	1	1	-□1□
5	S05329		连接螺钉	Screw,pan	1	1	-□1□
6	N01013		锁紧螺母	Nut	1	1	-□1□
7	12312024		复位连接板	Reset connector	1	1	-□1□
8	S04021		固定螺钉M4×4	Set screw M4×4	1	1	-□1□
9	12312017		指示板盖	Holder plate cover	1	1	-□1□
10	S04032	062501016	螺钉M5×14	Screw pan M5×14	2	2	
11	12312018		指示板组件	Indication plate assy	1	1	-□1□
12	207S11011		固定螺钉M4×5	Set screw M4×5	4	4	-□1□
13	12312019		复位电磁铁安装板	Solenoid mounting plate	1	1	-□1□
14	301S20001		段螺钉M4	Shoulder screw,M4	2	2	
15	12312021		压板	Push lever	1	1	
16	12312022		压杆板	Plate,push lever	1	1	
17	S04041	062350516	螺钉 M3.5×5	Screw pan M3.5×5	2	2	
18	12922004	104833001	橡皮塞4.3	Rubber cap,4.3	2	2	
19	1231202000		定位杆轴组件	Stop lever shaft assy	1	1	-□1□
	1291206000	SA4406001	定位杆轴组件	Stop lever shaft assy	1	1	
20	11729011	047301842	弹簧销AW3×18	Pin spring roll AW3×18	1	1	
21	123S30004	SA4408001	螺栓L	Stud,L	1	1	
22	123S30005	SA4409001	螺栓S	Stud,S	1	1	
23	12912061	SA4411101	切换指示板	Flipup holder plate	1	1	
24		S18964001	切换指示标签	Label	1	1	
25	S04028	062500816	螺钉M5×8	Screw pan M5×8	2	2	
26	12903016	SA4412001	轴承导向套	Ball guide bush	1	1	
27	12927022	150820001	弹簧	Spring	1	1	
28	11724001	071063550	钢珠1/4	Bearing ball	1	1	
29	12304001	SA4413001	轴臂	Arm,lever shaft	1	1	
30	S05004	062501416	螺钉M5×14	Screw pan M5×14	1	1	
31	123S20002	SA5588001	螺钉M4	Shoulder screw,M4	1	1	
32	11727007	SA4414001	弹簧	Spring	2	2	
33	12312006	SA4415001	滑轴架	Slide shaft bracket	1	1	
34	S04028	062500816	螺钉M5×8	Screw pan M5×8	2	2	
35	12312007	S07588101	滑动轴	Slide shaft	1	1	
36	12312008	SA4416001	支架板	Support plate,slide shaft	1	1	
37	12927018	149863001	弹簧	Spring,plate	2	2	
38	12303003	SA4417001	紧圈	Set screw collar	3	3	
39	S10007	014400432	紧定螺钉M4×4	Set screw,socket(CP)M4×4	5	5	
40	123S11004	SA4418001	导向螺钉	Guide screw	1	1	
41	207S11011		固定螺钉M4×5	Set screw M4×5	2	2	
42	12311010		感应磁钢安装板	Solenoid mounting plate	1	1	
43	12312002	SA4402001	指示板组件	Indication plate assy	1	1	
44	12922004	104833001	橡皮塞4.3	Rubber cap,4.3	2	2	
45	12312003	SA5336001	指示板盖	Holder plate cover	1	1	
46	S04032	062501016	螺钉M5×14	Screw pan M5×14	2	2	
47	12312004	SA4404001	压板	Push lever	1	1	
48	123S20001	SA4441001	段螺钉M4	Shoulder screw,M4	2	2	
49	12912059	SA4405001	压杆板	Plate,push lever	1	1	
50	S04041	062350516	螺钉 M3.5×5	Screw pan M3.5×5	2	2	
51	12927017	SA5333001	弹簧	Spring	1	1	
52	12330010		霍尔传感器	Hall sensor	1	1	
53	S04021		固定螺钉M4×4	Set screw M4×4	1	1	
54	12312023		霍尔传感器安装板	Hall sensor mounting plate	1	1	
55	207S11011		固定螺钉M4×5	Set screw M4×5	2	2	
56	12347001		感应磁钢	Magnet	2	2	

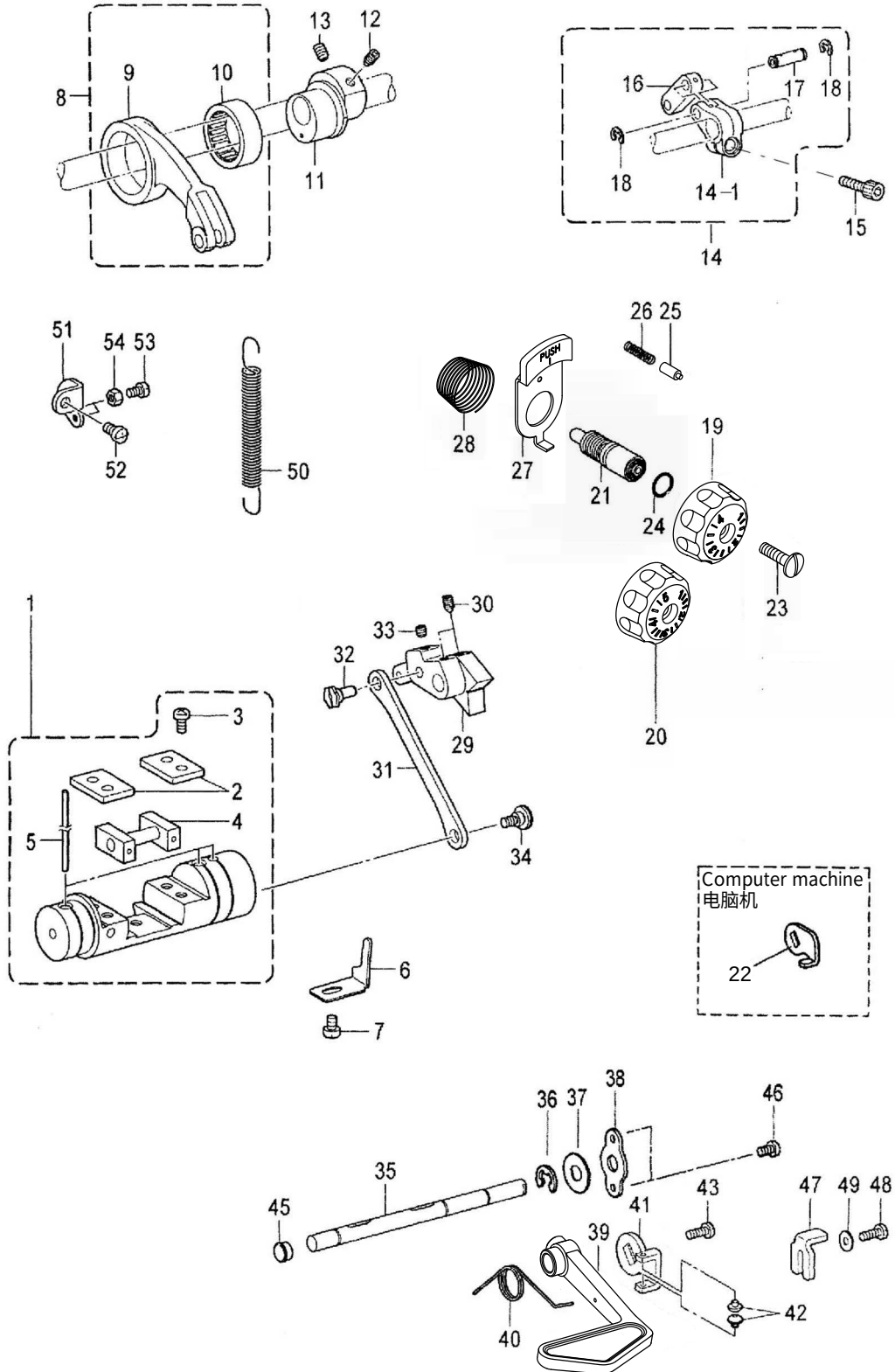
E.压脚部件/Presser foot mechanism



E.压脚部件/Presser foot mechanism

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	12903004	SA2495001	压杆轴套	Presser bar bush	1	1	
2	S04028	062500816	螺钉M5×8	Screw,pan M5×8	1	1	
3	123S30002		调节螺栓 M14	Presser adjusting screw M14	1	1	
4	123S16001		调节螺母 M14	Presser adjusting nut M14	1	1	
5	12905006	SA7607001	弹簧导杆	Spring guide	1	1	
6	11627002	S07346101	压紧弹簧	Presser bar spring,5	1	1	
7	12902004	SA2496001	压紧杆	Presser bar	1	1	
8	12905007	SA2498001	压杆抱箍	Guide bracket,PBAR	1	1	
9	129S12001	S25289001	螺栓M6×10	Bolt,socket M6×10	1	1	
10	12904002	SA2499001	压杆提升曲柄	Presser bar lifting crank	1	1	
11	12311007	S31006001	抬压脚扳手	Lifting lever	1	1	
12	124S30009	S39051001	螺钉(带垫圈)M3.5×12	Screw,pan(s/p w) M3.5×12	1	1	
13	1291300100	S07353001	松线板组件	Tension release plate assy	1	1	58□□0B
	1291330100	S07351001	松线板组件	Tension release plate assy	1	1	58□□0J
14	S09018	012061832	螺钉M6×18	Set screw,socket(ft)M6×18	1	1	
15	N01012	012061832	螺母M6	Nut M6	1	1	
16	12912010	SA2501001	抬压脚连杆	Presser bar lifting lever	1	1	
17	12912095		膝控连杆	Knee lifter connecting rod	1	1	
18	129S20001	SA1179001	段螺钉M5	Shoulder screw,M5	1	1	
19	11626008	S07349001	膝提前拔销	Pbar lifting lever shaft	1	1	
20	12908004	SA2504001	紧圈	Set screw,collar	1	1	
21	S09019	012500536	螺钉M5×5	Set screw,socket(ft)M5×5	2	2	
22	12927002	S07355051	弹簧	Spring extension	1	1	
23	S04032	062501416	螺钉M5×14	Screw,pan M5×14	1	1	
24	N01017	021500106	六角螺母M5	Nut 1 M5	1	1	
25	12912090		抬压脚后杠杆	Knee lifter lever	1	1	
26	12912600		膝控顶杆	Knee lifter bar	1	1	
27	129S20001	SA1179001	段螺钉M5	Shoulder screw,M5	1	1	
28	129S20002	SA2165001	段螺钉M6	Shoulder screw,M6	1	1	
29	129S20001	SA1179001	段螺钉M5	Shoulder screw,M5	1	1	
30	12928016	S07350001	垫圈	Washer,plain	1	1	
31	1291230100	S07529001	松线连杆组件	Thread release connecting rod assy	1	1	
32	H05002	048030342	挡圈E3	Retaining ring ,E3	1	1	
33	12930301	SA2677001	松线电线	Tension release wire	1	1	
34	116S16006		螺母SM3/16"×32	Nut SMSM3/16"×32	2	2	
35	12912302	SA2678001	松线电线夹	Wire holder	1	1	
36	S04028	062500816	螺钉M5×8	Screw,pan M5×8	2	2	
37	12912303	SA2679001	松线电线夹	Wire holder	1	1	
38	S04038	062060816	螺钉M6×8	Screw,pan M6×8	2	2	

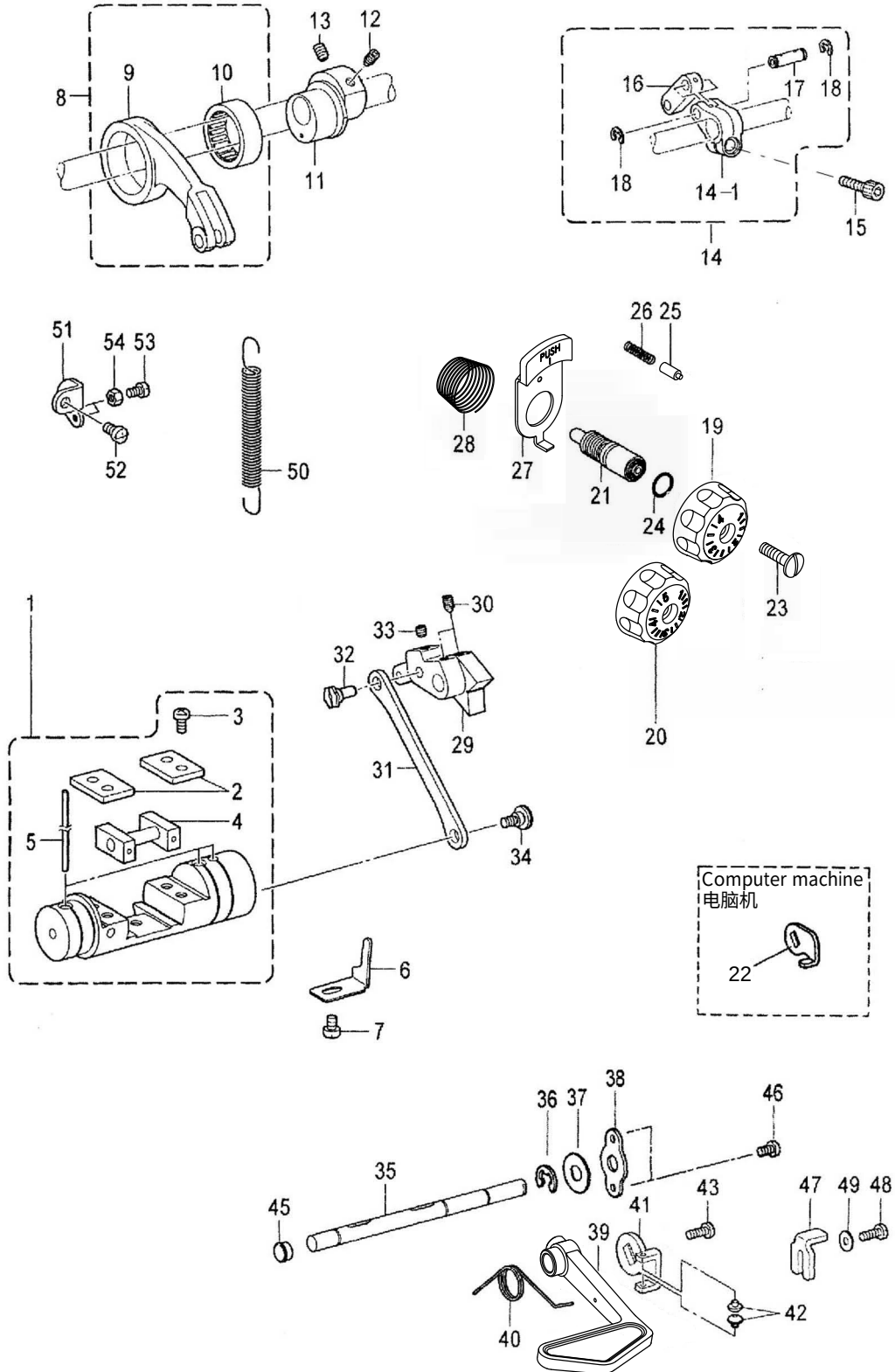
F.送布部件/Feed mechanism



F.送布部件/Feed mechanism

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	1290200500	SA3062001	切换器11组件	Feed regulator assy,11	1		58420
	1290200500	SA3062001	切换器11组件	Feed regulator assy,11	1	1	58720/58750
1	1290200600	SA2509001	切换器组件	Feed regulator assy		1	58420
	1290200600	SA2509001	切换器组件	Feed regulator assy	1	1	58450
2	12909003	SA2511001	滑块导向	Guide plate	2	2	
3	S04029	062501016	螺钉M5×12	Screw,pan M5×12	4	4	
4	12909004	SA2512001	滑块组件	Slide block assy	1	1	
5	12923018	SA2515001	油线 4×4 L=150	Wick,4×4 L=150	1	1	
6	12912014	SA2516001	切换器定位	Stopeer	1	1	
7	S04033	062060816	螺钉M6×8	Screw,pan M6×8	1	1	
8	1290500800	143611201	送布连杆组件	Frocker connecting rod assy	1	1	
9	12905009	143612100	送布大连杆	Feed rocker connecting rod	1	1	
10	11624002	118954000	滚针轴承	Needle bearing	1	1	
11	12910001	SA2518001	送布偏心轮5	Level feed eccentric wheel 5	1	1	58420/58450
	12910201	SA2791001	送布偏心轮7	Level feed eccentric wheel 7	1	1	58720/58750
12	S10020		螺钉	Set scre	1	1	
13	S10023		倒送料扳手定位螺钉	Set screw	1	1	
14	1290400800		水平送料臂5组件	Feed rocker arm5 assy	1	1	58420/58450
	1290400900		水平送料臂7组件	Feed rocker arm7 assy	1	1	58720/58750
14-1	12904003	SA2521001	水平送料臂5	Feed rocker arm5	1	1	58420/58450
	12904201	SA2793001	水平送料臂7	Feed rocker arm7	1	1	58720/58750
15	S05078	018062032	螺栓M6×20	Bolt,socket M6×20	1	1	
16	12905010	143613051	送布小连杆	Link	1	1	
17	11626010	143616001	送布曲柄轴	Shaft	1	1	
18	11629002	048060342	挡圈E6	Retaining ring ,E6	2	2	
19	1231100200		针距标盘4	Stitch length dial,4	1		58420
20	1231100300		针距标盘5	Stitch length dial,5		1	58420
	1231100300		针距标盘5	Stitch length dial,5	1	1	58450
	1231100400		针距标盘7	Stitch length dial,7	1	1	58720/58750
21	129S30007	SA3056001	调节螺栓	Feed regulating stud	1	1	
22	12912304	SA2541001	倒缝扳手板	Reverse stitching lever plate	1	1	58□□0J
23	101S11022		螺钉SM3/16"×28	Screw,SMSM3/16"×28	1	1	
24	10122016	108549001	O形圈	O Ring	1	1	
25	11426022	S50098101	定位销	Positioning pin	1	1	
26	11427034	100328001	止动销弹簧	Notch spring	1	1	
27	11412079		标盘锁按键	Dial lock lever	1	1	
28	11427035		弹簧	Spring	1	1	
29	12909005	SA2525001	送料调节器 5	Feed regulator 5	1	1	58420/58450
	12909201	SA2796001	送料调节器 7	Feed regulator 7	1	1	58720/58750
30	S10021	016061031	紧定螺钉 M6×10	Set screw,socket(cn)M6×10	2	2	
31	12905011	SA2526001	切换器连杆	Connecting rod	1	1	
32	12910002	SA2527001	偏心轴	Eccentric shaft	1	1	
33	S10019	012060636	螺钉M6×6	Set screw,socket(ft)M6×6	1	1	
34	129S20003	SA2528101	段螺钉M6	Shoulder screw,M6	1	1	
35	12902007	SA2529101	倒缝手柄轴 TR	Shaft,Rlever TR	1	1	
36	12929003	048080342	挡圈E8	Retanining ring ,E8	1	1	
37	11628003	025100132	平垫圈S10	Washer,plain S 10	1	1	
38	12912017	SA2530001	垫片	Spacer	1	1	
39	304033	S07374109	倒缝扳手	Reverse stitching lever	1	1	
40	12927005	SA2531001	弹簧	Spring	1	1	

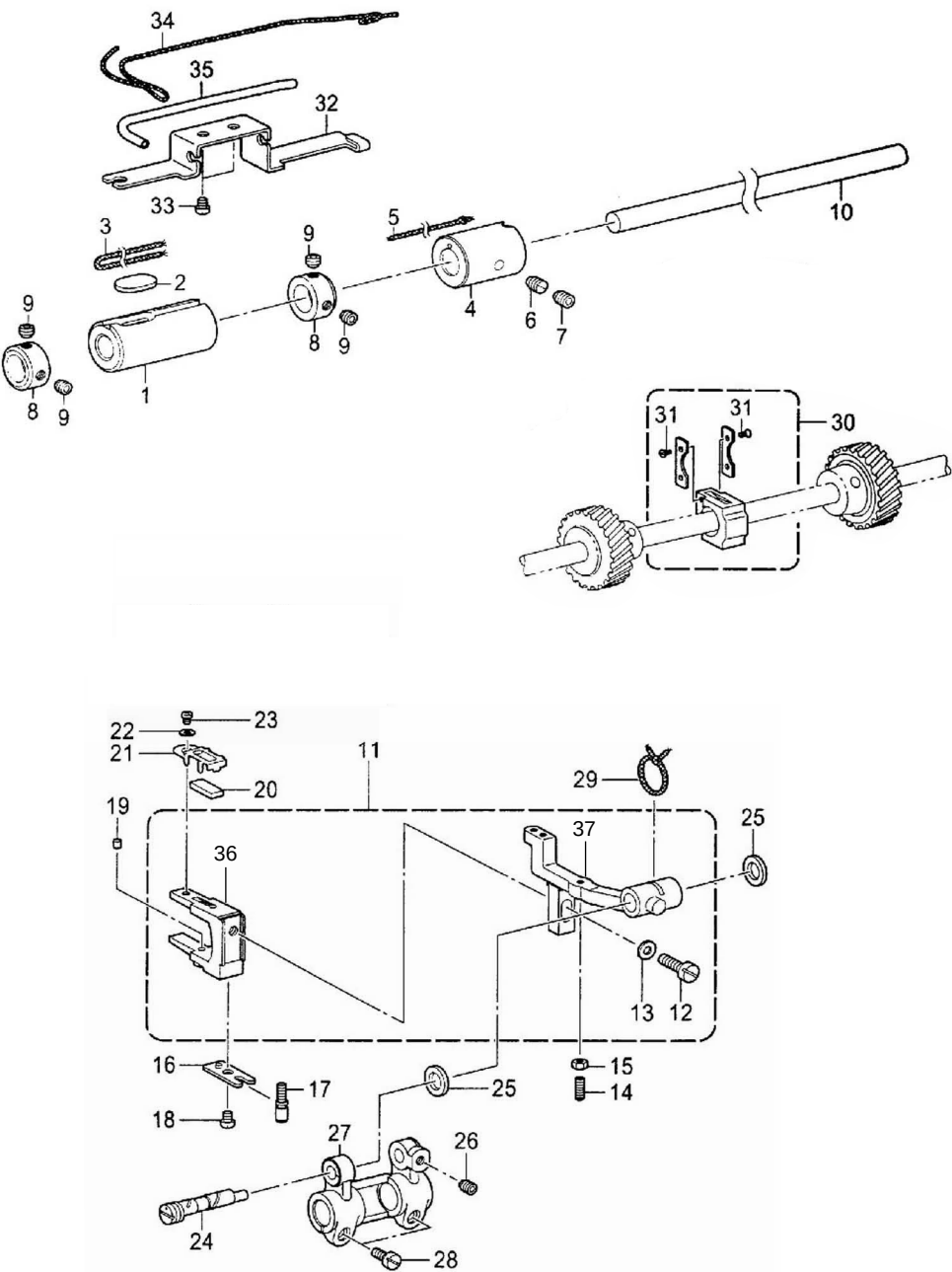
F.送布部件/Feed mechanism



F.送布部件/Feed mechanism

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
41	12912018	SA3067001	手柄导向	Lever guide	1	1	58□□0B
42	12922002	S48367000	导向橡皮	Rubber	2	2	58□□0B
43	129S11001	SA6592001	螺钉M5	Screw,pan M5	1	1	
45	40122016	104821001	橡皮塞10.5	Rubber cap,10.5	1	1	
46	S04028	062500816	螺钉M5×8	Screw,pan M5×8	2	2	
47	12912019	SA2532001	定位器	Stooper	1	1	
48	S04029	062501216	螺钉M5×12	Screw,pan M5×12	1	1	
49	12928018	025050236	平垫圈M5	Washer,plain M5	1	1	
50	12927006	S07376001	调节器弹簧	Feed regulator spring	1	1	
51	12912020	SA2533001	弹簧挂钩	Spring hook	1	1	
52	S04038	062060816	螺钉M6×10	Screw,pan M6×10	1	1	
53	S04029	062501216	螺钉M5×12	Screw,pan M5×12	1	1	
54	N01017	021500106	六角螺母M5	Nut 1 M5	1	1	

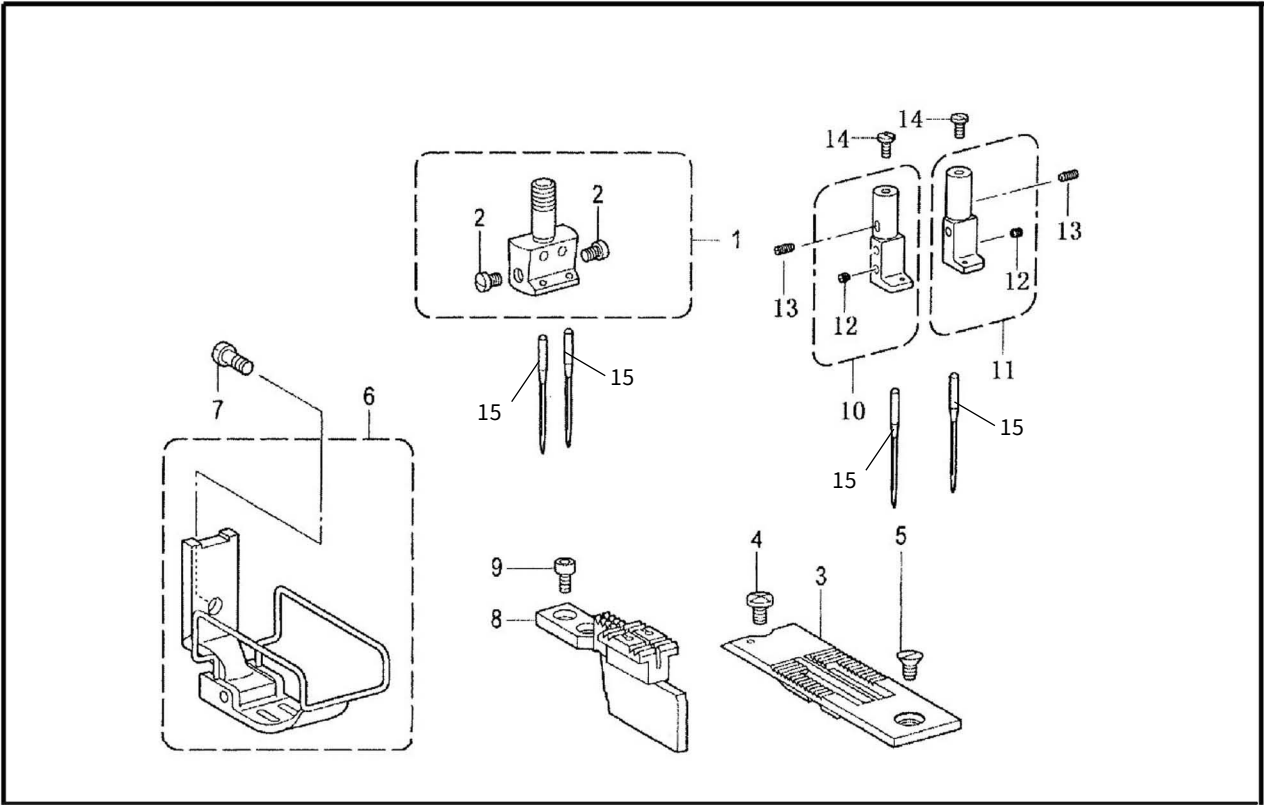
G.送布轴部件/Feed shaft mechanism



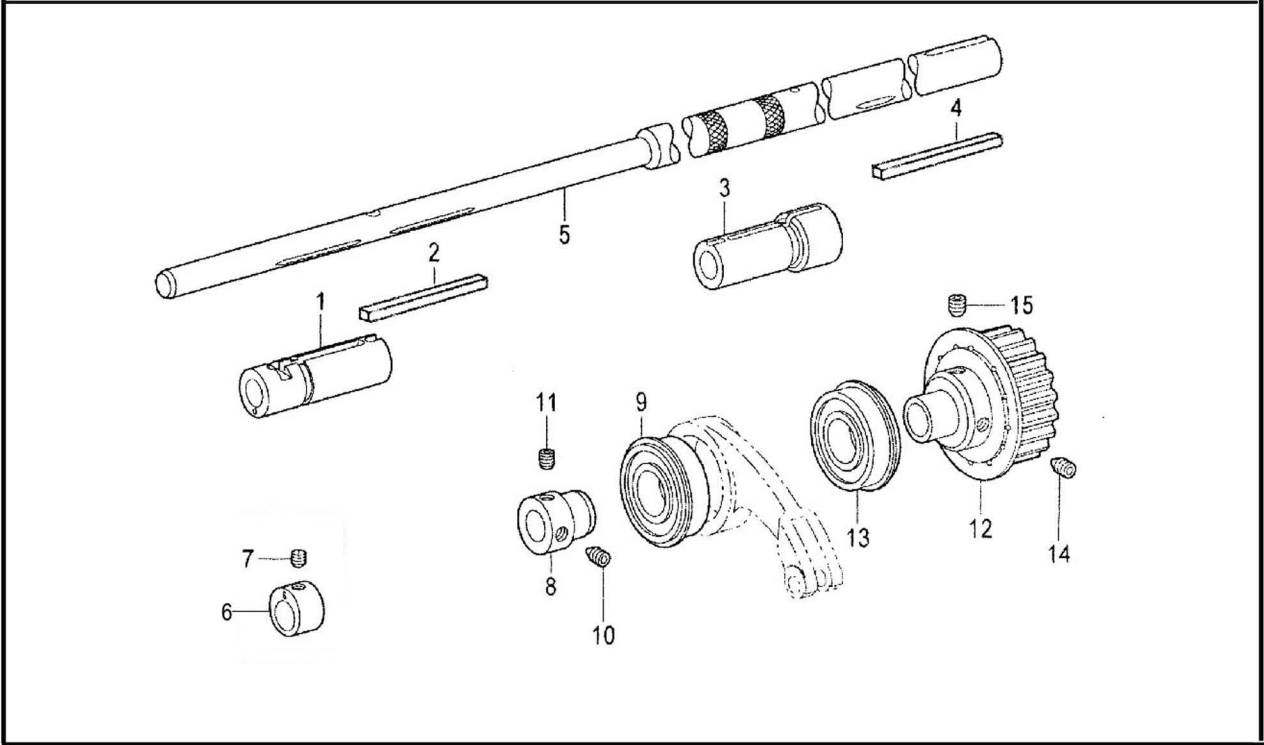
G.送布轴部件/Feed shaft mechanism

序号 No	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	12903005	SA3855001	送布轴套L	Bush,l:frocker shaft	1	1	
2	12923005	SA3965001	油毡	Felt	1	1	
3	12923018	SA4028001	油线 4×4 L=120	Wick,4×4 L=120	1	1	
4	12903006	SA2543001	送布轴套R	Feed rocker shaft bush,R	1	1	
5	12923018	108802001	油线 4×4 L=250	Wick,4×4 L=250	1	1	
6	S10022	SA2544001	紧定螺钉 M6×8	Set screw M6×8	1	1	
7	S10019	012060636	螺钉M6×6	Set screw,socket M6×6	1	1	
8	12908005	SA2546001	紧圈	Set screw collar	2	2	
9	S10018	S23651001	紧定螺钉M6×0.75 L=6	Set screw,socket M6×0.75 L=6	4	4	
10	12902008	SA3840001	送布轴	Feed rocker shaft	1	1	
11	1290700200		送布台叉组件 ST	Feed bar st fork assy	1	1	58□□0B
	1290720100	SA6150101	送布台叉组件 TR	Feed bar tr fork assy	1	1	58□□0J
12	207S11006	SA2927001	螺钉 M6×14	Screw, M6×14	1	1	
13	11628005	025060132	平垫圈S6	Washer,plain S 6	1	1	
14	S07005	SA2566001	螺钉M3.5×12	Set screw M3.5×12	1	1	
15	N01016	021350106	螺母M3.5	Nut 1 M3.5	1	1	
16	12912021	SA2553001	开叉板	Forked plate	1	1	
17	129S30010	SA2554001	调整螺栓	Adusting screw,height	1	1	
18	S04035	062400616	螺钉M4×6	Screw,pan M4×6	1	1	
19	12923006	SA3990001	油毡	Flat	2	2	
20	12923007	SA3887001	油毡	Flat	1	1	
21	12912022	SA3888001	油毡压架	Flat holder	1	1	
22	12928019	025030132	平垫圈S3	Washer,plain S 3	1	1	
23	S04036	062300416	螺钉M3×4	Screw,pan M3×4	1	1	
24	12910003	SA2550001	送布台安装轴	Feed bar shaft	1	1	
25	12928003	SA2551001	轴向垫圈	Thrust ring	2	2	
26	S10019	012060636	螺钉M6×6	Set screw,socket(ft)M6×6	1	1	
27	12904004	SA2555001	水平送布台臂	Feed rocker base arm	1	1	
28	S01059	SA2928001	螺钉M5×13	Screw,M5×13	2	2	
29	12923018	SA4538001	油线 4×4 L=180	Wick,4×4 L=180	1	1	
30	1290900600	SA2806001	角滑块组件	Feed bar slide block assy	1	1	
31	S02018	SA6308001	螺钉M2×4	Screw,flat M2×4	4	4	
32	12912023	SA4009001	油线支架	Wick support	1	1	
33	S04035	062400616	螺钉M4×6	Screw,pan M4×6	2	2	
34	12923018	SA2724001	油线4×4 L=400	Wick,4×4 L=400	1	1	
35	12921002	SA4011001	维尼龙油管 L=100	Oil tube,L=100	1	1	
36	12905012		送布台叉	Feed bar fork	1	1	
37	12907001		送布ST	Feed bar , st	1	1	58□□0B
	12907202		送布TR	Feed bar , tr	1	1	58□□0J

H.针位部件/Gauge parts



I.下轴部件/Lower shaft mechanism

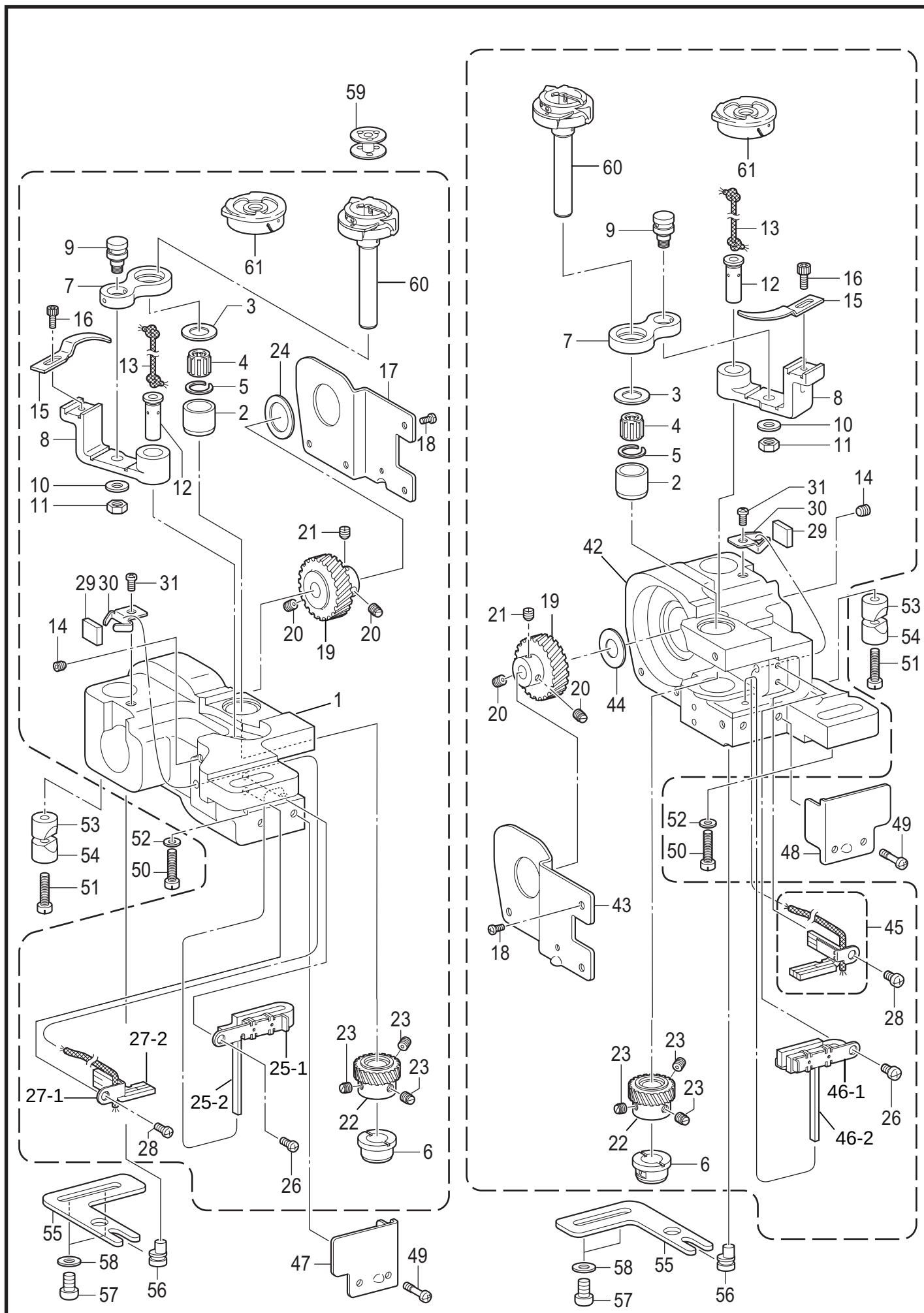


H.针位部件/Gauge parts

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	★		针夹组件	Needle clamp assy	1	1	58□20□
2	116S11012	116323001	螺钉SM9/64"×40 L=4	Screw,SMSM9/64"×40 L=4	2	2	58420/58720
3	★		针板	Needle plate	1	1	
4	129S30014	S11244001	针板螺钉SM11/64"×40 L=7	ScrewSM11/64"×40 L=7	1	1	
5	129S17003	100032004	平头螺钉SM11/64"×40 L=8	Screw,flatSM11/64"×40 L=8	1	1	58420B系列
	1123NS17001		针板螺钉SM11/64"×40 L=12	ScrewSM11/64"×40 L=12	1	1	58420J系列
6	★		压脚组件	Presser foot assy	1	1	
7	129S11010	113050001	螺钉SM9/64×44" L=9	Screw,SM9/64×44" L=9	1	1	
8	★		送布牙	Feed dog	1	1	
9	129S13002	S07494001	螺钉SM1/8×44" L=7	Screw,w/socket SM1/8×44" L=7	2	2	
10	★		针夹组件L	Needle clamp assy,L	1	1	58□50□
11	★		针夹组件R	Needle clamp assy,R	1	1	58□50□
12	129S15006	013660412	螺钉SM1/8"×40 L=4	Screw,SM1/8"×40 L=4	2	2	58450/58750
13	129S15007	S13085001	螺钉SM1/8"×40 L=5.5	Screw,SM1/8"×40 L=5.5	2	2	58450/58750
14	117S11023	149831101	螺钉SM1/8"×40 L=7	Screw,SM1/8"×40 L=7	2	2	58450/58750
15	11617002		机针DP×5 (#14)	Needle ,DP×5	2		
	10117002		机针DP×5 (#21)	Needle ,DP×5		2	
★参考针位组零件明细表/★Reference gauge parts list							

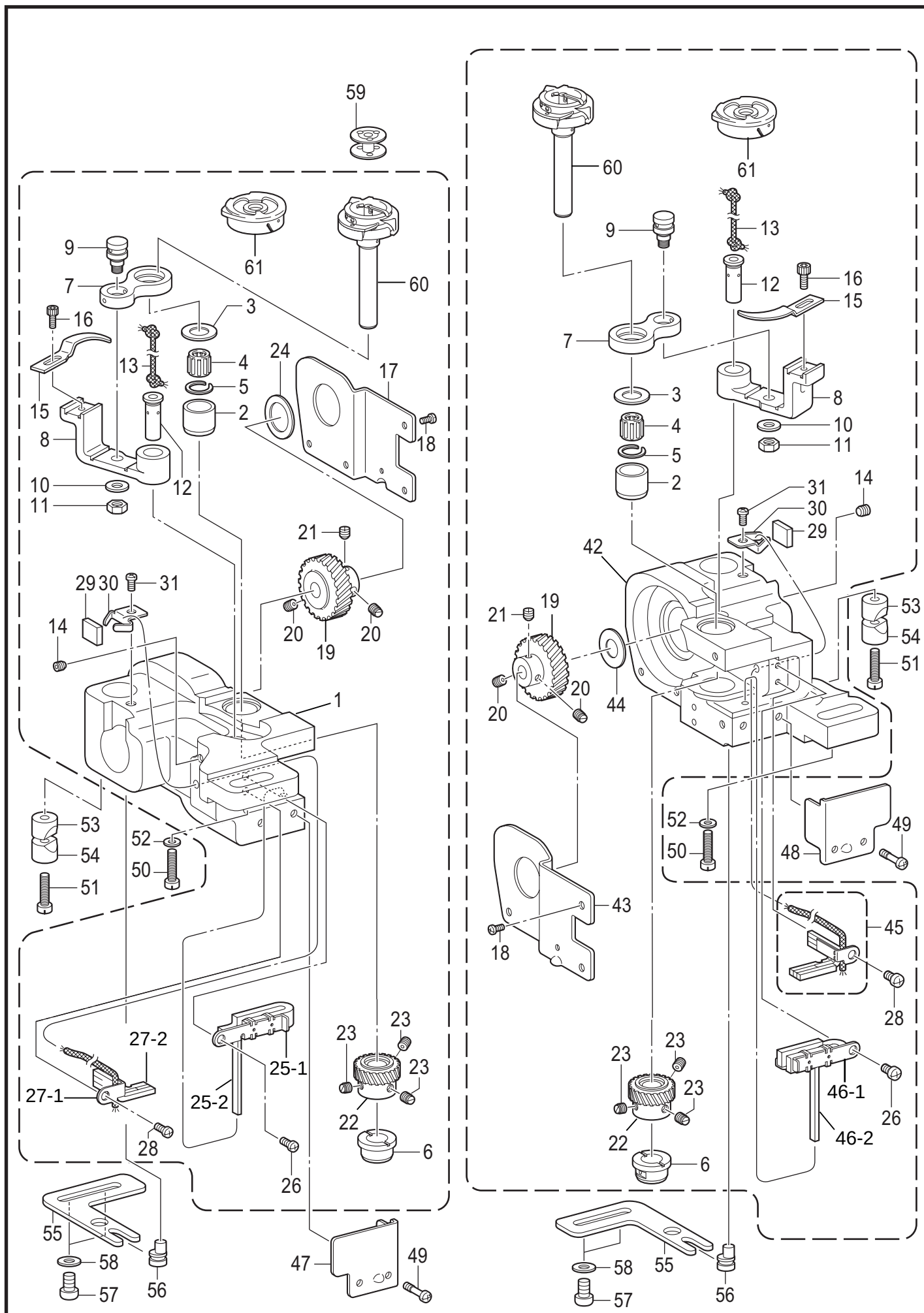
I.下轴部件/Lower shaft mechanism

No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	12903011	SA3890001	旋梭基座轴套L	Rotary hook base bush,L	1	1	
2	12923023	SA4585001	油毡	Felt	1	1	
3	12303001		旋梭基座轴套R	Rotary hook base bush,R	1	1	58□□0J
	12903012	SA3891001	旋梭基座轴套R	Rotary hook base bush,R	1	1	58□□0B
4	12923023	SA4585001	油毡	Felt	1	1	
5	12902010	SA2571001	下轴	Lower shaft	1	1	
6	12910005	SA2759001	抬牙凸轮	F-lifting eccentric wheel assy	1	1	58□□0B
	12910302	SA2580101	抬牙凸轮	F-lifting eccentric wheel assy	1	1	58□□0J
7	S07004	SA2575001	螺钉M6×0.75 L=6	Set screw,(ft)M6×0.75 L=6	1	1	
8	12903013	SA2584001	轴承套	Ball bearing bush	1	1	
9	B10002	S38707001	球轴承 6004ZZNR	Ball bearing,thrust 6004ZZNR	1	1	
10	S10020	SA2585001	固定螺钉M6×0.75 L=10	Screw,socket(ft)M6×0.75 L=10	1	1	
11	S09017	S23651001	固定螺钉M6×0.75 L=10	Screw,socket(ft)M6×0.75 L=10	1	1	
12	12935004	SA2587101	同步轮D组件	Timing pulley assy,D	1	1	
13	B10009	158115001	球轴承 6204ZZNR	Ball bearing,thrust 6204ZZNR	1	1	
14	S10020	SA2585001	固定螺钉M6×0.75 L=10	Screw,socket(ft)M6×0.75 L=10	1	1	
15	S10023	SA4213001	固定螺钉M6×0.75 L=10	Screw,socket(CP)M6×0.75 L=10	1	1	



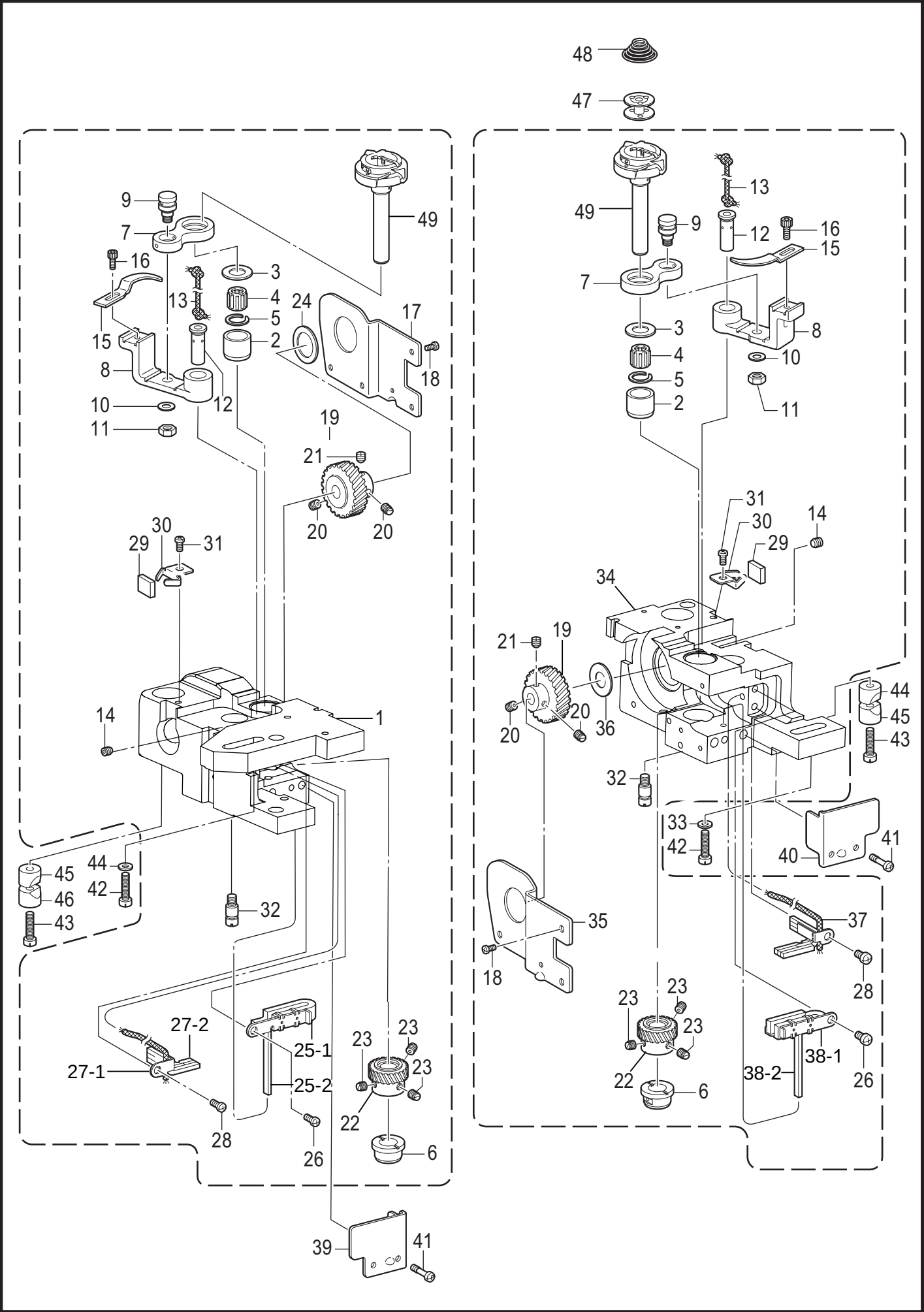
J1.旋梭部件/Rotary hook mechanism(58□□0B)

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	12918008	SA2955001	梭架(左)	Rotary hook base(L)	1	1	58420B/58450B
	12918201	SA2959001	梭架(左)	Rotary hook base(L)	1	1	58720B/58750B
2	11603011	SA4029001	旋轴上轴套	Rotary hook shaft bush	2	2	58420B/58450B
	11803001	S09259001	旋轴上轴套	Rotary hook shaft bush	2	2	58720B/58750B
3	12928004	S09260001	轴向垫圈A 1.2MM	Thrust ring,A:1.2MM<t=1.2>	2	2	
	12928005	SA4038001	轴向垫圈1.0MM	Thrust ring<t=1.0>	2	2	
	12928006	S09261001	轴向垫圈B 1.4MM	Thrust ring,B:1.4MM<t=1.4>	2	2	
	12928007	SA4444001	轴向垫圈B 0.8MM	Thrust ring,0.8MM<t=0.8>	2	2	
4	11624004	S07420000	滚针轴承	Needle bearing	2	2	
5	11629004	S07419001	梭轴上轴挡圈	Retaining ring	2	2	
6	12903008	SA6474001	旋梭轴套D	Rotary hook shaft bush	2	2	
7	12905013	SA3856001	分线钩连杆	Opener link	2	2	58420B/58450B
	12905303	SA3857001	分线钩连杆	Opener link	2	2	58720B/58750B
8	12905014	SA3859001	分线钩杆	Opener lever	2	2	58420B/58450B
	12905304	SA3861001	分线钩杆	Opener lever	2	2	58720B/58750B
9	12902009	SA2560001	分线钩连杆轴	Shaft,Olink	2	2	
10	12928008	025710132	平垫圈	Washer,plain	2	2	
11	N01017	021500316	六角螺母M5	Nut3 M5	2	2	
12	12926009	SA3889101	分线钩杆短轴	Olever shaft	2	2	
13	12923018	SA4026001	油线 4×4 L=100	Wick,4×4L=100	2	2	
14	S09019	012501031	螺钉M5×5	Set screw,socket(ft)M5×5	2	2	
15	11612014	S38212001	分线钩	Opener	2	2	
16	129513003	154965001	螺钉SM3.57×8	Bolt,socket SM3.75×8	2	2	
17	12912024	SA2562201	旋梭基座盖L	Rotary hook base cover,L	1	1	
18	S04037	062300612	螺钉M3×6	Screw,pan M3×6	8	8	
19	12925003	SA2572001	螺旋齿轮(大)	Spiral gear	2	2	
20	S08007	SA2574001	螺钉M6×0.75 L=5	Set screw,(ft)M6×0.75 L=5	4	4	
21	S07009	SA2575001	螺钉M6×0.75 L=6	Set screw,(ft)M6×0.75 L=6	2	2	
22	12925004	SA6301001	螺旋齿轮(小)	Spiral gear	2	2	
23	S10063	SA2574001	螺钉M6×0.75 L=5	Set screw,(ft)M6×0.75 L=5	6	6	
24	12928009	SA3054001	垫圈 L	Thrust washer,L	1	1	
25-1	12912053		左下油毡架	Felt support	1	1	
25-2	12923032	SA6424101	左下齿轮油毡	Felt	1	1	
26	S04035	062400616	螺钉M4×6	Screw,pan M4×6	2	2	
27-1	12912054		油毡架	Felt support	1	1	
27-2	12923016	SA4044001	油毡	Felt	2	2	
28	S04035	062400616	螺钉M4×6	Screw,pan M4×6	2	2	
29	12923008	SA4012001	油毡	Felt	2	2	
30	12912027	SA3894001	油毡架	Felt support	2	2	
31	S04035	062400616	螺钉M4×6	Screw,pan M4×6	2	2	
42	12918009	SA3956001	梭架(右)	Rotary hook base(R)	1	1	58420B/58450B
	12918202	SA3960001	梭架(右)	Rotary hook base(R)	1	1	58720B/58750B
43	12912028	SA2563301	旋梭基座盖R	Rotary hook base cover,R	1	1	58□□0B
44	12928010	SA2579001	垫圈	Specer	1	1	
45	12912052	SA6425101	油毡架UR	Felt support UR	1	1	
46-1	12912055		右下油毡架	Felt support DR	1	1	
46-2	12923015		右下齿轮油毡	Felt	1	1	



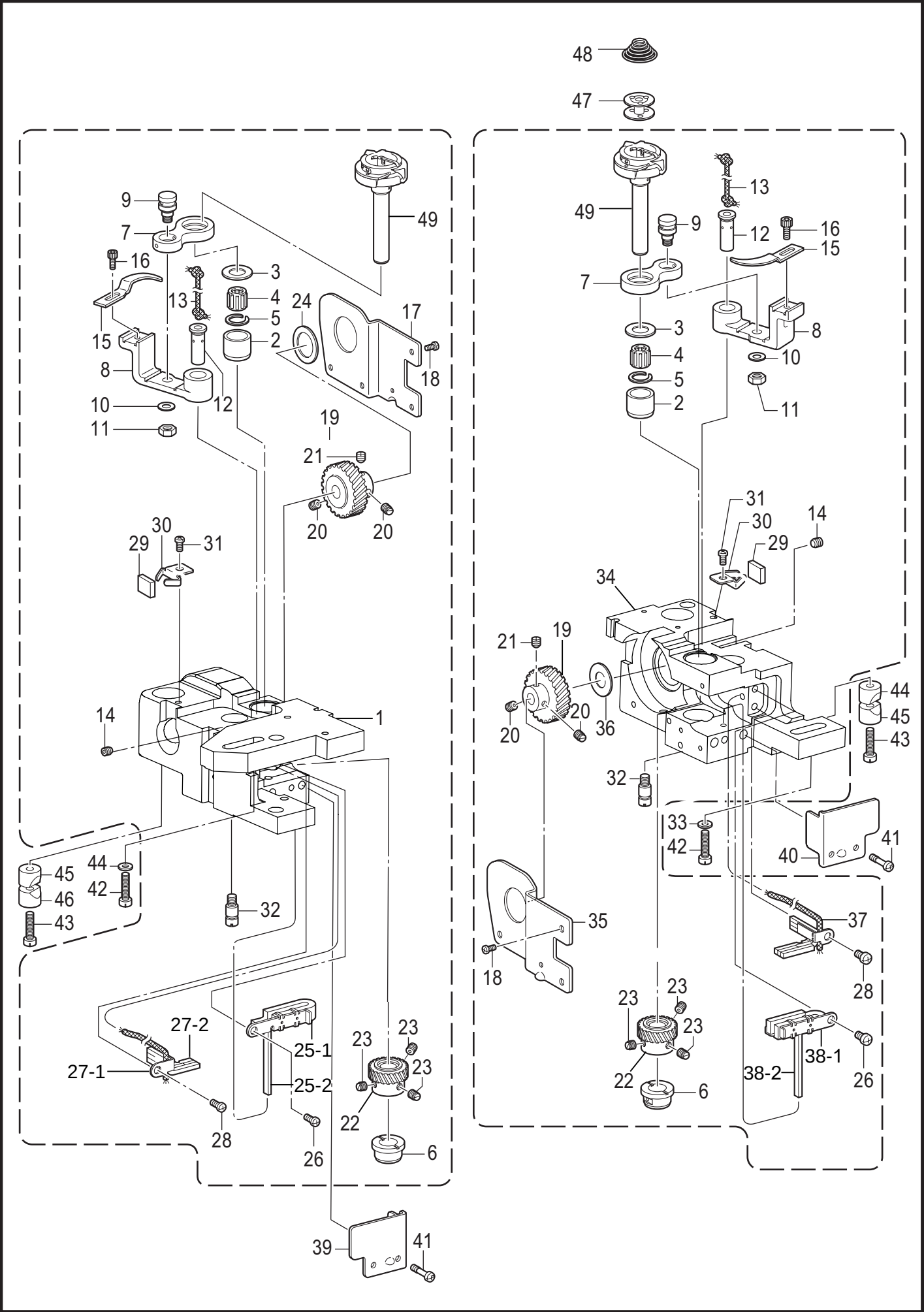
J1.旋梭部件/Rotary hook mechanism(58□□0J-B)

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
47	12912031	SA6462001	旋梭基座盖FL	Rotary hook base cover,FL	1	1	
48	12912032	SA6463001	旋梭基座盖FR	Rotary hook base cover,FR	1	1	
49	129S30011	SA6417001	螺钉M4×12	Screw,M4×12	4	4	
50	129S11003	SA2556001	螺钉M6×25	Screw,M6×25	2	2	
51	129S11003	SA2556001	螺钉M6×25	Screw,M6×25	2	2	
52	20628003	115947101	主轴右垫片	Washer,plain 6.35	2	2	
53	12903009	SA2722001	套管A	Pinch sleeve A	2	2	
54	12903010	SA2565001	套管B	Pinch sleeve B	2	2	
55	12912033	SA2567001	调节板	Needle upper positioning plate	2	2	58□□0B
56	12910004	SA2568001	调节轴	Needle upper positioning shaft	2	2	58□□0B
57	S04038	062061016	螺钉M6×10	Screw,pan M6×10	4	4	58□□0B
58	12928018		平垫圈S6	Washer,plain S6	4	4	58□□0B
59	11618001	S01928151	梭芯	Bobbin	2	2	58420/58450
	11818001	S09285051	梭芯	Bobbin	2	2	58720/58750
60	1291800600		旋梭组件	Rotary hook assy	2		58420B-003
	1291800700		旋梭组件	Rotary hook assy		2	58420B-005
	1161800400		旋梭组件 (国产)	Rotary hook assy(C)	2	2	58420B-C
	1171800100		旋梭组件	Rotary hook assy	2	2	58450B
	1291802600		旋梭组件 (国产)	Rotary hook assy(C)	2	2	58450B-C
	1181800200		旋梭组件	Rotary hook assy	2	2	58720B
	1291802700		旋梭组件 (国产)	Rotary hook assy(C)	2	2	58720B-C
	1291801300		旋梭组件	Rotary hook assy	2	2	58750B
	1191800400		旋梭组件 (国产)	Rotary hook assy(C)	2	2	58750B-C
61	12918029		梭心套 (国产)	Bobbin case assy(C)	2	2	58450B-C
	12918030		梭心套 (国产)	Bobbin case assy(C)	2	2	58750B-C
※序号 C表示国产旋梭							



J2.旋梭部件/Rotary hook mechanism(58□□0J)

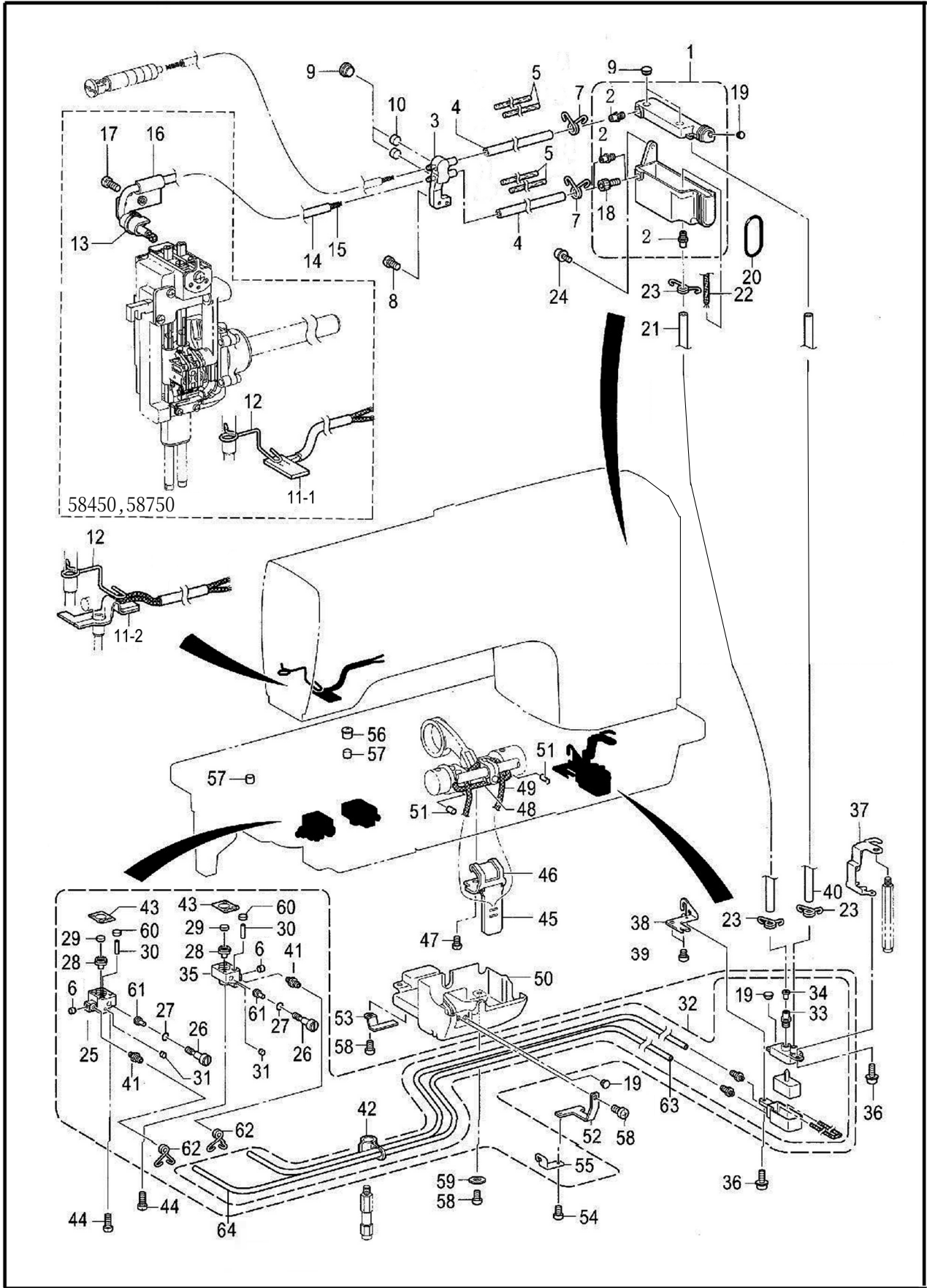
序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	12301006		梭架(左)	Rotary hook base(L)	1	1	58420J/58450J
	12301008		梭架(左)	Rotary hook base(L)	1	1	58720J/58750J
2	11603011	SA4029001	旋轴上轴套	Rotary hook shaft bush	2	2	58420J/58450J
	11803001	S09259001	旋轴上轴套	Rotary hook shaft bush	2	2	58720J/58750J
3	12928004	S09260001	轴向垫圈A 1.2MM	Thrust ring,A:1.2MM<t=1.2>	2	2	
	12928005	SA4038001	轴向垫圈1.0MM	Thrust ring<t=1.0>	2	2	
	12928006	S09261001	轴向垫圈B 1.4MM	Thrust ring,B:1.4MM<t=1.4>	2	2	
	12928007	SA4444001	轴向垫圈B 0.8MM	Thrust ring,0.8MM<t=0.8>	2	2	
4	11624004	S07420000	滚针轴承	Needle bearing	2	2	
5	11629004	S07419001	梭轴上轴挡圈	Retaining ring	2	2	
6	12903008	SA6474001	旋梭轴套D	Rotary hook shaft bush	2	2	
7	12905013	SA3856001	分线钩连杆	Opener link	2	2	58420J/58450J
	12905303	SA3857001	分线钩连杆	Opener link	2	2	58720J/58750J
8	12905014	SA3859001	分线钩杆	Opener lever	2	2	58420J/58450J
	12905304	SA3861001	分线钩杆	Opener lever	2	2	58720J/58750J
9	12902009	SA2560001	分线钩连杆轴	Shaft,Olink	2	2	
10	12928008	025710132	平垫圈	Washer,plain	2	2	
11	N01017	021500316	六角螺母M5	Nut3 M5	2	2	
12	12926009	SA3889101	分线钩杆短轴	Olever shaft	2	2	
13	12923018	SA4026001	油线 4×4 L=100	Wick,4×4L=100	2	2	
14	S09019	012501031	螺钉M5×5	Set screw,socket(ft)M5×5	2	2	
15	11612014	S38212001	分线钩	Opener	2	2	
16	129S13003	154965001	螺钉SM3.57×8	Bolt,socket SM3.75×8	2	2	
17	12912024	SA2562201	旋梭基座盖L	Rotary hook base cover,L	1	1	
18	S04037	062300612	螺钉M3×6	Screw,pan M3×6	8	8	
19	12925003	SA2572001	螺旋齿轮(大)	Spiral gear	2	2	
20	s08007	SA2574001	螺钉M6×0.75 L=5	Set screw,(ft)M6×0.75 L=5	4	4	
21	S07009	SA2575001	螺钉M6×0.75 L=6	Set screw,(ft)M6×0.75 L=6	2	2	
22	12925004	SA6301001	螺旋齿轮(小)	Spiral gear	2	2	
23	S10063	SA2574001	螺钉M6×0.75 L=5	Set screw,(ft)M6×0.75 L=5	6	6	
24	12928009	SA3054001	垫圈 L	Thrust washer,L	1	1	
25-1	12912053		左下油毡架	Felt support	1	1	
25-2	12923032	SA6424101	左下齿轮油毡	Felt	1	1	
26	S04035	062400616	螺钉M4×6	Screw,pan M4×6	2	2	
27-1	12912054		油毡架	Felt support	1	1	
27-2	12923016	SA4044001	油毡	Felt	2	2	
28	S04035	062400616	螺钉M4×6	Screw,pan M4×6	2	2	
29	12923008	SA4012001	油毡	Felt	2	2	
30	12912027	SA3894001	油毡架	Felt support	2	2	
31	S04035	062400616	螺钉M4×6	Screw,pan M4×6	2	2	
32	129S20301	SA2717001	定位螺钉	Stopper screw	2	2	58420J
33	20628003	115947101	主轴右垫片	Washer,plain 6.35	2	2	



J2.旋梭部件/Rotary hook mechanism(58□□0J-E)

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
34	12301007		梭架(右)	Rotary hook base(R)	1	1	58420J/58450J-E
	12301009		梭架(右)	Rotary hook base(R)	1	1	58720J/58750J-E
35	12312015		旋梭基座盖R	Rotary hook base cover,R	1	1	58□□0J-E
36	12928010	SA2579001	垫圈	Specer	1	1	
37	12912052	SA6425101	油毡架UR	Felt support UR	1	1	
38-1	12912055		右下油毡架	Felt support DR	1	1	
38-2	12923015		右下齿轮油毡	Felt	1	1	
39	12912031	SA6462001	旋梭基座盖FL	Rotary hook base cover,FL	1	1	
40	12912032	SA6463001	旋梭基座盖FR	Rotary hook base cover,FR	1	1	
41	129S30011	SA6417001	螺钉M4×12	Screw,M4×12	4	4	
42	129S11003	SA2556001	螺钉M6×25	Screw,M6×25	2	2	
43	129S11003	SA2556001	螺钉M6×25	Screw,M6×25	2	2	
44	20628003		梭架固定垫片	Washer,plain 6.35	2	2	
45	12903009	SA2722001	套管A	Pinch sleeve A	2	2	
46	12903010	SA2565001	套管B	Pinch sleeve B	2	2	
47	11618001	S01928151	梭芯	Bobbin	2	2	58420J/58450J
	11818001	S09285051	梭芯	Bobbin	2	2	58720J/58750J-E
48	12918022	148602001	梭心座簧	Bobbin Spring	2	2	58420J/58450J-E
	12918024	S09286000	梭心座簧	Bobbin Spring	2	2	58720J/58750J-E
49	1291801400		旋梭组件	Rotary hook assy	2	2	58420J-E
	1291801500		旋梭组件	Rotary hook assy	2	2	58450J-E
	1291801600		旋梭组件	Rotary hook assy	2	2	58720J-E
	1291801700		旋梭组件	Rotary hook assy	2	2	58750J-E

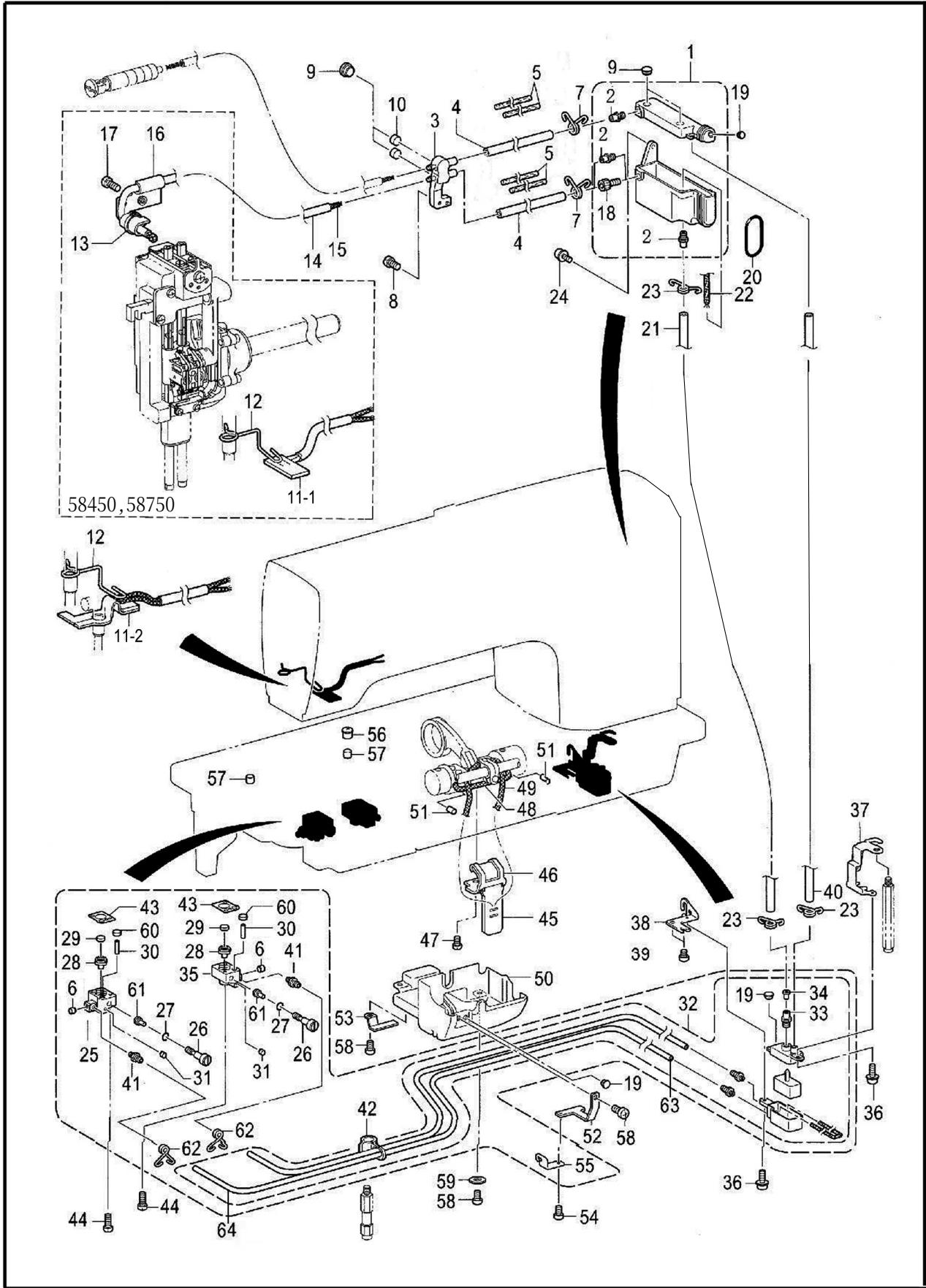
K.供油润滑部件/Lubrication



K.供油润滑部件/Lubrication

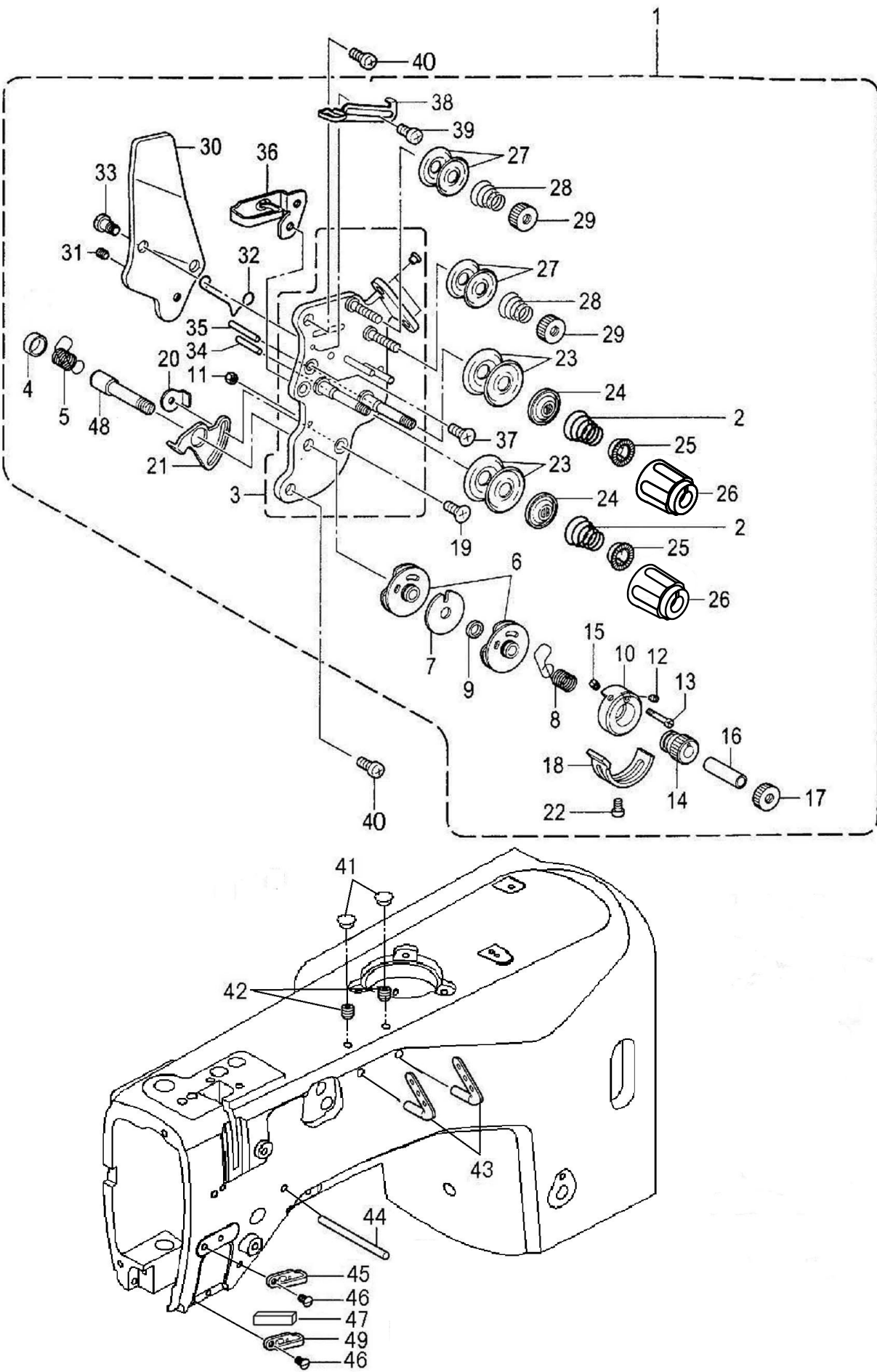
序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	12911004	SA4205101	油罐组件	Oil tank assy	1	1	
2	129S30009	SA3040001	供油口 8.6	Oil feeding pipe,8.6	2	2	58420/58720
	129S30009	SA3040001	供油口 8.6	Oil feeding pipe,8.6	4	4	58450/58750
3	12936002	SA3946001	油管接头	Oil terminal	1	1	
4	12921006	SA2956001	维尼龙油管L=135	Oil tube,L=135	1	1	
	12921006	SA2956001	维尼龙油管L=135	Oil tube,L=135	2	2	58450/58750
5	12923018		油线 φ 3.3 L=300	Wick,4×4 L=300	600	600	
	12923018		油线 φ 3.3 L=300	Wick,4×4 L=300	1200	1200	58450/58750
6	12922009	140327001	橡皮塞6.3	Rubber cap,6.3	2	2	
7	20729005	SA3055101	油管夹	Tube clip	2	2	
	20729005	SA3055101	油管夹	Tube clip	4	4	58450/58750
8	S04028	062500816	螺钉M5×8	Screw,pan M5×8	1	1	
9	12922001	SA2929001	橡皮塞12.5	Rubber cap,12.5	3	3	
	12922001	SA2929001	橡皮塞12.5	Rubber cap,12.5	4	4	58450/58750
10	12923010	S38266000	油毡	Rotary hook shaft felt	1	1	
	12923010	S38266000	油毡	Rotary hook shaft felt	2	2	58450/58750
11-1	12923035		油毡块	Felt assy	1	1	
11-2	12923036		油毡垫	Felt assy	1	1	58420/58720
12	12912035	SA4033101	油毡压架	Felt support	1	1	
13	61910003		尼龙扎带3×80	Cable band 3×80	2	2	
14	12921002		油管L=280	Tube L=280	1	1	58450/58750
15	12923018		油线 4×4 L=380	Wick, 4×4 L=380	1	1	
16	12912065	SA5154001	油管支架	Tube support	1	1	58450/58750
17	S04029		螺钉M5×12	Screw,pan M5×8	1	1	58450/58750
18	S05079	018081236	螺栓M8×12	Bolt,socket M8×12	1	1	58420/58720
19	12922006		橡皮塞8	Rubber cap,8	1	1	
20	12922013	081038070	O形圈P38	O ring P38	1	1	
21	12921006	SA2723001	维尼龙油管L=210	Oil tube,L=210	1	1	
22	12923019		油线 L=400	Wick,φ3.3 L=300	1	1	
	12923009		油线 φ 3.3 L=300	Wick,L=300	1	1	
23	20729005	SA3055101	油管夹	Tube clip	3	3	
24	129S30016	0A5501006	螺栓(带垫圈)M5	Screw,pan(S/P washer)M5×10	2	2	
25	12901007	SA3896001	集油器L	Oil block,L	1	1	
26	129S20004	SA6475001	油量调整螺栓	Oil adjusting screw	2	2	
27	O01004	081004070	O形圈P4	O ring P4	2	2	
28	12922007	SA6468001	橡皮垫片	Rubber packing	2	2	
29	12922008	SA6423001	旋梭轴垫片	Rotary hook shaft felt	2	2	
30	12923021	SA6415001	油线 L=90	Wick L=90	0.18	0.18	
31	12922016	142274101	橡皮塞4.3	Rubber cap,4.3	2	2	
32	12911005	SA3037001	副油罐组件	Subtank assy	1	1	
33	12936004		供油口 8.6	Oil feeding pipe	1	1	
34	12922010	SA3060001	油门垫片	Valve packing	1	1	
35	12901008	SA3898001	集油器R	Oil block,R	1	1	
36	129S30017	0A4400806	螺栓(带垫圈)M4	Screw,pan(S/P washer)M4×8	2	2	
37	12912036	SA3045201	副油罐安装架A	Subtank setting plate,A	1	1	
38	12912037	SA3046001	副油罐安装架B	Subtank setting plate,B	1	1	
39	S04033	062060816	螺钉M6×8	Screw,pan M6×8	2	2	
40	12921006	SA3044001	维尼龙油管L=242	Oil tube,L=242	1	1	
41	12936003	S51815001	油嘴管3.8	Oil feeding pipe,3.8	4	4	
42	12911006	SA6472001	油管固定夹	Tube support	1	1	
43	12928011	SA3923101	旋梭台D垫片	Rotary hook base D packing	2	2	
44	S04039	062401616	螺钉M4×16	Screw,pan M4×16	4	4	
45	12923014	SA2604001	油毡	Felt	1	1	
46	12912039	SA2605001	油毡压架	Felt support	1	1	
47	S04030	062500616	螺钉M5×6	Screw,pan M5×6	1	1	

K.供油润滑部件/Lubrication



K.供油润滑部件/Lubrication

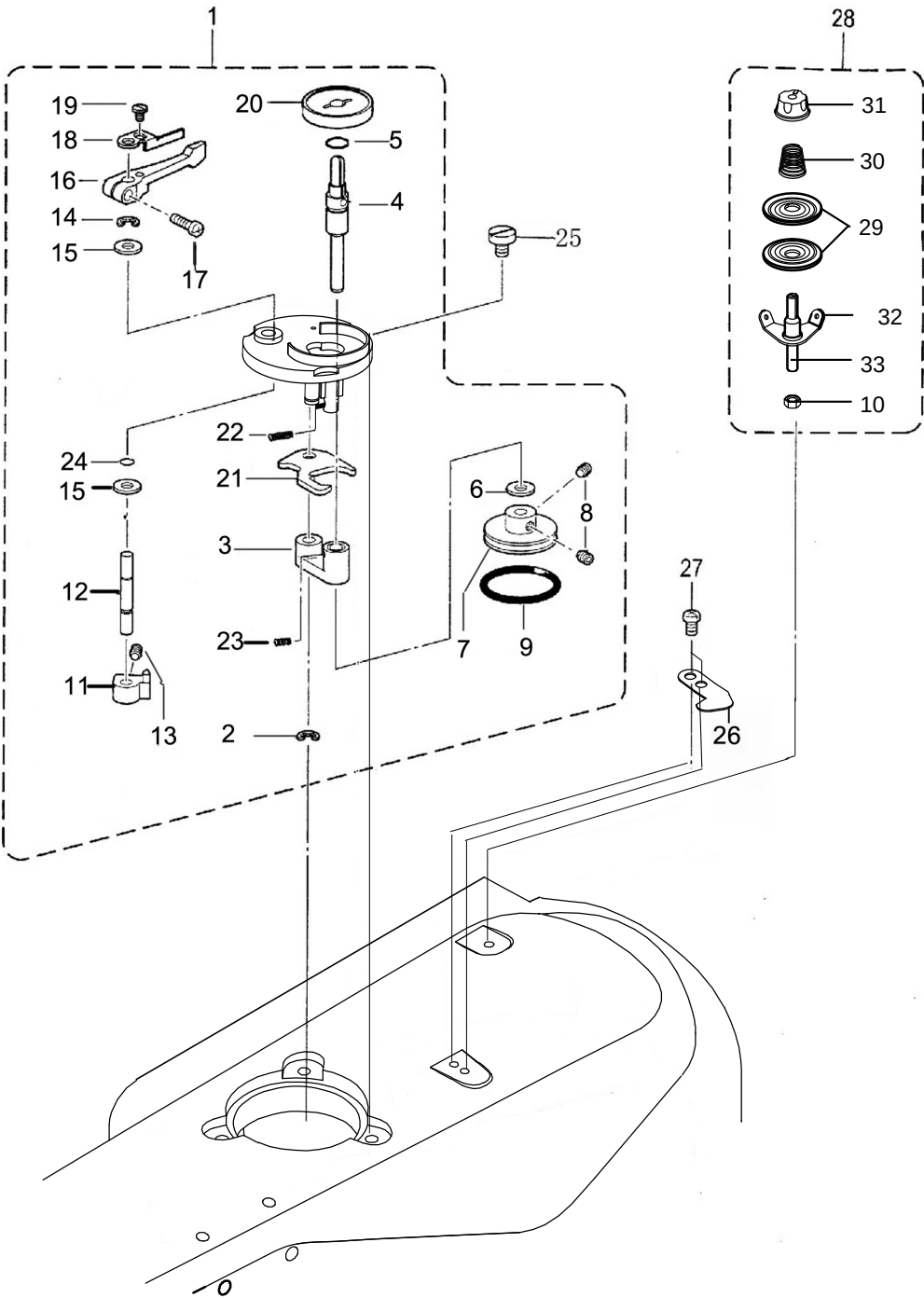
序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
48	12923018	109405001	油线 4×4 L=100	Wick,4×4 L=100	1	1	
49	20123021	108801001	油线 4×4 L=350	Wick,4×4 L=350	1	1	
50	12911007	SA2606101	油盖	Oil cover	1	1	
51	12923012	148743001	油毡	Felt	2	2	
52	12912040	SA3048101	油管压架A	Tube support,A	1	1	
53	12912041	SA3049001	油管压架B	Tube support,B	1	1	
54	S04035	062400616	螺钉M4×6	Screw,pan M4×6	1	1	
55	12912042	SA6473001	油管导向	Tube guide	1	1	
56	12922012	140890009	油盖	Oil cap	1	1	
57	12923030	112753001	油毡	Felt	2	2	
58	S04038	062061016	螺钉M6×10	Screw,pan M6×10	3	3	
59	11628005		平垫圈S6	Washer,plain S6	1	1	
60	12923037	SA6423001	旋梭轴油毡	Rotary hook shaft felt	2	2	
61	12926013	SA6416001	油量调节销	Rubber presser	2	2	
62	30129007	SA4508001	油管夹	Tube clip	4	4	
63	12923050		油毡	Felt	2	2	
64	12921005		油管(φ4×φ6)	Tube(φ4×φ6)	2	2	



L.穿线部件/Thread Mechanism

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	1231300200	SA3417301	面线调节组件3	Upper Thread Tension Assy , 3	1		
2	12927008	SA3415001	夹线弹簧-3	Tension Spring , L	2		
1	1231300300	SA2607301	面线调节组件5	Upper Thread Tension Assy , 5		1	
2	12927009	SA3416101	夹线弹簧-5	Tension Spring , LL		2	
3	12912043	SA4212001	调整台组件	Tension Plate Assy	1	1	
4	12922020	SA2613001	盖子	Cap	1	1	
5	12927010	SA2614201	弹簧L	Thread Takeup Spring,L	1	1	
6	1291300500	SA2615001	导向组件	Guide Assy,T/Takeup Spring	2	2	
7	12928035	SA2619001	垫片	Spacer	1	1	
8	12927011	SA2623201	弹簧R	Thread Takeup Spring,R	1	1	
9	12903014	SA2620001	轴套	Collar	1	1	
10	12908006	SA2621001	定位圈	Stopper Support	1	1	
11	N01013	Q21300106	螺母M3	Nut,1M3	1	1	
12	129S15006	SA2626001	螺钉M3.5	Set screw,(cp)M3.5	1	1	
13	129S11008	SA2624001	固定螺栓	Spring guide set screw	1	1	
14	12913022	SA2625001	调节旋钮	Adujusting thumb	1	1	
15	129S15006	SA2626001	螺钉M3.5	Set screw,(cp)M3.5	1	1	
16	12903015	SA2627001	轴套	Collar	1	1	
17	129S30044	SA2628001	调线螺母	Tension nut	1	1	
18	12912044	SA2629001	弹簧限位板	Stopper	1	1	
19	129S17004	061350616	螺钉M3.5×6	Screw,flat M3.5×6	1	1	
20	12912084	SA2824001	定位螺钉M3.5	Nut,whirlstop M3.5	1	1	
21	12912045	SA2630001	限位板	Stopper	1	1	
22	129S30026	062350512	螺钉M3.5×5	Screw,pan M3.5×5	1	1	
23	12913007	145446001	夹线盘	Disc,tension	4	4	
24	12913008	159805001	夹线压盘	Tension disc presser	2	2	
25	12911008	S20681000	调节弹簧垫圈	Wacher	2	2	
26	123S16002	S20682105	调节螺母	Tension nut	2	2	
27	12928036	144504001	小夹线垫片	Thread guide disc	4	4	
28	12927012	154560101	小夹线弹簧A	Pretension spring,A	2	2	
29	129S30012	155510001	夹线螺母	Tension nut	2	2	
30	12913009	SA2632001	松线板	Tension releade plate	1	1	
31	S09019	012500536	螺钉M5×5	Set screw,socket(ft)M5×5	1	1	
32	12927013	S38274001	松线弹簧	Treleadw spring	1	1	
33	129S30020	SA2633001	段螺钉M3.5	Shoulder screw,M3.5	2	2	
34	12926011	SA4506001	松线销L	Tension release pin,L	1	1	
35	12926012	SA4507001	松线销R	Tension release pin,R	1	1	
36	12912046	SA2634001	线导向U	Thread guide,U:arm	1	1	
37	129S17004	061350616	螺钉M3.5×6	Screw,flat M3.5×6	2	2	
38	12912047	SA2635001	线调整	Thread quantity adjust	1	1	
39	129S30027	062300616	螺钉M3×6	Screw,pan M3×6	1	1	
40	S04028	062500816	螺钉M5×8	Screw,pan M5×8	2	2	
41	13822001		三眼线钩固定螺钉孔塞	Rubber plug	2	2	
42	S10019	012060636	螺钉M6×6	Set screw,socket(ft)M6×6	2	2	
43	12313001		三眼线勾	Thread retainer	2	2	
44	12902011	SA2637001	松线轴	Bar,tension release	1	1	
45	112312009		线导向M	Thread guide,M:arm	1	1	
46	129S17002	SA2640001	螺钉M5×8	Screw,flat M5×8	2	2	
47	11623022	114941001	过线钩毡	Felt	1	1	58□□0-□□5
48	12926010	SA6378001	调整短轴	Tension Stud	1	1	
49	112312007		下过线钩	Thread guide,D:arm	1	1	58□□0-□□5
50	112312008		下过线油毡压板	Felt Presser ForThread Oil Supply	1	1	58□□0-□□5
51	101S11019		螺钉SM3/32"×56	Screw SM3/32"×56	2	2	58□□0-□□5
52	12912049	SA2638001	线导向M	Thread guide,M:arm	1	1	58□□0J-4□3

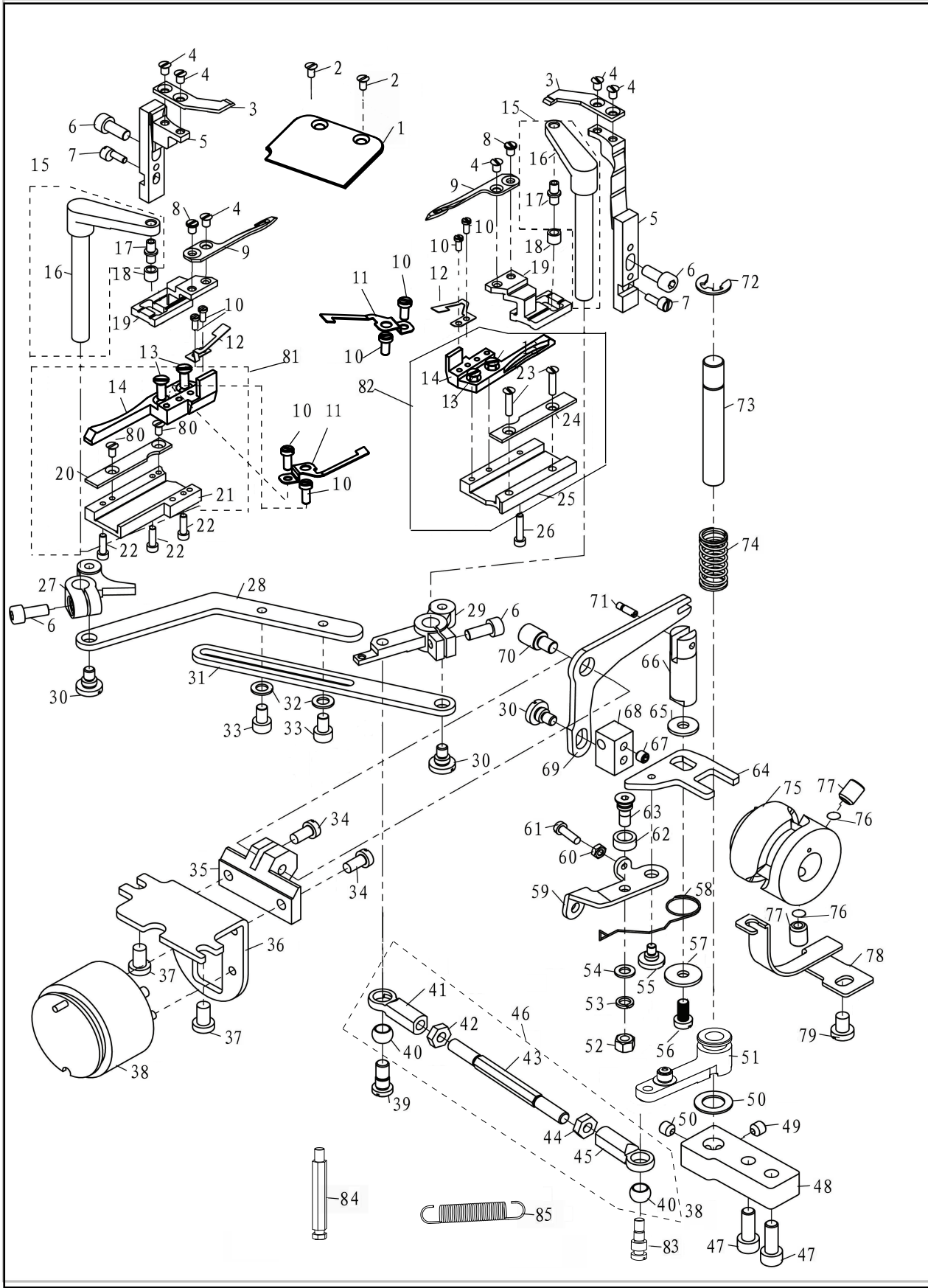
N.卷线部件/Bobbin Winder Mechanism



N.卷线部件/Bobbin Winder Mechanism

序号 No	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	1233100400	SA1971101	卷线器组件	Bobbin Winder Unit	1	1	
2	H05012	048040342	挡圈E4	Retaining Ring,E4	1	1	
3	1231100900	SA1975001	卷线轴基座	B-Winder Shaft Support Assy	1	1	
4	12302002	SA1978001	绕线轴	Bobbin Winder Shaft	1	1	
5	O01008	081009070	O形圈P9	O Ring,P9	1	1	
6	12928021	025060136	平垫圈S6	Washer,Plain S6	1	1	
7	12935005	SA1980001	卷线轮	Bobbin Winder Wheel	1	1	
8	S09019	012500536	螺钉M5×5	Set Screw,Socket(FT)M5×5	2	2	
9	12922014	S25789000	橡皮垫圈29	Rubber Ring,29	1	1	
10	114S16001		螺母	Nut	1	1	
11	12910007	SA1982101	梭芯夹凸轮	Bobbin Presser Cam	1	1	
12	12302003	SA1983001	梭芯夹轴	Bobbin Winder Arm Shaft	1	1	
13	S09019	012500536	螺钉M5×5	Set Screw,Socket(FT)M5×5	1	1	
14	H05012	048040342	挡圈E4	Retaining Ring,E4	1	1	
15	12328001	025060136	平垫圈S6	Washer,Plain S6	2	2	
16	12304004	SA1984001	梭芯压臂柄	Bobbin Presser Arm	1	1	
17	S05307		螺钉M4×14	Screw,Pan M4×14	1	1	
18	12312009	SA1985001	梭芯夹	Bobbin Presser	1	1	
19	123S11006	S23418002	螺钉M4×5	Screw,M4×5	1	1	
20	12911009	SA1988001	梭芯座	Bobbin Support	1	1	
21	12312013	SA1989001	卷线杠杆	Bobbin Winder Lever	1	1	
22	12907014	SA1990101	弹簧	Spring	1	1	
23	12907015	SA1991001	弹簧	Bobbin Winder Base Spring	1	1	
24	12922030	SA2190001	O形密封圈	O Ring	1	1	
25	123S11015	SA1992101	绕线器固定螺钉	Bobbin Winder Fixed Screw	3	3	
26	11419001	SA1360101	割线刀	Knife	1	1	
27	114S11015		割线刀螺钉SM9/64"×40 L=6	Screw SM9/64"×40 L=6	2	2	
28	1381300600		卷线器夹线组件	Bobbin Winder Tension Assy	1	1	
29	10112005		夹线盘	Disc , Tension	2	2	
30	11427006		夹线弹簧	Tension Spring	1	1	
31	13811004		压线螺母	Tension Nut	1	1	
32	11413022		过线板	Song Line board	1	1	
33	112S13004		夹线器轴	Folder spool	1	1	

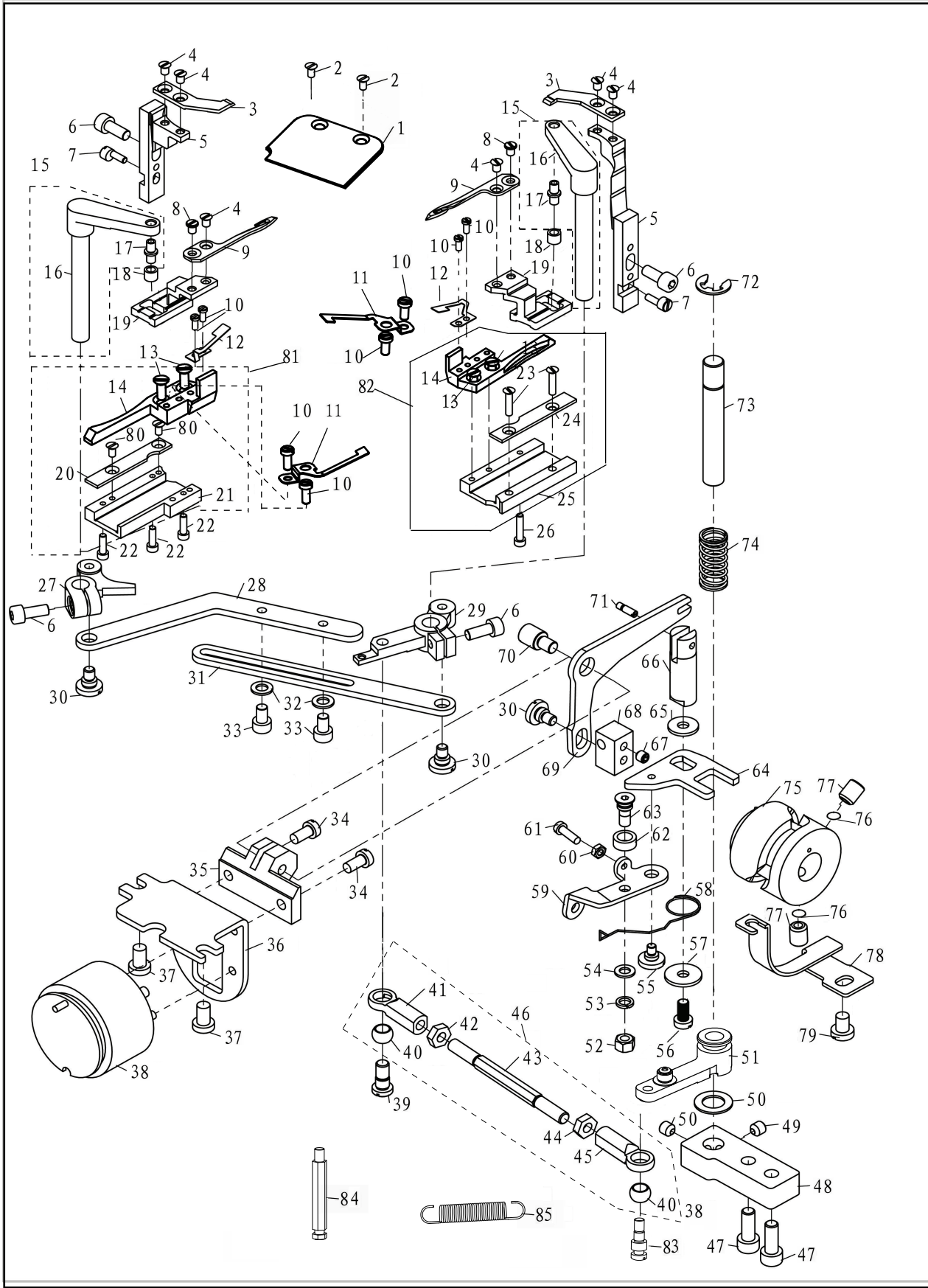
O.切线部件/Thread trimmer mechanism



O.切线部件/Thread trimmer mechanism

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	12915117		剪线盖板	Cover for trimming	1	1	
2	S02003		一字沉头螺钉 M4×5	Screw M3×6	2	2	
3	12319001		定刀	Fixed knife	2	2	
4	123517001		定刀螺钉 SM9-64×40=4.5	Screw SM9/16×40 L=4.5	6	6	
5	12309001		定刀架	Fixed knife holder	2	2	
6	207513009		圆柱头内六角螺钉 M5×12	Screw M5×12	4	4	
7	123530003		定刀调节螺钉M3	Fixed knife adjustable screw	2	2	
8	123511002		动刀螺钉SM9/64×40 L=4	Screw SM9/64×40 L=4	2	2	
9	12319002		动刀	Movable knife	2	2	
10	201511001		螺钉SM3/32"×56 L=4.7	Screw SM3/32"×56 L=4.7	8	8	
11	12312001		支撑弹簧片	Adjust spring plate	2	2	
12	12327002		底线保持簧	The bottom line to keep the spring	2	2	
13	S02034		一字沉头螺钉 M3×8	Screw M3×8	4	4	
14	12309002		动刀托架	Movable knife holder	2	2	
15	1230400100		动刀轴组件	Movable knife bar assy.	2	2	
16	12304001		动刀轴	Movable knife bar	2	2	
17	12329001		动刀驱动销	Movable knife drive pin	2	2	
18	12309003		动刀驱动滚柱	Knife drive roller	2	2	
19	12309004		动刀驱动滑块	Knife drive roller	2	2	
20	12309005		动刀导向架盖板 (L)	Knife guide frame cover(L)	1	1	
21	12309006		动刀导向架 (L)	Knife guide frame	1	1	
22	S05328		圆柱头内六角螺钉 M3×10	Screw M3×10	3	3	
23	S02010		一字沉头螺钉 M3×14	Screw M3×14	2	2	
24	12309007		动刀导向架盖板(R)	Knife guide frame cover(R)	1	1	
25	12309008		动刀导向架(R)	Knife guide frame	1	1	
26	S05329		圆柱头内六角螺钉 M3×14	Screw M3×14	1	1	
27	12304002		切线杠杆L	Trimming shaft L	1	1	
28	12305001		切线连杆L	Trimming connector L	1	1	
29	12304003		切线杠杆 R	Trimming shaft R	1	1	
30	129520302		轴位螺钉M5	Screw M5	3	3	
31	12912313		切线连杆R	Trimming connector R	1	1	
32	W01004		平垫圈M5	Washer 5.3	2	2	
33	S04028		螺钉 M5×8	Kcrew M5×8	2	2	
34	S04029		螺钉M5×12	Kcrew M5×12	2	2	
35	12901302		电磁铁杆支撑架	Solenoid lever bracket	1	1	
36	12912307		切线电磁铁架	Thread trimmer solenoid bracket	1	1	
37	S04038		十字一字盘头螺钉 M6×10	Kcrew M6×10	2	2	
38	1233000500		剪线电磁铁组件	Thread trimmer solenoid assy.	1	1	
39	129520307		长度调节连杆轴位螺钉	Screw	1	1	
40	12903308		套管	Bush	2	2	
41	12905302		球接连杆组件 L	Connector ASM L	1	1	
42	129516003		左旋螺母SM15/64"×28	Levorotation Nut M6	1	1	
43	123530001		长度调节连杆	Connecting Rod Length Adjustment	1	1	
44	123516003		螺母SM15/64"×28	Nut SM15/64"×28	1	1	
45	12905301		球接连杆组件 R	Connector ASM R	1	1	
46	1230500300		长度调节连杆组件	Connecting Rod Adjustment Assy	1	1	
47	S04031		螺钉M6×16	Screw,pan M6×16	2	1	
48	12912312		主杆轴架	Knife main lever shaft bracket	1	1	
49	S10019		螺钉 M6×6	Screw M6×6	2	2	
50	12928023		橡胶垫圈	Rubber cushion	1	1	
51	1290130300		主杆组件	Knife main lever assy	1	1	
52	N01017		六角螺母M5	Nut 1 M5	1	1	
53	W02001		弹簧垫圈2-5	Washer spring 2-5	1	1	

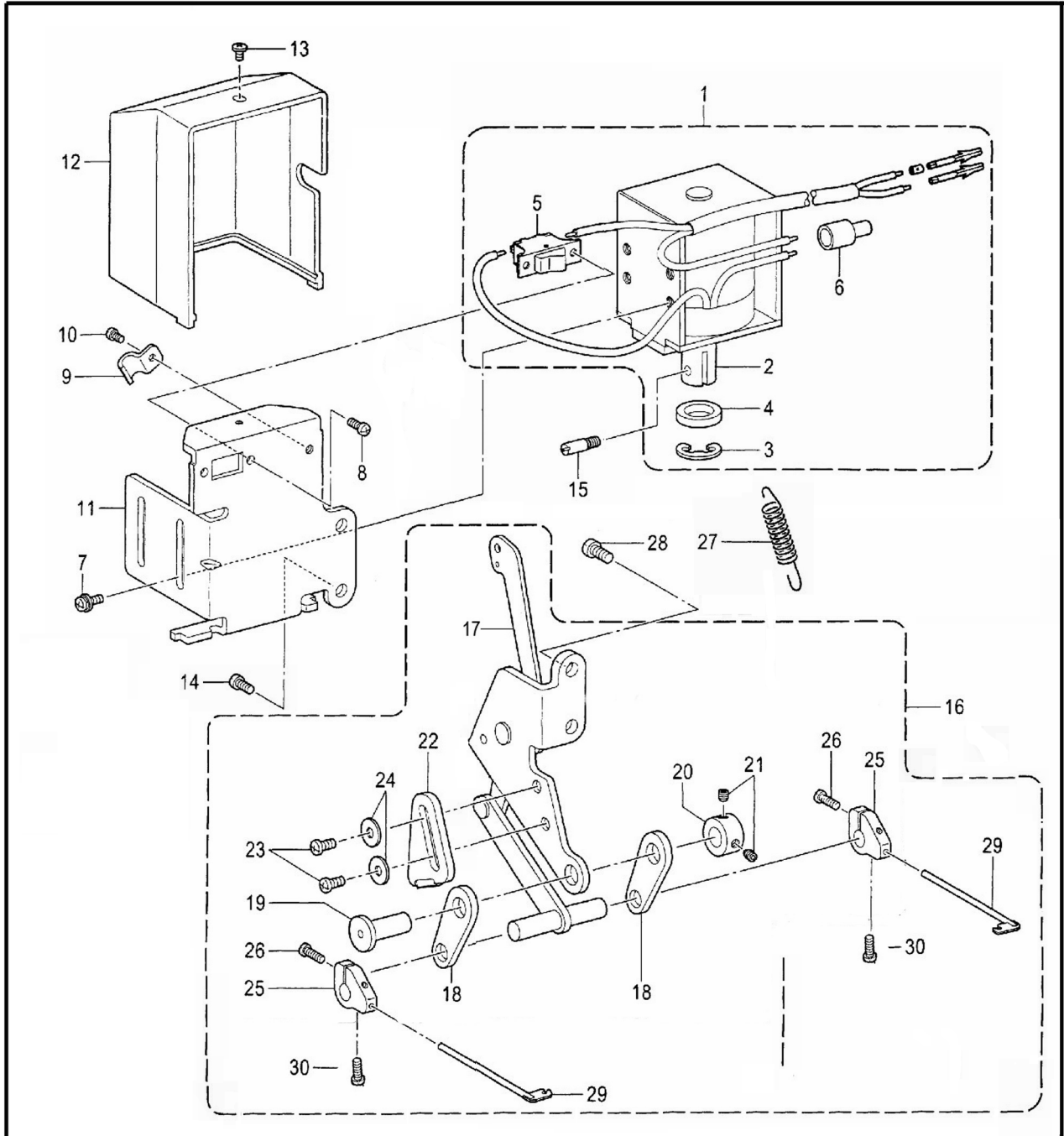
O.切线部件/Thread trimmer mechanism



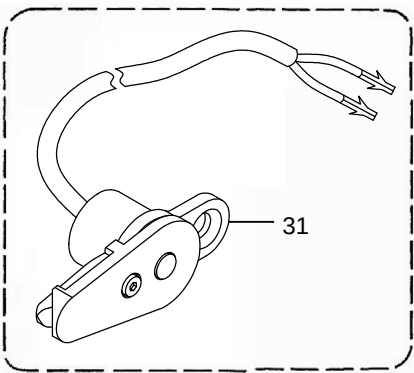
O.切线部件/Thread trimmer mechanism

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
54	W01004		垫圈	Washer ,plain	1	1	
55	129S20304		松线杆轴位螺钉 M4	Screw of separator pole M4	1	1	
56	S04029		螺钉M5×12	Screw,pan M5×12	1	1	
57	12928302		垫圈	Washer	1	1	
58	12927303		弹簧	Spring	1	2	
59	12912332		松线杆	Tension release lever	1	1	
60	N01016		螺母M3.5	Nut M3.5	1	1	
61	S01030		螺钉M3.5×9.7	screw,pan M3.5×12	1	1	
62	12903307		松线滚轮	Roller	1	1	
63	129S20306		滚轮轴	Roller	1	1	
64	12912310		切线轴板	Connecting plate	1	1	
65	12928301	SA2860001	垫圈	Washer	1	1	
66	12926301	SA2651001	切线轴	Thread trimming driving rod	1	1	
67	S09019	012500536	螺钉M5×5	Set screw,Socket(FT)M5×5	1	1	
68	12908301	SA2644001	电磁铁接头	Thread trimming solenoid joint	1	1	
69	12912308	SA2646001	电磁铁杆	Solenoid lever	1	1	
70	129S20303	SA2647001	电磁铁杆短轴	Solenoid lever stud	1	1	
71	120S11010	148546001	销	Plunge pin	1	1	
72	H05008	048070342	挡圈E8	Retaining ring ,E8	1	1	
73	12902302	SA2658001	主杆轴	knife main lever shaft	1	1	
74	12027001	S07509001	弹簧	Spring	1	1	
75	12310001		剪线凸轮	Cut Cam	1	1	
76	12928303		垫片	Washer	2	2	
77	S10025		内六角凹端紧定螺钉 M8×8	Screw M8×8	2	2	
78	12912309	SA2648001	线夹	Fastening band	1	1	
79	S04033	062060816	螺钉M6×8	Screw,pan M6×8	1	1	
80	S02007		左盖板螺钉 M3×6	Word screw M3×6	2	2	
81	1230900600		动刀导向架(L)组件	Knife guide frame(L) Assy.	1	1	
82	1230900800		动刀导向架(R)组件	Knife guide frame(R) Assy.	1	1	
83	123S20003		长度调节连杆轴位螺钉	Screw	1	1	
84	123S30006		复位拉簧连接柱	Connecting column	1	1	
85	12327004		剪线复位拉簧	Spring	1	1	

P.扫线部件/Thread wiper mechanism



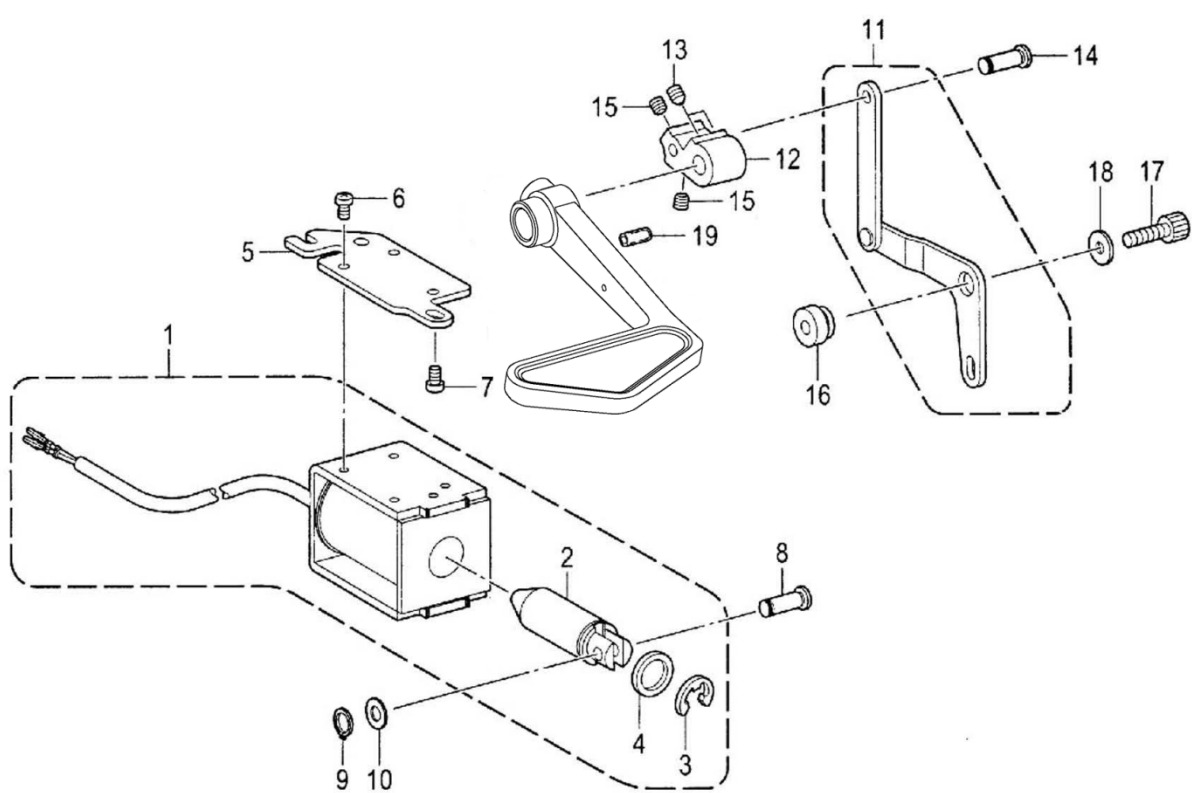
选配/Optional (58□□0J-1□□E)



P.扫线部件/Thread wiper mechanism

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	1233000300	SA2680001	扫线电磁铁组件	Thread wiper solenoid assy	1	1	
2	12330004	148511001	插棒式铁芯	Plunger	1	1	
3	H05011	048090342	挡圈E9	Retaining ring ,E9	1	1	
4	12022003	S38426000	橡皮垫	Rubber cushion	1	1	
5	12030010	S02664001	扫线开关	Thread wiper switch	1	1	
6	12022004	S02665000	电线接头	Terminal connector	1	1	
7	129S30302		螺钉(带垫片)M4×6	screw,pan M4×6	4	4	
8	129S30027	062300616	螺钉M3×6	screw,pan M3×6	2	2	
9	12912315	140647101	电线固定夹	Cord holder	1	1	
10	S13006	062400616	螺钉M4×6	screw,pan M4×6	1	1	
11	12312014	SA2732001	电磁铁安装板	Solenoid bracket	1	1	
12	12311006	SA2696001	电磁铁盖	Solenoid cover	1	1	
13	129S13004		螺钉M4×8	screw,pan M4×8	1	1	
14	S04028	062501016	螺钉M5×8	screw,pan M5×8	2	2	
15	120S11010	148546001	销	Pin	1	1	
16	1291231700	SA2682101	电磁铁连杆组件	Solenoid link assy	1	1	
17	12912318		动作传动板	Driver	1	1	
18	12012023	S07549101	扫线连接环	Link	2	2	
19	12926302		销	Pin	1	1	
20	12903304		紧圈	Set screw collar	1	1	
21	S09019		螺钉M5×5	screw,pan M5×5	2	2	
22	12912320		定位板	Stopper	1	1	
23	S04028		螺钉M5×8	screw,pan M5×8	2	2	
24	W01126		平垫圈5	Plain washer 5	2	2	
25	12004006	S07552101	扫线器架	Thread wiper supporter	2	2	
26	120S13003	062661212	螺钉SM3.18-44×12	screw, SM3.18-44×12	2	2	
27	12927304	SA2684001	弹簧	Spring	1	1	
28	S04028	062501016	螺钉M5×8	screw,pan M5×8	2	2	
29	12912321	S07553001	扫线器	Thread wiper	2	2	
30	129S11005	S07424001	螺钉SM3.18-44×4	Set screw,SM3.18-44×4	2	2	
31	1293032300		电子夹线器组件	Nest less e-edvice	1	1	选配/optional

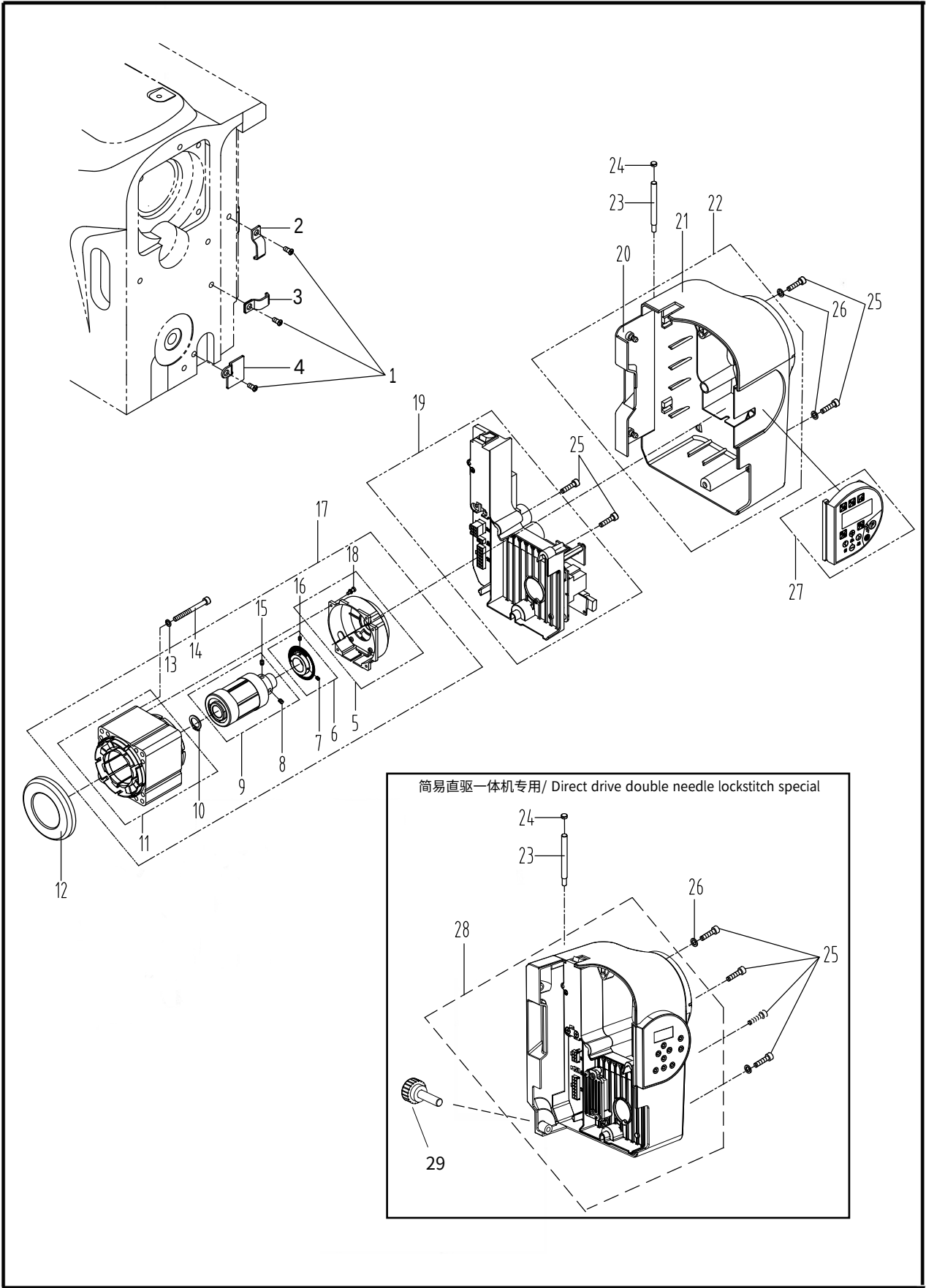
Q.倒缝部件/Quick reverse mechanism



Q.倒缝部件/Quick reverse mechanism

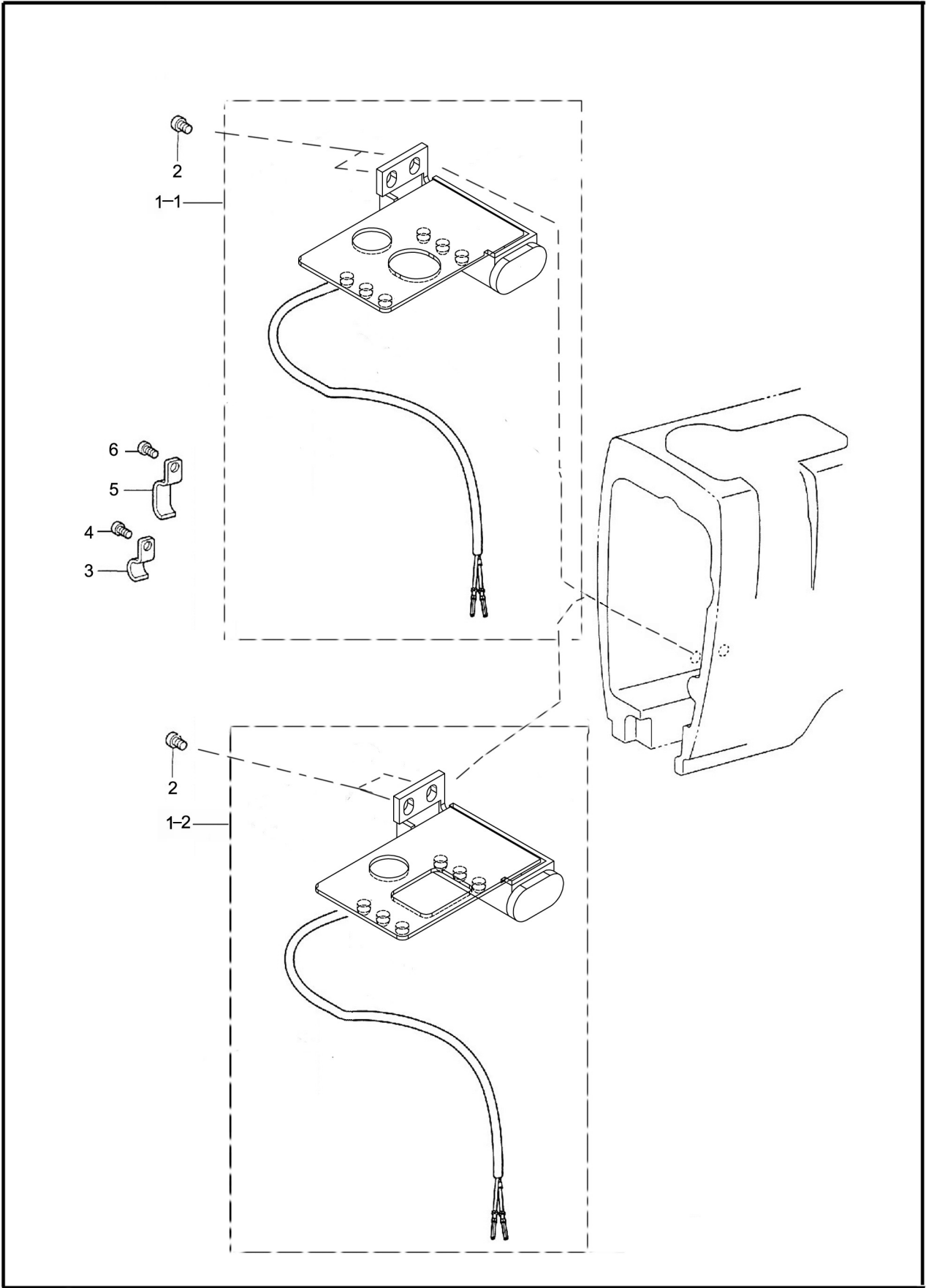
序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	1233000600		倒缝电磁铁组件	Quick reverse solenoid assy	1	1	
2	12930311	154729001	铁芯	Solenoid core	1	1	
3	H05005	154730001	挡圈E15	Retaining ring ,E15	1	1	
4	12022001	154731000	橡胶垫	Rubber cushion	1	1	
5	12912323	SA2535101	电磁铁基座	Solenoid base	1	1	
6	129S30016	062500812	螺栓(带垫圈)M5×10	screw,pan M5×10	3	3	
7	S04038	062061016	螺钉M6×10	screw,pan M6×10	2	2	
8	12926303	SA2992001	连接销	Pin	1	1	
9	H03003	048060142	挡圈5.6	Retaining ring ,5.6	1	1	
10	12928018	153138001	垫圈6.5	Washer,plain 6.5	1	1	
11	1291233000	SA2536001	电磁铁曲杆组件	Solenoid lever assy	1	1	
12	12904303	SA2540001	反转曲柄	Reverse crank	1	1	
13	S10021	016061031	紧定螺钉 M6×10	screw,pan M6×10	2	2	
14	12926303	SA2992001	连接销	Pin	1	1	
15	S10019	012060636	螺钉M6×6	screw,pan M6×6	2	2	
16	12903305	SA2539001	电磁铁曲杆轴	Solenoid lever shaft	1	1	
17	S05078	018062032	螺钉M6×20	screw,pan M6×20	1	1	
18	12928002	149095009	垫圈	Washer	1	1	
19	11203001	153132000	倒送料板手定位套	Oil tube	1	1	

R.电机与电控部件/Motor and Electronic control box mechanis



R.电机电控部件/Motor and safety switch mechanism							
序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	S04028		螺钉M5×8	screw,pan M5×8	3	3	58□□0J
2	12312011		线夹	Cord holder	1	1	58□□0J
3	12312011		线夹	Cord holder	1	1	58□□0J
4	12912317		线夹	Cord holder	1	1	58□□0J
5	95100119		电机罩壳组件（配鲍麦克斯）	Motor cover asm.powermax	1	1	
6	1383300900		电机光栅组件（配鲍麦）	Motor grating sensor asm	1	1	
7	S09022		GB/T 77-2000 螺钉M3×4	screw M3×4	1	1	
8	S09113		GB/T77-2000螺钉M6×6	screw M6×6	1	1	
9	95100124		电机转子总成	Motor rotor	1	1	
10	H03001		GB/T894.1-1986挡圈15	Snap ring 15	1	1	
11	95100120		电机定子总成（配鲍麦克斯）	Motor stator,powermax	1	1	
12	13811060		A4-0238电机绝缘防护罩	Protection cover	1	1	
13	W02058		GB 93-1987弹垫d5(镀白锌)	Spring washer 5	4	4	
14	951S05001		内六角圆柱头螺钉M5×75	screw M5×75	4	4	
15	S09113		GB/T77-2000螺钉M6×6	screw M6×6	1	1	
16	S09022		GB/T 77-2000 螺钉M3×4	screw M3×4	1	1	
17	1233300200		光电伺服电机（鲍麦编码器）	Motor cover asm.powermax	1	1	
	1233300600		光电伺服电机（众邦编码器）	Motor cover asm.zobow	1	1	
18	951S15011		小盘头组合螺钉M3×12	screw M3×12	5	5	
19	1233300100		58420J一体电控（鲍麦）	Electronic control box	1	1	58□□0J
20	12311008		电线盖板	Wire cover plate	1	1	58□□0J
21	12311001		58420J电控罩壳	Electronic control casing	1	1	58□□0J
22	1231100100		58420J电控罩壳组件	Electronic control box	1	1	58□□0J
23	13826009		罩壳台阶销	Pin	1	1	
24	12922015		橡皮塞	Rubber plug	1	1	
25	114S13001		电控固定螺钉M5×20	screw M5×20	4	4	
26	W01004		GB/T 97.1 M5垫片(镀白锌)	Spring washer 5	2	2	
27	1233300300		操作面板组件	Control panel	1	1	58□□0J
28	12333005		双针直驱电控(T19)	Direct drive electronic control	1	1	58□□0B
29	138S30006		罩壳固定螺钉	screw	1	1	58□□0B

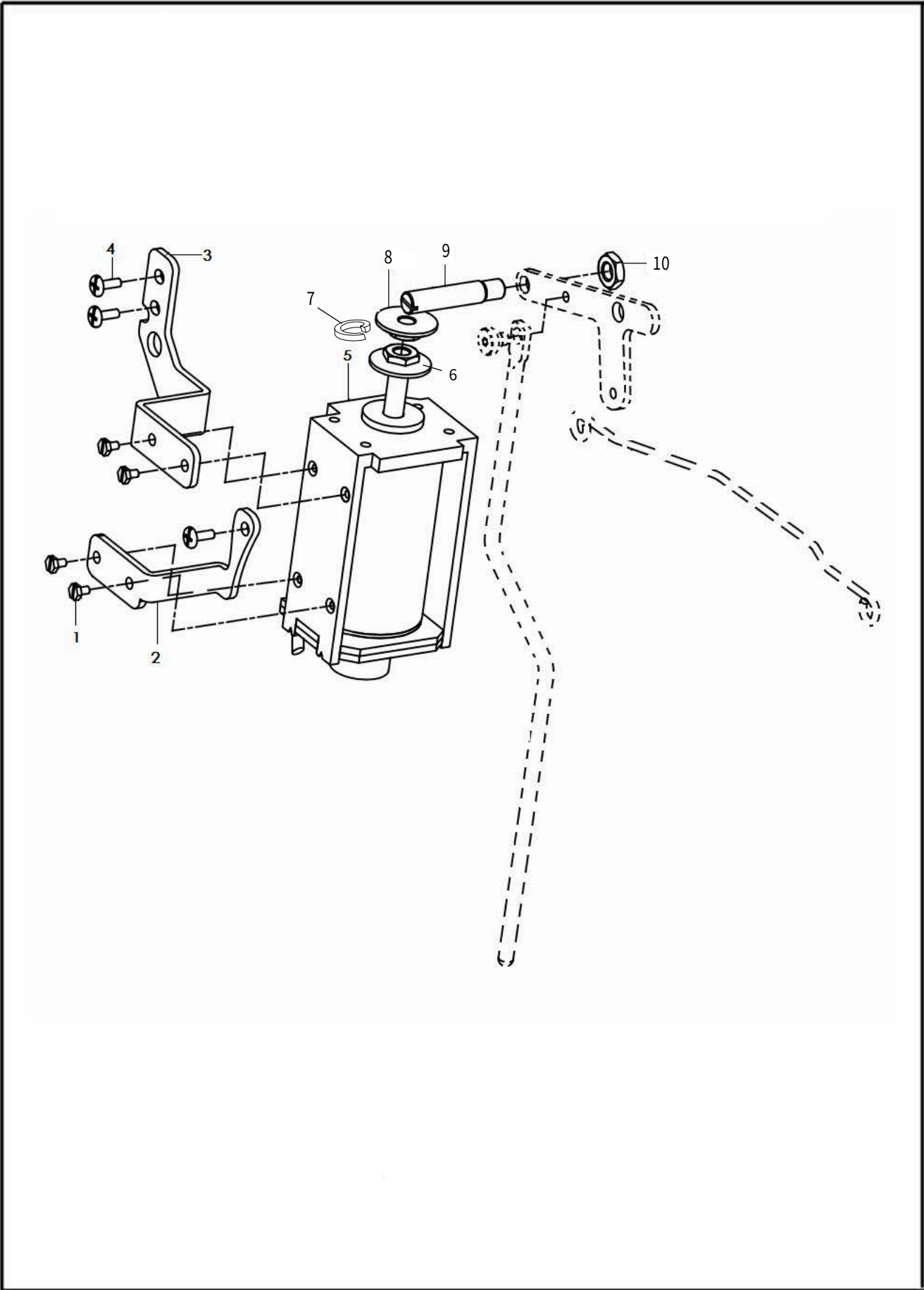
S.倒缝开关分部件/Quick reverse switch mechanism



S.倒缝开关分部件/Quick reverse switch mechanism

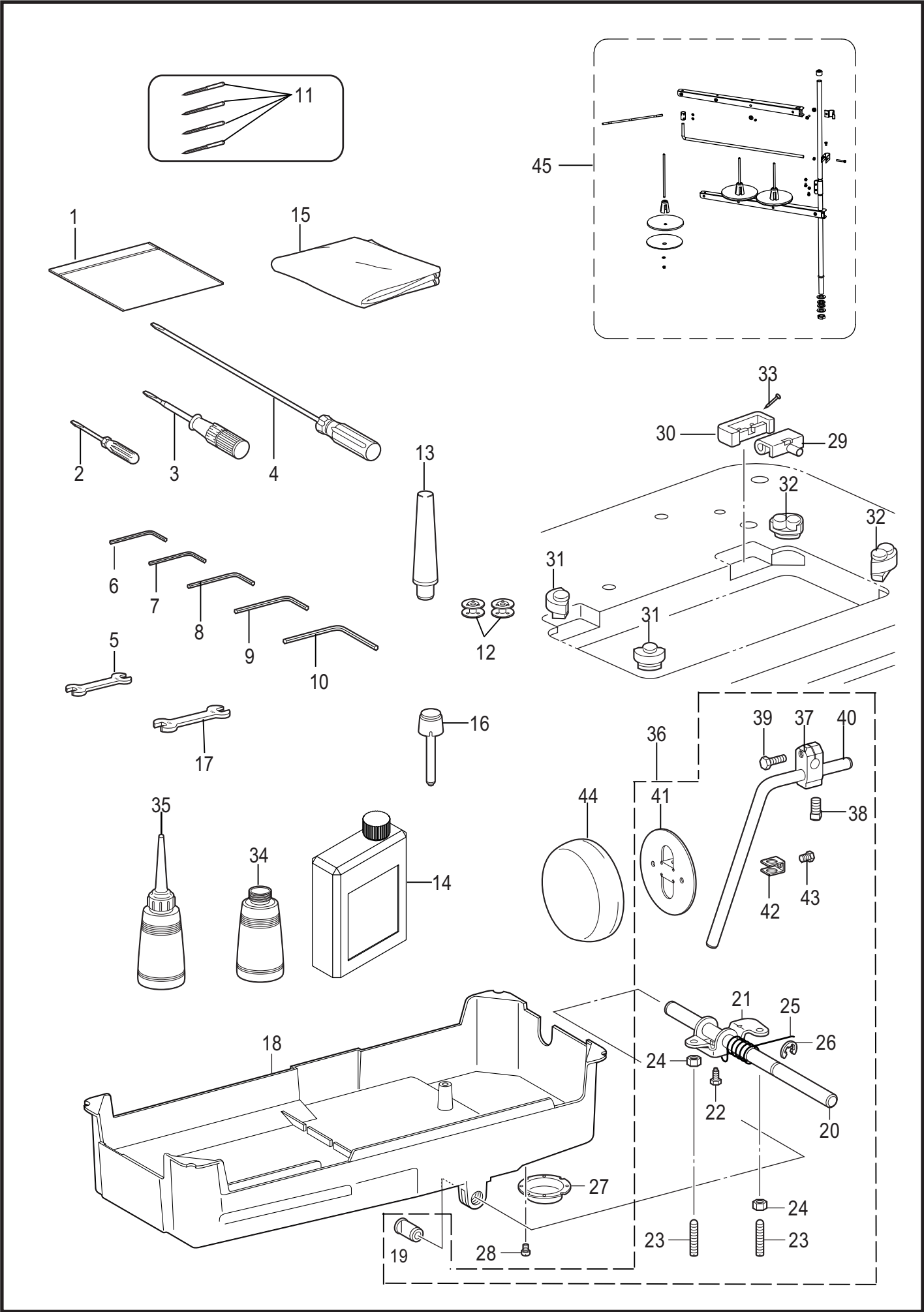
序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1-1	1233000100		倒缝开关 (含LED灯) 5V	Reverse actuator assy	1	1	58□20
1-2	1233000200		倒缝开关 (含LED灯) 5V	Reverse actuator assy	1	1	58□50
2	S04030	SA2689100	螺钉M5×6	screw,pan M5×6	2	2	
3	12312010		线夹	Stopper	5	5	58□□0B
	12312010		线夹	Stopper	1	1	58□□0J
4	S04030	062500616	螺钉M5×6	screw,pan M5×6	1	1	
5	12312011		线夹	Stopper	1	1	58□□0J
6	S04030	062500616	螺钉M5×6	screw,pan M5×6	1	1	

T.自动抬压脚部件/Auto lifter components



T.自动抬压脚部件/Auto lifter components

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	201S12005		电磁铁固定螺钉	screw	4	4	
2	12912210		电磁铁右支架	Right bracket	1	1	
3	12912200		电磁铁左支架	Left bracket	1	1	
4	S04028		螺钉 M5×8(镀铬)	screw,Pan M5×8	3	3	
5	1233000700		内置抬压脚电磁铁组件	Solenoid asm.	1	1	
6	113S16004		法兰螺母	Flange nuts	1	1	
7	W02023		标准型弹簧垫圈φ8	Spring washer	1	1	
8	112309001		六角法兰面螺母M8	Flange nuts	1	1	
9	129S30050		抬压脚链接销	Link pin	1	1	
10	N01028		螺母M8 (镀锌)	Nut M8	1	1	



Z.附件/Accessories

序号 No.	件号 Part No.	参考件号 Ref.Part No.	零部件名称	Name of parts	数量 Amt.		备注
					□□3	□□5	
1	30131029	122991001	附属品塑料袋	Accessory Bag	1	1	
2	10131004	142443001	螺丝刀 (小)	screwDriver,1.9×52	1	1	
3	10131003	118837001	螺丝刀 (中)	screwDriver,3.4×70	1	1	
4	10131002	S17774001	螺丝刀 (大)	screwDriver,4.7×250	1	1	
5	30131006	100887001	扳手 (8mm~10mm)	Wrench	1	1	
6	20131044		直柄内六角螺丝刀(1.5mm)	Hexagonal Wrench 1.5			
7	20131046	142002001	内六角扳手2	Hexagonal Wrench,2	1	1	
8	30131010	154125001	内六角扳手3	Hexagonal Wrench,2.5	1	1	
9	30131012	142721001	内六角扳手4	Hexagonal Wrench,3	1	1	
10	20131056	149570001	内六角扳手6	Hexagonal Wrench,5	1	1	
11	11617002	107415014	机针DP×5 (#14)	Needle ,DP×5	4		
	10117002	107415022	机针DP×5 (#21)	Needle ,DP×5		4	
12	11618001	S01928151	梭芯	Bobbin	2	2	58420/58450
	11818001	S07741001	梭芯	Bobbin	2	2	58720/58750
13	10111011		机头支柱	Head Rest	1	1	
14	20131037	S55663001	油壶	Oil Tank Assy	1	1	
15	13831038	144226001	防尘罩	Head Cover	1	1	
16	12911014	145573000	膝控提升顶杆	Knee Lifter Complying Bar	1	1	
17	40931025		扳手 (9mm~11mm)	Wrench	1	1	
18	12901011	SA2692101	油盘	Oil Pan	1	1	
19	11636007	149578000	塑料轴套	Bush	1	1	
20	12902019	SA2582001	膝控横轴	Knee Lifter shaft	1	1	
21	12912087	SA2590001	膝控曲柄	Knee Lifter	1	1	
22	101S12002	S25344001	螺栓M6	Bolt,M6	1	1	
23	417S10003	S25475101	螺钉M6×19	Set screw,M6×19	2	2	
24	N01012	021060306	六角螺母M6	Nut,3M6	2	2	
25	11627011	S15889001	复位弹簧	Twist Spring	1	1	
26	H05010	146293001	挡圈E10	Retaining Ring,E10	1	1	
27	12912088	153230101	放油口	Drain	1	1	
28	S01031	S23418002	螺钉M4×5	screw,M4×5	2	2	
29	1011203100	143882001	机头连接钩组件	Head Hinge	2	2	
30	10122060	143910009	机头连接钩座(6-1) (内销)	Rubber Cushion	2	2	
31	12922017	SA1962001	头部防震垫	Head Cushion	2	2	
32	12922018	SA1963001	头部防震垫	Head Cushion	2	2	
33	101S30010	109714000	机头连接勾座钉	Nail	4	4	
34	11631008	114486002	油壶	Oiler	1	1	
35	11631008	114483002	油壶组件	Oiler Assy	1	1	
36	1160101000	S38300001	脚弓托架组件	Knee Lifter Assy	1	1	
37	12912417	146039121	操纵杆接头	Knee Lifter Bracket	1	1	
38	101S12003	100463021	操纵杆接头螺钉	Knee Lifter Bracket , screw	1	1	
39	129S12002	S35820021	锥头螺钉M6	screw,Pan M6	1	1	
40	12912414	S38278001	操作杆	Knee Lifter Bar	1	1	
41	12912415	S34756021	操作板	Knee Lifter Plate	1	1	
42	12912416	114967021	操作杆接头	Knee Lifter Plate Stopper	1	1	
43	101S12004	110087021	螺钉M6	screw,Pan M6	1	1	
44	10122024	S31885001	操纵板软垫	Knee lifter plate cover	1	1	
45	1233100600		线架组件 3DRTHF	Cotton Stand Assy,3DRTHF	1	1	

针位组零件明细表/Gauge parts list

电脑机（自动剪线）/Computer machine（Auto Thread Trimming）						
机型 Modle	58420G/58420J系列			58450G/58450J系列		
针位距离 Needle gauge (mm)	针板 Needle Plate	压脚 Presser Foot Assembly	送布牙 Feed Dog	针夹头 Needle Clamp Assembly	针板 Needle Plate	压脚 Presser Foot Assembly
1/8" (3.2mm)	12915306		810586		12915306	810590
3/16" (4.8mm)	12915307		810756		12915307	810761
1/4" (6.4mm)	12915206	1291632500	12914301 (-3) 12914314 (-5) 12914315 (*)	11634001	12915206	1291632500 12914301 (-3) 12914314 (-5) 12914315 (*) 11734002 (左) 11734003 (右)
5/16" (7.9mm)	12915309		804008		12915309	810800
3/8" (9.5mm)	12915308		810587		12915308	810591
1/2" (12.7mm)	12915312		810588		12915312	810592
5/8" (15.9mm)	12915314		810589		12915314	810593
3/4" (19mm)	12915315		811002		12915315	811005
7/8" (22.2mm)	12915316		811003		12915316	811006
1" (25.4mm)	12915317		811004		12915317	811007
备注 Remarks	(-3) 为薄料送布牙, (-5) 为厚料送布牙, *为椭圆形针孔送布牙适用于极厚料。 (-3) thin material feed dog, (-5) Thick material feed dog . 58420G与58420J系列电脑车针板杰克克专用, 除针板外其他针位与兄弟款电脑车通用, 与重机双针电脑车针位不通用。					

针位组零件明细表/Gauge parts list

机型 Modle	普通机/Ordinary machine							
	58420/58420B/58720/58720B				58450/58450B/58750/58750B			
针位距离 Needle gauge (mm)	针板 Needle Plate	压脚 Presser Foot Assembly	送布牙 Feed Dog	针夹头 Needle Clamp Assembly	针板 Needle Plate	压脚 Presser Foot Assembly	送布牙 Feed Dog	针夹头 Needle Clamp Assembly
1/8" (3.2mm)	800980				1293407700			
5/32" (4mm)	1293406300				1293407800			
3/16" (4.8mm)	800979				804060			
1/4" (6.4mm)	12915004	1291600200	12914001	11634001	12915004	1291600200	12914001	11734002 (左) 11734003 (右)
5/16" (7.9mm)	804053				803190			
3/8" (9.5mm)	804009				804065			
7/16" (11.1mm)	1293406700				1293408200			
1/2" (12.7mm)	804055				804056			
5/8" (15.9mm)	810101				1293403700			
3/4" (19mm)	1293407000				1293408300			
7/8" ☆ (22.2mm)	1293407100				1293408400			
1" ☆ (25.4mm)	1293407200				1293408500			
1-1/4" ☆ (31.8mm)	1293407300				1293408600			
1-1/2" ★ (38.1mm)	1293407400				1293408700			
1-5/8 " ★ (41.3mm)	1293407500				1293408800			
1-13/16" ★ (46mm)	1293407600				1293408900			
备注 Remarks	☆58720B/58750B针位对应的机壳不通用，需要公司定做。 ☆58720B/58750B The shell of needle is not common and needs to made by the company. ★此类针位对应的所有机壳不通用，需要公司定做。 ★All the shells corresponding to this kind of needle are not common and needs to made by the company.							

双针系列机型装箱清单

Packing list of series head for double needle lockstitch sewing machine

序号 No.	件号 Part No.	零件名称	Name of parts	数量Amt.	备注 Note
1		机头	Sewing machine head	1	
2		装箱清单	Packing list	1	
3	20731047	螺丝刀(大)	Screw drive L	1	
4	10131003	螺丝刀(中)	Screw drive M	1	
5	10131004	螺丝刀(小)	Screw drive S	1	
6	30131006	扳手(8mm-10mm)	Wrench(8mm-10mm)	1	
7	40931025	扳手(9mm-11mm)	Wrench(9mm-11mm)	1	
8	20131044	直柄内六角螺丝刀(1.5mm)	Hexagonal Wrench 1.5	1	58450/58750
9	20131046	内六角扳手(2mm)	Hexagonal Wrench 2	1	
10	30131010	内六角扳手(2.5mm)	Hexagonal Wrench 2.5	1	
11	30131012	内六角扳手(3mm)	Hexagonal Wrench 3	1	
12	20131056	内六角扳手(5mm)	Hexagonal Wrench 5	1	
13	20131051	镊子	Nipper	1	
14	11617002	机针DP×5 (#14)	Needle DP×5 (#14)	4	-□□3
	10117002	机针DP×5 (#21)	Needle DP×5 (#21)	4	-□□5
15	11618001	梭芯	Bobbin	2	58420/58450
	11818001	梭芯	Bobbin	2	58720/58750
16	10111011	机头支柱	Head rest	1	
17	20131037	油壶	Oiler	1	
18	12911014	膝控提升顶杆	Knee Lifter Complying Bar	1	
19	20131079	8.5×12袋	Bag (8.5×12)	2	
20	12901011	油盘组件	Oil Pan Assy	1	
21	12922017	头部防震垫	Head Cushion	2	
22	12922018	头部防震垫	Head Cushion	2	
23	1011203100	机头连接钩组件	Head Hinge 6-1	2	
24	10122060	机头连结钩座(6-1)(内销)	Nail	2	
25	11411029	注射器	Injector	1	
26	20131075	干燥剂	Desiccant	8	
27	20131077	20×15袋	Bag (20×15)	2	
28	20131078	32.5×7袋	Bag (32.5×7)	1	
29	12931023	塑料袋(600×300×600)	Bag (600×300×600)	1	
30	12931024	油纸(600×300)	Oil Paper	1	
31	13831018	防尘罩77×51(cm)	Head Cover	1	
32	11631008	油壶	Oiler	2	
33	1160101000	脚弓托架组件	Knee Lifter Assy	1	
34	1233100600	线架组件 3DRTHF	Cotton Stand Assy,3DRTHF	1	
35	11431039	进口白油	Oil	0.003Kg	
36	12931009	说明书	Instruction Book	1	
37	S01031	GB/T65-1985螺钉M4×4.7	Screw	2	
38	20131159	73×130合格证	Product Qualified Card	1	
39	10131093	标签纸70×30	Label	1	
40	20131160	标签纸80×50	Label	2	
41	11631025	泡沫箱	Foam Box	1	
42	12931006	纸箱	Carton Packing	1	
43	12931014	泡沫块	Foam Block	2	58420J系列
44		鲍麦调速器 (包括拉杆、安装螺钉)	Speed Controller	1	58420J系列
	10130043	众邦调速器 (包括拉杆、安装螺钉)	Speed Controller	1	58420B系列

杰克缝纫机

全球销量遥遥领先

Leading in global sales

400-8876-858
www.chinajack.com



JACK SEWING MACHINE CO.,LTD.

2019年10月份 Edition: 2019 September

杰克缝纫机股份有限公司

中国浙江省台州市椒江区三甲东海大道东段1008号

电话 :0086-576-88177788 88177789

传真 :0086-576-88177758

产品标准代号 : Q/TK 007-2017

资料如有更改, 恕不另行通知, 以实样为准

JACK SEWING MACHINE CO.,LTD.

NO.1008, DONGHAI AVENUE EAST, JIAOJIANG DISTRICT,TAIZHOU CITY, ZHEJIANG

TEL: 0086-576-88177782 88177767

ack.com

FAX: 0086-576-88177787

www.chinajack.com

Standard code of the products:Q/TK 007-2017

You will be not informed if the file has been revised. Please set sample as standard.