

使用说明书

高速双针平缝机

HIGH-SPEED TWIN-NEEDLE LOCKSTITCH SEWING MACHINE

OPERATION MANUAL

好推手广告有限公司

HTS ADVERTISING CO.,LTD.

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使用说明

Instructions For Operation

操作前注意事项

① 安全预防

1. 打开电源后，将手指远离机针下面和周围及远离皮带轮。
2. 当机器不使用或操作者离开时，必须关掉电源。
3. 当倾斜机头、安装或卸下V型带、调整机器时，必须关掉电源。
4. 机器运转时，避免将手指、头发、棒状物等靠近主动轮、V型带、旋梭或马达，否则可能引起伤害。
5. 机器运转时，不要将手指插入挑线杆防护罩下、机针下面及周围或主动轮附近。
6. 如果安装了皮带轮、压脚防护罩、透明有机玻璃罩，则在这些防护设施不完善时不要开机。

② 开机须知

1. 如果油盘中无油，则不要开机。
2. 如果机器是靠人工滴油润滑的，则在充分润滑前不要开机。
3. 如果是新机器，则在开机之前核对皮带轮运转方向。
(观测者面对马达皮带轮，皮带轮应逆时针方向运转)。
4. 确认马达的额定电压和相位。

③ 操作条件

1. 不要在高于 35℃或低于 5℃时使用，否则会造成机器损坏。
2. 避免在肮脏的环境中使用机器。

PRECAUTIONS BEFORE STARING OPERATION

① Safety Precautions

1. When turning the power on, keep your hands and fingers away from the area around/under the needle and the area around the pulley.
2. Power must be turned off when the machine is not in use, or when the operator leaves his/her seat.
3. Power must be turned off before tilting the machine head, installing or removing the "V" belt, adjusting the machine, or when replacing.
4. Avoid placing fingers, hairs, bars etc., Near the pulley, "V" belt, bobbin winder pulley, or motor when the machine is in operation. Injury could result.
5. Do not insert fingers into the thread tade-up cover, under/around the needle, or pulley when the machine is in operation.
6. If a belt cover, finger guard, and/or eye guard are installed, do not operate the machine without these safetv devices.

② Precautions before Starting Operation

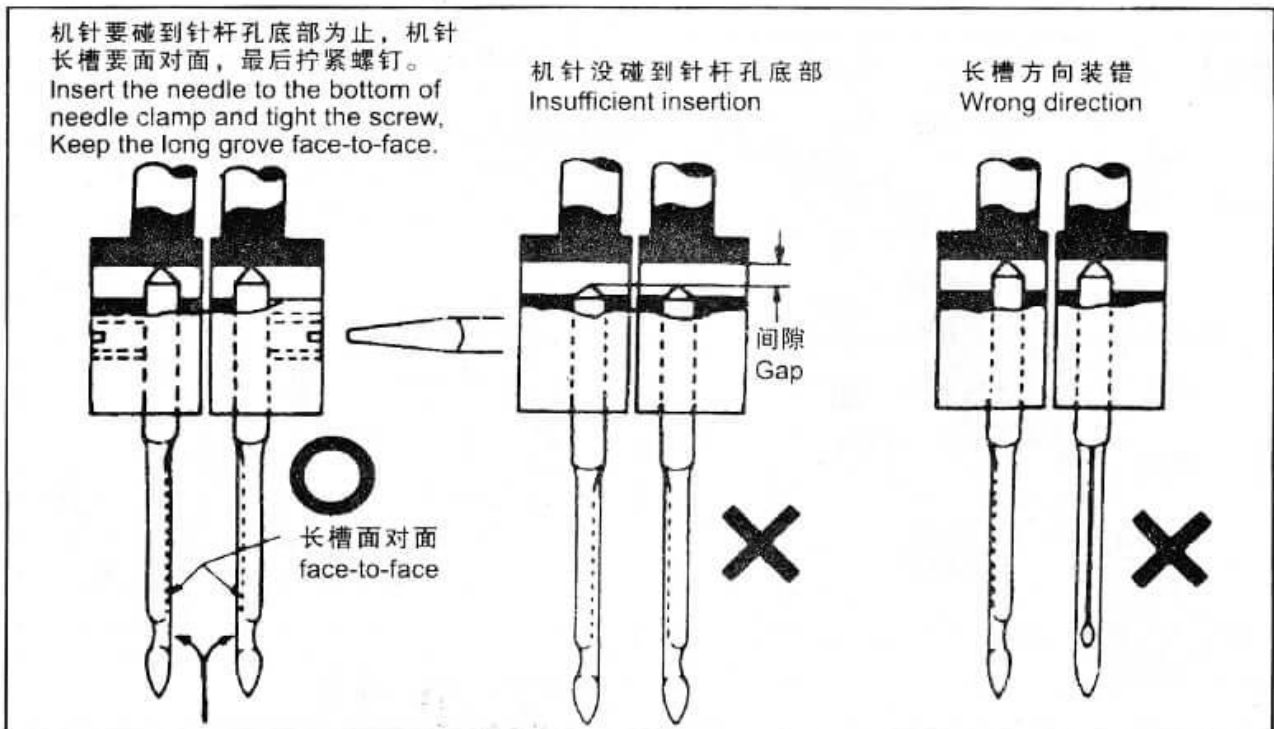
1. If the machine's oil pan has an oil sump, never operate the machine before filling it.
2. If the machine is lubricated by a drop oiler, never operate the machine before lubricating.
3. When a new sewing machine is first turned on, venfy the rotational direction of the pulley with the power on.
(The pulley should rotate counterclockwise when viewed from the pulley.)
4. Varify the voltage and (single or three) plase with those given on the machine nameplate.

③ Precautions for Operating Conditions

1. Avoid using the machine at abnormally high temperature (35 °C or higher) or low,temperatures (5°C or lower). Otherwise, machine failure may result.
2. Avoid using the machine in dusty comditions.

① 安装机针 How to attach needle

注：一定要先切断电源再装机针。
Note: Before attach needle, be sure to switch off the power source.

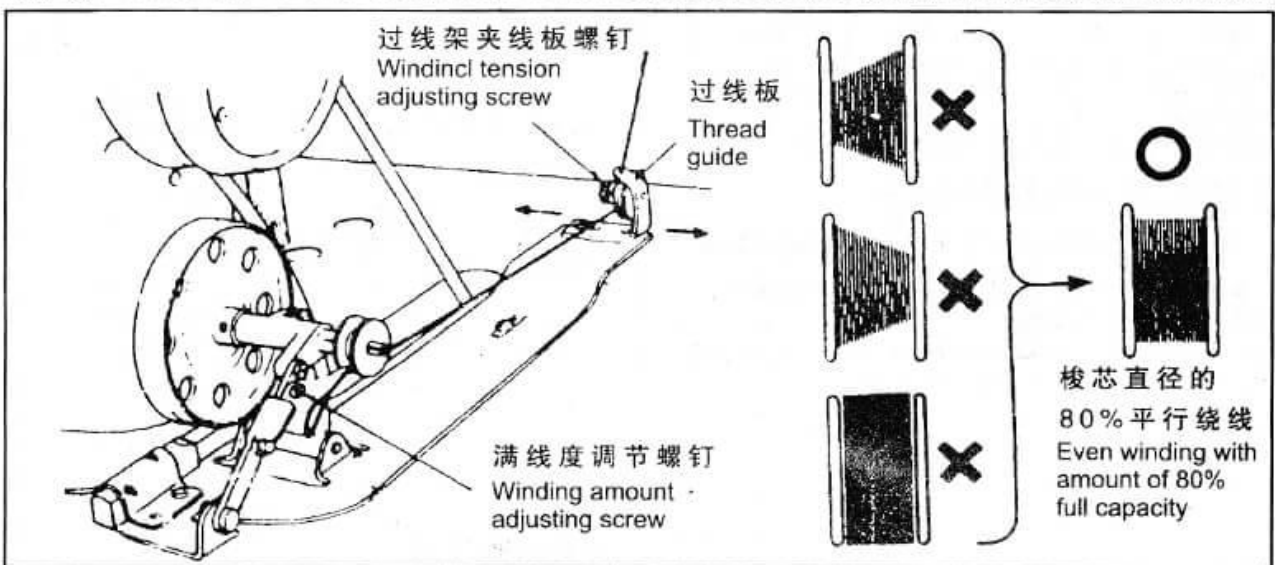


② 绕线调节法 How to wind the lower thread on the bobbin

注：空运转时一定要把压脚提起。
Note: Raise the presser foot while the sewing machine left out of use.

- 绕线压力的强弱 绕涤纶、尼龙线时，要减少绕线压力。
- 单边绕线 过线架朝绕线量少的方向移动。
- 绕线量调节 绕线量大时，旋松满线度调节螺钉，绕线量少时，拧紧螺钉。

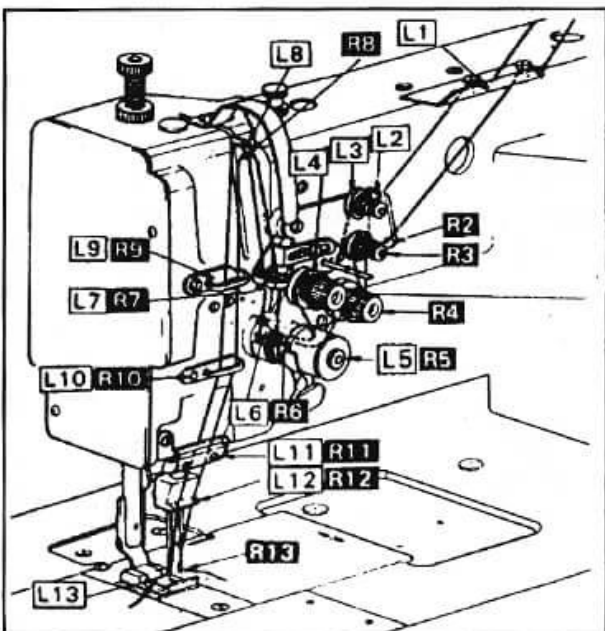
Strength of winding: Particularly in the case of nylon or polyester thread, it is desirable that the bobbin is wound loosely enough.
Uneven winding: In the case of uneven winding, adjust the thread guide slightly toward the less wound part of bobbin to obtain even winding.
Winding amount of thread: When the winding amount of thread is excessive, loose the adjusting screw and tighten when insufficient.



3 穿面线方法 Threading

挑线杆上升至最高位置，按下列顺序穿线

Raise the thread take-up lever to its highest position and thread the upper thread in the following order.



5 线勾的调节 Adjusting of thread guide

根据缝料的厚薄调节线勾位置

Adjusting the thread guide according to the sewing materials conditions

线勾位置 Thread guide position	左 Left	中 Middle	在 Right
缝料 Materials	厚料 Heavy	M } 标准 B } Standard	薄料 Light
面线供给量 Upper thread	多 Increase	标准 Standard	少 Decrease

7 梭芯装入旋梭的方法

Put the bobbin into the rotating hook

从梭芯抽出约5cm的线，如图所示方向拿住梭芯，然后装入旋梭。

Pull out thread about 5cm, hold the bobbin as shown, and put the bobbin into rotating hook.

4 针距调节和倒缝

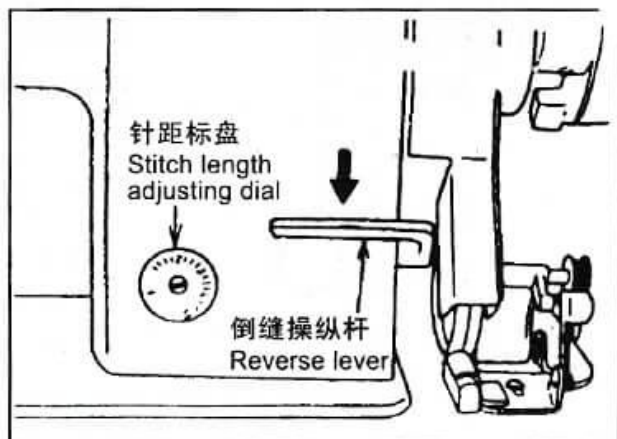
Adjusting of stitch length & reverse lever

注：压下倒缝操纵杆，转动针距标盘，调节针距。

倒缝……压下倒缝操纵杆

放开倒缝操纵杆，则恢复为顺缝。

For desired stitch length, push the reverse lever downward and adjust by stitch length dial, Push the reverse lever downward, reverse sewing can be continued When the reverse lever is released, reverse sewing return to forward sewing

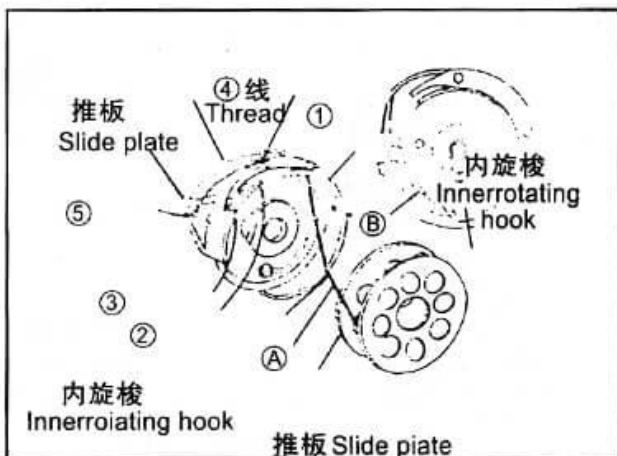


6 压脚压力的调节

Adjusting pressure of presser foot

调压螺钉 Pressure regulating thumb screw

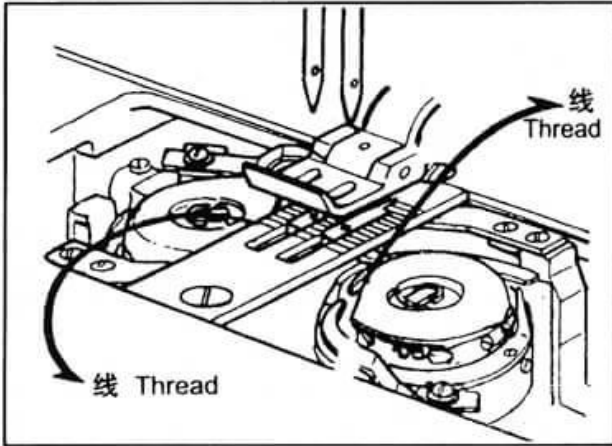
薄料 (弱) For light material (Weaken)
厚料 (强) For heavy material (Strength)



8 引底线的方法 Leading the lower thread

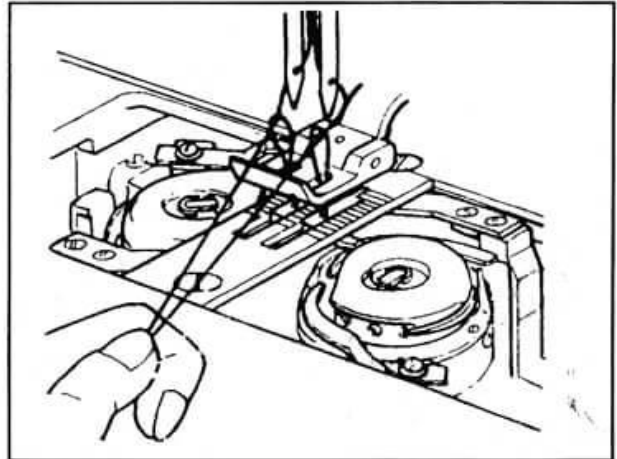
(1) 把底线从底板上抽出。

Lead the lower thread to thread groove(1), pass thread through tongue(2), pull out lower thread over bed plate

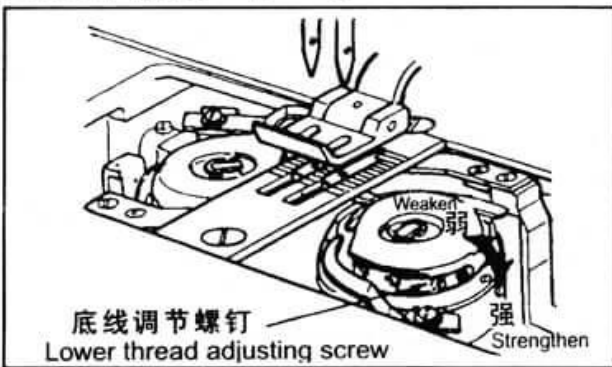


(2) 左手拉住两根面线，用右手慢慢转一圈皮带轮如图所示，面线拉起把底线也引出，然后拉齐从压脚下面拉过，放倒对面。

Hold up upper thread by left hand, rotate the wheel by right hand, lower thread be led while upper thread pull out. make the length of upper thread and lower thread uniform, lead thread under the presser foot.



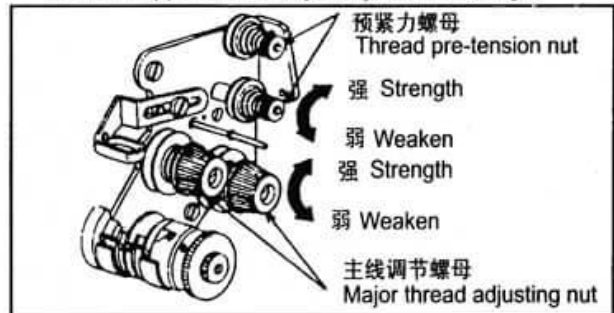
9 调节底线 Adjusting the lower thread



11 调节面线 Adjusting the upper thread

左右旋转面线调节螺母进行调节

Turn the upper thread adjusting stud left or right



10 挑线簧的调节 Adjusting thread take-up spring

1. 挑线簧动作量的调节

-1. 左面线的挑线簧 ①: 把定位块的止动螺钉②放松, 调节定位块。

-2. 右面线的挑线簧 ④: 把定位块的止动螺钉⑤放松, 调节定位块⑥。

1. Adjusting the thread take-up spring stroke

-1. Thread take-up spring for left upper thread Loosen the stop screw (2), adjusting the stopper block(3).

-2. Thread take-up spring for right upper thread: Loosen the stop screw(5), adjusting the stopper block(6).

2. 挑线簧强度的调节

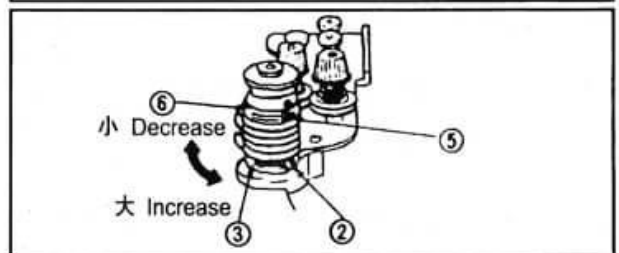
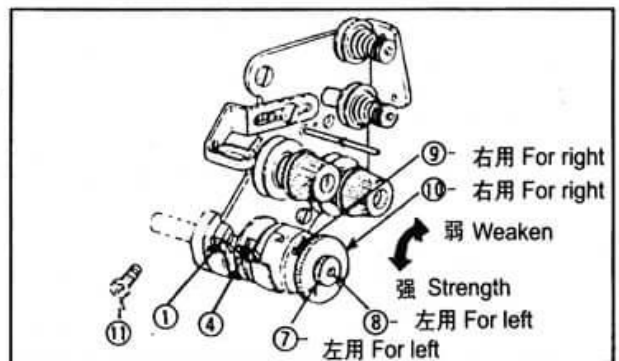
-1. 调节左面线时, 先放松固定螺母⑦及机头内部调节座螺钉(11), 然后调节夹线螺钉。调节结束, 拧紧固定螺母及调节座螺钉即可。

-2. 调节右面线时, 先放松紧固螺钉⑨, 回转调节螺母⑩。调节结束, 拧紧固定螺钉⑨进行固定。

2. Adjusting the thread take-up spring tension

-1. Thread take-up spring tension for left upper thread: Loosen the Nut(7) and Screw (11), then adjusting the tension screw After adjustment, tighten the Nut(7) and Screw(11)

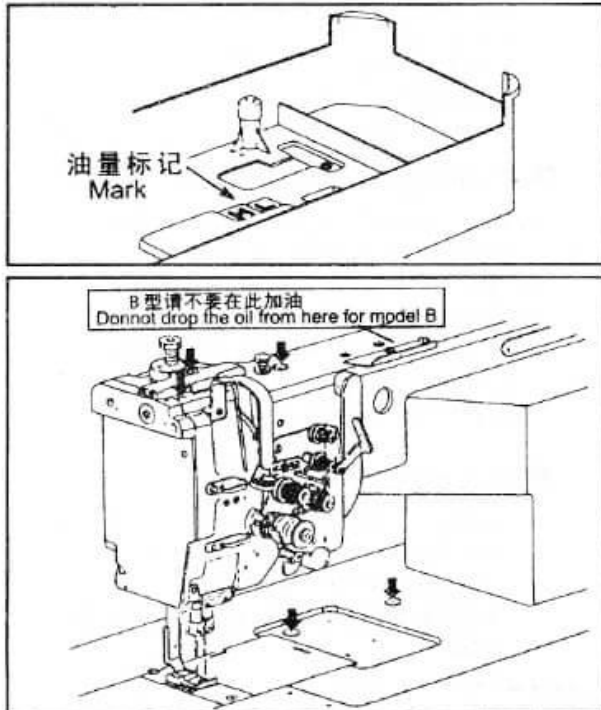
-2. Thread take-up spring tension for right upper thread: Loosen the Screw (9), adjusting the nut (10) After adjustment, tighten Screw(9)



故障状态 Problem	原因 Cause	简单的修理方法 Solution
跳针 Stitches skip	(1) 针的原因 Needle ● 针弯曲 Needle is bent ● 针与线不相配 Size of needle and thread is not suitable	换新针 Insert new needle 根据线的粗细配适当型号的机针 Select proper needle for thread thickness
	(2) 针没装好 Needle is not inserted correctly ● 针没装到底 Needle is not fully inserted ● 针装歪(如图) Installation of needle is crooked(see picture)  ● 针装反 Installation of needle is opposite	针要碰到针杆孔底部为止 Needle must be inserted fully into the bottom of needle bar 针孔要装直(如下图) Installation of needle must be straight(see the below picture)  针的长槽要面对面 Keep the long groove of needle face to face
松浮不紧 Stitches are loosened	(1) 面线调节太松 Surface stitch is too loosened	面线调节螺母向右一点点调节至适度 Turn the surface stitch nut to the right side lightly until it gets the suitable place
	(2) 挑线簧太软松 Stitch-spring is too soft	夹线调节螺钉一点点向左旋转, 挑线簧逐步变硬。 厚的材料(针脚长的)要求挑线簧较硬。 When the thread-holding nut turn left, the stitch-spring will become hard, heavy material (long needle foot) requires hard stitch-spring
	(3) 底线调节太松 Bottom stitch is too loosened	梭芯套上的梭皮螺钉逐渐调节至适度 Turn the screw of bobbin case to a suitable place.
线被切断 Needle thread breaks	(1) 线的质量不好 The thread quality is too poor	调换成质量好的缝纫线, 不能使用粗细不均的线 Select good quality thread, don't use rough thread
	(2) 针的原因 Needle cause ● 针弯曲 Needle is bent ● 针没装好 Needle is not well installed ● 与线相配的针太细 Needle size is too thin for thread	换新针 Insert new needle 参照跳针(2)项 See item (2) of stitches skip 用与线相配的机针 Select proper needle size for thread
	(3) 面线张力太大 Thread tension too tight ● 两夹线板内线屑太多 Tension disc area lint excessive ● 梭芯绕线过慢或绕线不够 Bobbin winding too low or not enough ● 梭芯套内线屑太多 Bobbin case lint excessive ● 梭芯套上的梭皮歪斜(浮起)或折断 Bobbin case tension spring lean or break ● 梭芯装入梭芯套的方法不对 Bobbin in stalling not correct	面线调节螺母向左旋转, 减小张力, (如果是面线不紧而调得太紧的话, 先查清不紧的原因) Turn tension adjust nut post left, the pressure will be decreased, (if the thread tension not too light, check the case first) 夹线组件调节螺母拧下后能全部分解, 把夹线板内面和夹线螺钉的过线槽清理干净。 Tension assembly complete adjust nut will be take apart, then clean them 正确绕线, 平行绕线且至梭芯外径的80% Correct wind the thread, wind parallel to bobbin diameter 80% 清除尘屑 Clean the lint  改正或换掉安装歪斜的 Correct or change them 梭芯装入梭芯套后, 拖动底线, 梭芯逆时针方向回转 Bobbin put in the bobbin case, pull the bottom stitch, turn the bobbin counterclockwise.
针角起皱 Fabric wrinkle	(1) 对于被缝制的材料, 针、线太细 Refer to material of sewing needle, thread too small	对于被缝制得材料要用适当粗细得针和线, 特别是极薄的材料, 不能用过粗的针和线, 否则会起皱 The material sewing will be fit for the needle and thread, specially the light-weight material, not use too thick neele and thread, otherwise will wrinkle.
	(2) 调节螺钉(底线、面线)调得太紧 Adjust nut (bottom stitch, surface stitch) Adjusting too tight.	调整面线调节螺母、挑线簧、梭芯套 Adjusting tension adjust nut, take-up spring, tension case.
	(8) 压紧杆压得太紧 The thread take-up press too tight	压紧杆调压螺钉向右旋转, 减小压力(极薄材料要调低压力) Turn the set screw right, the press will be decised (light-weight material under low press).

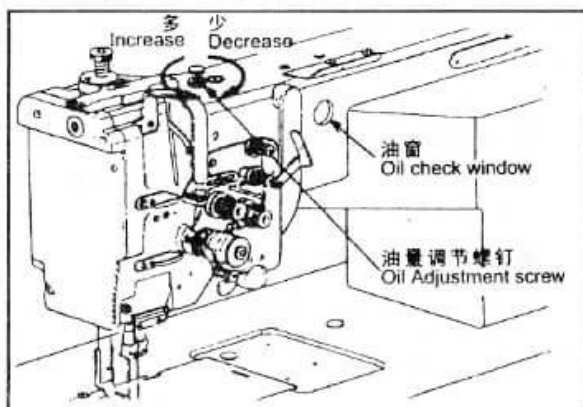
① 润滑 Lubrication (1)

油加到油盘中H位置。
 在使用中要定期检查，如果油量在L位置以下，
 请补加到H位置。
 请使用白色缝纫机油。
 Pour oil up to the position H of oil tank.
 During operation, check the oil volume periodically, if
 oil lever is below the position L, replenish oil up to the
 position H Please use the Sewing Machine oil.



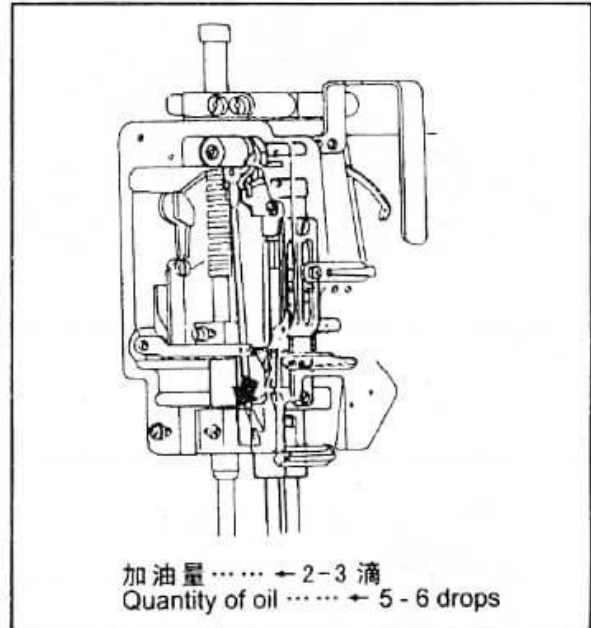
③ 供油状态和调节挑线杆供油 Condition of oil lubrication & adjusting take-up lever lubrication

- (1) 运转过程中确认油窗里有油滴下。
- (2) 可调节给挑线杆组件加油的调节螺钉。
- (1) Be sure to the oil is splashing through the oil check window while sewing machine is operating
- (2) Adjusting the oil adjustmet screw

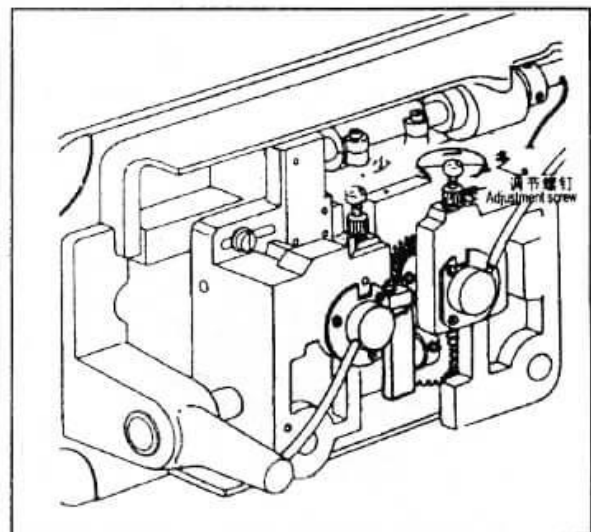


② 润滑 Lubrication (2)

新的缝纫机或长期不使用的缝纫机,在
 使用前要适量地加油(箭头所指)。
 While a new sewing machine is first operated,
 or when a sewing machine left out of use for
 a long period of time is operated ,it will be
 necessary to oil.



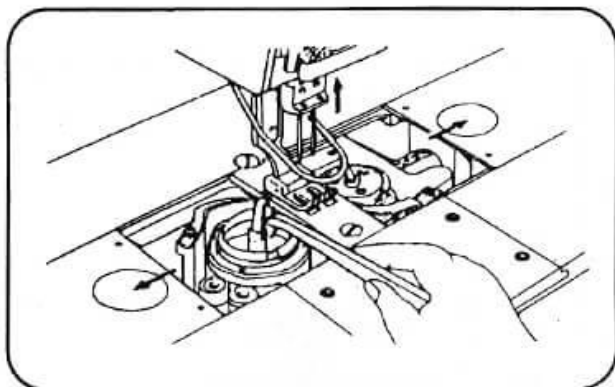
④ 旋梭供油调节装置 Adjustment of hook lubrication



清洁 CLEANING

* 为了更好地保养和延长使用寿命，每天需进行下列清洁工作。此外，若长时间不使用机器，再次使用时，请按下列步骤进行操作。

* 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.

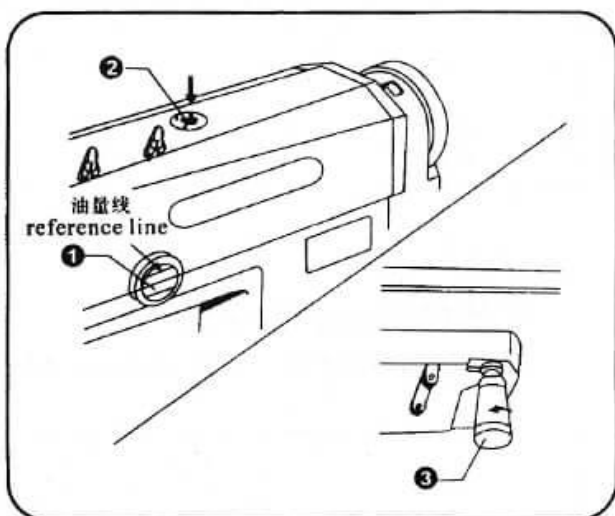


■ 清理旋梭

1. 转动上轮将机针提升到最高位置。
2. 打开左右推板。
3. 卸下梭心和梭帽。
4. 清理掉旋梭内所有碎线头。
5. 装上梭心和梭帽。

■ Cleaning the rotary hook

1. Turn the machine pulley to raise the needle to its highest position.
2. Open the left and right slide plates.
3. Remove the bobbin or the cap.
4. Remove all thread scraps from inside the rotary hook.
5. Replace the bobbin or the cap.

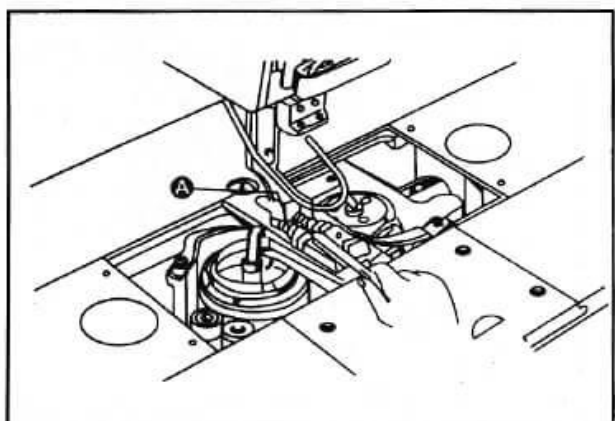


■ 再次加油

- * 使用缝纫机10号润滑油。
1. 如果油量到油窗●下线，通过油孔●加油直到油量达到上线。
 2. 若油壶●里的油已满，松开油壶●放掉里面的油。
 3. 把油壶●旋回油盘上。

■ Oil replenishment

- * Use only the lubricating oil. (Nisseki Sewing lube 10)
1. If the oil level drops to the lower reference line in the oil sight glass ●, pour oil in through the oil inlet ● until the oil level rises to the upper reference line.
 2. If the oil container ● has filled with oil, unscrew the oil container ● and dispose of the oil inside it.
 3. Screw the oil container back into the oil pan



■ 送布牙的清扫

抬起压脚，取下针板，清扫送布牙A间距(牙槽)内的灰尘，然后再安好针板。

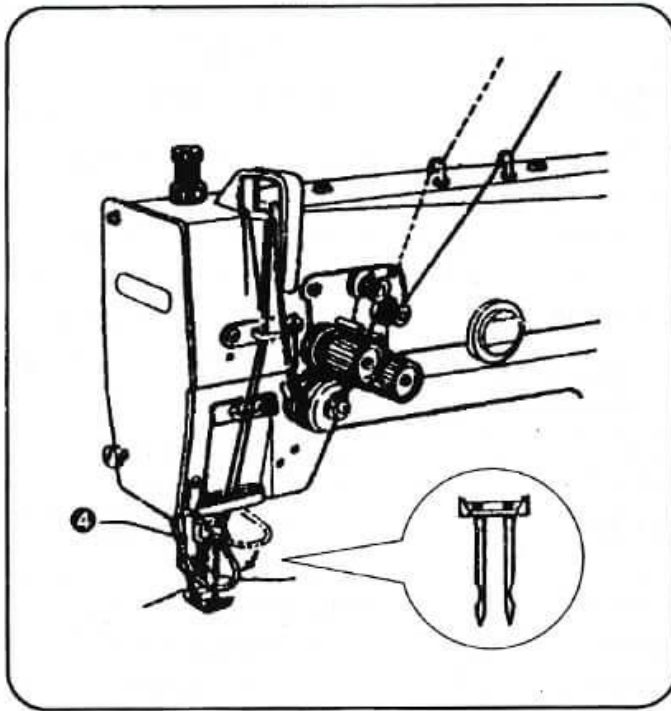
■ Cleaning feed dog

Pls uplift the press feet, take out the needleplate clean the dust between part A, then install back the needle plate.

■ 润滑 Lubrication

根据6页的步骤进行润滑

Lubricate the sewing machine according to the procedur on page6.



■ 检查

1. 检查上线是否正确。(参考16页)
2. 检查机针尾部是否损坏。
 - 若机针尾部损坏, 应换新机针。
3. 放下护指架④。
4. 试缝。

■ Checking

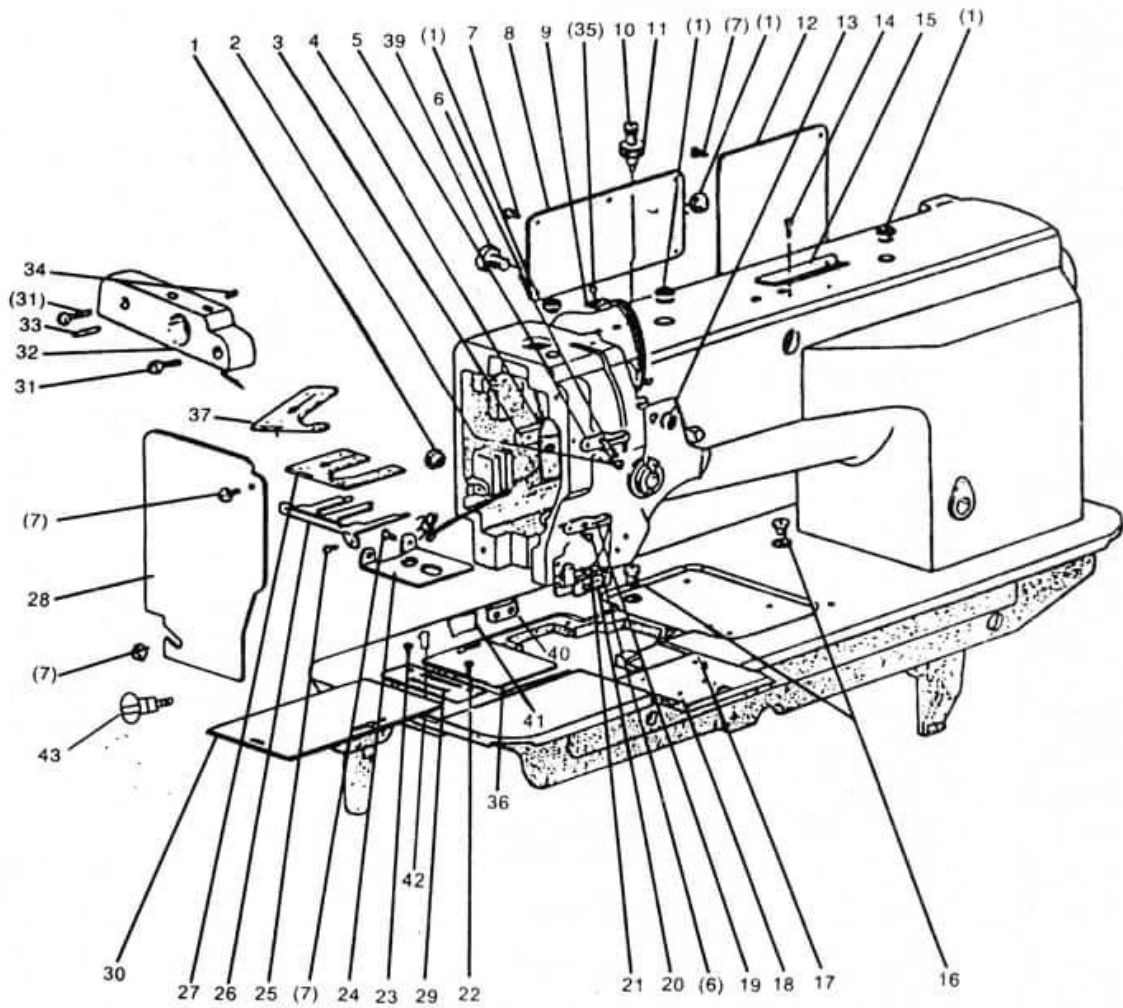
1. Check tha the upper threads have benn threaded correctly.(Refer to page 16)
2. Check that the end of the needle is not broken. If the end of needle is broken. the needle should be replaced.
3. Lower the finger guard④.
4. Carry out a test sewing.

2000S-2052-3/2252-3
2000S-2052-5/2252-5

型号 Model	2052-3	2252-3	2052-5	2252-5
规格 Specification				
用途 Material weight	薄料-中厚料 Thin-Medium material		中厚料 Medium material	
最高缝速 Max speed	4000rpm	3500rpm	3000rpm	3000rpm
针距长度 Stitch length	0~4mm	0~5mm	0~7mm	0~7mm
针杆行程 Needle bar stroke	33.4mm	33.4mm	35mm	33.4mm
压脚提升高度 Presser foot clearance	膝控 13mm 手动 7mm Kneel lifter 13mm Hand 7mm			
使用机针 Needle	DP × 5 (标准#14) DP × 5 (Standard#14)		DP × 5 (标准#18-#22) DP × 5 (Standard#18-#22)	
旋梭 Rotating hook	全回转自动加油水平旋梭 (标准旋梭) Rotary automatic lubrication Horizontal rotating hook (Standard rotating hook)		全回转自动加油水平旋梭 (2倍旋梭) Rotary automatic lubrication Horizontal rotating hook (Twice rotating hook)	
挑线杆 Take-up lever	滑杆式 Slide type			
针距调节 Adjustment of stitch	标盘式 Dial type			
供油方式 Lubrication	自动润滑 Automatic lubrication			
电机 Motor	离合器马达成370W Clutch motor 370W			
二针间距 Gap of two needles	标准 Standard	6.4mm		
	特殊 Special	2.4、4、5.6、3.2、4.8、8、9.5、12.7、16、19、25.4、28.5、31.8、38.1		

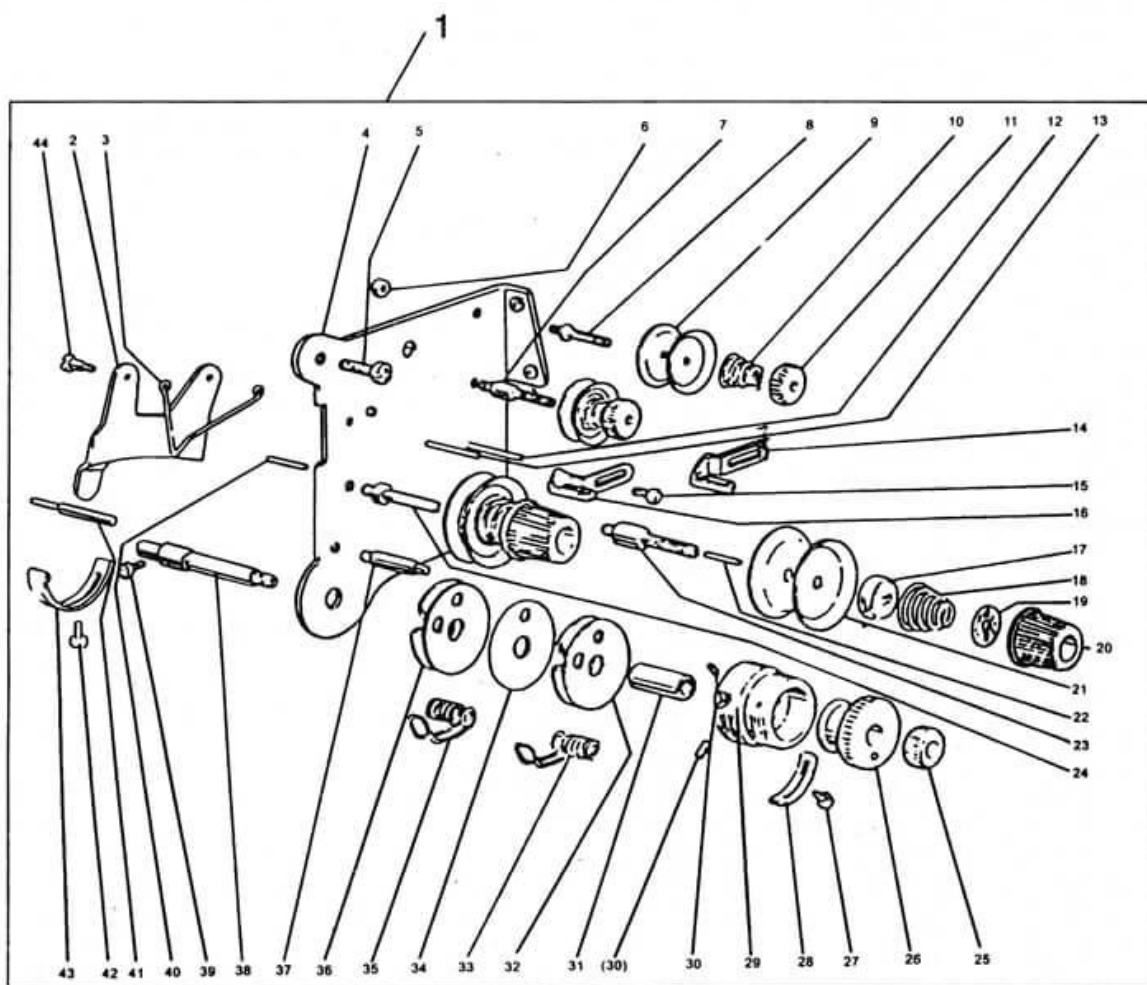
零件样本
Parts Book

1、机壳部件
ARM BED AND IT'S ACCESSORIES



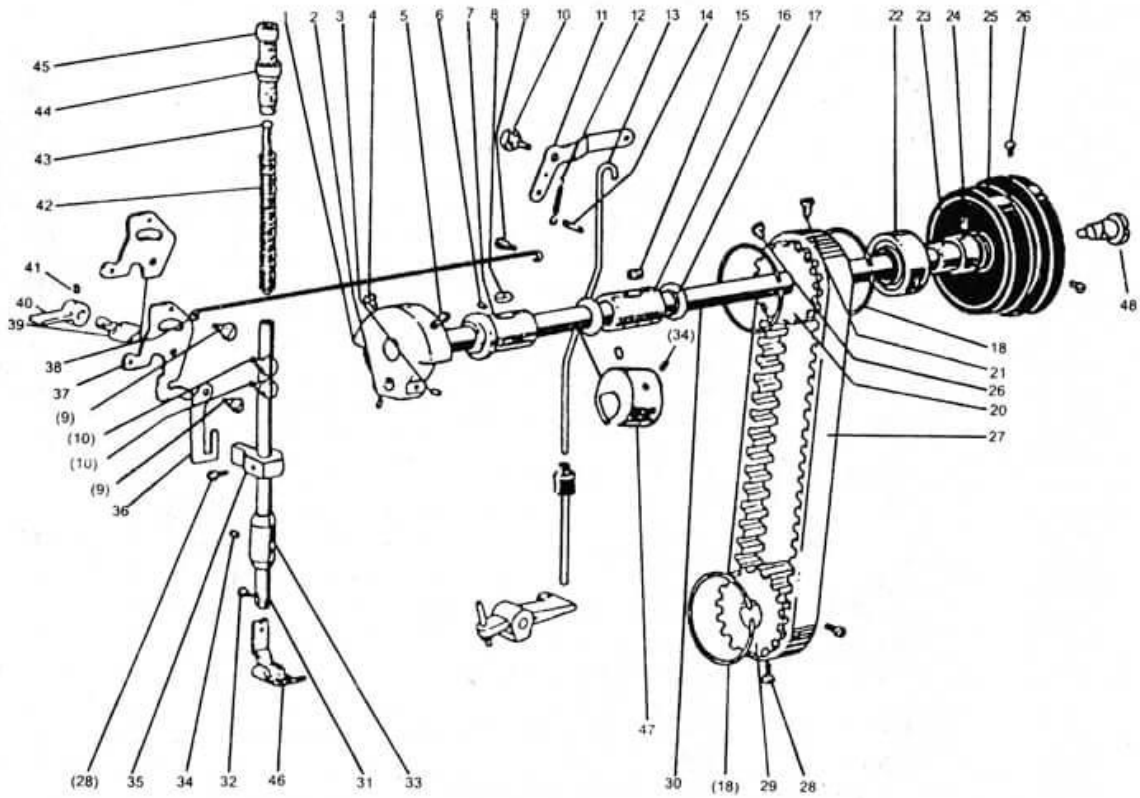
2、夹线调节部件

THREAD TENSION REGULATOR MECHANISM



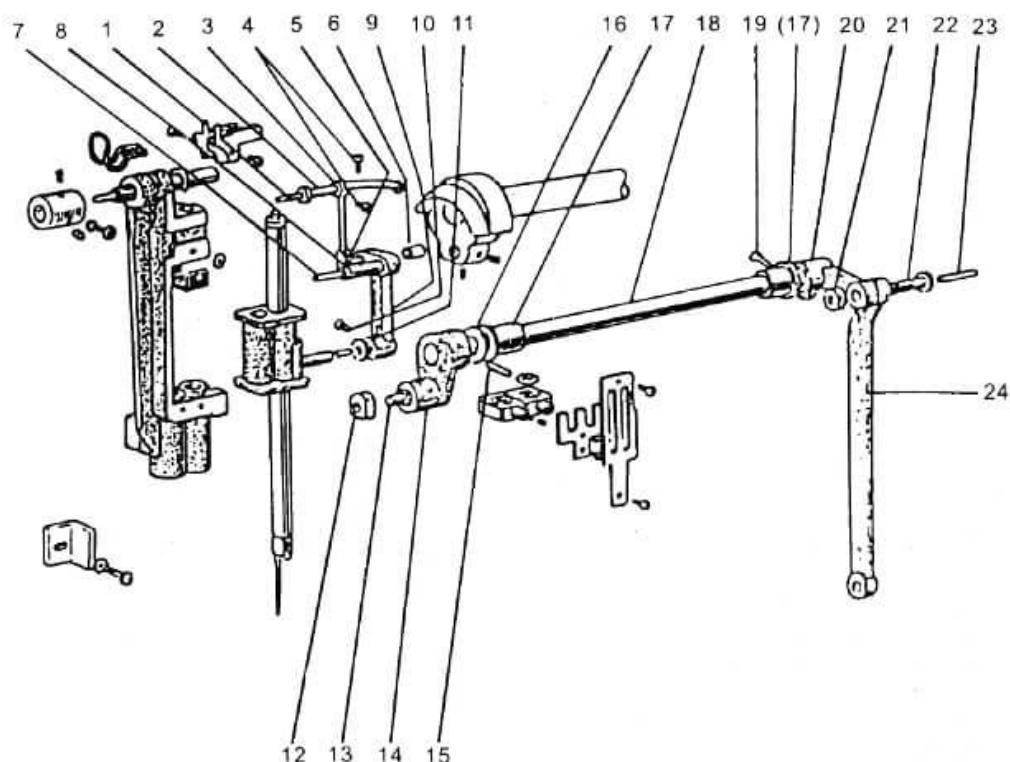
3、上轴压脚部件

UPPER SHAFT PRESSER FOOT MECHANISM



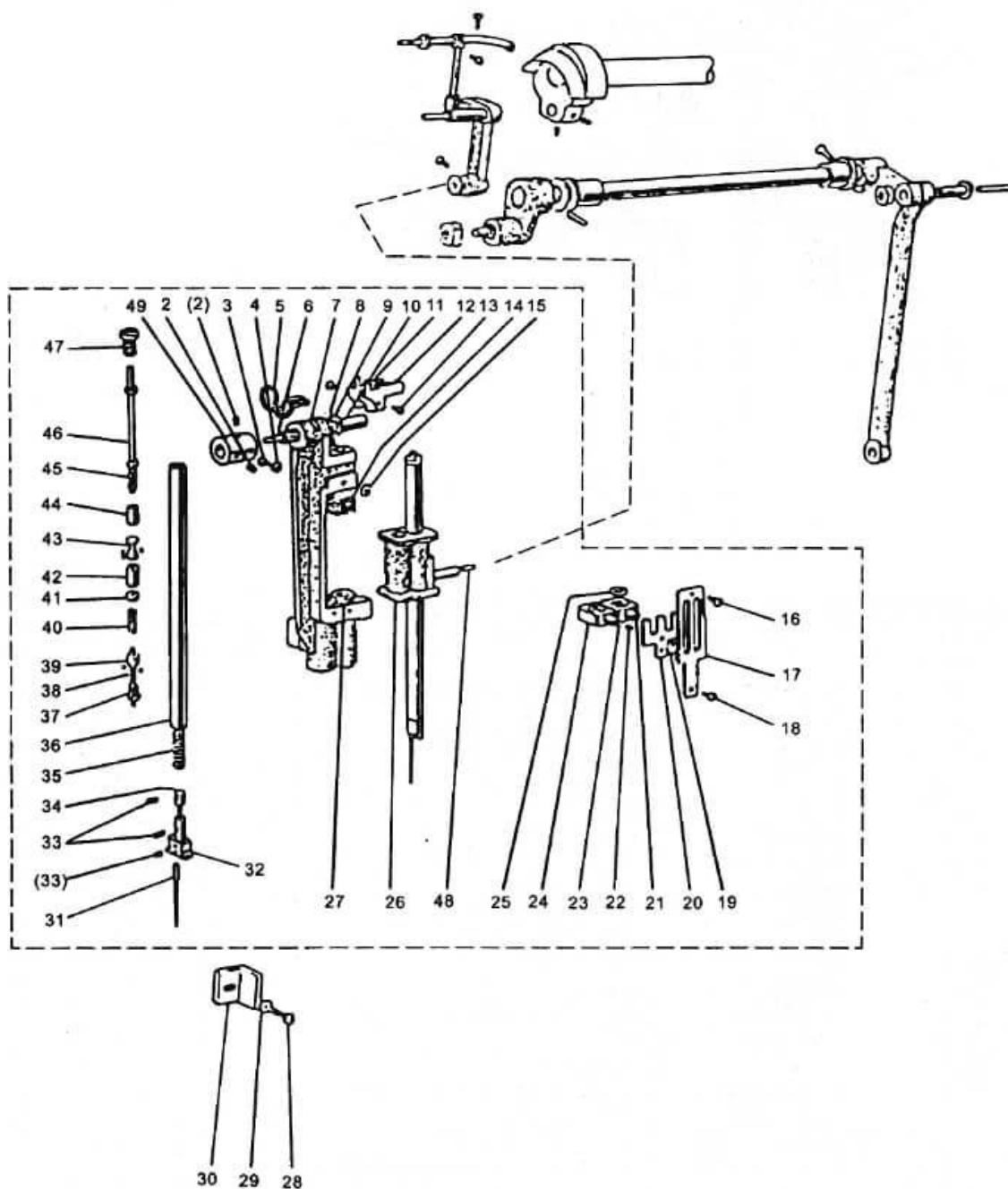
5、针杆挑线部件

THREAD TAKE-UP LEVER NEEDLE BAR ROCK MOTION MECHANIS

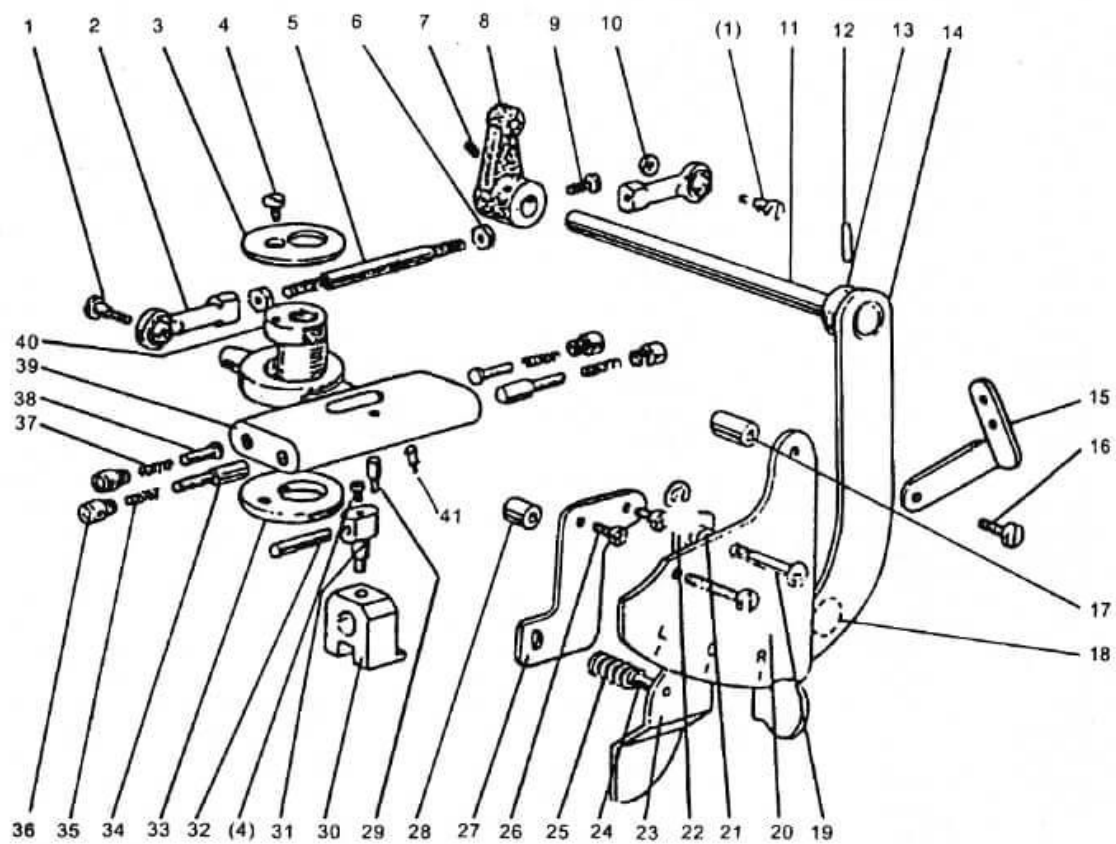


5. 针杆挑线部件 THREAD TAKE-UPLEVER NEEDLE BAR ROCK MOTION MECHANISM							
NO.	REF.NO.	零件名称	DESIGNATION	2052-3	2052-5	2252-3	2252-5
1	228.05-01	棉线	OIL WICK			1	1
2	228.05-01	挑线杆铰链轴	THREAD TAKE-UP GUIDE BRACKET PIN			1	1
3	228.05-03	挑线杆	THREAD TAKE-UP LEVER			1	
	228.05-03	挑线杆	THREAD TAKE-UP LEVER				1
4	228.05-04	主动轮螺钉	SDREW SM15/64"X28 L=12			3	3
5	228.05-05	滑杆	THREACK TAKE-UP LINK			1	1
6	228.05-06	滑杆塞子	PLUG			1	1
7	228.05-07	连杆轴棉线	OIL WICK			1	1
8	228.05-08	挑线曲柄连杆轴	NEEDLE BAR CRANK PIN			1	1
9	228.05-09	挑线连杆	THREAD TAKE-UP LINK			1	1
10	228.05-10	压脚螺杆	SCREW SM9/64"X40 L=11			1	1
11	228.50-11	套筒	TAKE-UP SPING GUIDE			1	1
12	228.05-12	滑块	SLIDE BLOCK			1	1
13	228.05-13	支撑轴螺钉	SCREW			1	1
14	228.05-14	针杆摆动曲柄 (左)	NEEDLE BAR VIBRATING CRANK (LEFT)			1	1
15	228.05-15	压脚摆动曲柄 (左) 锥销	PIN			1	1
16	228.05-16	垫片	WASHER			1	1
17	228.05-17	针杆架摆动轴轴套	NEEDLE BAR ROCK SHAFT BUSHING			1	1
18	228.05-18	针杆摆动曲柄轴	NEEDLE BRA			1	1
19	228.05-19	压脚曲柄 (右) 螺钉	SCREW SM1/4"X24 L=16			1	1
20	228.05-20	针杆摆动曲柄 (右)	NEEDLE BAR VIBRATING CRANK (RIGHT)			1	1
21	228.05-21	六角螺钉	NUT			1	1
22	228.05-22	圆柱头螺钉	SCREW			1	1
23	228.05-23	油线	OIL WICK			1	1
24	228.05-24	连杆	LINK			1	1

6、针杆调节 NEEDLE BAR

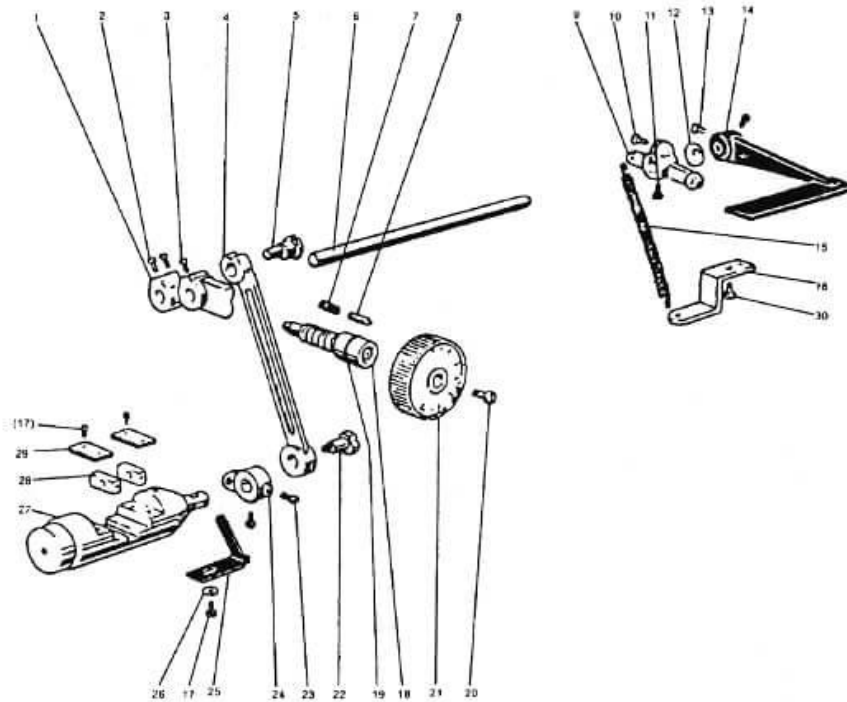


7、针杆变换机构部件



8、针距调节部件

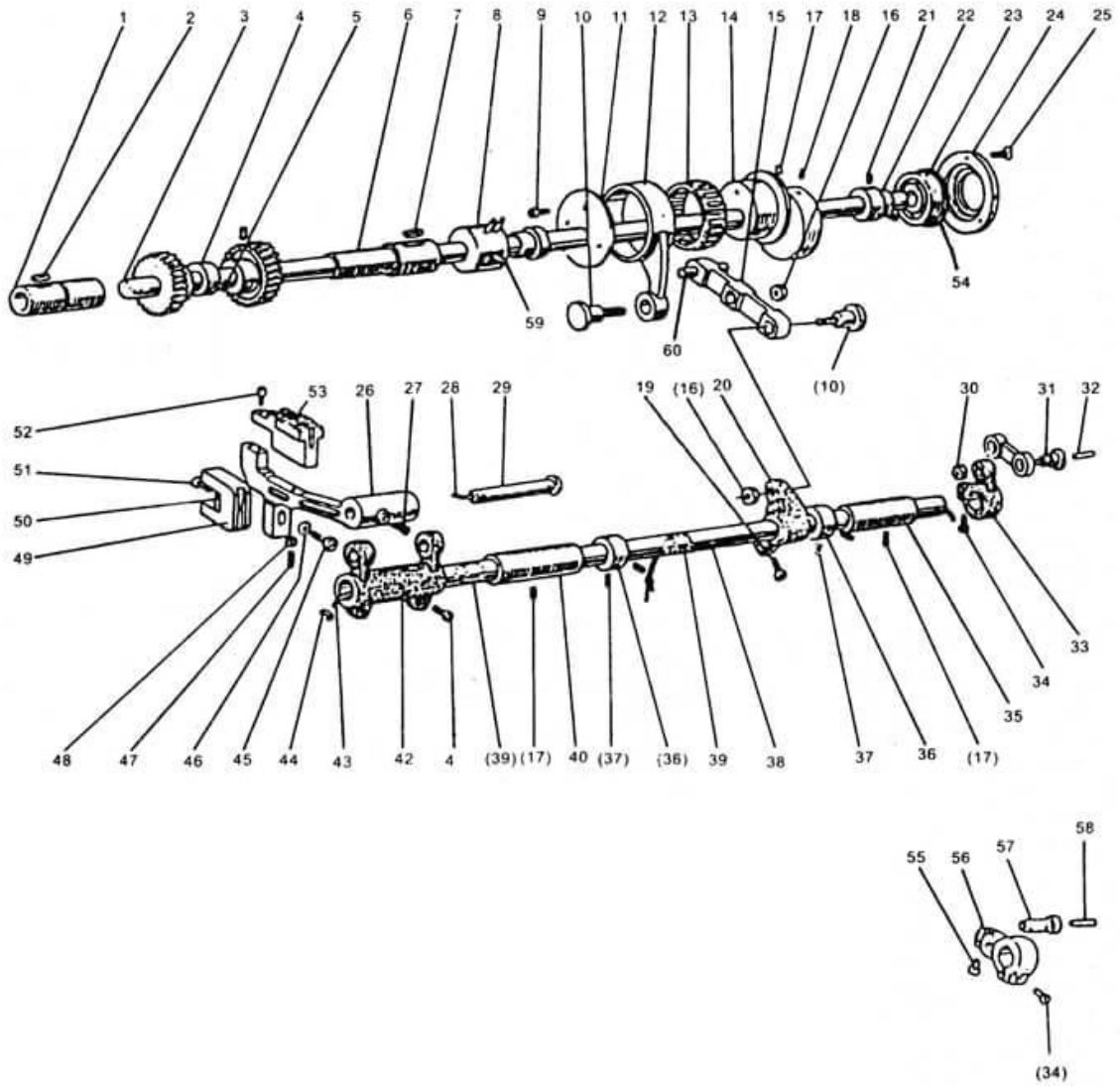
STITCH REGULATOR MECHANISM



8. 针距调节部件 STITCH REGULATOR MECHANISM							
NO.	REF.NO.	零件名称	DESIGNATION	2052-3	2052-5	2252-3	2252-5
1	224.08-01	针距调节摆杆	FEED REGULATOR COMPLETE	1	1	1	1
2	224.08-01	倒缝操纵杆螺钉	SCREW SM15/64"X28 L=10	2*	2	2	2
3	224.08-03	圆柱头螺钉	SCREW	1	1	1	1
4	224.08-04	连杆	CONNECTING LINK	1	1	1	1
5	224.08-05	偏心轴	ECCENTRIC SHAFT	1	1	1	1
6	224.08-06	倒缝操纵杆短轴 (上)	REVERSE STITCH SHAFT (UPPER)	1	1	1	1
7	224.08-07	针距按钮簧	SPRING	1	1	1	1
8	224.08-07	止动销	STOPPER PIN	1	1	1	1
9	224.08-09	倒缝操纵杆曲柄	REVERSE STITCH CRANK	1	1	1	1
10	224.08-10	拉簧操纵曲柄	SCREW	1	1	1	1
11	224.08-11	圆柱井头螺钉	SCREW SM11/64"X40 L=8.5	1	1	1	1
12	224.08-12	倒缝操纵杆垫圈	WASHER	1	1	1	1
13	224.08-13	限位块螺钉	SCREW SM15/64"X28 L=10	2	2	2	2
14	224.08-14	倒缝操纵杆	REVERSE FEED LEVER	1	1	1	1
15	224.08-15	倒缝操纵曲柄弹簧	SPRING FOR REVERSE FEED CRANK	1	1	1	1
16	224.08-16	弹簧架	BRACKET FOR SPRING	1	1	1	1
17	224.08-17	挑线杆防护罩螺钉	SCREW SM11/64"X40 L=8	5	5	5	5
18	224.08-18	针距调节螺杆	SCREW BAR	1	1	1	1
19	224.08-19	针距调节螺杆O型圈	O-RING	1	1	1	1
20	224.08-20	针距标盘螺钉	SCREW SM3/16"X28 L=8	1	1	1	1
21	224.08-21	针距标盘	DIAL	1			
	226.08-21	针距标盘	DIAL		1		1
	228.08-21	针距标盘	DIAL			1	
22	224.08-22	针距连杆铰链轴	HINGE PIN	1	1	1	1
23	224.08-23	螺钉	SCREW	1	1	1	1
24	224.08-24	倒缝操纵杆曲柄 (下)	STITCH REGULATING CRANK LOWER	1	1	1	1
25	224.08-25	倒缝台挡板	HOLDING PLATE FOR REVERSE BAR	1	1	1	1
26	224.08-26	检测器架垫圈	WASHER	1	1	1	1
27	224.08-27	倒缝台	REVERSE BAR	1	1	1	1
28	224.08-28	送布轴连杆滑块	SQUARE BLOCK	2	2	2	2
29	224.08-29	导向板	GUIDE PLATE	2	2	2	2
30	224.08-30	弹簧架固定螺钉	BRACKET FOR SPRING SCREW	1	1	1	1

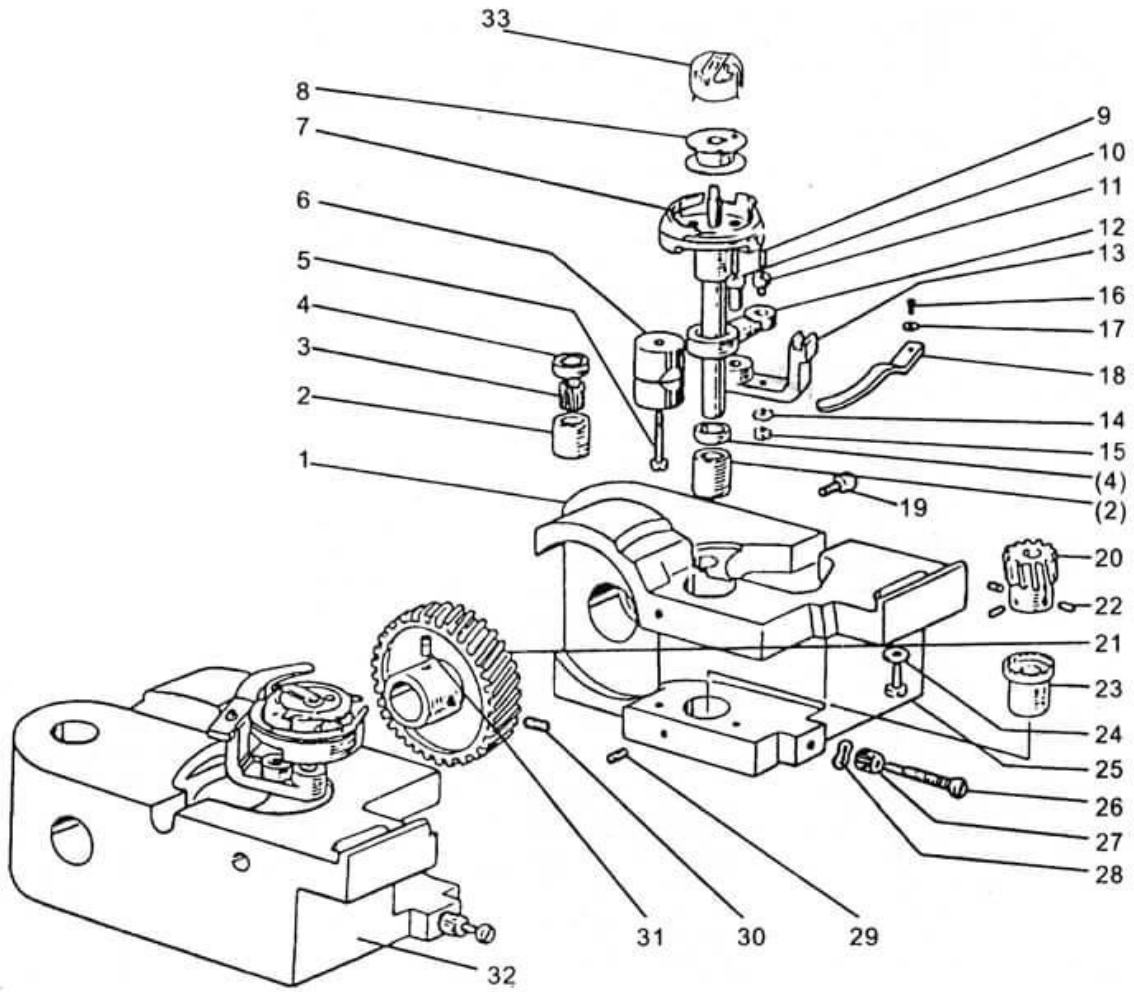
9、下轴、送布轴部件

LOWER SHAFT AND FEED ROCK SHAFT MECHANISM

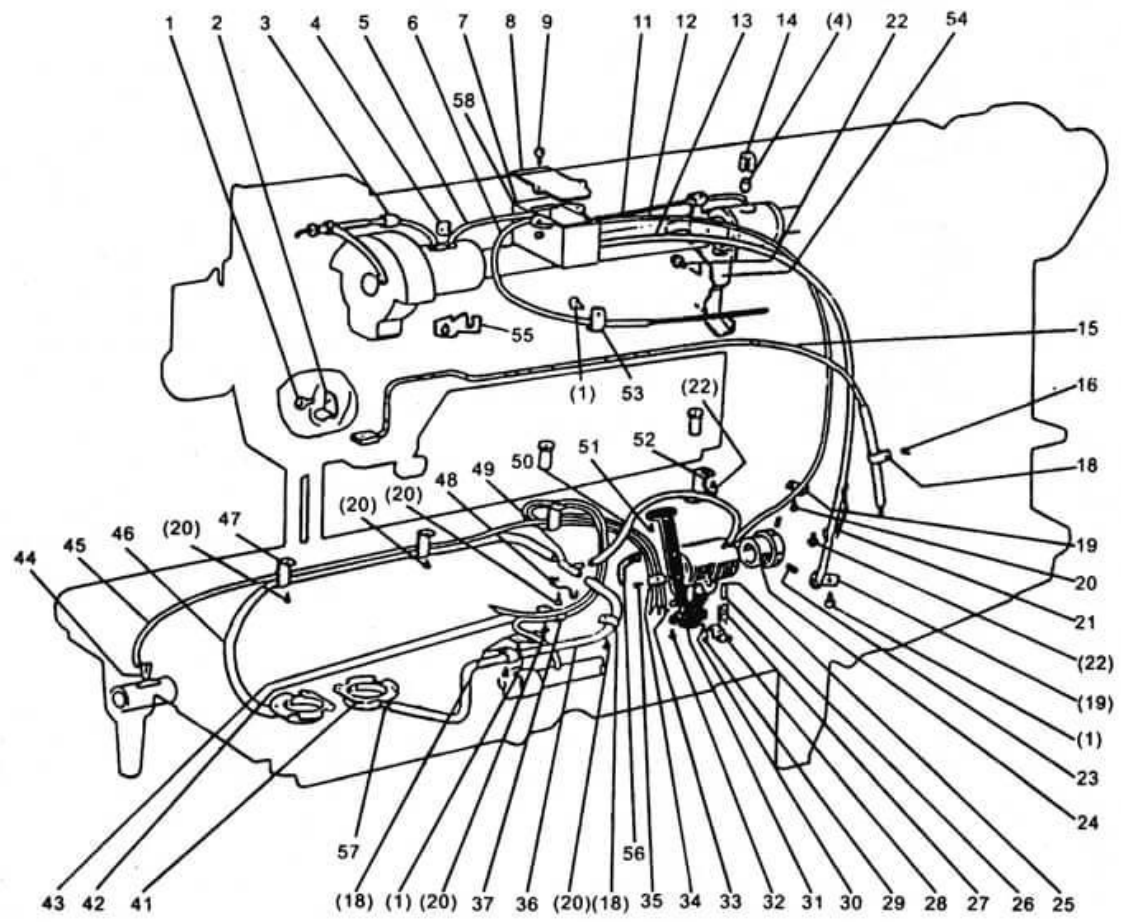


9. 下轴, 送布轴部件 LOWER SHAFT AND FEED ROCK SHAFT MECHANISM							
NO.	REF.NO.	零件名称	DESIGNATION	2052-3	2052-5	2252-3	2252-5
1	224.09-01	下轴轴套(左)	LOWER SHAFT BUSHING (LEFT)	1	1	1	1
2	224.09-01	油线	OIL WICK	1	1	1	1
3	224.09-03	下轴	LOWER SHAFT	1	1	1	1
4	224.09-04	抬牙凸轮	LOWER LIFTING CAM	1	1	1	1
5	224.09-05	紧定螺钉	SCREW SM1/4"X40 L=5	1	1	1	1
6	224.09-06	下轴轴套(右)	LOWER SHAFT BUSHING (RIGHT)	1	1	1	1
7	224.09-07	油线	OIL WICK	1	1	1	1
8	224.09-08	下轴轴套(中)	LOWER SHAFT BUSHING (MIDDLE)	1	1	1	1
9	224.09-09	短轴端盖螺钉	SCREW	3	3	3	3
10	224.09-10	轴位螺钉	SCREW	2	2	2	2
11	224.09-11	垫片	WASHER	1	1	1	1
12	224.09-12	送布凸轮连杆	FEED CONNECTING ROD	1	1	1	1
13	224.09-13	轴承	NEEDLE BEARING	1	1	1	1
14	224.09-14	送布凸轮	LEVER FEED CONNECTING SCM	1		1	1
	224.09-14	送布凸轮	LEVER FEED CONNECTING SCM		1		
15	224.09-15	送布轴连杆	LINK	1	1	1	1
16	224.09-16	六角螺母	NUT	2	2	2	2
17	224.09-17	上轴轴套(中)螺钉	SCREW SM15/64"X28 L=10	3	3	3	3
18	224.09-18	挑线杆定位螺钉	SCREW	1	1	1	1
19	224.09-19	圆柱头螺钉	SCREW SM15/64"X28 L=14	1	1	1	1
20	224.09-20	送布轴曲柄(中)	FEED ROCK SHAFT CRANK (MIDDLE)	1	1	1	1
21	224.09-21	上轴紧圈螺钉	SCREW SM1/4"X40 L=8	2	2	2	2
22	224.09-22	下轴右轴套	BUSHING	1	1	1	1
23	224.09-23	轴承	BALL BEARING	1	1	1	1
24	224.09-24	挡板	BEARING HOLDER	1	1	1	1
25	224.09-25	送布凸轮垫圈螺钉	SCREW	3	3	3	3
26	224.09-26	牙架	FEED BAR	1	1	1	1
27	224.09-27	内装六角紧定螺钉	SCREW	1	1	1	1
28	224.09-28	油线	OIL WICK	1	1	1	1
29	224.09-29	牙架曲柄轴	FEED BAR SHFT	1	1	1	1
30	224.09-30	六角螺母	NUT	1	1		
31	224.09-31	圆柱头螺钉	SCREW	1	1	1	1
32	224.09-32	油线	OIL WICK	1	1	1	1
33	224.09-33	送布轴曲柄(右)	FEED ROCK SHAFT CRANK (RIGHT)	1	1		
34	224.09-34	压脚摆动曲柄(右)螺钉	SCREW SM1/4"X24 L=16	1	1	1	1
35	224.09-35	送布轴轴套	FEED ROCK SHAFT BUSHING	1	1	1	1
36	224.09-36	上轴紧圈	COLLAR	2	2	2	2
37	224.09-37	上轴紧圈螺钉	SCREW SM1/4"X40 L=8	4	4	4	4
38	224.09-38	送布轴	FEED ROCK SHAFT	1	1	1	1
39	224.09-39	羊毛毡	FELT	2	2	2	2
40	224.09-40	抬牙轴轴套	FEED ROCK SHAFT BUSHING (LEFT)	1	1	1	1
41	224.09-41	牙架曲柄螺钉	SCREW SM3/16"X28 L=12	2	2	2	2
42	224.09-42	牙架曲柄	FEED BAR CRANK	1	1	1	1
43	224.09-43	油线	OIL WICK	1	1	1	1
44	224.09-44	毛线夹	HOLDER	1	1	1	1
45	224.09-45	六角螺栓	BOLT	1	1	1	1
46	224.09-46	垫圈	WASHER	1	1	1	1
47	224.09-47	内六角紧定螺钉	SCREW	1	1	1	1
48	224.09-48	螺母	NUT	1	1	1	1
49	224.09-49	抬牙曲柄叉	FEED BAR CONNECTING FORK	1	1	1	1
50	224.09-50	羊毛毡	OIL WICK	1	1	1	1
51	224.09-51	圆柱头螺钉	SCREW SM1/8"X44 L=4	1	1	1	1
52	224.09-52	内六角螺栓	BOLT SM1/8"X28 L=7	2	2	2	2
53	224.09-53	送布牙1/4	FEED DOG 1/4	1		1	
	224.09-53	送布牙1/5	FEED DOG 1/5		1		1
54	224.09-54	止动环	STOPPER RING	1	1	1	1
55	224.09-55	牙架曲柄螺钉	SCREW SM3/16"X28 L=15			1	1
56	224.09-56	送布曲柄	FEED BAR CONNECTING FORK			1	1
57	224.09-57	销	PIN			1	1
58	224.09-58	滑杆棉线	OIL WICK			1	1
59	224.09-59	油管接头	OIL RUBD JOINT	3	3	3	3
60	224.09-60	送布连杆轴	FEED ROCKER SHAFT	1	1	1	1

10、旋梭台部件
HOOK SADDLE MECHANISM



11、供油部件 OIL LUBRICATION MECHANISM



12、附件 ACCESSORIES

