

高速双针平缝机

HIGH SPEED DOUBLE NEEDLE LOCKSTITCH MACHINE SERIES

2000S-1 series

Westman
W-2200

使用说明书 & 零件样本

Operation instruction & Parts Book

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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 take-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 safety 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's first turned on, verify 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) phase with those given on the machine nameplate.

③ Precautions for Operating Conditions

1. Avoid using the machine at abnormally high temperature (35℃ or higher) or low,temperatures (5℃ 0r lower). Otherwise, machine failure may result.
2. Avoid using the machine in dusty conditions.

① 安装机针 How to attach needle

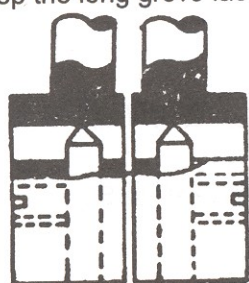
注：一定要先切断电源再装机针。

Note: Before attach needle, be sure to switch off the power source.

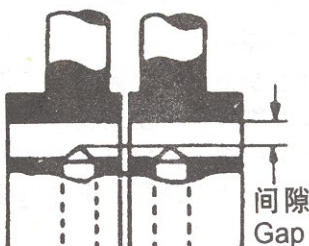
机针要碰到针杆孔底部为止，机针长槽要面对面，最后拧紧螺钉。
Insert the needle to the bottom of needle clamp and tight the screw, Keep the long groove face-to-face.

机针没碰到针杆孔底部
Insufficient insertion

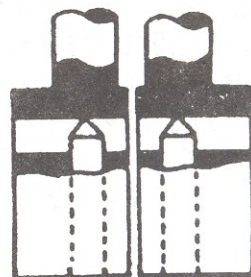
长槽方向装错
Wrong direction



长槽面对面
face-to-face



间隙
Gap



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。

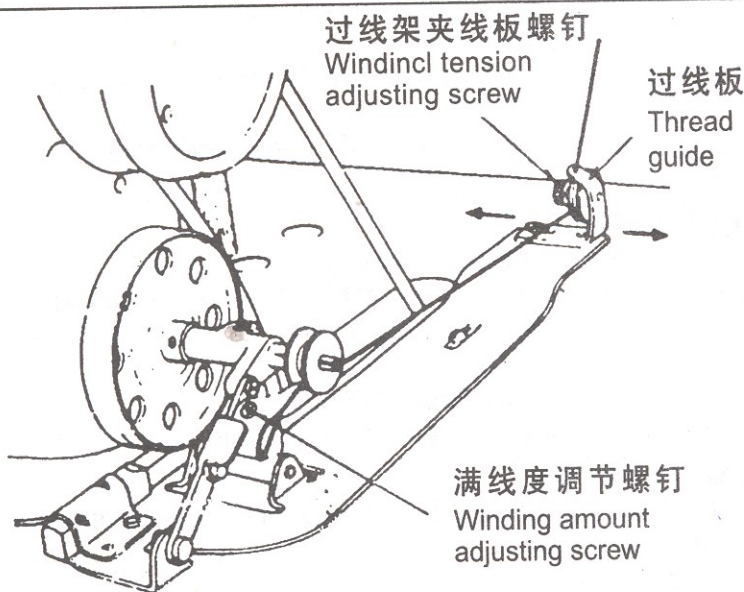
Note: Raise the presser foot while the sewing machine left out of use.

- 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, loosen the adjusting screw and tighten when insufficient.

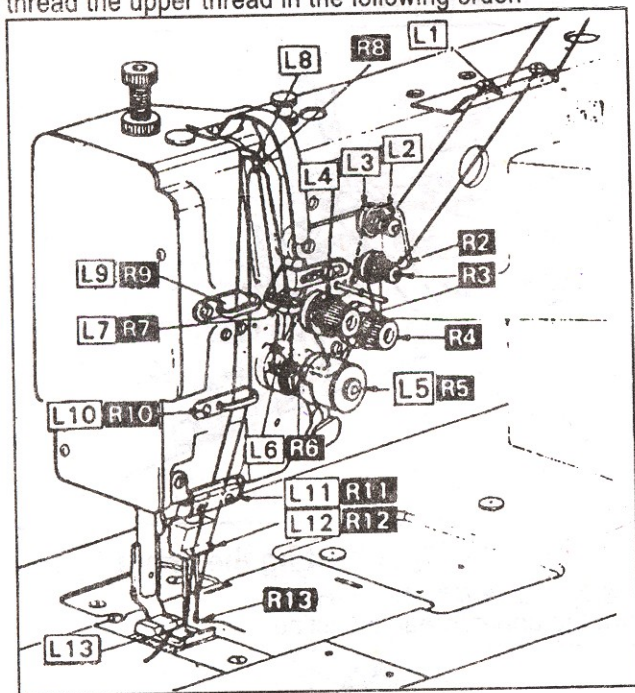


梭芯直径的
80% 平行绕线
Even winding with
amount of 80%
full capacity

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.

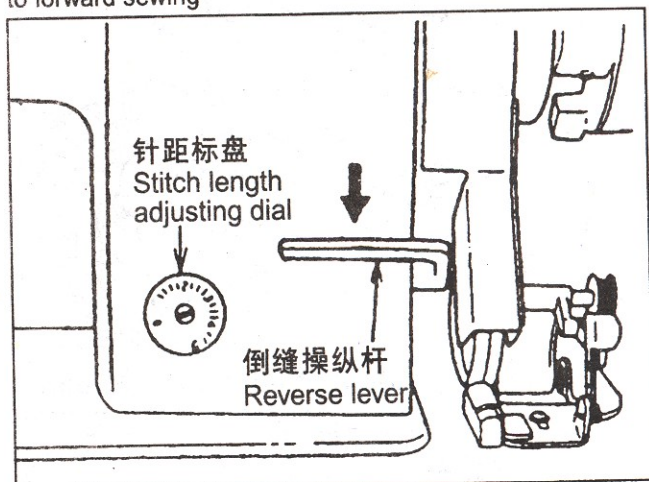


④ 针距调节和倒缝

Adjusting of stitch length & reverse lever

注：压倒下缝操纵杆，转动针距标盘，调节针距。
倒缝……压倒下缝操纵杆
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



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	右 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。

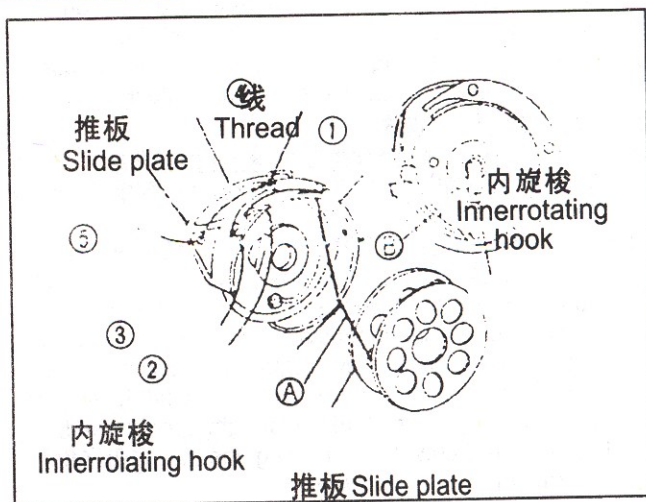
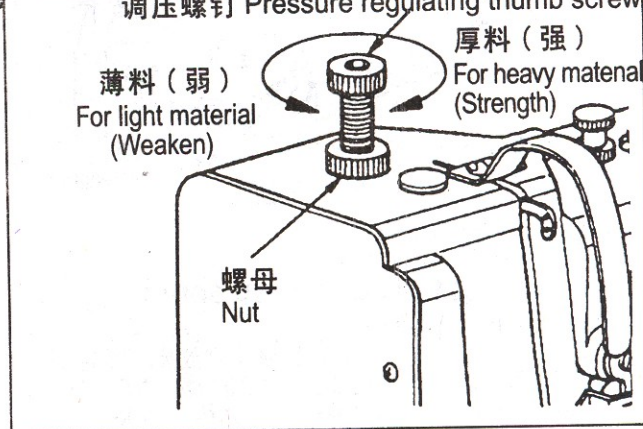
Pull out thread about 5cm, hold the bobbin as shown, and put the bobbin into rotating hook.

⑥ 压脚压力的调节

Adjusting pressure of presser foot

调压螺钉 Pressure regulating thumb screw

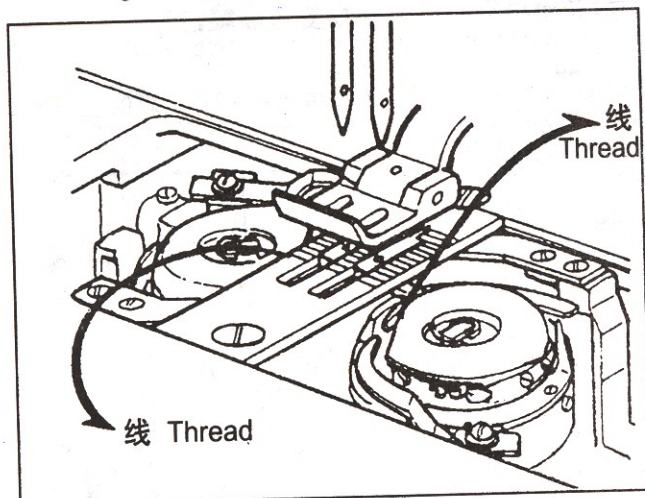
薄料 (弱) For light material (Weaken)
厚料 (强) For heavy material (Strength)



8 引底线的方法 Leading the lower thread

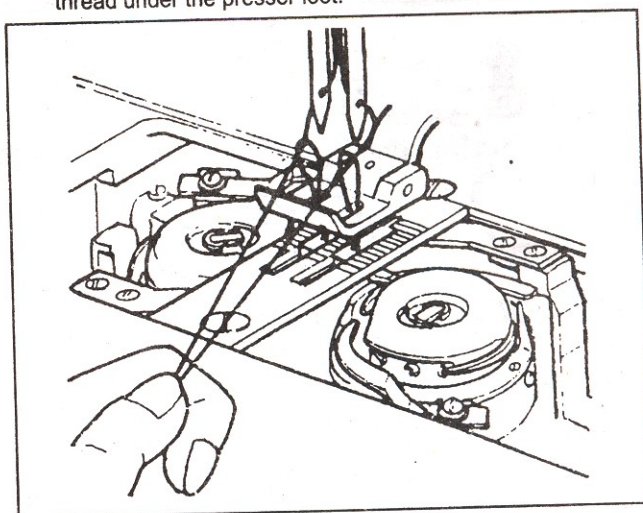
(1) 把底线从底板面上抽出。

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

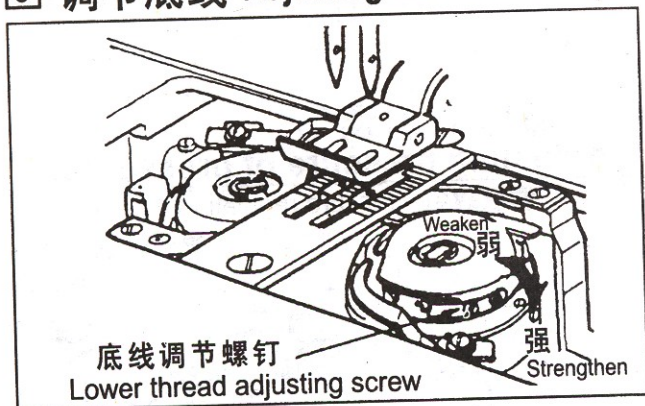


(2) 左手拉住两根面线, 用右手慢慢转一圈皮带轮 如图所示, 面线拉起把底线也引出, 然后拉齐

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.



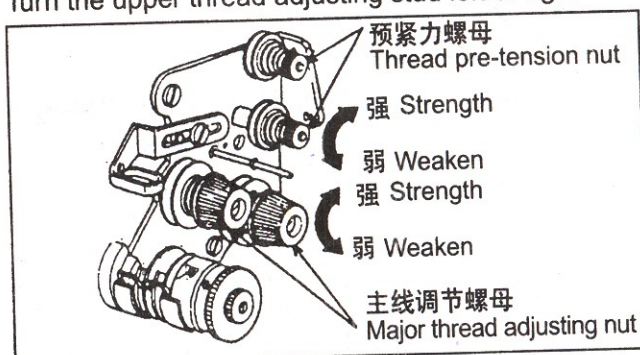
9 调节底线 Adjusting the lower thread



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



11 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

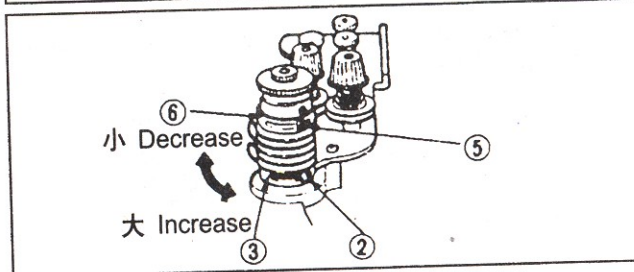
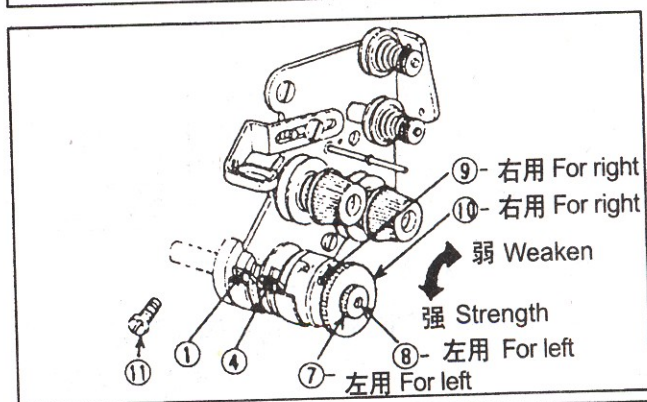
-1. 调节左面线时, 先放松固定螺母⑦及机头内部调节座螺钉(11), 然后调节夹线螺钉。调节结束, 拧紧固定螺母及调节座螺钉即可。

-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 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 ● 两夹线板间线屑太多 tension disc area lint excessive ● 梭芯绕线过慢或绕线不够 bobbin winding too low or not enough ● 梭芯套里线屑太多 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 installing 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 tight, 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 decreased (light-weight material under low press).

① 润滑 Lubrication (1)

油加到油盘中 H 位置。

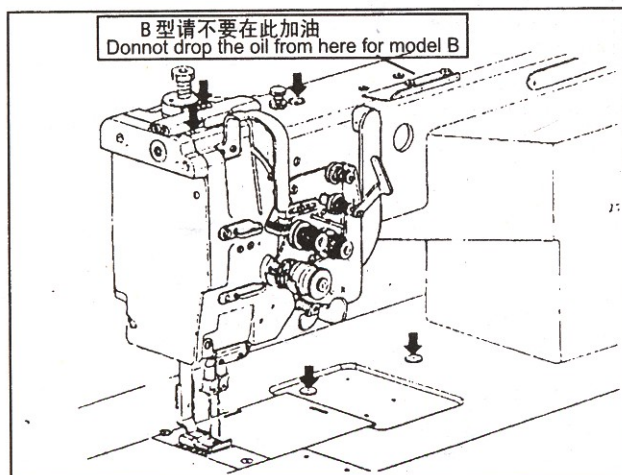
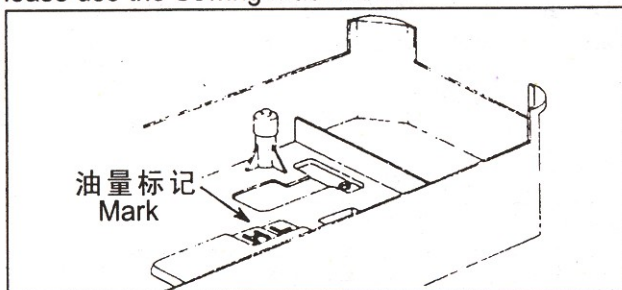
在使用中要定期检查，如果油量在 L 位置以下，请补加到 H 位置。

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 level is below the position L, replenish oil up to the position H.

Please use the Sewing Machine oil.



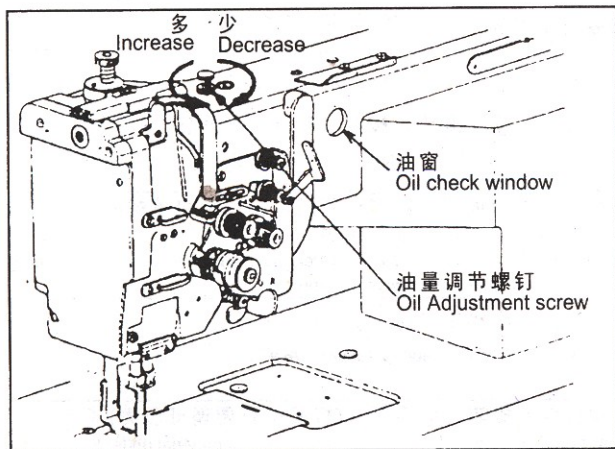
③ 供油状态和调节挑线杆供油 Condition of oil lubrication & adjusting take-up lever lubrication

(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

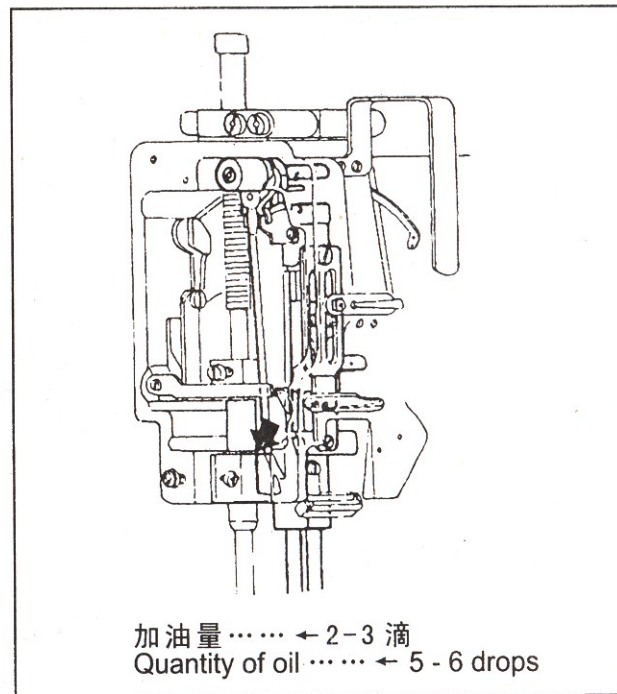
(2) Adjusting the oil adjustmet screw



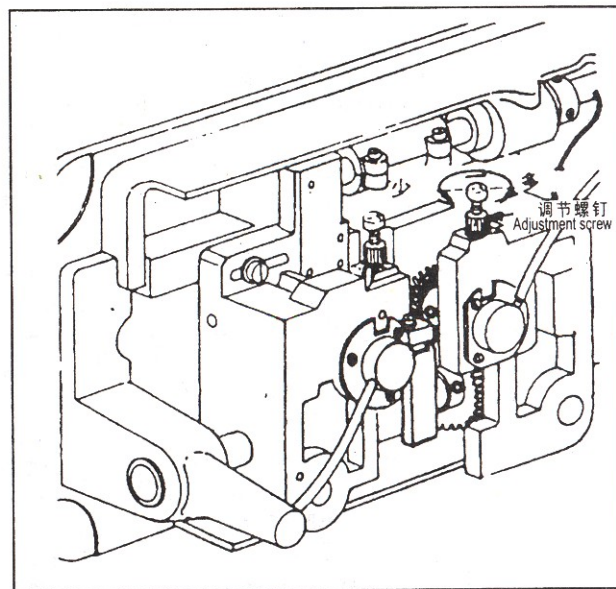
② 润滑 Lubrication (2)

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

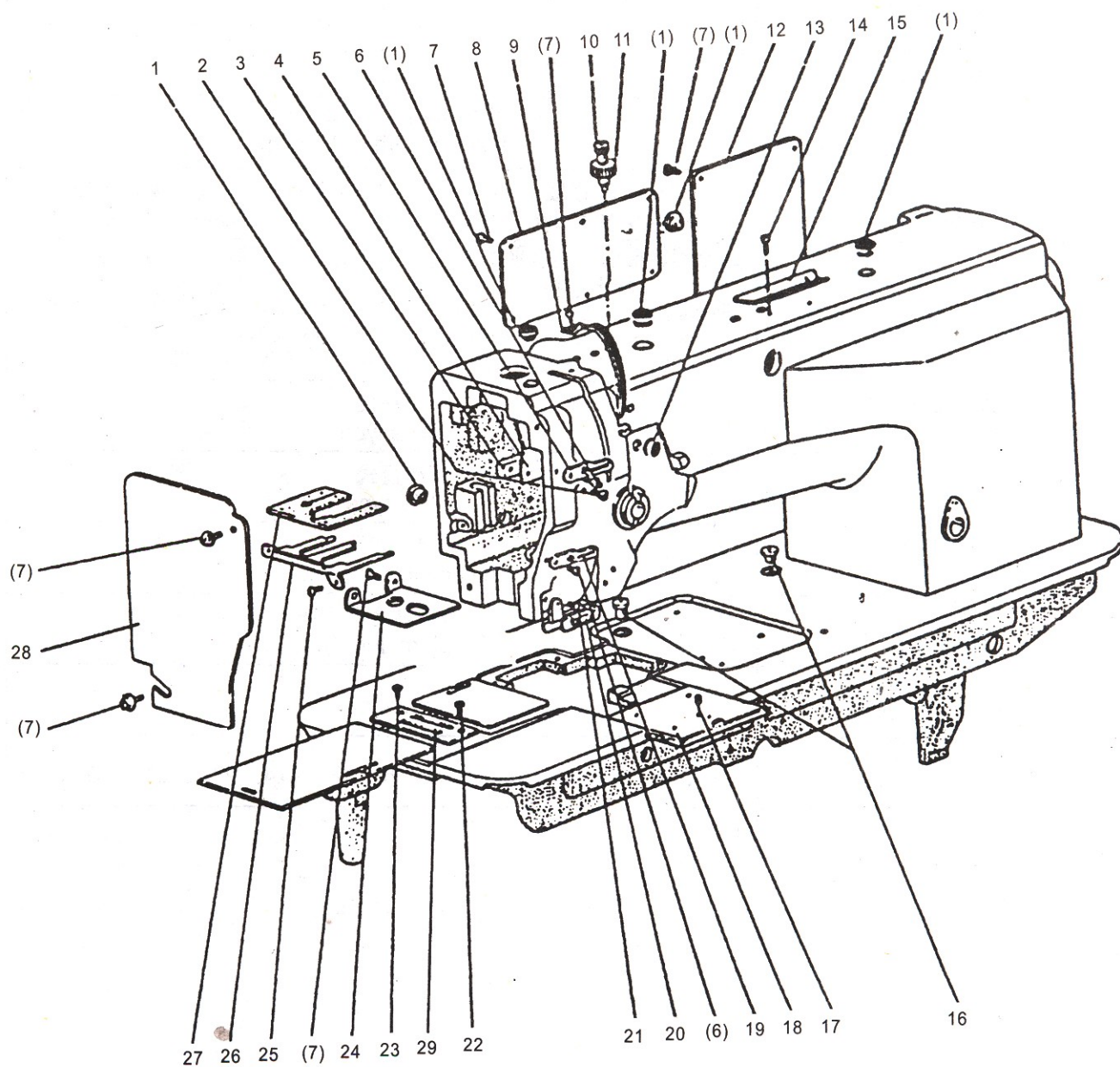


2000S-1B 2000S-1M

规格 Specification		型号 Model	2000S -1M	2000S -1B
用 途 material weight			薄料—中厚料 Thin-Medium material	中厚料 Medium material
最高缝速 Max speed			4000spin	3000spm
针距长度 Stitch length			0 ~ 4mm	0~7mm
针杆行程 Needle bar stroke			33.4mm	35mm
压脚提升高度 Presser foot clearance			膝控 13mm 手动 7mm kneel lifter13mm Hand7mm	
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 lubricat ion horizonta 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 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、8、9.5、12.7、16、19、25.4、28.5、31.8、38.1	

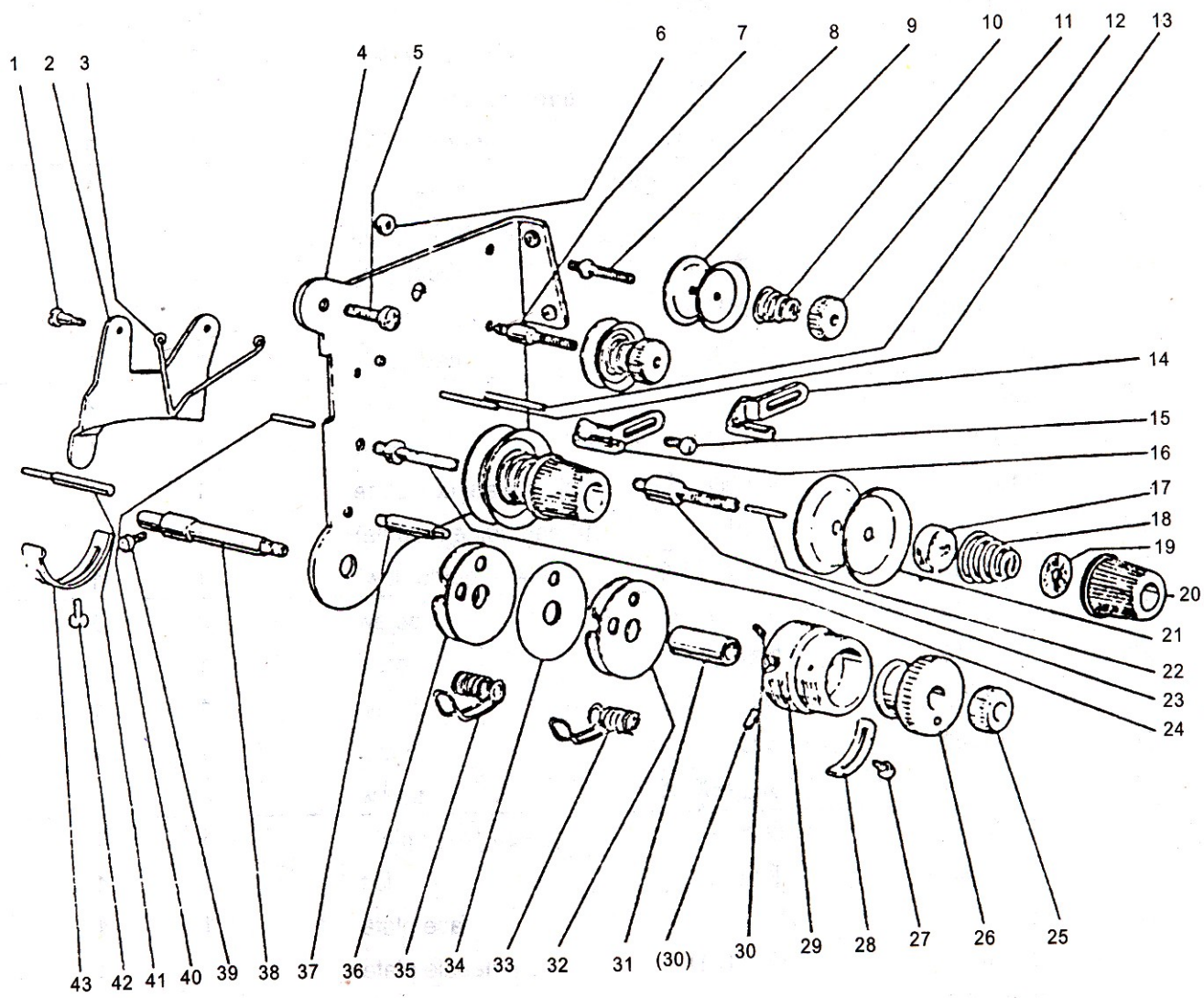
1. 机壳部件

ARM BED AND IT'S ACCESSORIES



序号 No.	图 号 Ref. No.	名 称 Description	M	B
1	2303069	橡皮塞 rubber plug	5	5
2	2304018	过线勾沉头螺钉 screw	2	2
3	2304016	挡油罩板垫块 spacer	1	1
4	2304015	挡油罩板 oil guard plate	1	1
5	2303022	线勾(上) thread guide	1	1
6	2303595	防油垫固定板螺钉 screw	2	2
7	2301017	后盖板螺钉组件 screw	15	15
8	2303018	后盖板(左) side cover (left)	1	1
9	2303020	挑线杆防护罩 thread take-up cover	1	1
10	2303387	M10×33定位螺钉 thumb screw	1	1
11	2303388	M10×8.5调节螺母 special nut	1	1
12	2303019	后盖板(右) side cover (right)	1	1
13	2303417	机头橡皮塞 rubber plug	1	1
14	2303415	线勾螺钉 screw	2	2
15	2304020	上过线板 thread guide	1	1
16	2303418	油杯 cap	2	2
17	2303033	13/64(32)×4紧定螺钉 screw	1	1
18	2403023	推板(前)组件 slide plate complete	1	1
19	2303023	线勾(中) thread guide (middle)	1	1
20	2403022	线勾(下)组件 thread guide (low)	1	1
21	2303025	9/64(40)×6.5圆柱头螺钉 screw	2	2
22	2301045	针板螺钉 screw	1	1
23	2303027	针板螺钉(后) screw	1	1
24	2303390	油线板 cover	1	1
25	2301241	摆动连杆座螺钉 screw	2	2
26	2303392	油板 oil guard plate	1	1
27	2303393	羊毛毡 felt	1	1
28	2303017	面板 face plate	1	1
29	2303426	针板 (1/4) needle plate		1
29	2303026	针板 (1/4) needle plate	1	

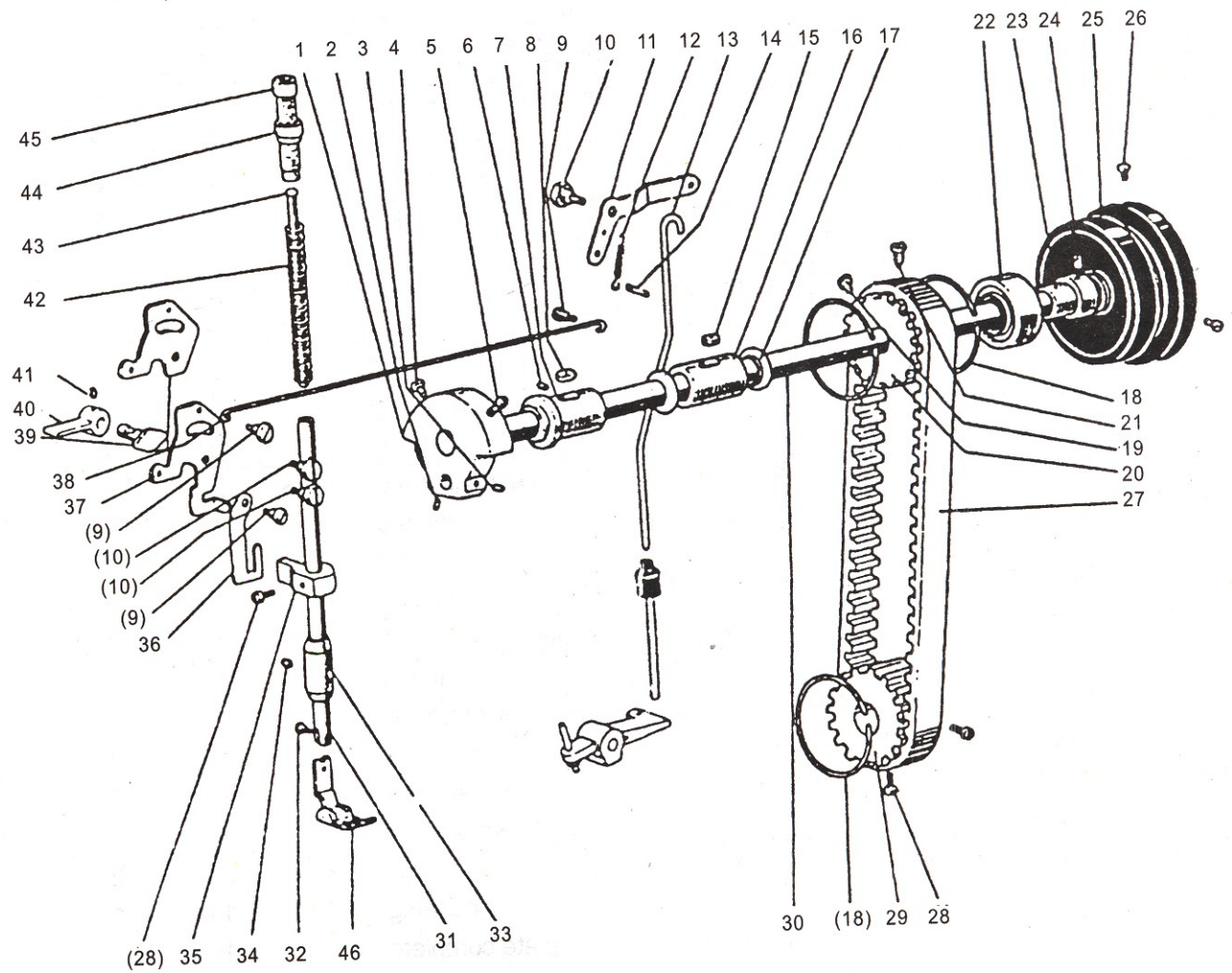
2、夹线调节部件
THREAD TENSION REGULATOR MECHANISM



序号 No.	图 号 Ref. No.	名称 Description	M	B
1	2303061	松线压板螺钉 screw	2	2
2	2303062	松线板 tension releasing plate	1	1
3	2304214	松线板压弹簧 tension releasing spring	1	1
4	2303068	夹线调节器安装板 mounting plate	1	1
5	2301066	挑线杆防护罩螺钉 screw	2	2
6	2303060	11/64(40)×3六角螺母 nut	2	2
7	2303416	夹线调节螺钉 thread tension stud	1	1
8	2303036	夹线调节螺钉 thread tension stud	1	1
9	2301022	夹线板 thread tension disc	4	4
10	2303037	夹线弹簧 thread tension spring	2	2
10	2303428	夹线弹簧 thread tension spring		2
11	2303038	夹线螺母 thumb nut	2	2
12	2303035	过线销 pin	2	2
13	2304201	夹线定位板销 pin	1	1
14	2303427	线勾 thread guide		1
15	2301013	面板线勾螺钉 screw	1	1
11	2303040	夹线调节器线勾 thread guide	1	
17	2301031	松线板 thread tension releasing plate	2	2
18	2302022	夹线弹簧 thread tension spring	2	
19	2301037	夹线螺母止动板 thumb nut revolution stopper	2	2
20	2301029	夹线螺母小组件 thumb nut complete	2	2
21	2301032	夹线板 thread tension complete	4	4
22	2303064	过线钉 pin	1	1
23	2303059	夹线调节螺钉 thread tension stud	1	1
24	2303039	夹线调节螺钉 thread tension stud	1	1
25	2303047	1/4(40)×4.5螺母 thumb nut	1	1
26	2303046	套筒 take-up spring guide	1	1
27	2303051	9/64(40)×6圆柱头螺钉 screw	1	1
28	2303050	止动块 stopper	1	1
29	2303049	导向套 thread tension post	1	1
30	2303045	下/8(44)×3.5紧定螺钉 screw	2	2
31	2303048	轴套 bushing	1	1
32	2403028	过线板组件 plate complete	1	1
33	2303043	挑线簧 thread take-up spring	1	1
34	2303055	过线板 plate	1	1
35	2303042	挑线簧 thread take-up spring	1	1
36	2403027	过线板组件 plate complete	1	1
37	2303044	阶梯螺钉 screw	1	1
38	2303041	阶梯轴螺钉 thread tension stud	1	1
39	2301241	摆动连杆库螺钉 screw	1	1
40	2303065	过线钉 pin	1	1
41	2303066	松线钉 tension releasing pin	1	1
42	2303025	9/64(40)×6.5圆柱头螺钉 screw	2	2
43	2303067	止动块 stopper	1	1

3、上轴压脚部件

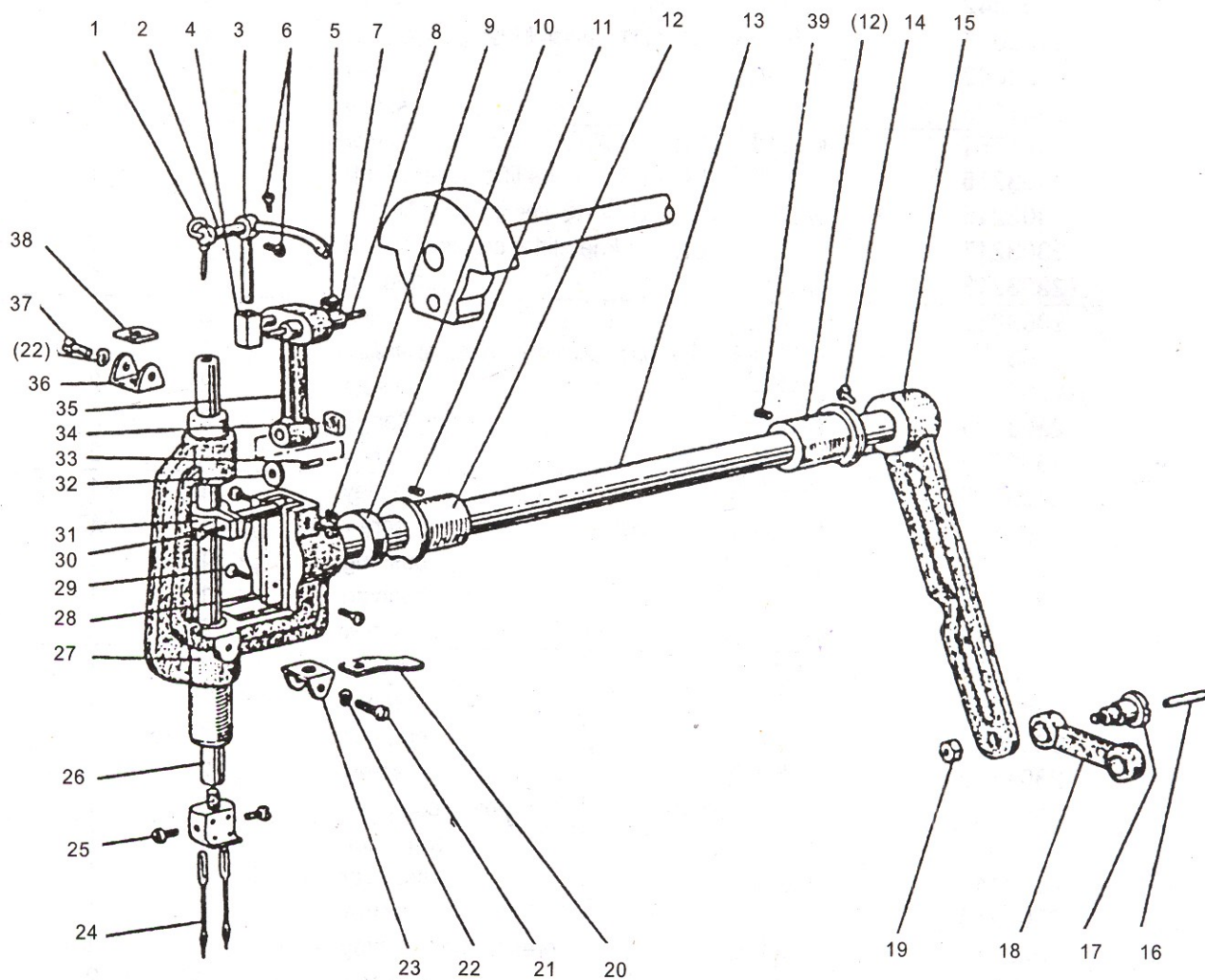
UPPER SHAFT PRESSER FOOT MECHANISM



序号 No.	图 号 Ref. No.	名 称 Description	M	B
1	2403036	针杆曲柄组件 needle bar crank complete	1	
1	2403037	针杆曲柄组件 needle bar crank complete		1
2	2301086	上轴紧圈螺钉 screw	1	1
3	2301068	挑线曲柄定位螺钉 screw	1	1
4	2301009	针杆曲柄螺钉 screw	1	1
5	2301070	针杆曲柄定位螺钉 screw	1	1
6	2304042	挑线杆定位螺钉 screw	1	1
7	2403015	上轴轴套(左)组件 arm shaft bushing complete (left)	1	1
8	2303002	羊毛毡 felt	1	1
9	2301185	铰链螺钉 screw	1	1
10	2301361	膝控提升杠杆(右)螺钉 screw	3	3
11	2303215	膝控提升杠杆(右) knee lifter lever (right)	1	1
12	2303216	膝控提升杠杆(右)弹簧 knee lifter lever (right) spring	1	1
13	2303217	膝控提升连杆 knee lifter connecting rod	1	1
14	2303218	弹簧销 spring pin	1	1
15	2303012	羊毛毡 felt	2	1
11	2303011	上轴轴套(中) arm shaft bushing complete (middle)	1	1
17	2301090	上轴油封 oil seal	2	2
18	2303099	弹簧挡圈 spring flange	2	2
19	2301120	同步带轮螺钉 screw	2	2
20	2303095	同步带轮 pulley	1	1
21	2301148	倒缝操纵杆曲柄螺钉 screw	1	1
22	2303337	轴承 bushing	1	1
23	2303336	轴套 bushing	1	1
24	2301120	轴套螺钉 screw	2	2
25	2303335	主动轮 pulley	1	1
26	2301092	主动轮螺钉 screw	2	2
27	2303097	同步带 cog belt	1	1
28	2301120	同步带轮螺钉 screw	2	2
29	2403041	同步带轮组件 pulley complete	1	1
30	2303092	上轴 arm shaft	1	1
31	2303147	压紧杆 presser bar	1	1
32	2303148	1/8(44)×9圆柱头螺钉 screw	1	1
33	2303414	压紧杆轴套 presser bar bushing	1	1
34	2301064	上轴轴套(中)螺钉 screw	2	2
35	2303209	压紧杆导架 presser bar guide bracket	1	1
36	2303214	操作板 operation plate	1	1
37	2303212	膝控提升杠杆(左) knee lifter lever (left)	1	1
38	2303213	膝控提升拉杆 knee lifter rod	1	1
39	2303211	压紧杆提升凸轮 Dresser bar liftina cam	1	1
40	2403132	压脚扳手组件 presser bar lift	1	1
41	2301027	三眼线勾螺钉 screw	2	2
42	2303219	压紧杆弹簧 presser bar spring	1	1
43	2301006	压紧杆弹簧导柱 presser bar spring guide	1	1
44	2301198	调压螺钉锁紧螺母 special nut	1	1
45	2302059	调压螺钉 screw	1	1
46	2403111	压脚组件(1/4) presser foot complete (1/4)	1	
46	2403112	压脚组件(1/4) presser foot complete (1/4)		1

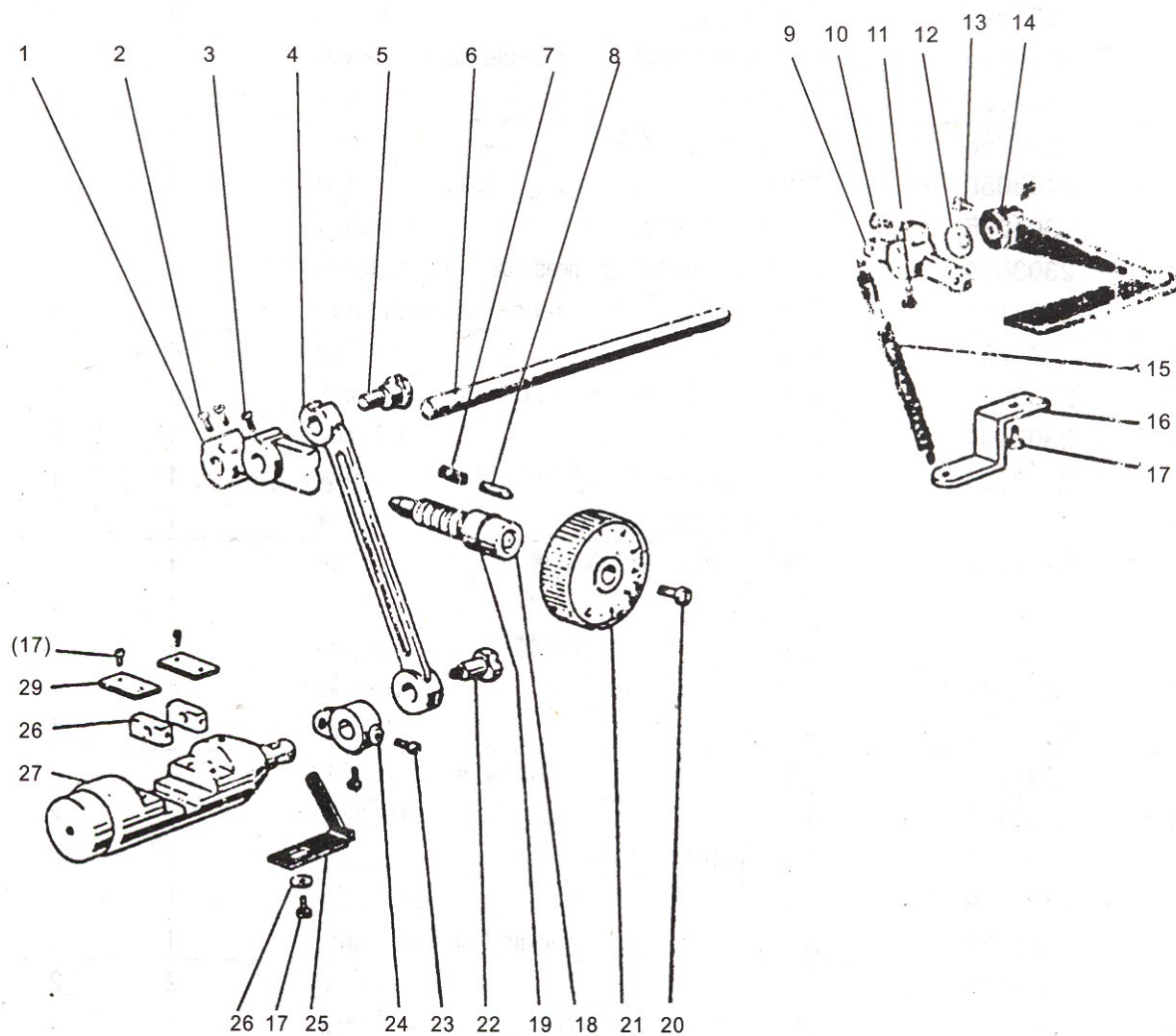
4、针杆挑线部件

THREAD TAKE-UP LEVER NEEDLE BAR ROCK MOTION MECHANIS



序号 No.	图 号 Ref. No.	名 称 Description	M	B
1	2304036	棉线 oil wick	1	1
2	2303102	挑线杆铰链轴 thread take-up guide bracket pin	1	1
3	2303100	挑线杆 thread take-up lever	1	
3	2304232	挑线杆 thread take-up lever		1
4	2303101	挑线杆滑块 thread take-up link	1	
4	2304034	滑杆 thread take-up link		1
5	2304037	滑杆塞子 plug	1	1
6	2301092	主动轮螺钉 screw	3	3
7	2304040	挑线曲柄连杆轴 needle bar crank pin	1	1
8	2304038	滑杆棉线 oil wick	1	1
9	2301068	挑线曲柄定位螺钉 screw	1	1
10	2403058	紧圈组件 collar complete	1	1
11	2301095	压紧杆导架螺钉 screw	1	1
12	2303004	针杆架摆动轴轴套 needle bar rock shaft bushing	2	2
13	2303114	针杆摇动轴 needle bar rock shaft	1	1
14	2301207	压脚曲柄(右)螺钉 screw	1	1
15	2303127	针杆摇动轴曲柄 needle bar rock shaft crank	1	1
16	2303131	油线 oil wick	1	1
17	2303130	SM5/16(24)×26.2圆柱头螺钉 screw	1	1
18	2303129	针杆摇动轴曲柄连杆 link	1	1
19	2303132	SM5/16(24)×5.5六角螺母 nut	1	1
20	2303119	羊毛毡 felt	1	1
21	2303122	SM1/8(44)×4.8圆柱头螺钉 screw	2	2
22	GB93-87-3	弹簧垫圈 M3 washer	4	4
23	2303120	保持架 holder	1	1
24	2303121	机针 needle (dpx5 #14)	2	
24	2303445	机针 needle (dpx5 #18-#22)		2
25	2303115	SM9/64(40)×3圆柱头螺钉 screw	2	2
26	2303109	针杆 needle bar	1	1
27	2303106	针杆架 needle bar rock frame	1	1
28	2303107	垫片 washer	2	2
29	2303108	SM3/32(56)×4沉头螺钉 screw	4	4
30	2303111	SM9/64(40)×8.5圆柱头螺钉 screw	1	1
31	2303110	针杆接头 needle bar connecting stud	1	1
32	2303124	垫片 washer	1	1
33	2303125	羊毛毡 felt	1	1
34	2303113	针杆接头滑块 square block	1	1
35	2303112	挑线连杆 thread take-up link	1	1
36	2303118	保持架 holder	1	1
37	2303123	SM1/8(44)×3.5圆柱头螺钉 screw	2	2
38	2303117	羊毛毡 felt	1	1
39	2301064	上轴轴套(中)螺钉 screw	1	1

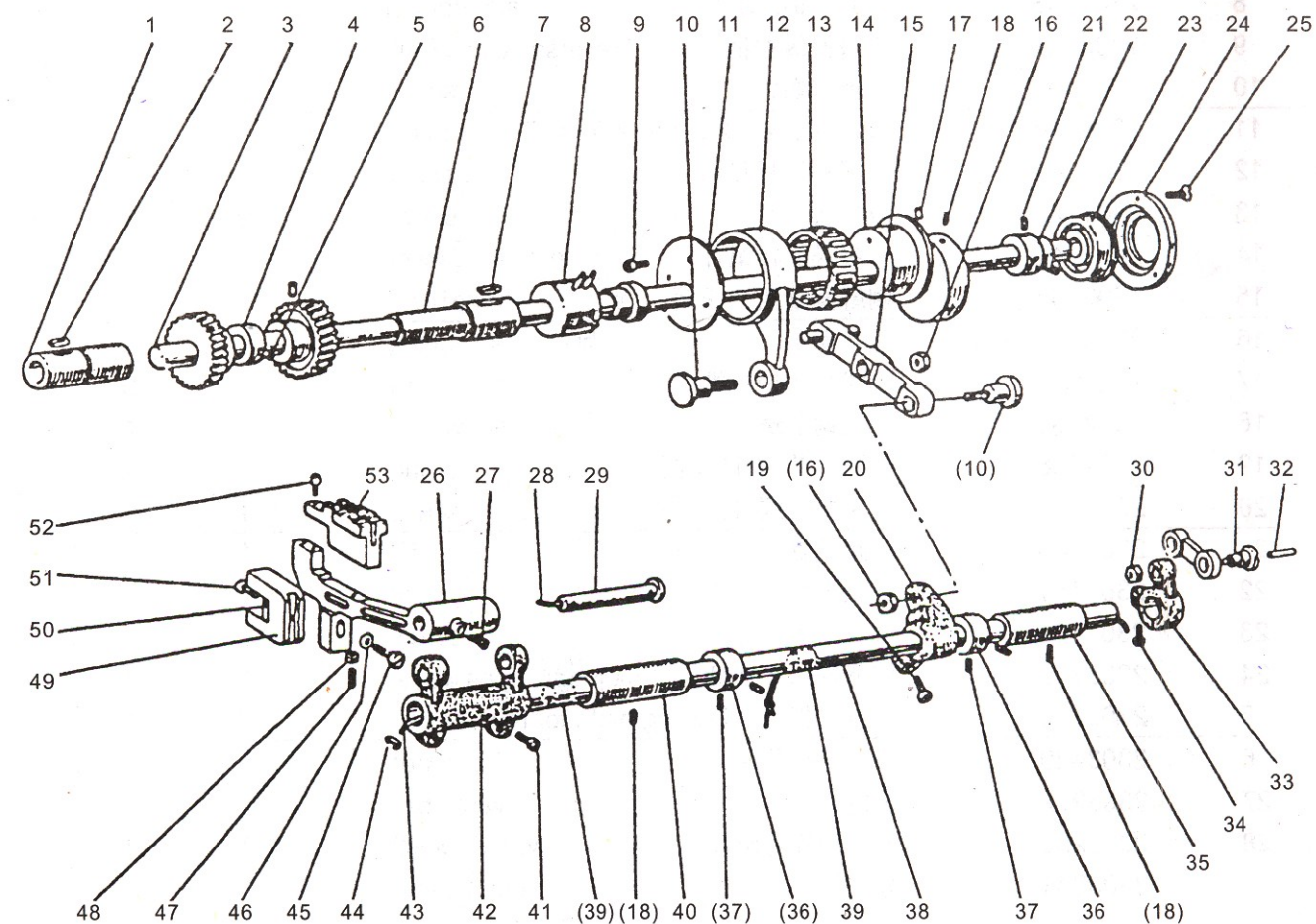
5、针距调节部件 STITCH REGULATOR MECHANISM



序号 No.	图 号 Ref. No.	名 称 Description	M	B
1	2403140	针距调节摆杆组件 feed regulator complete	1	1
2	2301120	倒缝操纵杆螺钉 screw	2	2
3	2303229	SM15/64(28)×12圆柱头螺钉 screw	1	1
4	2303230	连杆 connecting link	1	1
5	2303231	偏心轴 eccentric shaft	1	1
6	2303236	倒缝操纵杆短轴(上) reverse stitch shaft (upper)	1	1
7	2303244	针距按钮簧 spring	1	1
8	2301138	Φ4×16止动销 stopper pin	1	1
9	2303232	倒缝操纵曲柄 reverse stitch crank	1	1
10	2303422	拉簧架螺钉 screw	1	1
11	2303233	SM11/64(40)×8.5圆柱头螺钉 screw	1	1
12	2301144	倒缝操纵杆垫圈 washer	1	1
13	2301120	限位块螺钉 screw	2	2
14	2403148	倒缝操纵杆组件 reverse feed lever	1	1
15	2303234	倒缝操纵曲柄弹簧 spring for reverse feed crank	1	1
16	2303235	弹簧架 bracket for spring	1	1
17	2301066	挑线杆防护罩螺钉 screw	6	6
18	2302035	针距调节螺杆 screw bar	1	1
19	2301136	针距调节螺杆O型圈 o-ring	1	1
20	2301135	针距标盘螺钉 screw	1	1
21	2303243	针距标盘 dial	1	
22	2303461	针距标盘 dial		1
23	2301120	倒缝操纵杆螺钉 screw	2	2
24	2303239	倒缝操纵杆曲柄(下) stitch regulating crank lower	1	1
25	2303240	倒缝台挡板 holding plate for reverse bar	1	1
26	2303420	检测器架垫圈 washer	1	1
27	2303242	倒缝台 reverse bar	1	1
28	2303262	送布轴连杆滑块 square block	2	2
29	2303241	导向板 guide plate	2	2

6、下轴、送布轴部件

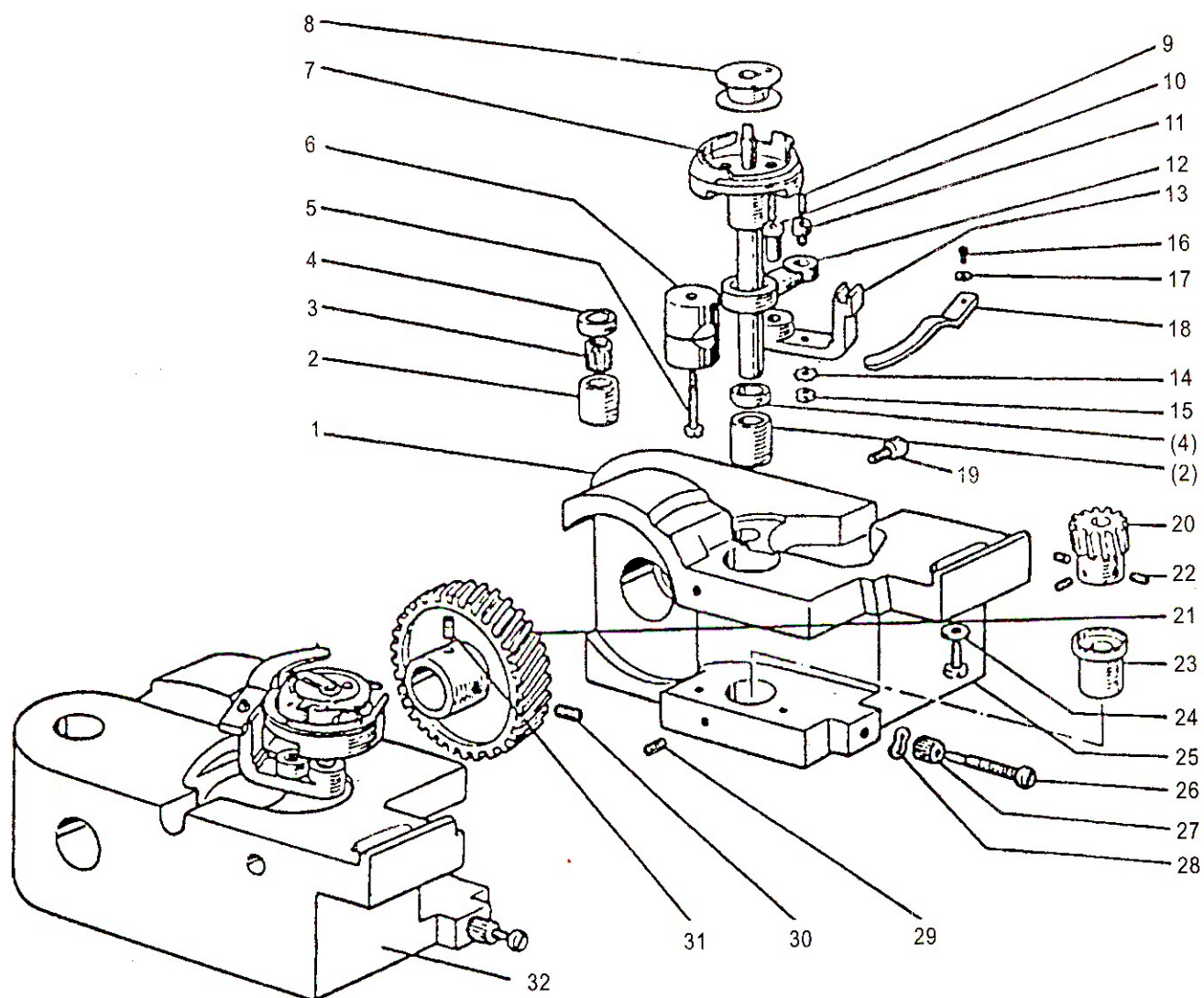
LOWER SHAFT AND FEED ROCK SHAFT MECHANISM



序号 No.	图 号 Ref. No.	名 称 Description	M	B
1	2403016	下轴轴套(左)组件 lower shaft bushing complete (left)	1	1
2	2303006	油线 oil wick	1	1
3	2303285	下轴 lower shaft	1	1
4	2303290	抬牙凸轮 feed lifting cam	1	1
5	2303289	下/4(40)×5紧定螺钉 screw	1	1
6	2403017	下轴轴套(右)组件 lower shaft bushing complete (right)	1	1
7	2303006	油线 oil wick	1	1
8	2403018	下轴轴套(中)组件 lower shaft bushing complete (middle)	1	1
9	2303423	短轴端盖螺钉 screw	3	3
10	2303264	下/4(24)×22轴位螺钉 screw	2	2
11	2303268	垫片 washer	1	1
12	2303270	送布凸轮连杆 feed connecting rod	1	1
13	2303269	轴承 needle bearing	1	1
14	2303267	送布凸轮 lever feed connecting cam	1	
14	2303463	送布凸轮 lever feed connecting cam		1
15	2403161	送布轴连杆组件 link complete	1	1
16	2303265	1/4(24)×3.5六角螺母 nut	2	2
17	2304042	挑线杆定位螺钉 screw	1	1
18	2303266	15/64(28)×14圆柱头螺钉 screw	3	3
19	2303266	15/64(28)×14圆柱头螺钉 screw	1	1
20	2303263	送布轴曲柄(中) feed rock shaft crank (middle)	1	1
21	2301086	上轴紧圈螺钉 screw	2	2
22	2303293	下轴右轴套 bushing	1	1
23	2303292	轴承 ball bearing	1	1
24	2303294	挡板 bearing holder	1	1
25	2303424	送布凸轮垫圈螺钉 screw	3	3
26	2303249	牙架 feed bar	1	1
27	GB78-85	内六角紧定螺钉M5×5 screw	1	1
28	2303255	油线 oil wick	1	1
29	2303258	牙架曲柄轴 feed bar shaft	1	1
30	2303136	5/16(24)×5六角螺母 nut	1	1
31	2303130	5/16(24)×26.2圆柱头螺钉 screw	1	1
32	2303131	油线 oil wick	1	1
33	2303135	送布轴曲柄(右) feed rock shaft crank (right)	1	1
34	2301207	压脚曲柄(右)螺钉 screw	1	1
35	2303010	送布轴轴套 feed rock shaft bushing	1	1
36	2401016	上轴紧圈组件 collar complete	2	2
37	2301086	上轴紧圈螺钉 screw	4	4
38	2303246	送布轴 feed rock shaft	1	1
39	2303247	羊毛毡 felt	2	2
40	2301172	抬牙轴轴套 feed rock shaft bushing (left)	1	1
41	2301162	牙架曲柄螺钉 screw	2	2
42	2303256	牙架曲柄 feed bar crank	1	1
43	2303248	油线 oil wick	1	1
44	2303259	毛线夹 holder	1	1
45	2303291	SM15/64×28×18六角螺栓 bolt	1	1
46	2301249	垫圈 washer	2	2
47	GB78-85	内六角紧定螺钉M3×14 screw	1	1
48	螺母 GB6170-86-M3	螺母M3 nut	1	1
49	2303286	抬牙曲柄叉 feed bar connecting fork	1	1
50	2303287	羊毛毡 felt	1	1
51	2303288	1/8(44)×4圆柱头螺钉 screw	1	1
52	2303253	1/8(40)×7内六角螺栓 bolt	2	2
53	2303254	送布牙1/4 feed dog 1/4	1	
53	2303462	送布牙 feed dog 1/4		1

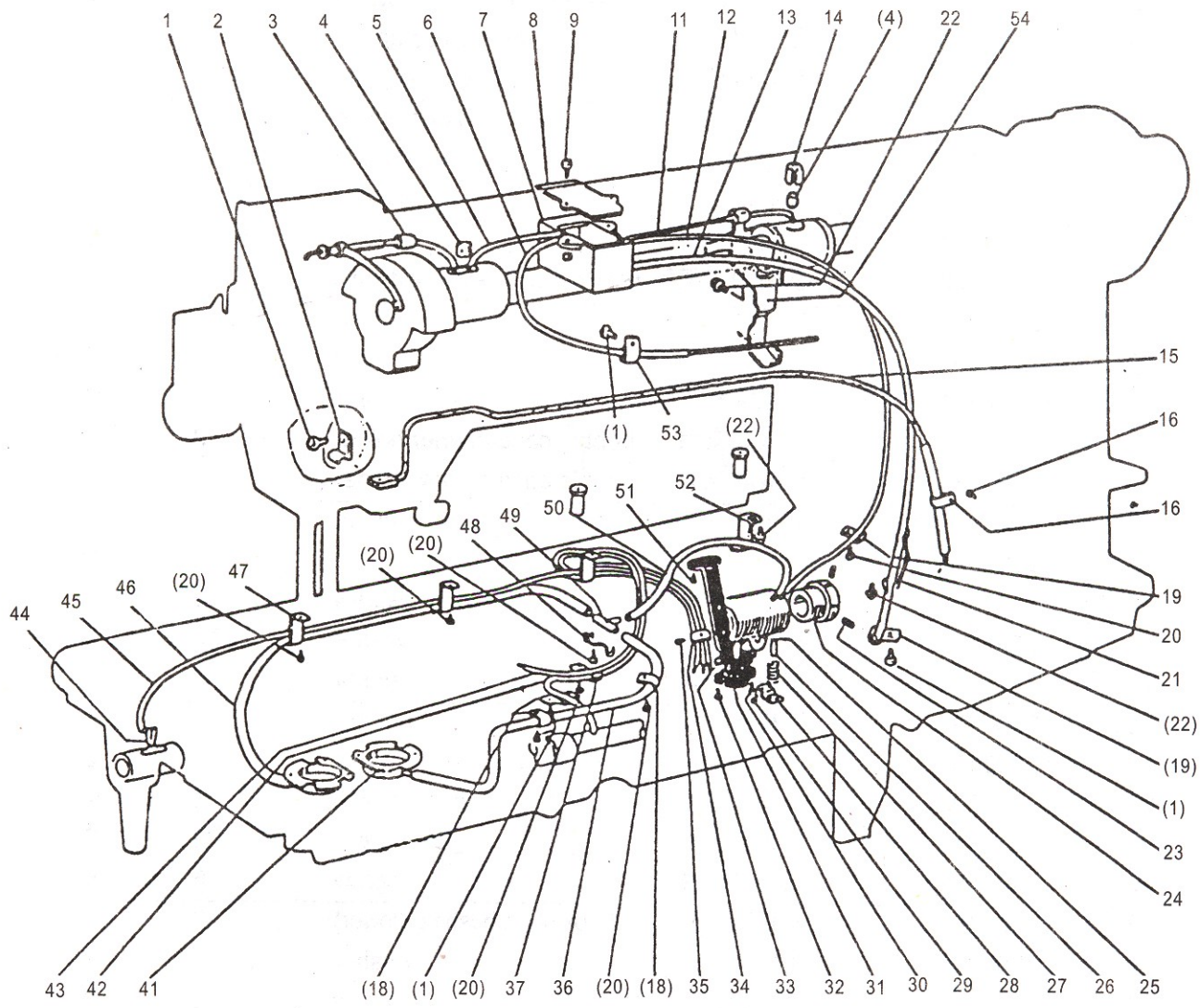
7、旋梭台部件

HOOK SADDLE MECHANISM



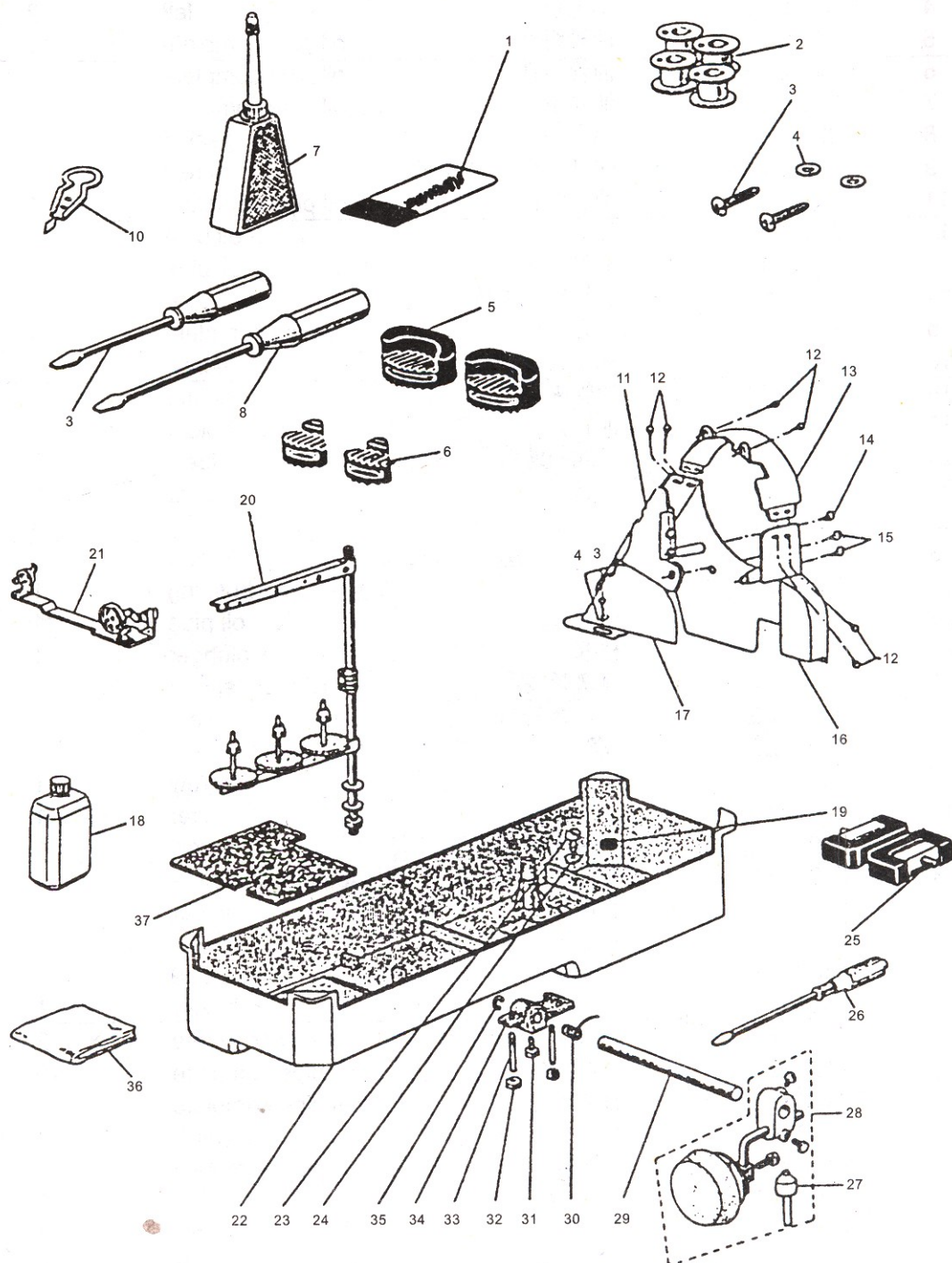
序号 No.	图 号 Ref. No.	名 称 Description	M	B
1	2303295	旋梭台(右) hook saddle (right)	1	
1	2303477	旋梭台(右) hook saddle (right)		1
2	2303297	旋梭轴轴套(上) hook shaft bushing (upper)	2	
2	2303478	旋梭轴轴套(上) hook shaft bushing (upper)		2
3	2303298	轴承 needle bearing	2	2
4	2303299	垫片 washer	2	
4	2303479	垫片 washer		2
5	2303314	15/64(28)×30圆柱头螺钉 screw	2	2
6	2403185	轴套组件 bushing complete	2	2
7	2403181	旋梭组件 hook complete	2	
7	2403182	旋梭组件 hook complete		2
8	2304111	梭心 bobbin	2	
8	2303483	梭心 bobbin		2
9	2303307	油线2.5×15 oil wick	2	2
10	2303306	拨线勾支架轴 bobbin case opener holder pin	1	1
11	2303304	特殊螺钉 screw	1	1
12	2303305	支架连杆 link	2	
12	2303481	支架连杆 link		2
13	2303303	拨线勾支架 bobbin case opener holder	2	
13	2303480	拨线勾支架 bobbin case opener holder		2
14	GB93-87-5	弹簧垫片M5 spring washer	2	2
15	2302084	牙架连杆铰链轴螺母 nut	2	2
16	2301241	摆动连杆座螺钉 screw	2	2
17	2303137	垫片 washer	2	2
18	2303312	旋梭拨线勾 opener	2	
18	2303482	旋梭拨线勾 opener		2
19	2303308	3/16(28)×14.5内六角紧定螺栓 bolt	2	2
20	2303302	旋梭台齿轮(2) gear (small)	2	2
21	2303301	旋梭台齿轮(1) gear (large)	2	2
22	2301086	上轴紧圈螺钉 screw	6	6
23	2303300	旋梭轴轴套(下) hook shaft bushing (lower)	2	2
24	2301249	垫圈 washer	2	2
25	2303316	1/4(24)×23圆柱头螺钉 screw	2	2
26	2303309	特殊螺钉3/16×(28)×43 screw	2	2
27	2303310	3/16(28)×9调节螺母 nut	2	2
28	GB860-87-6	波形垫圈 spring washer	2	2
29	2301110	送布轴轴套螺钉 screw	4	4
30	2301068	挑线曲柄定位螺钉 screw	2	2
31	2303311	1/4(40)×6.5紧定螺钉 screw	2	2
32	2303317	旋梭台(左) hook saddle (left)	1	
32	2303484	旋梭台(左) hook saddle (left)		1

8、供油部件
OIL LUBRICATION MECHANISM



序号 No.	图 号 Ref. No.	名 称 Description	M	B
1	2301066	挑线杆防护罩螺钉 screw	4	4
2	2303356	油管夹 holder	1	1
3	2303103	橡胶管 pipe	1	1
4	2303012	羊毛毡 felt	2	2
5	2403214	油管组件 oil pipe complete	1	1
6	2403215	油管组件 oil pipe complete	1	1
7	2403213	油盒组件 oil pipe complete	1	1
8	2303352	油盒垫片 gasket	1	1
9	GB819-85	螺钉(镀锌)M4×16 screw	2	2
11	2403216	油管组件 oil pipe complete	1	1
12	2303347	油管 oil pipe	1	1
13	2303348	油管5D×1T×360L oil pipe	1	1
14	2303389	上轴轴套油管 pipe	1	1
15	2403217	油管组件 oil pipe complete	1	1
16	2303419	偏心连杆轴螺钉 screw	7	7
18	2303128	油管夹 holder	2	2
19	2303385	油管夹 holder	2	2
20	2301053	大线勾螺钉 screw	7	7
21	2303386	油管夹 holder	1	1
22	2301017	后盖板螺钉组件 screw	3	3
23	2303394	11/64×40×10紧定螺钉 screw	2	2
24	2303395	轴套 bushing	1	1
25	2303374	油管 oil pipe	1	1
26	2301263	柱塞 plunger	1	1
27	2301264	柱塞弹簧 Dlunaer sprina	1	1
28	2301265	柱塞弹簧挡板 plunger spring plate	1	1
29	2303122	1/8(44)×4.8圆柱头螺钉 screw	1	1
30	2303142	9/64(40)×5圆柱头螺钉 screw	1	1
31	2303370	过滤板 filter	1	1
32	2303372	9/64×40×7圆柱头螺钉 screw	1	1
33	2403221	油管板组件 base plate complete	1	1
34	2303373	油管夹 holder	1	1
35	2301013	面板线勾螺钉 screw	1	1
36	2303360	油管 oil pipe	1	1
37	2303381	油管夹 holder	1	1
41	2403219	供油管盖组件 cover complete	2	2
42	2403224	油管组件 oil pipe complete	1	1
43	2403223	油管组件 oil pipe complete	1	1
44	2303384	油线 oil wick	3	3
45	2403222	油管组件 oil pipe complete	1	1
46	2303361	油管 Oil pipe	1	1
47	2303380	油管夹 holder	3	3
48	2303363	油管夹 holder	1	1
49	2403218	油管接头组件 oil pipe complete	1	1
50	2303362	油管 oil pipe	1	1
52	2303391	压板 holding plate	1	1
53	2303353	塑料夹 holder	1	1
54	2303354	油管夹 holder	1	1

9、附件 ACCESSORIES



序号 No.	图 号 Ref. No.	名 称 Description		M	B
1	2303121	机针DpX5#14	needle	6	
1	2303397	机针DPX5#18	needle		6
2	2304111	梭心	bobin	4	
2	2303483	梭心	bobin		4
3	GB99-76	绕线器木螺钉	screw	4	4
4		垫圈	wacher	2	1
5	2303398	防振垫块	bibration preventing rubber.	2	2
6	2303399	防振垫块	bibration preventing rubber	1	2
7	2301310	小油壶	oilier	1	1
8	2301313	螺钉起子(中)	screw driver(middle)	1	1
9	2301314	螺钉起子(小)	screw driver(small)	1	1
10	2403232	穿线器组件	thread needle kit	1	1
11	2303592	皮带罩板	belt cover	6	1
12	2301017	后盖板螺钉组件	screw	1	6
13	2301299	皮带罩(上)	belt cover(upper)	1	1
14	2301303	皮带罩板螺钉螺母	nut	2	1
15	2301303	皮带罩螺钉	screw	1	2
16	2303591	皮带罩(下)	belt cover(lover)	1	1
17		皮带罩架小组件	belt cover bracket	1	1
18	2303407	油箱	oil can	1	1
19	2301311	小磁块	magnet	1	1
20	2403236	线架组件	cotton stand	1	1
21	2302119	绕线器组件	bobbin winder		
21	2301001	绕线器组件	bobbin winder		1
22	2303402	油盘	oil reservoir	1	1
23	2301281	放油螺钉	screw	1	1
24	2301282	防油螺钉垫圈	washer	2	1
25	2401104	机壳铰链组件	hinger complete	1	2
26	2301315	螺钉起子(大)	screw driver(large)	1	
27	2403235	膝控提升顶杆组件	knee lift shaft	1	1
28	2403234	小附件组件	small parts	1	1
29	2303403	膝控铰链轴	knee lift crank	1	1
30	2301286	膝控复位弹簧	spring	1	1
31	2301293	碰块弯杆接头螺钉	screw	2	1
32	2301289	调节螺母	nut	2	2
33	2301288	膝控限位调节螺钉	screw	1	2
34	2303404	膝控提升杠杆曲柄	knee lift shaft		1
35	GB896-86-9	E型挡圈5	e-type ring	1	
36	2301317	机罩	cover	1	1
37	2303409	油垫	wahser	1	