

Sun Special[®]

SS6240B

LM - ORIGINAL

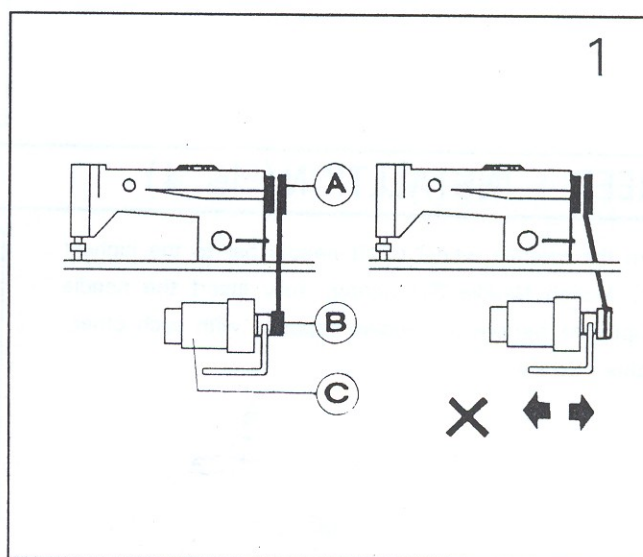
ATTENTION

1. Before delivery the machine parts are coated with rust preventive grease, which may be hardened and contaminated by dust during storage and shipment. This grease must be removed by clean cloth with gasoline.

2. Though strict inspection and test before delivery confirm every machine, the machine parts may be loosed or deformed after long distance transportation with jolt. A thorough examination must be performed after cleaning the machine. Turn the balance wheel to see if there is running obstruction, parts collision, uneven resistance or abnormal noise. If these exist, adjustment must be made accordingly before run.

1. MOTOR INSTALLATION (FIG. 1)

Move motor(C) right and left, align groove(A) of the pulley with groove(B) of the motor pulley.



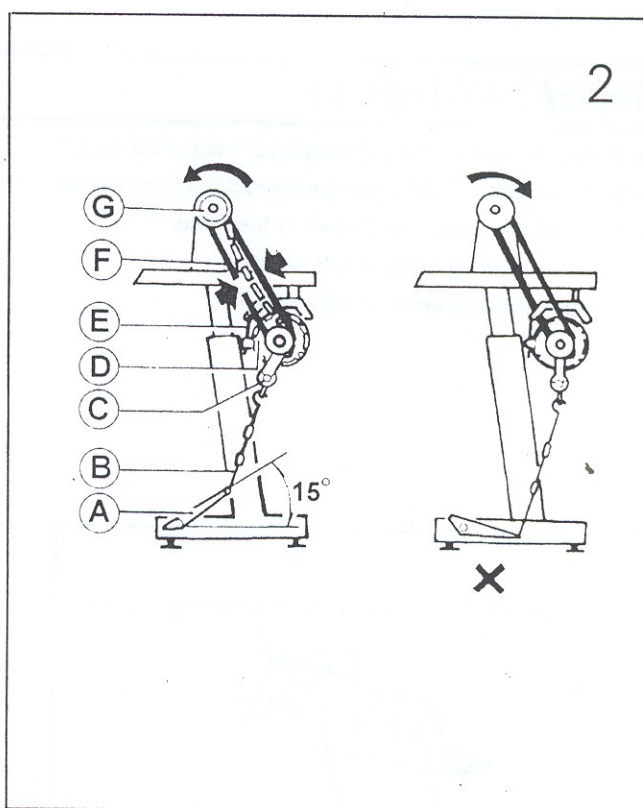
2. CONNECTING THE CLUTCHLEVER TO THE PEDAL (FIG. 2)

1. the optimum tilt angle of pedal with floor is approx 15 degree.

2. Adjust the clutch of the motor so that clutch lever C and draw bar B run in line.

3. The machine balance wheel should rotate counter-clockwise for normal sewing when view from opposite side of balance wheel. The motor is rotated in the same direction. The rotation can be reversed by reversing (turn over 180 deg.) the plug of motor.

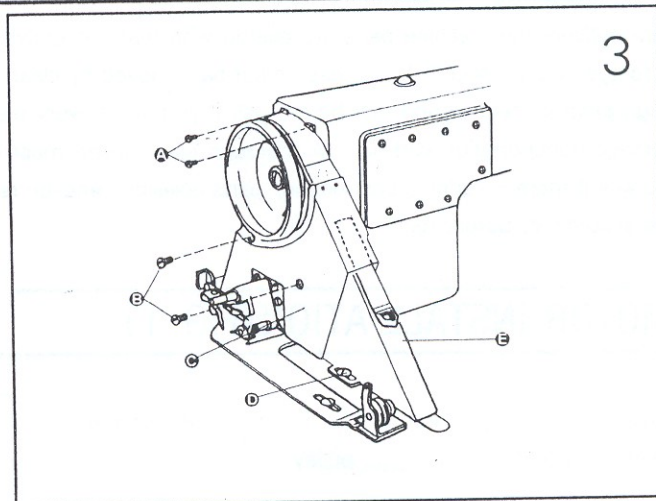
4. Adjust the tension of V-belt F by moving the motor vertically. The proper tension of V-belt is a slack of 10 - 20mm when the belt is depressed at the belt span by finger.



3. BELT COVER INSTALLATION (FIG. 3)

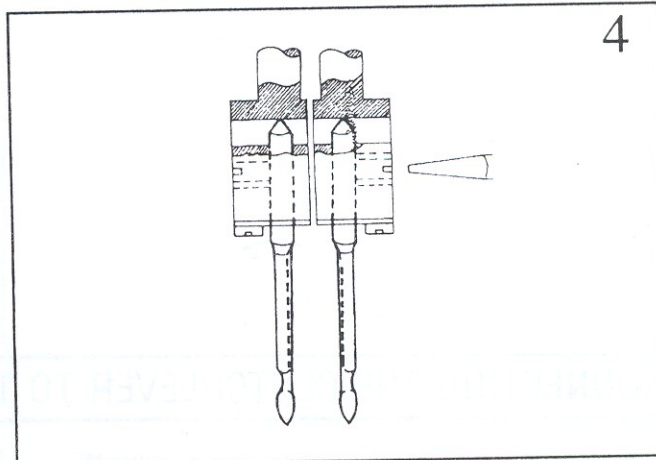
Install the belt cover for the sake of safety.

Install belt cover (C) to arm with screw (A) and screw (B), and install belt cover (E) on board with screw (D).



4. NEEDLE INSTALLTION (FIG. 4)

Turn the balance wheel to lift needle bar to the highest position, loosen Needle Set Screw, fully insert the needle shank upto the bottom of needles opposite with each other, then tighten Screw.



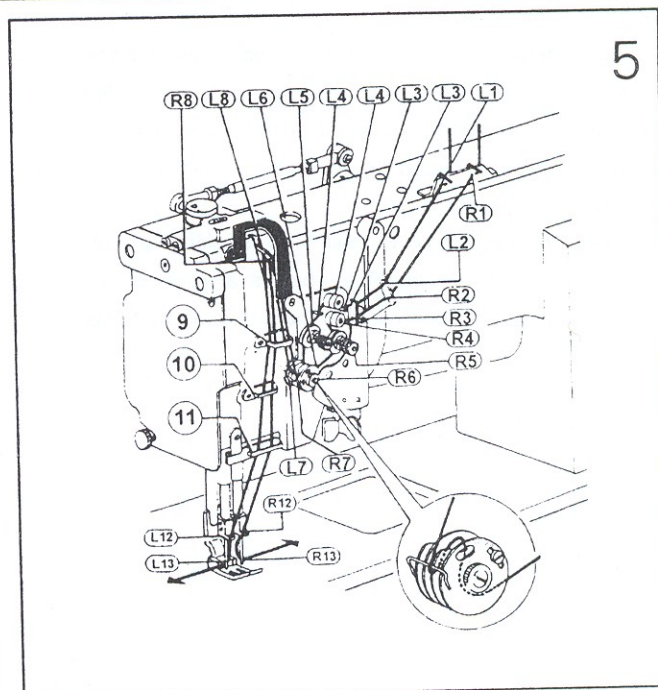
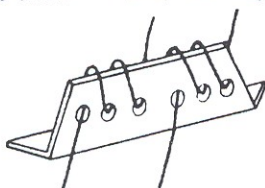
5. THREADING (FIG. 5)

As threading needle thread, needle bar should be raised to its highest position, . Then draw the thread end from thread spool and thread it in the order shown in the finger.

Note: L: Threading order of left needle

R: Threading order of right needle

drical shape as shown in as a, then tighten the screw.

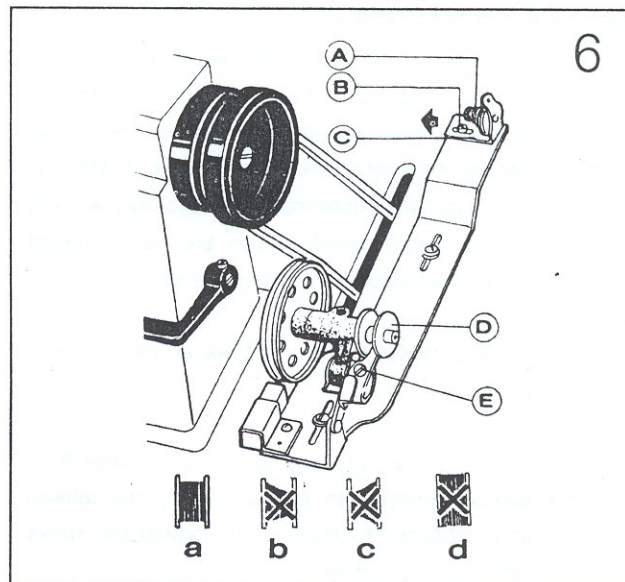


6. INSTALLING THE BOBBIN WINDER (FIG. 6)

The bobbin winder pulley should align with the V-belt and there should be some clearance between them. When the bobbin winder stop latch lever is depressed, the V-belt should be in touch with the bobbin winder pulley in order that the bobbin winder puller can be driven by the V-belt.

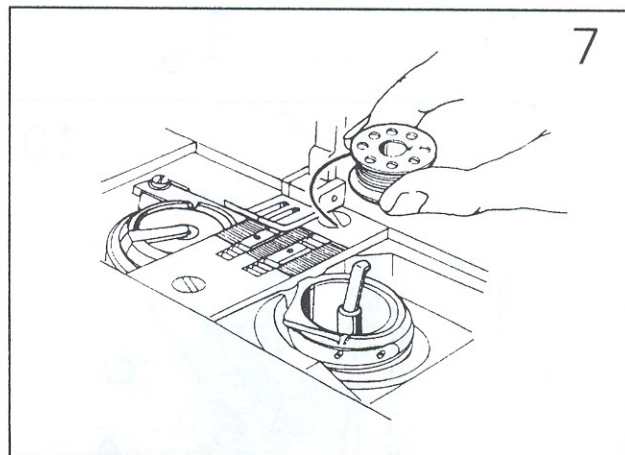
The thread wound on the bobbin should be neat and tight, if not tight, adjust the winding tension by turning the tension stud nut (A) of the bobbin winder tension bracket. When the thread wound on the bobbin does not present a cylindrical shape as shown in Fig. 10(a), loosen the set screw (B) of the bobbin winder tension bracket and move the bracket (C) leftward or rightward. If the thread is wound as shown in the figure (b), move the bracket rightward or if wound as shown in the figure (c), move it leftward. After positioning the bracket adequately, tighten the set screw (B).

Do not overfill the bobbin. The optimum wound length of the thread will fill about 80% of the bobbin capacity. This can be adjusted by the screw (E) of the bobbin winder stop latch.



7. BOBBING INSTALLATION (FIG. 7)

Draw about 5mm thread from the bobbin, see the Fig. 7 hold the bobbin in the correct way, and put it in the rotating hook.



8. THREADING BOBBIN THREAD AND INSTALLING BOBBIN CASS (FIG. 8)

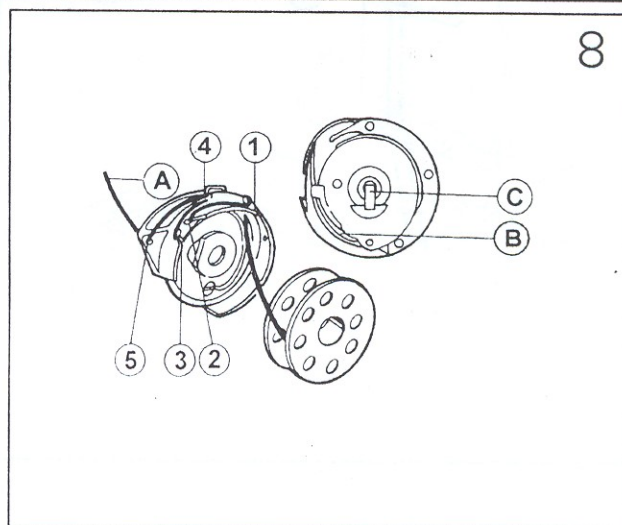
1. Draw the bobbin thread from point (A) in the left side of bobbin set into bobbin case.

2. Thread the thread through the bobbin case in the order (1) - (5) shown in the Fig.

3. Keep Hollow (B) of bobbin case facing the convex of rotating hook and place bobbin case in the rotating hook.

4. Release latch (C)

5. Place the thread end on the throat plate.



9. THREAD TENSION ADJUSTMENT (FIG. 9, 10, 11, 12, 13)

Needle thread and bobbin thread adjustment

Thread tension is adjusted in accordance with materials, thread and other factors.

In practice, thread tension is adjusted according to the stitches obtained, and with it the normal stitch is formed.

All forms of stitches are shown in Fig. 9. The normal stitch of sewing machine is shown as Fig. a. If stitch is abnormal as Fig b, c the puckering and thread breakage will occur, and the needle thread tension and bobbin thread tension should be adjusted so that the normal stitch can be obtained.

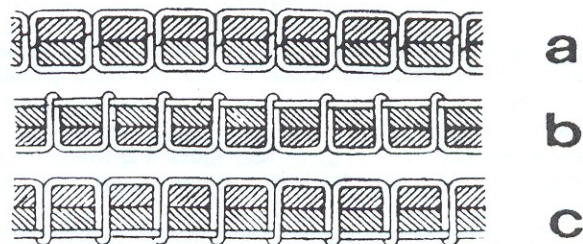
As adjusting needle thread, first adjust bobbin thread as Fig. 10

1. Turn Screw A, C
2. Adjusting thread take – up spring swing range B

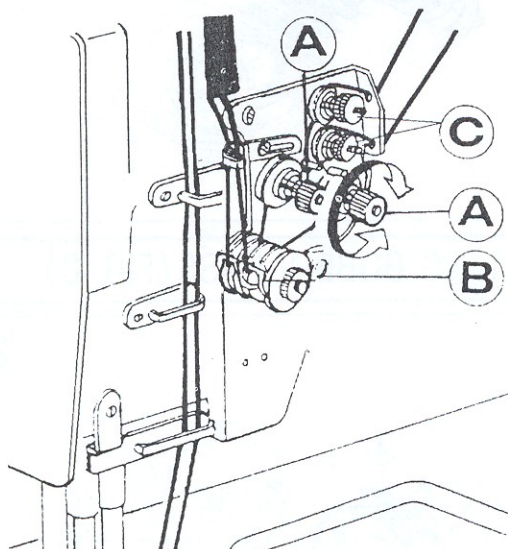
For special sewing with special thread, the tension needed can be obtained by adjusting the power and stroke of the thread take – up spring.

As for bobbin thread tension, adjust Screw A with small screwdriver as Fig. 11

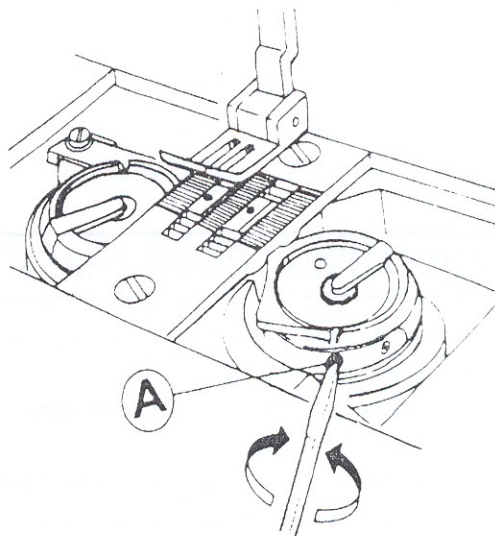
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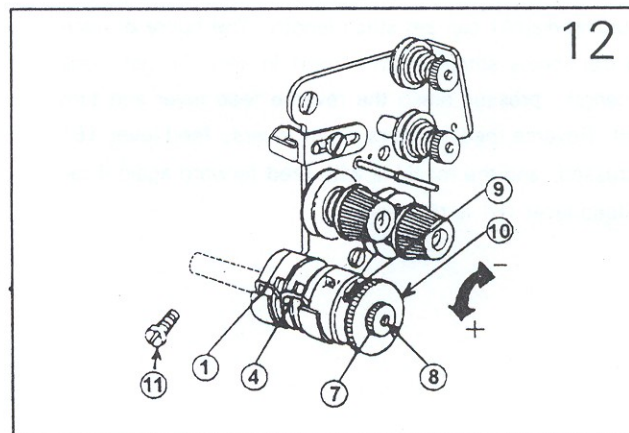


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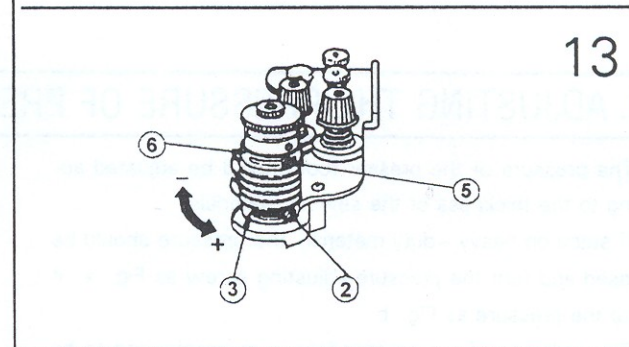
Adjusting thread take – up spring swing range

1. Left thread take – up spring (1)
Loosen Screw (2), thus can adjust throat plate position.
2. Right thread take – up spring (4)
loosen Screw (5), thus can adjust hold block position.



Adjusting thread take – up spring strength

As adjust left needle thread, loosen Nut (7) and (11), then adjust Screw. After this tension screws and nut. As adjust right needle thread, loosen Screw and Nut (10), and then tension the screw.

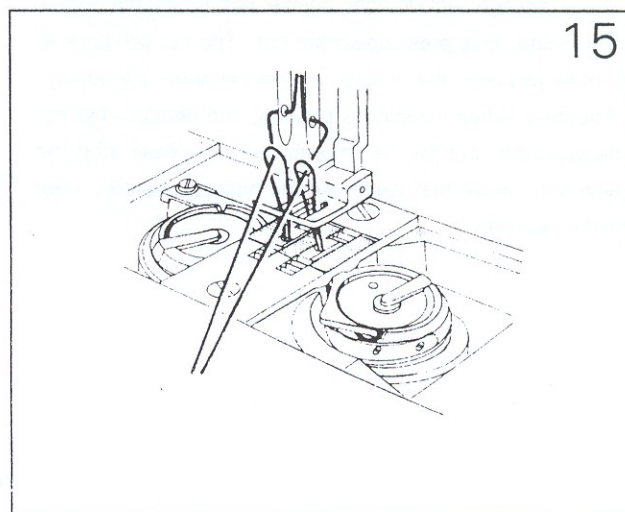
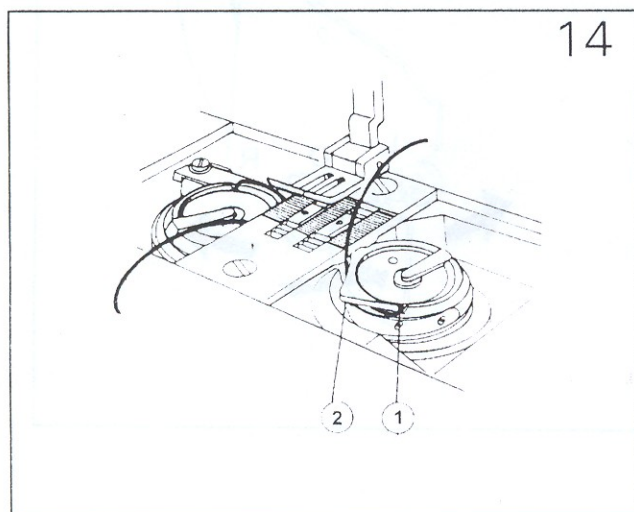


Adjusting thread position according to the sewing material.

	Left	Middle	Right
Thread guide position			
Sewing material	Heavy	Medium	Light

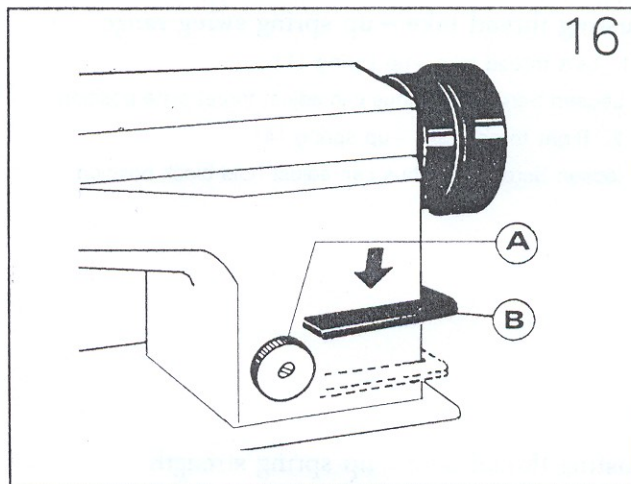
10. THE BOBBIN THREAD THROUGH AND OUT THE HOOK (FIG. 14, 15)

1. Pass the thread end though thread slit (1), and draw it through under position loop (2), place the thread end on the surface of machine bed.
2. Hold the two needles thread with left hand. As the figure shows, raise the needle thread, and the bobbin thread will be drawn out of throat plate, then place the needle thread and bobbin thread under the presser foot neatly.



11. SET STITCH LENGTH AND REVERSE FEEDING (FIG. 16)

Turning dial (A) can set stitch length. The figure on face of the dial shows stitch length (mm) in arm. To get small stitch length, presses down the reverse feed lever and turn the dial. Reverse feeding starts when reverse feed lever (B) is depressed, and the machine with feed forward again if reverse feed lever (B) is released.

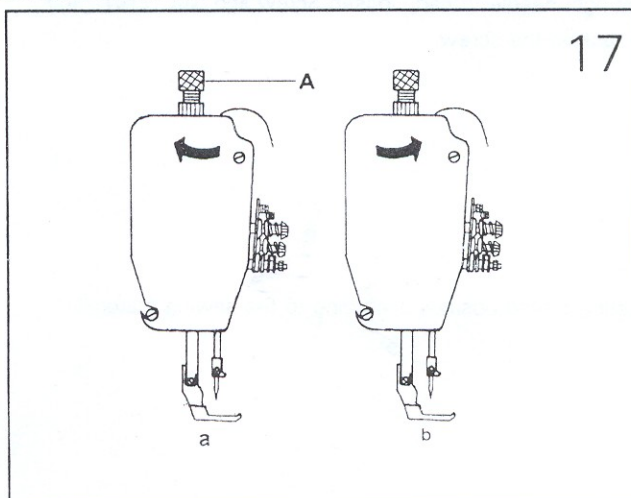


12. ADJUSTING THE PRESSURE OF PRESSER FOOT (FIG. 17)

The pressure of the presser foot should be adjusted according to the thickness of the sewing materials.

If stitch on heavy-duty material, the pressure should be increased and turn the pressure adjusting screw as Fig. a, if reduce the pressure as Fig. b

The pressure of the presser foot is recommended to be less as long as normal feeding is ensured

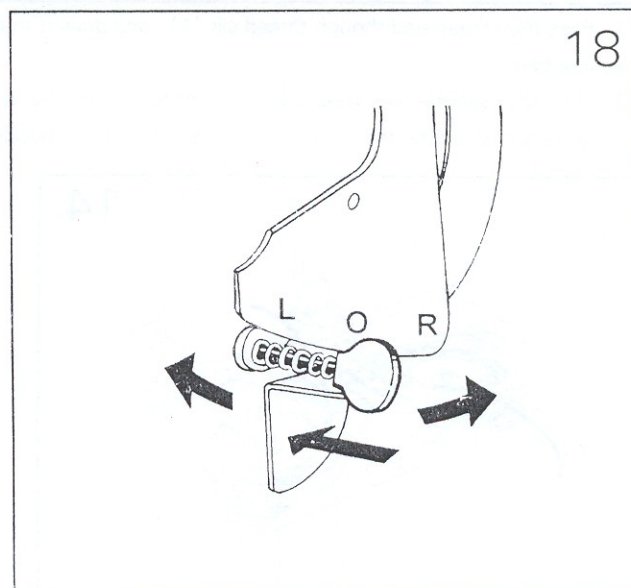


13. LEFT RIGHT NEEDLE BAR STOPPING (FIG. 18)

1. Stop left needle bar Turn the button to L position
2. Stop right needle bar Turn the button to R position.
3. Replacement

When change left or right needle bar to double two-needle running, only press down the nut. The nut can back to the O mark position, the double needles can work altogether.

Attention: When machine is running, the needle-bar nut can be operated, but for the smooth running please stop the machine first, make the needle bar the highest position, then make the operation.

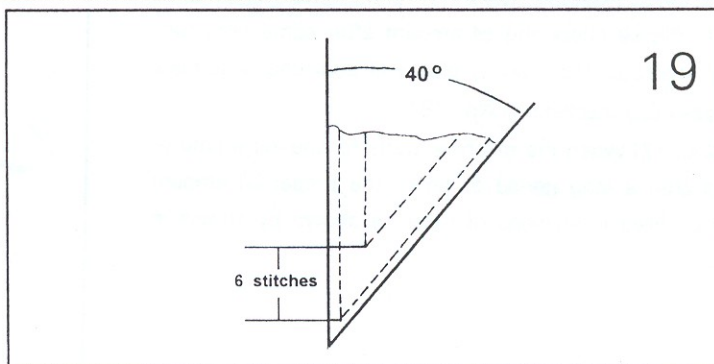


14. THE RELATIONSHIP BETWEEN SEWING STITCH ANGLE AND NEEDLE STITCH LENGTH (FIG. 19)

1. For the neat sewing stitch angle, please choose the sewing angle and needle length as the FIG. 19 (only for 6.4mm needle gauge)

2. After choose the angle and stitch length, then the outside stitches can be got.

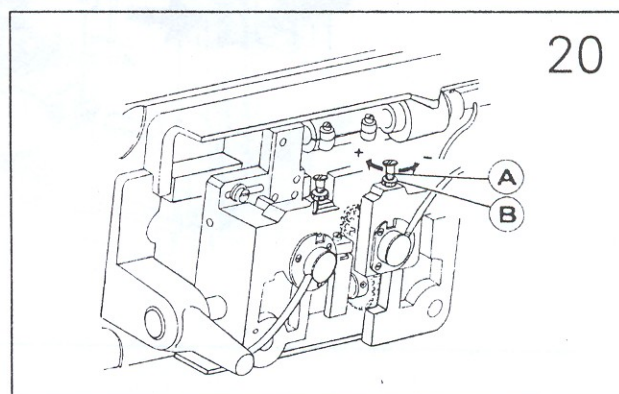
3. For example: the stitch angle is 40 degree, needle gauge is 2.9mm, and the stitch is 6.



angle \ Stitch	2	3	4	5	6	7	8
30°				4.8	4.0	3.7	3.0
40°			4.4	3.5	2.9	2.5	2.2
50°		4.6	3.4	2.7	2.3	2.0	1.7
60°	5.5	3.7	2.8	2.2	1.9	1.6	
70°	4.6	3.0	2.3	1.8	1.5		
80°	3.8	2.5	1.9	1.5	1.3		
90°	3.2	2.1	1.6	1.3			
100°	2.7	1.8	1.3				
110°	2.2	1.5					
120°	1.8	1.2					
130°	1.5						
140°	1.1						

15. HOOK OIL AMOUNT ADJUSTMENT (FIG. 20)

Adjusting screw A can adjusting hook oil amount, first loosen Screw B, turn Screw A clockwise can make more oil turn counterclockwise the screw, less oil. After this, tension Screw B.

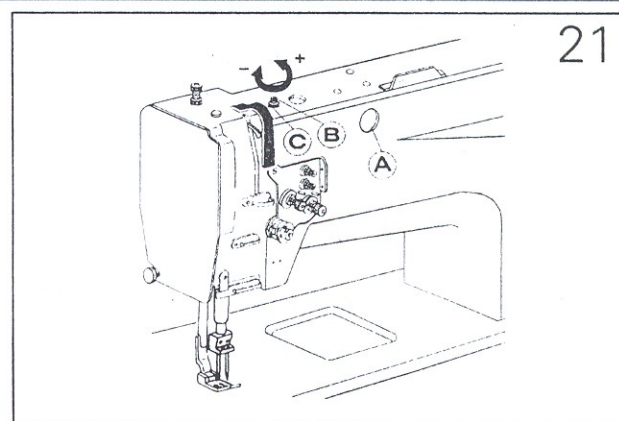


16. OILING EXAMINATION AND TAKE - UP LEVER OILING (FIG21)

After running, please observe if Oil Window A fill with oil, if not stop and make examination.

Adjustment oiling of take - up lever:

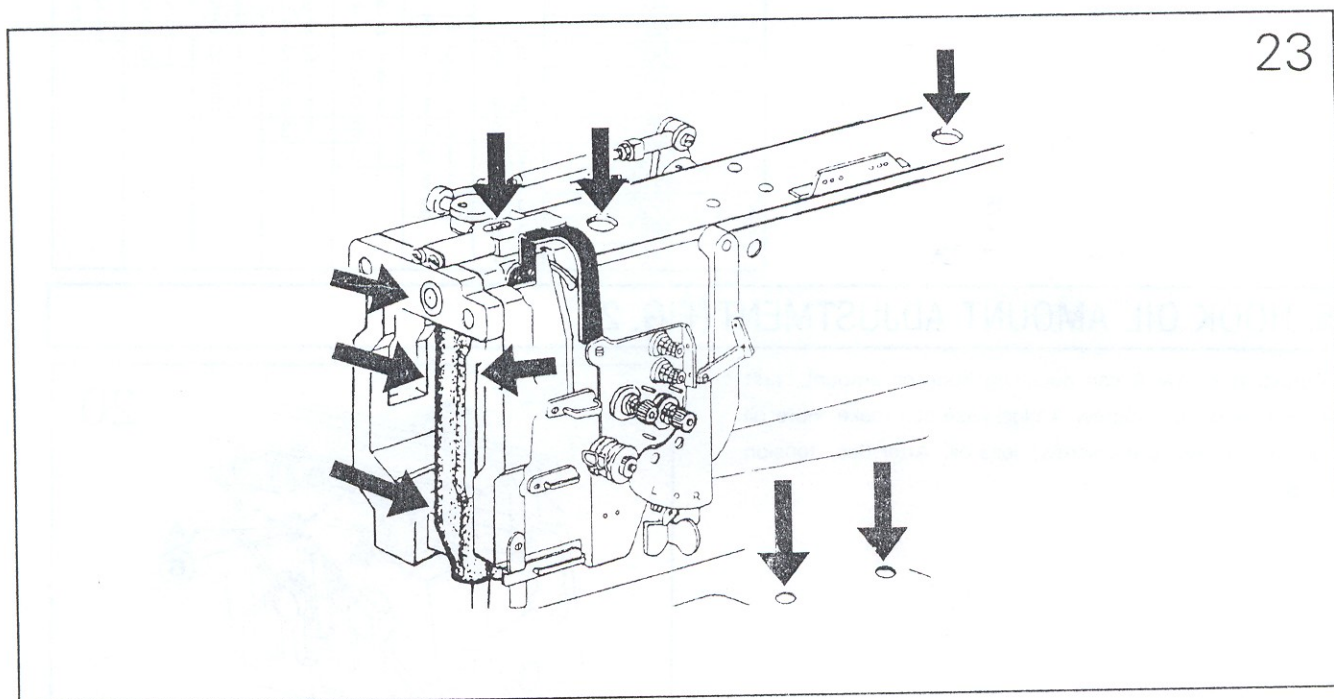
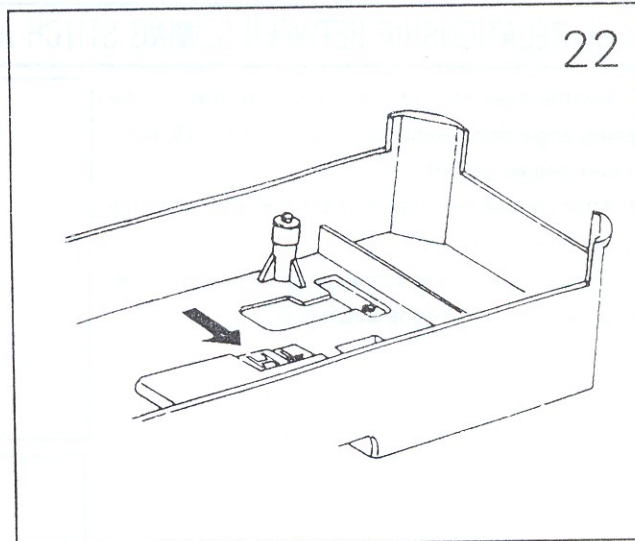
Loosen Screw C, turn Screw B as Fig21, then tension Screw C.



17. LUBRICATING (FIG22. 23)

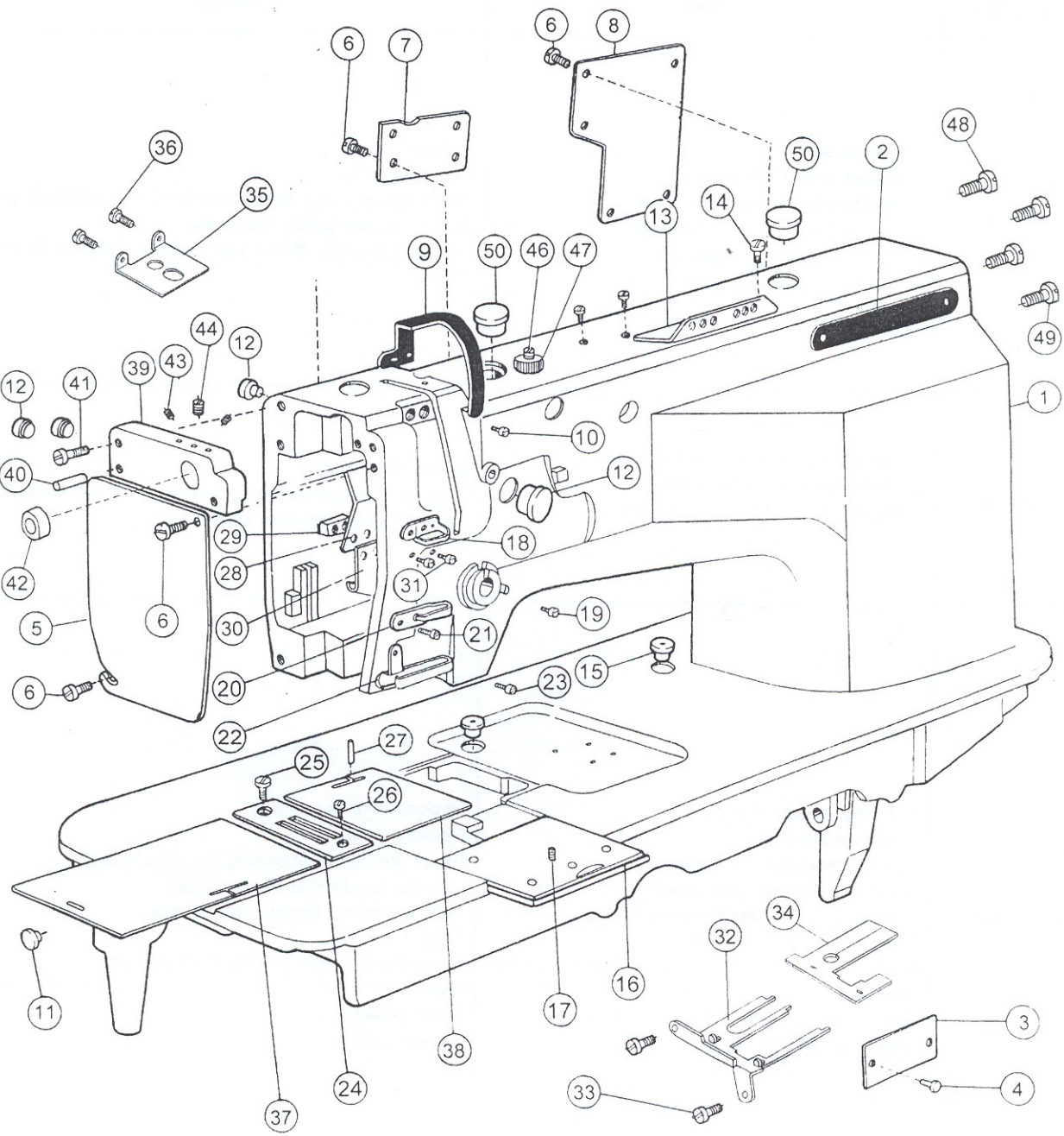
Fill oil (1) Oil amount should be filled according to the marks in the oil reservoir. Mark (H) refers to the highest of oil amount. Please check the oil amount after some time running, if oil amount low mark L, please fill additional oil to mark H. (please use machine oil No. 18)

Fill oil (2) When the machine starts for the initial time or refuses after a long period of time, the proper oil amount should be filled in sections of machine shown by arrows in Fig. 23



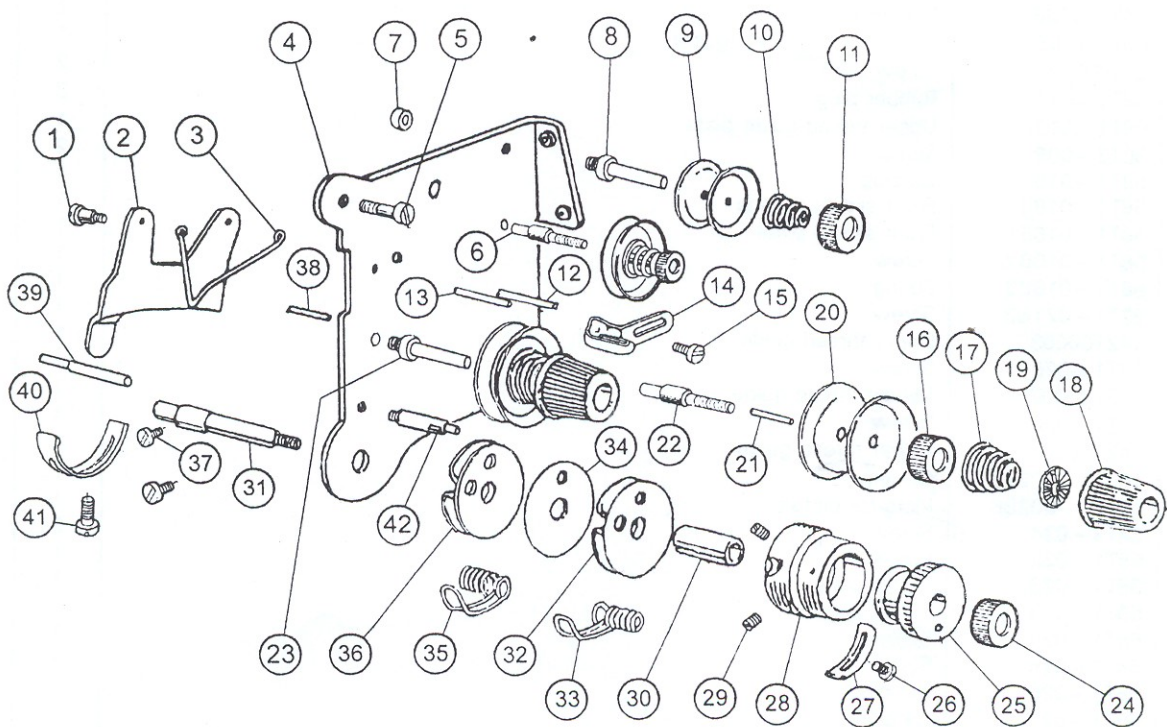
TROUBLE SHOOTING

Description	Cause	Remedy
Needle skip	1. Needle bent Needle doesn't fit thread 2. Insufficient insertion of needle Wrong direction of needle eye Wrong installation of needles	Replace needle Change needle Insert needle shank to the bottom of the needle adapter Set the needle to the needle eye The long grooves of the two needles opposite to each other
Thread float	1. Needle thread tension is too weak 2. Thread take up is too weak 3. Bobbin thread tension is too weak	Adjust the tension Turn the pressure adjusting lever right for more pressure Tighten the bobbin case spring
Thread breakage	1. Thread quality is bad 2. Needle bent Wrong installation of needle Needle is slimmer than thread 3. Needle thread tension is too strong Dust fill between the discs Bobbin thread winding is wrong and over the capacity Dust in bobbin case spring deformed or bent Wrong installation of bobbin	Replace with fine thread Replace needle Reset the needle according to the requirements Use the needle that fits the thread Turn the thread tension screw loose Clear it Rewind the thread to 80% of its capacity Clear it Reset or replace Reinstall bobbin
Puckering	1. Thread is too thick, compared with materials 2. Bobbin and needle thread tension is too strong 3. The pressure adjusting screw loose	Replace with proper needle, thread Adjust with thread tension nut, thread take-up spring Turn the pressure adjusting screw loose



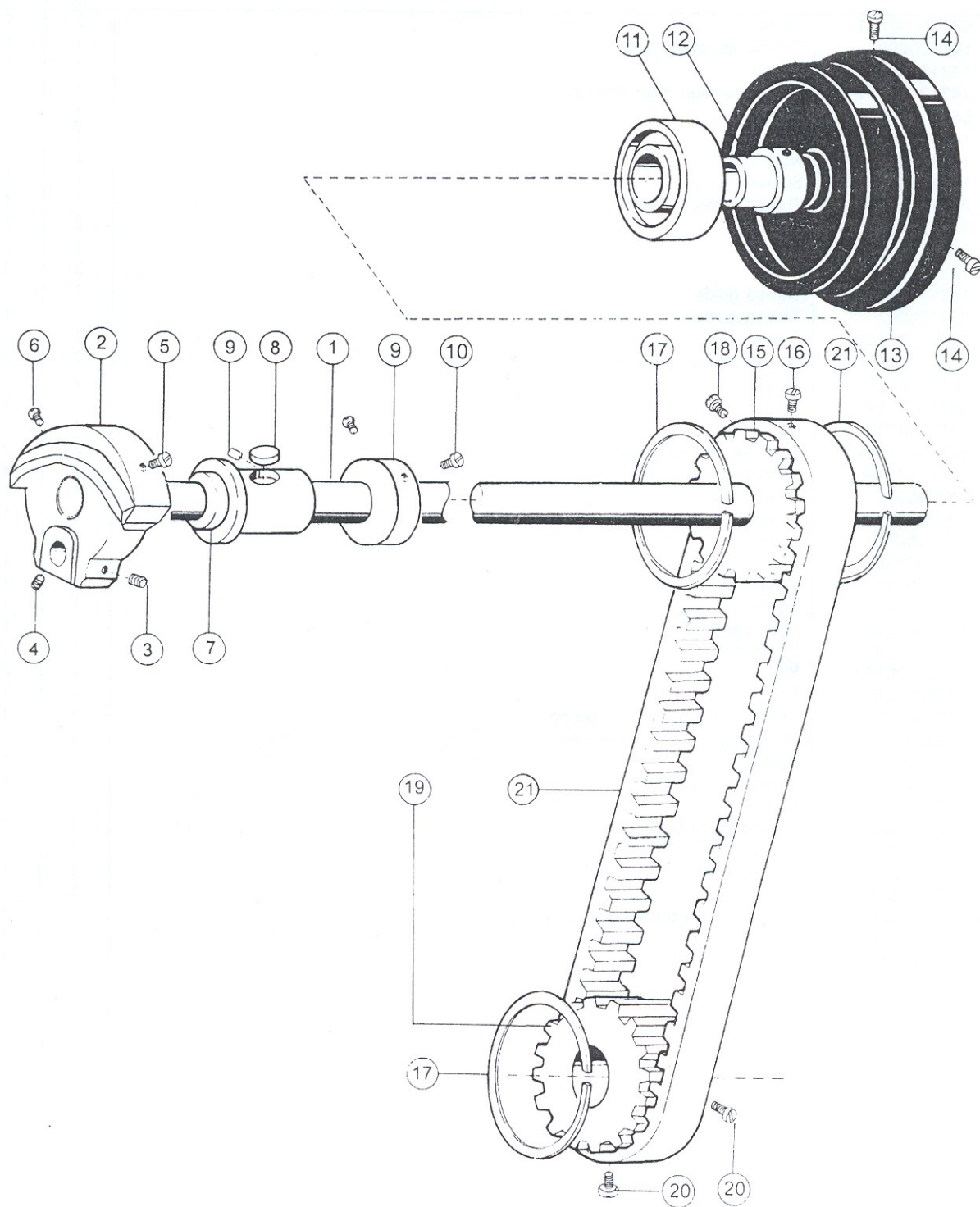
1. MACHINE ARM PARTS(1)

No	Ref. No.	Description	Qt	
			M	B
1	156110000	Machine arm assembly	1	1
2	156100001	Model plate	1	
	180100001	Model plate		1
3	156100002	Trade mark plate	1	
	180100002	Trade mark plate		1
4	GB828 -86	Screw	4	4
5	156100003	Face plate	1	1
6	GB818 -85	Screw	11	11
7	142100006	Side cover	1	1
8	142100008	Side cover	1	1
9	60T1 -005	Thread takeup lever guard	1	1
10	GB818 -85	Screw	2	2
12	58T1 -011	Rubber plug	3	3
13	58T1 -013	Upper thread guide plate	1	1
14	36T2 -005	Screw	2	2
15	58T1 -015	Oil plug	2	2
16	58T1 -016B	Front sliding fittings	1	1
	58T1 -016B1	Front sliding plate	1	1
17	58T1 -016B2	Screw	1	1
	58T1 -016B3	Spring	1	1
	22T1 -021G3	Screw	1	1
18	142100003	Upper thread guide	1	1
19	58T1 -020	Screw	1	1
20	142100007	Middle thread guide	1	1
21	58T1 -020	Screw	1	1
22	142120004	Lower thread guide	1	1
	100T1 -002B5	Oil felt	1	1
	100T1 -002B6	Plate for oil felt	1	1
	28T3 -034	Screw	2	2
23	58T1 -022	Screw	1	1
24	58T1 -023	Throat plate	1	
	59T1 -003	Throat plate		1
25	58T1 -024	Screw	1	1
26	58T1 -025	Screw	1	1
27	58T1 -026	Set pin	1	1
28	58T1 -027	Oil plate	1	1
29	58T1 -028	Bracket for oil retainer	1	1
30	142100013	Oil Plate	1	1
31	58T1 -018	Screw	2	2
32	156100009	Middle oil plate	1	1
33	58T6 -005	Screw	2	2
34	142100009	Oil felt		
35	156100005	Lower oil plate	1	1
36	GB818 -85	Screw	2	2
37	58T1 -029	Left sliding plate	1	1
38	58T1 -030	Right sliding plate	1	1
39	156100006	Needle bar stand	1	1
40	GB117 -86	Pin	2	2
41	GB818 -85	Screw	2	2
42	156100007	Bushing	1	1
43	22T1 -011	Screw	2	2
44	22T1 -013	Screw	1	1
45	GB879 -86	Pin	1	1
46	142100011	Screw	1	1
47	142100012	Screw	1	1
48	22T1 -006	Screw (small)	2	2
49	22T8 -009	Screw (big)	2	2
50	58T1 -010	Rubber plug	2	2



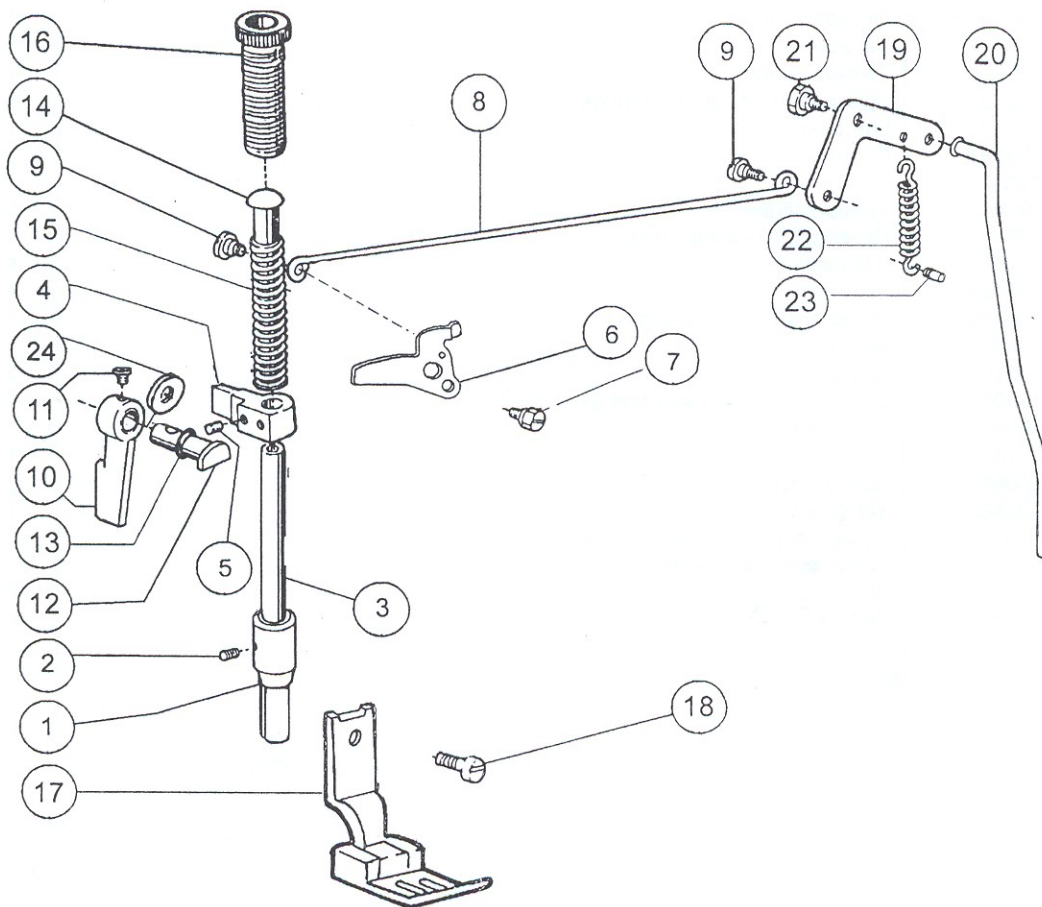
2. MACHINE ARM PARTS(2)

No	Ret. No.	Description	Qt	
			M	B
1	58T1 - 031C17	Screw	2	2
2	142130002	Thread adjusting lever	1	1
3	142130003	Spring	1	1
4	142131001	Thread tension discs fittings	1	1
5	58T1 - 005	Screw	1	1
6	142130004	Screw	1	1
7	142130005	Nut	2	2
8	142130006	Screw	1	1
9	22T1 - 009E3	Thread tension discs	4	4
10	142130010	Spring	2	2
11	36T2 - 006D4	Nut	2	2
12	142130011	Pin	3	3
14	142130013	Thread guide	1	
	179130001	Thread guide		1
15	22T1 - 003C6	Screw	1	1
16	22T1 - 012F4	Thread releasing discs	2	2
17	22T1 - 012F3	Spring	2	
	48T1 - 003A1	Spring		2
18	22T1 - 012F2	Nut	1	1
19	22T1 - 012F10	Plate for thread tension	2	2
20	22T1 - 012F5	Thread tension plate	4	4
21	142130017	Thread nail	1	1
22	142130018	Screw	1	1
23	142130019	Screw	1	1
24	142130020	Nut	1	1
25	142130021	Case	1	1
26	58T1 - 034	Screw	1	1
27	142130023	Hold piece	1	1
28	142130024	Direct case	1	1
29	60T3 - 001A11	Screw	2	2
30	142130026	Shaft	1	1
31	142130027	Shaft for thread takeup spring	1	1
32	142132000	Thread guide plate assembly	1	1
33	142132001	Spring	1	1
34	142132002	Thread guide plate	1	1
35	142132003	Spring	1	1
36	142133000	Thread guide plate assembly	1	1
37	58T6 - 005	Screw	1	1
38	142130028	Thread nail	1	1
39	142130029	Pin	1	1
40	58T1 - 033	Stop plate for thread thkeup spring	1	1
41	58T1 - 034	Screw	1	1
42	142130030	Screw	1	1



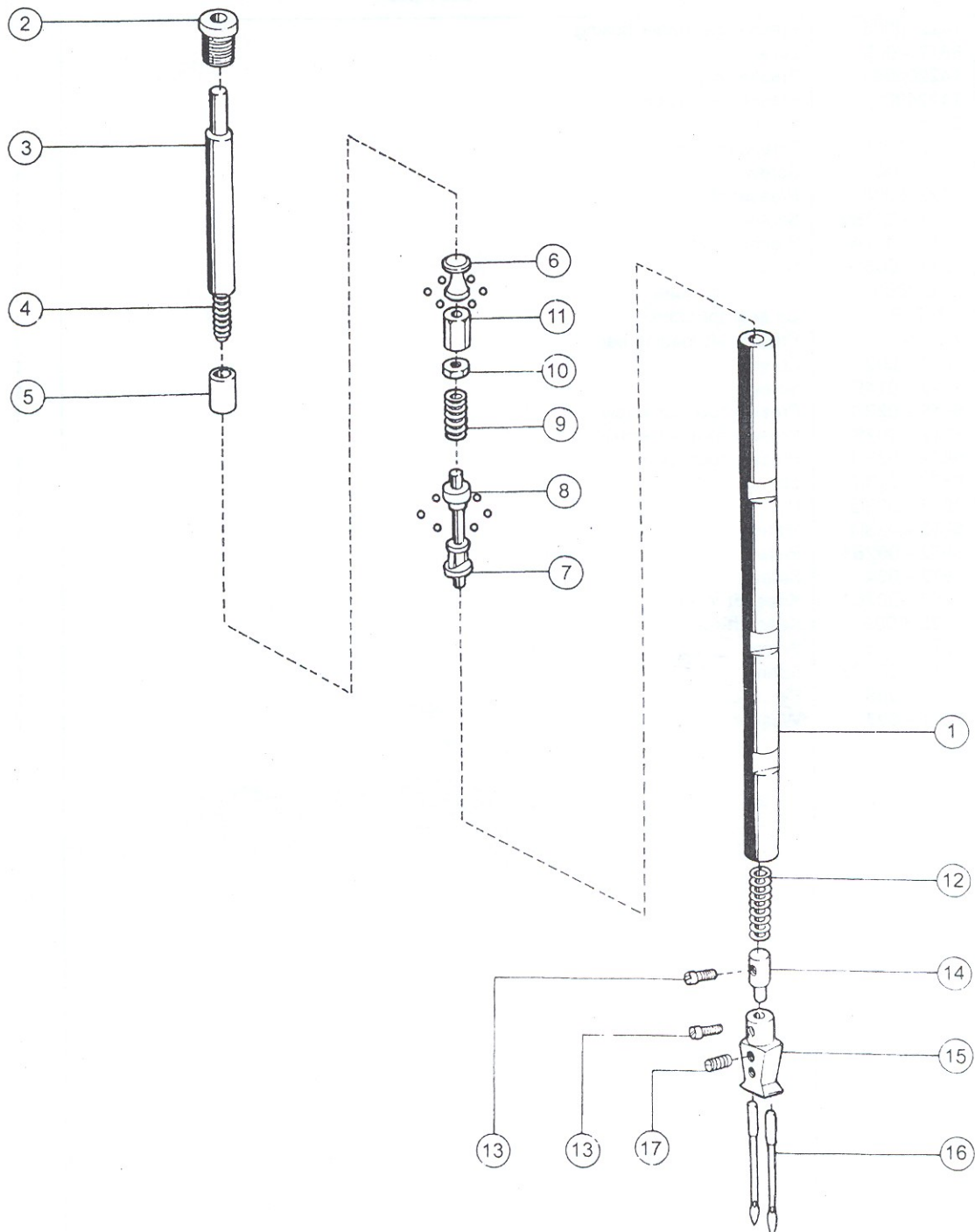
3. PRESSER FOOT LIFT PARTS

No	Ret. No.	Description	Qt	
			M	B
1	156210000	Upper shaft fittings	1	1
	142210001	Upper shaft	1	1
2	156211000	Needle bar crank fittings	1	1
	156211001	Needle bar crank	1	1
3	22T2 -005B2	Set screw	1	1
4	58T2 -001A2a3	Tension screw	1	1
5	22T2 -007	Set screw	1	1
6	22T2 -006	Tension screw	1	1
7	58T2 -002B	Upper shaft left busing fittings	1	1
	58T2 -002B1	Left bushing	1	1
8	58T2 -002B2	Oil felt for left fittings	1	1
9	156200001	Balance roll	1	1
10	22T5 -010D4	Tension screw	2	2
11	58T2 -004C	Upper shaft bearing fittings	1	1
	GB277 -89	Ball beading	1	1
	58T2 -004C1	Stop ring	1	1
12	58T2 -004C2	Upper shaft ring bushing	1	1
13	142200001	Balance wheel	1	1
14	22T3 -007C2	Screw	2	2
15	58T2 -006E	Upper shaft cog wheel fittings	1	1
	58T2 -006E1	Cog wheel	1	1
16	22T5 -013	Screw	1	1
17	58T2 -006E3	Springv stop ring	3	3
18	58T2 -004C3	Set screw	1	1
19	142230000	Lqwer shaft cog wheel fittings	1	1
	142230001	Lower shaft cog wheel	1	1
20	22T5 -001A4	Screw	2	2
21	58T2 -008	Cog belt	1	1



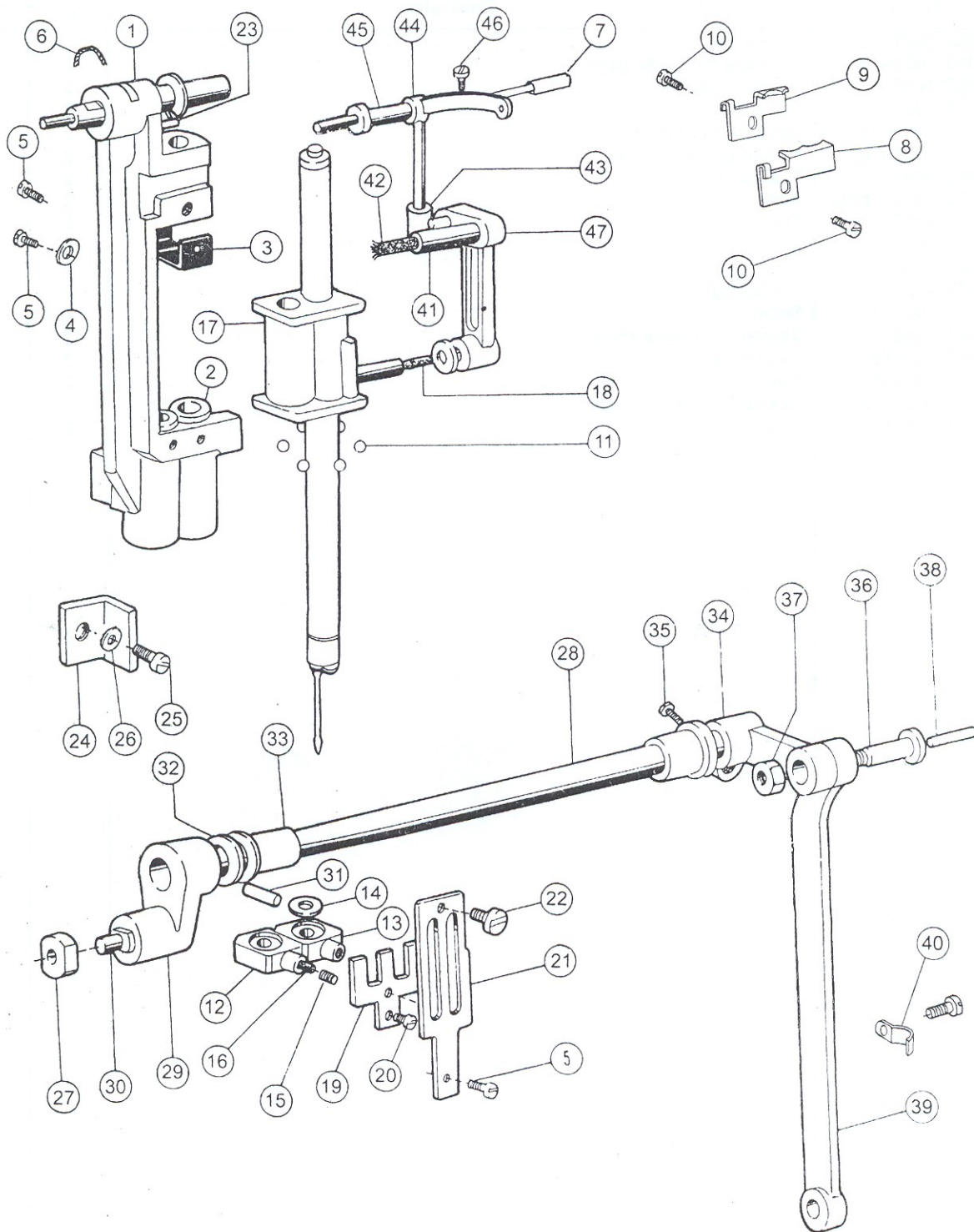
4. PRESSER FOOT LIFT PARTS

No	Ret. No.	Description	Qt	
			M	B
1	142200003	Presser bar upper busing	1	1
2	58T2 - 003	Screw	1	1
3	142200004	Presser bar	1	1
4	142240001	Presser bar guide	1	1
5	22T5 - 001A4	Screw	1	1
6	142200005	Thread releasing plate	1	1
7	22T7 - 005	Screw	1	1
8	142200006	Presser lift	1	1
9	22T7 - 004B2	Screw	2	2
10	22T7 - 001A1	Presser lever	1	1
11	22T1 - 006	Screw	1	1
12	142200007	Presser lift crank	1	1
13	GB1235 - 76	Oil seal for crank	1	1
14	22T7 - 012	Presser lift leading bar	1	1
15	48T7 - 002	Spring	1	1
16	22T7 - 014E1	Screw	1	1
17	58T2 - 023I1	Presser foot assembly	1	
	59T2 - 002B	Presser foot assembly		1
	58T2 - 023I1	Presser foot lever	1	1
	58T2 - 023I2	Spring	1	1
	58T2 - 023I3	Pin	1	1
	58T2 - 023I4	Plate	1	
	59T2 - 002B1	Plate		1
18	58T2 - 024	Screw	1	1
19	22T7 - 007C1	Knee lift lever	1	1
20	142200009	Knee lift rod	1	1
21	22T7 - 005	Screw	1	1
22	22T7 - 007C2	Spring	1	1
23	22T7 - 008	Pin	1	1
24	22T1 - 007	Washer	1	1



5. NEEDLE BAR AND THREAD TAKE - UP PARTS(1)

No	Ret. No.	Description	Qt	
			M	B
1	156311001	Needle bar	2	2
2	60T3 - 001A7a2	Adjusting bar guide screw	2	2
3	156311002	Adjusting bar	2	2
4	60T3 - 001A7a4	Coil spring	2	2
5	60T3 - 001A7a5	Adjusting bar bushing	2	2
6	60T3 - 001A7a6	Needle bar upper roller	2	2
7	156312001	Triangle pin	2	2
8	60T3 - 001A7a7b2	Stud	2	2
9	156312003	Coil spring	2	2
10	156312004	Nut	2	2
11	156312005	Nut	2	2
12	60T3 - 001A7a8	Coil spring	2	2
13	60T3 - 001A7a9	Screw	4	4
14	156311005	Stopper for needle clamp	2	2
15	60T3 - 001A8	Needle clamp	2	2
16	58T3 - 001A10	Needle DP x 5(90. 14#)	2	
	58T3 - 001A10	Needle DP x 5(110. 18#)		2
17	60T3 - 001A11	Screw	2	2

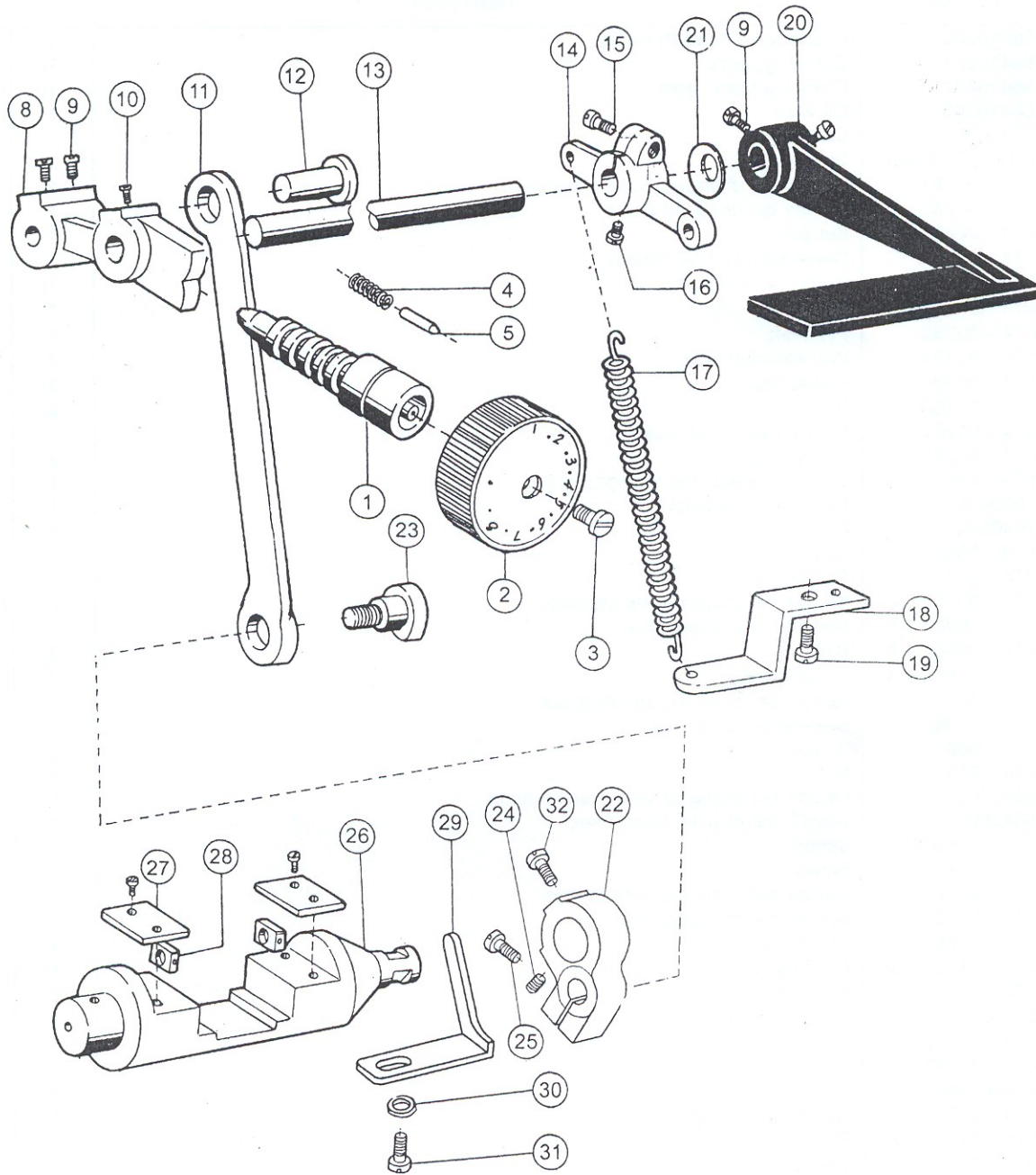


6. NEEDLE BAR AND THREAD TAKE - UP PARTS

No	Ret. No.	Description	Qt	
			M	B
1	156310002	Needle bar holder	1	1
2	60T3 -001A2	Bushing	2	2
3	60T3 -001A3	Needle bar stopper	1	1
4	60T3 -001A4	Washer	1	1
5	22T6 -001A5	Screw	4	4
6	156310003	Oil line	1	1
7	142322002	Rubber pipe	1	1
8	156310004	Upper oil line clamp	1	1
9	156310005	Lever	1	1
10	58T1 -034	Screw	2	2
11	GB308 -77	Ball	12	12
12	60T3 -001A12	Left needle bar stopper	1	1
13	60T3 -001A13	Right needle bar stopper	1	1
14	60T3 -001A14	Washer	4	4
15	60T3 -001A15	Screw	2	2
16	60T3 -001A16	Washer	2	2
17	156310011	Needle bar connector	1	1
18	60T3 -001A18	Oil felt	1	1
19	60T3 -001A19	Stopper inside guide	1	1
20	60T3 -001A20	Screw	2	2
21	156310012	Stopper outside guide	1	1
22	60T3 -001A22	Screw	1	1
23	GB879 -86	Springy pin	1	1
24	156310013	needle bar holder guide	1	1
25	156310014	Screw	1	1
26	22T1 -007	Washer	1	1
27	60T3 -003	Needle bar sliding block	1	1
28	58T3 -001A8	Needle bar vibrating shaft	1	1
29	60T3 -004B1	Needle bar left vibrating crank	1	1
30	60T3 -004B2	shaft for needle bar sliding block	1	1
31	GB117 -86	Pin	1	1
32	60T3 -004B3	Washing	1	1
33	58T3 -002	Bushing	2	2
34	60T3 -005C1	Needle bar vibrating right crank	1	1
35	58T3 -004C2	Screw	1	1
36	60T3 -006D1	Screw	1	1
37	58T3 -007	Nut	1	1
38	58T7 -019	Oil wick	1	1
39	60T3 -005C2	Needle bar vibrating connecting lever	1	1
40	58T3 -004C3	Hold plate	1	1
	58T3 -004C4	Screw	1	1
41	58T3 -008E1	Needle bar crank shaft	1	1
42	58T7 -019	Oil wick	1	1
43	156321000	Thread takeup lever sliding bushing assembly	1	1
44	180320001	Thread takeup lever	1	
	156320002	Thread takeup lever		1
45	142322000	Thread takeup lever shaft fittings	1	1
46	22T3 -007C2	Screw	3	3
47	60T3 -007E	Needle bar link fittings	1	1

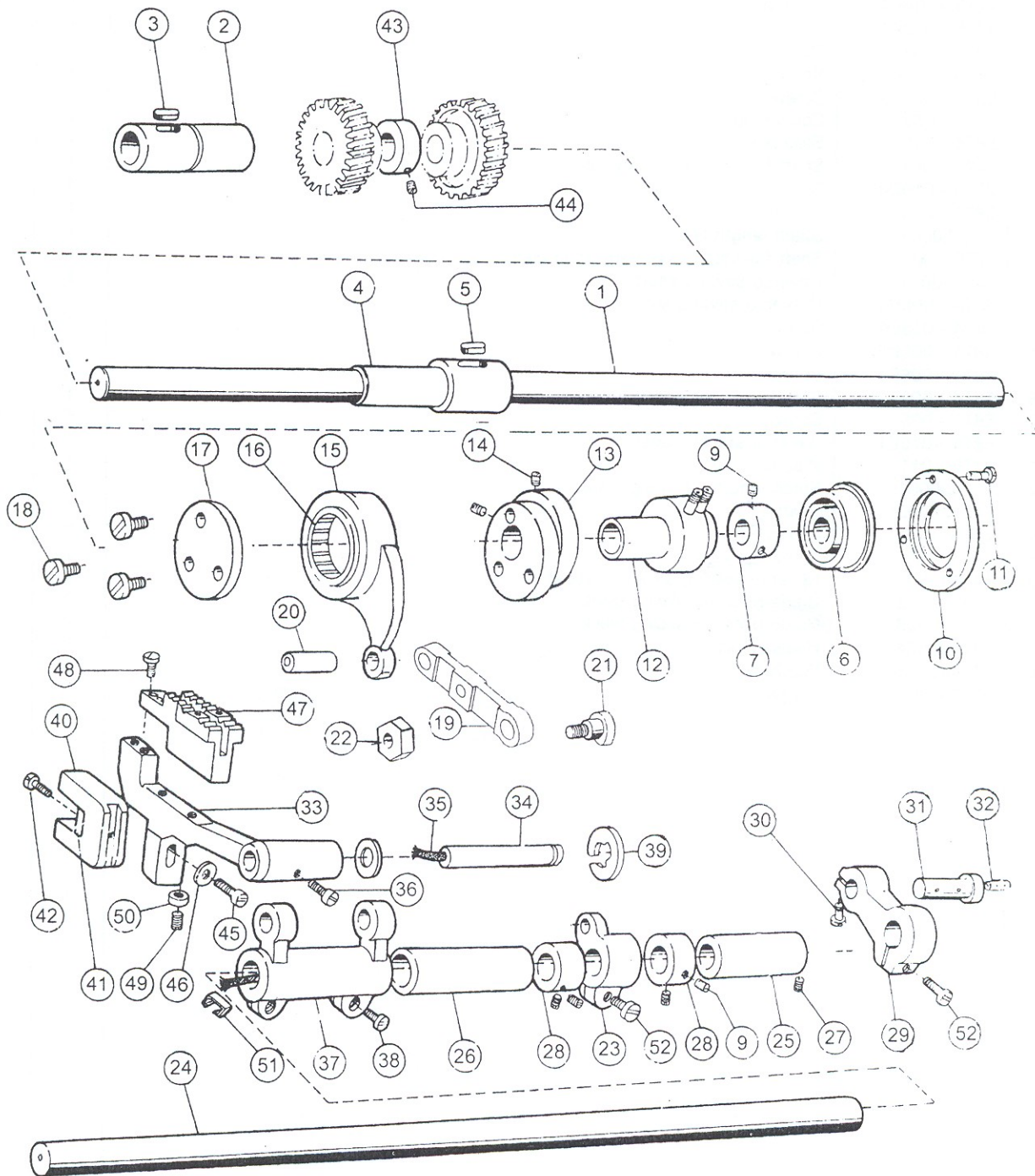
7. NEEDLE BAR CHANGING PARTS

No	Ret. No.	Description	Qt	
			M	B
1	156410000	Changing block shaft fittings	1	1
	156410001	Changing block	1	1
	156410002	Changing block shaft	1	1
	156410003	Oil wick	1	1
	60T4 -001A4	Stop ring	1	1
	Q/BF -YS10908	Screw	1	1
2	60T4 -002B1	Needle bar changing guide assembly	1	1
	60T4 -002B1 -1	Needle bar changing guide	1	1
	60T4 -002B1 -2	Set pin	1	1
3	60T4 -002B2	Guide adjusting pin fittings	1	1
	60T4 -002B2 -1	Guide adjusting pin	1	1
4	60T4 -002B2 -2	Screw	1	1
5	60T4 -002B3	Pin shaft	1	1
6	60T4 -002B4	Withstanding stud	2	2
7	60T4 -002B5	Coil spring	2	2
8	60T4 -002B6	Screw	4	4
9	60T4 -002B7	Fulcrum adjusting stud	1	1
10	60T4 -002B8	Coil spring	2	2
11	156400001	Shim for needle bar changing guide	1	1
12	156200002	Eccentric core block	1	1
13	156400002	Cover	1	1
14	58T6 -005	Screw	1	1
15	60T4 -007	Fulcrum adjusting pin	1	1
16	60T4 -008C1	Needle bar changing link assembly	2	2
	60T4 -008C1 -1	Needle bar changing link	2	2
	60T4 -008C1 -2	Ball	2	2
	60T4 -008C1 -3	Inside collar	2	2
17	60T4 -008C2	Needle bar changing agjusting bar	1	1
18	GB6170 -86	Hexagonal nut M5	2	2
19	60T4 -009	Screw	2	2
20	60T4 -010	Nut	2	2
21	156420000	Needle bar changing lever crank fittings	1	1
	156420001	Needle bar chaning lever crank	1	1
22	Q/BF -YS00910	Screw	1	1
23	22T1 -011	Screw	1	1
24	60T4 -012E1	Needle bar changing plate fittings	1	1
	60T4 -012E1 -1	Needle bar changing lever	1	1
	60T4 -012E1 -2	Lever shaft	1	1
	60T4 -012E1 -3	Bushing for lever shaft	1	1
25	60T4 -012E2	Stop pin	1	1
26	60T4 -013F1	Needle bar changing set plate	1	1
27	60T4 -013F2	Pin	1	1
28	60T4 -013F3	Spring	1	1
29	GB896 -86	Split stop ring	1	1
30	60T4 -013F4 -1	Needle bar changing reset plate	1	1
31	60T4 -013F4 -2	Pin	1	1
32	60T4 -014	Coil spring	1	1
33	60T4 -015	Bushing nut	1	1
34	60T4 -016	Screw	1	1
35	60T4 -017	Thread guide	1	1
36	60T4 -018	Bushing nut	1	1
37	60T4 -019	Screw	1	1
38	60T4 -020	Needle bar changing stop set plate	1	1
39	58T1 -005	Screw	2	2



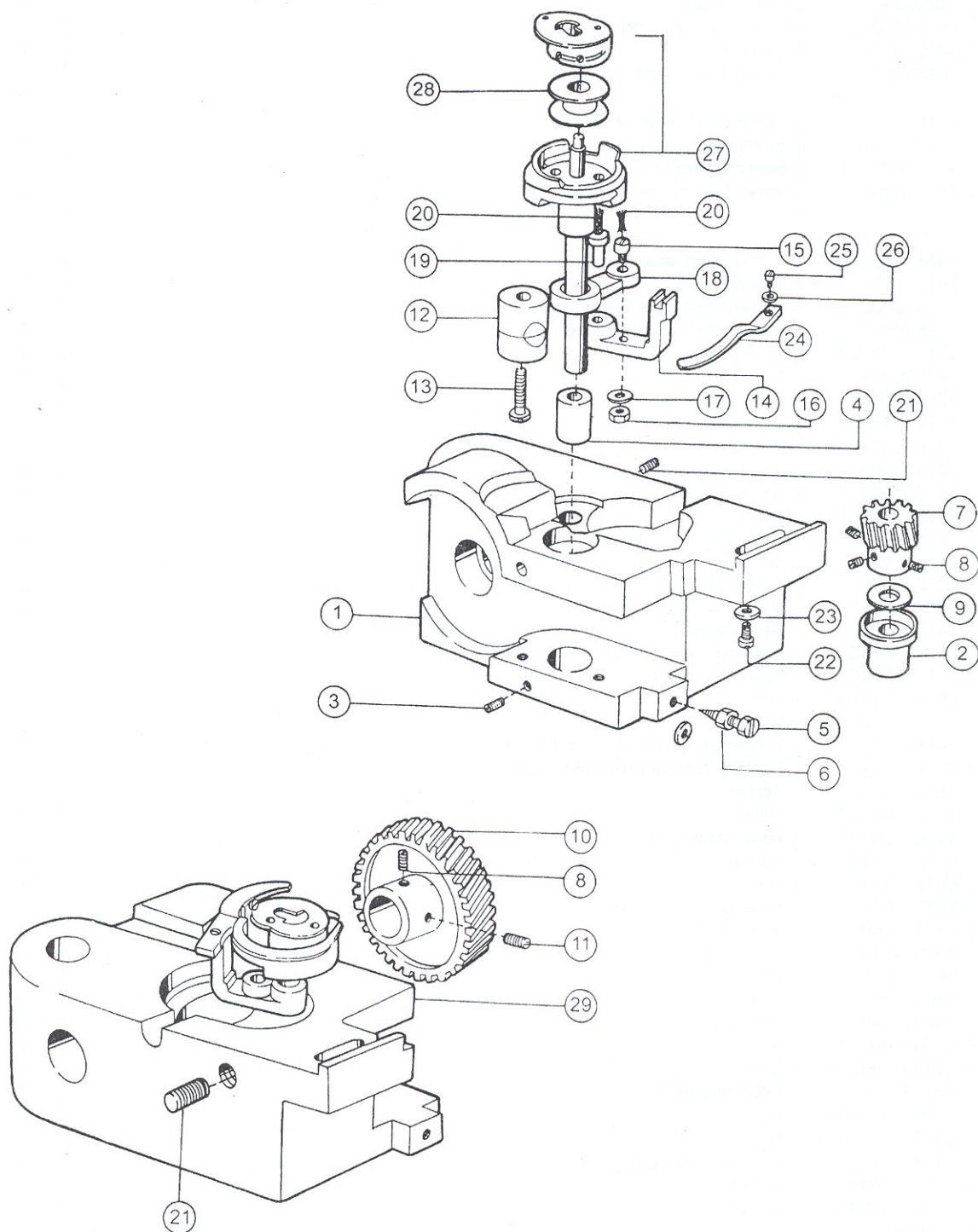
8. NEEDLE BAR CHANGING PARTS

No	Ret. No.	Description	Qt	
			M	B
1	59T4 -001A	Stitch length adjusting lead screw fittings		1
	22T5 -006C1	Stitch length adjusting lead screw	1	1
	22T5 -006C4	O - type	1	1
2	57T5 -002A1	Dial	1	
	59T4 -001A1	Dial		1
3	36T5 -007D5	Screw	1	
	58T4 -001A2	Screw		1
4	58T4 -002	Coil spring	1	1
5	58T4 -003	Stop pin	1	1
8	142410001	Shaft for reverse sewing lever	1	1
9	22T5 -010D4	Screw	4	4
10	58T4 -006	Screw	1	1
11	142420001	Stitch length link	1	1
12	22T6 -007	Shaft for stitch length adjusting crank	1	1
13	142400001	Reverse sewing shaft	1	1
14	58T4 -008D1	Rerverse sewing shaft	1	1
15	58T4 -008D2	Screw	1	1
16	58T4 -008D3	Screw	1	1
17	58T4 -008D4	Spring	1	1
18	58T4 -009	Bracket for coil spring	1	1
19	58T1 -005	Screw	5	5
20	58T4 -010E1	Reverse sewing lever	1	1
21	22T5 -011	Washer	1	1
22	142430001	Stitch length adjusting crank	1	1
23	142430002	Shaft	1	1
24	GB77 -85	Screw	2	2
25	GB70 -85	Screw	1	1
26	142440001	Reverse sewing adjusting stand	1	1
27	142440002	Guide plate for sliding block	2	2
28	142440003	Guide plate for sliding block	2	2
29	142440004	Holder block	1	1
30	142440005	Washer	1	1
31	58T1 -005	Screw	1	1



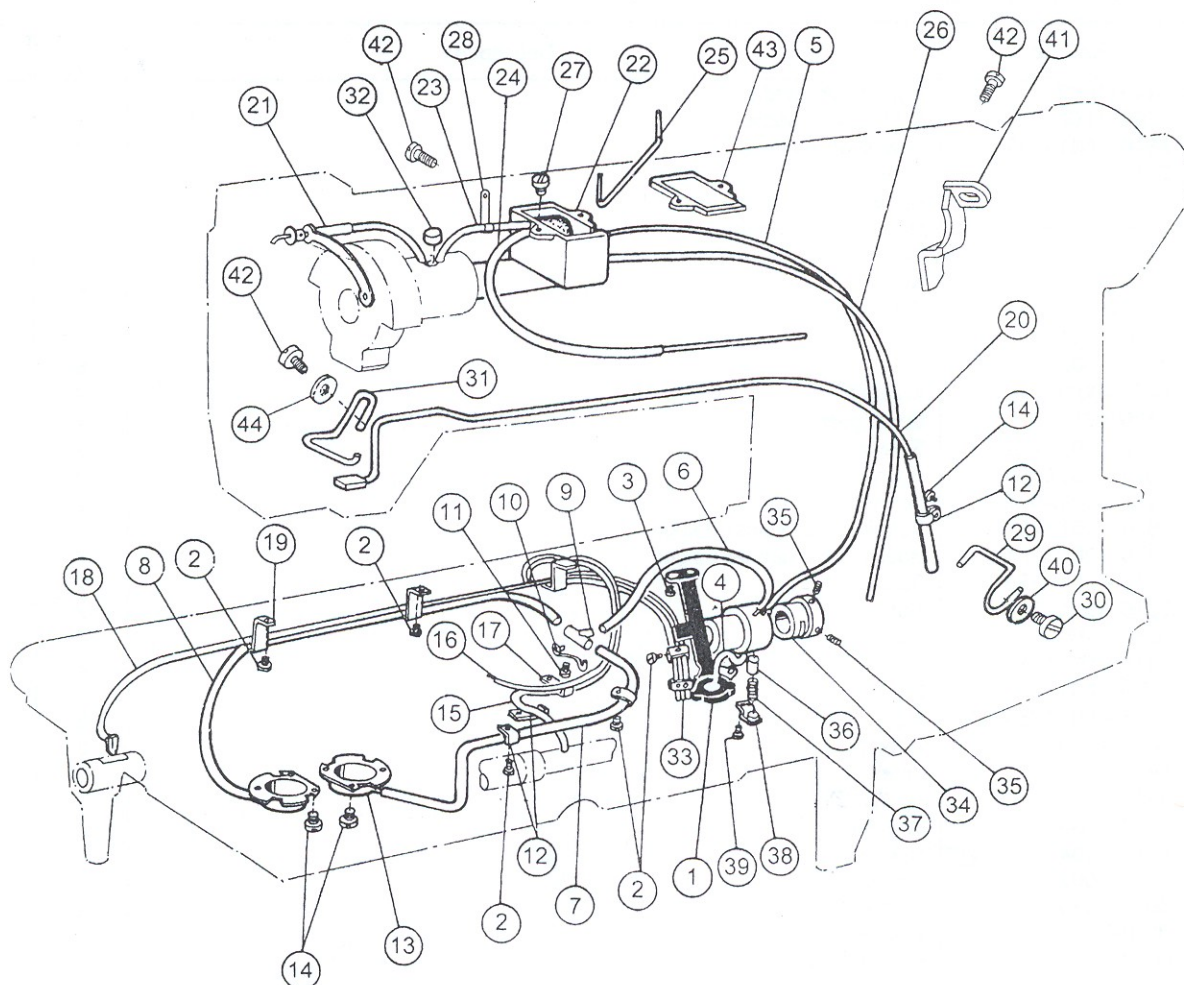
9. LOWER SHAFT AND FEED PARTS

No	Ret. No.	Description	Qt	
			M	B
1	142500001	Lower shaft	1	1
2	142510001	Lower shaft left bushing	1	1
3	58T9 - 019	Oil wick	1	1
4	142520001	Lower shaft middle bushing	1	1
5	58T7 - 019	Oil wick	1	1
6	142530000	Lower shaft keening fitting	1	1
	GB827 - 89	Bearing stop ring	1	1
	58T5 - 004C1	Bearing stop ring	1	1
7	142530001	Inner bushing for bearing	1	1
9	22T3 - 002B2	Set screw	6	6
10	58T5 - 005	Lower shaft bearing holder	1	1
11	58T5 - 006	Screw	3	3
12	142540000	Lower shaft right bushing assembling	1	1
	142540001	Lower shaft right bushing	1	1
	22T4 - 007C2	Oil nozzle	3	3
13	142560001	Feed cam	1	
	179510001	Feed cam		1
14	22T2 - 002	Screw	1	1
15	142560002	Feed link	2	2
16	142560008	Needle bearing	1	1
17	142560003	Holder plate	1	1
18	58T5 - 018J3	Screw	3	3
19	142560005	Feed link	1	1
20	142560006	Pin	1	1
21	142560007	screw	2	2
22	58T2 - 030	Nut	2	2
23	142560009	Feed crank	1	1
24	58T5 - 013G	Feed rock shaft fittings	1	1
	58T5 - 013G1	Feed rock shaft	1	1
	58T5 - 013G2	Felt	2	2
	58T7 - 019	Oil wick	1	1
25	142500003	Bushing for feed rock right shaft	1	1
26	22T6 - 012	Bushing for feed rock left shaft	1	1
27	58T2 - 003	Screw	2	2
28	22T6 - 005B1	collar	2	2
29	60T6 - 001A1	Feed right crank	1	1
30	58T6 - 001A8	Screw	1	1
31	60T6 - 002	pin	1	1
32	58T7 - 019	oil wick	1	1
33	142570001	Feed stand	1	1
34	142570003	Feed crank shaft	1	1
35	58T7 - 019	oil wick	1	1
36	GB77 - 85	Screw	1	1
37	142570004	Feed crank	1	1
38	22T6 - 001A1b	Screw	2	2
39	GB896 - 86 - 6	Collar	1	1
40	142571001	Feed dog fork	1	1
41	58T5 - 018J6a2	Felt	1	1
42	58T5 - 018J6a3	Screw	1	1
43	142571002	Feed dog lift cam	1	1
44	58T5 - 004C3	Screw	1	1
45	58T4 - 008D2	screw	1	1
46	BQ10024	Collar	1	1
47	58T5 - 018J7	Feed dog	1	
	59T5 - 002B	Feed dog		1
48	142500004	Screw	2	2
49	GB78 - 85	screw	1	1
50	GB6170 - 86	Nut	1	1
51	22T6 - 015	Oil wick clamp	1	1
52	58T4 - 008D2	Screw	1	1



10. HOOK AND SADDLE PARTS

No	Ret. No.	Description	Qt	
			M	B
1	142611002	Right hook saddle	1	
	179611002	Right hook saddle		1
2	58T6 - 001A1a2	Low shaft bushing	2	2
3	22T2 - 009	Screw	4	4
4	58T6 - 001A1a4	Upper shaft bushing	2	
	59T6 - 001A1a2	Upper shaft bushing		2
5	142611007	Screw	2	2
6	142611008	Nut	2	2
	GB860 - 87 - 6	Washer	2	2
7	58T6 - 001A2b1	Spiral gear	2	2
8	22T3 - 002B2	Screw	8	8
9	58T6 - 001A3	Washer	2	2
10	142612001	Spiral gear	2	2
11	58T6 - 001A4C2	Screw	2	2
12	58T6 - 001A6E1	Bushing	2	2
13	58T6 - 001A6E2	Screw	2	2
14	58T6 - 001A7F1	Bobbin case opener holder	2	
	59T6 - 001A2b1	Bobbin case opener holder		2
15	58T6 - 001A7F2	Screw	2	2
16	58T6 - 001A7F3	Nut	2	2
17	GB93 - 87	Spring	2	2
18	58T6 - 001A7F4	Link	2	
	59T6 - 001A2b2	Link		2
19	58T6 - 001A7F5 - 1	Pin	2	2
20	58T7 - 019	Oil wick	2	2
21	58T6 - 001A8	Screw	2	2
22	58T6 - 002	Screw	2	2
23	58T6 - 003	Washer	2	2
24	58T6 - 004	Opener	2	
	59T6 - 002	Opener		2
25	58T6 - 005	Screw	2	2
26	BQ10005	Washer	2	2
27	60T7 - 001A	Hook fittings	2	
	61T7 - 001A	Hook fittings		2
28	58T6 - 007	Bobbin	2	
	59T6 - 004	Bobbin		2
29	142620000	Left hook saddle fittings	1	
	179620000	Left hook saddle fittings		1
	142620001	Left hook saddle	1	
	179620001	Left hook saddle		1

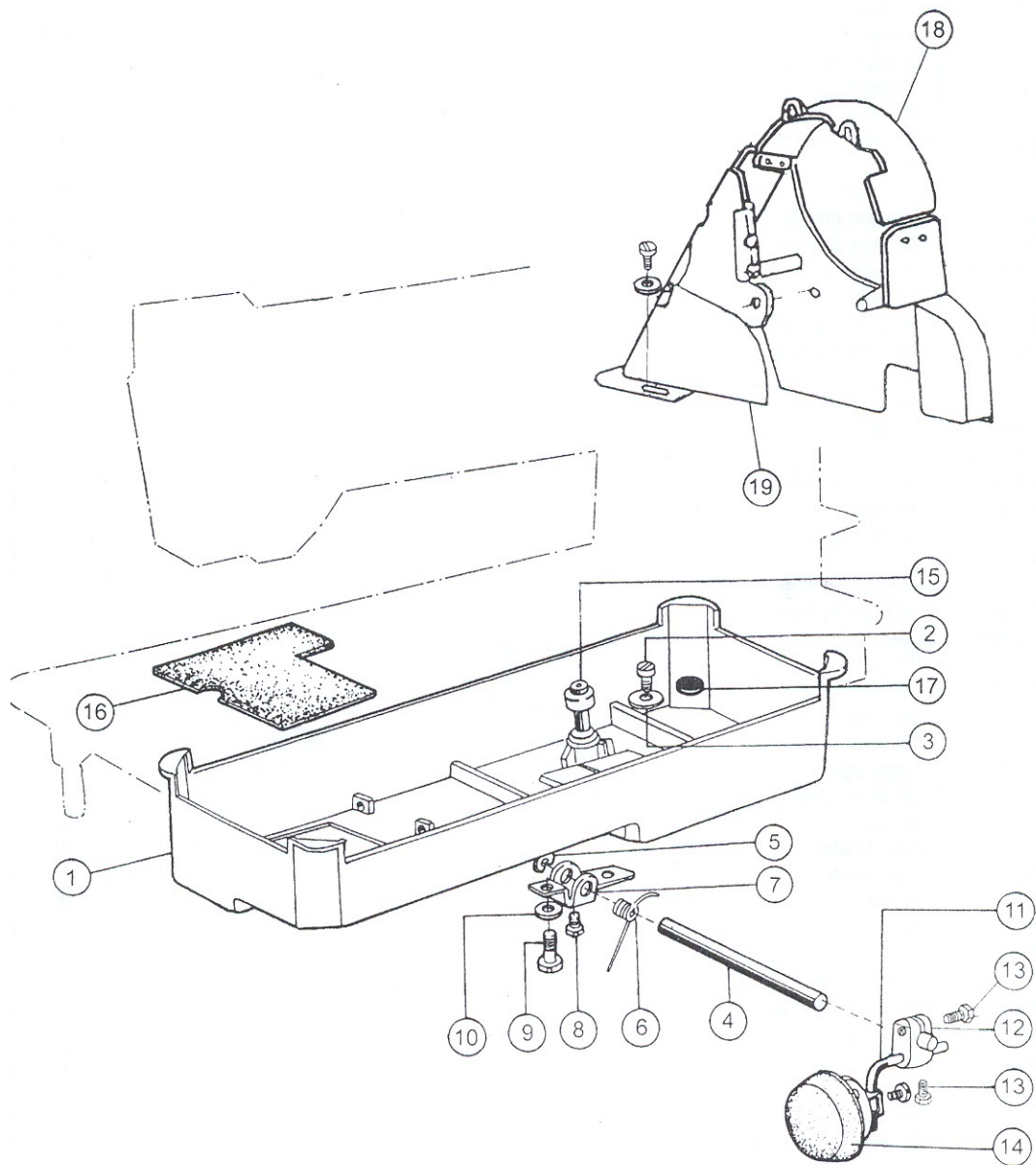


11. OIL LUBRRICATION PARTS) (1)

No	Ret. No.	Description	Qt	
			M	B
1	142710000	Filter fittings	1	1
	142711000	Filter set plate assembly	1	1
	142711001	Filter set plate	1	1
	58T7 - 001A1a2	Oil pipe	1	1
	58T7 - 001A2	Filter	1	1
	58T7 - 001A3	Screw	1	1
	142710002	Filter holder	1	1
	58T7 - 001A5	Screw	1	1
	58T7 - 001A6	Oil pipe clamp	1	1
	58T7 - 001A7	Screw	7	7
2	58T7 - 002	Screw	3	3
	22T1 - 007	Washer	3	3
4	58T7 - 003	Oil sucking pipe	1	1
	142730004	Oil pipe	1	1
6	142720001	Oil pipe	1	1
	142720002	Oil pipe for tight hook saddle	1	1
8	58T7 - 003 - 4	Oil pipe for tight hook saddle	1	1
	58T7 - 004B1	3 - mouth nozzle fittings	1	1
10	58T7 - 005	Nozzle holder	1	1

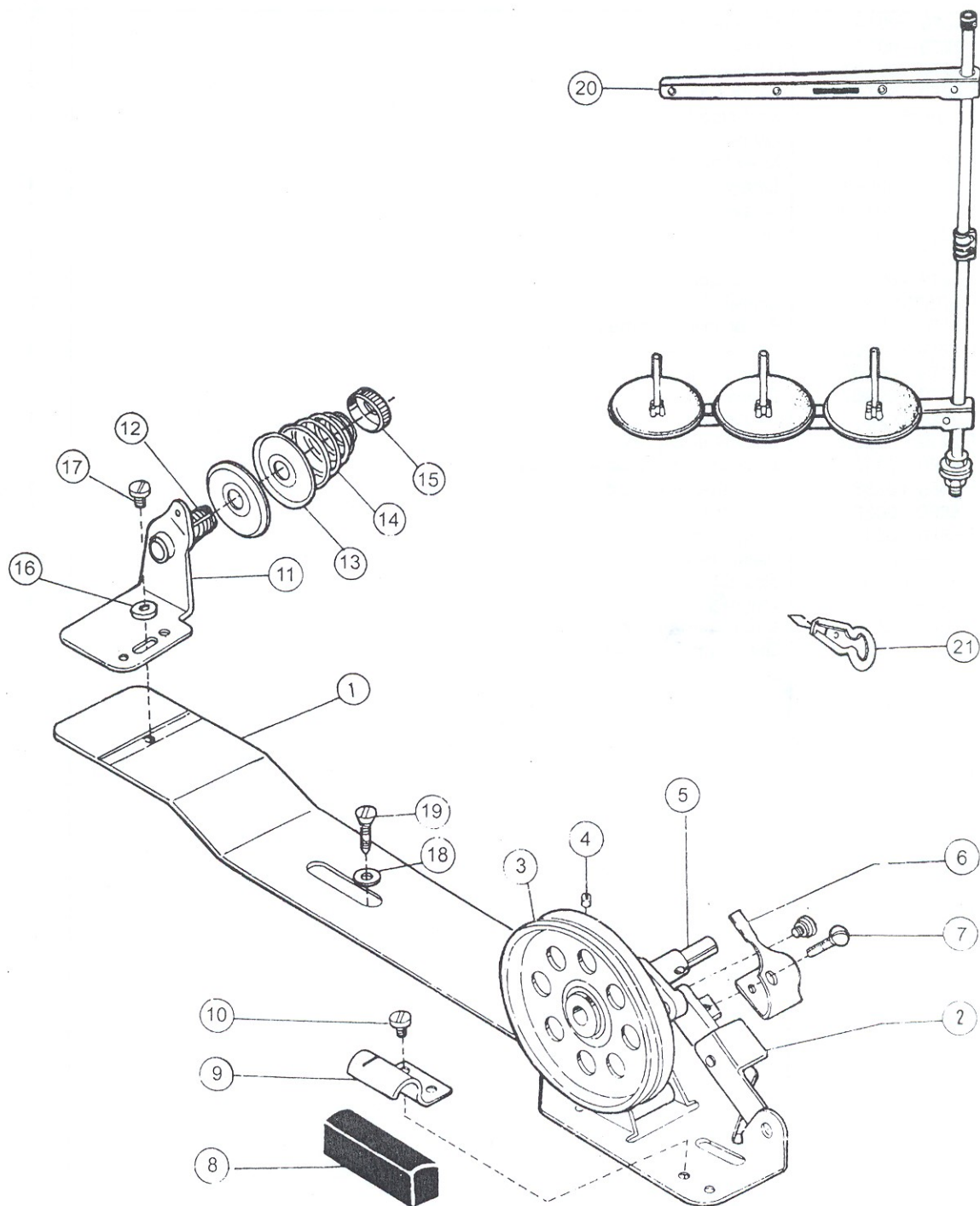
11. OIL LUBRRICATION PARTS) (2)

No	Ref. No	Description	Qt	
			M	B
11	58T1 -022	Screw	1	1
12	58T3 -004C3	Holder plate	4	4
13	58T7 -006C	Oil cup assembly	2	2
	58T7 -006C1	Oil cup for hook saddle	2	2
	22T4 -007C2	Oil pipe	2	2
14	58T3 -004C4	Screw	6	6
15	58T7 -007D	Oil pipe fittings	1	1
	58T7 -007D1	Oil pipe	1	1
	58T7 -019	Oil wick	1	1
16	58T7 -008E	Oil pipe fittings	1	1
	58T7 -007D1 -1	Oil pipe	1	1
	58T7 -019	Oil wick	1	1
17	58T7 -009	Oil pipe clamp	1	1
18	58T7 -010F	Oil pipe fittings	1	1
	58T7 -007D1 -2	Oil pipe	1	1
	58T7 -019	Oil wick	1	1
19	58T7 -011	Oil pipe clamep	3	3
20	58T7 -016H	Oil pipe fittings	1	1
	58T7 -007D1 -3	Oil pipe	1	1
	58T7 -019	Oil wick	1	1
	58T7 -016H1	Oil felt	1	1
21	58T7 -007D1 -4	Oil pipe	1	1
22	58T7 -012G1a	Oil cup assembly	1	1
	58T7 -012G1a1	Oll cup	1	1
	58T7 -012G1a2	Cover	1	1
	GB879 -76	Pin	1	1
	GB52002	Hexagonal nut	2	2
23	58T7 -012G2b	Oil pipe fittings	1	1
	58T7 -012G2b1	Oil pipe	1	1
	58T7 -019	Oil wick	1	1
24	58T7 -012G3C	Oil pipe fittings	1	1
	58T7 -003 -5	Oil pipe	1	1
	58T7 -019	Oil wick	1	1
25	58T7 -012G4	press spring	1	1
26	142730001	Oil drain pipe	1	1
27	58T7 -013	Screw	2	2
28	142700002	Pipe holder	1	1
29	142700003	Pipe holder	1	1
30	58T5 -018J3	Screw	3	3
31	142700004	Spring	1	1
32	58T7 -018	Felt	1	1
33	22T6 -015	Pipe holder	1	1
34	58T5 -008E	Bushing fittings	1	1
	58T5 -008E1	bushing	1	1
35	58T5 -008E2	Screw	2	2
36	58T5 -009	Plug	1	1
37	58T5 -010	Spring	1	1
38	58T5 -011	Bracket for spring	1	1
39	58T3 -001A7	Screw	1	1
40	BQ10009	Washer	1	1
41	142700008	Oloe holder	1	1
42	GB818 -85	Screw	3	3
43	142700001	washer	1	1
44	BQ10009	Washer	1	1



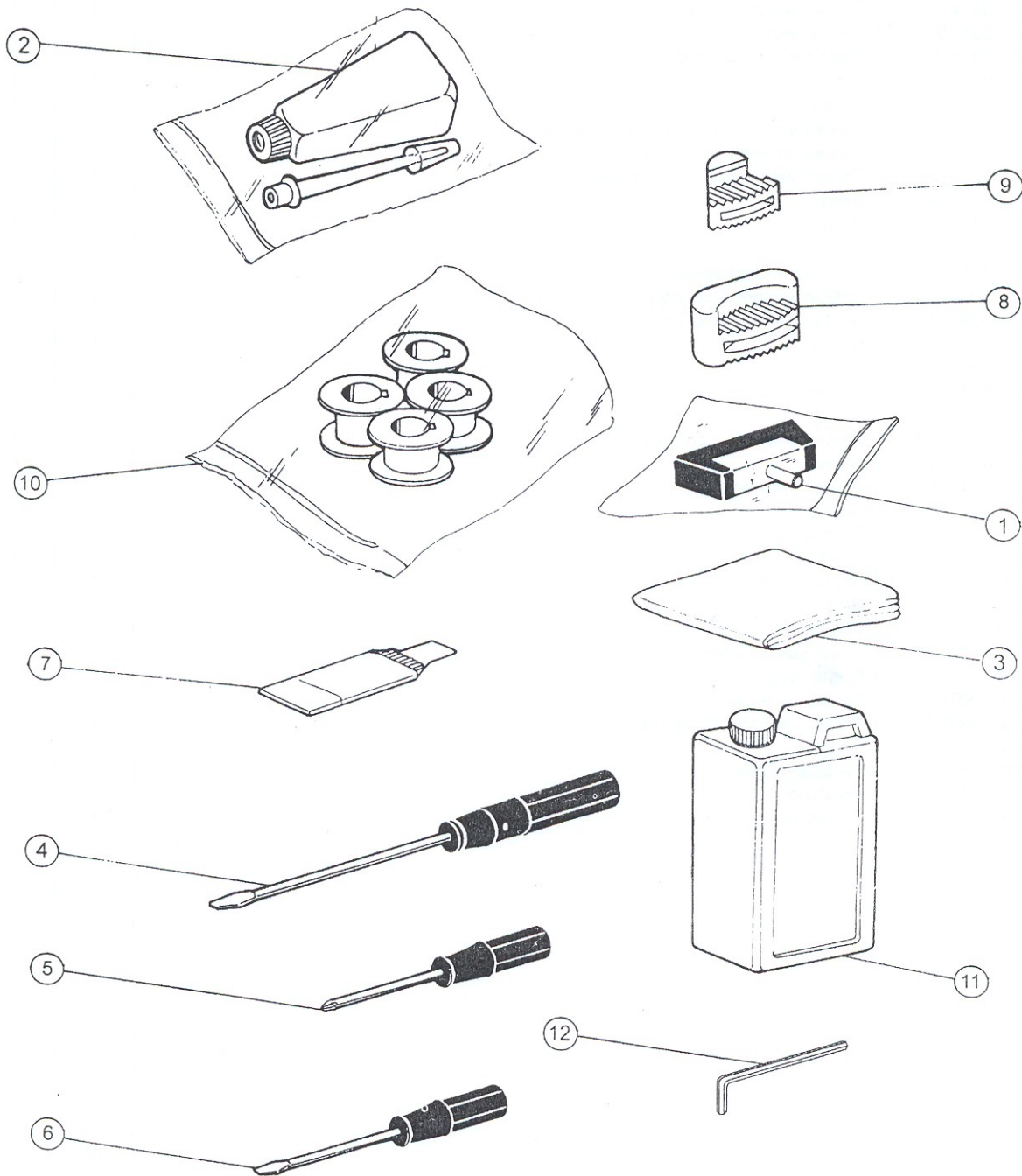
12. OIL RESERVOIR PARTS

No	Ret. No.	Description	Qt	
			M	B
1	58F0 - 001A1	Oil reservoir	1	1
2	22T9 - 001A2	Screw	1	1
3	22T9 - 001A3	Washer	1	1
4	58F0 - 001A2	Hinge pin	1	1
5	GB896 - 86	Split stop ring	1	1
6	58F0 - 001A3	Spring	1	1
7	58F0 - 001A4	Knee lifter crank	1	1
8	22T9 - 003B4	Screw	1	1
9	22T9 - 001A9	Screw	1	1
10	22T9 - 001A10	Nut	1	1
11	22T9 - 003B2	Bell crank	1	1
12	22T9 - 003B3	Connector	1	1
13	GB5781 - 86	Screw	2	2
14	58F0 - 002	Pat bracket assembly	1	1
	22T9 - 003B5	Knee lifter pat	1	1
	22T9 - 003B6	Bracket for pat	1	1
	22T9 - 003B7	Screw	1	1
	22T9 - 023	Plastic bag	1	1
	22T9 - 003B8	Knee lifter pat mat	1	1
15	58F0 - 003B	knee lifter lifting rod assembly	1	1
	58F0 - 003B1	knee lifter lifting rod	1	1
	58F0 - 003B2	Cap for rod	1	1
16	58F0 - 004	Oil gasket	1	1
	22T9 - 020	Plastic bag	1	1
	22T9 - 019	plastic bag	1	1
17	22T9 - 012	Magnetic block	1	1
18	124F10000	Belt cover assembly	1	1
19	124F20000	Belt cover assembly	1	1



13. THREAD WINDER AND SPOOL STAND PARTS

No	Ret. No.	Description	Qt	
			M	B
1	6F0 -001A	Thread winder stand assembly		
	6F0 -001A1	Thread winder stand	1	1
	6F0 -001A2	Thread winder	1	1
	6F0 -001A3	Shaft for thread winder	1	1
	6F0 -001A4	Spring	1	1
	6F0 -001A5	Screw	1	1
2	6F0 -001A6a	Thread winding adjusting lever assembly		
	6F0 -001A6a1	Thread winding adjusting lever	1	1
	6F0 -001A6a2	Thread winding connecting lever	1	1
	6F0 -001A6a3	Rivet	2	2
3	6F0 -002	Pulley	1	1
4	22T1 -011	Screw	1	1
5	6F0 -003	Thread winding spindle	1	1
6	6F0 -004 -1	Bobbin winder stop latch	1	
	6F0 -004 -2	Bobbin winder stop latch		1
7	6F0 -005	Screw	1	1
8	6F0 -006	Spacer	1	1
9	6F0 -007	Spacer holder	1	1
10	6F0 -008	Screw	1	1
11	6F0 -009B1b1	Thread pass -by bracket	1	1
12	6F0 -009B1b2	Screw	1	1
13	22T1 -012F5	Thread tension discs	2	2
14	22T1 -012F3	Spring	1	1
15	J2. 2. 7	Thumb nut	1	1
16	BQ10021	Washer	1	1
17	22T2 -004	Screw	1	1
18	BQ10021	Washer	2	2
19	GB99 -76	Screw	2	2
20	GXJ -3 型	Spool stand assembly	1	1
	58F0 -008	Plastic bag	1	1
21	58F0 -007C	Thread tweezer	1	1
	58F0 -007C1	Thread tweezer complete	1	1
	58F0 -007C2	Spring	1	1
22	GB99 -76	Wooden screw	2	2
	BQ10008	Washing	2	2
	22T9 -022	Plastic bag	1	1



14. ACCESSORIES

No	Ret. No.	Description	Qt	
			M	B
1	36T11 - 008B	Hinge assembly	2	2
	22T9 - 007F1	Hinge	2	2
	36T11 - 008B1	Hinge socket	2	2
	22T9 - 023	Plastic bag	1	1
2	22T9 - 011	Oil pot	1	1
3	22T9 - 018	Machine arm cover	1	1
4	22T9 - 013	Screwdriver	1	1
5	W050102049	Screwdriver	1	1
6	22T9 - 015	Screwdriver	1	1
7	DP x5 - 110	Needle	1	1
8	22T9 - 009	Cushion	2	2
9	22T9 - 010	Cushion	2	2
10	59T6 - 004	Bobbin		4
	58T6 - 007	Bobbin	4	
	22T9 - 021	Plastic bag	1	1
11	58F0 - 017	Oil tank	1	1
12		Allen key (2mm, 2.5mm, 3mm, 4mm)	1	1