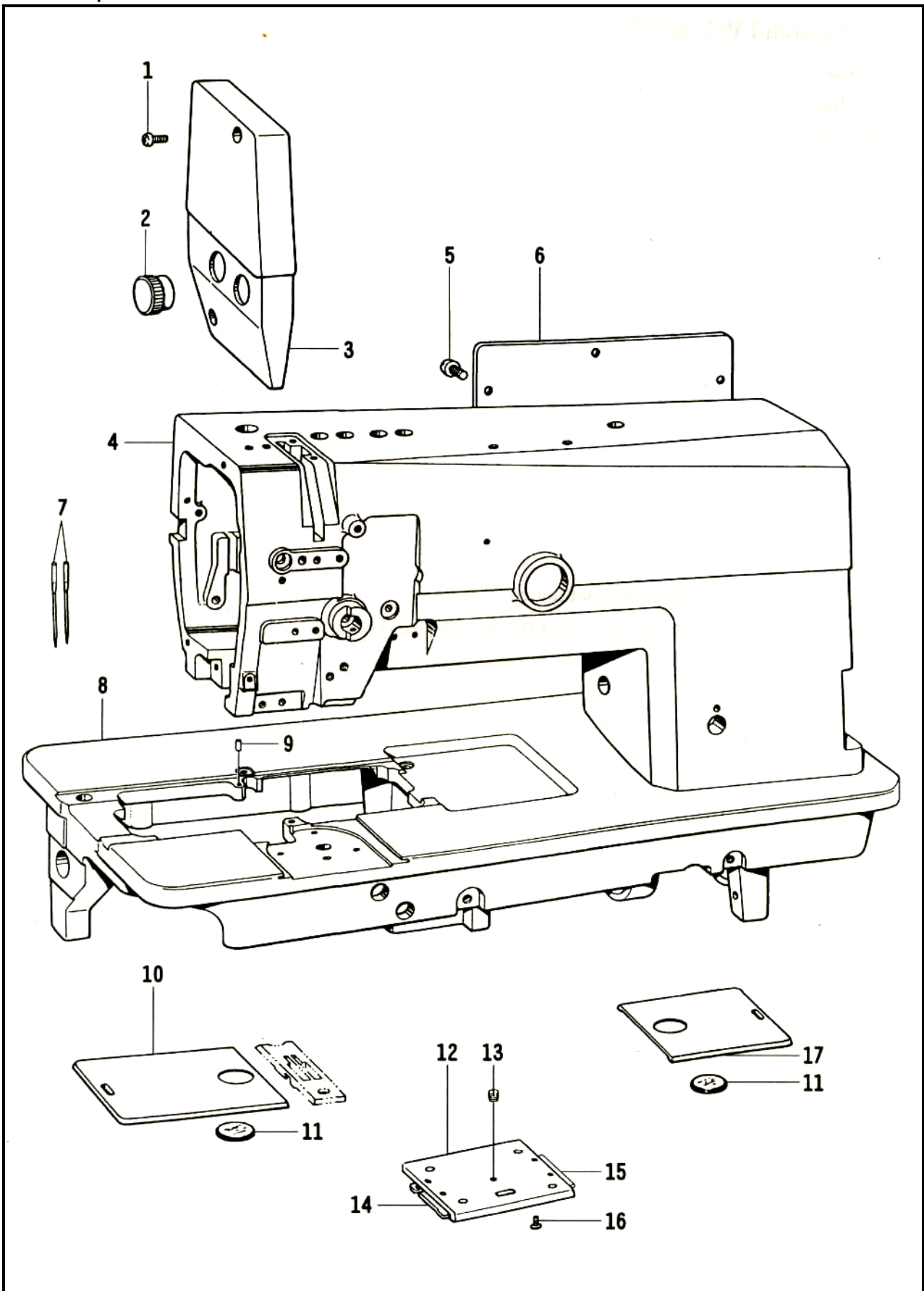


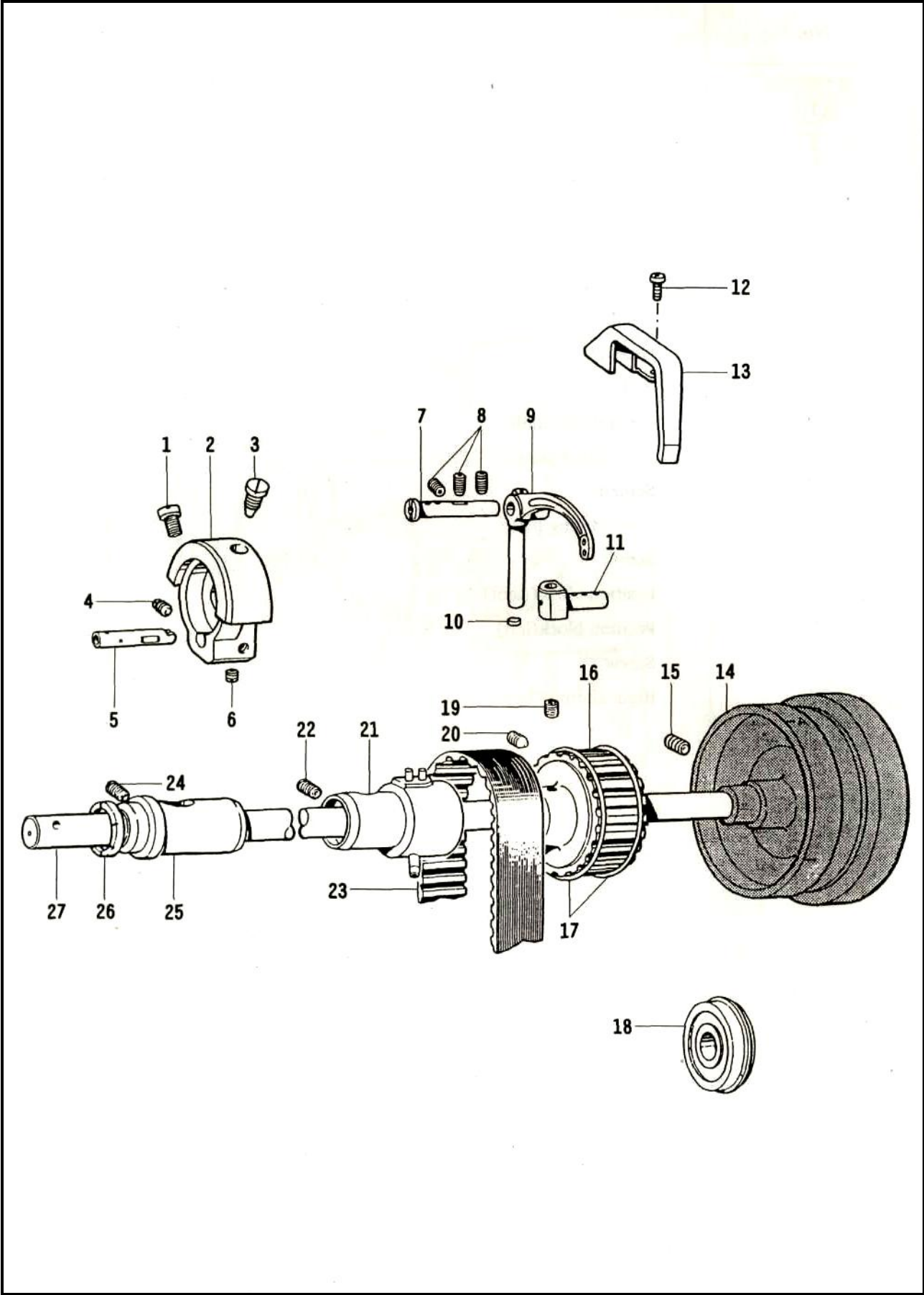
1. Arm parts



1. Arm parts

No.	Name	Qt.
1	Screw	2
2	Plug	2
3	Face plate	1
4	Arm	1
5	Screw	7
6	Rear cover	1
7	Needle	2
	Needle	2
8	Bed	1
9	Position pin shaft	1
10	Left sliding plate	1
11	Screen	2
12	Front sliding plate	1
13	Screw	1
14	Position block(right)	1
15	Position block(left)	1
16	Screw	4
17	Right sliding plate	1

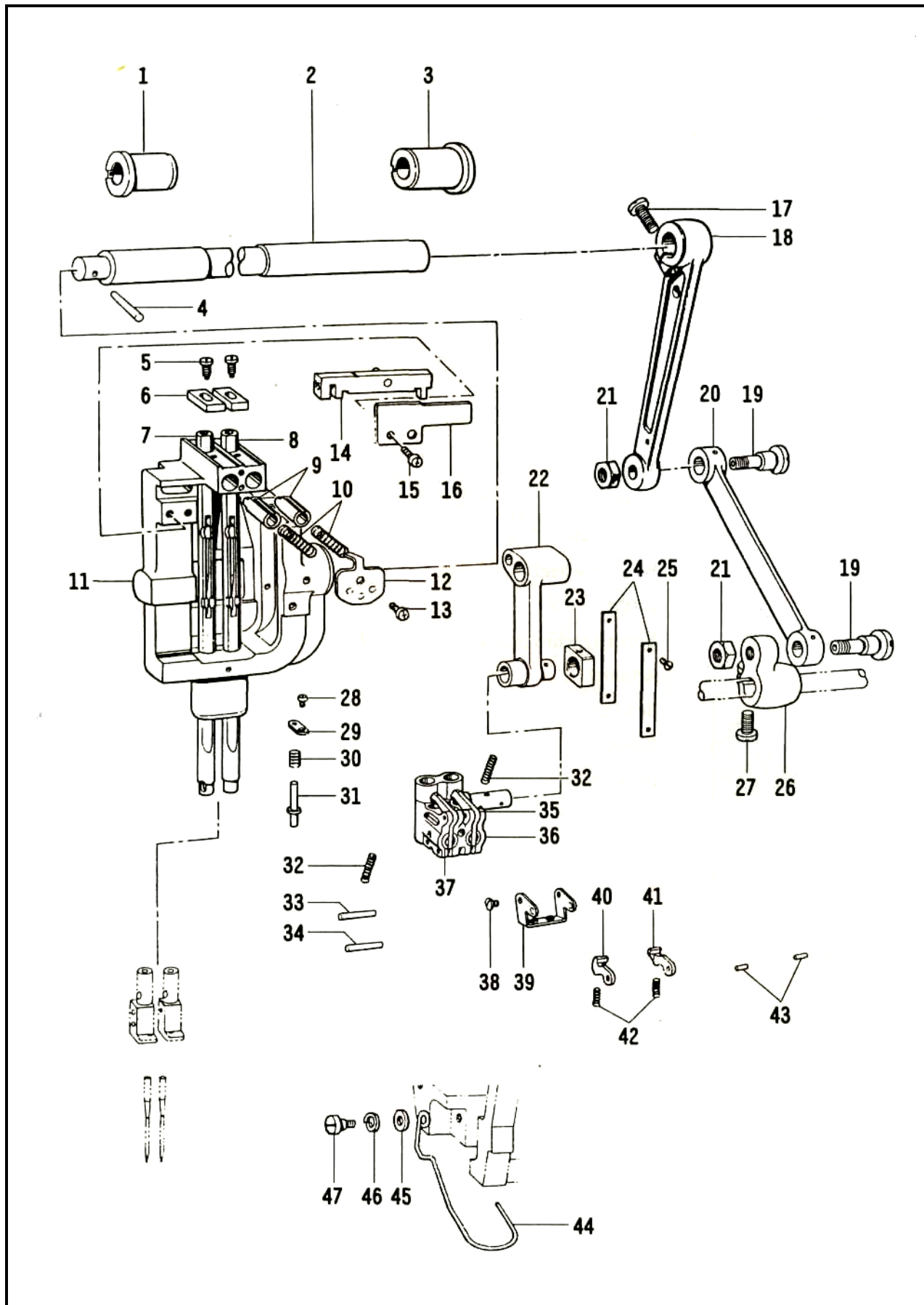
2. Upper shaft parts



2. Upper shaft parts

No.	Name	Qt.
1	Screw	1
2	Needle bar crank	1
3	Position screw	1
4	Screw	1
5	Pin for needle bar crank	1
6	Screw	1
7	Pin for take-up lever	1
8	Screw	3
9	Take-up lever	1
10	Oil stopper	1
11	Sliding block	
12	Screw	2
13	Safety cover	1
14	Balance wheel	1
15	Screw	2
16	Upper synchro pulley	1
17	Retainer	2
18	Bearing	1
19	Screw	1
20	Position screw	1
21	Middle bushing	1
22	Screw	1
23	Synchro belt	1
24	Screw	1
25	Front bushing	
26	Washer	1
27	Upper shaft	1

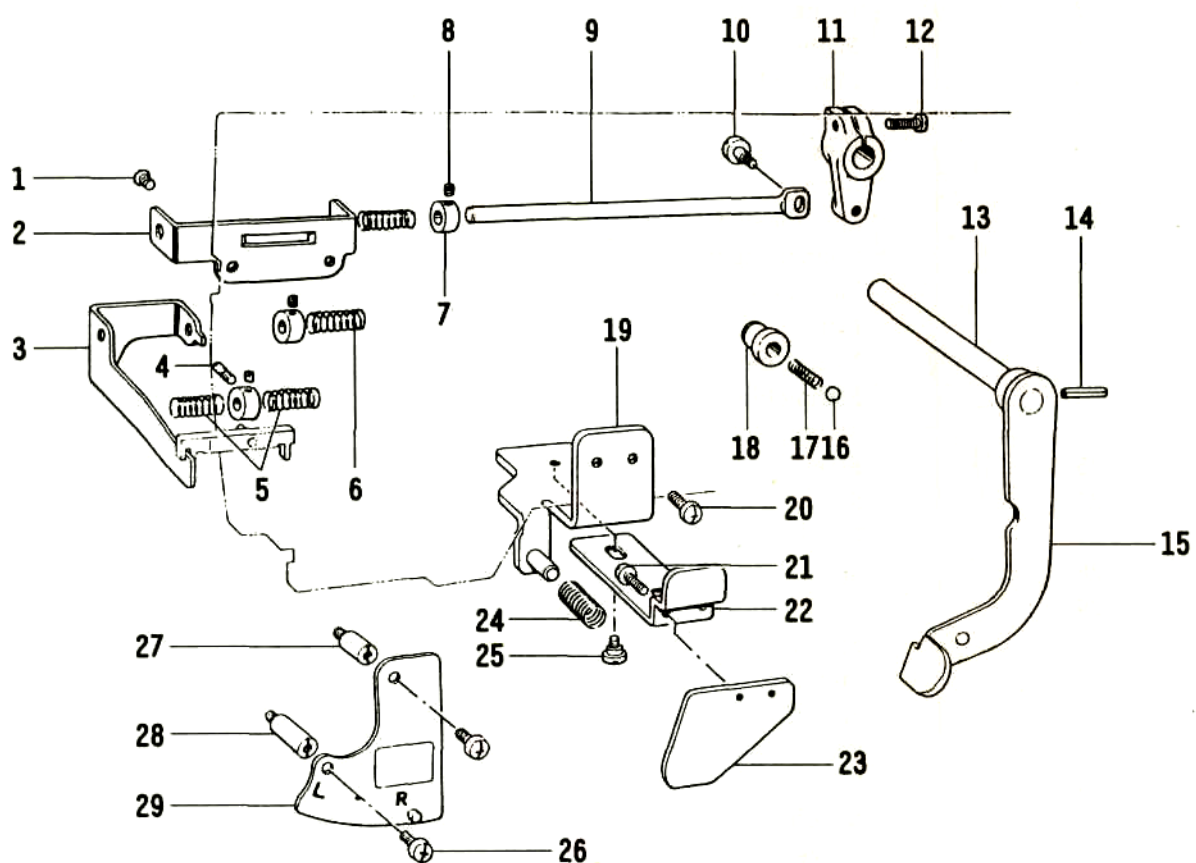
3. Needle feed parts



3. Needle feed parts

No.	Name	Qt.
1	Front bushing of swing shaft:	1
2	Swing shaft	1
3	Rear bushing of swing shaft	1
4	Pin	1
5	Regulative screw	2
6	Stopper block	1
7	Needle bar assembly(left)	1
8	Needle bar assembly(right)	1
9	Position column	2
10	Spring	2
11	Needle bar swing bracket	2
12	Position plate	1
13	Screw	2
14	Moving bracket for needle bar separator	1
15	Screw	2
16	Presser plate	1
17	Screw	1
18	Link for swing bracket	1
19	Connecting pin	2
20	Link for swing bracket	1
21	Nut	2
22	Needle bar link	1
23	Sliding block	1
24	Sliding block guide rail	2
25	Screw	4
26	Screw	1
27	Position plate	1
28	Spring	1
29	Prop stud	1
30	Spring	1
31	Prop stud	1
32	Spring	2
33	Position pin	1
34	Pin	1
35	Needle bar connector	1
36	Hinge	2
37	Connecting column for needle bar	2
38	Screw	2
39	Presser plate for stop block	1
40	Stop block(inside)	1
41	Stop block(outside)	1
42	Stop spring	2
43	Connecting pin	2
44	Safety finger	1
45	Washer	1
46	Elastic washer	1
47	Screw	1

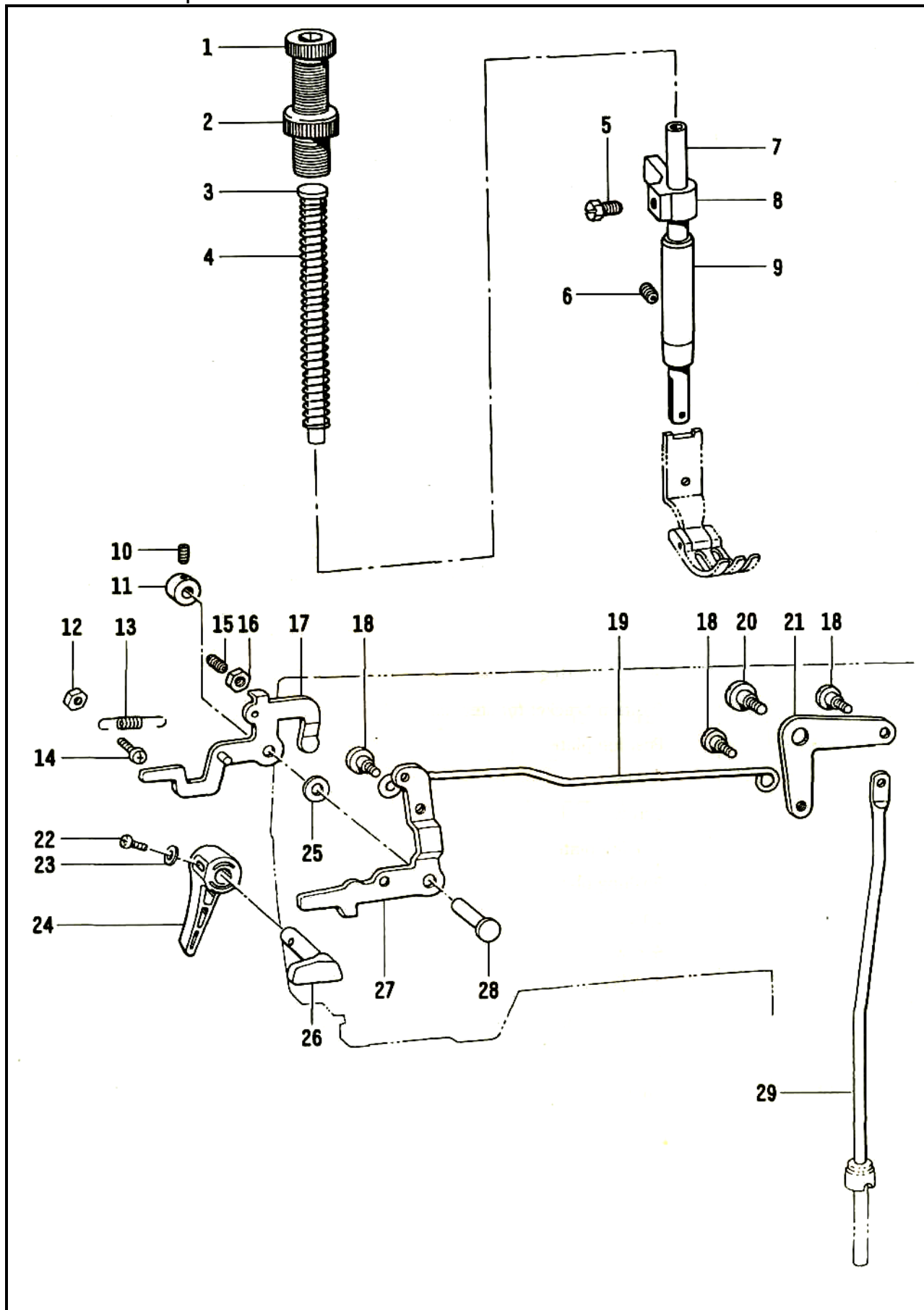
4. Needle bar separator parts



4. Needle bar separator parts

No.	Name	Qt.
1	Screw	2
2	Guide bracket	1
3	Moving bracket	1
4	Position screw	1
5	Spring	2
6	Spring	2
7	Collar	3
8	Screw	5
9	Moving shaft	1
10	Screw	1
11	Crank	1
12	Screw	1
13	Spanner shaft	1
14	Pin	1
15	Spanner	1
16	Steel ball	1
17	Position spring	1
18	Position bracket for steel ball	1
19	Position plate	1
20	Screw	2
21	Screw	2
22	Moving plate	1
23	Pushing plate	1
24	Spring	1
25	Screw	2
26	Screw	2
27	Screw bracket(short)	1
28	Screw bracket(long)	1
29	Tighten plate	1

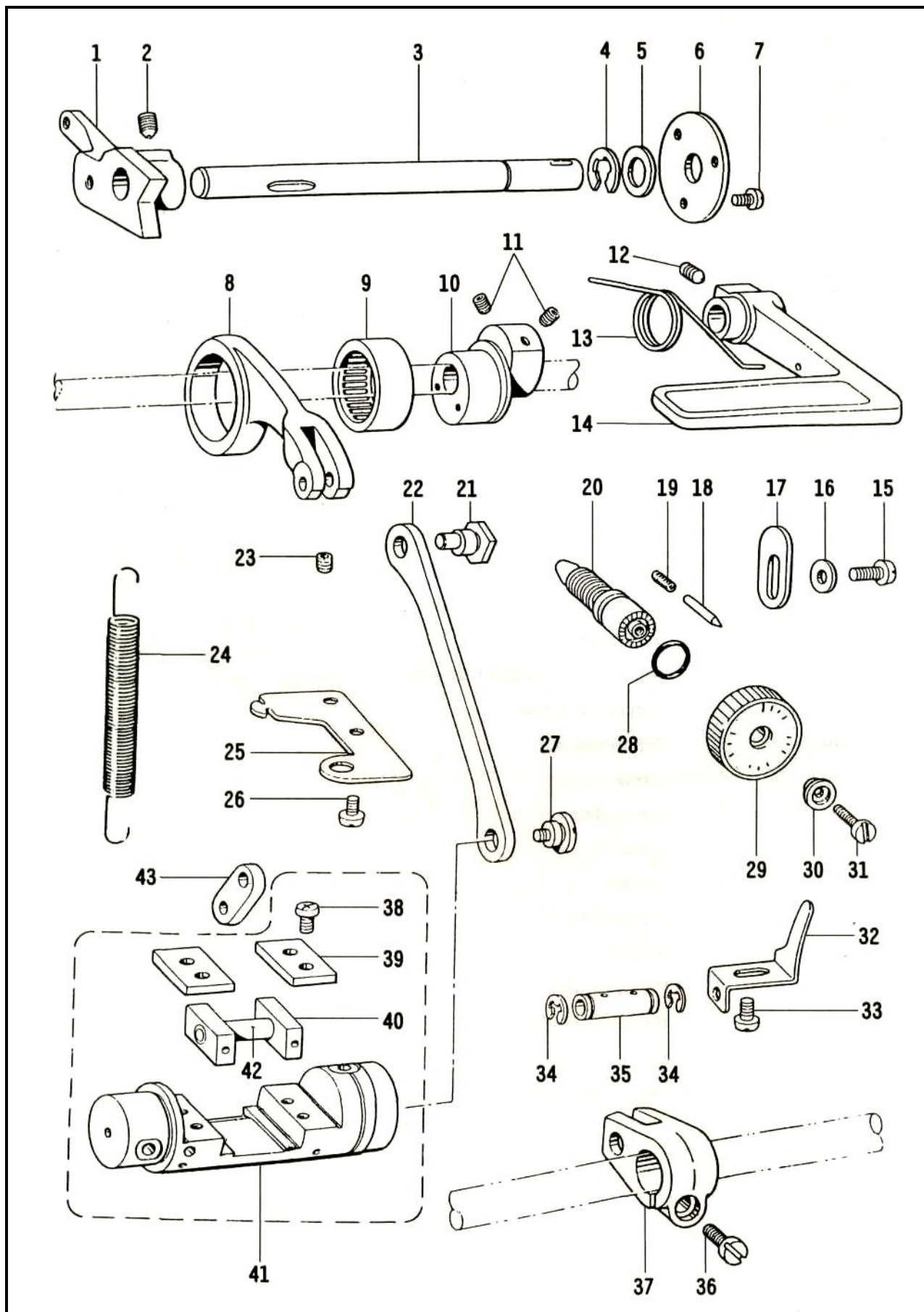
5. Presser foot parts



5. Presser foot parts

No.	Name	Qt.
1	Adjusting screw	1
2	Locking nut	1
3	Presser foot bar	1
4	Spring	1
5	Screw	1
6	Screw	1
7	Presser bar	1
8	Guide bracket	1
9	Presser bar bushing	1
10	Screw	2
11	Collar	1
12	Nut	1
13	Spring	1
14	Screw	1
15	Adjusting screw	1
16	Locking nut	1
17	Presser foot lifter position plate	1
18	Connecting screw	3
19	Connecting rod	1
20	Screw	1
21	Swing plate	1
22	Screw	1
23	Washer	1
24	Presser lifter bar	1
25	Washer	1
26	Presser lifter cam	1
27	Presser lifter plate	1
28	Pin	1
29	Knee lifter prop rod	1

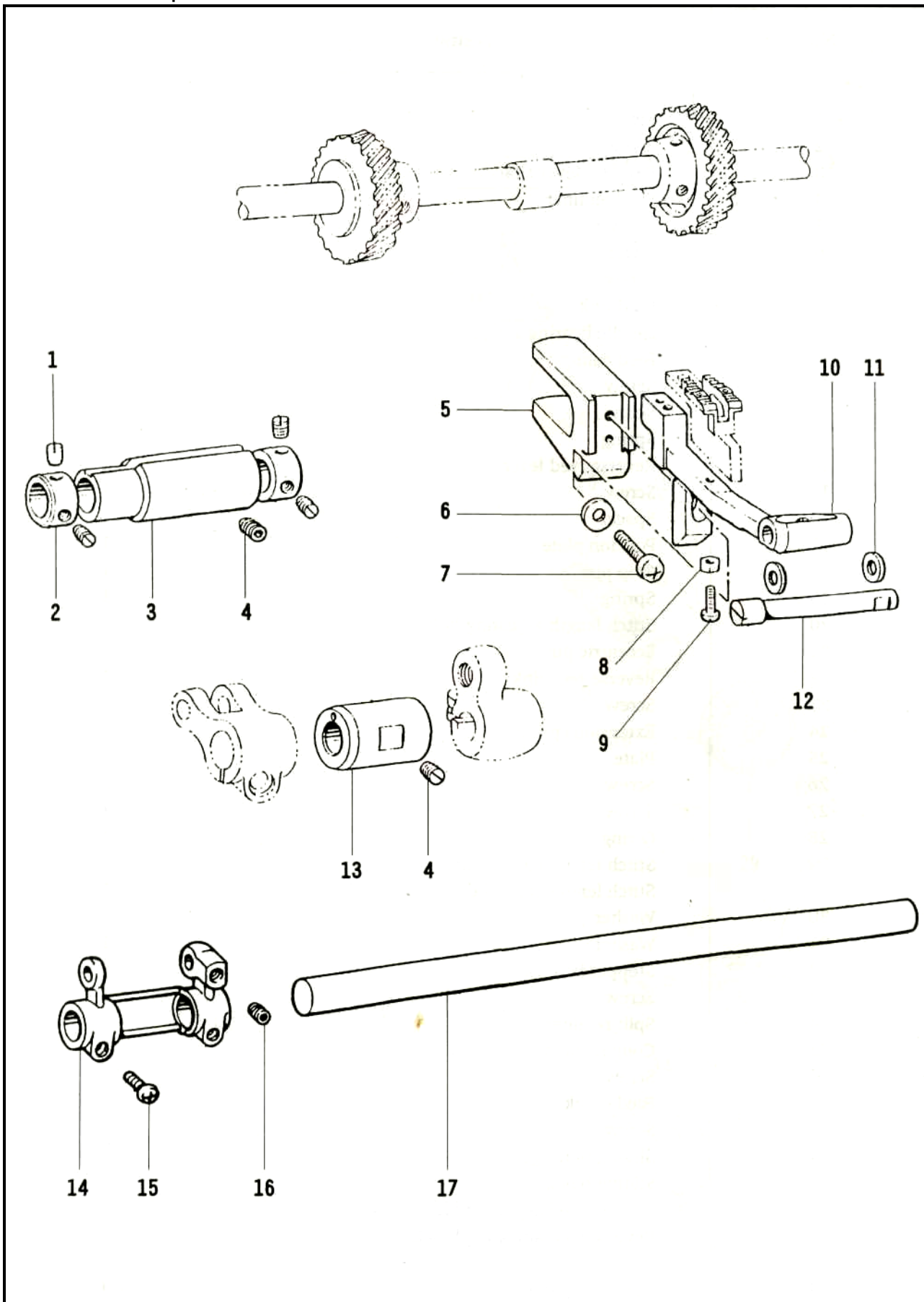
6. Feed and reverse feed parts



6. Feed and reverse feed parts

No.	Name	Qt.
1	Swing bar	1
2	Screw	3
3	Reverse lever shaft	1
4	Split retainer	1
5	Washer	1
6	Cover	1
7	Screw	3
8	Feed link	1
9	Needle bearing	1
10	Feed cam	1
11	Screw	2
12	Screw	1
13	Spring	1
14	Reverse feed lever	1
15	Screw	1
16	Spacer	1
17	Position plate	1
18	Stop pin	1
19	Spring	1
20	Stitch length adjusting bolt	1
21	Eccentric pin	1
22	Reverse feed link	1
23	Screw	1
24	Extension spring	1
25	Plate	1
26	Screw	2
27	Screw	1
28	O-ring	1
29	Stitch length control dial	1
	Stitch length control dial	1
30	Washer	1
31	Washer	1
32	Stopper bracket	1
33	Screw	1
34	Split retainer	2
35	Connecting pin	1
36	Screw	1
37	Feed crank	1
38	Screw	4
39	Sliding block guide plate	2
40	Sliding block	2
41	Reverse feed adjusting bracket	1
	Reverse feed adjusting bracket	1
42	Pin	1
43	Connecting block	1

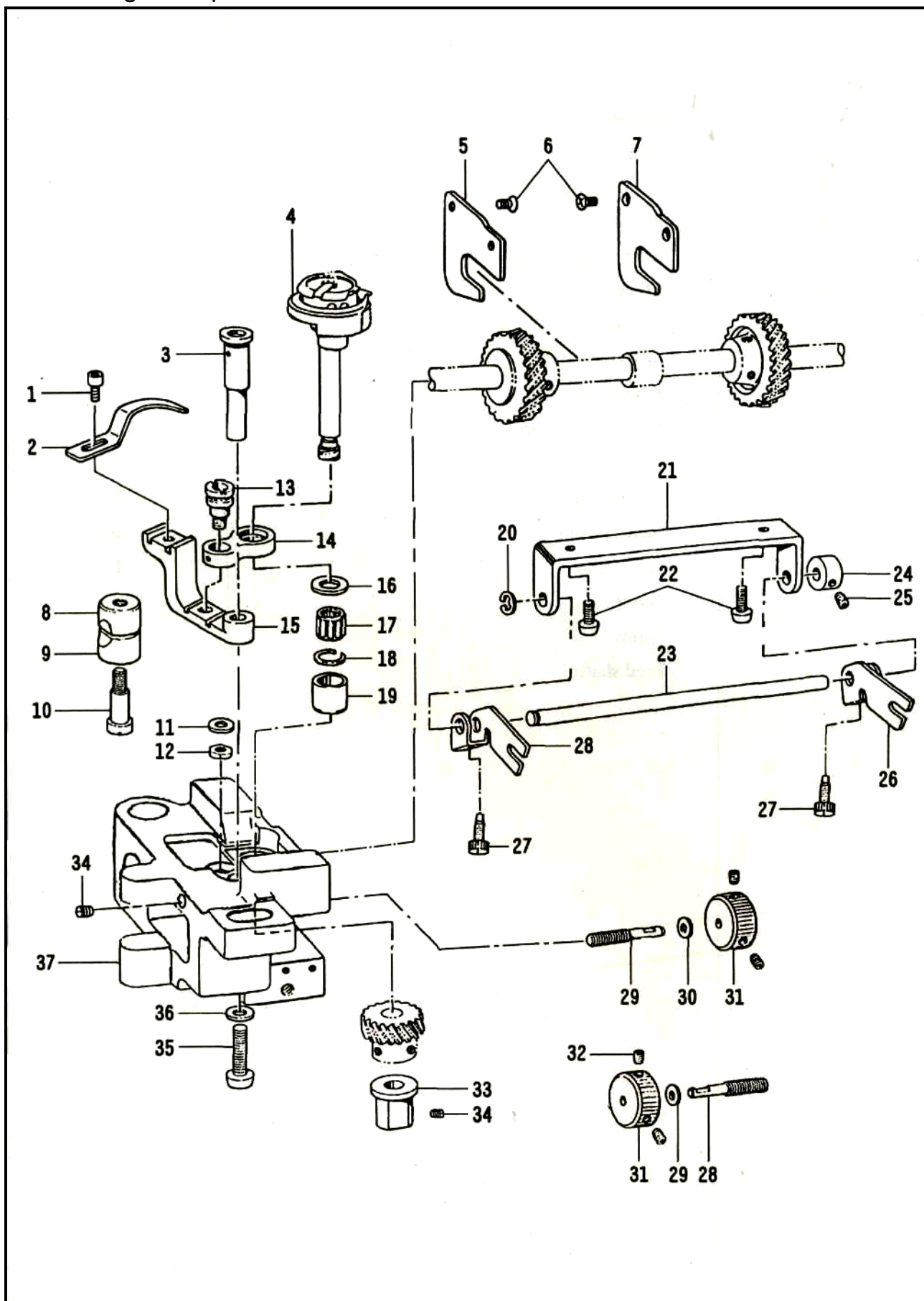
7. Feed shaft parts



7. Feed shaft parts

No.	Name	Qt.
1	Screw	4
2	Collar	2
3	Front bushing	1
4	Screw	2
5	Feed dog lifter fork	1
6	Washer	1
7	Screw	1
8	Adjusting nut	1
9	Adjusting screw	1
10	Feed dog support	1
11	Spacer	2
12	Connecting pin	1
13	Rear bushing	1
14	Front crank	1
15	Screw	2
16	Screw	1
17	Feed shaft	1

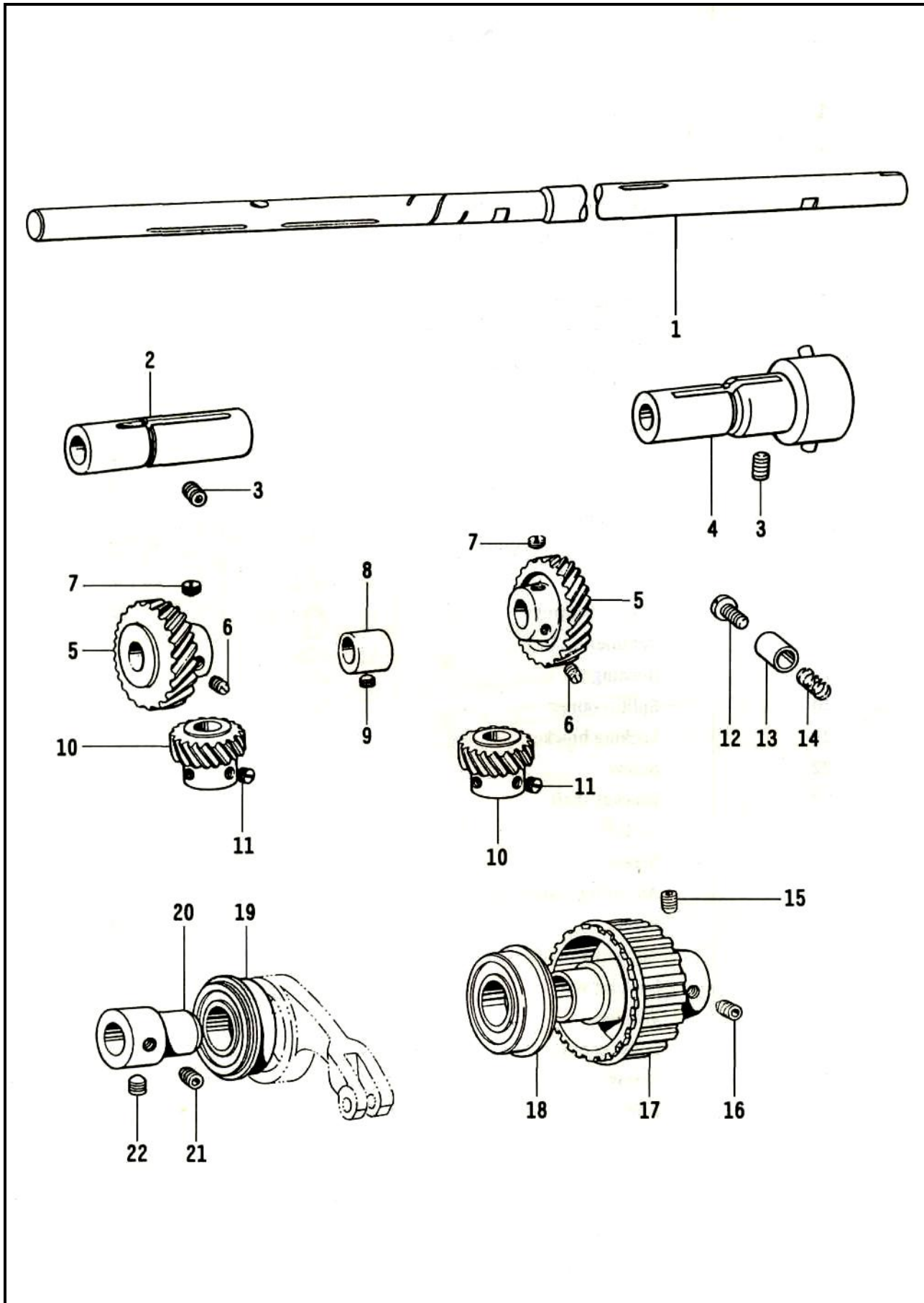
8. Rotating hook parts



8. Rotating hook parts

No.	Name	Qt.
1	Screw	2
2	Thread finger	2
3	Hinge shaft	2
4	Rotating hook assembly	2
5	Stop plate (left hook saddle)	1
6	Screw	4
7	Stop plate (right hook saddle)	1
8	Upper bushing for hook shaft	2
9	Lower bushing for hook shaft	2
10	Screw	2
11	Washer	2
12	Nut	2
13	Screw	2
14	Thread finger link	2
15	Thread finger bracket	2
16	Bushing	2
17	Needle bearing	2
18	Retainer	2
19	Bushing	2
20	Split retainer	1
21	Locking bracket	1
22	Screw	2
23	Bracket shaft	1
24	Collar	1
25	Screw	1
26	Adjusting bracket(left)	1
27	Screw	2
28	Adjusting bracket(right)	1
29	Locking screw	2
30	Washer	2
31	Locking nut	2
32	Screw	4
33	Bushing for hook saddle	2
34	Screw	4
35	Screw	2
36	Washer	2
37	Right hook saddle	1
	Left hook saddle	1

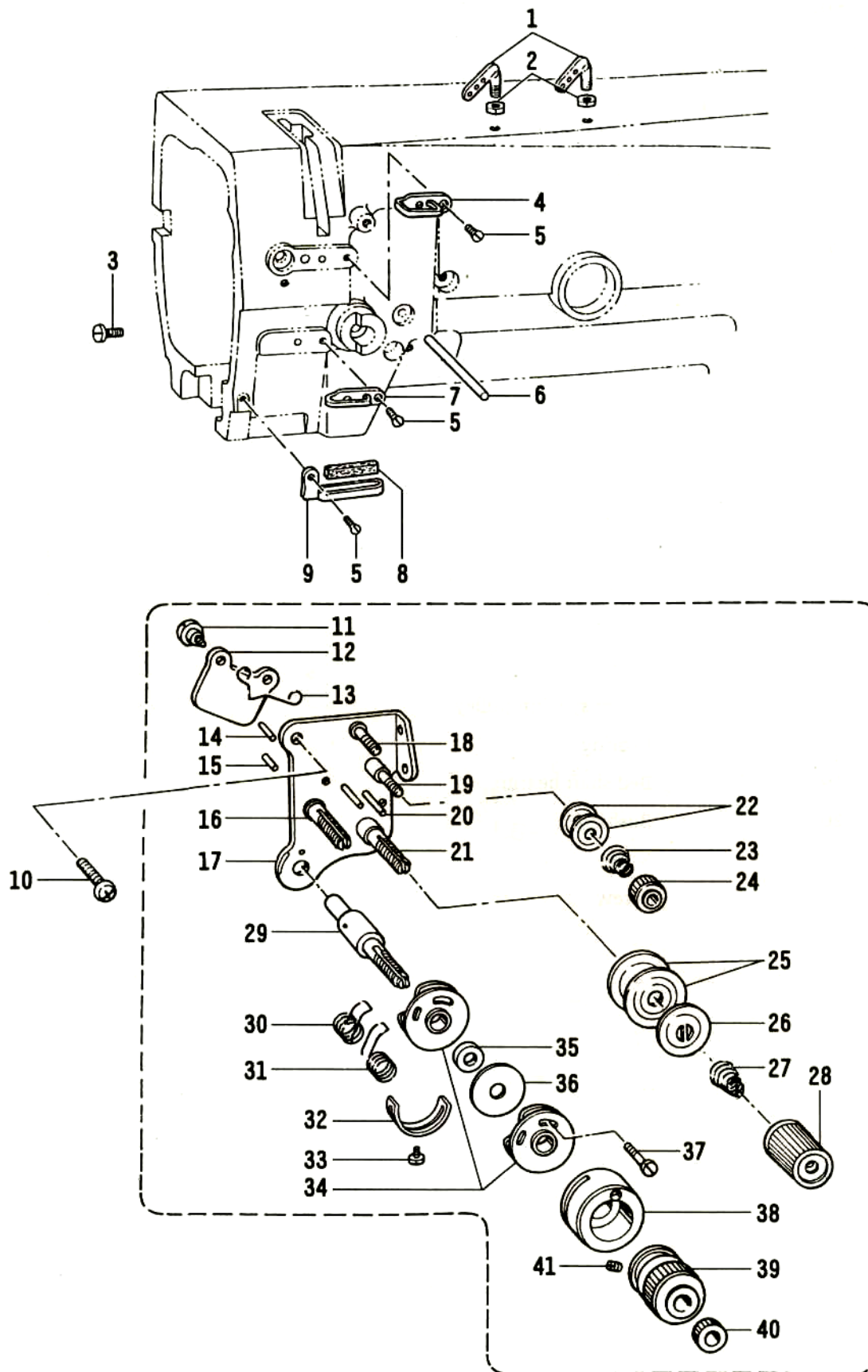
9. Bed shaft parts



9. Bed shaft parts

No.	Name	Qt.
1	Bed shaft	1
2	Left bushing for bed shaft	1
3	Screw	2
4	Right bushing for bed shaft	1
5	Big gear	2
6	Screw	4
7	Stop screw	2
8	Cam for feed dog lifter fork	1
9	Screw	1
10	Small gear	2
11	Screw	6
12	Screw	1
13	Plunge	1
14	Spring	1
15	Position screw	1
16	Screw	1
17	Lower synchro pulley	1
18	Bearing	1
19	Bed shaft bearing	1
20	Bushing	1
21	Screw	1
22	Screw	1
		1

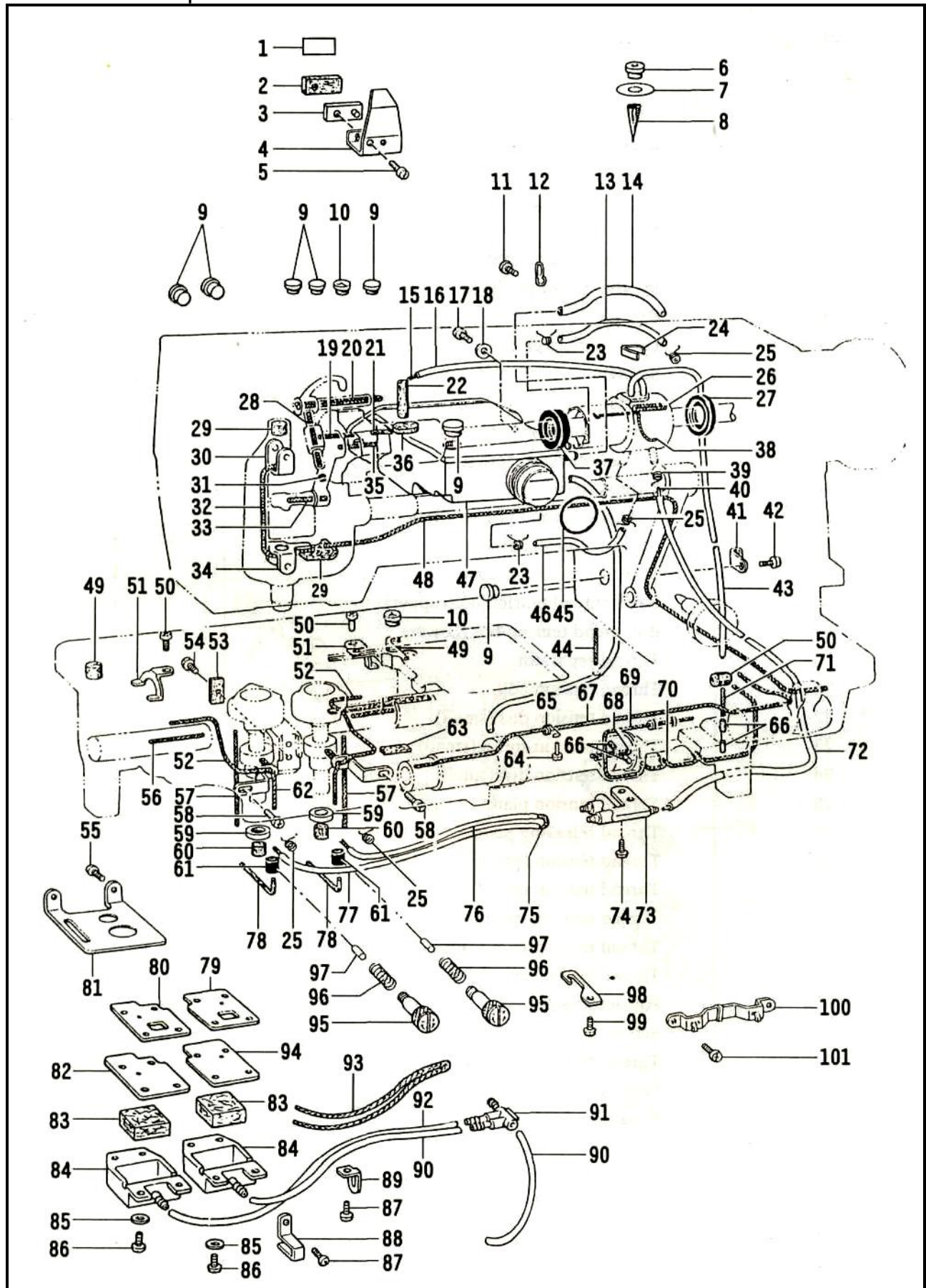
10. Thread guide parts



10. Thread guide parts

No.	Name	Qt.
1	Thread retainer	2
2	Locking nut	2
3	Screw	1
4	Upper thread guide	1
5	Screw	3
6	Thread releasing rod	1
7	Middle thread guide	1
8	Felt	1
9	Lower thread guide	1
10	Screw	1
11	Screw	2
12	Thread erecting plate	1
13	Thread releasing spring	1
14	Thread releasing Pin(big)	1
15	Thread releasing pin(small)	1
16	Thread tension bolt	1
17	Thread tension set plate	1
18	Small thread tension bolt(upper)	1
19	Big thread tension bolt(Lower)	1
20	Thread separator	2
21	Thread tension bolt	1
22	Thread tension disk(small)	4
23	Thread tension spring(small)	2
24	Thread tension disk(small)	2
25	Thread tension plate	4
26	Thread releasing plate	2
27	Thread tension spring	2
28	Thread tension nut	2
29	Thread take-up spring shaft	1
30	Thread take-up spring(inside)	1
31	Thread take-up spring(outside)	1
32	Position bracket	2
33	Screw	1
34	Thread control plate assembly	2
35	Washer	2
36	Separate piece	1
37	Screw	1
38	Position bracket	1
39	Adjuster	1
40	Locking nut	1
41	Screw	1

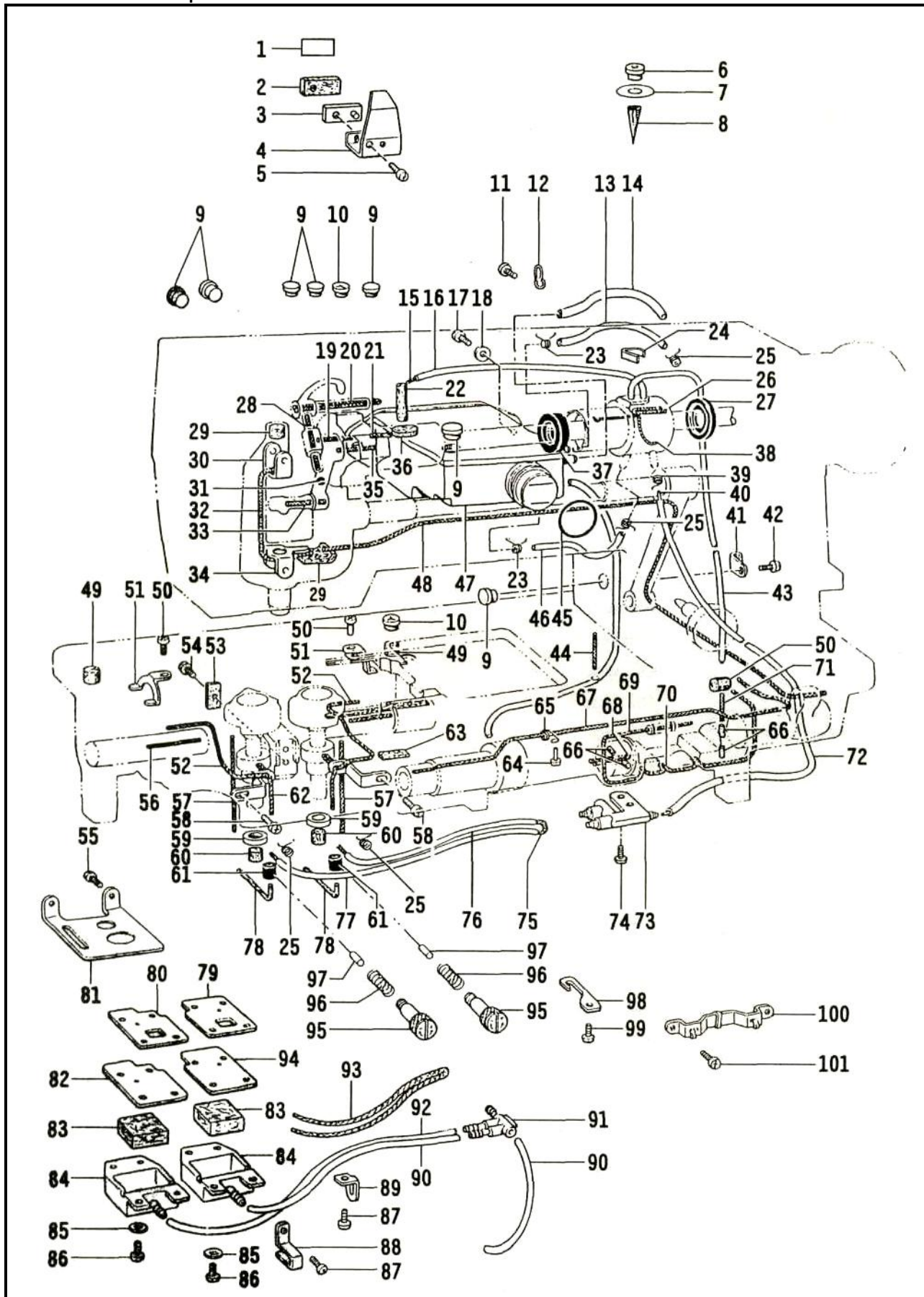
11. Lubrication parts



11. Lubrication parts

No.	Name	Qt.
1	Position piece for oil felt	1
2	Oil felt	1
3	Position block for oil felt	1
4	Position bracket for oil felt	1
5	Screw	1
6	Plug	1
7	Direction piece	1
8	Oil filter	1
9	Plug	7
10	Plug	2
11	Screw	1
12	Position hook for oil pipe	1
13	Oil pipe	1
14	Oil pipe	1
15	Oil wick	1
16	Oil pipe	1
17	Screw	2
18	Washer	2
19	Oil wick	1
20	Oil wick	1
21	Oil wick	1
22	Felt	1
23	Locking spring	4
24	Oil pipe clip	1
25	Locking spring	5
26	Oil wick	1
27	Seal ring	1
28	Oil wick	1
29	Felt	2
30	Position bracket for oil wick	2
31	Plug	1
32	Oil wick	1
33	Oil wick	1
34	Screw	2
35	Oil wick	1
36	Felt	1
37	Seal ring	1
38	Oil wick	1

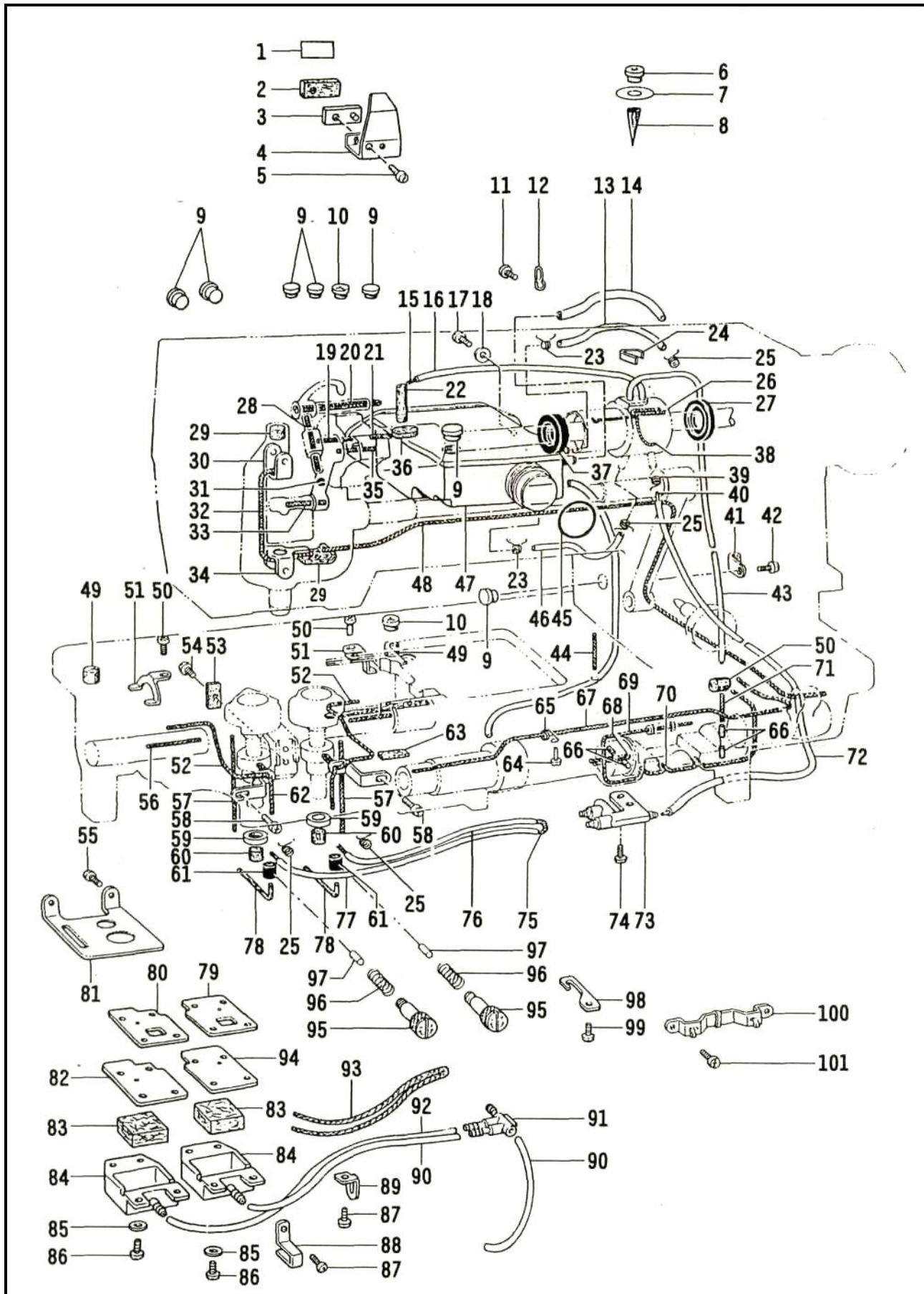
11. Lubrication parts



11. Lubrication parts

No.	Name	Qt.
39	Oil felt	1
40	Steel rope	1
41	Position bracket for oil wick	1
42	Screw	1
43	Oil pipe	1
44	Oil pipe	1
45	O-type seal ring	1
46	Oil pipe	1
47	Oil box	1
48	Long oil wick	1
49	Oil felt	3
50	Screw	4
51	Position clamp for oil wick	2
52	Oil wick	2
53	Felt	1
54	Screw	1
55	Screw	2
56	Oil wick	2
57	Oil wick	2
58	Screw	4
59	Set ring	2
60	Felt	2
61	Plug	2
62	Position clamp for felt	2
63	Felt	2
64	Screw	14
65	Position bracket for oil wick	1
66	Felt	4
67	Long oil wick	1
68	Oil wick	1
69	Oil wick	1
70	Oil wick	1
71	Oil wick	1
72	Oil pipe	1
73	3-nozzle oil mouth	1
74	Screw	2
75	Oil wick	1
76	Oil pipe	1
77	Oil pipe	1
78	Oil wick	2

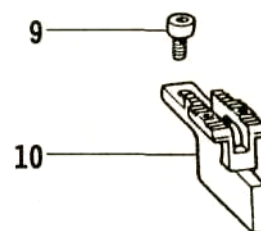
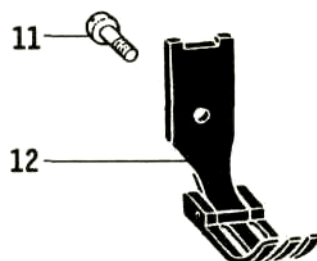
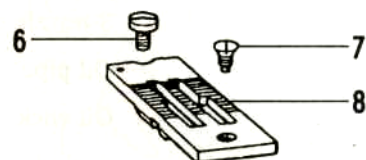
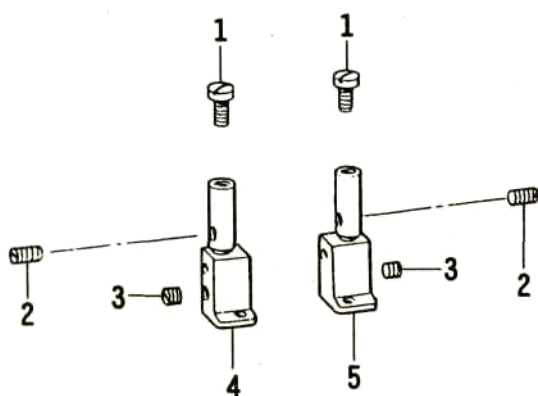
11. Lubrication parts



11. Lubrication parts

No.	Name	Qt.
79	Press plate (right)	1
80	Press plate (left)	1
81	Cover plate	1
82	Seal piece	1
83	Felt	2
84	Cover	2
85	Washer	8
86	Screw	8
87	Screw	2
88	Oil pipe support (left)	1
89	Oil pipe support (right)	1
90	Oil pipe	2
91	3-nozzle oil mouth	1
92	Oil pipe	1
93	Oil wick	1
94	Seal piece	1
95	Adjusting screw	2
96	Spring	2
97	Plunger	2
98	Oil pipe support	1
99	Screw	1
100	Oil wick support	1
101	Screw	2

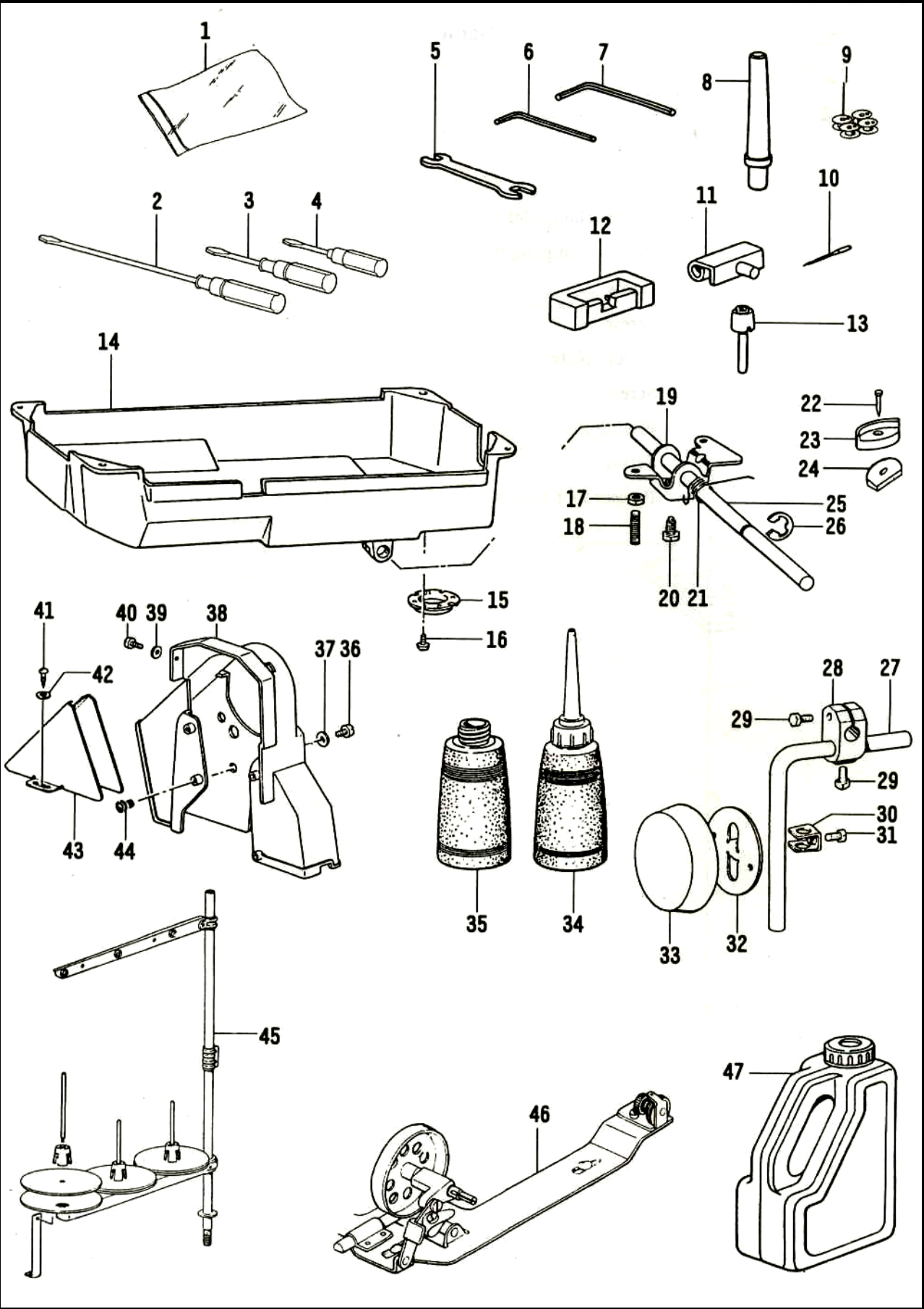
12. Standard parts



12. Standard parts

No.	Name	Qt.
1	Position screw	2
2	Screw	2
3	Screw	2
4	Needle clamp (left)	1
5	Needle clamp (right)	1
6	Screw	1
7	Screw	1
8	Needle plate	1
9	Screw	2
10	Feed dog	1
11	Screw	1
12	Presser foot assembly	1






13. Accessories



13. Accessories

No.	Name	Qt.
1	Accessories bag	1
2	Screw driver(big)	1
3	Screw driver(medium)	1
4	Screw driver(small)	1
5	Spanner	1
6	Spanner	1
7	Spanner	1
8	Machine head support	1
9	Bobbin	4
10	Needle	4
	Needle	4
11	Hinge pin	2
12	Hinge pin socket	2
13	Knee lift prop rod	1
14	Oil reservoir	1
15	Support	1
16	Screw	4
17	Adjusting nut	2
18	Screw	2
19	Stopper case	1
20	Screw	1
21	Spring	1
22	Pin	4
23	Cushion	4
24	Cushion	4
25	Hinge shaft	1
26	Split retainer	1
27	Knee lifter bar	1
28	Knee lifter connector	1
29	Screw	2
30	Stopper	1
31	Screw	1
32	Knee lifter plate	1
33	Pat	1
34	Small oil pot	1
35	Oil pot for receiving oil	1
36	Screw	4
37	Washer	4
38	Safety guard	1
39	Washer	1
40	Screw	1
41	Wood screw	2
42	Washer	2
43	Small belt safety cover	1
44	washer	1
45	Spool stand	1
46	Thread winder assembly	1
47	Big oil pot	1

14. Standard parts list

Needle gauge	Model	<div> (L)</div> <div> (R)</div> Left & right needle clamp	 Needle plate	 Feed dog	 Presser foot
1/8" (3.2mm)	~3	(L) 21WF2-001A	21WF4-065A	①21WF3-018A1	21WF5-001A
	~5	(R) 21WF2-002A		21WF3-018A2	
				②21WF3-018A3	
5/32" (4.0mm)	~3	(L) 21WF2-001B	21WF4-065B	21WF3-018B	21WF5-001B
	~5	(R) 21WF2-002B			
3/16" (4.8mm)	~3	(L) 21WF2-001C	21WF4-065C	①21WF2-018C1	21WF5-001C
				21WF2-018C2	
	~5	(R) 21WF2-002C		②21WF2-018C3	
				③21WF2-018C4	
1/4" (6.4mm)	~3	(L) 21WF2-001D	21WF4-065D	①21WF3-018D1	21WF5-001D
				21WF3-018D2	
	~5	(R) 21WF2-002D		②21WF3-018D3	
				③21WF3-018D4	
5/16" (7.9mm)	~3	(L) 21WF2-001E	21WF4-065E	21WF3-018E	21WF5-001E
	~5	(R) 21WF2-002E			
3/8" (9.5mm)	~3	(L) 21WF2-001F	21WF4-065F	21WF3-017F1	21WF5-001F
	~5	(R) 21WF2-002F		②21WF3-017F2	
7/16" (11.1mm)	~3	(L) 21WF2-001G	21WF4-065G	21WF3-018G	21WF5-001G
	~5	(R) 21WF2-002G			
1/2" (12.7mm)	~3	(L) 21WF2-001H	21WF4-065H	21WF3-017H1	21WF5-001H
	~5	(R) 21WF2-002H		③21WF3-017H2	
5/8" (15.9mm)	~3	(L) 21WF2-001I	21WF4-065I	21WF3-017I1	21WF5-001I
	~5	(R) 21WF2-002I		③21WF3-017I2	

1. Feed dog with marked ① is for light duty. Diameter of needle eye is 1.2mm

2. Feed dog with marked ② is for medium duty. Diameter of needle eye is 2mmX3mm

3. Feed dog with marked ③ is for heavy duty. Diameter of needle eye is 2.3mmX4mm