

Sun Special

SSTC31606 / SSTC31606-1

SINGLE NEEDLE/DOUBLE NEEDLE MEDIUM AND HEAVY
DUTY COMPOUND FEED LOCKSTITCH SEWING MACHINE

OPERATION INSTRUCTION / PARTS MANUAL

TRANSPORTE TRIPLO

95. 20606

GC 20606 - 1L-18 TYPICAL

CONTENTS

Operation instruction

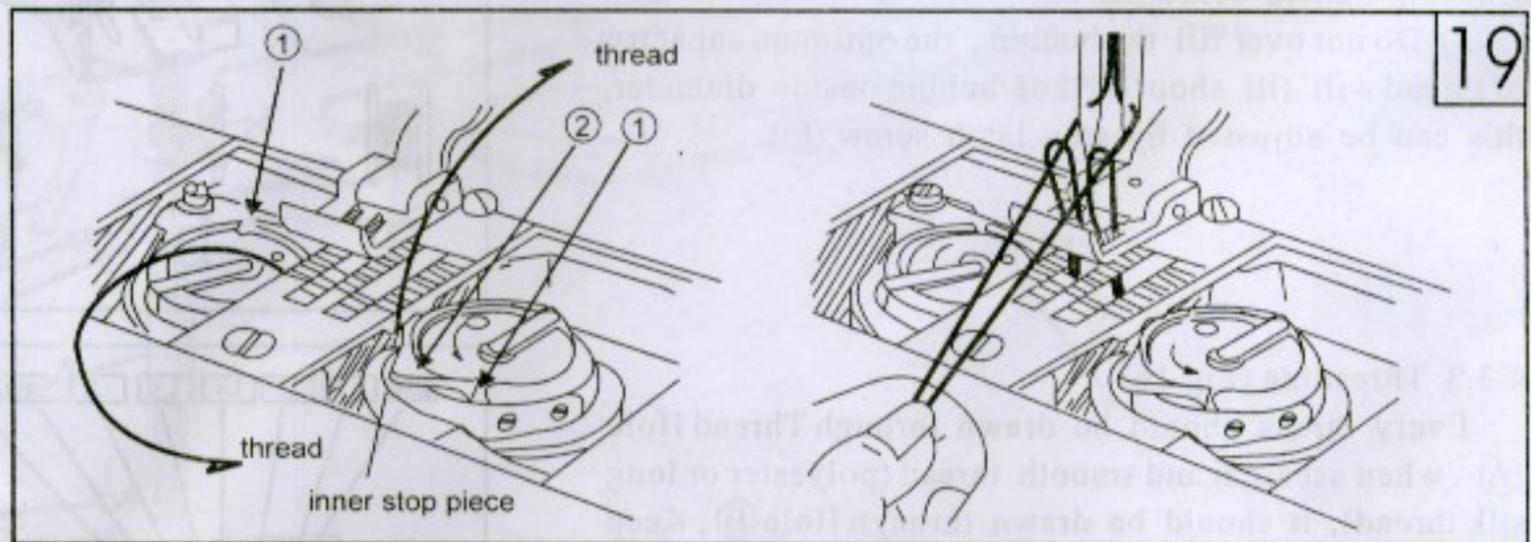
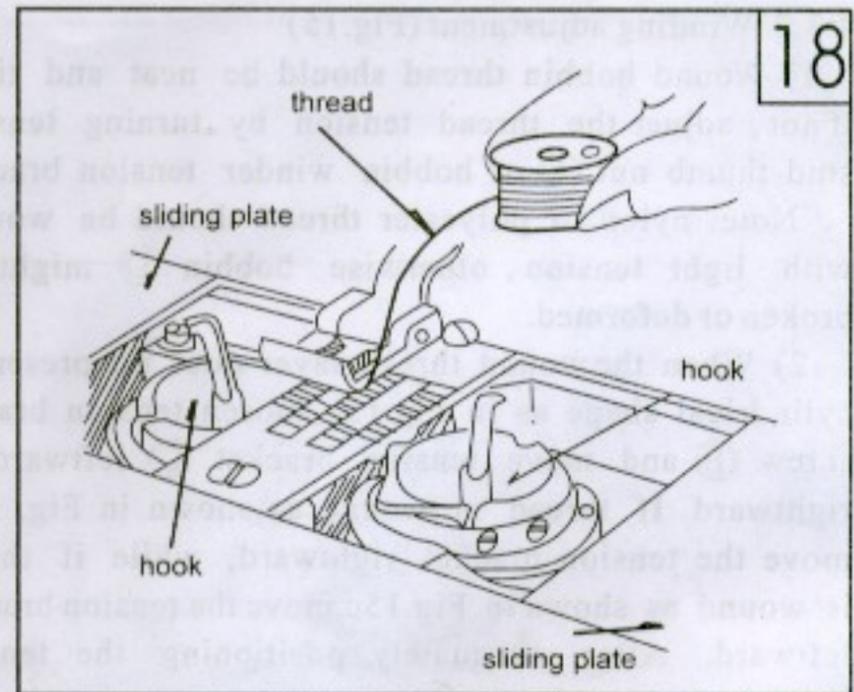
1. Brief introduction	1
2. Main specifications	1
3. Installation and preparation	1
3.1 Installation	1
3.1.1 Location of the machine	1
3.1.2 Installing oil reservoir	1
3.1.3 Mounting machine head	1
3.1.4 Mounting knee lifter	2
3.1.5 Installing the motor	2
3.1.6 Connecting the clutch lever to the pedal	3
3.1.7 Installing the thread winder	3
3.1.8 Installing the thread spool stand	3
3.2 Preparation	3
3.2.1 Cleaning the machine	3
3.2.2 Examination	4
3.2.3 Precaution before start	4
4. Operation	5
4.1 Coordination between needle thread and sewing material	5
4.2 Installing the needle	5
4.3 Winding the bobbin thread	5
4.3.1 Winding method	5
4.3.2 Winding adjustment	6
4.3.3 Threading	6
4.3.4 Stich length and reverse sewing control	6
4.3.5 Setting the bobbin	7
4.3.6 Drawing thread from the bobbin	7
5. Machine adjustment	7
5.1 Thread tension adjustment	7
5.2 Adjusting the pressure of presser foot	8
5.3 Use and adjustment of the safety clutch device	8
5.3.1 The function of the safety clutch device	8
5.3.2 Resetting the safety clutch device	8
5.3.3 Regulating the strength on the safety clutch device	9
5.4 Upper feed adjustment	9
5.5 Presser foot lift volume adjustment	10
5.6 Hook oil amount adjustment	10

4.3.5 Placing bobbin (Fig.18)

Note: when bobbin is placed into the bobbin case, the thread should be wound properly in the correct direction shown in the figure.

4.3.6 Drawing thread from the bobbin (Fig.19)

- Draw the thread end to Bobbin Slot (1) shown in the figure, and pull it out down through the inner bobbin stop piece.
- Hold the thread with left hand, turn the balance wheel slowly and get the bobbin thread, then draw them a little apart from the presser foot.

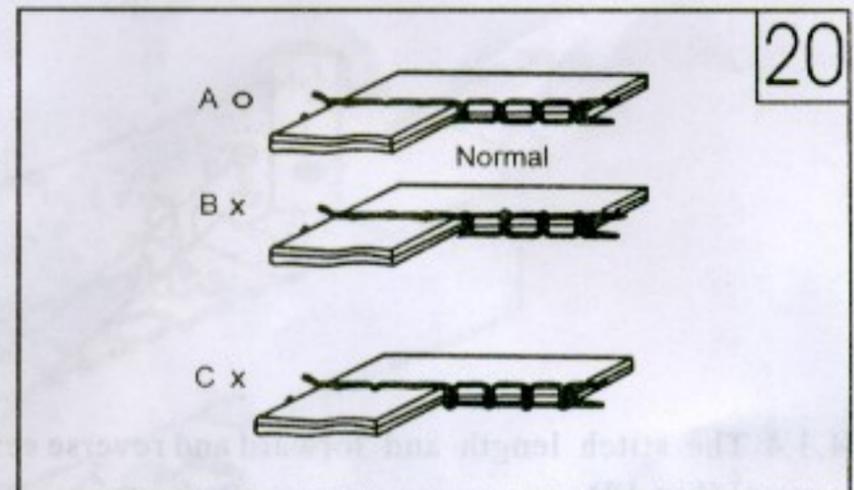


5. Machine Adjustment

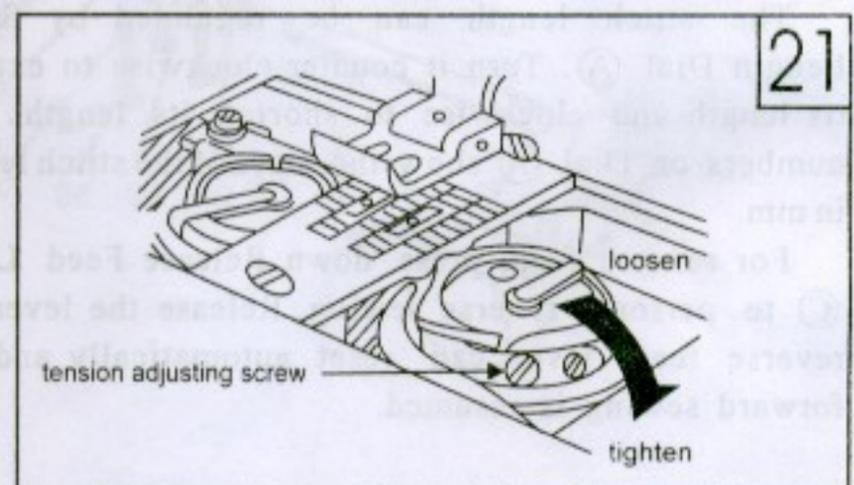
5.1 Thread tension adjustment

All forms of stitches are shown in Fig.20.

The normal stitch of sewing machine is shown as Fig.(A) If stitch is abnormal, 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.



- If the stitch seam shows as Fig.20B, indicates that the needle thread or bobbin thread tension is too loose, then turn the thread tension screw counter-clockwise to release the needle thread pressure; or turn the adjusting screw with a screwdriver to increase the bobbin thread tension. (see Fig.20,22)



b. If the needle thread is too loose and the bobbin thread is too tight, then shows as Fig. 20C, And turn the thread tension screw clockwise to increase the needle thread tension; or turn loose the bobbin lace screw to reduce the bobbin thread tension. (See Fig. 21, 22)

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

5.2 Adjusting the pressure of presser foot (Fig.23)

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 on the back of the arm clockwise if reduce the pressure, turn it counter-clockwise.

5.3 Use and adjustment of the safety clutch device

The function of the safety clutch device is to prevent the hook and teeth-belt from destroy when the needle thread is drawn into the hook for adnormal load during the operation.

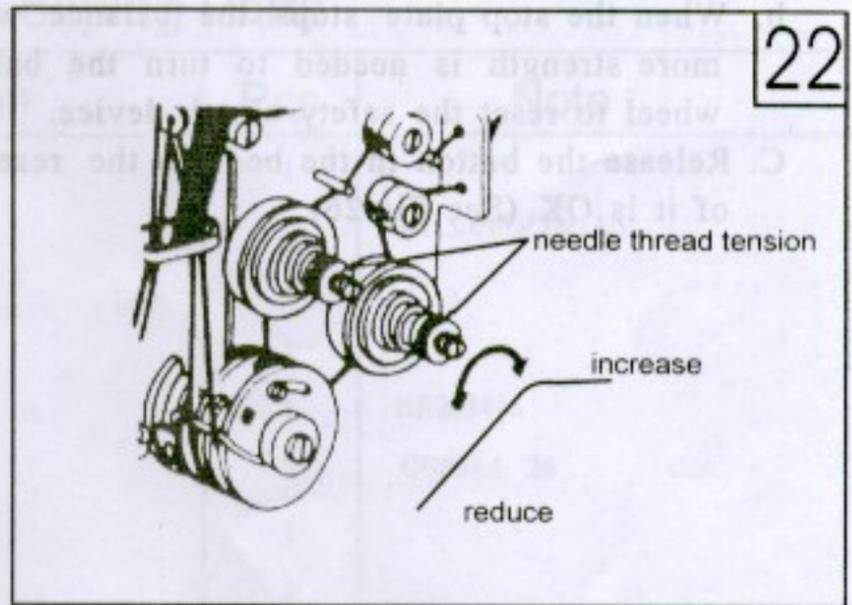
5.3.1 The function of the safety clutch device(Fig.24)

- a. When the safety clutch device is functioning, the teeth-belt will remove the load and the rock shaft will stop rotating, only the upper shaft rotates, and the machine stops work.
- b. Clean off the needle thread which is drawn in the hook.
- c. Turn the shaft of the teeth-belt with hand to check if the rock shaft can turn smoothly, then reset the safety clutch device.

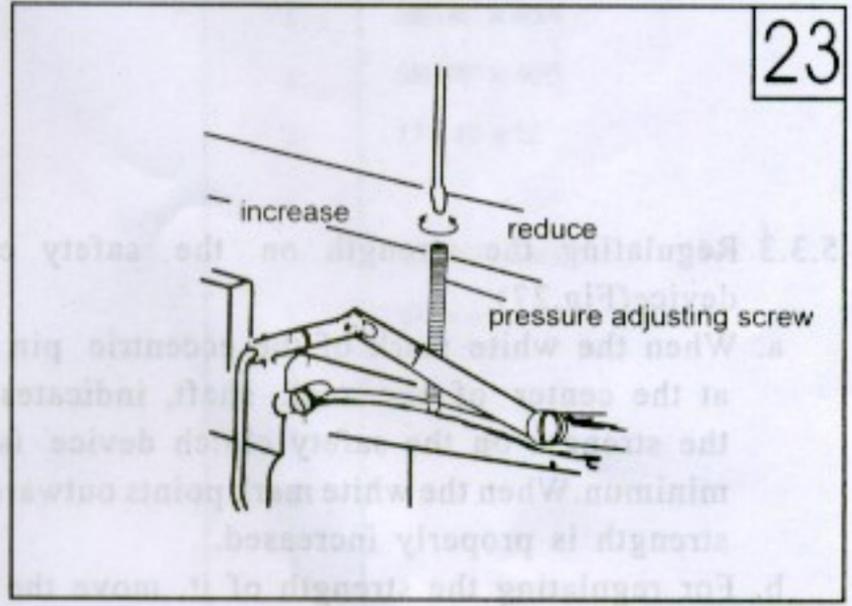
5.3.2 Resetting the safety clutch device.

- a. While press down the button in the bed surface with left hand, turn the balance wheel slowly with right hand in the direction shown in Fig. 25.

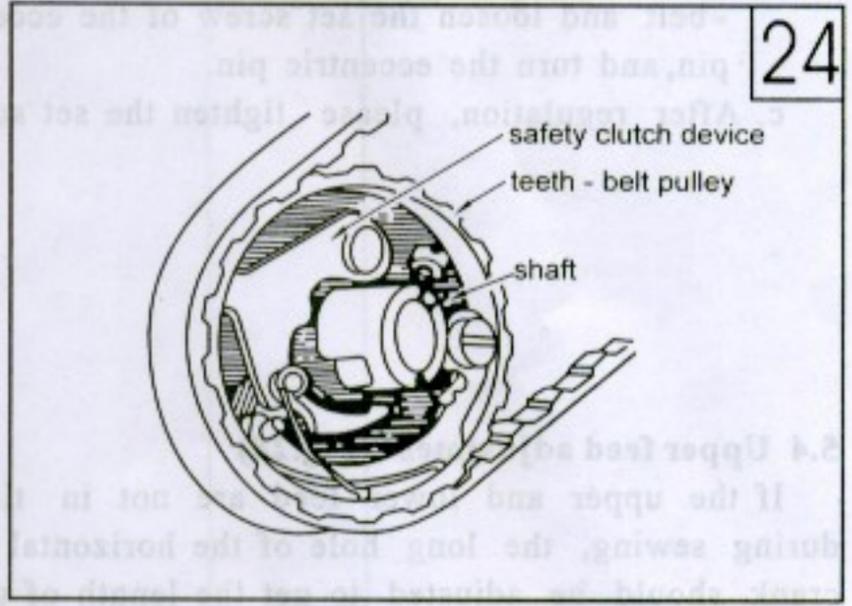
22



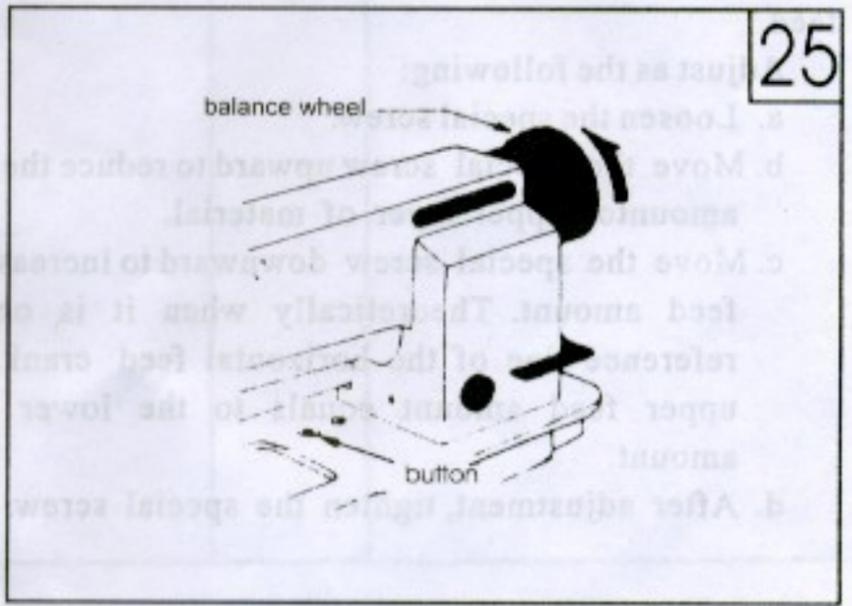
23



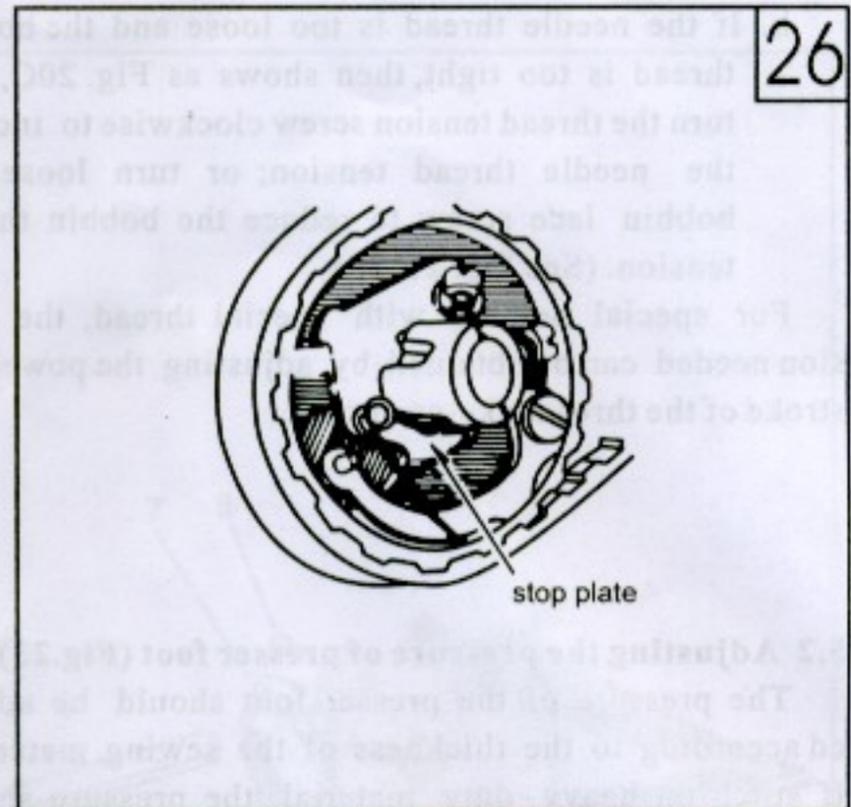
24



25

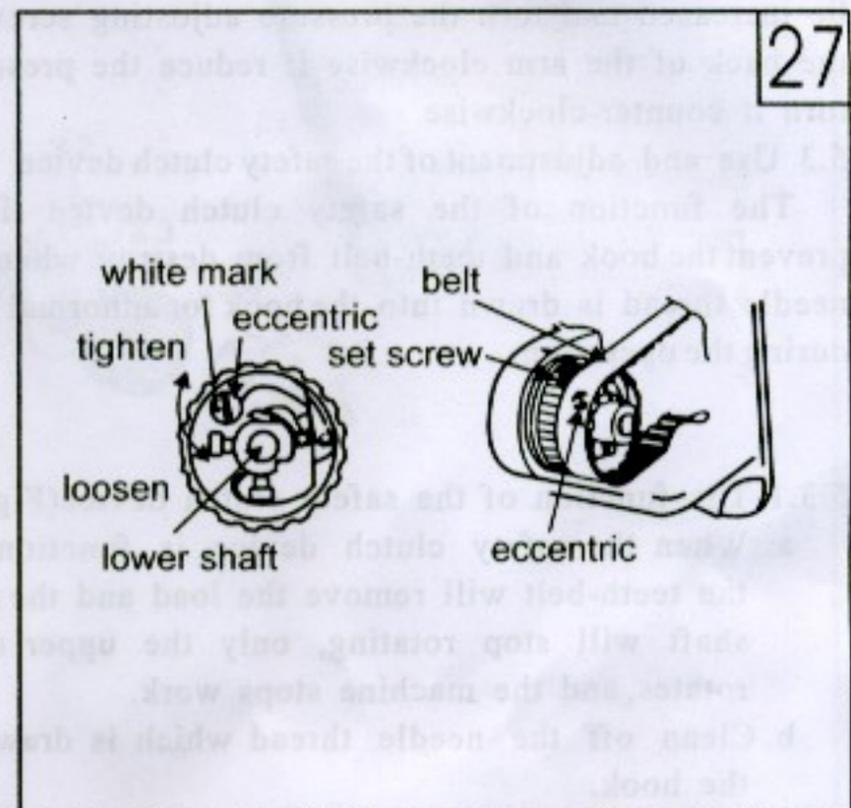


- b. When the stop plate stops the balance wheel, more strength is needed to turn the balance wheel to reset the safety clutch device.
- C. Release the button in the bed. So the resetting of it is OK. (See Fig.26)



5.3.3 Regulating the strength on the safety clutch device(Fig.27)

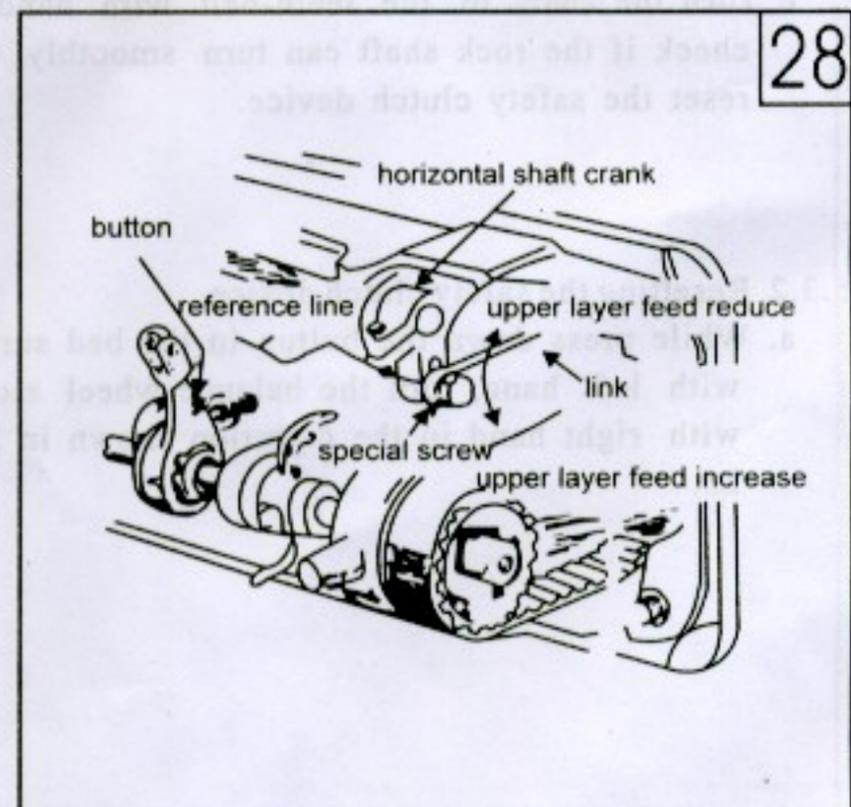
- a. When the white mark of the eccentric pin aims at the center of the rock shaft, indicates that the strength on the safety clutch device is the minimum. When the white mark points outward, the strength is properly increased.
- b. For regulating the strength of it, move the teeth - belt and loosen the set screw of the eccentric pin, and turn the eccentric pin.
- c. After regulation, please tighten the set screw.



5.4 Upper feed adjustment (Fig.28)

If the upper and lower feed are not in timing during sewing, the long hole of the horizontal feed crank should be adjusted to get the length of upper feed.

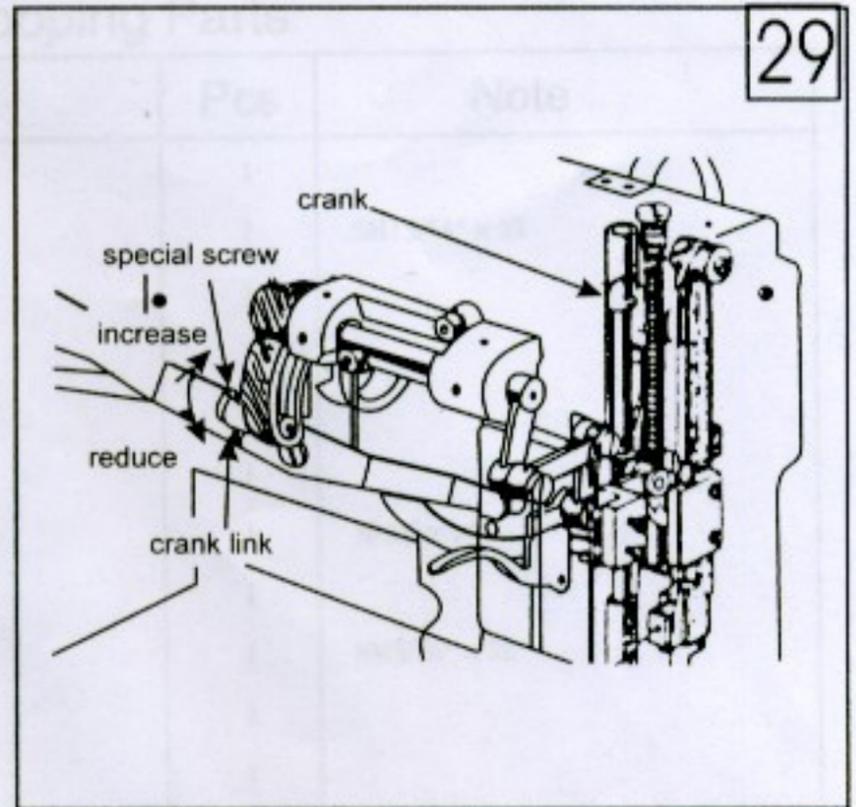
- Adjust as the following:
- a. Loosen the special screw.
 - b. Move the special screw upward to reduce the feed amount on upper layer of material.
 - c. Move the special screw downward to increase the feed amount. Theoretically when it is on the reference line of the horizontal feed crank, the upper feed amount equals to the lower feed amount.
 - d. After adjustment, tighten the special screw.



5.5 Presser foot lift volume adjustment (Fig.29)

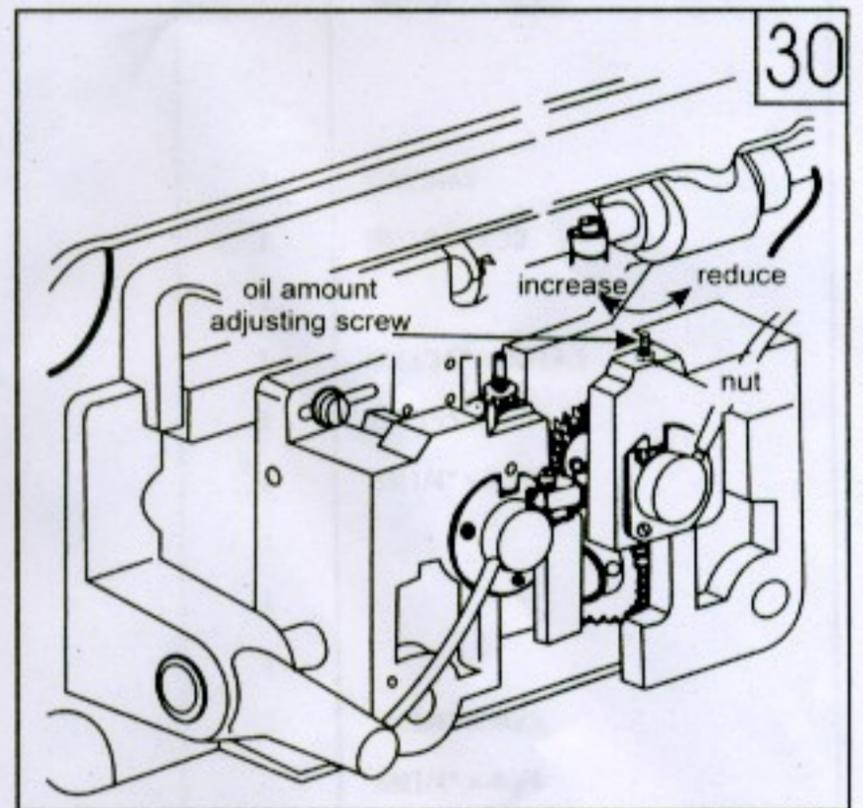
when stitch on the very elastic material or the thickness of the sewing material is changed. The adjustment should be done in the following order:

1. Loosen the special screw.
2. When the centerline distance between the special screw and the presser foot lift rear crank becomes shorter, the presser foot lift volume will become longer. On the contrary the distance becomes longer, the lift volume will become shorter.
3. After adjustment, tighten the special screw. The common presser foot lift volume can be adjusted in the range of 2-6 mm.



5.6 Hook oil amount adjustment (Fig.30)

It adopts plunger full auto lubrication system, even at very low speed, it can supply and suck oil very well. Generally only the hook oil amount can be adjusted, the other can not be adjusted. The hook oil amount can be obtained by the oil amount adjusting screw. First loosen the nut of the adjusting screw, turn the screw clockwise to increase the oil amount, on the contrary reduce the oil amount. After adjustment, tighten the nut.



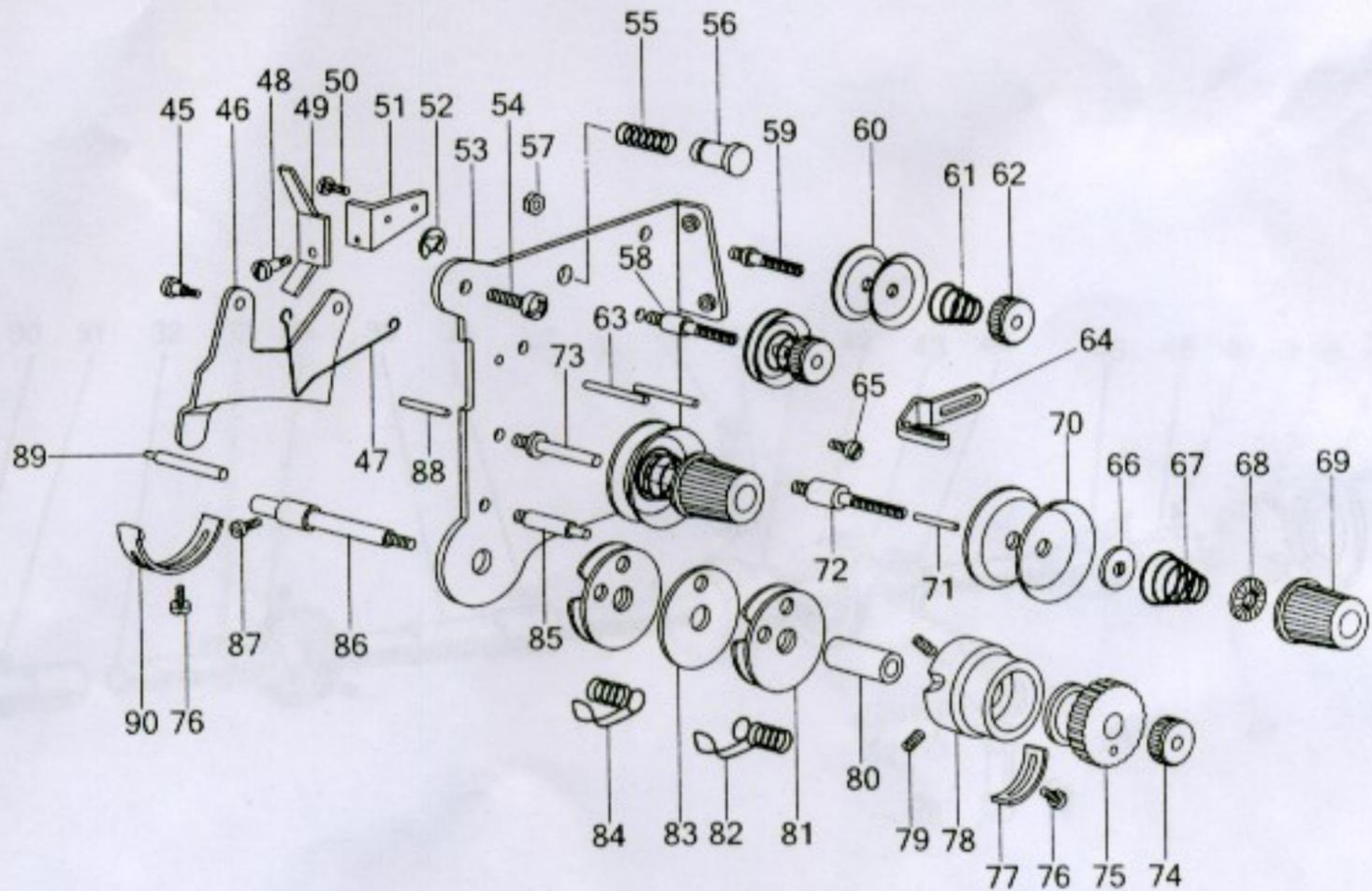
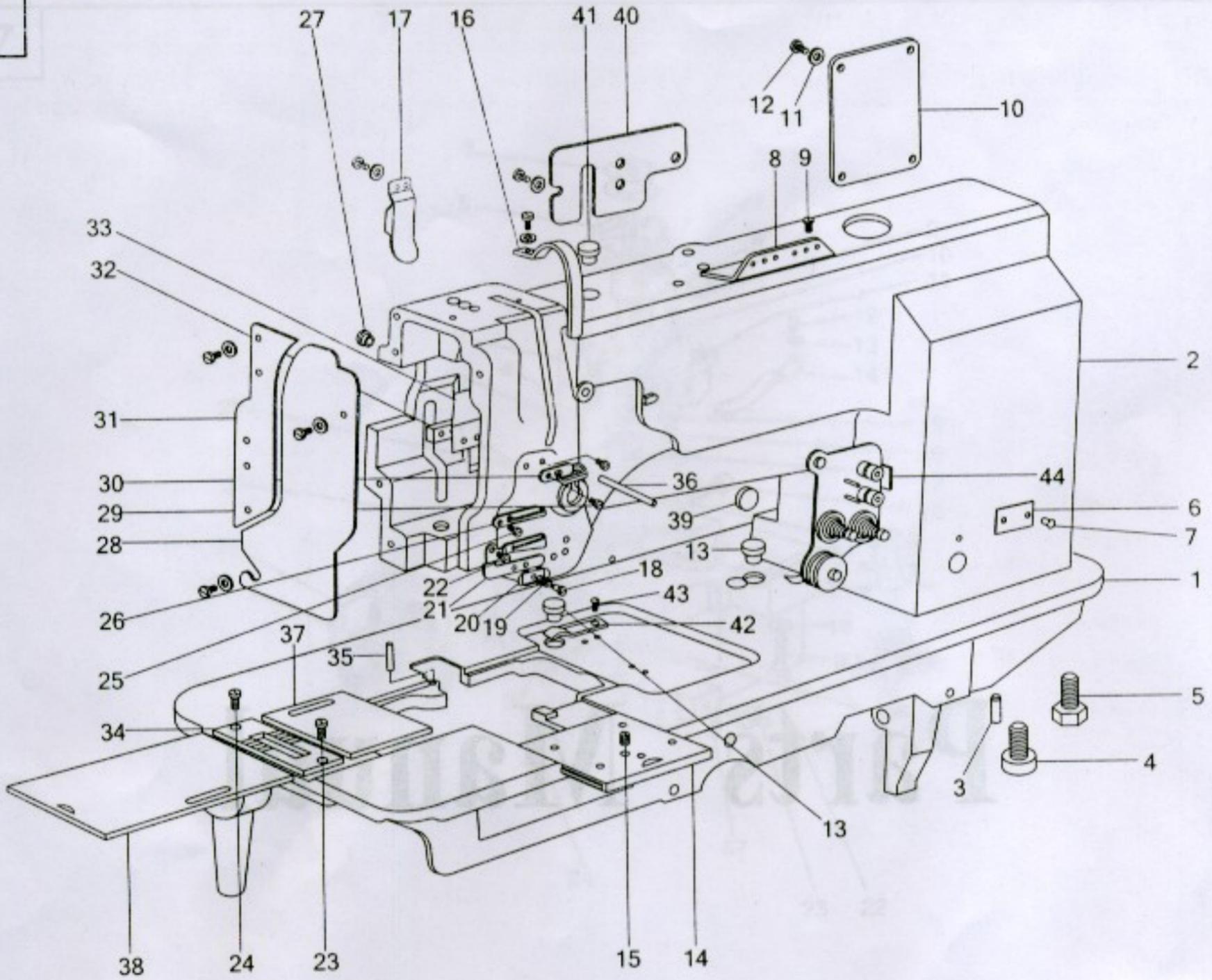
SSTC31606 Rock Shaft And Threaded Looping Parts

1

Item	Part number	Description	Qty	Note
1	1974-041	01		
2	1974-042	Spring		
3	1974-043	8 Washer		
4	1974-044	Washer		
5	1974-045	Washer		
6	1974-046	Washer		
7	1974-047	Washer		
8	1974-048	Washer		
9	1974-049	Washer		
10	1974-050	Washer		
11	1974-051	Washer		
12	1974-052	Washer		
13	1974-053	Washer		
14	1974-054	Washer		
15	1974-055	Washer		
16	1974-056	Washer		
17	1974-057	Washer		
18	1974-058	Washer		
19	1974-059	Washer		
20	1974-060	Washer		
21	1974-061	Washer		
22	1974-062	Washer		
23	1974-063	Washer		
24	1974-064	Washer		
25	1974-065	Washer		
26	1974-066	Washer		
27	1974-067	Washer		
28	1974-068	Washer		
29	1974-069	Washer		
30	1974-070	Washer		
31	1974-071	Washer		
32	1974-072	Washer		
33	1974-073	Washer		
34	1974-074	Washer		
35	1974-075	Washer		
36	1974-076	Washer		
37	1974-077	Washer		
38	1974-078	Washer		
39	1974-079	Washer		
40	1974-080	Washer		
41	1974-081	Washer		
42	1974-082	Washer		
43	1974-083	Washer		
44	1974-084	Washer		
45	1974-085	Washer		
46	1974-086	Washer		
47	1974-087	Washer		
48	1974-088	Washer		
49	1974-089	Washer		
50	1974-090	Washer		
51	1974-091	Washer		
52	1974-092	Washer		
53	1974-093	Washer		
54	1974-094	Washer		
55	1974-095	Washer		
56	1974-096	Washer		
57	1974-097	Washer		
58	1974-098	Washer		
59	1974-099	Washer		
60	1974-100	Washer		
61	1974-101	Washer		
62	1974-102	Washer		
63	1974-103	Washer		
64	1974-104	Washer		
65	1974-105	Washer		
66	1974-106	Washer		
67	1974-107	Washer		
68	1974-108	Washer		
69	1974-109	Washer		
70	1974-110	Washer		
71	1974-111	Washer		
72	1974-112	Washer		
73	1974-113	Washer		
74	1974-114	Washer		
75	1974-115	Washer		
76	1974-116	Washer		
77	1974-117	Washer		
78	1974-118	Washer		
79	1974-119	Washer		
80	1974-120	Washer		
81	1974-121	Washer		
82	1974-122	Washer		
83	1974-123	Washer		
84	1974-124	Washer		
85	1974-125	Washer		
86	1974-126	Washer		
87	1974-127	Washer		
88	1974-128	Washer		
89	1974-129	Washer		
90	1974-130	Washer		
91	1974-131	Washer		
92	1974-132	Washer		
93	1974-133	Washer		
94	1974-134	Washer		
95	1974-135	Washer		
96	1974-136	Washer		
97	1974-137	Washer		
98	1974-138	Washer		
99	1974-139	Washer		
100	1974-140	Washer		

Parts Manual

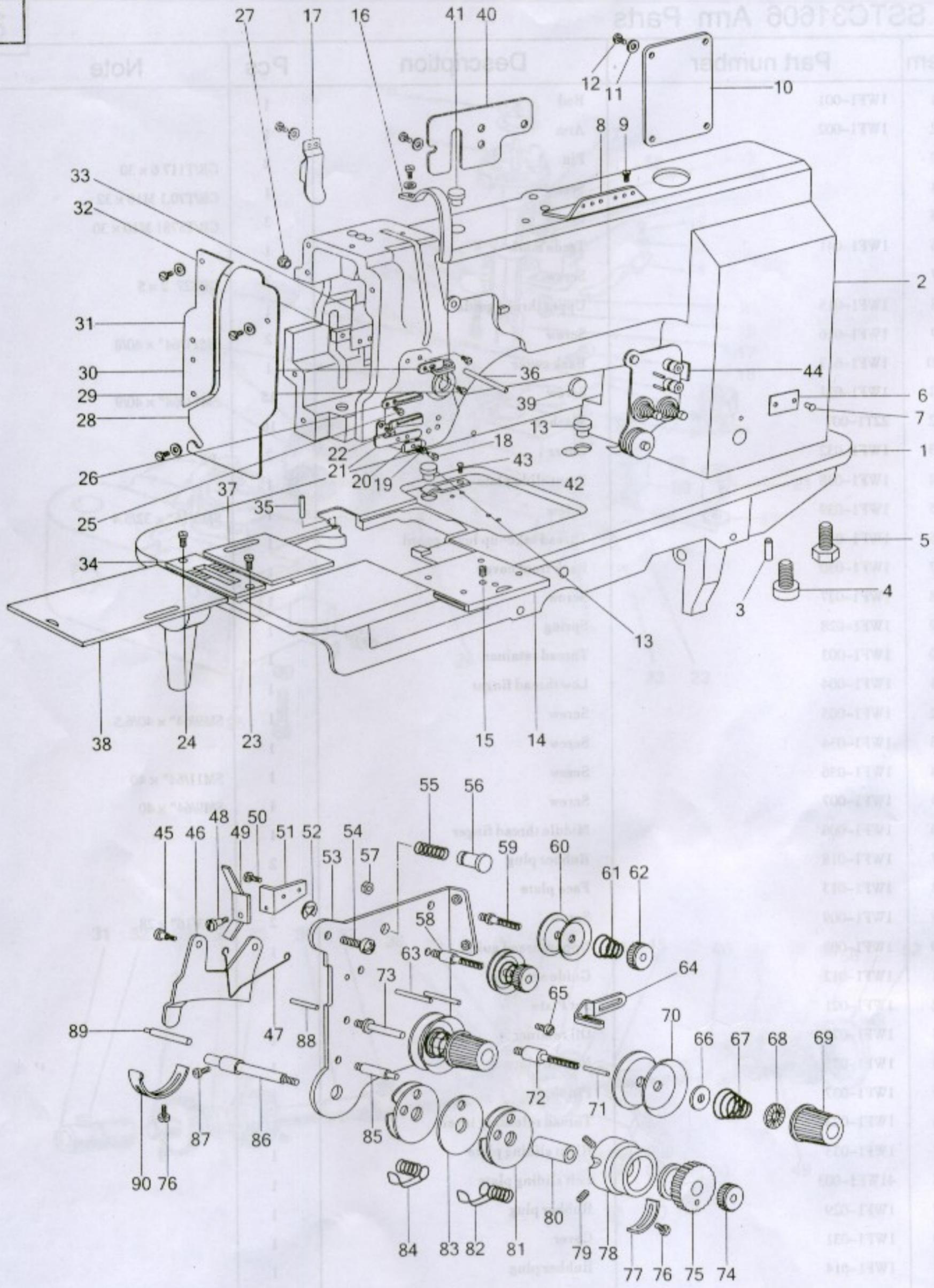
1



1. SSTC31606 Arm Parts

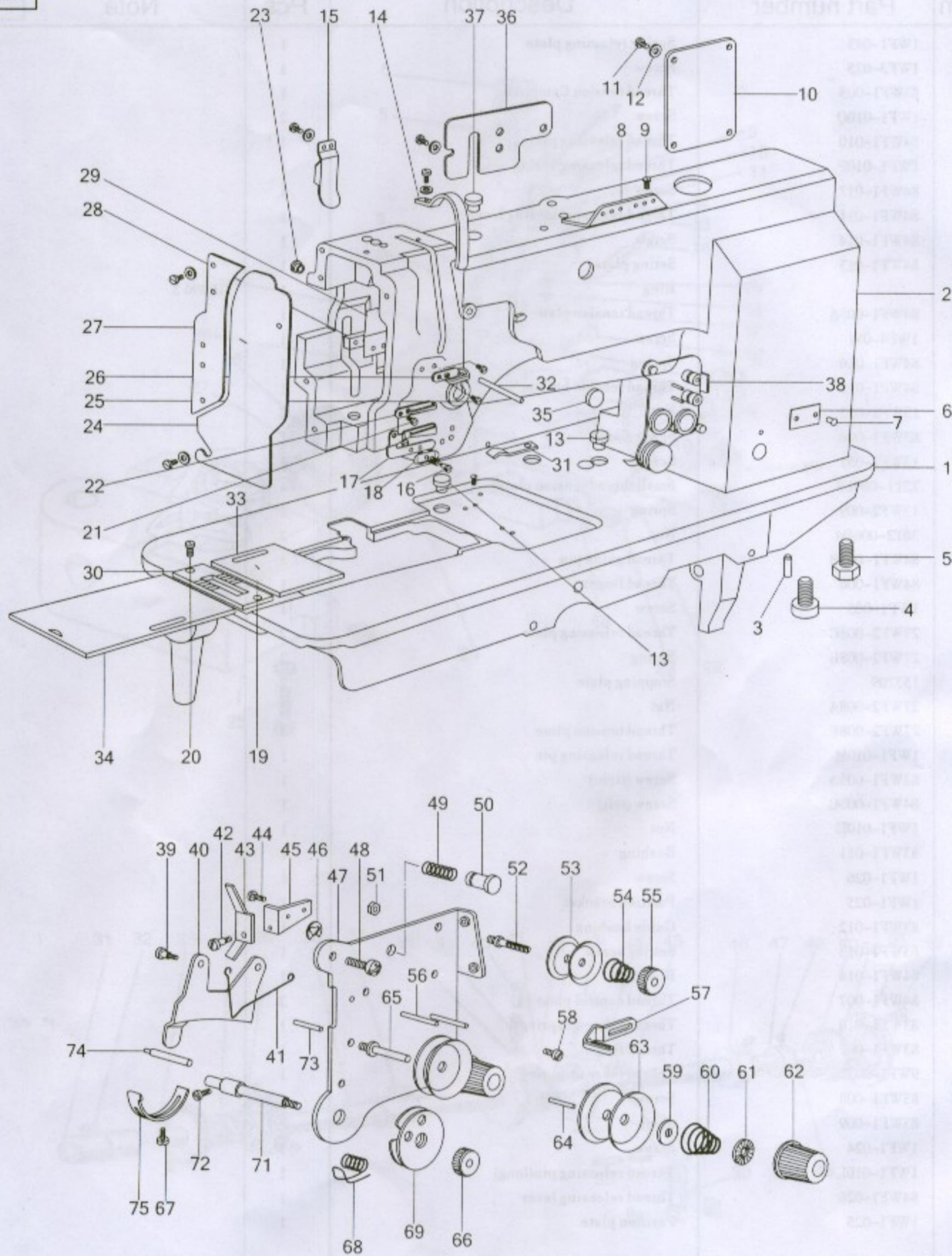
Item	Part number	Description	Pcs	Note
1	1WF1-001	Bed	1	
2	1WF1-002	Arm	1	
3		Pin	2	GB/T117 6 × 30
4		Screw	1	GB/T70.1 M10 × 32
5		Screw	3	GB/T5781 M10 × 30
6	1WF1-041	Trade mark	1	
7		Screw	2	GB827 2 × 5
8	1WF1-015	Upper thread guide	1	
9	1WF1-016	Screw	2	SM11/64" × 40/8
10	1WF1-017	Back cover	1	
11	1WF1-011	Screw	15	SM11/64" × 40/9
12	22T1-007	Washer	16	
13	1WF1-032	Cover	2	PE
14	1WF1-038	Front slide plate	1	
15	1WF1-039	Screw	1	SM3/16" × 32/5.4
16	1WF1-019	Thread take-up lever guard	1	
17	1WF1-030	Back front cover	1	
18	1WF1-027	Screw	1	
19	1WF1-028	Spring	1	
20	1WF1-003	Thread retainer	1	
21	1WF1-004	Low thread finger	1	
22	1WF1-005	Screw	1	SM9/64" × 40/6.5
23	1WF1-034	Screw	1	
24	1WF1-036	Screw	1	SM11/64" × 40
25	1WF1-007	Screw	1	SM9/64" × 40
26	1WF1-006	Middle thread finger	1	
27	1WF1-018	Rubber plug	2	
28	1WF1-013	Face plate	1	
29	1WF1-009	Screw	2	SM3/16" × 28
30	1WF1-008	Upper thread guide	1	
31	1WF1-012	Guide set plate	1	
32	1WF1-021	Set Plate	1	
33	1WF1-020	Oil retainer	1	
34	1WF1-035	Needle plate	1	
35	1WF1-037	Pin shaft	1	
36	1WF1-023	Thread releasing lever	1	
37	1WF1-033	Right sliding plate	1	
38	41WF1-003	Left sliding plate	1	
39	1WF1-029	Rubber plug	1	
40	1WF1-031	Cover	1	
41	1WF1-014	Rubber plug	1	

1



1. SSTC31606 Arm Parts

Item	Part number	Description	Pcs	Note
42	1WF1-043	Spring retaining plate	1	
43	1WF3-025	Screw	1	
44	83WF1-005	Thread tension Complete	1	
45	1WF1-010Q	Screw	2	
46	84WF1-010	Thread releasing plate	1	
47	1WF1-010P	Thread releasing spring	1	
48	84WF1-012	Screw	1	
49	84WF1-011	Thread releasing moving lever	1	
50	84WF1-014	Screw	1	
51	84WF1-013	Setting plate	1	
52		Ring	1	GB896 5
53	84WF1-005A	Thread tension plate	1	
54	1WF4-051	Screw	1	
55	84WF1-016	Spring	1	
56	84WF1-015	Thread tension button	1	
57	13WF2-052	Nut	2	
58	83WF1-006	Screw (long)	1	
59	13WF2-051	Screw	1	
60	22T1-009E3	Small thread tension plate	4	
61	13WF2-009	Spring	2	
62	36T2-006D4	Nut	2	
63	84WF1-005B	Thread guide pin	3	
64	84WF1-006	Thread finger	1	
65	1WF1-005	Screw	1	
66	27WF2-008C	Thread releasing plate	2	
67	27WF2-008B	Spring	2	
68	153209	Stopping plate	2	
69	27WF2-008A	Nut	2	
70	27WF2-008F	Thread tension plate	4	
71	1WF1-010M	Thread releasing pin	1	
72	83WF1-005A	Screw (right)	1	
73	84WF1-005C	Screw (left)	1	
74	1WF1-010H	Nut	1	
75	83WF1-011	Bushing	1	
76	1WF1-026	Screw	1	
77	1WF1-025	Position bracket	1	
78	83WF1-012	Guide bushing	1	
79	83WF1-013	Setting screw	1	
80	84WF1-014	Bushing	1	
81	84WF1-007	Thread control plate	2	
82	83WF1-010	Thread take-up spring	1	
83	83WF1-007	Thread finger	1	
84	9WF1-003B	Thread take-up spring	1	
85	83WF1-008	Screw	1	
86	83WF1-009	Shaft	1	
87	1WF1-024	Screw	1	
88	1WF1-010L	Thread releasing pin(long)	1	
89	84WF1-026	Thread releasing lever	1	
90	1WF1-025	Position plate	1	



CONTENTS

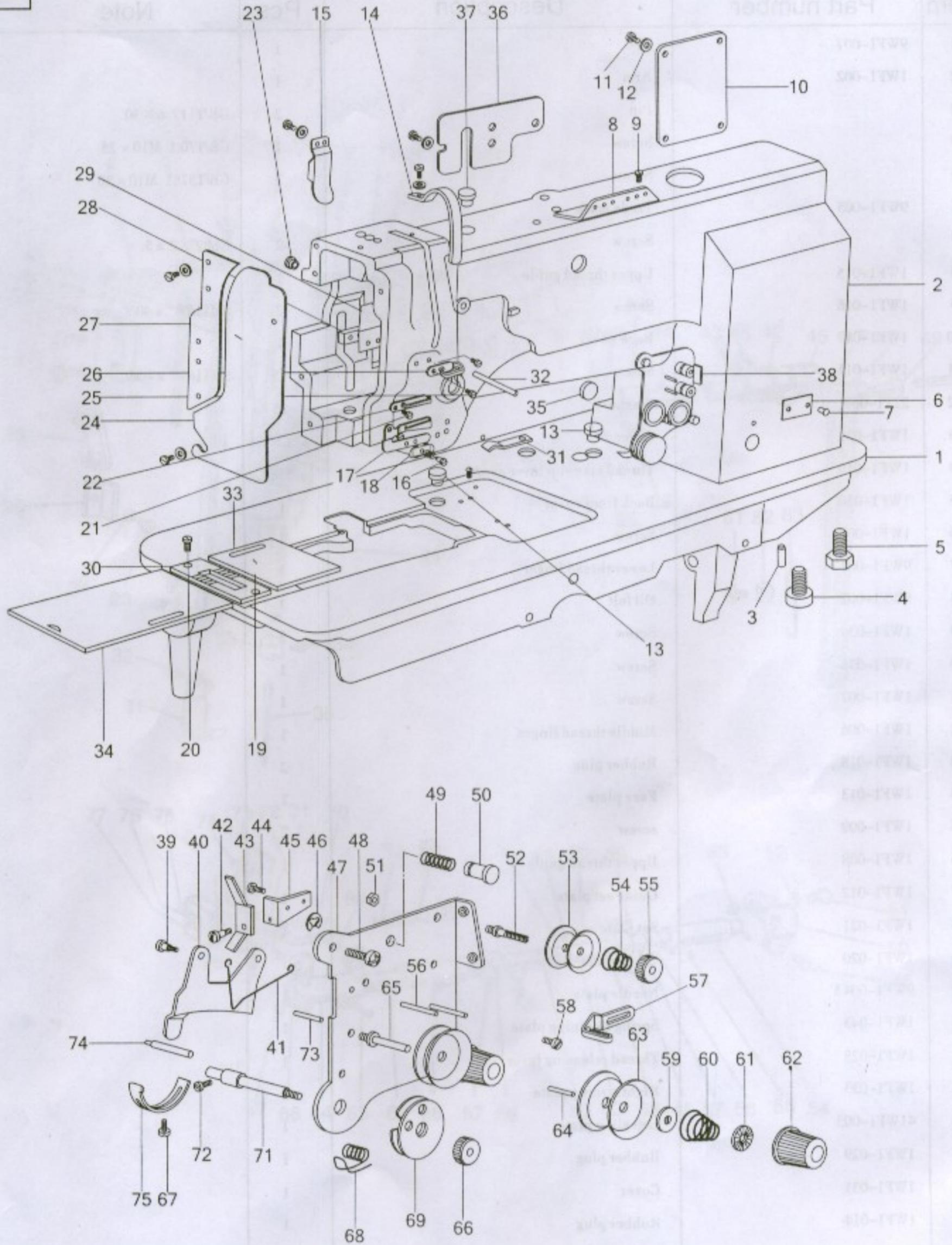
Parts manual

1. SSTC31606 Arm parts	11~14
2. SSTC31606-1 Arm parts	15~18
3. Upper shaft and presser foot parts	19~20
4. SSTC31606 Needle bar motion and Lower feed parts	21~24
5. SSTC31606-1 Needle bar motion and Lower feed parts	25~28
6. SSTC31606 Rock shaft and thread looping parts	29~32
7. SSTC31606-1 Rock shaft and thread looping parts	33~36
8. Stitch length adjusting parts	37~38
9. Knee lifter parts	39~40
10. SSTC31606 Lubrication parts	41~42
11. SSTC31606-1 Lubrication parts	43~44
12. Accessories	45~46

3.1.7 Installing the thread winder	3
3.1.8 Installing the thread spool stand	3
3.2 Preparation	3
3.2.1 Cleaning the machine	3
3.2.2 Examination	4
3.2.3 Protection before start	4
4. Operation	3
4.1 Coordination between needle thread and sewing material	3
4.2 Installing the needle	3
4.3 Winding the bobbin thread	3
4.3.1 Winding method	3
4.3.2 Winding adjustment	6
4.3.3 Threading	6
4.3.4 Stitch length and reverse sewing control	6
4.3.5 Setting the bobbin	7
4.3.6 Drawing thread from the bobbin	7
5. Machine adjustment	7
5.1 Thread tension adjustment	7
5.2 Adjusting the pressure of presser foot	8
5.3 Use and adjustment of the safety clutch device	8
5.3.1 The function of the safety clutch device	8
5.3.2 Resetting the safety clutch device	8
5.3.3 Regulating the strength on the safety clutch device	9
5.4 Upper feed adjustment	9
5.5 Presser foot lift volume adjustment	10
5.6 Floor oil amount adjustment	10

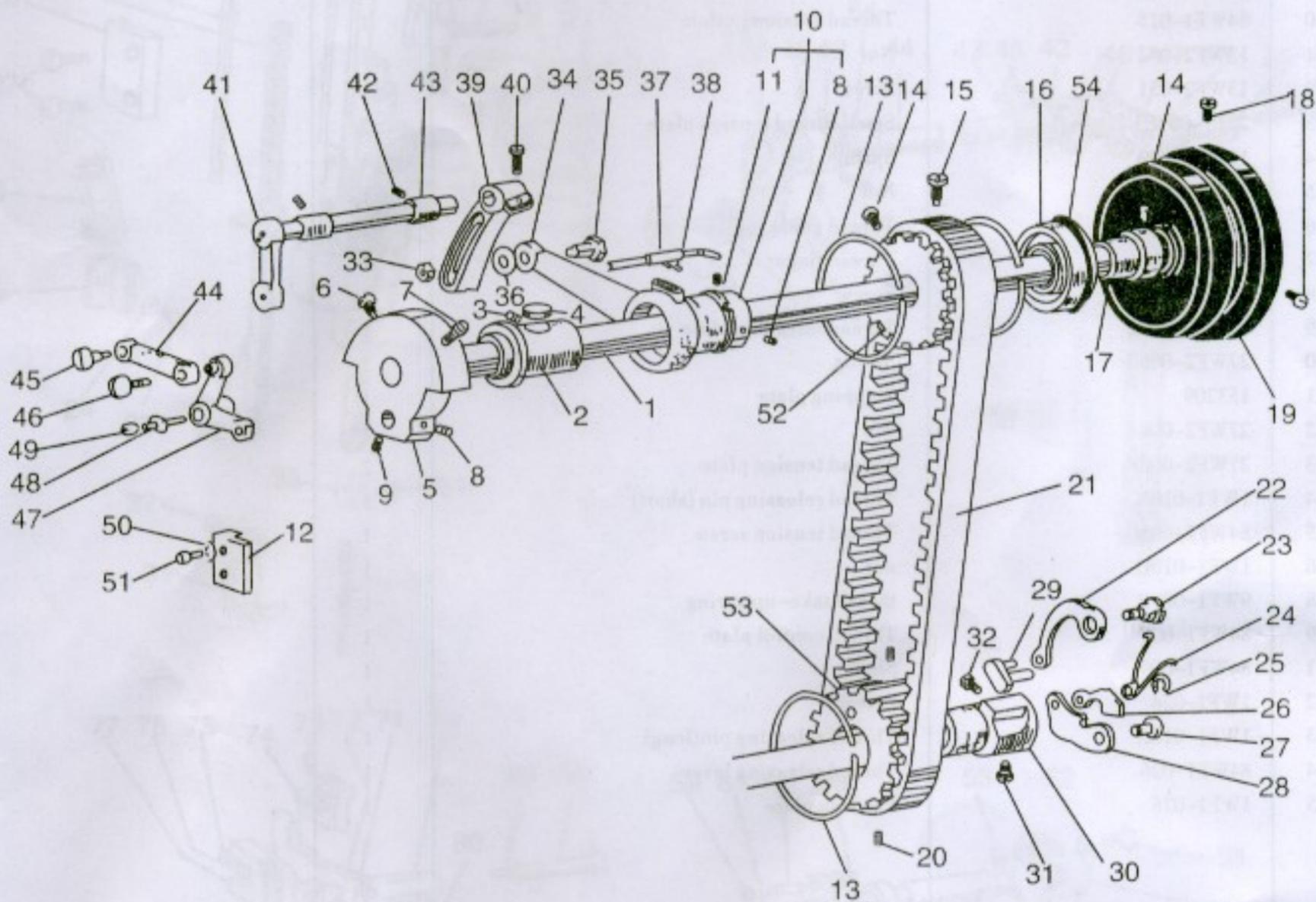
2. SSTC31606-1 Arm Parts

Item	Part number	Description	Pcs	Note
1	9WF1-007	Bed	1	
2	1WF1-002	Arm	1	
3		Pin	2	GB/T117 6×30
4		Screw	1	GB/T70.1 M10×25
5		Screw	3	GB/T5781 M10×30
6	9WF1-005	Trade mark	1	
7		Screw	2	Gb827 2×5
8	1WF1-015	Upper thread guide	1	
9	1WF1-016	Screw	2	SM11/64"×40/8
10	1WF1-017	Back cover	1	
11	1WF1-011	Screw	15	SM11/64"×40/9
12	22T1-007	Washer	15	
13	1WF1-032	Cover	2	PE
14	1WF1-019	Thread take-up lever guard	1	
15	1WF1-030	Back front cover	1	
16	1WF1-005	Screw	1	
17	9WF1-001	Lower thread finger	1	
18	9WF1-002	Oil felt	1	
19	1WF1-034	Screw	2	
20	1WF1-036	Screw	1	
21	1WF1-007	Screw	1	
22	1WF1-006	Middle thread finger	1	
23	1WF1-018	Rubber plug	2	
24	1WF1-013	Face plate	1	
25	1WF1-009	screw	2	
26	1WF1-008	Upper thread guide	1	
27	1WF1-012	Guide set plate	1	
28	1WF1-021	Set plate	1	
29	1WF1-020	Oil retainer	1	
30	9WF1-004A	Needle plate	1	
31	1WF1-043	Spring retaining plate	1	
32	1WF1-023	Thread releasing lever	1	
33	1WF1-033	Right sliding plate	1	
34	41WF1-003	Left sling plate	1	
35	1WF1-029	Rubber plug	1	
36	1WF1-031	Cover	1	
37	1WF1-014	Rubber plug	1	



2. SSTC31606-1 Arm Parts

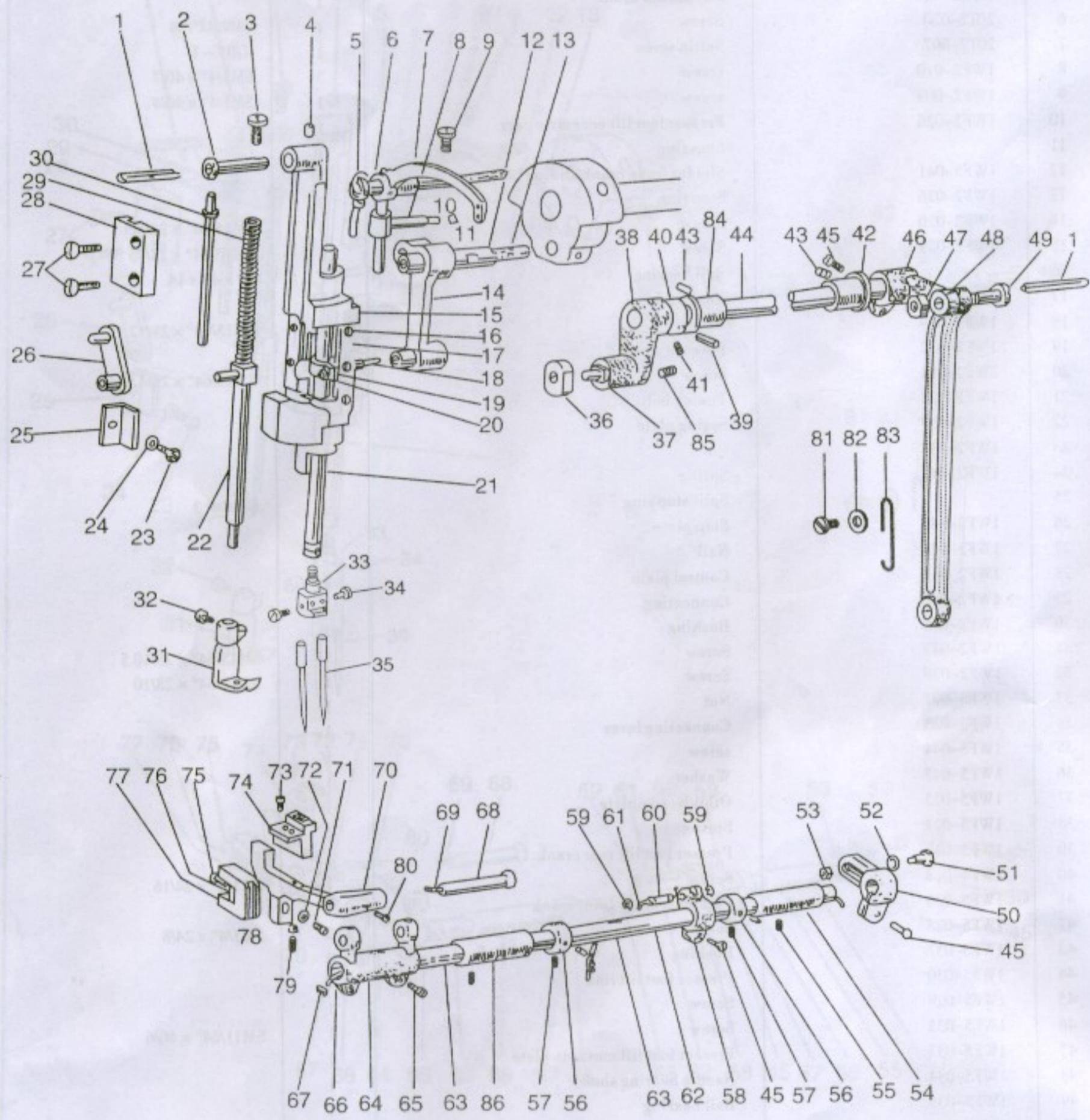
Item	Part number	Description	Pcs	Note
38	84WF1-027	Thread tension complete	1	
39	1WF1-010Q	Screw	2	
40	84WF1-010	Thread releasing plate	1	
41	1WF1-010P	Thread releasing spring	1	
42	84WF1-012	Screw	1	
43	84WF1-011	Thread releasing moving lever	1	
44	84WF1-014	Screw	1	
45	84WF1-013	Setting plate	1	
46		Ring	1	GB896 5
47	84WF1-005A	Thread tension plate	1	
48	1WF4-051	Screw	1	
49	84WF1-016	Spring	1	
50	84WF1-015	Thread tension button	1	
51	13WF2-052	Nut	1	
52	13WF2-051	Screw	1	
53	22T1-009E3	Small thread tension plate	2	
54	13WF2-009	Spring	1	
55	36T2-006D4	Nut	1	
56	84WF1-005B	Thread guide pin	2	
57	84WF1-006	Thread finger	1	
58	1WF1-005	Screw	1	
59	27WF2-008C	Thread releasing plate	1	
60	27WF2-008B	Spring	1	
61	153209	Stopping plate	1	
62	27WF2-008A	Nut	1	
63	27WF2-008F	Thread tension plate	2	
64	1WF1-010M	Thread releasing pin (short)	1	
65	84WF1-005C	Thread tension screw	1	
66	1WF1-010H	nut	1	
68	9WF1-003B	thread take-up spring	1	
69	84WF1-007	Thread control plate	1	
71	84WF1-009	Shaft	1	
72	1WF1-024	Screw	1	
73	1WF1-010L	Thread releasing pin(long)	1	
74	84WF1-026	Thread releasing lever	1	
75	1WF1-025	Position plate	1	



3. Upper Shaft Presser Foot Parts

Item	Part number	Description	Pcs	Note
1	1WF2-025	Upper shaft	1	
2	1WF2-022	Front bushing	1	
3	1WF2-023	Screw	1	SM1/4" x 24/13
4	1WF2-024	Oil felt	1	
5	1WF2-021	Needle bar crank	1	
6	20T2-020	Screw	1	SM9/32"/28
7	20T2-007	Settin screw	1	GB7 - 1
8	1WF2-010	screw	3	SM1/4" x 40/7
9	1WF2-009	screw	1	SM1/4" x 40/4
10	1WF5-026	Presser foot lift eccentric cam	1	
11		Stop ring	1	GB894.1 5
12	1WF5-041	Slot for frong crank sliding block	1	
13	1WF2-026	Stop ring	3	
14	1WF2-030	Screw	3	SM15/64" x 28/8.5
15	1WF2-029	Screw	1	SM15/64" x 28/15
16		Ball bearing	1	20 x 47 x 14
17	1WF2-031	Rear bushing	1	
18	1WF2-019	Screw	2	SM15/64" x 28/12
19	1WF2-032	Balance wheel	1	
20	1WF2-044	Screw	2	SM15/64" x 28/4.5
21	1WF2-028	Timing belt	1	
22	1WF2-039	Spring plate	1	
23	1WF2-037	Pin	1	
24	1WF2-041	Spring	1	
25		Split stop ring	1	GB896 3
26	1WF2-040	Stop plate	1	
27	1WF2-048	Nail	1	
28	1WF2-045	Control plate	1	
29	1WF2-042	Connecting	1	
30	1WF2-046	Bushing	1	
31	1WF2-047	Screw	1	SM15/64" x 28/10.5
32	1WF2-038	Screw	1	SM15/64" x 28/10
33	1WF5-001	Nut	1	
34	1WF5-025	Connecting lever	1	
35	1WF5-044	screw	1	
36	1WF5-047	Washer	1	
37	1WF5-023	Oil tube complete	1	
38	1WF5-024	Spring	1	
39	1WF5-045	Presser foot lift rear crank	1	
40	1WF4-018	Screw	1	SM1/4" x 24/16
41	1WF5-038	Presser foot lift front crank	1	
42	1WF5-028	Screw	2	SM1/4" x 24/8
43	1WF5-037	Bushing	2	
44	1WF5-030	Presser foot lift link	1	
45	1WF5-029	Screw	1	
46	1WF5-032	Screw	1	SM11/64" x 40/6
47	1WF5-033	Presser foot lift movable plate	1	
48	1WF5-034	Needle bearing shaft	1	
49	1WF5-035	Ball bearing	1	
50	22T1-007	Washer	2	
51	1WF5-042	Screw	2	SM11/64 x 40/10
52	1WF2-027	Upper timing wheel	1	
53	1WF2-043	Lower timing wheel	1	
54	1WF2-080	Ring	1	

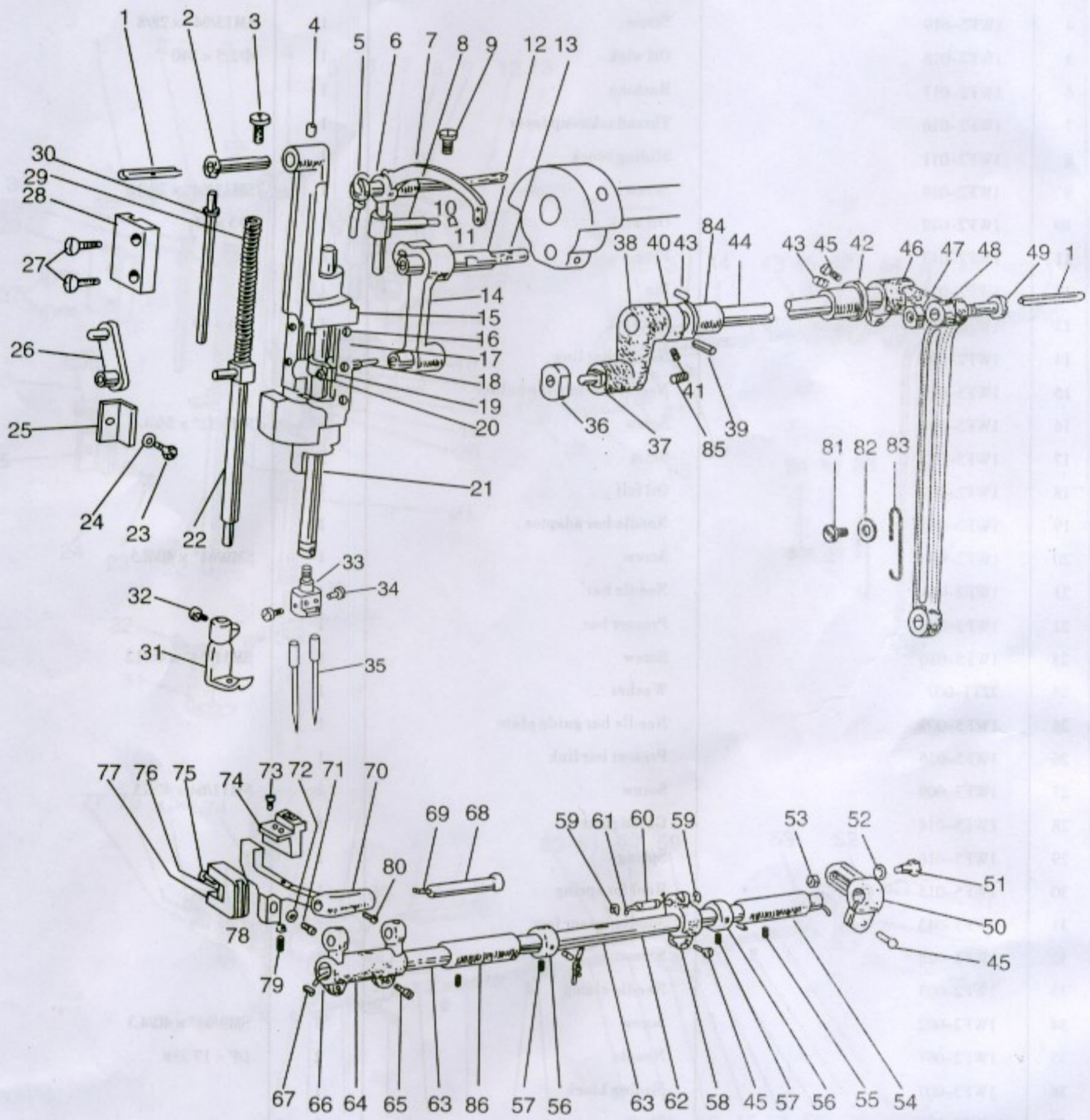
Item	Part number	Description	Pcs	Note
------	-------------	-------------	-----	------



4. SSTC31606 Needle Bar And Lower Feed Parts

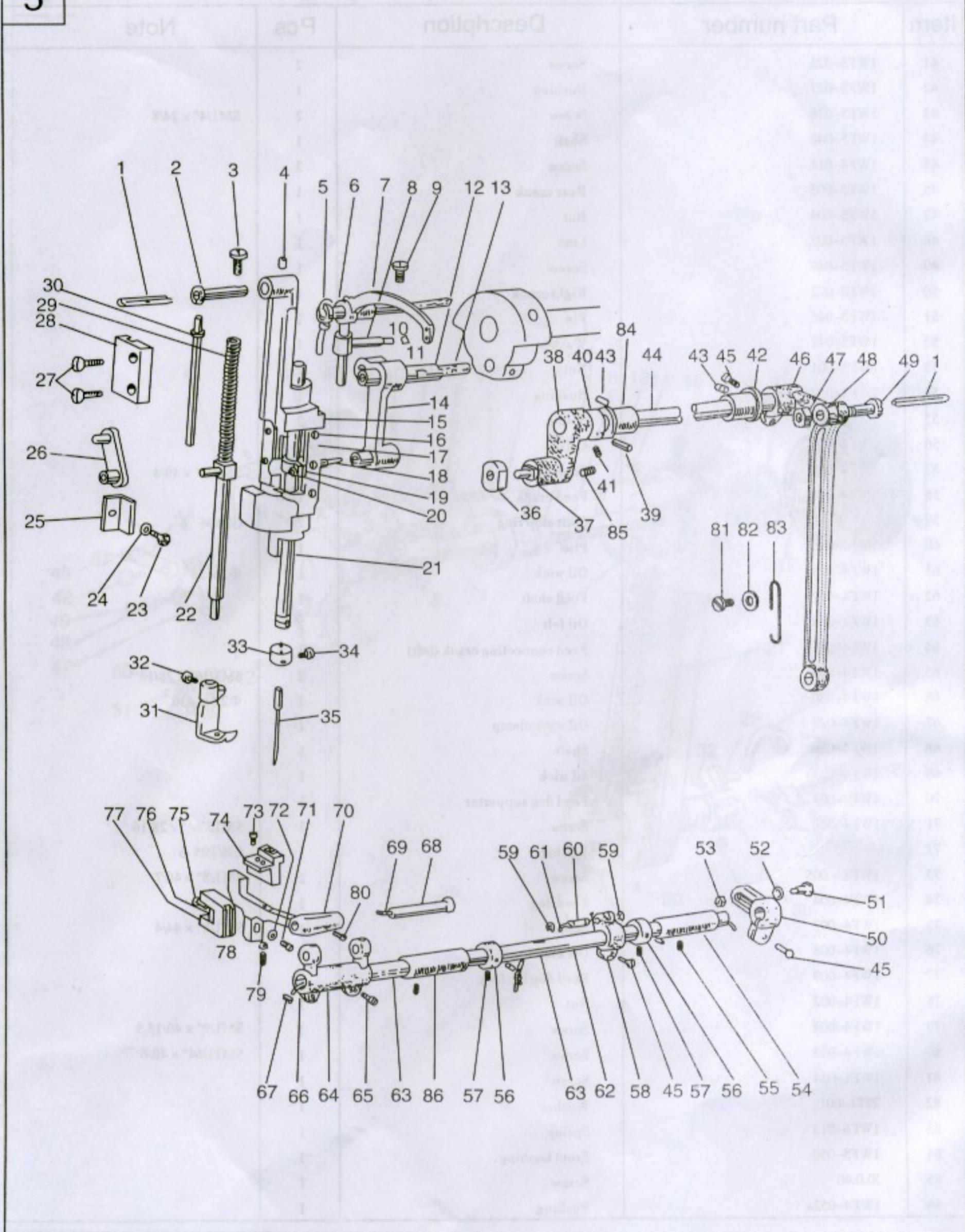
Item	Part number	Description	Pcs	Note
1	1WF5-017	Oil wick	2	Φ2.5 × 80
2	1WF5-018	Shaft	1	
3	1WF5-031	Screw	1	SM5/16" × 28/10
4	1WF5-019	Screw	1	SM15/64" × 28/8
5	1WF2-018	Oil wick	1	Φ2.5 × 240
6	1WF2-017	Bushing	1	
7	1WF2-016	Thread take-up lever	1	
8	1WF2-011	Sliding block	1	
9	1WF2-019	Screw	1	SM15/64" × 28/12
10	1WF2-012	Oil wick	1	Φ3 × 25
11	1WF2-013	Plug	1	
12	1WF2-014	Pin	1	
13	1WF2-015	Oil wick	1	Φ3 × 80
14	1WF2-008	Needle bar link	1	
15	1WF5-011	Needle bar moving holder	1	
16	1WF5-013	Screw	6	SM3/32" × 56/4.6
17	1WF5-012	Shim	2	
18	1WF2-007	Oil felt	1	
19	1WF2-005	Needle bar adaptor	1	
20	1WF2-006	Screw	1	SM9/64" × 40/8.5
21	1WF2-004	Needle bar	1	
22	1WF5-006	Presser bar	1	
23	1WF5-010	Screw	1	SM11/64" × 40/12
24	22T1-007	Washer	1	
25	1WF5-009	Needle bar guide plate	1	
26	1WF5-036	Presser bar link	1	
27	1WF3-009	Screw	2	SM11/64 × 40/15
28	1WF5-014	Guide plate	1	
29	1WF5-016	Spring	1	
30	1WF5-015	Reel for spring	1	
31	1WF5-043	Small presser foot	1	
32	1WF3-025	Screw	1	
33	1WF2-003	Needle clamp	1	
34	1WF2-002	Screw	2	SM9/64" × 40/4.3
35	1WF2-001	Needle	2	DP × 17 23#
36	1WF5-007	Sliding block	1	
37	1WF5-008	Shaft	1	
38	1WF5-020	Left crank	1	
39		Pin	1	GB/T117 4 × 24
40	1WF5-021	Washer	1	

Item	Part number	Description	Pcs	Note
------	-------------	-------------	-----	------



4. SSTC31606 Needle Bar And Lower Feed Parts

Item	Part number	Description	Pcs	Note
41	1WF5-022	Screw	2	
42	1WF5-027	Bushing	1	
43	1WF5-028	Screw	2	SM1/4" x 24/8
44	1WF5-048	Shaft	1	
45	1WF4-018	Screw	3	
46	1WF5-005	Rear crank	1	
47	1WF5-004	Nut	1	
48	1WF5-003	Link	1	
49	1WF5-049	Screw	1	
50	1WF5-002	Right crank	1	
51	1WF5-046	Pin	1	
52	1WF5-047	Washer	1	
53	1WF5-001	Nut	1	
54	1WF4-052	Bushing	1	
55	1WF2-023	Screw	2	
56	1WF4-054	Collar	2	
57	1WF2-009	Screw	4	SM1/4" x 40/4
58	1WF4-017	Feed crank	1	
59		Split stop ring	2	GB896 6
60	1WF4-019	Pin	1	
61	1WF4-020	Oil wick	1	Φ3 x 55
62	1WF4-037	Feed shaft	1	
63	1WF4-038	Oil felt	2	
64	1WF4-035	Feed connecting crank (left)	1	
65	1WF4-034	Screw	2	SM3/16" x 28/12
66	1WF4-030	Oil wick	1	Φ2.5 x 430
67	1WF4-029	Oil wick clamp	1	
68	1WF4-036	Shaft	1	
69	1WF4-031	oil wick	1	
70	1WF4-001	Feed dog supporter	1	
71	1WF4-032	Screw	1	SM15/64" x 28/16
72		Washer	1	GB/T95 6
73	1WF4 - 005	Screw	2	SM1/8" x 40/7
74	1WF4-004	Feed dog	1	
75	1WF4-007	Screw	1	SM1/8" x 44/4
76	1WF4-008	Oil wick	1	
77	1WF4-009	Feed dog lift fork	1	
78	1WF4-002	Nut	1	
79	1WF4-003	Screw	1	SM1/8" x 40/13.5
80	1WF4-033	Screw	1	SM11/64" x 40/6
81	1WF1-024	Screw	1	
82	22T1-001	Washer	1	
83	1WF6-013	Spring	1	
84	1WF5-050	Front bushing	1	
85	J0.0.40	Screw	1	
86	1WF4-052a	Bushing	1	



Operation Instruction

1. Brief introduction

Both the models adopt straight twin-needle and twin-needle and twin-needle with synchronous for thread looping, sliding lever for thread take-up to form two-line of lockstitch seam. The upper shaft and lower shaft is connected by ball bearing and driven by tooth-type synchronous belt, plunge oil pump lubrication system. They adopt the compound feed mechanics of feed dog, needle bar and presser foot, even if for long stitch length and long material. They can deal with them freely.

They are widely used in factories of suitcase, tent, cushion, leather goods, apparatus, etc.

The difference between the two models:

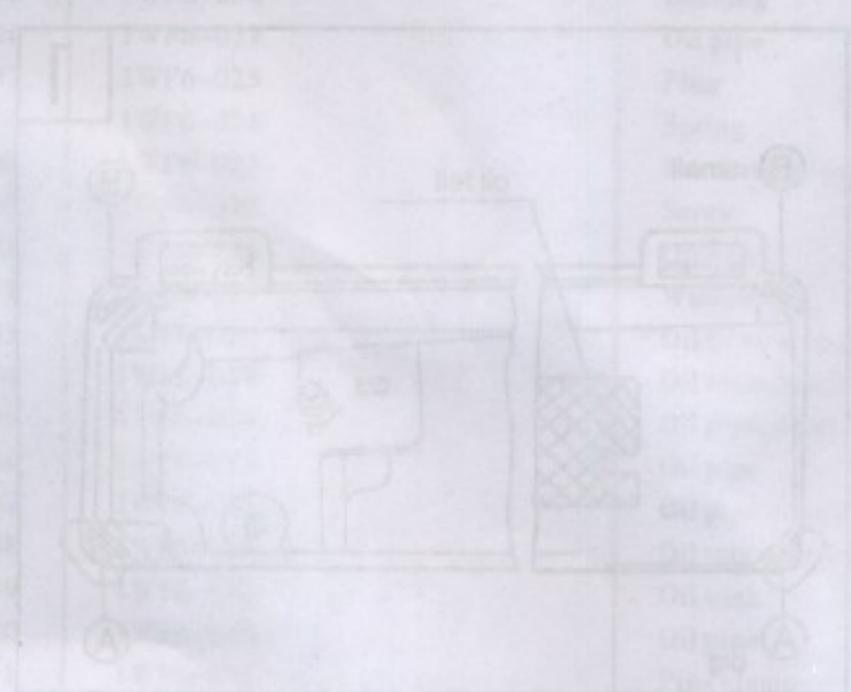
STC31606 adopts twin-needle two large horizontal hooks with auto lubrication. With the same it can form ten different needle gauge.

STC31606-1 adopts single needle and form single line double lockstitch form.

2. Main Technical Specification

1	Application:	60x1400
2	Max. sewing speed:	105x1.5
3	Max. stitch length:	9 mm
4	Needle bar stroke:	36 mm
5	Presser foot:	medium and heavy duty materials
6	Hook:	2000 rpm
7	Needle:	9 mm
8	Lubrication:	36 mm
9	Needle gauge: (Twin-needle)	0.4, 3.2, 4, 4.8, 6, 8, 9.5, 12.7, 16, 19, 22.5, 25.4, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100
10	Motor power:	0.37 kw (detach motor)

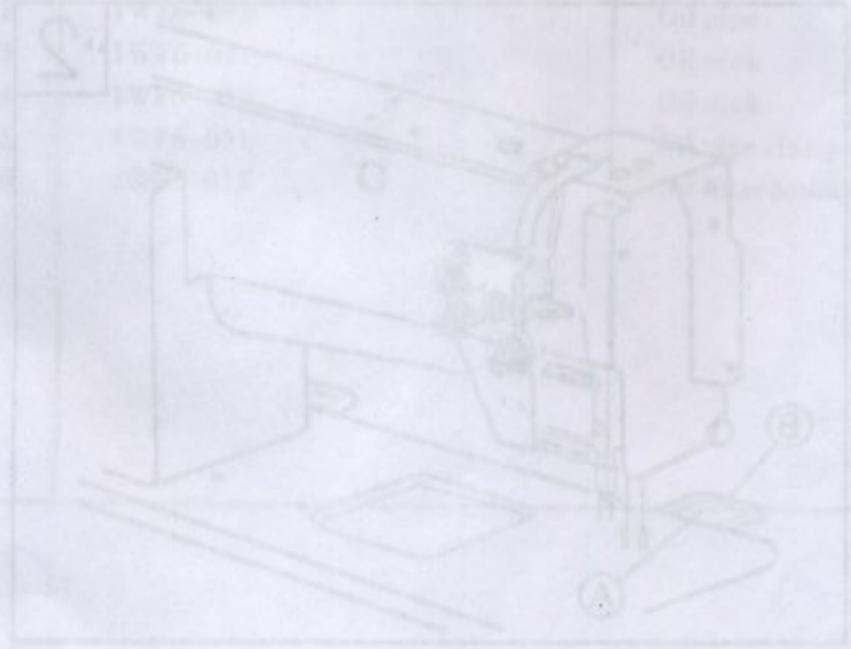
3. Installation and preparation



3.1 Installation

3.1.1 Location of the machine

To ensure a smooth running, the machine should be located on rigid and flat floor. The insert of rubber mat between machine stand and floor is recommended for further reducing the running noise and vibration.



3.1.2 Oil Reservoir Installation (Fig. 1)

Put the oil reservoir into the table cutout and place the four cushions on the four corners of the cutout, and place oil into the oil reservoir.

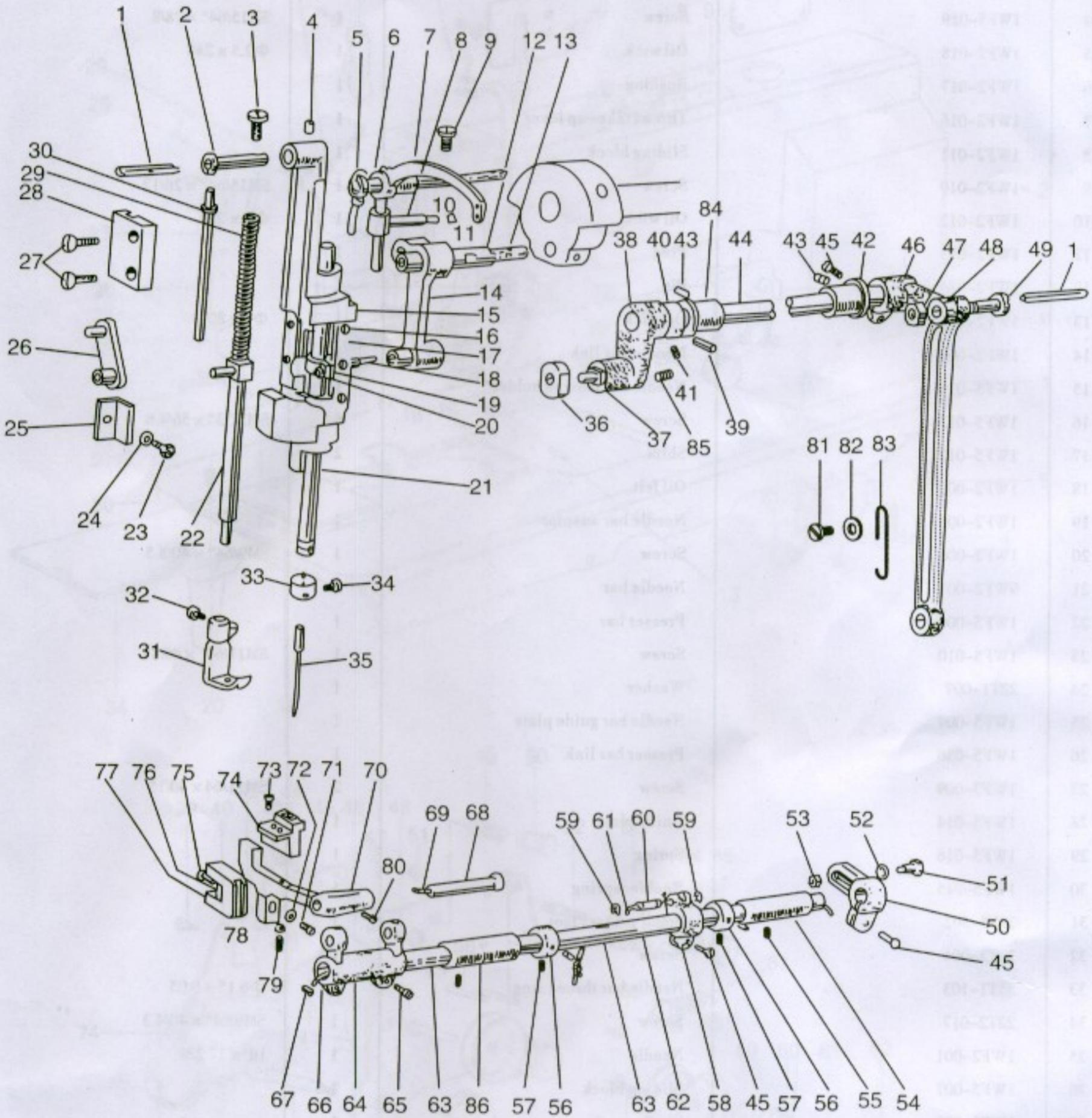
3.1.3 Mounting machine head (Fig. 2)

Make the hinge (A) of machine head engaged with hinge socket (B) on the table, then turn the machine head freely till it is seated on the frame of table cutout.

5. SSTC31606-1 Needle Bar And Lower Feed Parts

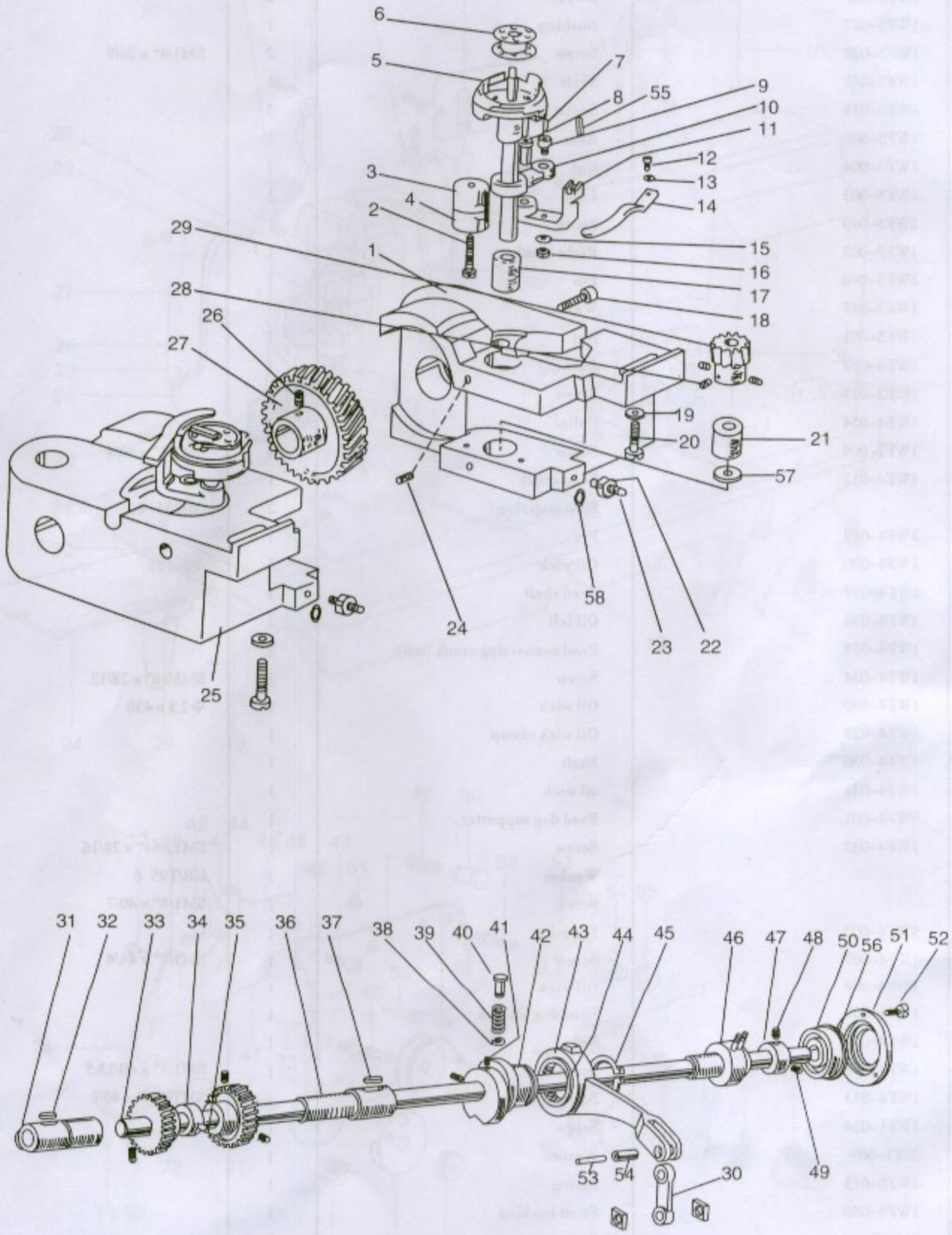
Item	Part number	Description	Pcs	Note
1	1WF5-017	Oil wick	2	Φ2.5 × 80
2	1WF5-018	Shaft	1	
3	1WF5-031	Screw	1	SM5/16" × 28/10
4	1WF5-019	Screw	1	SM15/64" × 28/8
5	1WF2-018	Oil wick	1	Φ2.5 × 240
6	1WF2-017	Bushing	1	
7	1WF2-016	Thread take-up lever	1	
8	1WF2-011	Sliding block	1	
9	1WF2-019	Screw	1	SM15/64" × 28/12
10	1WF2-012	Oil wick	1	Φ3 × 25
11	1WF2-013	Plug	1	
12	1WF2-014	Pin	1	
13	1WF2-015	Oil wick	1	Φ3 × 80
14	1WF2-008	Needle bar link	1	
15	1WF5-011	Needle bar moving holder	1	
16	1WF5-013	Screw	6	SM3/32" × 56/4.6
17	1WF5-012	Shim	2	
18	1WF2-007	Oil felt	1	
19	1WF2-005	Needle bar adaptor	1	
20	1WF2-006	Screw	1	SM9/64" × 40/8.5
21	9WF2-001	Needle bar	1	
22	1WF5-006	Presser bar	1	
23	1WF5-010	Screw	1	SM11/64" × 40/12
24	22T1-007	Washer	1	
25	1WF5-009	Needle bar guide plate	1	
26	1WF5-036	Presser bar link	1	
27	1WF3-009	Screw	2	SM11/64 × 40/15
28	1WF5-014	Guide plate	1	
29	1WF5-016	Spring	1	
30	1WF5-015	Reel for spring	1	
31	35T5-502	Small presser foot	1	
32	22T2-004	Screw	1	
33	35T1-103	Needle bar thread ring	1	Φ6.15 ± 0.05
34	22T2-017	Screw	1	SM9/64" × 40/4.3
35	1WF2-001	Needle	1	DP × 17 23#
36	1WF5-007	Sliding block	1	
37	1WF5-008	Shaft	1	
38	1WF5-020	Left crank	1	
39		Pin	1	GB/T117 4×24
40	1WF5-021	Washer	1	

Item	Part number	Description	Pcs	Note
------	-------------	-------------	-----	------



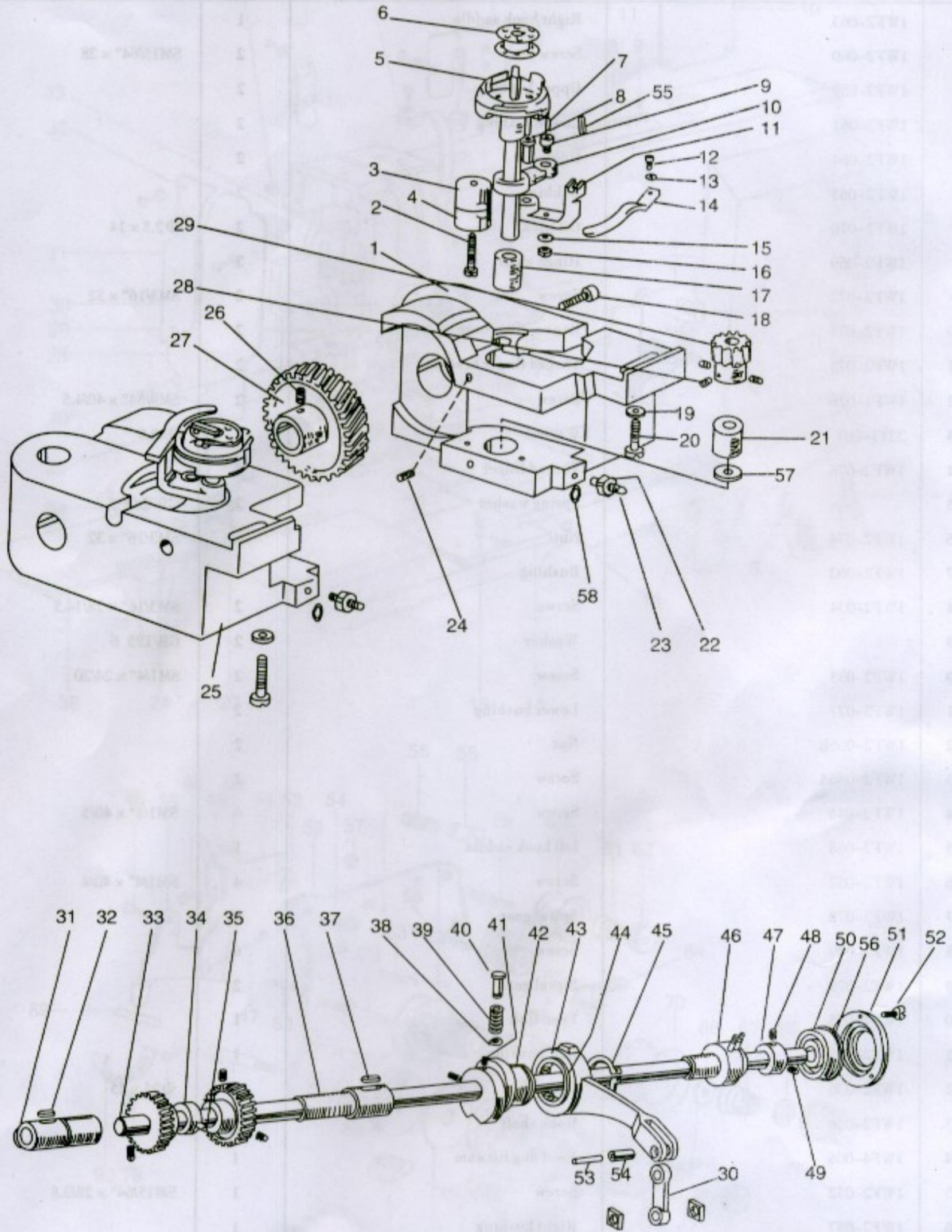
5. SSTC31606-1 Needle Bar And Lower Feed Parts

Item	Part number	Description	Pcs	Note
41	1WF5-022	Screw	2	
42	1WF5-027	Bushing	1	
43	1WF5-028	Screw	2	SM1/4" x 24/8
44	1WF5-048	Shaft	1	
45	1WF4-018	Screw	3	
46	1WF5-005	Rear crank	1	
47	1WF5-004	Nut	1	
48	1WF5-003	Link	1	
49	1WF5-049	Screw	1	
50	1WF5-002	Right crank	1	
51	1WF5-046	Pin	1	
52	1WF5-047	Washer	1	
53	1WF5-001	Nut	1	
54	1WF4-052	Bushing	1	
55	1WF2-023	Screw	2	
56	1WF4-054	Collar	2	
57	1WF2-009	Screw	4	SM1/4" x 40/4
58	1WF4-017	Feed crank	1	
59		Split stop ring	2	GB896 6
60	1WF4-019	Pin	1	
61	1WF4-020	Oil wick	1	Φ3 x 55
62	1WF4-037	Feed shaft	1	
63	1WF4-038	Oil felt	2	
64	1WF4-035	Feed connecting crank (left)	1	
65	1WF4-034	Screw	2	SM3/16" x 28/12
66	1WF4-030	Oil wick	1	Φ2.5 x 430
67	1WF4-029	Oil wick clamp	1	
68	1WF4-036	Shaft	1	
69	1WF4-031	oil wick	1	
70	9WF4-001	Feed dog supporter	1	
71	1WF4-032	Screw	1	SM15/64" x 28/16
72		Washer	1	GB/T95 6
73		Screw	2	SM1/8" x 40/7
74	9WF4-002	Feed dog	1	
75	1WF4-007	Screw	1	SM1/8" x 44/4
76	1WF4-008	Oil wick	1	
77	1WF4-009	Feed dog lift fork	1	
78	1WF4-002	Nut	1	
79	1WF4-003	Screw	1	SM1/8" x 40/13.5
80	1WF4-033	Screw	1	SM11/64" x 40/6
81	1WF1-024	Screw	1	
82	22T1-007	Washer	1	
83	1WF6-013	Spring	1	
84	1WF5-050	Front bushing	1	
85	J0.0.40	Screw	1	
86	1WF4-052a	Bushing	1	



6. SSTC31606 Rock Shaft And Thread Looping Parts

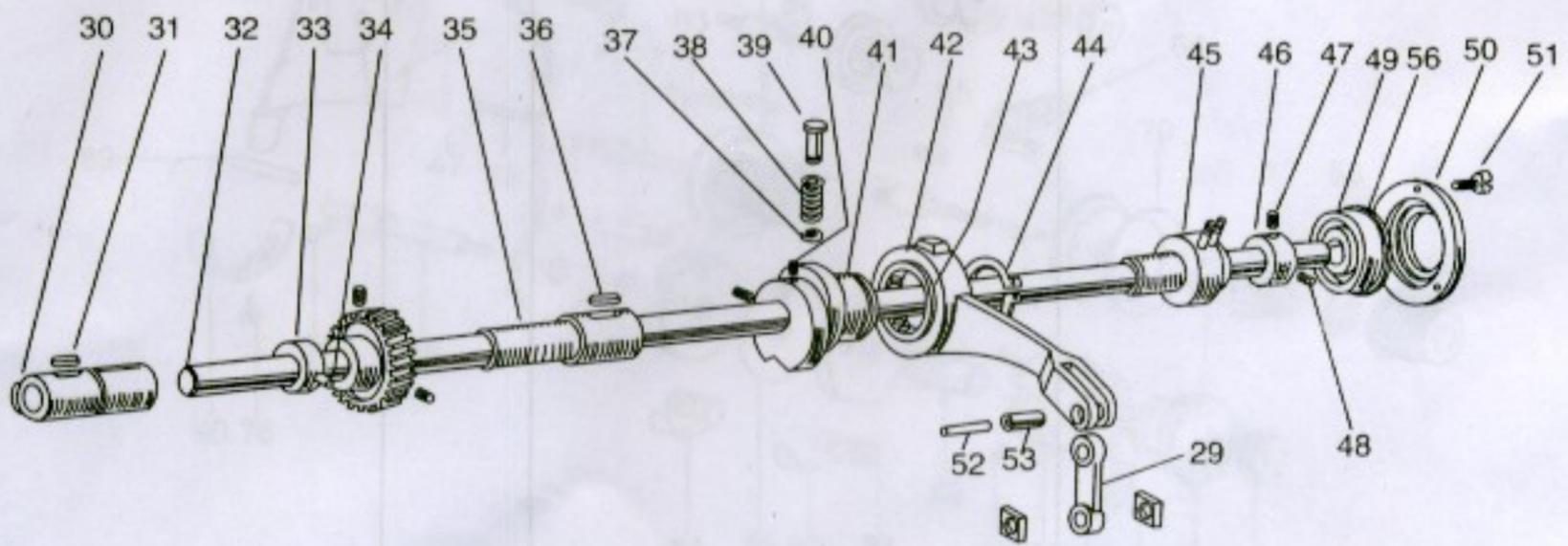
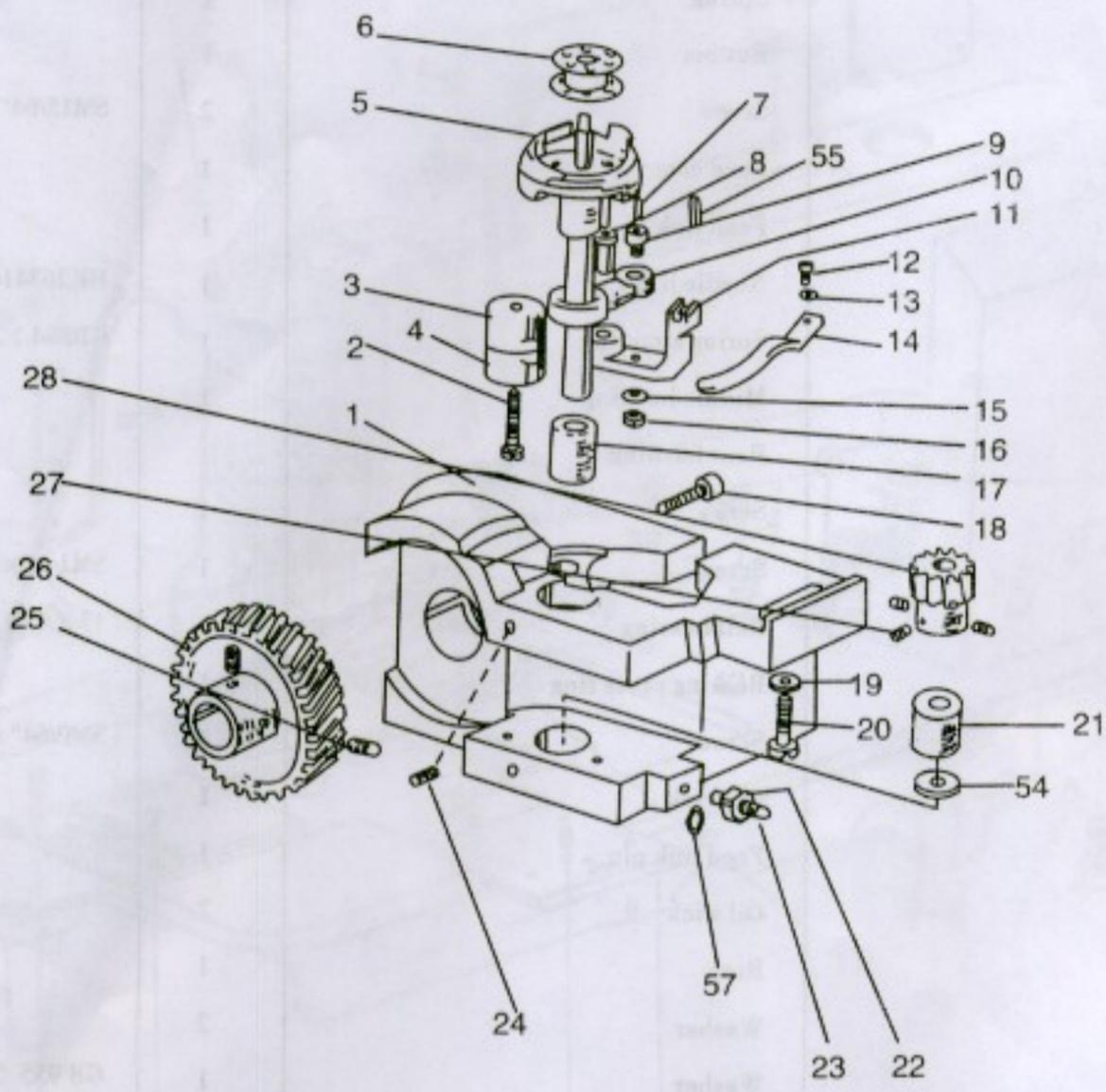
Item	Part number	Description	Pcs	Note
1	1WF2-063	Right hook saddle	1	
2	1WF2-060	Screw	2	SM15/64" × 28
3	1WF2-059	Upper bushing	2	
4	1WF2-061	Lower bushing	2	
5	1WF2-064	Hook	2	
6	1WF2-065	Bobbin	2	
7	1WF2-070	Oil wick	2	Φ2.5 × 14
8	1WF2-069	Hinge shaft	2	
9	1WF2-072	Screw	2	SM3/16" × 32
10	1WF2-071	Connecting lever	2	
11	1WF2-075	Thread finger bracket	2	
12	1WF1-026	Screw	2	SM9/64" × 40/4.5
13	22T1-007	Washer	2	D=0.5
14	1WF2-076	Thread finger	2	
15		Spring washer	2	GB7246 5
16	1WF2-074	Nut	2	SM3/16" × 32
17	1WF2-062	Bushing	2	
18	1WF2-034	Screw	2	SM3/16" × 28/14.5
19		Washer	2	GB/T95 6
20	1WF2-033	Screw	2	SM1/4" × 24/20
21	1WF2-077	Lower bushing	2	
22	1WF2-066B	Nut	2	
23	1WF2-066A	Screw	2	
24	1WF2-044	Screw	4	SM1/4" × 40/5
25	1WF2-068	left hook saddle	1	
26	1WF2-052	Screw	4	SM1/4" × 40/4
27	1WF2-078	Spiral gear	2	
28	1WF2-009	Screw	6	
29	1WF2-079	Sipral gear	2	
30	1WF4-055	Feed link	1	
31	1WF2-035	Left bushing	1	
32	1WF2-036	Oil wick	1	Φ25 × 45
33	1WF2-056	Rock shaft	1	
34	1WF4-006	Feed dog lift cam	1	
35	1WF2-052	Screw	1	SM15/64" × 28/3.8
36	1WF2-057	Right bushing	1	
37	1WF2-058	Oil wick	1	Φ2.5 × 85
38		Split stop ring	1	GB896 5



6. SSTC31606 Rock Shaft And Thread Looping Parts

Item	Part number	Description	Pcs	Note
39	1WF4-041	Spring	1	
40	1WF4-042	Buttom	1	
41	1WF4-010	Screw	2	SM15/64" × 28/13.5
42	1WF4-011	Feed cam	1	
43	1WF4-012	Feed link	1	
44		Needle bearing	1	HK263416
45		Spring stop ring	1	GB894.1 26
46	1WF2-055	Middle bushing	1	
47	1WF2-051	Rear bushing	1	
48	22T3-002B2	Screw	1	
49	1WF2-052	Screw	1	SM1/4" × 40/5
50		Ball bearing	1	17 × 40 × 12
51	1WF2-050	Bearing press ring	1	
52	1WF2-049	Screw	3	SM9/64" × 40/7
53	1WF4-044	Oil wick	1	
54	1WF4-043	Feed link pin	1	
55	1WF2-073	Oil wick	2	
56	1WF2-081	Ring	1	
57	1WF2-077A	Washer	2	
58		Washer	1	GB 955 5

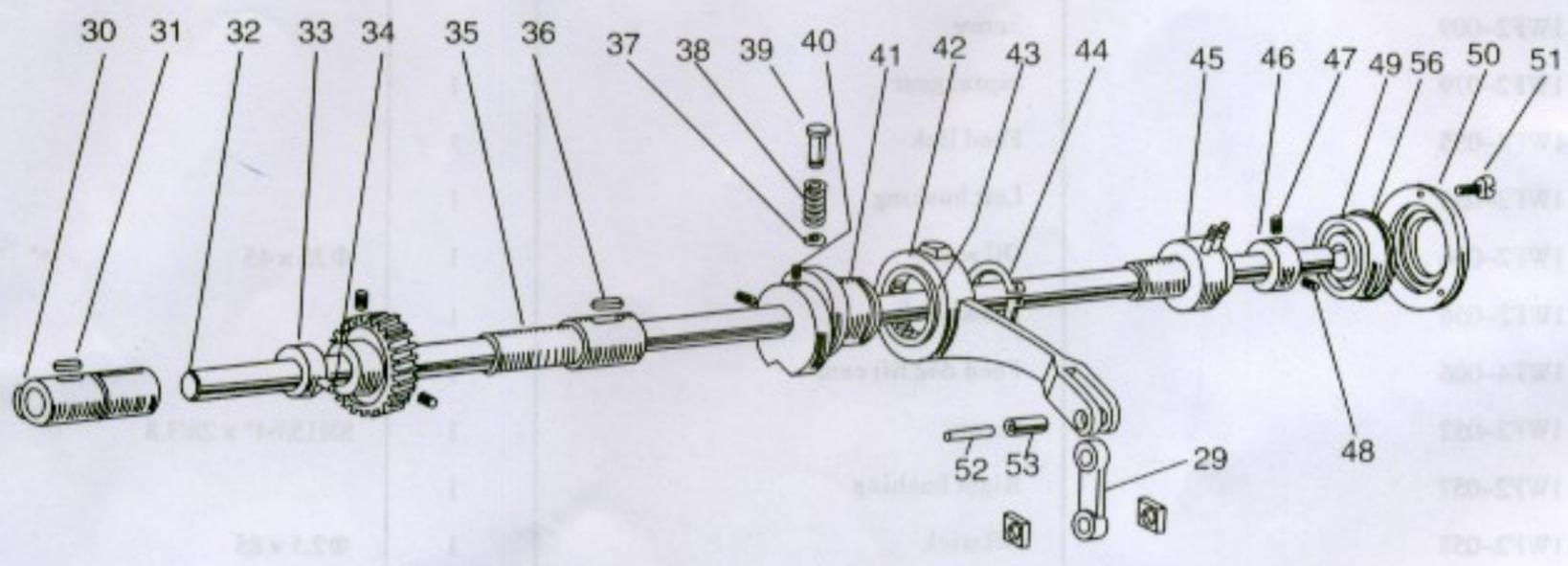
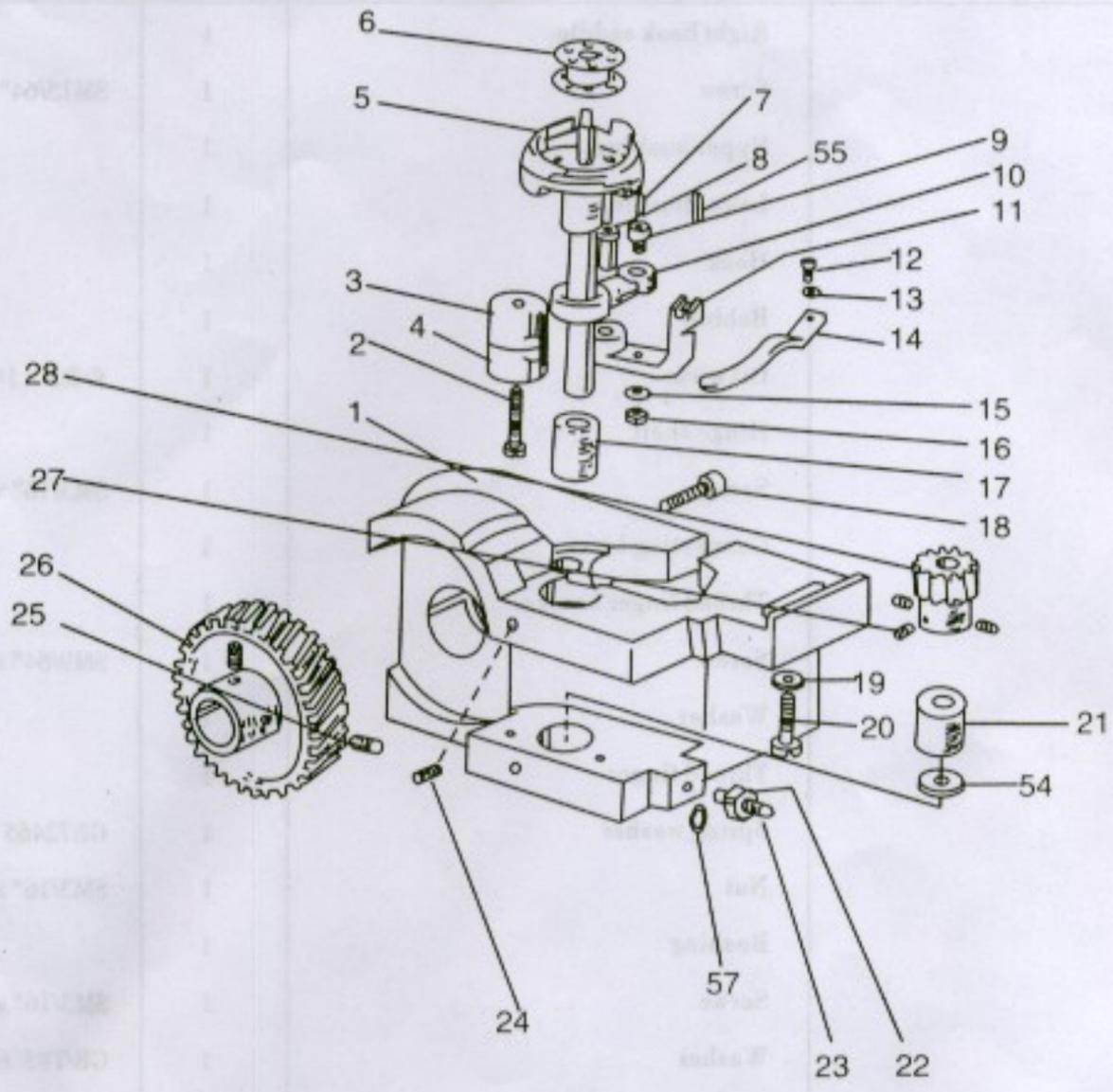
Note	Pcs	Description	Part number	Item
------	-----	-------------	-------------	------



7.SSTC31606-1 Rock Shaft And Thread Looping Parts

Item	Part number	Description	Pcs	Note
1	1WF2-063	Right hook saddle	1	
2	1WF2-060	Screw	1	SM15/64" × 28
3	1WF2-059	Upper bushing	1	
4	1WF2-061	Lower bushing	1	
5	1WF2-064	Hook	1	
6	1WF2-065	Bobbin	1	
7	1WF2-070	Oil wick	1	Φ2.5 × 14
8	1WF2-069	Hinge shaft	1	
9	1WF2-072	Screw	1	SM3/16" × 32
10	1WF2-071	Connecting lever	1	
11	1WF2-075	Thread finger bracket	1	
12	1WF1-026	Screw	1	SM9/64" × 40/4.5
13	22T1-007	Washer	1	
14	1WF2-076	Thread finger	1	
15		Spring washer	1	GB72465
16	1WF2-074	Nut	1	SM3/16" × 32
17	1WF2-062	Bushing	1	
18	1WF2-034	Screw	1	SM3/16" × 28/14.5
19		Washer	1	GB/T95 6
20	1WF2-033	Screw	1	SM1/4" × 24/20
21	1WF2-077	Lower bushing	1	
22	1WF2-066B	Nut	1	
23	1WF2-066A	Screw	1	
24	1WF2-044	Screw	2	SM1/4" × 40/5
25	1WF2-052	Screw	2	SM1/4" × 40/4
26	1WF2-078	Spiral gear	1	
27	1WF2-009	Screw	3	
28	1WF2-079	Spiral gear	1	
29	1WF4-055	Feed link	1	
30	1WF2-035	Left bushing	1	
31	1WF2-036	Oil wick	1	Φ25 × 45
32	1WF2-056	Rock shaft	1	
33	1WF4-006	Feed dog lift cam	1	
34	1WF2-052	Screw	1	SM15/64" × 28/3.8
35	1WF2-057	Right bushing	1	
36	1WF2-058	Oil wick	1	Φ2.5 × 85
37		Split stop ring	1	GB896 5
38	1WF4-041	Spring	1	

Item	Part number	Description	Pcs	Note
------	-------------	-------------	-----	------



1. Brief introduction

Both the models adopt straight twin-needle and two horizontal hooks with auto lubrication for thread looping, sliding lever for thread take up to form two lines of lockstitch seam. The upper shaft and lower shaft is connected by ball bearing and driven by teeth-type synchronic belt; plunge oil pump lubrication system. They adopt the compound feed mechanics of feed dog, needle bar and presser foot, even if for long stitch length and long material, They can deal with them freely.

They are widely used in factories of suitcase, tent, cushion, leather goods, apparel, mat, etc..

The difference between the two models:

SSTC31606 adopts twin-needle, two large horizontal hooks with auto lubrication. With the parts it can form ten different needle gauges.

SSTC31606-1 adopts single needle and form single line double lockstitch form.

2. Main Technical Specification

1 Application:	medium and heavy duty materials
2 Max. sewing speed:	2000 spm
3 Max. Stitch length:	9 mm
4 Needle bar stroke:	36 mm
5 Presser foot lift height:	8mm(by hand); 16mm(by knee)
6 Hook:	large horizontal hook with auto lubrication
7 Needle:	DP×17 Nm125~180
8 Lubrication:	pump auto lubrication (partial of manually oiling)
9 Needle gauge: (Twin-needle)	6.4, 3.2, 4, 4.8, 8, 9.5, 12.7, 16, 19, 25.4
10 Motor power:	0.37 kw (clutch motor)

3. Installation and preparation

3.1 Installation

3.1.1 Location of the machine

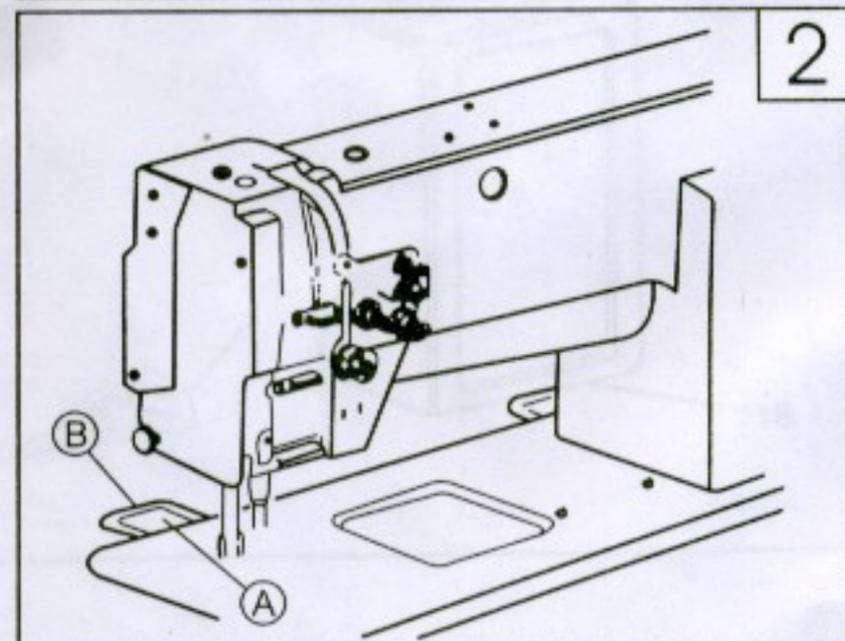
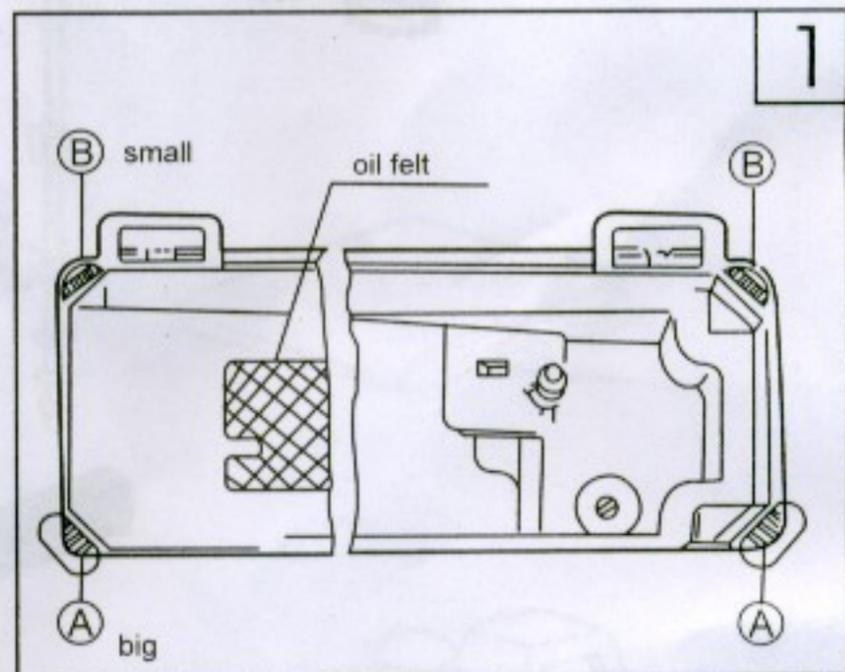
To ensure a smooth running, the machine should be located on rigid and flat floor. The insert of rubber mat between machine stand and floor is recommended for further reducing the running noise and vibration.

3.1.2 Oil Reservoir Installation(Fig.1)

Put the oil reservoir into the table cutout, and place the four cushions on the four corners of the cutout, and place oil felt into the oil reservoir.

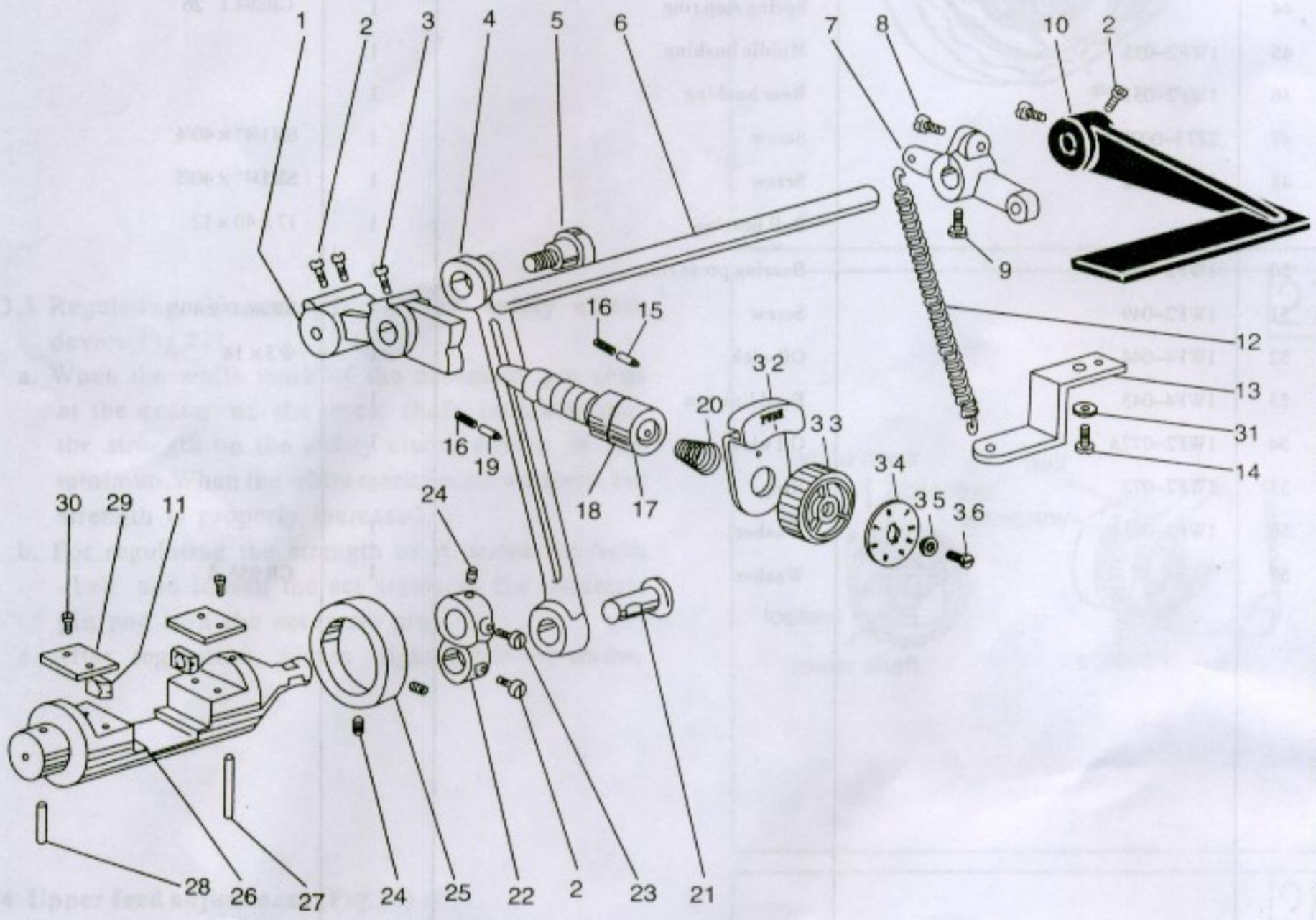
3.1.3 Mounting machine head(Fig.2)

Make the hinge (A) of machine head engaged with hinge socket (B) on the table, then turn the machine head freely till it is seated on the frame of table cutout.



7.SSTC31606-1 Rock Shaft And Thread Looping Parts

Item	Part number	Description	Pcs	Note
39	1WF4-042	Buttom	1	
40	1WF4-010	Screw	2	SM15/64" × 28/13.5
41	1WF4-011	Feed cam	1	
42	1WF4-012	Feed link	1	
43		Needle bearing	1	HK263416
44		Spring stop ring	1	GB894.1 26
45	1WF2-055	Middle bushing	1	
46	1WF2-051	Rear bushing	1	
47	22T3-002B2	Screw	1	SM1/4" × 40/4
48	1WF2-052	Screw	1	SM1/4" × 40/5
49		Ball bearing	1	17 × 40 × 12
50	1WF2-050	Bearing press ring	1	
51	1WF2-049	Screw	3	SM9/64" × 40/7
52	1WF4-044	Oil wick	1	Φ3 × 18
53	1WF4-043	Feed link pin	1	
54	1WF2-077A	Oil wick	1	
55	1WF2-073	Ring	1	
56	1WF2-081	Washer	1	
57		Washer	1	GB 955 5

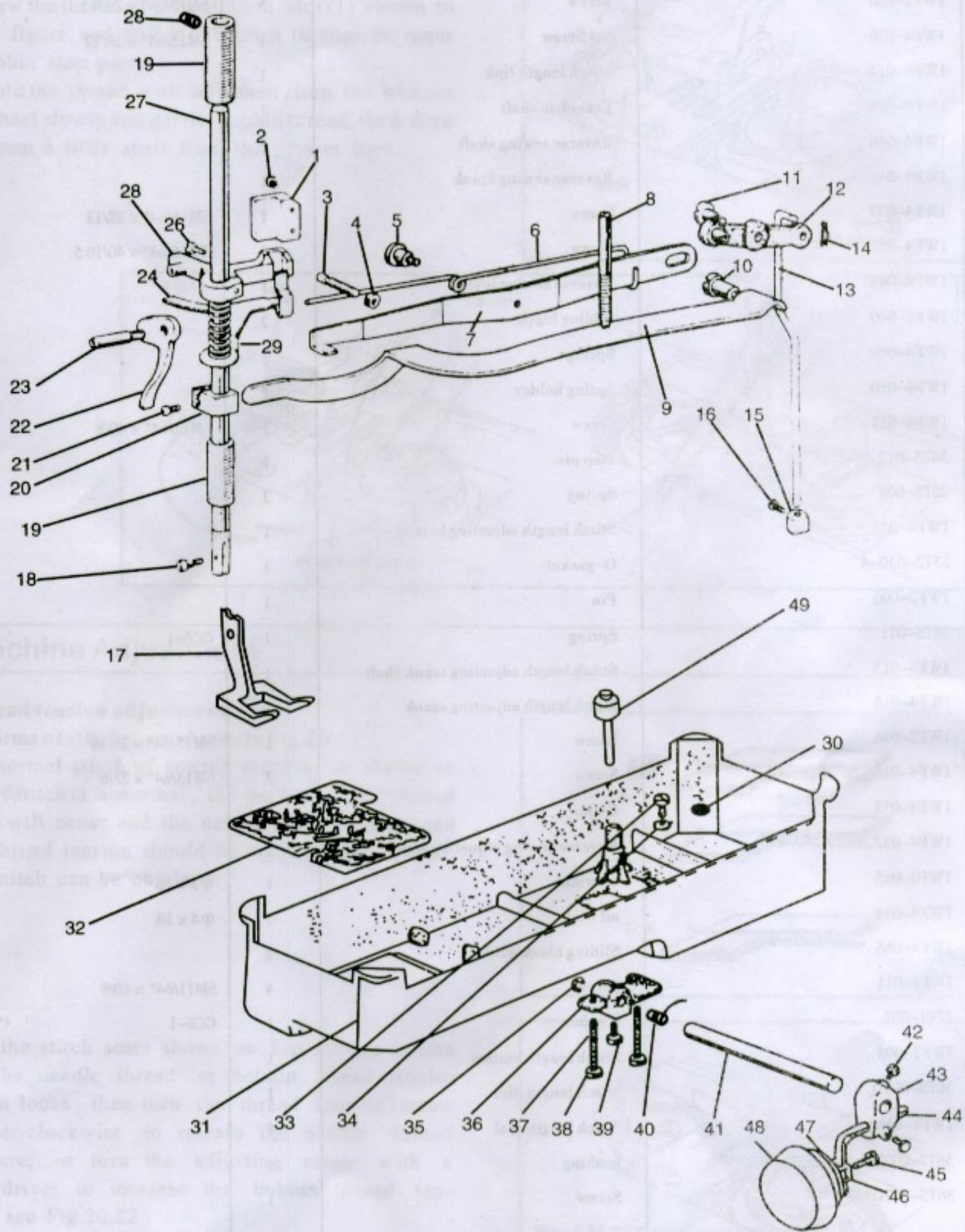


Adjust the following:

- Loosen the special...
- Move the special...
- Move the special...

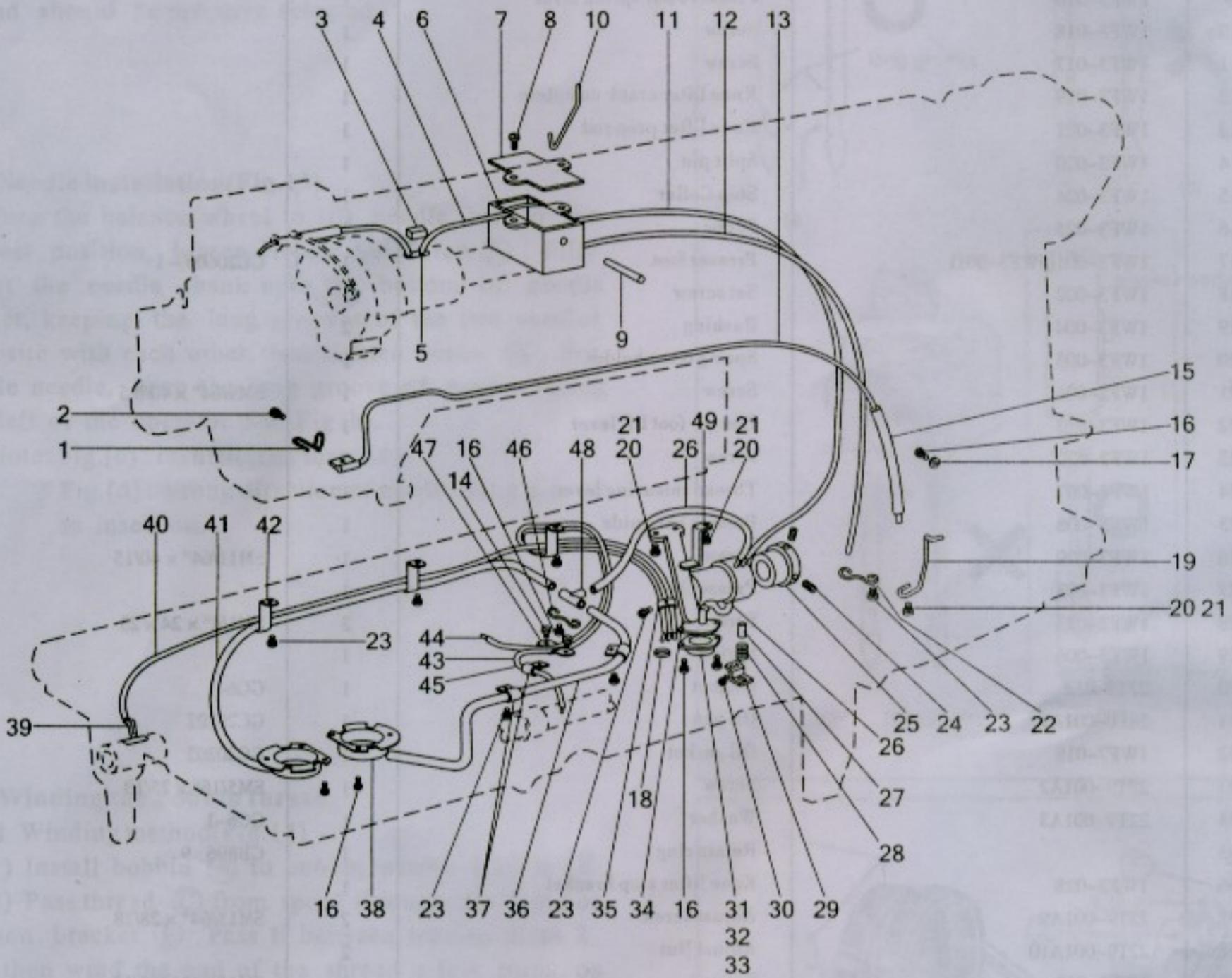
8. Stitch Length Adjusting Parts

Item	Part number	Description	Pcs	Note
1	1WF4-025	Stitch length adjusting swing lever	1	
2	1WF2-030	Screw	5	SM15/64" × 28/8.5
3	1WF4-026	Set Screw	1	SM15/64" × 28/12
4	1WF4-014	Stitch length link	1	
5	1WF4-028	Eccentric shaft	1	
6	1WF4-046	Reverse sewing shaft	1	
7	1WF4-047	Reverse sewing crank	1	
8	1WF4-027	Screw	1	SM15/64" × 28/13
9	1WF4-021	Screw	1	SM15/64" × 40/10.5
10	1WF4-048	Reverse sewing lever	1	
11	1WF4-040	Sliding block	2	
12	1WF4-049	Spring	1	
13	1WF4-050	Spring holder	1	
14	1WF4-051	Screw	1	SM11/64" × 40/8
15	36T5-012	Stop pin	1	
16	22T5-009	Spring	2	
17	1WF4-023	Stitch length adjusting bolt	1	
18	33T2-030-A	O-gasket	1	
19	7WF2-006	Pin	1	
20	36T5-011	Spring	1	GC6-1
21	1WF4-013	Stitch length adjusting crank shaft	1	
22	1WF4-015	Stitch length adjusting crank	1	
23	1WF2-038	Screw	1	SM15/64" × 28/10
24	1WF4-016	Screw	3	SM15/64" × 28/6
25	1WF4-053	Collar	1	
26	1WF4-057	Reverse sewing adjusting stand	1	
27	1WF4-045	oil wick	1	Φ3 × 26
28	1WF4-039	oil wick	1	Φ4 × 16
29	1WF4-056	Sliding block guide	2	
30	1WF1-011	Screw	4	SM11/64" × 40/9
31	22T1-007	Washer	1	GC6-1
32	7WF2-005	Stitch length button	1	
33	36T5-007D ₂	Stitch length dial	1	
34	1WF4-058A	Stitch length dial	1	
35	36T5-007D ₄	bushing	1	
36	36T5-007D ₅	Screw	1	



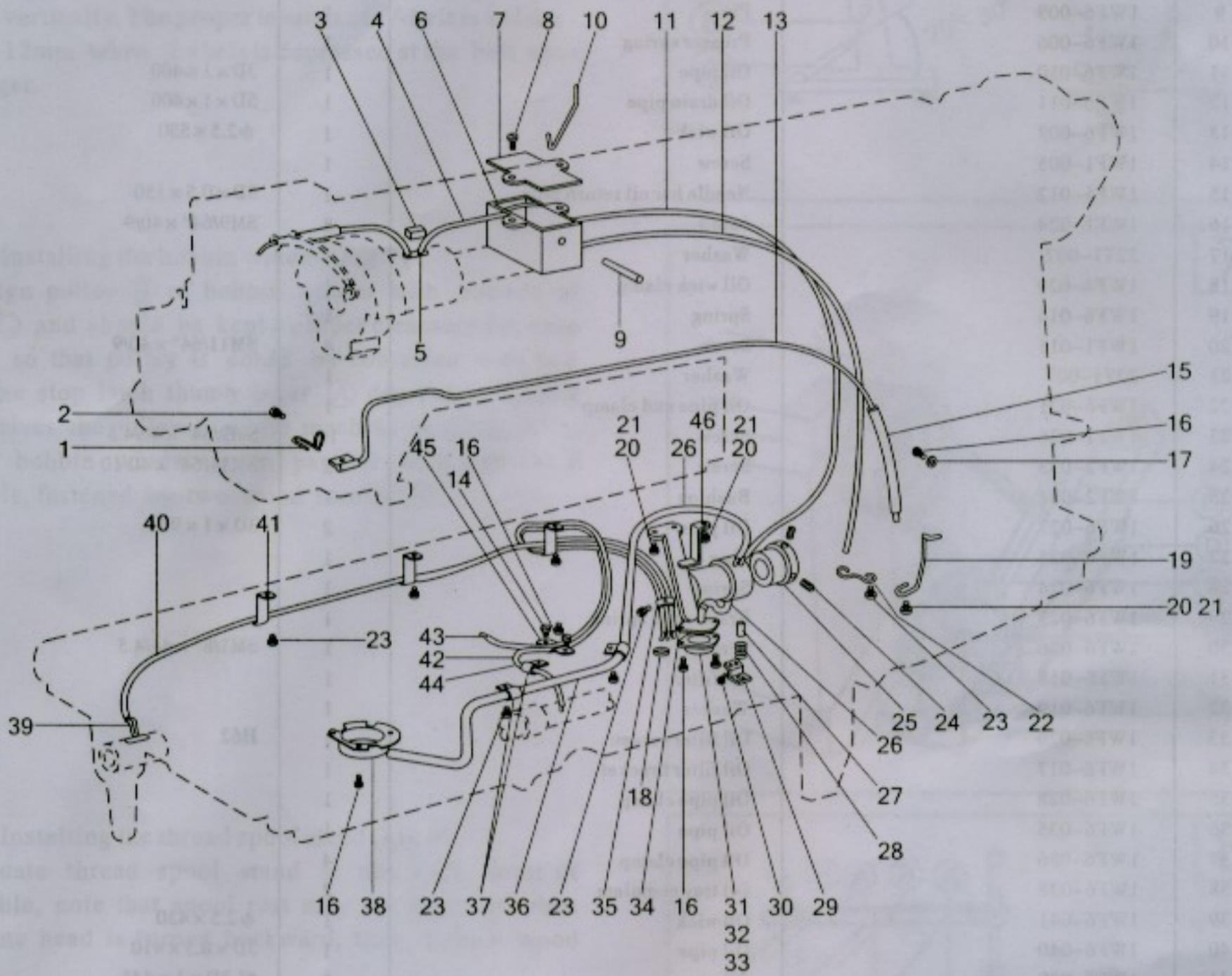
9.Presser Foot Lift Parts

Item	Part number	Description	Pcs	Note
1	1WF5-040	Sliding block rail	1	
2	1WF5-039	Screw	2	SM1/64" x 40/12
3	1WF3-011	Screw	1	SM1/4" x 24/16.5
4	1WF3-010	Nut	1	
5	1WF3-013	Screw	1	
6	1WF3-014	Spring	1	
7	1WF3-012	Knee lifter lever	1	
8	1WF3-015	Adjusting screw	1	
9	1WF3-016	Pressure bar spring lever	1	
10	1WF3-018	Screw	1	
11	1WF3-017	Screw	1	
12	1WF3-019	Knee lifter crank complete	1	
13	1WF3-021	Knee lifter prop rod	1	
14	1WF3-020	Split pin	1	
15	1WF3-024	Stop Collar	1	
16	1WF3-025	Screw	1	
17	1WF3-001(9WF3-001)	Presser foot	1	GC20606 - 1
18	1WF3-002	Set screw	1	
19	1WF3-004	Bushing	2	
20	1WF3-005	Spring lever holder	1	
21	1WF2-006	Screw	1	SM9/64" x 40/8.5
22	1WF3-023	Presser foot lift lever	1	
23	1WF3-022	Screw	1	
24	1WF3-007	Thread releasing lever	1	
25	1WF3-008	Presser bar guide	1	
26	1WF3-009	Screw	1	SM11/64" x 40/15
27	1WF3-003	Presser bar	1	
28	1WF2-023	Screw	2	SM1/4" x 24 x 23
29	1WF3-006	Spring	1	
30	22T9-012	Magnet	1	GC6-1
31	58F0-001A1	Oil pan	1	GC20202
32	1WF7-018	Oil gasket	1	GC20202
33	22T9-001A2	Screw	1	SM5/16" x 25/10
34	22T9-001A3	Washer	1	GC6-1
35		Retain ring	1	GB896 9
36	1WF3-028	Knee lifter stop bracket	1	
37	22T9-001A9	Adjust screw	2	SM15/64" x 28/28
38	22T9-001A10	Adjust Nut	2	
39	1WF3-030	Screw	1	SM15/64" x 28/15
40	22T9-001A7	Spring	1	
41	1WF3-027	Hinge pin	1	
42	1WF3-030	Screw	2	SM5/16" x 18/13
43	22T9-003B3	Connector	1	GC6-1
44	22T9-003B2	Bent rod	1	GC6-1
45	22T9-003B7	Screw	1	SM15/64" x 28/8
46	22T9-003B6	Knee lifter bell bracket	1	GC6-1
47	22T9-003B5	Bell	1	GC6-1
48	22T9-003B8	Pat	1	GC6-1
49	1WF3-026	Knee lifter prop rod	1	



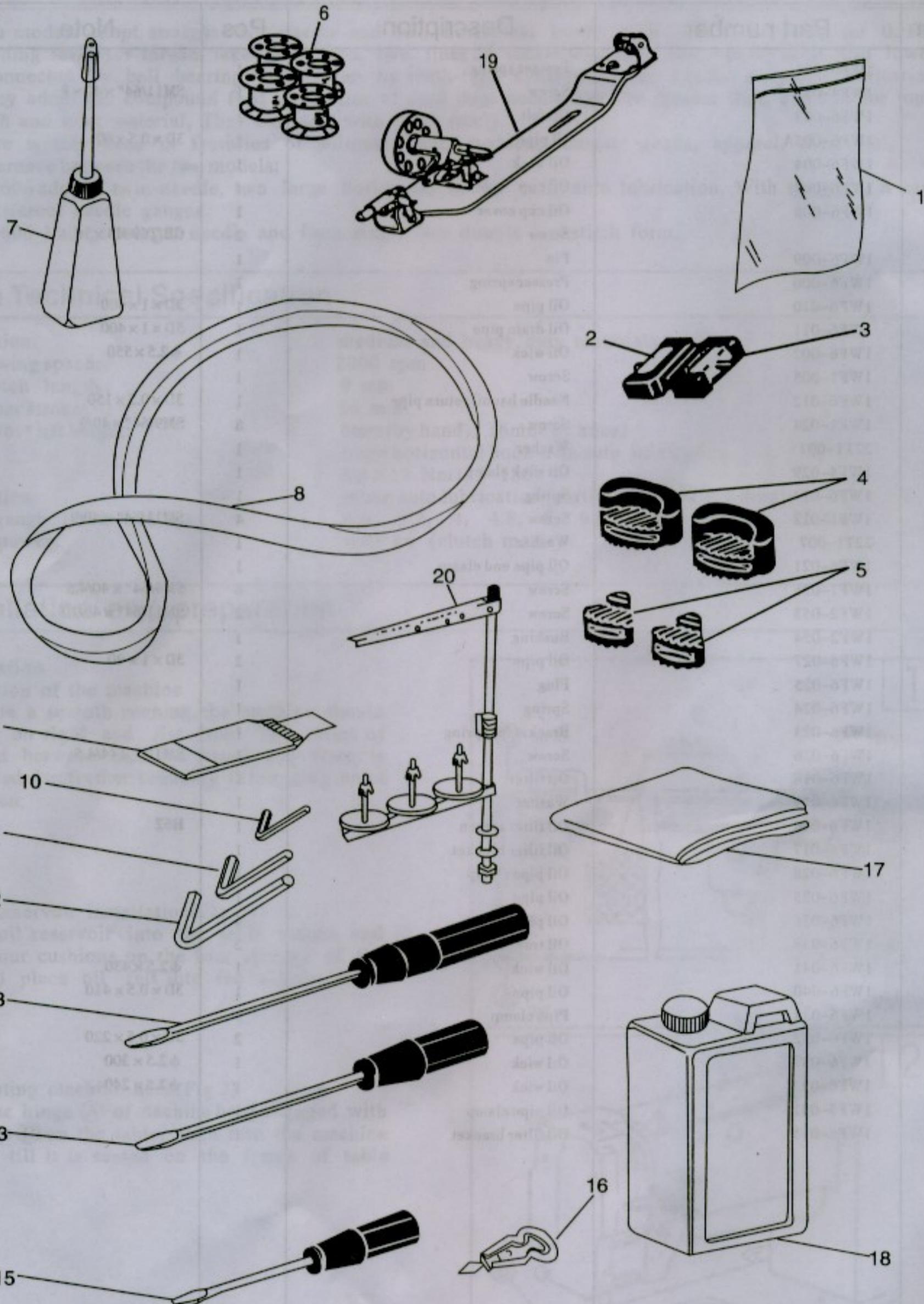
10.SSTC31606 Lubrication Parts

Item	Part number	Description	Pcs	Note
1	1WF6-001	Presser spring	1	
2	1WF4-051	Screw	1	SM11/64" × 40 × 8
3	1WF6-003	Oil felt	1	
4	1WF6-005A	oil pipe	1	3D × 0.5 × 60
5	1WF6-004	Oil wick	1	
6	1WF6-007	Oil cup	1	
7	1WF6-008	Oil cup cover	1	
8		Screw	2	GB/T69 M4 × 16
9	1WF6-009	Pin	1	
10	1WF6-006	Presser spring	1	
11	1WF6-010	Oil pipe	1	3D × 1 × 400
12	1WF6-011	Oil drain pipe	1	5D × 1 × 400
13	1WF6-002	Oil wick	1	φ2.5 × 550
14	1WF1-005	Screw	1	
15	1WF6-012	Needle bar oil return pipe	1	3D × 0.5 × 150
16	1WF1-024	Screw	8	SM9/64" × 40/9
17	22T1-007	Washer	1	
18	1WF4-029	Oil wick clamp	1	
19	1WF6-014	Spring	1	
20	1WF1-011	Screw	4	SM11/64" × 40/9
21	22T1-007	Washer	1	
22	1WF6-021	Oil pipe end clamp	1	
23	1WF1-026	Screw	10	SM9/64" × 40/4.5
24	1WF2-053	Screw	2	SM11/64" × 40/10
25	1WF2-054	Bushing	1	
26	1WF6-027	Oil pipe	2	3D × 1 × 90
27	1WF6-025	Plug	1	
28	1WF6-024	Spring	1	
29	1WF6-023	Bracket for spring	1	
30	1WF6-026	Screw	1	SM1/8" × 44/4.5
31	1WF6-018	Oil filter	1	
32	1WF6-019	Washer	1	
33	1WF6-020	Oil filter screen	1	H62
34	1WF6-017	Oil filter bracket	1	
35	1WF6-028	Oil pipe clamp	1	
36	1WF6-035	Oil pipe	1	
37	1WF6-036	Oil pipe clamp	4	
38	1WF6-038	Oil tray complete	2	
39	1WF6-041	Oil wick	1	φ2.5 × 430
40	1WF6-040	Oil pipe	1	3D × 0.5 × 410
41	1WF6-039	Oil pipe	1	#1 3D × 1 × 445
42	1WF6-034	Pipe clamp	3	
43	1WF6-032	Oil pipe	2	3D × 0.5 × 220
44	1WF6-037	Oil wick	1	φ2.5 × 300
45	1WF6-033	Oil wick	1	φ2.5 × 240
46	1WF6-030	3-nozzle oil mouth bracket	1	
47	1WF6-031	Oil pipe clamp	1	
48	1WF6-029	3-nozzle oil mouth	1	
49	1WF6-015	Oil filter bracket	1	



10.SSTC31606-1 Lubrication Parts

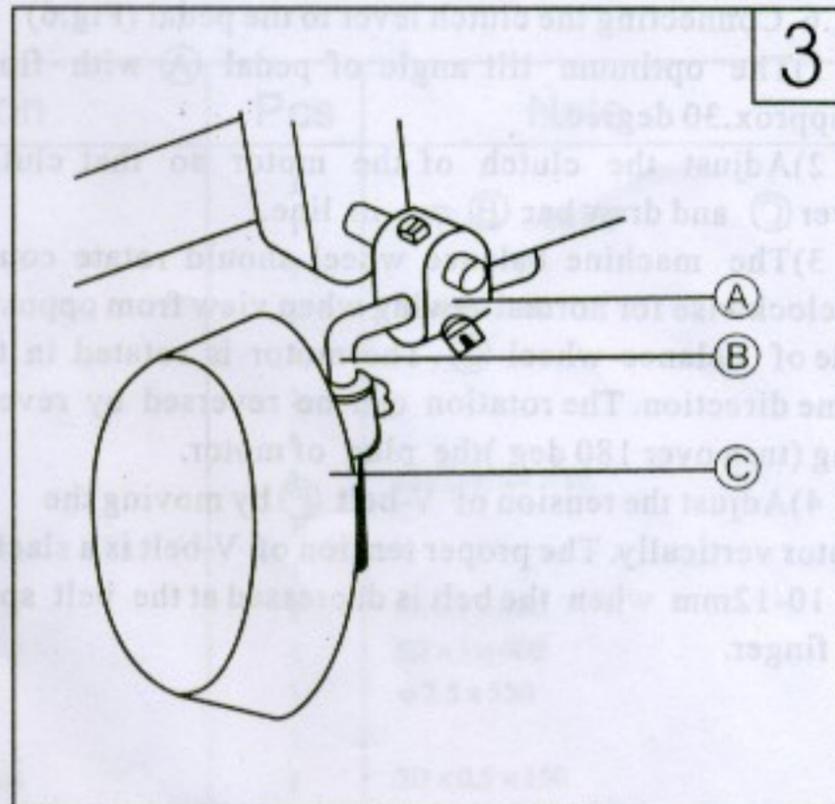
Item	Part number	Description	Pcs	Note
1	1WF6-001	Presser spring	1	
2	1WF4-051	Screw	1	SM11/64" × 40 × 8
3	1WF6-003	Oil felt	1	
4	1WF6-005A	oil pipe	1	3D × 0.5 × 60
5	1WF6-004	Oil wick	1	
6	1WF6-007	Oil cup	1	
7	1WF6-008	Oil cup cover	1	
8		Screw	2	GB/T69 M4 × 16
9	1WF6-009	Pin	1	
10	1WF6-006	Presser spring	1	
11	1WF6-010	Oil pipe	1	3D × 1 × 400
12	1WF6-011	Oil drain pipe	1	5D × 1 × 400
13	1WF6-002	Oil wick	1	φ2.5 × 550
14	1WF1-005	Screw	1	
15	1WF6-012	Needle bar oil return pipe	1	3D × 0.5 × 150
16	1WF1-024	Screw	8	SM9/64" × 40/9
17	22T1-007	Washer	1	
18	1WF4-029	Oil wick clamp	1	
19	1WF6-014	Spring	1	
20	1WF1-011	Screw	4	SM11/64" × 40/9
21	22T1-007	Washer	1	
22	1WF6-021	Oil pipe end clamp	1	
23	1WF1-026	Screw	8	SM9/64" × 40/4.5
24	1WF2-053	Screw	2	SM11/64" × 40/10
25	1WF2-054	Bushing	1	
26	1WF6-027	Oil pipe	2	3D × 1 × 90
27	1WF6-025	Plug	1	
28	1WF6-024	Spring	1	
29	1WF6-023	Bracket for spring	1	
30	1WF6-026	Screw	1	SM1/8" × 44/4.5
31	1WF6-018	Oil filter	1	
32	1WF6-019	Washer	1	
33	1WF6-020	Oil filter screen	1	H62
34	1WF6-017	Oil filter bracket	1	
35	1WF6-028	Oil pipe clamp	1	
36	1WF6-035	Oil pipe	1	
37	1WF6-036	Oil pipe clamp	4	
38	1WF6-038	Oil tray complete	2	
39	1WF6-041	Oil wick	1	φ2.5 × 430
40	1WF6-040	Oil pipe	1	3D × 0.5 × 410
41	1WF6-034	Pipe clamp	3	
42	1WF6-032	Oil pipe	2	3D × 0.5 × 220
43	1WF6-037	Oil wick	1	φ2.5 × 300
44	1WF6-033	Oil wick	1	φ2.5 × 240
45	1WF6-031	Oil pipe clamp	1	
46	1WF6-015	Oil filter bracket	1	



3.1.4 Knee control presser foot lifter installation(Fig.3)

a. Installing

Install Connector (A) , Bell Crank (B) , Bell (C) in the order shown in Fig.3.

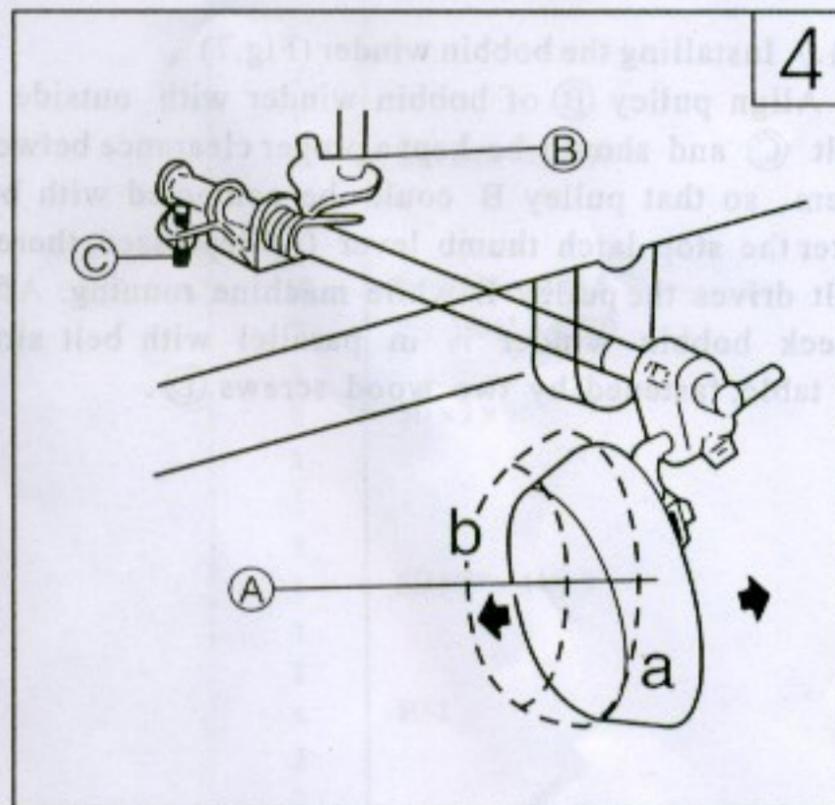


Adjustment (Fig.4)

In the order of the following:

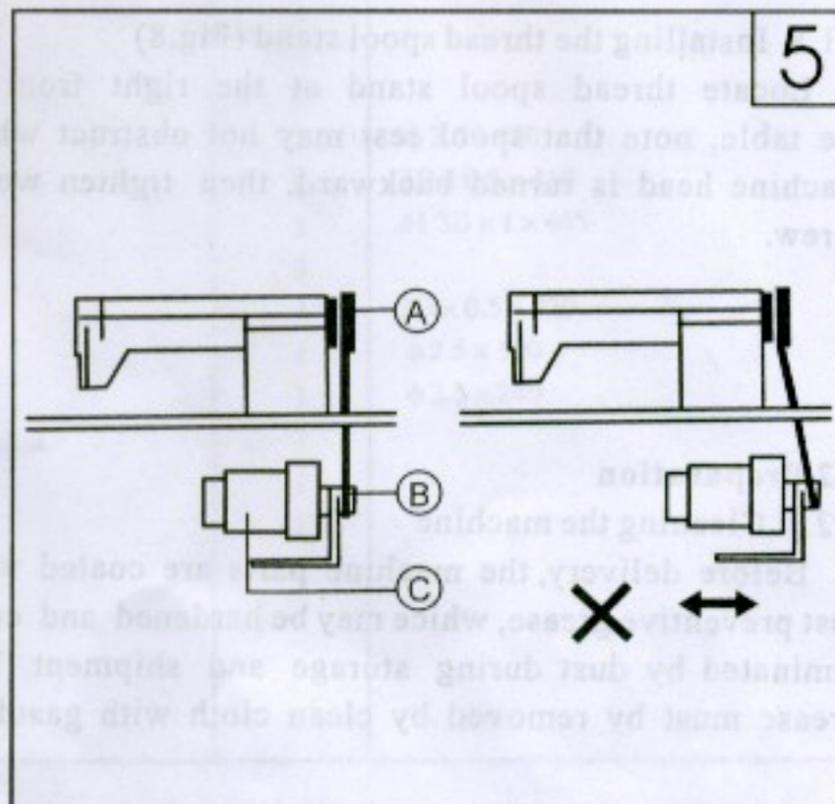
1. When the presser foot is at its lowest position, keep the crank in the position shown by b in the figure, turn Knee Control Stop Adjusting Screw (C) to touch with the oil reservoir, and tighten the nut of Screw (C) .

2. When operate by knee, the presser foot lift volume is controlled by Screw (B) . Turn the presser foot lever down, make the bell in the position shown by a in the figure, lift the presser foot to 13 mm, adjust Screw (B) to touch the oil reservoir. Then tighten the nut of Screw (B) .



3.1.5 Installing the motor (Fig.5)

Align machine balance wheel belt groove (A) with motor pulley belt groove (B) by moving the motor (C) leftward or rightward. Be sure the belt is not touch with table.



12. Accessories

Item	Part number	Description	Pcs	Note
1	33TF-010	Parts bag	1	
2	22T9-007F1	Hinge pin	2	GC6-1
3	22T9-007F2	Hinge pin socket	2	GC6-1
4	1KT5-004	Cushion	2	Ge20202
5	1KT5-003	Cushion	2	Ge20202
6	1WF2-065	Bobbin	4	
7	33TF-011	Oil pot	1	
8		V-belt	1	M41
9		Needle	1	DP × 17 23#
10		Hex key	1	2 GB/T5356-1998
11		Hex key	1	2.5 GB/T5356-1998
12		Hex key	1	3 GB/T5356-1998
13	33TF-012	Screwdriver	1	GC6-1
14	33TF-013	Screwdriver	1	GC6-1
15	33TF-014	Screwdriver	1	GC6-1
16	58T0-007C	Thread tweezer	1	Ge20202
17	1F-013	Cover	1	70 × 35
18	1F-012	Oil tank	1	
19	S14420020	Bobbin winder	1	
20	1F-014(33TF-019)	Thread stand	1	GC20606 - 1

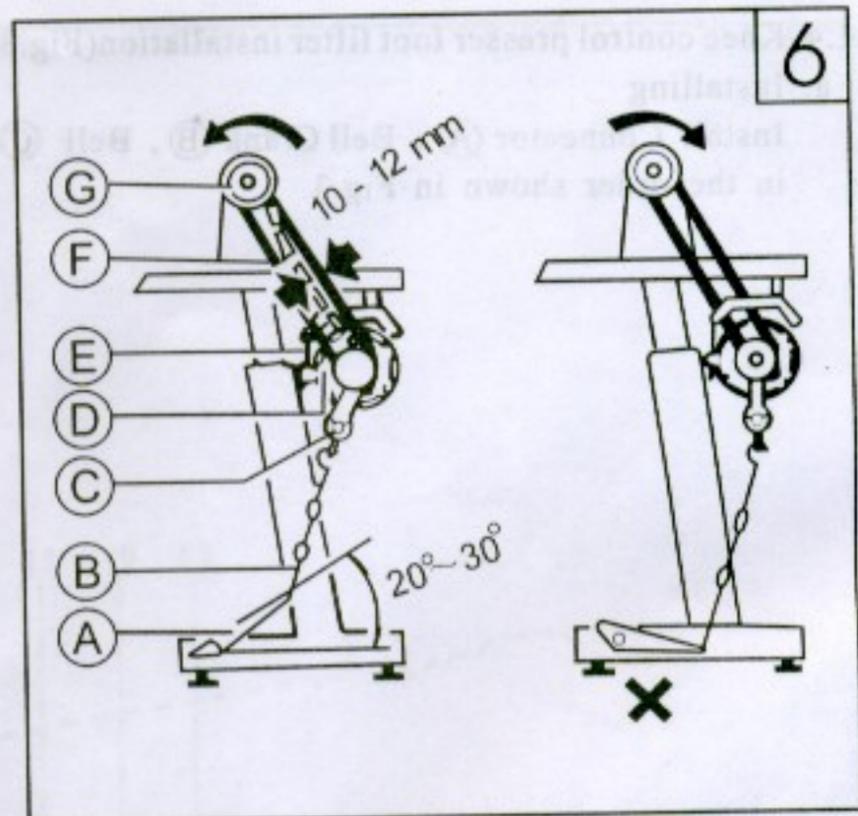
3.1.6 Connecting the clutch lever to the pedal (Fig.6)

1)The optimum tilt angle of pedal (A) with floor is approx.30 degree.

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

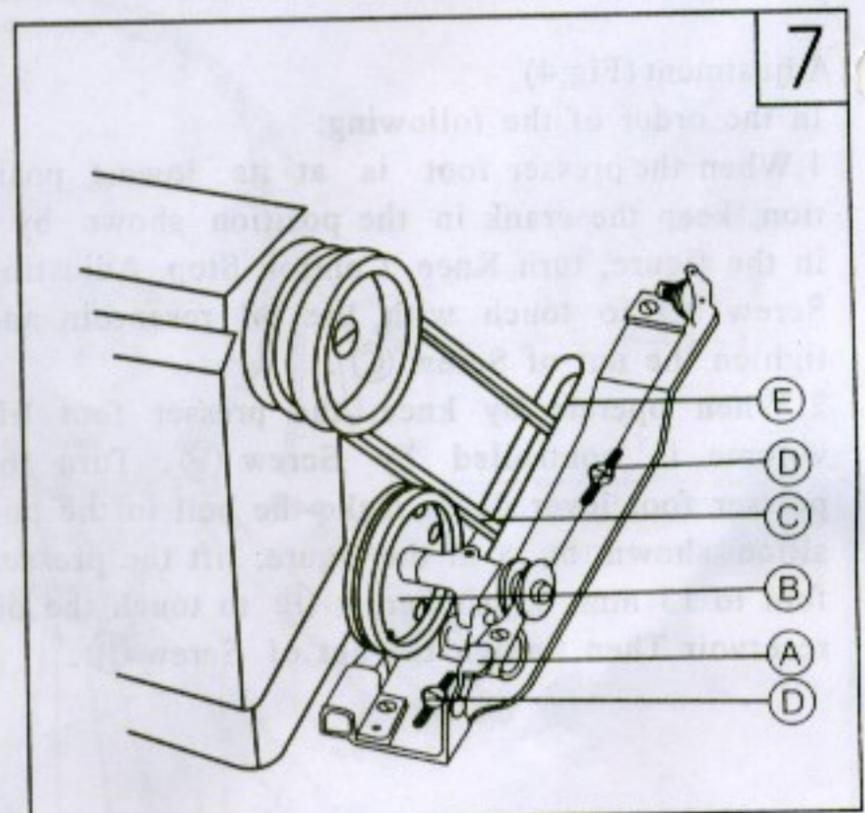
3)The machine balance wheel should rotate counterclockwise for normal sewing when view from opposite side of balance wheel (G). The motor is rotated in the same direction. The rotation can be reversed by reversing (turn over 180 deg.)the plug of motor.

4)Adjust the tension of V-belt (F) by moving the motor vertically. The proper tension of V-belt is a slack of 10-12mm when the belt is depressed at the belt span by finger.



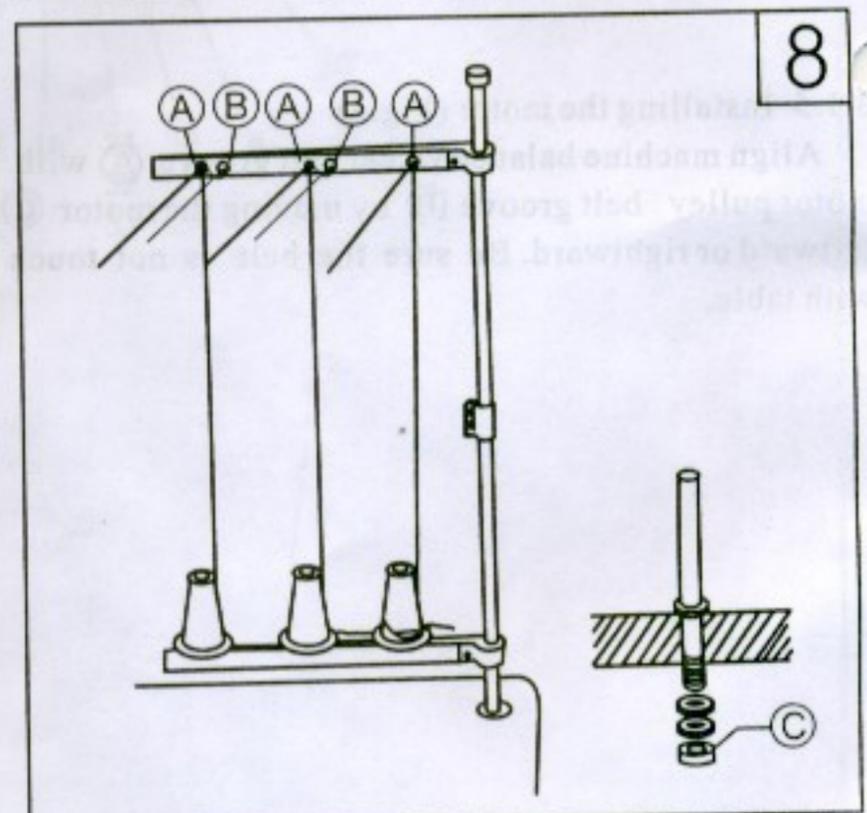
3.1.7 Installing the bobbin winder (Fig.7)

Align pulley (B) of bobbin winder with outside of belt (C) and should be kept a proper clearance between them, so that pulley B could be contacted with belt after the stop latch thumb lever (A) depressed, thereby belt drives the pulley B while machine running. After check bobbin winder is in parallel with belt slit E of table, fastened by two wood screws (D).



3.1.8 Installing the thread spool stand (Fig.8)

Locate thread spool stand at the right front of the table, note that spool rest may not obstruct when machine head is turned backward, then tighten wood screw.



3.2 Preparation

3.2.1 Cleaning the machine

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

3.2.2 Examination

Though every machine is confirmed by strict inspection and test before delivery, 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.

3.2.3 Precaution before Start

a. Oiling (Fig.9)

Oil amount should be filled according to the marks in the oil reservoir. Mark (H) refers to the highest of oil amount; (L) refers to the lowest, be careful that the oil amount should not be lower than Mark (L), otherwise the machine parts can not be fed with oil and cause overheat and collision.

Be sure to use machine oil HA-8 or HJ-7

b. When the machine starts for the initial time or reuse after a long period of time, the proper oil amount should be filled in sections of machine shown by arrows in Fig10,11. When it is in operation, observe the oil sparking in oil screen to check the oil condition.

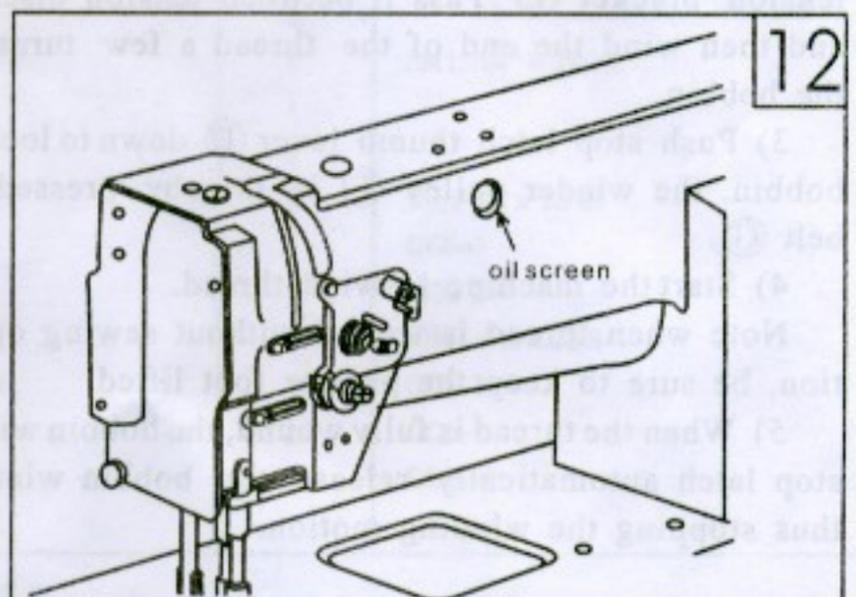
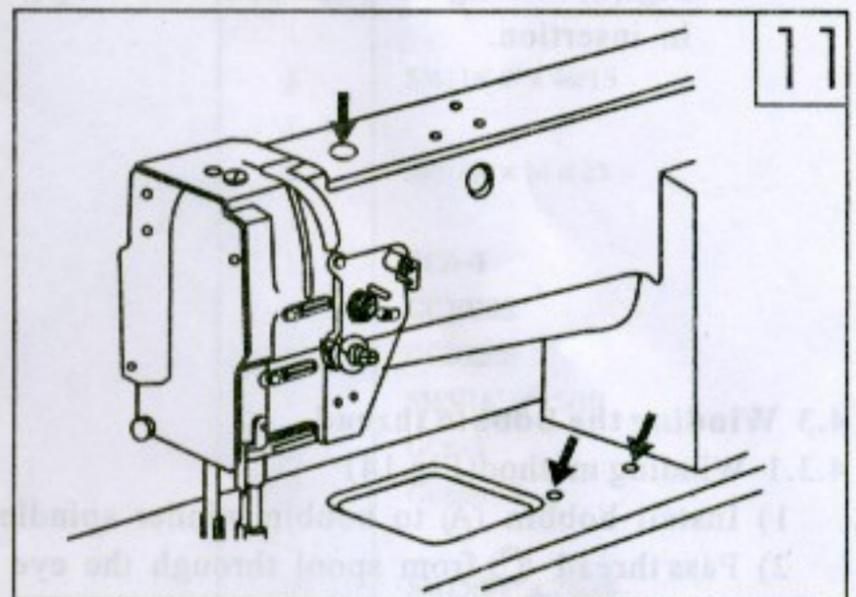
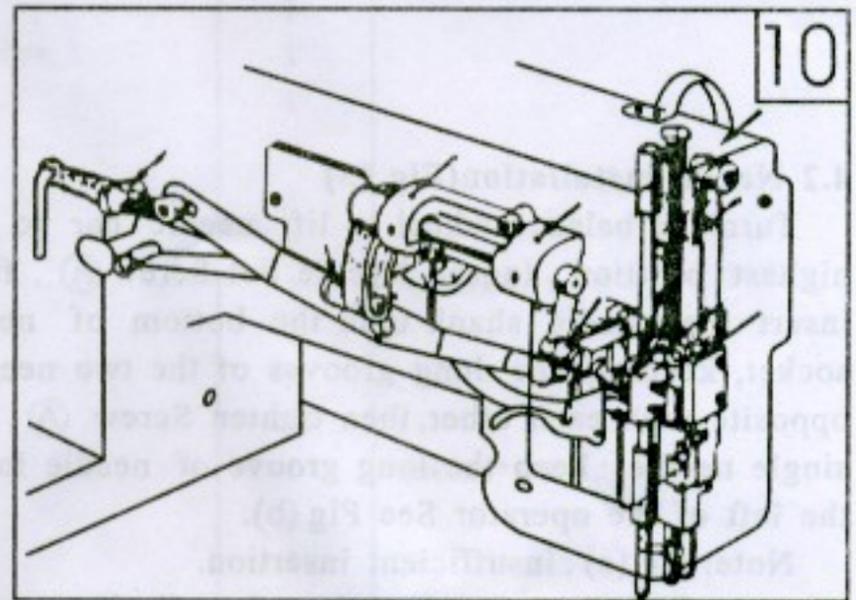
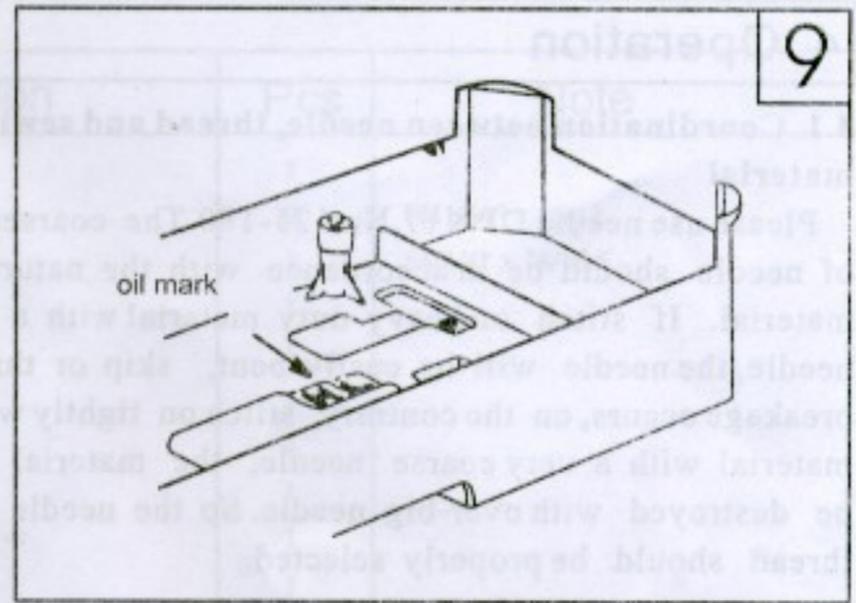
Note: when the machine needs drop oiling, do not start before drop oiling.

c. When a new machine starts running, for extending its life, please run at a medium and low speed (1000 spm) for about a month and then raise the speed gradually.

d. Please turn off the power when it is not in use or the operator leaves away from it.

e. Replace the oil every month. When replacing, fully drain off the old oil in the reservoir and add the new one.

f. The needle gauge options are: 6.4, 3.2, 4, 4.8, 8, 9.5, 12.7, 16, 19, 25.4 For getting it, the throat plate, presser foot or alternating foot, needle holder, feed dog, left and right sliding plates, thread guide should be changed. It is provided with 6.4mm when it leaves off the factory, For the other size, the relevant parts can be ordered from the factory.



4. Operation

4.1 Coordination between needle, thread and sewing material

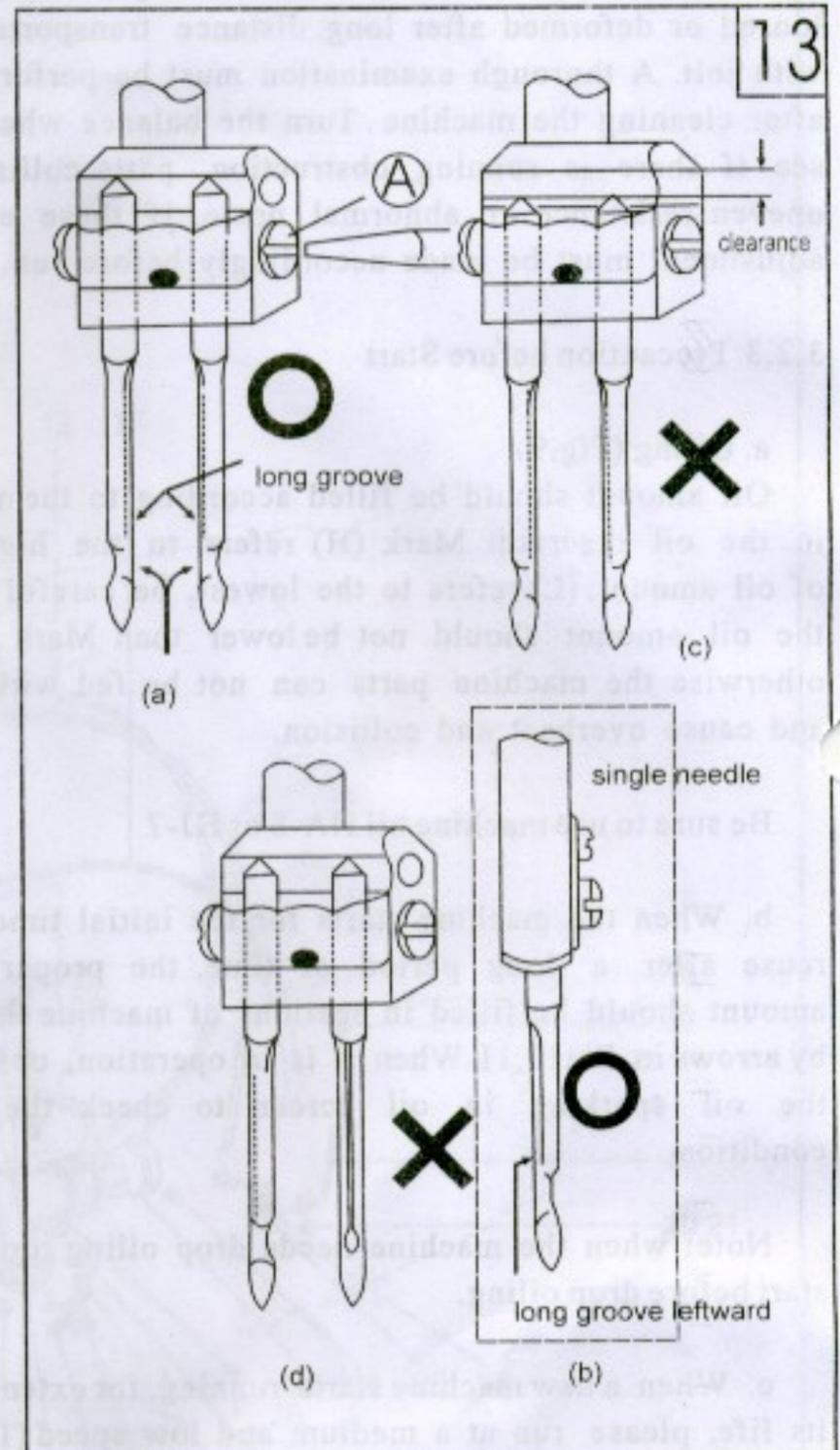
Please use needle DP×17, Nm125-180. The coarseness of needle should be in accordance with the nature of material. If stitch on heavy duty material with a slim needle, the needle will be easily bent, skip or thread breakage occurs, on the contrary, stitch on tightly woven material with a very coarse needle, the material will be destroyed with over-big needle. So the needle and thread should be properly selected.

4.2 Needle installation (Fig.13)

Turn the balance wheel to lift needle bar to the highest position, loosen Needle Set Screw (A), fully insert the needle shank up to the bottom of needle socket, keeping the long grooves of the two needles opposite with each other, then tighten Screw (A). For single needle, keep the long groove of needle facing the left of the operator. See Fig (b).

Note: Fig.(c) : insufficient insertion.

Fig.(d) : wrong direction of needle long groove in insertion.



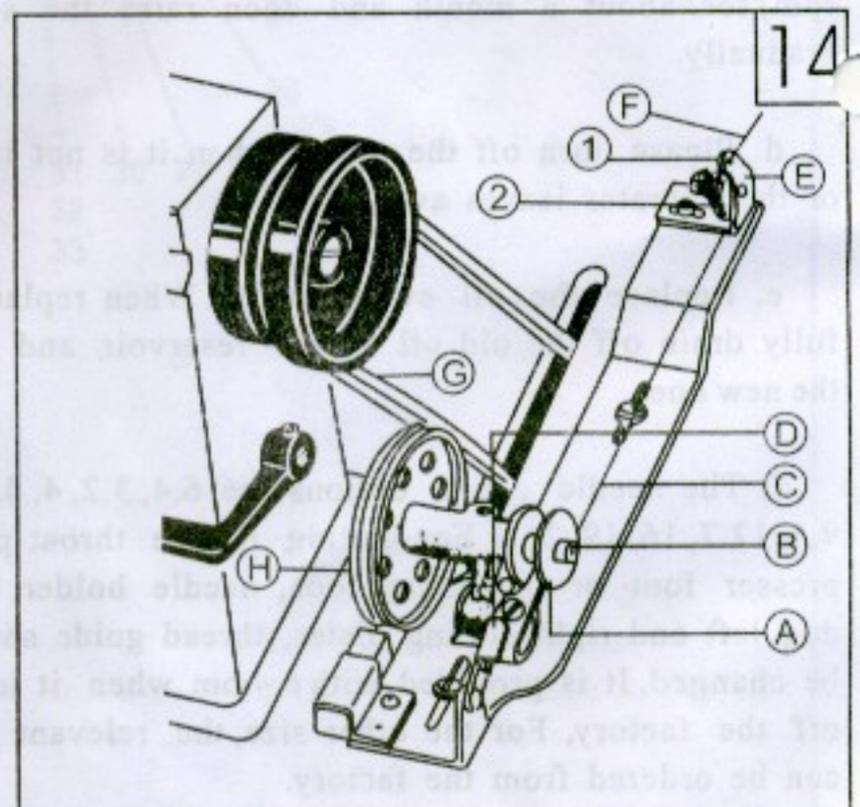
4.3 Winding the Bobbin thread

4.3.1 Winding method (Fig.14)

- 1) Install bobbin (A) to bobbin winder spindle (B).
- 2) Pass thread (C) from spool through the eye 1 on tension bracket (E). Pass it between tension discs 2, and then wind the end of the thread a few turns on the bobbin.
- 3) Push stop latch thumb lever (D) down to lock the bobbin, the winder pulley (F) is thereby pressed on belt (G).
- 4) Start the machine to wind thread.

Note when thread is wound without sewing operation, be sure to keep the presser foot lifted.

- 5) When the thread is fully wound, the bobbin winder stop latch automatically release the bobbin winder, thus stopping the winding motion.



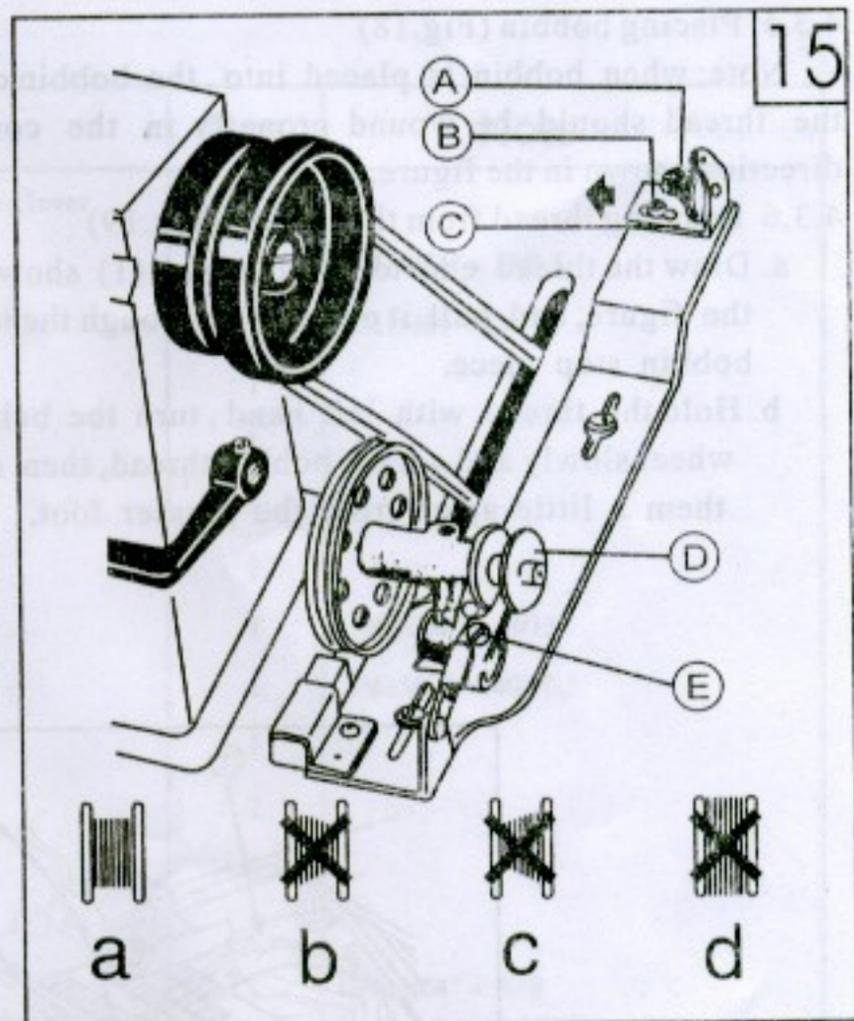
4.3.2 Winding adjustment (Fig.15)

1) Wound bobbin thread should be neat and tight, if not, adjust the thread tension by turning tension stud thumb nut (A) of bobbin winder tension bracket.

Note: nylon or polyester thread should be wound with light tension, otherwise bobbin (D) might be broken or deformed.

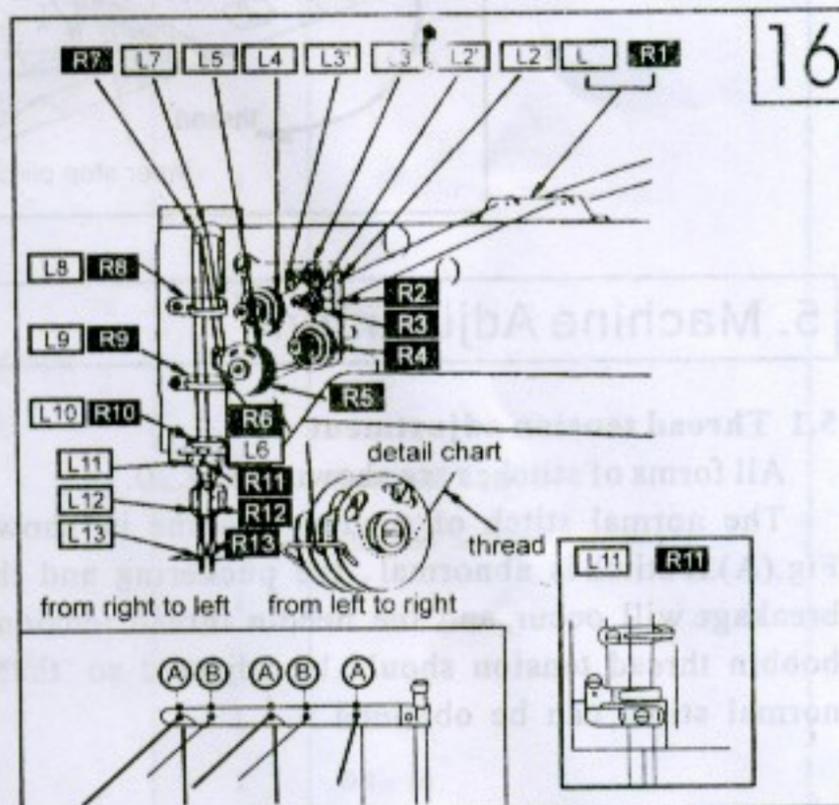
2) When the wound thread layer does not present a cylindrical shape as in Fig.15a, loosen tension bracket screw (B) and move tension bracket (C) leftward or rightward. If thread is wound as shown in Fig, 15b, move the tension bracket rightward, while if thread is wound as shown in Fig.15c, move the tension bracket leftward, After adequately positioning the tension bracket, tighten screw (B).

3) Do not over fill the bobbin, the optimum capacity of thread will fill about 80% of bobbin outside diameter, this can be adjusted by stop latch screw (E).



4.3.3 Threading (Fig.16)

Every thread should be drawn through Thread Hole (A), when use light and smooth thread (polyester or long silk thread), it should be drawn through Hole (B), Keep the thread take-up lever in its highest position, draw every thread in the following numerical order.



4.3.4 The stitch length and forward and reverse sewing control (Fig.17)

The stitch length can be regulated by Stitch Length Dial (A). Turn it counter-clockwise to expand its length and clockwise to shorten its length. The numbers on Dial (A) show the sizes of the stitch length in mm.

For reverse feed, press down Release Feed Lever (C) to perform reverse sewing, Release the lever, the reverse feed lever can reset automatically and the forward sewing is resumed.

