

Sun Special[®]

SS8000

SAFETY INSTRUCTION

1. Never operate your machine unless it has been properly lubricated.
2. The machine normally rotates toward you. Take care not to allow your machine to rotate in the reverse direction. (The machine rotates counterclockwise as observed from the hand wheel side.)
3. For the first month after the installation of your machine, run it at a lower speed .
4. Do not put your hands under the needle while the sewing machine is in operation.
5. Keep your hands away from the thread take –up lever while the sewing machine is in operation.
6. Operate the hand wheel after the sewing machine has completely stopped.

1. ADJUSTMENT OF NEEDLE BAR STOP POSITION

1. Adjust of "UP" stop position

1) As a standard, the stop position is set to when the red mark A on the motor cover is linear with the red mark B on the hand wheel.

2) Kick down the pedal by heel to make the machine stop at "UP" stop position. While holding the pulley insert the adjusting tool ① in the hole C, then remove the tool.

Turn the tool clockwise, the stop will arrive earlier.

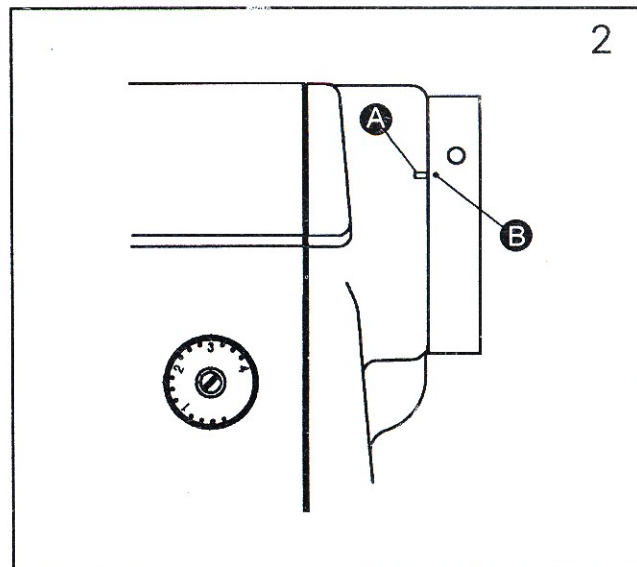
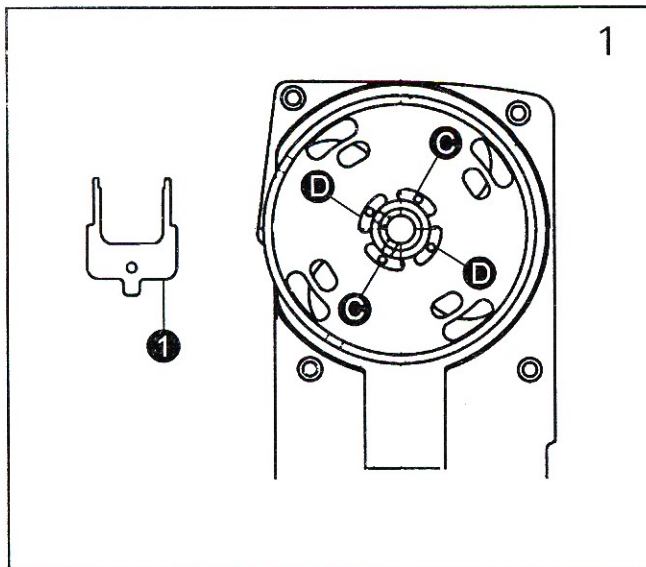
Turn the tool counterclockwise, the stop will arrive later.

2. Adjust of "DOWN" stop position

1) When the pedal is neutral the machine stops as "DOWN" stop position. Run the machine and stop at "DOWN" stop position. While holding the pulley insert the adjusting tool ① in the hole D, then remove the tool.

Turn the tool clockwise, the stop will arrive earlier.

Turn the tool counterclockwise, the stop will arrive later.



2. PRECAUTIONS FOR STARTING TO OPERATE

1. Lubrication

Before starting sewing machine operation, fill oil for hook lubrication into the oil tank.

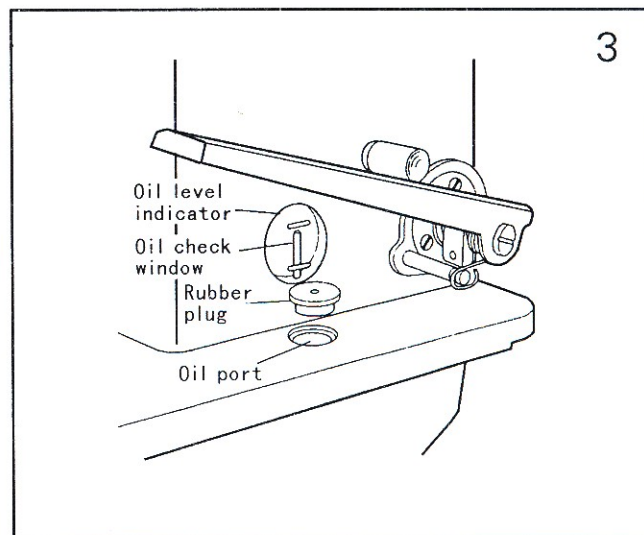
1) Remove the rubber plug from the oil port, and fill the oil from the oil port.

2) Fill in oil until the tip of the oil level indicator matched the line in the oil check window.

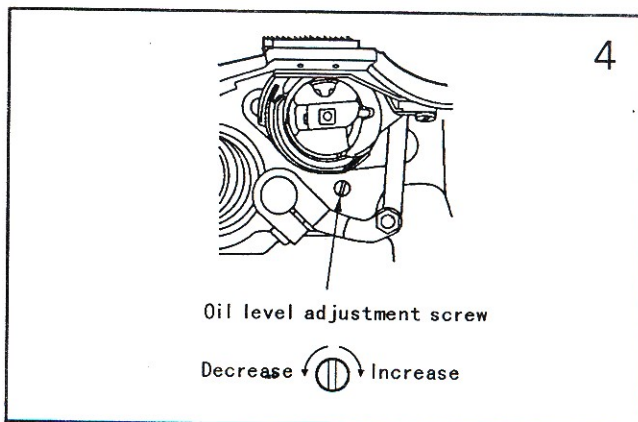
3) When done filling the oil, set the rubber plug into the oil port.

4) If the tip of the oil level indicator drops below the line in the oil check window during operation, replenish the oil.

5) The max. oil amount is 120ml.



2. Adjusting of the amount of oil for hook
Turn the oil level adjustment screw, and adjust the amount of oil for hook.



3. PERIODICAL CLEANING

1. Machine

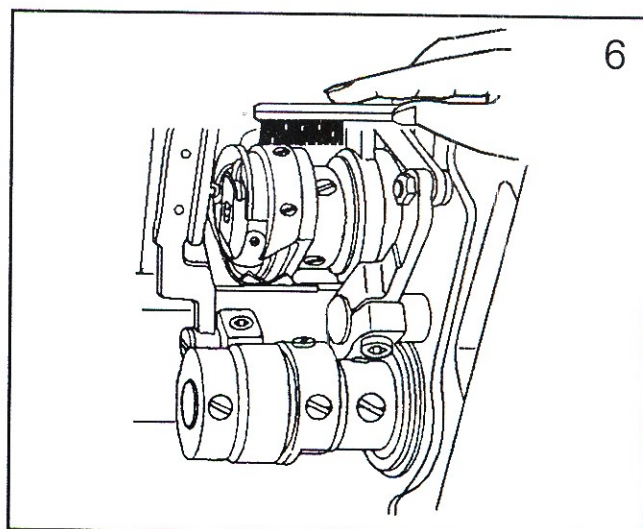
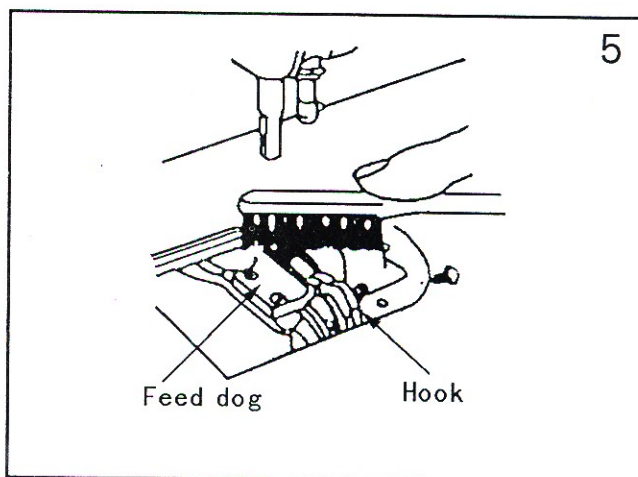
- 1) Remove the throat plate and clean the feed dog.
- 2) Assembling is to be made by screwing in the screw by 2 to 3 rotations by hand at first, then tightening them evenly by use of a long size screw driver.
- 3) Lay down the machine head and clean the hook and inner bobbin case.

2. Control box

Remove dust from the connector. (If the connector covered with dust, machine might misoperated.)

3. Precaution for position detector

- 1) A light type detection element is used in the detector. Thus, take care not to adhere dust or oil on the detector plate when the sewing machine pulley is removed for adjustments, etc. If dust or oil does adhere, wipe off with a soft cloth while taking care not to scratch the detector plate. Do not allow oil to seep into the clearances of the detector plate.
- 2) If the position detector connector had been disconnected or the machine has locked completely, the motor is automatically switched off in a predetermined period of time to prevent the motor from burning (The motor may not be switched off if incomplete lock – up or overload has occurred.) The operation is restored to normal by switching the power off, and then on after the fault has been repaired. The above also takes place when the detector had become faulty or any wire had been broken.

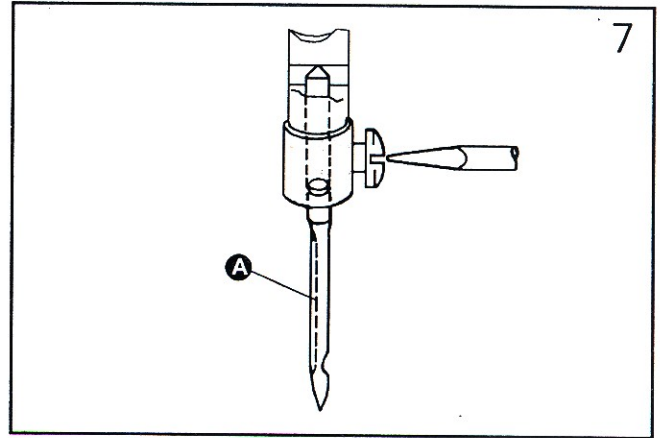


4. HOW TO ATTACH NEEDLE

Insert the needle up to the bottom of needle clamp and tighten the screw keeping the long groove side of needle forward the left.

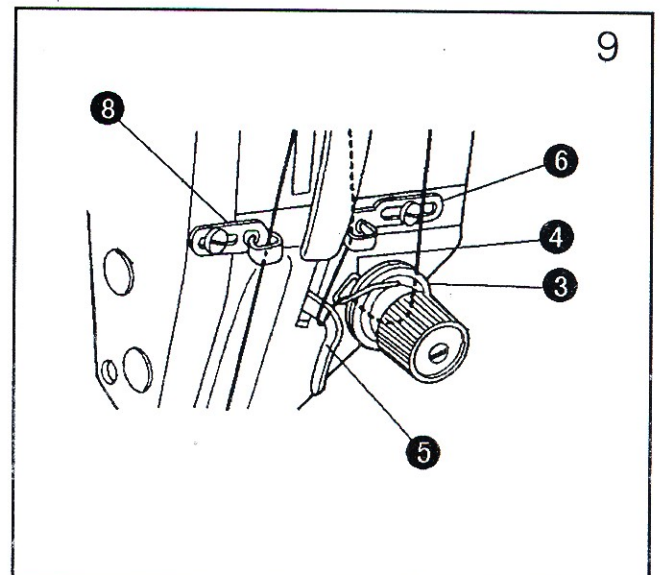
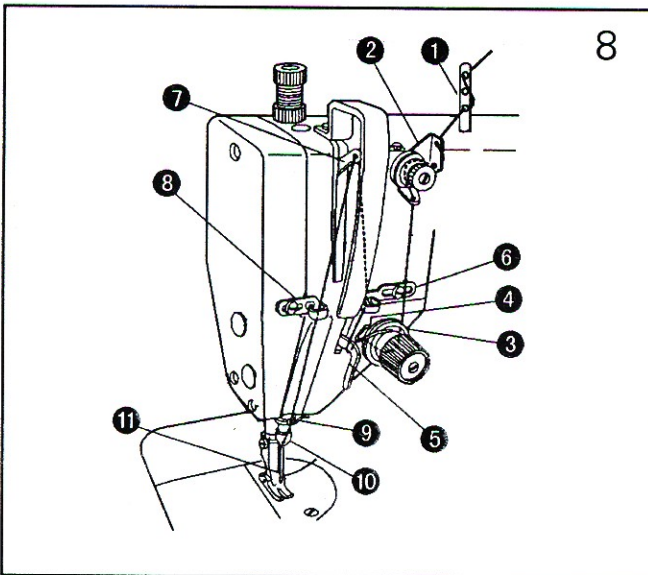
NOTE

If snapping of thread occurs during back sewing with polyester threads, it may be avoided by fitting the needle with the long groove shifted to the front side.



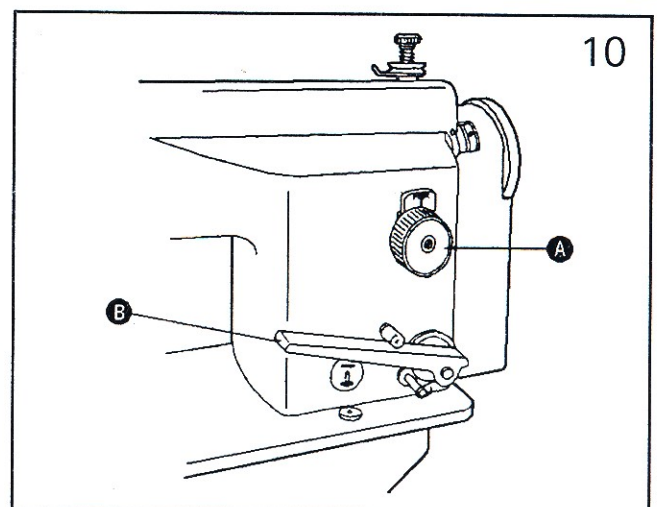
5. THREADING

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



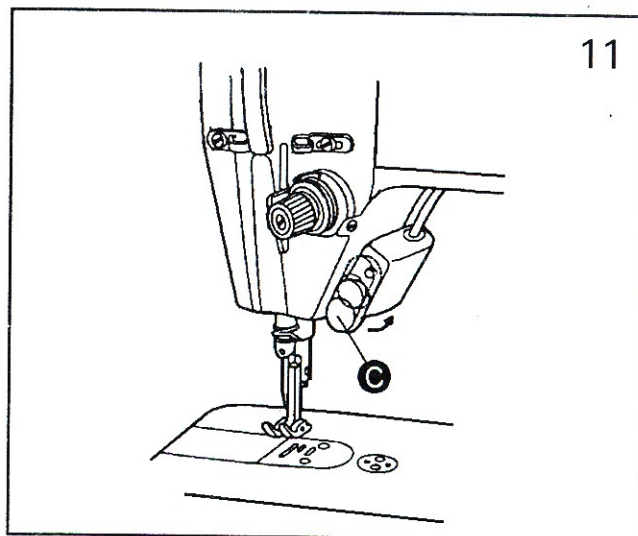
6. ADJUSTING OF STITCH LENGTH & REVERSE LEVER

1. Rotate the drop feed dial A while depressing the reverse lever B, then pressing the push lever, when adjusting the stitch length .
2. If the reverse lever B is depressed, reverse sewing (backward sewing) will take place.



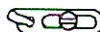
3. Touchback switch

- 1) Reverse sewing will take place while the push –button C is pressed. When the push –button is released, reverse sewing turns into forward sewing.
- 2) When the push –button C is turned 180 degrees in the direction of the arrow, the switch will be locked, and backward sewing will not take place even if the button is pressed.



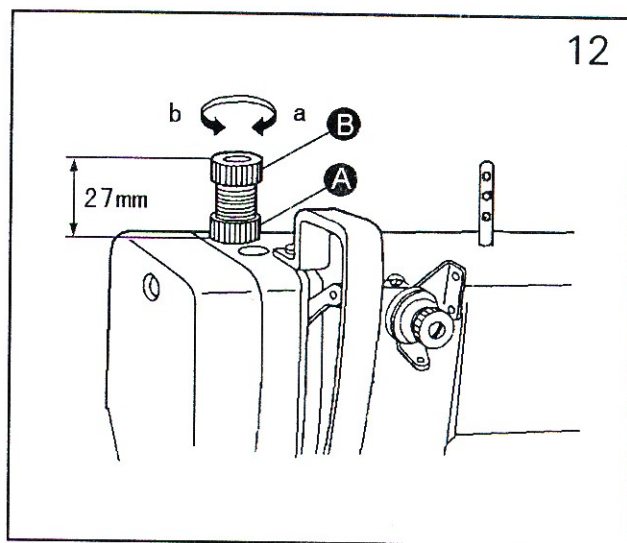
7. ADJUSTMENT OF THE THREAD GUIDE

Refer to the table , and adjust according to the stitching conditions, the material and thread.

	1	2	3
Thread guide position	Left 	Middle 	Right 
Materials	Heavy	Medium	Light
Thread	Polyester Cotton Vinylon # 30 – 50	Polyester #50 to 60	Polyester #50 to 60
		Cotton Vinylon #50 to 89	

8. ADJUSTING OF PRESSURE OF PRESSER FOOT

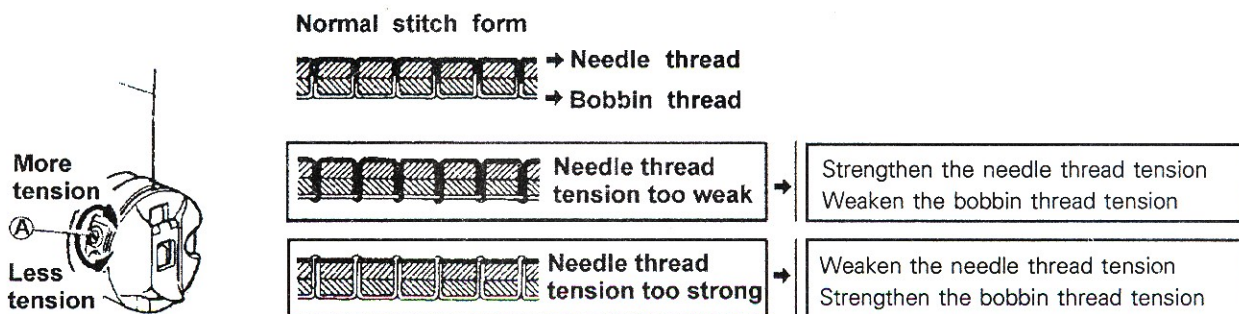
Pressure of the presser foot can be adjusted by turning the pressure regulating thumb screw B. First loosen lock nut A, for heavy materials, turn the pressure regulating thumb screw in the direction (a) to increase the pressure, while for light materials, turn the pressure regulating thumb screw in the direction b to decrease the pressure, then tighten lock nut A.



9. THREAD TENSION ADJUSTMENT

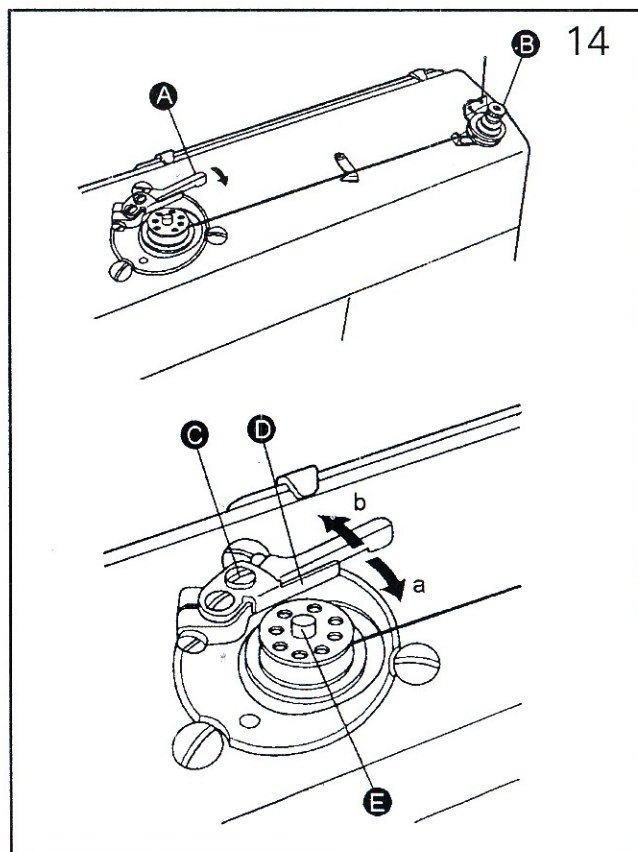
Thread tension should be determined in accordance with the stitch obtained by adjusting the tension of the bobbin thread and needle thread.

13



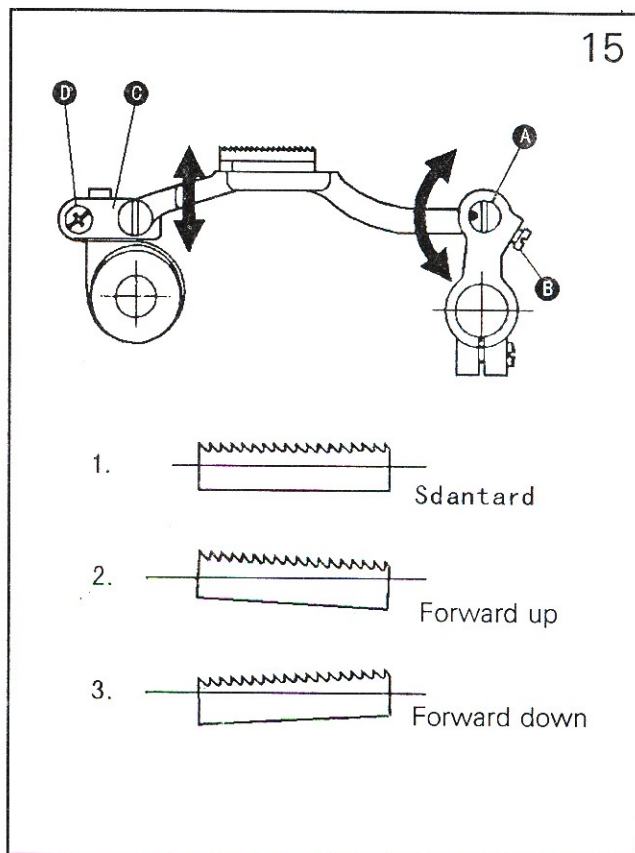
10. HOW TO WIND THE LOWER THREAD ON THE BOBBIN

1. Press the bobbin onto the thread winding shaft E.
2. Pass the thread for winding thread as shown in the figure and wind the end of the thread clockwise around the bobbin several times, then wind the thread on the thread adjuster side counterclockwise several times.
3. Press lever A in the direction of the arrow, and start to run the sewing machine.
4. The operation will automatically stop when winding is completed.
5. Adjust thread winding strength by thread adjuster nut B.
6. Adjust thread winding amount by loosening screw C and moving the adjustment plate D. The thread winding amount will decrease when moved in the direction of (a). The thread winding amount will increase when moved in the direction of (b).



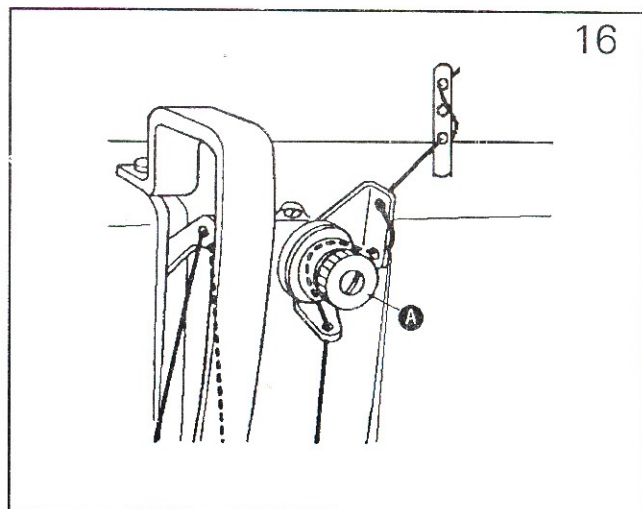
11. ADJUSTMENT OF FEED DOG HEIGHT AND INCLINATION

1. As a standard, the eccentric shaft A mark on the left of the horizontal feed arm is set to the direct left side, and the feed dog height is set to 0.8mm (max.) as shown in the fig.
2. To adjust the feed dog height and inclination, loosen the screw B at the left of the horizontal feed arm, and turn the eccentric shaft A, or loosen the screw D on joint C , and move the joint C up and down.
3. When the eccentric shaft is set to "Forward up" position, puckering may be avoided and free loop is less like to occur.
4. When the eccentric shaft is set to "Forward down" position, misalignment of fabrics is less likely to occur and yarn severance may be avoided.



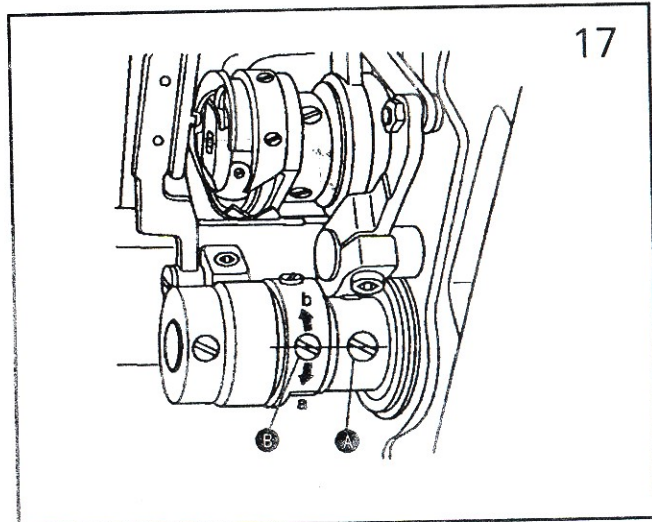
12. ADJUSTMENT OF REMAINING NEEDLE THREAD LENGTH AFTER THREAD TRIMMING

1. Turn the pretension nut A and adjust.
2. When turned clockwise, the length of thread left in the needle will be short.
3. When turned counterclockwise, the length of the thread left in the needle will be long.



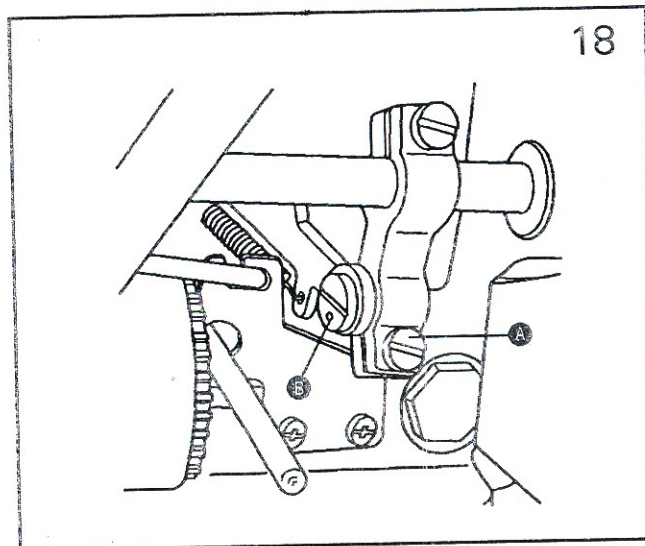
13. ADJUSTMENT OF FEED TIMING

1. Adjust by changing the position of the vertical feed eccentric ring.
2. As a standard, the vertical feed timing is set to when the screw A on the bearing bushing is linear with screw B on the vertical feed eccentric ring.
3. When the eccentric ring is moved in the direction of (a), the vertical feed dog will rise earlier.
4. When the eccentric ring is moved in the direction of (b), the vertical feed dog will rise later.



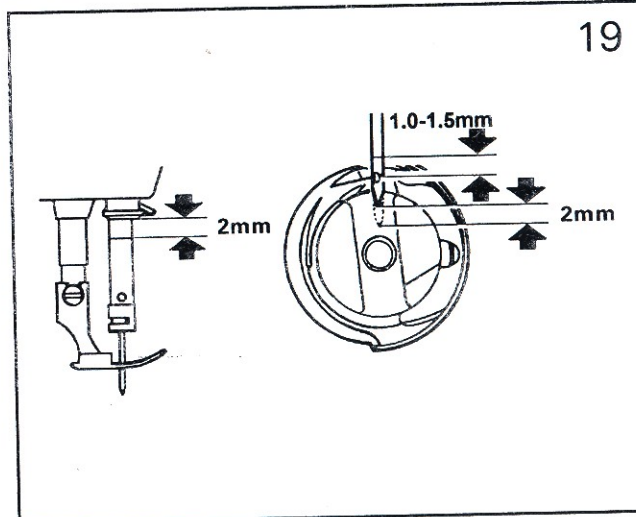
14. ADJUSTMENT OF FORWARD BACKWARD STITCH LENGTH

1. Loosen screw A on the right of the adjustment arm.
2. Turn the eccentric shaft B and adjust.
3. The forward stitch length will increase and the backward length will decrease when the eccentric shaft B is turned counterclockwise.
4. The forward stitch length will decrease and the backward length will increase when the eccentric shaft B is turned clockwise.



15. ADJUST THE SYNCHRONIZATION OF THE NEEDLE WITH ROTATING HOOK

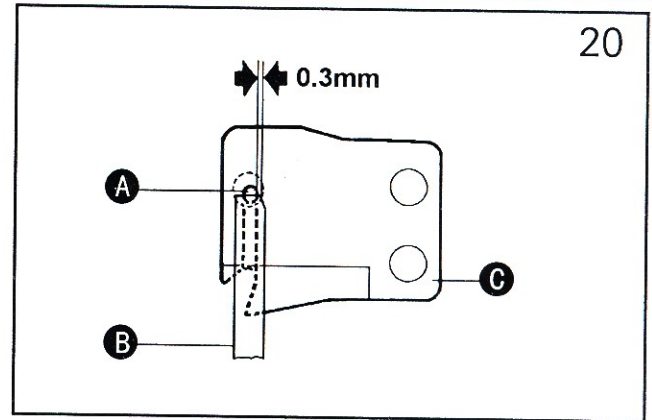
When lifting the needle bar from its lowest position of the stroke to the distance 2mm, the hook point of the bobbin should align with the center line of the needle and be 1.0 – 1.5mm above upper end of the needle eye.



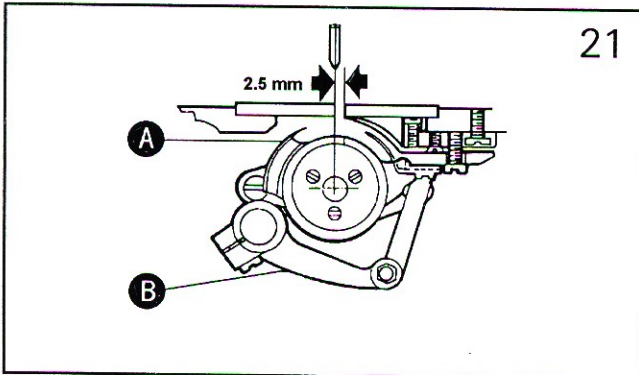
16. POSITION OF THE FIXED KNIFE AND LEFT KNIFE POINT

1. The standard position is shown in the figure.
2. If the size is larger than the standard, the knife will cut the 3 threads in the meantime or draw the thread out of the needle eye; if smaller, will cause cutting damage, so make sure to avoid that.
3. As things mentioned above occur, adjustment is done by setting the fixed knife support or the fixed knife (B).

A – the blade C – the knife (left)

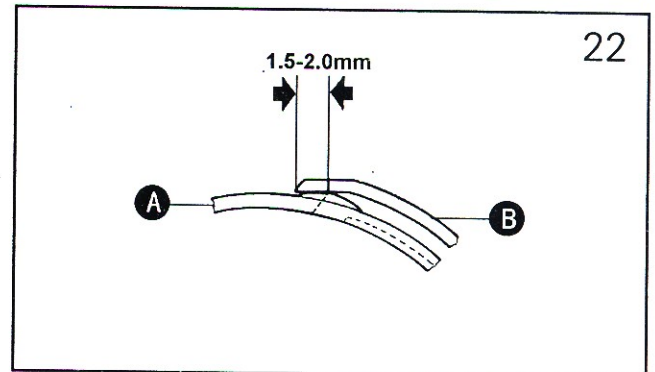


17. ADJUSTING KNIFE CUTTING ENGAGEMENT



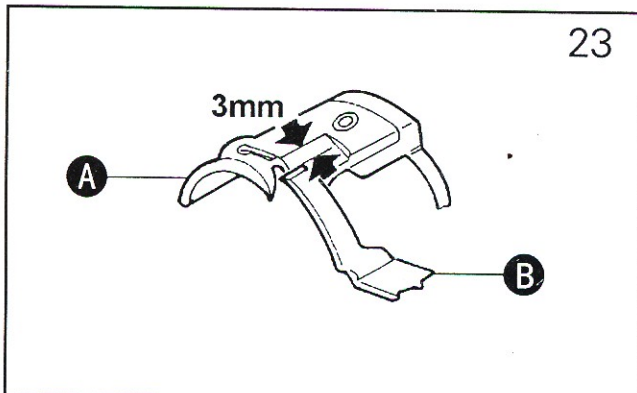
1. The figure shows the standard positions of the left knife and the fixed knife.

A – knife(right) B – cutter driving shaft

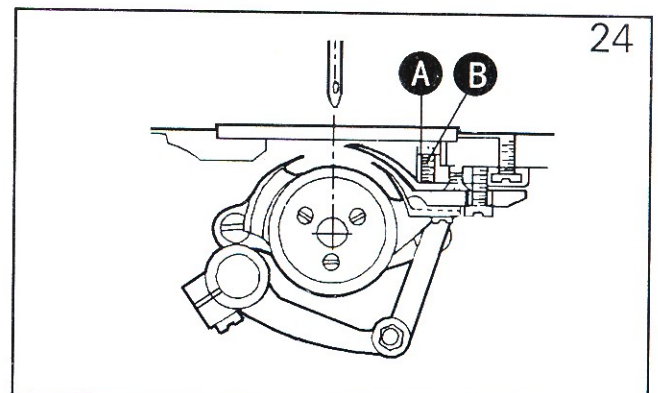


2. Adjust the degree of knife cutting engagement: When the electromagnet works, turn the machine, the left knife A follows the motion of the thread cutting cam. The maximum degree of cutting engagement is 1.5 – 2.0mm. adjust the cutter driving crank if necessary.

18. ADJUSTING CUTTING PRESSURE



1. The figure shows the standard position that left knife A begins to touch fixed knife B.



2. When cutting thick thread, increase the cutting force.
3. For adjusting cutting force, loosen set nut A, and adjust screw B.

This diagram is an exploded view of a mechanical assembly, likely a sewing machine. It shows the main body (1) and various components that attach to it, including a motor assembly (top left), a foot assembly (bottom center), and various internal mechanisms. The components are numbered 1 through 84. Two inset boxes provide detailed views of specific sub-assemblies: one for the motor area (top left) and one for the foot assembly (bottom center).

Motor Assembly (Top Left Inset):

- 68, 69, 70, 71, 61, 67, 66, 55, 63, 62, 60, 64, 61, 57, 58, 56

Foot Assembly (Bottom Center Inset):

- 76, 78, 79, 80, 81, 82, 83, 84

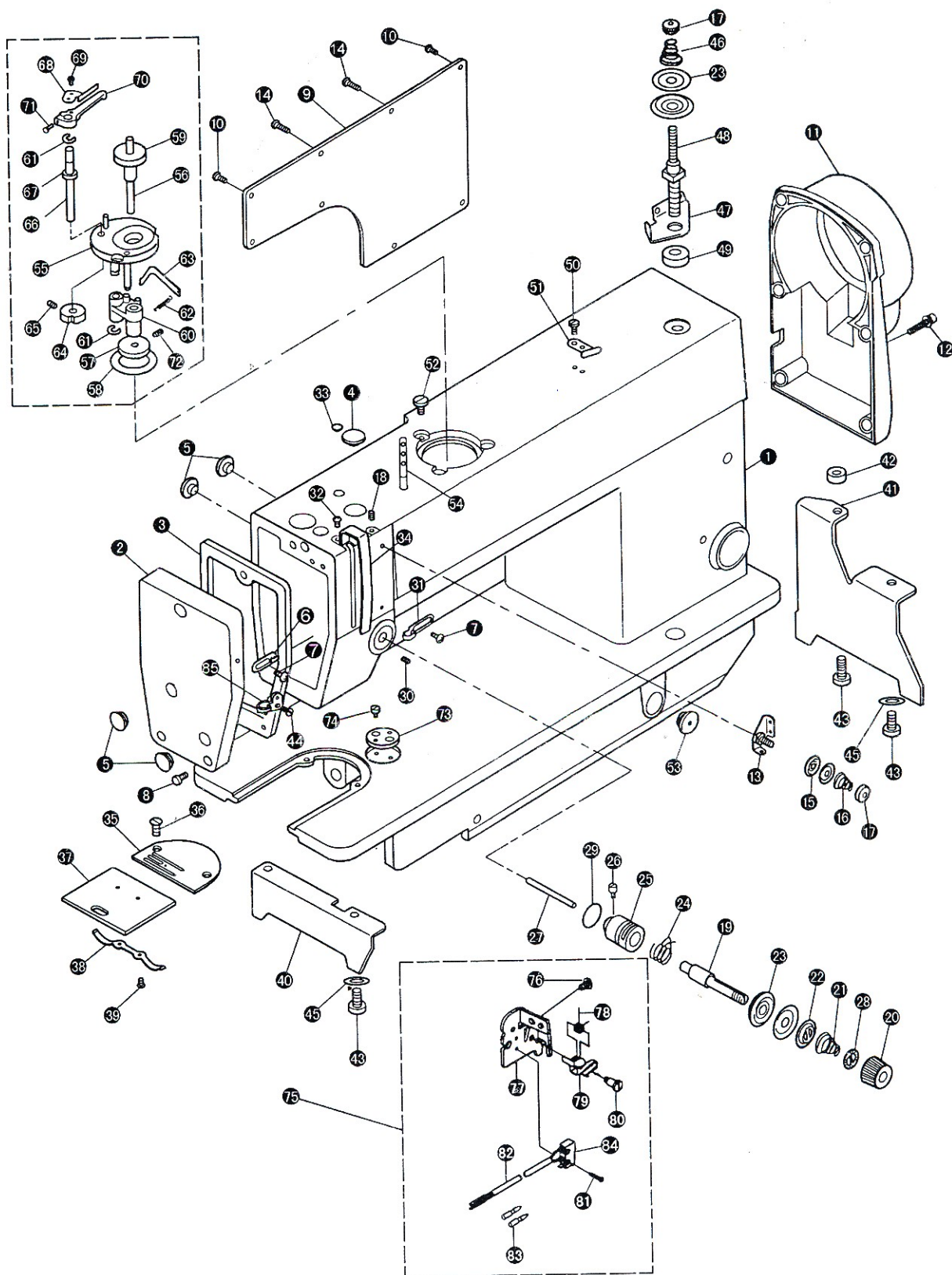
Main Assembly Components:

- 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84

1. ARM BED & ITS ACCESSORIES (1)

No.	Ref. No.	Description	Qt.
1	001C11000	Arm bed complete	1
2	001C10002	Face plate	1
3	001C10003	Gasket for face plate	1
4	022130003	Rubber plug $\Phi 19$	1
5	022130004	Rubber plug $\Phi 11.8$	4
6	022130005	Thread guide	1
7	006200007	Screw	2
8	022100004	Screw	3
9	001C10004	Arm side cover	1
10	022100006	Screw	6
11	001C10008	Pulley cover	1
12	058270002	Screw	6
13	036240001	Thread guide	1
14	022640003	Screw	2
15	022150003	Thread tension discs	2
16	036240003	Pre-tension spring	1
17	036240004	Pre-tension adjusting nut	2
18	022100011	Set screw	1
19	022160001	Thread tension stud	1
20	022160002	Thread tension nut	1
21	022160003	Thread tension spring	1
22	022160004	Thread tension releasing pin	1
23	022160005	Thread tension discs	4
24	022160006	Thread take-up spring	1
25	022160007	Thread tension regulator bushing	1
26	022160012	Screw	1
27	001100012	Thread tension releasing pin	1
28	022160010	Thumb net revolution stopper	1
29	022160011	O-ring	1
30	020700001	Screw(5.95 28/7.5)	1
31	022100014	Thread guide	1
32	0585A0003	Screw	1
33	022100015	Rubber plug $\Phi 8.8$	1
34	001100005	Thread take-up cover	1
35	153100002	Needle plate	1
36	020100002	Screw	2
37	022170001	Slide plate	1
38	022170002	Spring for Slide plate	1
39	020100024	Screw	2
40	001100006	Bed stud(left)	1
41	001C10006	Bed stud(right)	1
42	001100008	Spacer	1
43	001400008	Screw	4
44	022210009	Screw	1
45	S4A0400011	Washer 6	4
46	001102001	Thread tension spring	1
47	001102002	Thread guide	1
48	001102003	Thread tension stud	1
49	001102004	Spacer	1
50	001100009	Thread cutter	1
51	022830004	Screw	2
52	001100010	Screw	3
53	001C10009	Rubber plug	1
54	108200009	Thread guide	1
55	001111000	Bobbin winder base	1
56	001110010	Bobbin winder shaft	1
57	001110011	Bobbin winder wheel	1
58	001110001	Rubber ring	1
59	001110002	Bobbin cushion	1
60	001113000	Bobbin winder shaft holder assy	1
61	SFB1403008	C-type stop ring 5	2
62	001110003	Spring	1
63	001110004	Plate spring	1
64	001110005	Bobbin winder cam	1
65	S150224011	Screw	1
66	001111005	Cam shaft	1
67	001110006	Spacer	1

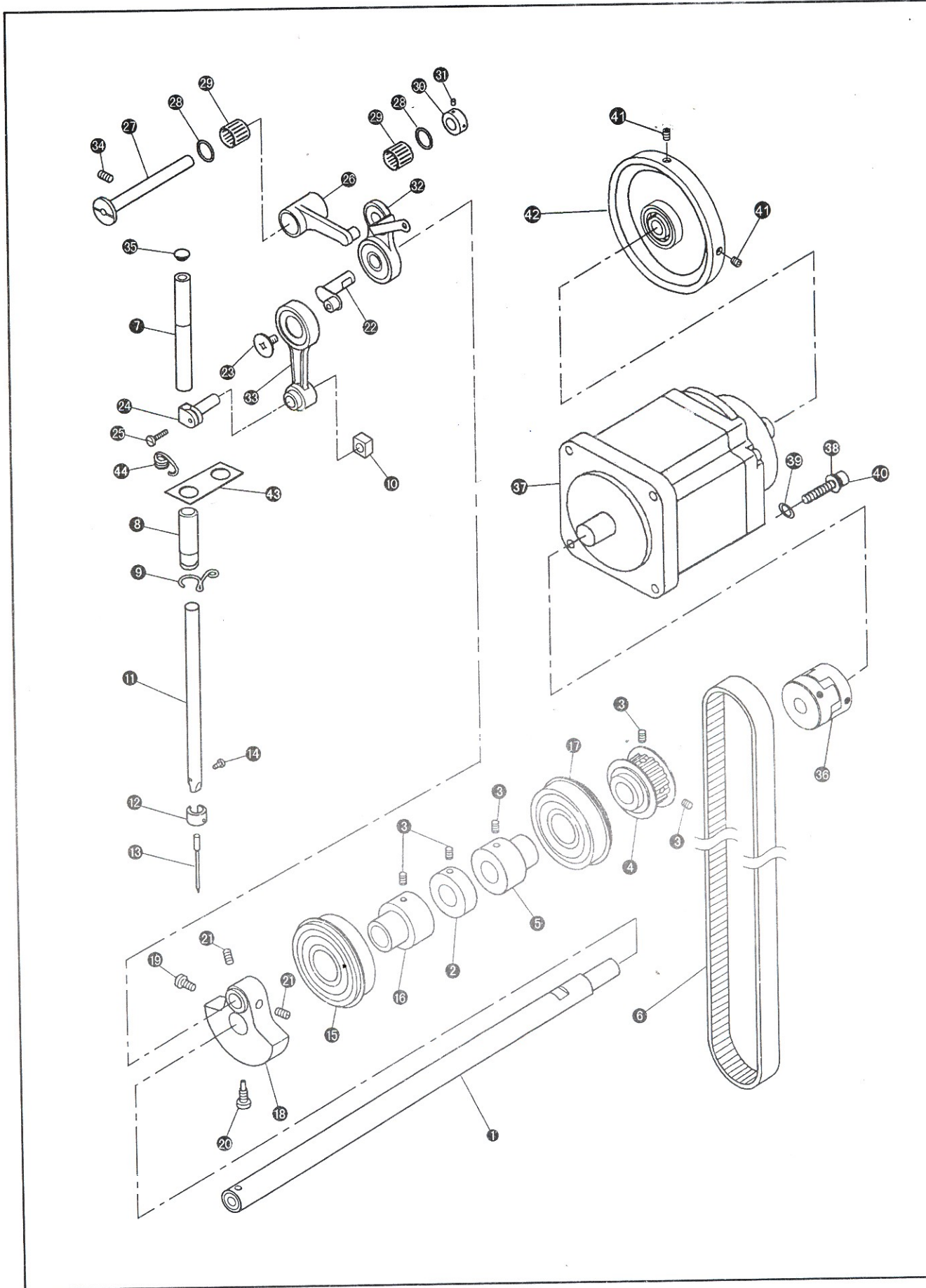
1. ARM BED AND ITS ACCESSORIES(2)



1. ARM BED & ITS ACCESSORIES (2)

No.	Ref. No.	Description	Qt.
68	001110008	Adjust plate	1
69	058710007	Screw	1
70	001110009	Lever	1
71	022700015	Screw	1
72	S150224009	Screw	2
73	057100008	Plate for guide	1
74	121100004	Screw	2
75	001C12000	Touch switch	1
76	0585A0003	Screw	1
77	001C12001	Bracket	1
78	001C12003	Spring	1
79	001C12002	Retainer	1
80	001C12004	Screw	1
81	S4B1503009	Screw	2
82	001C12005	Wire	1
83	036911002	Terminal pin	2
84	36T8-007C4	Micro switch	1
85	001C10005	Thread guide	1

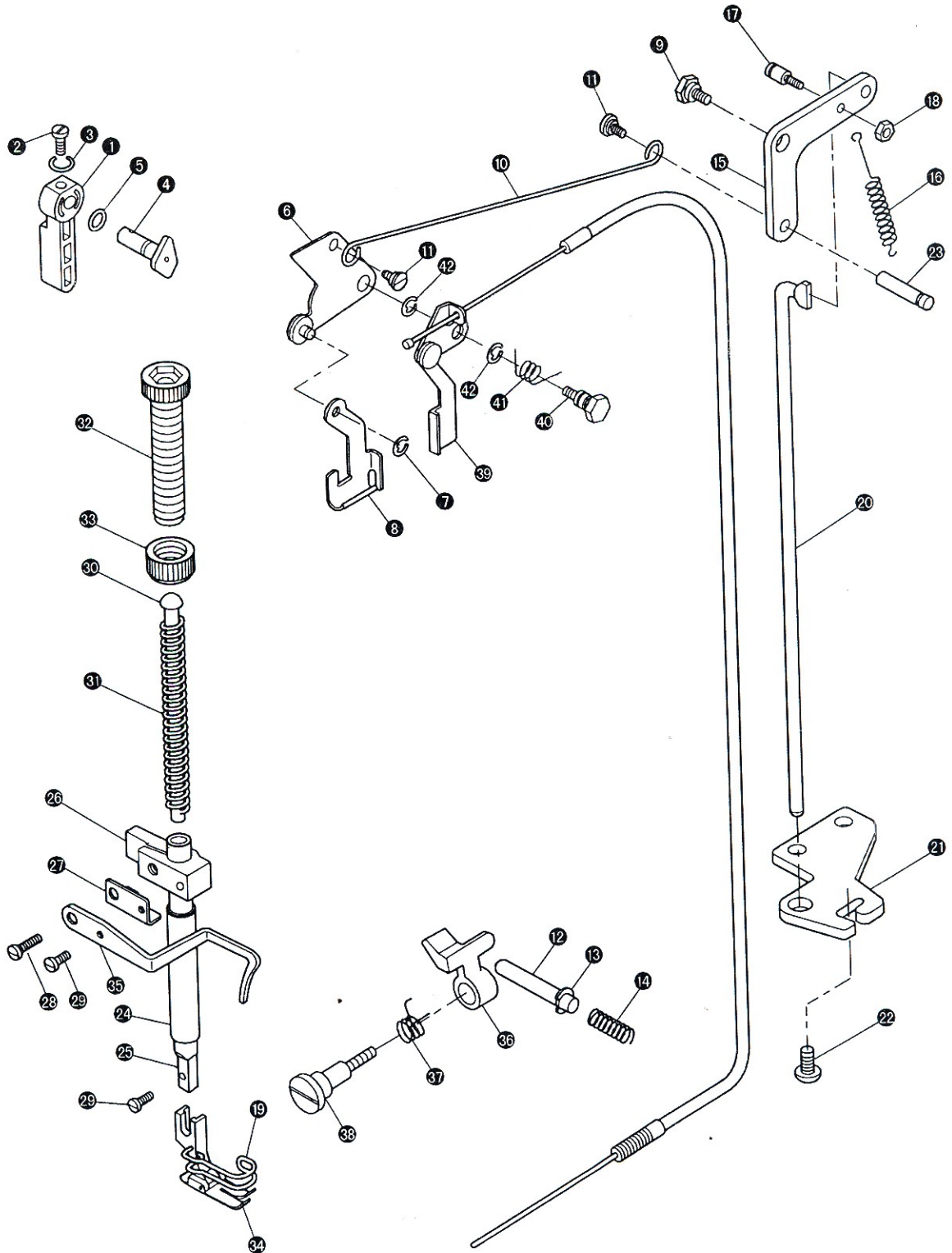
2. NEEDLE BAR AND THREAD TAKE -UP MECHANISM



2. NEEDLE BAR & THREAD TAKE-UP MECHANISM

No.	Ref. No.	Description	Qt.
1	001C20001	Upper shaft	1
2	001200002	Bobbin winder driving wheel	1
3	S150224003	Screw	8
4	001200003	Belt pulley (upper)	1
5	001202001	Bushing (right)	1
6	001C20002	Timing belt	1
7	001200005	Needle bar bushing (upper)	1
8	001C20003	Needle bar bushing (lower)	1
9	022230002	Thread guide	1
10	001200007	Slide block	1
11	001C20004	Needle bar	1
12	022200015	Thread guide	1
13	022200016	Needle	1
14	022200017	Screw	1
15	S150866037	Bearing	1
16	001201001	Bushing (left)	1
17	S150866006	Bearing	1
18	001203001	Needle bar crank	1
19	022200006	Screw	1
20	022200007	Screw	1
21	022220002	Screw	2
22	001210001	Thread take-up crank	1
23	022210006	Screw	1
24	022210008	Needle bar holder	1
25	022210009	Screw	1
26	001211001	Thread take-up	1
27	001211002	Thread take-up support shaft	1
28	001211003	Spacer	2
29	S150866038	Needle bearing	2
30	001211004	Collar	1
31	022100011	Screw	2
32	001212000	Thread take-up lever assy	1
33	001213000	Needle bar lever assy	1
34	020300007	Screw	1
35	022100015	Rubber plug $\Phi 8.8$	1
36	001C22000	Coupling joint	1
37	001C20005	Motor	1
38	S8A3103004	Washer	4
39	S150667001	Washer	4
40	S150220045	Screw	4
41	S150224011	Screw	2
42	001C21000	Hand wheel (Hohsing)	1
42	001C23000	Hand wheel (Mitsubishi)	1
43	001200008	Felt pouch for return oil filter	1
44	B965373089	Oil filter holder	1

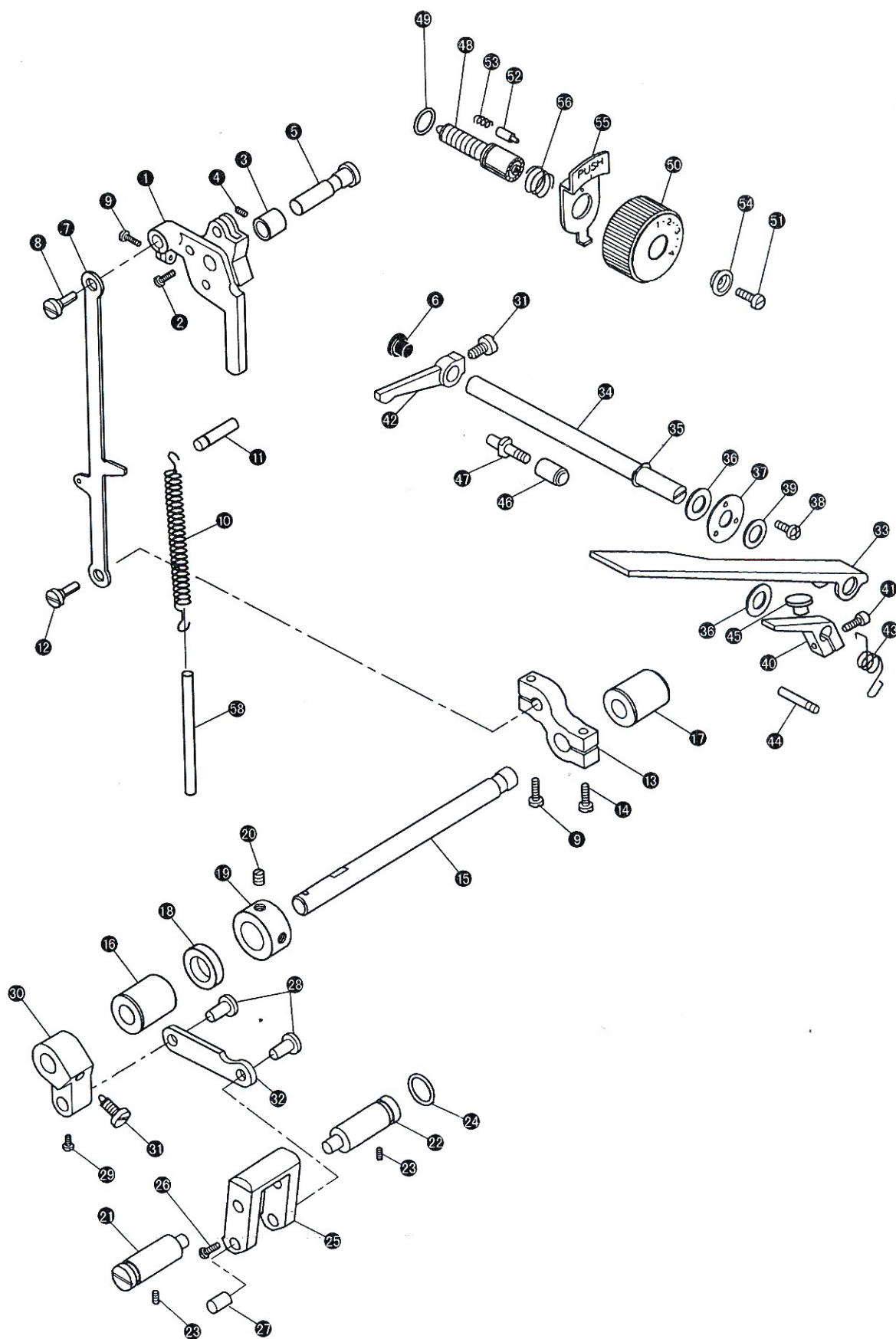
3. PRESSER FOOT MECHANISM



3. PRESSER FOOT MECHANISM

No.	Ref. No.	Description	Qt.
1	022710001	Presser bar lifter lever	1
2	022100006	Screw	1
3	022100007	Washer	1
4	001300001	Presser bar lifter cam	1
5	036620002	O-ring	1
6	001301100	Knee lifter lever (left)	1
7	S4B1202008	C-type stop ring 4	1
8	001301001	Pull up plate	1
9	022730004	Screw	1
10	001C30001	Knee lifter rod	1
11	022720002	Hinged screw	2
12	001300002	Tension release pin	1
13	S4A0105006	C-type stop ring 3	1
14	001300003	Tension release pin spring	1
15	001300017	Knee lifter lever (right)	1
16	001300018	Spring for knee lifter lever	1
17	001300019	Screw	1
18	036730005	Nut	1
19	057700002	Finger guard	1
20	001C30002	Knee lifter connecting rod	1
21	001300004	Knee lifter connecting rod guide	1
22	0585A0003	Screw	2
23	022700008	Pin	1
24	001C30003	Bushing for presser bar	1
25	001C30004	Presser bar	1
26	001300007	Presser bar guide	1
27	001300008	Bracket plate	1
28	058270002	Screw	1
29	022700015	Screw	2
30	001300009	Spring guide	1
31	001300010	Presser spring	1
32	022750001	Screw	1
33	022750002	Nut	1
34	02276	Presser foot	1
35	001300011	Upper thread guide	1
36	001300012	Tension releaser	1
37	001300013	Spring	1
38	001300014	Screw	1
39	001303000	Tension release lever assy	1
40	001300015	Screw	1
41	001300016	Spring	1
42	S8A3103018	C-type stop ring 6	2

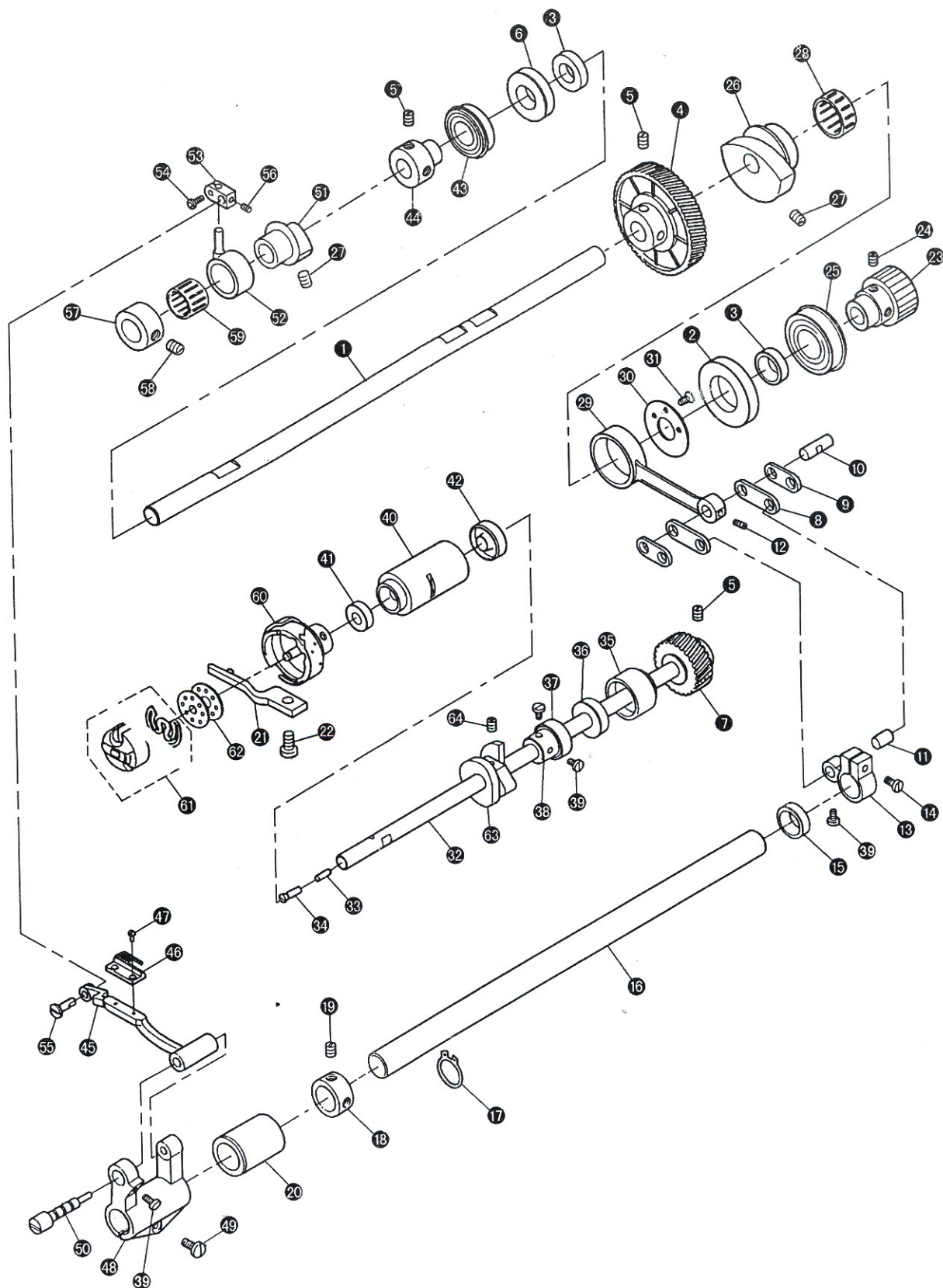
4. STITCH LENGTH REGULATING MECHANISM



4. STITCH LENGTH REGULATOR MECHANISM

No.	Ref. No.	Description	Qt.
1	001400001	Feed regulator	1
2	022510004	Screw	1
3	001400002	Bushing for feed regulator	1
4	020300007	Screw	1
5	001400003	Feed regulator shaft	1
6	142100024	Rubber plug $\Phi 11.8$	1
7	001400004	Feed regulating link	1
8	036500001	Connecting rod stud	1
9	022640003	Screw	2
10	001400005	Spring	1
11	022700008	Pin	1
12	001400006	Eccentric shaft	1
13	001400007	Feed regulating crank (right)	1
14	001400008	Screw	1
15	001400009	Feed regulating shaft	1
16	001400010	Bushing for feed regulating shaft	1
17	001400035	Bushing for feed regulating shaft (right)	1
18	001400011	Oil seal	1
19	001400012	Collar	1
20	022220003	Screw	2
21	001400013	Pin (left)	1
22	001400014	Pin (right)	1
23	028400083	Screw	2
24	S150656023	O-ring	1
25	001400015	Feed regulating crank	1
26	036550007	Screw	2
27	001400016	Link pin (short)	1
28	001400017	Link pin (long)	2
29	036550005	Screw	1
30	001400018	Feed regulating crank (left)	1
31	022500013	Screw	2
32	001400019	Feed regulating crank link	1
33	001400020	Reverse lever	1
34	001400021	Reverse lever shaft	1
35	S150651004	C-type stop ring 8	1
36	001400022	Washer	2
37	001400023	Retainer	1
38	0585A0003	Screw	3
39	001400024	Washer	1
40	001400025	Adjusting reverse lever	1
41	001400026	Screw	1
42	001400031	Reverse lever crank	1
43	001400027	Spring	1
44	001400028	Pin	1
45	155100027	Rubber cushion	1
46	001400029	Rubber stopper	1
47	001400030	Rubber stopper shaft	1
48	036540001	Screw bar	1
49	022530004	O-ring	1
50	001400033	Dial for stitch length regulator	1
51	001A00003	Screw	1
52	036500012	Stopper pin	1
53	022500009	Spring	1
54	036540004	Bushing	1
55	036500010	Pusher	1
56	036500011	Spring	1

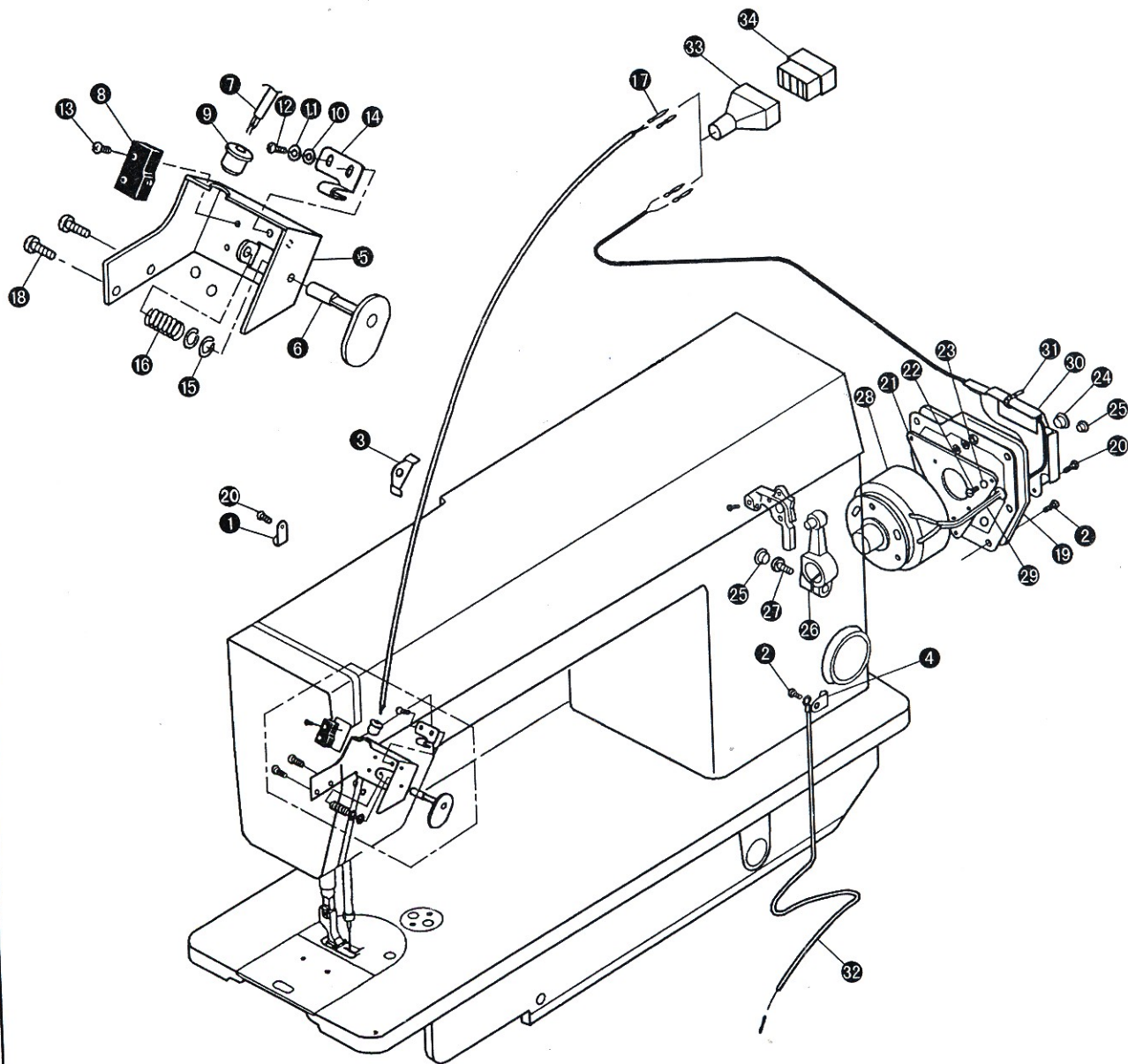
5. FEED AND FEED LIFTING MECHANISM



5. FEED & FEED LIFTING MECHANISM

No.	Ref. No.	Description	Qt.
1	001C50001	Feed lifting rock shaft	1
2	001500002	Bushing (right)	1
3	001500003	Oil seal	2
4	001500004	Bevel gear (large)	1
5	022220002	Screw	6
6	001500005	Bushing (middle)	1
7	001500007	Bevel gear (small)	1
8	001500008	Link (long)	2
9	036558001	Link (short)	2
10	036400104	Link pin (long)	1
11	036400204	Link pin (short)	1
12	BX63845009	Screw	1
13	001500009	Feed crank	1
14	058270002	Screw	1
15	001500010	Oil seal	1
16	001C50002	Feed rock shaft	1
17	S4A0500010	Retaining ring	1
18	022620001	Collar	1
19	022320002	Screw	2
20	001C50003	Bushing for Feed rock shaft	1
21	022400013	Rotating hook positioner	1
22	022400015	Screw	1
23	001501001	Belt pulley (lower)	1
24	S150224003	Screw	2
25	S150866037	Bearing	1
26	001502001	Level feed eccentric cam	1
27	020300007	Screw	4
28	S150866003	Needle bearing	1
29	001502002	Level feed connecting rod	1
30	001502003	Spacer	1
31	165330001	Screw	3
32	001C50004	Lower shaft	1
33	022411002	Filter	1
34	022411001	Screw	1
35	001504001	Lower shaft bushing(right)	1
36	001504002	Oil seal	1
37	S150866043	Bearing	1
38	001505001	Bearing	1
39	036550005	Screw	2
40	001506001	Lower shaft bushing(left)	1
41	001504002	Oil seal	1
42	001506003	Oil seal	1
43	S150866041	Bearing	1
44	001507001	Bearing	1
45	001508001	Feed bar	1
46	022600002	Feed dog	1
47	022610004	Screw	2
48	001508002	Feed rock shaft crank	1
49	022612001	Screw	1
50	001508003	Eccentric shaft	1
51	001509001	Feed lifting eccentric cam	1
52	001509002	Feed lifting eccentric rod	1
53	001509003	Connecting block	1
54	022100004	Screw	1
55	001509004	pin	1
56	B12500532	Screw	1
57	001509005	Collar	1
58	020700001	Screw	2
59	S150866042	Needle bearing	1
60	03643	Rotary hook assy	1
61	03642	Bobbin case assy	1
62	048400003	Bobbin	1
63	036450001	Thread trimmer cam	1
64	036450002	Screw	2

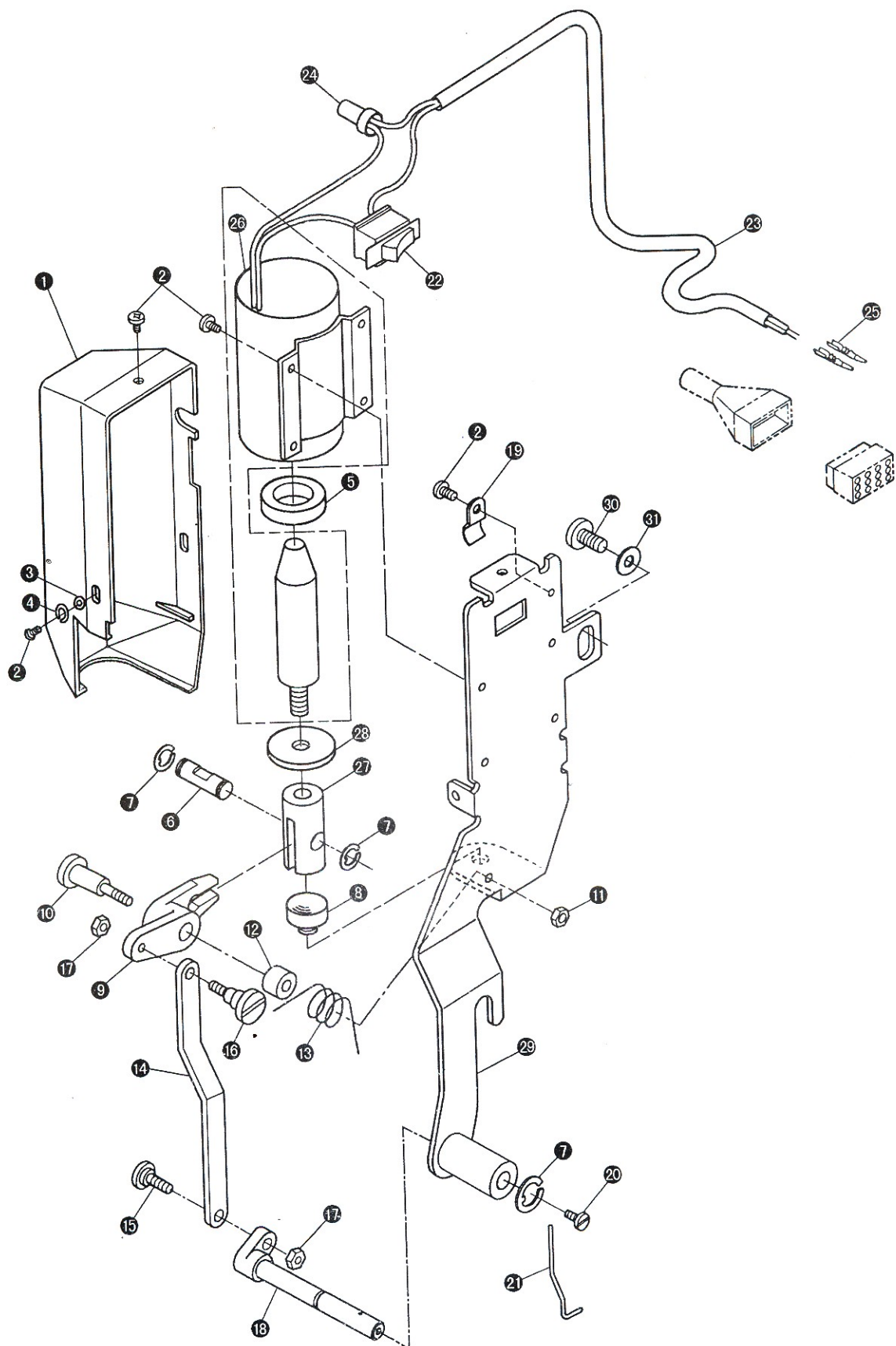
6. TOUCH BACK MECHANISM



6. TOUCH BACK MECHANISM

No.	Ref. No.	Description	Qt.
1	001600006	Clamp	2
2	022100006	Screw	7
3	001600001	Cord holder	1
4	001600007	Clamp	1
5	036830001	Bracket for touch switch	1
6	036811	Push button	1
7	001C61001	Wire	1
8	036830004	Micro switch	1
9	036700013	Rubber plug	1
10	S4B1503007	Washer	2
11	S8A3103009	Washer	2
12	S4B1503010	Screw	2
13	S4B1503009	Screw	2
14	036830005	Plate spring	1
15	S4A0105006	C-type stop ring 3	2
16	036830006	Spring	1
17	036911002	Terminal pin	5
18	022200019	Screw	2
19	001C60002	Arm side cover (right)	1
20	0585A0003	Screw	3
21	001600004	Solenoid bracket	1
22	022100006	Screw	3
23	022100007	Washer	3
24	022130003	Rubber plug $\Phi 19$	1
25	022130004	Rubber plug $\Phi 11.8$	2
26	001601000	Feed reverse driving crank aasy	1
27	S150220005	Screw	1
28	001610000	Solenoid	1
29	001C62001	Wire	1
30	001600005	Code holder	1
31	W060402029	Band	1
32	001C60001	Ground wire	1
33	036700017	Connector cap	1
34	108500003	Connector 12-pole	1

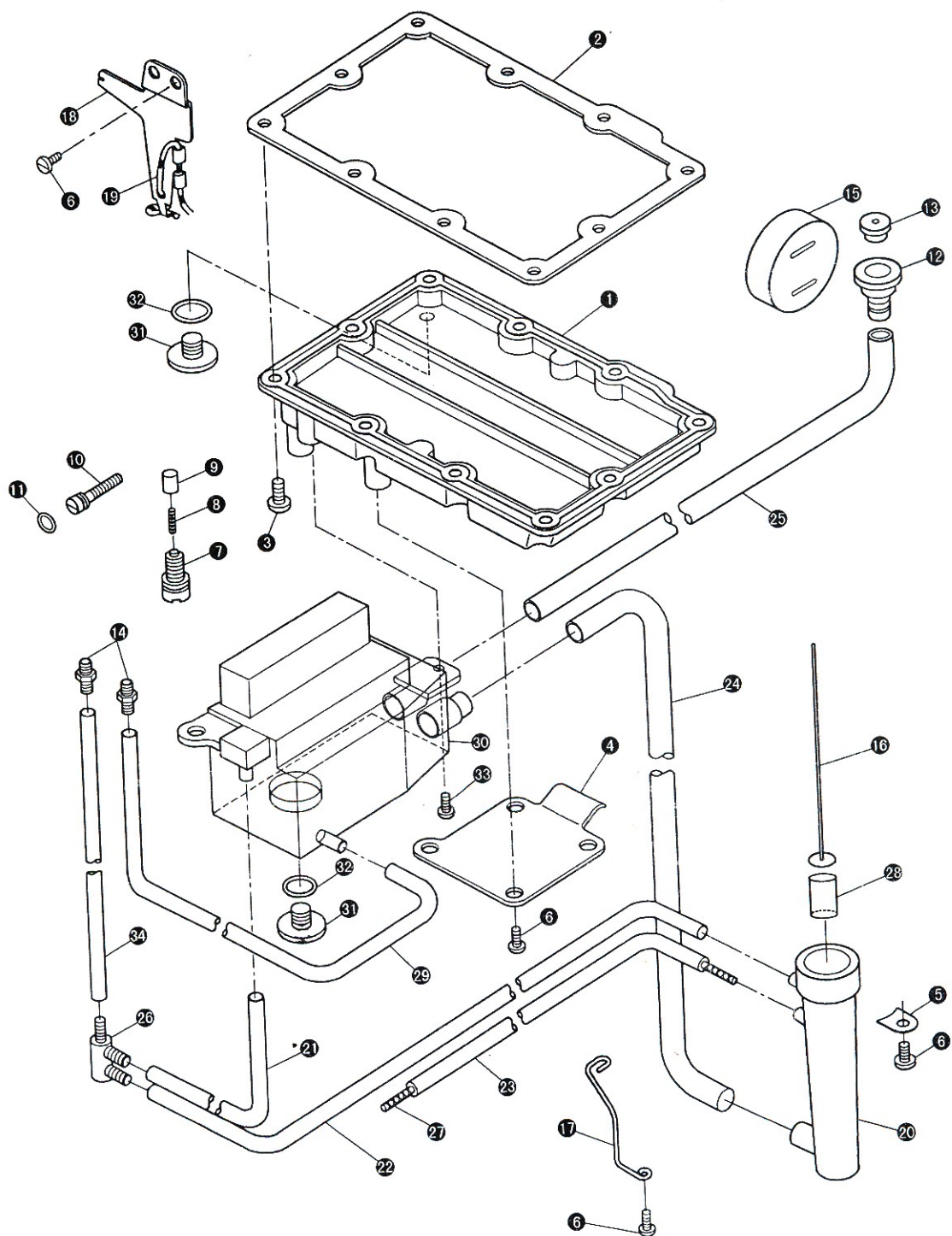
8. WIPER MECHANISM



8. WIPER MECHANISM

No.	Ref. No.	Description	Qt.
1	001800001	Solenoid cover for wiper	1
2	S8A3101005	Screw	8
3	S8A3103002	Washer	8
4	S4A0400012	Washer	8
5	001801001	Rubber cushion	1
6	001801002	Pin	1
7	SFB1403008	C-type stop ring 5	3
8	001801003	Rubber cushion	1
9	001801004	Wiper driving crank	1
10	001801005	Stud screw (1)	1
11	028100035	Nut	1
12	001801006	Washer	1
13	001801007	Spring	1
14	001C80001	Thread wiper connecting rod	1
15	001801009	Stud screw (2)	1
16	001801010	Stud screw (3)	1
17	028100037	Nut	2
18	001801011	Wiper shaft	1
19	036910003	Clamp	1
20	022610004	Screw	1
21	036920003	Thread wiper	1
22	036910009	Thread wiper switch	1
23	001C80002	Wire	1
24	S150677003	Connecting	1
25	036911002	Terminal pin	2
26	001801013	Wiper solenoid	1
27	001801014	Connecting plate	1
28	001801015	Washer	1
29	001C81000	Thread wiper bracket	1
30	022510004	Screw	2
31	036900003	Washer	2

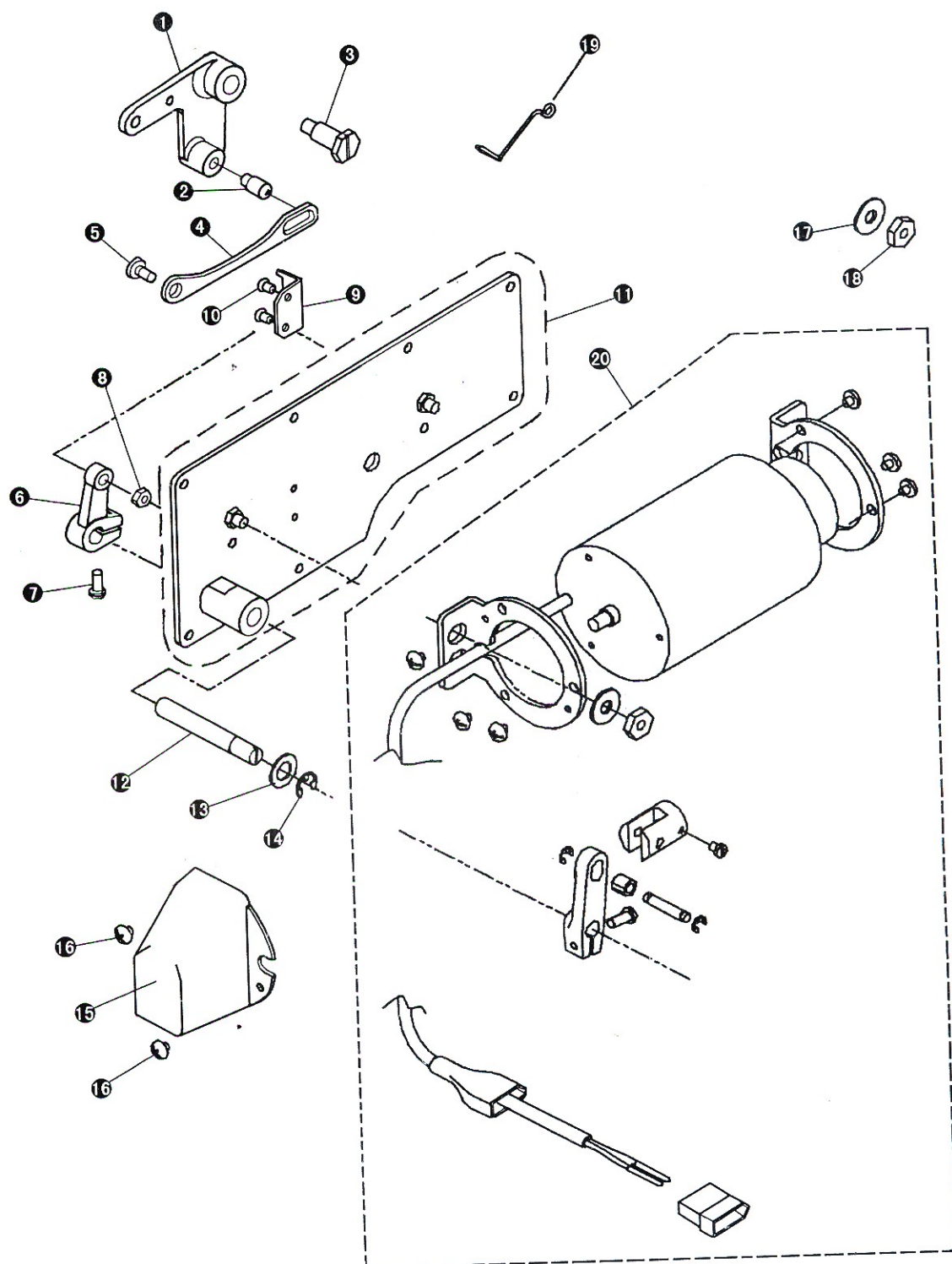
9. OIL LUBRICATION MECHANISM



9. OIL LUBRICATION MECHANISM

No.	Ref. No.	Description	Qt.
1	001900001	Bottom cover	1
2	001900002	Gasket for bottom cover	1
3	022640003	Screw	10
4	001900003	Cover	1
5	001900005	Washer	2
6	0585A0003	Screw	9
7	001900006	Screw	1
8	001900007	Spring	1
9	036400015	Plunger	1
10	001900008	Screw	1
11	S150656024	O-ring	1
12	001900009	Oil inlet	1
13	001900010	Rubber plug	1
14	001900011	Oil pipe connector	2
15	001900012	Oil sight window	1
16	001900013	Floater	1
17	001900015	Pipe holder	1
18	001901001	Oil wick holder	1
19	001901002	Oil wick	1
20	001910001	Floater case	1
21	001C91001	Oil pipe	2
22	001C91003	Oil pipe	1
23	001C91004	Oil pipe	1
24	001910006	Oil pipe	1
25	001910007	Oil pipe	1
26	001910013	Oil pipe connector	1
27	001C91005	Oil wick	1
28	001900016	Oil floater	1
29	001C91002	Oil pipe	1
30	001910011	Oil tank	1
31	001910012	Screw	2
32	124510003	O-ring	2
33	022100006	Screw	2
34	001910002	Oil pipe	1

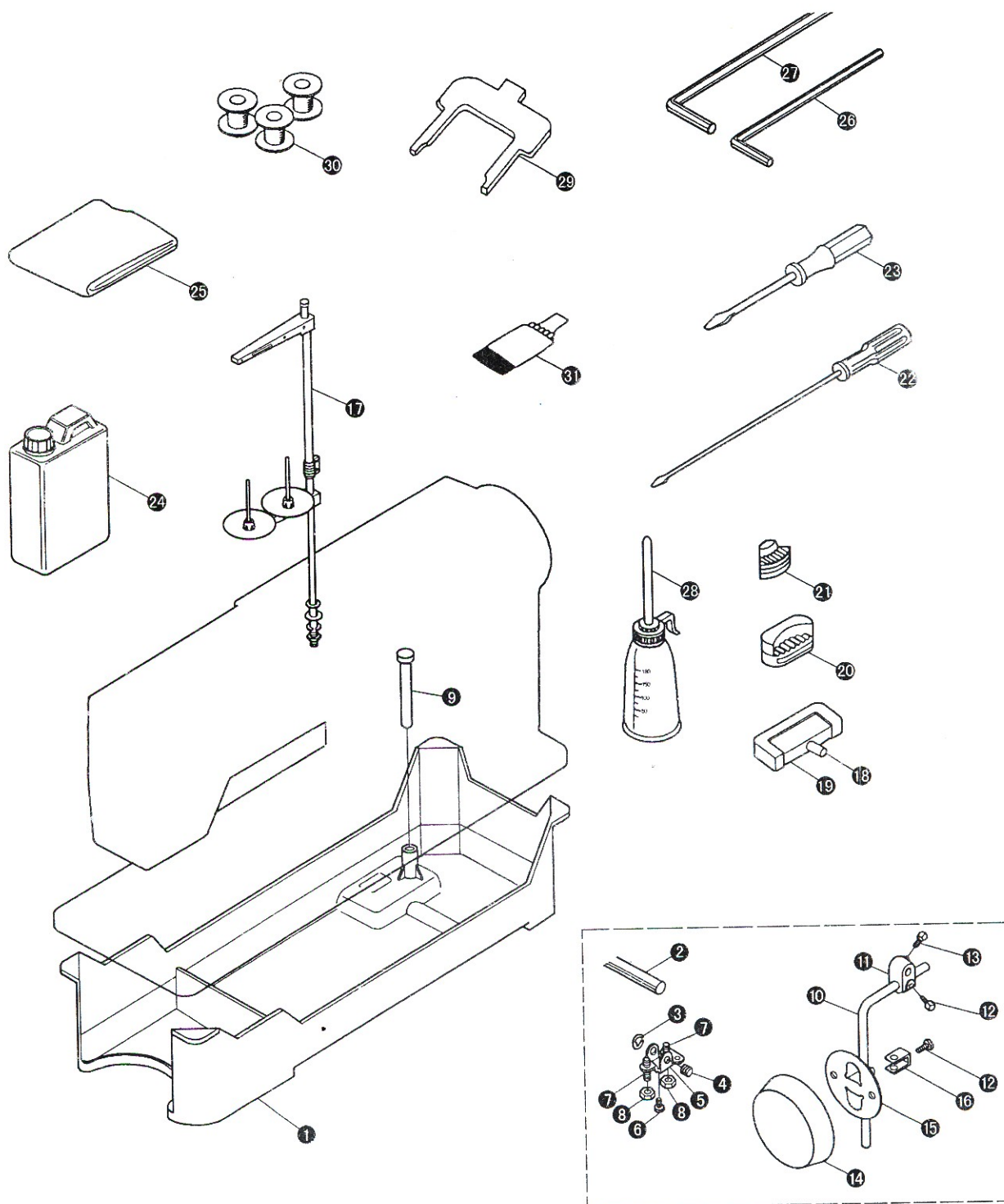
10. AUTOMATIC FOOT LIFTER MECHANISM



10. AUTOMATIC FOOT LIFTER MECHANISM

No.	Ref. No.	Description	Qt.
1	001E32001	Knee lifter lever (right)	1
2	001E32002	Hinge screw	1
3	001E30001	Hinge screw	1
4	001E31101	Link	1
5	001E31102	Screw	1
6	108C02002	Link crank	1
7	022612001	screw	1
8	022910010	Nut	1
9	001E31003	Bracket	1
10	028100005	Screw	2
11	001E31000	Back plate	1
12	108C02004	Shaft	1
13	001E31004	Washer	1
14	S150651004	Stop ring	1
15	001E30003	Solenoid cover	1
16	S150237002	Screw	2
17	197300005	Washer	2
18	001E31005	Nut	2
19	001E30002	Pipe holder	1
20	001E33000	Foot lifter solenoid	1

11. ACCESSORIES



11. ACCESSORIES

No.	Ref. No.	Description	Qt.
1	001CF1100	Oil reservoir	1
2	001F01102	Knee lifter shaft	1
3	S4A1002010	C-type stop ring 9	1
4	022910007	Spring	1
5	022910008	Knee lifter	1
6	022900036	Screw	1
7	022910009	Screw	1
8	020300005	Nut	2
9	001F01001	Knee lifter lifting rod	2
10	W210105018	Knee lifter shaft	1
11	W210105029	Knee lifter coupling joint	1
12	W120105040	Screw	1
13	W120105042	Screw	2
14	W210105006	Knee lifter cover	1
15	W210105003	Knee lifter plate	1
16	W210105004	Knee lifter plate stopper	1
17	006F00030	Thread stand assy	1
18	02299	Hinge of machine head	1
19	022960002	Hinge socket of machine head	2
20	022900009	Rubber cap (big)	2
21	022900010	Rubber cap (small)	1
22	W050102050	Screw driver (big)	1
23	W050102051	Screw driver (small)	1
24	022910009	Oil can	1
25	W060302036	Machine cover	1
26	W050102034	Hexagon socket screw key(2mm)	1
27	W050102035	Hexagon socket screw key(3mm)	1
28	W050202013	Oiler	1
29	001CF1002	Speed command disc adjusting plate	1
30	048400003	Bobbin	1
31	022200016	Needle (DB x 1 14#)	3
			1