

GLOBAL

OV 100 SERIES

OV 103 – High speed, 3 thread, single needle overlock machine

OV 104 – High speed, 4 thread, double needle overlock machine

OV 105 – High speed, 5 thread, double needle safety stitch machine

**INSTRUCTION / OPERATING MANUAL
PARTS MANUAL**

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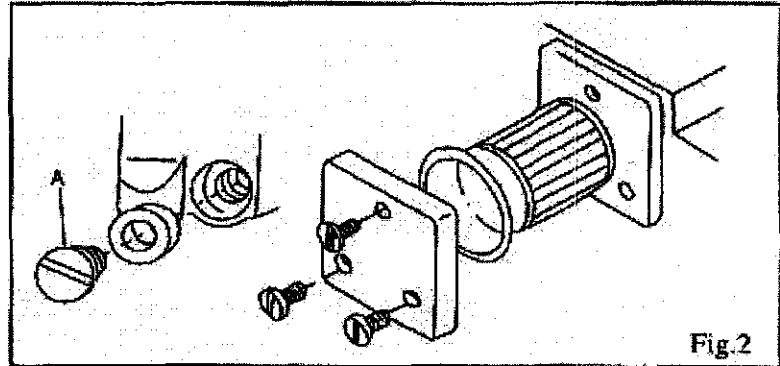
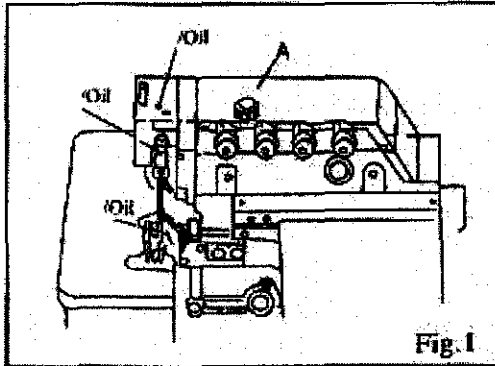
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MAIN SPECIF ATIONS

Models	Thread	Sewing speed (volv/min)	Stitch length (mm)	Presser foot lift (mm)	Decibel (dB)	Torque (N · m)	Overedge width (mm)
737	3	5500 ~ 6000	0 ~ 5	6	≤84	≥0.4	1.5 ~ 6
747	4	5500 ~ 6000	0 ~ 5	6	≤84	≥0.4	1.5 ~ 6
757	5	5500 ~ 6000	0 ~ 5	6	≤84	≥0.4	1.5 ~ 6

Thank you very much for using our Ultra High speed, Straight Needle, Overlock Safety Stitch Machine. Before operating this machine, please study this book thoroughly, understand the functions and features of the machine. Then it will help you to increase your sewing efficiency and quality.

ATTENTION: Because this is an ultra high speed machine. Do not run it before filling oil and making sure the correct turection of motor.



How To Install The Machine

1. Install the machine according to the table cut-out diagram, Cushion Rubber and Rest Board as enclosed. In case of semi-submerged, the distance between Needle plate top surface and Table Top is about 100mm, and for fully-submerged is about 5mm.
 2. Setting the pedal of clutch motor to the left side and the pedal of presser foot lift at right side.
 3. Install the cloth waste chute, thread stand as parts list.
 4. Be sure the motor turning direction is clockwise. And the belt can be pressed inward about 10mm.
- NOTE: The dimensions of motor pulley and sewing speed are shown in Table 1.

How To Operate The New Machine

Please run the new machine in the first four at 20% less speed than maximum. Then replace the new oil and thereafter the machine may be operated up to maximum speed.

Lubrication And Drainage

1. Lubrication Fig.1

Remove Screw A and fill in enclosed ultra high speed lubricate oil (or similar to Mobil#10, Esso#32) until the top of Oil Level indicator between two lines of Oil Level Sight Window. Then replace Screw A.

When the machine is operated for the first time is was idle for a long time, please be sure to oil the top of the needle holder, guide, upper looper guide etc . before operating the machine.

2. Drainage Fig.2

Remove Screw A and drain out the oil then eplace Screw A.

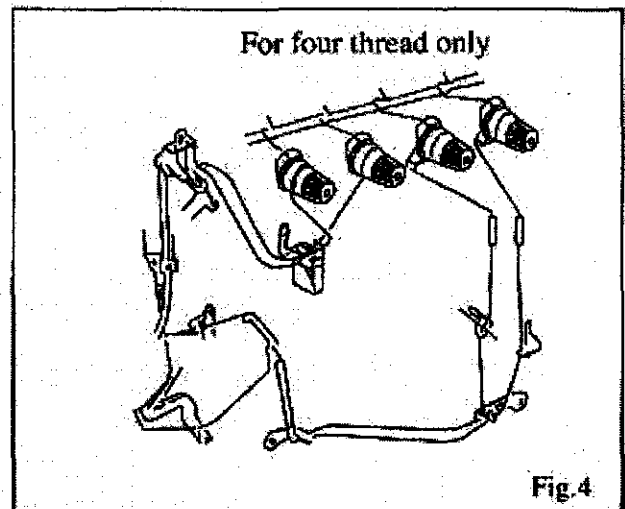
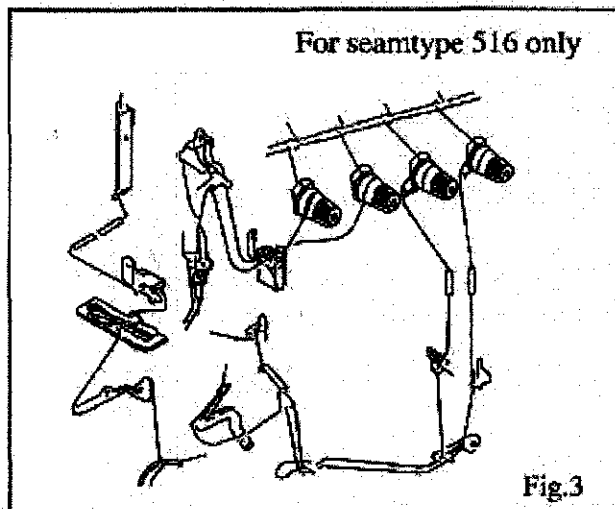
For keeping the good lubrication and machine life. please replace the new oil when the new machine has been operating over four weeks, And after that, change oil every four months.

This machine has been fixed with oil filer, Please clean it every month or replace a new one if necessary.

3. Needle Cooling Lubrication-Silicon oil.

THREADING THE MACHINE

Refer to the sewing type you need for correct threading. Any incorrect threading may cause thread break, uneven stitches or skip stitches etc.



Thread tension

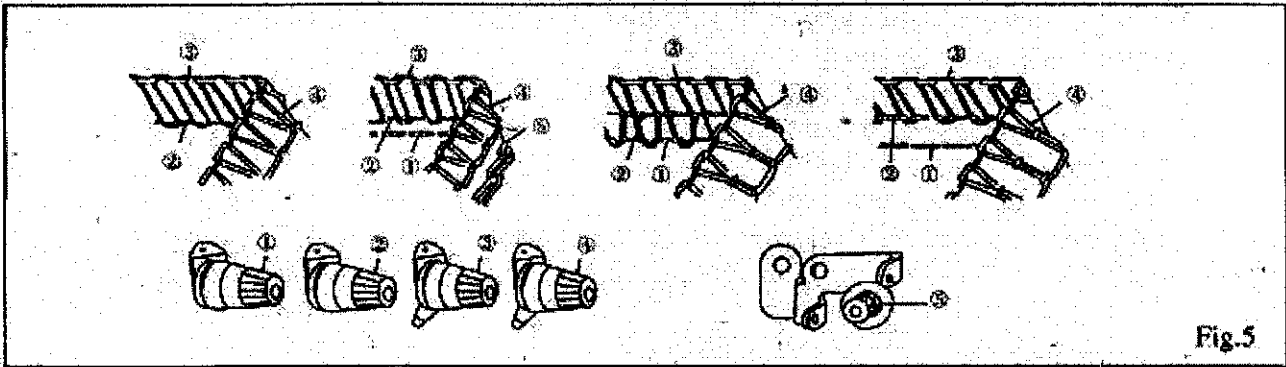


Fig.5

The thread tension be adjusted according to sewing fabric, thickness, sewing thread, seam width, stitch length etc. Therefore the pressure of the Tension Nuts or Thread Guides must be adjusted in each individual case.

1. Tension Nuts Adjustment. Fig.5

- The tension Nut ① controls the double chain needle thread or left side overlock needle thread.
- The tension Nut ⑤ controls the double chain looper thread.
- The tension Nut ② controls the overlock needle thread.
- The tension Nut ③ controls the upper looper thread.
- The tension Nut ④ controls the lower looper thread.

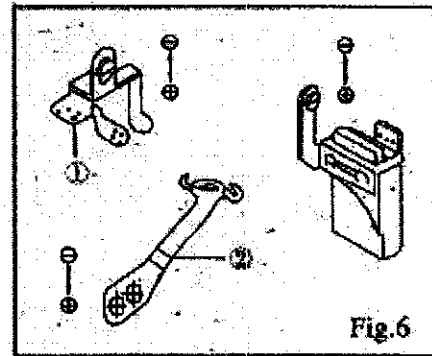


Fig.6

2. Needle Thread Control Fig.6

In case of sewing type 504,512,&514, push Thread guide ① and ② to lowest point. and up to highest point fo sewing type 503,505.

Note: The (+) direction is for more needle thread tension, and the (-) direction is for less needle thread tension.

3. Looper thread Control Fig.7

For sewing type 512, when Upper Looper is extremely left, push takeup ① and ② at the position as the chain line(----).

In case of sewing tupe 503, &505, When Upper Looper moves to lowest, set Take up ① and ② at the position as the continuous line (----).

Adjust thread guide ③ as follow. Point A--for stretchy thread is used.

Point B--for seaming and blindstitch hemming. Point C--for seaming tupe 512.

Adjust Thread guide ④ as follows.

Point D--for stretchy thead is used.

Point E--for seaming and blindstitch hemming.

NOTE: The direction is for more thread in sewing seam, and the direction is for less thead in sewing seam.

4. Chain Looper Thread Cam Control Fig.8

When the needle moves to its highest position, the right corner of the Thread Cam ③ matches with the upper surface of Thread Guide Bracket①.

loosen scrwe ② and adjust the thread cam ③ as clockwise is late for timing of looper thread cam.

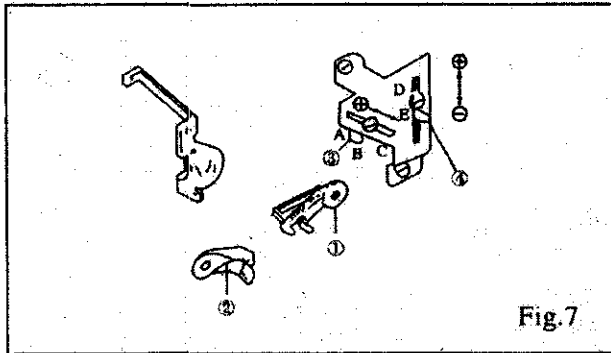


Fig.7

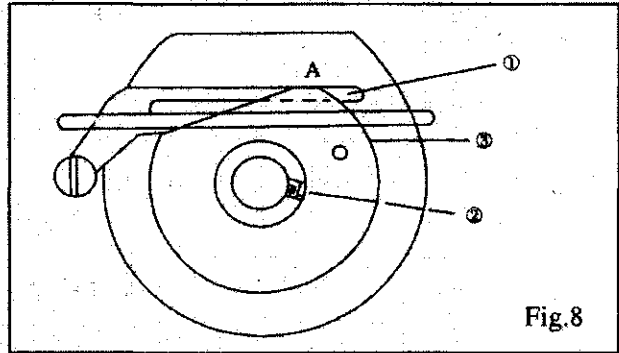


Fig.8

Stitch length adjustment

The stitch length adjustment is made accoring to the sewing fabric, differential feed ratio etc.

Keep pushing the Push Botton enter deep inside.

Keep pressing the Push Botton and match the desired stitch length which is shown on the pulley with the indicating point of Belt Cover.

Max:diff ratio	Machine type	Pulley scale						
		1	2	3	4	5	6	7
1:2	Seaming	1	1.5	2	2.5	3	3.5	3.8
1:3	Shirring	0.7	1	1.4	1.7	2	2.3	2.5
1:1.3	Sergin.	1.6	2.3	3.1	3.9	4.7	5.4	5.9
1:4	Special	0.6	0.9	1.2	1.5	1.8	2.1	1

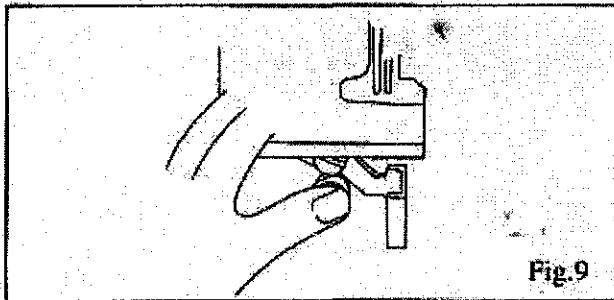


Fig.9

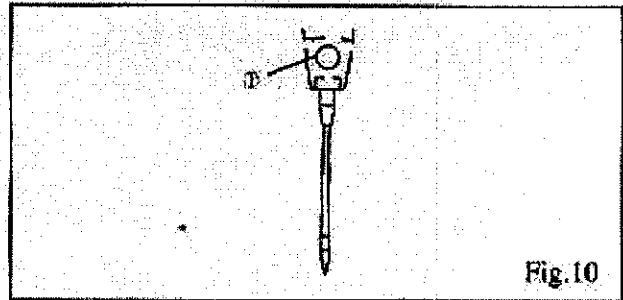


Fig.10

Needle replacement

Please use DCX27 or equivalent needle size.

Loosen Screw ① and remove the old needle.

Insert the needle which long groove faces you and push it up deep into the needle hole until it stops and tighten Screw ①.

Differential feed ratio adjustment

The differential feed ratio is the ratio of movements between Main Feed Dog and Differential feed dog, when the movement of main feed dog is bigger than differential feed dog, the fabric be stretched in sewing. Otherwise the fabric be shrunk.

Loosen Nut ① then turn screw ② in clockwise for stretching the fabric, and in reverse direction for shrinking the fabric then tighten Nut ①.

Note: When the surface of adjusting level ③ be set at the scale ② the differential feed ratio is 1:1, and if it be set over the scale its ratio can be adjustable up to 1:0.7.

Scale		1	2	3	4	5
Differential Feed ratio	1:1.3	-	1:0.7	1:0.9	1:1.1	1:1.3
	1:2	1:0.7	1:1	1:1.4	1:1.7	1:2
	1:3	1:1	1:1.5	1:2	1:2.5	1:3
	1:4	1:1.1	1:1.6	1:2.3	1:2.8	1:3.3

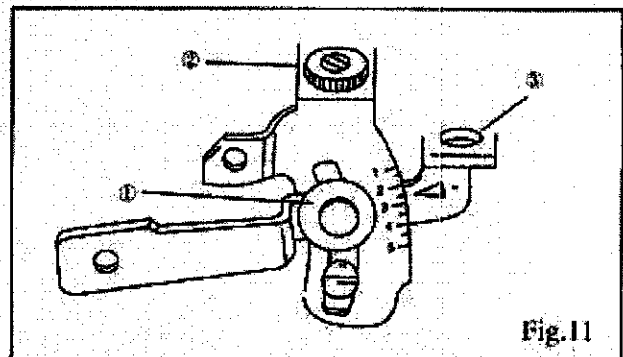
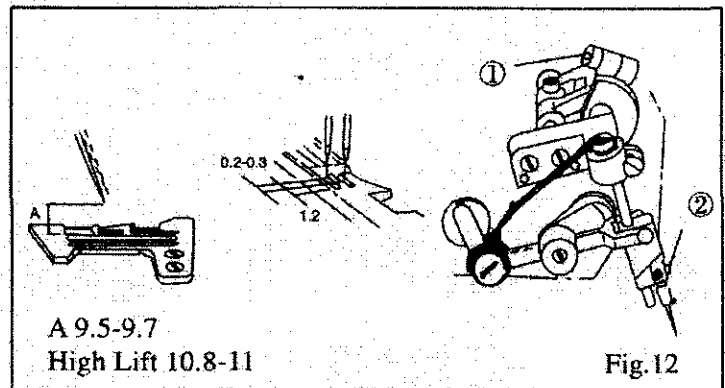


Fig.11

Parts relation and timing



1. Needle and Needle Plate Fig.12

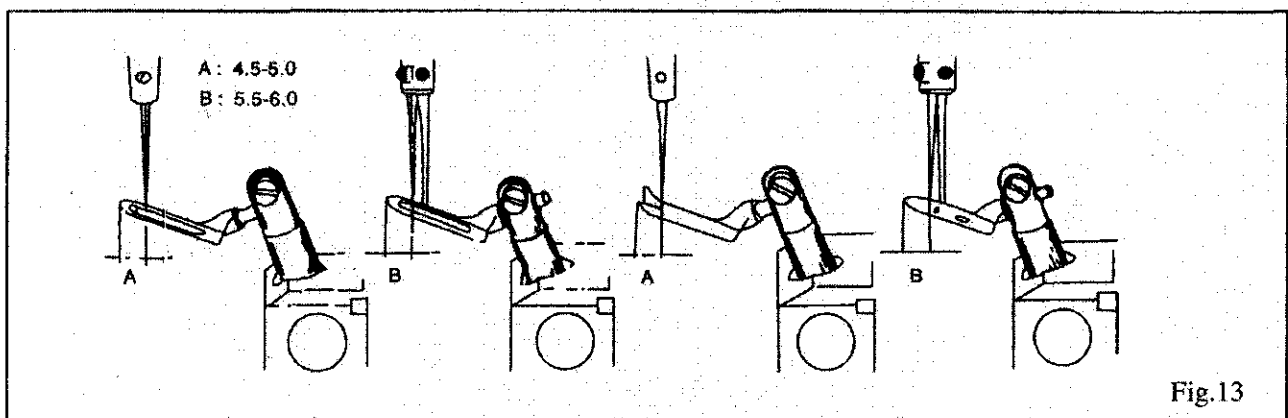
When the Needle moves to the highest position, the distance between needle point (left needle if two needle) and needle plate is 9.5-9.7mm for standard lift machine or 10.8-11.0mm for high lift machine, Each needle must center in each needle slot of Needle plate. The right needle must be ahead about 0.2-0.3mm than left needle. And the distance between the needle point (right needle if two needle) to needle slot of Needle Plate or presser foot is 1.2mm.

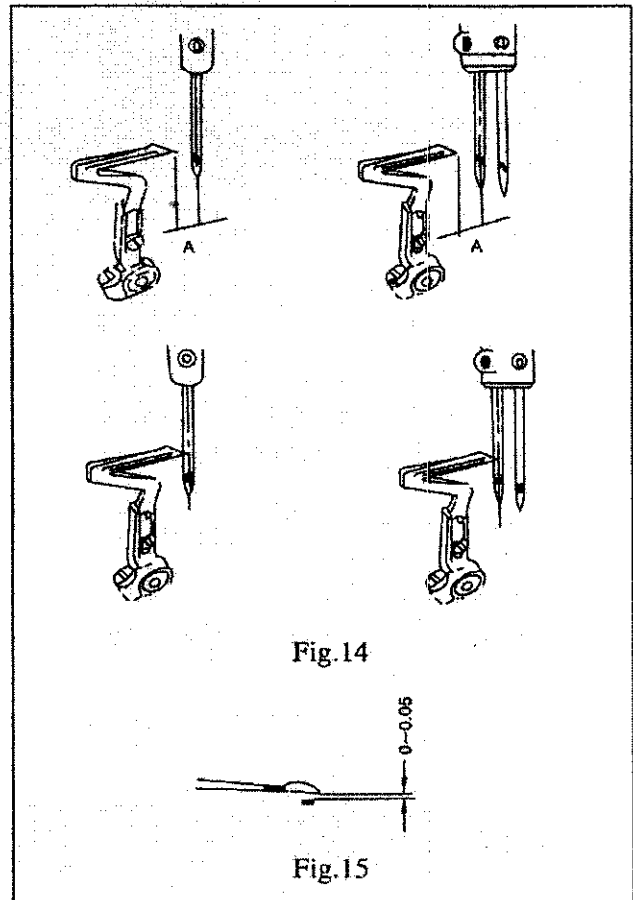
Slightly loosen Screw ① of Needle Drive Crank. Rotate the pulley to check if needle center in each needle slot of needle plate. or you may loosen screw ② and adjust needle holder.

Rotate the pulley for removing the needle to the highest position, tap the Needle Holder guide until the correct needle height is obtained. Tighten screw ①.

2. Upper Looper (Spreader) and Needle Fig.13

When the Upper (spreader) moves to the extremely left, the distance between the point of looper (spreader) and center line of needle is 4.5-5.0, for 1 needle (spreader) to center line of left needle is 5.5-6.0mm for 2 needle machine.





3. Lower Lopper and Needle Fig.14 15

When the lower looper moves to the extremely left, the distance between looper point and center line of needle (left needle if 2 needle) is 3.4-3.6mm for high lift machine. When the lower looper moves to the center line of needle (left needle if 2 needle) the gap between needle and looper is 0-0.05mm.

4. Upper Lopper and Lower Lopper Fig.16

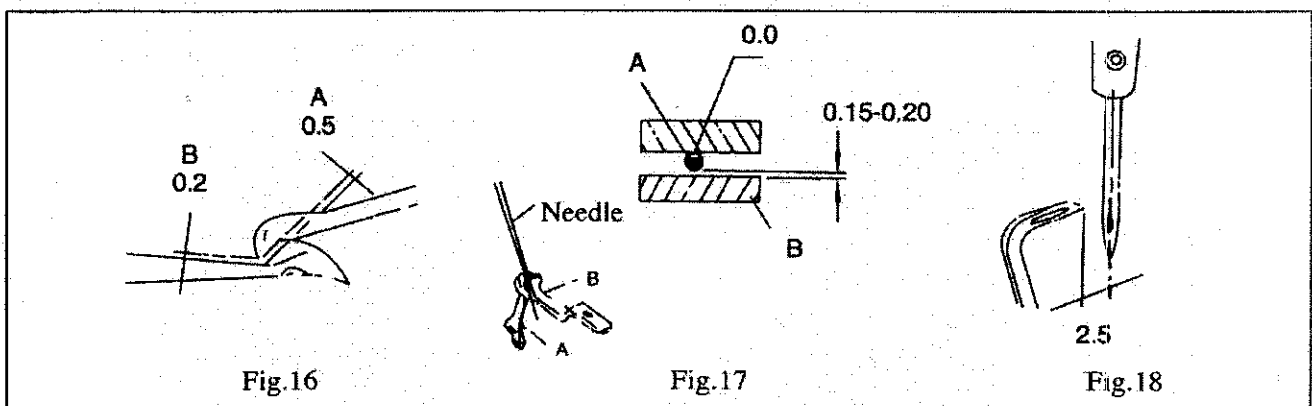
When the Upper and Lower Lopper is crossed.

5. Needle and eedle Guard Fig.17

When the Lower Lopper point is opposite the center line of Needle (left needle if 2 needle), the gap between Needle and rear Needle Guard A is 0mm. When Needle moves to the lowest position, the gap between Needle and front Needle guard B is 0.15-0.2mm.

6. Chain Lopper and eedle Fig.18

The Chain Lopper must be fixed into the lowest position of is holder and when the Chain Lopper moves the the extremely left, the distance between the looper point and center line of needle is 2.5mm.



Problem settlement:

Needle break

REASON	CORRECT
1. Needle installed wrong	1. Reset needle correctly.
2. Wrong needle size	2. Use properly needle for fabric and thread.
3. Needle is bended.	3. Replace new needle.
4. Wrong relation with Needle Guard.	4. Readjust Needle guard.
5. Wrong relation with looper.	5. Readjust looper.
6. Needle does not center the needle slot of Needle Plate or Presser Foot.	6. Readjust the Needle Plate and Presser Foot.

Thread break

REASON	CORRECT
1. Inferior quality of thread.	1. Use good quality thread.
2. Thread thicker than Needle hole.	2. Use proper Needle for fabric and thread.
3. Wrong threading.	3. Rethreading correctly.
4. Thread tension is too strong.	4. Readjust thread tension nut.
5. Needle installed wrong.	5. Reset needle correctly.
6. Thread Stand installed wrong.	6. Reset thread stand for threading smoothly.
7. Over heat of Needle 1.No silicon oil 2 Wrong setting of Needle Guard.	7. (1) Fill in Silicone oil. (2) Readjust Needle Guard.
8. Thread Disc or Guide is burred.	8. Grind off polish or replace new one.
9. Wrong relation of Needle and Looper.	9. Readjust Needle and Looper.
10. Needle, Looper needle Plate and guide is burred.	10. grind off, polish or replace new one.

Skip Stitches

REASON	CORRECT
1. Wrong relation of Needle and Loper.	1. Readjust Needle and Loper.
2. Wrong threading.	2. Rethreading correctly.
3. Needle installed wrong.	3. reset Needle correctly.
4. Inadequate thread tension or tension too strong.	4. Readjust Thread Tension Nut.
5. Loper point is damaged.	5. Replace new one.
6. Needle is bended.	6. Replace new one.
7. Wrong installed Needle Guard.	7. Readjust Needle guard.

Loose Stitches

REASON	CORRECT
1. Wrong threading	1. Rethreading correctly.
2. Thread is thicker than Needle hole.	2. Use proper Needle.
3. Tension Disc do not press thread properly.	3. Reset Tension Disc properly.
4. Needle thread is not lubricated.	4. Fill silicon oil.
5. Wrong setting of Needle and Loopers.	5. Readjust needle and loopers.

Uneven Stitches

REASON	CORRECT
1. Wrong threading.	1. Rethreading correctly.
2. Thread stand installed wrong.	2. Reset Threadt for threading smoothly.
3. Lower Knife installed wrong.	3. readjust lower knife.
4. Knives do not trim neatly. (1) Knives installed wrong. (2) Dull lower knife.	4. Correct as follow: (1) Readjust Knives. (2) Sharpen or replace new knives.
5. Thread Disc or Guide in burred.	5. Grind off, Polish or replace new one.
6. Needle point is damaged.	6. Replace new Needle.
7. Inadequate heigh of feed dogs.	7. readjust feed dogs.
8. Inadequate thread tension.	8. Readjust Thread tension nut.

Wrinkled stitches

REASON

1. Thread tension is too strong.
2. Inadequate pressure of presser foot.
3. Inadequate height of feed dogs.
4. Knives do not trim neatly.
5. Differential feed is not matched.
6. Needle is too thick.
7. Seam width is too narrow against the chainoff finger of Needle plate.

CORRECT

1. Readjust thread tension nut.
2. Readjust Presser foot pressure.
3. Readjust feed dogs.
4. Readjust knives or sharpen knives.
5. Readjust differential feed ratio.
6. Use proper Needle for fabric and thread.
7. Readjust seam width or replace chain off finger.

Thread chain does not come off smoothly

REASON

1. Presser foot installed wrong.
2. Inadequate timing of looper thread cam.
3. Double chain looper installed wrong.
4. Wrong threading.
5. Inadequate or too strong thread tension.
6. Wrong relation of Needle and looper.
7. Needle Plate Thread Disc or Presser foot is burred.
8. Thread tension disk is rough.

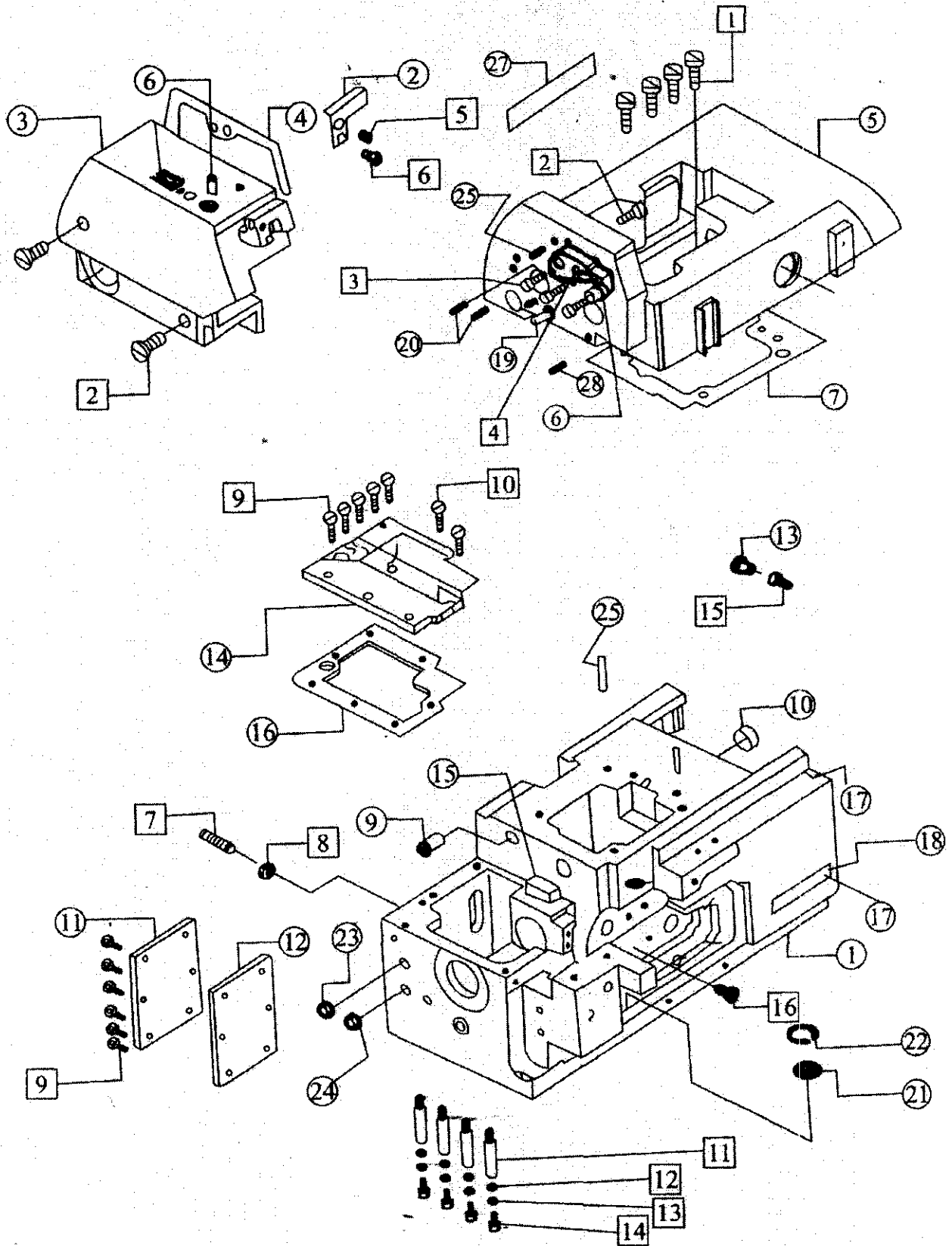
CORRECT

1. Reset presser foot correctly.
2. Readjust Looper thread Cam.
3. Reset Double chain looper correctly.
4. Rethreading correctly.
5. Readjust Thread tension nut.
6. Readjust Needle and looper.
7. Grind off, polish or replace new one.
8. Polish thread tension disk.

Parts Book

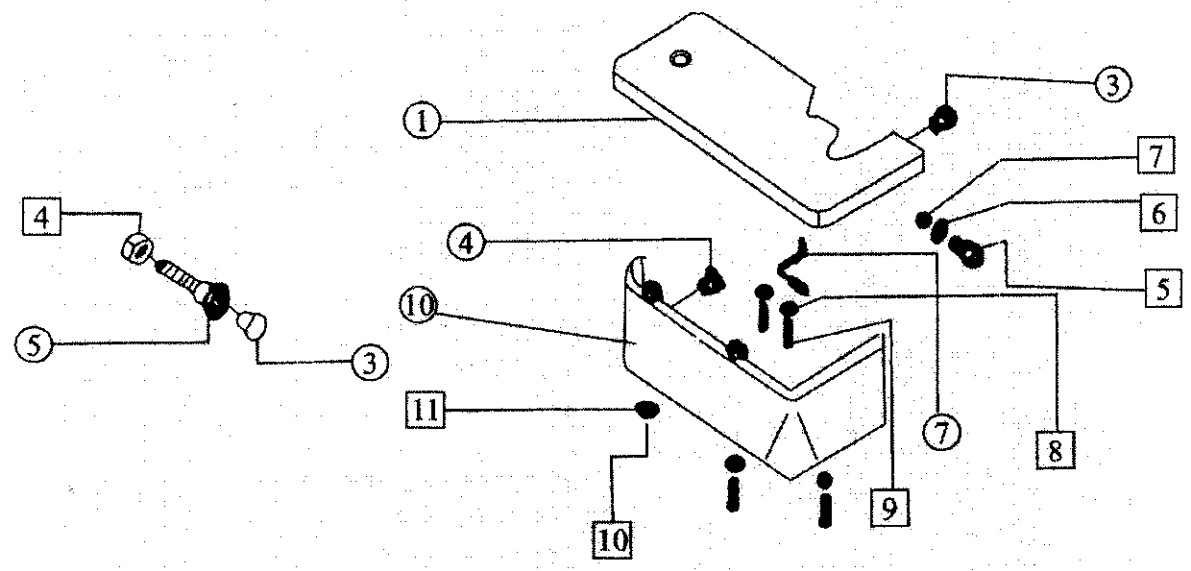
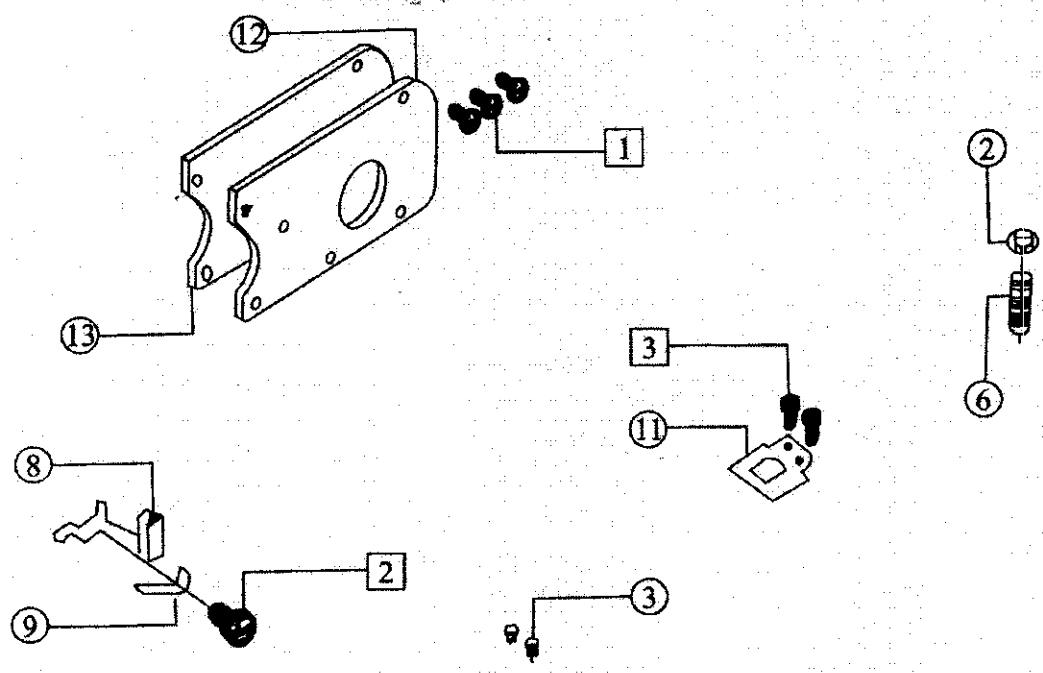
Frame assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M1-1A	machine frame	1	1	1
2	M1-2	needle thread cover plate	1	1	1
3	M1-3A	upper oncde cover	1	1	1
4	M1-4A	upper oncde cover pad	1	1	1
5	M1-5A	lather shell upper knot	1	1	1
6	M1-6	needle plate	1	1	1
7	M1-7	upper washer	1	1	1
8	M1-8	oil tube	1	1	1
9	M1-9	rear oil adhesive case	1	1	1
10	M1-10	oil seal	1	1	1
11	M1-11	rear cover	1	1	1
12	M1-12	rear cover oil seal	1	1	1
13	M1-13	oil seal	1	1	1
14	M1-14	cover	1	1	1
15	M1-15	oil sear washer	1	1	1
16	M1-16	cover washer	1	1	1
17	M1-17	rivet	4	4	4
18	M1-18A	machine modle plate	1	1	1
19	M1-19	model tube	1	1	1
20	M1-20	pin	2	2	2
21	M1-21	oil screen	1	1	1
22	M1-22	snap ring	1	1	1
23	M1-23	oil seal I	1	1	1
24	M1-24	oil seal II	1	1	1
25	M1-25	begin pin	4	4	4
26	M1-26	trade mark plste	1	1	1
27	M1-28	mard plate	1	1	1
28	M1-29	oil amount adjusting pin	1	1	1
1	S064	screw	4	4	4
2	S065	screw	3	3	3
3	S054	needle bar asm screw	2	2	2
4	S061	needle lind set screw	1	1	1
5	S009	needle thread cover plate top silk	1	1	1
6	S071	needle thread cover plate set screw	1	1	1
7	S041	main cover bearing regulate screw	1	1	1
8	N03	main cover bearing regulate nut	1	1	1
9	S032	rear cover plate	11	11	11
10	S036	lower cover plate	2	2	2
11	S081	oil pan join screw	4	4	4
12	W14	washer	4	4	4
13	W03	elasticity washer	4	4	4
14	S080	nexagon socker screw	4	4	4
15	S044	screw	1	1	1
16	S065	screw	1	1	1



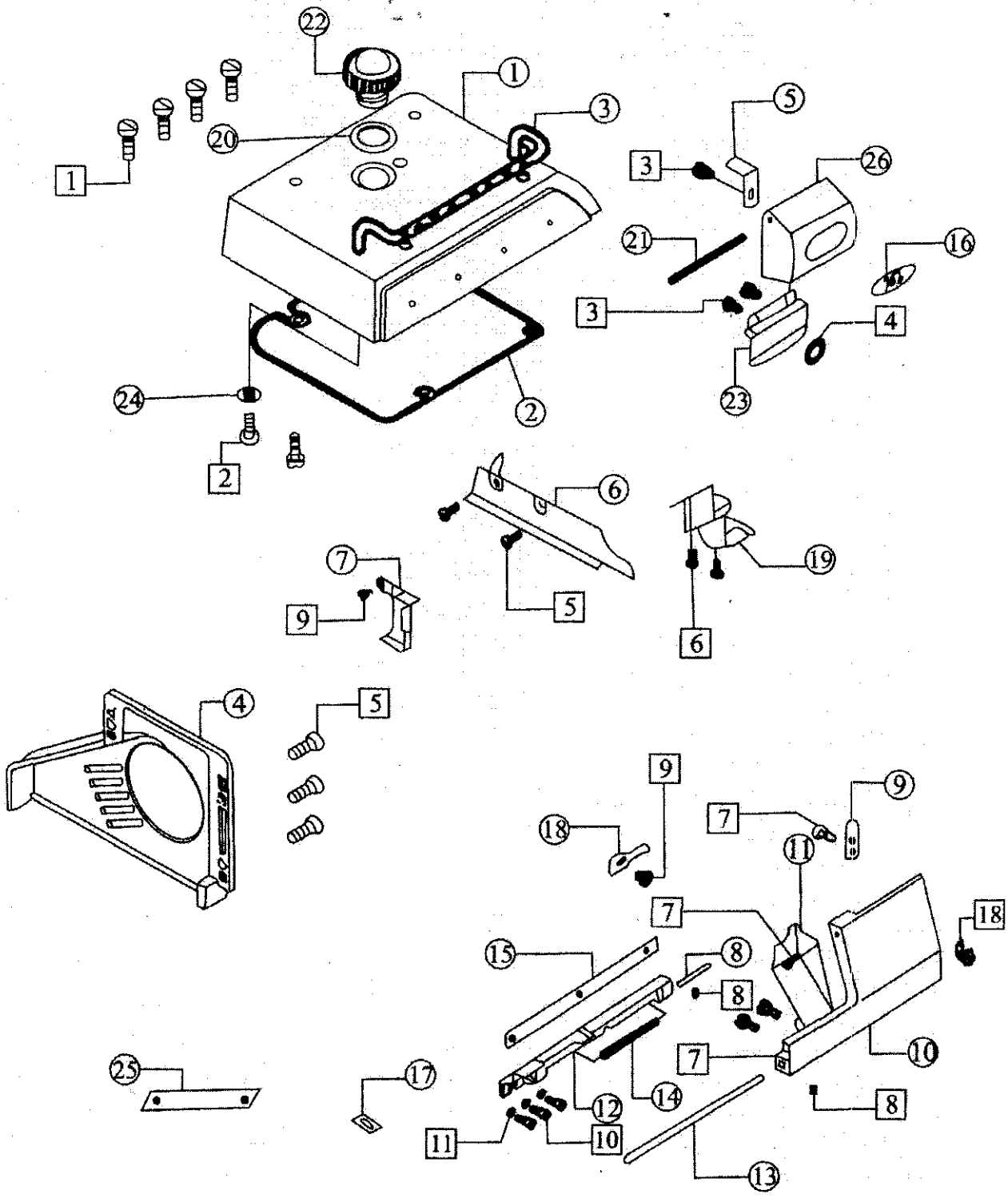
Cloth plate assemblies

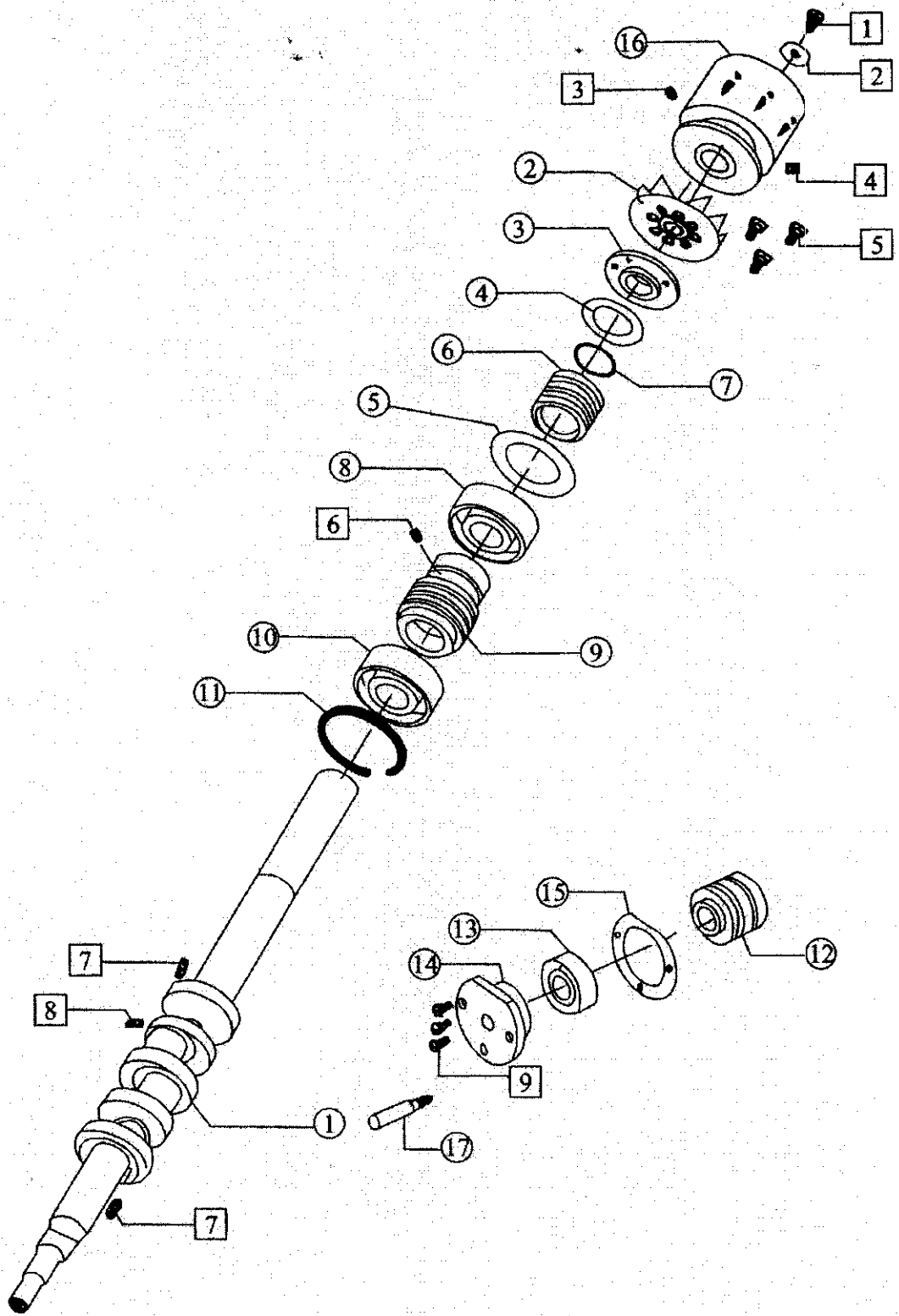
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M2-1	cloth plate	1	1	1
	5M2-1	cloth plate	0	0	0
2	M2-2	washer	1	1	1
3	M2-3	colloid cose	4	4	4
4	M2-4	colloid cose	1	1	1
5	M2-5	choth plate spring screw	1	1	1
6	M2-6	spring	1	1	1
7	M2-7	cloth plate spring	1	1	1
8	M2-8	cloth plate slider cover	1	1	1
9	M2-9	cloth plate cover spring	1	1	1
10	M2-10	cloth plate lower plate	1	1	0
	5M2-10	cloth plate lower plate	0	0	1
11	M2-11	washer	1	1	1
12	M2-12	upper looper sealing plate	1	1	1
13	M2-13	upper looper sealing plate washer	1	1	1
1	S037	upper looper sealing plate screw	3	3	3
2	S049	set screw	1	1	1
3	S010	screw	2	2	2
4	N03	set nut big cover stable screw	2	2	2
5	S083	screw	1	1	1
6	W11	screw washer	1	1	1
7	N01	screw nut	1	1	1
8	W08	washer	2	2	2
9	S012	big cover spring vscrew	2	2	2
10	S099	big cover join screw	3	3	3
11	W07	big cover join screw washer	3	3	3



Cover assemblies

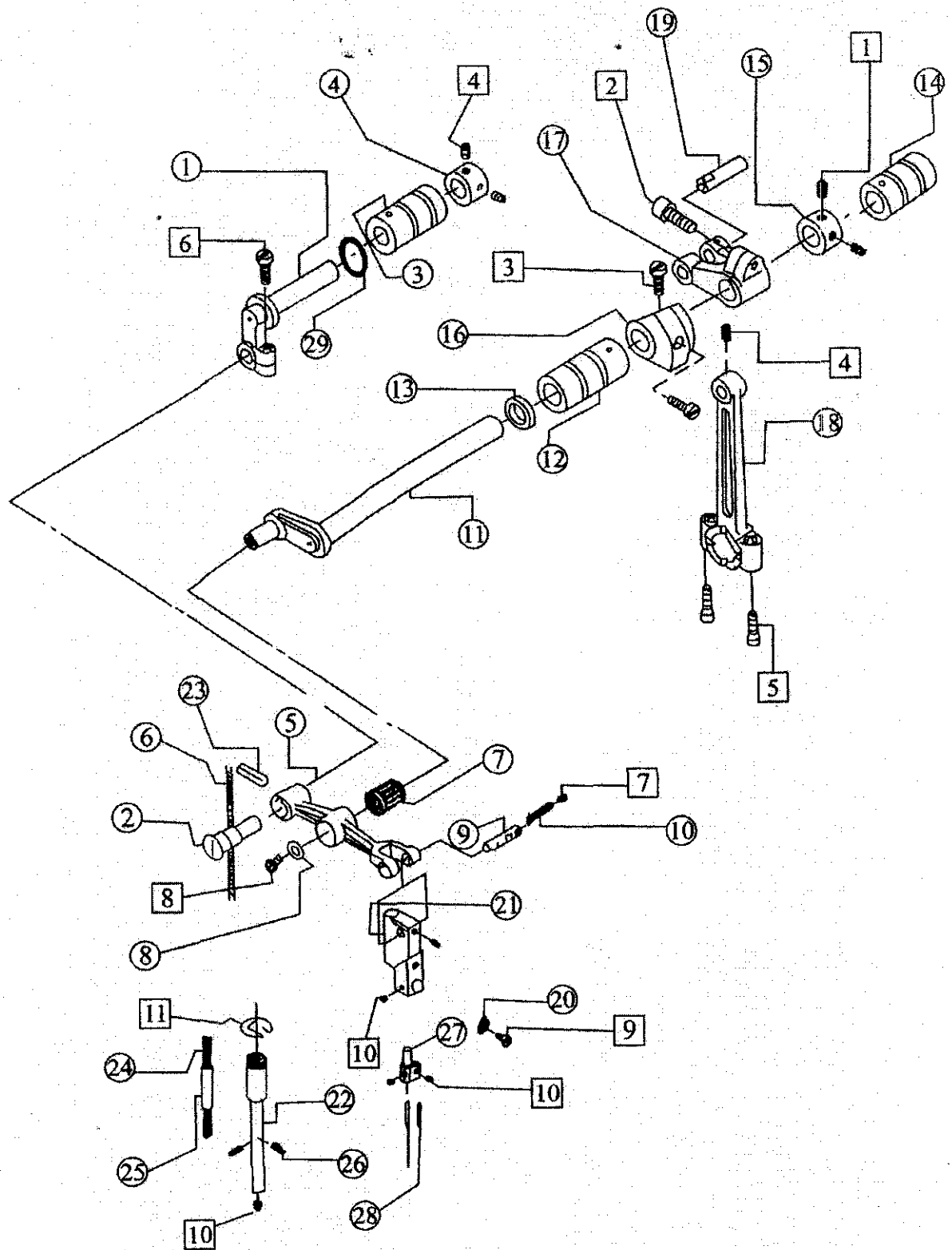
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M3-12	upper cover	1	1	1
2	M3-2	upper cover washer	1	1	1
3	M3-3	thread guide supporter	1	1	1
4	M3-4A	belt cover	1	1	1
5	M3-5	thread cover spring	1	1	1
6	M3-6	cloth guide plate	1	1	1
7	M3-7	oil guide II	1	1	1
8	M3-8	pin	1	1	1
9	M3-9	front spring	1	1	1
10	M3-10	front cover	1	1	1
11	M3-11	front cover guard	1	1	0
	5M3-11	front cover guard	0	0	1
12	M3-12	front cover hinge	1	1	1
13	M3-13	hinge pin	1	1	1
14	M3-14	front cover hinge spring	1	1	1
15	M3-15	front cover hinge washer	1	1	1
16	M3-16A	trade mark plate	1	1	1
17	M3-17	oil flow window	2	2	2
18	M3-18	front cover snap guard	1	1	1
19	M3-19	oil guard I	1	1	1
20	M3-20	oil idverl gauge washer	1	1	1
21	M3-21	pin	1	1	1
22	M3-22A	oil cover gauge cover	1	1	1
23	M3-23A	oil sight	1	1	1
24	M3-24	washer	1	1	1
25	M3-25	trade mark plate	1	1	1
26	M3-26A	upper cover	1	1	1
1	S098	upper cover screw	4	4	4
2	S091	thread guard screw	2	2	2
3	S017	upper cover spring screw	3	3	3
4	W17	wather	2	2	2
5	S032	cloth guide plate screw	5	5	5
6	S020	oil guard screw I	2	2	2
7	S090	snap plate	4	4	4
8	S082	screw	3	3	3
9	S027	front cover plate blkck spring screw	2	2	2
10	S024	front cover hinge screw	3	3	3
11	W11	front cover hinge washer	3	3	3
12	E02	snap uing	1	1	1





Needle bar assemblies

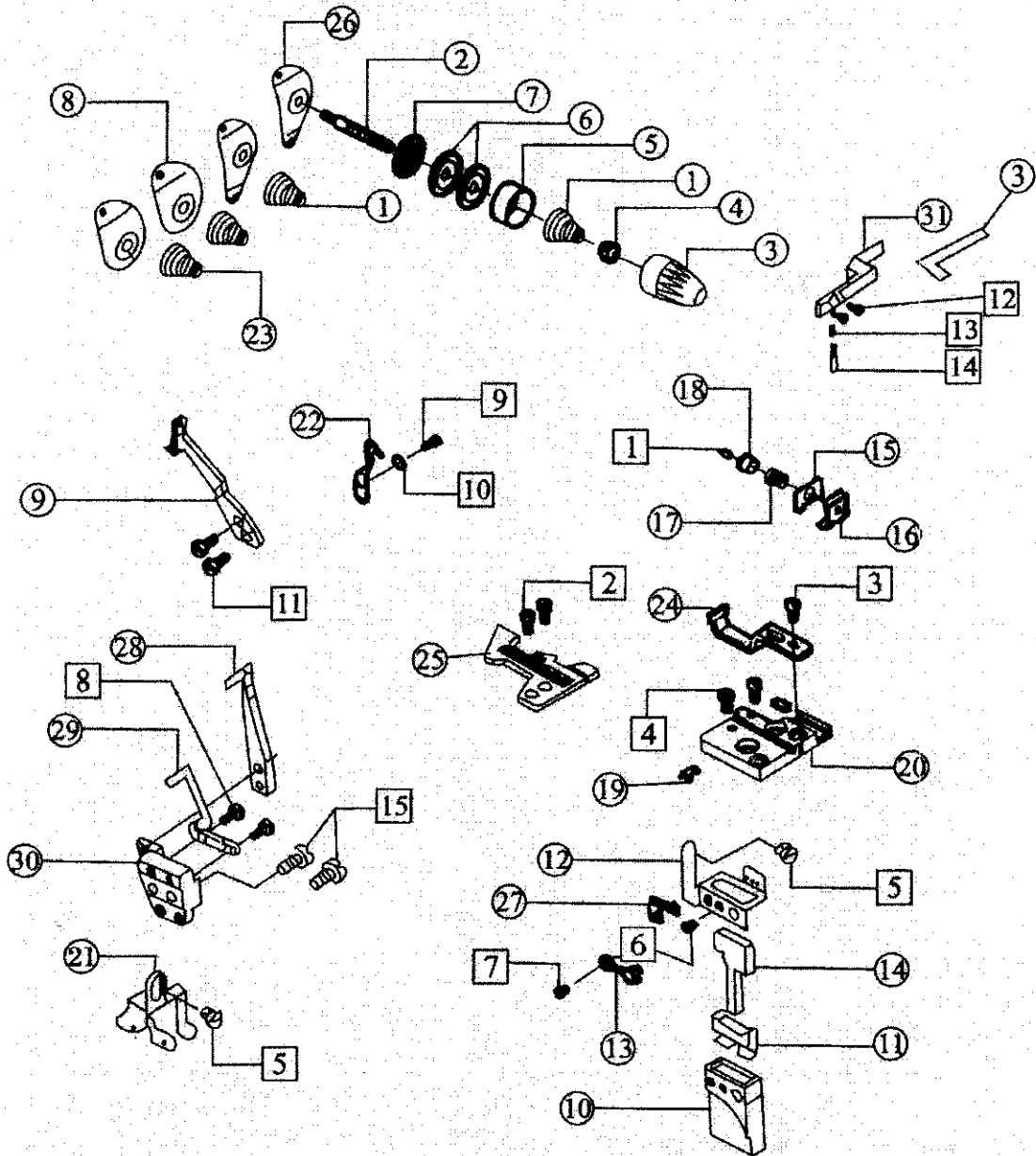
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M5-1	needle bur driving frame rock shaft	1	1	1
2	M5-2	eccentric shaft	1	1	1
3	M5-3	needle bar shaft bushing back	1	1	1
4	M5-4	snap ring	1	1	1
5	M5-5	throat driving crank	1	1	1
6	M5-6	oi wick	1	1	1
7	M5-7	needle bearing	1	1	1
8	M5-8	washer ring	1	1	1
9	M5-9	throat clip guide pin	1	1	1
10	M5-10	oil wick	1	1	1
11	M5-11	throat bar rock crank	1	1	1
12	M5-12	needle driving shaft bearing	1	1	1
13	M5-13	seal ring	2	2	2
14	M5-14	needle bar rear driving copper bearing	1	1	1
15	M5-15	snap ring	2	2	2
16	M5-16	balance block	1	1	1
17	M5-17	needle bar frame rock shaft crank	0	1	0
	5M5-17	throat bar shaft crank	1	0	1
18	M5-18	needle bar connecting rod	1	1	1
19	M5-19	connecting link pin	1	1	1
20	M5-20	washer	1	1	1
21	M5-21	throat clip guide bushing	1	1	1
22	M5-22	needle bar	1	1	1
23	M5-23	oil felt	1	1	1
24	M5-24	oil wick	1	1	1
25	M5-25	plasties tube	1	1	1
26	M5-26	oil wick	2	2	2
27	4M5-27	needle clamp	0	1	0
	3M5-27	needle clamp	1	0	0
	5M5-27	needle clamp	0	0	0
28	M5-58	needle	0	0	1
29	M5-59	oil seal	1	2	2
1	S057	snep ring screw	4	4	4
2	S102	hexagon socket screw	1	1	1
3	S055	balance block position screw	2	2	2
4	S043	frame rock shaft set screw	3	3	3
5	S074	shaft position screw	2	2	2
6	S053	screw	1	1	1
7	S001	screw	1	1	1
8	S006	screw	1	1	1
9	S012	screw	1	1	1
10	S009	screw	5	5	5
11	E01	snap ring	1	1	1



Thread guide assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M6-1	thread tension spring	1	2	2
2	M6-2	thread tension screw	3	4	4
3	M6-3A	thread tension nut	3	4	4
4	M6-4	thread tension spring	3	4	4
5	M6-5A	thread tension spring retainer house	3	4	4
6	M6-6	thread tension disc	6	8	8
7	M6-7	thread tension disc washer	3	4	4
8	M6-8A	thread guide	2	2	2
9	M6-9	upper thread take-up	1	1	0
	5M6-9	upper thread take-up	0	0	1
10	M6-10	oil box	1	1	1
11	M6-11	oil felt	1	1	1
12	M6-12	thread guide	1	1	1
13	M6-13	oil box washer	1	1	1
14	M6-14	oil felt	1	1	1
15	M6-15	tension spring	1	1	1
16	M6-16	thread controller disc holder	1	1	1
17	M6-17	spring	1	1	1
18	M6-18	thread controller disc guide bushing	1	1	1
19	M6-19	throat plate positionign rod	2	2	2
20	M6-20	throat plate barcket	1	1	1
21	M6-21	thread mark guide	1	1	0
	5M6-21	thread mark guide	0	0	1
22	M6-22	teat needle guard	1	1	1
23	M6-23	thread tension spring	2	2	2
24	4M6-24	front needle guard	0	1	0
	3M6-24	front needle guard	1	0	0
	5M6-24	front needle guard	0	0	1
25	4M6-25	throat plate	0	1	0
	3M6-25	throat plate	1	0	0
	5M6-25	throat plate	0	0	1
26	M6-26A	thread guide	1	2	1
27	5M6-27	thread guide	0	0	1
28	5M6-28	needle guard I	0	0	1
29	5M6-29	needle guide II	0	0	1
30	M6-30	needle guard barcket	1	1	0
	5M6-30	needle guard barcket	0	0	1
31	M6-31	snap plate	1	1	1
32	M6-32	snap plate washer	1	1	1
1	S099	screw	1	1	1
2	S035	throat plate screw	2	2	2
3	S016	fornt needle snap screw	1	1	1
4	S061	throat plat barcket screw	2	2	2
5	S015	thread guide holder screw	2	2	2

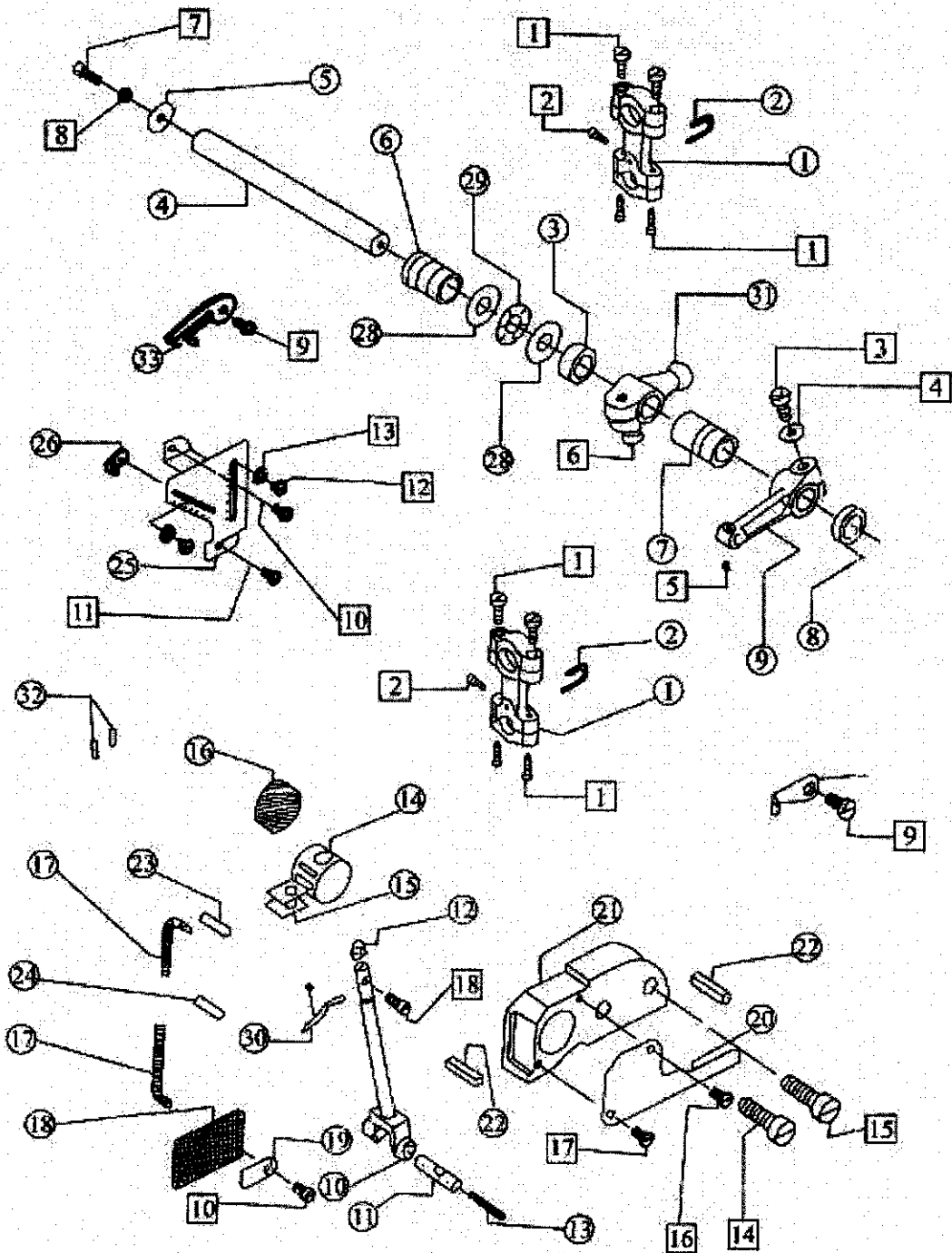
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
6	S033	oil box set screw	1	1	1
7	S072	oil box washer set screw	1	1	1
8	S005	rear needle guard screw	2	2	2
9	S023	needle guard screw	1	1	1
10	W07	needle tuard washer	1	1	1
11	S017	thread take up screw	2	2	2
12	S103	snap plate screw I	2	2	2
13	S019	snap plate screw II	1	1	1
14	S104	snap plate set screw	1	1	1
15	S045	screw	2	2	2



Upper looper assemblies

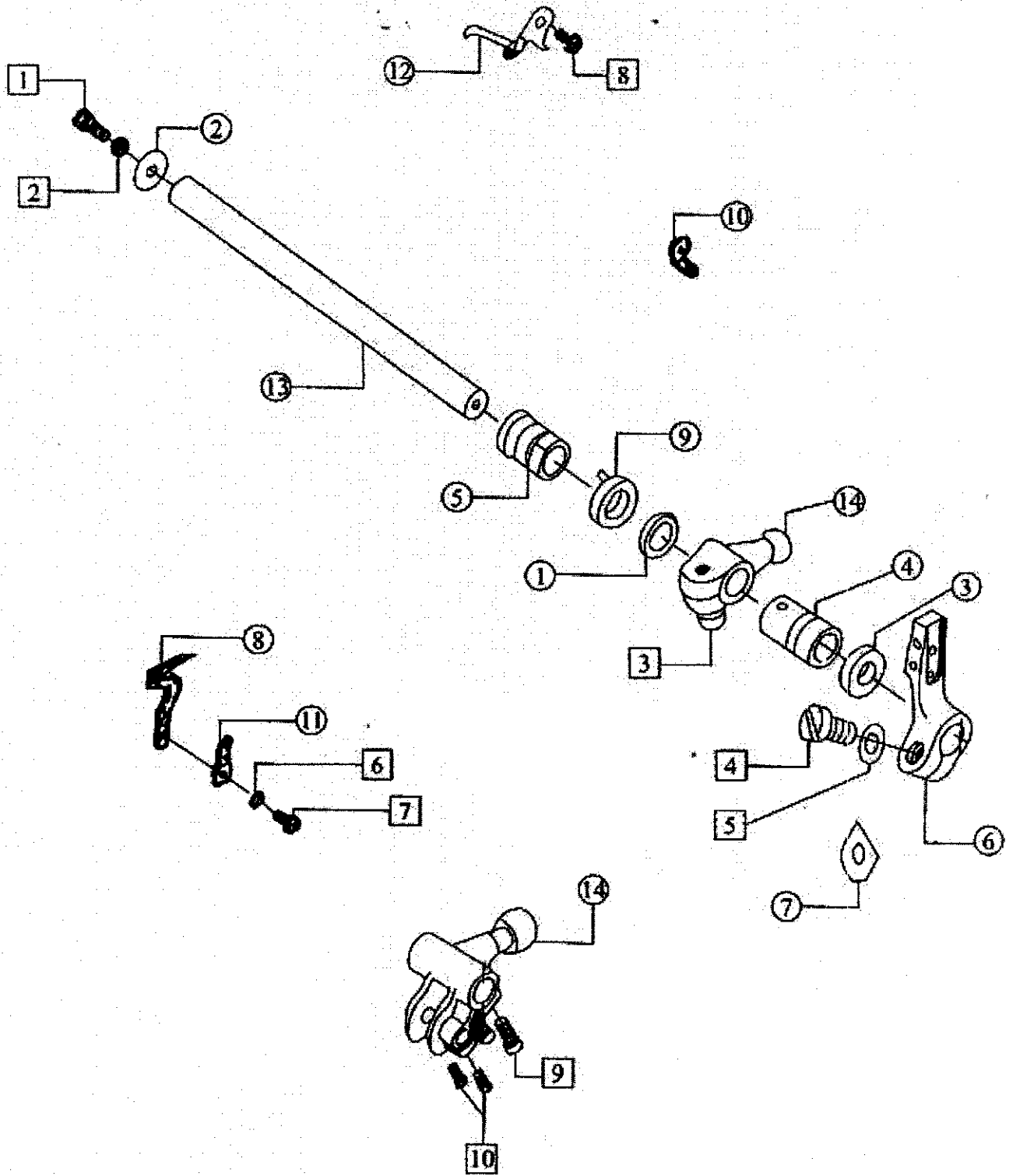
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M7-1	looper link	2	2	2
2	M7-2	looper link holder	2	2	2
3	M7-3	thickness washer	0	1	0
	5M7-3	thickness washer	1	0	1
4	M7-4	upper looper shaft	1	1	1
5	M7-5	big washer	1	1	1
6	M7-6	upper looper shaft rear bushing	1	1	1
7	M7-7	upper looper shaft foot bushing	1	1	1
8	M7-8	upper looper shaft oil seal	1	1	1
9	M7-9	upper looper shaft crant	1	1	1
10	M7-10	upper looper shaft bar	1	1	1
11	M7-11	connecting rod shaft pin	1	1	1
12	M7-12	washer	1	1	1
13	M7-13	oil wick	1	1	1
14	M7-14	upper looper slide bar slide block	1	1	1
15	M7-15	oil felt	2	2	2
16	M7-16	oil felt	1	1	1
17	M7-17	oil wick	2	2	2
18	M7-18	screen oil plate	1	1	1
19	M7-19	felt plate	1	1	1
20	M7-20	thread hider snap plate	1	1	1
21	M7-21	upper looper shaft slide bar bracket	1	1	1
22	M7-22	oil seal	2	2	2
23	M7-23	oil tube	1	1	1
24	M7-24	oil tube	1	1	1
25	M7-25	thread amount regulating plate	1	1	1
26	M7-26	upper looper thread guide	1	1	1
27	M7-27	upper looper shaft thread plate	1	1	1
28	M7-28	shaft bearing guild	2	2	2
29	M7-29	lower looper holder copper	1	1	1
30	M7-30	looper	1	1	1
31	M7-31	upper looper crank bearing	0	1	0
	5M7-31	upper looper crank bearing	1	0	1
32	M7-32	threading rube	2	2	2
33	M7-33	two for thread guide	1	1	1
1	S074	shaft screw	8	8	8
2	S0384	screw	2	2	2
3	S058	upper looper shaft crank screw	1	1	1
4	W12	upper looper shaft washer	1	1	1
5	S009	link pin set screw	1	1	1
6	S101	hexagon socket screw	1	1	1
7	S036	upper looper shaft screw	1	1	1
8	W04	wather	1	1	1
9	S032	upper looper shaft thread guide screw	2	2	2

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
10	S027	thread amount regulating plate	2	2	2
11	S037	screw	1	1	1
12	S014	looper shaft thread guide screw	2	2	2
13	W08	looper shaft thread guide washer	2	2	2
14	S097	upper looper shaft thread plate screw	1	1	1
15	S062	upper looper shaft thread plate screw	1	1	1
16	S012	thread holder snap plate screw	1	1	1
17	S095	thread holder snap plate screw	1	1	1
18	S015	upper looper set screw	1	1	1



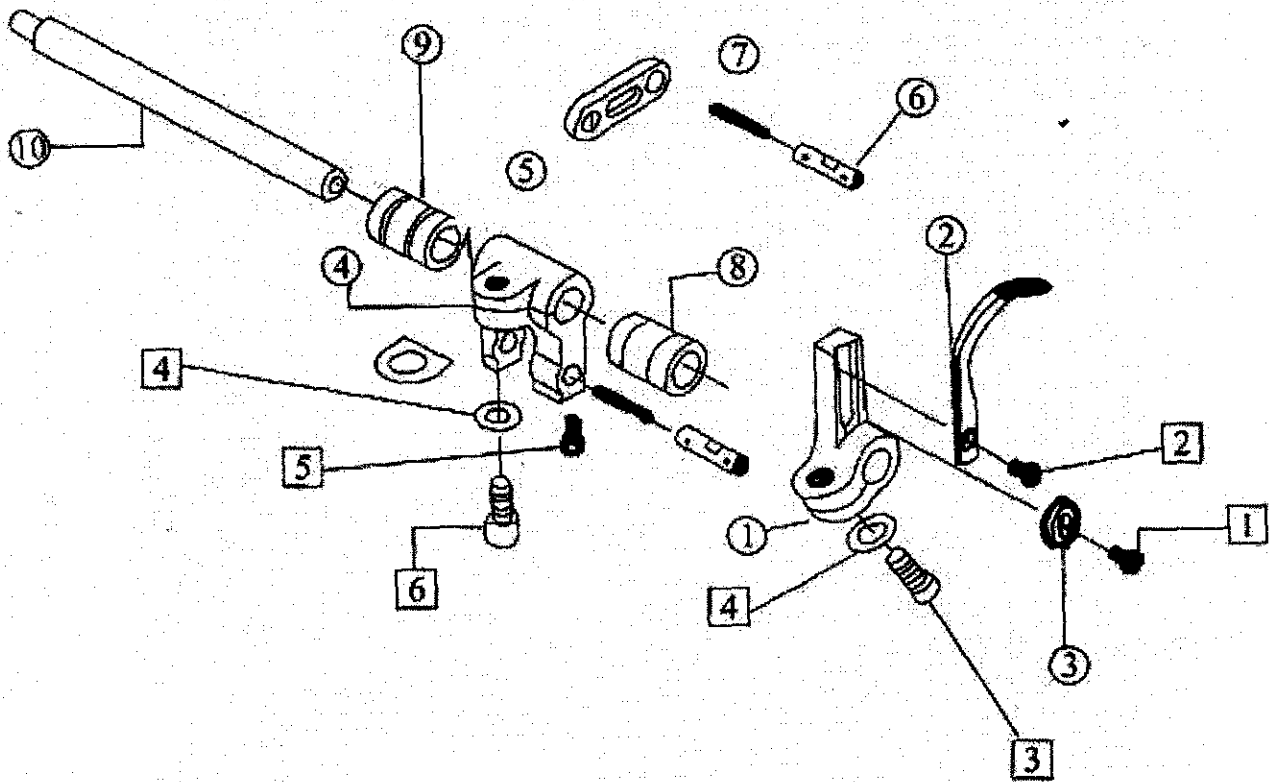
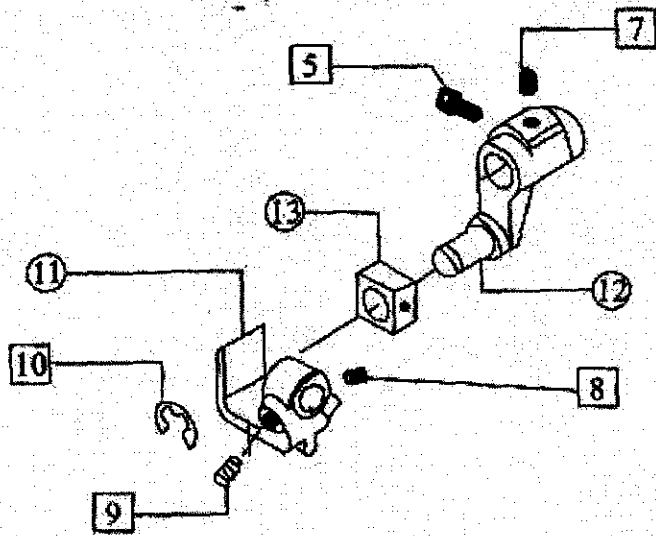
Lower looper assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M8-1	lower looper shaft copper bushing	1	1	0
	5M8-1	washer	0	0	1
2	M8-2	lower looper shaft washer	1	1	1
3	M8-3	oil seal	1	1	2
4	M8-4	lower looper front bushing	1	1	1
5	M8-5	lower looper rear bushing	1	1	1
6	M8-6	lower looper holder	1	1	1
7	M8-7	lower looper crank washer	2	2	5
8	M8-8	lower looper	1	1	0
9	M8-9	copper washer	1	1	1
10	M8-10	thread guide	1	1	1
11	M8-11	lower looper thread guide	1	1	1
12	M8-12	lower looper 3-thread guide	1	1	1
13	M8-13	lower looper shaft	1	1	0
	5M8-13	lower looper shaft	0	0	1
14	M8-14	lower looper crank	1	1	0
	5M8-14	lower looper crank	0	0	1
1	S036	lower looper shaft screw	1	1	1
2	W04	elastic washer	1	1	1
3	S101	crank screw	1	1	1
4	S060	lower looper holder screw	1	1	1
5	W12	lower looper holder washer	1	1	1
6	W07	lower looper holder washer	1	1	1
7	S022	lower looper screw	1	1	1
8	S032	lower looper thread guide screw	1	1	1
9	S067	crank screw	0	0	2
10	S015	crank screw	0	0	2



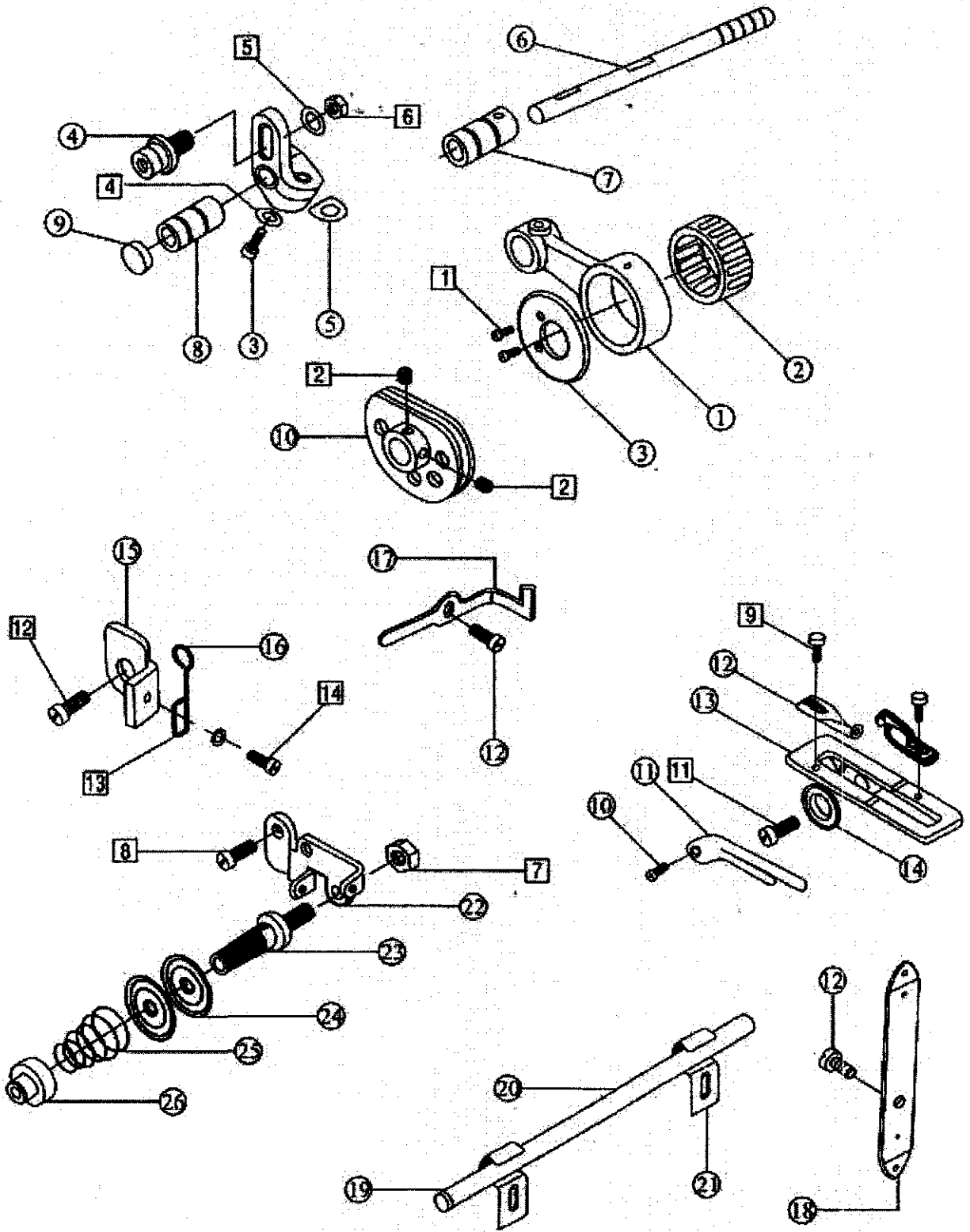
Front lower looper assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	5M9-1	front looper shaft holder	0	0	1
2	5M9-2	front looper	0	0	1
3	5M9-3	front looper shaft reguiding washer	0	0	1
4	5M9-4	front looper crank	0	0	1
5	5M9-5	regulating plate	0	0	1
6	5M9-6	regulating plate pin	0	0	2
7	5M9-7	oil thread	0	0	2
8	5M9-8	front looper shaft front bushing	0	0	1
9	5M9-9	front looper shaft rear bushing	0	0	1
10	5M9-10	front looper shaft	0	0	1
11	5M9-11	driving lever	0	0	1
12	5M9-12	driving crank	0	0	1
13	5M9-13	front looper slide block	0	0	1
1	S005	front looper thread guide screw	0	0	1
2	S016	front looper guide set screw	0	0	1
3	S060	front looper holder set screw	0	0	1
4	W12	front looper holder screw washer	0	0	2
5	S028	front looper crank screw	0	0	2
6	S101	front looper crank holder set screw	0	0	1
7	S043	hexagon socket selfscrew	0	0	1
8	S094	driving lever set screw	0	0	1
9	S093	driving lever set screw	0	0	1
10	E03	snapping	0	0	1



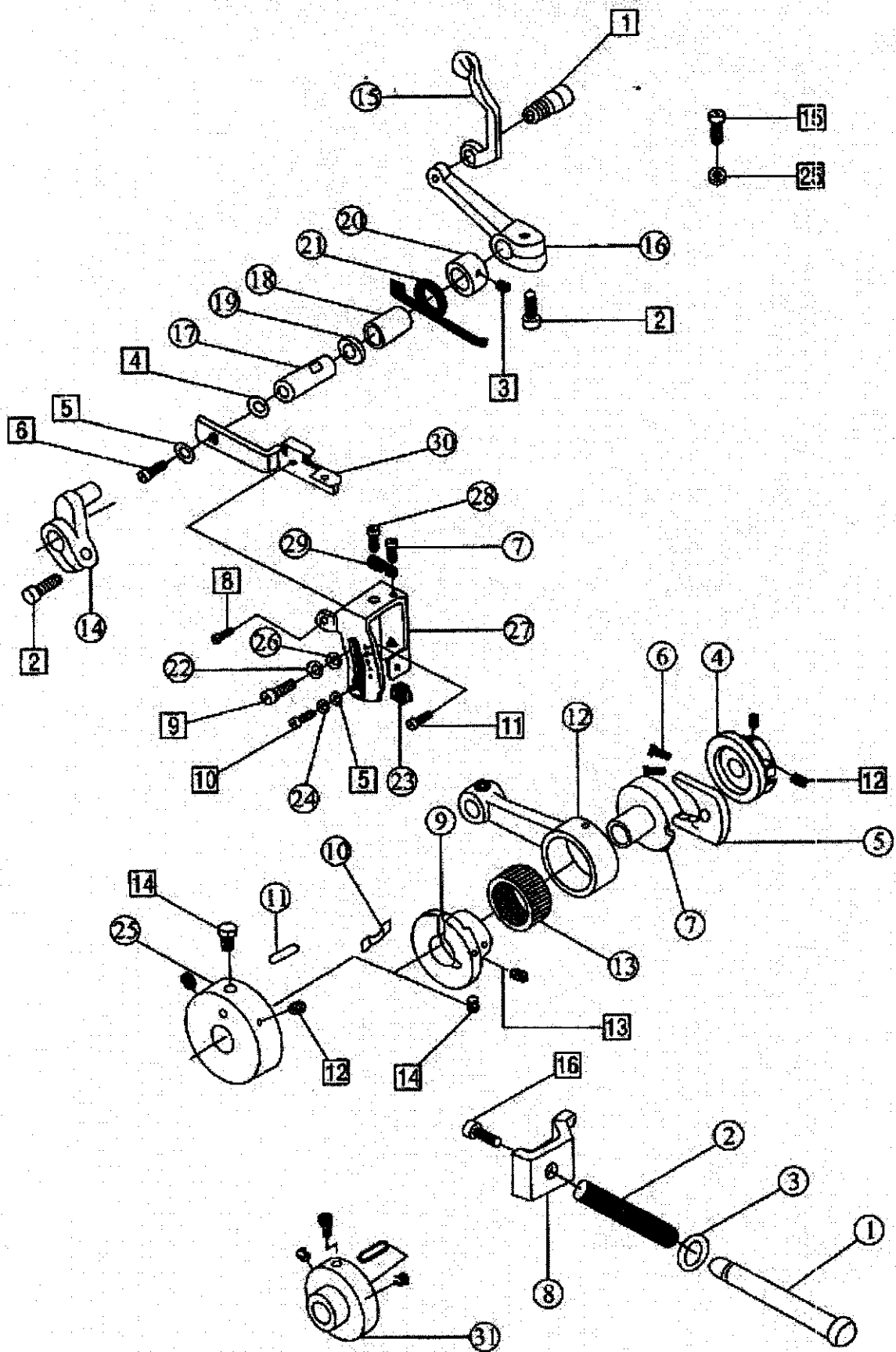
Cam assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	SM10-1	bearing snap screw	0	0	1
2	SM10-2	breat guide camtop	0	0	1
3	SM10-3	shaft snap crank screw	0	0	1
4	SM10-4	shaft snap washer	0	0	1
5	SM10-5	crank adjusting pin wather	0	0	1
6	SM10-6	crank adjusting pin nut	0	0	1
7	SM10-7	holder finger nut	0	0	1
8	SM10-8	holder finger	0	0	1
9	SM10-9	thread guide plate screw	0	0	1
10	SM10-10	thread guide plate screw	0	0	1
11	SM10-11	thread guide finger set screw	0	0	1
12	SM10-12	thread guide for 2-thread screw	0	0	2
13	SM10-13	washer	0	0	1
14	SM10-14	thread guide hook screw	0	0	1
15	SM10-15		0	0	1
16	SM10-16	thread guide hook	0	0	1
17	SM10-17	2-thread thread guide	0	0	1
18	SM10-18	rear thread guide finger set screw	0	0	1
19	SM10-19	thread guide tube bushing	0	0	2
20	SM10-20	thread guide tube	0	0	1
21	SM10-21	thread guide tube clamp	0	0	2
22	SM10-22	thread tension plate holder	0	0	1
23	SM10-23	holder spool	0	0	1
24	SM10-24	holder spool	0	0	2
25	SM10-25	holder spool spring	0	0	1
26	SM10-26	presser nut	0	0	1
1	S002	bearing snap ring screw	0	0	2
2	S009	cam set screw	0	0	2
3	S101	crank set screw	0	0	1
4	W12	crank washer	0	0	1
5	W06	crank adjusting pin wather	0	0	1
6	N02	crank adjusting pin nut	0	0	1
7	N03	thread tension scrwe nut	0	0	1
8	S032	hread tension screw	0	0	1
9	S003	hread guide plate screw	0	0	2
10	S017	hread guide plate screw	0	0	1
11	S038	hread guide finger set screw	0	0	1
12	S027	hread guide for 2-thread screw	0	0	3
13	W11	washer	0	0	1
14	S020	hread guide hook screw	0	0	1



Differential feed assemblies

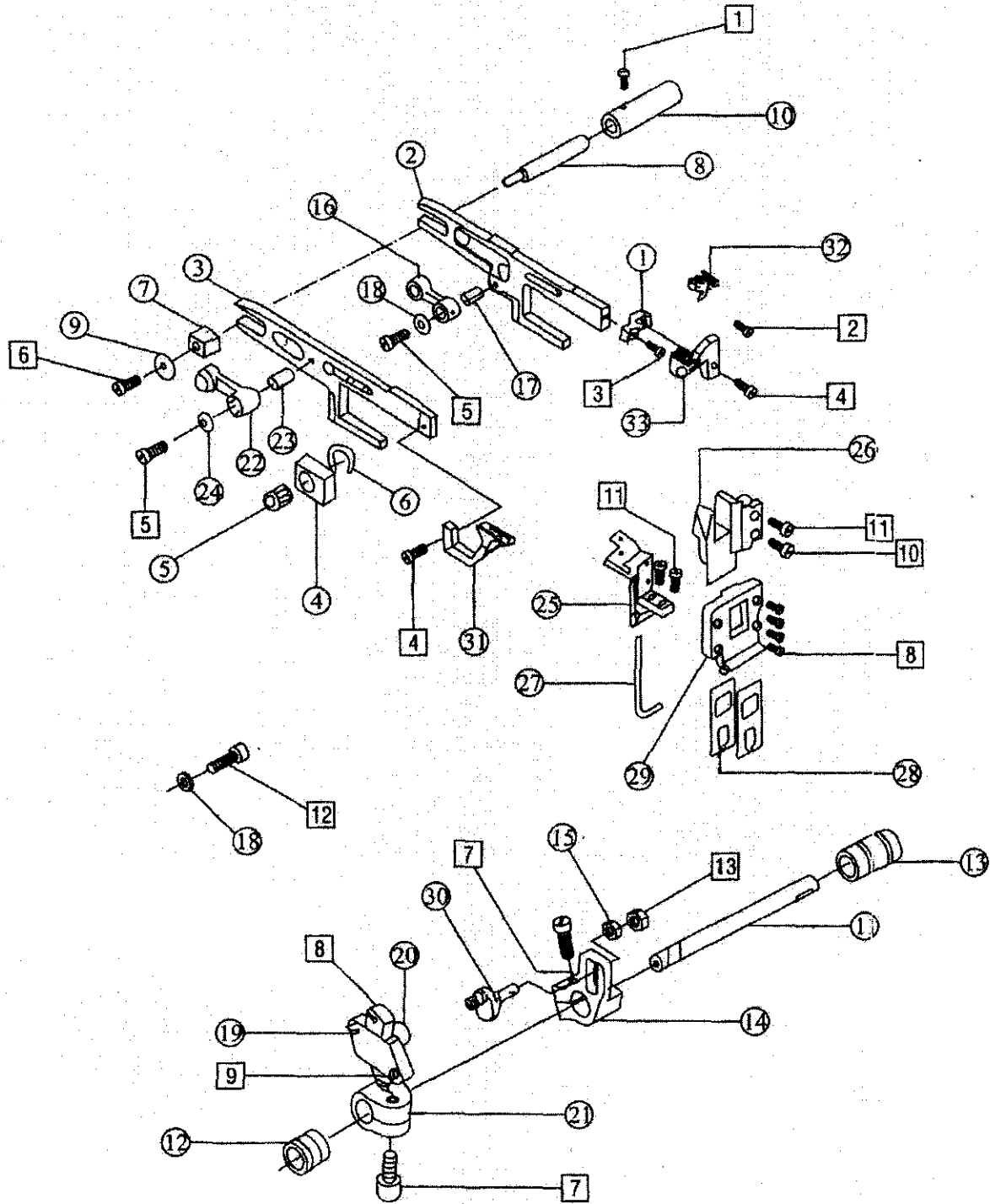
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M11-1	stich length reglating shaft	1	1	1
2	M11-2	spring	1	1	1
3	M11-3	oil washer	1	1	1
4	M11-4	stich length regulating cam asm	1	1	1
5	M11-5	stich length regulating block	1	1	1
6	M11-6	stich length regulating block spring	2	2	2
7	M11-7	stich length cam	1	1	1
8	M11-8	stich length regulating plate	1	1	1
9	M11-9	feed lngth cam	1	1	1
10	M11-10	feed cam spring	1	1	1
11	M11-11	feed cam pin	1	1	1
12	M11-12	feed link	1	1	1
13	M11-13	feed rod rolling pin bearing	1	1	1
14	M11-14	feed crank	1	1	1
15	M11-15	differential link	1	1	1
16	M11-16	differential crank	1	1	1
17	M11-17	pin	1	1	1
18	M11-18	differential shaft bearing	1	1	1
19	M11-19	oil seal	1	1	1
20	M11-20	snap ring	1	1	1
21	M11-21	spring	1	1	1
22	M11-22	washer	1	1	1
23	M11-23	regalating block	1	1	1
24	M11-24	washer	2	2	2
25	M11-25	feed cam	1	1	0
26	M11-26	washer	1	1	1
27	M11-27	differential regulating holder	1	1	1
28	M11-28	regulating screw	1	1	1
29	M11-29	regulating screw spring	1	1	1
30	M11-30	differential rigulating link	1	1	1
31	SM11-31	crank link cam	0	0	1
1	S096	differential link screw	1	1	1
2	S101	differential crank screw	2	2	2
3	S028	snap ring screw	1	1	1
4	W15	washer	1	1	1
5	S01	washer	2	2	2
6	S037	differential positon screw	1	1	1
7	S012	spring screw	1	1	1
8	S034	differential set screw	1	1	1
9	S079	screw	1	1	1
10	S027	differential positop screw	1	1	1
11	S032	differential positop screw	1	1	1
12	S043	stich length	4	4	4
13	S008	feed cam regulating screw	1	1	1
14	S011	feed cam screw	1	1	1
15	S040	screw	1	1	1
16	S036	stich length screw	1	1	1



Feed dog assemblies

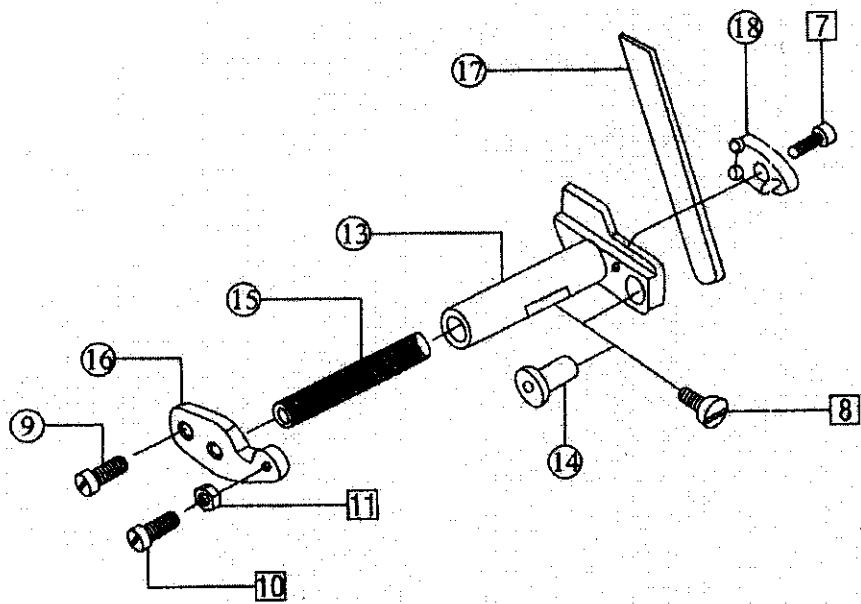
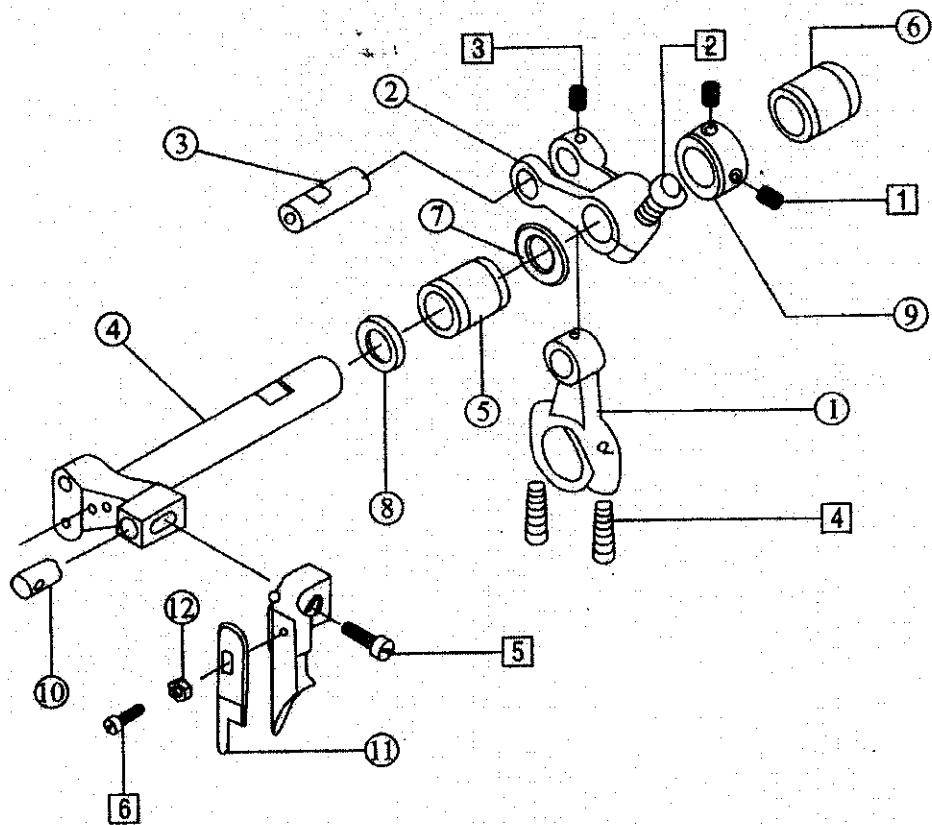
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M12-1	dog link plate	1	1	1
2	M12-2	feed dog holder	1	1	1
3	M12-3	differential feed dog holear	1	1	1
4	M12-4	feed dog lift slide block	1	1	1
5	M12-5	feed dog lift slide block shaft bearing	1	1	1
6	M12-6	snap ring	1	1	1
7	M12-7	differential feed slide block	1	1	1
8	M12-8	slide block eccentric share	1	1	1
9	M12-9	diferential feed slide block eccentric washer	1	1	1
10	M12-10	slide block eccentric shaft bushing	1	1	1
11	M12-11	feed shaft	1	1	1
12	M12-12	feed shaft bashing (left)	1	1	1
13	M12-13	feed shaft bashing (right)	1	1	1
14	M12-14	feed regulating crank	1	1	1
15	M12-15	washer	1	1	1
16	M12-16	feed dog holder link	1	1	1
17	M12-17	feed dog holder link bashing	1	1	1
18	M12-18	differetial feed dog holder link bashing	2	2	2
19	M12-19	crank slide block cover	1	1	1
20	M12-20	crank slide block	1	1	1
21	M12-21	feed regulating crank	1	1	1
22	M12-22	differential feed dog holder link	1	1	1
23	M12-23	differential feed dog holder link bushing	1	1	1
24	M12-24	differential feed dog holder link bushing washer	2	2	2
25	M12-25	screw oil plate	1	1	1
26	M12-26	feed dog carrier connection rod	1	1	1
27	M12-27	sealing connecting ring	1	1	1
28	M12-28	adjustable oil seal	2	2	2
29	M12-29	sealing connecting rod	1	1	1
30	M12-30	feed dog link ecentric shaft	1	1	0
	5M12-30	feed dog link ecentric shaft	0	0	1
31	M12-31	differential dog	1	1	0
	5M12-31	differential dog	0	0	1
32	M12-32	main feed dog	1	1	0
	5M12-32	main feed dog	0	0	1
33	M12-33	main feed dog	1	1	0
	5M12-33	main feed dog	0	0	1
1	S028	regulating bushing	1	1	1
2	S005	feed dog bushing screw	1	1	1
3	S024	screw	1	1	1
4	S100	main fed dog screw	2	2	2
5	S029	dog holder link	2	2	2
6	S006	feed dog lift slide block screw	1	1	1
7	S101	feed shaft crank screw (right)	2	2	2

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
8	S012	crank screw (left)	5	5	5
9	S069	crank slide block cover screw	2	2	2
10	S034	tooth rorks screw.	1	1	1
11	S046	tooth rorks screw	4	4	4
12	S031	screw	1	1	1
13	N02	reed crank pin shaft nat	1	1	1



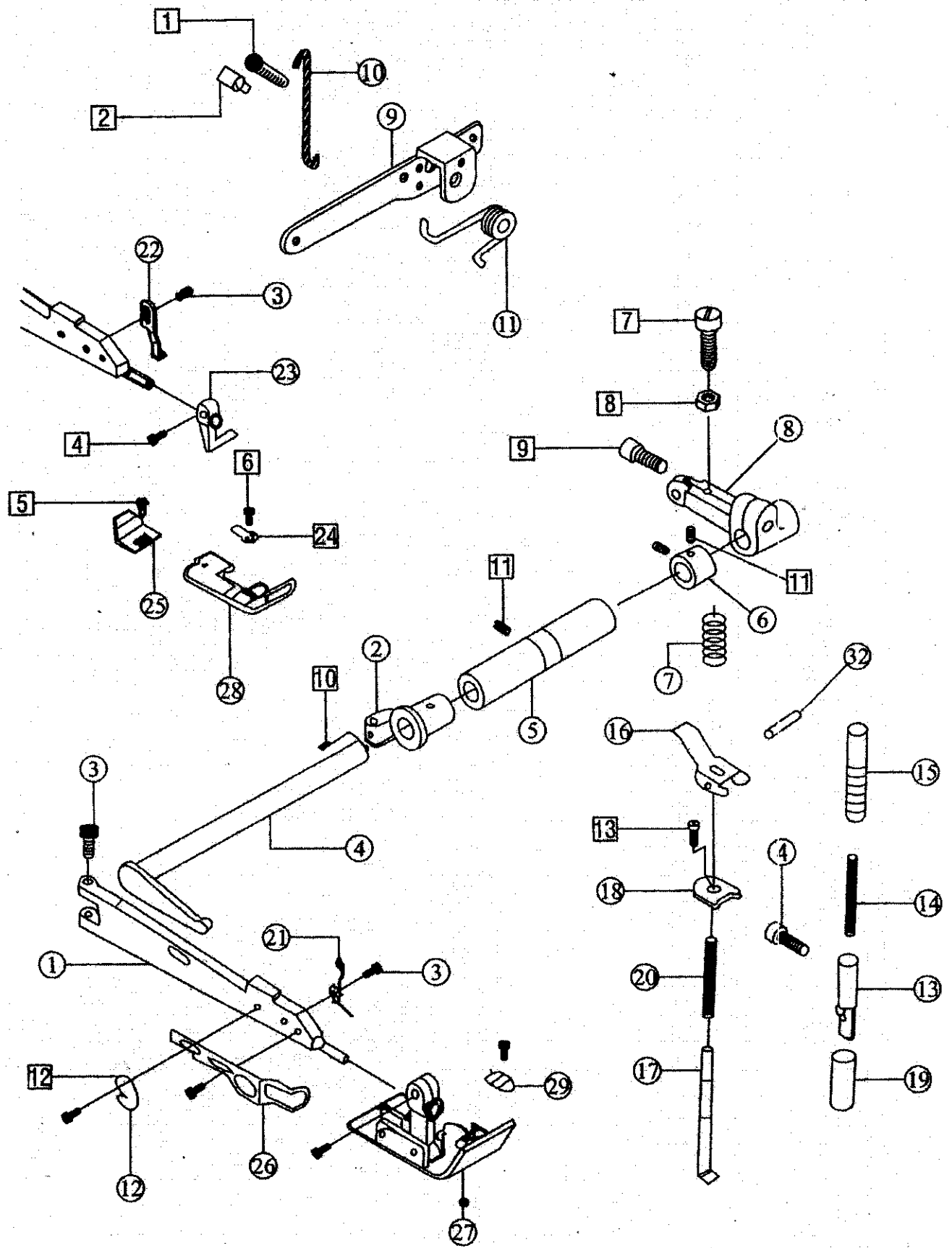
Trimming assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M13-1	upper knife driving connecting link	1	1	1
2	M13-2	upper knife crank	1	1	0
	5M13-2	upper knife crank	0	0	1
3	M13-3	crank pin	1	1	1
4	M13-4	upper knife frame rock shaft	1	1	1
5	M13-5	upper knife frame rock shaft brushing left	1	1	1
6	M13-6	upper knife frame rock shaft bushing right	1	1	1
7	M13-7	washer	1	1	1
8	M13-8	upper knife holder	1	1	0
	5M13-8	upper knife holder	0	0	1
9	M13-9	snap ring	1	1	1
10	M13-10	upper knife holder pin	1	1	1
11	M13-11	upper knife	1	1	1
12	M13-12	washer	1	1	1
13	M13-13	lower knife holder	1	1	0
	5M13-13	lower knife holder	0	0	1
14	M13-14	lower knife holder bushing	1	1	1
15	M13-15	lower knife holder spring	1	1	1
16	M13-16	lower knife holder	1	1	1
17	M13-17	lower knife	1	1	1
18	M13-18	lower knife holder locking plate	1	1	1
1	S057	snapping screw	2	2	2
2	S010	upper knife crank set screw	1	1	1
3	S043	upper knife crank pin screw	1	1	1
4	S074	upper knife connecting link screw	2	2	2
5	S046	upper knife holder screw	1	1	1
6	S025	upper knife screw	1	1	1
7	S036	lower knife holder locking plate screw	1	1	1
8	S033	lower knife holder locking plate screw	1	1	1
9	S045	lower knife snap plate screw	1	1	1
10	S022	lower knife snap plate screw	1	1	1
11	N01	lower knife snap plate screw	1	1	1



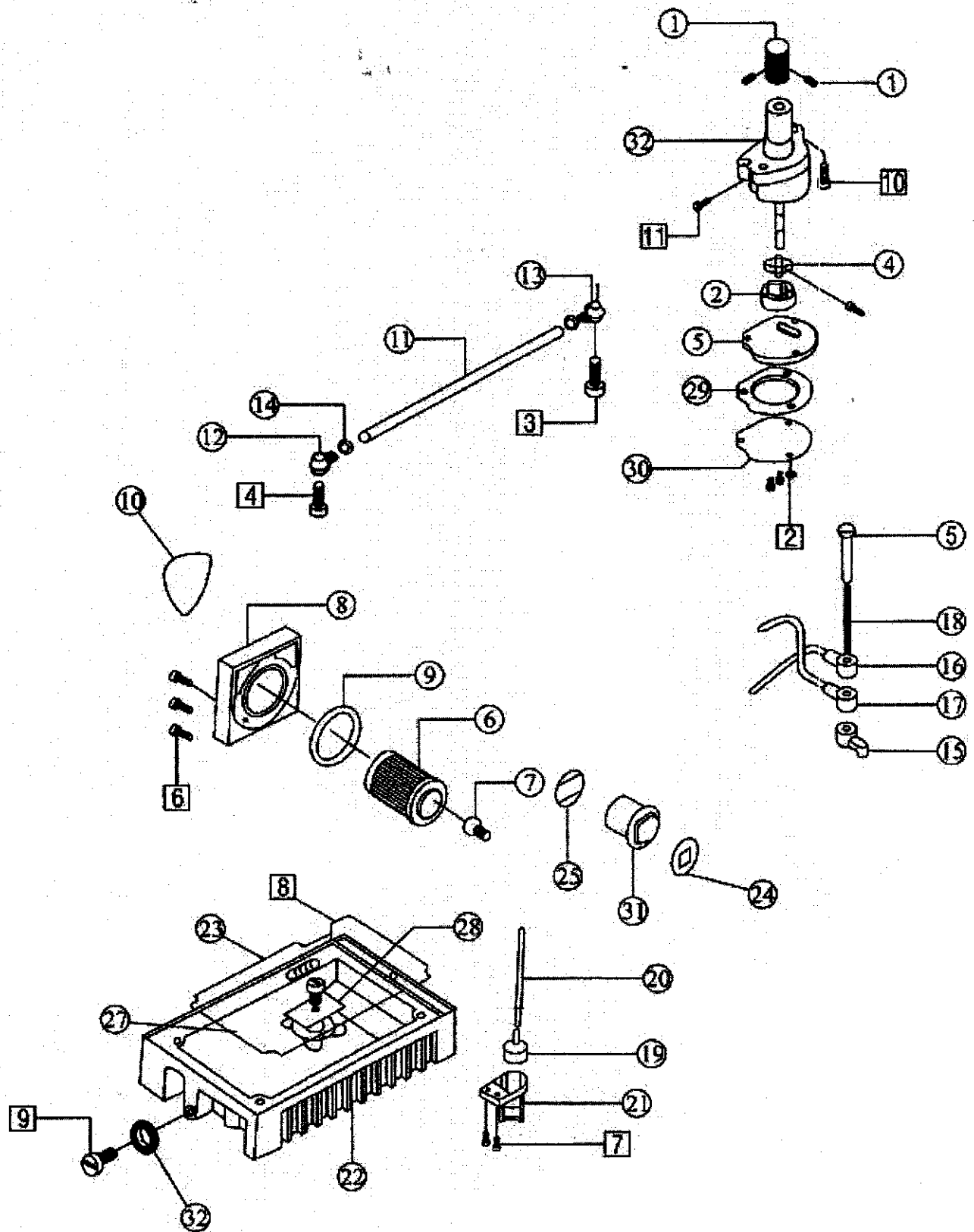
Presser foot assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M14-1	presser foot holder	1	1	1
2	M14-2	presser foot shaft bushing	1	0	1
3	M14-3	presser foot holder pin	1	1	0
4	M14-4	presser foot holder shaft	1	1	1
5	M14-5	presser foot shaft bushing	1	1	1
6	M14-6	presser foot shaft snap ring	1	1	1
7	M14-7	lever spring	1	1	1
8	M14-8	presser foot crank	1	1	1
9	M14-9	presser foot lifting lever	1	1	1
10	M14-10	hook	1	1	1
11	M14-11	spring	1	1	1
12	M14-12	thread cutting knife	1	1	1
13	M14-13	presser barhead	1	1	1
14	M14-14	presser bar spring	1	1	1
15	M14-15	presser regulating screw	1	1	1
16	M14-16	presser foot lifting handle	1	1	1
17	M14-17	presser foot lifting knob	1	1	1
18	M14-18	presser foot lifting handle bracket	1	1	1
19	M14-19	presser bar bushing	1	1	1
20	M14-20	presser foot lifting spring	1	1	1
21	5M14-21	presser foot	0	0	1
22	M14-22	presser foot holder connecting plate	1	1	1
23	M14-23	presser foot holder	1	1	1
24	M14-24	presser foot base	1	1	1
25	M14-25	presser foot	1	1	1
26	M14-26	presser foot holder cover	1	1	1
27	M14-27	presser foot form	0	1	0
28	M14-28	presser foot base	0	1	0
29	M14-29	lifter presser foot	0	1	0
30	M14-30	presser form	1	0	0
31	5M14-31	presser form	0	0	1
32	M14-32	presser foot lifting handle pin	1	1	1
1	S059	screw	1	1	1
2	S030	set screw	1	1	1
3	S011	presser foot holder connecting plate screw	2	2	2
4	S016	presser foot holder screw	1	1	1
5	S004	screw	1	1	1
6	S013	screw	1	1	1
7	S068	presser foot crank screw	1	1	1
8	N03	nut	1	1	1
9	S010	presser foot crank screw	1	1	1
10	S009	presser foot shaft snap washer screw	3	3	3
11	S043	screw	1	1	1
12	S071	thread cutting knife screw	2	2	2
13	S007	presser foot lifting handle screw	1	1	1



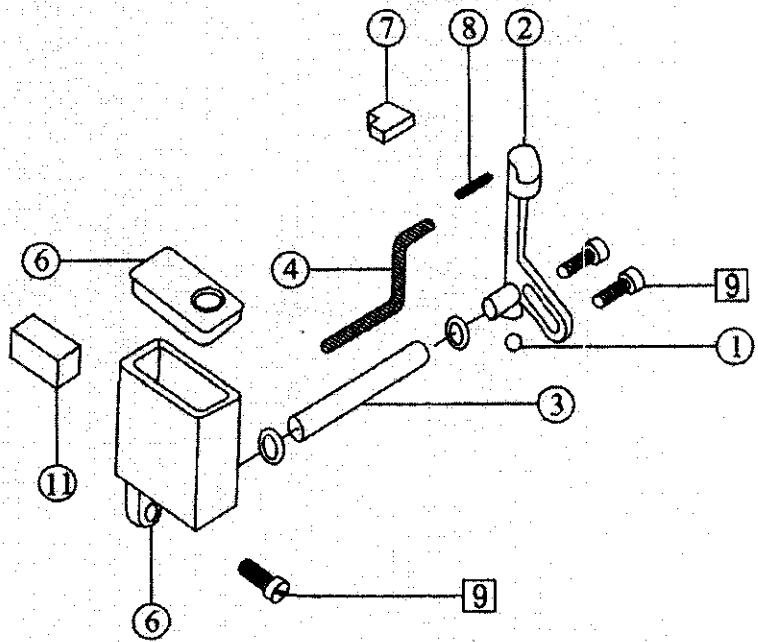
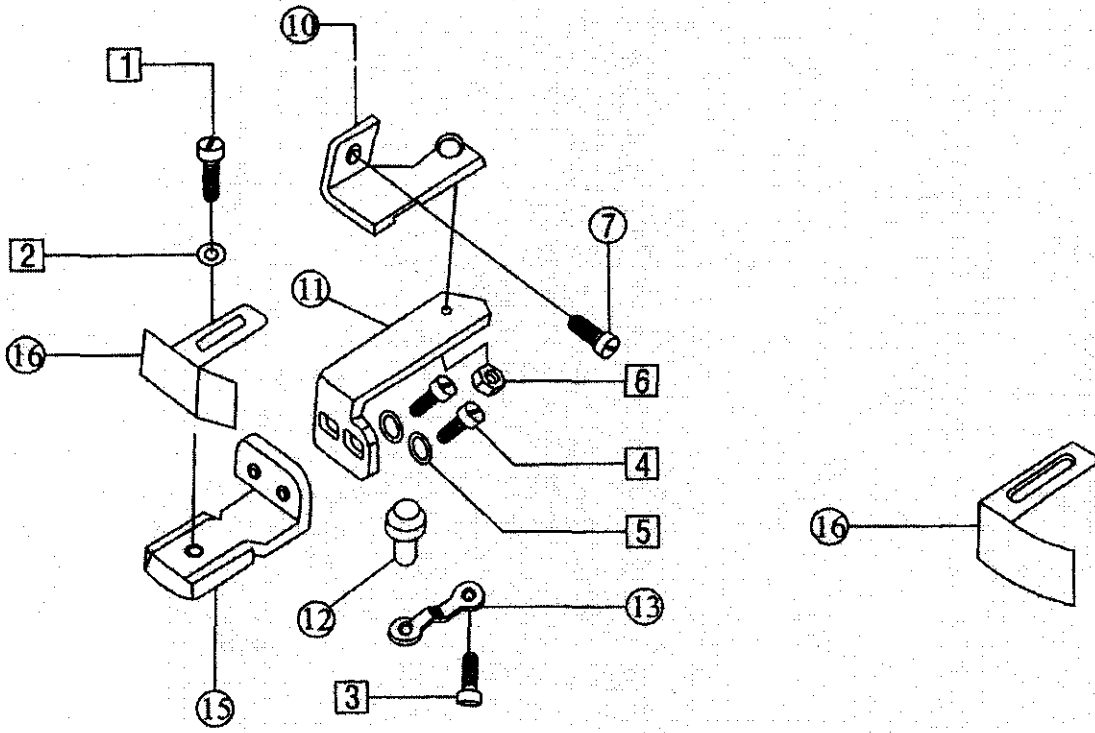
Lubrication assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M15-1	oil pump worm gear	1	1	1
2	M15-2	oil pump rotator bushing	1	1	1
3	M15-3	oil pump rptatpr shaft	1	1	1
4	M15-4	oil pump rotator	1	1	1
5	M15-5	oil pump cover plate	1	1	1
6	M15-6	oil cleaner	1	1	1
7	M15-7	oil cljerner joint	1	1	1
8	M15-8	oil clerner cover	1	1	1
9	M15-9	oil clerner cover seal ring	1	1	1
10	M15-10	ingicaing plate	1	1	1
11	M15-11	oil tube	1	1	1
12	M15-12	oil tube joint	1	1	1
13	M15-13	oil tube joint	1	1	1
14	M15-14	oil tube shap ring	4	4	4
15	M15-15	lubrcate bushing	1	1	1
16	M15-16	upper screen	1	1	1
17	M15-17	lower screen	1	1	1
18	M15-18	regulating pin	1	1	1
19	M15-19	oil show bracket	1	1	1
20	M15-20	oil show cleaner link	1	1	1
21	M15-21	oil show cleaner guard	1	1	1
22	M15-22	oil pan	1	1	1
23	M15-23	oil pan washer	1	1	1
24	M15-24	boug on with	1	1	1
25	M15-25	oil dial	1	1	1
26	M15-26	oil seal	1	1	1
27	M15-27	oil pan magnet	1	1	1
28	M15-28	oil pan magnet cover	1	1	1
29	M15-29	oil screen holder	1	1	1
30	M15-30	oil screen felt	1	1	1
31	M15-31	oil bouy	1	1	1
32	M15-32	oil pump asm	1	1	1
33	M15-33		1	1	1
34	M15-34		1	1	1
1	S057	oil pamp worm gear screw	2	2	2
2	S024	oil cleaner screw	3	3	3
3	S086	oil tube joint screw	1	1	1
4	S063	oil tube joint screw	1	1	1
5	S052	oil screen screw	1	1	1
6	S039	oil screen cover screw	3	3	3
7	S042	oil boy finger screw	2	2	2
8	S037	oil pan magnet cover screw	1	1	1
9	S066	oil pan oil screw	1	1	1
10	S048	oil pump screw	1	1	1
11	S065	oil pumps asm svrew	1	1	1



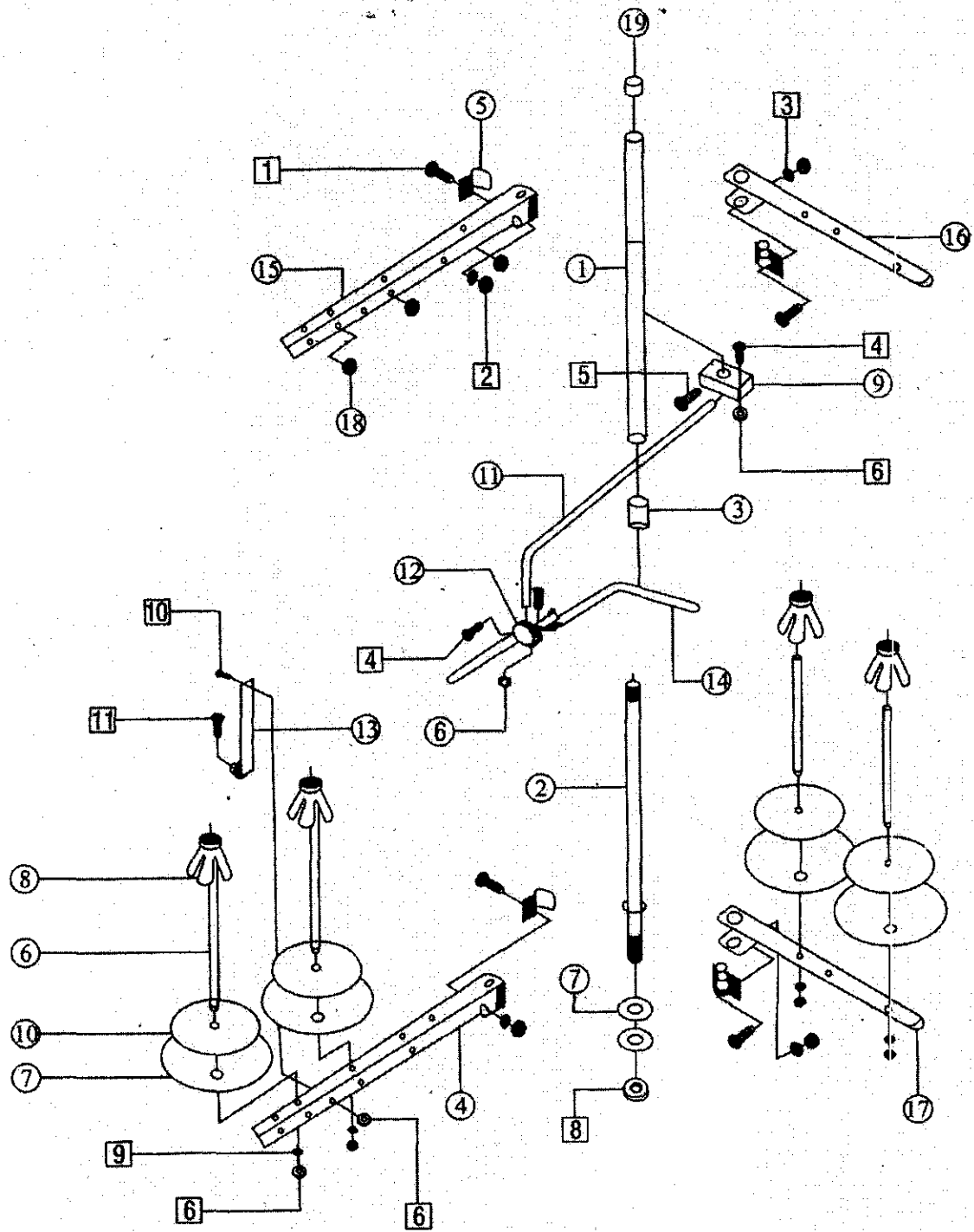
Feed snap assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M16-1	oil seal	1	1	1
2	M16-2	needle cooler	1	1	0
	5M16-2	needle cooler	0	0	1
3	M16-3	oil tube bracker	1	1	1
4	M16-4	oil wick	1	1	1
5	M16-5	lower oil cover	1	1	1
6	M16-6	lower oil box	1	1	1
7	M16-7	oil felt	1	1	0
	5M16-7	oil felt	0	0	1
8	M16-8	oil wick	1	1	1
9	M16-9	cloth guide holder	1	1	1
10	M16-10	hinge plate	1	1	1
11	M16-11	oil felt block	1	1	
12	M16-12	hinge pin	1	1	1
13	M16-13	hinge spring	1	1	0
14	M16-14	snap plate	1	1	1
15	M16-15	snap plate bracket	1	1	1
16	M16-16	snap plate	1	1	0
	5M16-16	snap plate	0	0	1
1	S018	snap plate screw	1	1	1
2	W09	washer	1	1	1
3	S021	hinge spring screw	1	1	1
4	S026	hinge screw	2	2	2
5	W11	washer	2	2	2
6	N03	nut	1	1	1
7	S047	cloth guide holder screw	1	1	1
8	S037	needle cooler screw	3	3	3



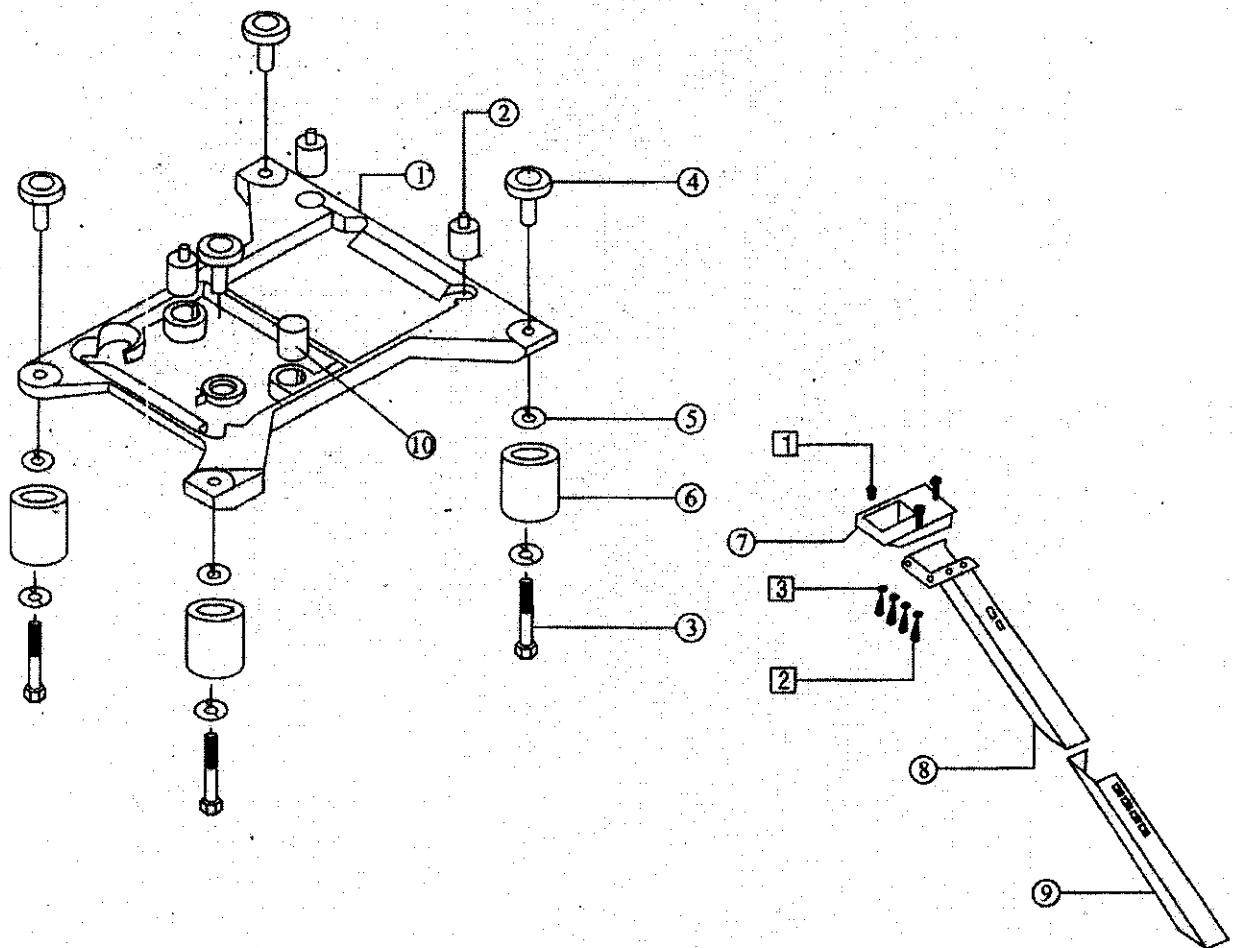
Thread spool assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M17-1	upper thread column	1	1	1
2	M17-2	lower thread column	1	1	1
3	M17-3	bushing	1	1	1
4	M17-4	long thread spool tray bracket	1	1	1
5	M17-5	thread guide hook	4	4	4
6	M17-6	spool pin	3	4	5
7	M17-7	spool tray	3	4	5
8	M17-8	centering device	3	4	5
9	M17-9	clamp plate	1	1	1
10	M17-10	spool tray cushion	3	4	5
11	M17-11	thread guide connecting bar	1	1	1
12	M17-12	thread guide joint	1	1	1
13	M17-13	thread stand holder	1	1	1
14	M17-14	thread guide bar	1	1	1
15	M17-15	thread spool tray bracket	1	1	1
16	M17-16	thread guide plate	1	1	1
17	M17-17	thread spool tray bracket	1	1	1
18	M17-18	thread guide hook	3	3	3
19	M17-19	rubber seal	1	1	1
1	S088	thread guide hook screw	4	4	4
2	N06	thread guide hook screw	4	4	4
3	W02	thread guide washer	4	4	4
4	S075	clamp plate screw	3	3	3
5	S051	stand holder screw	1	1	1
6	N04	nut	8	8	8
7	W16	lower washer	2	2	2
8	N05	nut	1	1	1
9	W05	nut	4	4	4
10	S087	thread stand holder screw	1	1	1
11	S089	thread stand holder join screw	1	1	1















Plater row material assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M18-1	machine head plate	1	1	1
2	M18-2	head shockproof cushion			
3	M18-3	screw	4	4	4
4	M18-4	screw	4	4	4
5	M18-5	pig washer	12	12	12
6	M18-6	plate doy link bushing	4	4	4
7	M18-7	row material trollgh bracket	1	1	1
8	M18-8	row material trough (1)	1	1	1
9	M18-9	row material trough (2)	1	1	1
10	M18-10	head shockproof cushion	1	1	1
1	S076	row material seat screw	3	3	3
2	W13	row material washer	4	4	4
3	S077	row material screw	4	4	4



Accessories assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M19-1	machine head cover	1	1	1
2	M19-2	oil can/100cc -	1	1	1
3	M19-3	notes oil	1	1	1
4	M19-4	tundish	1	1	1
5	M19-5	oil can/50cc	1	1	1
6	M19-6	spanner	1	1	1
7	M19-7	spanner	1	1	1
8	M19-8	spanner	1	1	1
9	M19-9	cross screw driver	1	1	1
10	M19-10	cross screw driver	1	1	1
11	M19-11	cross screw driver	1	1	1
12	M19-12	cross screw driver	1	1	1
13	M19-13	screw driver	1	1	1
14	M19-14	screw driver	1	1	1
15	M19-15	screw driver	1	1	1
16	M19-16	tweezer	1	1	1
17	M19-17	metal guide	1	1	1
18	M19-18	presser foot base	1	1	1
19	M19-19	presser foot base chain	1	1	1
20	M19-20	affach nentbox	1	1	1
21	S009	thimble screw	1	1	1
22	DCX27	needle	4	4	4
23	M11-19	lower knife	1	1	1
24	M13-6	oil filter	1	1	1

MODELS	THROAT PLATE	PRESSER FOOT	MAIN FEED DOG	DIFFERENTIAL FEED DOG	AUXILIARY FEED DOG	UPPER LOOPER	LOWER LOOPER	CHAIN LOOPER	NEEDLE CLAMP	WASHER	NEEDLE BAR SHAFT	LOWER LOOPER SHAFT
												
OV-103-040	E800	P253E-3	D440	H445	D095	LP26	M8-8	——	KG131-E	KJ10F	KF25-A	KJ09B-E
OV-104-240	E919	P253E-4	D440	H445	D095	LP26	M8-8	——	KG142-E	KJ13F	KF26-A	KJ11B-E
OV-105-350	E982	P504-A	D489	H497	D502	LP26	M8-8	——	KG153-E	KJ13F	KF26-A	KJ11B-E
OV-105-550	E870	P960-A	D490	H501	D502	LP38	M8-8	5M9-2	KG155-E	KJ13F	KF26-A	KJ11B-E