

SUPER HIGH SPEED OVERLOCK SEWING MACHINE

**Operation Manual
Parts Book**

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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

To The Operators

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.

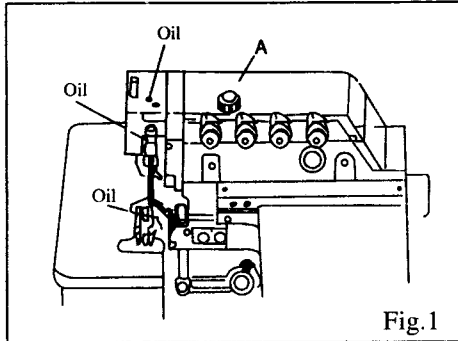


Fig.1

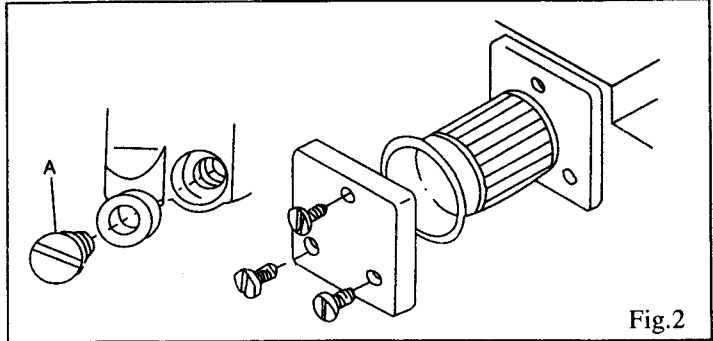


Fig.2

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 ride.
 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 it 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 replace 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 filter, 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.

For seamtype 516 only

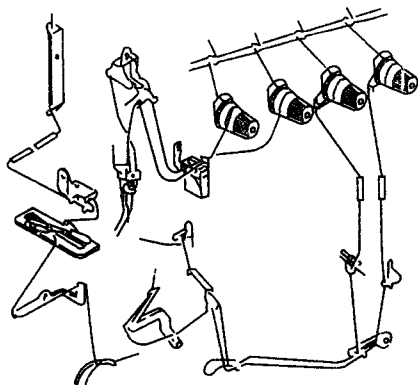


Fig.3

For four thread only

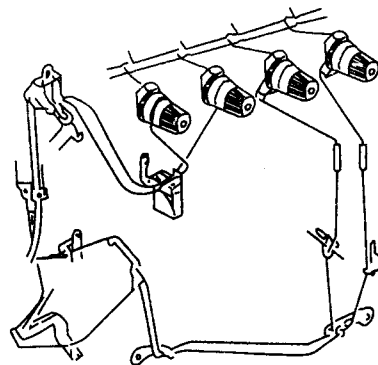


Fig.4

Thread tension

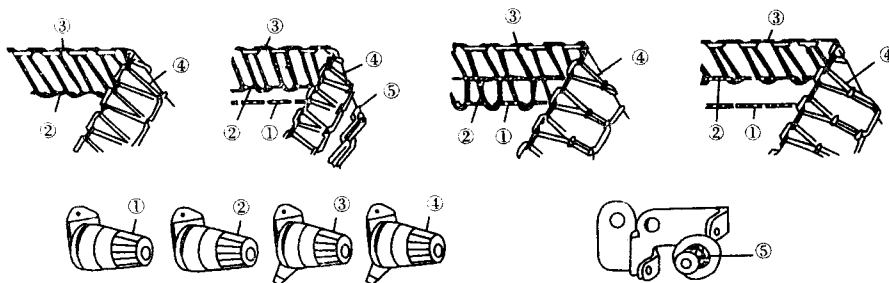


Fig.5

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.

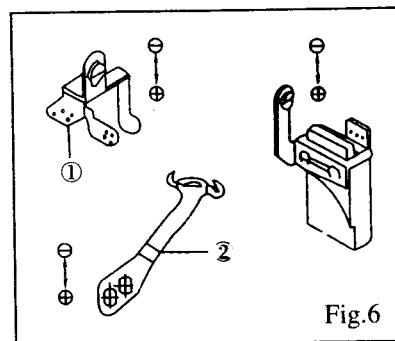


Fig.6

2. Needle Thread Control Fig.6

In case of sewing type 504,512,&514, push Thread guide① 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.

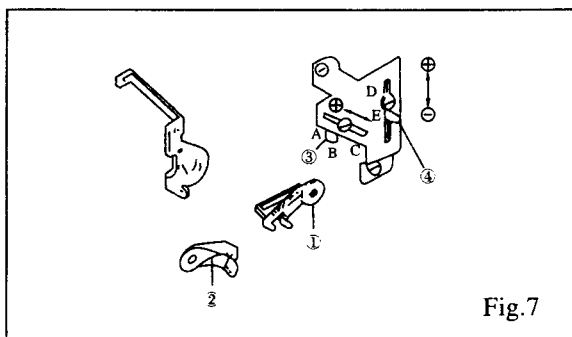


Fig.7

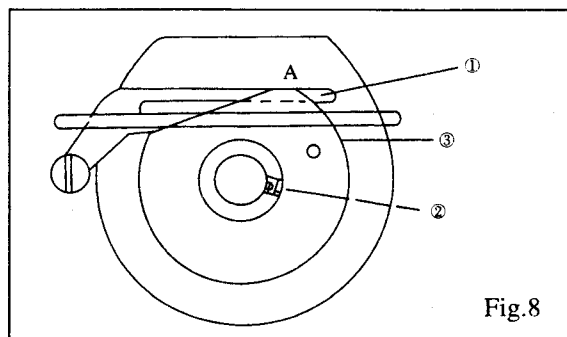


Fig.8

Stitch length adjustment

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

Keep pushing the Push Button enter deep inside.

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

Maxidiff 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

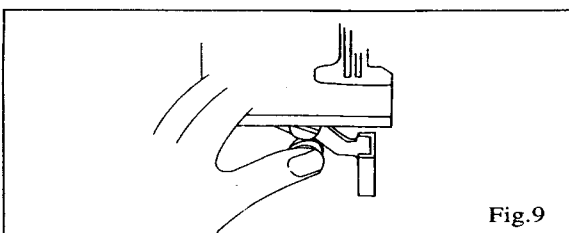


Fig.9

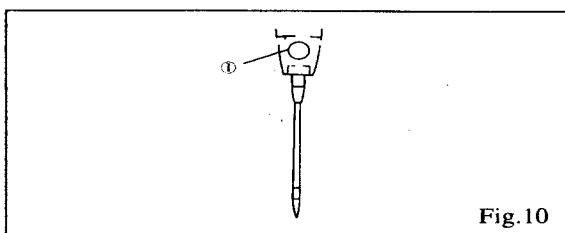


Fig.10

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	1:13	-	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

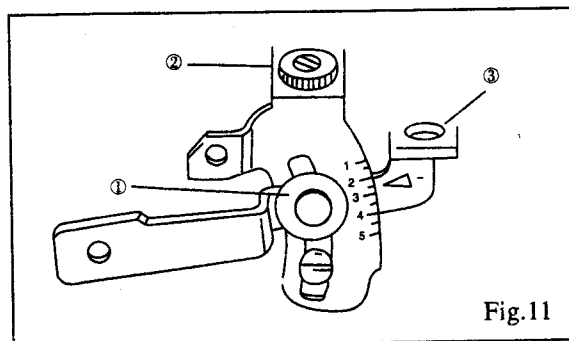


Fig.11

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.

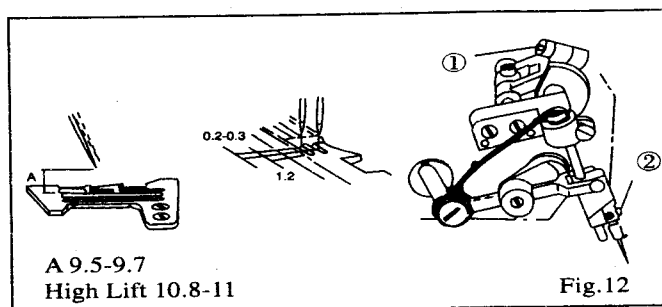


Fig.12

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.

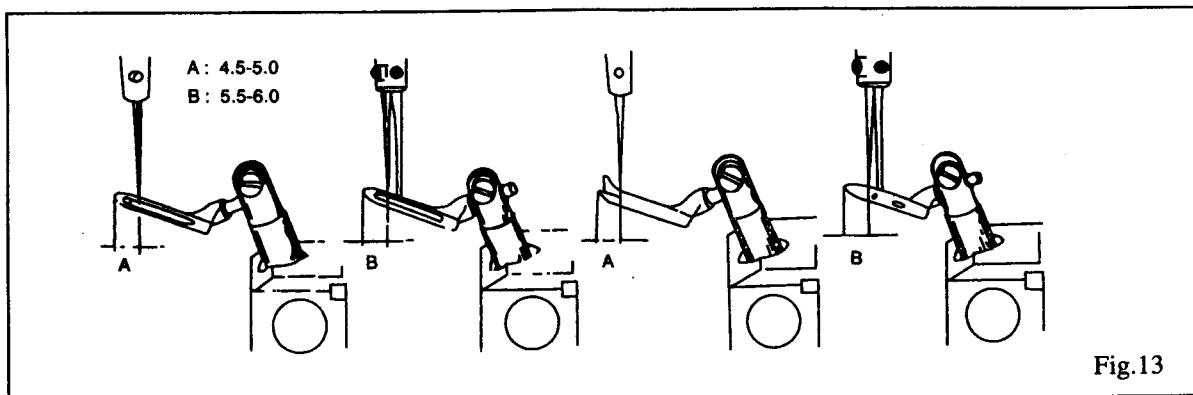


Fig.13

3. Lower Looper 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 Looper and Lower Looper Fig.16

When the Upper and Lower Looper is crossed.

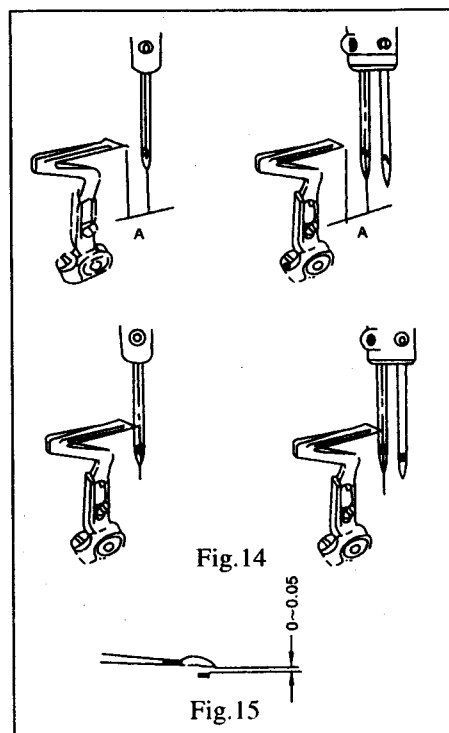


Fig.14

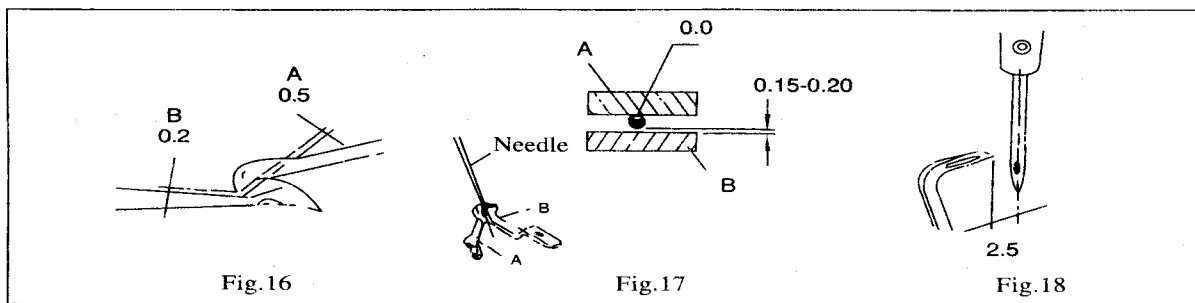
Fig.15

5. Needle and Needle Guard Fig.17

When the Lower Looper 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 Looper and Needle Fig.18

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



Problem settlement:

Needle break

REASON

1. Needle installed wrong
2. Wrong needle size
3. Needle is bended.
4. Wrong relation with Needle Guard.
5. Wrong relation with looper.
6. Needle does not center the needle slot of Needle Plate or Presser Foot.

CORRECT

1. Reset needle correctly.
2. Use properly needle for fabric and thread.
3. Replace new needle.
4. Readjust Needle guard.
5. Readjust looper.
6. Readjust the Needle Plate and Presser Foot.

Thread break

REASON

1. Inferior quality of thread.
2. Thread thicker than Needle hole.
3. Wrong threading.
4. Thread tension is too strong.
5. Needle installed wrong.
6. Thread Stand installed wrong.
7. Over heat of Needle 1.No silicon oil
2 Wrong setting of Needle Guard.
8. Thread Disc or Guide is burred.
9. Wrong relation of Needle and Looper.
10. Needle, Looper needle Plate and guide is burred.

CORRECT

1. Use good quality thread.
2. Use proper Needle for fabric and thread.
3. Rethreading correctly.
4. Readjust thread tension nut.
5. Reset needle correctly.
6. Reset thread stand for threading smoothly.
7. (1) Fill in Silicone oil.
(2) Readjust Needle Guard.
8. Grind off polish or replace new one.
9. Readjust Needle and Looper.
10. grind off, polish or replace new one.

Skip stitches

REASON

1. Wrong relation of Needle and Looper.
2. Wrong threading.
3. Needle installed wrong.
4. Inadequate thread tension or tension too strong.
5. Looper point is damaged.
6. Needle is bended.
7. Wrong installed Needle Guard.

CORRECT

1. Readjust Needle and Looper.
2. Rethreading correctly.
3. reset Needle correctly.
4. Readjust Thread Tension Nut.
5. Replace new one.
6. Replace new one.
7. Readjust Needle guard.

Loosen stitches

REASON

1. Wrong threading
2. Thread is thicker than Needle hole.
3. Tension Disc do not press thread properly.
4. Needle thread is not lubricated.
5. Wrong setting of Needle and Loopers.

CORRECT

1. Rethreading correctly.
2. Use proper Needle.
3. Reset Tension Disc properly.
4. Fill silicon oil.
5. Readjust needle and loopers.

Uneven stitches

REASON

1. Wrong threading.
2. Thread stand installed wrong.
3. Lower Knife installed wrong.
4. Knives do not trim neatly.
 - (1) Knives installed wrong.
 - (2) Dull lower knife.
5. Thread Disc or Guide in burred.
6. Needle point is damaged.
7. Inadequate height of feed dogs.
8. Inadequate thread tension.

CORRECT

1. Rethreading correctly.
2. Reset Threadt for threading smoothly.
3. readjust lower knife.
4. Correct as follow:
 - (1) Readjust Knives.
 - (2) Sharpen or replace new knives.
5. Grind off, Polish or replace new one.
6. Replace new Needle.
7. readjust feed dogs.
8. Readjust Thread tension nut.

Wrinkled stitches

REASON

1. Thread tension is too strong.
2. Inadequate pressure of presse 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. Rendjust seam width or replace chain off finger.

Thread chain does not come out 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.

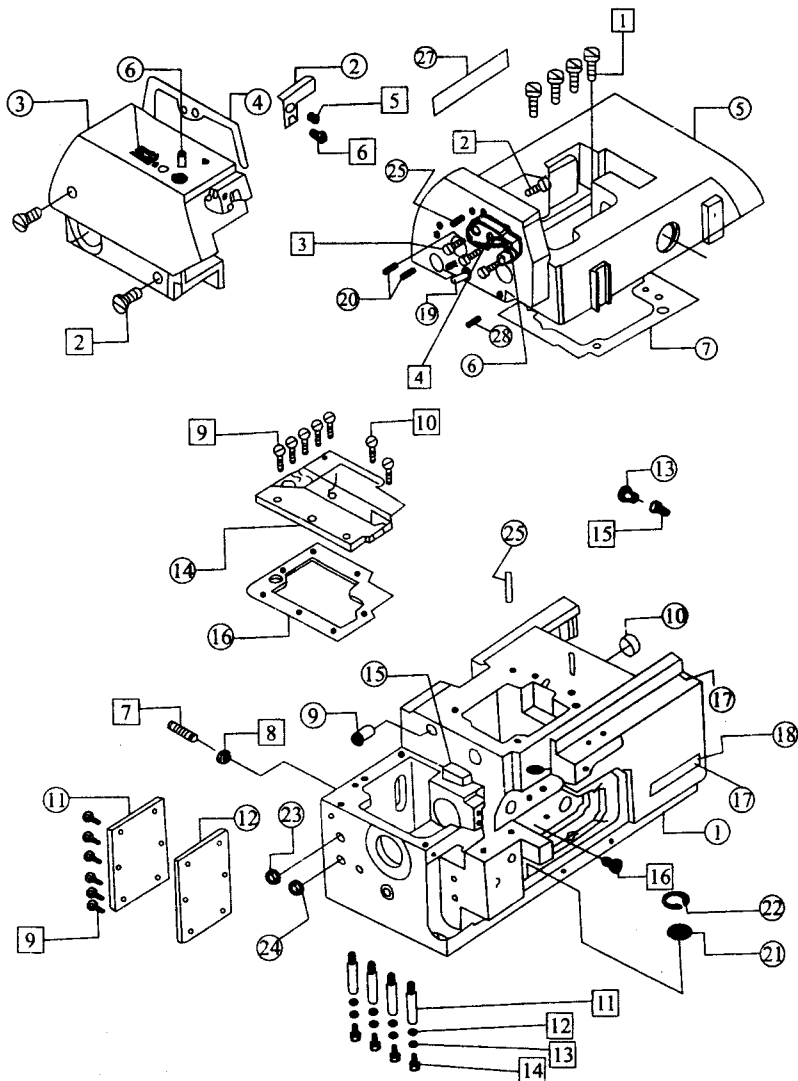
CORRECT

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.

一、Frame assemblies

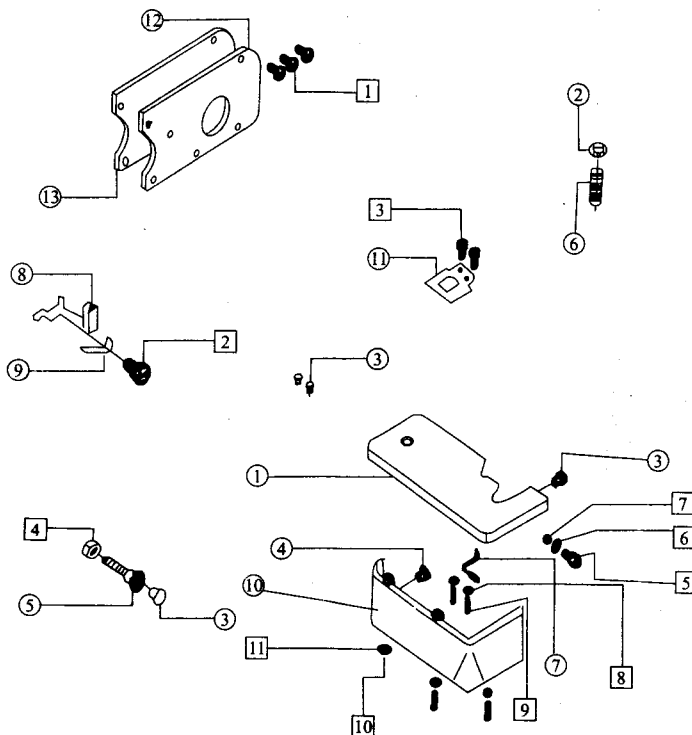
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M1-1A	machine frame	1	1	1
2	M1-2	needle thread cover plate	1	1	1
3	M1-3A	upper oncle cover	1	1	1
4	M1-4A	upper oncle cover pad	1	1	1
5	M1-5A	lather shell upper knot	1	1	1
6	M1-6	needle plate	1	1	1
7	M1-7	upper washer	1	1	1
8	M1-8	oil tube	1	1	1
9	M1-9	rear 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

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
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



二、Cloth plate assemblies

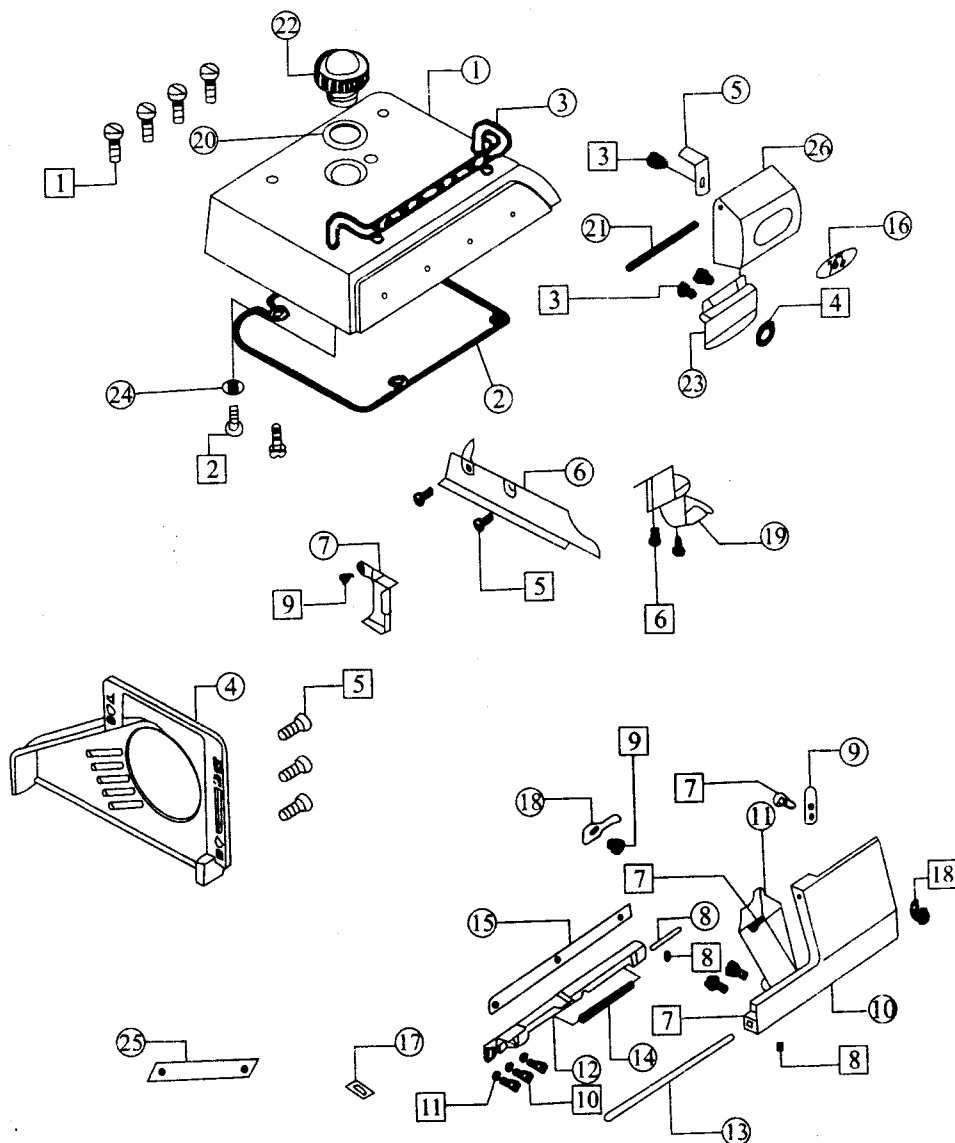
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M2-1	cloth plate	1	1	1
	5M2-1	cloth plate	0	0	0
2	M2-2	washer	1	1	1
3	M2-3	colloid cose	4	4	4
4	M2-4	colloid cose	1	1	1
5	M2-5	choth plate spring screw	1	1	1
6	M2-6	spring	1	1	1
7	M2-7	cloth plate spring	1	1	1
8	M2-8	cloth plate slider cover	1	1	1
9	M2-9	cloth 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



三、Cover assemblies

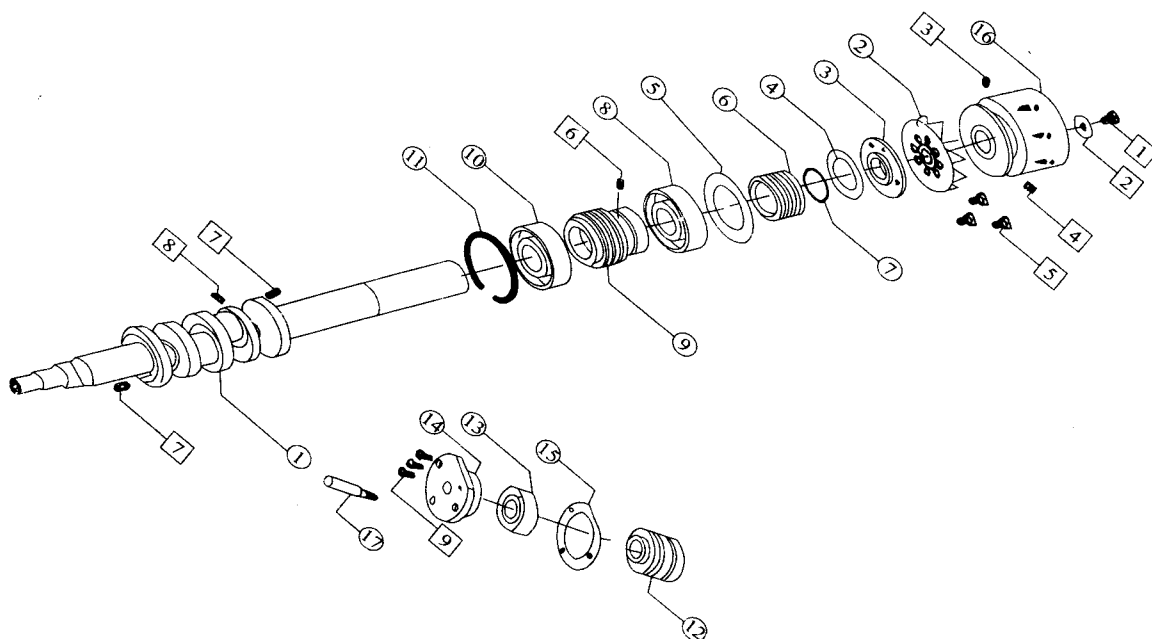
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M3-12	upper cover	1	1	1
2	M3-2	upper cover washer	1	1	1
3	M3-3	thread guide supporter	1	1	1
4	M3-4A	belt cover	1	1	1
5	M3-5	thread cover spring	1	1	1
6	M3-6	cloth guide plate	1	1	1
7	M3-7	oil guide II	1	1	1
8	M3-8	pin	1	1	1
9	M3-9	front spring	1	1	1
10	M3-10	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

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
20	M3-20	oil idvert 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



四、Main shaft assemblies

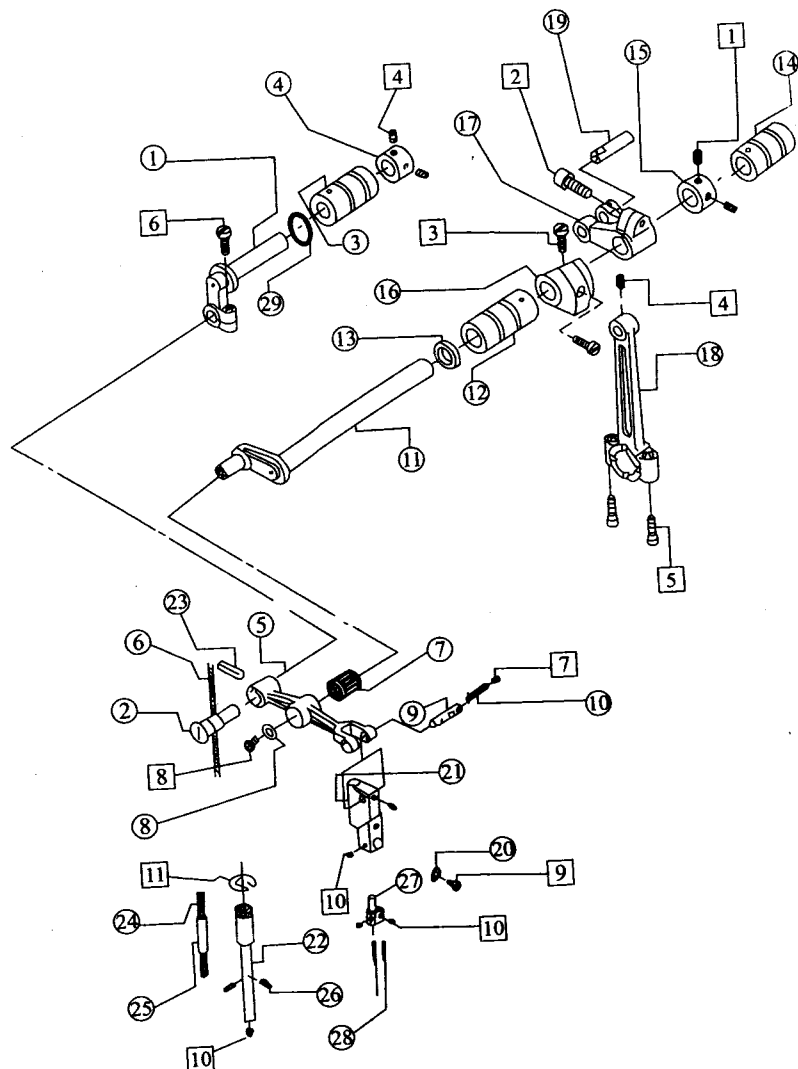
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M4-1	main shaft	1	1	1
2	M4-2	wheel	1	1	1
3	M4-3	rear shaft bearing cover	1	1	1
4	M4-4	rear shaft bearing cover washer	1	1	1
5	M4-5	main shaft spring washer	1	1	1
6	M4-6	main shaft bysgubg asm	1	1	1
7	M4-7	Seal ring	1	1	1
8	M4-8	main shaft queen shaft bearing	1	1	1
9	M4-9	oil pump worm	1	1	1
10	M4-10	main shaft bearing	1	1	1
11	M4-11	shaft end bushing washer	1	1	1
12	M4-12	main shaft light bushing	1	1	1
13	M4-13	bearing 80200	1	1	1
14	M4-14	bearing cover	1	1	0
	5M4-14	bearing cover	0	0	1
15	M4-15	bearing cover washer	1	1	1
16	M4-16	pulley	1	1	1
17	5M4-17	bulgy pulley bearing	0	0	1
1	S073	pulley screw	1	1	1
2	W03	pulley screw washer	1	1	1
3	S070	pulley set screw	1	1	1
4	S085	pulley set screw	1	1	1
5	S032	rear shafting bearint cover srew	3	3	3
6	S043	oil pump worm screw	1	1	1
7	S078	screw	2	2	2
8	S019	screw	1	1	1
9	S022	bearing cover screw	3	3	3



五、Needle bar assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M5-1	needle bar 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	oil 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

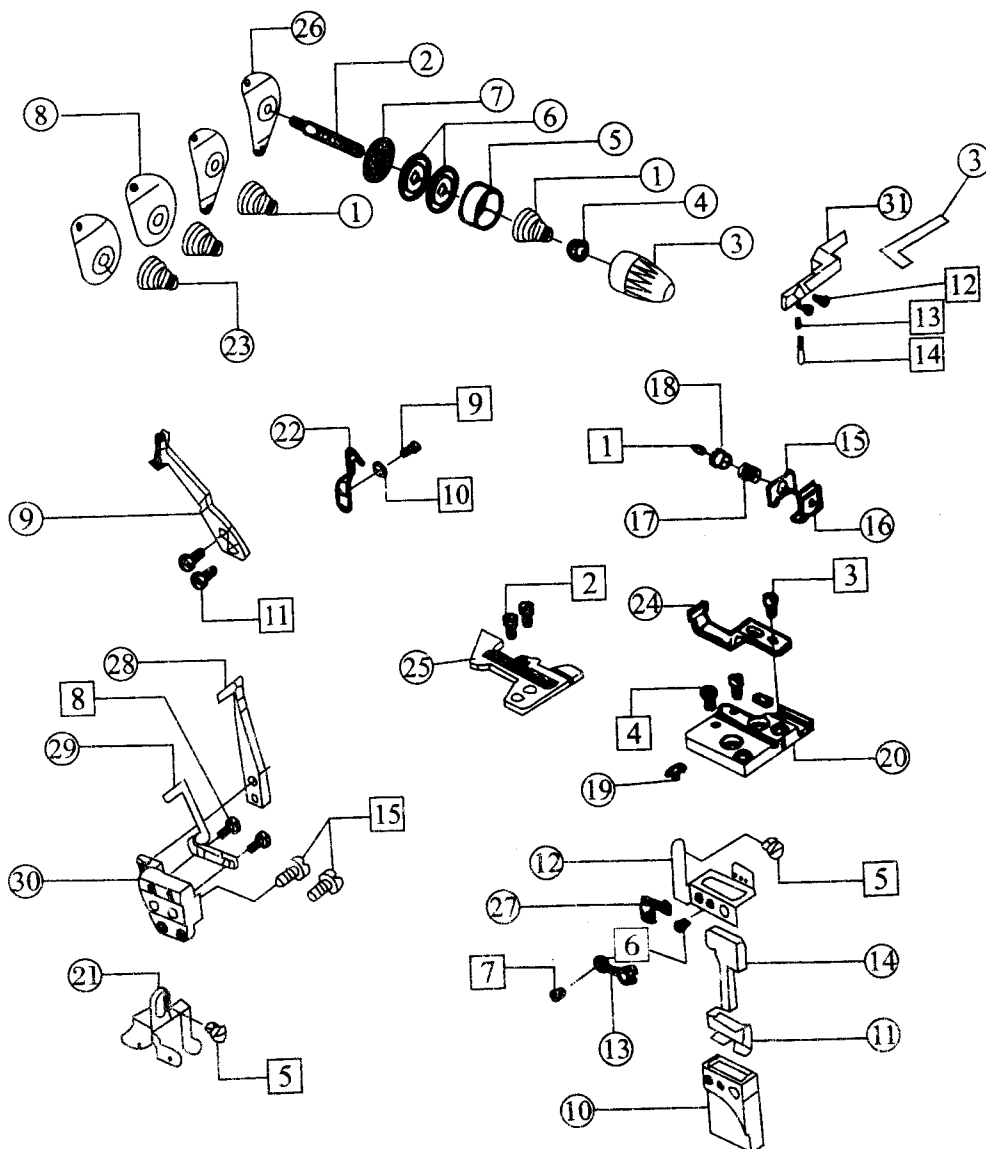
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
22	M5-22	needle bar	1	1	1
23	M5-23	oil felt	1	1	1
24	M5-24	oil wick	1	1	1
25	M5-25	plasties tube	1	1	1
26	M5-26	oil wick	2	2	2
27	4M5-27	needle clamp	0	1	0
	3M5-27	needle clamp	1	0	0
	5M5-27	needle clamp	0	0	0
28	M5-58	needle	0	0	1
29	M5-59	oil seal	1	2	2
1	S057	snap 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



六、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	threat plate positionign rod	2	2	2
20	M6-20	threat 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

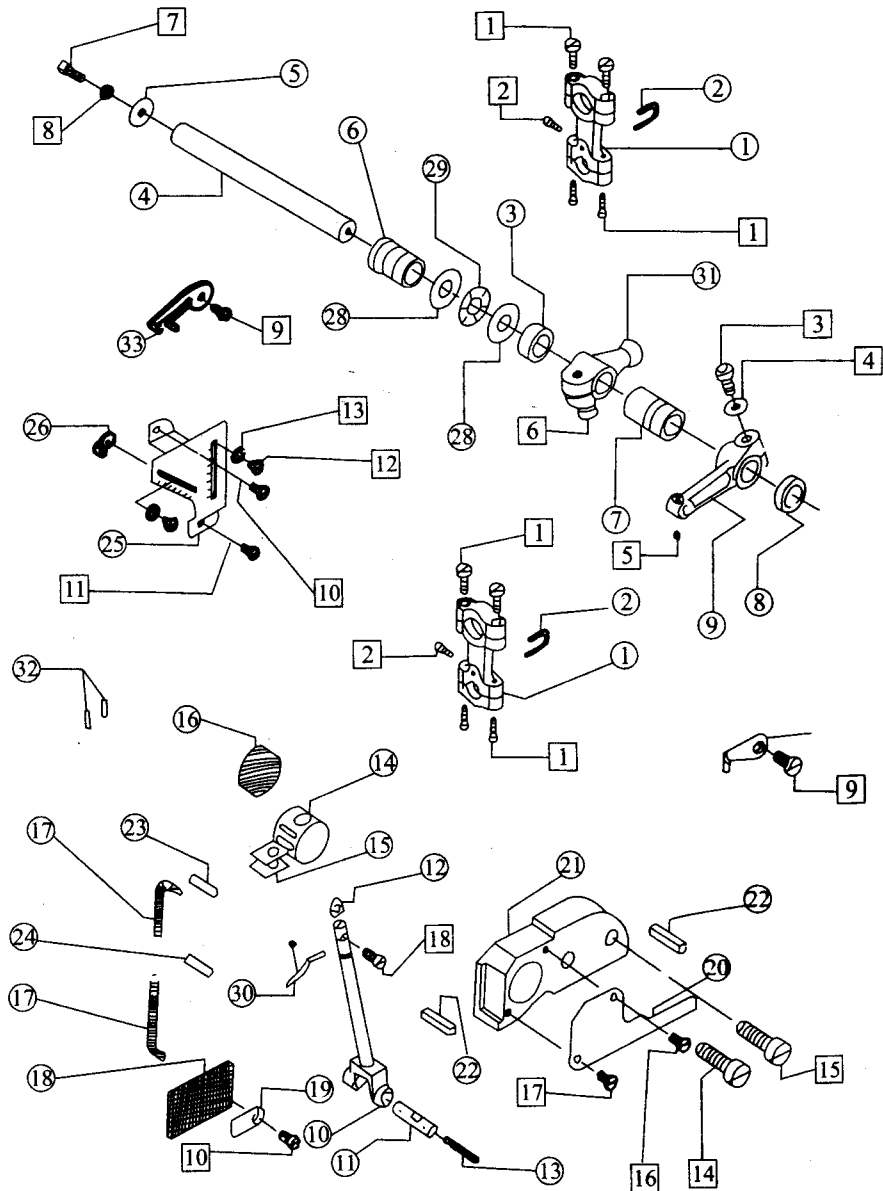
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
6	S033	oil box set screw	1	1	1
7	S072	oil box washer set screw	1	1	1
8	S005	rear needle guard screw	2	2	2
9	S023	needle guard screw	1	1	1
10	W07	needle tuard washer	1	1	1
11	S017	thread take up screw	2	2	2
12	S103	snap plate screw I	2	2	2
13	S019	snap plate screw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



七、Upper looper assemblies

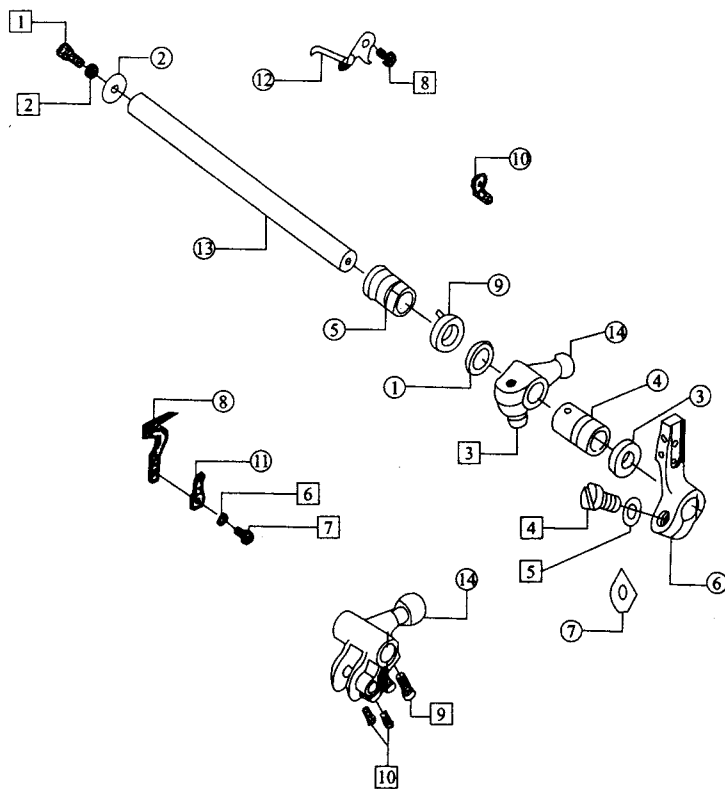
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M7-1	looper link	2	2	2
2	M7-2	looper link holder	2	2	2
3	M7-3	thickness washer	0	1	0
	5M7-3	thickness washer	1	0	1
4	M7-4	upper looper shaft	1	1	1
5	M7-5	big washer	1	1	1
6	M7-6	upper looper shaft rear bashing	1	1	1
7	M7-7	upper looper shaft foot bushing	1	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 slidel 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	acreen oil plate	1	1	1
19	M7-19	felt plate	1	1	1
20	M7-20	thread hlder 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 guaid	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	nexagon 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



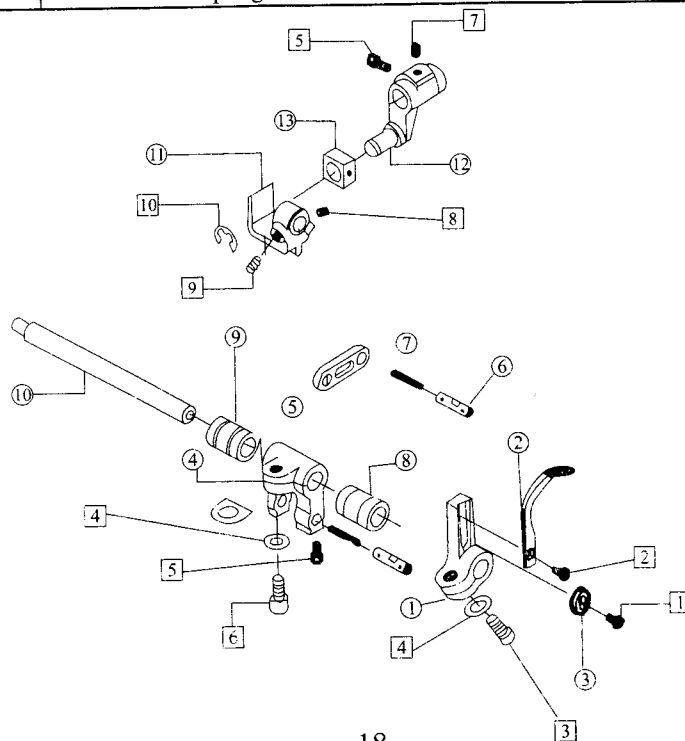
八、Lower looper assemblies

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



九、Front lower looper assemblies

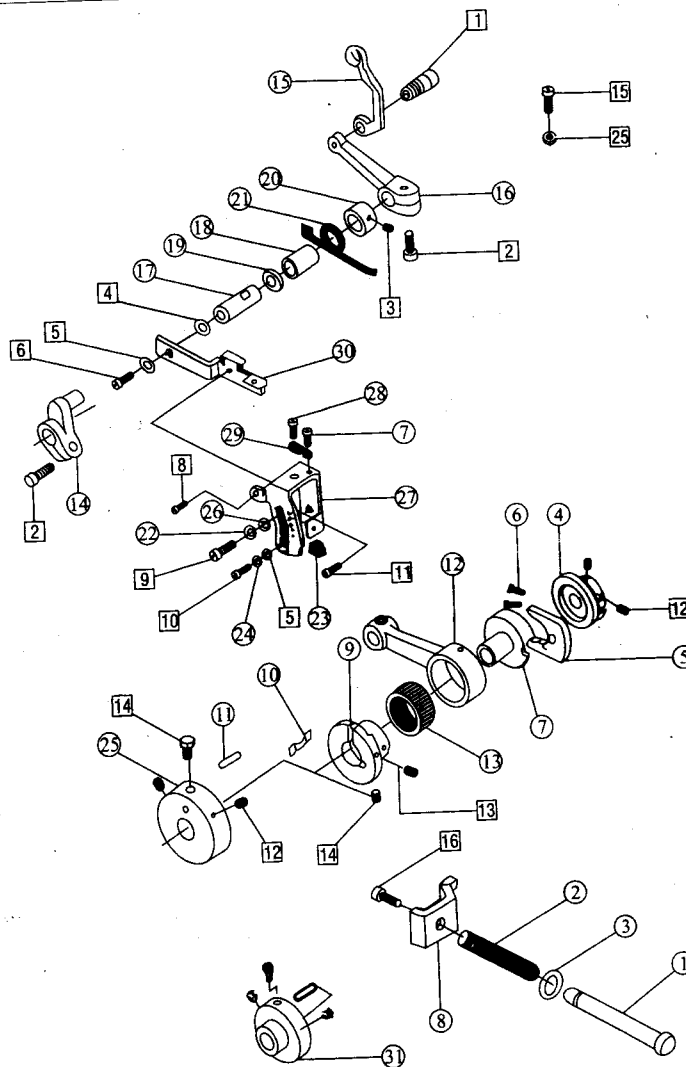
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	5M9-1	front looper shaft holder	0	0	1
2	5M9-2	front looper	0	0	1
3	5M9-3	front looper shaft regulding washer	0	0	1
4	5M9-4	frong looper crank	0	0	1
5	5M9-5	regulafting plate	0	0	1
6	5M9-6	tegulating palte pin	0	0	2
7	5M9-7	oil thread	0	0	2
8	5M9-8	front looper shaft front bushing	0	0	1
9	5M9-9	front looper shaft rear bushing	0	0	1
10	5M9-10	frong 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 ruide 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	nexagon socket sefscrew	0	0	1
8	S094	driving levdr set screw	0	0	1
9	S093	driving lever set screw	0	0	1
10	E03	snapping	0	0	1



十一、Differential feed assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M11-1	stitch length regulating shaft	1	1	1
2	M11-2	spring	1	1	1
3	M11-3	oil washer	1	1	1
4	M11-4	stitch length regulating cam asm	1	1	1
5	M11-5	stitch length regulating block	1	1	1
6	M11-6	stitch length regulating block spring	2	2	2
7	M11-7	stitch length cam	1	1	1
8	M11-8	stitch length regulating plate	1	1	1
9	M11-9	feed length 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	regulating block	1	1	1
24	M11-24	washer	2	2	2

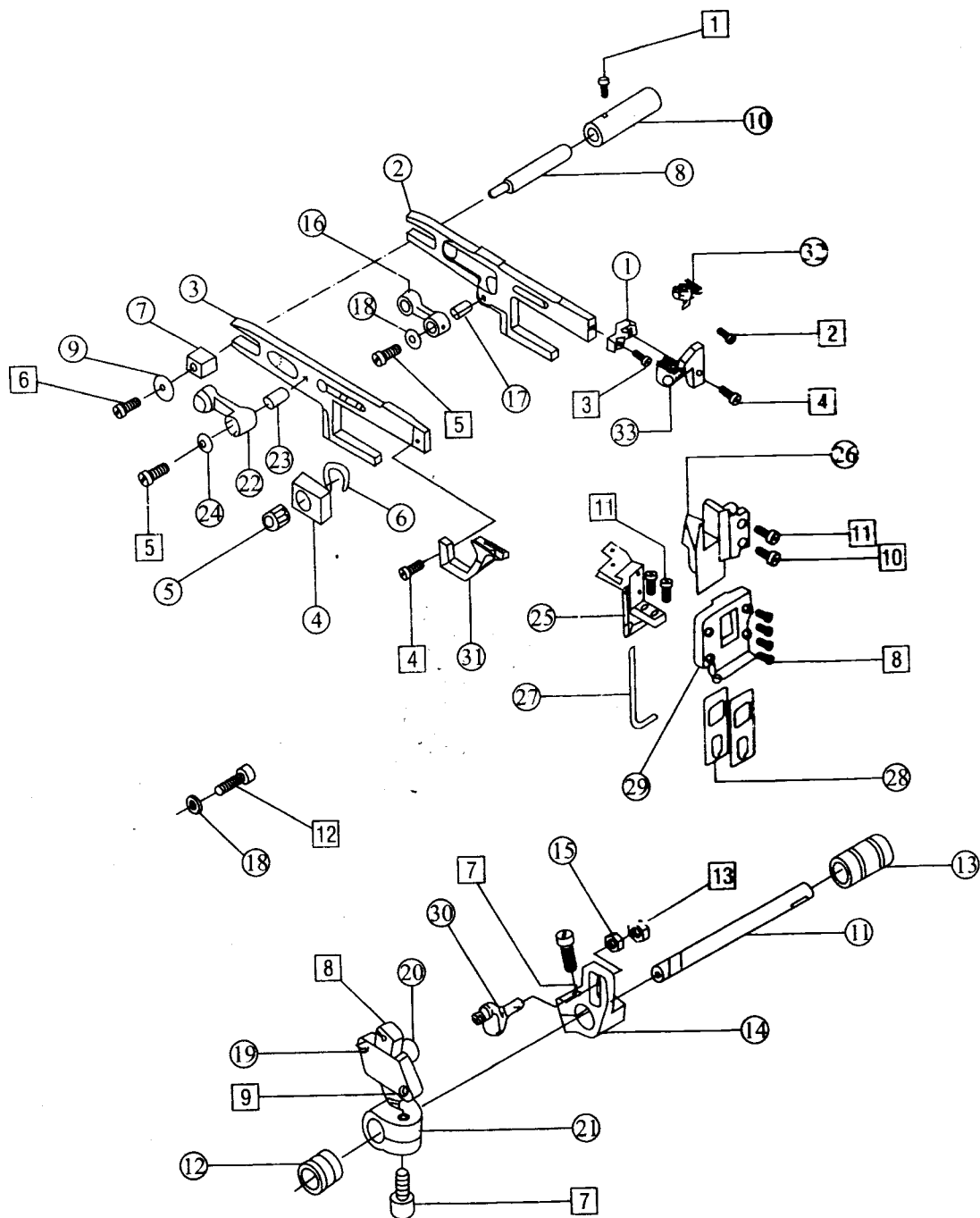
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
25	M11-25	feed cam	1	1	0
26	M11-26	washer	1	1	1
27	M11-27	differential regulating holder	1	1	1
28	M11-28	regulating screw	1	1	1
29	M11-29	regulating screw spring	1	1	1
30	M11-30	differential regulating link	1	1	1
31	5M11-31	crank link cam	0	0	1
1	S096	differential 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	stitch 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	stitch length screw	1	1	1



十二、Feed dog assemblies

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M12-1	doy 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	pifferential 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 hloader 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

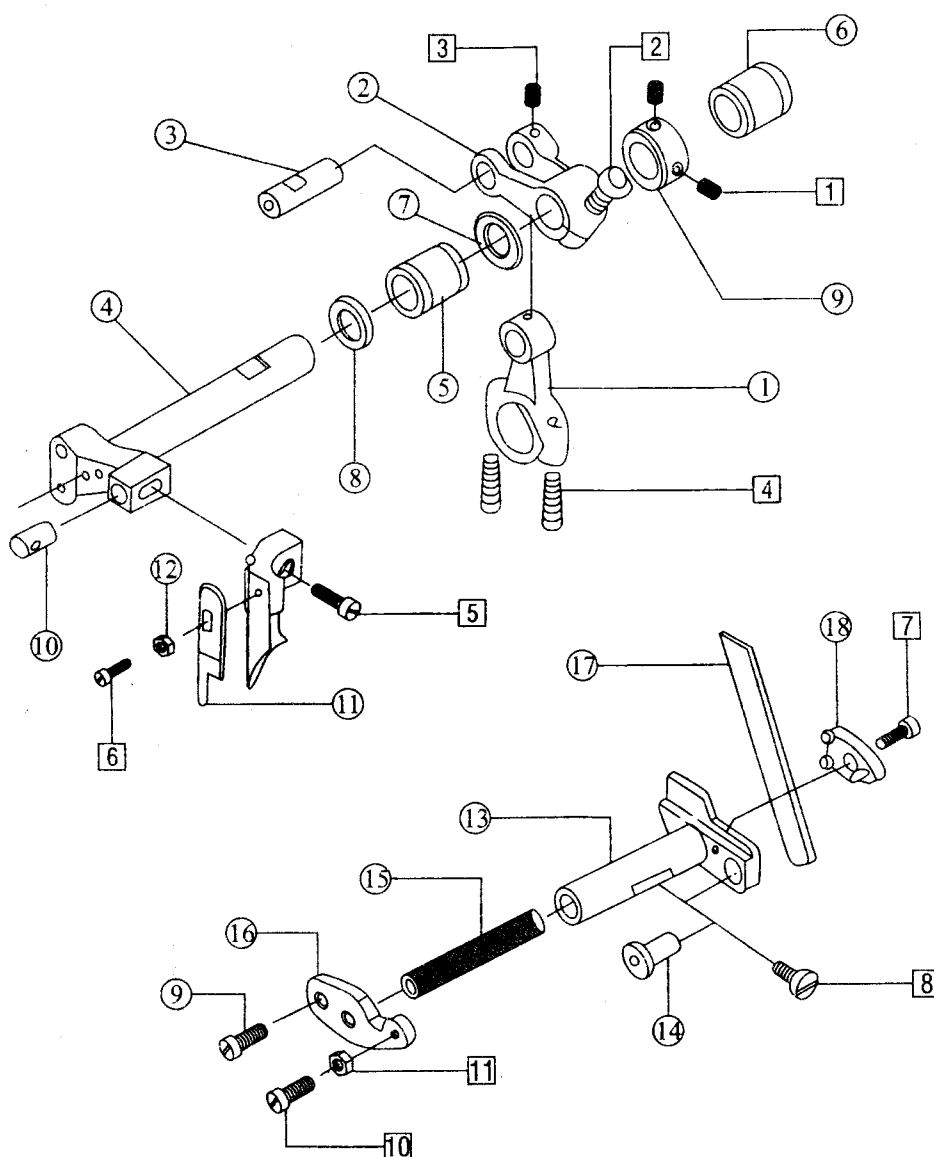
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
8	S012	crank screw (left)	5	5	5
9	S069	crank slide block cover screw	2	2	2
10	S034	tooth rorks screw	1	1	1
11	S046	tooth rorks screw	4	4	4
12	S031	screw	1	1	1
13	N02	reed crank pin shaft nat	1	1	1



十三、Trimming assemblies 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
	SM13-2	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
	SM13-8	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
	SM13-13	lower knife holder	0	0	1

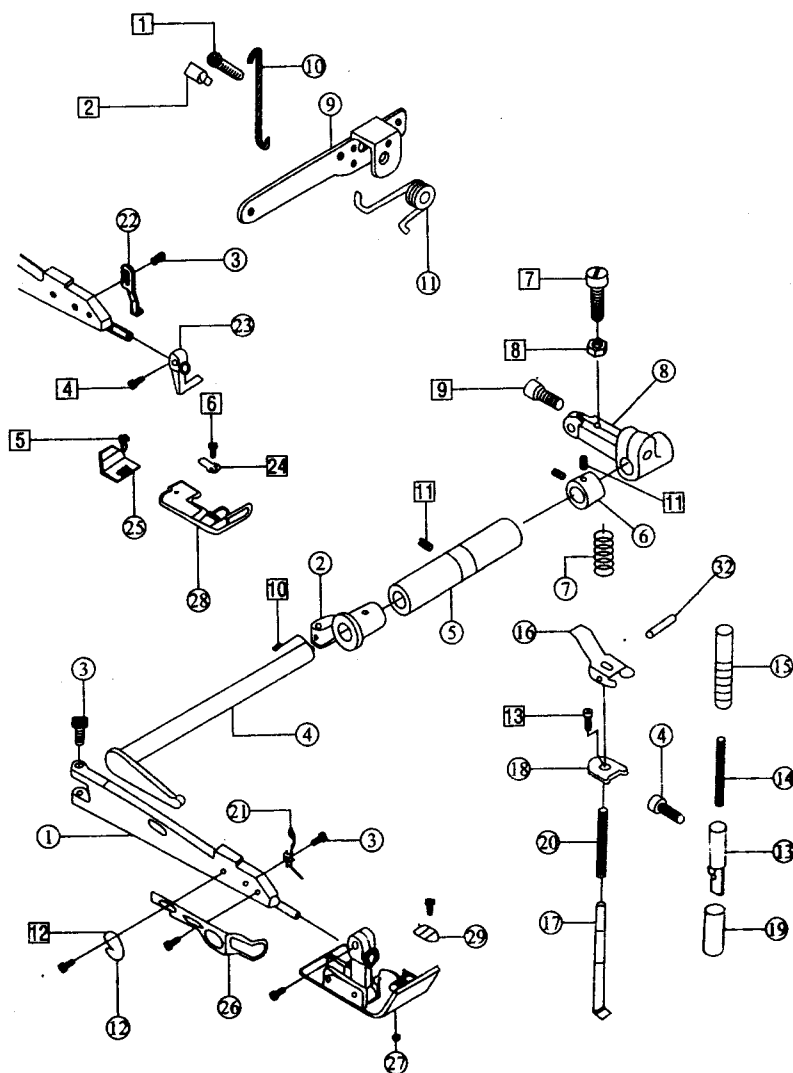
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
14	M13-14	lower knife holder bushing	1	1	1
15	M13-15	lower knife holder spring	1	1	1
16	M13-16	lower knife holder	1	1	1
17	M13-17	lower knife	1	1	1
18	M13-18	lower knife holder locking plate	1	1	1
1	S057	snapping screw	2	2	2
2	S010	upper knife crank set screw	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



十四、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 screnl	1	1	1
16	M14-16	presser foot lifting handle	1	1	1
17	M14-17	presser foot lifting anh	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 liftn spring	1	1	1
21	5M14-21	presser foot	0	0	1
22	M14-22	presser foot holder conneting plate	1	1	1
23	M14-23	presser foot holder	1	1	1

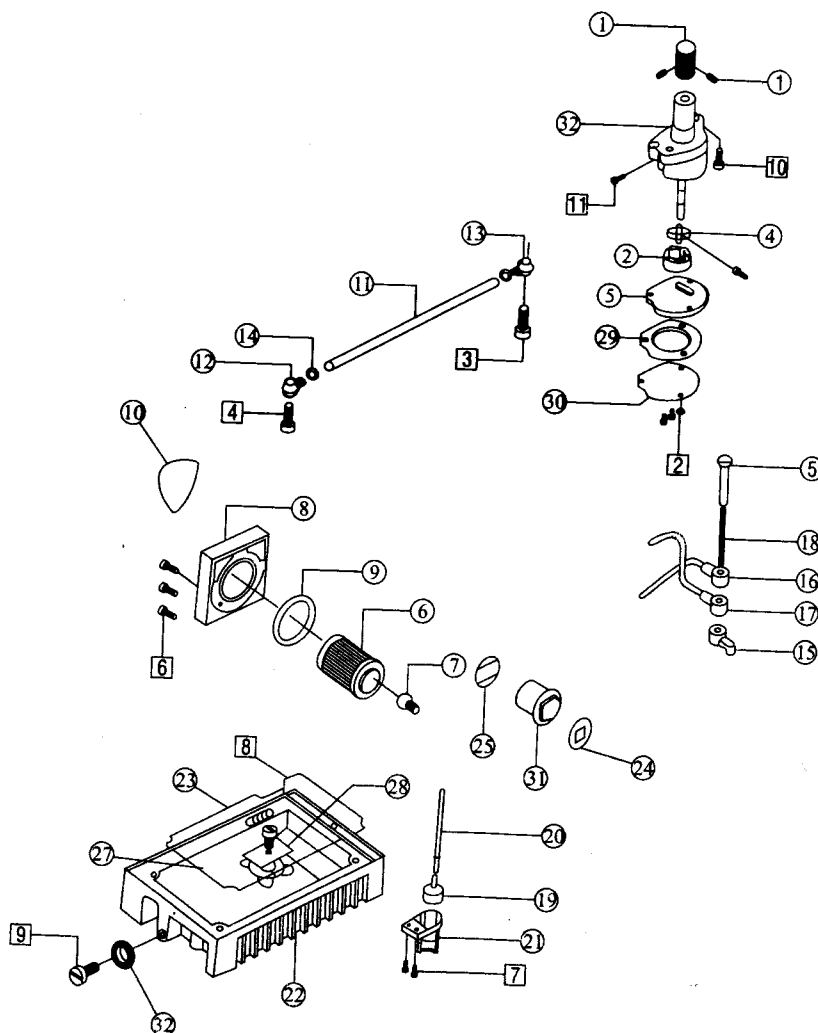
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
24	M14-24	presser foot base	1	1	1
25	M14-25	presser foot	1	1	1
26	M14-26	presser foot holder cover	1	1	1
27	M14-27	presser foot form	0	1	0
28	M14-28	presser foot base	0	1	0
29	M14-29	lifter presser foot	0	1	0
30	M14-30	presser form	1	0	0
31	5M14-31	presser form	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 crand screw	1	1	1
8	N03	nut	1	1	1
9	S010	presser foot crand 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 footlifting handle screw	1	1	1



十五、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 eljerner 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

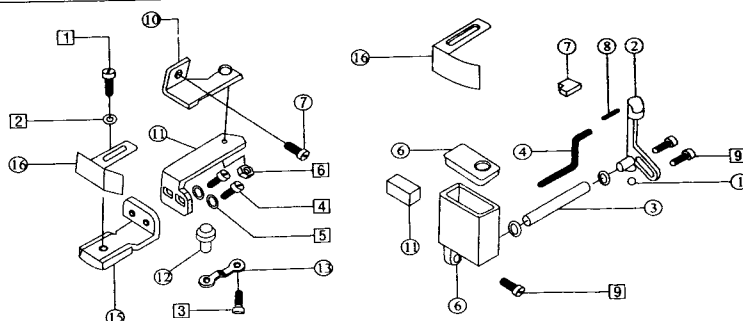
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
24	M15-24	boug on with	1	1	1
25	M15-25	dial	1	1	1
26	M15-26	oil seal	1	1	1
27	M15-27	oil pan magnet	1	1	1
28	M15-28	oil pan magnet cover	1	1	1
29	M15-29	oil screen holder	1	1	1
30	M15-30	oil screen felt	1	1	1
31	M15-31	oil bouy	1	1	1
32	M15-32	oil pump asm	1	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
11	S065	oil pumps asm svrew	1	1	1



十六、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 bracket	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	oinge plate	1	1	1
11	M16-11	oil felt block	1	1	1
12	M16-12	hinge pin	1	1	1

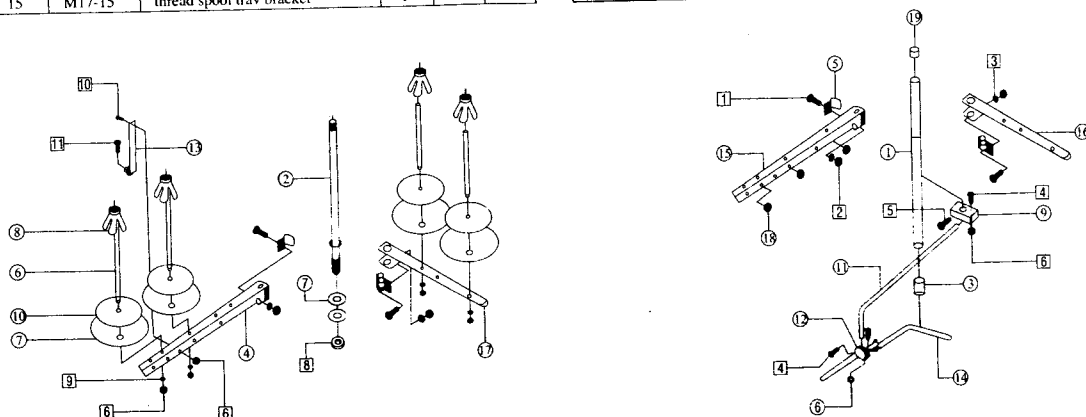
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
13	M16-13	hinge spring	1	1	0
14	M16-14	snap plate	1	1	1
15	M16-15	snap plate bracket	1	1	1
16	M16-16	snap plate	1	1	0
	5M16-16	snap plate	0	0	1
1	S018	snap late screw	1	1	1
2	W09	washer	1	1	1
3	S021	hinge spring screw	1	1	1
4	S026	hinge screw	2	2	2
5	W11	washer	2	2	2
6	N03	nat	1	1	1
7	S047	cloth guide holder screw	1	1	1
8	S037	needle cooler screw	3	3	3



十七、Thread spool assemblies

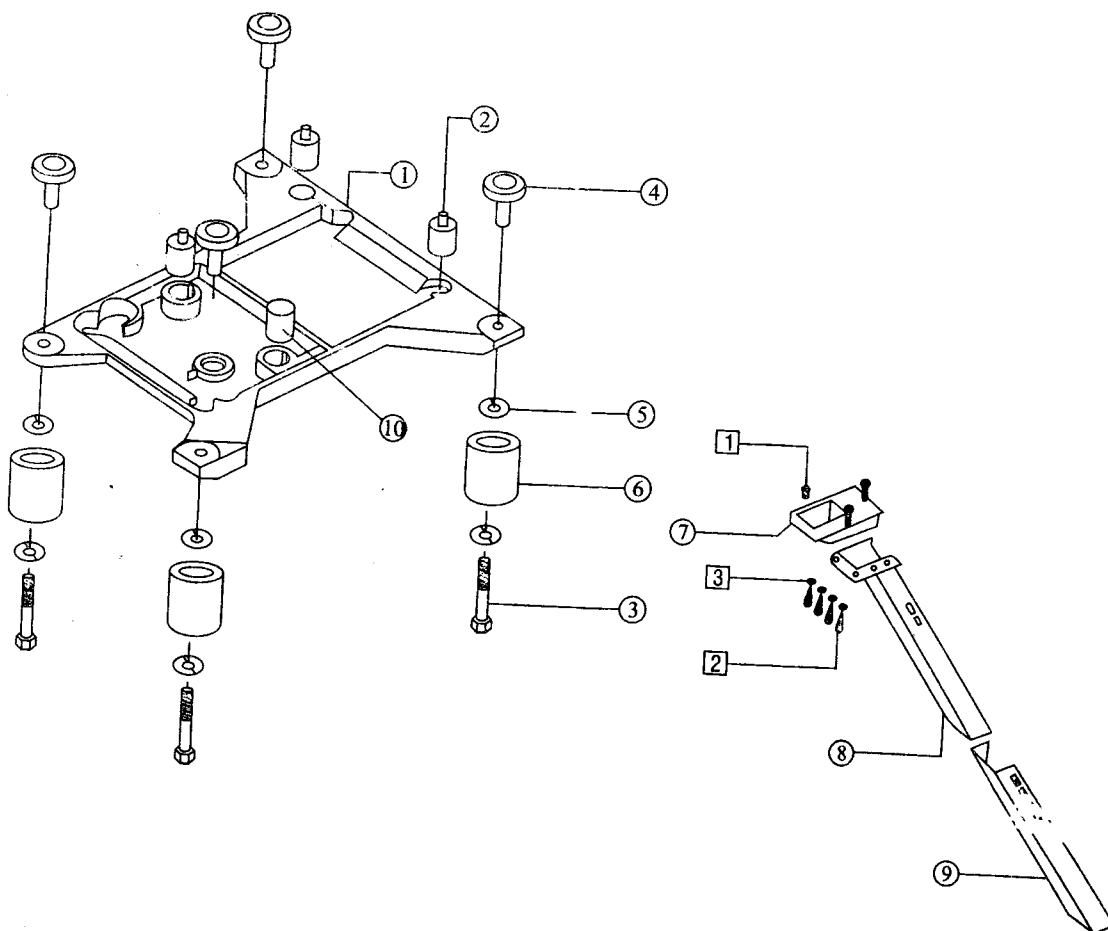
Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
1	M17-1	upper thread column	1	1	1
2	M17-2	lower thread column	1	1	1
3	M17-3	bushing	1	1	1
4	M17-4	long thread spool tray bracket	1	1	1
5	M17-5	thread guide hook	4	4	4
6	M17-6	spool pin	3	4	5
7	M17-7	spool tray	3	4	5
8	M17-8	centering device	3	4	5
9	M17-9	clamp 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

Ref.No	Part No.	Name	Amt. Req.		
			3	4	5
16	M17-16	thread guide plate	1	1	1
17	M17-17	thread spool tray sracket	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	styk 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



十八、Plater row material assemblies

Ref.No	Part No.	Name	Arnt. Req.		
			3	4	5
1	M18-1	machine head plate	1	1	1
2	M18-2	head shockproof cushion			
3	M18-3	screw			
4	M18-4	screw	4	4	4
5	M18-5	pin washer	4	4	4
6	M18-6	plate dog link bushing	12	12	12
7	M18-7	row material trolly bracket	4	4	4
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	1	1	1
2	W13	row material washer	3	3	3
3	S077	row material screw	4	4	4



十九、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	3009	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

