

INDIA'S LARGEST INDUSTRIAL SEWING MACHINES MANUFACTURER



Pioneer in Bag Sewing Machines



**NP-7A**  
**PARTS MANUAL**

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## 1. SPECIFICATIONS

### TECHNICAL DETAILS

Speed (sec/bag).....	5-6
Seam.....	Single Thread Chain Stitch
Stitch Range (mm.).....	7.2 (fixed)
Revolution (rpm.).....	1,600±125
Needle.....	DN x 1-# 25
Thread (vinyon, synthetic or cotton) .....	20/6
Drive Motor.....	60W
Power Supply .....	110,220 or 240V.,A.C. 12V,24V., D.C. (specify one.) 50-60Hz, Single Phase
Net Weight (Kg) .....	5.2kg Including Thread Cone
Machine Dimension (mm.).....	360(L) x 245(W) x 315 (H)
Packing Dimension (cft.).....	2.5

### STANDARD ACCESSORIES

1. Needles DN x1-# 25.....	2 pcs.
2. Thread Cone.....	1 roll
3. Screw Driver.....	1 pc.
4. Allen Key.....	1 pc.
5. Oil Can.....	1 pc.
6. Looper.....	1 pc.

## 2. PREPARATION FOR START

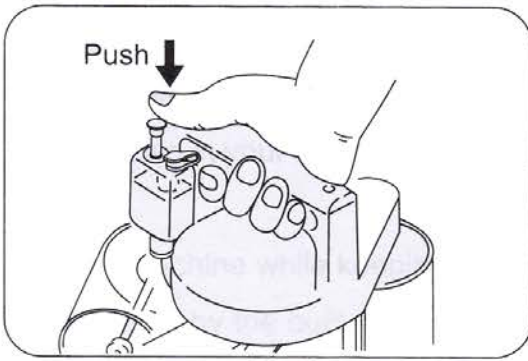


Fig. 1

### 1. Oiling (fig.1)

Oiling is imperative to keep the machine in good operating condition. Fill Oil in the reservoir (capacity 45cc). To feed oil, push the button of the lubricator. One push feeds 0.08cc of oil, which would normally service for several hours of operation. Do not run the machine out of oil, otherwise it will break down.

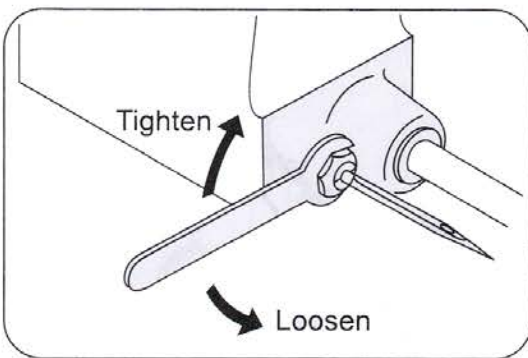


Fig. 2

### 2. Needle Setting (Fig. 2, 3, 4)

Turn the pulley until Needle Bar reaches its highest position. Loosen Needle Bar Clamping Nut, and set Needle in the Bar as deep as it will go.

Be sure to set a Needle with its concave part facing correctly toward the Loper. Fix Clamping Nut tightly, otherwise Needle may come loose during operation and break.

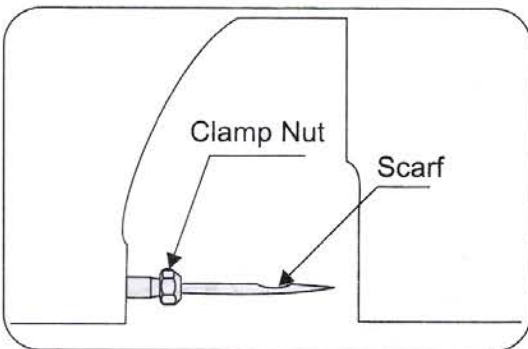


Fig. 3

### 3. Threading (Fig.5)

The machine is delivered being threaded to show you proper threading of the machine, which is shown in Fig. 5, for identification. Follow the guide numbers 1 to 6 of Fig. 5.

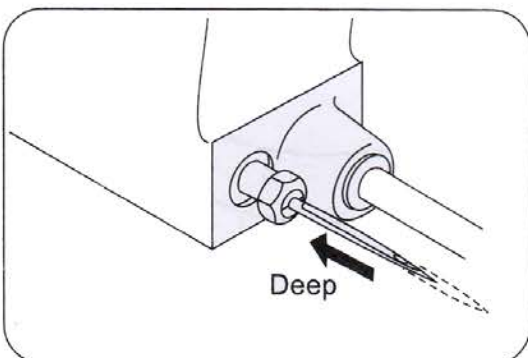
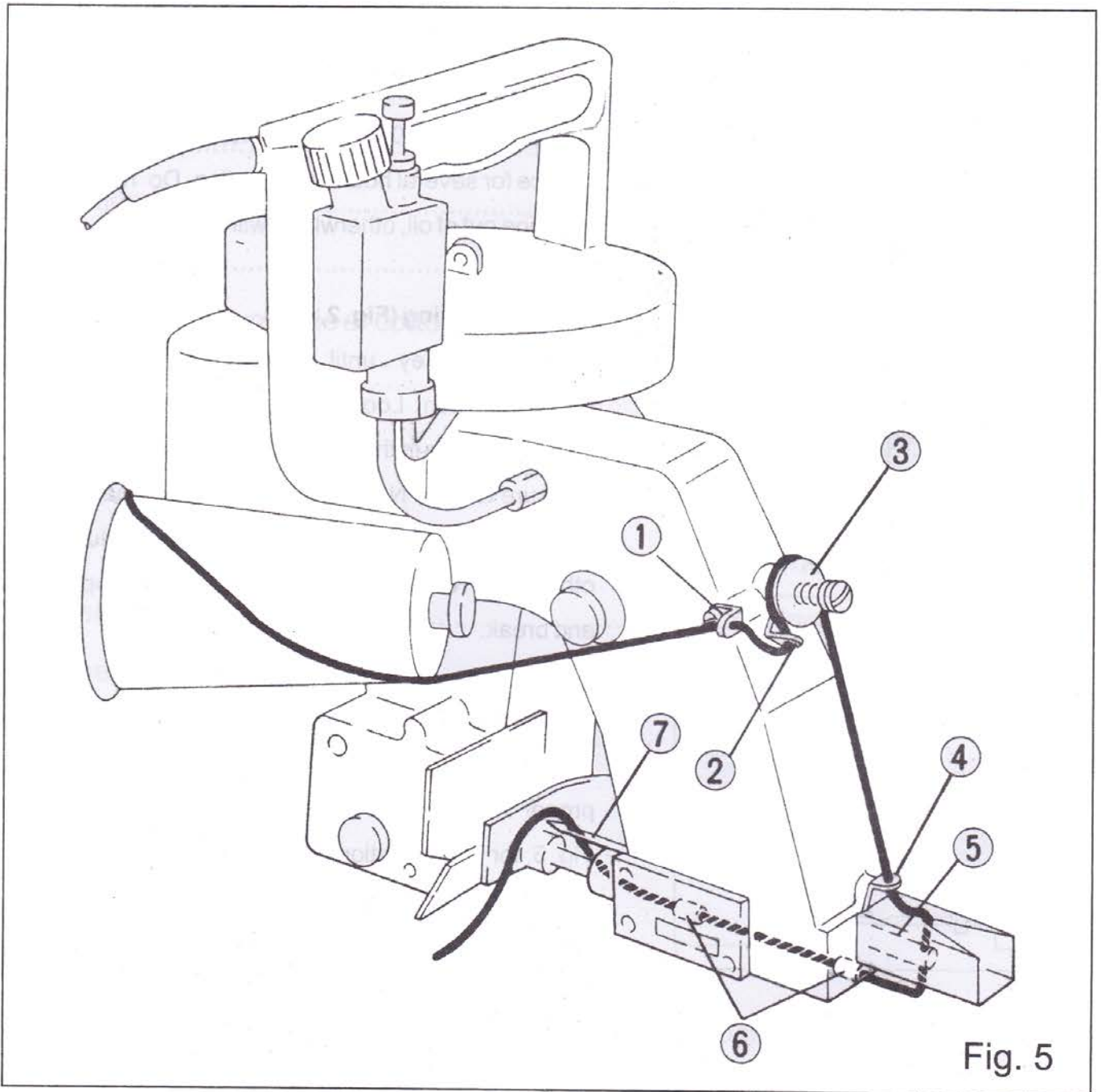


Fig. 4



The machine is delivered threaded for identification.

The illustration below shows the procedure for threading the machine correctly.

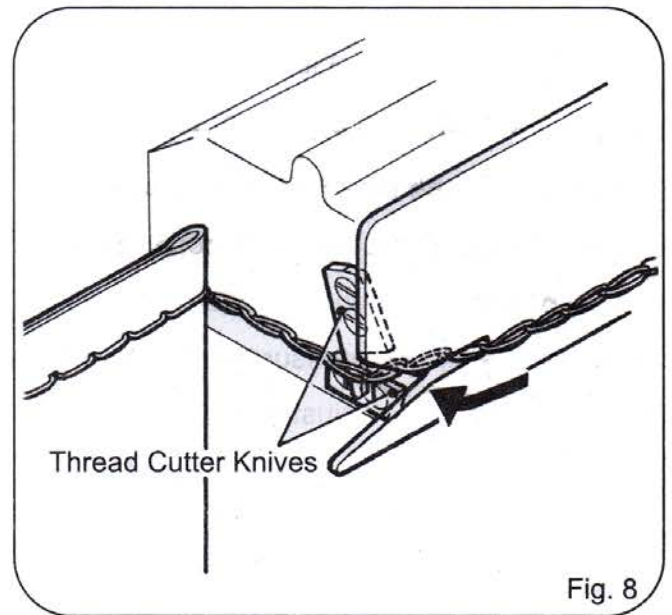
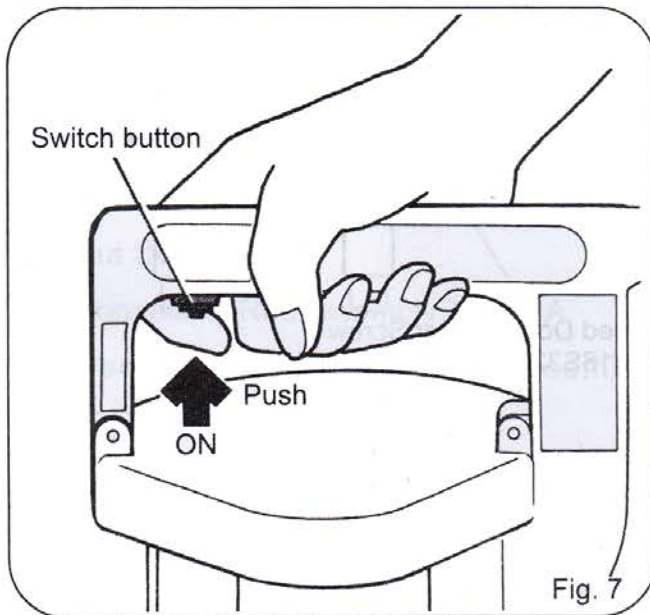
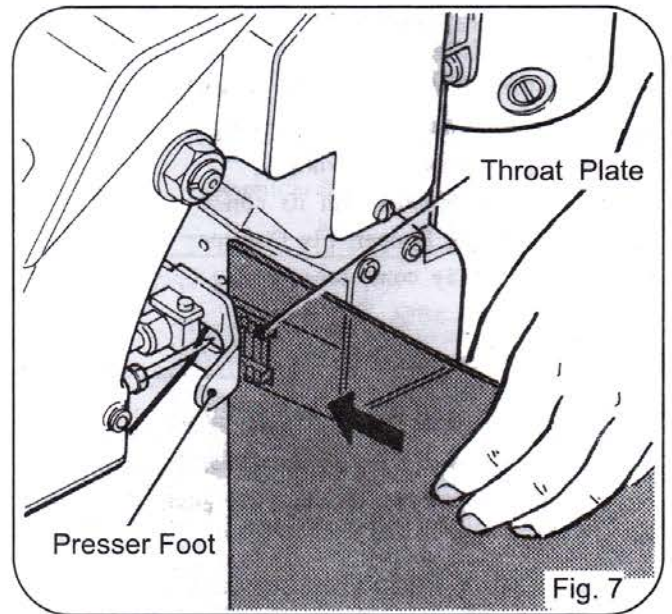
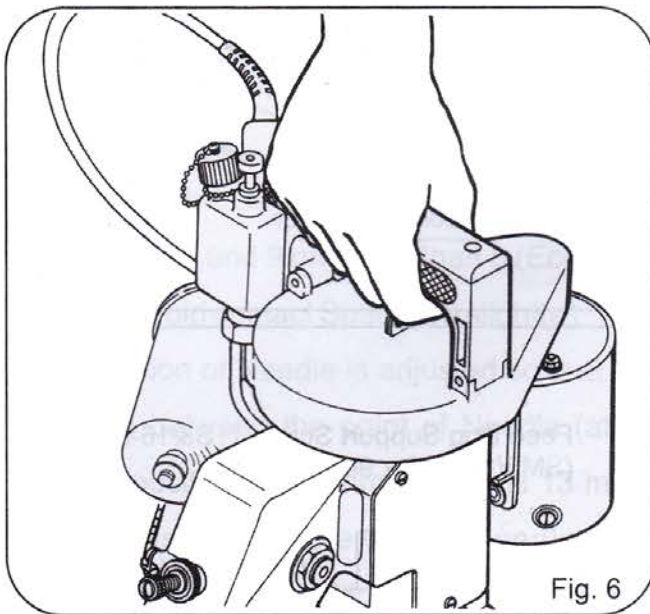


- |                          |                  |
|--------------------------|------------------|
| 1. Thread Eyelet         | 5. Needle Bar    |
| 2. Thread Tension Eyelet | 6. Thread Eyelet |
| 3. Tension disc          | 7. Needle        |
| 4. Thread Eyelet         |                  |

### 3. START

Before starting, make sure that the supply voltage accords with the specification of the motor. Hold the machine in your right hand and place your index finger on the switch button on the handle. (Fig.6)  
Hold the bag in your left hand lightly and insert the bag mouth between Feed Dog and Presser Foot (Fig.7)

Run the machine while keeping the bag straight. Never pull or pull back the bag. After closing the thread is cut by the built in nibbler type cutter. When cutting the thread, leave at least 3 cm long extended tail to prevent the unwilling loosening of the seam. (Fig.9)



Run the machine with empty bags and make sure you are well versed in its operation before entering into actual operation.

## 4.AJUSTMENTS

### 1. Thread Tension

Thread tension is adjustable by turning the Thread Tension Nut,

Turn the Nut clockwise for tighter tension and counter clockwise for looser.

### 2.Position of Needle and Loper (Fig.10)

Looper must pass the concave part of Needle with clearance of 0.1 mm as shown in Fig.10. Adjustment of the clearance can be done after loosening the screw of Loper Rocker.

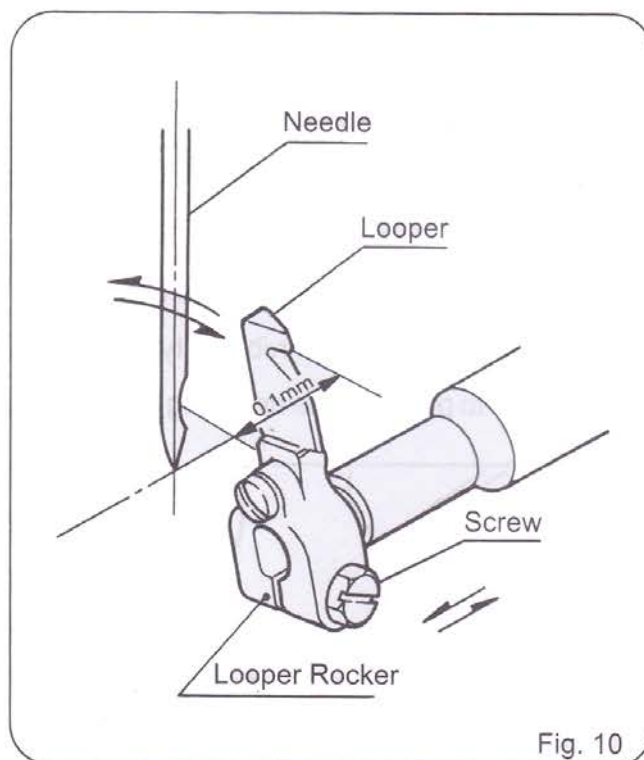


Fig. 10

### 3.Position of Feed Dog

Feed Dog Should be 2.5 mm above throat plate at its highest position as shown in Fig.11. The height of Feed Dog is determined by the height of Feed Dog support Screws (4 pcs. in all).

### 4. Pressure of Presser Foot

When to adjust the pressure of Presser Foot, take out Needle Bar Guard and loosen Screw of Presser Bar Connection. Move up Presser Bar to increase the pressure and down to decrease. After the adjustment, tighten the Screw firmly.

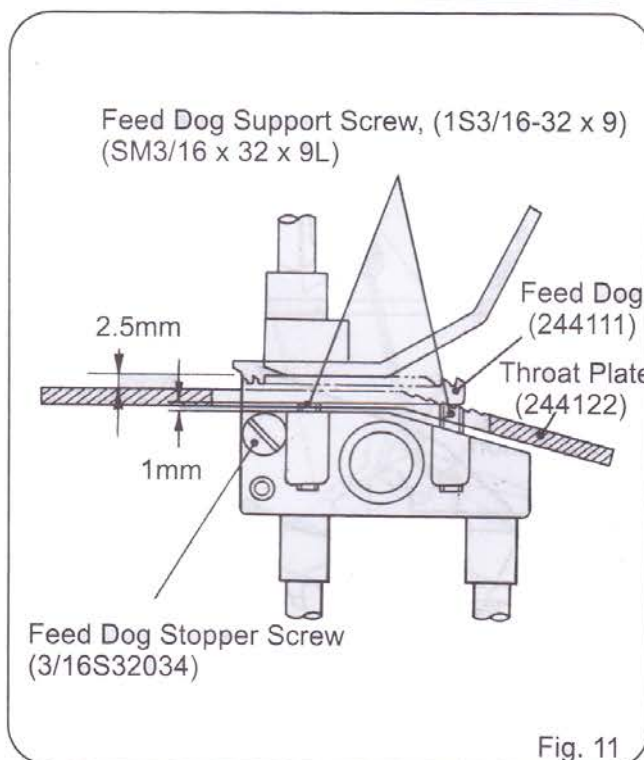


Fig. 11



## 5. REPLACING PARTS

For replacement or adjustment of Ball Rod, refer to Fig. 12.

Take out Screw 1 and disconnect Rod End 2 from Needle Bar Lever 3 After loosening the Nut 4 adjust the clearance between Connecting Rod 5 and Rod End 2 , so that Needle Bar moves in the center of the clearance between the upper and lower Presser Bar Bushings. (Needle Bar stroke is 37 mm).

To fix Eccentric Cam 7 on Main Shaft 8 , tighten the Screws 9 and 9 on Main Shaft 8 (Eccentric Cam 7 should contact Spacer 10 slightly.)

The position of Needle is adjusted so that the distance between the point of Needle (at its highest position) and Throat Plate is 13 mm , after loosening screw on Needle Bar Connection Assembly 6 in Fig. 12.

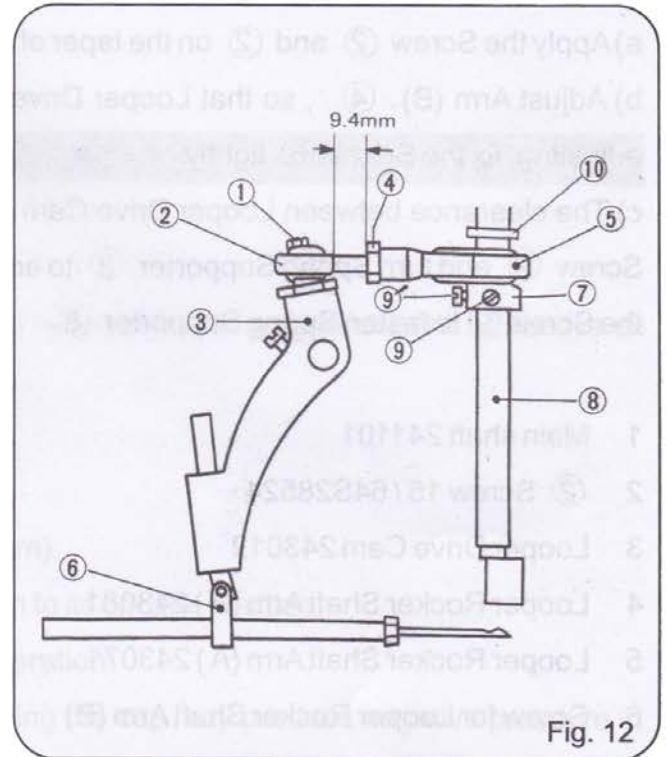


Fig. 12

- 1 Screw 11/64S40089
- 2 Rod End 6APOS8
- 3 Needle Bar Lever 242051A
- 4 Nut 1N8
- 5 Connecting Rod Assembly 242011A
- 6 Needle Bar Connection Assembly 242101A
- 7 Eccentric Cam (Part of Connecting Rod Assembly) 242011
- 8 Main Shaft 241101
- 9 9 Screw 11/64S40001
- 10 Spacer 241161



## 5. REPLACING PARTS

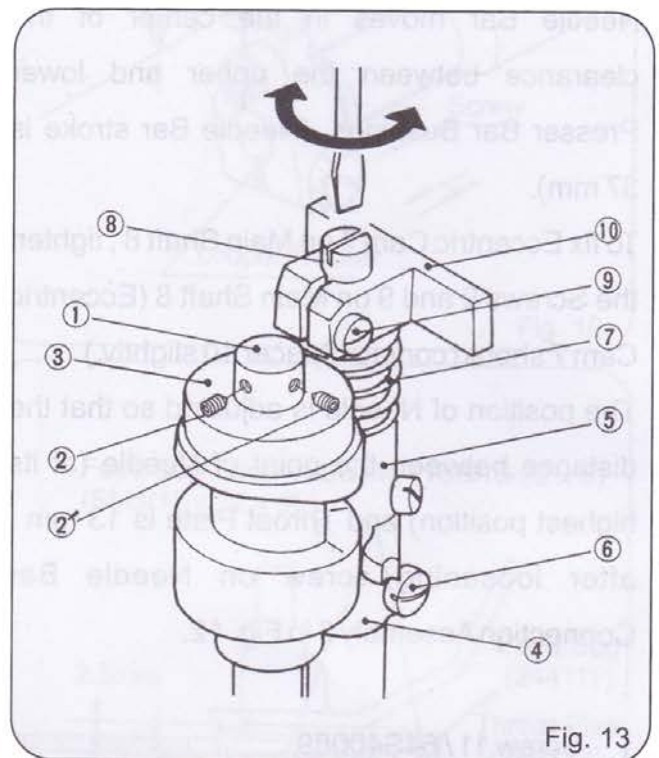
Adjust Looper Drive Cam ③ when necessary as follows : (Refer to Fig. 13. ).

a) Apply the Screw ② and ② on the taper of Main Shaft ① .

b) Adjust Arm (B) ④ , so that Looper Drive Cam ③ and Arm (A) ⑤ move smoothly . After adjusting, fix the Screw ⑥ tightly.

c) The clearance between Looper Drive Cam ③ and Arm ⑤ is effected by Spring ⑦ Loosen Screw ⑨ and turn Spring Supporter ⑧ to adjust the pressure of Spring ⑦ After adjusting, tighten the Screw ⑨ to fasten Spring Supporter ⑧

- 1 Main shaft 241101
- 2 ② Screw 15/64S28524
- 3 Looper Drive Cam 243012
- 4 Looper Rocker Shaft Arm (B) 243081
- 5 Looper Rocker Shaft Arm (A) 243071
- 6 Screw for Looper Rocker Shaft Arm (B)
- 7 Spring 243131
- 8 Spring Supporter 243121
- 9 Screw for Spring Supporter Block 9/64S40035
- 10 Spring Supporter Block 243111



## 6. MAINTENANCE & LUBRICATION

Clean the machine at the end of the day's work. Wipe dust and other foreign matter off the Feed Dog teeth Looper and Throat Plate eyelets where they are easily gathered.

Care should be taken to keep the machine free from rust, especially when to leave it unused for some time.

Recommended lubricants are shell X-100, Motor. Oil 10W / 30, shell Vitria Oil 31 or the equivalent. For operation and maintenance of the lubricator, refer to section 7.

Important!

When adjusting the machine or replacing parts, always disconnect the Electric Cord from the power source. This is important in view of safety to the operator and adjuster.

## 7. LUBRICATOR

### 1. Operation

The lubricator comprises a pump and a reservoir. The reservoir holds max 45 cc of oil. (Effective oil volume is 28cc.)

To operate the lubricator :

1. First unscrew the reservoir cap by half a turn.\*
2. Push the button to its lowest position (stroke : 12mm).
3. When released, the button will automatically return to its original position.
4. Lastly, tighten the cap to prevent oil leak during operation.

\*Repeated working on the button without first loosening the cap may produce negative pressure in the reservoir, and the dust in the atmosphere may be easily introduced in it when the cap is loosened.

### 2. Maintenance

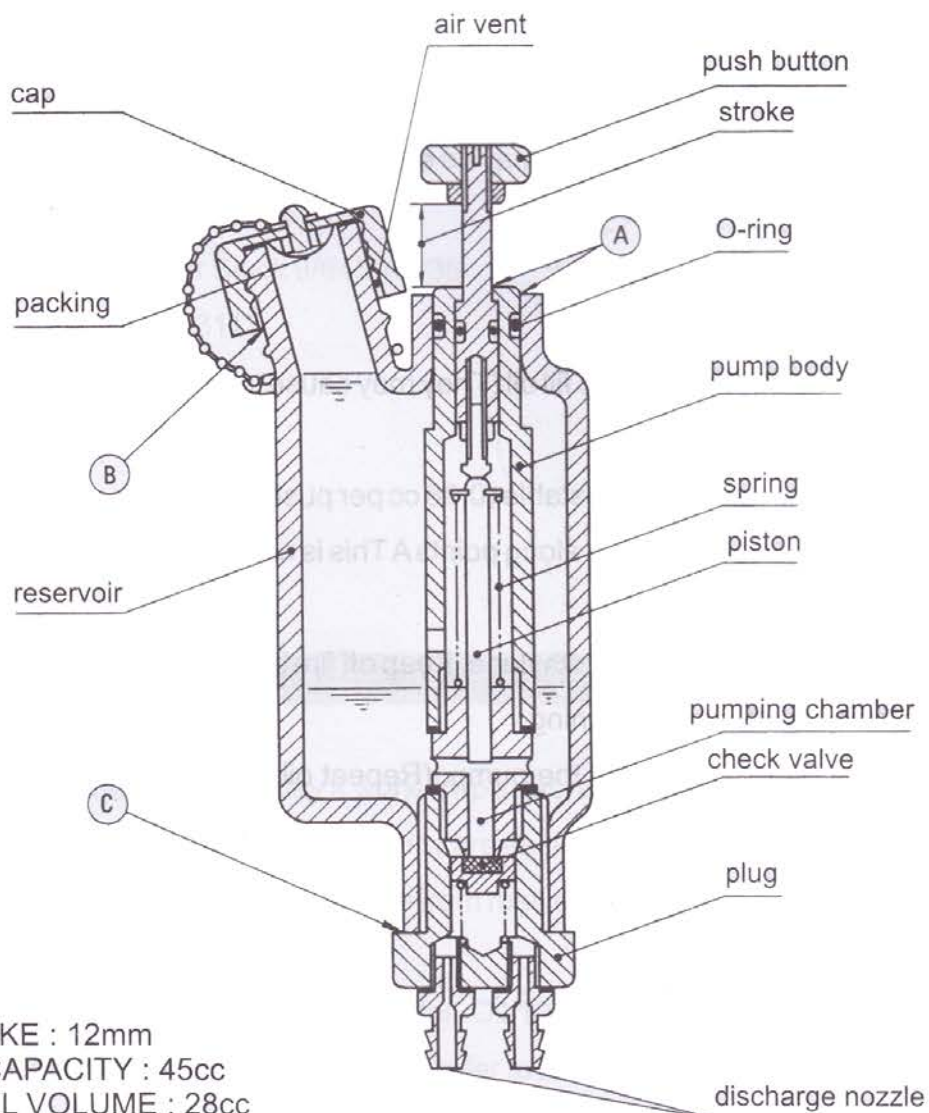
1. Keep off dust or foreign matter when to fill oil (They may cause jamming of the piston and the check valve).
2. Rate of discharge is fixed and not adjustable (0.08 cc per push).
3. At high temperatures, grease may run along points A This is normal, grease being used when the lubricator was assembled in our plant.
4. Reservoir is made of high density polyethylene. Keep off fire and refrain from using organic, benzene, or xylene chemicals for cleaning.

Check periodically for correct working of the pump. (Repeat oil feed and look at the oil through the discharge pipe.)

### 3. Troubleshooting

Trouble	Cause	Remedy
Oil not fed.	Low oil level.	Fill oil.
Full stroke movement not obtainable.	Dust attached on the interior wall of the pumping chamber.	Replace lubricator.
Button will not return. Oil leak from (A)	Dust accumulated, or break of spring.	Replace lubricator.
Oil leak from (B)	Wornout or displaced seal of O-Ring.	Replace lubricator.
Oil leak from (C)	Wornout or displaced seal of packing.	Tighten plug or replace lubricator.
	Loose plug.	

#### PUSH-BUTTON LUBRICATOR Model : NP-7A



PISTON STROKE : 12mm  
 RESERVOIR CAPACITY : 45cc  
 EFFECTIVE OIL VOLUME : 28cc  
 DISCHARGE RATE : 0.08cc per push



## 8. ORDERING PARTS

The parts list showing all the parts used in the machine is included in this book.

Check the list, and specify parts numbers and quantities required clearly.

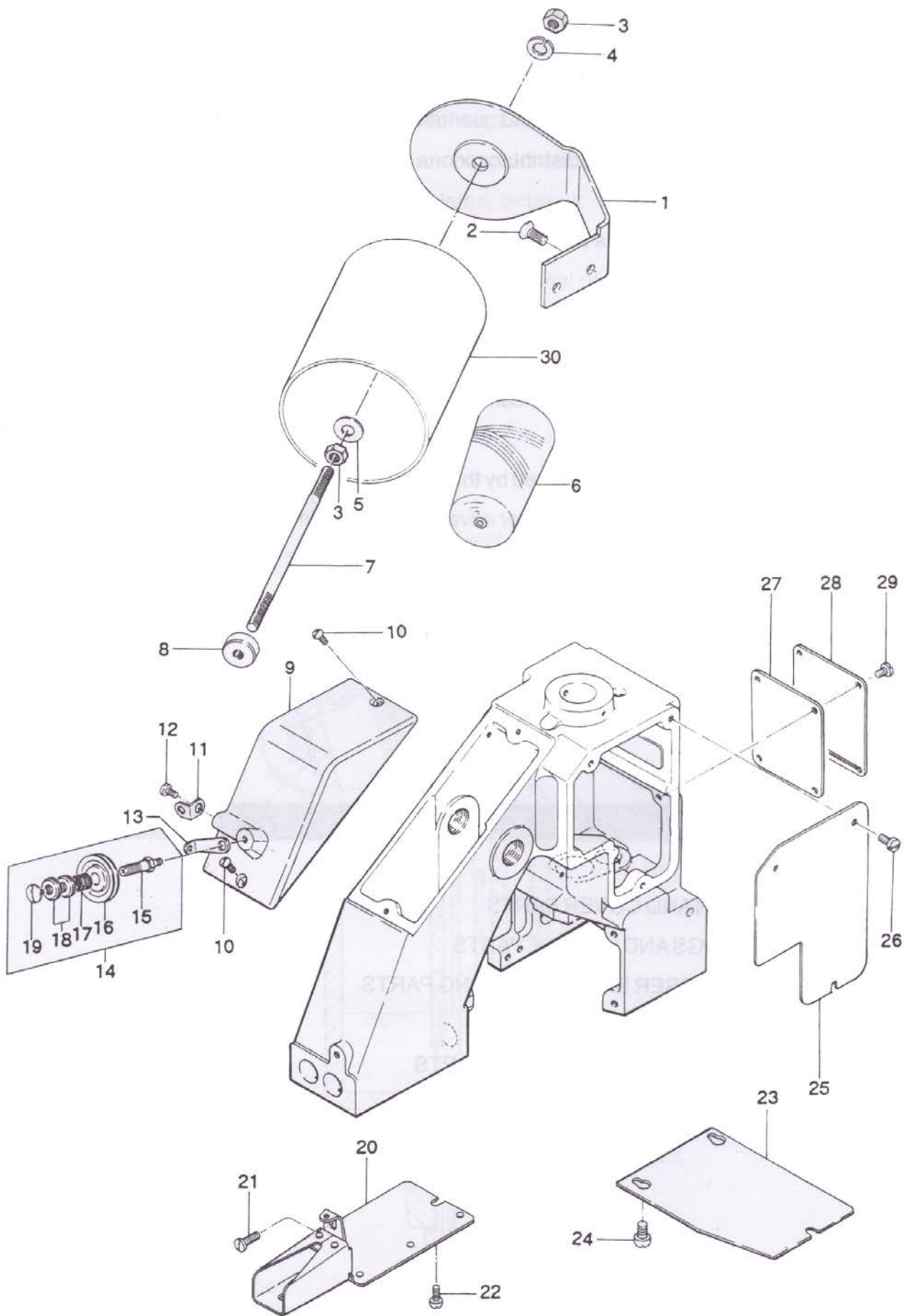
Send your order to the nearest agent, distributor or one of our branch offices.

1. Description of each part and its stamp number is described in this parts list. Screws and nuts for parts are shown adjacent to the relevant parts. When ordering parts, describe clearly stamp number with its name of part.
2. The parts which have no Ref. Number can not be delivered independently: always order it as an assembly.
3. A set of assembled parts is represented by the stamp number of its main parts.
4. The last figure in the parts stamp number advances on each improvement of the parts.
5. Part No. described in [ ] of Remarks means old part No.

\* The part list is subject to change without prior notice.

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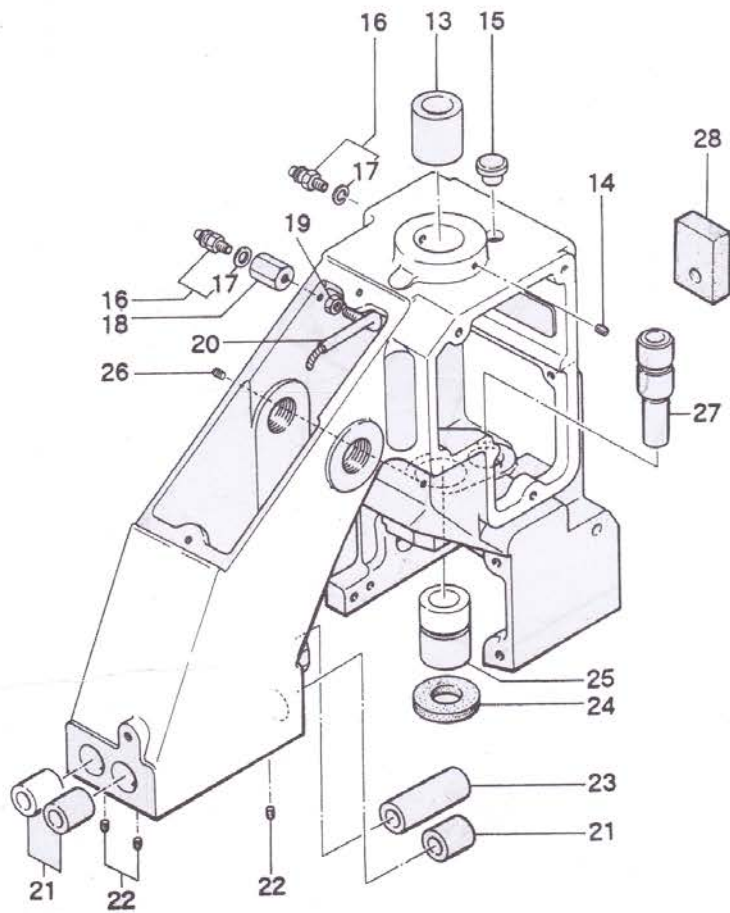
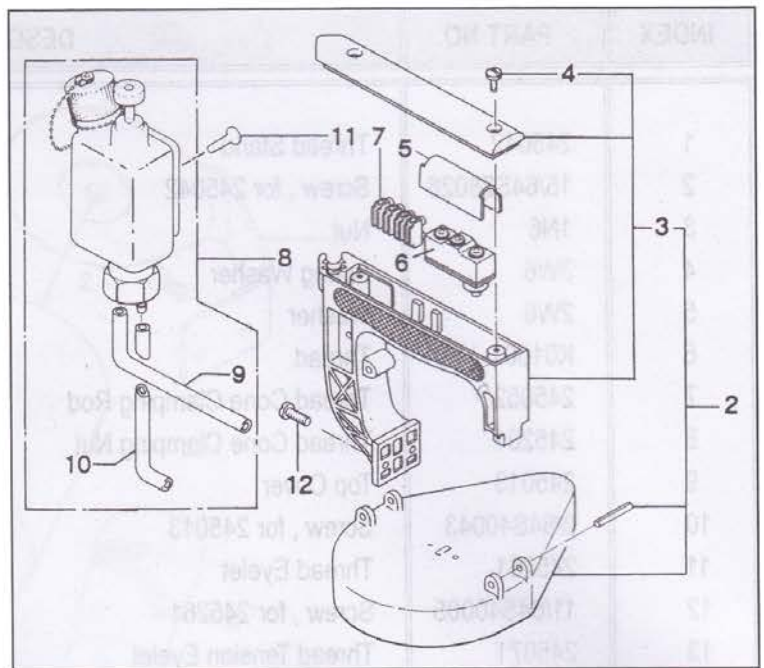
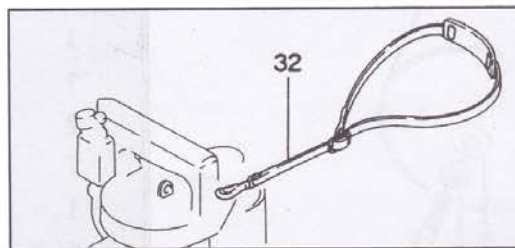
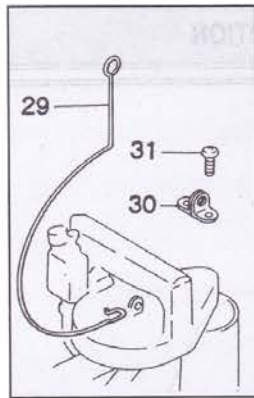
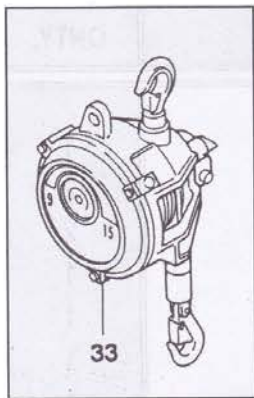
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(1) THREAD TENSION AND COVER PARTS

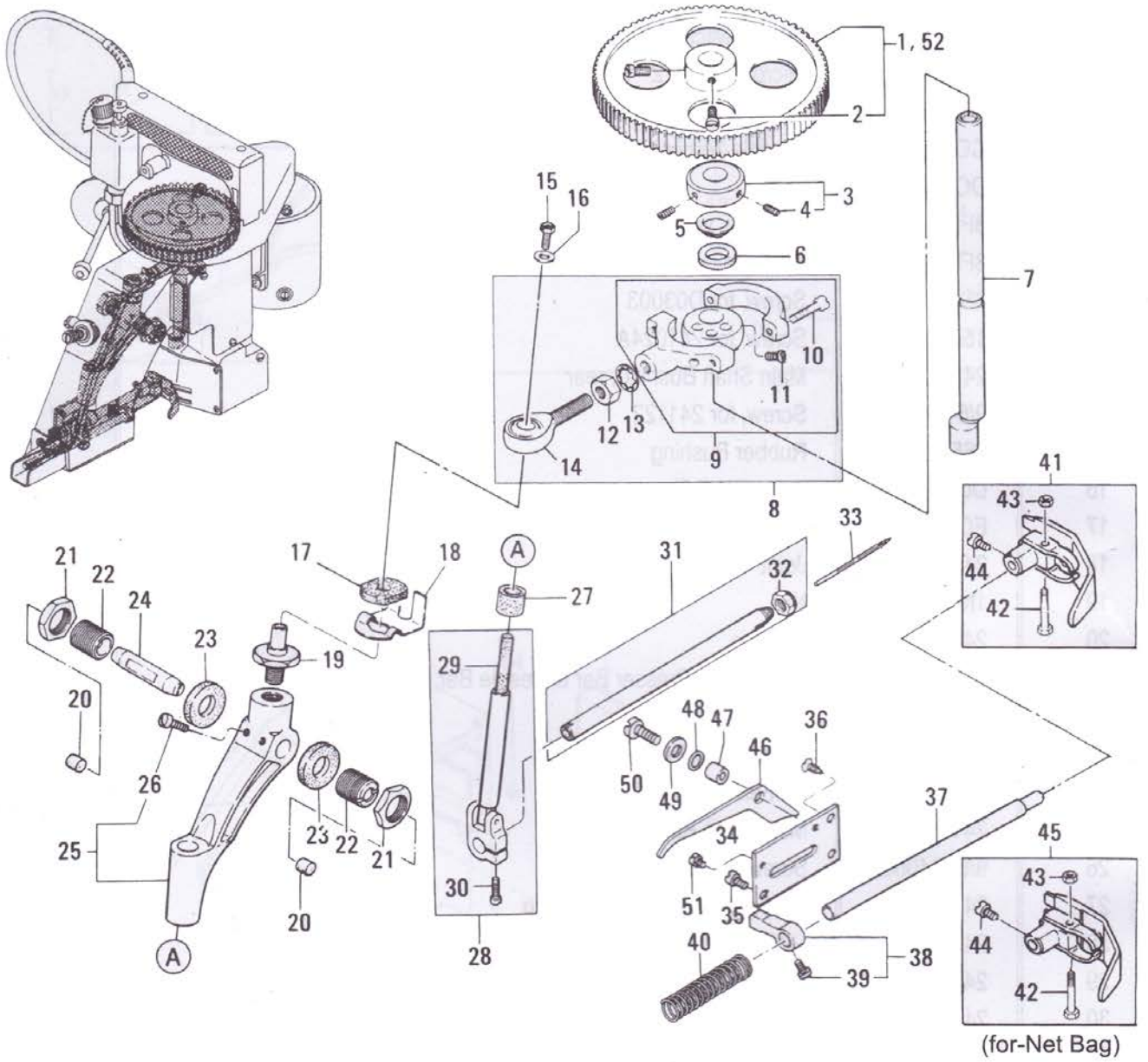
INDEX	PART NO.	DESCRIPTION	QNTY.
1	245042	Thread Stand	1
2	15/64S28028	Screw , for 245042	2
3	1N6	Nut	2
4	3W6	Spring Washer	1
5	2W6	Washer	1
6	K01001	Thread	1
7	245052	Thread Cone Clamping Rod	1
8	245201	Thread Cone Clamping Nut	1
9	245013	Top Cover	1
10	9/64S40043	Screw , for 245013	2
11	245261	Thread Eyelet	1
12	11/64S40005	Screw , for 245261	1
13	245071	Thread Tension Eyelet	1
14	245081A	Thread Tension Assembly	1
15	245081	Tension Post	1
16	065261	Tension Disc	2
17	245101	Tension Spring	1
18	245091	Tension Nut	2
19	9/64S40011	Screw , for 245081A	1
20	245033	Needle Bar Guard	1
21	11/64S400065	Screw , for 245033	1
22	9/64S40065	Screw , for 245033	2
23	245222	Looper Cover	1
24	9/64S40065	Screw , for 245222	3
25	245022	Side Plate	1
26	9/64S40005	Screw , for 245022	3
27	245481	Gasket	1
28	245302	Inside Cover	1
29	9/64S40005	Screw , for 245302	4
30	245181	Thread Cone Cover	1





(2) BUSHINGS, OILINGS AND HANDLE PARTS

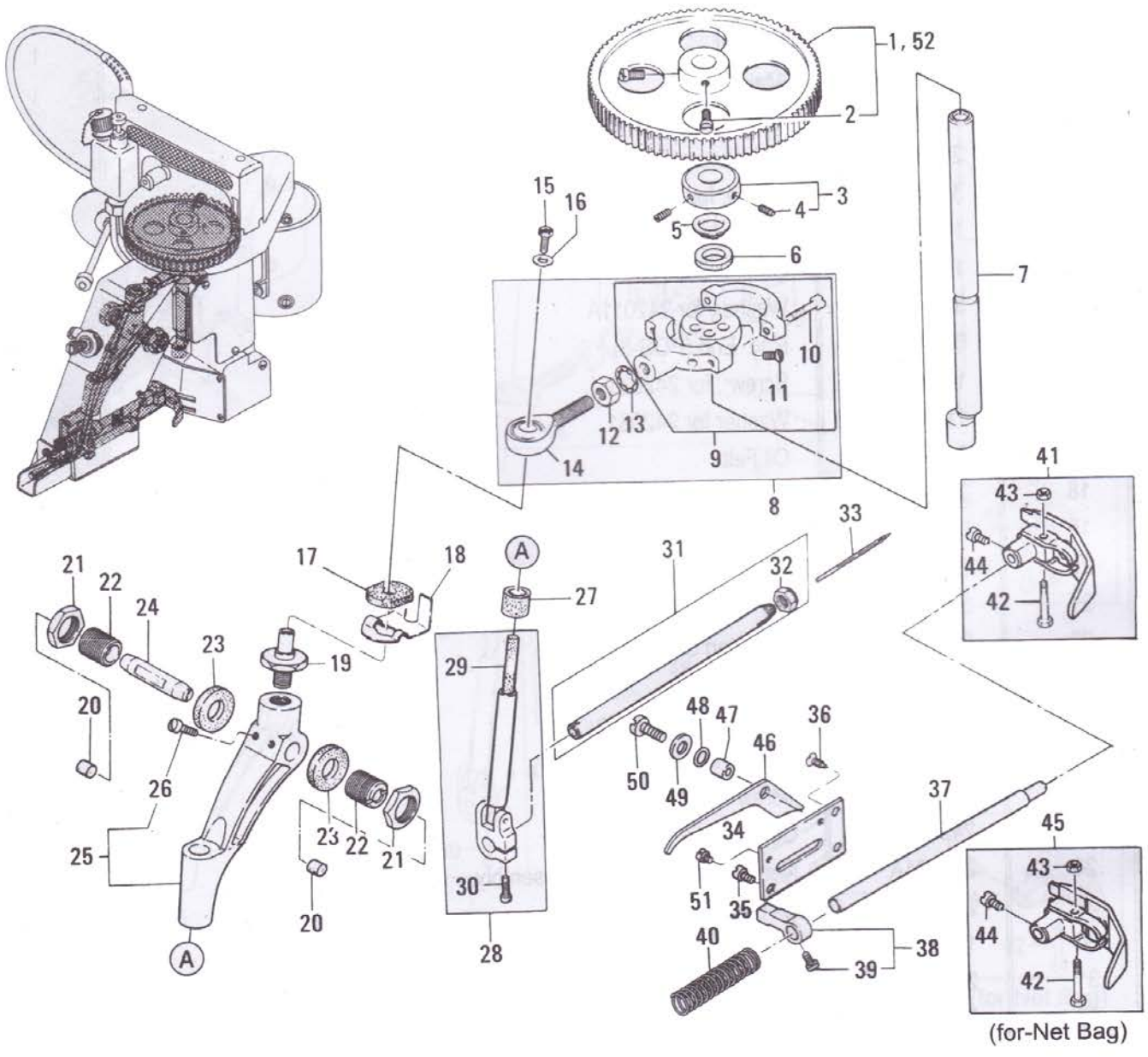
INDEX	PART NO.	DESCRIPTION	QNTY.
1	241024AS	Handle Assembly	1
2	241024A	Handle Assembly	1
3	241024	Handle	1
4	9/64S40011	Screw, for 241024A	2
5	245132	Micro Switch Cover	1
6	C02001	Micro Switch ( Z- 15GK655-B)	1
	C02006	Micro Switch (X-10GD-B)	1
7	CO5008	Flexible Terminal Block (ML-SK-1,4P)	1
8	DO3003	Oiler	1
9	8FU2-6x90F	Oil Tube, with oil felt	1
10	8FU2-6x60F	Oil Tube, with oil felt	1
11	6S5x15	Screw, for D03003	1
12	15/64S28021	Screw, for 241024A	2
13	241122	Main Shaft Bushing, rear	1
14	9/64S40502	Screw, for 241122	1
15	065401	Rubber Bushing	1
16	D07021	Joint (BN-5-6)	2
17	E03014	Washer	2
18	245471	Joint	1
19	1N4	Nut	1
20	245461	Oil Pipe	1
21	242212	Bushing for Presser Bar & Needle Bar, upper	3
22	9/64S40502	Screw, for 242212	3
23	242222	Presser Bar Bushing, lower	1
24	205131	Oil Felt	1
25	241111	Main Shaft Bushing, rear	1
26	9/64S40502	Screw, for 241111	1
27	243021	Looper Rocker Shaft Bushing	1
28	245162	Oil Felt	1
29	245271	Hanger	1
30	241151	Hook	1
31	1/8S40006	Screw, for 241151	2
32	245171	Shoulder Belt	1
33	EW -6 .5	Spring Balancer	1
34	241024BS	Handle Assembly (Safety type with pulley cover)	1
35	241024B	Handle Assembly (Safety type with pulley cover)	1





**(3) NEEDLE BAR, PRESSER BAR AND DRIVING PARTS**

INDEX	PART NO.	DESCRIPTION	QNTY.
1	241092	Synchro Pulley	1
2	3/16S28001	Screw,for 241092	2
3	241131	Retaining Collar	1
4	11/64S40502	Screw,for 241131	2
5	241161	Spacer	1
6	205131	Oil Felt	1
7	241101	Main Shaft	1
8	242011A	Connecting Rod Assembly	1
9	242011	Connecting Rod Sub-Assembly	1
10	3/16S28029	Screw, for connecting rod cap	2
11	11/64S40001	screw, for eccentric cam	2
12	1N8	Nut, for 242011A	1
13	5W8	Washer, for 242011A	1
14	6A04001	Rod End (POS-8)	1
15	11/64S40089	Screw , for 242031	1
16	11/64W15103	Washer for 242031	1
17	245211	Oil Felt	1
18	242041	Spring	1
19	242031	Rod End Stud	1
20	245491	Cap	2
21	5/8N18101	Nut, for 242081	2
22	242081	Adjusting Stud	2
23	245231	Oil Felt	2
24	242071	Needle Bar Lever Stud	1
25	242051A	Needle Bar Laver Assembly	1
26	11/64S40004	Screw for 242051A	2
27	245371	Oil Felt	1
28	242101A	Needle Bar Connection Assembly	1
29	205171	Oil Felt	1
30	11/64S40003	Screw, for 242101A	1
31	242121A	Needle Bar with Nut	1
32	242131	Needle Clamp Nut	1
33	B01002	Needle (DNx1#25)	1
34	242171	Presser Foot Lifter Base	1
35	11/64S40002	Screw, for 242171	1
36	11/64S40007	Screw for 242171	2
37	242201	Presser Bar	1
38	242181	Presser Bar Connection	1

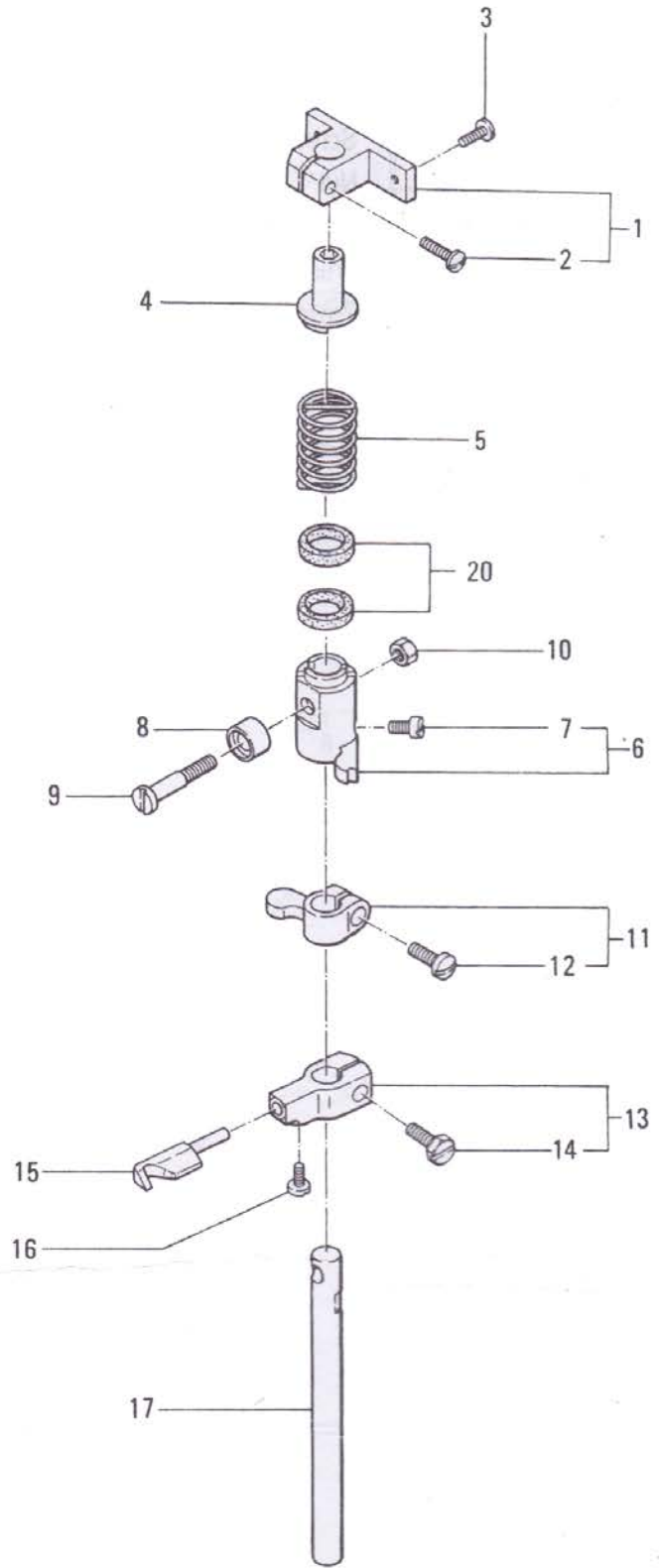
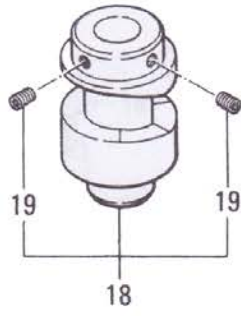
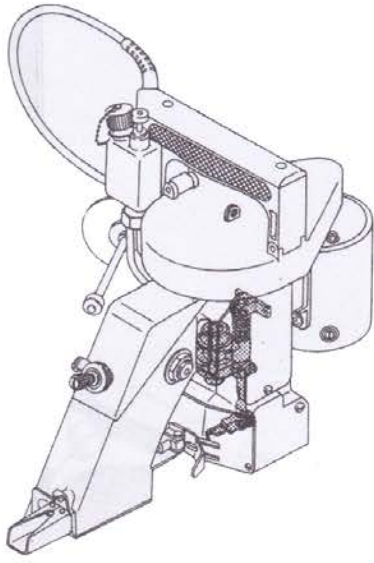


(for-Net Bag)

(3) NEEDLE BAR, PRESSER BAR AND DRIVING PARTS

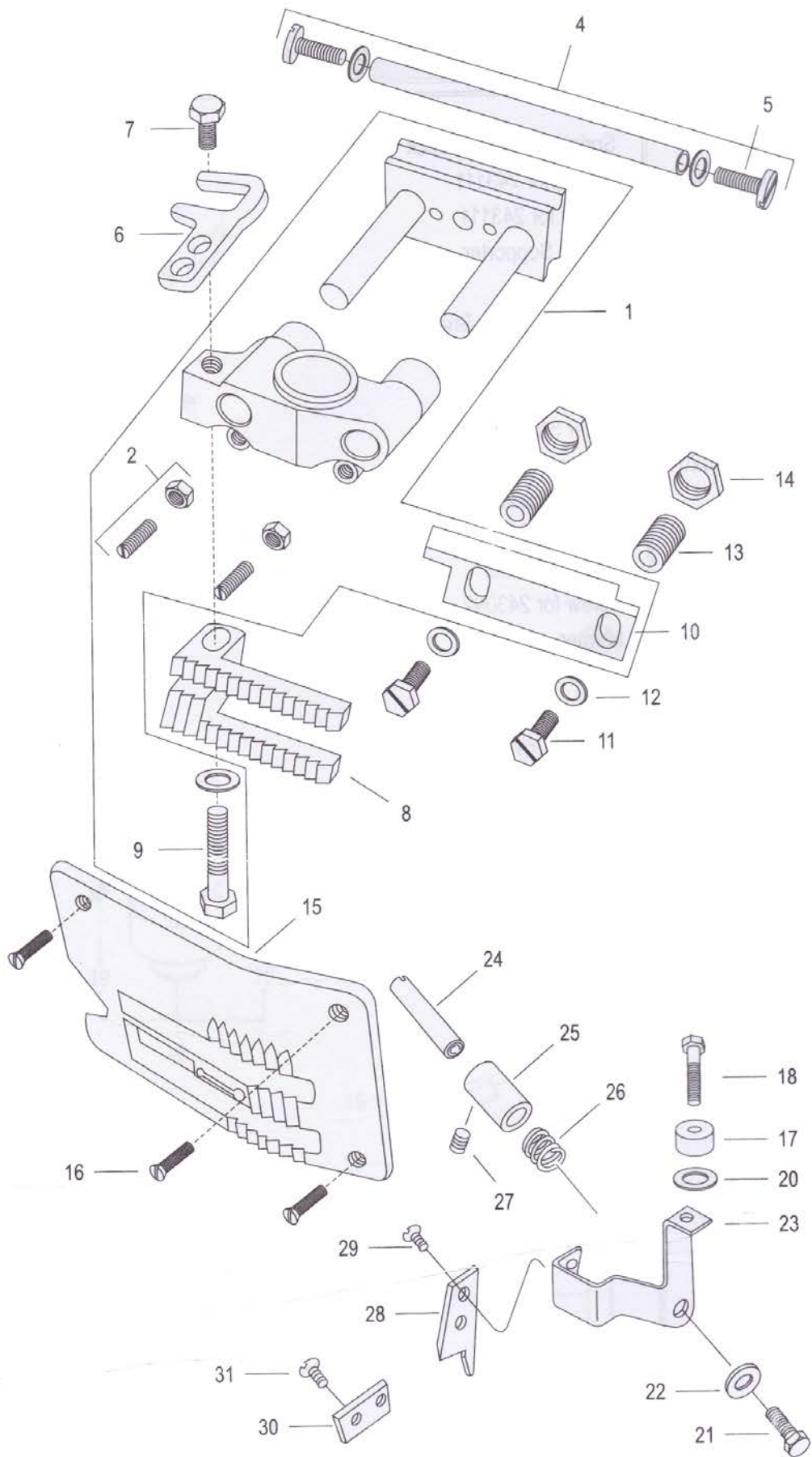
INDEX	PART NO.	DESCRIPTION	QNTY.
39	11/64S40003	Screw for242181	1
40	2242191	Presser Spring	1
41	242231A	Presser Foot Assembly	1
42	9/64S40055	Screw	1
43	9/64N40101	Nut	1
44	11/64S40005	Screw, for 242231A, 242233A	1
45	242233A	Presser Foot Assembly (for Net Bag)	1
46	242161	Presser Foot Lifter	1
47	242271	Collar	1
48	31LP6	"O" Ring	1
49	11/64W15103	Washer	1
50	11/64S40009	Screw, for 242161	1
51	9/64S40001	Screw, for Lifter Stopper	1
52	241091	Synchro Pulley	1





(4) LOOPER DRIVING PARTS

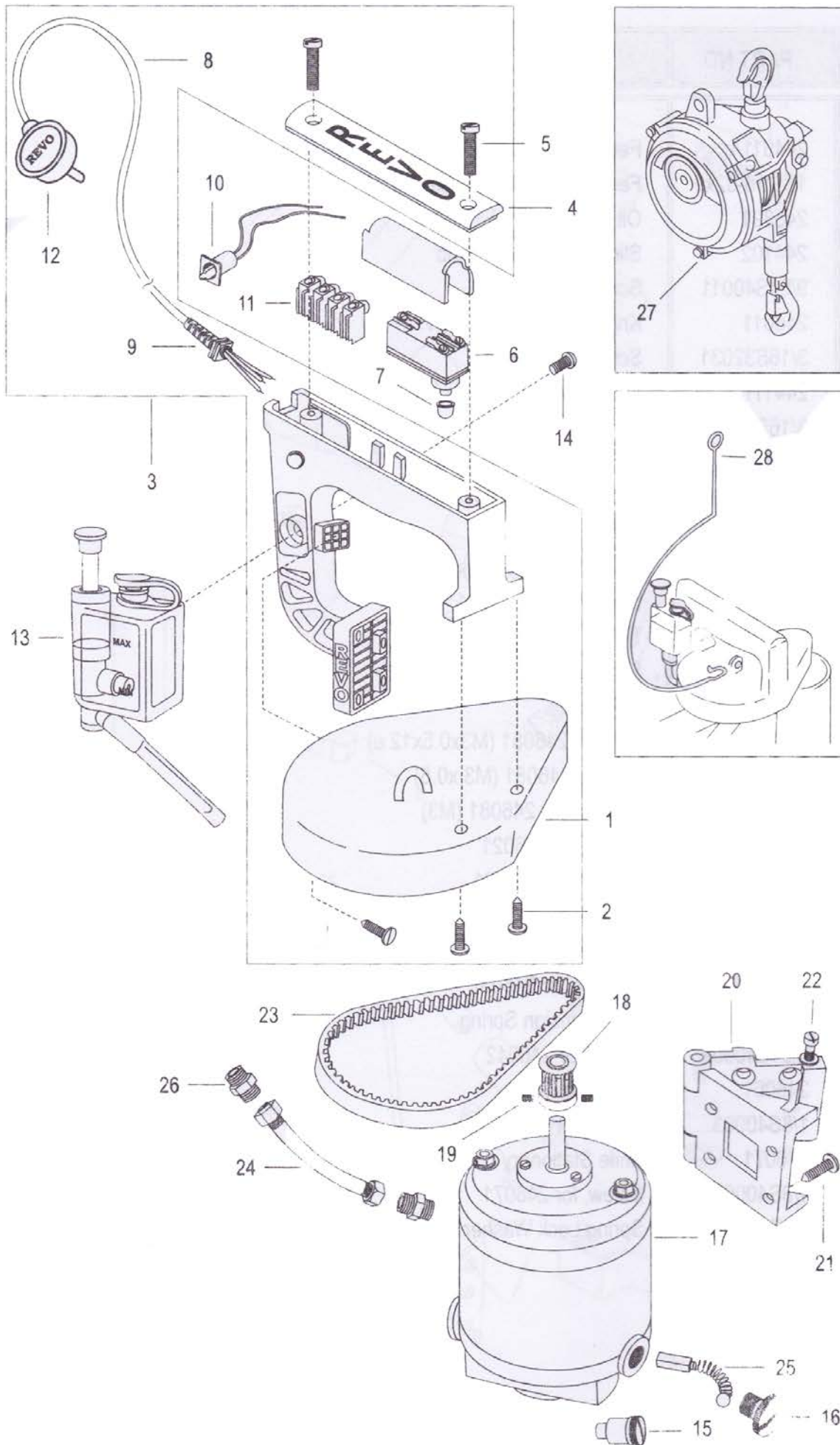
INDEX	PART NO.	DESCRIPTION	QNTY.
1	243111	Spring Supporter Block	1
2	9/64S40035	Screw, for 243111	1
3	9/64S40005	Screw for 243111	2
4	243121	Spring Supporter	1
5	243131	Spring	1
6	243071	Looper Rocker Shaft Arm (A)	1
7	11/64S40002	Screw, for 243071	1
8	243041	Roller	1
9	243061	Roller Stud Screw	1
10	11/64N40201	Nut,for 243061	1
11	243081	Looper Rocker Shaft Arm (B)	1
12	11/64S40009	Screw,for 243081	1
13	243092	Looper Rocker	1
14	11/64S40089	Screw for 243092	1
15	243102	Looper	1
16	9/64S40001	Screw for 243102	1
17	243032	Looper Rocker Shaft	1
18	243012	Looper Drive Cam	1
19	15/64S28524	Screw, for 243012	2
20	205131	Oil Felt	2
21	11/64S40049		
22	11/64N15105		
23	243021		
24	243032		
25	243042		
26	243051		
27	243061		
28	243081		
29	243092		
30	243102		
31	243102		
32	205131		





(5) FEED DRIVING AND THREAD CUTTER PARTS

INDEX	PART NO.	DESCRIPTION	QNTY.
1	244011A	Feed Dog Carrier Block Assembly	1
2	1S3/16-32x9	Feed Dog Support Screw (SM3/16x32x9)	4
3	245391	Oil felt	1
4	244102	Slide Block Guide Stud	1
5	9/64S40011	Screw for 244102	2
6	246011	Knife Bracket Extension	1
7	3/16S32031	Screw for 246011	2
8	244111	Feed Dog	1
9	3/16S32034	Screw for 244111	1
10	244081	Slide Block Adjusting	1
11	3/16S32025	Lock Bolt, for 244091	2
12	11/64W15103	Washer for 244091	2
13	244091	Stud Slide Block Adjusting Support	2
14	3/8N24201	Lock Nut, for 244091	2
15	244122	Throat Plate	1
16	9/64S40043	Screw, for 244122	3
17	246081	Ball	1
18	1B3x12	Bolt, for 246081 (M3x0.5x12 e)	1
19	1N3	Nut, for 246081 (M3 x0.5)	1
20	1W3	Washer, for 246081 (M3)	1
21	11/64S40049	Screw, for 246021	1
22	11/64W15103	Washer for 246021	1
23	246021	Knife Bracket	1
24	246032	Knife Bracket Pin	1
25	246042	Bushing for 246032	1
26	246051	Knife Tension Spring	1
27	9/64S40502	Screw for 246042	1
28	246061	Knife Moving	1
29	1/8S40003	Screw, for 246061	2
30	246071	Knife Stationary	1
31	1/8S40003	Screw, for 246071	2
32	3W3	Spring Lock Washer (M3)	1





(6) MOTOR PARTS (FOR TOTALLY ENCLOSED TYPE MOTOR)

INDEX	PART NO.	DESCRIPTION	QNTY.
1	D105	Guard Belt	1
2	D105 - 1	Screw for D105	3
3	D800	Handle Complete with Guard Belt (105, 802, 802 - 1, 105 - 1)	1
4	D802	Micro Switch Cover	1
5	D802 - 1	Screw for D802	2
6	D806	Micro Switch	1
7	D806 - 3	Micro Button Guard	1
8	D808 - 1	Wire 12 Feet Length	1
9	D808 - 2	Handle Wire Sleeve	1
10	D808 - 3	Indicator Bulb	1
11	D808 - 4	Wire Connector Stick	1
12	D809	Plug	1
13	D811	Oil Tank	1
14	D811 - 1	Screw for D811	1
15	D900 - 3	Carbon Holder with Cap Contt. Type	2
16	D900 - 4	Carbon Cap Contt. Type	2
17	D901	Motor Intt.	1
18	D903	Pulley Motor (Timing)	1
19	D903 - 1	Screw for D903	2
20	D906	Hinges Motor Mount	1
21	D906 - 1	Screw for D906	8
22	D908	Screw Locking for D906	2
23	D910	Timing Belt (OPTIBELT ZR 170XL)	1
24	DS913	Flexible Pipe	1
25	D919	Carbon Brushes with Spring Square Type	2
26	DS936	Nut for DS913	2

OPTIONAL ACCESSORIES

INDEX	PART NO.	DESCRIPTION	QNTY.
27	D907	Revo Suspension Unit	1
28	D907A	Hanging Hook	1
29	D808	Wire (1Feet Length)	1
30	D808C	Wire Roll (90m)	1



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