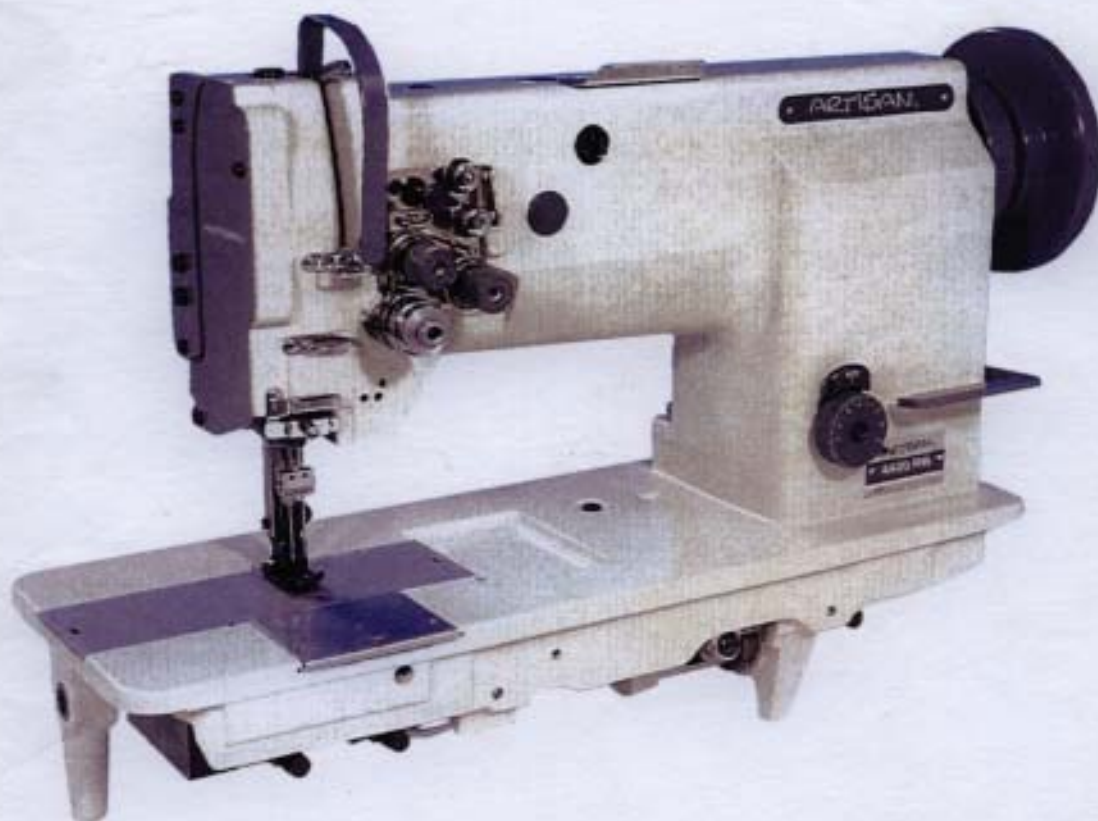


ARTISAN®

Model 4420 RB
Double Needle Lockstitch
Heavy Duty Walking Foot Sewing Machine
With Automatic Lubrication

Instruction Manual & Spare Parts List



1. Brief introduction

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

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

The difference between the two models:

GC20606 adopts twin - needle, two large horizontal hooks with auto lubrication. With the parts it can form ten different needle gauges.

GC20606 - I adopts single needle and form single line double lockstitch form.

2. Main Technical Specification

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

3. Installation and preparation

3.1 Installation

3.1.1 Location of the machine

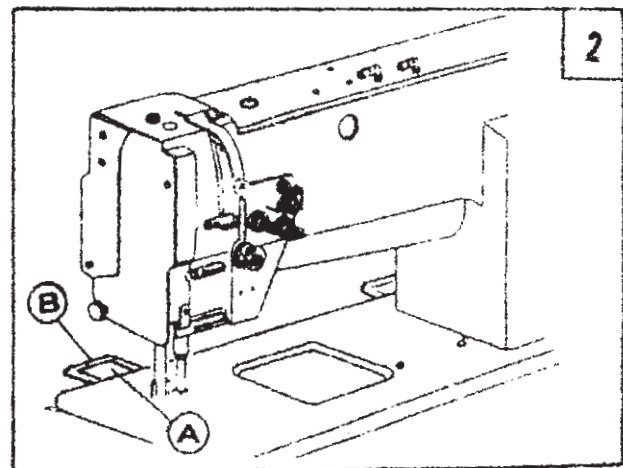
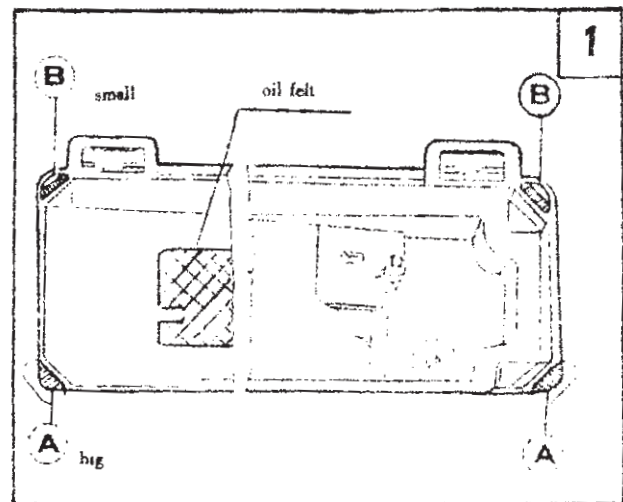
To ensure a smooth running, the machine should be located on rigid and flat floor. The insert of rubber mat between machine stand and floor is recommended for further reducing the running noise and vibration.

3.1.2 Oil Reservoir Installation (Fig.1)

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

3.1.3 Mounting machine head (Fig.2)

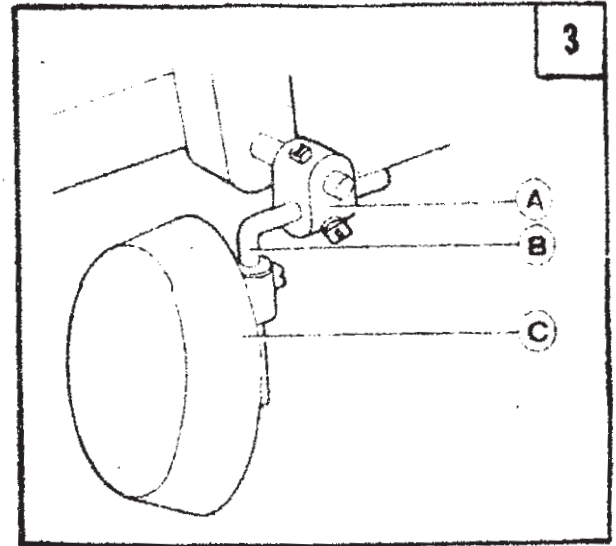
Make the hinge (A) of machine head engaged with hinge socket B on the table, then turn the machine head freely till it is seated on the frame of table cutout.



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

a. Installing

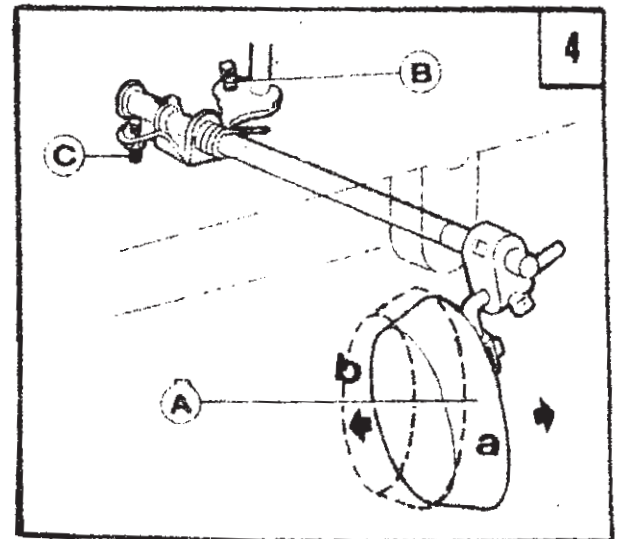
Install Connector (A), Bell Crank (B), Bell (C) in the order shown in Fig.3.



b. Adjustment (Fig.4)

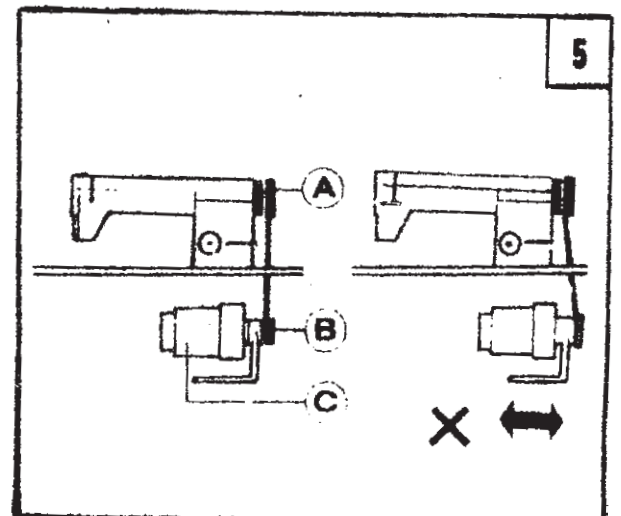
In the order of the following:

1. When the presser foot is at its lowest position, keep the crank in the position shown by b in the figure, turn Knee Control Stop Adjusting Screw (C) to touch with the oil reservoir, and tighten the nut of Screw (C).
2. When operate by knee, the presser foot lift volume is controlled by Screw (B). Turn the presser foot lever down, make the bell in the position shown by a in the figure, lift the presser foot to 13 mm, adjust Screw (B) to touch the oil reservoir, then tighten the nut of Screw (B).



3.1.5 Installing the motor (Fig.5)

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



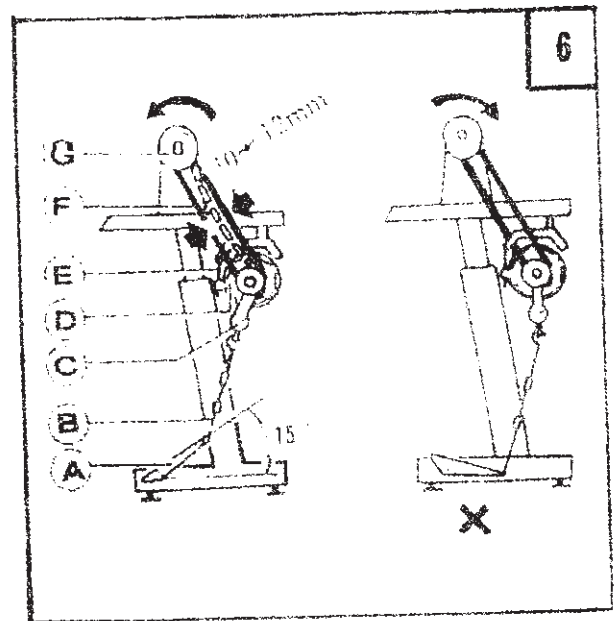
3.1.6 Connecting the clutch lever to the pedal (Fig.6)

1) The optimum tilt angle of pedal (A) with floor is approx. 15 degree.

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

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

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

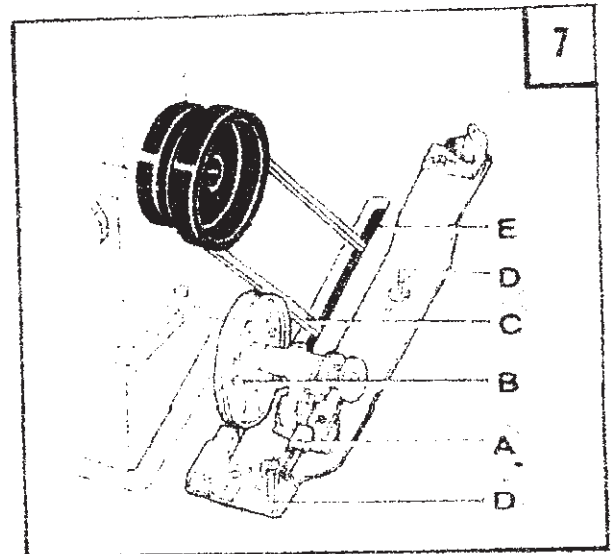


3.1.7 Installing the bobbin winder (Fig.7)

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

3.1.8 Installing the thread spool stand (Fig.8)

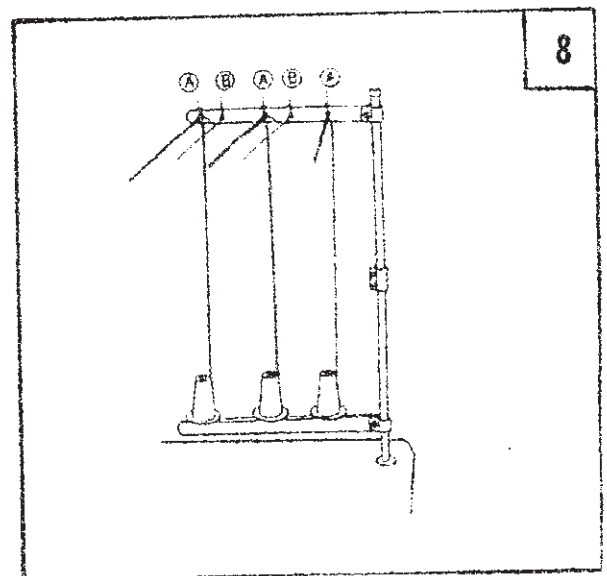
Locate thread spool stand at the right front of the table, note that spool rest may not obstruct when machine head is turned backward, then tighten wood screw.



3.2 Preparation

3.2.1 Cleaning the machine

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



3.2.2 Examination

Though every machine is confirmed by strict inspection and test before delivery, the machine parts may be loosed or deformed after long distance transportation with jolt. A thorough examination must be performed after cleaning the machine. Turn the balance wheel to see if there is running obstruction, parts collision, uneven resistance or abnormal noise. If these exist, adjustment must be made accordingly before run.

3.2.3 Precaution before Start

a. Oiling (Fig. 9)

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

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

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

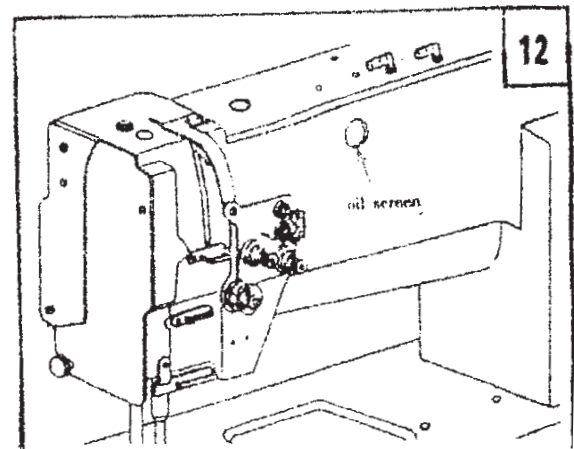
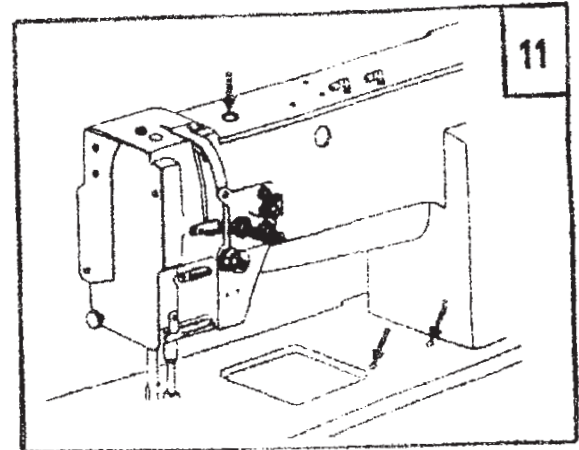
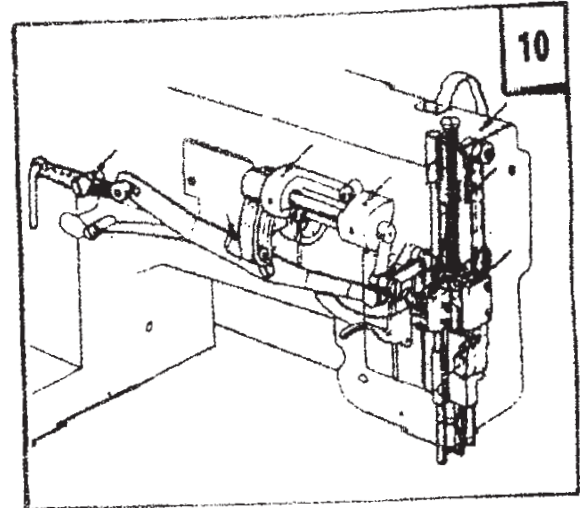
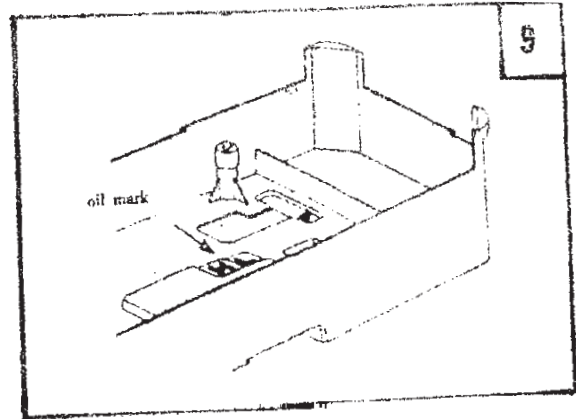
Note: when the machine needs drop oiling, do not start before drop oiling.

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

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

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

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



4. Operation

4.1 Coordination between needle, thread and sewing material

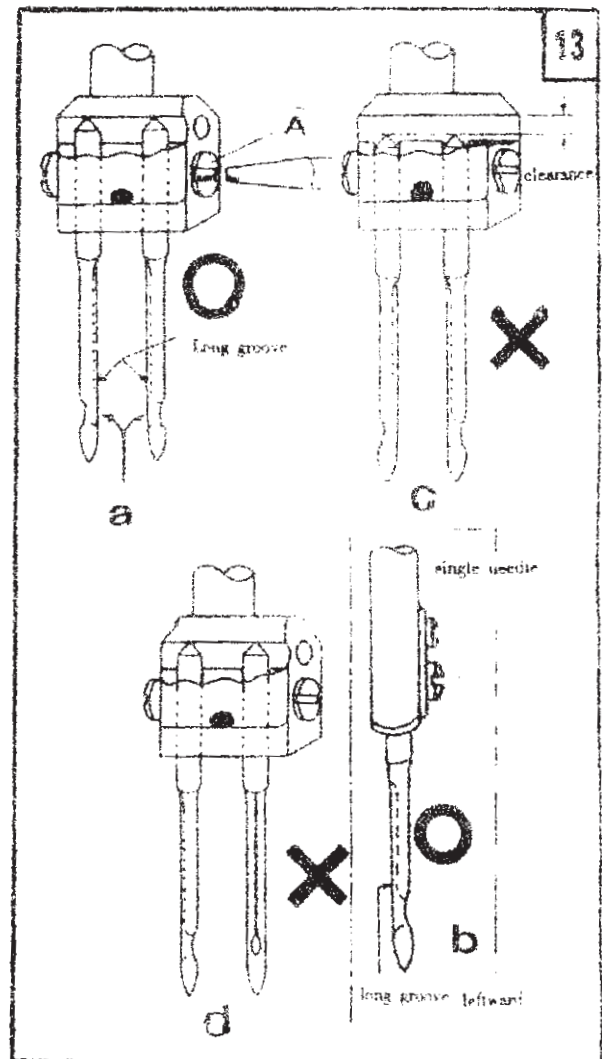
Please use needle GR2 - 2 or DP x 17, 135 x 17, SY3355 Nm125 - 180. The coarseness of needle should be in accordance with the nature of material. If stitch on heavy duty material with a slim needle, the needle will be easily bent, skip or thread breakage occurs, on the contrary, stitch on tightly woven material with a very coarse needle, the material will be destroyed with over - big needle hole. So the needle and thread should be properly selected.

4.2 Needle installation (Fig. 13)

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

Note: Fig. (c): insufficient insertion.

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



4.3 Winding the Bobbin thread

4.3.1 Winding method (Fig. 14)

1) Install bobbin (A) to bobbin winder spindle (B).

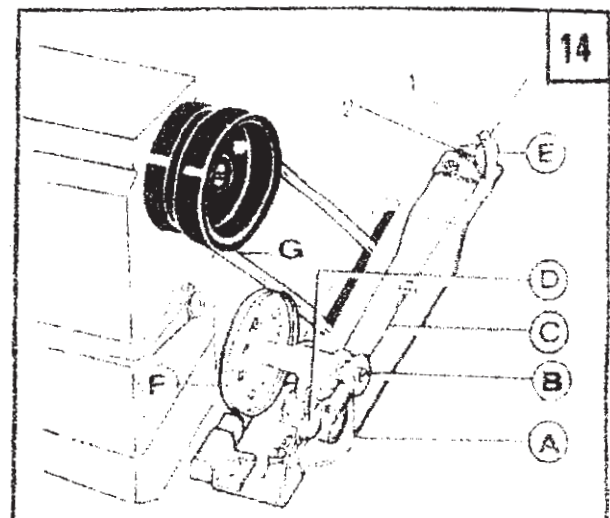
2) Pass thread (C) from spool through the eye 1 on tension bracket (E), pass it between tension discs 2, and then wind the end of the thread a few turns on the bobbin.

3) Push stop latch thumb lever (D) down to lock the bobbin, the winder pulley (F) is thereby pressed on belt (G).

4) Start the machine to wind thread.

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

5) When the thread is fully wound, the bobbin winder stop latch automatically release the bobbin winder.



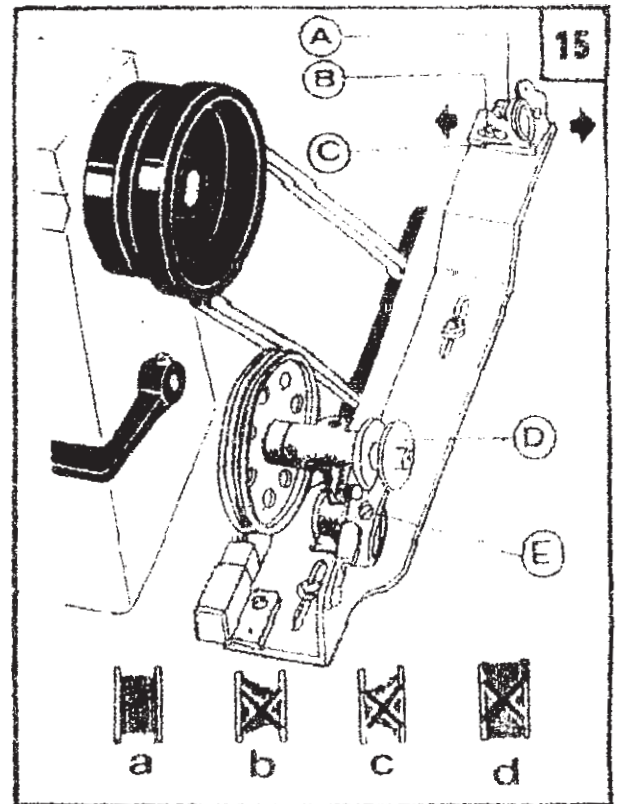
4.3.2 Winding adjustment (Fig. 15)

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

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

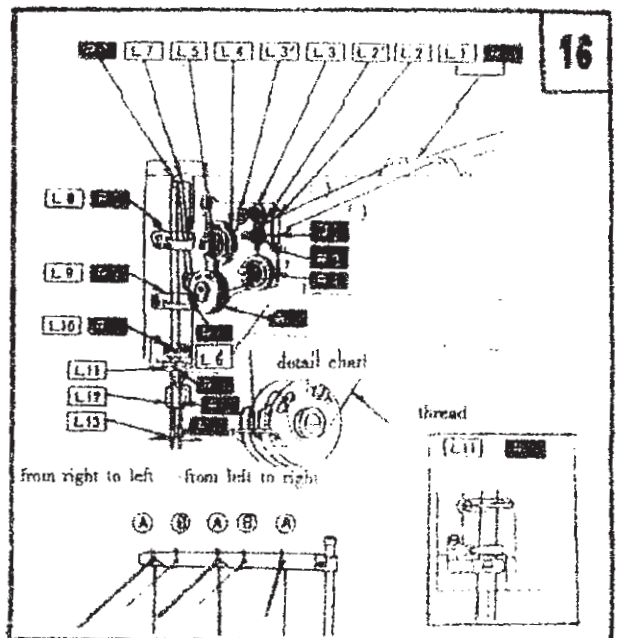
2) When the wound thread layer does not present a cylindrical shape as in Fig. 15a, loosen tension bracket screw (B) and move tension bracket (C) leftward or rightward. If thread is wound as shown in Fig. 15b, move the tension bracket rightward, while if thread is wound as shown in Fig. 15c, move the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

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



4.3.3 Threading (Fig. 16)

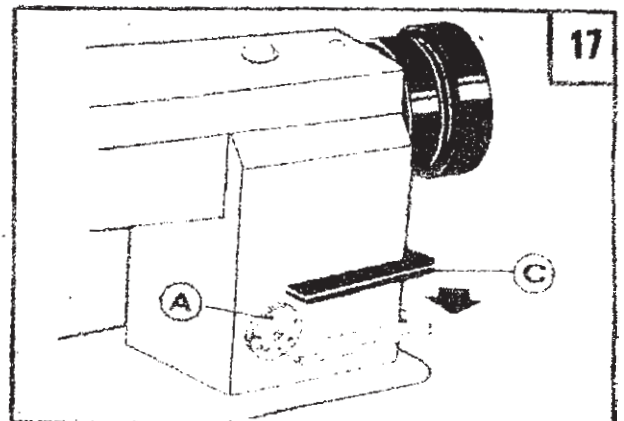
Every thread should be drawn through Thread Hole (A), when use light and smooth thread (polyester or long silk thread), it should be drawn through Hole (B). Keep the thread take-up lever in its highest position, draw every thread in the following numerical order.



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

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

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

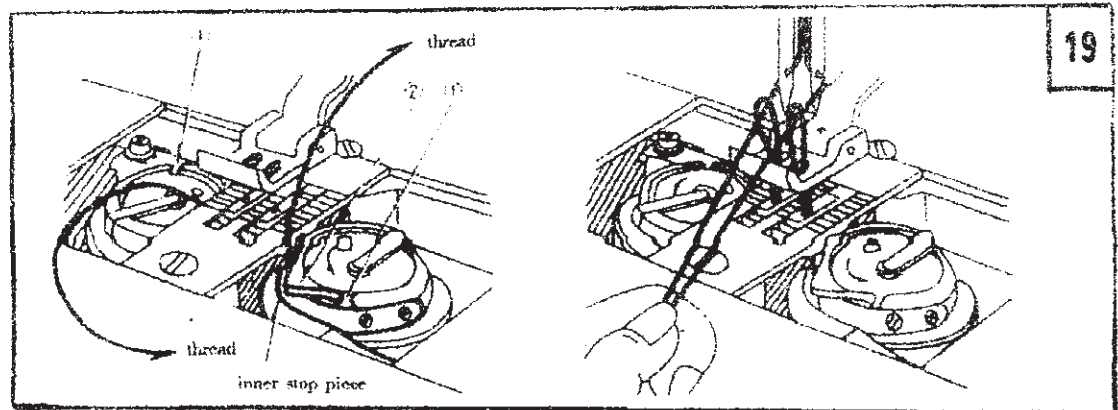
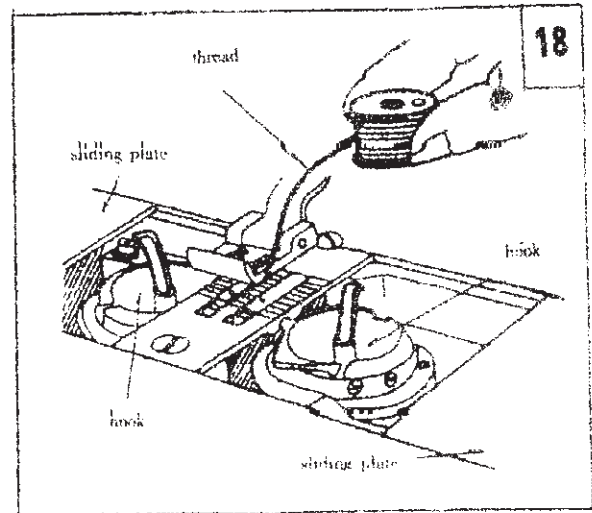


4.3.5 Placing bobbin (Fig. 18)

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

4.3.6 Drawing thread from the bobbin (Fig. 19)

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



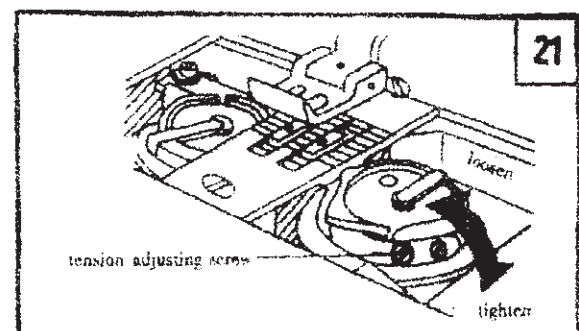
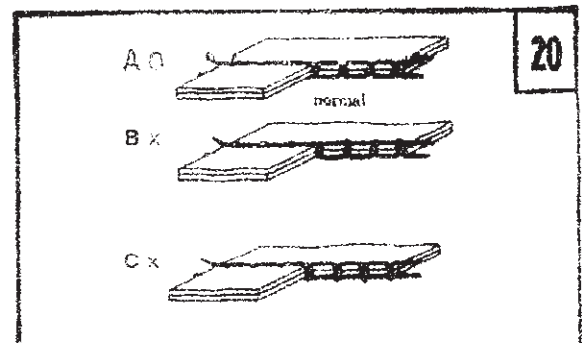
5. Machine Adjustment

5.1 Thread tension adjustment

All forms of stitches are shown in Fig. 20.

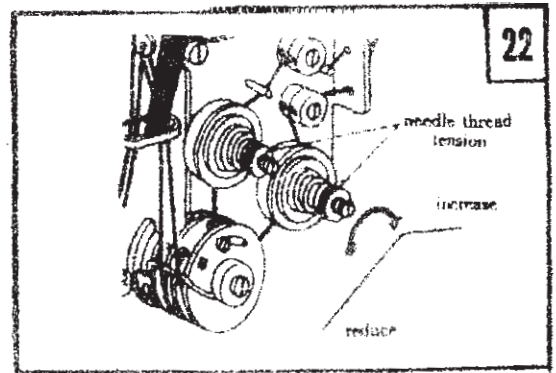
The normal stitch of sewing machine is shown as Fig. (A). If stitch is abnormal, the puckering and thread breakage will occur, and the needle thread tension and bobbin thread tension should be adjusted so that the normal stitch can be obtained.

- If the stitch seam shows as Fig. 20B, indicates that the needle thread or bobbin thread tension is too loose, then turn the thread tension screw counter-clockwise to release the needle thread pressure; or turn the adjusting screw with a screwdriver to increase the bobbin thread tension. (see Fig. 21, 22)



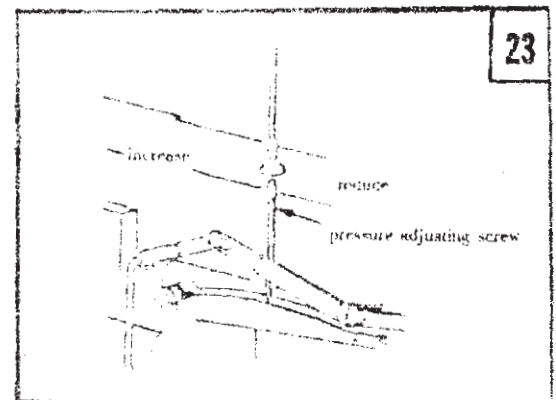
b. If the needle thread is too loose and the bobbin thread is too tight, then shows as Fig. 20C. And turn the thread tension screw clockwise to increase the needle thread tension; or turn loose the bobbin lace screw to reduce the bobbin thread tension. (see Fig. 21, 22)

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



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

The pressure of the presser foot should be adjusted according to the thickness of the sewing materials. If stitch on heavy duty material, the pressure should be increased and turn the pressure adjusting screw on the back of the arm clockwise; if reduce the pressure, turn it counter - clockwise.

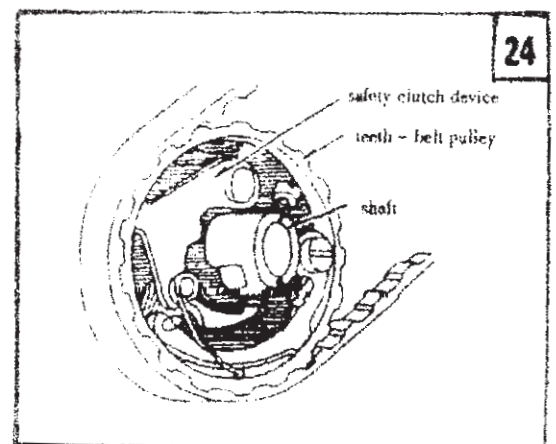


5.3 Use and adjustment of the safety clutch device

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

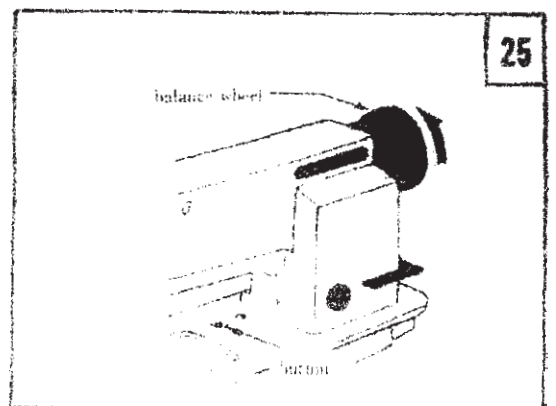
5.3.1 The function of the safety clutch device (Fig. 24)

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

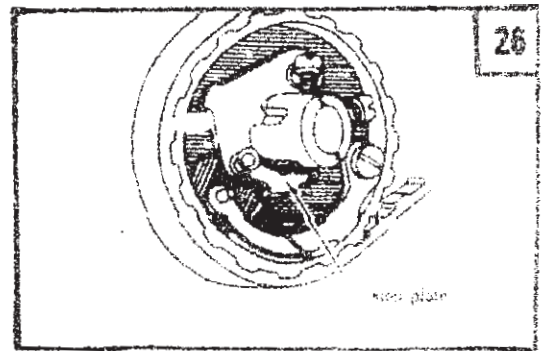


5.3.2 Resetting the safety clutch device

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

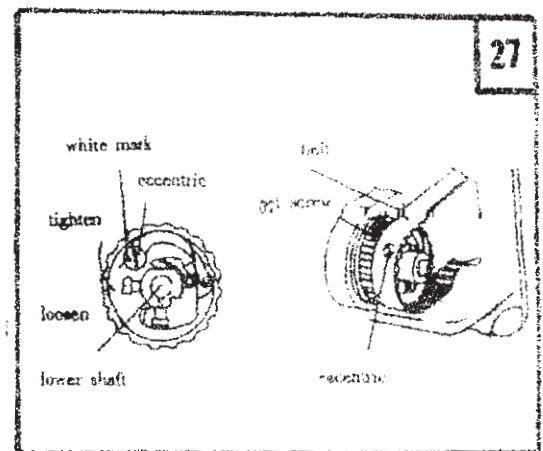


- b. When the stop plate stops the balance wheel, more strength is needed to turn the balance wheel to reset the safety clutch device.
- c. Release the button in the bed. So the resetting of it is OK. (see Fig.26)



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

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

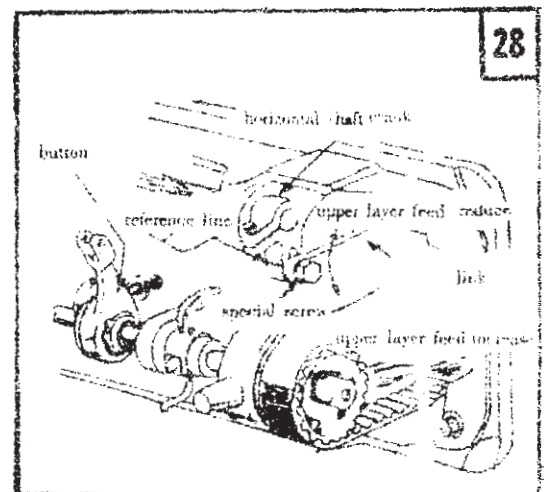


5.4 Upper feed adjustment (Fig.28)

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

Adjust as the following:

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

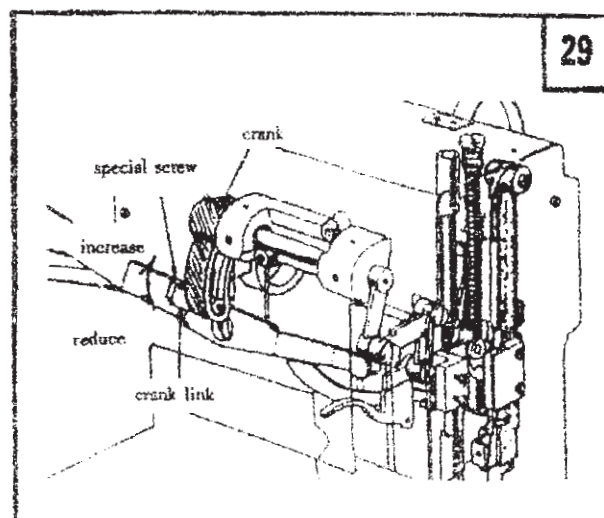


5.5 Presser foot lift volume adjustment (Fig. 29)

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

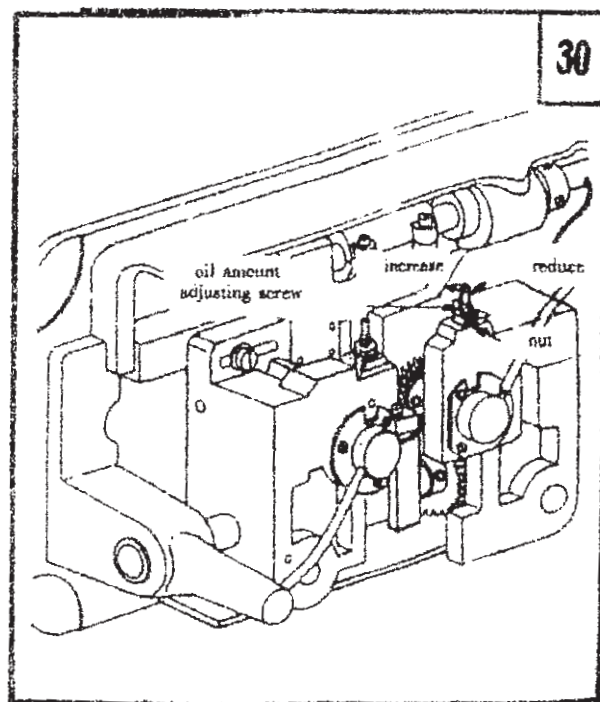
1. Loosen the special screw.
2. When the centerline distance between the special screw and the presser foot lift rear crank becomes shorter, the presser foot lift volume will become longer. On the contrary the distance becomes longer, the lift volume will become shorter.

3. After adjustment, tighten the special screw. The common presser foot lift volume can be adjusted in the range of 2 - 6 mm.

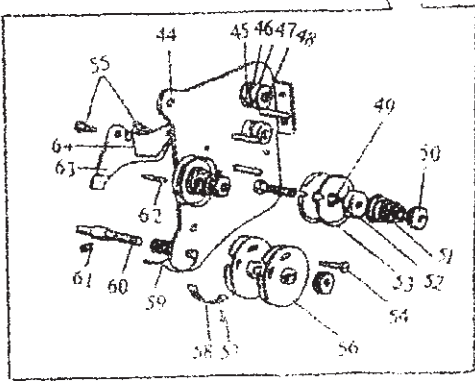
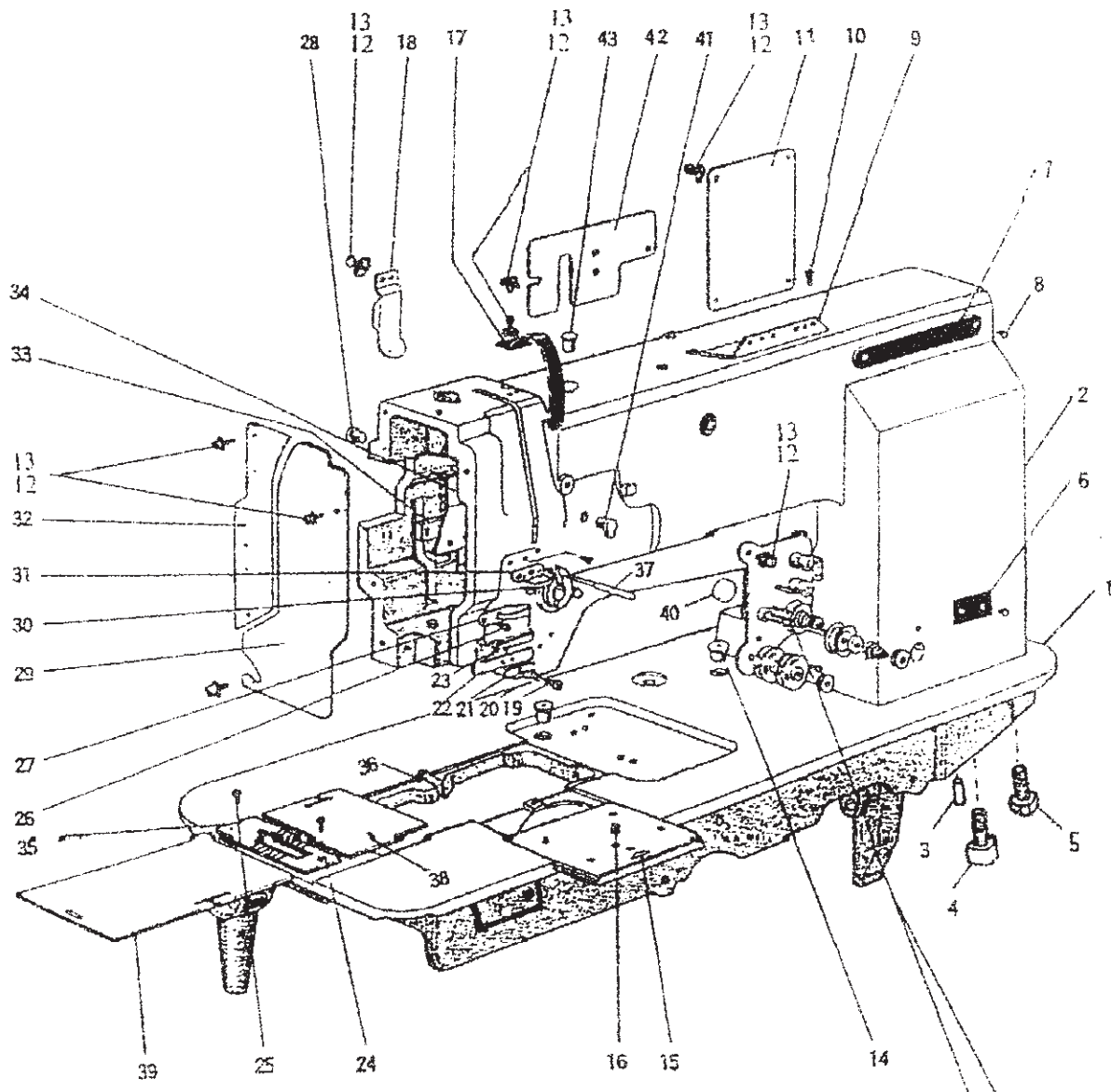


5.6 Hook oil amount adjustment (Fig. 30)

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



1.

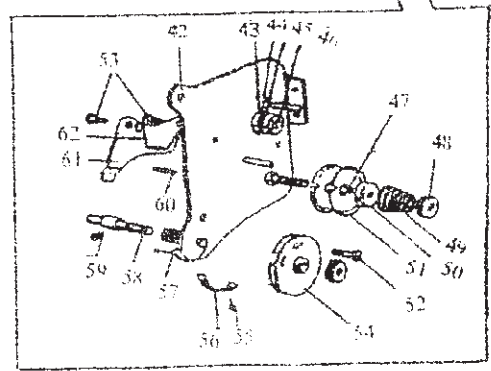
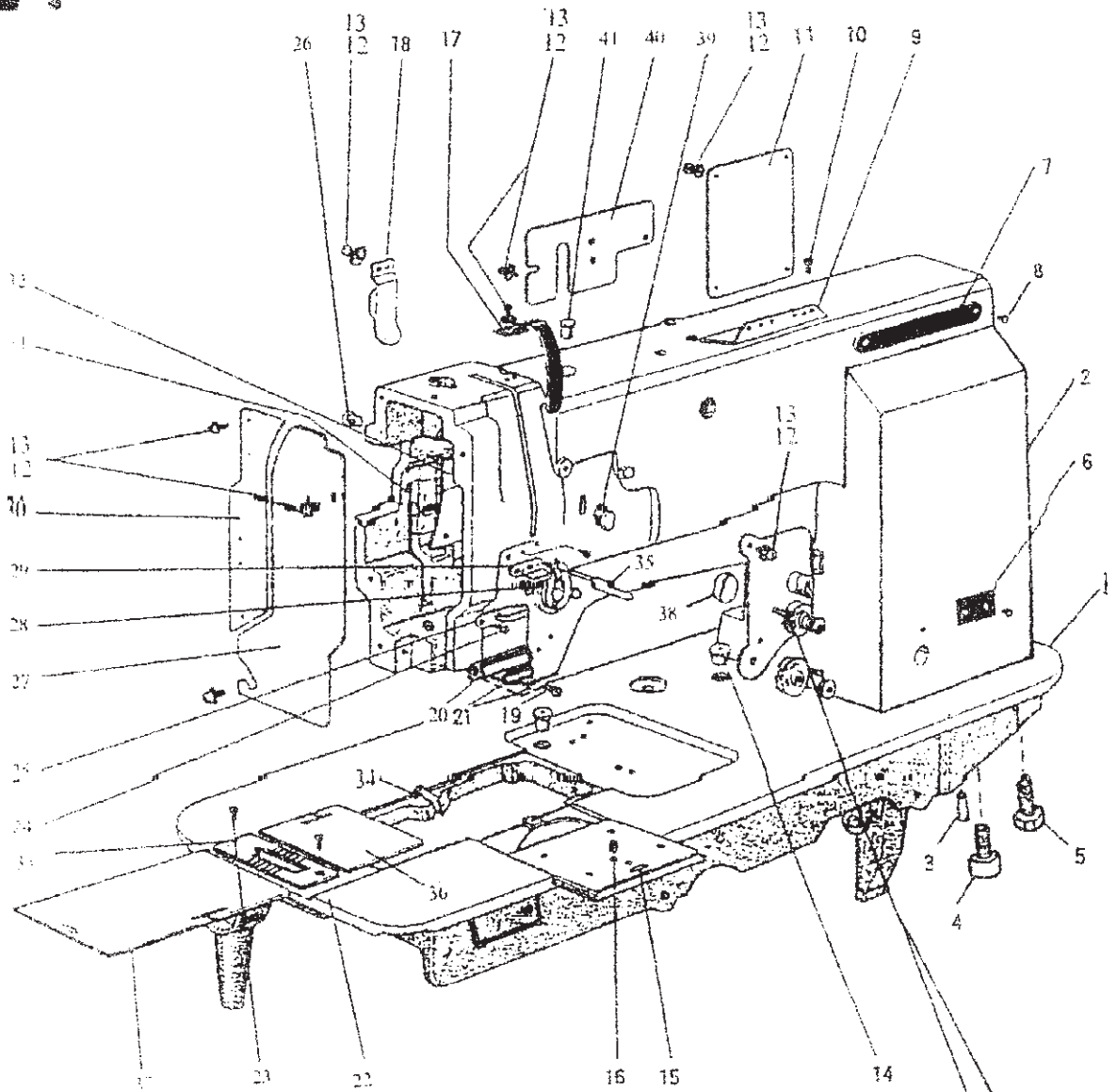


1. GC20606 Arm Parts

Item	Description	Qty
1.	Body	1
2.	Arm	1
3.	Pin	2
4.	Screw	1
5.	Screw	3
6.	Trade mark plate	1
7.	Stabil plate	1
8.	Nail	4
9.	Upper thread guide	1
10.	Screw	2
11.	Back cover	1
12.	Screw	15
13.	Washer	15
14.	Cover	2
15.	Front slide plate	1
16.	Screw	4
17.	Thread take-up lever guard	1
17.	Back front cover	1
19.	Screw	1
20.	Spring	1
21.	Thread retainer	1
22.	Low thread finger	1
23.	Screw	1
24.	Screw	1
25.	Spring	1
26.	Screw	1
27.	Middle thread finger	1
28.	Rubber plug	2
29.	Face plate	1
30.	Screw	2
31.	Upper thread finger	1

Item	Description	Pcs
32.	Guide set plate	1
33.	Set plate	1
34.	Oil retainer	1
35.	Throat plate	1
36.	Pin shaft	1
37.	Thread releasing lever	1
38.	Right sliding plate	1
39.	Left sliding plate	1
40.	Plug	1
41.	Plug	1
42.	Back fitting cover	1
43.	Plug	1
44.	Thread tension set plate assembly	1
45.	Thread guide bracket	2
46.	Thread guide plate	2
47.	Spring	2
48.	Thread guide bracket screw assembly	2
49.	Thread releasing pin	1
50.	Thread tension nut	3
51.	Thread tension spring	2
52.	Thread releasing plate	2
53.	Thread tension plate	4
54.	Screw	1
55.	Screw	2
56.	Thread control plate assembly	2
57.	Screw	1
58.	Stop plate	1
59.	Thread take - up spring	1
60.	Shaft for thread take - up spring	1
61.	Set screw	1
62.	Thread releasing pin	1
63.	Thread tension retaining plate	1
64.	Thread releasing spring	1

2.

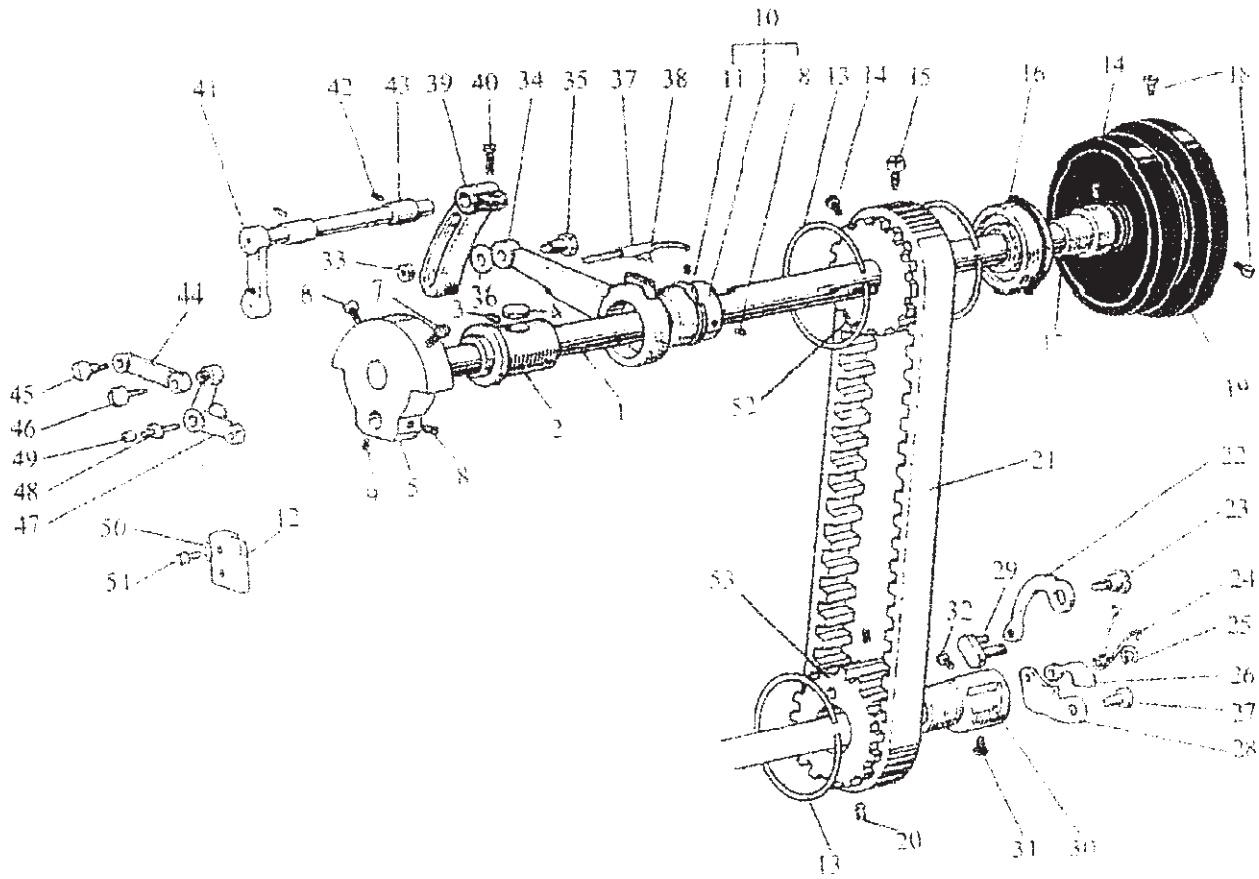


2. GC20606 - 1 Arm Parts

Item	Description	Pcs
1.	Bed	1
2.	Arm	1
3.	Pin	2
4.	Screw	1
5.	Screw	2
6.	Trade mark plate	1
7.	Model plate	1
8.	Nail	4
9.	Upper thread guide	1
10.	Screw	2
11.	Back cover	1
12.	Screw	15
13.	Washer	15
14.	Cover	2
15.	Front slide plate	1
16.	Screw	1
17.	Thread take - up lever guard	1
18.	Back front cover	1
19.	Screw	1
20.	Low thread finger	1
21.	Oil felt	1
22.	Screw	1
23.	Screw	1
24.	Screw	1
25.	Middle thread finger	1
26.	Rubber plug	2
27.	Face plate	1
28.	Screw	2
29.	Upper thread finger	1
30.	Guide set plate	1
31.	Set plate	1

Item	Description	Pcs
32.	Oil retainer	1
33.	Throat plate	1
34.	Pin shaft	1
35.	Thread releasing lever	1
36.	Right sliding plate	1
37.	Left sliding plate	1
38.	Plug (ø14.5)	1
39.	Plug (ø12.7)	1
40.	Back fitting cover	1
41.	Plug (ø12.7)	1
42.	Thread tension set plate assembly	1
43.	Thread guide bracket	2
44.	Thread guide plate	2
45.	Spring	2
46.	Thread guide bracket screw assembly	2
47.	Thread releasing pin	1
48.	Thread tension nut	3
49.	Thread tension spring	2
50.	Thread releasing plate	2
51.	Thread tension plate	4
52.	Screw	1
53.	Screw	2
54.	Thread control plate assembly	2
55.	Screw	1
56.	Stop plate	1
57.	Thread take - up spring	1
58.	Shaft for thread take - up spring	1
59.	Set screw	1
60.	Thread releasing pin	1
61.	Thread tension retaining plate	1
62.	Thread releasing spring	1

3.

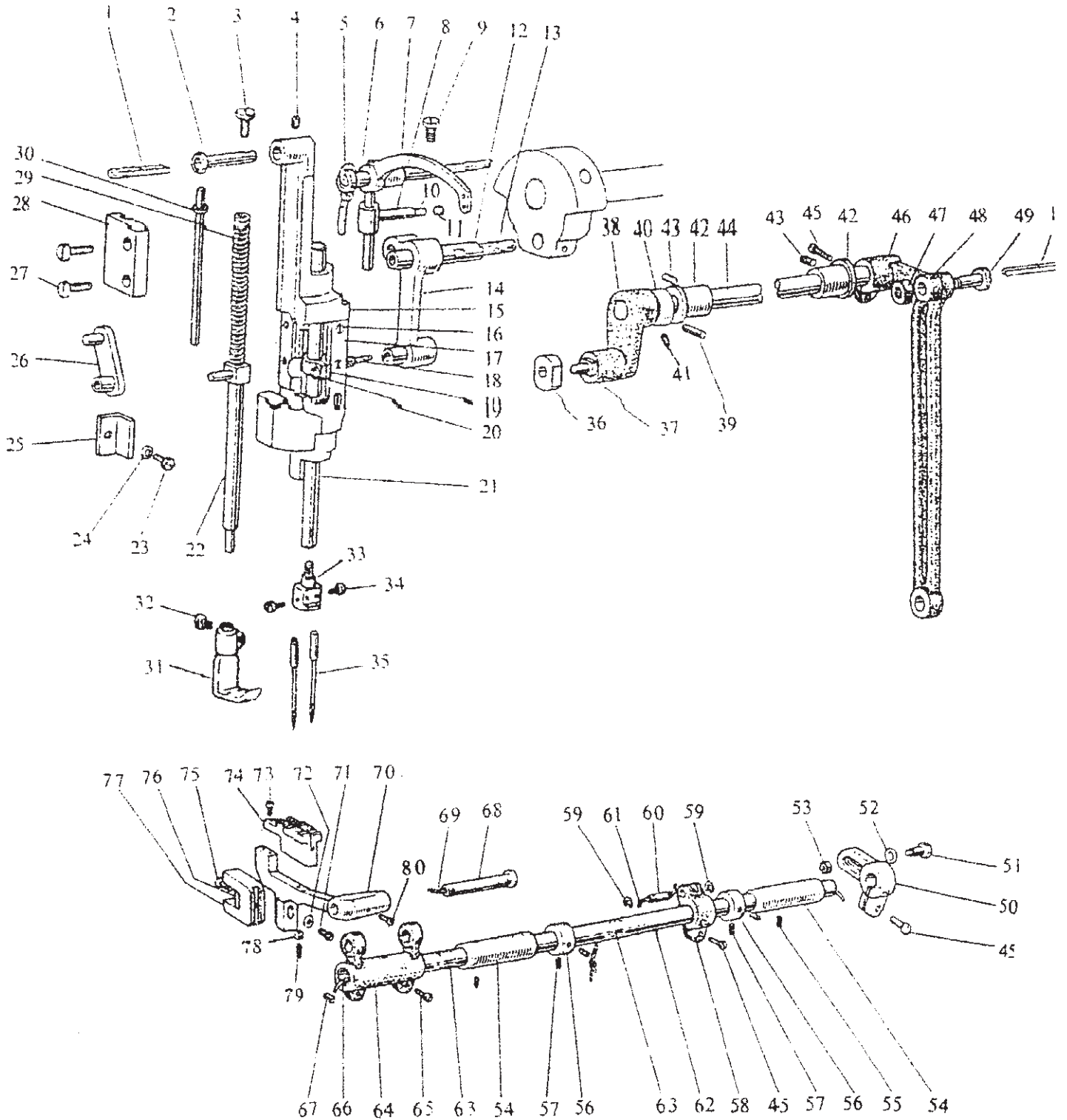


3. Upper Shaft And Presser Foot Parts

Item	Description	Pos
1.	Upper shaft	1
2.	Front bushing	1
3.	Screw	1
4.	Oil felt	1
5.	Needle crank	1
6.	Screw	1
7.	Screw	1
8.	Screw	3
9.	Screw	1
10.	Presser foot lift eccentric cam	1
11.	Stop ring	1
12.	Slot for front crank sliding block	1
13.	Stop ring	3
14.	Screw	3
15.	Set screw	1
16.	Ball bearing for upper shaft	1
17.	Rear bushing for upper shaft	1
18.	Screw	2
19.	Balance wheel	1
20.	Screw	2
21.	Teeth belt	1
22.	Springy plate	1
23.	Pin for eccentric shaft	1
24.	Spring	1
25.	Split stop ring	1
26.	Stop plate	1
27.	Nail	1
28.	Control plate	1
29.	Connection	1
30.	Bushing	1
31.	Set screw	1

Item	Description	Qty
32.	Screw	1
33.	Nut	1
34.	Connecting lever	1
35.	Connecting screw	1
36.	Washer	1
37.	Oil ring assembly	1
38.	Spring	1
39.	Presser foot lift rear crank	1
40.	Screw	3
41.	Presser foot lift front crank	1
42.	Screw	2
43.	Bushing	2
44.	Presser foot lift link	1
45.	Connecting screw	1
46.	Connecting screw	1
47.	Presser foot lift movable plate	1
48.	Shaft for needle bearing	1
49.	Needle bearing	1
50.	Washer	1
51.	Screw	2
52.	Timing wheel	2
53.	Timing wheel	1

4.



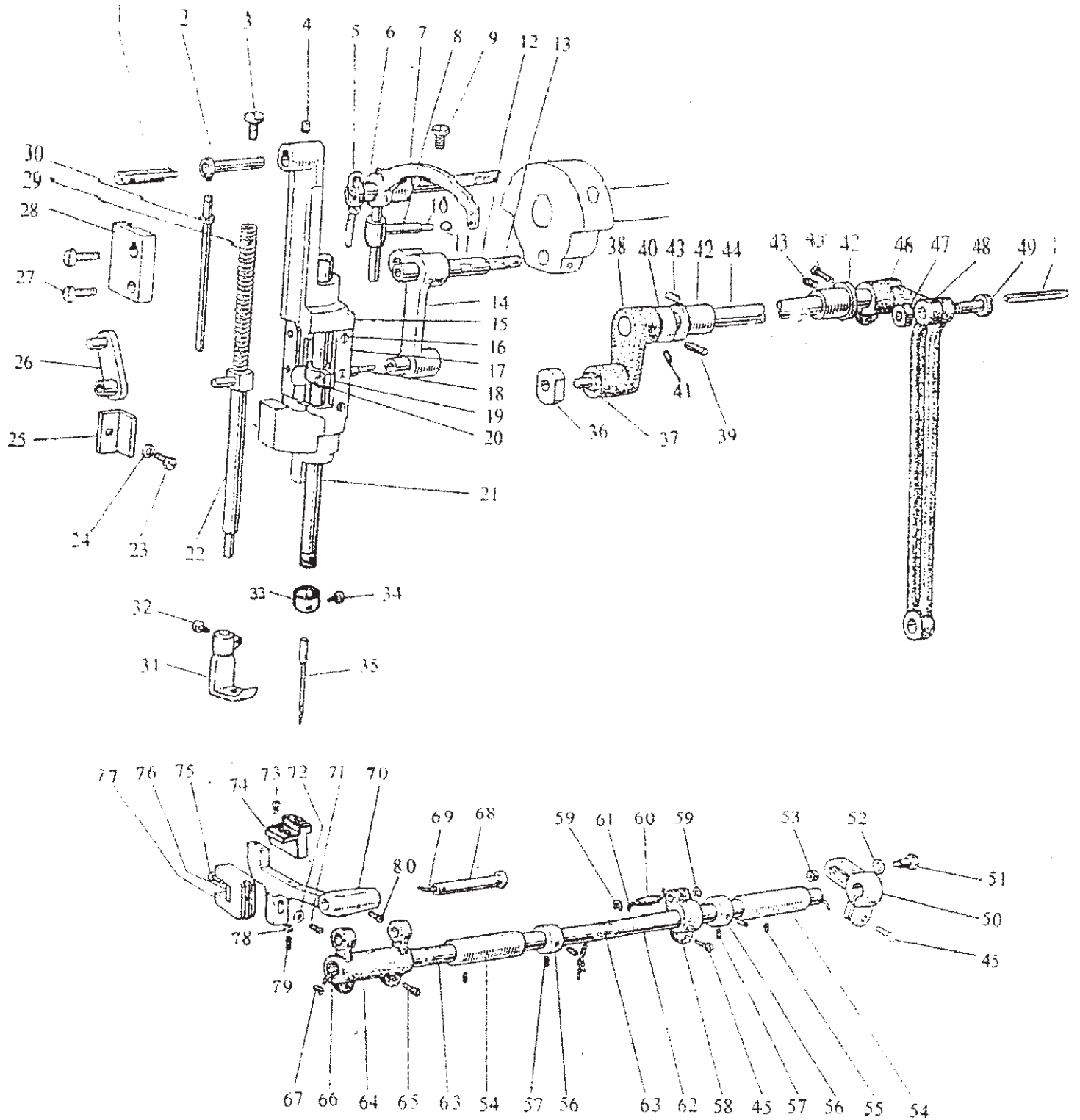
4. GC20606 Needle Bar And Lower Feed Parts

Item	Description	Pcs
1.	Oil wick	2
2.	Shaft for needle bar motion holder	1
3.	Screw	1
4.	Screw	1
5.	Oil wick	1
6.	Bushing for thread take - up lever hole	1
7.	Thread take - up lever	1
8.	Sliding block	1
9.	Screw	1
10.	Oil wick	1
11.	Plug	1
12.	Pin for needle bar crank	1
13.	Oil wick	1
14.	Needle bar link	1
15.	Needle bar motion holder	1
16.	Screw	6
17.	Shim for needle bar motion holder	2
18.	Oil felt	1
19.	Needle bar adaptor	1
20.	Screw	1
21.	Needle bar	1
22.	Presser bar	1
23.	Screw	1
24.	Washer	1
25.	Needle bar holder guide	1
26.	Presser bar link	1
27.	Screw	2
28.	Needle bar motion holddr guide	1
29.	Spring	1
30.	Reel for spring	1
31.	Alternate foot	1
32.	Screw	1
33.	Needle holder	1
34.	Screw	2
35.	Needle	2
36.	Sliding block for needle bar motion	1
37.	Shaft for sliding block	1
38.	Left crank	1
39.	Pin	1
40.	Washer	1
41.	Screw	2

4. GC20606 Needle Bar And Lower Feed Parts

Item	Description	Pcs
1.	Oil wick	2
2.	Shaft for needle bar motion holder	1
3.	Screw	1
4.	Screw	1
5.	Oil wick	1
6.	Bushing for thread take - up lever hole	1
7.	Thread take - up lever	1
8.	Sliding block	1
9.	Screw	1
10.	Oil wick	1
11.	Plug	1
12.	Pin for needle bar crank	1
13.	Oil wick	1
14.	Needle bar link	1
15.	Needle bar motion holder	1
16.	Screw	6
17.	Shim for needle bar motion holder	2
18.	Oil felt	1
19.	Needle bar adaptor	1
20.	Screw	1
21.	Needle bar	1
22.	Presser bar	1
23.	Screw	1
24.	Washer	1
25.	Needle bar holder guide	1
26.	Presser bar link	1
27.	Screw	2
28.	Needle bar motion holddr guide	1
29.	Spring	1
30.	Reel for spring	1
31.	Alternate foot	1
32.	Screw	1
33.	Needle holder	1
34.	Screw	2
35.	Needle	2
36.	Sliding block for needle bar motion	1
37.	Shaft for sliding block	1
38.	Left crank	1
39.	Pin	1
40.	Washer	1
41.	Screw	2

5.

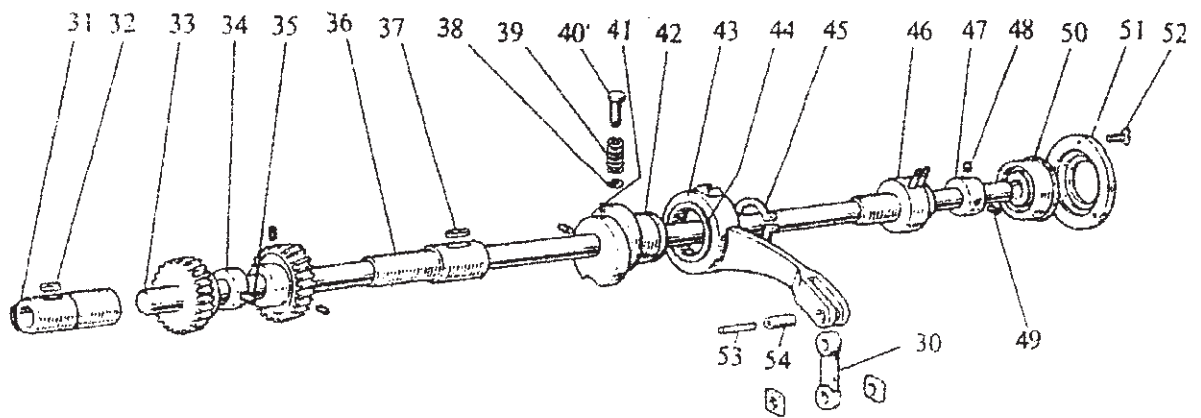
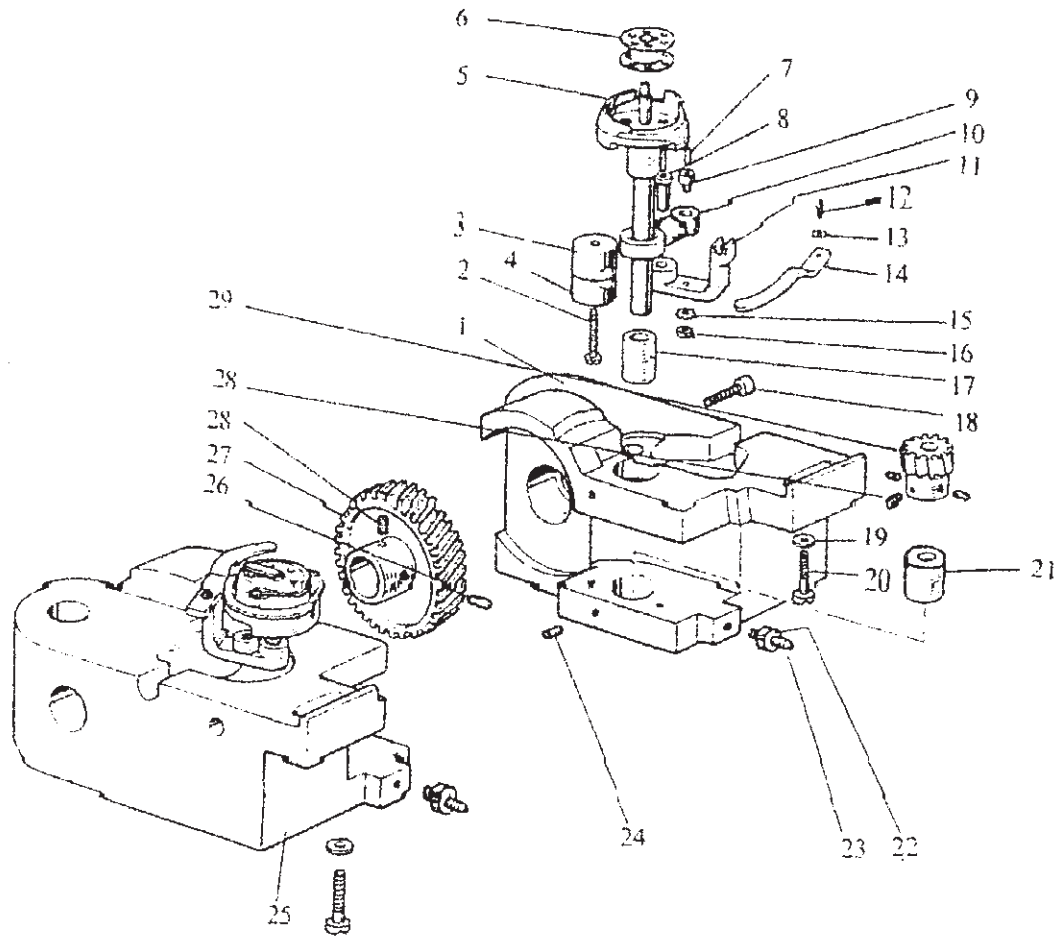


5. GC20606 – 1 Needle Bar And Lower Feed Parts

Item	Description	Pcs
1.	Oil wick	2
2.	Shaft for needle bar motion holder	1
3.	Screw	1
4.	Screw	1
5.	Oil wick	1
6.	Bushing for thread take – up lever hole	1
7.	Thread take – up lever	1
8.	Sliding block	1
9.	Screw	1
10.	Oil wick	1
11.	Plug	1
12.	Pin for needle bar crank	1
13.	Oil wick	1
14.	Needle bar link	1
15.	Needle bar motion holder	1
16.	Screw	6
17.	Shim for needle bar motion holder	2
18.	Oil felt	1
19.	Needle bar adaptor	1
20.	Screw	1
21.	Needle bar	1
22.	Presser bar	1
23.	Screw	1
24.	Washer	1
25.	Needle bar holder guide	1
26.	Presser bar link	1
27.	Screw	2
28.	Needle bar motion holddr guide	1
29.	Spring	1
30.	Reel for spring	1
31.	Alternate foot	1
32.	Screw	1
33.	Thread guide ring	1
34.	Screw	2
35.	Needle	2
36.	Sliding block for needle bar motion	1
37.	Shaft for sliding block	1
38.	Left crank	1
39.	Pin	1
40.	Washer	1
41.	Screw	2

Item	Description	Pcs
42.	Bushing for needle bar motion shaft	2
43.	Set screw	2
44.	Shaft for needle bar motion	1
45.	Screw	3
46.	Rear crank for needle bar motion	1
47.	Connecting nut	1
48.	Link for needle bar motion	1
49.	Connecting screw	1
50.	Right crank for feed shaft	1
51.	Pin for right crank	1
52.	Washer	1
53.	Nut	1
54.	Feed shaft bushing	2
55.	Set screw	2
56.	Collar for feed shaft	2
57.	Screw	4
58.	Feed crank	1
59.	Split stop ring	2
60.	Pin for feed crank	1
61.	Oil wick	1
62.	Feed shaft	1
63.	Oil felt	2
64.	Feed connecting crank (left)	1
65.	Tension screw	2
66.	Oil wick clump	1
67.	Oil wick	1
68.	Shaft for feed dog support crank	1
69.	Oil wick	1
70.	Feed dog support	1
71.	Connecting screw	1
72.	Washer	1
73.	Screw	2
74.	Feed dog	1
75.	Screw	1
76.	Oil felt for feed dog lift fork	1
77.	Feed dog lift fork	1
78.	Nut	1
79.	Feed dog adjusting screw	1
80.	Screw	1

6.

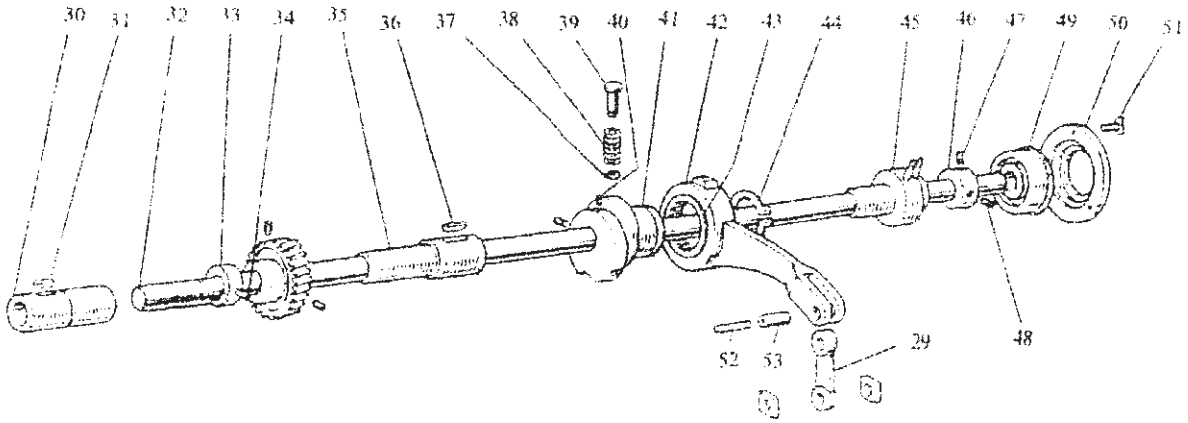
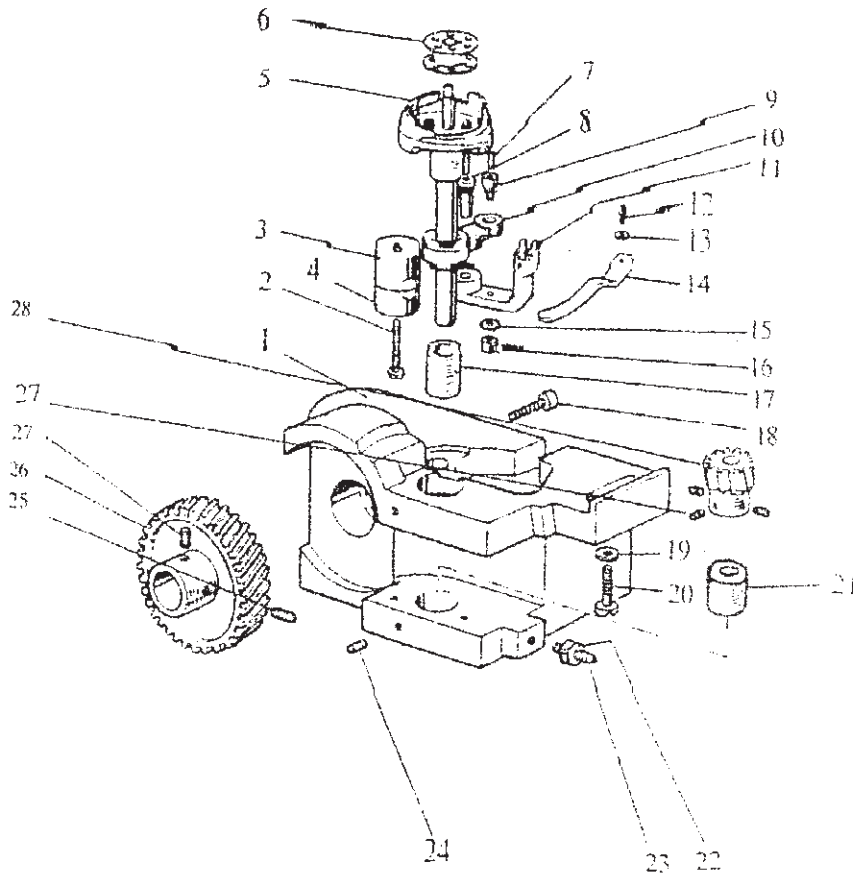


6. GC20606 Rock Shaft And Thread Looping Parts

Item	Description	Pcs
1.	Right hook saddle	1
2.	Screw	2
3.	Upper bushing of hook saddle	2
4.	Lower bushing of hook saddle	2
5.	Hook assembly	2
6.	Bobbin	2
7.	Oil wick	2
8.	Hinge shaft	2
9.	Screw	2
10.	Connecting lever	2
11.	Thread finger bracket	2
12.	Screw	2
13.	Washer	2
14.	Thread finger	2
15.	Springy washer	2
16.	Nut	2
17.	Bushing	2
18.	Set screw	2
19.	Washer	2
20.	Tension screw for hook saddle	2
21.	Bushing	2
22.	Adjusting nut	2
23.	Adjusting screw	2
24.	Screw	4
25.	Left hook saddle	1
26.	Screw	8
27.	Spiral gear	2
28.	Screw	2
29.	Spiral gear	1
30.	Feed link	1
31.	Left bushing for rock shaft	1

Item	Description	Pcs
32.	Oil wick	1
33.	Rock shaft	1
34.	Feed dog lift cam	1
35.	Set screw	1
36.	Right bushing for rock shaft	1
37.	Oil wick	1
38.	Split stop ring	1
39.	Spring	1
40.	Button	2
41.	Set screw	1
42.	Feed cam	1
43.	Feed link	1
44.	Needle bearing	1
45.	Springy stop ring	1
46.	Middle bushing assembly for rock shaft	1
47.	Rear bushing for rock shaft	1
48.	Screw	1
49.	Set screw	1
50.	Ball bearing for rock shaft	1
51.	Bearing press ring	3
52.	Set screw	1
53.	Oil wick	1
54.	Feed link pin	1

7.

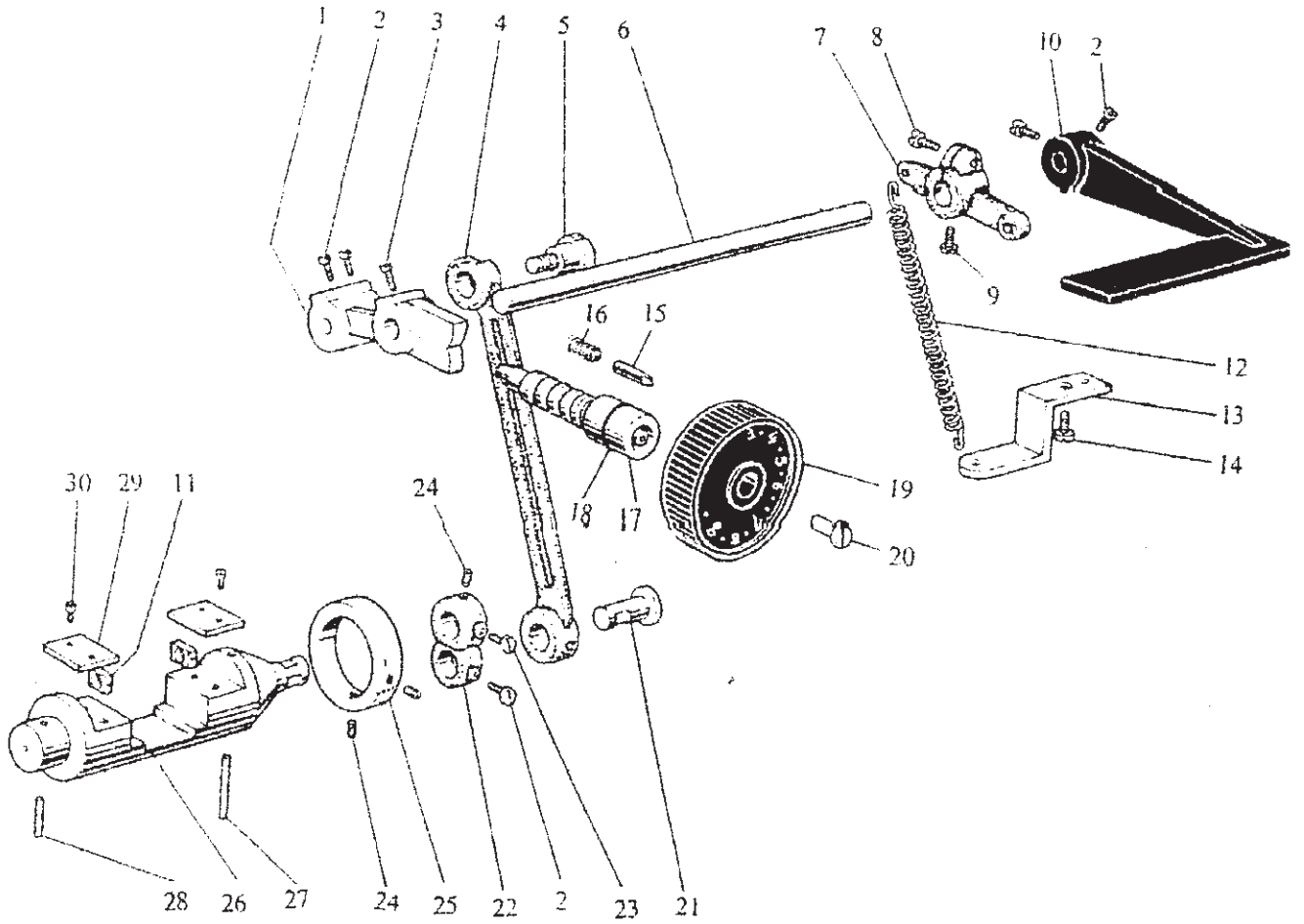


Item	Description	Pcs
32.	Rock shaft	1
33.	Feed dog lift cam	1
34.	Set screw	1
35.	Right bushing for rock shaft	1
36.	Oil wick	1
37.	Split stop ring	1
38.	Spring	1
39.	Button	1
40.	Set screw	2
41.	Feed cam	1
42.	Feed link	1
43.	Needle bearing	1
44.	Springy stop ring	1
45.	Middle bushing assembly for rock shaft	1
46.	Rear bushing for rock shaft	1
47.	Screw	1
48.	Set screw	1
49.	Ball bearing for rock shaft	1
50.	Bearing press ring	3
51.	Set screw	1
52.	Oil wick	1
53.	Feed link pin	1

7. GC20606 – 1 Rock Shaft And Thread Looping Parts

Item	Description	Pcs
1.	Right hook saddle	1
2.	Screw	1
3.	Upper bushing of hook saddle	1
4.	Lower bushing of hook saddle	1
5.	Hook assembly	1
6.	Bobbin	1
7.	Oil wick	1
8.	Hinge shaft	1
9.	Screw	1
10.	Connecting lever	1
11.	Thread finger bracket	1
12.	Screw	1
13.	Washer	1
14.	Thread finger	1
15.	Springy washer	1
16.	Nut	1
17.	Bushing	1
18.	Set screw	1
19.	Washer	1
20.	Tension screw for hook saddle	1
21.	Bushing	1
22.	Adjusting nut	1
23.	Adjusting screw	1
24.	Screw	2
25.	Screw	4
26.	Spiral gear	1
27.	Screw	1
28.	Spiral gear	1
29.	Feed link	1
30.	Left bushing for rock shaft	1
31.	Oil wick	1

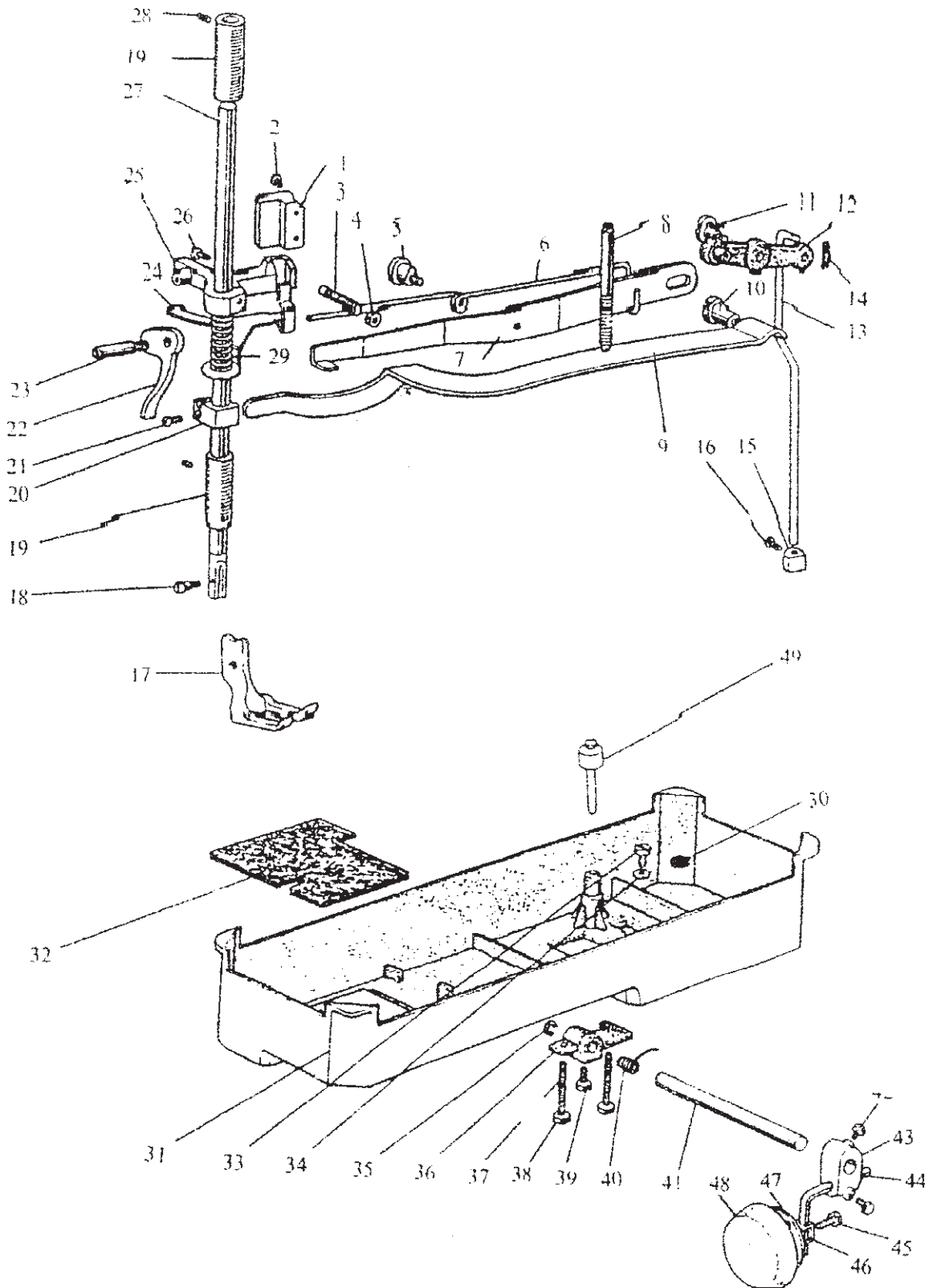
8.



8. Stitch Length Adjusting Parts

Item	Description	Pcs
1.	Stitch length adjusting swing lever	1
2.	Screw	5
3.	Set screw	1
4.	Stitch length link	1
5.	Stitch length link eccentric shaft	1
6.	Reverse sewing shaft	1
7.	Reverse sewing crank	1
8.	Tension screw	1
9.	Set screw	1
10.	Reverse sewing lever	1
11.	Sliding block	2
12.	Spring	1
13.	Spring holder	1
14.	Screw	1
15.	Stop pin	1
16.	Pin spring	1
17.	Stitch length adjusting bolt	1
18.	O - gasket	1
19.	Stitch length dial	1
20.	Screw	1
21.	Stitch length adjusting crank shaft	1
22.	Stitch length adjusting crank	1
23.	Tension screw	1
24.	Set screw	3
25.	Collar	1
26.	Reverse sewing adjusting stand	1
27.	Oil wick	1
28.	Oil wick	1
29.	Sliding block guide	2
30.	Tension screw	4

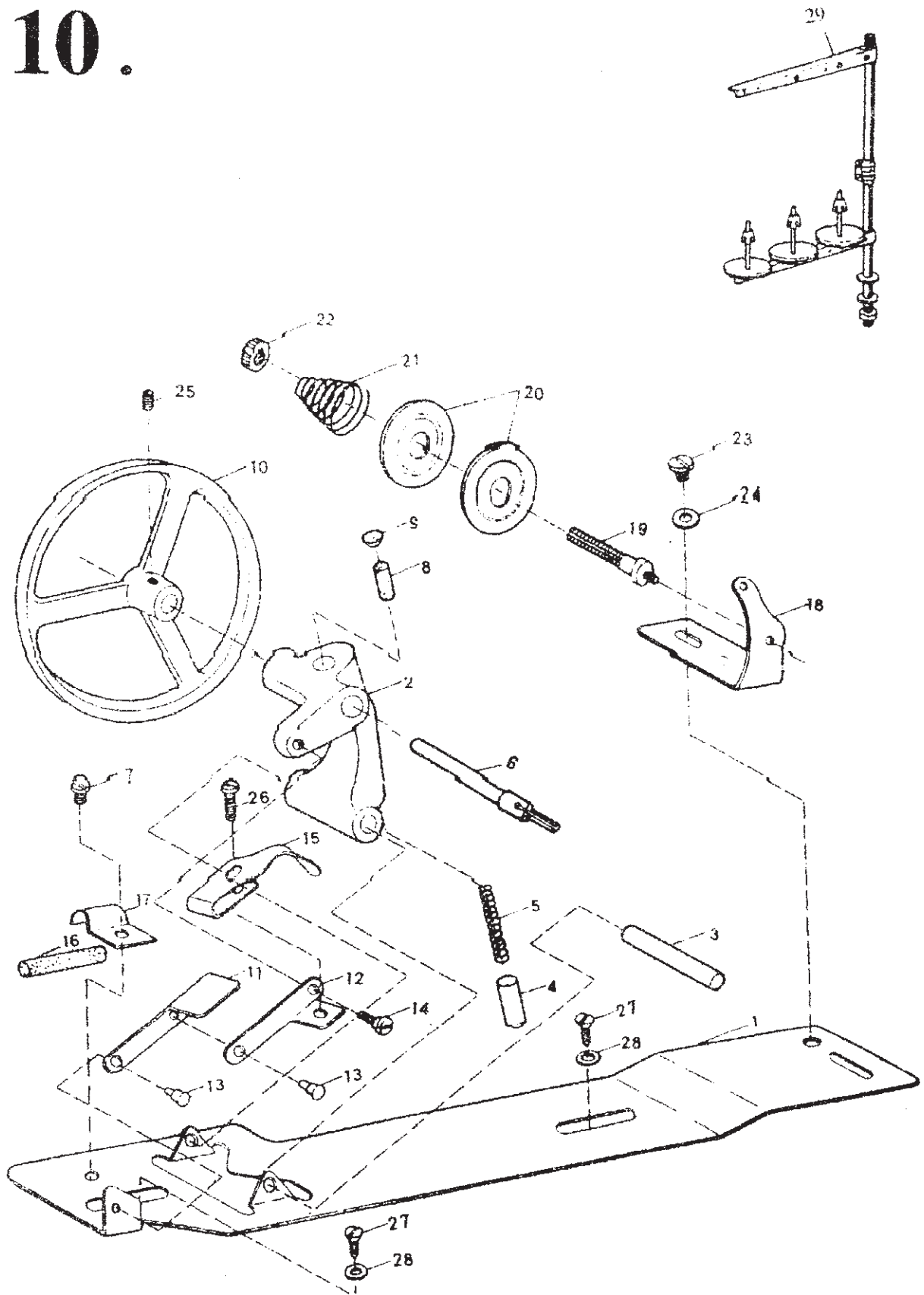
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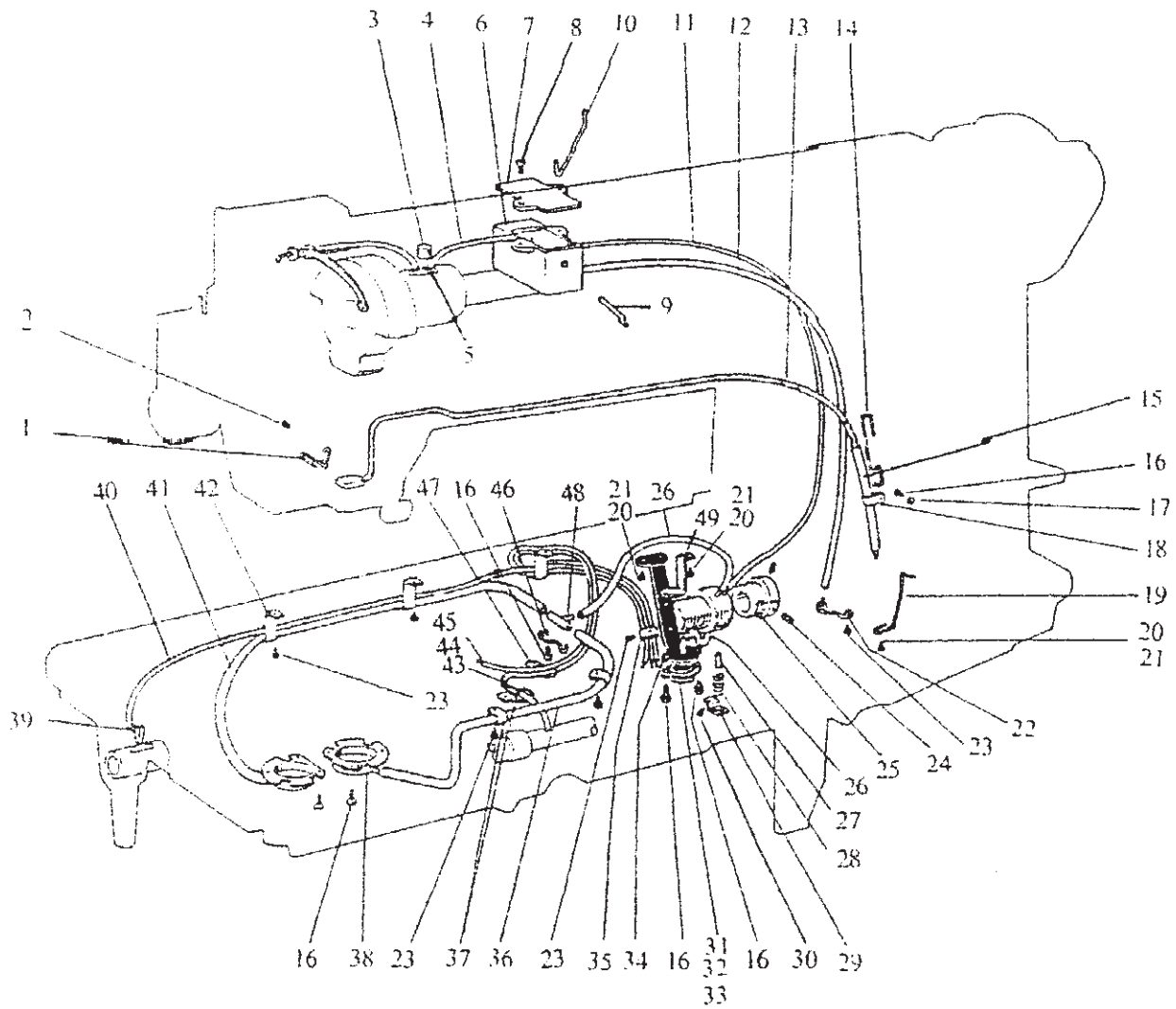
9. Presser Foot Lift Parts

Item	Description	Pcs
1.	Sliding block rail	1
2.	Screw	2
3.	Screw	1
4.	Nut	1
5.	Screw	1
6.	Spring	1
7.	Knee lift lever	1
8.	Pressure adjusting screw	1
9.	Presser bar springy lever	1
10.	Screw	1
11.	Screw	1
12.	Knee control crank assembly	1
13.	Knee lift prop rod	1
14.	Split pin	1
15.	Stop collar	1
16.	Screw	1
17.	Presser foot	1
18.	Set screw	1
19.	Bushing for presser bar shaft	2
20.	Springy lever holder	1
21.	Screw	1
22.	Presser foot lift lever	1
23.	Screw	1
24.	Thread releasing lever	1
25.	Presser bar guide	1
26.	Tension screw	1
27.	Presser bar	1
28.	Screw	2
29.	Spring	1
30.	Magnet	1
31.	Oil reservoir	1
32.	Oil gasket	1

10.



11.



11. GC20606 Lubrication Parts

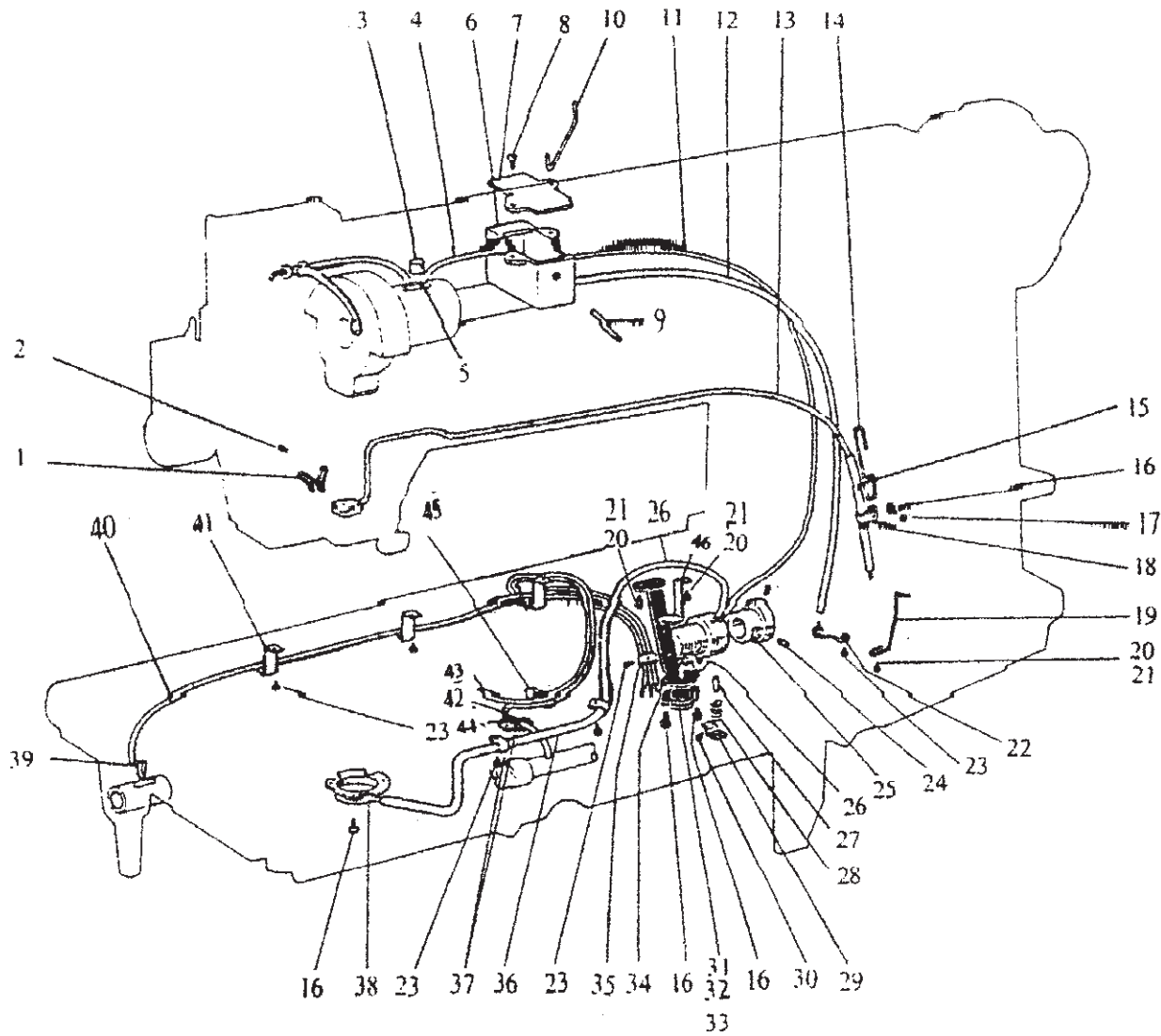
Item	Description	Pcs
1.	Oil felt press spring	1
2.	Screw	1
3.	Oil felt	1
4.	Oil pipe	1
5.	Oil wick	1
6.	Oil cup	1
7.	Oil cup cover	1
8.	Screw	2
9.	Springy pin	1
10.	Wick press spring	1
11.	Oil pipe	1
12.	Oil drain pipe	1
13.	Oil wick	1
14.	Oil pipe position finger	1
15.	Needle bar oil return pipe	1
16.	Screw	10
17.	Washer	1
18.	Oil pipe clamp	1
19.	Oil pipe set spring	1
20.	Screw	4
21.	Washer	4
22.	Oil pipe end clamp	1
23.	Screw	8
24.	Screw	2
25.	Bushing	1
26.	Oil pipe	2
27.	Plunger	1
28.	Spring	1
29.	Braket for spring	1
30.	Screw	1
31.	Oil filter	1

10. Thread Winder Parts

Item	Description	Pcs
1.	Thread winder base	1
2.	Thread winding bracket	1
3.	Thread winding bracket shaft	1
4.	Prop pin	1
5.	Spring	1
6.	Thread winding shaft	1
7.	Screw	1
8.	Oil wick	1
9.	Oil wick cover	1
10.	Thread winding pulley	1
11.	Thread winding swing lever	1
12.	Thread winding link	1
13.	Rivet	1
14.	Screw	1
15.	Thread stop latch	1
16.	Stop block	1
17.	Set bracket	1
18.	Thread guide	1
19.	Screw	1
20.	Thread tension disc	2
21.	Thread tension spring	1
22.	Nut	1
23.	Screw	1
24.	Washer	1
25.	SCREW	1
26.	Screw	1
27.	Wood screw	2
28.	Washer	2
29.	Thread spool stand	1 set

Item	Description	Pcs
32.	Washer	1
33.	Filter screen	1
34.	Oil filter bracket	1
35.	Oil pipe clamp	1
36.	Oil pipe	1
37.	Pipe clamp	3
38.	Oil tray assembly	2
39.	Oil wick	1
40.	Oil pipe	1
41.	Oil pipe	1
42.	Pipe clamp	3
43.	Oil pipe	2
44.	Oil wick	1
45.	Oil wick	1
46.	3 - nozzle oil mouth bracket	1
47.	Oil pipe clamp	1
48.	3 - nozzle oil mouth assmbly	1
49.	Oil filter bracket	1

12.



12. GC20606 – 1 Lubrication Parts

Item	Description	Pcs
1.	Oil felt press spring	1
2.	Screw	1
3.	Oil felt	1
4.	Oil pipe	1
5.	Oil wick	1
6.	Oil cup	1
7.	Oil cup cover	1
8.	Screw	2
9.	Springy pin	1
10.	Wick press spring	1
11.	Oil pipe	1
12.	Oil drain pipe	1
13.	Oil wick	1
14.	Oil pipe position finger	1
15.	Needle bar oil return pipe	1
16.	Screw	10
17.	Washer	1
18.	Oil pipe clamp	1
19.	Oil pipe set spring	1
20.	Screw	4
21.	Washer	4
22.	Oil pipe end clamp	1
23.	Screw	8
24.	Screw	2
25.	Bushing	1
26.	Oil pipe	2
27.	Plunger	1
28.	Spring	1
29.	Bracket for spring	1
30.	Screw	1
31.	Oil filter	1

Item	Description	Pes
32.	Washer	1
33.	Filter screen	1
34.	Oil filter bracket	1
35.	Oil pipe clamp	1
36.	Oil pipe	1
37.	Pipe clamp	3
38.	Oil tray assembly	2
39.	Oil wick	1
40.	Oil pipe	1
41.	Pipe clamp	3
42.	Oil pipe	2
43.	Oil wick	1
44.	Oil wick	1
45.	Oil pipe clamp	1
46.	Oil filter bracket	1