

ARTISAN®



797 AB-800

**Spare Parts Catalog
and Instruction Manual**

1. Safety precautions:

- 1) When turning the power on, keep your hands and fingers away from the area around/under the needle and the area around the pulley.
- 2) Power must be turned off when the machine is not in use, or when the operator leaves the seat.
- 3) Power must be turned off when tilting the machine head, installing or removing the "V" belt, adjusting the machine, or when replacing.
- 4) Avoid placing fingers, hairs, bars etc., near the pulley, "V" belt, bobbin winder pulley, or motor when the machine is in operation.
- 5) Do not insert fingers into the thread take-up cover, under/around the needle, or pulley when the machine is in operation.
- 6) If a belt cover, finger guard, eye guard are installed, do not operate the machine without these safety devices.

2. Precautions before starting operation:

- 1) Never operate the machine before filling the machine's oil pan
- 2) When a new sewing machine is first turned on, verify the rotational direction of the pulley with the power on.
- 3) Verify the voltage and phase (single or three) with those given on the machine nameplate.

3. Precautions for operating conditions:

- 1) Avoid using the machine at abnormally high temperatures (35°C or higher) or low temperatures (5°C or lower).
- 2) Avoid using the machine in dusty conditions.

4. Specifications:

Model		GC0388-D	GC0388
Specifications			
Material weight		Heavy	
Max. sewing speed		2,000 rpm	
Stitch length		0—8.0 mm	
Needle bar stroke		38.0 mm	
Thread take-up lever stroke		73.0 mm	
Alternating movement		2.0-5.0 mm	
Walking foot alternate operating system		Dial	
Feed dog height		1.0 mm	
Needle		DP×17 22#	
Presser foot stroke	By hand	6.0 mm	
	By knee	16.0 mm	
Hook		Fully rotating automatic lubrication (for thread trimmer), Large	Fully rotating automatic lubrication, Large
Lubrication system		Automatic	
Thread trimmer		○	×
Touch back		○	

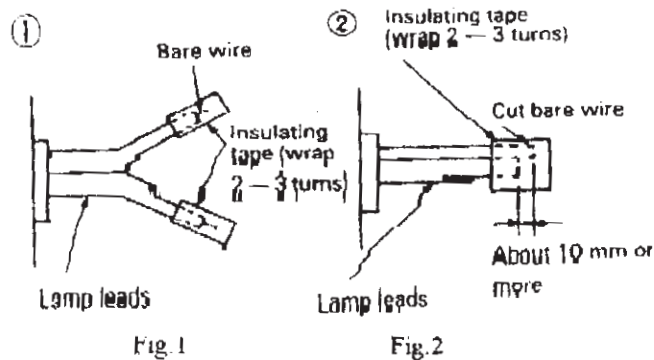
5. Power cable connection:

1) Connection to power supply:

Each connector(plug) should be completely set in the corresponding receptacle of the control box after checking the connector shape and mating direction.

(1) When a three-phase motor is used, connect "U" phase to the red lead, "V" phase to the white lead, "W" phase to the black lead. Motor rotation

direction depends on the internal switch setting in the control box.



Note: The green wire must be connected to the ground terminal in order to properly ground the motor.

(2) The appropriate power fuse capacity is as follows:

Three-phase power source: 200-240V : 10A

Single-phase power source: 100-120V : 15A

2) Lamp leads

(1) When installing a work lamp (6V, 15-20W), remove the insulation from the leads at the back of the control box, strip the wire and connect them appropriately insulating the connections using insulating tape.

Note: The power switch must be turned off before connecting the lamp.

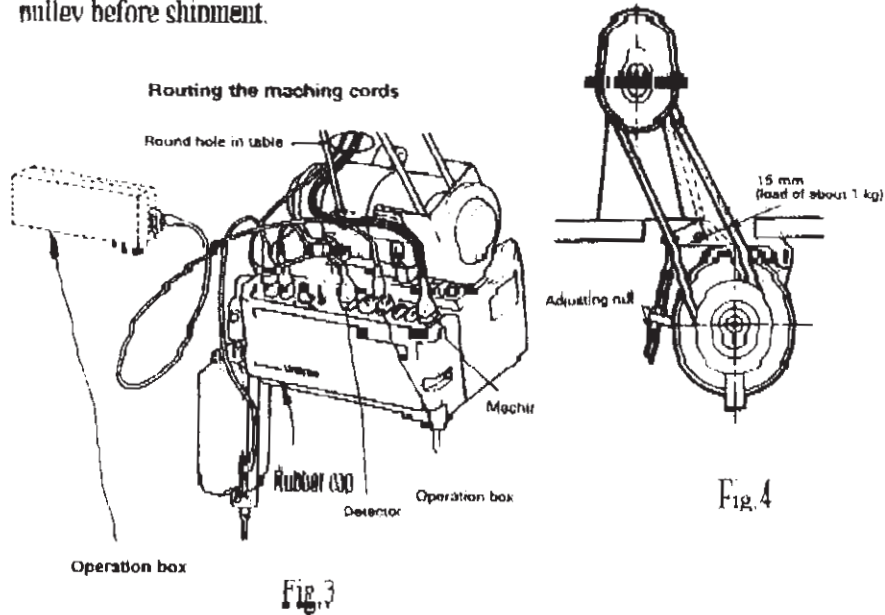
(2) When a work lamp is not used, the lamp lead ends must be insulated as shown in Fig.(1) or Fig.(2) so that the two leads do not shortcircuit. If this is not done, the transformer in the control box will be burned.

Note: The work lamp must not be connected in parallel to any heater, such as a foot warmer.

3) Direction of rotation

To change motor rotation direction, remove the rubber cap (see Fig. 3) at the bottom left of the motor front cover and push the internal direction selector switch.

Rotation direction has been set to counterclockwise as seen from the motor pulley before shipment.



6. Connection of control box (Fig.3):

The control box should be connected as shown Fig.3.

Note: (1) Be sure to turn the power switch off before connecting or disconnecting the connectors.

(2) The combination of the machine heads with the motor control panels are specified below. Use special care to ensure the correct combination when replacing the machine head or motor control panel.

Machine head model	Control box model
GC0388-D	XC-AM-A1020
	XC-AM-B2020

7. Installing the belt (Fig.4):

- 1) Use a V-belt for sewing machine use, type M.
- 2) To adjust the belt tension, change the motor height by turning the tension adjust nuts so that the belt sinks about 15mm when depressed by hand at the center of the belt span.

If the tension is too low, the speed may not be consistent in the low or

medium range, or the needle may not stop in the proper position. If the tension is too high, the motor bearings will deteriorate more rapidly.

8. Adjustment of needle bar stop position(Fig5, Fig6, Fig7):

1) Adjustment of "UP" position

When the pedal is kicked down by heel to cut the thread, the machine stops in the "UP" position. If the marks deviate more than 3mm, adjust as follows:

- (1) Disconnect the plug (12 pins) from the control panel;
- (2) Run the machine and stop in the "UP" position;
- (3) While holding the pulley, insert the adjusting tool into the two holes marked "A", then rotate the pulley.

2) Adjustment of "DOWN" position

When the pedal is returned to the neutral position, the machine stops in the "DOWN" position. If the marks deviate more than 3mm, adjust as follows:

- (1) Disconnect the plug (12 pins) from the control panel;
- (2) Run the machine and stop in the "DOWN" position;
- (3) While holding the pulley, insert the adjusting tool into the two holes marked "B", then rotate the pulley.

3) Confirm the stop operation then the plug (12 pins) coming from the machine head into the receptacle.

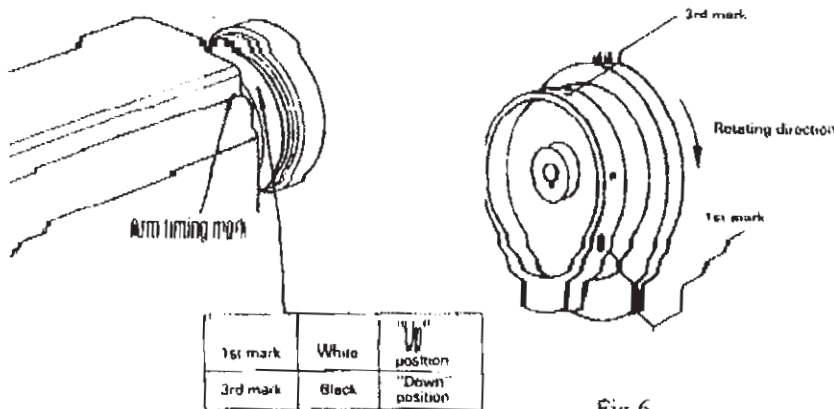


Fig.5

Fig.6

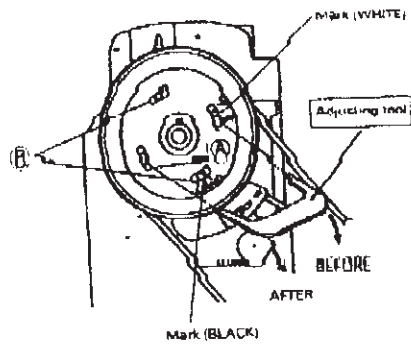


Fig. 7

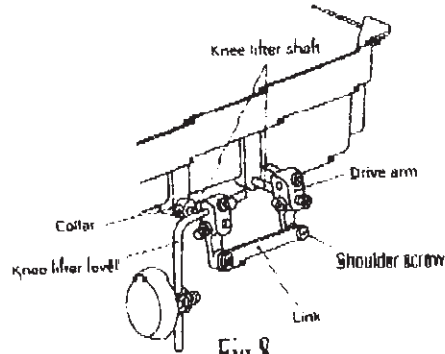


Fig. 8

9. Installing the knee lifter (Fig.8) :

- 1) Pull out the knee lifter shafts (on the right and left) as far as possible, and properly set them.
- 2) Install the drive arm on each shaft.
- 3) Set a link between the right and left drive arms to connect them.
- 4) Install the knee lifter lever on the left drive arm.

10. Lubrication (Fig.9):

Pour oil up to position "A" of the oil tank.

During operation, check the oil level periodically, and in cases where the oil level is below position "B", replenish the oil supply up to position "A".

Use white spindle oil.

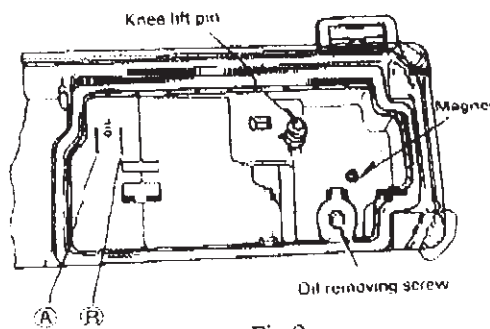


Fig.9

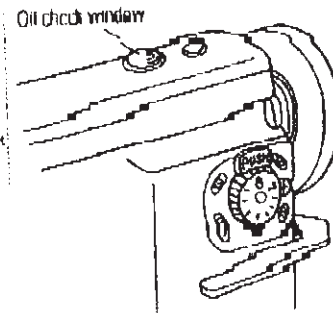


Fig.10

11. Condition of oil lubrication (Fig.10):

While operating the machine, check the condition of oil lubrication through the oil check window.

12、 Adjustment of the hook lubrication (Fig.11):

Adjustment can be done by turning screw "A".

(1) When the screw has been fully tightened Maximum

(2) When the screw has been fully loosened Maximum

Note: After adjustment of this screw, the machine should be operated for at least 30 seconds, then check the oil mist from the hook.

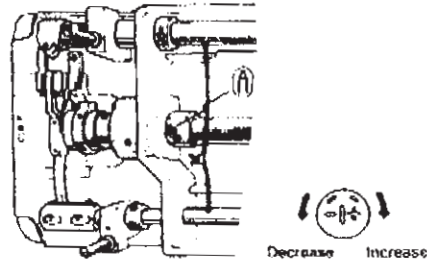


Fig.11

13、 Adjustment of oil pump (图 12)

The standard adjustment is as follows:

The adjusting plate keeps the bypass hole fully closed. To decrease splashing, open the bypass hole appropriately.

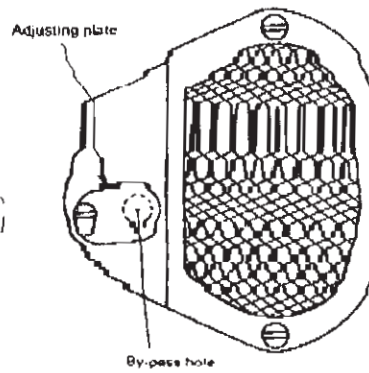


Fig.12

14、 Periodical cleaning (Fig.13, Fig.14, Fig.15):

Clean the feed dog, hook and oil pump periodically.

Maintenance of motor: Remove dust from the motor filter every one or two months.

Control box: Remove dust from the connector.

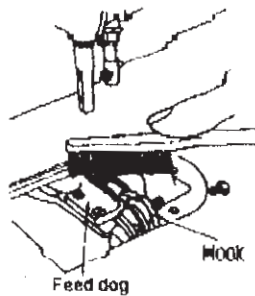


Fig.13

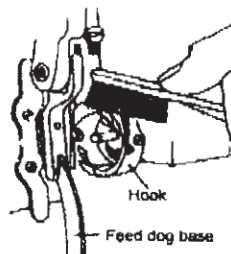


Fig.14

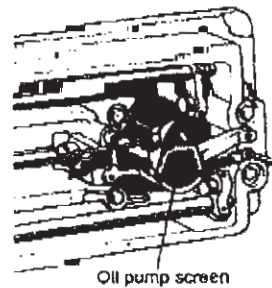


Fig.15

15. Handling instructions (Motor and control box) (Fig.16):

- 1) Keep your feet away from the pedal when turning the power on or off
- 2) Always turn the power off when leaving your seat.
- 3) The brakes may fail if the power is switched off or power failure occurs during operation of the sewing machine.

4) The control box cover must be kept closed during machine operation to prevent malfunction caused by the entry of dirt.

5) The control circuitry must not be checked with a multimeter to protect the semiconductor parts from voltage.

6) The power switch must be turned off before tilting the machine head or touching the needle.

7) The three-phase motor must be grounded using ground wire (GREEN). The single-phase motor must not be wired to a starburst connection.

8) When manipulating the switch in the control box, first turn off the power switch, then open the front cover (Fig.16). If you have to open the bottom cover, wait for 10 minutes after the power switch has been turned off, since a high voltage is applied inside the box. (This is vital to discharge the built-in capacitors).

9) Use the motor away from high noise sources such as high-frequency welders.

10) A suitable capacity is 15A for a single-phase, and 10A for three-phase motor respectively.

11) The detector uses an optical detecting element. Do not allow dirt, dust, oil etc., to attach to the detecting plate when the machine pulley has been removed for adjustment. If dirty, gently wipe it off while avoiding scratching the plate. Also, care should be taken to avoid oil soaking into the crevices in the plate.

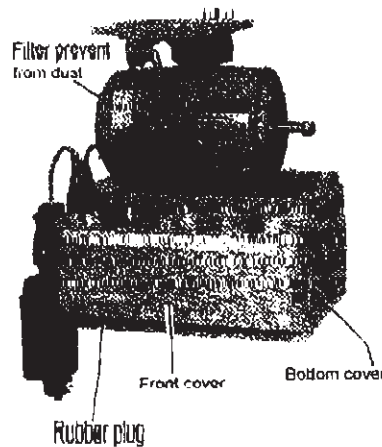


Fig.16

16. Installation of belt cover:

Be sure to install the belt cover for safety.

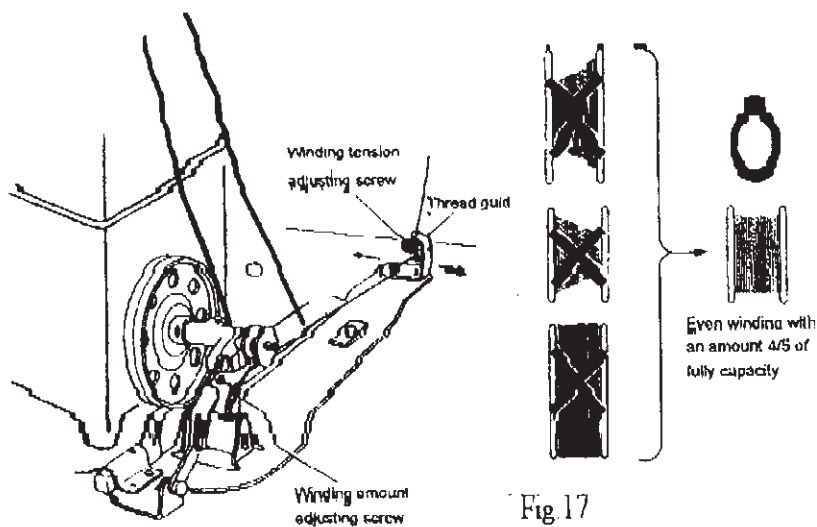
17. How to wind the lower thread (Fig.17):

Strength of winding: Particularly in the case of nylon or polyester thread,

wind the bobbin loosely.

Uneven winding: If the bobbin is wound unevenly, slide the thread guide toward the less wound portion of bobbin.

Winding amount: When the bobbin is wound excessively, loosen the adjusting screw. When the bobbin is wound insufficiently, tighten the adjusting screw.

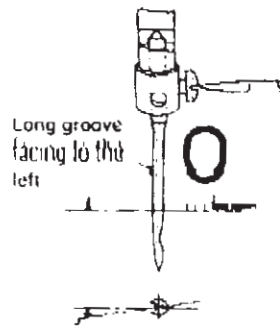


18. How to attach a needle (Fig.18):

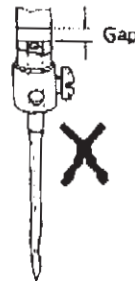
Note: Before attach the needle, be sure to turn the power switch off.

Note: If thread snapping occurs during reverse sewing with polyester, it may be avoided by fitting the needle with the long groove shifted to the front side. Normally, avoid fitting the needle with the groove facing backward.

Insert the needle until it bottoms, and tighten the screw keeping the long groove in the needle facing to the left.



Insufficient insertion



Wrong direction



Fig.18

19. How to route the upper thread (Fig.19):

Raise the thread take-up lever to its highest possible position, and route the upper thread in the order illustrated below.

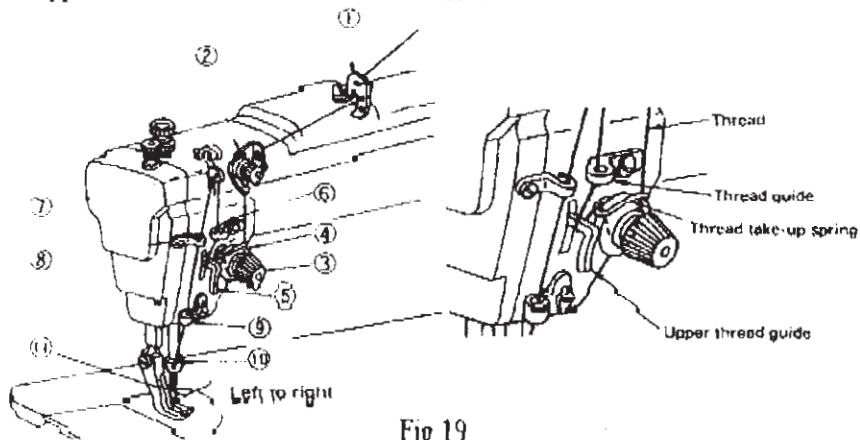


Fig.19

20. Adjustment of stitch length and reverse sewing (Fig.20):

1) To change the stitch length, rotate the stitch length adjusting dial while pressing the "push" lever.

2) Pressing the stitch length adjusting lever for reverse stitching.

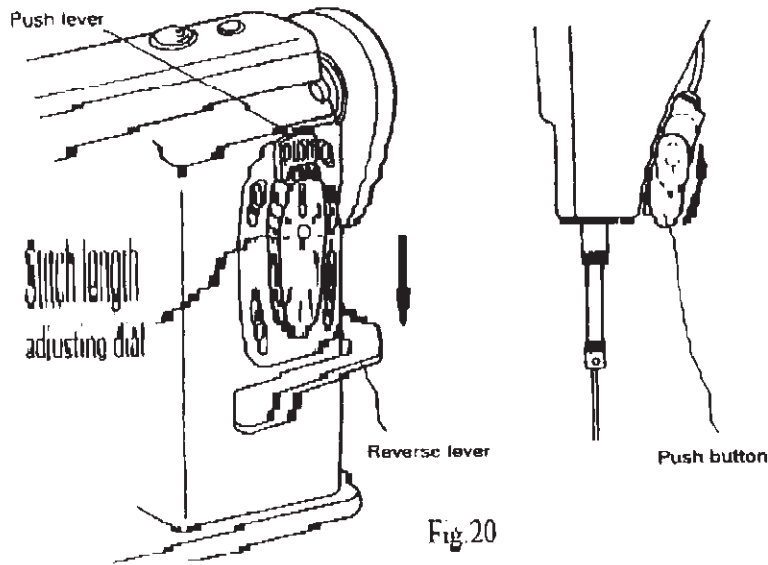


Fig.20

21. Adjusting the thread tension (Fig.21):

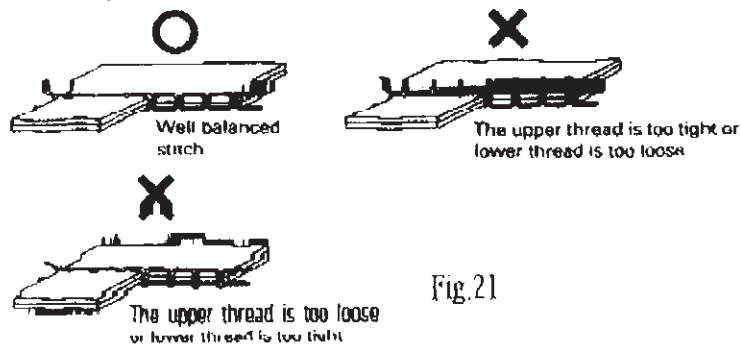


Fig.21

22. Upper thread tension (Fig.22):

- 1) The upper thread can be adjusted based on the lower thread tension.
- 2) Adjustment can be done by rotating the thread tension nut.

For special fabric sewing with special thread, the desired tension can be obtained by adjusting the strength and operating range of thread take-up spring.

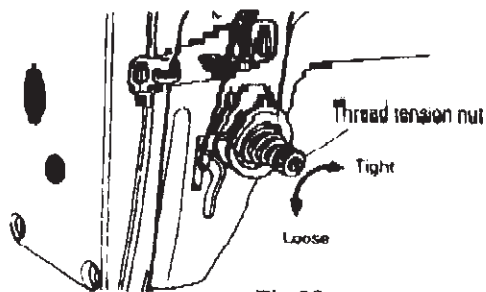


Fig.22

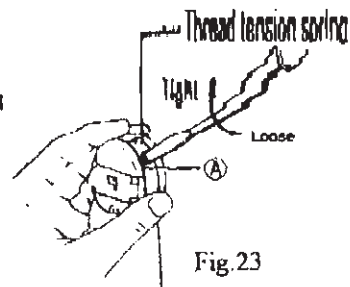


Fig.23

23. Lower thread tension (Fig.23):

Lower thread tension can be adjusted by rotating screw "A".

24. Adjustment of presser pressure (Fig.24):

- 1) Pressure should be adjusted according to the material to be sewn.
- 2) Pressure on both the walking foot and the presser foot can be adjusted.
- 3) Sewing pressure should be adjusted to the minimum required strength.

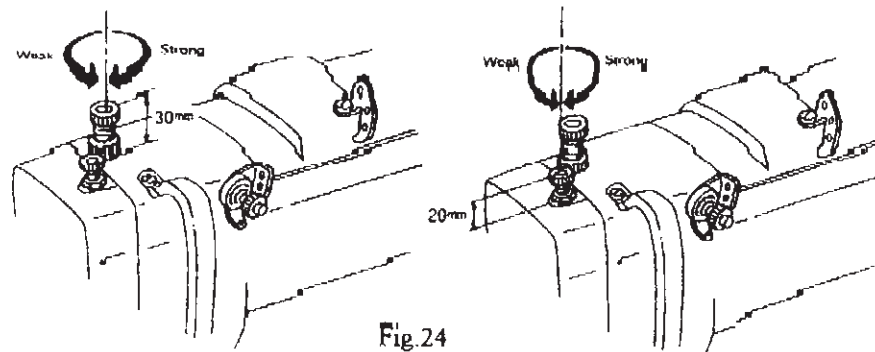


Fig.24

25. Feed dog height (Fig.25):

- 1) Feed dog should be 1.0mm higher than the throat plate
- 2) To adjust the dog height as follows:
 - (1) Loosen the screw "A", move the feed bar upward and downward.
 - (2) When adjustment is completed, tighten the screw "A".

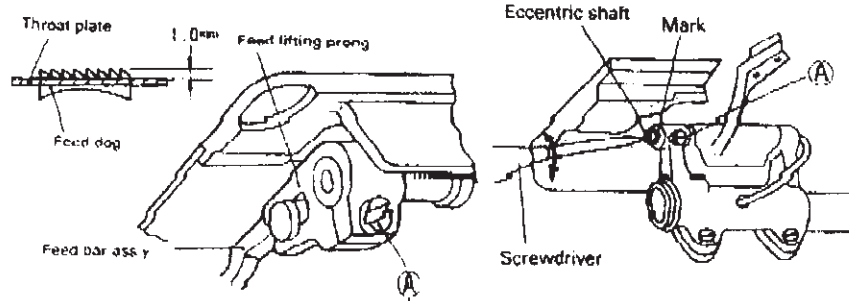








Fig.25

Fig.26

26. Adjustment of feed dog inclination (Fig.26):

If necessary, adjust the inclination according to the material to be sewn as follows:

Position of mark on the eccentric shaft	Feed dog
 Horizontal	 Standard
 Up	 Front up (MAX.)
 Down	 Front down (MAX.)

1) Loosen the screw "A".

2) Rotate the eccentric shaft clockwise or counterclockwise with screw driver.

3) Tighten the screw "A".

27. Adjustment of stitch length and forward/backward sewing (Fig.27):

1) Loosen the set screws located in the bracket.

2) Rotate the stitch length adjusting pin

until the desired length is reached as follows:

(1) Clockwise: Increases the stitch length in forward sewing, and decreases the stitch length in backward sewing.

(2) Counterclockwise: Decreases the stitch length in forward sewing, and increases the stitch length in backward sewing.

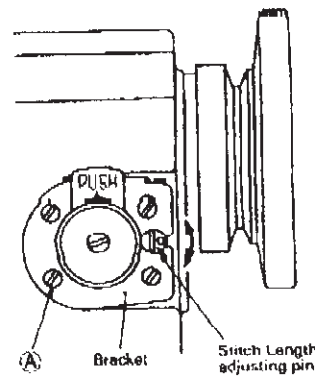


Fig.27

28. Presser bar lifter (Fig.28):

Rotate the presser bar lifter in the direction of the arrow. This raises the presser foot

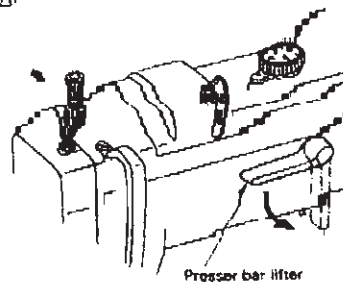


Fig.28

29、 Adjustment of walking foot and presser foot:

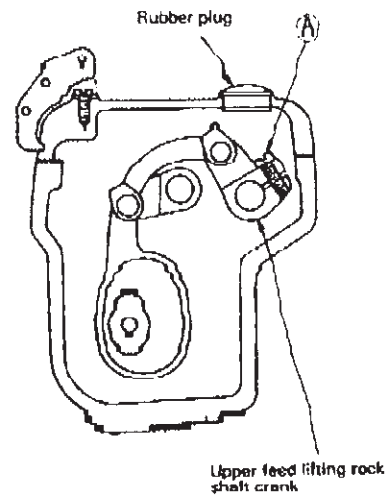
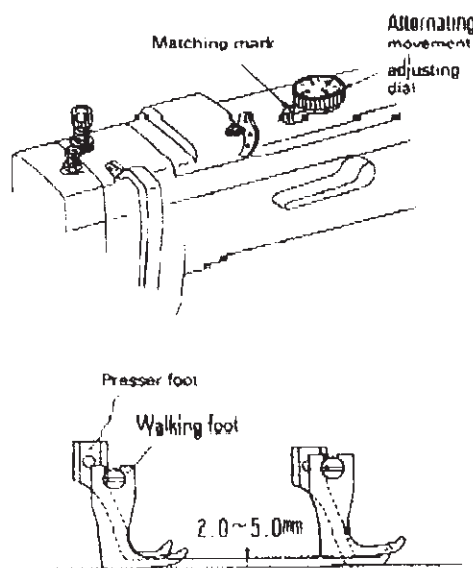
1) Adjustment of alternating movement (Fig.29).

(1) The alternating movement on the walking foot and presser foot can be adjusted by using adjusting dial located on the top cover.

(2) Face the desired number printed on the dial to the matching mark located on the top cover. The number printed on the dial represents the possible protrusion of the walking foot and presser foot from the throat plate when the alternating movements on these are evenly set.

(3) The alternating movements can be readjusted up to 2.0-5.0mm.

2) To change the balance of the alternating movements between the walking foot and presser foot (Fig.30):



(1) To increase the rise of the walking foot and decrease the rise of the presser foot:

- ① Remove the rubber plug of top cover.
- ② Rotate the pulley until the presser foot is slightly raised from the throat plate.

- ③ Loosen screw "A" (on the right side)
- ④ The built-in spring pulls down the presser foot until it makes contact with the throat plate. Tighten the screw "A".
- ⑤ After this adjustment, the protrusion of the presser foot has been decreased by a set distance. And the vertical motion of the walking foot has been increased by the same distance.

(2) As a contrary case (1) , to decrease the rise of the walking foot and increase the rise of pressor foot as follows:

Fist, rotate the pulley until the walking foot is slightly raised from the throat plate. Next, loosen screw "A". Finally, tighten screw "A". This decreases the rise of the walking foot.

3) Installing the feed regulator bracket (Fig.31):

Note: If the feed regulator bracket is poorly positioned, the resultant alternating movements may be too short or long, causing defective machine operation.

(1) Set the clearance between special screw "A" located on the regulator stud and the side wall of the machine arm to 26.5mm as Fig.31.

(2) With the feed regulator stud held as explained is step (1) above, adjust the feed regulator bracket. This adjustment should insure a clearance of 12mm between the periphery of pin "B" located on the feed regulator bracket and the top cover mounting face located on the arm. Tighten screw "C".

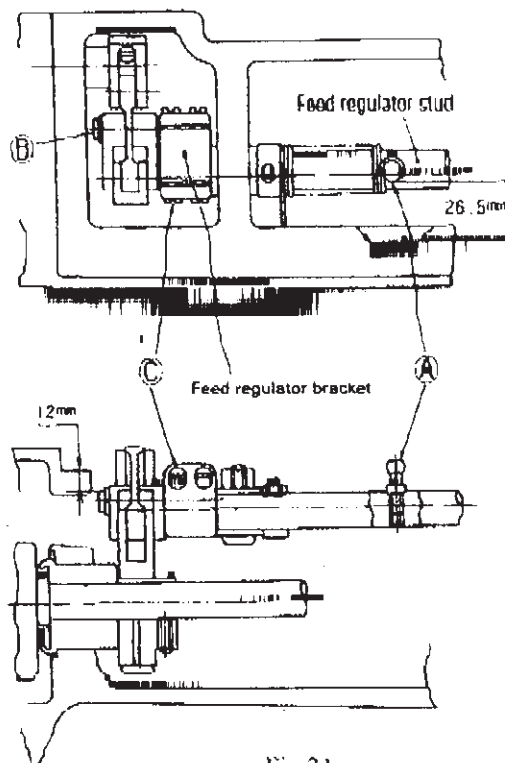


Fig.31

4) Feed pitch adjustment of walking foot (Fig.32):

The ratio of the upper feed amount (of the walking foot) to the lower feed amount (of the feed dog) has been adjusted to 1:1. However, the walking foot feeding amount can be increased or decreased depending on the operating conditions.

Loosen the nut located on the upper feed rock shaft crank (left), and shift to adjust the position of the pivot bracket upward or downward.

Upper position → Feed pitch → Small

Lower position → Feed pitch → Large

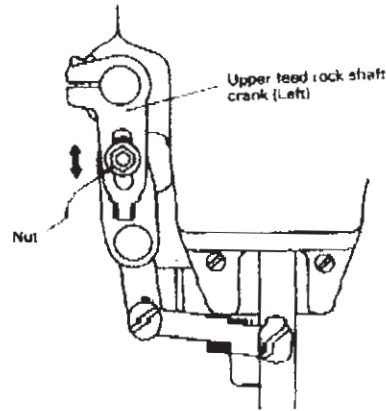


Fig.32

30. Adjustment of feed timing (Fig.33):

1) The standard position of the eccentric feed cam and eccentric feed lifting cam are illustrated to Fig.33

2) Open the top cover, properly slide the eccentric ring to adjust the position.

3) The eccentric feed cam can also be adjusted by removing the rubber plug located on the top cover. In the latter case, however, the built-in bevel gear is concealed, care should be taken when adjusting.

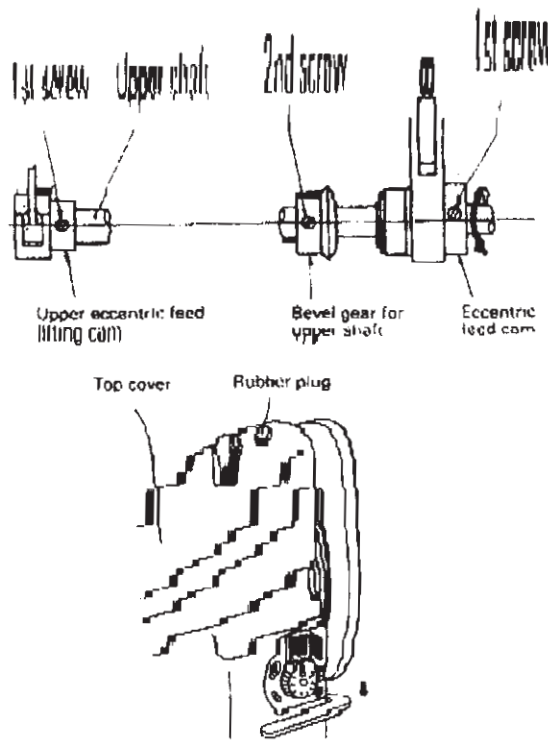


Fig.33

31. Adjustment of thread trimmer mechanism:

1) The thread trimmer mechanism illustrated as Fig.34.

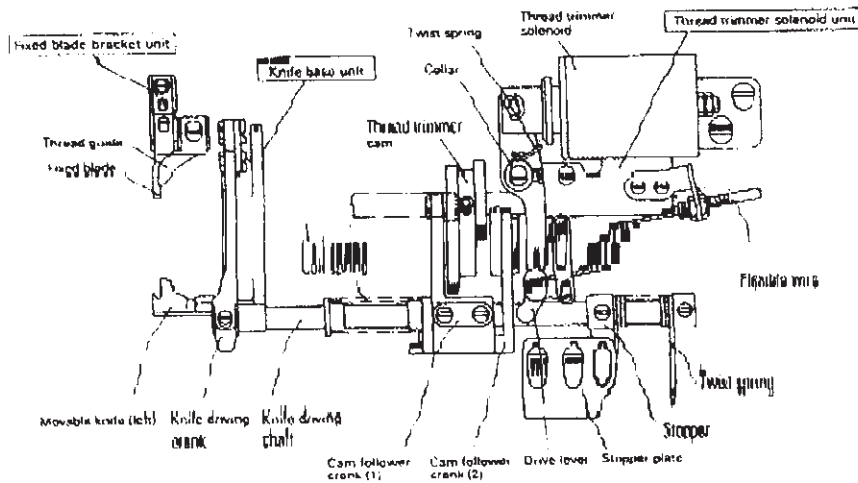


Fig.34

2) Relation between the fixed blade and movable knife (left) edge:

(1) The standard position is illustrated as Fig.35.

(2) The distance between the fixed blade and movable knife is 0.3mm.

(3) The correct position of fixed blade bracket or fixed blade can be adjusted according to Fig.35.

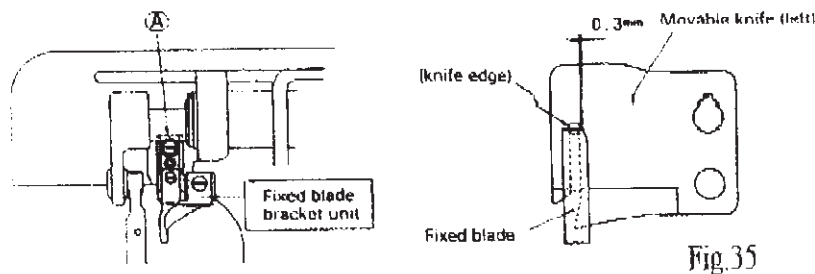


Fig.35

3) Knife driving shaft:

(1) The standard position is illustrated as Fig.36.

(2) When assembling, the knife driving shaft must first be put through the drive arm.

(3) Cam follower crank 1 must be positioned as illustrated to the right,

and secured on the recess located on the knife driving shaft.

(4) The stopper must be secured on the recess in such a way that the knife driving shaft is snug and smoothly rotates in the shaft direction.

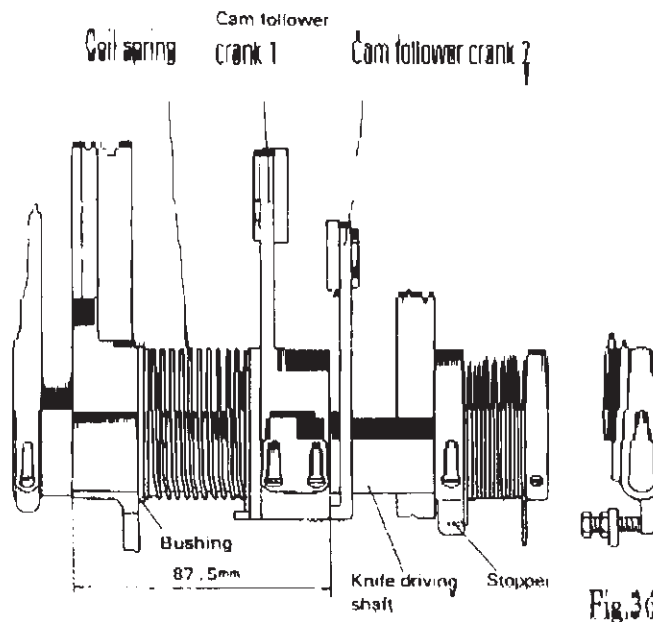


Fig.36

4) Installing the thread trimmer solenoid unit (Fig.37):

(1) Operation stroke of the thread trimmer solenoid:

- a. Standard operation stroke is 6.0mm.
- b. This stroke can be adjusted by using nut "A".

(2) Installing the unit:

- a. The unit can be mounted by using screws "B" and "C".
- b. Clearance of 1.0mm must be insured between the driving lever and cam follower crank 2 with stopper nut "A" made contact with solenoid.
- c. In such a situation, activating the solenoid should create a clearance of 0.5mm between cam follower crank 1 and 2. This situation is standard. To meet this standard, slide the solenoid mounting bracket in the direction of the arrow as illustrated, if adjustment is needed.

5) Installing the thread trimming cam (Fig.38):

(1) Face the 2nd timing mark "A" (GREEN) located on the pulley to the matching mark on the arm.

(2) With the thread trimmer solenoid activated, rotate the thread trimmer cam forward until the cam makes contact with the roller. Then, secure the cam.

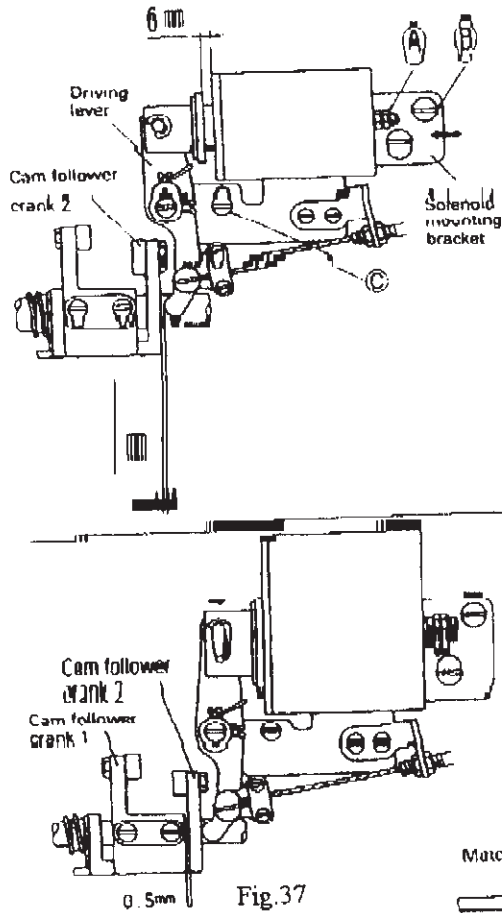


Fig. 37

(3) With the thread trimmer solenoid deactivated, allow the cam follower crank 2 to return to its original position. This should create a clearance of 0.5mm-1.0mm between the cam and roller end. This distance is standard.

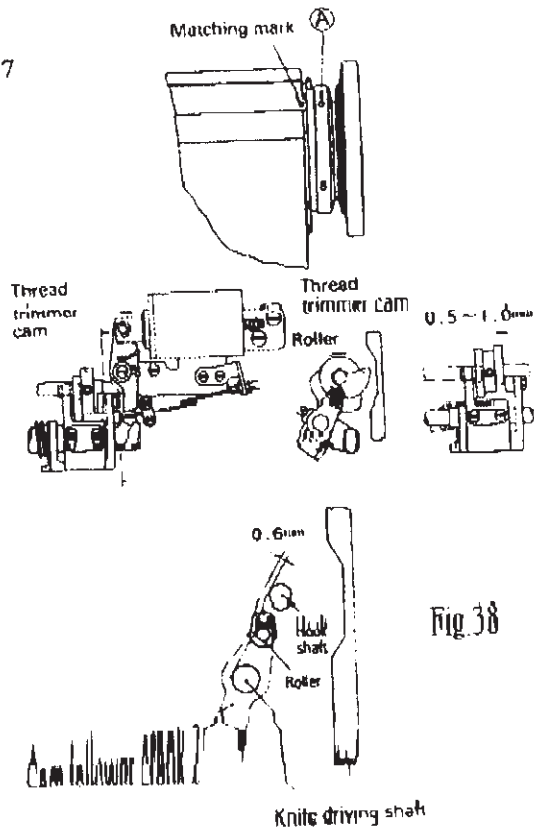


Fig. 38

6) Adjustment of knife engagement (Fig.39):

(1) Position of movable knife (left) and fixed blade:

See the Fig.39, the standard distances from the needle center are 7.5mm and 5mm from the movable knife (left) and fixed blade respectively.

(2) Adjustment of knife engagement:

With the solenoid activated, turn on the machine. This rotates the thread trimming cam which rotates the movable knife (left). When the movable knife (left) has moved to its farthest distance, the standard engagement of the blade is 1.5mm-2.0mm

The engagement can be adjusted by properly mounting the drive arm.

(3) Adjustment of knife engagement pressure:

a. If a thread is poorly cut, particularly when it is thick, slightly increase the engaging pressure. This should solve the problem.

b. The engaging pressure

can be adjusted in this way: Loosen lock nut "B" and adjust it by using adjusting screw "A".

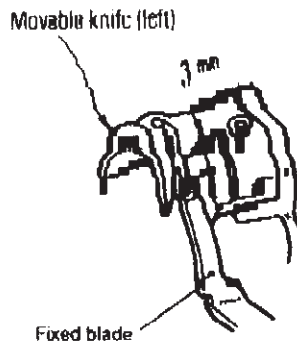
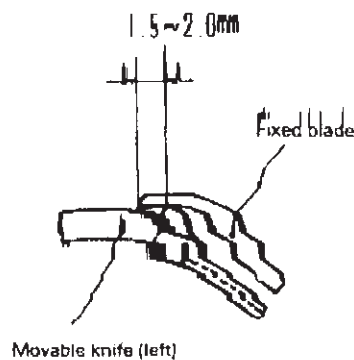
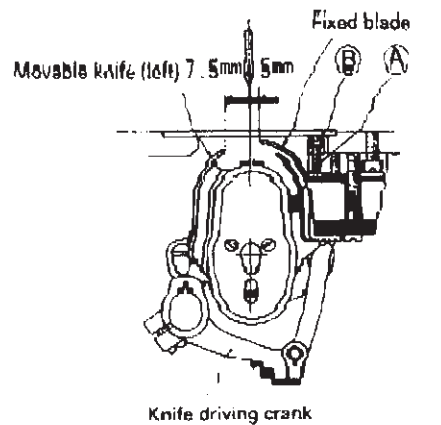
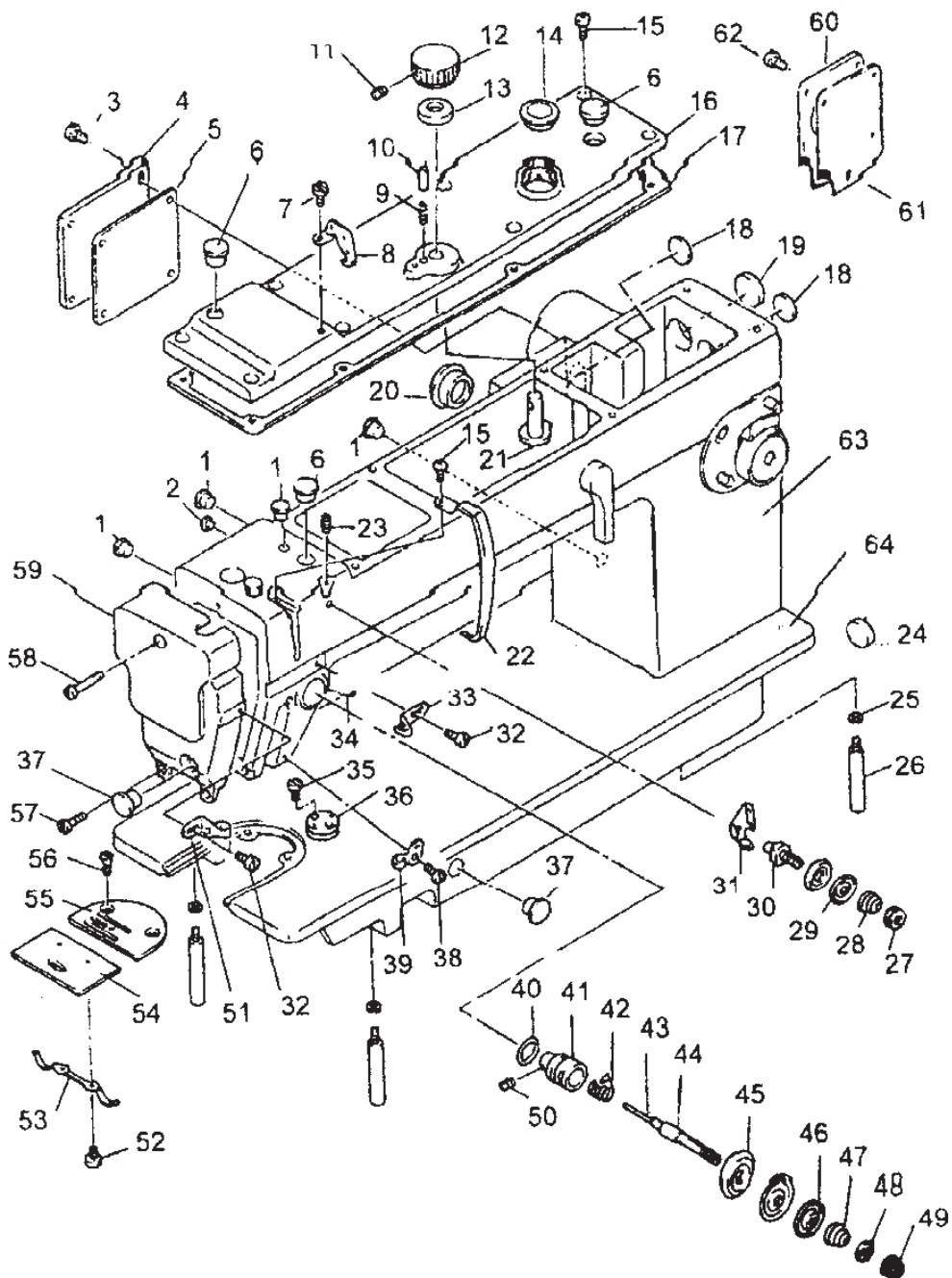


Fig.39

A: ARM BED AND ITS ACCESSORIES



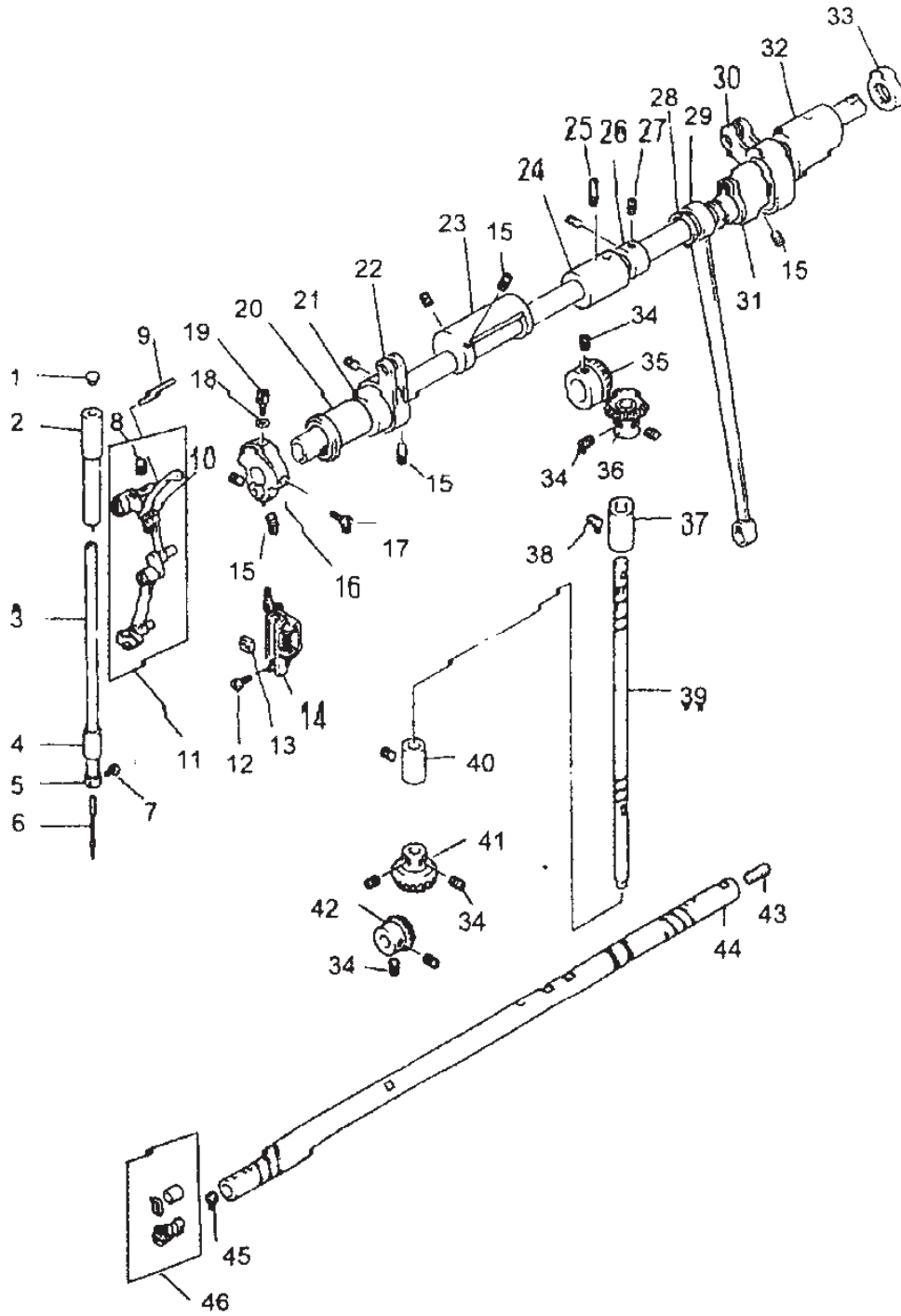
A: ARM BED AND ITS ACCESSORIES

No.	Ref. No.	Description	Pcs.
A1	H6401001	Rubber plug	4
A2	H6401002	Rubber plug	1
A3	H6401003	Screw	4
A4	H6401004	Arm side cover	1
A5	H6401005	Gasket for arm side cover	1
A6	H6401006	Rubber plug	3
A7	H6401007	Screw	1
A8	H6401008	Thread guide	1
A9	H6401009	Coil spring for upper feed lifting	1
A10	H6401010	Stopper pin for upper feed lifting	1
A11	H6401011	Set screw	2
A12	H6401012	Dial for upper feed lifting	1
A13	H6401013	Plate for upper feed lifting	1
A14	H6401014	Oil check window	1
A15	H6401015	Screw	8
A16	H6401016	Top cover	1
A17	H6401017	Gasket for top cover	1
A18	H6401018	Rubber plug	2
A19	H6401019	Rubber plug	1
A20	H6401020	Rubber plug	1
A21	H6401021	Upper feed lifting regulator cam	1
A22	H6401022	Thread take-up cover	1
A23	H6401023	Set screw	1
A24	H6401024	Rubber plug	1
A25	H6401025	Spring washer	3
A26	H6401026	Leg	3
A27	H6401027	Pre-tension adjusting nut	1
A28	H6401028	Thread tension spring	1
A29	H6401029	Thread tension disc	2
A30	H6401030	Thread tension stud	1
A31	H6401031	Thread guide	1
A32	H6401032	Screw	2
A33	H6401033	Thread guide	1
A34	H6401034	Set screw	1
A35	H6401035	Screw	2
A36	H6401036	Cloth guide plate	1

A: ARM BED AND ITS ACCESSORIES

No.	Ref. No.	Description	Pcs.
A37	H6401037	Rubber plug	1
A38	H6401038	Screw	1
A39	H6401039	Thread guide	1
A40	H6401040	O-ring	1
A41	H6401041	Thread tension regulator bushing	1
A42	H6401042	Thread take-up spring	1
A43	H6401043	Thread releasing pin	1
A44	H6401044	Thread tension stud	1
A45	H6401045	Thread tension disc	2
A46	H6401046	Thread tension releasing disc	1
A47	H6401047	Thread tension spring	1
A48	H6401048	Thumb nut revolution stopper	1
A49	H6401049	Thumb nut	1
A50	H6401050	Screw	1
A51	H6401051	Thread guide	1
A52	H6401052	Screw	2
A53	H6401053	Plate spring for slide plate	1
A54	H6401054	Slide plate	1
A55	H6401055	Needle plate	1
A56	H6401056	Screw	2
A57	H6401057	Screw	2
A58	H6401058	Screw	1
A59	H6401059	Face plate	1
A60	H6401060	Arm bed cover	1
A61	H6401061	Gasket for arm bed cover	1
A62	H6401062	Screw	1
A63	H6401063	Arm	1
A64	H6401064	Bed	1

B: SEWING MECHANISM



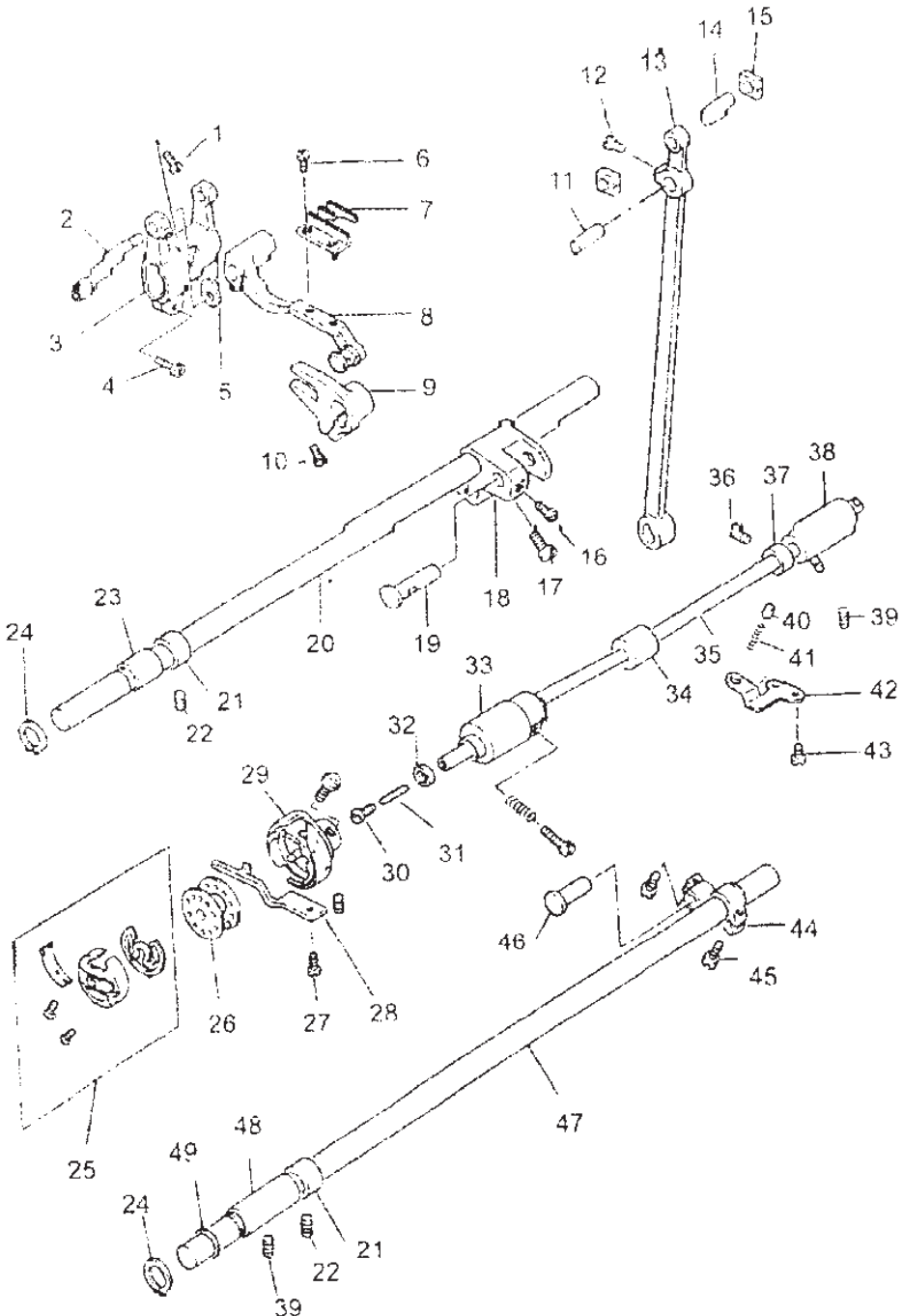
B: SEWING MECHANISM

No.	Ref. No.	Description	Pcs.
B1	H6402001	Rubber plug	1
B2	H6402002	Needle bar bushing (upper)	1
B3	H6402003	Needle bar	1
B4	H6402004	Needle bar bushing (lower)	1
B5	H6402005	Thread guide	1
B6	H6402006	Needle	1
B7	H6402007	Set screw	1
B8	H6402008	Screw	1
B9	H6402009	Felt	1
B10	H6402010	Oil shade cap	1
B11	H6402011	Thread take-up lever ASSAY	1
B12	H6402012	Screw	2
B13	H6402013	Slide block	1
B14	H6402014	Needle bar connecting link guide	1
B15	H6402015	Set screw	2
B16	H6402016	Needle bar crank	1
B17	H6402017	Screw	1
B18	H6402018	O-ring	1
B19	H6402019	Set screw	1
B20	H6402020	Upper shaft bushing (upper)	1
B21	H6402021	Upper feed lifting cam	1
B22	H6402022	Upper feed rock crank (left)	1
B23	H6402023	Balance weight	1
B24	H6402024	Upper shaft bushing (middle)	1
B25	H6402025	Screw	1
B26	H6402026	Collar for upper shaft	1
B27	H6402027	Screw	2
B28	H6402028	C type retaining ring	1
B29	H6402029	Crank rock	1
B30	H6402030	Upper feed rock crank (right)	1
B31	H6402031	Upper feed lifting cam (right)	1
B32	H6402032	Upper shaft bushing (right)	1
B33	H6402033	Oil seal	1
B34	H6402034	Screw	8
B35	H6402035	Upper shaft gear	1
B36	H6402036	Vertical shaft gear (upper)	1

B: SEWING MECHANISM

No.	Ref. No.	Description	Pcs.
B37	H6402037	Vertical shaft bushing (upper)	1
B38	H6402038	Screw	2
B39	H6402039	Vertical shaft	1
B40	H6402040	Vertical shaft bushing (lower)	1
B41	H6402041	Vertical shaft gear (lower)	1
B42	H6402042	Lower shaft gear	1
B43	H6402043	Rubber plug	1
B44	H6402044	Upper shaft	1
B45	H6402045	Felt	1
B46	H6402046	Oil amount adjusting pin assy	1

C: SEWING MECHANISM & FEED ROCK LOWER SHAFT MECHANIS



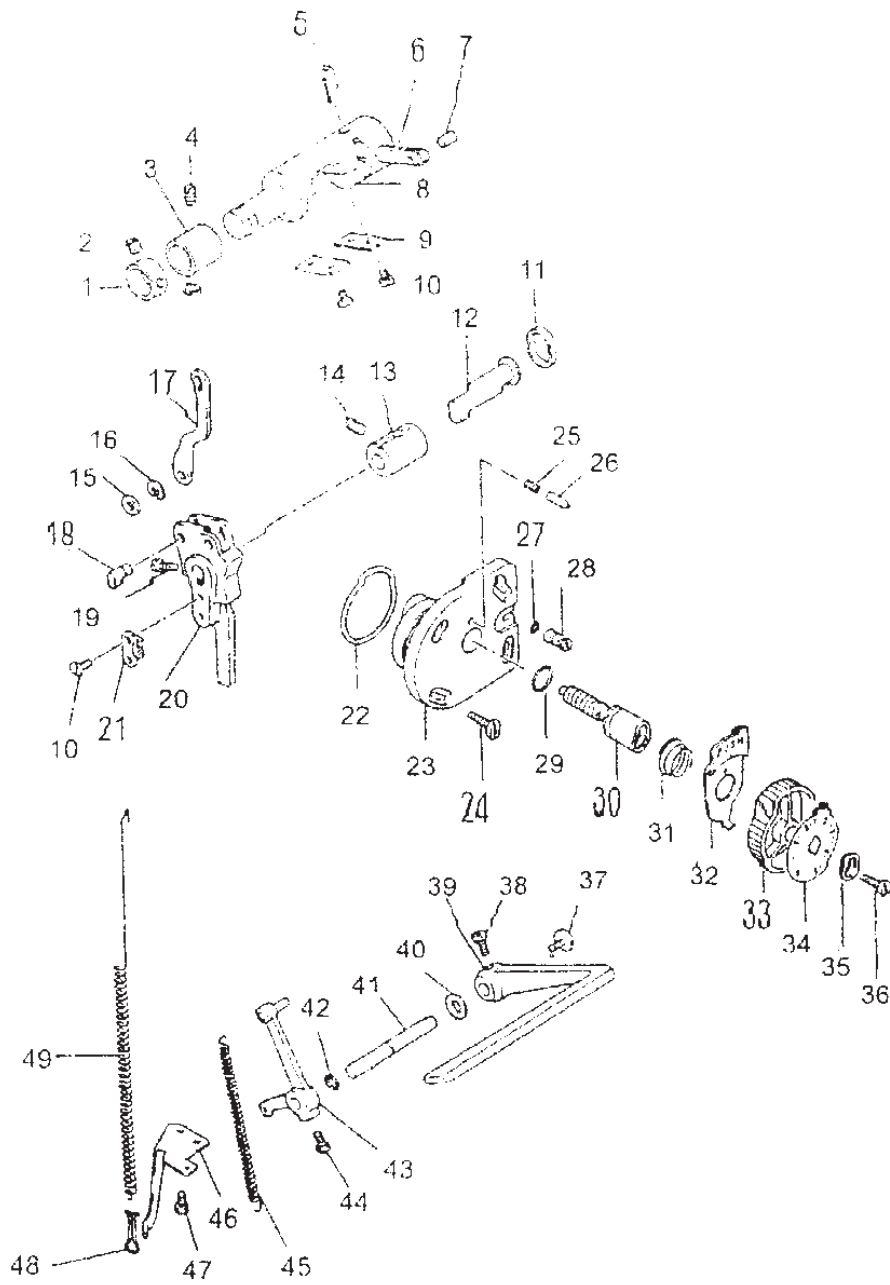
C: SEWING MECHANISM & FEED ROCK LOWER SHAFT MECHANISM

No.	Ref. No.	Description	Pcs.
C1	H6403001	Screw	1
C2	H6403002	Shaft for feed bar (eccentric)	1
C3	H6403003	Feed rock shaft crank	1
C4	H6403004	Screw	1
C5	H6403005	Washer	1
C6	H6403006	Screw	2
C7	H6403007	Feed dog	1
C8	H6403008	Feed bar assy	1
C9	H6403009	Feed lifting rock shaft fork	1
C10	H6403010	Screw	1
C11	H6403011	Upper feed rock shaft	1
C12	H6403012	Screw	1
C13	H6403013	Connecting rod for upper feed	1
C14	H6403014	Upper feed rock shaft	1
C15	H6403015	Square block	2
C16	H6403016	Screw	1
C17	H6403017	Screw	1
C18	H6403018	Feed rock shaft crank (right)	1
C19	H6403019	Pin	1
C20	H6403020	Feed rock shaft	1
C21	H6403021	Collar for feed rock shaft	2
C22	H6403022	Screw	4
C23	H6403023	Pushing for feed rock shaft	1
C24	H6403024	C-type retaining ring	1
C25	H6403025	Bobbin case	1
C26	H6403026	Bobbin	1
C27	H6403027	Screw	1
C28	H6403028	Hook positioner	1
C29	H6403029	Rotating hook	1
C30	H6403030	Screw	1
C31	H6403031	Oil felt for hook shaft	1
C32	H6403032	Oil seal	1
C33	H6403033	Bushing for hook shaft (left)	1
C34	H6403036	Bushing for hook shaft (middle)	1
C35	H6403037	Hook shaft	1
C36	H6403038	Screw	2

C: SEWING MECHANISM & FEED ROCK LOWER SHAFT MECHANISM

No.	Ref. No.	Description	Pcs.
037	H6403039	Collar for hook shaft	1
038	H6403040	Bushing for hook shaft (right)	1
039	H6403041	Screw	1
040	H6403042	Plunger	1
041	H6403043	Coil spring	1
042	H6403044	Guide plate	1
043	H6403045	Screw	1
044	H6403046	Feed lifting rock shaft crank (right)	1
045	H6403047	Screw	2
046	H6403048	Pin	1
047	H6403049	Feed lifting rock shaft	1
048	H6403050	Bushing for feed lifting shaft	1
049	H6403051	Washer	1

D: STITCH LENGTH MECHANISM



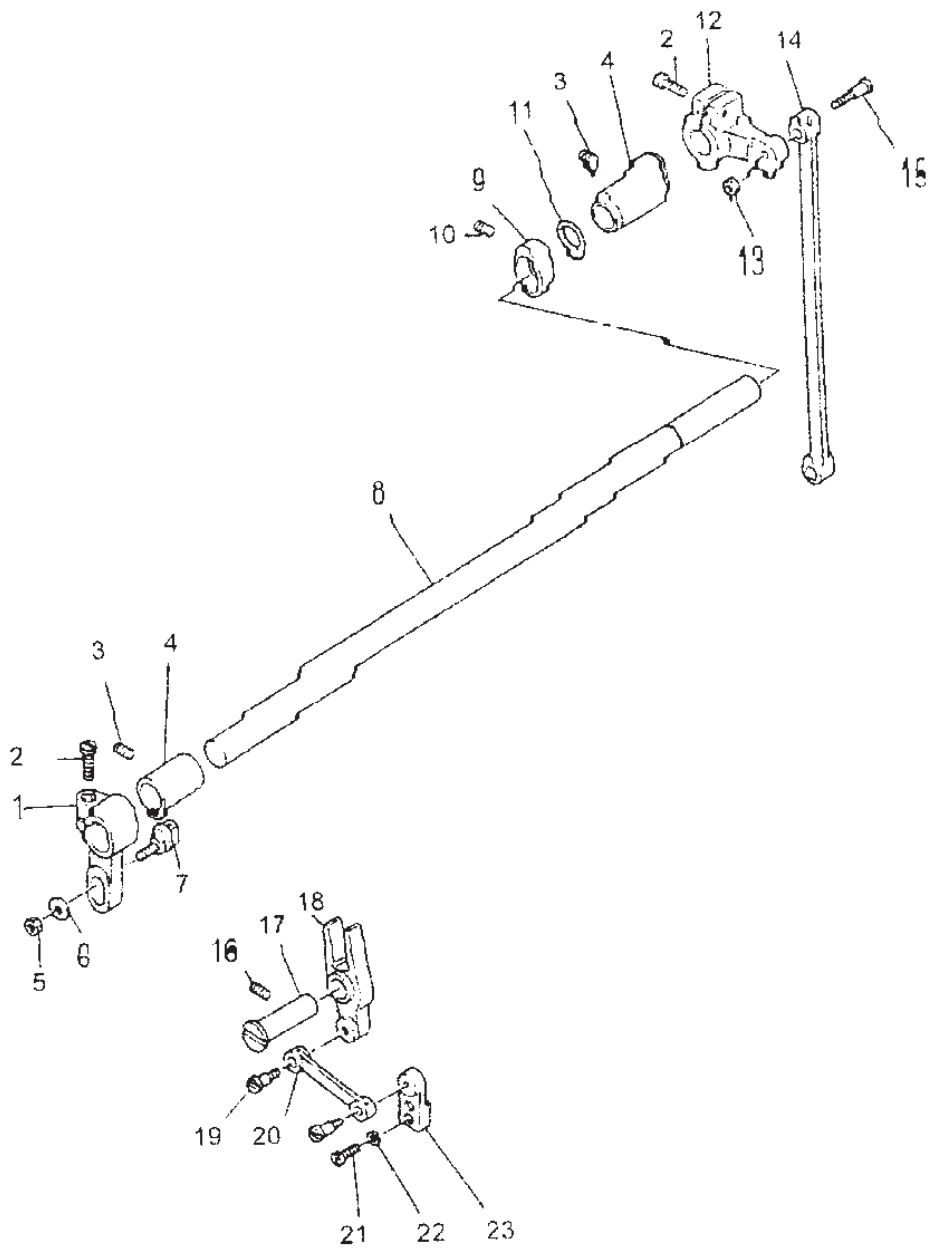
D: STITCH LENGTH MECHANISM

No.	Ref. No.	Description	Pcs.
01	H6404001	Collar for reverse bar	1
02	H6404002	Screw	2
03	H6404003	Bushing for reverse bar	1
04	H6404004	Screw	1
05	H6404005	Screw	1
06	H6404006	Bracket pin	1
07	H6404007	Pin	1
08	H6404008	Reverse bar	1
09	H6404009	Guide plate	2
010	H6404010	Screw	6
011	H6404011	Rubber plug	1
012	H6404012	Pin	1
013	H6404013	Bushing for feed regulator	1
014	H6404014	Screw	1
015	H6404015	Washer	2
016	H6404016	E type ring	2
017	H6404017	Link	1
018	H6404019	Pin	2
019	H6404020	Screw	1
020	H6404021	Feed regulator	1
021	H6404022	Spring retainer	1
022	H6404023	O ring	1
023	H6404024	Bracket	1
024	H6404025	Screw	4
025	H6404026	Spring for stopper pin	1
026	H6404027	Stopper pin	1
027	H6404028	O ring	1
028	H6404029	Feed regulator pin	1
029	H6404030	O ring	1
030	H6404031	Screw bar	1
031	H6404032	Coil spring	1
032	H6404033	Stopper pin releasing lever	1
033	H6404034	Dial	1
034	H6404035	Plate for stitch length	1
035	H6404036	Bushing	1
036	H6404037	Screw	1

D: STITCH LENGTH MECHANISM

No.	Ref. No.	Description	Qts.
D37	H6404038	Screw	1
D38	H6404039	Screw	1
D39	H6404040	Foot reversing lever	1
D40	H6404041	Spring washer	1
D41	H6404042	Foot reversing lever shaft	1
D42	H6404043	O ring	1
D43	H6404044	Crank for foot reversing lever	1
D44	H6404045	Screw	1
D45	H6404046	Spring	1
D46	H6404047	Spring holder	1
D47	H6404048	Screw	1
D48	H6404049	Spring holder	1
D49	H6404050	Coil spring	1

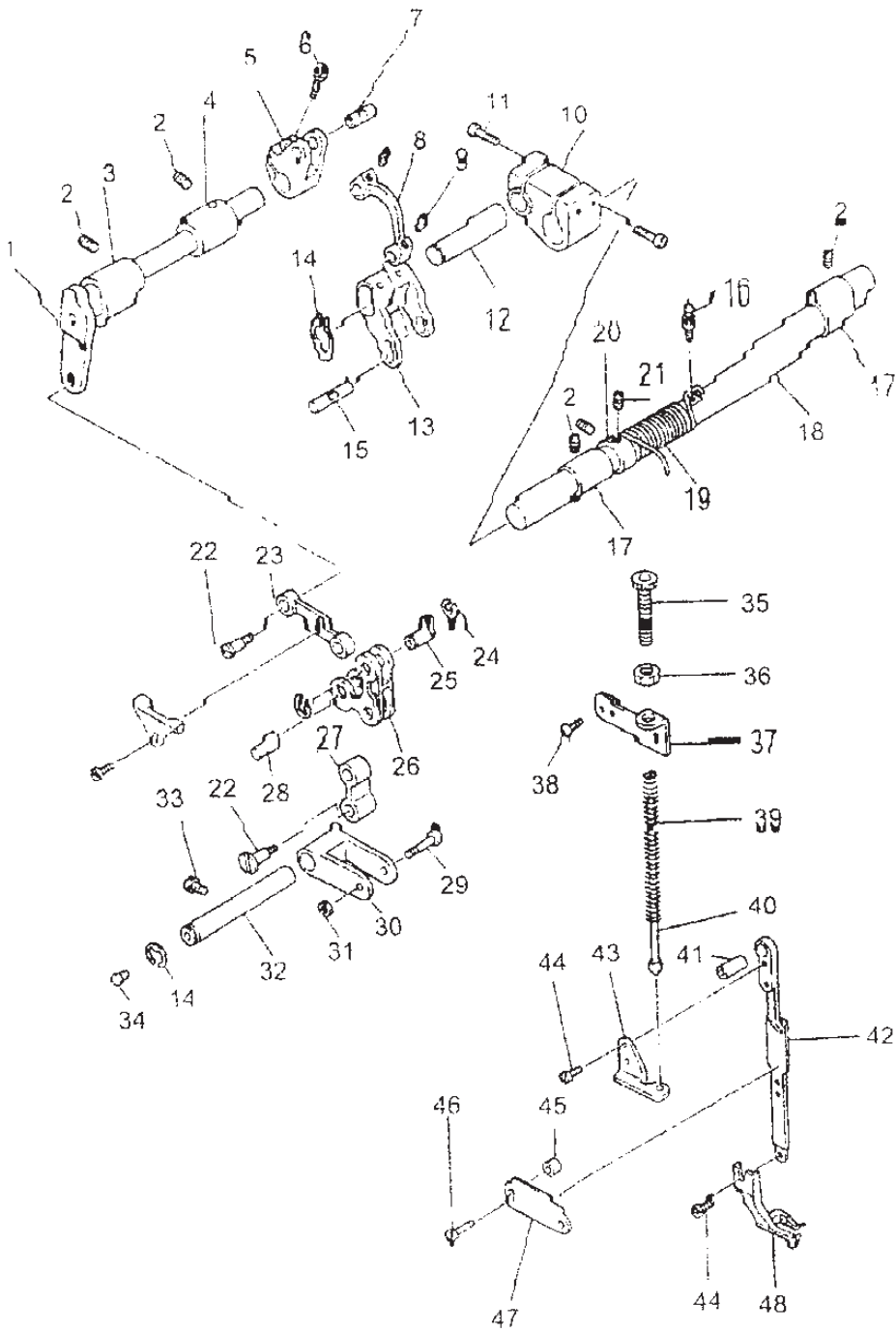
E: UPPER FEED ROCK SHAFT MECHANISM



E: UPPER FEED ROCK SHAFT MECHANISM

No.	Ref. No.	Description	Qty.
E1	H6405001	Upper feed rock shaft crank (left)	1
E2	H6405002	Screw	-
E3	H6405003	Screw	-
E4	H6405004	Washing foot upper feed rock shaft crank	1
E5	H6405005	Nut	1
E6	H6405006	Washer	1
E7	H6405007	Feed connecting slick link	1
E8	H6405008	Upper feed rock shaft	1
E9	H6405009	Collar	1
E10	H6405010	Screw	-
E11	H6405011	O-ring	1
E12	H6405012	Upper feed rock shaft crank (right)	1
E13	H6405013	Nut	1
E14	H6405014	Feed driver connecting rod	1
E15	H6405015	Screw	1
E16	H6405016	Screw	1
E17	H6405017	Hinge pin	1
E18	H6405018	Feed connecting lever	1
E19	H6405019	Screw	2
E20	H6405020	Washing foot connecting rod	1
E21	H6405021	Screw	2
E22	H6405022	Spring washer	2
E23	H6405023	Feed arm	1

F: UPPER FEED LIFTING ROCK SHAFT MECHANISM



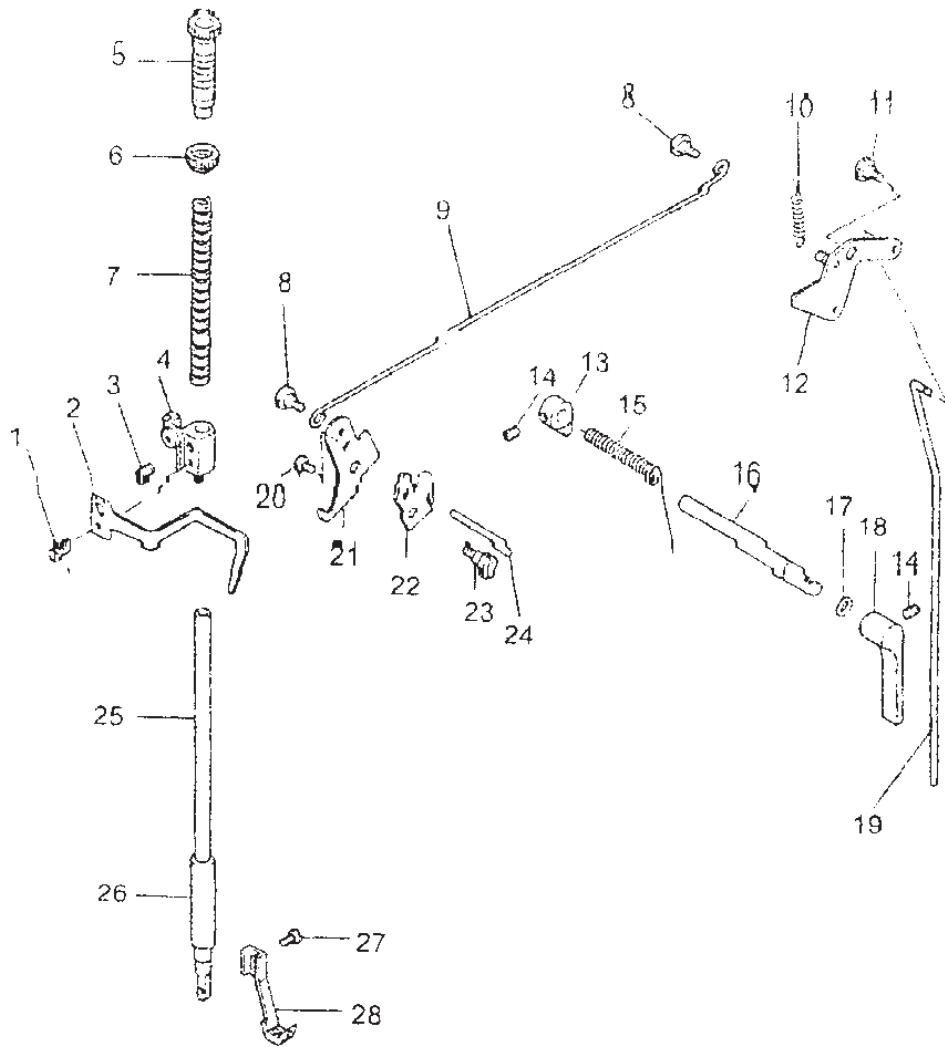
F: UPPER FEED LIFTING ROCK SHAFT MECHANISM

No.	Ref. No.	Description	Pcs.
F1	H6406001	Upper feed lifting rock shaft	1
F2	H6406002	Screw	4
F3	H6406003	Bushing for upper feed lifting rock shaft	1
F4	H6406004	Bushing for upper feed lifting rock shaft	1
F5	H6406005	Upper feed lifting rock crank	1
F6	H6406006	Screw	1
F7	H6406007	Upper feed lifting rock crank shaft	1
F8	H6406008	Link	1
F9	H6406009	Screw	2
F10	H6406010	Upper feed regulator bracket	1
F11	H6406011	Screw	4
F12	H6406012	Shaft for upper feed lifting rock shaft	1
F13	H6406013	Crank for upper feed lifting rock crank	1
F14	H6406014	C-type ring	1
F15	H6406015	Pin	1
F16	H6406016	Cam follower	1
F17	H6406017	Bushing for upper feed shaft	2
F18	H6406018	Upper feed regulator shaft	1
F19	H6406019	Spring	1
F20	H6406020	Collar	1
F21	H6406021	Screw	2
F22	H6406022	Screw	2
F23	H6406023	Link for feed lifting rock shaft	1
F24	H6406024	F type ring	2
F25	H6406025	Pin	1
F26	H6406026	Bell crank	1
F27	H6406027	Link	1
F28	H6406028	Pin	1
F29	H6406029	Stud screw	1
F30	H6406030	Bell crank support	1
F31	H6406031	Nut	1
F32	H6406032	Bell crank support shaft	1
F33	H6406033	Screw	1
F34	H6406034	Rubber plug	1
F35	H6406035	Thumb screw	1
F36	H6406036	Nut	1

F: UPPER FEED LIFTING ROCK SHAFT MECHANISM

No.	Ref. No.	Description	Pcs.
F37	H6406037	Presser regulating bracket	1
F38	H6406038	Screw	2
F39	H6406039	Spring	1
F40	H6406040	Spring guide bar assy	1
F41	H6406041	Bushing for walking foot guide link	1
F42	H6406042	Walking foot guide link	1
F43	H6406043	Spring guide bar holder	1
F44	H6406044	Screw	3
F45	H6406045	Washer	2
F46	H6406046	Screw	2
F47	H6406047	Walking foot guide bracket	1
F48	H6406048	Walking foot	1

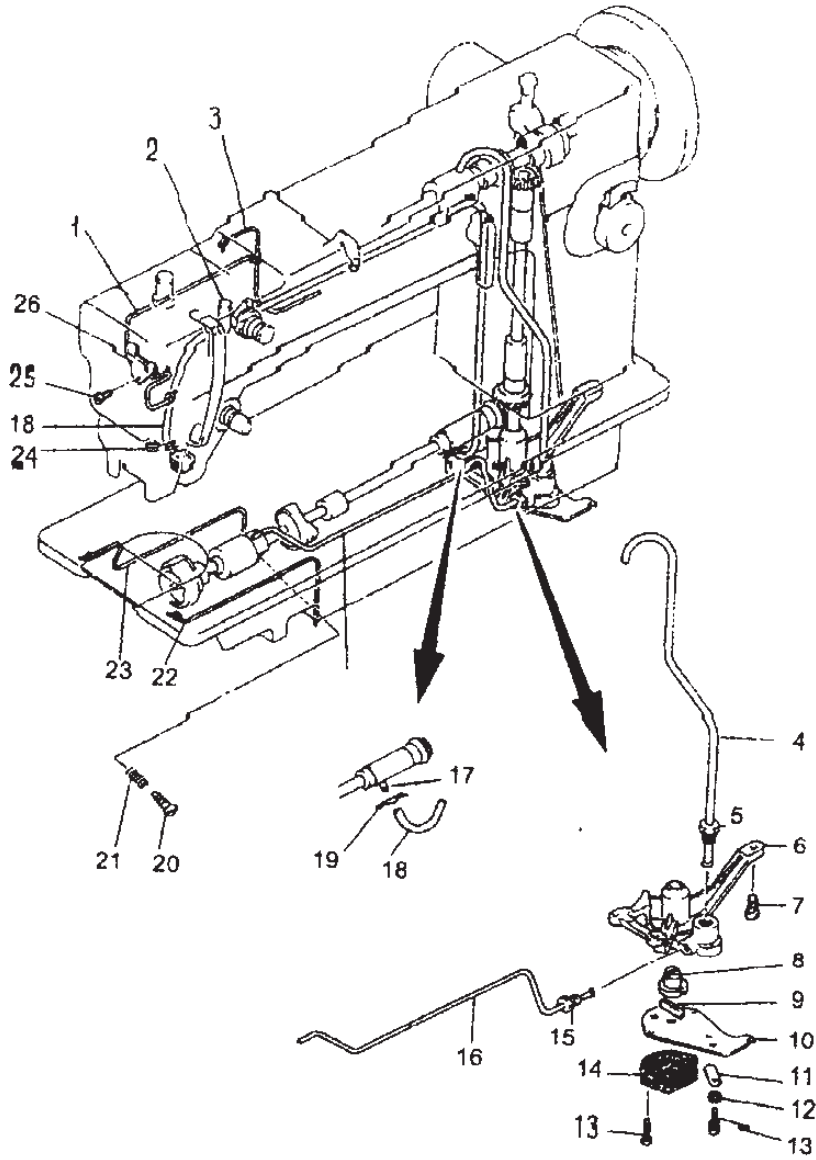
G: PRESSER FOOT MECHANISM



G: PRESSER FOOT MECHANISM

No.	Ref. No.	Description	Qts.
G1	H6407001	Screw	1
G2	H6407002	Thread guide	1
G3	H6407003	Presser bar guide bracket	1
G4	H6407004	Screw	1
G5	H6407005	Thumb screw	1
G6	H6407006	Nut	1
G7	H6407007	Presser bar spring	1
G8	H6407008	Screw	2
G9	H6407009	Knee lifter rod	1
G10	H6407010	Spring	1
G11	H6407011	Stud bolt	1
G12	H6407012	Knee lifter lever	1
G13	H6407013	Presser bar lifting cam	1
G14	H6407014	Screw	2
G15	H6407015	Spring	1
G16	H6407016	Presser bar lifting shaft	1
G17	H6407017	O-ring	1
G18	H6407018	Presser bar lifter	1
G19	H6407019	Knee lifter connecting rod	1
G20	H6407020	Screw	1
G21	H6407021	Knee lifter lever (left)	1
G22	H6407022	Tension releasing cam	1
G23	H6407023	Stud bolt	1
G24	H6407024	Thread releasing pin	1
G25	H6407025	Presser bar	1
G26	H6407026	Bushing for presser bar	1
G27	H6407027	Screw	1
G28	H6407028	Presser foot	1

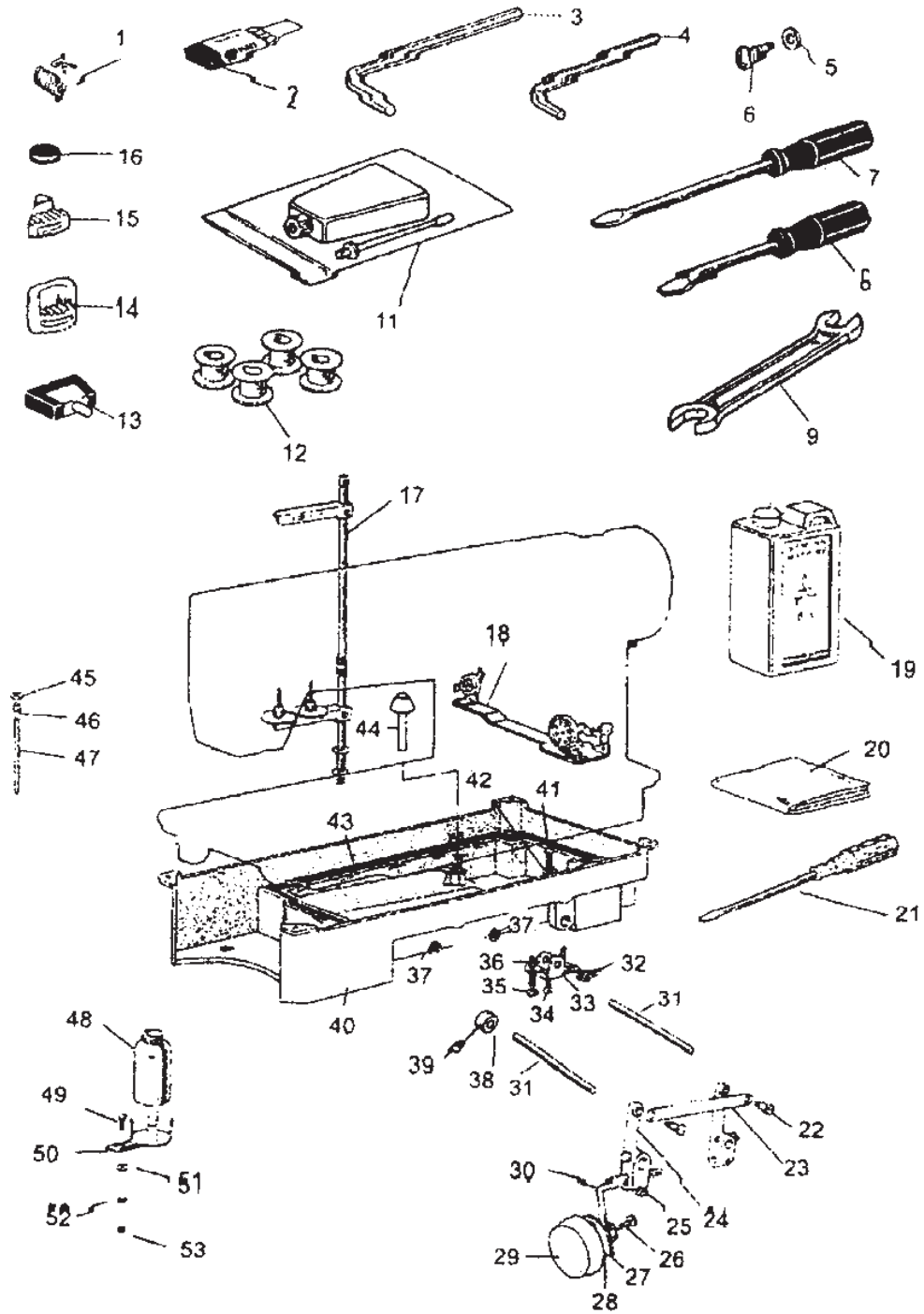
H: OIL LUBRICATION MECHANISM



H: OIL LUBRICATION MECHANISM

No.	Ref. No.	Description	Pcs.
H1	H6408001	Oil wick	1
H2	H6408002	Oil felt	1
H3	H6408003	Oil wick	1
H4	H6408004	Upper shaft oil tube	1
H5	H6408005	Bushing	1
H6	H6408006	Oil pump	1
H7	H6408007	Screw	3
H8	H6408008	Router	1
H9	H6408009	Slider	1
H10	H6408010	Oil pump cover	1
H11	H6408011	Oil adjusting plate	1
H12	H6408012	Spring washer	1
H13	H6408013	Screw	3
H14	H6408014	Oil pump filter	1
H15	H6408015	Bushing	1
H16	H6408016	Lower shaft oil tube	1
H17	H6408017	Oil pipe for lower shaft bushing	1
H18	H6408018	Oil return tube	1
H19	H6408019	Oil return tube clip	1
H20	H6408020	Oil adjusting screw	1
H21	H6408021	Oil adjusting spring	1
H22	H6408022	Oil wick	1
H23	H6408023	Oil wick	1
H24	H6408024	Oil felt holder	1
H25	H6408025	Screw	1
H26	H6408026	Oil wick holder	1

1: ACCESSORIES



I: ACCESSORIES

No.	Ref. No.	Description	Pcs.
11	H6411001	Thread take-up spring	1
12	H6411002	Needle	4
13	H6411003	Socket wrench 3	1
14	H6411004	Socket wrench 2	1
15	H6411005	Washer for wood screw	4
16	H6411006	Wood screw	4
17	H6411007	Screw driver (middle)	1
18	H6411008	Screw driver (small)	1
19	H6411009	Spanner	1
111	H6411010	Oil with oiler	1
112	H6411011	Bobbin	4
113	H6411012	Hinge with rubber cushion	2
114	H6411013	Vibration preventing rubber (large)	2
115	H6411014	Vibration preventing rubber (small)	2
116	H6411015	Magnet block	1
117	H6411016	Thread stand assy	1
118	H6411017	Bobbin winder assy	1
119	H6411018	Oil tank	1
120	H6411019	Cover	1
121	H6411020	Screw driver (large)	1
122	H6411021	Screw	2
123	H6411022	Link	1
124	H6411023	Knee lifter driving crank	2
125	H6411024	Bolt	3
126	H6411025	Bolt	1
127	H6411026	Knee lifter plate stopper	1
128	H6411027	Knee lifter plate	1
129	H6411028	Knee lifter cover	1
130	H6411029	Knee lifter shaft	1
131	H6411030	Knee lifter shaft	2
132	H6411031	Coil spring	1
133	H6411032	Knee lifter	1
134	H6411033	Screw	1
135	H6411034	Nut	2
136	H6411035	Set screw	2
137	H6411036	E-type ring	1

I: ACCESSORIES

No.	Ref. No.	Description	Pcs.
138	H6411037	Collar	1
139	H6411038	Screw	2
140	H6411039	Oil reservoir	1
141	H6411040	Screw	1
142	H6411041	Seal washer	1
143	H6411042	Gasket for oil reservoir	2
144	H6411043	Knee lifter lifting pin	1
145	H6411044	Gasket	1
146	H6411045	Screw	1
147	H6411046	Drainage tube	1
148	H6411047	Oil bottle	1
149	H6411048	Screw	1
150	H6411049	Oil bottle holder	1
151	H6411050	Washer	1
152	H6411051	Spring washer	1
153	H6411052	Nut	1