

**Sun Special<sup>®</sup>**

**SSTC7280** SERIES

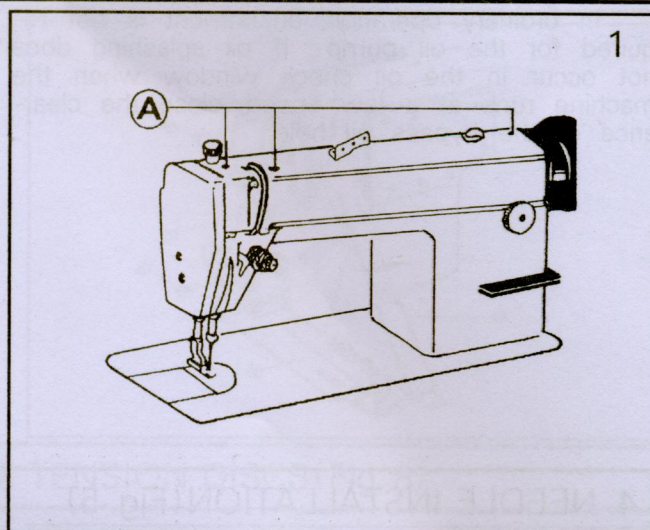
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## ※NOTE (Fig. 1)

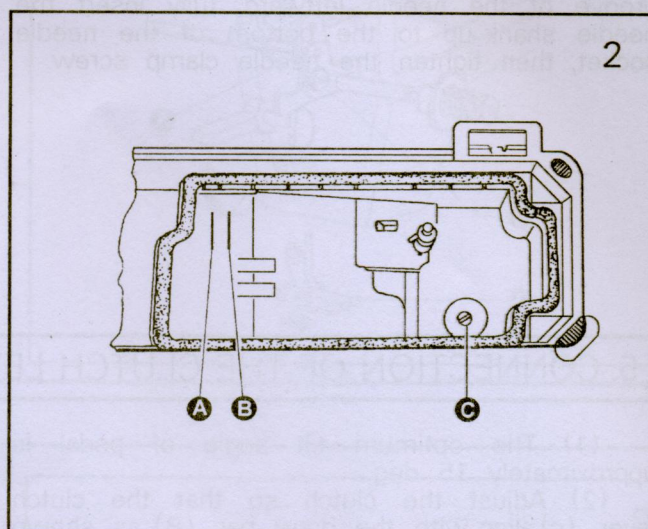
Before putting a new machine into operation, remove the plugs(A) on the top of the arm and replenish sufficient amount of oil, then lift the presser foot and run the machine at a low speed of 2000 spm to check oil distributing condition through oil check window. When lubricating is normal, keep the machine run in at this speed for 30 minutes, then increase the running speed gradually. After one month run – in operation, the machine can be run at the Max speed under normal working condition.



## 1. OIL FILLING (Fig. 2)

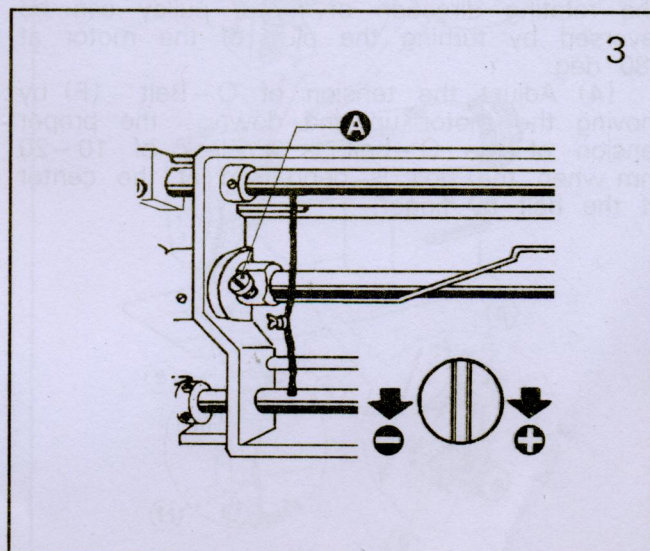
(1) The oil amount in the oil reservoir is controlled through the reference marks A and B shown in Fig2. The mark A indicates the max oil amount level, the mark B for the min. oil amount level. If the oil amount level is under the mark B replenish the oil reservoir with oil in time.

(2) When filling oil, loosen the oil draining screw (c), drain off the remaining oil in the oil reservoir completely, clean the oil reservoir and tighten the oil draining screw(c), then fill the oil reservoir with fresh oil.



## 2. ROTATING HOOK OIL AMOUNT ADJUSTMENT (Fig. 3)

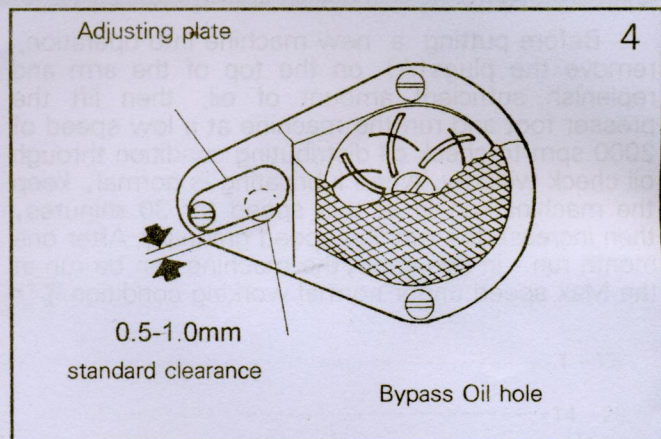
Adjust the oil amount of the rotating hook by turning the oil amount adjusting screw (A). Turn the screw(A) clockwise (in the “+” direction) to increase the oil amount; turn it counter-clockwise (in the “-” direction) to decrease the oil amount.





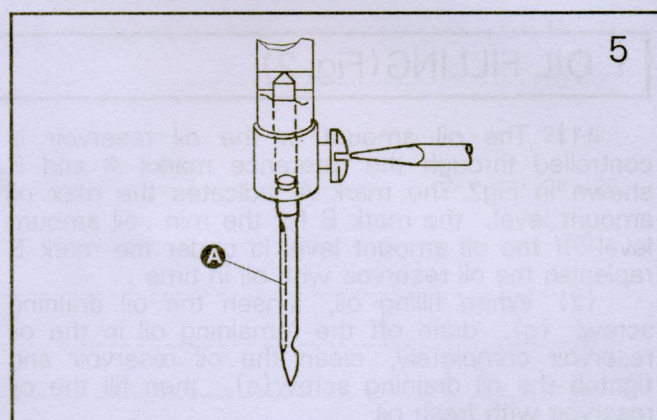
### 3. OIL PUMP ADJUSTMENT (Fig. 4)

In ordinary operation, adjustment is not required for the oil pump. If oil splashing does not occur in the oil check window when the machine runs at a low speed, close the clearance of the bypass oil hole.



### 4. NEEDLE INSTALLATION (Fig. 5)

Turning the balance wheel to lift the needle bar to the upper end of its stroke. Loosen the needle clamp screw while keeping the long groove of the needle leftward, fully insert the needle shank up to the bottom of the needle socket, then tighten the needle clamp screw.



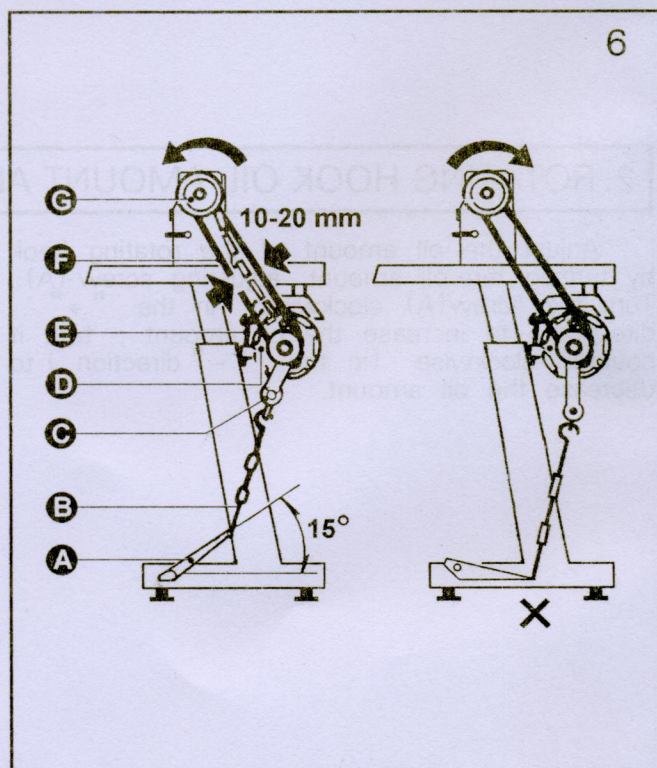
### 5. CONNECTION OF THE CLUTCH LEVER WITH THE PEDAL (Fig. 6)

(1) The optimum tilt angle of pedal is approximately 15 deg.

(2) Adjust the clutch so that the clutch lever (c) align with the draw bar (B) as shown in Fig. 6

(3) The machine pulley should rotate counter clockwise when viewed from the outside of it. The rotating direction of motor pulley can be reversed by turning the plug of the motor at 180 deg.

(4) Adjust the tension of O-Belt (F) by moving the motor up and down, the proper tension of the O-belt is a slack of 10-20 mm when the belt is depressed at the center of the belt by finger.

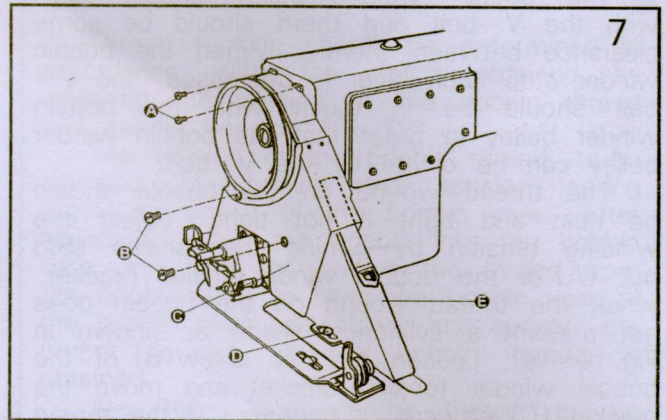




## 6. BELT COVER INSTALLATION(Fig. 7)

Install the belt cover for the sake of safety.

Install belt cover(C) to arm with screw(A) and screw(B) , and install belt cover(E) on board with screw(D).



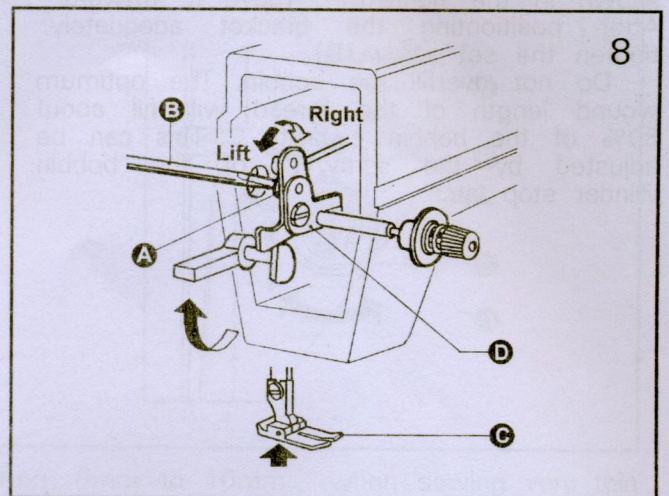
## 7. ADJUST THE OPENING TIME OF THE TENSION DISCS(Fig. 8)

Within the presser foot lift range , the opening time of the tension discs can be adjusted as follows:

(1) Remove the rubber plug from the back of the arm and Loosen the screw (A) of the knee lift level (left)

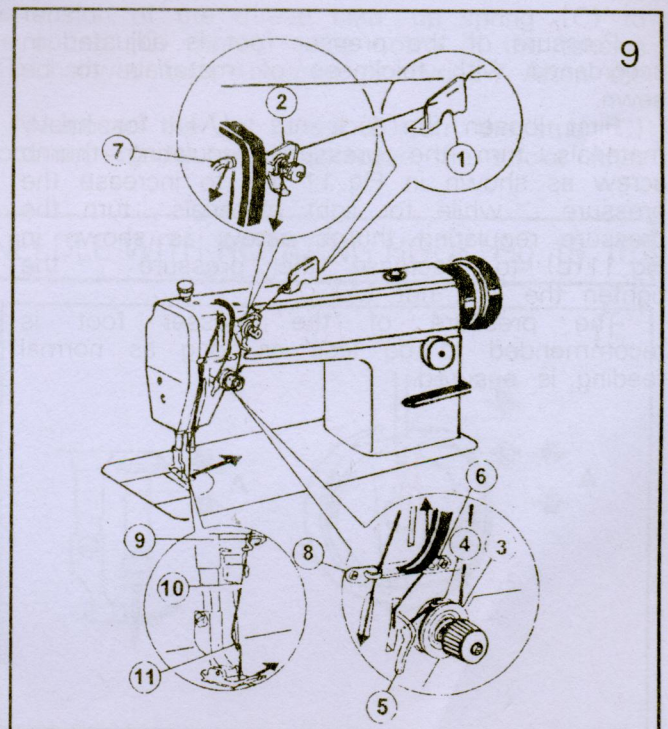
(2) Move the tension releasing cam (D) leftward for earlier opening or rightward for Later opening.

It will facilitate the adjustment if putting a block under the presser foot lift.



## 8. THREADING(Fig. 9)

To thread the needle thread, raise the needle bar to the upper end of its stroke, lead the thread from the spool and perform threading as shown in Fig9 . To draw the bobbin thread, hold the end of the needle thread and turn the balance wheel to lower the needle bar and then lift it to its highest position. Pull the ends of needle thread and bobbin thread frontward under presser foot.



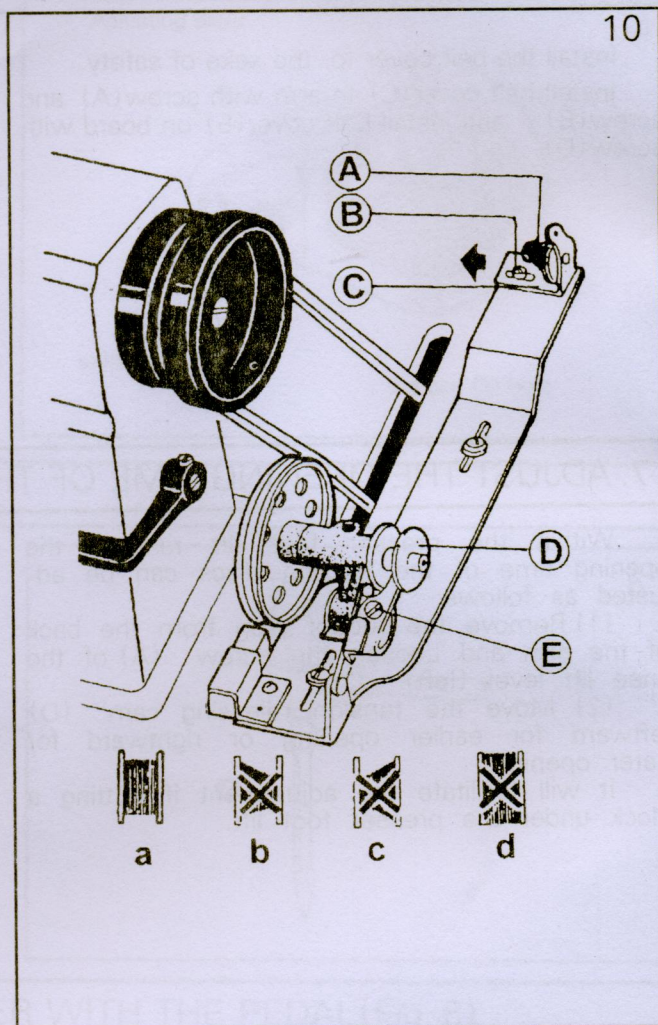


## 9. WINDING INSTALLATION AND ADJUSTMENT (Fig. 10)

The bobbin winder pulley should Align with the V-belt and there should be some clearance between them. When the bobbin winder stop latch lever is depressed, the V-belt should be in touch with the bobbin winder pulley in order that the bobbin winder pulley can be driven by the V-belt.

The thread wound on the bobbin should be neat and tight if not tight, adjust the winding tension by turning the tension stud nut (A) of the bobbin winder tension bracket, when the thread wound on the bobbin does not present a cylindrical shape as shown in Fig.10 (a), Loosen the set screw(B) of the bobbin winder tension bracket and move the bracket (C) leftward or rightward, if the thread is wound as shown in the figure (b), move the bracket leftward or rightward of wound as shown in the figure(c), move it leftward. After positioning the bracket adequately, tighten the set screw (B).

Do not overfill the bobbin, The optimum wound length of the thread will fill about 80% of the bobbin capacity. This can be adjusted by the screw(E) of the bobbin winder stop latch.

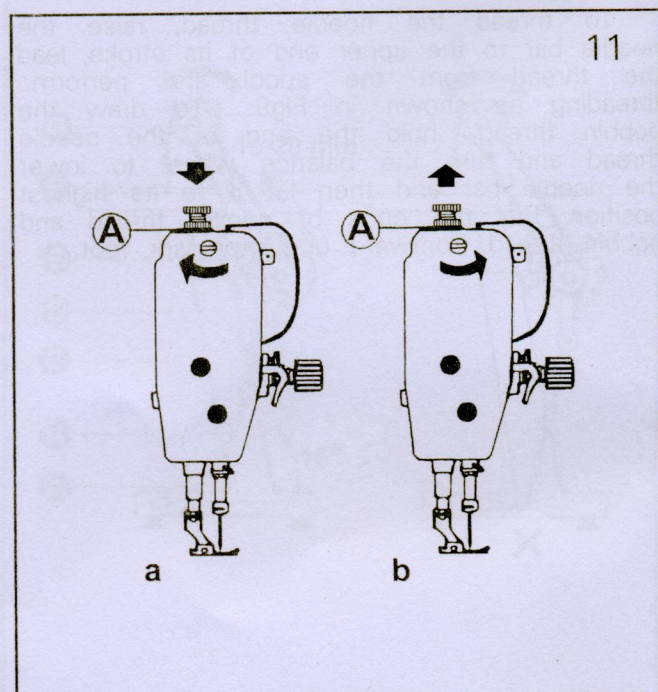


## 10. ADJUST THE PRESSURE OF PRESSER FOOT (Fig. 11)

Pressure of the presser foot is adjusted in accordance with thickness of materials to be sewn.

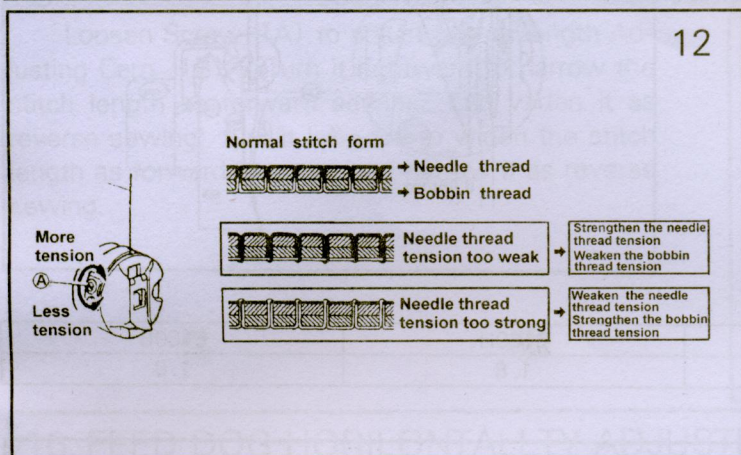
First loosen the lock nut (A), for heavy materials, turn the pressure regulating thumb screw as shown in Fig.11 (a) to increase the pressure, while for light materials, turn the pressure regulating thumb screw as shown in Fig.11(b) to decrease the pressure, then tighten the lock nut (A).

The pressure of the presser foot is recommended to be less as long as normal feeding is ensured.





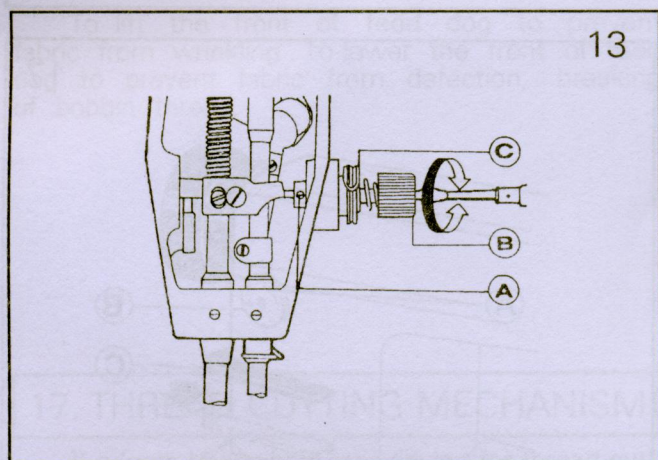
## 11. THREAD TENSION ADJUSTMENT (Fig. 12, 13, 14)



Thread tension should be determined in accordance with the stitch obtained by adjusting the tension of the bobbin thread and needle tension (Fig. 12)..

The tension of the bobbin thread: to be adjusted by turning the tension spring regulating screw of the bobbin case. After adjusting, insert the bobbin into the bobbin case and hold the end of the thread from the bobbin case to hang the bobbin case, if the bobbin case falls slowly and evenly, the proper tension of the bobbin thread is obtained.

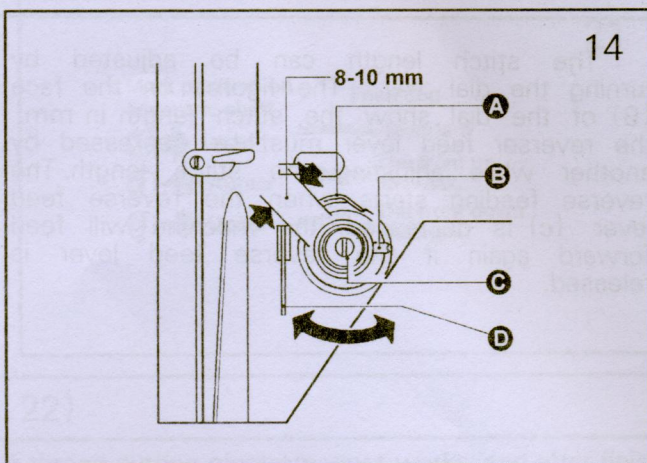
The tension of needle thread: to be adjusted by turning the thumb nut.



The stroke of the thread take-up spring runs from 8mm to 10mm, when sewing very thin fabrics, reduce the thread take-up spring tension and increase the thread take-up spring stroke, where as increase the thread take-up spring tension and reduce the thread take-up stroke when sewing very thick fabrics.

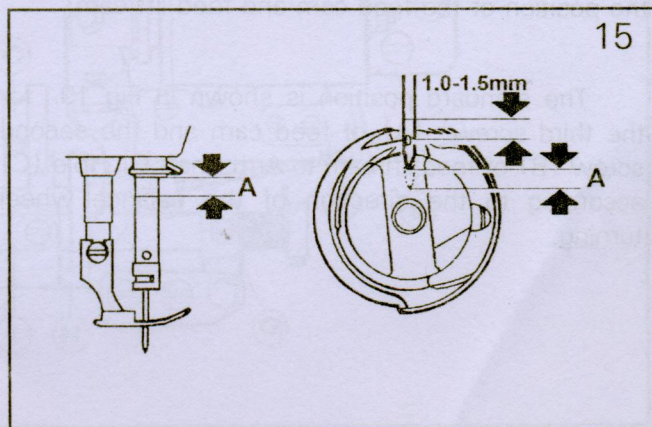
Adjusting the thread take-up spring tension : (Fig. 13) First loosen the set screw (A), Turn the tension stud (B) counter-clockwise to decrease the tension of the thread take-up spring (C) to zero. then turn the tension stud (B) clockwise till the spring (C) comes to the notch of the tension regulating bushing, and again turn the tension stud (B) halfway back (counter clockwise), After the adjustment, tighten the set screw (A).

Adjusting the thread take-up spring stroke: (Fig. 14) loosen the set screw (B) turn the stud (C) clockwise to increase the stroke or turn stud (C) counter-clockwise to decrease the stroke After the adjustment. tighten the set screw (B).



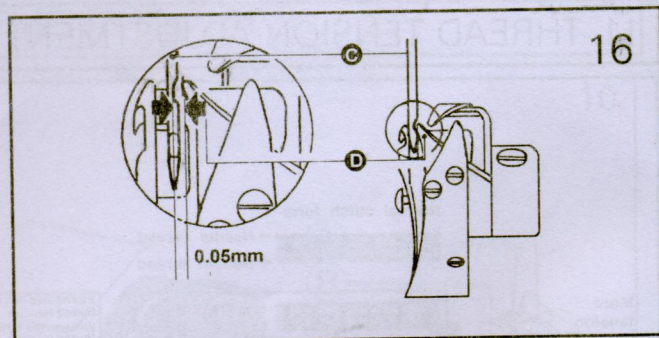
## 12. ADJUST THE SYNCHRONILATION OF THE NEEDLE WITH ROTATING HOOK (Fig. 15, 16)

When lifting the needle bar from its lowest position of the stroke to the distance A, the hook point D of the bobbin should align with the center line of the needle and be 1.0 - 1.5 mm above upper end of the needle eye (Fig. 15)





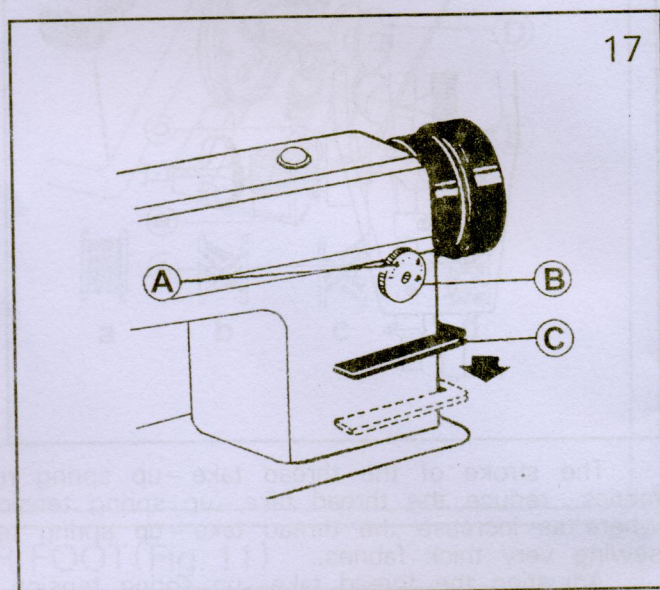
The clearance between the bottom of the needle notch and the hook point should be approx 0.05 mm (Fig. 16).



| Model | 7280M | 7280H | 7280B |
|-------|-------|-------|-------|
| A     | 2     | 1.8   | 1.8   |

### 13. ADJUSTMENT OF STITCH LENGTH AND REVERSE FEEDING (Fig. 17)

The stitch length can be adjusted by turning the dial (A). The figures on the face (B) of the dial show the stitch length in mm. the reverser feed lever must be depressed by another while adjusting the stitch length. The reverse feeding starts when the reverse feed lever (c) is depressed, the machine will feed forward again if the reverse feed lever is released.

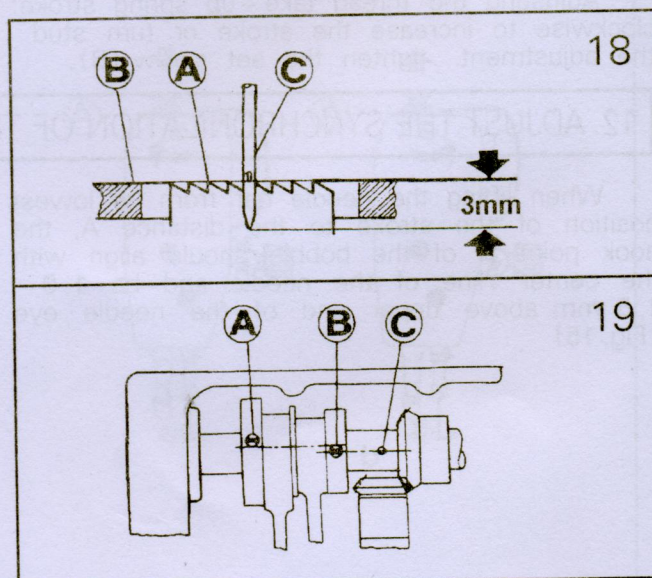


### 14. ADJUSTING THE POSITION OF FEED DOG AND NEEDLE (Fig. 18. 19)

Turn the balance wheel, and lower Feed Dog (A). When the top of the feed dog is flush with Throat Plate Surface (B), Needle Point (C) should be 3mm below the throat plate surface.

The adjustment should be made by adjusting the position of the feed cam and feed lift cam.

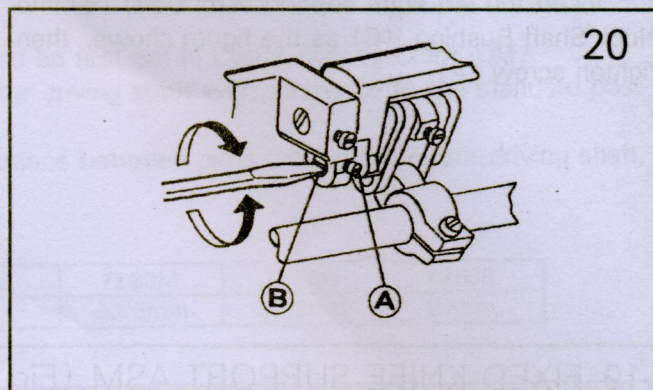
The standard position is shown in Fig. 19. for the third screw (A) of feed cam and the second screw (B) of feed lift cam to Arm Shaft Oil Hole (C) according to the direction of the balance wheel turning.





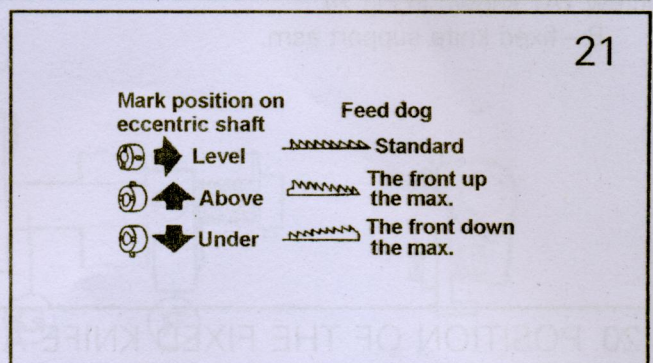
## 15. STITCH LENGTH ERROR ADJUSTMENT(Fig. 20)

Loosen Screw (A) to adjust Stitch Length Adjusting Cam (B). Turn it rightward to narrow the stitch length as forward sewing, and widen it as reverse sewing; turn it leftward to widen the stitch length as forward sewing, and narrow it as reverse sewing.



## 16. FEED DOG HORIZONTALITY ADJUSTMENT(Fig. 21)

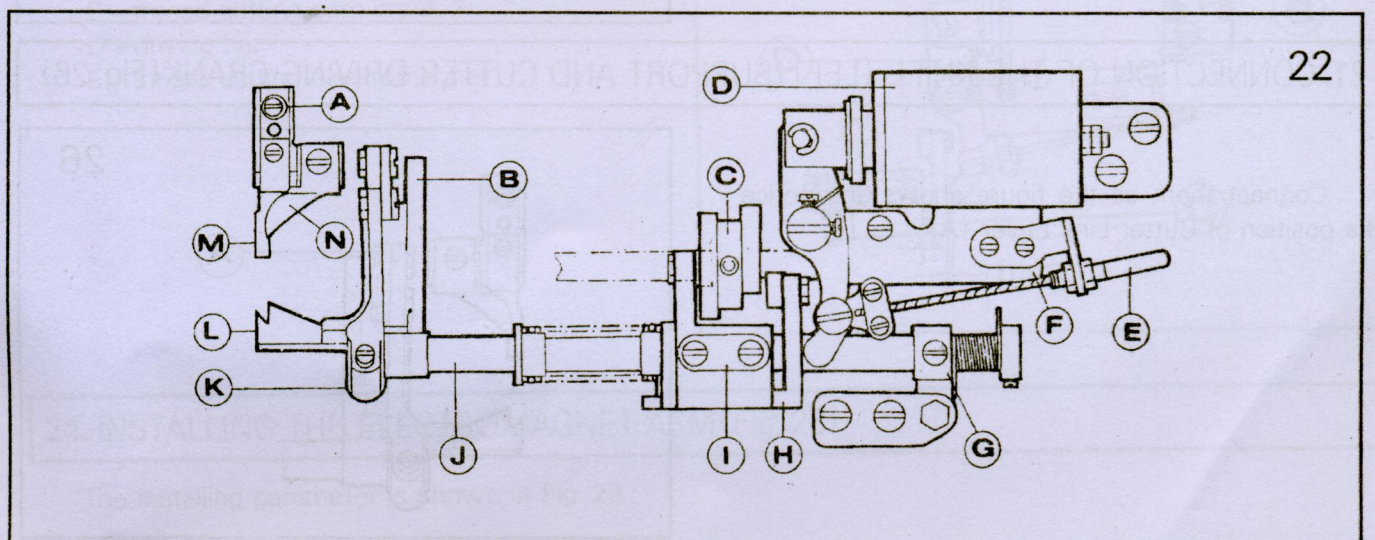
To lift the front of feed dog to prevent fabric from wrinkling. To lower the front of feed dog to prevent fabric from defection, breaking of bobbin thread.



## 17. THREAD CUTTING MECHANISM(Fig. 22)

It adopts hook shaft cam driving for thread cutting. If thread cutting electromagnet works, and after finish thread trimming, reset thread cutting cam crank at once, otherwise may cause the movable knife and needle into collision, and damage them.

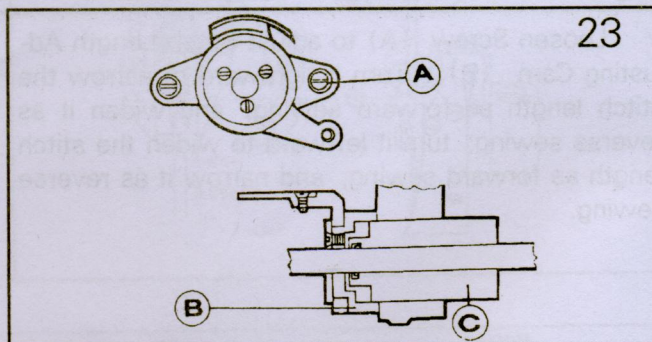
- A – fixed knife support asm.
- B – knife support asm. (left)
- C – thread cutting cam.
- D – thread cutting electromagnet.
- E – soft thread.
- F – electromagnet asm.
- G – stopper.
- H, I – thread cutting cam crank.
- J – cutter driving shaft.
- K – cutter driving crank.
- L – knife (left).
- M – fixed knife.
- N – thread retainer.





## 18. KNIFE SUPPORT ASM(left) (Fig. 23)

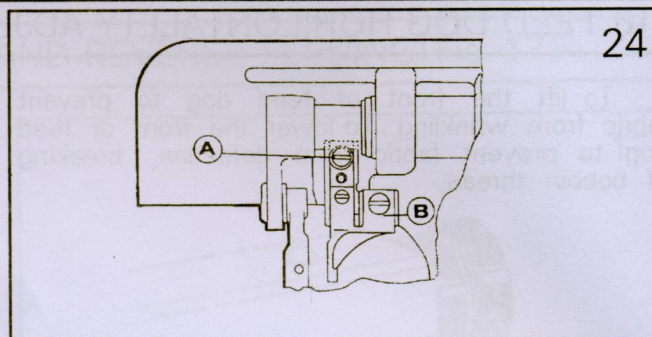
Insert the left knife support asm. (left) (B) into Hook Shaft Bushing (C) as the figure shows, then tighten screw (A).



## 19. FIXED KNIFE SUPPORT ASM (Fig. 24)

Remove the hook positioner, then set it with screw (A) shown in Fig 24.

B – fixed knife support asm.



## 20. POSITION OF THE FIXED KNIFE AND LEFT KNIFE POINT (Fig. 25)

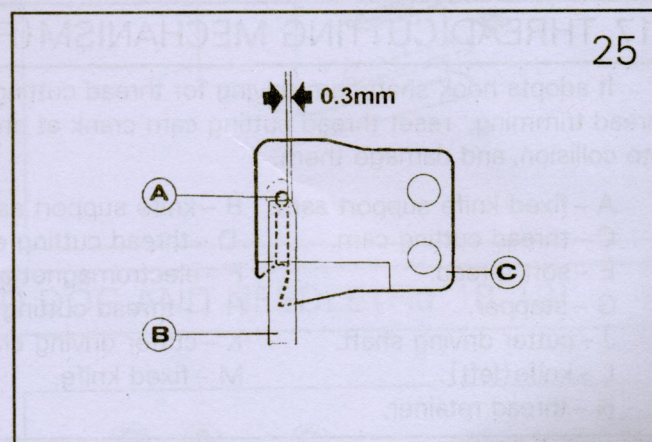
(1) The standard position is shown in the figure.

(2) If the size is larger than the standard, the knife will cut the 3 threads in the meantime or draw the thread out of the needle eye; if smaller, will cause cutting damage, so make sure to avoid that.

(3) As things mentioned above occur, adjustment is done by setting the fixed knife support or the fixed knife (B).

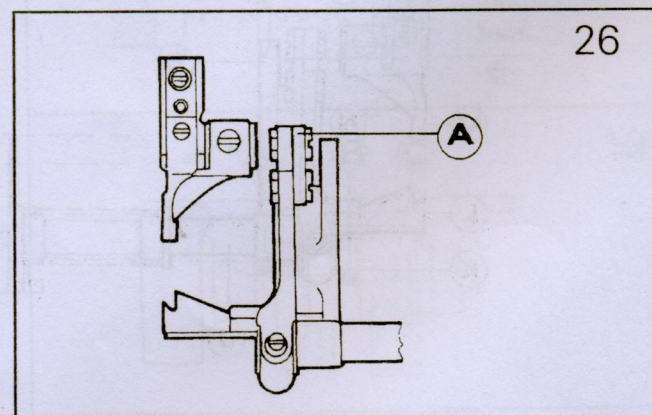
A – the blade

C – the knife (left)



## 21. CONNECTION OF THE KNIFE (LEFT) SUPPORT AND CUTTER DRIVING CRANK (Fig. 26)

Connect them as the figure shows and notice the position of Cutter Link Lever (A).





## 22. POSITION OF THE CUTTER DRIVING SHAFT (Fig. 27)

- (1) The Standard position is shown in the figure.
- (2) When assemble it, Cutter Driving Shaft (G) should be first put in Cutter Driving Crank (A).
- (3) Set Thread Cutting Cam Crank 1 (D) on the cutter driving shaft with reference to the standard position.

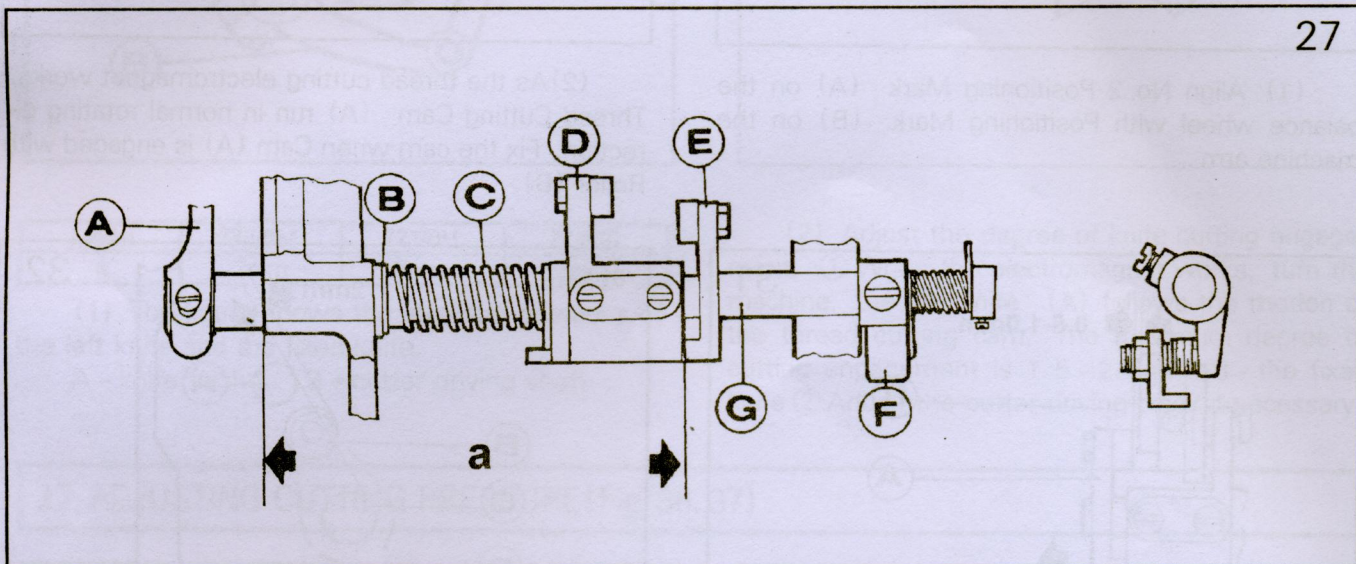
(4) Set Stopper (F), make sure that there is no clearance between parts around the cutter driving shaft, and rotate steadily.

B – spring end cover

C – spring

E – thread cutting cam crank 2

| Model | 72 80M | 72 80H | 72 80B |
|-------|--------|--------|--------|
| a     | 90.5mm | 90.5mm | 87mm   |



## 23. THE ELECTROMAGNET CORE STROKE (Fig. 28)

(1) The standard stroke of the electromagnet core is 6mm.

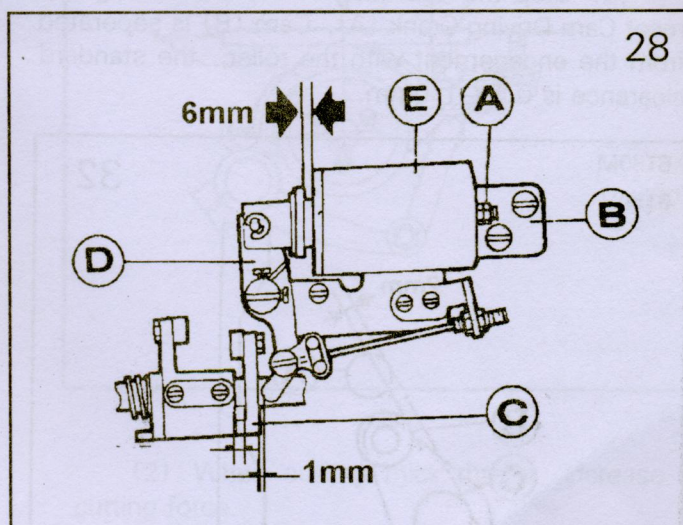
(2) The stroke can be adjusted with Positioning screw (A)

B – thread cutting electromagnet holder

C – thread cutting cam crank 2

D – driving bar

E – thread cutting electromagnet

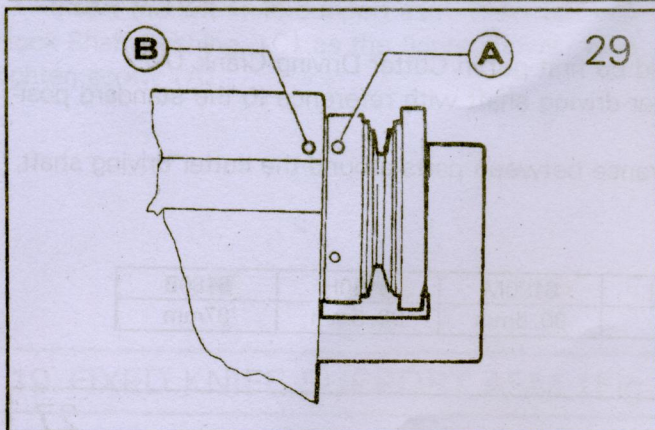


## 24. INSTALLING THE ELECTROMAGNET ASM (Fig. 28)

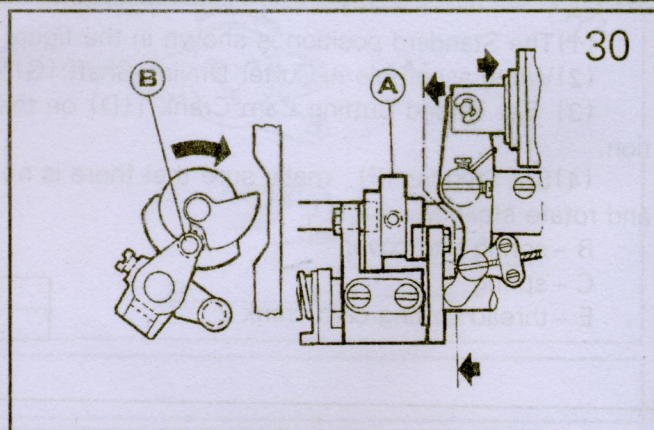
The installing parameter is shown in Fig. 28.



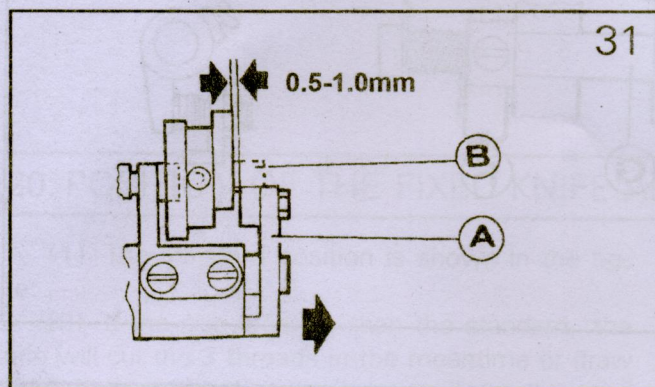
## 25. INSTALLING THREAD CUTTING CAM (Fig. 29. 30. 31. 32. 33)



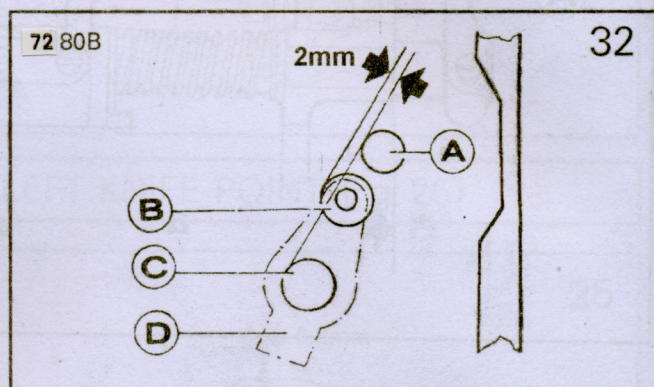
(1) Align No. 2 Positioning Mark (A) on the balance wheel with Positioning Mark (B) on the machine arm.



(2) As the thread cutting electromagnet works, Thread Cutting Cam (A) run in normal rotating direction. Fix the cam when Cam (A) is engaged with Roller (B).

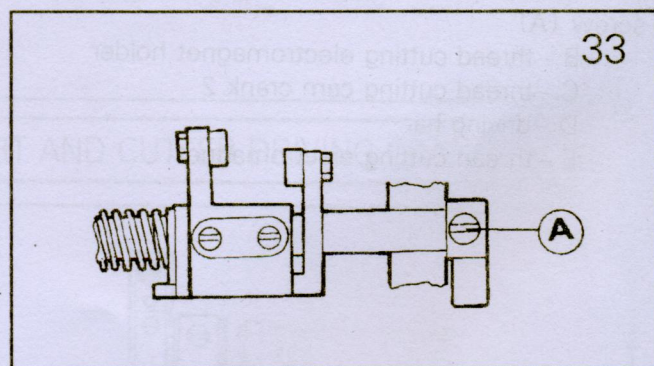
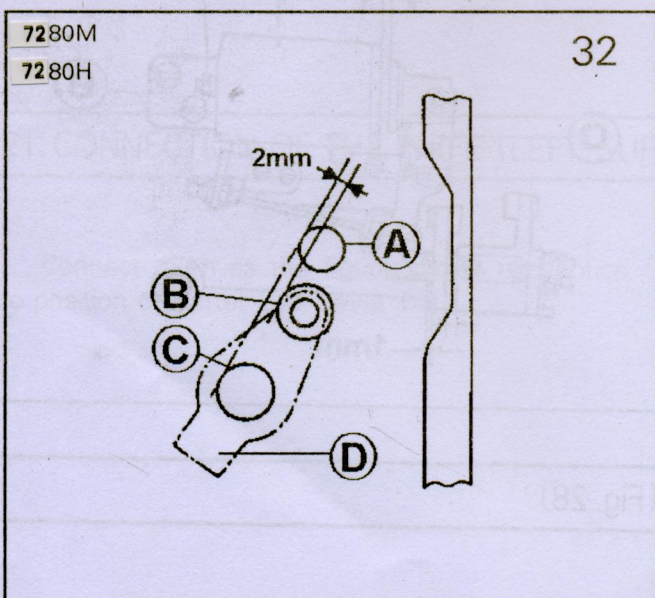


(3) Stop the operation of the electromagnet, reset Cam Driving Crank (A), Cam (B) is separated from the engagement with the roller, the standard clearance is 0.5 - 1.0mm.



Note: the figure shows the standard position of Cam Driving Crank (D) before operation.

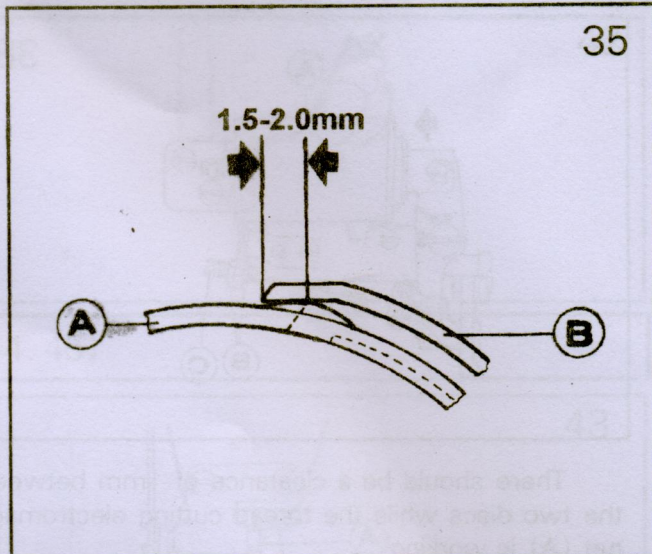
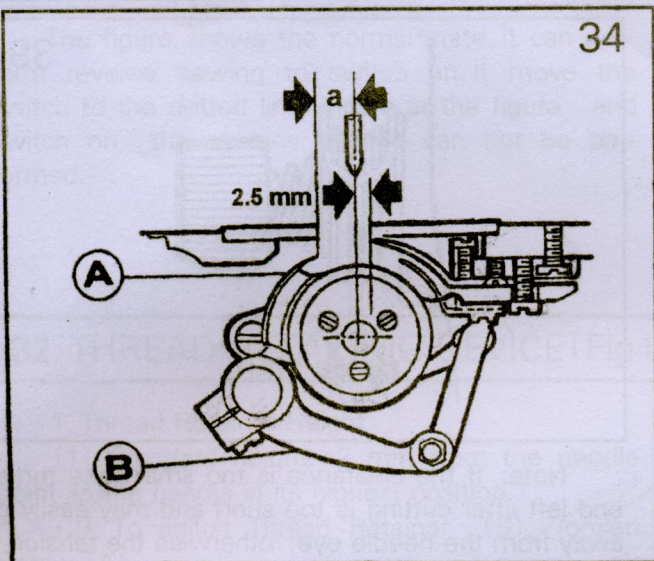
A - hook shaft B - roller C - cutter driving shaft



It may change the positions mentioned above to remove the stopper, then adjust with Screw (A), and readjust the above (1) - (3)



## 26. ADJUSTING KNIFE CUTTING ENGAGEMENT (Fig. 34. 35)



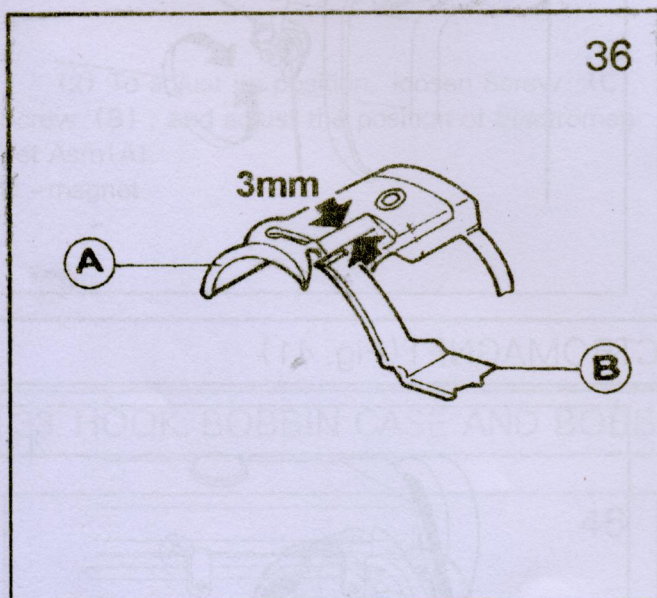
| Model | 72 80M | 72 80H | 72 80B |
|-------|--------|--------|--------|
| a     | 7mm    | 7mm    | 7mm    |

(1) The figure shows the standard positions of the left knife and the fixed knife.

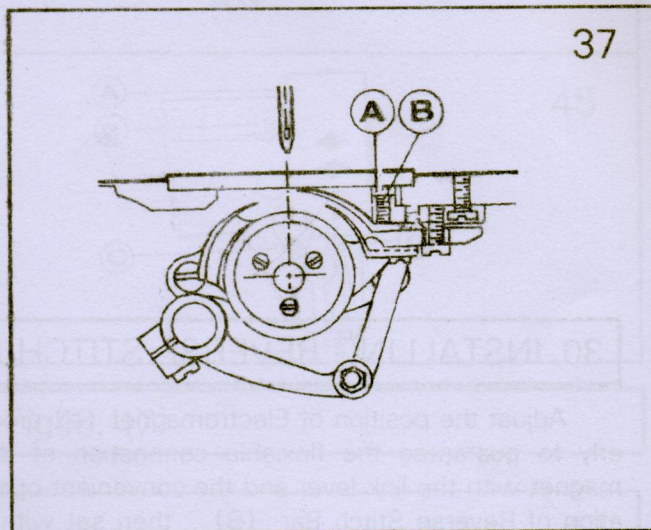
A – knife (right) B – cutter driving shaft

(2) Adjust the degree of knife cutting engagement: ① When the electromagnet works, turn the machine, the left knife (A) follows the motion of the thread cutting cam. The maximum degree of cutting engagement is 1.5 – 2.0mm B – the fixed knife ② Adjust the cutter driving crank if necessary.

## 27. ADJUSTING CUTTING PRESSURE (Fig. 36. 37)



(1) The figure shows the standard position that Left Knife (A) begins to touch Fixed Knife (B).

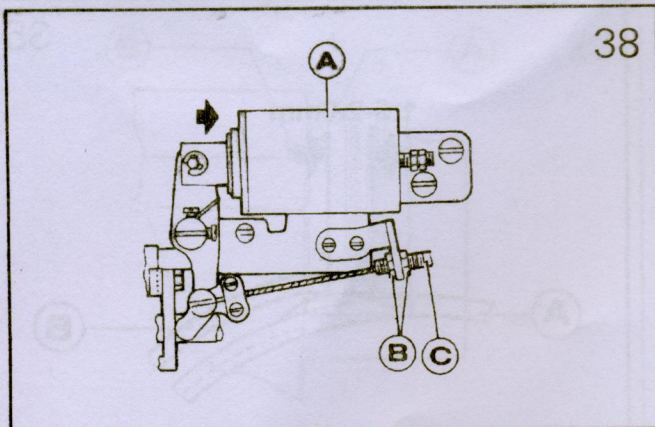


(2) When cutting thick thread, increase the cutting force.

(3) For adjusting cutting force, loosen Set Nut (A), and adjust Screw (B).

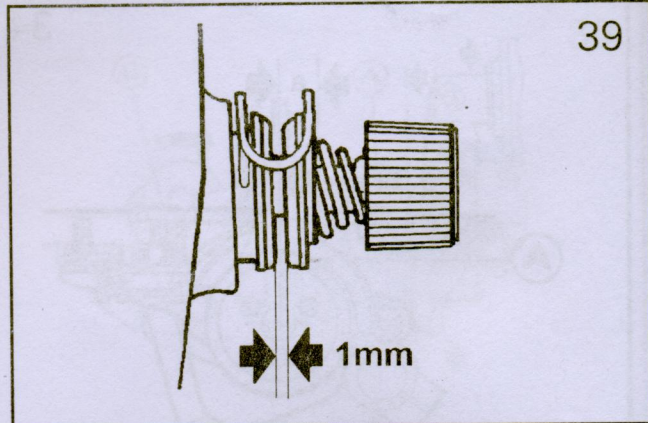


## 28. ADJUSTING NEEDLE THREAD TENSION (Fig. 38, 39)



There should be a clearance of 1mm between the two discs while the thread cutting electromagnet (A) is working.

For adjustment, loosen Nut (B), and move soft thread (C).



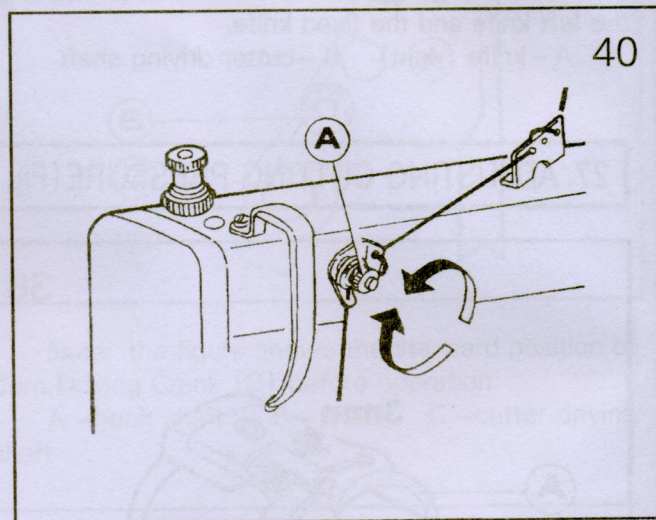
Note: If the clearance is too small, the thread end left after cutting is too short and may easily go away from the needle eye; otherwise the tension is poor and affect the needle thread tension.

## 29. THREAD END REMAINS ADJUSTMENT (Fig. 40)

To get the needle thread end remains properly, adjust Nut (A).

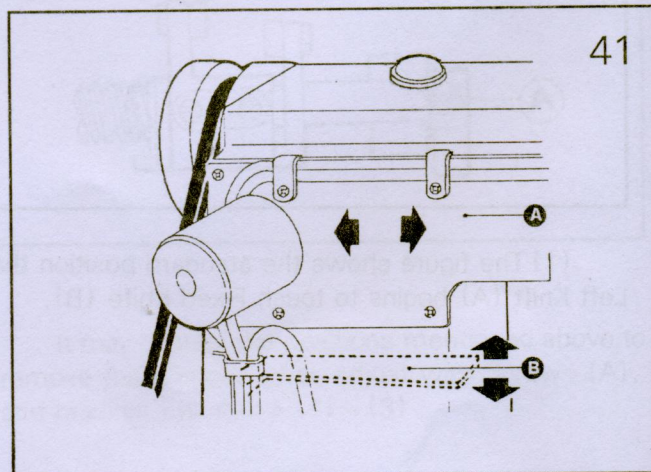
Turn rightward: get short

Turn leftward: get long



## 30. INSTALLING REVERSE STITCH ELECTROMAGNET (Fig. 41)

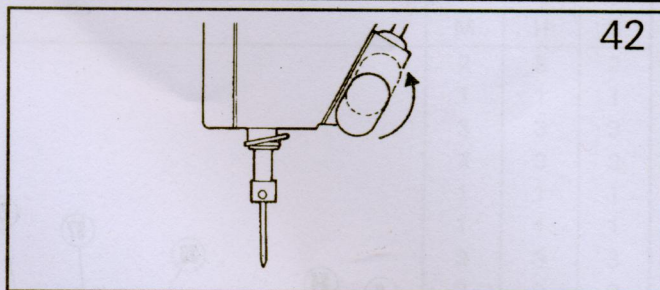
Adjust the position of Electromagnet (A) properly to guarantee the flexible connection of the magnet with the link lever and the convenient operation of Reverse Stitch Bar (B), then set with a screw.





### 31. REVERSE STITCH SWITCH(Fig. 42)

The figure shows the normal state. It can perform reverse sewing to switch on. If move the switch to the dotted line shown in the figure, and switch on, the reverses sewing can not be performed.

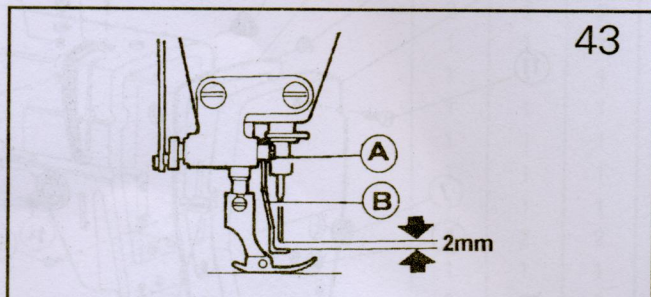


### 32. THREAD RETAINING DEVICE(Fig43. 44. 45)

#### 1. Thread Retainer Height

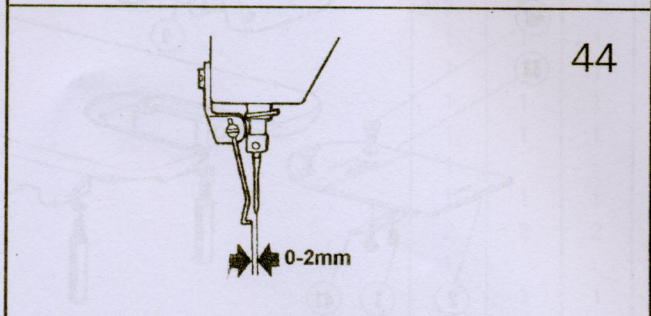
(1) Standard height: 2 mm from the needle point as the needle in its highest position.

(2) To adjust Thread Retainer (B), loosen Screw (A).



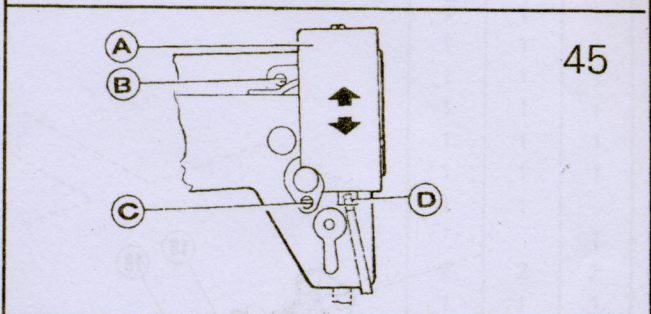
#### 2. Thread Retainer Working position.

(1) When the magnet move into the electromagnet completely, the standard distance between the thread retainer and the center of the needle should be 0 – 2 mm.

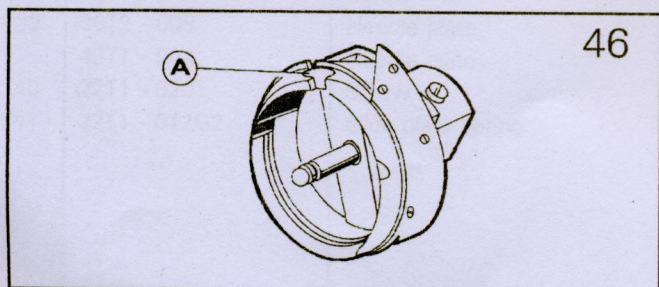


(2) To adjust its position, loosen Screw (C), Screw (B), and adjust the position of Electromagnet Asm(A).

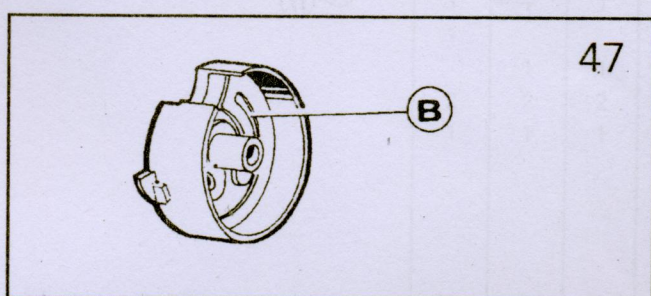
D – magnet



### 33. HOOK. BOBBIN CASE AND BOBBIN (Fig46. 47)

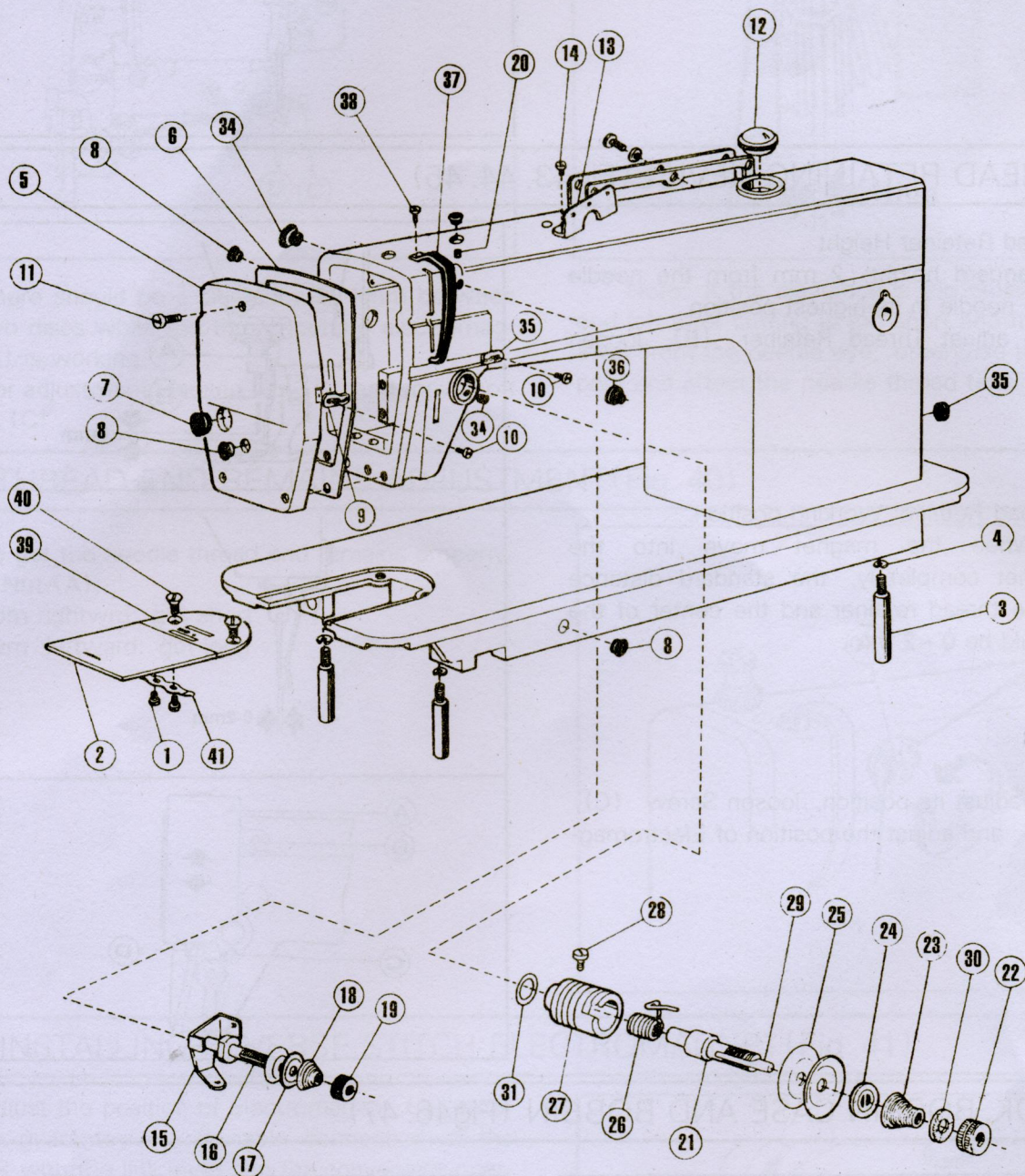


1. There is a thread groove(A) in the special hook for thread cutting sewing machine.



2. The bobbin case used in the machine should be with a spring(B) in its bottom, which prevents the bobbin from running without loading.



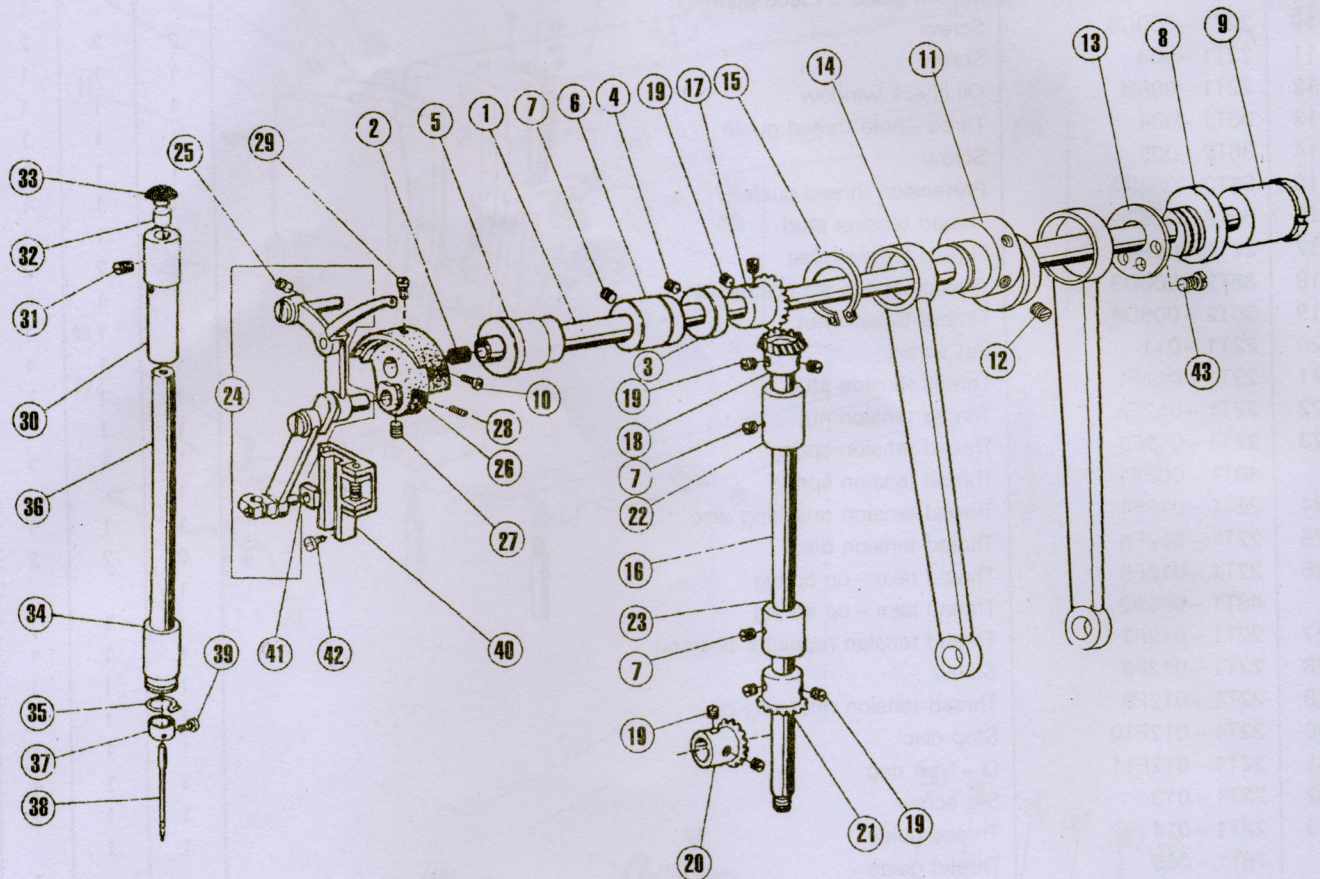




# 1. ARM AND BED MECHANISM

| No. | Ref. No.     | Description                      | Qt. |   |   |
|-----|--------------|----------------------------------|-----|---|---|
|     |              |                                  | M   | H | B |
| 1   | 22T1 -021G3  | Screw                            | 2   | 2 | 2 |
| 2   | 22T1 -021G1  | Slide plate                      | 1   | 1 | 1 |
| 3   | 48T1 -005    | Leg                              | 3   | 3 | 3 |
| 4   | GB93 -76     | Spring washer 6                  | 3   | 3 | 3 |
| 5   | 124T1 -002B1 | Face plate                       | 1   | 1 | 1 |
| 6   | 124T1 -002B2 | Face plate gasket                | 1   | 1 | 1 |
| 7   | 22T1 -003C3  | Rubber plug                      | 3   | 3 | 3 |
| 8   | 22T1 -003C4  | Rubber plug                      | 3   | 3 | 3 |
| 9   | 22T1 -003C5  | Thread guide on face plate       | 1   | 1 |   |
|     | 78T1 -004C1  | Thread guide on face plate       |     |   | 1 |
| 10  | 22T1 -003C6  | Screw                            | 2   | 2 | 2 |
| 11  | 22T1 -004    | Screw                            | 1   | 1 | 1 |
| 12  | 22T1 -008H   | Oil check window                 | 1   | 1 | 1 |
| 13  | 36T2 -004    | Three - hole thread guide        | 1   | 1 | 1 |
| 14  | 36T2 -005    | Screw                            | 1   | 1 | 1 |
| 15  | 36T2 -006D1  | Pretension thread guide          | 1   | 1 | 1 |
| 16  | 36T2 -006D2  | Thread tension stud              | 1   | 1 | 1 |
| 17  | 22T1 -009E3  | Thread tension disc              | 2   | 2 | 2 |
| 18  | 36T2 -006D3  | Tension spring for pretension    | 1   | 1 | 1 |
| 19  | 36T2 -006D4  | Thread tension nut               | 1   | 1 | 1 |
| 20  | 22T1 -011    | Set screw                        | 1   | 1 | 1 |
| 21  | 22T1 -012F1  | Thread tension stud              | 1   | 1 | 1 |
| 22  | 22T1 -012F2  | Thread tension nut               | 1   | 1 | 1 |
| 23  | 22T1 -012F3  | Thread tension spring            | 1   | 1 | 1 |
|     | 48T1 -003A1  | Thread tension spring            | 1   |   |   |
| 24  | 22T1 -012F4  | Thread tension releasing disc    | 1   | 1 | 1 |
| 25  | 22T1 -012F5  | Thread tension disc              | 2   | 2 | 2 |
| 26  | 22T1 -012F6  | Thread take - up spring          | 1   |   |   |
|     | 48T1 -003A2  | Thread take - up spring          |     | 1 | 1 |
| 27  | 22T1 -012F7  | Thread tension regulator bushing | 1   | 1 | 1 |
| 28  | 22T1 -012F8  | Screw                            | 1   | 1 | 1 |
| 29  | 22T1 -012F9  | Thread tension releasing pin     | 1   | 1 | 1 |
| 30  | 22T1 -012F10 | Stop disc                        | 1   | 1 | 1 |
| 31  | 22T1 -012F11 | O -type ring                     | 1   | 1 | 1 |
| 32  | 22T1 -013    | Set screw                        | 1   | 1 | 1 |
| 33  | 22T1 -014    | Thread guide                     | 1   | 1 |   |
|     | 78T1 -005    | Thread guide                     |     |   | 1 |
| 34  | 22T1 -015    | Rubber plug                      | 2   | 2 | 2 |
| 35  | 22T1 -016    | Rubber plug                      | 1   | 1 | 1 |
| 37  | 36T2 -007    | Thread take - up lever guard     | 1   | 1 |   |
|     | 78T2 -002    | Thread take - up lever guard     |     |   | 1 |
| 38  | 22T2 -004    | Screw                            | 1   | 1 | 1 |
| 39  | 36T2 -008    | Needle plate                     | 1   |   |   |
|     | 48T1 -004    | Needle plate                     |     | 1 | 1 |
| 40  | 22T1 -020    | Screw                            | 2   | 2 | 2 |
| 41  | 22T1 -012G2  | Slide plate spring               | 1   | 1 | 1 |



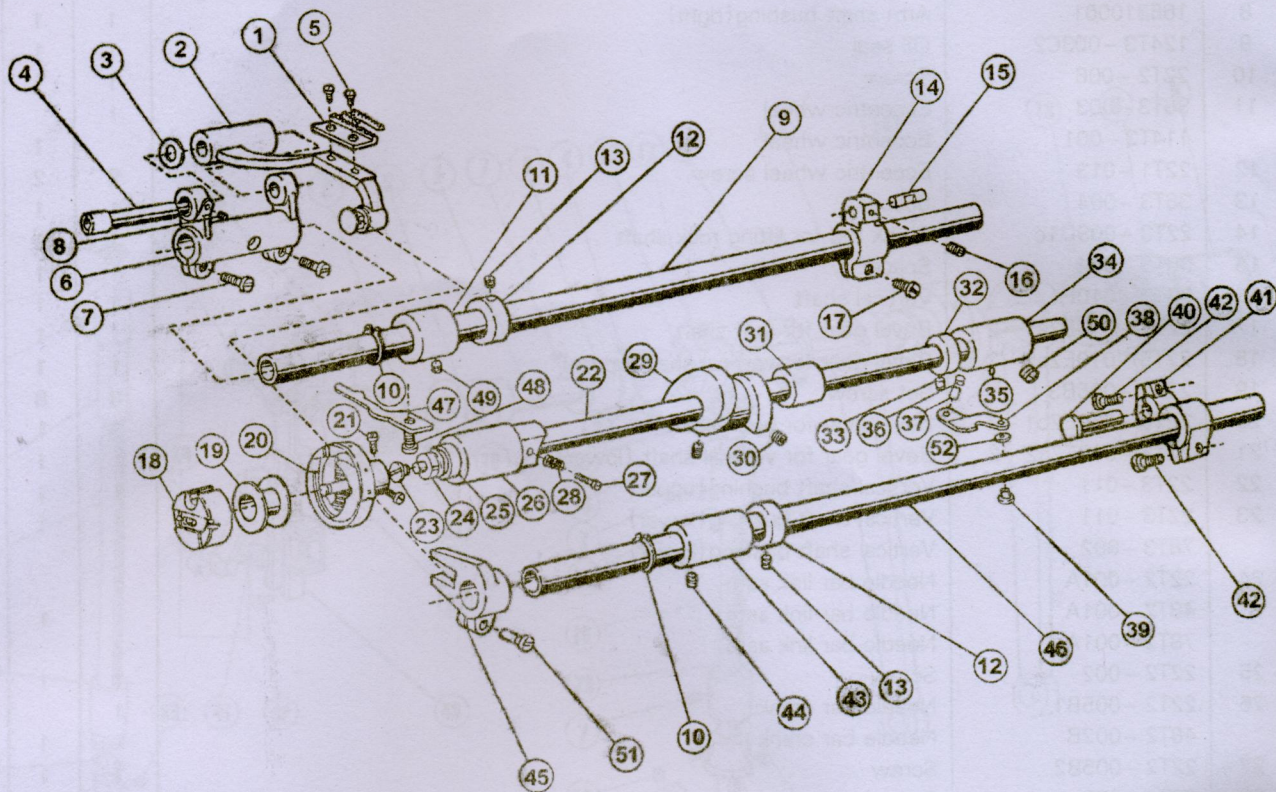




## 2. ARM SHAFT AND VERTICAL SHAFT AND THREAD TAKE - UP MECHANISM

| No. | Ref. No.         | Description                           | Qt. |   |   |
|-----|------------------|---------------------------------------|-----|---|---|
|     |                  |                                       | M   | H | B |
| 1   | 108T3 -001A1     | Arm shaft                             | 1   | 1 | 1 |
| 2   | 22T3 -001A2      | Rubber plug                           | 2   | 2 | 2 |
| 3   | 22T3 -002B1      | Collar for arm shaft                  | 1   | 1 | 1 |
| 4   | 22T2 -005B3      | Screw                                 | 2   | 2 | 2 |
| 5   | 22T3 -003        | Arm shaft bushing (left)              | 1   | 1 | 1 |
| 6   | 22T3 -004        | Arm shaft bushing (middle)            | 1   | 1 | 1 |
| 7   | 22T2 -002        | Screw                                 | 3   | 3 | 3 |
| 8   | 165310001        | Arm shaft bushing(right)              | 1   | 1 | 1 |
| 9   | 124T3 -003C2     | Oil seal                              | 1   | 1 | 1 |
| 10  | 22T2 -006        | Screw                                 | 1   | 1 | 1 |
| 11  | 36T3 -003        | Eccentric wheel                       | 1   |   |   |
|     | 114T3 -001       | Eccentric wheel                       |     | 1 | 1 |
| 12  | 22T1 -013        | Eccentric wheel screw                 | 2   | 2 | 2 |
| 13  | 36T3 -004        | Spacer                                | 1   | 1 | 1 |
| 14  | 22T3 -009D1c     | Crank rod for lifting rock shaft      | 1   | 1 | 1 |
| 15  | 36T3 -004        | Spacer                                | 1   | 1 | 1 |
| 16  | 22T3 -010E1      | Vertical shaft                        | 1   | 1 | 1 |
| 17  | 22T3 -010E2a1 -2 | Bevel gear for arm shaft              | 1   | 1 | 1 |
| 18  | 22T3 -010E2a2 -2 | Bevel gear for vertical shaft (upper) | 1   | 1 | 1 |
| 19  | 22T2 -005B3      | Set screw                             | 8   | 8 | 8 |
| 20  | 22T3 -010E2b1 -2 | Bevel gear for hook shaft             | 1   | 1 | 1 |
| 21  | 22T3 -010E2b2 -2 | Bevel gear for vertical shaft (lower) | 1   | 1 | 1 |
| 22  | 22T3 -011        | Vertical shaft bushing (upper)        | 1   | 1 | 1 |
| 23  | 22T3 -011        | Vertical shaft bushing (lower)        | 1   | 1 |   |
|     | 78T3 -002        | Vertical shaft bushing (lower)        |     |   | 1 |
| 24  | 22T2 -001A       | Needle bar link asm                   | 1   |   |   |
|     | 48T2 -001A       | Needle bar link asm                   |     | 1 |   |
|     | 78T2 -001A       | Needle bar link asm                   |     |   | 1 |
| 25  | 22T2 -002        | Screw                                 | 1   | 1 | 1 |
| 26  | 22T2 -005B1      | Needle bar crank                      | 1   |   |   |
|     | 48T2 -002B       | Needle bar crank                      |     | 1 | 1 |
| 27  | 22T2 -005B2      | Screw                                 | 1   | 1 | 1 |
| 28  | 22T2 -006        | Screw                                 | 1   | 1 | 1 |
| 29  | 22T2 -007        | Set screw                             | 1   | 1 | 1 |
| 30  | 22T2 -008        | Needle bar bushing (upper)            | 1   | 1 | 1 |
| 31  | 22T2 -009        | Screw                                 | 1   | 1 | 1 |
| 32  | 22T2 -010        | Felt plug                             | 1   | 1 | 1 |
| 33  | 22T2 -011        | Rubber plug                           | 1   | 1 | 1 |
| 34  | 22T2 -012C1      | Needle bushing (lower)                | 1   |   |   |
|     | 124T2 -006       | Needle bushing (lower)                |     | 1 | 1 |
| 35  | 22T2 -012C2      | Thread guide                          | 1   | 1 | 1 |
| 36  | 22T2 -014        | Needle bar                            | 1   |   |   |
|     | 78T2 -004        | Needle bar                            |     | 1 | 1 |
| 37  | 22T2 -015        | Thread guide for needle bar           | 1   |   |   |
|     | 48T2 -004        | Thread guide for needle bar           |     | 1 | 1 |
| 38  | DB x1 14#        | Needle                                | 1   |   |   |
|     | DP x5 18#        | Needle                                |     | 1 |   |
|     | DB x1 22#        | Needle                                |     |   | 1 |
| 39  | 22T2 -017        | Screw                                 | 1   | 1 | 1 |
| 40  | 36T3 -005E       | Guide rail for slide block            | 1   | 1 | 1 |
| 41  | 22T2 -020        | Slide block                           | 1   | 1 | 1 |
| 42  | 22T2 -019        | Set screw                             | 2   | 2 | 2 |
| 43  | 100T6 -012       | Screw                                 | 3   | 3 | 3 |



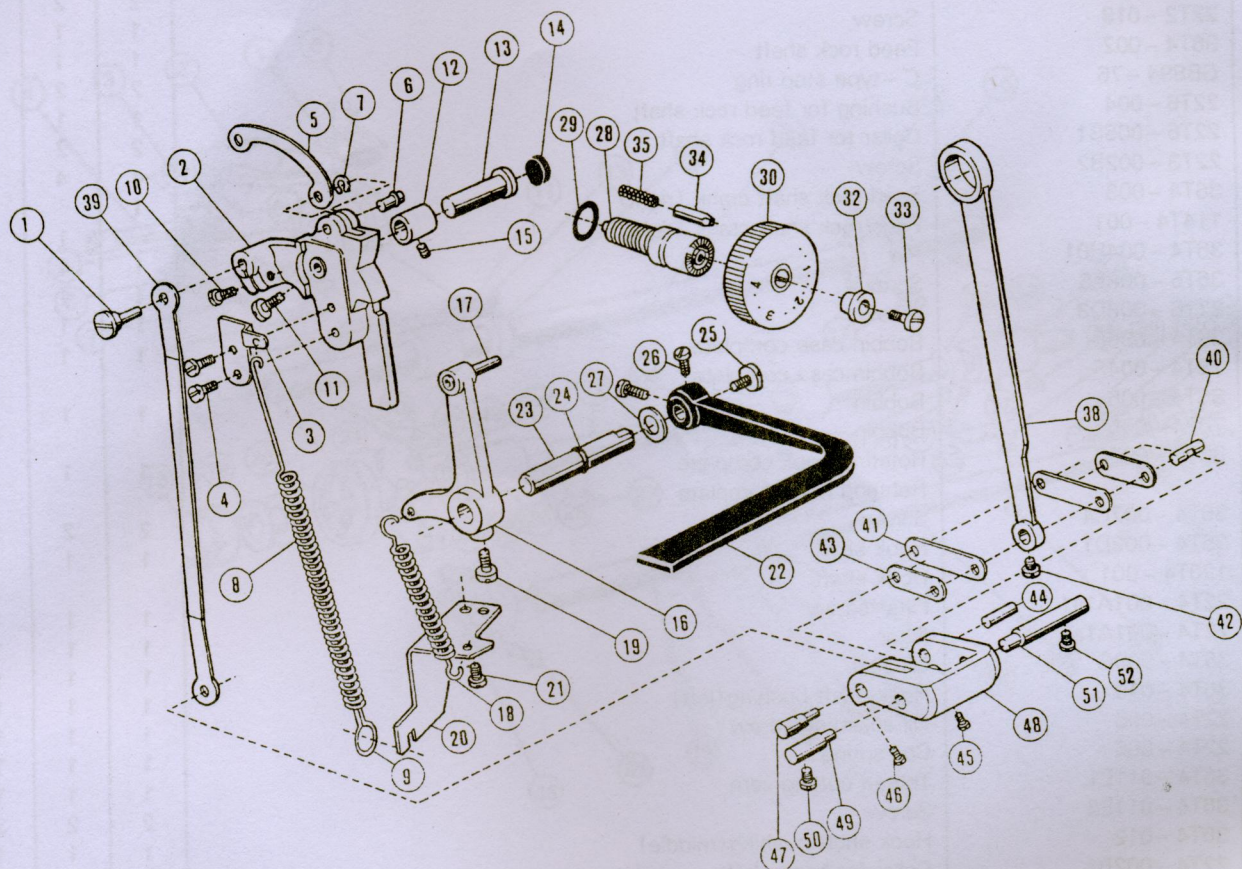




### 3. FEEDING AND FEED LIFTING AND ROTATING HOOK MECHANISM

| No. | Ref. No.      | Description                           | Qt. |   |   |
|-----|---------------|---------------------------------------|-----|---|---|
|     |               |                                       | M   | H | B |
| 1   | 22T6 -001A3   | Feed dog                              | 1   | 1 | 1 |
| 2   | 36T4 -001A1a  | Feed bar                              | 1   | 1 | 1 |
| 3   | 22T6 -001A6   | Washer                                | 1   | 1 | 1 |
| 4   | 36T4 -001A2   | Shaft for feed bar                    | 1   | 1 | 1 |
| 5   | 22T6 -001A4   | Screw                                 | 2   | 2 | 2 |
| 6   | 22T6 -001A1a  | Feed rock shaft crank                 | 1   | 1 | 1 |
| 7   | 22T6 -001A1b  | Screw                                 | 2   | 2 | 2 |
| 8   | 22T2 -019     | Screw                                 | 1   | 1 | 1 |
| 9   | 36T4 -002     | Feed rock shaft                       | 1   | 1 | 1 |
| 10  | GB894 -76     | C - type stop ring                    | 2   | 2 | 2 |
| 11  | 22T6 -004     | Bushing for feed rock shaft           | 1   | 1 | 1 |
| 12  | 22T6 -005B1   | Collar for feed rock shaft            | 2   | 2 | 2 |
| 13  | 22T3 -002B2   | Screw                                 | 4   | 4 | 4 |
| 14  | 36T4 -003     | Feed rock shaft crank (right)         | 1   |   |   |
|     | 114T4 -001    | Feed rock shaft crank (right)         |     | 1 | 1 |
| 15  | 36T4 -004H01  | Pin                                   | 1   | 1 | 1 |
| 16  | 36T5 -008E5   | Screw                                 | 1   | 1 | 1 |
| 17  | 22T6 -008D3   | Screw                                 | 1   | 1 | 1 |
| 18  | 36T4 -005B    | Bobbin case complete                  | 1   | 1 |   |
|     | 78T4 -004F    | Bobbin case complete                  |     |   | 1 |
| 19  | 36T4 -006     | Bobbin                                | 1   | 1 |   |
|     | 78T4 -005     | Bobbin                                |     |   | 1 |
| 20  | 36T4 -007C    | Rotating hook complete                | 1   | 1 |   |
|     |               | Rotating hook complete                |     |   | 1 |
| 21  | 36T4 -007C4   | Screw                                 | 2   | 2 | 2 |
| 22  | 36T4 -008D1   | Hook shaft                            | 1   | 1 |   |
|     | 120T4 -001    | Hook shaft                            |     |   | 1 |
| 23  | 22T4 -001A1a1 | Filter screw                          | 1   | 1 | 1 |
| 24  | 22T4 -001A1a2 | Filter                                | 1   | 1 | 1 |
| 25  | 36T4 -009G    | Oil seal                              | 1   | 1 | 1 |
| 26  | 36T4 -010     | Hook shaft bushing (left)             | 1   | 1 | 1 |
| 27  | 22T4 -005     | Oil adjusting screw                   | 1   | 1 | 1 |
| 28  | 22T4 -006     | Coil spring                           | 1   | 1 | 1 |
| 29  | 36T4 -011E1   | Thread cutting cam                    | 1   | 1 | 1 |
| 30  | 36T4 -011E2   | Screw                                 | 2   | 2 | 2 |
| 31  | 36T4 -012     | Hook shaft bushing (middle)           | 1   | 1 | 1 |
| 32  | 22T4 -002B1   | Collar for hook shaft                 | 1   | 1 | 1 |
| 33  | 22T2 -009     | Screw                                 | 2   | 2 | 2 |
| 34  | 36T4 -014F1   | Hook shaft bushing (right)            | 1   | 1 | 1 |
| 35  | 22T4 -007C2   | Oil pipe for hook shaft bushing       | 1   | 1 | 1 |
| 36  | 36T4 -015     | Plunger                               | 1   | 1 | 1 |
| 37  | 36T4 -016     | Plunger spring                        | 1   | 1 | 1 |
| 38  | 22T4 -010     | Guide plate                           | 1   | 1 |   |
|     | 78T4 -006     | Guide plate                           |     |   | 1 |
| 39  | 22T8 -009     | Screw                                 | 1   | 1 | 1 |
| 40  | 22T6 -007     | Hinge pin                             | 1   | 1 | 1 |
| 41  | 36T4 -017     | Feed lifting rock shaft crank (right) | 1   | 1 | 1 |
| 42  | J0.0.71       | Screw                                 | 2   | 2 | 2 |
| 43  | 22T6 -012     | Bushing for feed lifting shaft (left) | 1   | 1 | 1 |
| 44  | 22T2 -002     | Screw                                 | 1   | 1 | 1 |
| 45  | 36T4 -018H1D1 | Feed lifting fork                     | 1   | 1 | 1 |
| 46  | 36T4 -018H2   | Feed lifting rock shaft               | 1   | 1 | 1 |
| 47  | 22T4 -013     | Hook positioner                       | 1   |   |   |
|     | 48T4 -002     | Hook positioner                       |     | 1 |   |
|     | 78T4 -003     | Hook positioner                       |     |   | 1 |
| 48  | 22T4 -015     | Screw                                 | 1   | 1 | 1 |
| 49  | 22T2 -009     | Screw                                 | 1   | 1 | 1 |
| 50  | 22T1 -013     | Screw                                 | 1   | 1 | 1 |
| 51  | 22T6 -008D3   | Screw                                 | 1   | 1 | 1 |
| 52  | GB93 -76      | Washer                                | 1   | 1 | 1 |





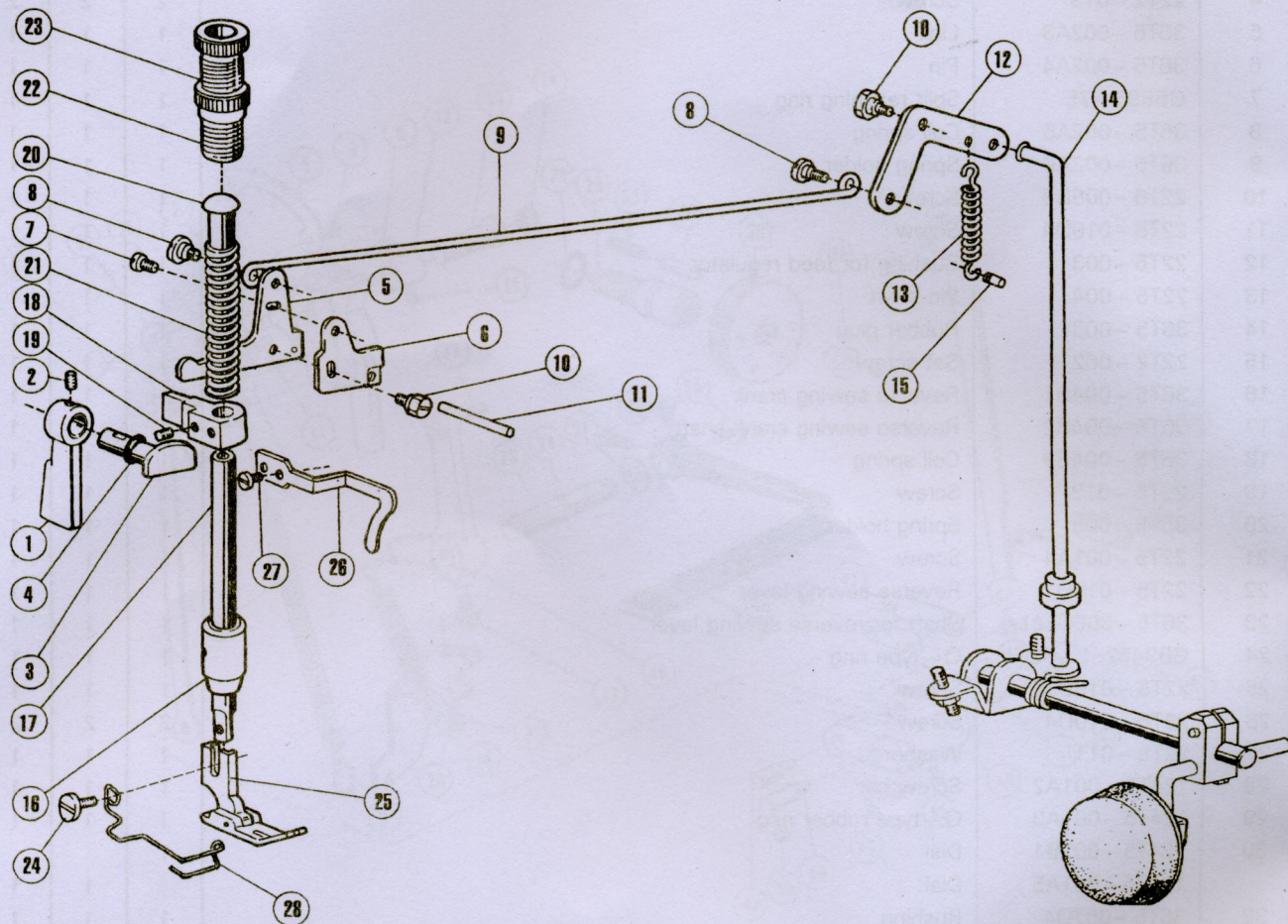


#### 4. STITCH LENGTH REGULATING MECHANISM

| No. | Ref. No.       | Description                    | Qt. |   |   |
|-----|----------------|--------------------------------|-----|---|---|
|     |                |                                | M   | H | B |
| 1   | 36T5 -001      | Set pin                        | 1   | 1 | 1 |
| 2   | 36T5 -002A1    | Feed regulator                 | 1   |   |   |
|     | 114T5 -001     | Feed regulator                 |     | 1 | 1 |
| 3   | 36T5 -002A2    | Spring retainer                | 1   | 1 | 1 |
| 4   | 22T2 -019      | Screw                          | 2   | 2 | 2 |
| 5   | 36T5 -002A3    | Link                           | 1   | 1 | 1 |
| 6   | 36T5 -002A4    | Pin                            | 1   | 1 | 1 |
| 7   | GB896 -75      | Split retaining ring           | 1   | 1 | 1 |
| 8   | 36T5 -002A5    | Coil spring                    | 1   | 1 | 1 |
| 9   | 36T5 -002A6    | Spring holder                  | 1   | 1 | 1 |
| 10  | 22T6 -008D3    | Screw                          | 1   | 1 | 1 |
| 11  | 22T5 -010D4    | Screw                          | 1   | 1 | 1 |
| 12  | 22T5 -003      | Bushing for feed regulator     | 1   | 1 | 1 |
| 13  | 22T5 -004      | Pin shaft                      | 1   | 1 | 1 |
| 14  | 36T5 -003      | Rubber plug                    | 1   | 1 | 1 |
| 15  | 22T2 -002      | Set screw                      | 1   | 1 | 1 |
| 16  | 36T5 -004B1    | Reverse sewing crank           | 1   | 1 | 1 |
| 17  | 36T5 -004B2    | Reverse sewing crank shaft     | 1   | 1 | 1 |
| 18  | 36T5 -004B3    | Coil spring                    | 1   | 1 | 1 |
| 19  | 22T5 -013      | Screw                          | 1   | 1 | 1 |
| 20  | 36T5 -005      | Spring holder                  | 1   | 1 | 1 |
| 21  | 22T5 -001A4    | Screw                          | 1   | 1 | 1 |
| 22  | 22T5 -010D1    | Reverse sewing lever           | 1   | 1 | 1 |
| 23  | 36T5 -006C1a1  | Shaft for reverse sewing lever | 1   | 1 | 1 |
| 24  | GB3452.1 -92   | O -type ring                   | 1   | 1 | 1 |
| 25  | 22T5 -010D3    | Screw                          | 1   | 1 | 1 |
| 26  | 22T5 -010D4    | Screw                          | 2   | 2 | 2 |
| 27  | 22T5 -011      | Washer                         | 1   | 1 | 1 |
| 28  | 124T5 -001A2   | Screw bar                      | 1   | 1 | 1 |
| 29  | 124T5 -001A3   | O -type rubber ring            | 1   | 1 | 1 |
| 30  | 124T5 -002B1   | Dial                           | 1   |   |   |
|     | 124T5 -001A5   | Dial                           |     | 1 | 1 |
| 32  | 36T5 -007D4    | Bushing                        | 1   | 1 | 1 |
| 33  | 36T5 -007D5    | Screw                          | 1   | 1 | 1 |
| 34  | 36T5 -012      | Thrust pin                     | 1   | 1 | 1 |
| 35  | 22T5 -009      | Coil spring                    | 1   | 1 | 1 |
| 38  | 36T5 -008E2    | Feed link                      | 1   | 1 | 1 |
| 39  | 36T5 -008E3    | Stitch length regulating link  | 1   | 1 | 1 |
| 40  | 36T4 -004H02   | Pin                            | 1   | 1 | 1 |
| 41  | 36T5 -008E4H02 | Link                           | 2   |   |   |
|     | 114T5 -003     | Link                           |     | 2 | 2 |
| 42  | 36T5 -008E5    | Screw                          | 1   | 1 | 1 |
| 43  | 36T5 -008E4H01 | Link                           | 2   | 2 | 2 |
| 44  | 36T5 -008E6    | pin                            | 1   | 1 | 1 |
| 45  | 36T5 -008E7    | Screw                          | 1   | 1 | 1 |
| 46  | 36T5 -008E8    | Screw                          | 1   | 1 | 1 |
| 47  | 36T5 -008E9    | Eccentric shaft                | 1   | 1 | 1 |
| 48  | 36T5 -008E10   | Stitch length adjusting crank  | 1   | 1 | 1 |
| 49  | 36T5 -009H02   | Set pin(left)                  | 1   | 1 | 1 |
| 50  | 22T6 -008D3    | Screw                          | 1   | 1 | 1 |
| 51  | 36T5 -009H01   | Set pin(right)                 | 1   | 1 | 1 |
| 52  | 22T6 -008D3    | Screw                          | 1   | 1 | 1 |



# 1. STITCH LENGTH REGULATING MECHANISM

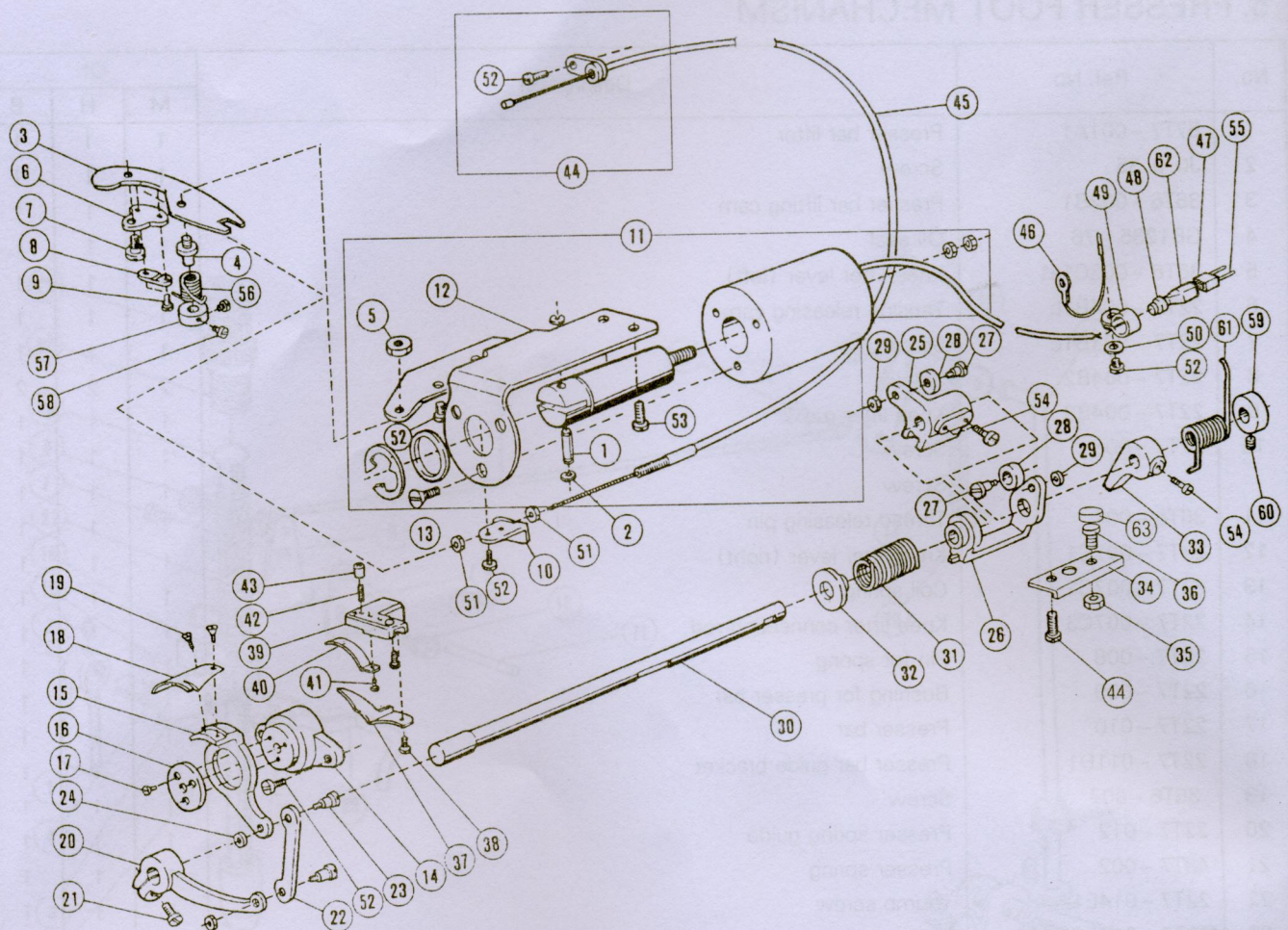




## 5. PRESSER FOOT MECHANISM

| No. | Ref. No.       | Description                | Qt. |   |   |
|-----|----------------|----------------------------|-----|---|---|
|     |                |                            | M   | H | B |
| 1   | 57T7 - 001A1   | Presser bar lifter         | 1   | 1 | 1 |
| 2   | J0. 0. 35      | Screw                      | 1   | 1 | 1 |
| 3   | 36T6 - 002B1   | Presser bar lifting cam    | 1   | 1 | 1 |
| 4   | GB1235 - 76    | Oil seal                   | 1   | 1 | 1 |
| 5   | 36T6 - 003C1a1 | Knee lifter lever (left)   | 1   | 1 | 1 |
| 6   | 22T7 - 004B1b  | Tension releasing cam      | 1   | 1 | 1 |
| 7   | 22T7 - 004B1c  | Screw                      | 1   | 1 | 1 |
| 8   | 22T7 - 004B2   | Screw                      | 2   | 2 | 2 |
| 9   | 22T7 - 004B3   | Knee lifter rod            | 1   | 1 | 1 |
| 10  | 22T7 - 005     | Screw                      | 1   | 1 | 1 |
|     |                | Screw                      | 1   | 1 | 1 |
| 11  | 36T6 - 004     | Thread releasing pin       | 1   | 1 | 1 |
| 12  | 22T7 - 007C1   | Knee lifter lever (right)  | 1   | 1 | 1 |
| 13  | 22T7 - 007C2   | Coil spring                | 1   | 1 | 1 |
| 14  | 22T7 - 007C3   | Knee lifter connecting rod | 1   | 1 | 1 |
| 15  | 22T7 - 008     | Pin for spring             | 1   | 1 | 1 |
| 16  | 22T7 - 009     | Bushing for presser bar    | 1   | 1 | 1 |
| 17  | 22T7 - 010     | Presser bar                | 1   | 1 | 1 |
| 18  | 22T7 - 011D1   | Presser bar guide bracket  | 1   | 1 | 1 |
| 19  | 36T6 - 007     | Screw                      | 1   | 1 | 1 |
| 20  | 22T7 - 012     | Presser spring guide       | 1   | 1 | 1 |
| 21  | 48T7 - 002     | Presser spring             | 1   | 1 | 1 |
| 22  | 22T7 - 014E1   | Thumb screw                | 1   | 1 | 1 |
| 23  | 22T7 - 014E2   | Lock nut                   | 1   | 1 | 1 |
| 24  | 22T7 - 015     | Screw                      | 1   | 1 | 1 |
| 25  | 22T7 - 017F    | Presser foot asm           | 1   |   |   |
|     | 48T7 - 003A    | Presser foot asm           |     | 1 | 1 |
| 26  | 36T6 - 009     | Thread guide               | 1   | 1 | 1 |
| 27  | 22T2 - 004     | Screw                      | 1   | 1 | 1 |
| 28  | 57T7 - 002     | Presser foot spring        | 1   | 1 | 1 |





## 6. KNIFE ACTUATING MECHANISM

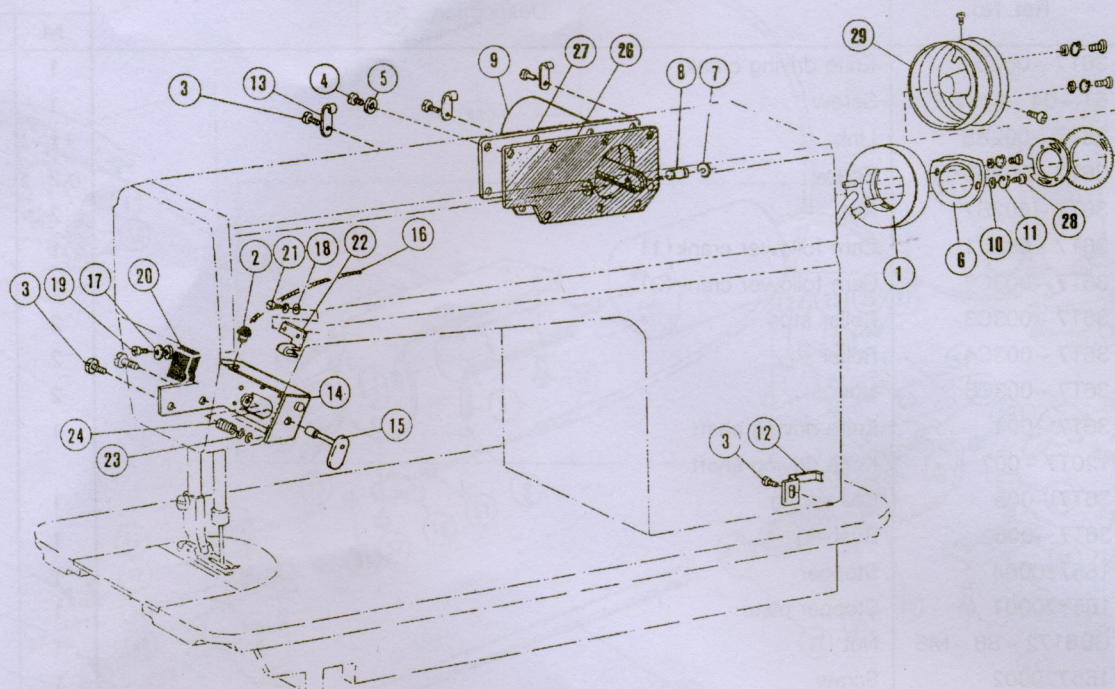
| No. | Ref. No.       | Description                      | Qt. |   |   |
|-----|----------------|----------------------------------|-----|---|---|
|     |                |                                  | M   | H | B |
| 1   | 36T8 - 009     | Pin                              | 1   | 1 | 1 |
| 2   | GB896 - 76     | Split retaining ring             | 2   | 2 | 2 |
| 3   | 36T7 - 001A1   | Flexible driving lever           | 1   | 1 | 1 |
| 4   | 36T7 - 001A2   | Screw                            | 1   | 1 | 1 |
| 5   | J0.0.16        | Nut                              | 1   | 1 | 1 |
| 6   | 36T7 - 001A3   | Bracket for flexible wire        | 1   | 1 | 1 |
| 7   | 36T7 - 001A4   | Screw                            | 1   | 1 | 1 |
| 8   | 36T7 - 001A5   | Flexible wire connecting bracket | 1   | 1 | 1 |
| 9   | 36T7 - 001A6   | Screw                            | 2   | 2 | 2 |
| 10  | 36T7 - 001A7   | Holder for flexible wire         | 1   | 1 | 1 |
| 11  | 165710000      | Solenoid assy for thraed trimmer | 1   | 1 | 1 |
| 12  | 36T7 - 001A8b  | Solenoid mounting bracket        | 1   | 1 | 1 |
| 13  | GB68 - 76      | Screw                            | 3   | 3 | 3 |
| 14  | 36T7 - 002B1a1 | Knife holding saddle             | 1   | 1 | 1 |
| 15  | 36T7 - 002B1a2 | knife base (left)                | 1   | 1 |   |
|     | 120T7 - 001A1  | knife base (left)                |     |   | 1 |
| 16  | 36T7 - 002B1a3 | Washer                           | 1   | 1 | 1 |
| 17  | 36T7 - 002B1a4 | Screw                            | 3   | 3 | 3 |
| 18  | 36T7 - 002B2   | Blade (left)                     | 1   | 1 |   |
|     | 120T7 - 001A2  | Blade                            |     |   | 1 |
| 19  | 36T7 - 002B3   | Set screw                        | 2   | 2 | 2 |



## 6. KNIFE ACTUATING MECHANISM

| No. | Ref. No.         | Description                    | Qt. |   |   |
|-----|------------------|--------------------------------|-----|---|---|
|     |                  |                                | M   | H | B |
| 20  | 36T7 - 002B4     | Knife driving crank            | 1   | 1 | 1 |
| 21  | 61 - 04 - 01/B6  | Screw                          | 1   | 1 | 1 |
| 22  | 36T7 - 002B5     | Link                           | 1   | 1 | 1 |
| 23  | 36T7 - 002B6     | Screw                          | 2   | 2 | 2 |
| 24  | 36T7 - 002B7     | Nut                            | 2   | 2 | 2 |
| 25  | 36T7 - 003C1     | Cam follower crank(1)          | 1   | 1 | 1 |
| 26  | 36T7 - 003C2     | Cam follower crank(2)          | 1   | 1 | 1 |
| 27  | 36T7 - 003C3     | Roller stud                    | 2   | 2 | 2 |
| 28  | 36T7 - 003C4     | Roller                         | 2   | 2 | 2 |
| 29  | 36T7 - 003C5     | Nut                            | 2   | 2 | 2 |
| 30  | 36T7 - 004       | Knife driving shaft            | 1   | 1 |   |
|     | 120T7 - 002      | Knife driving shaft            |     |   | 1 |
| 31  | 36T7 - 005       | Coil spring                    | 1   | 1 | 1 |
| 32  | 36T7 - 006       | Bushing                        | 1   | 1 | 1 |
| 33  | 165720004        | Stopper                        | 1   | 1 | 1 |
| 34  | 165720001        | Stopper plate                  | 1   | 1 | 1 |
| 35  | GB6172 - 86 - M6 | Nut                            | 1   | 1 | 1 |
| 36  | 165720002        | Screw                          | 1   | 1 | 1 |
| 37  | 36T7 - 009E1     | Thead guide                    | 1   | 1 |   |
|     | 120T7 - 003B1    | Thead guide                    |     |   | 1 |
| 38  | J0. 0. 72        | Screw                          | 1   | 1 | 1 |
| 39  | 36T7 - 009E2     | Bracket for fixed blade        | 1   | 1 | 1 |
| 40  | 36T7 - 009E3     | Fixed knife                    | 1   | 1 |   |
|     | 120T7 - 003B2    | Fixed knife                    |     |   | 1 |
| 41  | 36T7 - 009E4     | Set screw                      | 1   | 1 | 1 |
| 42  | 36T7 - 009E5     | Adjusting screw                | 1   | 1 | 1 |
| 43  | 36T7 - 009E6     | Adjusting nut                  | 1   | 1 | 1 |
| 44  | 36T8 - 002       | Screw                          | 2   | 2 | 2 |
| 45  | 36T7 - 010F      | Flexible wire asm              | 1   | 1 | 1 |
| 46  | 36T7 - 011G      | Earth wire asm                 | 1   | 1 | 1 |
| 47  |                  | Plug                           | 1   | 1 | 1 |
| 48  | 36T7 - 013       | Rubber sleeve                  | 1   | 1 | 1 |
| 49  | 36T7 - 014       | Wire clamp                     | 1   | 1 | 1 |
| 50  | GB848 - 76       | Washer                         | 1   | 1 | 1 |
| 51  | GB54 - 76        | Nut                            | 2   | 2 | 2 |
| 52  | 22T2 - 019       | Screw 4. 37 x 40/8             | 8   | 8 | 8 |
| 53  | 36T8 - 002       | Screw                          | 2   | 2 | 2 |
| 54  | 22T5 - 010D4     | Screw                          | 3   | 3 | 3 |
| 55  | 36T9 - 001A2a2   | Pin                            | 2   | 2 | 2 |
| 56  | 36T7 - 001A9     | Coil spring                    | 1   | 1 | 1 |
| 57  | 36T7 - 001A10    | Collar for driving lever       | 1   | 1 | 1 |
| 58  | 36T5 - 008E8     | Screw                          | 2   | 2 | 2 |
| 59  | 36T7 - 015H1     | Collar for knife driving shaft | 1   | 1 | 1 |
| 60  | 22T3 - 002B1     | Screw                          | 1   | 1 | 1 |
| 61  | 36T7 - 016       | Coil spring                    | 1   | 1 | 1 |
| 62  | 36T7 - 017       | Guard for plug                 | 1   | 1 | 1 |
| 63  | 165720003        | Rubber washer                  | 1   | 1 | 1 |

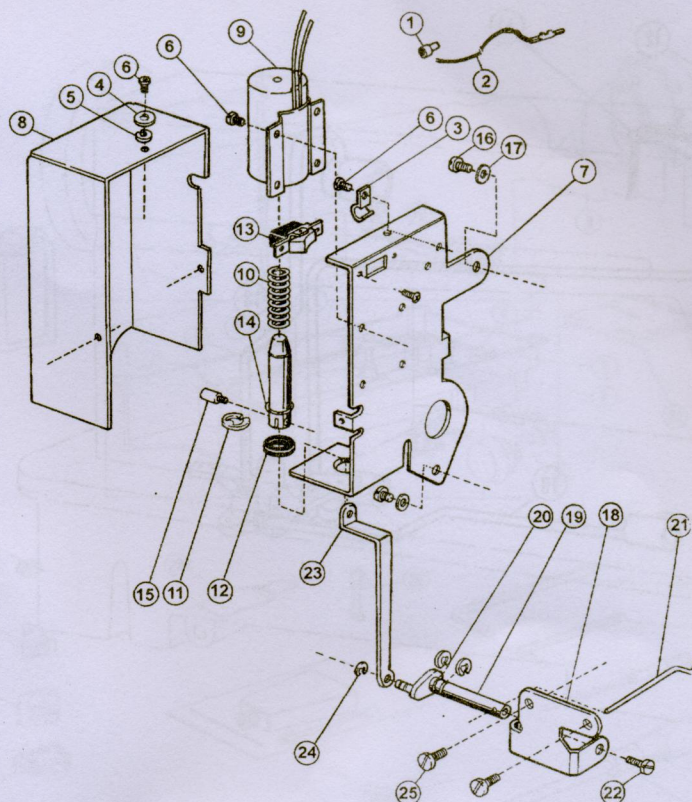




## 7. REVERSE SEWING AND DETECTOR MECHANISM

| No. | Ref. No.      | Description                          | Qt. |   |   |
|-----|---------------|--------------------------------------|-----|---|---|
|     |               |                                      | M   | H | B |
| 1   | 001D3 - 001A  | Detector componts                    | 1   | 1 | 1 |
| 2   | 36T7 - 014    | Rubber plug                          | 1   | 1 | 1 |
| 3   | 22T2 - 019    | Screw                                | 6   | 6 | 6 |
| 4   | 22T1 - 006    | Screw                                | 8   | 8 | 8 |
| 5   | 22T1 - 007    | Washer                               | 8   | 8 | 8 |
| 6   |               | Detector presser plate               | 1   | 1 | 1 |
| 7   | GB896 - 76    | Split washer 4                       | 2   | 2 | 2 |
| 8   | 36T8 - 009    | Pin                                  | 1   | 1 | 1 |
| 9   | 165820002     | Electric - magnet for reverse sewing | 1   | 1 | 1 |
| 10  | GB97. 1 - 85  | Washer                               | 2   | 2 | 2 |
| 11  | GB859 - 87    | Spring washer 3                      | 2   | 2 | 2 |
| 12  | 36T8 - 005    | Cord holder                          | 1   | 1 | 1 |
| 13  | 36T8 - 006    | Wire clamp                           | 1   | 1 | 1 |
| 14  | 36T8 - 007C1  | Switch bracket                       | 1   | 1 | 1 |
| 15  | 36T8 - 007C2a | Button asm                           | 1   | 1 | 1 |
| 16  | 36T8 - 007C3b | Cable for switch at reverse sewing   | 1   | 1 | 1 |
| 17  | GB859 - 76    | Spring washer 2                      | 2   | 2 | 2 |
| 18  | GB848 - 76    | Washer 2                             | 2   | 2 | 2 |
| 19  | GB818 - 85    | Screw                                | 2   | 2 | 2 |
| 20  | 36T8 - 007C4  | Micro switch                         | 1   | 1 | 1 |
| 21  | GB66 - 76     | Screw                                | 2   | 2 | 2 |
| 22  | 36T8 - 007C5  | Leaf spring                          | 1   | 1 | 1 |
| 23  | GB896 - 76    | Split retaining ring 3               | 2   | 2 | 2 |
| 24  | 36T8 - 007C6  | Coil spring                          | 1   | 1 | 1 |
| 26  | 36T8 - 008E1  | Gasket                               | 1   | 1 | 1 |
| 27  | 165820001     | Side cover                           | 1   | 1 | 1 |
| 28  |               | Screw                                | 2   | 2 | 2 |
| 29  | 165320001     | Balance wheel asm                    | 1   | 1 | 1 |

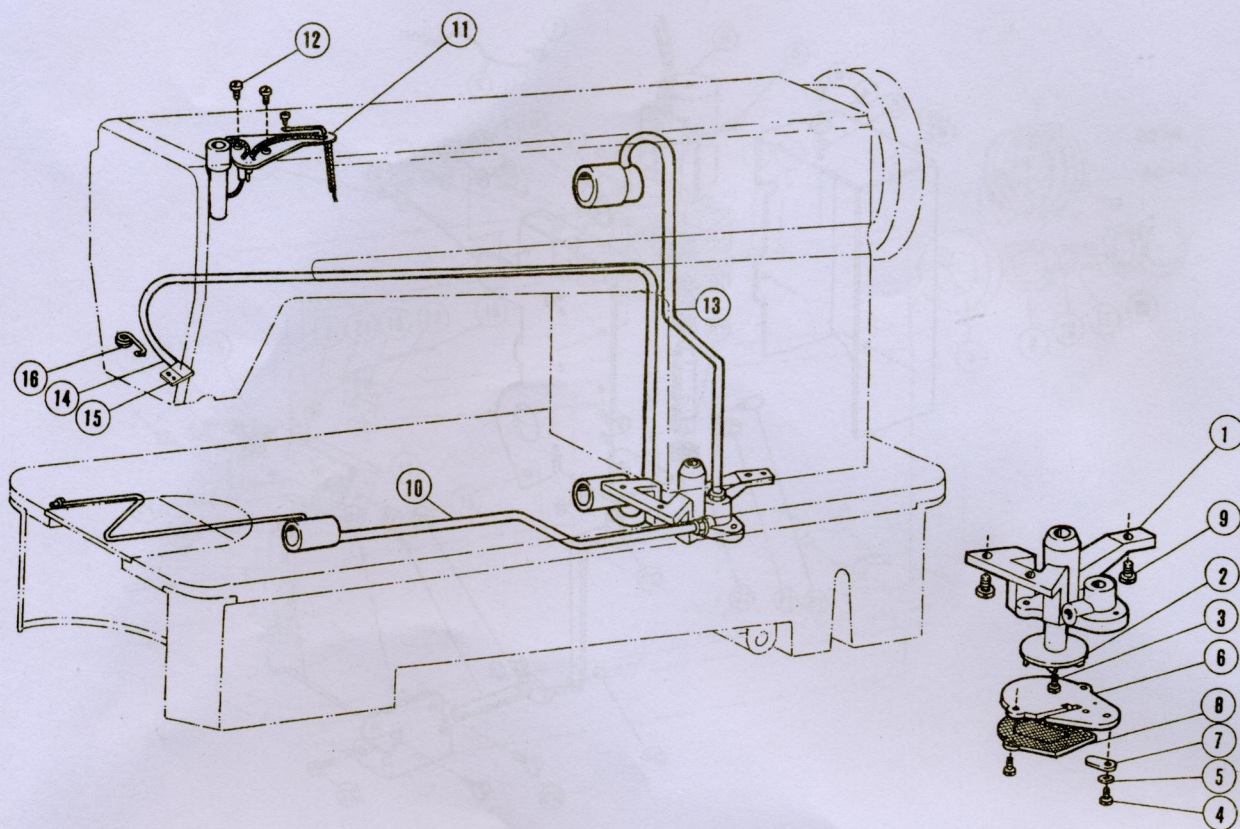




## 8. WIPER MECHANISM

| No. | Ref. No.      | Description          | Qt. |   |   |
|-----|---------------|----------------------|-----|---|---|
|     |               |                      | M   | H | B |
| 1   | 36T9 - 001A1  | Wire connector       | 1   | 1 | 1 |
| 2   | 36T9 - 001A2a | Wire                 | 1   | 1 | 1 |
| 3   | 36T9 - 001A3  | Cord clamp           | 1   | 1 | 1 |
| 4   | GB848 - 76    | Washer               | 8   | 8 | 8 |
| 5   | GB859 - 76    | Washer               | 8   | 8 | 8 |
| 6   | GB818 - 76    | Screw                | 8   | 8 | 8 |
| 7   | 36T9 - 001A4  | Solenoid bracket     | 1   | 1 | 1 |
| 8   | 36T9 - 001A5  | Cover for wiper mech | 1   | 1 | 1 |
| 9   | 36T9 - 001A6  | Solenoid for wiper   | 1   | 1 | 1 |
| 10  | 36T9 - 001A7  | Coil spring          | 1   | 1 | 1 |
| 11  | GB896 - 76    | Retaining ring       | 1   | 1 | 1 |
| 12  | 36T9 - 001A8  | Rubber ring          | 1   | 1 | 1 |
| 13  | 36T9 - 001A9  | Switch for wiper     | 1   | 1 | 1 |
| 14  | 36T9 - 001A10 | Washer               | 1   | 1 | 1 |
| 15  | 36T9 - 002    | Screw                | 1   | 1 | 1 |
| 16  | 22T5 - 001A4  | Screw                | 2   | 2 | 2 |
| 17  | 36T9 - 003    | Washer               | 2   | 2 | 2 |
| 18  | 36T9 - 004B1  | Wiper bracket        | 1   | 1 | 1 |
| 19  | 36T9 - 004B2a | Wiper shaft asm      | 1   | 1 | 1 |
| 20  | G896 - 76     | Retaining ring4      | 2   | 2 | 2 |
| 21  | 36T9 - 004B3  | Wiper                | 1   | 1 | 1 |
| 22  | 22T6 - 001A4  | Screw                | 1   | 1 | 1 |
| 23  | 36T9 - 004B4  | Link                 | 1   | 1 | 1 |
| 24  | GB896 - 76    | Retaining ring       | 1   | 1 | 1 |
| 25  | 36T9 - 005    | Screw                | 2   | 2 | 2 |

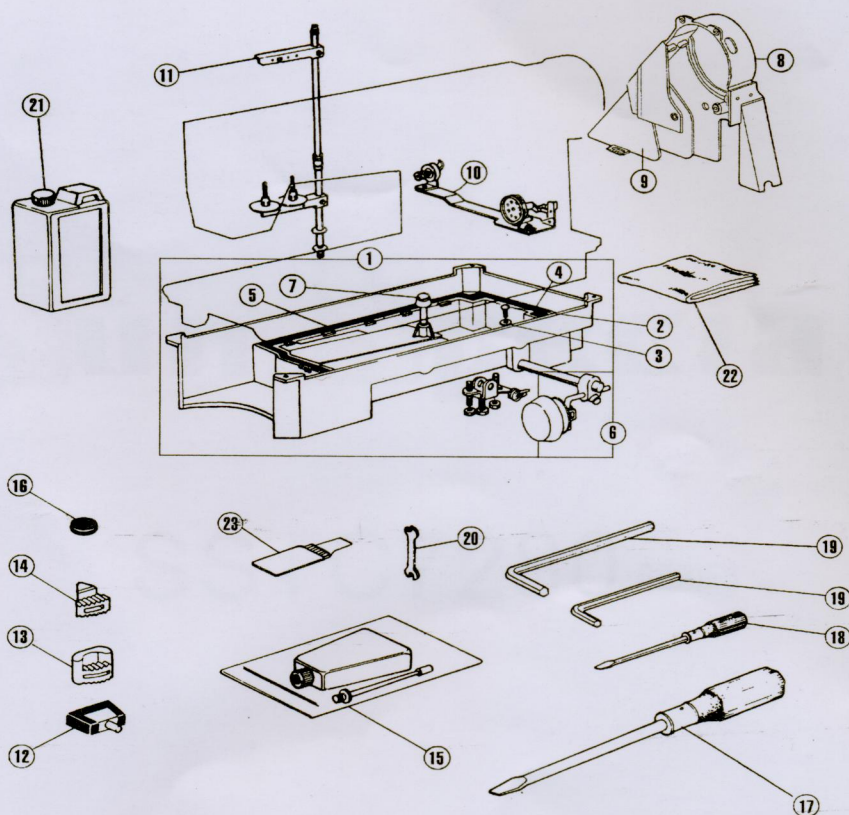




## 9. OIL PUMP MECHANISM

| No. | Ref. No.    | Description                      | Qt. |   |   |
|-----|-------------|----------------------------------|-----|---|---|
|     |             |                                  | M   | H | B |
| 1   | 22T8 -001   | Oil pump                         | 1   | 1 | 1 |
| 2   | 22T8 -002   | Oil pump impeller                | 1   | 1 | 1 |
| 3   | 22T8 -003   | Screw                            | 1   | 1 | 1 |
| 4   | 22T8 -004   | Screw                            | 3   | 3 | 3 |
| 5   | 22T8 -005   | Springee washer                  | 1   | 1 | 1 |
| 6   | 22T8 -006   | Oil pump fitting plate           | 1   | 1 | 1 |
| 7   | 22T8 -007   | Oil adjusting plate              | 1   | 1 | 1 |
| 8   | 22T8 -008A  | Oil pump screen asm              | 1   | 1 | 1 |
| 9   | 22T8 -009   | Screw                            | 3   | 3 | 3 |
| 10  | 36T10 -001A | Oil pump for hook shaft          | 1   | 1 | 1 |
| 11  | 22T8 -011C  | Oil braid fitting plate          | 1   | 1 | 1 |
| 12  | 22T8 -012   | Screw                            | 2   | 2 | 2 |
| 13  | 22T8 -013D  | Oil pump for arm shaft           | 1   | 1 | 1 |
| 14  | 22T8 -014   | Oil return pipe                  | 1   | 1 | 1 |
| 15  | 22T8 -015   | Felt pouch for return oil filter | 1   | 1 | 1 |
| 16  | 36T10 -002  | Oil filter holder                | 1   | 1 | 1 |





## 10. OIL RESERVOIR AND ACCESSORIES

| No. | Ref. No.     | Description                    | Qt.    |   |   |
|-----|--------------|--------------------------------|--------|---|---|
|     |              |                                | M      | H | B |
| 1   | 36T11 - 001A | Oil reservoir asm              | 1      | 1 | 1 |
| 2   | 22T9 - 001A2 | Screw                          | 1      | 1 | 1 |
| 3   | 22T9 - 001A3 | Washer                         | 1      | 1 | 1 |
| 14  | 22T9 - 001A4 | Oil gasket (S)                 | 1      | 1 | 1 |
| 5   | 22T9 - 001A5 | Oil gasket (B)                 | 1      | 1 | 1 |
| 6   | 22T9 - 003B  | Knee lifter asm                | 1      | 1 | 1 |
| 7   | 22T9 - 003B1 | knee lifter lifting pin        | 1      | 1 | 1 |
| 8   | 124T9 - 003B | Belt cover                     | 1      | 1 | 1 |
| 9   | 124T9 - 004C | Belt cover (S)                 | 1      | 1 | 1 |
| 10  | 6F0          | Thread winder asm (large hook) | 1      | 1 | 1 |
| 11  | GXJ - 2      | Thread spool asm               | 1      | 1 | 1 |
| 12  | 22T9 - 007F  | Hinge with rubber cushion      | 2      | 2 | 2 |
| 13  | 22T9 - 009   | Cushion (B)                    | 2      | 2 | 2 |
| 14  | 22T9 - 010   | Cushion (S)                    | 2      | 2 | 2 |
| 15  | 22T9 - 011   | Oil pot                        | 1      | 1 | 1 |
| 16  | 22T9 - 012   | Magnet block                   | 1      | 1 | 1 |
| 17  | 22T9 - 013   | Screw drive (long)             | 1      | 1 | 1 |
| 18  | 22T9 - 015   | Screw drive (short)            | 1      | 1 | 1 |
| 19  | 36T11 - 006  | Allen wrench M4 M6             | each 1 |   |   |
| 20  | 22T9 - 016   | Double open - end wrench       | 1      | 1 | 1 |
| 21  | 22T9 - 017   | Oil tank                       | 1      | 1 | 1 |
| 22  | 22T9 - 018   | Machine head cover             | 1      | 1 | 1 |
| 23  | 22T9 - 024   | Needle bag                     | 1      | 1 | 1 |



## LOCKSTITCH MACHINE HEAD PACKING LIST

| No. | Description                 | Qt     | Note   |
|-----|-----------------------------|--------|--|
| 1   | Instruction book            | 1      |  |
| 2   | Machine head                | 1      |  |
| 3   | Oil reservoir complete      | 1      | Back lifter presser foot with oil reservoir    |
| 4   | Knee lift lever             | 1      |  |
| 5   | Knee lift block bar         | 1      | Not available with back lifter<br>presser foot |
| 6   | Bar connection complete     | 1      |  |
| 7   | Block                       | 1      |  |
| 8   | Block holder                | 1      |  |
| 9   | Washer for block            | 1      |  |
| 10  | Screw                       | 1      |  |
| 11  | Thread winder complete      | 1      |  |
| 12  | Belt guard complete         | 1      |  |
| 13  | Belt guard complete(S)      | 1      |  |
| 14  | Machine head hinge complete | 2      |  |
| 15  | Screwdriver(long short)     | 1/each |  |
| 16  | Oil tank                    | 1      |  |
| 17  | Machine cover               | 1      |  |
| 18  | Needle                      | 1      |  |
| 19  | Bobbin                      | 3      | 2 for 6 – 9 7280B                              |
| 20  | Oil pot                     | 1      |  |
| 21  | Magnet                      | 1      |  |
| 22  | Cushion(big small)          | 2/each |  |
| 23  | Wood screw                  | 4      |  |
| 24  | Washer                      | 4      |  |
| 25  | V – type belt               | 1      |  |
| 26  | Thread spool                | 1      |  |
| 27  | Double – open – end wrench  | 1      |  |
| 28  | Hex – key                   | 1/each | For machine with thread trimmer                |
| 29  | Frame support bar           | 1      | For machine with thread trimmer                |
| 30  | Thread guide                | 1      | For machine with thread trimmer                |