

# **GLOBAL**

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## **WF 975 LH**

**Cylinder-Bed Unison Feed  
Sewing Machine**

**INSTRUCTION MANUAL  
CATALOG**

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## 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.

## 2. Precautions before starting operation:

- 1) When a new sewing machine is first turned on, verify the rotational direction of the pulley with the power on.
- 2) 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:

|                                  |              |    |
|----------------------------------|--------------|----|
| Max. Sewing Speed (rpm)          | 2,200        |    |
| Needle                           | DP×17 22#    |    |
| Needle Bar Stroke (mm)           | 34.2         |    |
| Thread Take-up Lever Stroke (mm) | 72.1         |    |
| Max.Stitch Length (mm)           | 6            |    |
| Presser Foot Stroke              | By hand (mm) | 8  |
|                                  | By knee (mm) | 14 |
| Alternating Movement (mm)        | 2.0-6.0      |    |

## **5. Preparation before starting operation:**

### **1) Cleaning the machine**

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

### **2) Examination**

Though every machine is inspected and tested strictly before leaving the factory, the machine parts may be loose or deformed after long distance transportation with jolt. A thorough examination must be performed after cleaning the machine. Turn the balance wheel to see if there is running obstruction, parts collision, uneven resistance or abnormal noise. If these exist, adjustment must be made accordingly before run-in operation.

### **3) Lubrication**

When a new machine begins to be used or an old machine which left out of use for a long time is to be used again, it must be lubricated fully. (The spots which arrowheads direct need to be lubricated.Fig.1)

**Please use white spindle oil**

**Please uplift presser foot when the machine is operated without material.**

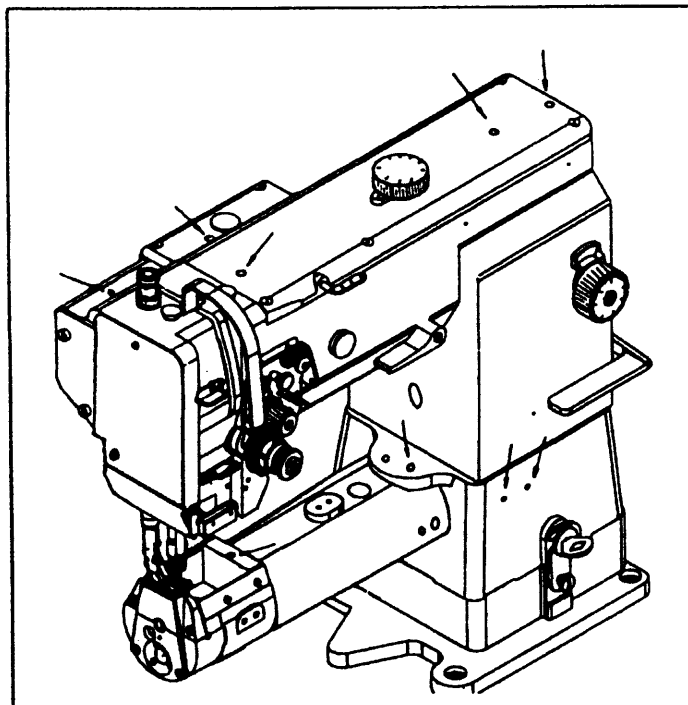


Fig.1

#### 4) Run-in operation

A new machine runs at a low speed (1600rpm) for about a month after being lubricated sufficiently, each of parts will achieve its best state. Then increasing speed to the maximum according to the nature of the work must be done.

#### 6. How to attach a needle (Fig.2):

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

This machine's needle size is DPX17 #22. Needle size must be selected according to the thread rightly. (Thread need to pass the pinhole of the needle freely.)

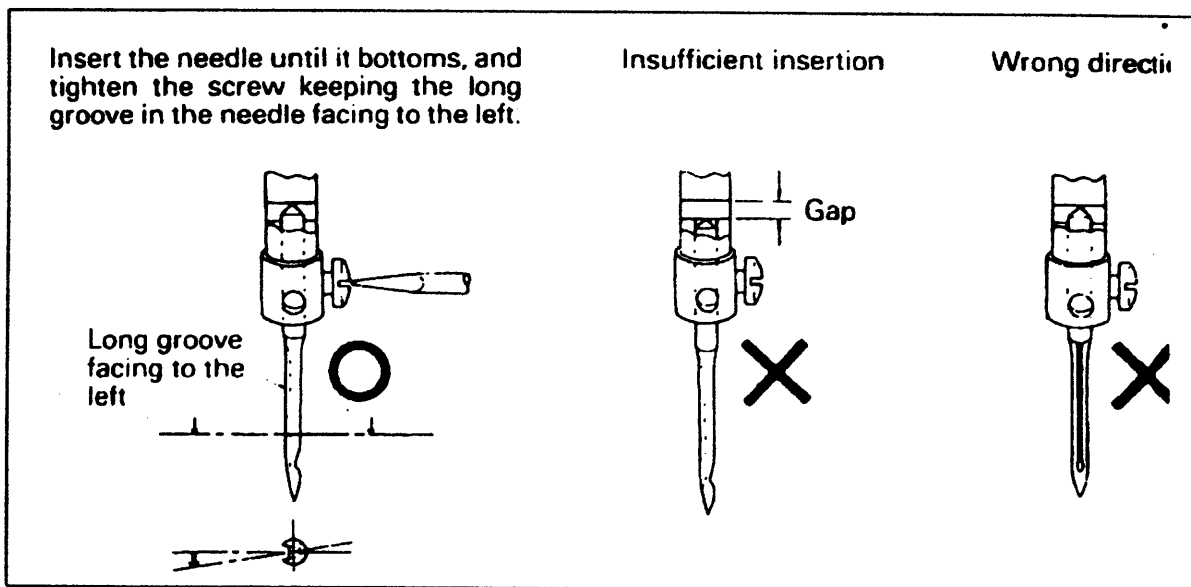


Fig. 2

#### 7. Winding the lower thread: (Fig.3):

1) Push a bobbin on the bobbin winder spindle (3) as far as it will go.

2) Pull out the thum and wind thread around the bobbin for several circles clockwise;

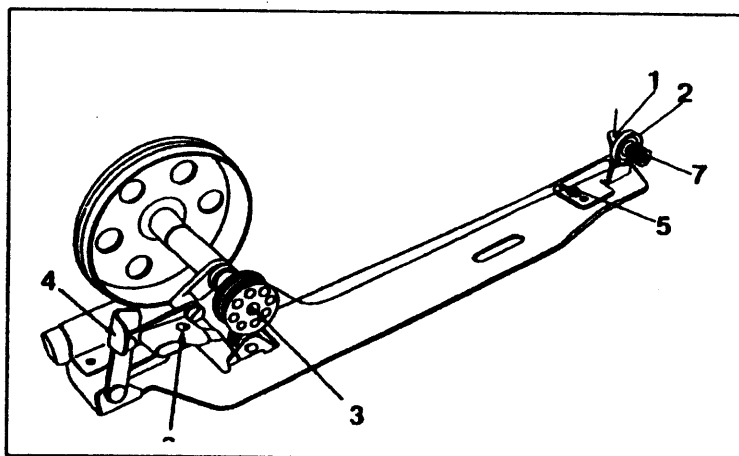


Fig. 3

3) Push the lever 4 backward so that the wheel of the pulley touches the “V” belt, then start the machine.

4) The pulley will separate from the “V” belt automatically after the bobbin is filled with thread.

## **8. Adjustment of the bobbin winder: (Fig.3):**

1) In case of uneven winding

Loosen the screw 5 in the tension bracket and move the bracket to the right or to the left as may be required.

2) Adjustment of the amount of the thread

Adjusting screw 6 can adjust the amount of the thread. Tightening the screw will increase the amount, otherwise the amount of the thread will decrease.

3) Winding strength

Adjusting the nut 7 can adjust the winding strength.

Adjusting screw 6 can adjust the amount of the thread. Tightening the screw will increase the amount, otherwise the amount of the thread will decrease.

## **9. How to route the upper thread (Fig.4):**

Raise needle bar to its highest possible position, and perform threading as shown in Fig.

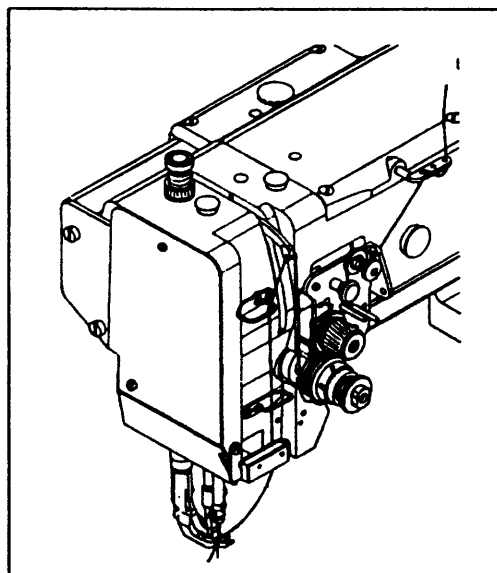


Fig.4

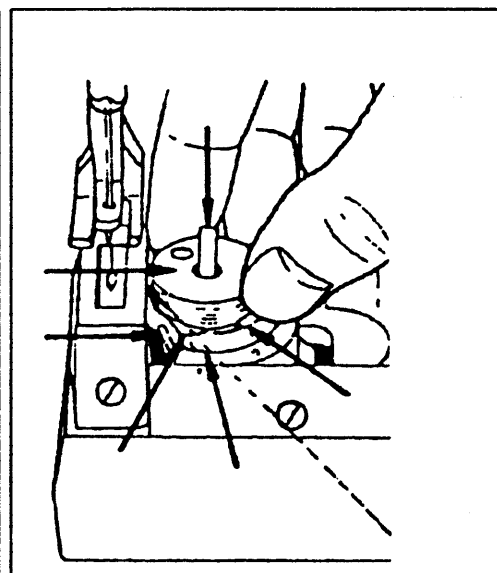


Fig.5

## 10. Removing and inserting the bobbin (Fig.5):

1) Taking out the bobbin: open the cover, take out the bobbin.

2) Inserting the bobbin: replace the bobbin into the shuttle bobbin case, shutdown the cover. Be sure to make the bobbin rotate counterclockwise and pull out the thrum.

## 11. Adjustment of the thread tension (Fig.6、 7、 8):

1) The tension of the upper and lower thread must be equal so as to adopt normal stitch.

(Fig.6 a)

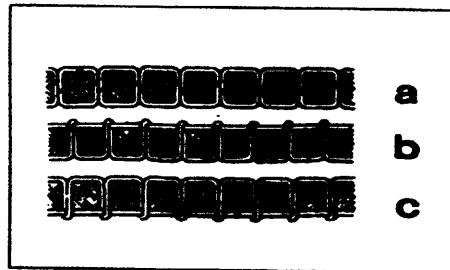


Fig.6

2) Tension of the upper thread (Fig.7)

Before adjusting the tension of the upper thread, it should be certain that the presser foot is let down but not in other position. Adjusting the thumb nut can adjust the tension of the upper thread. Rotating the thumb nut clockwise, the tension of the upper thread will increase. Otherwise, the tension of the upper thread will decrease.

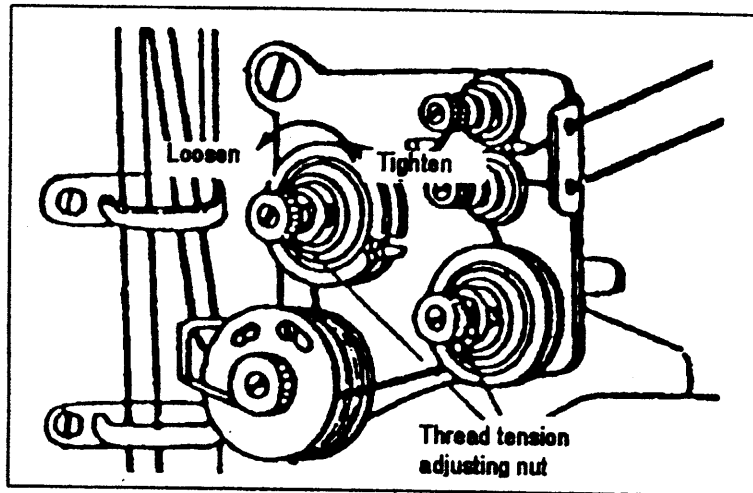


Fig.7

3) Tension of the lower thread (Fig.8)

Turning the large screw clockwise will increase the tension of the lower thread.

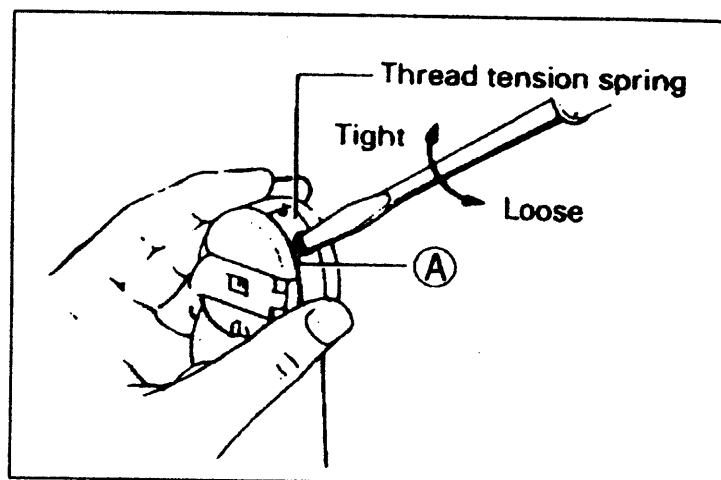


Fig.8

Otherwise, the tension of the lower thread will decrease.

## 12. Adjustment of presser foot pressure (Fig.9):

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.

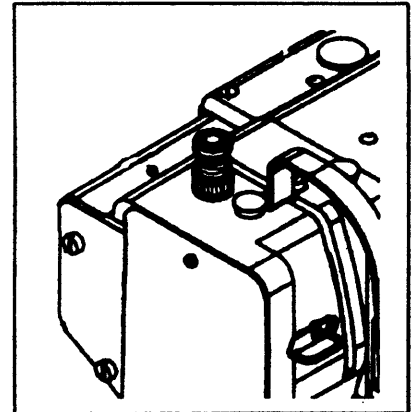


Fig.9

## 13. Adjustment of walking foot and presser foot:

### 1) Adjustment of alternating movement (Fig10):

(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 2.0-6.0mm.

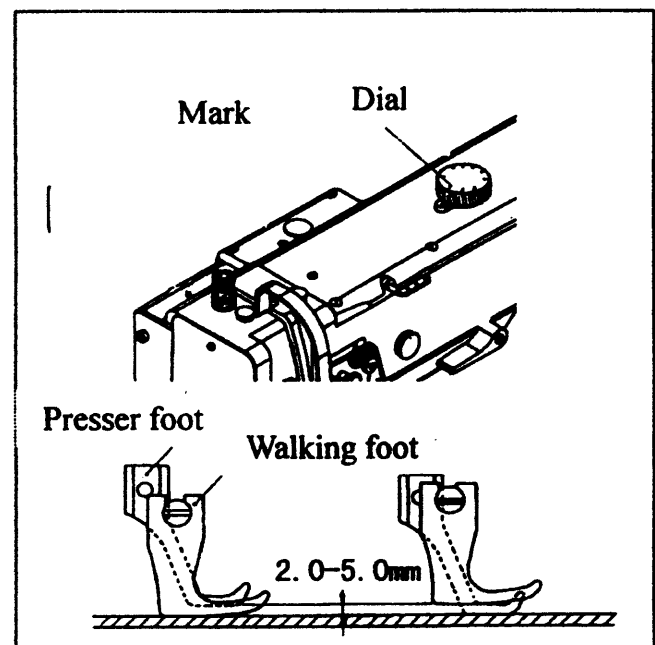


Fig.10

### 2) To change the balance of the alternating movements between the walking foot and presser foot (Fig.11):

(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 same distance has increased the vertical motion of the walking foot.

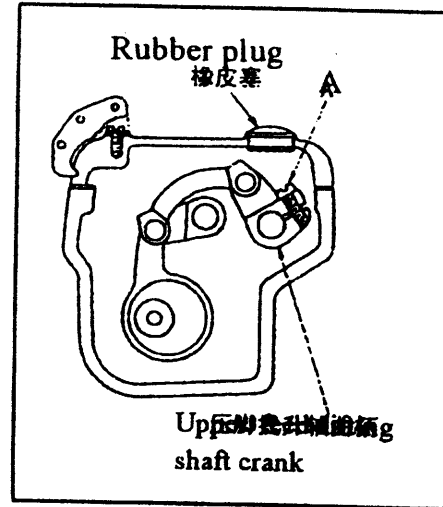


Fig.11

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

First, 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.12):

**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.12.

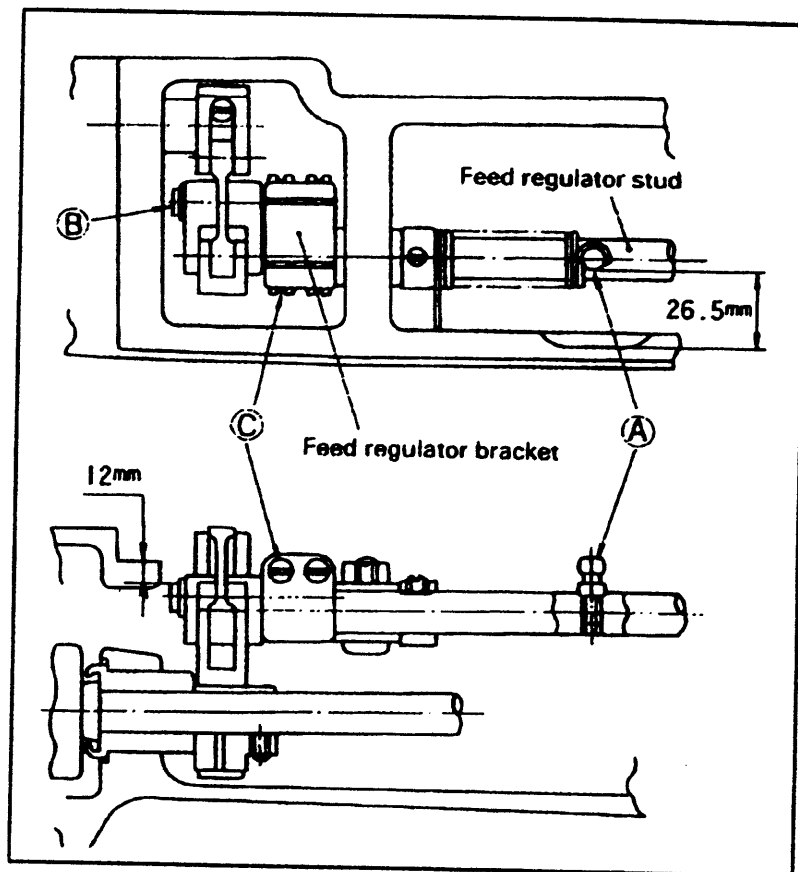


Fig.12



(2) With the feed regulator stud held as explained in 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".

#### 4) Feed pitch adjustment of walking foot (Fig.13):

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

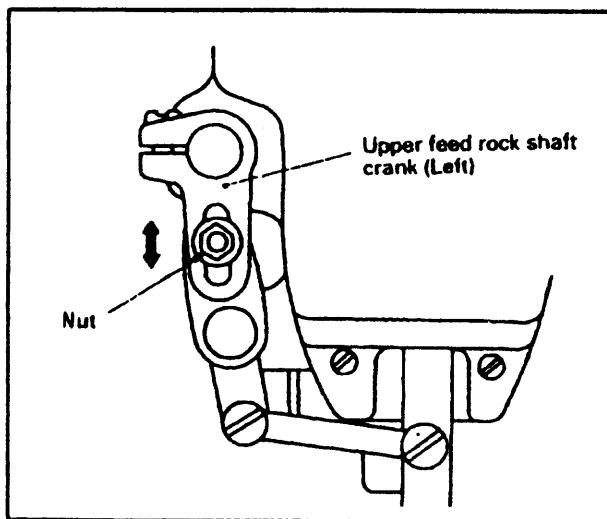


Fig.13

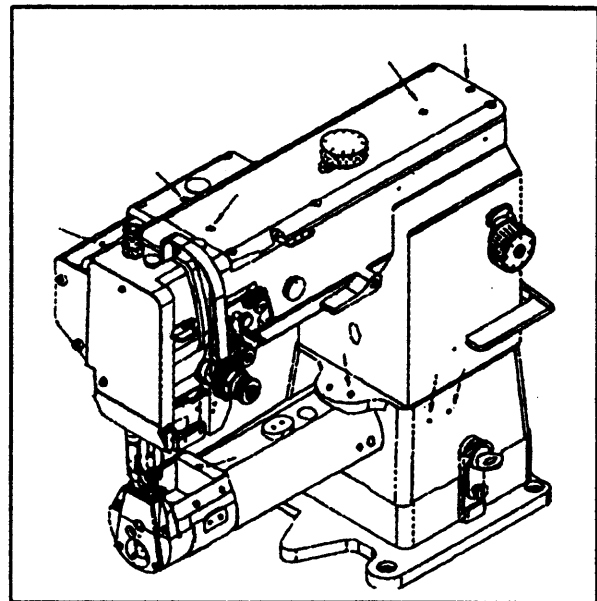


Fig.14

### 14. Adjustment of stitch length and reverse sewing (Fig.14):

- 1) To change the stitch length, rotate the stitch length adjusting dial.
- 2) Pressing the stitch length adjusting lever for reverse stitching.

### 15. Safety clutch device: (Fig.15, 16, 17, 18):

Safety clutch device is installed to prevent the hook and cog belt from

damage in case the thread is caught into the hook when the machine is loaded abnormally during operation.

### 1) Function of safety clutch.

(1) When the safety clutch acts, the cog belt pulley will be unloaded. Then the rotation of hook shaft will stop. The arm shaft only will rotate. Stop the operation of machine.

(2) Clean the thread thoroughly which is caught into the hook.

(3) Turn the cog belt hub by hand, and check

Whether the hook shaft rotates lightly and properly, place the clutch device as follows.

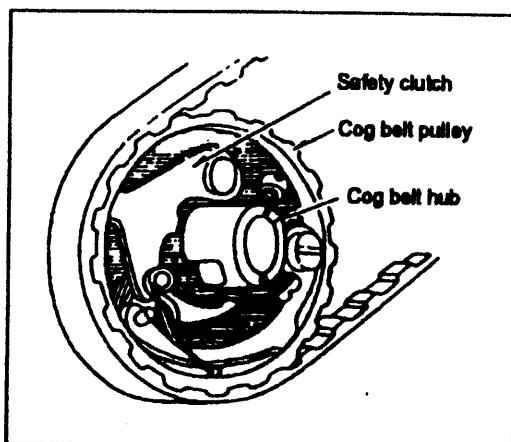


Fig.15

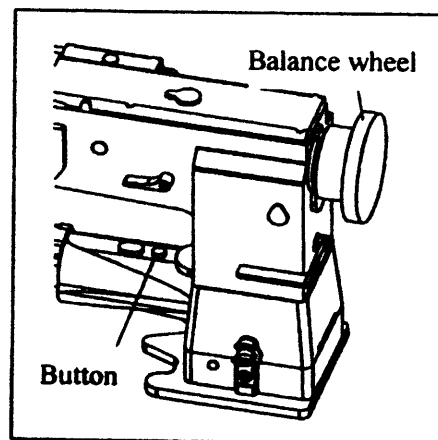


Fig.16

### 2) How to set the safety clutch.

(1) While pressing down the push button on the opposite side of bed by left hand, turn the balance wheel slowly by right hand away from you as shown in the figure.

(2) The balance wheel will stop by the gear plate, but turn the balance wheel more firmly.

(3) Release the push button.

(4) As shown in the Figure, the safety clutch device is set.

### 3) Force applied to the safety clutch

(1) The force applied to the safety clutch is the smallest when the white mark of the eccentric pin faces the center of the lower shaft. The force proportionally increases as the white mark faces the outside.

(2) To adjust the force slide the timing belt, loosen the set screw, and turn the eccentric pin.

(3) After the adjustment, make sure to fasten the set screw.

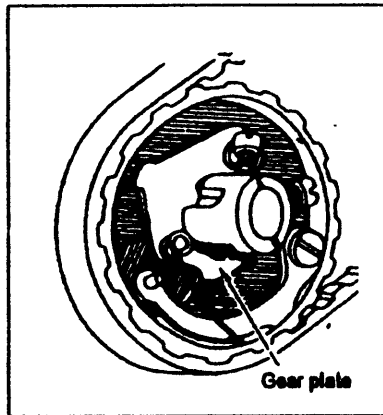


Fig.17

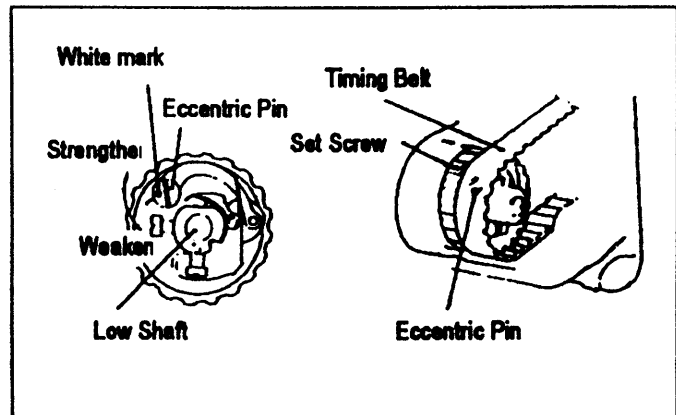


Fig.18

## 16. Adjustment of the height of the feed dog( Fig.19):

The max. height of the feed dog 1 from the surface to the needle plate 2 is normally 1mm. To adjust this height:

1) Lay down the machine head toward the other side, and turn the pulley so as to raise the feed dog to its highest position;

2) Loosen bell crank screw and adjust the height of the feed dog by raising or lowering it.

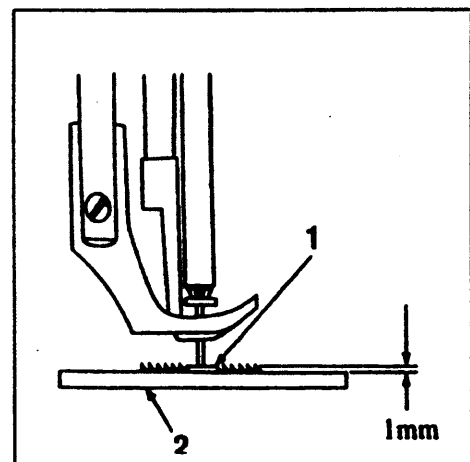


Fig.19

3) Tighten the screw after adjustment.

## 17. Relative position of the feed dog to needle plate (Fig. 20) :

1) Set the stitch length at minimum.

2) Turn the pulley so as to raise the feed dog to its highest point.

3) Lay down the machine head toward the other side, loosen the screw (E);

4) Adjust the needle plate to the center of the needle hole on the feed dog.

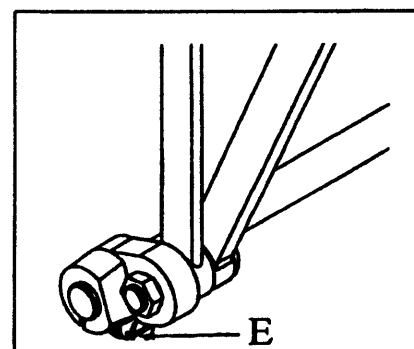


Fig.20

5) Tighten the screw.

## 18. Adjustment of the height of the needle bar (Fig.21):

When the needle bar is at its highest position, normally the measurement between the surface of the needle plate and the upper end of the needle eye is 22.3mm. You can adjust this at its lowest position. In this case, normally the measurement between the surface of the needle plate and the upper end of the needle eye is 11mm. To adjust this, loosen screw (B.fig.3), and raise or lower the needle bars may be required. Then tighten the screw.

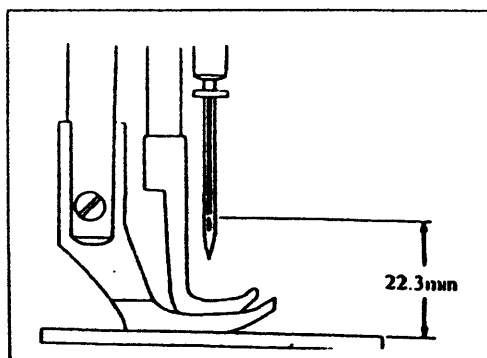


Fig.21

## 19. Adjustment of feed timing (Fig.22):

1) The standard position of the eccentric feed cam and eccentric feed lifting cam are illustrated to Fig.22

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 when adjusting.

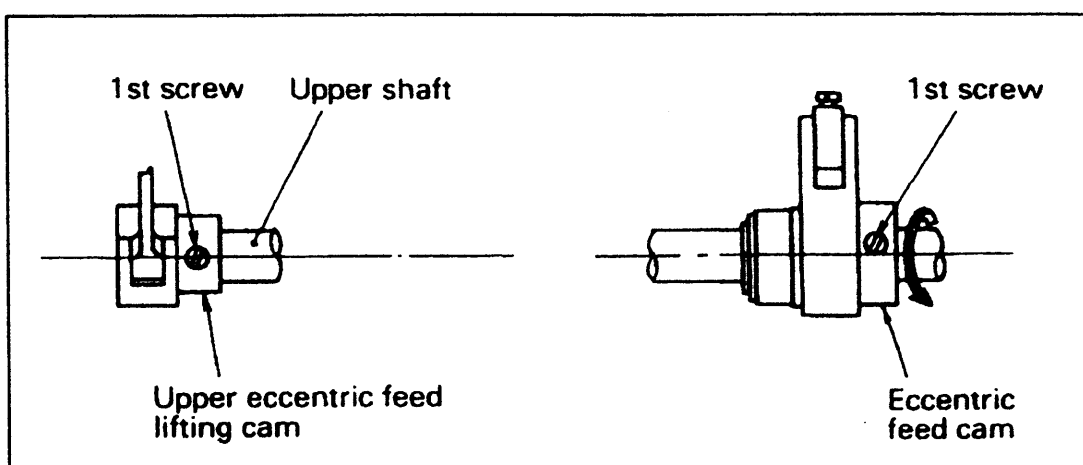
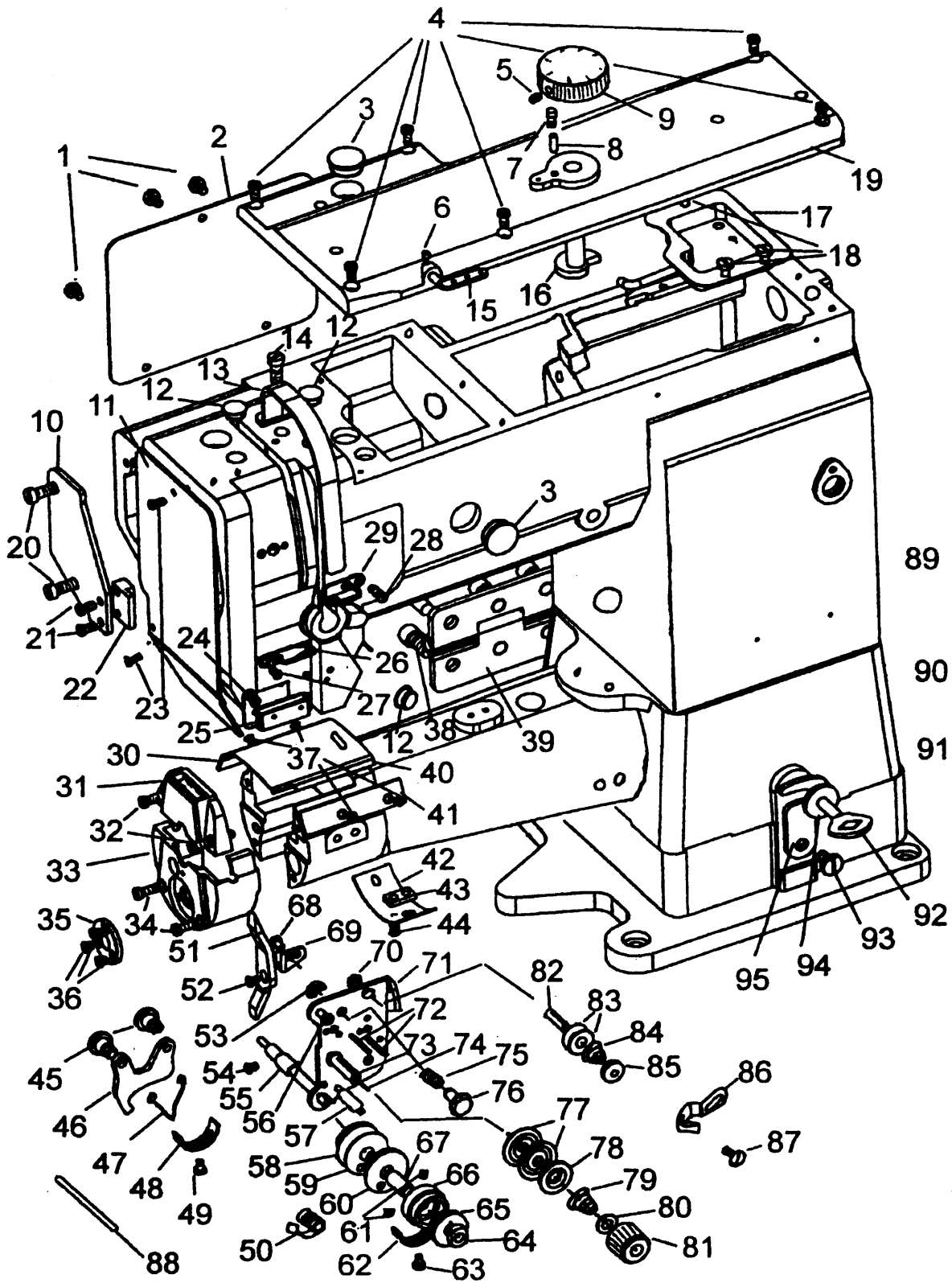


Fig.22

# A. ARM BED AND IT'S ACCESSORIES



## A. ARM BED AND IT'S ACCESSORIES

| No. | Ref. No. | Description                      | Pcs. |
|-----|----------|----------------------------------|------|
| A01 | H5301001 | Screw                            | 3    |
| A02 | H5301002 | Arm side cover                   | 1    |
| A03 | H5301003 | Rubber plug                      | 2    |
| A04 | H5301004 | Screw                            | 6    |
| A05 | H5301005 | Set screw                        | 2    |
| A06 | H5301006 | Screw                            | 1    |
| A07 | H5301007 | Spring                           | 1    |
| A08 | H5301008 | Pin                              | 1    |
| A09 | H5301009 | Dial for upper feed lifting      | 1    |
| A10 | H5301010 | Oil guard                        | 1    |
| A11 | H5301011 | Face plate                       | 1    |
| A12 | H5301012 | Rubber plug                      | 4    |
| A13 | H5301013 | Thread take-up cover             | 1    |
| A14 | H5301014 | Screw                            | 1    |
| A15 | H5301015 | Three hole thread guide          | 1    |
| A16 | H5301016 | Upper feed lifting regulator cam | 1    |
| A17 | H5301017 | Oil box                          | 1    |
| A18 | H5301018 | Screw                            | 3    |
| A19 | H5301019 | Top cover                        | 1    |
| A20 | H5301020 | Screw                            | 2    |
| A21 | H5301021 | Screw                            | 2    |
| A22 | H5301022 | Slide block                      | 1    |
| A23 | H5301023 | Face plate screw                 | 2    |
| A24 | H5301024 | Screw                            | 1    |
| A25 | H5301025 | Thread guide                     | 1    |
| A26 | H5301026 | Thread guide                     | 1    |
| A27 | H5301027 | Screw                            | 1    |
| A28 | H5301028 | Screw                            | 1    |
| A29 | H5301029 | Thread guide                     | 1    |
| A30 | H5301030 | needle guide plate (right)       | 1    |
| A31 | H5301031 | Needle plate                     | 1    |
| A32 | H5301032 | Set screw                        | 2    |
| A33 | H5301033 | Stop plate                       | 1    |
| A34 | H5301034 | Screw                            | 2    |
| A35 | H5301035 | Bushing                          | 1    |
| A36 | H5301036 | Screw                            | 3    |

## A. ARM BED AND IT'S ACCESSORIES

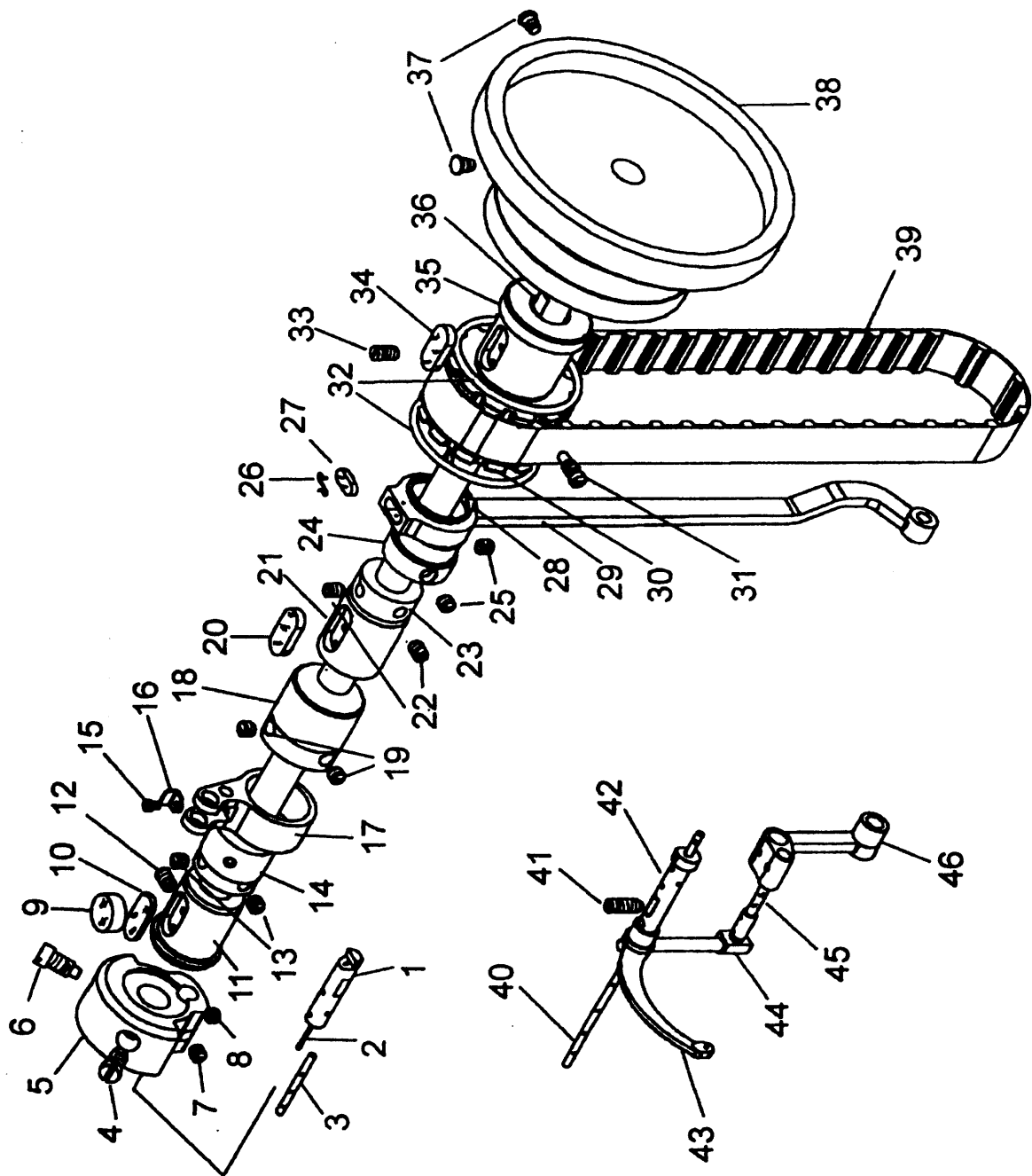
| No. | Ref. No. | Description               | Pcs. |
|-----|----------|---------------------------|------|
| A37 | H5301037 | Set screw                 | 4    |
| A38 | H5301038 | Hinge screw               | 8    |
| A39 | H5301039 | Arm bed hinge             | 1    |
| A40 | H5301040 | Slide plate               | 1    |
| A41 | H5301041 | needle guide plate (left) | 1    |
| A42 | H5301042 | Oil guard plate           | 1    |
| A43 | H5301043 | Oil guard plate block     | 1    |
| A44 | H5301044 | Screw                     | 1    |
| A45 | H5301045 | Screw                     | 2    |
| A46 | H5301046 | Tension releasing plate   | 1    |
| A47 | H5301047 | Tension releasing spring  | 1    |
| A48 | H5301048 | Stopper                   | 1    |
| A49 | H5301049 | Screw                     | 1    |
| A50 | H5301050 | Thread take-up spring     | 1    |
| A51 | H5301051 | Lever                     | 1    |
| A52 | H5301052 | Screw                     | 1    |
| A53 | H5301053 | Stop ring                 | 1    |
| A54 | H5301054 | Screw                     | 1    |
| A55 | H5301055 | Thread tension stud       | 1    |
| A56 | H5301056 | Screw                     | 2    |
| A57 | H5301057 | Screw                     | 1    |
| A58 | H5301058 | Plate complete            | 1    |
| A59 | H5301059 | Plate                     | 1    |
| A60 | H5301060 | Plate complete            | 1    |
| A61 | H5301061 | Screw                     | 2    |
| A62 | H5301062 | Stopper                   | 1    |
| A63 | H5301063 | Screw                     | 1    |
| A64 | H5301064 | Thumb nut                 | 1    |
| A65 | H5301065 | Take-up spring guard      | 1    |
| A66 | H5301066 | Thread tension post       | 1    |
| A67 | H5301067 | Bush                      | 1    |
| A68 | H5301068 | Screw                     | 1    |
| A69 | H5301069 | Mounting plate            | 1    |
| A70 | H5301070 | Nut                       | 2    |
| A71 | H5301071 | Mounting plate            | 1    |
| A72 | H5301072 | Pin                       | 2    |

## A. ARM BED AND IT'S ACCESSORIES

| No. | Ref. No. | Description                   | Pcs. |
|-----|----------|-------------------------------|------|
| A73 | H5301073 | Thread tension stud           | 1    |
| A74 | H5301074 | Pin                           | 1    |
| A75 | H5301075 | Spring                        | 1    |
| A76 | H5301076 | Push button                   | 1    |
| A77 | H5301077 | Thread tension disc           | 2    |
| A78 | H5301078 | Thread tension releasing disc | 1    |
| A79 | H5301079 | Spring                        | 1    |
| A80 | H5301080 | Thumb nut complete            | 1    |
| A81 | H5301081 | Thumb nut revolution stopper  | 1    |
| A82 | H5301082 | Thread tension stud           | 1    |
| A83 | H5301083 | Thread tension disc           | 2    |
| A84 | H5301084 | Spring                        | 1    |
| A85 | H5301085 | Thumb nut                     | 1    |
| A86 | H5301086 | Thread guide                  | 1    |
| A87 | H5301087 | Screw                         | 1    |
| A88 | H5301088 | Thread releasing pin          | 1    |
| A89 | H5301089 | Arm                           | 1    |
| A90 | H5301090 | Arm bed                       | 1    |
| A91 | H5301091 | Supporter                     | 1    |
| A92 | H5301092 | Screw                         | 1    |
| A93 | H5301093 | Screw                         | 1    |
| A94 | H5301094 | Washer                        | 1    |
| A95 | H5301095 | Link plate                    | 1    |



# B. ARM SHAFT MECHANISM



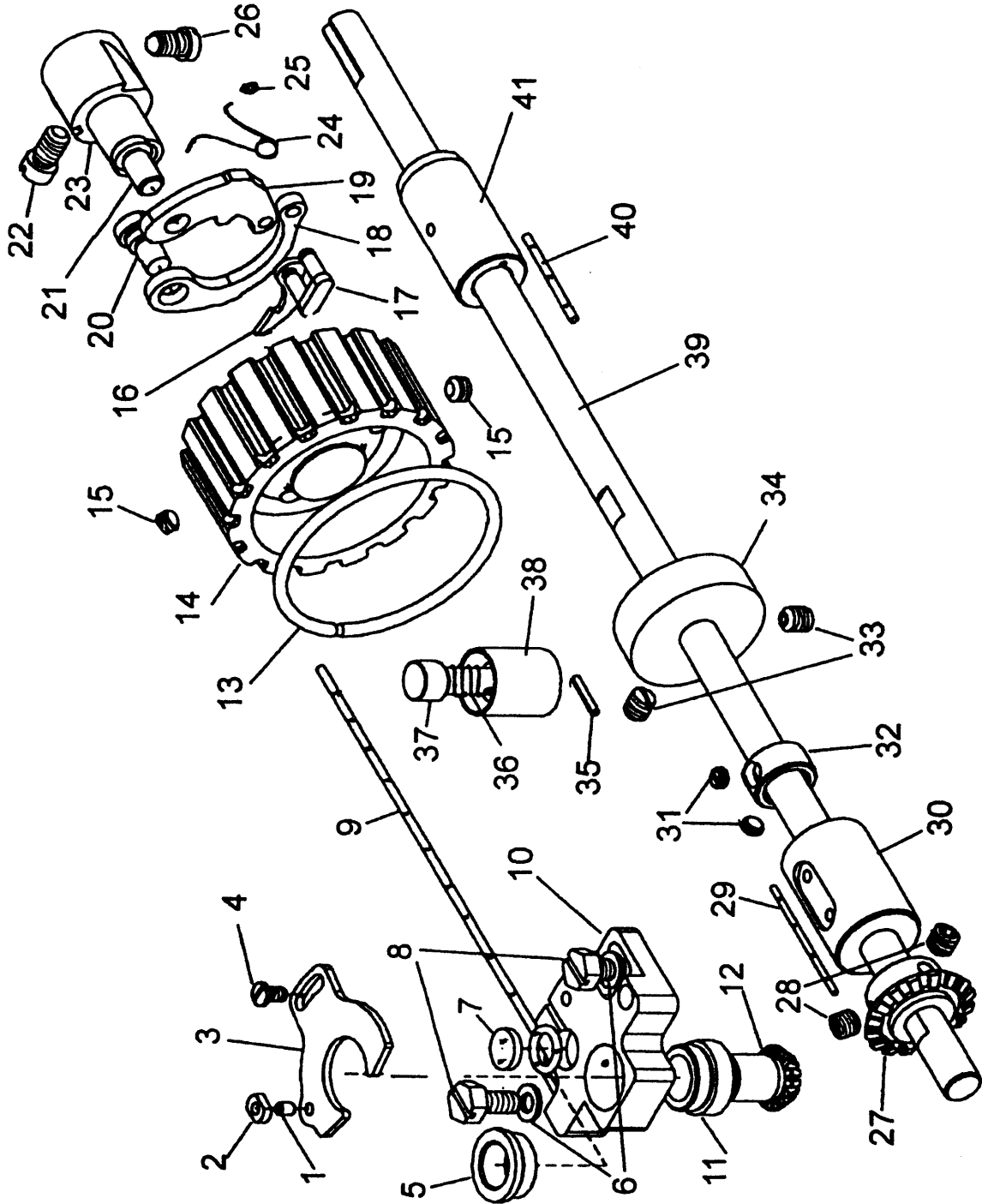
## B、 ARM SHAFT MECHANISM

| No. | Ref. No. | Description                   | Pcs. |
|-----|----------|-------------------------------|------|
| B01 | H5302001 | Pin                           | 1    |
| B03 | H5302002 | Oil wick                      | 1    |
| B04 | H5302003 | Screw                         | 1    |
| B05 | H5302004 | Needle bar crank              | 1    |
| B06 | H5302005 | Screw                         | 1    |
| B07 | H5302006 | Screw                         | 1    |
| B08 | H5302007 | Screw                         | 1    |
| B09 | H5302008 | Felt                          | 1    |
| B10 | H5302009 | Felt                          |      |
| B11 | H5302010 | Arm shaft bushing (left)      | 1    |
| B12 | H5302011 | Screw                         | 1    |
| B13 | H5302012 | Screw                         | 2    |
| B14 | H5302013 | Feed cam (left)               | 1    |
| B15 | H5302014 | Screw                         | 1    |
| B16 | H5302015 | Oil guard plate               | 1    |
| B17 | H5302016 | Feed cam crank                | 1    |
| B18 | H5302017 | Balance wheel                 | 1    |
| B19 | H5302018 | Screw                         | 2    |
| B20 | H5302019 | Felt                          | 1    |
| B21 | H5302020 | Arm shaft bushing (middle)    | 1    |
| B22 | H5302021 | Screw                         | 2    |
| B23 | H5302022 | Arm shaft collar              | 1    |
| B24 | H5302023 | Feed cam (right)              | 1    |
| B25 | H5302024 | Screw                         | 2    |
| B26 | H5302025 | Holder                        | 1    |
| B27 | H5302026 | Felt                          | 1    |
| B28 | H5302027 | Stop ring                     | 1    |
| B29 | H5302028 | Connecting rod for upper feed | 1    |
| B30 | H5302029 | Pulley (upper)                | 1    |
| B31 | H5302030 | Screw                         | 1    |
| B32 | H5302031 | Spring stop ring              | 2    |
| B33 | H5302032 | Screw                         | 1    |
| B35 | H5302033 | Arm shaft bushing (right)     | 1    |
| B36 | H5302034 | Arm shaft                     | 1    |
| B37 | H5302035 | Screw                         | 2    |
| B38 | H5302036 | Balance wheel                 | 1    |

## B、 ARM SHAFT MECHANISM

| No. | Ref. No. | Description                | Pcs. |
|-----|----------|----------------------------|------|
| B39 | H5302037 | Cog belt                   | 1    |
| B40 | H5302038 | Oil wick                   | 1    |
| B41 | H5302039 | Set screw                  | 1    |
| B42 | H5302040 | Pin                        | 1    |
| B43 | H5302041 | Thread take-up lever       | 1    |
| B44 | H5302042 | Thread take-up link        | 1    |
| B45 | H5302043 | Oil wick                   | 1    |
| B46 | H5302044 | Needle bar connecting link | 1    |

### C、 ROTATING HOOK SHAFT MECHANISM



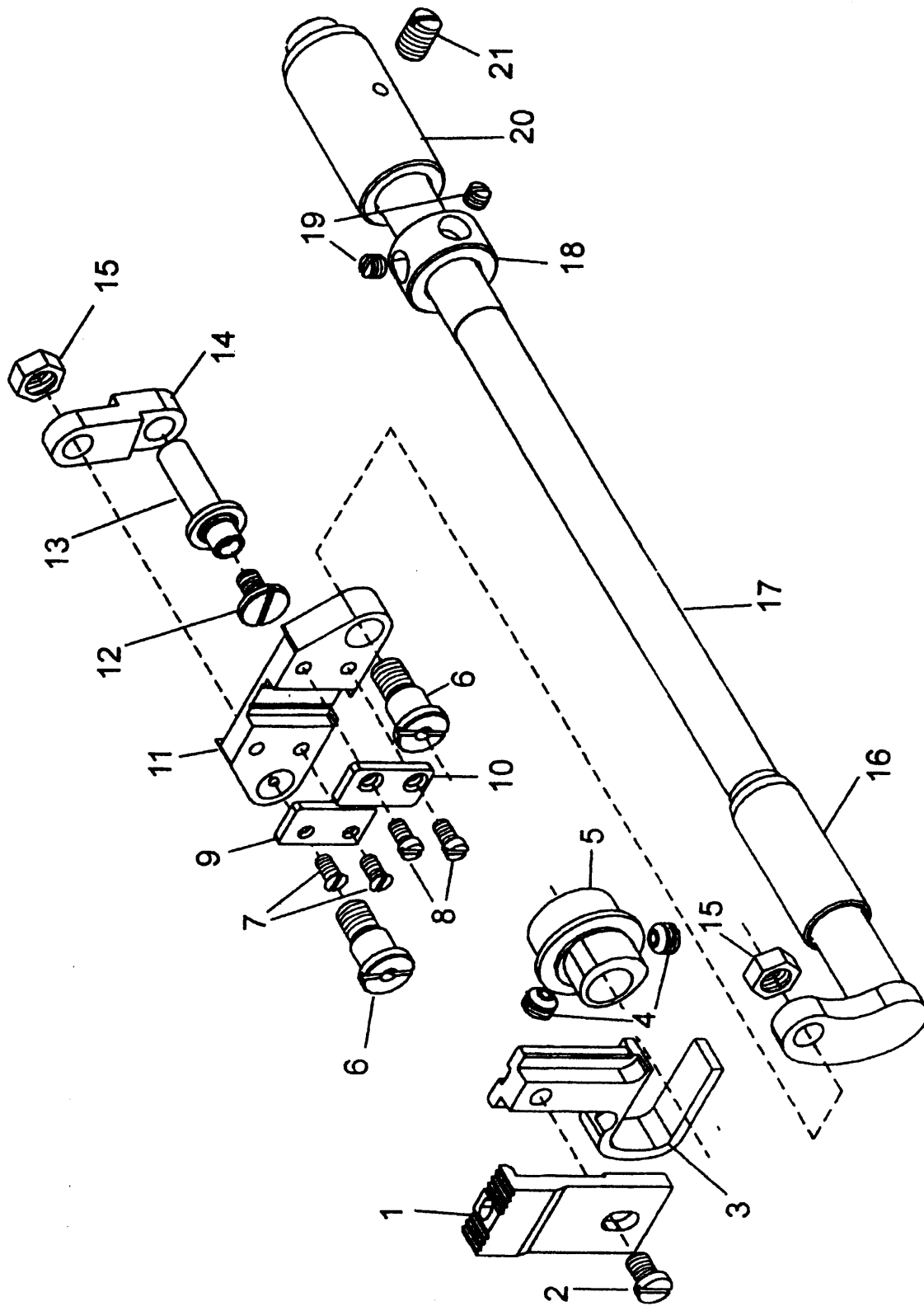
### C. ROTATING HOOK SHAFT MECHANISM

| No. | Ref. No. | Description                        | Pcs. |
|-----|----------|------------------------------------|------|
| C01 | H5303001 | Guide plate pin                    | 1    |
| C02 | H5303002 | Guide plate slide block            | 1    |
| C03 | H5303003 | Guide plate                        | 1    |
| C04 | H5303004 | Screw                              | 1    |
| C05 | H5303005 | Bushing                            | 1    |
| C06 | H5303006 | Washer                             | 2    |
| C07 | H5303007 | Felt                               | 1    |
| C08 | H5303008 | Screw                              | 2    |
| C09 | H5303009 | Oil wick                           | 1    |
| C10 | H5303010 | Rotating hook bracket              | 1    |
| C11 | H5303011 | Bushing                            | 1    |
| C12 | H5303012 | Bevel gear for hook shaft          | 1    |
| C13 | H5303013 | Stop ring                          | 1    |
| C14 | H5303014 | Pulley                             | 1    |
| C15 | H5303015 | Screw                              | 2    |
| C16 | H5303016 | Lever for pulley                   | 1    |
| C17 | H5303017 | Pin                                | 1    |
| C18 | H5303018 | Long lever for pulley              | 1    |
| C19 | H5303019 | Short lever for pulley             | 1    |
| C20 | H5303020 | Pin                                | 1    |
| C21 | H5303021 | Pin                                | 1    |
| C22 | H5303022 | Screw                              | 1    |
| C23 | H5303023 | Shaft for pulley                   | 1    |
| C24 | H5303024 | Spring for pulley                  | 1    |
| C25 | H5303025 | E-type stop ring                   | 1    |
| C26 | H5303026 | Screw                              | 1    |
| C27 | H5303027 | Bevel gear for hook shaft          | 1    |
| C28 | H5303028 | Set screw                          | 3    |
| C29 | H5303029 | Oil wick                           |      |
| C30 | H5303030 | Rotating hook shaft bushing (left) | 1    |
| C31 | H5303031 | Screw                              | 2    |
| C32 | H5303032 | Rotating hook shaft collar         | 1    |
| C33 | H5303033 | Set screw                          | 2    |
| C34 | H5303034 | Recessed wheel                     | 1    |
| C35 | H5303035 | Safe clutch shaft pin              | 1    |
| C36 | H5303036 | Safe clutch spring                 | 1    |

### C、 ROTATING HOOK SHAFT MECHANISM

| No. | Ref. No. | Description                         | Pcs. |
|-----|----------|-------------------------------------|------|
| C37 | H5303037 | Safe clutch shaft                   | 1    |
| C38 | H5303038 | Safe clutch bushing                 | 1    |
| C39 | H5303039 | Rotating hook shaft                 | 1    |
| C40 | H5303040 | Oil wick                            |      |
| C41 | H5303041 | Rotating hook shaft bushing (right) | 1    |

# D. FEED AND FEED LIFTING MECHANISM

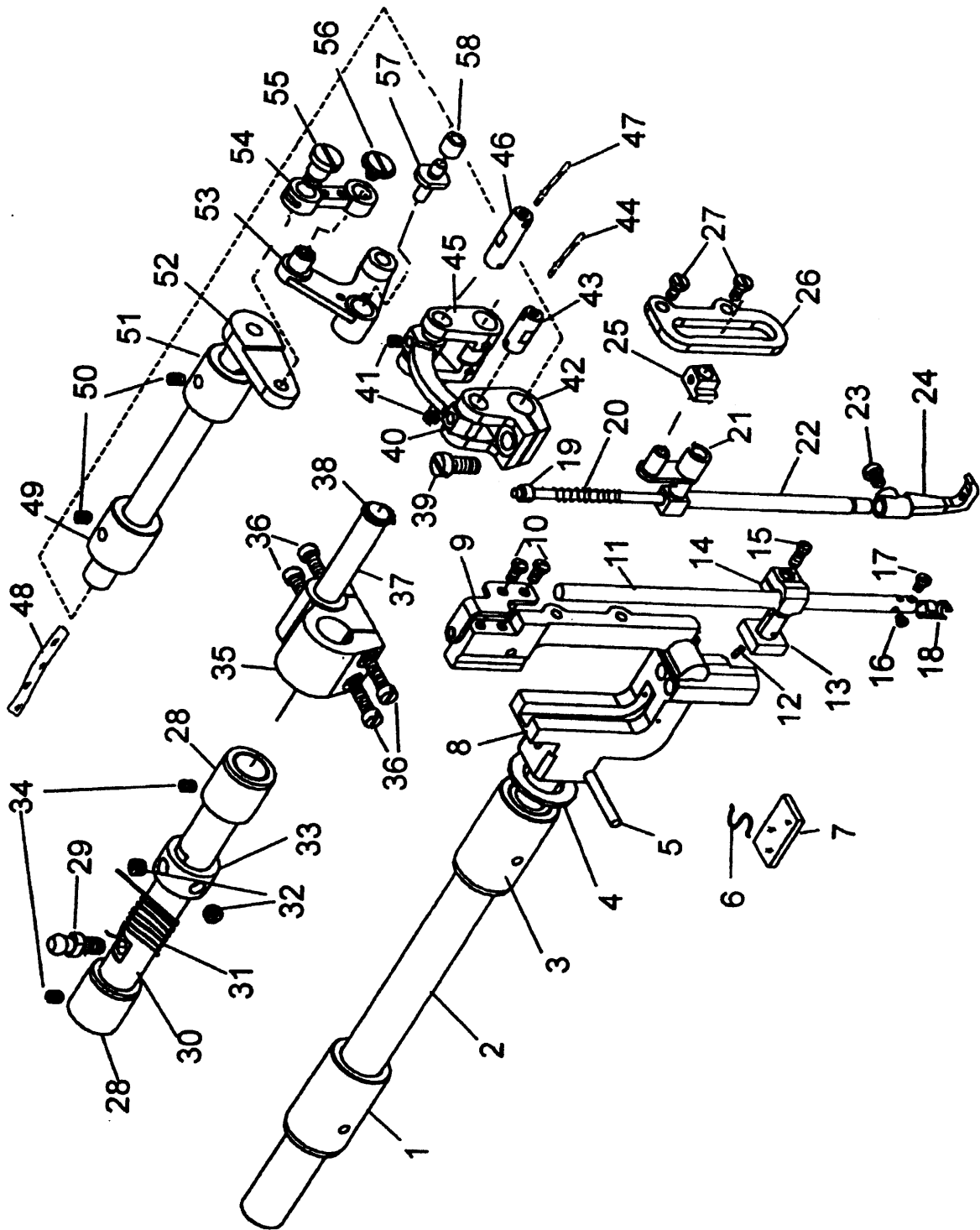


## D、 FEED AND FEED LIFTING MECHANISM

| No. | Ref. No. | Description                     | Pcs. |
|-----|----------|---------------------------------|------|
| D01 | H5304001 | Feed dog                        | 1    |
| D02 | H5304002 | Connecting screw for feed dog   | 1    |
| D03 | H5304003 | Feed rock lifting shaft crank   | 1    |
| D04 | H5304004 | Set screw                       | 2    |
| D05 | H5304005 | Feed eccentric                  | 1    |
| D06 | H5304006 | Screw                           | 2    |
| D07 | H5304007 | Screw                           | 2    |
| D08 | H5304008 | Screw                           | 2    |
| D09 | H5304009 | Guide plate (left)              | 1    |
| D10 | H5304010 | Guide plate (right)             | 1    |
| D11 | H5304011 | Feed rock shaft crank           | 1    |
| D12 | H5304012 | Screw                           | 1    |
| D13 | H5304013 | Pin                             | 1    |
| D14 | H5304014 | Link                            | 1    |
| D15 | H5304015 | Nut                             | 2    |
| D16 | H5304016 | Feed rock shaft bushing (left)  | 1    |
| D17 | H5304017 | Feed rock shaft                 | 1    |
| D18 | H5304018 | Collar for feed rock shaft      | 1    |
| D19 | H5304019 | Set screw                       | 2    |
| D20 | H5304020 | Feed rock shaft bushing (right) | 1    |
| D21 | H5304021 | Set screw                       | 2    |



# E. NEEDLE BAR FEEDING MECHANISM



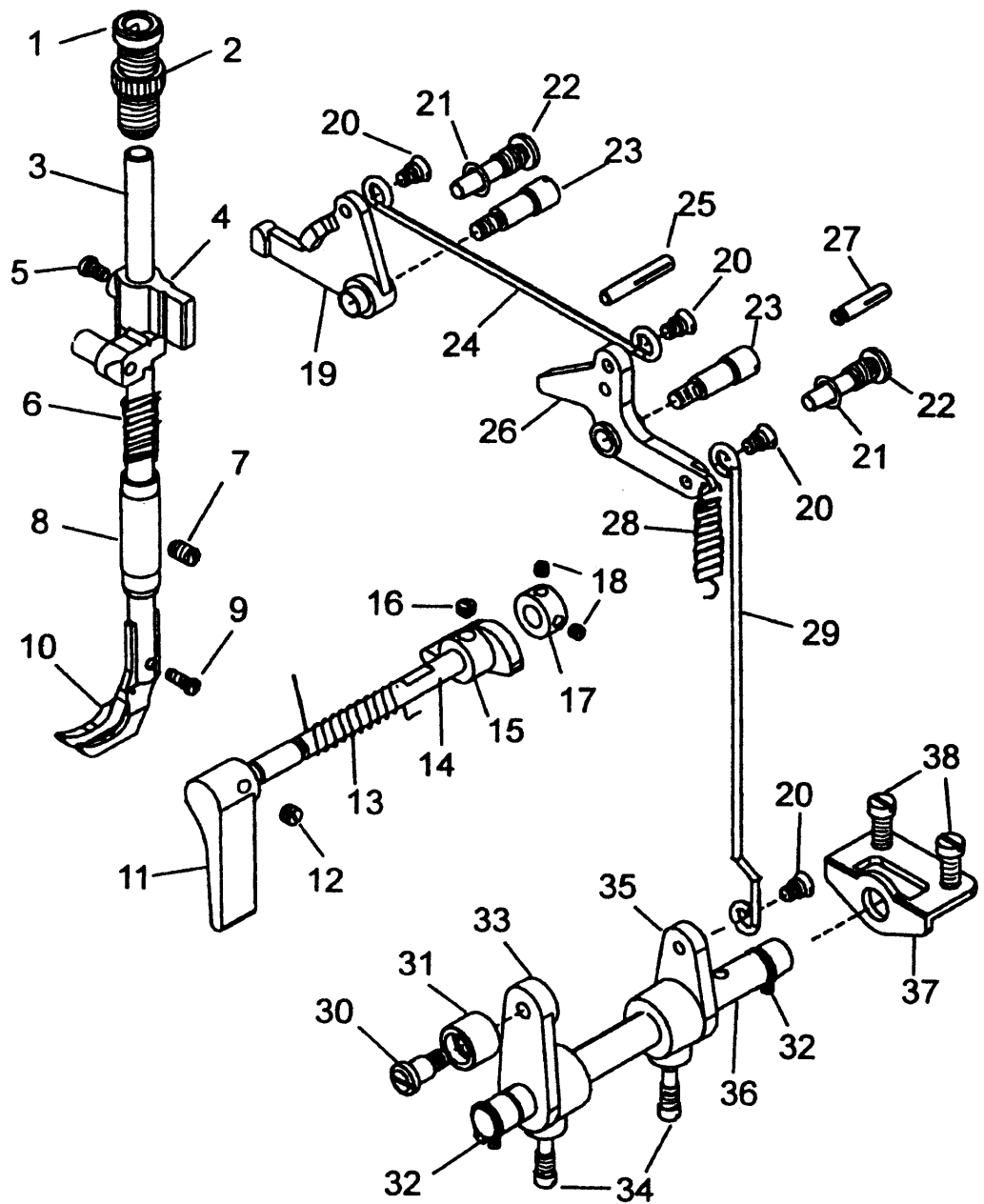
## E、 NEEDLE BAR FEEDING MECHANISM

| No. | Ref. No. | Description                           | Pcs. |
|-----|----------|---------------------------------------|------|
| E01 | H5305001 | Needle bar rock shaft bushing (right) | 1    |
| E02 | H5305002 | Needle bar rock shaft                 | 1    |
| E03 | H5305003 | Needle bar rock shaft bushing (left)  | 1    |
| E04 | H5305004 | Washer                                | 1    |
| E05 | H5305005 | Pin                                   | 1    |
| E06 | H5305006 | Felt clip                             | 1    |
| E07 | H5305007 | Felt                                  | 1    |
| E08 | H5305008 | Needle bar rock frame                 | 1    |
| E09 | H5305009 | Bracket                               | 1    |
| E10 | H5305010 | Screw                                 | 2    |
| E11 | H5305011 | Needle bar                            | 1    |
| E12 | H5305012 | Oil wick                              | 1    |
| E13 | H5305013 | Slide block                           | 1    |
| E14 | H5305014 | Needle bar connecting stud            | 1    |
| E15 | H5305015 | Screw                                 | 1    |
| E16 | H5305016 | Screw                                 | 1    |
| E17 | H5305017 | Screw                                 | 1    |
| E18 | H5305018 | Thread guide for needle bar           | 1    |
| E19 | H5305019 | Spring guide bar complete             | 1    |
| E20 | H5305020 | Spring                                | 1    |
| E21 | H5305021 | Presser bar connecting link           | 1    |
| E22 | H5305022 | Presser bar                           | 1    |
| E23 | H5305023 | Screw                                 | 1    |
| E24 | H5305024 | Presser foot                          | 1    |
| E25 | H5305025 | Slide block                           | 1    |
| E26 | H5305026 | Guide for slide block                 | 1    |
| E27 | H5305027 | Screw                                 | 2    |
| E28 | H5305028 | Bushing for upper feed shaft          | 2    |
| E29 | H5305029 | Cam follower                          | 1    |
| E30 | H5305030 | Upper feed regulator shaft            | 1    |
| E31 | H5305031 | Spring                                | 1    |
| E32 | H5305032 | Set screw                             | 2    |
| E33 | H5305033 | Collar                                | 1    |
| E34 | H5305034 | Set screw                             | 2    |
| E35 | H5305035 | Lifting rock shaft bracket            | 1    |
| E36 | H5305036 | Screw                                 | 4    |

## E、 NEEDLE BAR FEEDING MECHANISM

| No. | Ref. No. | Description                            | Pcs. |
|-----|----------|--|------|
| E37 | H5305037 | Shaft for Lifting rock shaft bracket   | 1    |
| E38 | H5305038 | Stop ring                              | 1    |
| E39 | H5305039 | Screw                                  | 1    |
| E40 | H5305040 | Link                                   | 1    |
| E41 | H5305041 | Set screw                              | 2    |
| E42 | H5305042 |  | 1    |
| E43 | H5305043 | Pin                                    | 1    |
| E44 | H5305044 | Oil wick                               | 1    |
| E45 | H5305045 | Crank for lifting rock shaft bracket   | 1    |
| E46 | H5305046 | Pin                                    | 1    |
| E47 | H5305047 | Oil wick                               | 1    |
| E48 | H5305048 | Oil wick                               | 1    |
| E49 | H5305049 | Bushing for lifting rock shaft (right) | 1    |
| E50 | H5305050 | Set screw                              | 2    |
| E51 | H5305051 | Bushing for lifting rock shaft (left)  | 1    |
| E52 | H5305052 | Lifting rock shaft                     | 1    |
| E53 | H5305053 | Bell crank                             | 1    |
| E54 | H5305054 | Link for feed lifting rock shaft       | 1    |
| E55 | H5305055 | Screw                                  | 1    |
| E56 | H5305056 | Screw                                  | 1    |
| E57 | H5305057 | Bell crank guide pin                   |      |
| E58 | H5305058 | Bell crank guide bracket block         |      |

# F. PRESSER FOOT MECHANISM



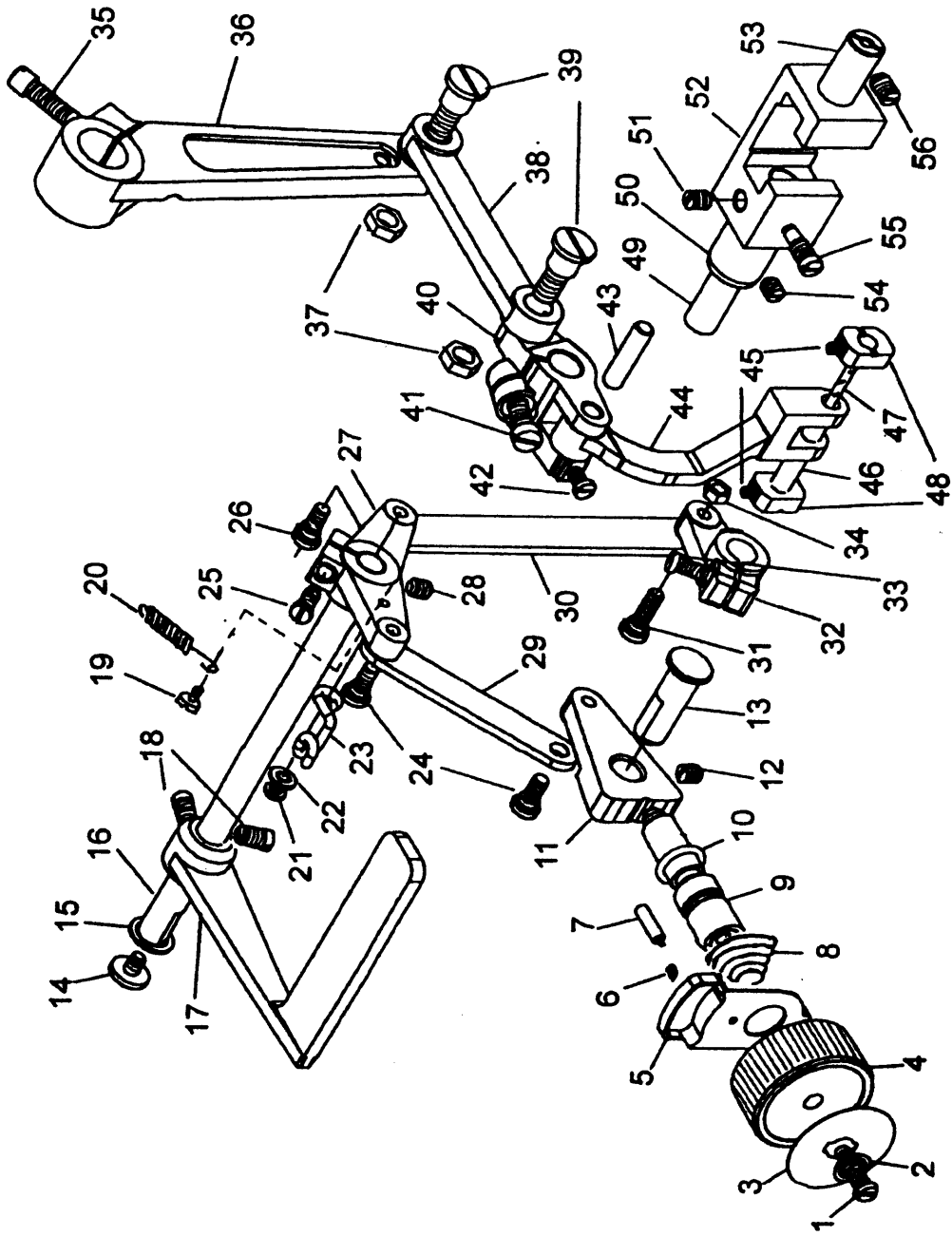
## F、PRESSER FOOT MECHANISM

| No. | Ref. No. | Description                            | Pcs. |
|-----|----------|--|------|
| F01 | H5306001 | Nut                                    | 1    |
| F02 | H5306002 | Thumb screw                            | 1    |
| F03 | H5306003 | Presser bar                            | 1    |
| F04 | H5306004 | Presser bar guide bracket              | 1    |
| F05 | H5306005 | Screw                                  | 1    |
| F06 | H5306006 | Presser bar spring                     | 1    |
| F07 | H5306007 | Set screw                              | 1    |
| F08 | H5306008 | Bushing for presser bar                | 1    |
| F09 | H5306009 | Screw                                  | 1    |
| F10 | H5306010 | Walking foot                           | 1    |
| F11 | H5306011 | Presser bar lifter                     | 1    |
| F12 | H5306012 | Set screw                              | 1    |
| F13 | H5306013 | Spring                                 | 1    |
| F14 | H5306014 | Presser bar lifting shaft              | 1    |
| F15 | H5306015 | Presser bar lifting cam                | 1    |
| F16 | H5306016 | Set screw                              | 1    |
| F17 | H5306017 | Collar                                 | 1    |
| F18 | H5306018 | Set screw                              | 2    |
| F19 | H5306019 | Tension releasing cam                  | 1    |
| F20 | H5306020 | Screw                                  | 4    |
| F21 | H5306021 | Seal                                   | 2    |
| F22 | H5306022 | Screw                                  | 3    |
| F23 | H5306023 | Screw                                  | 2    |
| F24 | H5306024 | Knee lifter rod                        | 1    |
| F25 | H5306025 | Pin                                    | 1    |
| F26 | H5306026 | Knee lifter lever                      | 1    |
| F27 | H5306027 | Pin                                    | 1    |
| F28 | H5306028 | Spring                                 | 1    |
| F29 | H5306029 | Knee lifter connecting rod             | 1    |
| F30 | H5306030 | Screw                                  | 1    |
| F31 | H5306031 | Guide block                            | 1    |
| F32 | H5306032 | Stop ring                              | 2    |
| F33 | H5306033 | Knee lifter connecting rod shaft crank | 1    |
| F34 | H5306034 | Screw                                  | 2    |
| F35 | H5306035 | Knee lifter connecting rod shaft crank | 1    |
| F36 | H5306036 | Knee lifter connecting rod shaft       | 1    |

## F、PRESSER FOOT MECHANISM

| No. | Ref. No. | Description    | Pcs. |
|-----|----------|----------------|------|
| F37 | H5306037 | Mounting plate | 1    |
| F38 | H5306038 | Screw          | 2    |

# G. STITCH LENGTH REGULATING MECHANISM



## G、 STITCH LENGTH REGULATING MECHANISM

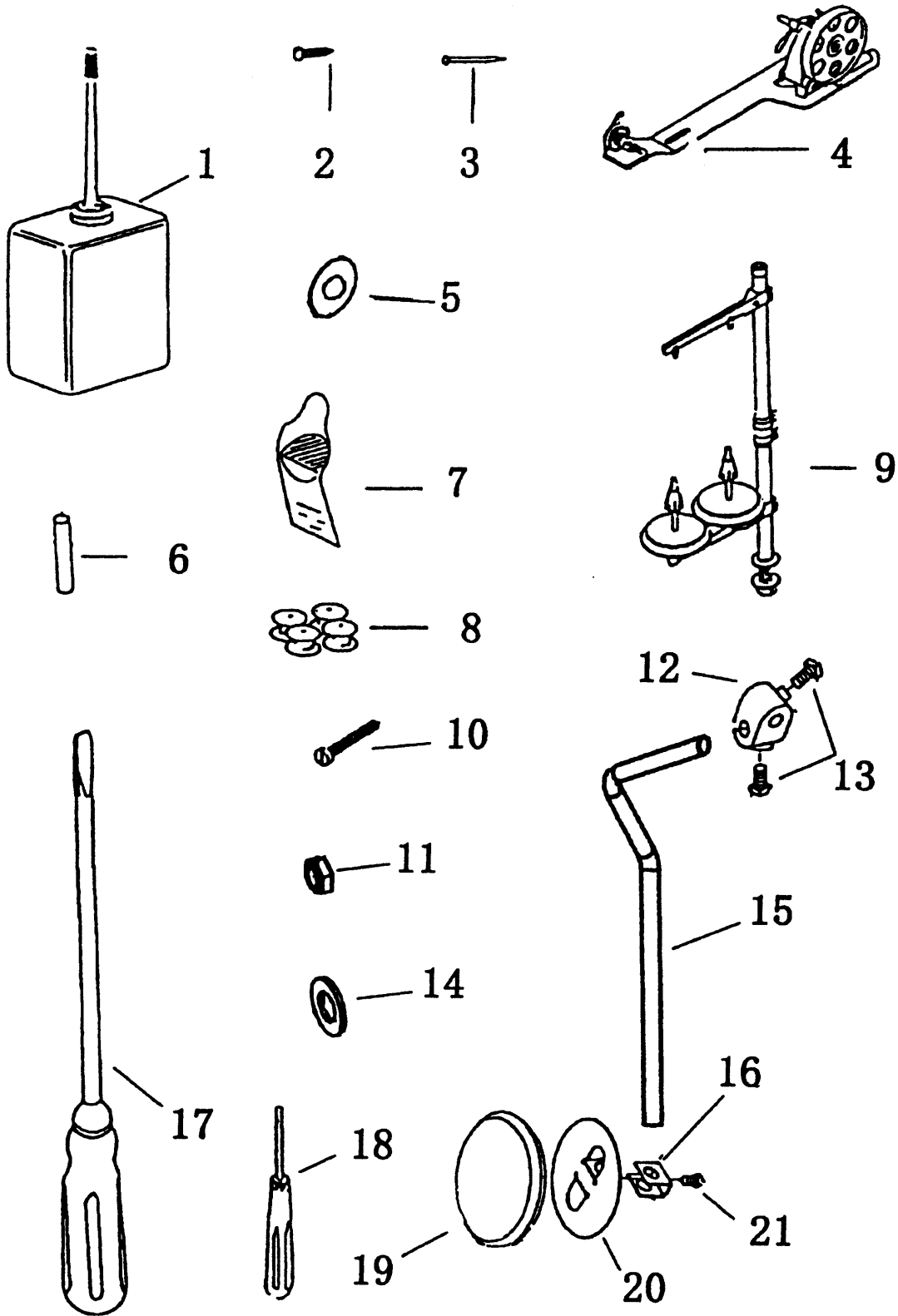
| No. | Ref. No. | Description                          | Pcs. |
|-----|----------|--------------------------------------|------|
| G01 | H5307001 | Screw                                | 1    |
| G02 | H5307002 | Bushing                              | 1    |
| G03 | H5307003 | Plate for stitch length              | 1    |
| G04 | H5307004 | Dial                                 | 1    |
| G05 | H5307005 | Stopper pin releasing lever          | 1    |
| G06 | H5307006 | Spring for stopper pin               | 1    |
| G07 | H5307007 | Stopper pin                          | 1    |
| G08 | H5307008 | Coil spring                          | 1    |
| G09 | H5307009 | Screw bar                            | 1    |
| G10 | H5307010 | Seal                                 | 1    |
| G11 | H5307011 | Feed regulator crank                 | 1    |
| G12 | H5307012 | Set screw                            | 1    |
| G13 | H5307013 | Pin                                  | 1    |
| G14 | H5307014 | Screw                                | 1    |
| G15 | H5307015 | Washer                               | 1    |
| G16 | H5307016 | Feed reversing lever shaft           | 1    |
| G17 | H5307017 | Feed reversing lever                 | 1    |
| G18 | H5307018 | Set screw                            | 2    |
| G19 | H5307019 | Screw                                | 1    |
| G20 | H5307020 | Spring                               | 1    |
| G21 | H5307021 | Screw                                | 1    |
| G22 | H5307022 | Washer                               | 1    |
| G23 | H5307023 | Spring retainer                      | 1    |
| G24 | H5307024 | Screw                                | 2    |
| G25 | H5307025 | Screw                                | 1    |
| G26 | H5307026 | Screw                                | 1    |
| G27 | H5307027 | Feed reversing lever shaft crank     | 1    |
| G28 | H5307028 | Set screw                            | 1    |
| G29 | H5307029 | Feed reversing lever shaft link      | 1    |
| G30 | H5307030 | Link for reversing block shaft crank | 1    |
| G31 | H5307031 | Screw                                | 1    |
| G32 | H5307032 | Reverse block shaft crank            | 1    |
| G33 | H5307033 | Screw                                | 1    |
| G34 | H5307034 | Nut                                  | 1    |
| G35 | H5307035 | Screw                                | 1    |
| G36 | H5307036 | Link                                 | 1    |



## G、 STITCH LENGTH REGULATING MECHANISM

| No. | Ref. No. | Description                           | Pcs. |
|-----|----------|---------------------------------------|------|
| G37 | H5307037 | Nut                                   | 2    |
| G38 | H5307038 | Link                                  | 1    |
| G39 | H5307039 | Screw                                 | 2    |
| G40 | H5307040 | Crank                                 | 1    |
| G41 | H5307041 | Screw                                 | 1    |
| G42 | H5307042 | Screw                                 | 1    |
| G43 | H5307043 | Crank shaft                           | 1    |
| G44 | H5307044 | Link for reversing block slide block  | 1    |
| G45 | H5307045 | Set screw                             | 2    |
| G46 | H5307046 | Shaft for reversing block slide block | 1    |
| G47 | H5307047 | Oil wick                              | 1    |
| G48 | H5307048 | Slide block                           | 2    |
| G49 | H5307049 | Reverse block shaft                   | 1    |
| G50 | H5307050 | Bushing for reverse block shaft       | 1    |
| G51 | H5307051 | Set screw                             | 1    |
| G52 | H5307052 | Reverse block                         | 1    |
| G53 | H5307053 | Reverse block shaft                   | 1    |
| G54 | H5307054 | Set screw                             | 1    |
| G55 | H5307055 | Screw                                 | 1    |
| G56 | H5307056 | Set screw                             | 1    |

# H. ACCESSORIES



## H、ACCESSORIES

| No. | Ref. No. | Description               | Pcs. |
|-----|----------|---------------------------|------|
| H01 | H5308001 | Oiler                     | 1    |
| H02 | H5308002 | Wood screw                | 4    |
| H03 | H5308003 | Nail                      | 15   |
| H04 | H5308004 | Bobbin winder assy        | 1    |
| H05 | H5308005 | Washer                    | 2    |
| H06 | H5308006 | Supporter                 | 1    |
| H07 | H5308007 | Needle                    | 1    |
| H08 | H5308008 | Bobbin                    | 1    |
| H09 | H5308009 | Thread stand assy         | 1    |
| H10 | H5308010 | Screw                     | 4    |
| H11 | H5308011 | Nut                       | 4    |
| H12 | H5308012 | Knee lifter driving crank | 1    |
| H13 | H5308013 | Screw                     | 2    |
| H14 | H5308014 | Washer                    | 4    |
| H15 | H5308015 | Knee lifter shaft         | 1    |
| H16 | H5308016 | Knee lifter bracket       | 1    |
| H17 | H5308017 | Screw driver (larger)     | 1    |
| H18 | H5308018 | Screw driver (middle)     | 1    |
| H19 | H5308019 | Knee lifter cover         | 1    |
| H20 | H5308020 | Knee lifter plate         | 1    |
| H21 | H5308021 | Screw                     | 1    |