



## **350 AUT SERIES**

**SINGLE NEEDLE DIRECT DRIVE LOCKSTITCH  
MACHINE WITH THREAD TRIMMER**

**INSTRUCTION / OPERATING MANUAL  
PARTS MANUAL**

Thank you very much for buying a GLOBAL sewing machine.  
Before using your new machine, please read the safety instructions.

With industrial sewing machines, it is normal to carry out work while positioned directly in front of moving parts such as the needle and thread take-up, and consequently there is always a danger of injury that can be caused by these parts. follow the instructions from training personnel and instructors regarding safe and operation before operating the machine so that you will know how to use it correctly.

## **SAFETY INSTRUCTIONS**

This instruction manual and the indications and symbols that are used on the machine itself are provided in order to ensure safe operation of this machine and to prevent accidents and injury to yourself or other people

### **Indications**

 DANGER

The instructions which follow this term indicate situations where failure to follow the instructions will almost certainly result in death or severe injury.

 DANGER .

The instructions which follow this term indicate situations where failure to follow the instructions could injury when using the machine or physical damage to equipment and surroundings.

### **Symbols**

 This symbol indicates something that you should be careful of. the picture inside the triangle indicates the nature of the caution that must be taken.(for example, the symbol at left means “beware of injury” .)

 This symbol indicates something that you must not do.

 This symbol indicates something that you must do. the picture inside the circle indicates the nature of the thing that must be done.(for example, the symbol at left means “you must make the ground connection” .)

### **[2]. Notes on safety**

 Wait at least 5 minutes after turning off the power switch and disconnect the power cord from the wall outlet before opening the face plate of the control box. Touching areas where high voltages are present can result in severe injury.

## Environmental requirements

The relative humidity should be within the range of 45 % to 85 % during use, and no dew formation should occur in any devices. Excessively dry or humid environments and dew formation may cause problems with correct operation.

Avoid exposure to direct sunlight during use. Exposure to direct sunlight may cause problems with correct operation.

In the event of an electrical storm, turn off the power and disconnect the power cord from the wall outlet .lightning may cause problems with correct operation.

## Installation

-  Machine installation should only be carried out by a qualified technician.
-  Do not connect the power cord until installation is complete. The machine may operate if the treadle is depressed by mistake, which could result in injury.
-  Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin, otherwise inflammation can result. Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea. Keep the oil out of the reach of children.
-  The sewing machine weighs more than 48 Kg. the installation should be carried out by two or more people.
-  Turn off the power switch before inserting or removing the plug, otherwise damage to the control box could result.
-  If using a work table which has casters, the casters should be secured in such a way so that they cannot move.
-  Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.
-  When securing the cords, do not bend the cords excessively or fasten them too hard with staples, otherwise there is the danger that fire or electric shocks could occur.

## Sewing

This sewing machine should only be used by operators who have received the necessary training in safe use beforehand.

This sewing machine should not be used by any applications other than sewing.

Be sure to wear protective goggles when using the machine. If goggles are not worn, there is the danger that if a needle breaks, parts of the broken needle may enter your eyes and injury may result.



If using a work table which has casters should be secured in such a way so that they cannot move.



At first operate the machine, should carry on low speed to whet to match an operation for 20 days.(3500 r/min)



If an error occurs in machine, or if abnormal noises or smells are noticed, immediately turn off the power switch. Then contact your nearest GLOBAL dealer or a qualified technician.



If the machine develops a problem, contact your nearest GLOBAL dealer or a qualified technician.



Turn off the power switch at the following times. The machine may operate if the treadle is depressed by mistake, which could result in injury. 1. when threading the needle . 2. when replacing the bobble and needle. 3. when not using the machine and when leaving the machine unattended.



Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.

Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.

Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.

## Cleaning



Turn off the power switch before carrying out cleaning. The machine may operate if the treadle is depressed by mistake, which could result in injury.



Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.

Be sure to wear protective goggles and gloves when handling the lubricating oil and grease ,so that they do not get into your eyes or onto your skin, otherwise inflammation can result. Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea. Keep the oil out of the reach of children.



Use only the proper replacement parts as specified by GLOBAL.

## Maintenance and inspection

Maintenance and inspection of the sewing machine should only be carried out by a qualified technician.

Any problem in machine operation which result from unauthorized modifications to the machine will not be covered by the warranty.



Turn off the power switch and disconnect the power cord from the wall outlet at following times, otherwise the machine may operate if the treadle is depressed by mistake, which could result in injury. 1. when carrying out inspection, adjustment and maintenance. 2. when replacing consumable parts such as the rotary hook.



If the power switch needs to be left on when carrying out some adjustment, be extremely careful to observe all safety precautions.



Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.



Ask your GLOBAL dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.



If any safety devices have been removed, be absolutely sure to reinstall them to their original positions and check that they operate correctly before using the machine.



Use only the proper replacement parts as specified by GLOBAL

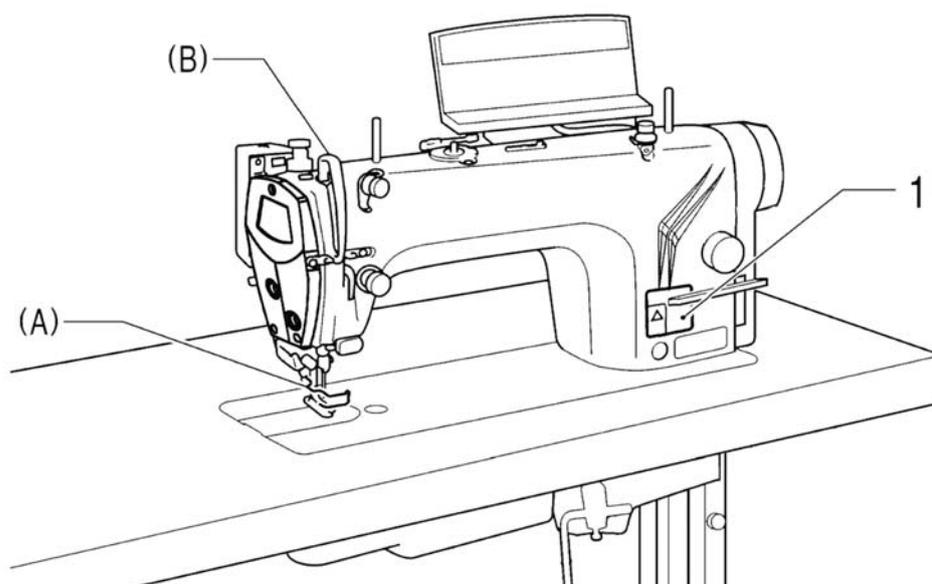
### [3]. Warning labels

The following warning labels appear on the machine. Please follow the instructions on the labels at all times when using the machine. If labels have been removed or are difficult to read, please contact your nearest GLOBAL dealer.



#### Safety devices

- (A) Finger guard
- (B) Thread take-up cover



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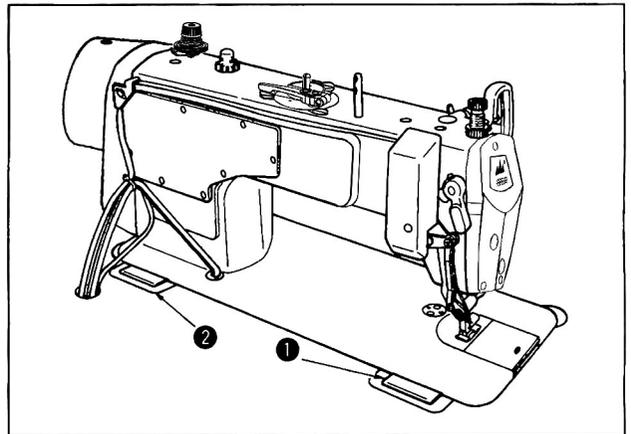
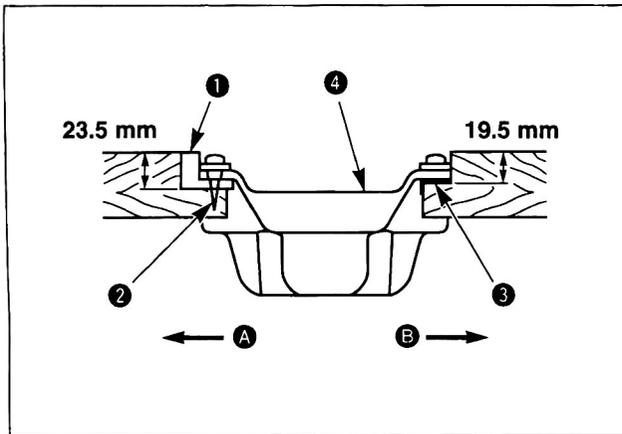
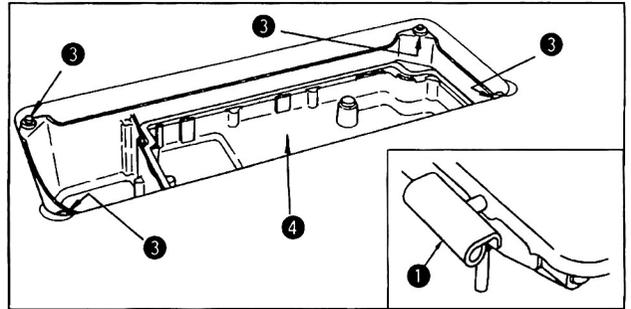
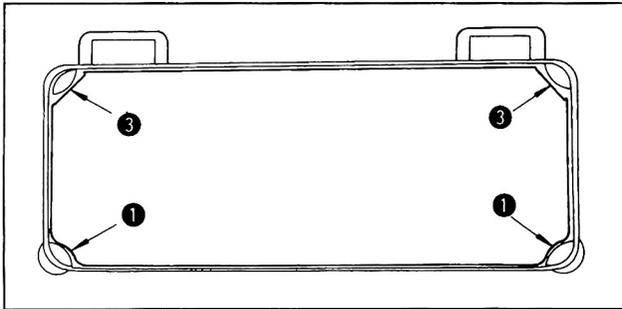
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# 1. SPECIFICATIONS

Application	General fabrics, light-weight and medium-weight materials
Sewing speed	Max. 4,000 rpm
Max. Stitch length	4 mm
Needle	DB x 1 #9 to #18
Presser foot lift	10 mm (standard) 13 mm (Max.)
Lubricating oil	White Oil 0
Noise	Workplace-related noise at sewing speed $n = 4,000 \text{ min}^{-1} : L_{PA} \leq 81 \text{ dB(A)}$ Noise measurement according to DIN 45635-48-A-1

# 2. INSTALLATION



## (1) Installing the under cover

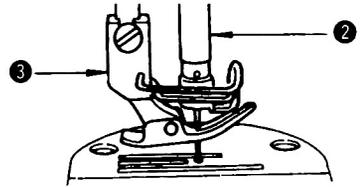
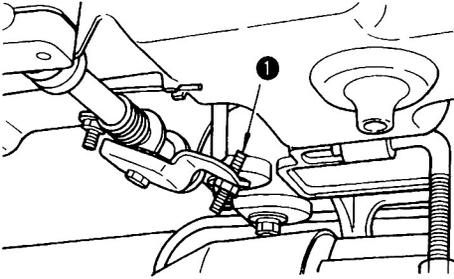
- 1) The oil pan should rest on the four corners of the machine table groove.
- 2) Fix two rubber seats ① on side A (operator's side) using nails ② as illustrated above. Fix two cushion seats ③ on side B (hinged side) using a rubber-based adhesive. Then place oil pan ④ on the fixed seats.
- 3) Fit hinge ① into the opening in the machine bed, and fit the machine head to table rubber hinge ② before placing the machine head on cushions ③ on the four corners.

### 3. ADJUSTING THE HEIGHT OF THE KNEE LIFTER



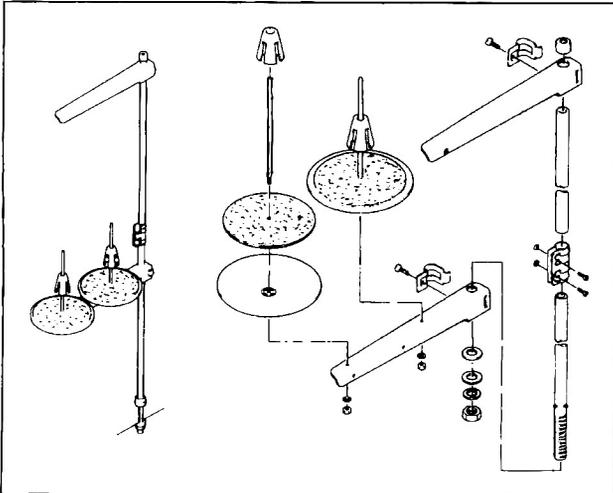
#### WARNING :

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



- 1) The standard height of the presser foot lifted using the knee lifter is 10 mm.
- 2) You can adjust the presser foot lift up to 13 mm using knee lifter adjust screw ①. (Max. 9 mm for A type)
- 3) When you have adjusted the presser foot lift to over 10 mm, be sure that the bottom end of needle bar ② in its lowest position does not hit presser foot ③.

### 4. INSTALLING THE THREAD STAND

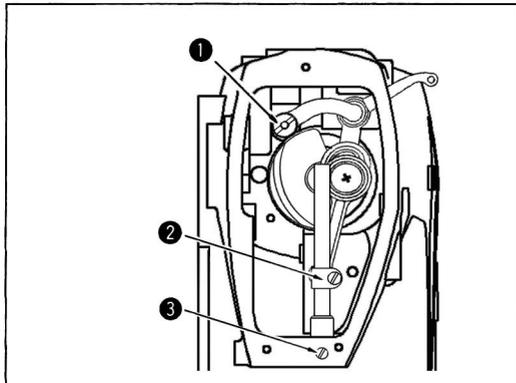


## 5. LIPIN



### WARNING :

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



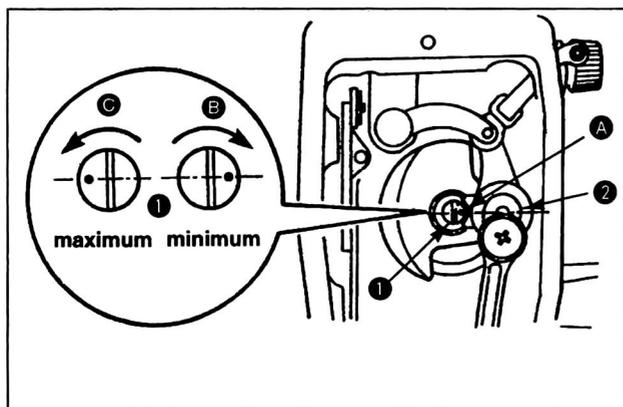
- 1) After loosening the screw ① of the thread lifting bar, please fill the hole with lubricating oil.
- 2) After taking down the need bar connection components and the screw in the need bar connection ②, please fill the hole with lubricating oil.
- 3) Firstly, take down the screw of the need bar ③ and then fill the hole with lubricating oil.

## 6. LUBRICATION



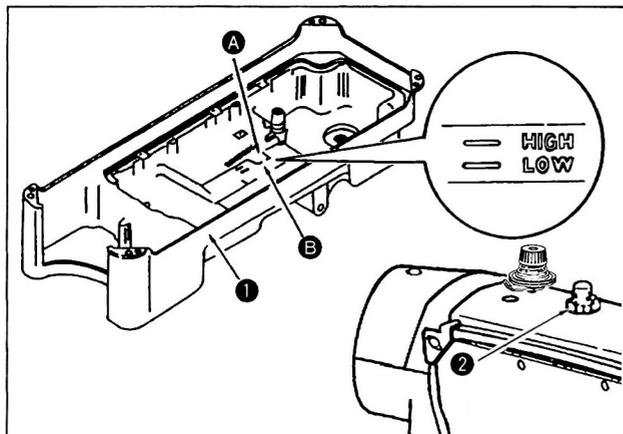
### WARNING :

Turn off the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



### (1) Adjusting the amount of oil supplied to the face plate parts

- 1) Adjust the amount of oil supplied to the thread take-up and needle bar crank ② by turning adjust pin ①.
- 2) The minimum amount of oil is reached when marker dot A is brought close to needle bar crank ② by turning the adjust pin in direction B.
- 3) The maximum amount of oil is reached when marker dot A is brought to the position just opposite from the needle bar crank by turning the adjust pin in direction C.



## (2) Information on lubrication

- 1) Fill oil pan ❶ with Machine Oil up to HIGH mark ❸.
- 2) When the oil level lowers below LOW mark ❷, refill the oil pan with the specified oil.
- 3) When you operate the machine after lubrication, you will see splashing oil through oil sight window ❹ if the lubrication is adequate.
- 4) Note that the amount of the splashing oil is unrelated to the amount of the lubricating oil.



**When you first operate your machine after setup or after an extended period of disuse, run your machine at 1,500 to 2,500 rpm. for about 10 minutes for the purpose of break-in.**

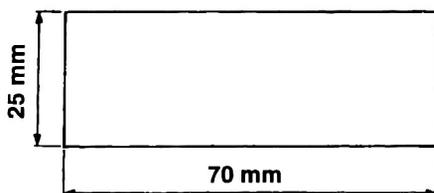
## 7. ADJUSTING THE AMOUNT OF OIL (OIL SPLASHES) IN THE HOOK



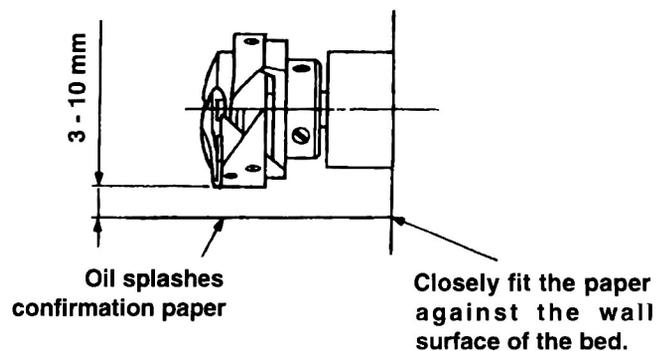
### WARNING :

Be extremely careful about the operation of the machine since the amount of oil has to be checked by turning the hook at a high speed.

### ① Amount of oil (oil splashes) confirmation paper

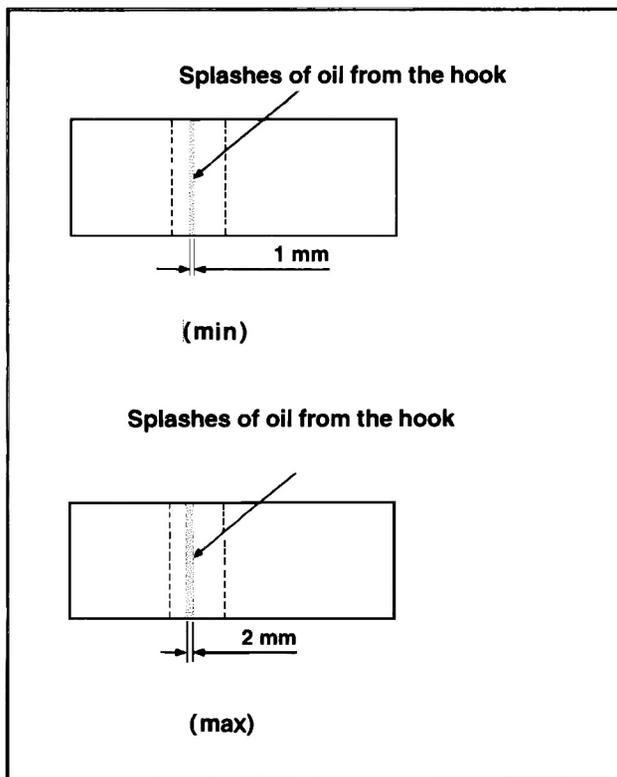


### ② Position to confirm the amount of oil (oil splashes)



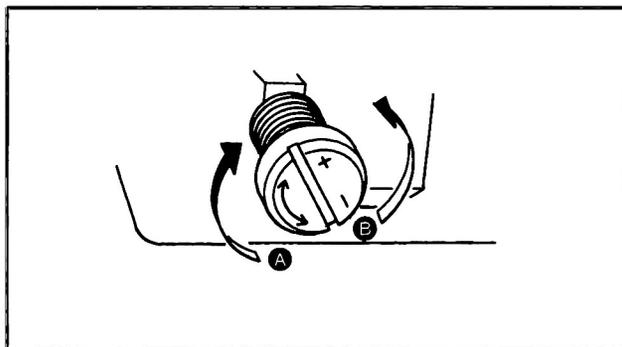
- \* When carrying out the procedure described below in 2, remove the slide plate and take extreme caution not to allow your fingers to come in contact with the hook.
- 1) If the machine has not been sufficiently warmed up for operation, make the machine run idle for approximately three minutes. (Moderate intermittent operation)
  - 2) Place the amount of oil (oil splashes) confirmation paper under the hook while the sewing machine is in operation.
  - 3) Confirm the height of the oil surface in the oil reservoir is within the range between "HIGH" and "LOW".
  - 4) Confirmation of the amount of oil should be completed in five seconds. (Check the period of time with a watch )

• **Sample showing the appropriate amount of oil**



- 1) The amount of oil shown in the samples on the left should be finely adjusted in accordance with sewing processes. Be careful not to excessively increase/decrease the amount of oil in the hook. (If the amount of oil is too small, the hook will be seized (the hook will be hot). If the amount of oil is too much, the sewing product may be stained with oil.)
- 2) Adjust the amount of oil in the hook so that the oil amount (oil splashes) should not change while checking the oil amount three times (on the three sheets of paper).

• **Adjusting the amount of oil (oil spots) in the hook**



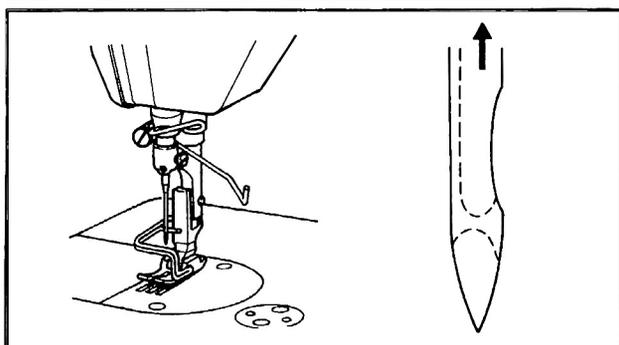
- 1) Turning the oil amount adjustment screw attached on the hook driving shaft front bushing in the “+” direction (in direction **A**) will increase the amount of oil (oil spots) in the hook, or in the “-” direction (in direction **B**) will decrease it.
- 2) After the amount of oil in the hook has been properly adjusted with the oil amount adjustment screw, make the sewing machine run idle for approximately 30 seconds to check the amount of oil in the hook.

**8. ATTACHING THE NEEDLE**

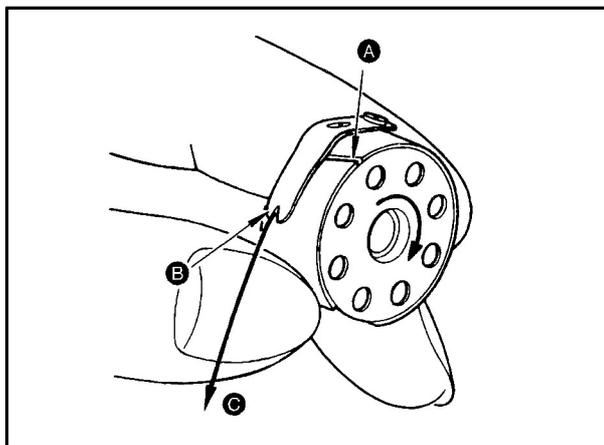


**WARNING :**

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

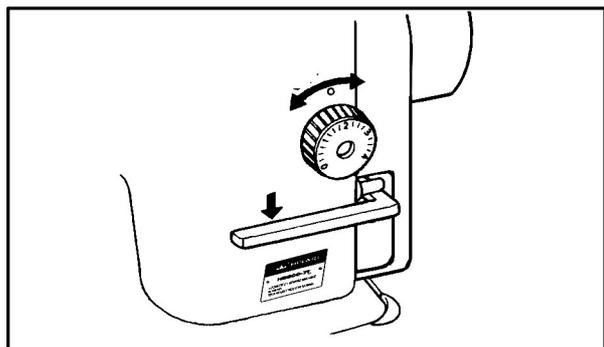


## 9. SETTING THE BOBBIN INTO THE BOBBIN CASE

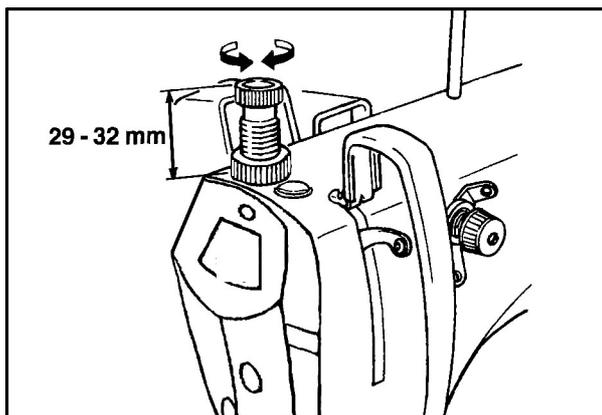


- 1) Pass the thread through thread slit **A**, and pull the thread in direction **B**.  
By so doing, the thread will pass under the tension spring and come out from notch **B**.
- 2) Check that the bobbin rotates in the direction of the arrow when thread **C** is pulled.

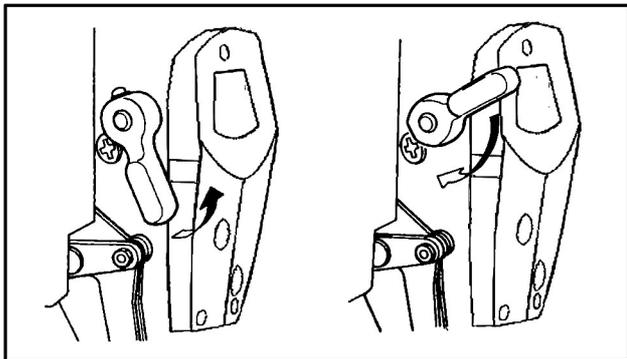
## 10. ADJUSTING THE STITCH LENGTH



## 11. PRESSER FOOT PRESSURE



## 12. HAND LIFTER

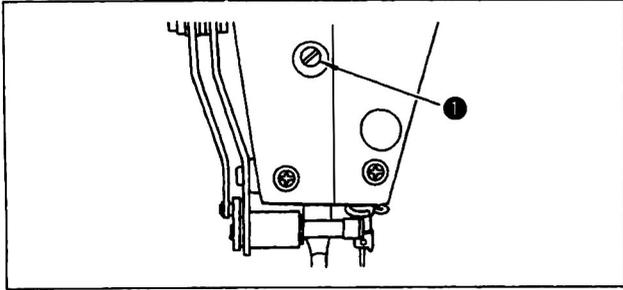


### 13. ADJUSTING THE HEIGHT OF THE PRESSER BAR



**WARNING :**

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



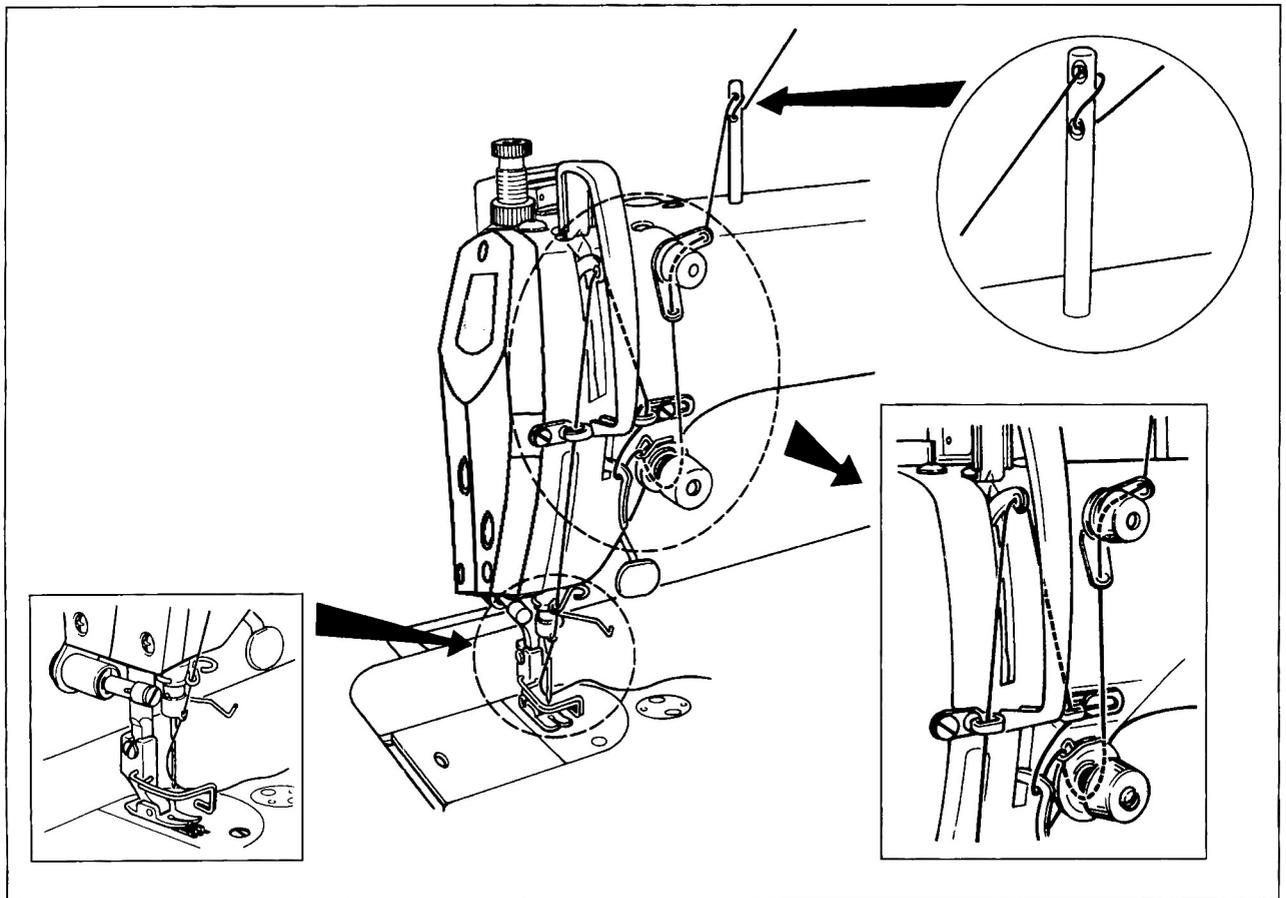
- 1) Loosen setscrew ❶, and adjust the presser bar height or the angle of the presser foot.
- 2) After adjustment, securely tighten the setscrew ❶

### 14. THREADING THE MACHINE HEAD

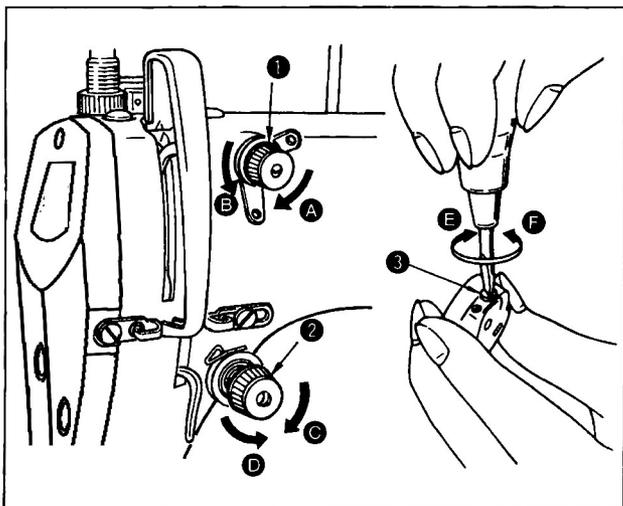


**WARNING :**

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



## 15. THREAD TENSION



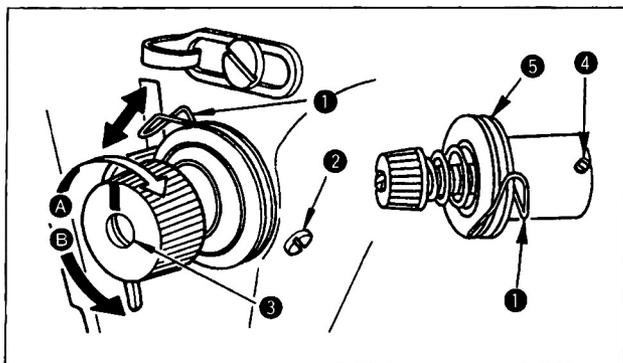
### (1) Adjusting the needle thread tension

- 1) As you turn thread tension No. 1 nut ① clockwise (in direction ①), the thread remaining on the needle after thread trimming will be shorter.
- 2) As you turn nut ① counterclockwise (in direction ②), the thread length will be longer.
- 3) As you turn thread tension No. 2 nut ② clockwise (in direction ③), the needle thread tension will be increased.
- 4) As you turn nut ② counterclockwise (in direction ④), the needle thread tension will be decreased.

### (2) Adjusting the bobbin thread tension

- 1) As you turn tension adjust screw ③ clockwise (in direction ⑤), the bobbin thread tension will be increased.
- 2) As you turn screw ③ counterclockwise (in direction ⑥), the bobbin thread tension will be decreased.

## 16. THREAD TAKE-UP SPRING



### (1) Changing the stroke of thread take-up spring ①

- 1) Loosen setscrew ②.
- 2) As you turn tension post ③ clockwise (in direction ①), the stroke of the thread take-up spring will be increased.
- 3) As you turn the knob counterclockwise (in direction ②), the stroke will be decreased.

### (2) Changing the pressure of thread take-up spring ①

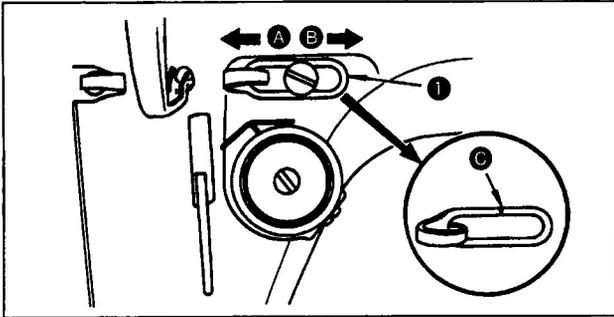
- 1) Loosen setscrew ②, and remove thread tension (asm.) ⑤.
- 2) Loosen setscrew ④.
- 3) As you turn tension post ③ clockwise (in direction ①), the pressure will be increased.
- 4) As you turn the post ③ counterclockwise (in direction ②), the pressure will be decreased.

## 17. ADJUSTING THE THREAD TAKE-UP STROKE



### WARNING :

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



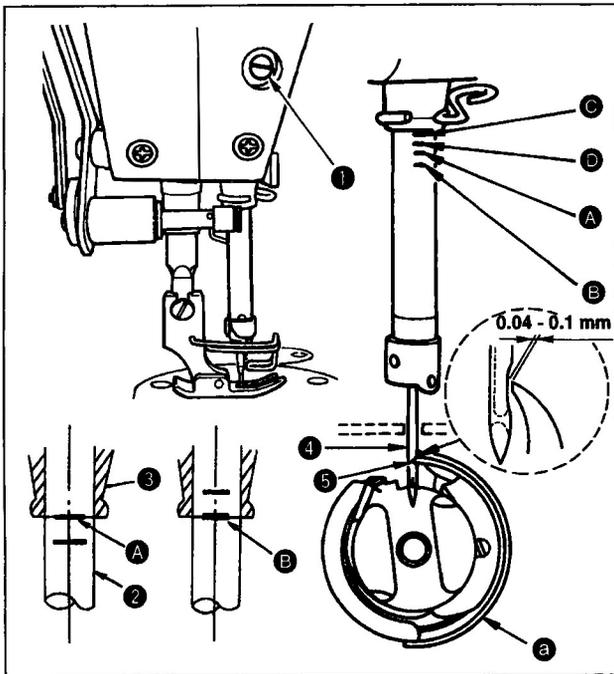
- 1) When sewing heavy-weight materials, move thread guide ① to the left (in direction A) to increase the length of thread pulled out by the thread take-up.
- 2) When sewing light-weight materials, move thread guide ① to the right (in direction B) to decrease the length of thread pulled out by the thread take-up.
- 3) Normally, thread guide ① is positioned in a way that marker line C is aligned with the center of the screw.

## 18. NEEDLE-TO-HOOK RELATIONSHIP



### WARNING :

To avoid possible personal injury due to abrupt start of the machine, turn off the power to the machine and check to be sure that the motor has totally stopped rotating in prior.



- 1) The standard tilt (horizontal) of the feed dog is obtained when marker dot A on the feed bar shaft is aligned with marker dot B on feed rocker ①. the marker dot B inclines forward the feed rocker shaft by 90°, as standard).
- 2) To tilt the feed dog with its front up in order to prevent puckering, loosen the setscrew, and turn the feed bar shaft 90° in the direction of the arrow, using a screwdriver.
- 3) To tilt the feed dog with its front down in order to prevent uneven material feed, turn the feed bar shaft 90° in the opposite direction from the arrow.



Whenever the feed dog tilt is adjusted, the feed dog height will be changed. So, it is necessary to check the height after tilt adjustment.

### (1) Adjust the timing between the needle and the hook as follows :

- 1) Turn the handwheel to bring the needle bar down to the lowest point of its stroke, and loosen setscrew ①.

#### (Adjusting the needle bar height)

- 2) (For a DB needle) Align marker line A on needle bar ② with the bottom end of needle bar lower bushing ③, then tighten setscrew ①.  
(For a DA needle) Align marker line C on needle bar ② with the bottom end of needle bar lower bushing ③, then tighten setscrew ①.

#### (Adjusting position of the hook a)

- 3) (For a DB needle) Loosen the three hook setscrews, turn the handwheel and align marker line B on ascending needle bar ② with the bottom end of needle bar lower bushing ③.  
(For a DA needle) Loosen the three hook setscrews, turn the handwheel and align marker line D on ascending needle bar ② with the bottom end of needle bar lower bushing ③.
- 4) After making the adjustments mentioned in the above steps, align hook blade point ⑤ with the center of needle ④. Provide a clearance of 0.04 mm to 0.1 mm (reference value) between the needle and the hook, then securely tighten setscrews in the hook.



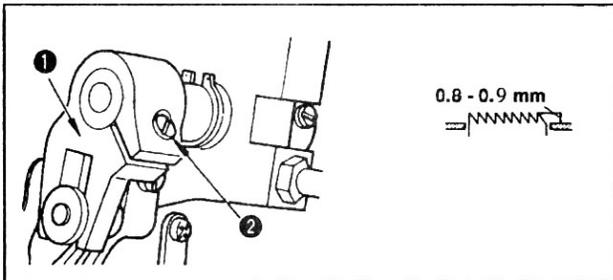
If the clearance between the blade point of hook and the needle is smaller than the specified value, the blade point of hook will be damaged. If the clearance is larger, stitch skipping will result.

## 19. HEIGHT OF THE FEED DOG



### WARNING :

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



To adjust the height of the feed dog :

- ① Loosen screw ② of crank ①.
- ② Move the feed bar up or down to make adjustment.
- ③ Securely tighten screw ②.



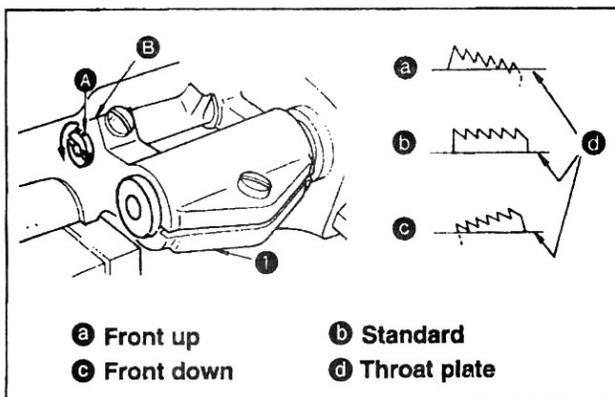
If the clamping pressure is insufficient, the motion of the forked portion becomes heavy.

## 20. TILT OF THE FEED DOG



### WARNING :

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.

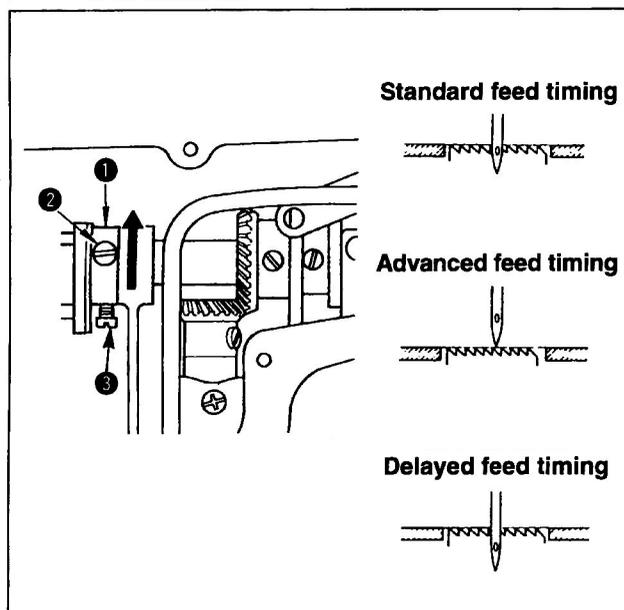


## 21. ADJUSTING THE FEED TIMING



### WARNING :

To avoid possible personal injury due to abrupt start of the machine, turn off the power to the machine and check to be sure that the motor has totally stopped rotating in prior.



- 1) Loosen screws ② and ③ in feed eccentric cam ① , move the feed eccentric cam in the direction of the arrow or opposite direction of the arrow, and firmly tighten the screws.
- 2) For the standard adjustment, adjust so that the top surface of feed dog and the top end of needle eyelet are flush with the top surface of throat plate when the feed dog descends below the throat plate.
- 3) To advance the feed timing in order to prevent uneven material feed, move the feed eccentric cam in the direction of the arrow.
- 4) To delay the feed timing in order to increase stitch tightness, move the feed eccentric cam in the opposite direction from the arrow.



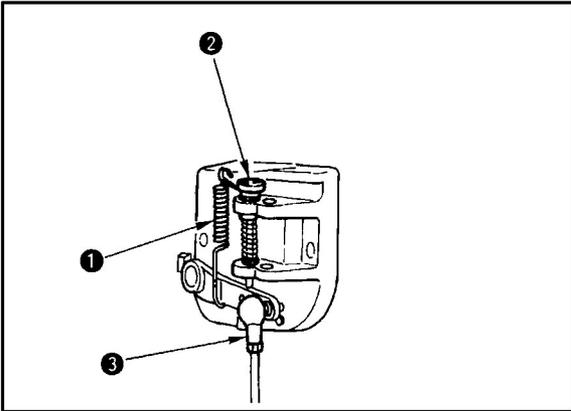
Be careful not to move the feed eccentric cam too far, or else needle breakage may result.

## 22. PEDAL PRESSURE AND PEDAL STROKE



### WARNING :

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



### (1) Adjusting the pressure required to depress the front part of the pedal

- 1) This pressure can be changed by changing the mounting position of pedaling pressure adjust spring ① .
- 2) The pressure decreases when you hook the spring on the left side.
- 3) The pressure increases when you hook the spring on the right side.

### (2) Adjusting the pressure required to depress the back part of the pedal

- 1) This pressure can be adjusted using regulator screw ② .
- 2) The pressure increases as you turn the regulator screw in.
- 3) The pressure decreases as you turn the screw out.

### (3) Adjusting the pedal stroke

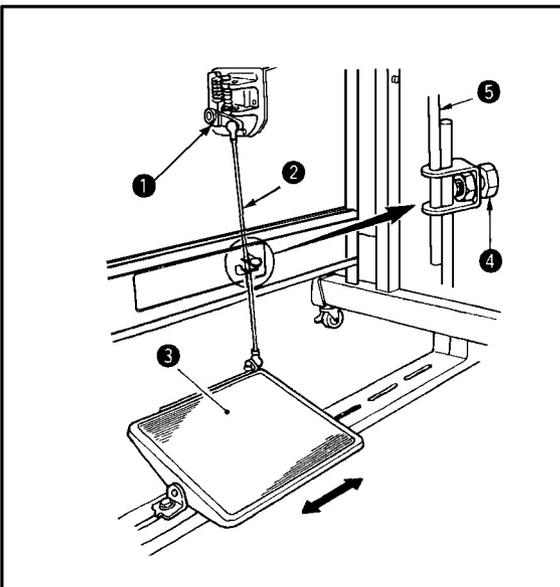
- 1) The pedal stroke increases when you insert connecting rod ③ into the right hole.

## 23. ADJUSTMENT OF THE PEDAL



### WARNING :

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start of the sewing machine.



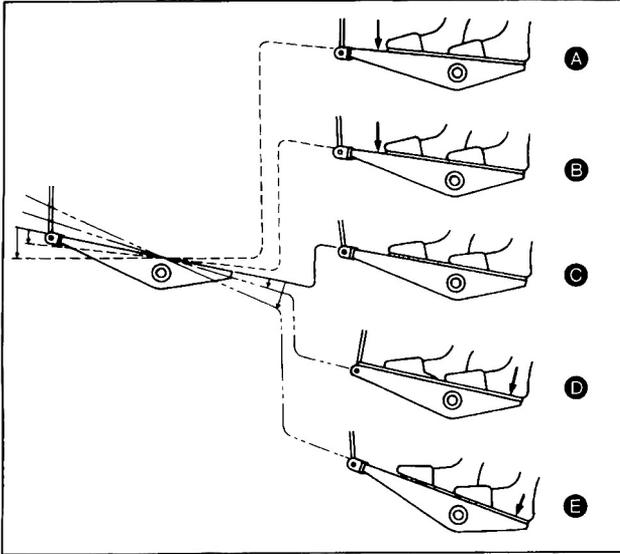
### (1) Installing the connecting rod

- 1) Move pedal ③ to the right or left as illustrated by the arrow so that motor control lever ① and connecting rod ② are straightened.

### (2) Adjusting the pedal angle

- 1) The pedal tilt can be freely adjusted by changing the length of the connecting rod.
- 2) Loosen adjust screw ④ , and adjust the length of connecting rod ⑤ .

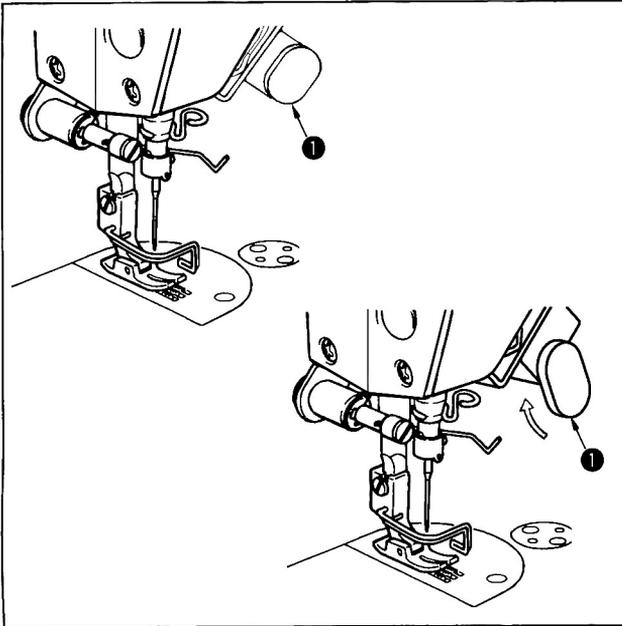
## 24. PEDAL OPERATION



### (1) The pedal is operated in the following four steps :

- 1) The machine runs at low sewing speed when you lightly depress the front part of the pedal. **B**
  - 2) The machine runs at high sewing speed when you further depress the front part of the pedal. **A**  
(If the automatic reverse feed stitching has been preset, the machine runs at high speed after it completes reverse feed stitching.)
  - 3) The machine stops (with its needle up or down) when you reset the pedal to its original position. **C**
  - 4) The machine trims threads when you fully depress the back part of the pedal. **E**
- \* If your machine is provided with the Auto-lifter an addition step is given between the machine stop and thread trimming step. The presser foot goes up when you lightly depress the back part of the pedal **D**, and if you further depress the back part, the thread trimmer is actuated.

## 25. ONE-TOUCH TYPE REVERSE FEED STITCHING MECHANISM



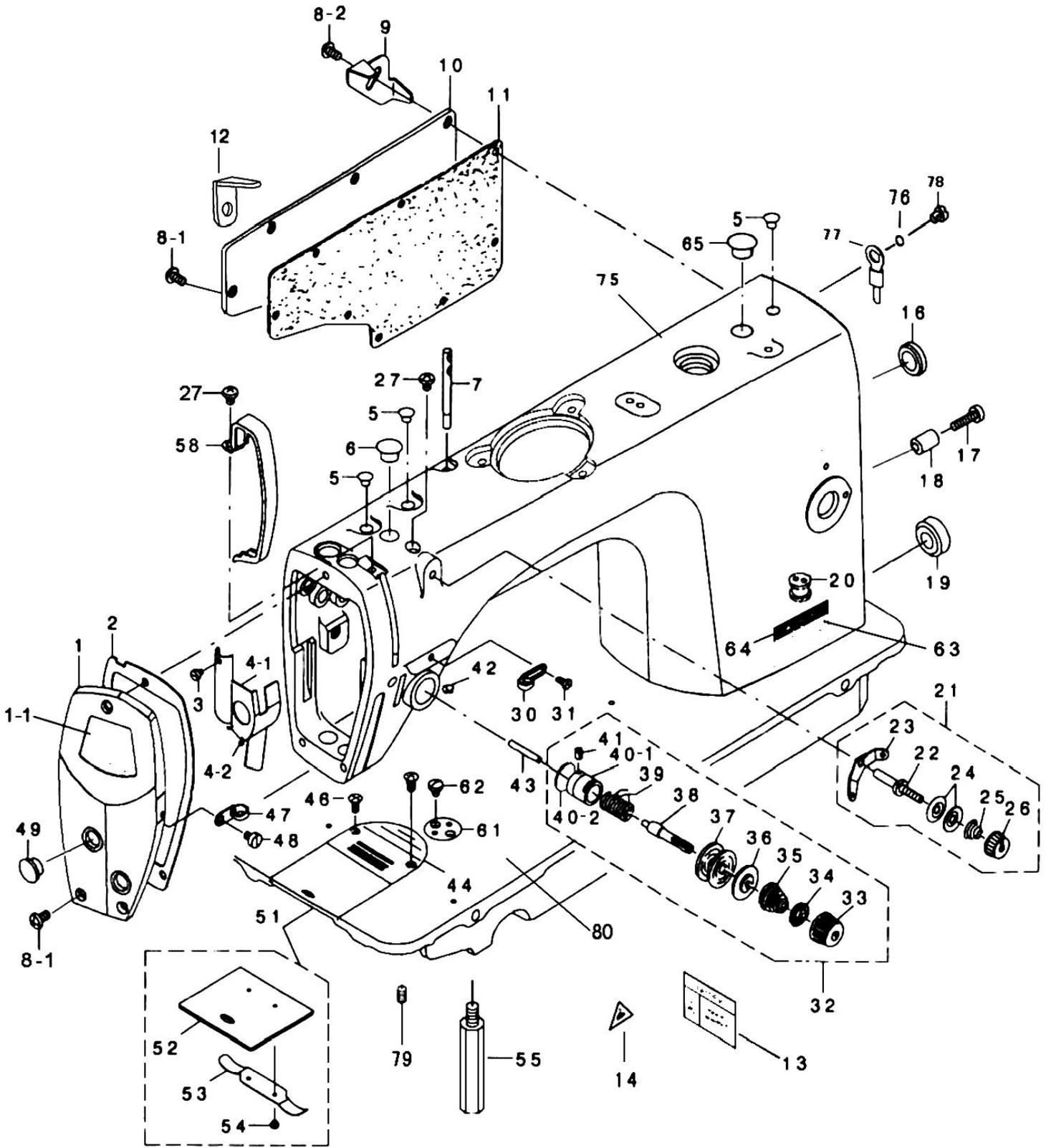
### (1) How to operate

- 1) The moment switch lever **1** is pressed, the machine performs reverse feed stitching.
- 2) The machine performs reverse feed stitching as long as the switch lever is held pressed.
- 3) The machine resumes normal feed stitching the moment the switch lever is released.

### (2) Height of the switch lever

- 1) Adjust the angle of switch lever **1** so that it can be easily operated.

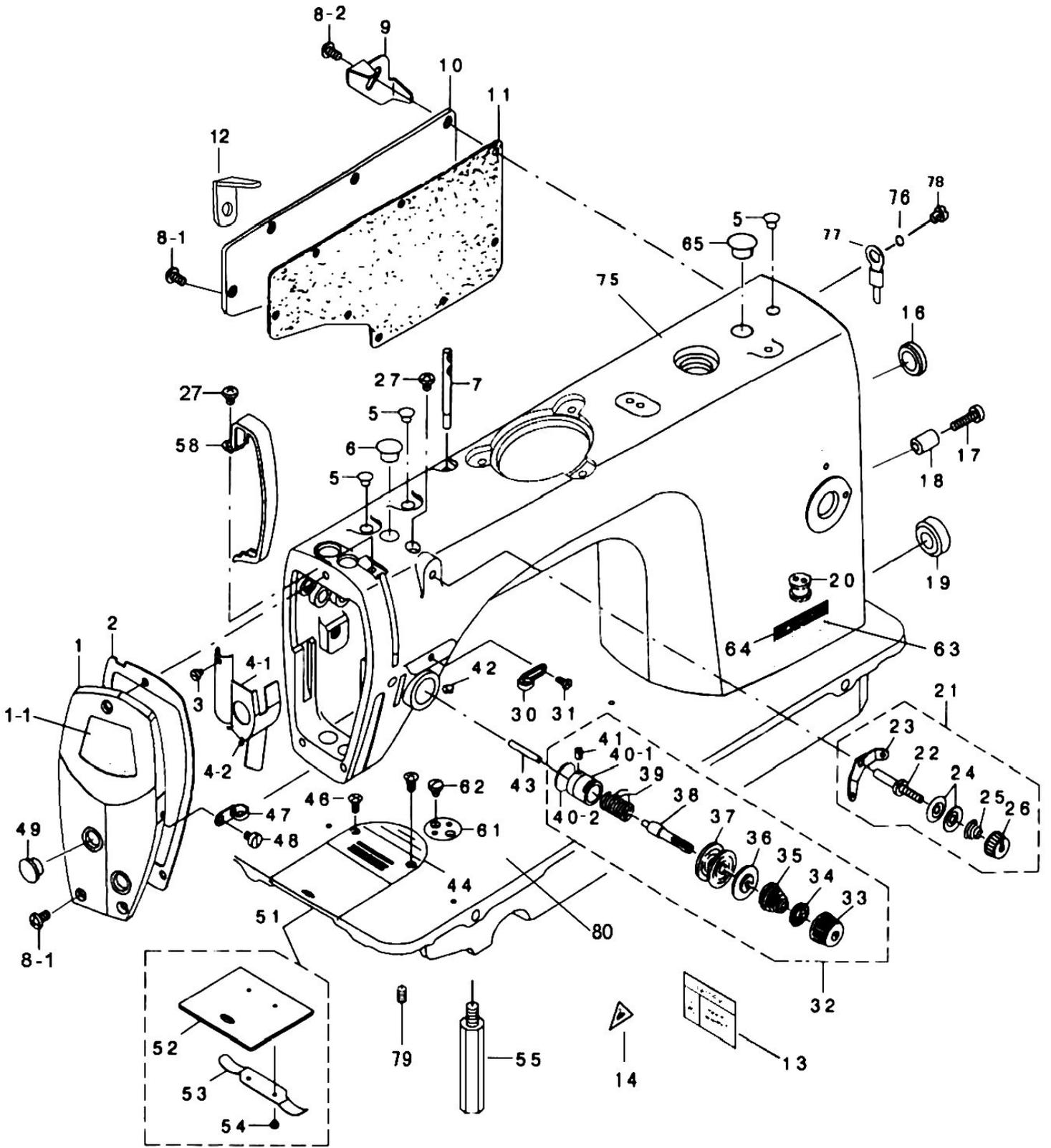
# 1. Machine frame & miscellaneous cover components



# 1、Machine frame & miscellaneous cover components

Ref. No.	Part. No.	Name	Description	Qty	Note
1	102.01-01		Plate	1	
1-1	102.01-01-01		Plate stick	1	
2	102.01-02		Plate agsket	1	
3	02-608440421-1		Screw	1	
4-1	102.01-04-01		Anti-oil plate	1	
4-2	101.01-04-02		Oil wick	1	
5	101.01-05		Rubber plug	3	
6	101.01-06		Rubber plug	1	
7	102.01-07		Thread guide rod	1	
8-1	02-412280923-1		Screw	9	
8-2	02-412281223-1		Screw	4	
9	102.01-09		Cord holder	1	
10	102.01-10		Side plate	1	
11	102.01-11		Gasket	1	
12	102.01-12			1	
13	101.01-13		Safety lable	1	
14	201.02-10			1	
16	101.01-16		Rubber plug	1	
17	02-512321821-1		Screw	1	
18	102.01-18		Reverse feed lever stopper	1	
19	101.01-19		Rubber plug	1	
20	101.01-20A		Rubber plug	1	
21	102.01-21		Thread tension asm.	1	
22	101.01-21-01		Thread tension post	1	
23	102.01-23		Thread tension guide	1	
24	101.01-21-03		Thread tension disk	2	
25	101.01-21-04		Thread tension spring	1	
26	101.01-21-05		Thread tension nut	1	
27	02-412280623-1		Screw	2	
30	101.01-25		Arm thread guide Right	1	
31	02-611400621-1		Screw	1	
32	101.01-27		Thread tension asm.	1	
33	101.01-27-01		Tension nut	1	
34	101.01-27-02		Rotating stopper	1	
35	101.01-27-03		Tension spring	1	
36	101.01-27-04		Thread tension disk presser	1	
37	101.01-27-05		Thread tension disk	2	
38	101.01-27-06		Tension post	1	
39	101.01-27-07		Take-up spring	1	
40-1	101.01-27-09		Tension post socket	1	
40-2	12-137160		Rubber ring	1	
41	02-909400421-1		Screw	1	
42	02-815281211-1		Screw	1	
43	101.01-27-10		Tension releasing	1	
44	102.01-44		Throat plate	1	
45	02-211400821-1		Screw	8	

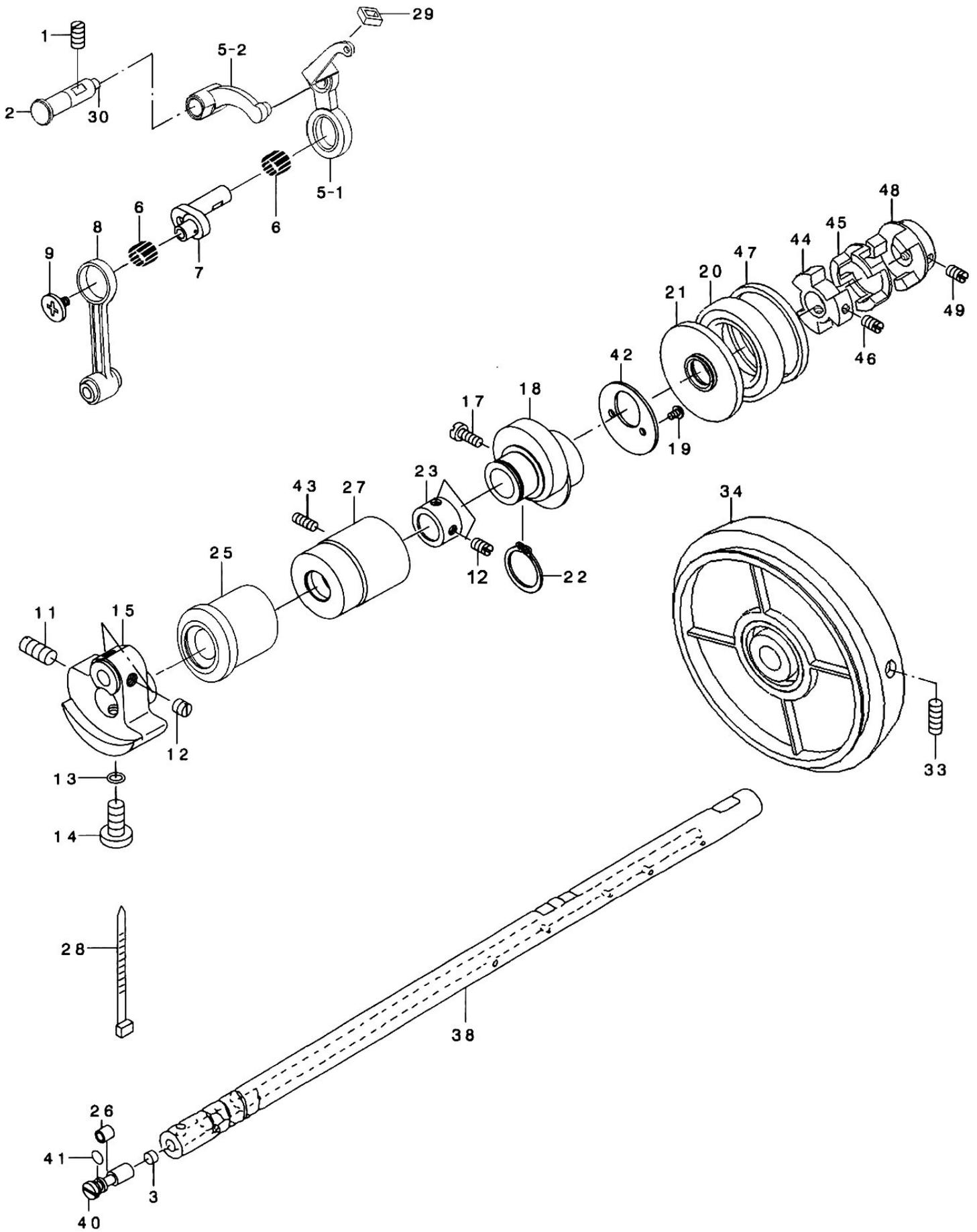
# 1. Machine frame & miscellaneous cover components



# 1. Machine frame & miscellaneous cover components

Ref. No.	Part. No.	Name	Description	Qty	Note
46	02-211400823-1		Screw	2	
47	101.01-32		Arm thread guide Left	1	
48	02-611400621-1		Screw	1	
49	101.01-34		Rubber plug	2	
51	101.01-46		Slide plate asm.	1	
52	101.01-36-01		Slide plate	1	
53	101.01-36-02		Bed slide spring	1	
54	02-606560221-3		Screw	2	
55	101.01-37		Bed screw stud	4	
58	101.01-23		Thread take-up lever cover	1	
61	102.01-61		Ruler stopper	1	
62	02-911400611-1		Screw	2	
63	101.01-44		Pole	2	
64	102.01-64		Model plate	1	
65	102.01-65		Rubber plug	1	
75	102.01-75			1	
	102.01-75-01			1	
76	08-0510610-1		Spring pin	1	
77	101.01-40			1	
78	02-412320821-1		Screw	1	
79	02-808440641-1		Screw	1	
80	102.01-76			1	

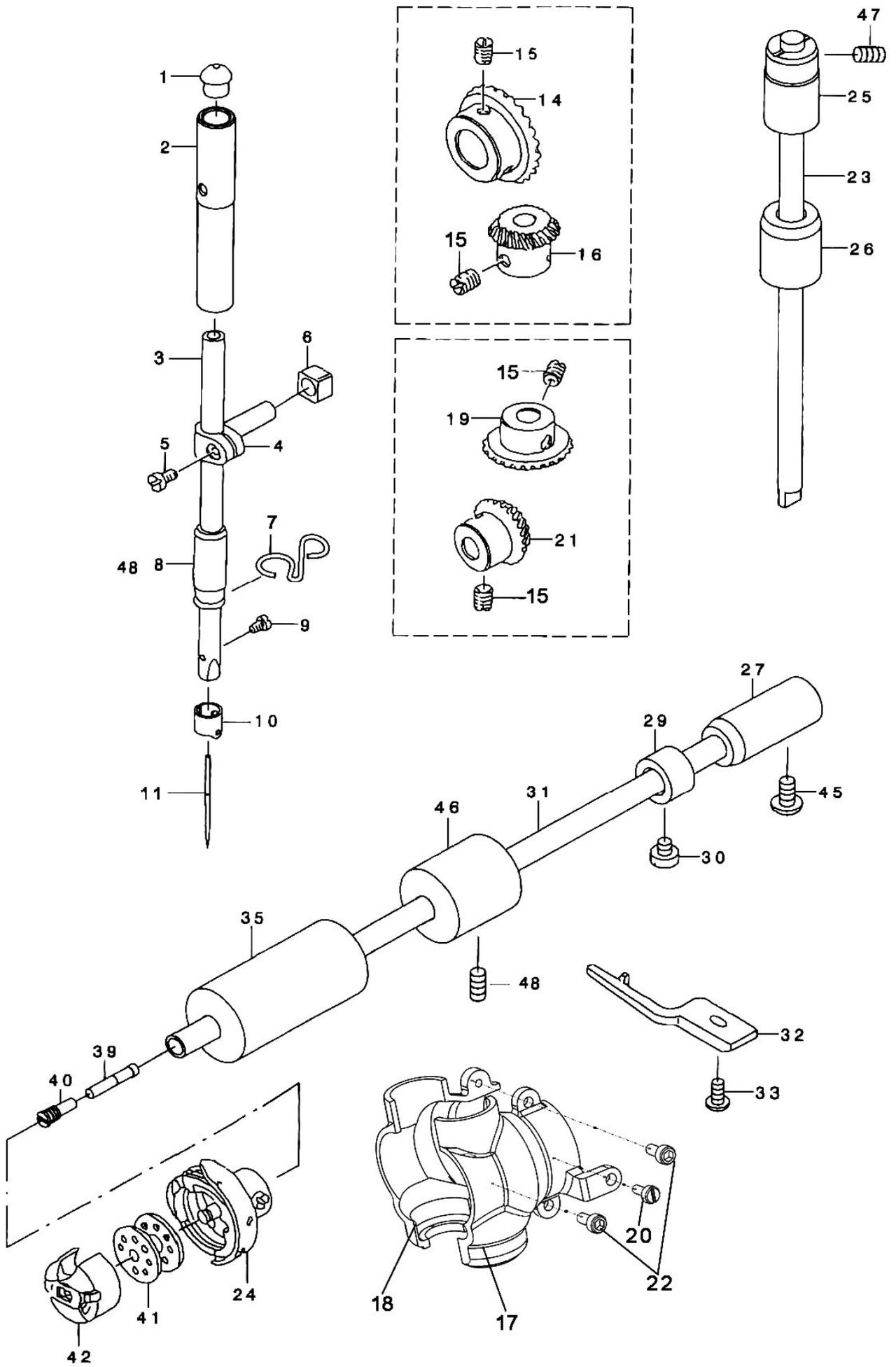
## 2、Main shaft & Thread take-up lever components



## 2、Main shaft & Thread take-up lever components

Ref. No	Part. No	Description	Qty	Note
1	02-815281151-1	Screw	1	
2	101.02-02	Thread take-up crank shaft	1	
3	101.02-31	Roller felt	1	
4	101.02-04	Thread take-up asm.	1	
5-1	101.02-04-01	Thread take-up lever asm.	1	
5-2	101.02-04-02	Thread take-up lever	1	
6	14-0081208-0	Thread take-up bearing	2	
7	101.02-04-04	Crank	1	
8	101.02-04-05	Needle bar crank rod	1	
9	101.02-04-06	Left screw	1	
11	02-818281651-1	Screw	1	
12	02-816400711-1	Screw	4	
13	12-046220	Rubber ring	1	
14	02-418281631-1	Screw	1	
15	102.02-15A	Needle bar crank	1	
17	02-516401111-1	Screw	2	
18	101.02-12	Feed drive eccentric cam	1	
19	02-209400821-1	Screw	2	
20	14-6355510-3	Bearing	1	
21	13-14150550-3	Oil seal	1	
22	10-1851320-1	Snap ring	1	
23	102.02-23	Collar	1	
25	101.02-19	Main shaft front bushing	1	
26	101.02-21	Oil adjusting pin	1	
27	102.02-27	Bushing, intermediate	1	
28	101.02-22	Cable band	1	
29	101.02-05	Rubber	1	
30	101.02-03	Roller felt	1	
33	02-815281014-1	Screw	2	
34	102.02-34-0	Hand wheel	1	
38	102.02-38	Main shaft	1	
40	101.02-29	Oil amount adjusting pin	1	
41	12-025180	Rubber ring	1	
42	101.02-32	Thrust collar	1	
43	02-815280614-1	Screw	1	
44	102.02-44	Linker(1)	1	
45	102.02-45	Rubber ring	1	
46	01-806000814-1	Screw	3	
47	102.02-47	Washer	1	
48	102.02-48	Linker(2)	1	
49	01-806000614-1	Screw	3	

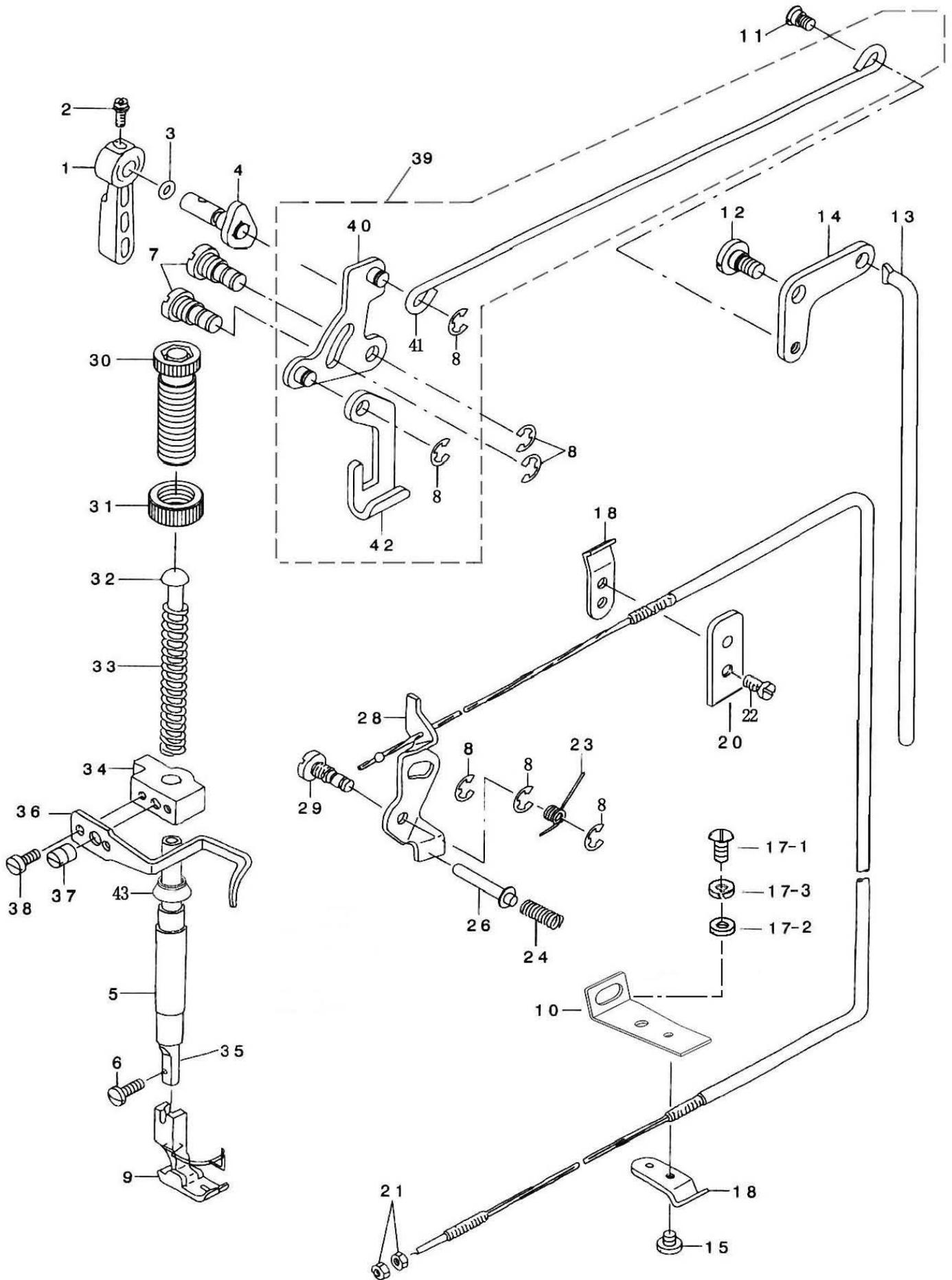
### 3. Needle bar, upright shaft & hook driving shaft components



### 3、 Needle bar, upright shaft & hook driving shaft components

Ref. No.	Part. No.	Description	Qty	Note
1	101.03-01	Cap	1	
2	101.03-02	Needle bar bushing (upper)	1	
3	101.03-03	Needle bar	1	
4	102.03-04A	Needle rod holder	1	
5	02-509400721-1	Screw	1	
6	102.03-06A	Slide block	1	
7	101.03-07	Needle bar thread guide	1	
8	101.03-08	Needle bar bushing (lower)	1	
9	02-508440511-1	Screw	1	
10	101.03-10	Needle bar thread guide	1	
11	101.03-11	Needle	1	
14	101.03-12	Conical gear	1	
15	02-816400711-1	Screw	8	
16	101.03-14	Conical gear	1	
17	102.03-19		1	
18	102.03-18		1	
19	101.03-16	Gear	1	
20	02-412280923-1	Screw	1	
21	101.03-18	Conical gear	1	
22	01-504001024-1	Screw	2	
23	101.03-20	Upright shaft	1	
24	101.03-37-01	Hook	1	
25	101.03-21	Upright shaft bushing (upper)	1	
26	101.03-23	Upright shaft bushing (lower)	1	
27	101.03-24	Bushing rear	1	
29	101.03-26	Thrust collar	1	
30	02-81140511-1	Screw	2	
31	102.03-31	Lower shaft	1	
32	103.07-14	Bobbin case holder	1	
33	02-511401221-1	Screw	1	
35	102.03-35	Lower shaft bushing	1	
39	101.03-35	Oil wick	1	
40	102.03-40	Oil seal screw	1	
41	101.03-37-02	Bobbin	1	
42	101.03-37-03	Bobbin case	1	
45	02-815280814-1	Screw	1	
46	102.03-46	Bushing (intermediate)	1	
47	02-815280711-1	Screw	1	
48	02-815280614-1	Screw	1	

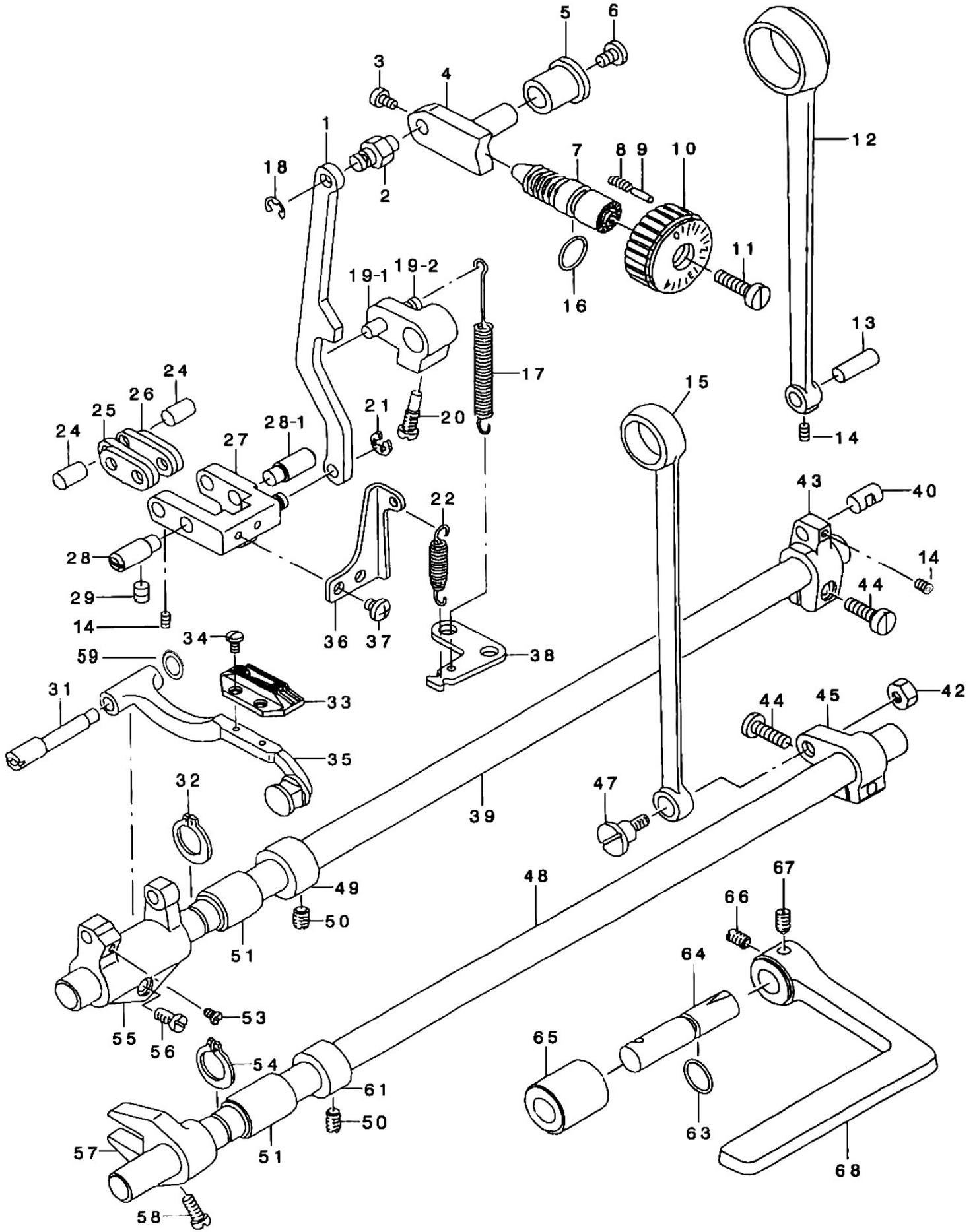
# 4、Hand lifter components



## 4、Hand lifter components

Ref. No.	Part. No.	Description	Qty	Note
1	101.04-01	Hand lifter	1	
2	19-409401023-1	Screw	1	
3	12-038180	Rubber ring	1	
4	101.04-04	Hand lifter cam asm.	1	
5	101.04-05	Presser bar bushing	1	
7	102.04-07	Link shaft	2	
2	02-509401021-1	Screw	1	
8	06-0500611-1	E-ring	7	
9	101.04-09	Presser foot asm.	1	
10	102.04-10	Wire holder bracket (lower)	1	
11	101.04-11	Hinge screw	1	
12	101.04-12	Hinge screw	1	
13	101.04-13	Knee lifter connecting rod	1	
14	101.04-14	Lifting lever link	1	
15	02-411400721-1	Screw	2	
17-1	02-715281521-1	Screw	1	
17-2	05-064141200-4	Washer	1	
17-3	07-0631616-1	Spring washer	1	
18	101.04-18	Wire holder	2	
19	02-412280923-1	Screw	1	
20	102.04-20	Wire holder bracket (upper)	1	
21	04-612320400-1	Nut	2	
22	02-112280821-1		1	
23	101.04-23	Tension release return spring	1	
24	101.04-24	Thread release pin spring	1	
26	102.04-26	Tension release supporting pin	1	
28	102.04-28	Thread tension release asm.	1	
29	102.04-29	Tension release pin	1	
30	101.04-32	Presser spring regulator	1	
31	101.04-31	Presser adjusting screw nut	1	
32	101.04-40	Presser guide bar	1	
33	101.13-12	Presser adjusting spring	1	
34	101.04-34	Presser bar guide bracket	1	
35	101.04-35	Presser bar	1	
36	102.04-36	Presser bar thread guide	1	
37	02-816400811-1	Screw	1	
38	02-509400721-1	Screw	2	
39	101.04-39	Knee lifting cross rod asm.	1	
40	101.04-39-01	Hand lifter link asm.	1	
41	101.04-39-05	Knee lifting cross rod	1	
42	101.04-39-03	Lifting lever	1	
43	101.04-41	Rubber	1	

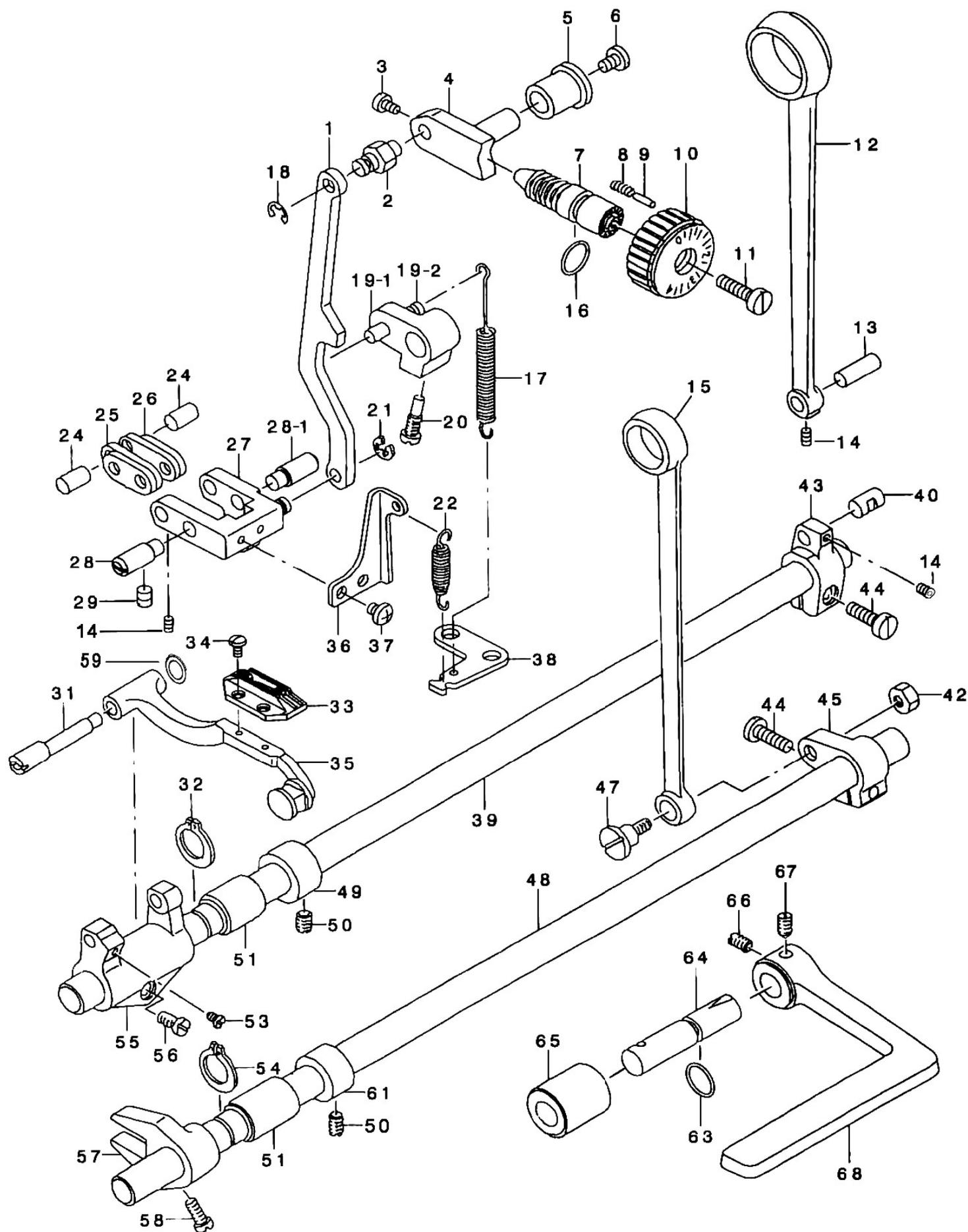
# 5、Feed mechanism components



## 5、Feed mechanism components

Ref. No	Part. No	Description	Qty	Note
1	102.05-01	Feed adjust rod	1	
2	102.05-02	Feed regulator pin	1	
3	02-509400621-1	Screw	2	
4	101.05-04	Feed regulator	1	
5	101.05-05	Feed regulator bushing	1	
6	02-312280721-1	Screw	1	
7	102.05-07	Feed regulator screw	1	
8	101.05-08	Spring	1	
9	102.05-09	Feed adjust pin	1	
10	101.05-10	Feed dial	1	
11	02-512281821-1	Screw	1	
12	101.05-12	Rocker shaft connecting rod	1	
13	101.05-13	Walking foot long pin	1	
14	02-809400424-1	Screw	4	
15	101.05-15	Connecting rod	1	
16	12-096230	Rubber ring	1	
17	102.05-17	Feed reverse spring	1	
18	06-0601012-1	E-ring	1	
19-1	102.05-19-01	Feed reverse arm	1	
19-2	101.05-19-02	Pin	1	
20	101.05-20	Screw	1	
21	06-0500611-1	E-ring	1	
22	102.05-23	Spring	1	
24	101.05-24	Walking foot short pin	2	
25	101.05-25	Connecting link long pin	2	
26	101.05-26	Connecting link short pin	2	
27	101.05-27A	Feed adjust link asm.	1	
28	101.05-28	Adjusting link fulcrum shaft pin	1	
28-1	102.05-28-01	Adjusting link fulcrum shaft pin	1	
29	02-815281151-1	Screw	2	
31	101.05-31	Feed bar shaft pin	1	
32	10-1381017-1	Retaining ring	1	
33	101.05-33	Feed dog	1	
34	02-608440621-1	Screw	2	
35	101.05-35	Feed bar asm.	1	
36	101.05-36	Adjusting link spring guide	1	
37	02-411400521-1	Screw	2	
38	101.05-38	Feed spring hood	1	
39	101.05-39	Feed rocker shaft	1	
40	101.05-40	Walking foot middle pin	1	
42	04-618280400-1	Nut	1	
43	101.05-43	Feed rocker shaft crank	1	
44	02-412281421-1	Screw	2	
45	101.05-45	Lifting crank (back)	1	

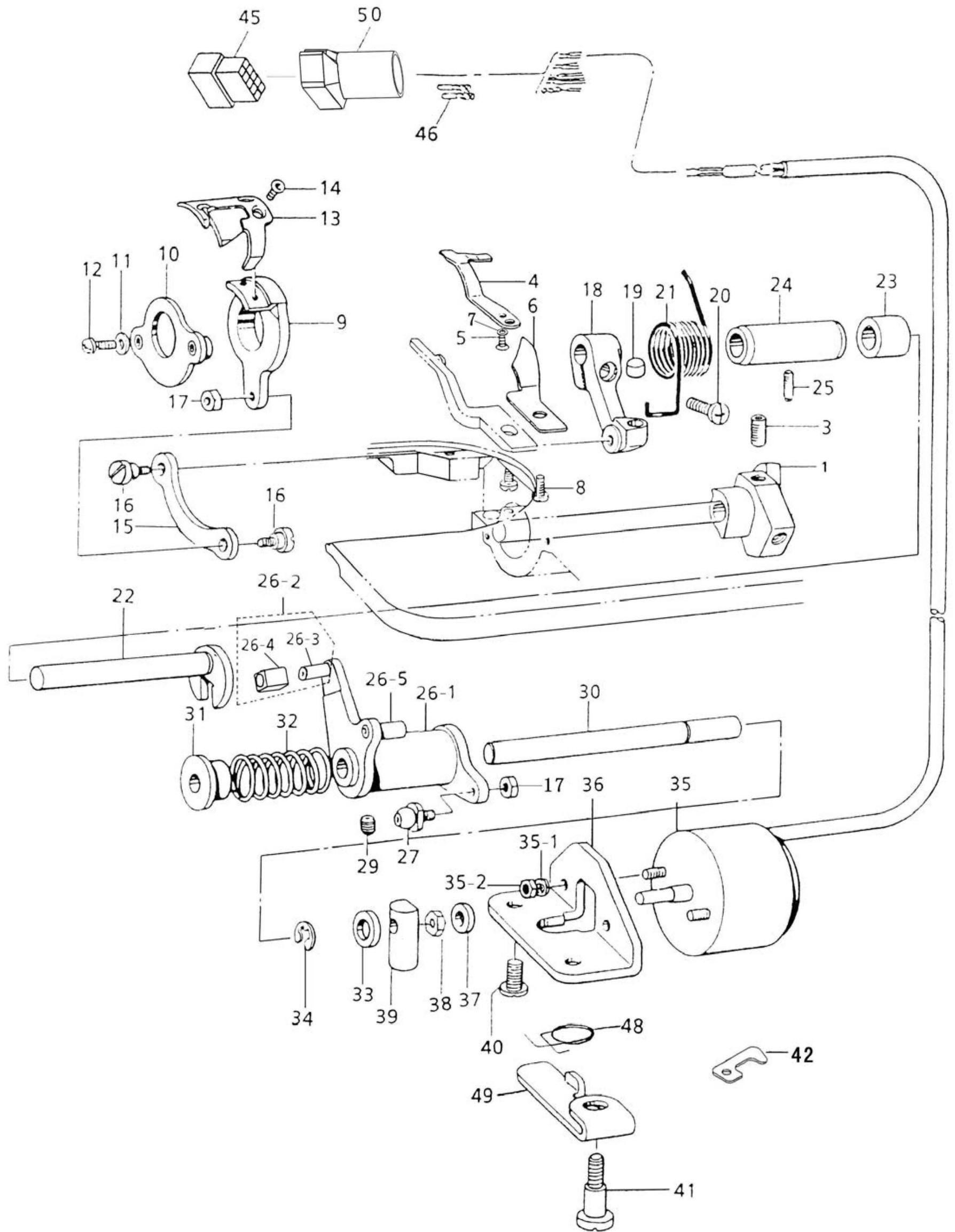
# 5、Feed mechanism components



## 5、Feed mechanism components

Ref. No	Part. No		Description	Qty	Note
47	101.05-47		Hinge screw	1	
48	101.05-48		Feed driving shaft	1	
49	101.02-17		Thrust collar	1	
50	02-816400611-1		Screw	4	
51	101.05-51		Feed rocker shaft bushing	2	
53	02-411400721-1		Screw	1	
	10-1381017-1		Retaining ring	1	
55	101.05-55		Feed bar crank	1	
56	02-412281421-1		Screw	1	
57	101.05-57		Driving shaft crank	1	
58	02-411401121-1		Screw	1	
59	05-051081203-5			1	
61	101.02-17		Thrust collar	1	
63	12-080200		Rubber ring	1	
64	101.05-63		Feed reverse shaft	1	
65	102.05-65		Feed lever bushing	1	
66	02-816400911-1		Screw	1	
67	02-816401041-1		Screw	1	
68	102.05-68		Reverse feed control lever	1	

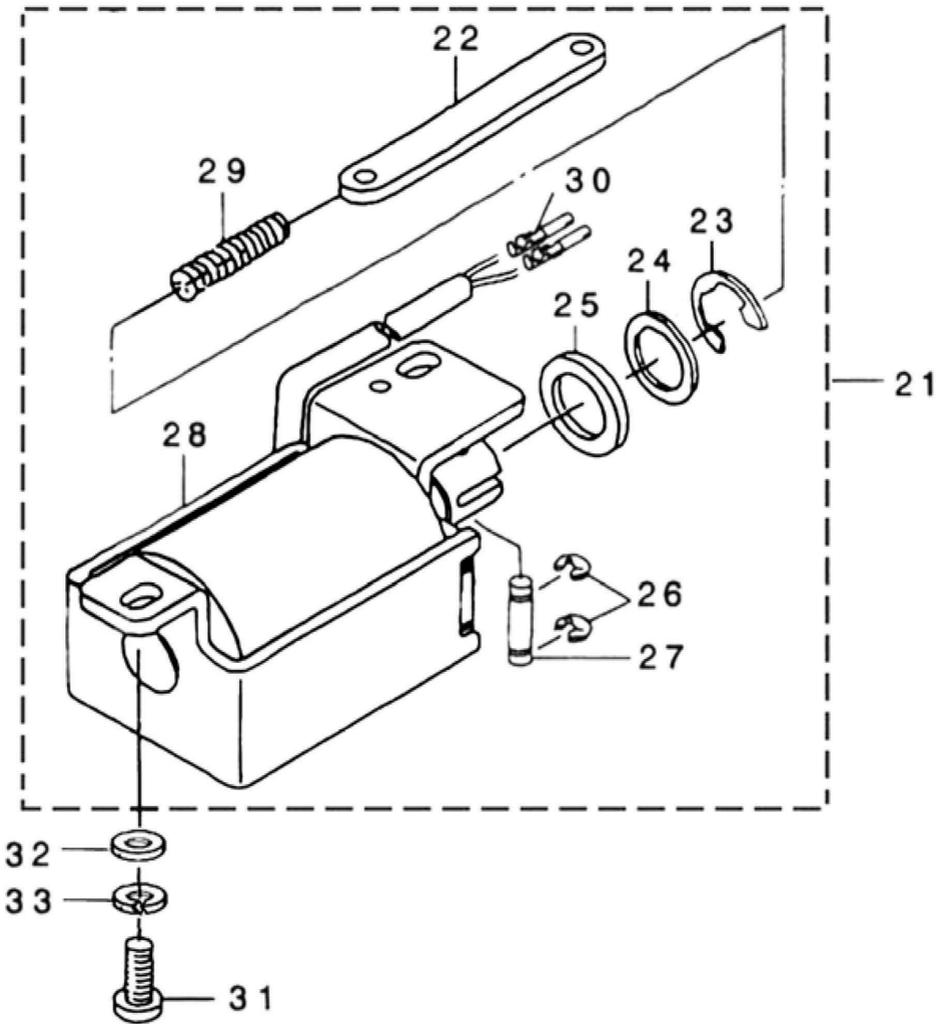
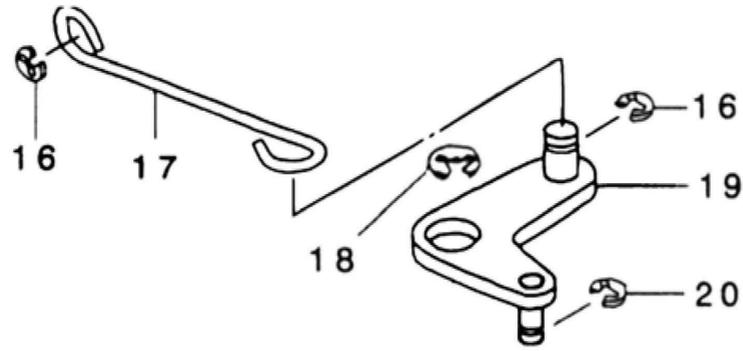
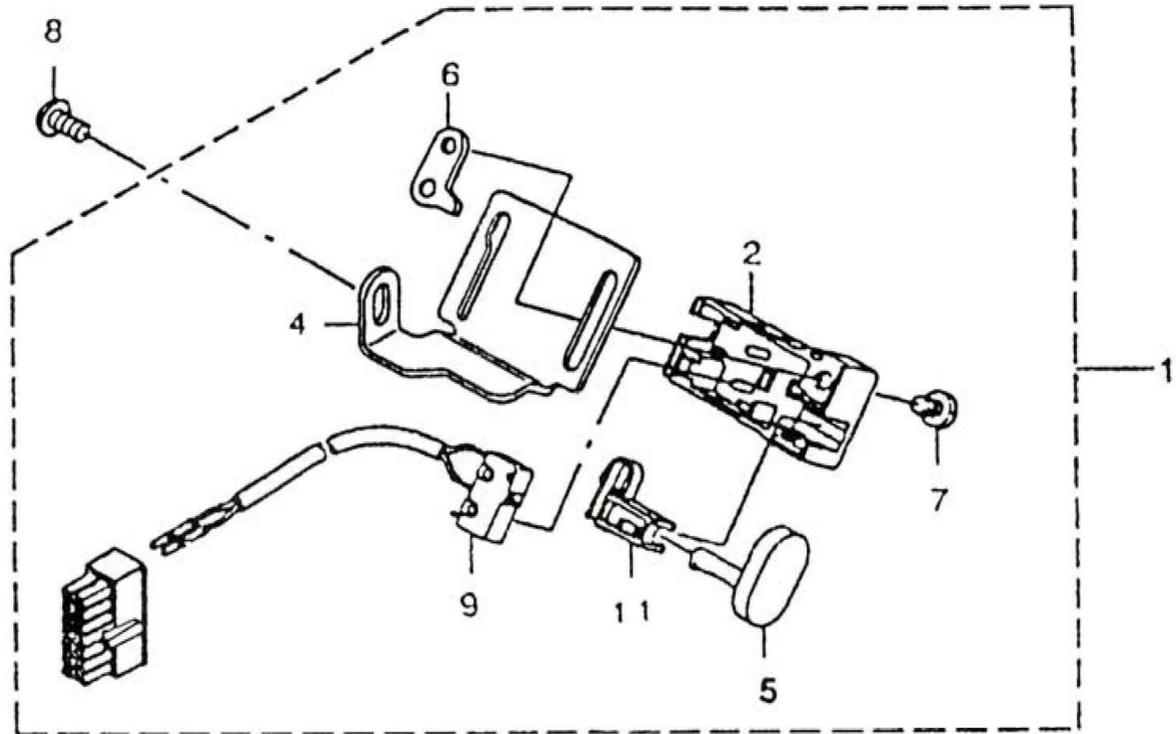
# 6.Thread trimmer components



## 6. Thread trimmer components

Ref. No.	Part. No.	Description	Qty	Note
1	103.11-01	Thread shear cam	1	
3	02-816401014-1	Screw	3	
4	102.06-04	Secant knife	1	
5	02-209400521-1	Screw	1	
6	102.06-06	Protect needle patch	1	
7	102.06-50		1	
8	02-509400521-1	Screw	1	
9	102.06-09	Knife bracket	1	
10	102.06-10	Partiality shank asm.	1	
11	05-045080900-4	Washer	2	
12	02-411401223-1	Screw	2	
13	102.06-13	Motorial knife	1	
14	02-111400524-1	Screw	2	
15	102.06-15	Knife shaft connecting rod	1	
16	102.06-16	Screw	2	
17	04-611400300-1	Nut	2	
18	102.06-18	Thread shear rock crank	1	
19	103.11-09-06	Positioning block	1	
20	02-512321423-1	Screw	1	
21	102.06-21	Spring	1	
22	102.06-22	Thread shear rock arm shaft	1	
23	102.06-23	Short bush	1	
24	102.06-24	Thread shear cam bushing	1	
25	02-811400614-1	Screw	1	
26-1	102.06-26-1	Thread shear rock arm shaft	1	
26-2	102.06-26-2-0	Slippery piece shaft asm.	1	
26-3	102.06-26-2-1		1	
26-4	102.06-26-2-2		1	
26-5	102.06-26-3	Limit potential shaft	1	
27	102.06-27-0	Roll shaft asm.	1	
29	02-816400514-1	Screw	1	
30	102.06-30	Thread shear shaft	1	
31	102.06-31	Spring cover	1	
32	102.06-32	Spring	1	
33	102.06-33	Magnetic plug cushion mat	1	
34	06-0601012-1	E-ring	1	
35	102.06-35	Magnetic plug	1	
35-1	102.06-35-1	Spring washer	2	
35-2	03-604000400-4	Nut	2	
36	102.06-36	Thread trimmer solenoid base	1	
37	102.06-37	Rubber ring	1	
38	04-606400400-1	Nut	1	
39	102.06-39	Magnetic plug pin	1	
40	02-315280921-1	Screw	1	
41	102.06-41	Screw	1	
42	101.06-20		1	
45	101.06-21	Housing 14P	1	
46	101.06-18-09	Pin contact	1	
48	102.06-48	Spring	1	
49	102.06-49	Thread loose seat	1	
50	101.06-22	Housing rubber	1	

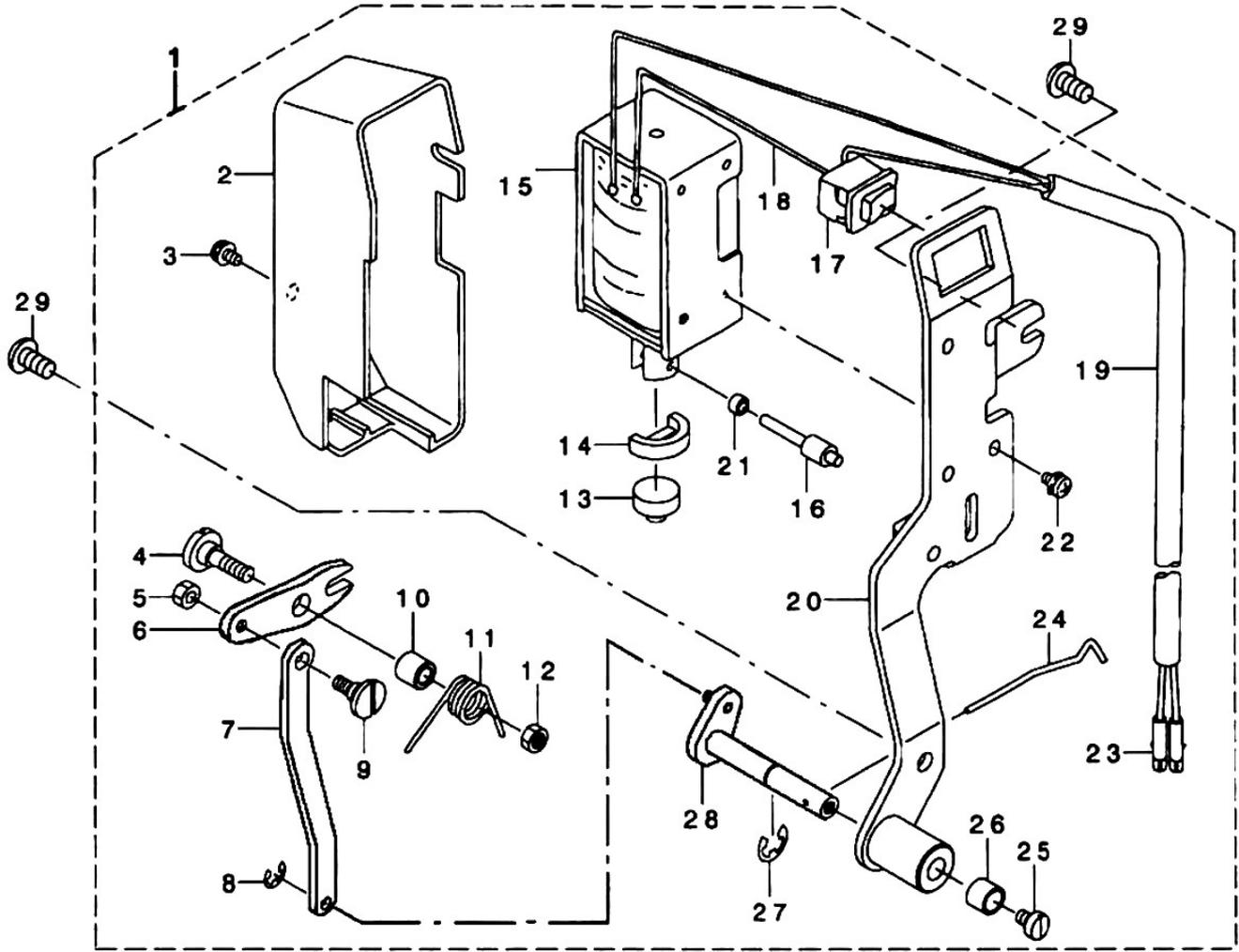
# 7、Automatic reverse feed components



## 7、Automatic reverse feed components

Ref. No.	Part. No.	Description	Qty	Note
1	102.07-01	Reverse feed switch asm.	1	
2	102.07-02	Reverse feed switch cover	1	
4	102.07-04	Reverse feed switch base	1	
5	102.07-05	Reverse feed switch shaft	1	
6	102.07-06	Reverse feed switch spring	1	
7	102.07-07	Screw	1	
8	102.07-08	Screw	2	
9	102.07-09	Power switch	1	
11	102.07-11	02-516402031-1	1	
16	06-0500611-1	E-ring 5	2	
17	101.07-04	Reverse feed connecting shaft	1	
18	06-0901018-1	E-ring 9	1	
19	101.07-06	Connecting arm asm	1	
20	06-0400809-1	E-ring 4	1	
21	102.07-32	Reverse feed asm	1	
22	101.07-08-01	Reverse feed connecting link	1	
23	101.07-08-02	E-ring 12	1	
24	101.07-08-03	Washer 16X24X2.6	1	
25	101.07-08-04	Rubber Plunger	1	
26	101.07-08-05	E-ring	2	
27	101.07-08-06	Plunger arm Pin	1	
28	101.07-08-07	Reverse feed magnet asm.	1	
29	101.07-08-08	Plunger spring	1	
30	101.07-08-09	pin contact	2	
31	02-715281521-1	Screw 15/64X28 L=12	2	
32	05-064141200-4	Washer	2	
33	07-0631616-1	Spring washer	2	

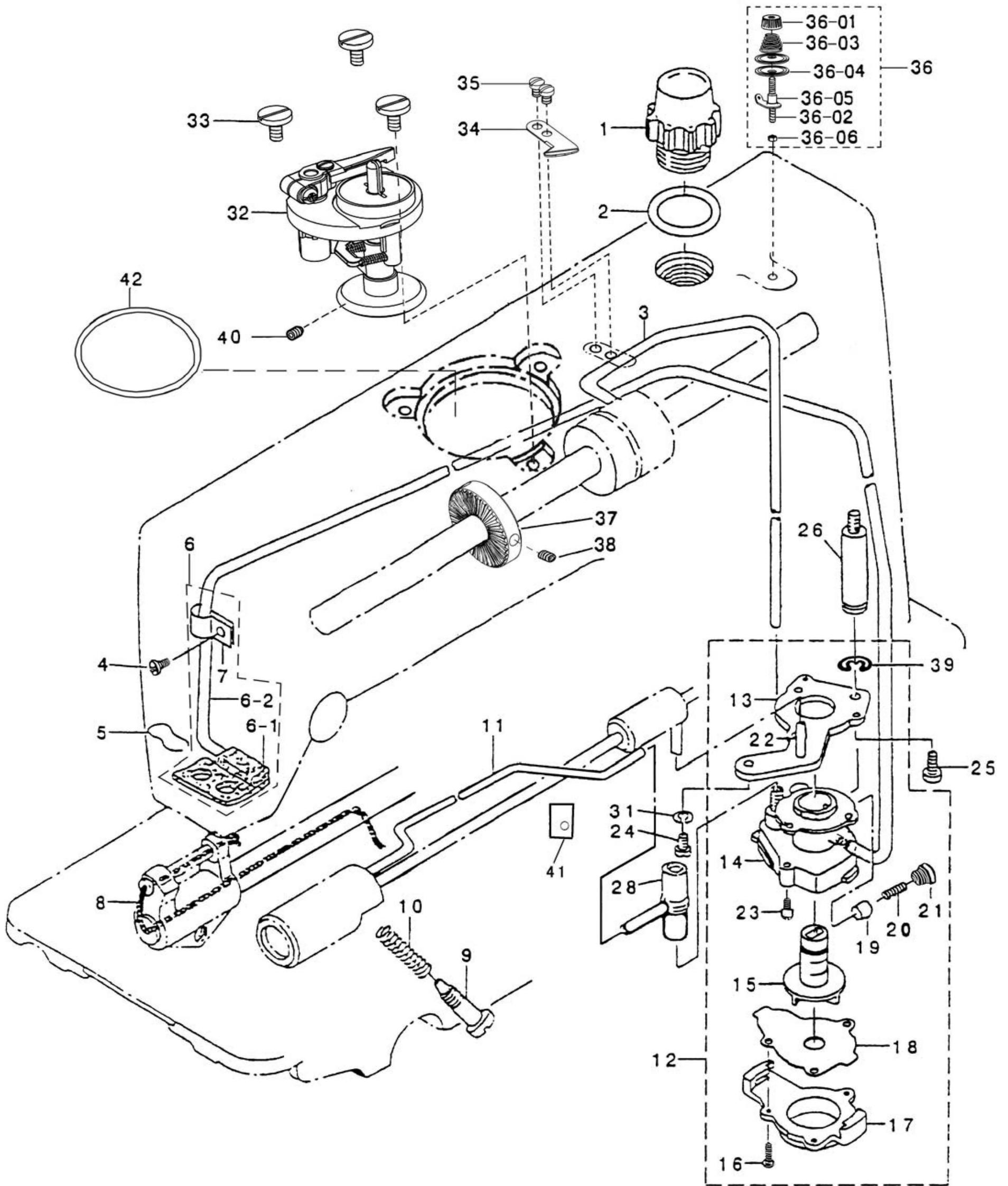
# 8. Wiper components



## 8.Wiper components

Ref. No.	Part. No.	Description	Qty	Note
1	101.08-01	Wiper asm.	1	
2	101.08-01-01	Wiper cover	(1)	
3	101.08-01-02	Screw	(1)	
4	101.08-01-03	Hinge screw	(1)	
5	101.08-01-04	Nut	(1)	
6	101.08-01-05	Wiper link A	(1)	
7	101.08-01-06	Wiper link B	(1)	
8	101.08-01-07	E-ring	(1)	
9	101.08-01-08	Wiper link B, hinge screw	(1)	
10	101.08-01-09	Wiper hinge screw collar	(1)	
11	101.08-01-10	Wiper spring	(1)	
12	101.08-01-11	Nut	(1)	
13	101.08-01-12	Wiper rubber A	(1)	
14	101.08-01-13	Wiper rubber B	(1)	
15	101.08-01-14	Wiper solenoid	(1)	
16	101.08-01-15	Pin	(1)	
17	101.08-01-16	Power switch	(1)	
18	101.08-01-17	Electric wire	(1)	
19	101.08-01-18	2-core cabtyre cord	(1)	
20	101.08-01-19	Wiper base asm.	(1)	
21	101.08-01-20	Nut	(1)	
22	101.08-01-21	Screw	(3)	
23	101.08-01-22	Pin contact	(2)	
24	101.08-01-23	Wiper	(1)	
25	02-509400521-1	Screw	(1)	
26	101.08-01-25	Wiper collar	(1)	
27	101.08-01-26	E-ring	(1)	
28	101.08-01-27	Wiper driving shaft asm.	(1)	
29	02-412280923-1	Screw	2	

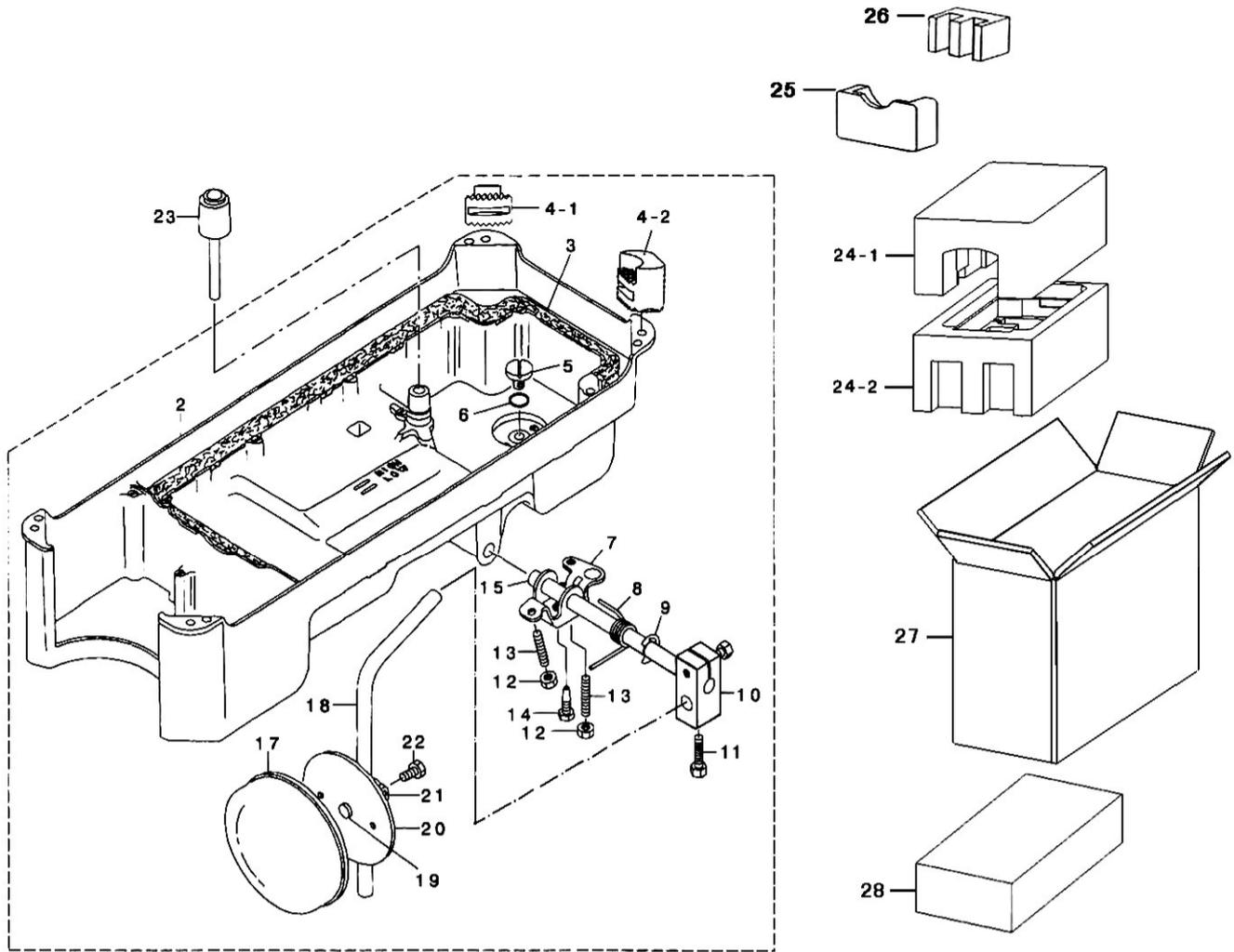
# 9、Oil lublication components & bobbin components



## 9, Oil lubrication components & bobbin components

Ref. No.	Part. No.	Description	Qty	Note
1	101.09-01	Oil sight window	1	
2	101.09-02	Rubber ring	1	
3	101.09-03	Main shaft oil tube	1	
4	02-412280623-1	Screw	1	
5	101.09-05	Oil felt presser	1	
6	101.09-06	Oil return tube asm.	1	
6-1	101.09-06-02	Return to asphalt felt	1	
6-2	101.09-06-01	Oil return tube	1	
7	101.09-06-03	Holder	1	
8	101.09-07	Oil wick	1	
9	102.09-09	Oil adjusting screw	1	
10	102.09-10	Spring	1	
11	102.09-11	Oil tube	1	
12	101.09-11	Lubricating oil pump asm.	1	
13	101.09-11-01	Oil pump installing base	1	
14	101.09-11-02	Oil pump	1	
15	101.09-11-03	Oil pump impeller	1	
16	101.09-11-04	Screw	1	
17	101.09-11-05	Lubricating oil pump cover	1	
18	101.09-11-06	Oil pump impeller cover	1	
19	101.09-11-07	Plunger	1	
20	101.09-11-08	Plunger spring	1	
21	101.09-11-09	Plunger screw	1	
22	101.09-11-10	Hook driving shaft oil tube	1	
23	101.09-11-11	Screw	3	
24	02-515281321-1	Screw	1	
25	02-511401021-1	Screw	1	
26	101.09-13A	Oil pump support, large	1	
28	101.09-16	Rubber joint	1	
32	102.09-32	Bobbin winder unit	1	
33	02-512320721-2	Screw	3	
34	102.09-34	Knife	1	
35	02-409400421-1	Screw	2	
36	102.09-36	Thread tension asm.	1	
36-01	102.09-36-01	Nut	1	
36-02	102.09-36-02	Screw	1	
36-03	102.09-36-03	Spring	1	
36-04	102.09-36-04	Thread tension disk	2	
36-05	102.09-36-05	Thread tension guide	1	
36-06	102.09-36-06	Nut	1	
37	102.09-37	Bobbin winder driving wheel	1	
38	02-811400614-1	Screw	2	
39	06-0901018-1	E-ring	1	
40	01-803000414-1	Screw	2	
42	102.09-42		1	

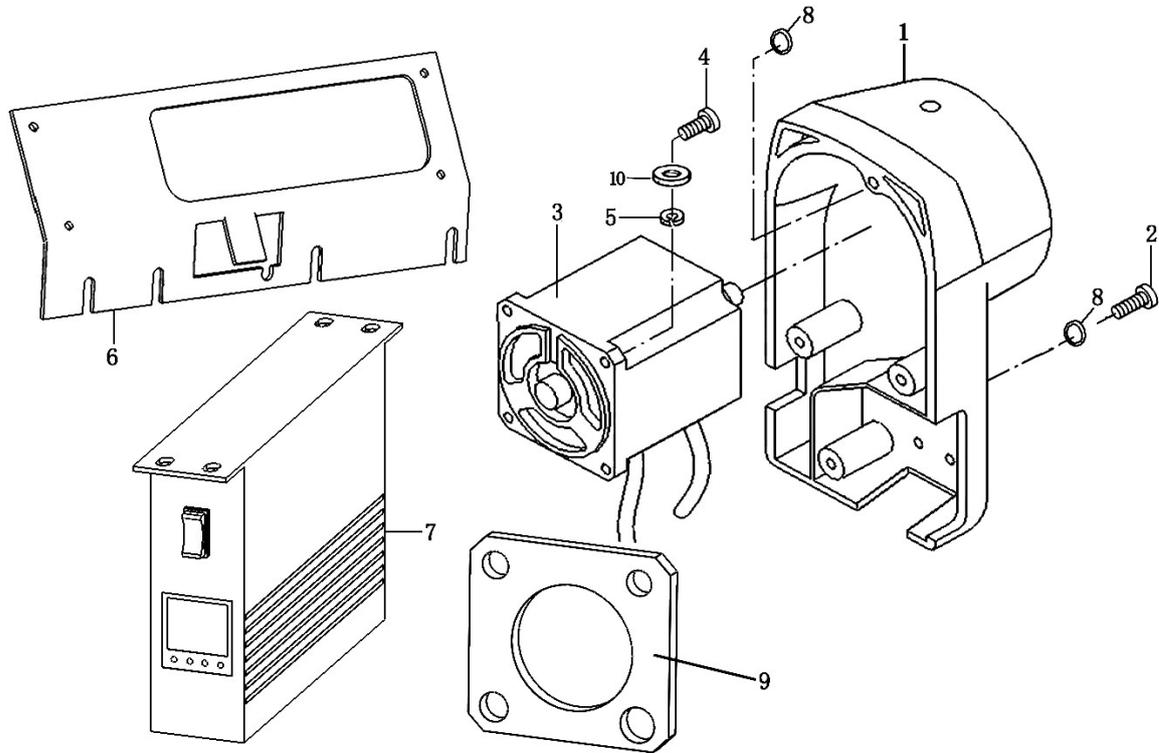
# 10、Oil reservoir components



# 10、Oil reservoir components

Ref. No.	Part. No.	Description	Qty	Note
2	101.10-01	Oil reservoir	1	
3	101.10-02	Oil reservoir gasket	1	
4-1	101.14-13	Quakeproof mat, small	2	
4-2	101.14-12	Quakeproof mat, larger	2	
5	02-620240721-1	Screw	1	
6	12-080150	Rubber ring	1	
7	101.10-05-01	Knee lifting rotating arm	1	
8	101.10-05-02	Spring	1	
9	06-1001020-1	E-ring	1	
10	101.10-05-04	Vertical shaft fitting arm	1	
11	101.10-05-05	Screw	2	
12	101.10-05-06	Nut	2	
13	101.10-05-07	Screw	2	
14	101.10-05-08	Screw	1	
15	101.10-05-09	Knee press cross shaft	1	
17	101.10-06-01	Knee pan plate cover	1	
18	101.10-06-02	Knee pan upright shaft	1	
19	101.10-06-03	Knee pan plate rubber	1	
20	101.10-06-04	Knee pan plate	1	
21	101.10-06-05	Knee pan plate support	1	
22	101.10-06-06	Screw	1	
23	101.10-07	Knee lifter push pin	1	
24-1	102.10-24-01	Foam mat A	1	
24-2	102.10-24-02	Foam mat B	1	
25	102.10-24-03		1	
26	102.10-24-04		1	
27	102.10-25-01		1	
28	101.14-17		1	
29	H8800S-7C		1	

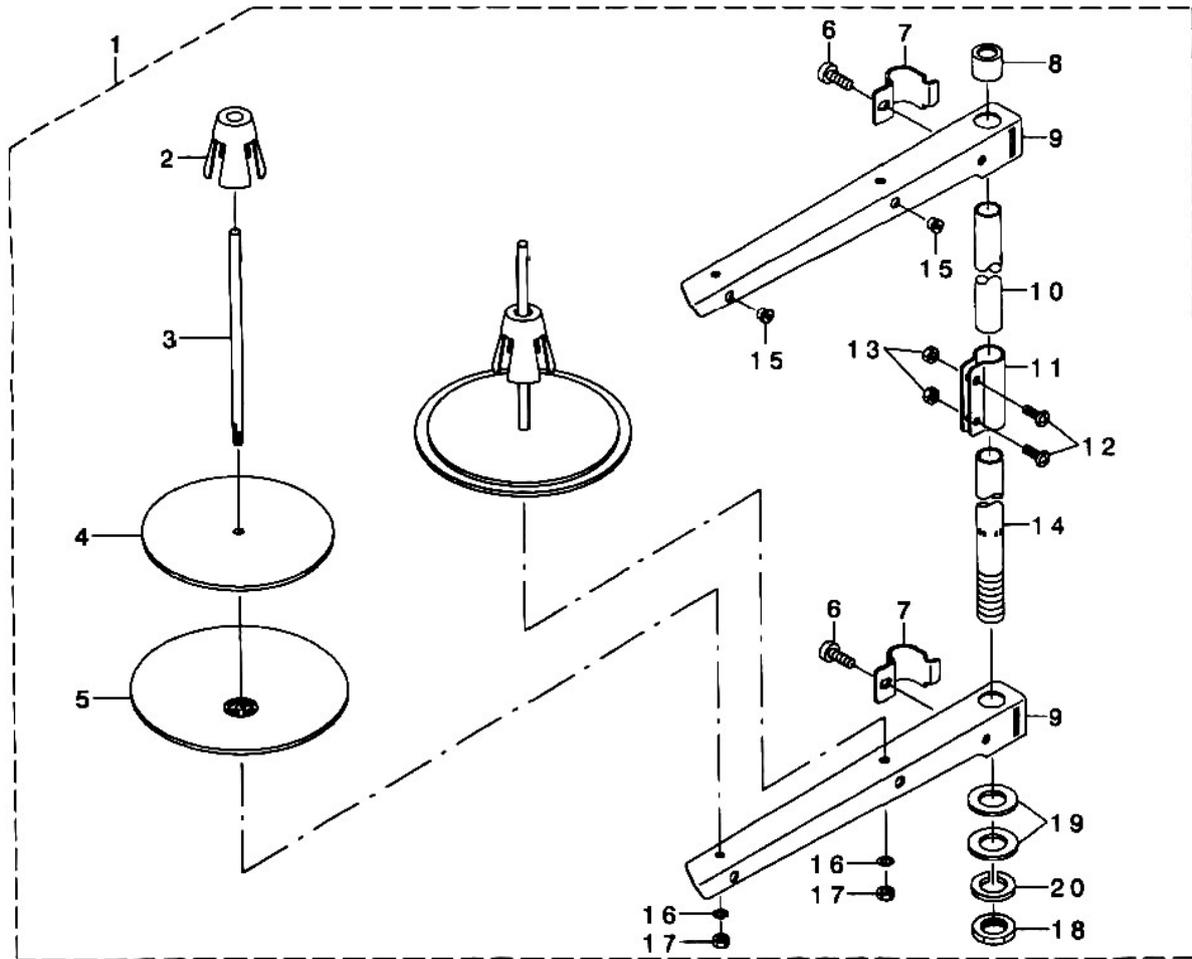
# 11, Driver components



# 11, Driver components

Ref. No	Part. No	Description	Qty	Note
1	102.11-34	Motor cover	1	
2	01-505002524-1	Screw	4	
3		Motor asm.	1	
4	02-512321624-1	Screw	4	
5	07-0521313-1	Washer	4	
6	102.11-39	Panel setting plate	1	
7		Control box	1	
8	101.04-30	Shaft plate	4	
9	102.11-41		1	
10	103.03-06		4	

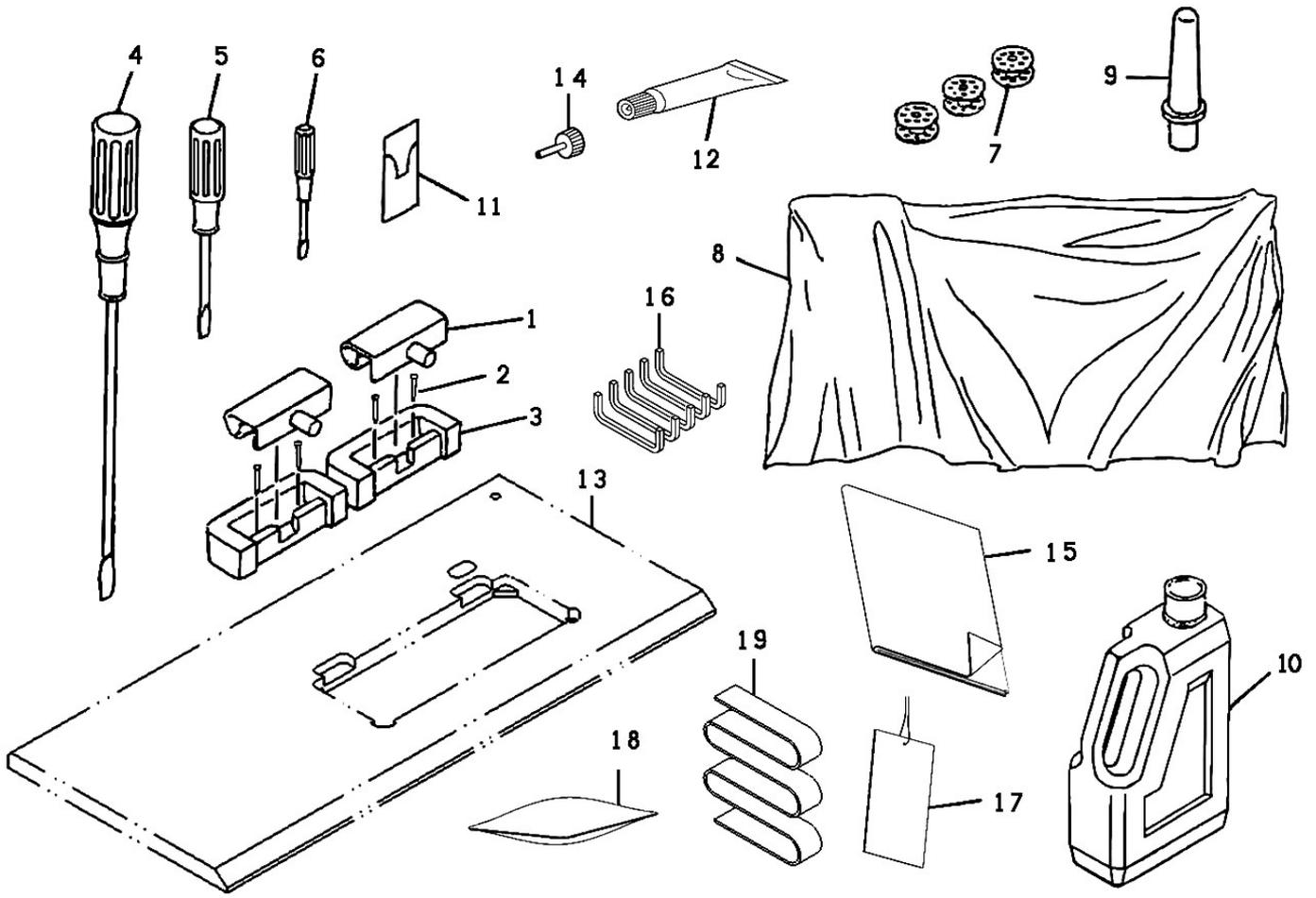
## 12、Thread stand components



## 12、Thread stand components

Ref. No.	Part. No.	Description	Qty	Note
1	101.12-01	Thread stand asm	1	
2	101.12-01-01	Spool retainer	2	
3	101.12-01-02	Spool pin	2	
4	101.12-01-03	Spool rest cushion	2	
5	101.12-01-04	Spool rest	2	
6	101.12-01-05	Screw	2	
7	101.12-01-06	Thread guide arm joint	2	
8	101.12-01-07	Spool rest rod rubber cap	1	
9	101.12-01-08	Spool rest arm	2	
10	101.12-01-09	Spool rest rod, upper	1	
11	101.12-01-10	Spool rest rod joint	1	
12	101.12-01-11	Screw	2	
13	101.12-01-12	Nut	2	
14	101.12-01-13	Spool rest rod ,lower	1	
15	101.12-01-14	Thread guide	2	
16	101.12-01-15	Spring washer	2	
17	101.12-01-16	Nut	2	
18	101.12-01-17	Nut	1	
19	101.12-01-18	Washer	2	
20	101.12-01-19	Spring washer	1	

# 13, Accessories



# 13, Accessories

Ref. No	Part. No	Description	Qty	Note
1	101. 14-01	Machine hinge plate asm.	2	
2	101. 14-02	Nail	4	
3	101. 14-03	Machine hinge plate	2	
4	101. 14-04	Screw driver ,large	1	
5	101. 14-05	Screw driver ,medium	1	
6	101. 14-06	Screw driver ,small	1	
7	101. 03-37-02	Bobbin	3	
8	101. 14-08	Machine head cover	1	
9	101. 14-09	Machine rest cover	1	
10	101. 14-10	Oil reservoir asm.	1	
11	101. 03-11	Needle	5	
12	103. 20-107	Grease tube	1	
13	102. 13-13	Table	1	
14	103. 20-108	Grease nozzle	1	
15	102. 13-15	Instruction manual&parts book	1	
16		Packing nail	10	
17		Quality certification	1	
18	101. 12-20	Air drier	1	
19		Packing band	1	
20		Stand asm.	1	
21	101. 12-19		1	