

# GLOBAL

## **WF 970-100 SA**

**Longarm cylinderarm sewing machine  
machine**

**Instruction manual  
& parts book**

**Always switch off the electricity when working on  
the machine.**

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## 一、 PRECAUTIONS BEFORE STARTING OPERATION

### 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) Do not operate the machine before lubricating it.
- 2) When a new sewing machine is first turned on, verify the rotational direction of the pulley with the power on (the pulley should rotate counterclockwise when viewed from pulley) .
- 3) Verify the voltage and (single or three) phase 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.

## 二、 SPECIFICATIONS

Max. sewing speed	1200 rpm
Stitch length	6 mm
Needle	DP×17 23#
Needle bar stroke	36 mm
Thread take-up lever stroke	74.5 mm
Presser foot stroke	By Hand 8 mm / By Knee 13 mm
Alternating movement	2-5 mm
Bed size In dia / Length	88.5 mm / 930 mm
Lubrication	Manual
Needle gauge	12.7mm

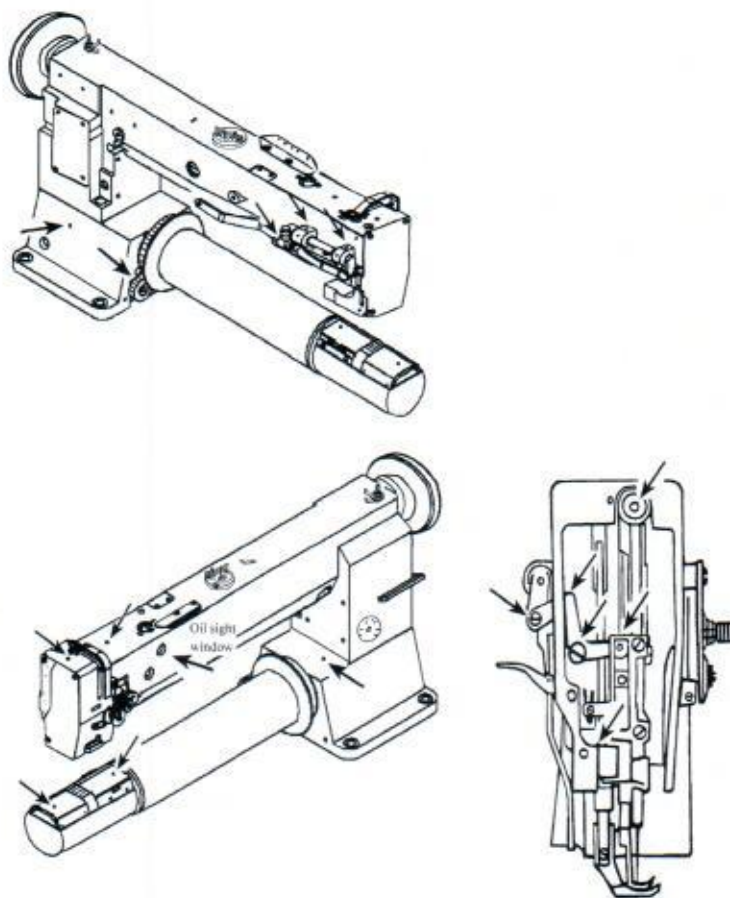
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## 三、CAUTIONS ON USE

### 1. Lubrication

- When a new sewing machine is first operated, or when a sewing machine is operated which is out of use for long period of time, it will be necessary to oil through the oil holes after removing the rubber plugs shown below.
- See dripping of oil through the oil sight hole to check oiling condition during operation.

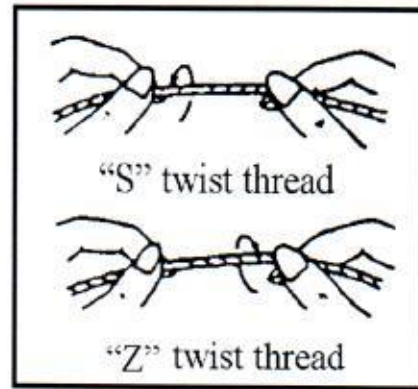
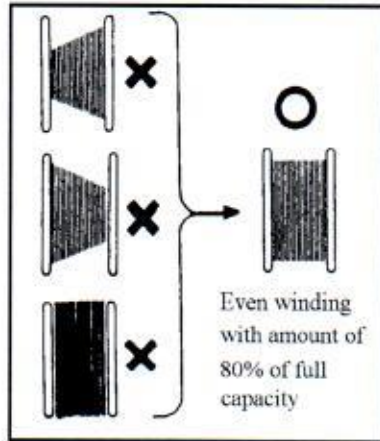
For oil, Use white spindle oil



### 2. Winding of bobbin thread

**Note:** When bobbin thread is wound, keep the presser foot lifted.

- **Tension of wound thread**    Slack winding is recommended for polyester thread and nylon thread.
- **Conically wound thread**    Move the thread guide toward smaller diameter of wound thread layer.
- **Length of wound thread**    Loosen the thread length adjusting screw to increase length of thread and tighten the screw to decrease length of thread.



### 3. Selection of thread

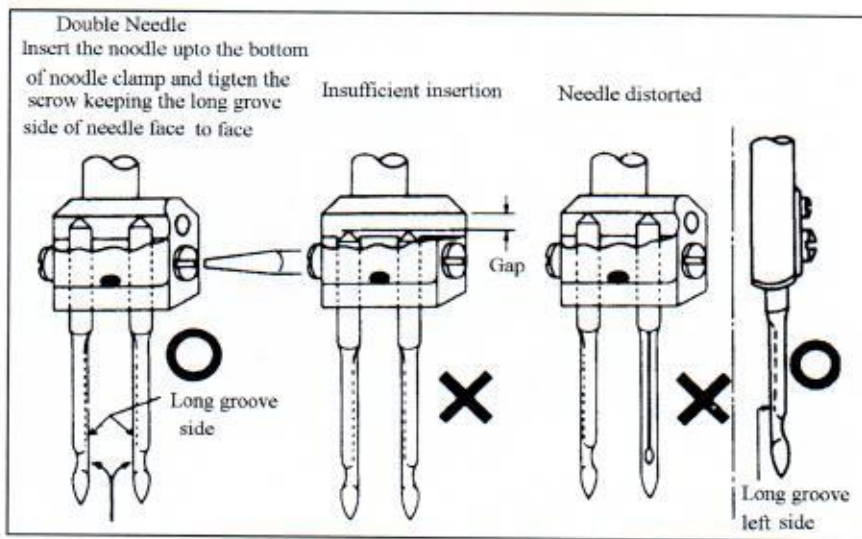
It is recommended to use "S" twist thread in the left needle (viewed from front), and "Z" twist thread in the right needle.

When use of needle threads discriminates is impossible, use "Z" twist thread in both the needles.

For bobbin thread, "S" twist thread as well as "Z" twist thread can be used.

### 4. Attaching the needle

**Note: Before installing the needles, be sure to turn off the power.**



### 5. Threading of needle threads

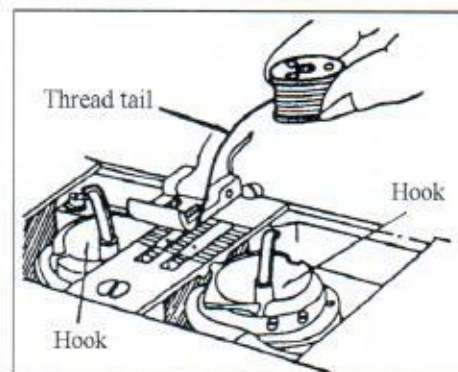
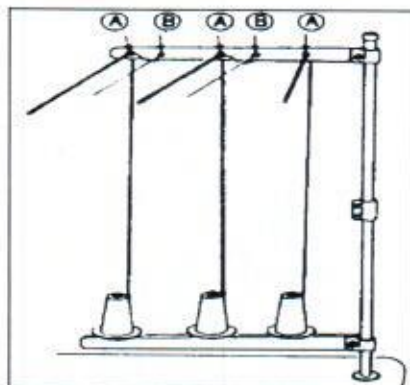
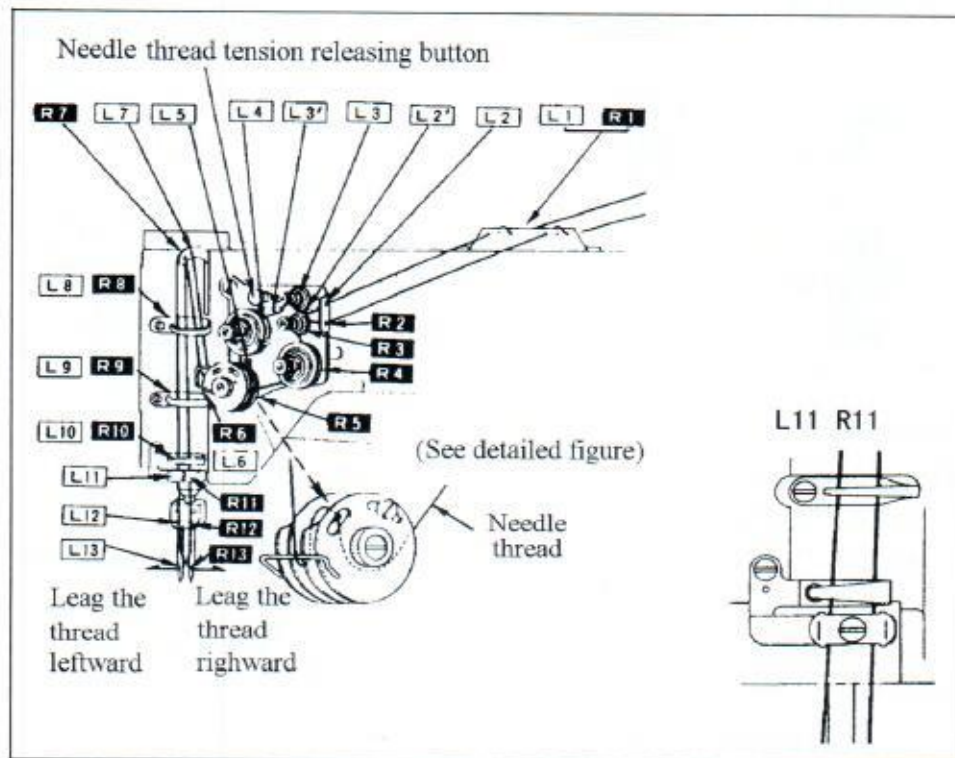
1) Pass each needle thread through thread guide "A" .

**Note: When thin slippery thread (polyester thread or filament thread, for example) is used pass the thread through thread guides "B" as wall.**

2) With the take-up lever located at the upper most position, pass each needle thread in the order shown in the following figure.

**Note: Pressing the upper thread loosening button shown in the figure below opens the saucer of**

the upper thread tension adjuster, and the upper thread can easily pulled out

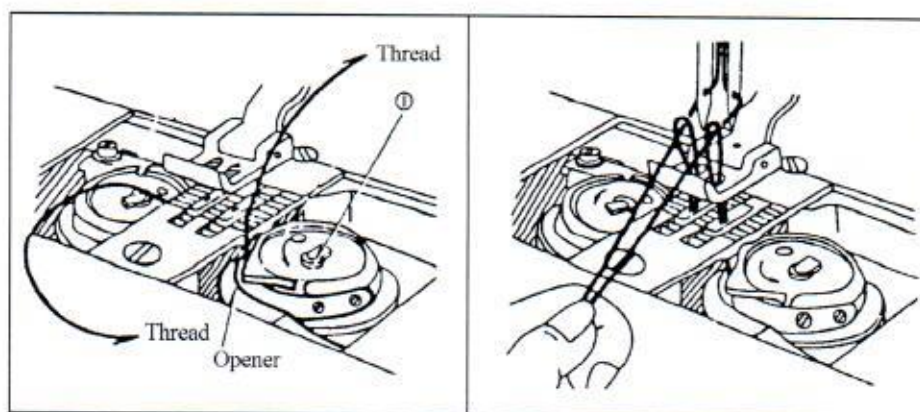


## 6. Setting of bobbin

- 1) Pulling out 5. cm thread tail from the bobbin.
- 2) Hold the bobbin so that the bobbin thread is would in right direction and put it into the hook.

## 7. Threading of bobbin threads

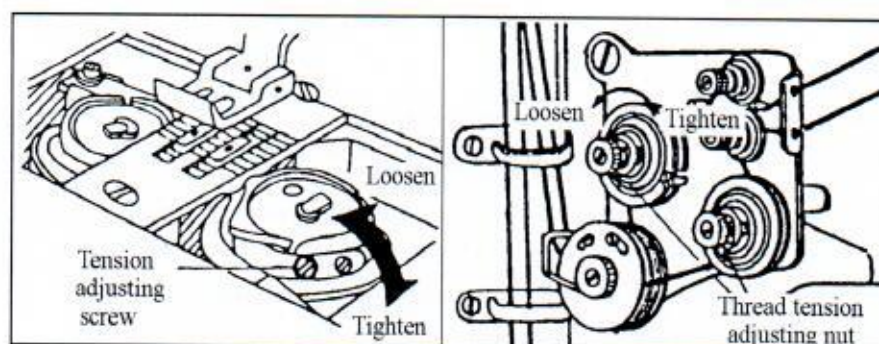
- 1) Put the hook into the bobbin case and press down the latch ①.
- 2) While holding the two needle threads by left hand, rotate the hand-wheel one turn by right hand. By pulling up the needle threads, as shown in the figure, the bobbin threads will be lifted. Each combination of bobbin thread and needle thread should be aligned and led backward.



## 8. Thread tension

### 1) Adjusting the bobbin thread tension

Turn tension screw, clockwise to increase the bobbin thread tension, or counter clockwise to decrease it.



### 2) Adjusting the needle thread tension

- Needle thread tension should be adjusted in reference to bobbin thread tension.
- Turn tension nut clockwise to increase the needle thread tension, or counter clocking to decrease it.
- Needle thread tension can be also adjusted for special fabric and thread by changing intensity and movable range of slack thread adjusting spring.

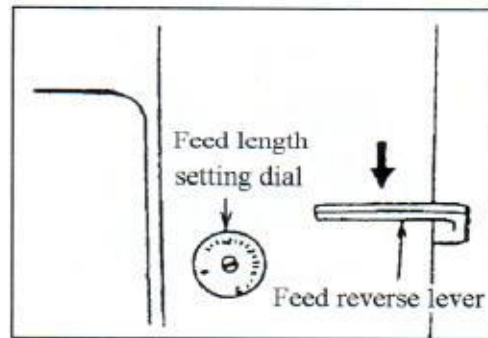
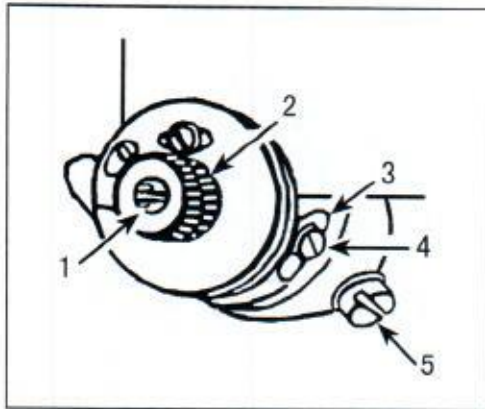
## 9. Thread take-up spring

### 1) To change the stroke of thread take-up spring

- Loosen screw "4" in the stopper, and move stopper "3" to the right or left.
- Move the stopper to the right to increase the stroke of the thread take-up spring, or to the left to decrease it.

### 2) To change the tension of the thread take-up spring

Loosen nut "2" and screw "5". Turn spring shaft "1" counter clockwise to increase the tension of the spring, or clockwise to decrease it. Fit a screwdriver in the spring shaft and turn it until the desired tension is provided.



## 10. Adjusting the stitch length

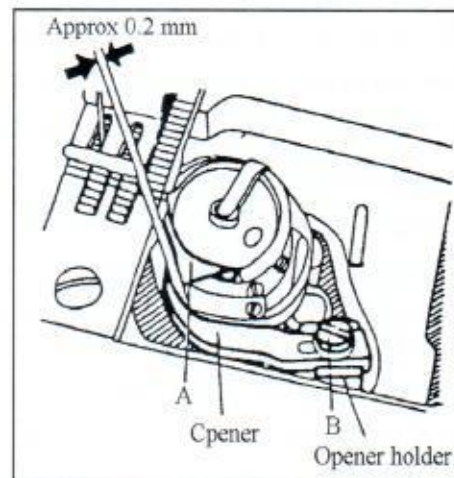
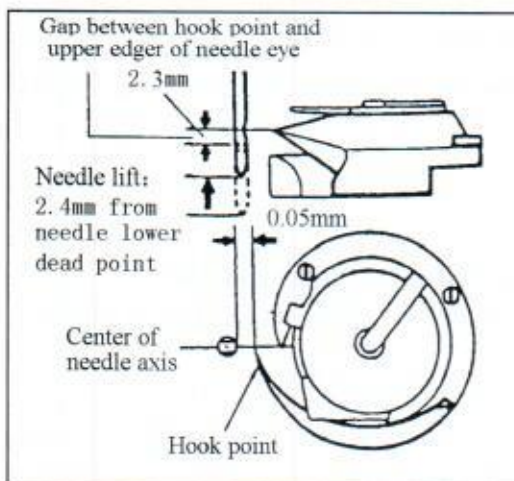
Turn stitch length dial counter-clockwise to bring the desired value to the top of the dial so that the value is aligned with the pin.

### Reverse feed stitching

- 1) The machine performs reverse feed stitching as long as the lever is held depressed.
- 2) The moment you release the lever, the machine resumed the normal stitching mode.

## 11. Timing between rotating hook motion and needle motion

- 1) Set feed length (stitch length) to "6" on the feed setting dial.
- 2) When needle is lifted 2.4mm from the lower dead point, as shown in Figure, the following positional relationship should be maintained.
  - The upper edge of needle eye should be 2.3 mm below the hook point.
  - The hook point should be located at the center of needle axis.
  - Gap between the hook point and the side face of needle should be 0.05mm.



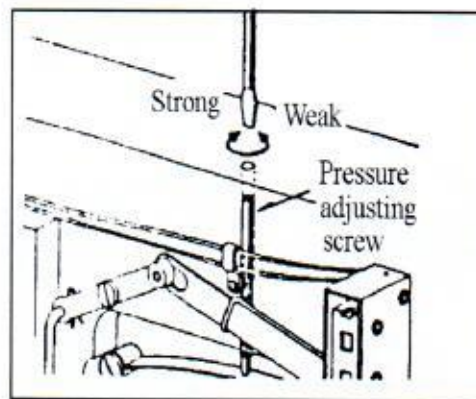


## 12. Relationship between hook motion and opener motion

- 1) Turn the balance wheel by hand and stop when the opener holder is located most remotely from the throat plate.
- 2) Make sure gap between the bobbin case holder A and the opener is approximately 0.2 mm.
- 3) If the gap is too large or small, loosen the opener holder set screw B and adjust position of the opener.

## 13. Adjusting the pressure of the presser foot

Pressure to fabric can be adjusted by turning the pressure adjusting screw.



## 14. Adjusting the presser foot and the walking foot

- 1) Loosen not 1, and change the position of the cam rod boss accordingly.

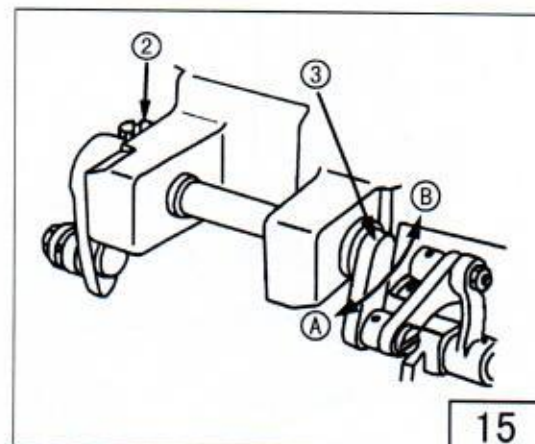
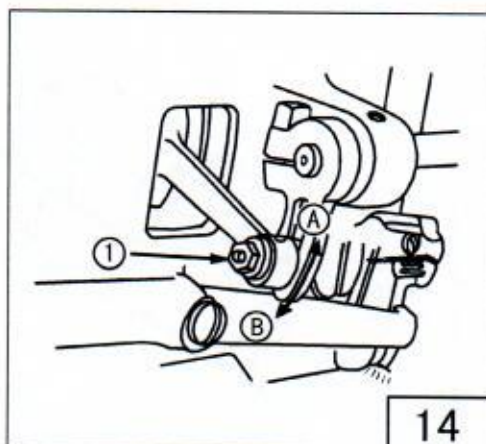
Highest position---The stroke is maximized. "A"

Lowest position--- The stroke is minimized. "B".

- 2) Alternate vertical motions of the walking foot and presser foot

The alternate vertical strokes of the walking foot and presser foot

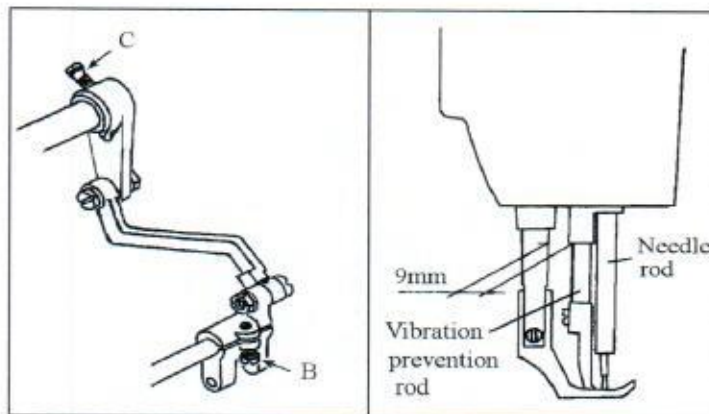
- Loosen screw ② of the top feed crank..
- Bring the thread take-up lever to its highest position, and lower the presser bar lifting lever. Move top feed crank ③ to left "A" to increase the stroke of the presser foot, or to the right "B" to increase it.



## 15. Relationship between needle motion and feed dog motion

- 1) Set feed length to "0" on the feed setting dial
- 2) Set the needle at the lowest position.
- 3) Lean the machine head backward, remove the back cover, loosen screw B and C.
- 4) Adjust the distance between presser rod and vibration prevention rod to 9 mm.
- 5) After the completion of adjustment, fully tighten the screws B and C.

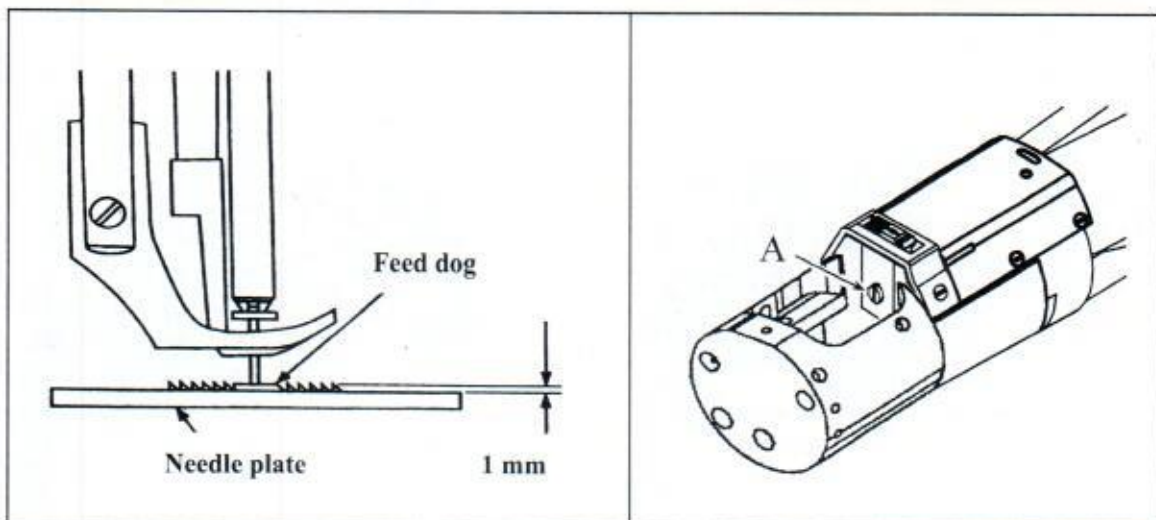
**Note:** At this time make certain that needle can enter the feed dog needle hole at the center of the hole.



## 16. Adjusting the height of the feed dog

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

- 1) Set the stitch length at minimum.
- 2) Turn the pulley so as to raise the feed dog to its highest position.
- 3) Loosen the screw "A", adjust the height of the feed dog.
- 4) Tighten the screw "A" after adjustment.



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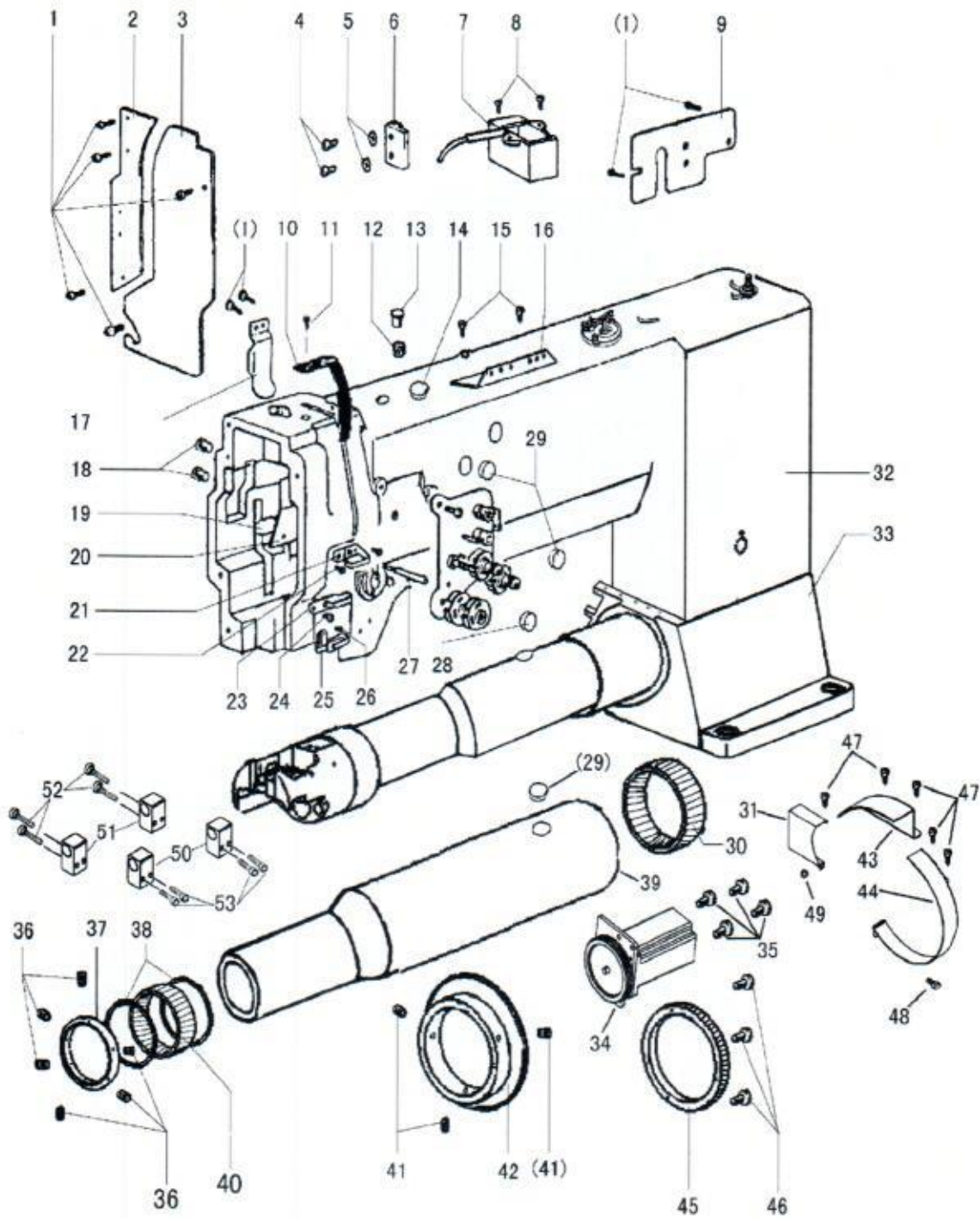
## 17. Regulate the atmospheric pressure

When the air cylinder works normally, the necessary atmospheric pressure is 5~6bar. Can find out through the dial plate of the filtering.

- 1) Lifting knob 1, clockwise rotation, the pressure increases.
- 2) Lifting knob 1, anticlockwise rotation, the pressure is reduced.



## A. ARM BED AND ITS ACCESSORIES



## A. ARM BED AND ITS ACCESSORIES

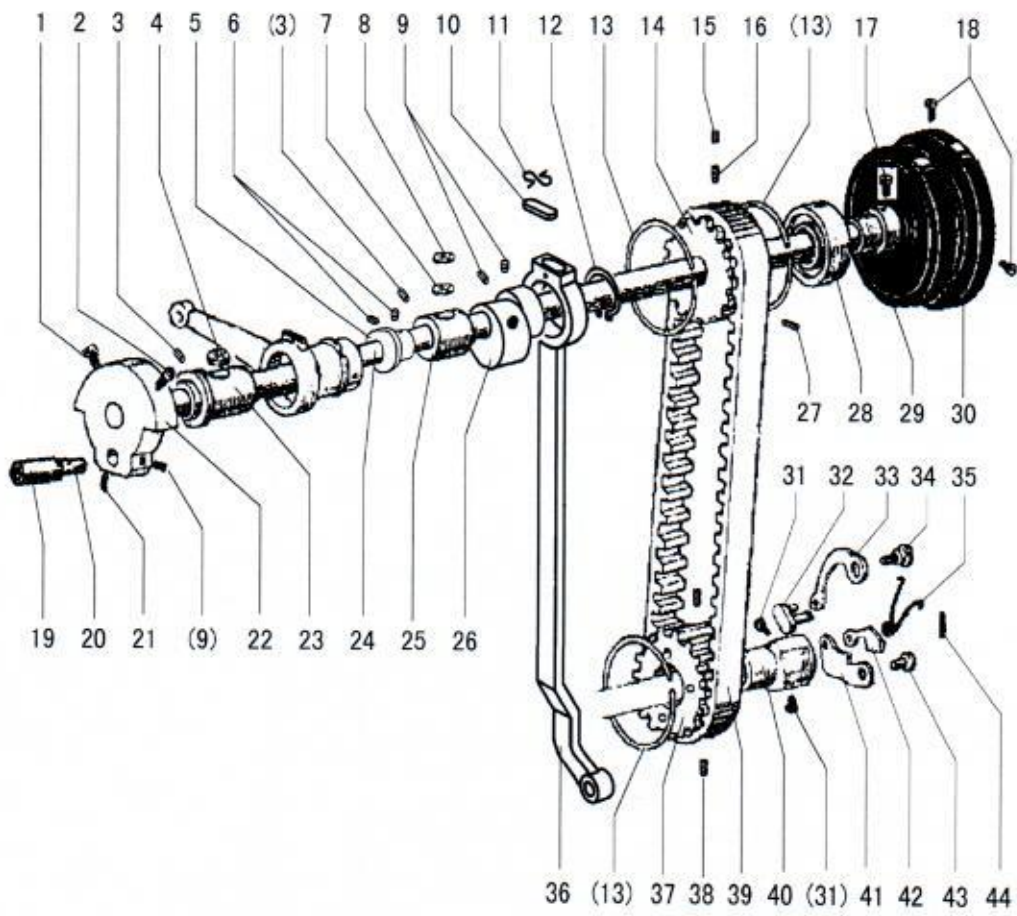
Pig. No.	Part No.	Description	Pcs	Remarks
A01	HA300B2170	Face plate screw	9	SM11/64(40)×9
A02	H4730B8001	Guide mounting plate	1	
A03	H4727B8001	Face plate	1	
A04	HA100E2150	Screw	2	SM11/64(40)×10
A05	H4722E8001	Washer	2	
A06	H4721E8001	Guide for slide block	1	
A07	HH61B17101	Oil pipe	1	
A08	H411040160	Screw	2	发黑
A09	H4718B8001	Arm side cover	1	
A10	H4717B8001	Thread take-up guard	1	
A11	HA300C2030	Screw	1	SM11/64(40)×8
A12	H32175B304	Felt	1	
A13	H4715B8001	Oil cup	1	φ13 (机壳顶上)
A14	H4735B8001	Oil cup	2	φ22 (机壳顶上/后面)
A15	HA700B2060	Screw	2	SM11/64(40)×8
A16	H2400B2100	Thread guide	1	
A17	H4716B8001	Oil guard plate	1	
A18	HA300B2090	Oil cup	2	φ8.8 (机壳后面)
A19	H2400B2060	Oil guard plate block	1	
A20	H3200B2060	Oil guard	1	
A21	H2400B2070	Thread guide	1	
A22	H2400B2080	Screw	2	SM3/16(28)×13
A23	H4726B8001	Thread guide	1	
A24	H3000D2160	Screw	1	SM9/64(40)×6.5
A25	H3212B0066	Thread guide	1	
A26	H3200B2100	Screw	1	SM9/64(40)×6.5
A27	H7010E8001	Tension releasing pin	1	
A28	H4736B8001	Oil cup	1	φ15 (机壳后面)
A29	HA307B0673	Oil cup	3	
A30	HN23B98001	带保持架滚针套	1	
A31	HN23B58001	Cover	1	
A32	HN20B68001	Arm	1	
A33	HN20B78001	Arm bed	1	
A34	HN23B17101	电机组件	1	
A35	H415060300	Screw	4	
A36	H7206E8001	Screw	6	SM15/64(28)×6
A37	HN21B58001	Stop ring	1	
A38	HN21B48001	Stop ring	2	
A39	HN24B07101	转筒组件	1	
A40	HN21B38001	Needle bearing	1	K75×83×30
A41	H7206E8001	Cover	3	SM15/64(28)×6
A42	HN23B08001	Turntable	1	
A43	HN23B78001	Cover	1	

## A. ARM BED AND ITS ACCESSORIES

Pig. No.	Part No.	Description	Pcs	Remarks
A44	HN23B68001	Cover	1	
A45	HN23B38001	Gear	1	
A46	H3100G2120	Screw	3	SM9/64(40)×9
A47	HE929D8001	Screw	5	SM11/64(40)×7.5
A48	H415040100	Screw	1	
A49	H003002040	Thumb nut	1	
A50	HN21D48001	送布轴支撑轴套	1	
A51	HN21D38001	下轴支撑轴套	1	
A52	H415040200	Screw	4	
A53	H415040150	Screw	4	

## B. ARM SHAFT MECHANISM

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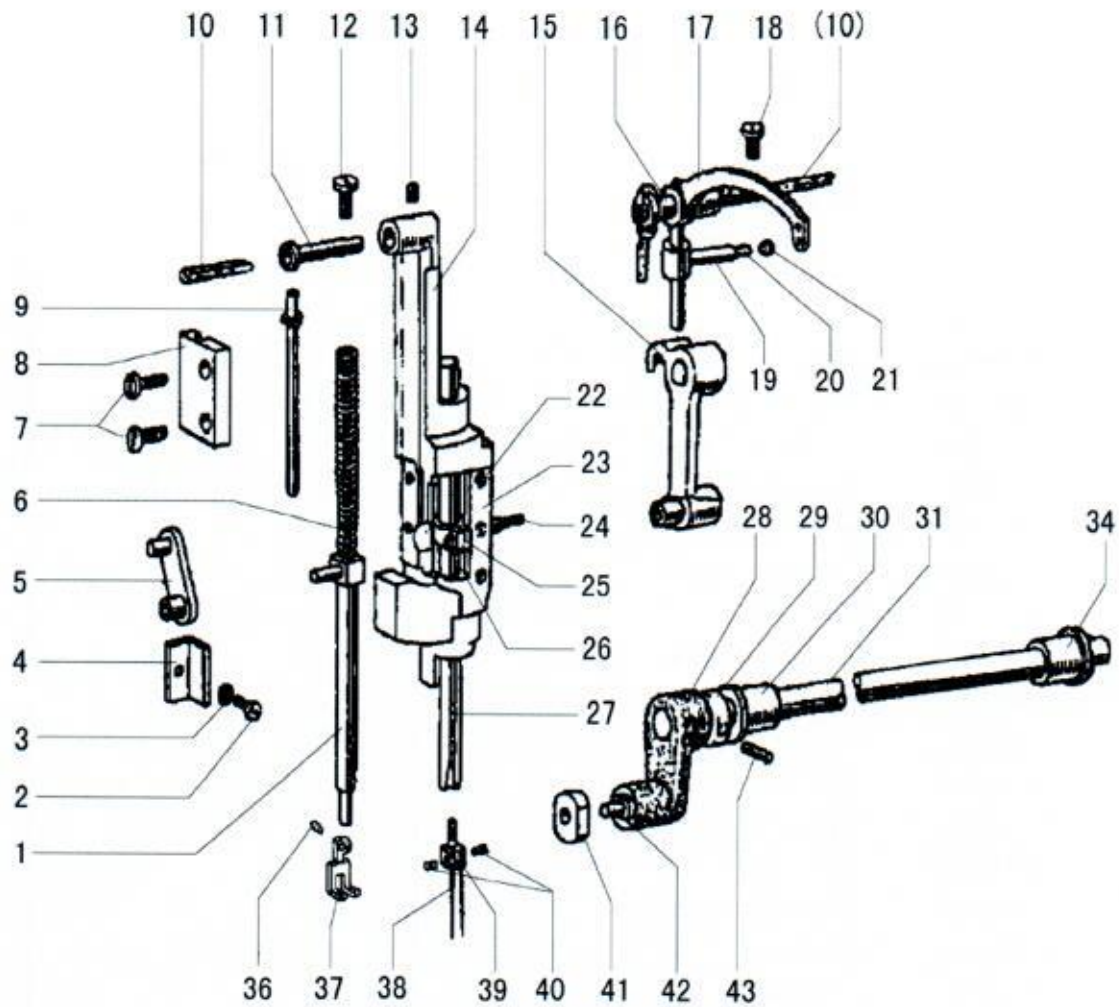
## B. ARM SHAFT MECHANISM

Pig. No.	Part No.	Description	Pcs	Remarks
B01	HA100C2060	Screw	1	SM9/32 (28) × 13
B02	HA100C2070	Screw	1	SM9/32 (28) × 14
B03	H2405D0664	Screw	1	SM15/64 (28) × 14
B04	H32111B104	Felt	1	
B05	H7005D8001	Driving wheel	1	
B06	H4723D8001	Screw	2	SM15/64 (28) × 4.5
B07	H6616B8001	Felt	1	
B08	H2009B0731	Felt	1	
B09	HA307C0662	Screw	3	SM1/4 (40) × 6
B10	H20111C106	Holder	1	
B11	H5330C8001	Felt	1	
B12	H007009260	Stop ring	1	
B13	H3205C0661	Spring stop ring	3	
B14	HH60C78001	Pulley	1	
B15	HE030C8001	Screw	1	SM17/64 (24) × 6.5
B16	HE029C8001	Screw	1	SM17/64 (24) × 14.5
B17	HA113F0684	Screw	2	SM15/64 (28) × 8.5
B18	HA110D0672	Screw	2	SM15/64 (28) × 12
B19	H2405D0662	Hinge pin	1	
B20	H4716F8001	Oil wick	1	
B21	HA105D0662	Screw	1	SM1/4 (40) × 4
B22	H4706D8001	Needle bar crank	1	
B23	H32111B204	Arm shaft bushing	1	
B24	HN20C58001	Arm shaft	1	
B25	HF126B8001	Arm shaft bushing	1	
B26	H5332C8001	Feed cam (right)	1	
B27	HE028C8001	Screw	1	SM17/64 (24) × 20
B28	H3205J0662	Needle bearing	1	
B29	H3205J0661	Arm shaft collar	1	
B30	H4100C2040	Balance wheel	1	
B31	HE022G8001	Screw	2	SM1/4 (32) × 10.5
B32	HE027G8001	Pin	1	
B33	HE023G8001	Long lever for pulley	1	
B34	HE024G8001	Pin	1	
B35	HE026G8001	Spring for pulley	1	
B36	HH60C58001	Connecting rod for upper feed	1	
B37	HE019G8001	Pulley	1	
B38	HE028E8001	Screw	2	SM7/32 (24) × 7
B39	HE109C8001	Cog belt	1	
B40	HE021G8001	Shaft for pulley	1	
B41	H4719D8001	Short lever for pulley	1	
B42	HE031G8001	Lever for pulley	1	
B43	HE029G8001	Pin	1	
B44	H601012100	Pin	1	



## C. NEEDLE BAR & THREAD TAKE-UP LEVER MECHANISM

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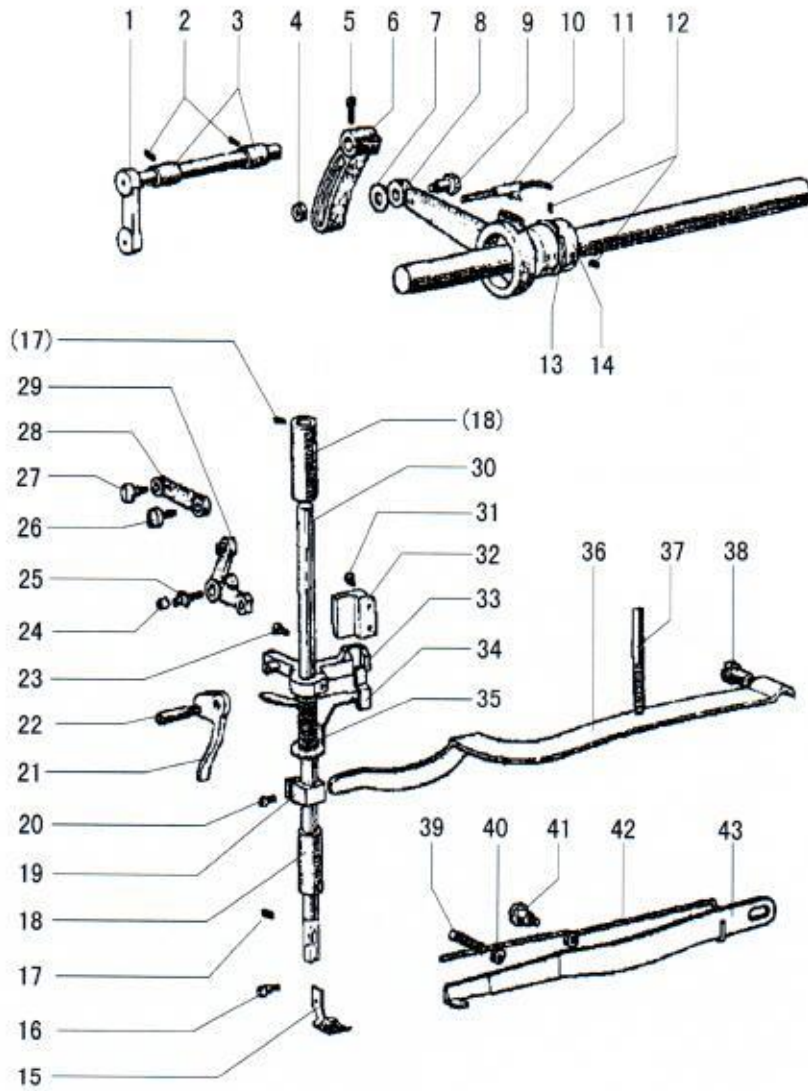


### C. NEEDLE BAR & THREAD TAKE-UP LEVER MECHANISM

Pig. No.	Part No.	Description	Pcs	Remarks
C01	H4725F8001	Presser bar	1	
C02	H3400C2020	Screw	1	
C03	H3200I2030	Washer	1	
C04	H3400C2010	Needle bar guide	1	
C05	H4726F8001	Presser bar connecting link	1	
C06	H4729F8001	Spring	1	
C07	H4753E8001	Screw	2	SM11/64(40) × 17.5
C08	H4728F8001	Guide for slide block	1	
C09	H4730F8001	Vibrating presser bar extension	1	
C10	H2405D1122	Oil wick	2	
C11	H4706F8001	Pin	1	
C12	H4707F8001	Screw	1	
C13	HA3411D308	Screw	1	SM15/64(28) × 7
C14	H4719F8001	Needle bar rock frame	1	
C15	H4717F8001	Needle bar connecting link	1	
C16	H2405D1121	Pin	1	
C17	H4712F8001	Thread take-up lever	1	
C18	HA110D0672	Screw	1	SM15/64(28) × 12
C19	H2405D1112	Thread take-up link	1	
C20	H24211D405	Oil wick	1	
C21	H24211D305	Oil wick	1	
C22	H32111D304	Screw	6	SM3/32(56) × 4
C23	H4721F8001	Washer	2	
C24	H3204D6513	Felt	1	
C25	H4722F8001	Needle bar connecting stud	1	
C26	H32111D604	Screw	1	SM9/64(40) × 8.5
C27	H4724F8001	Needle bar	1	
C28	H3406C0672	Crank	1	
C29	H4734F8001	Washer	1	
C30	H3204B0652	Needle bar rock shaft bushing	1	
C31	HF104F8001	Needle bar rock shaft	1	
C34	HF127B8001	Needle bar rock shaft bushing	1	
C35	H2010J0066	Thumb nut	2	
C36	HA700F2100	Screw	1	SM11/64(40) × 7
C37	H4746F8001	Vibrating Presser foot	1	
C38	JZDP1700G2302	Needle	2	DP × 17 23#
C39	H4755F8001	Needle bar connecting stud	1	
C40	H32132D104	Screw	2	SM9/64(40) × 3
C41	H4759F8001	Square block	1	
C42	H3406C0671	Screw	1	SM15/64(28) × 10
C43	H602040240	Pin	1	4 × 24

# D. PREAER FOOT MECHANISM

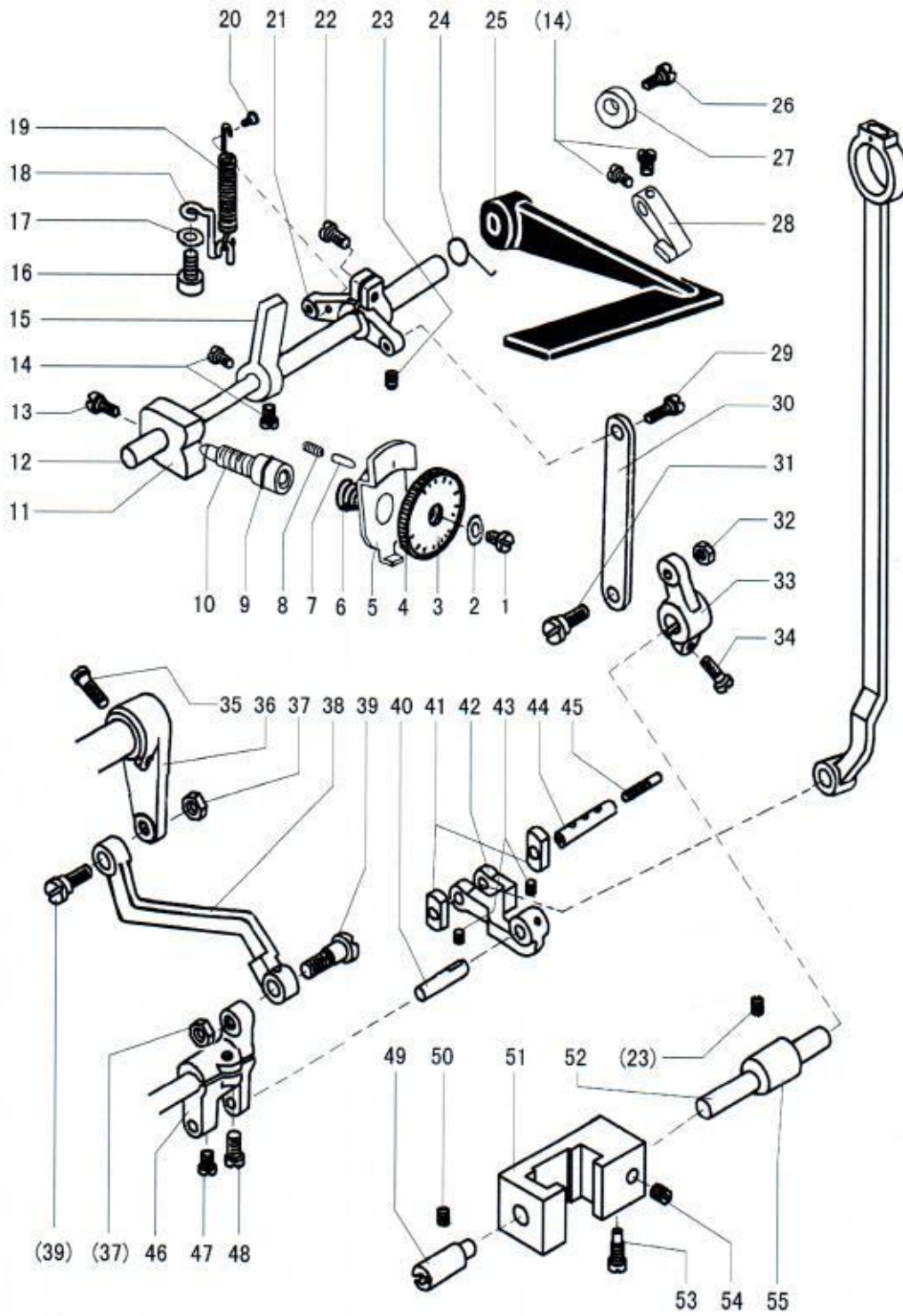
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## D. PREAER FOOT MECHANISM

Pig. No.	Part No.	Description	Pcs	Remarks
D01	H4705E8001	Feed lifting rock shaft	1	
D02	H4706E8001	Screw	2	SM1/4 (24) × 7
D03	H4707E8001	Bushing	2	
D04	H0030550608	Thumb nut	1	
D05	H3115F0671	Screw	1	SM1/4 (28) × 16
D06	H4709E8001	Regulating crank	1	
D07	H2013J0065	Washer	1	
D08	H2014J0066	Connecting rod	1	
D09	H2000J2100	Screw	1	M6 × 0. 75
D10	H20111C106	Felt clip	1	
D11	H4713E8001	Oil wick	1	
D12	HA307C0662	Screw	2	SM1/4 (40) × 6
D13	H007009250	Stop ring	1	
D14	H4714E8001	Eccentric	1	
D15	H4763E8001	Lifting Presser foot	1	
D16	H3200E2020	Screw	1	SM1/8 (44) × 4
D17	H4708D8001	Screw	2	SM1/4 (24) × 13
D18	H4744E8001	Bushing for presser bar	2	
D19	H4746E8001	Presser bar spring bracket	1	
D20	H240410034	Screw	1	SM9/64 (40) × 8. 5
D21	H4748E8001	Presser bar lifter	1	
D22	H4749E8001	Screw	1	SM11/64 (40) × 8. 5
D23	H4753E8001	Screw	1	SM11/64 (40) × 17. 5
D24	H4717E8001	Roller	1	
D25	H2004J0655	Support shaft	1	
D26	H4718E8001	Screw	1	SM11/64 (32) × 6
D27	H2004J0662	Screw	1	SM1/4 (40) × 5
D28	H4719E8001	Link	1	
D29	H4715E8001	Bell crank	1	
D30	H4754E8001	Presser bar	1	
D31	HA111G0683	Screw	2	SM11/64 (40) × 12
D32	H4723E8001	Guide	1	
D33	H4752E8001	Presser bar lifting bracket	1	
D34	H4768E8001	Thread releasing plate	1	
D35	H4767E8001	Spring	1	
D36	H4730E8001	Presser bar spring	1	
D37	H4729E8001	Screw	1	
D38	H3100G2170	Screw	1	SM1/4 (24) × 11
D39	H4725E8001	Screw	1	SM1/4 (24) × 19
D40	H4726E8001	Nut	1	
D41	H3100G2130	Screw	1	SM1/4 (24) × 7
D42	H4727E8001	Spring	1	
D43	H4728E8001	Knee lifter lever	1	

# E. STITCH REGULATOR MECHANISM



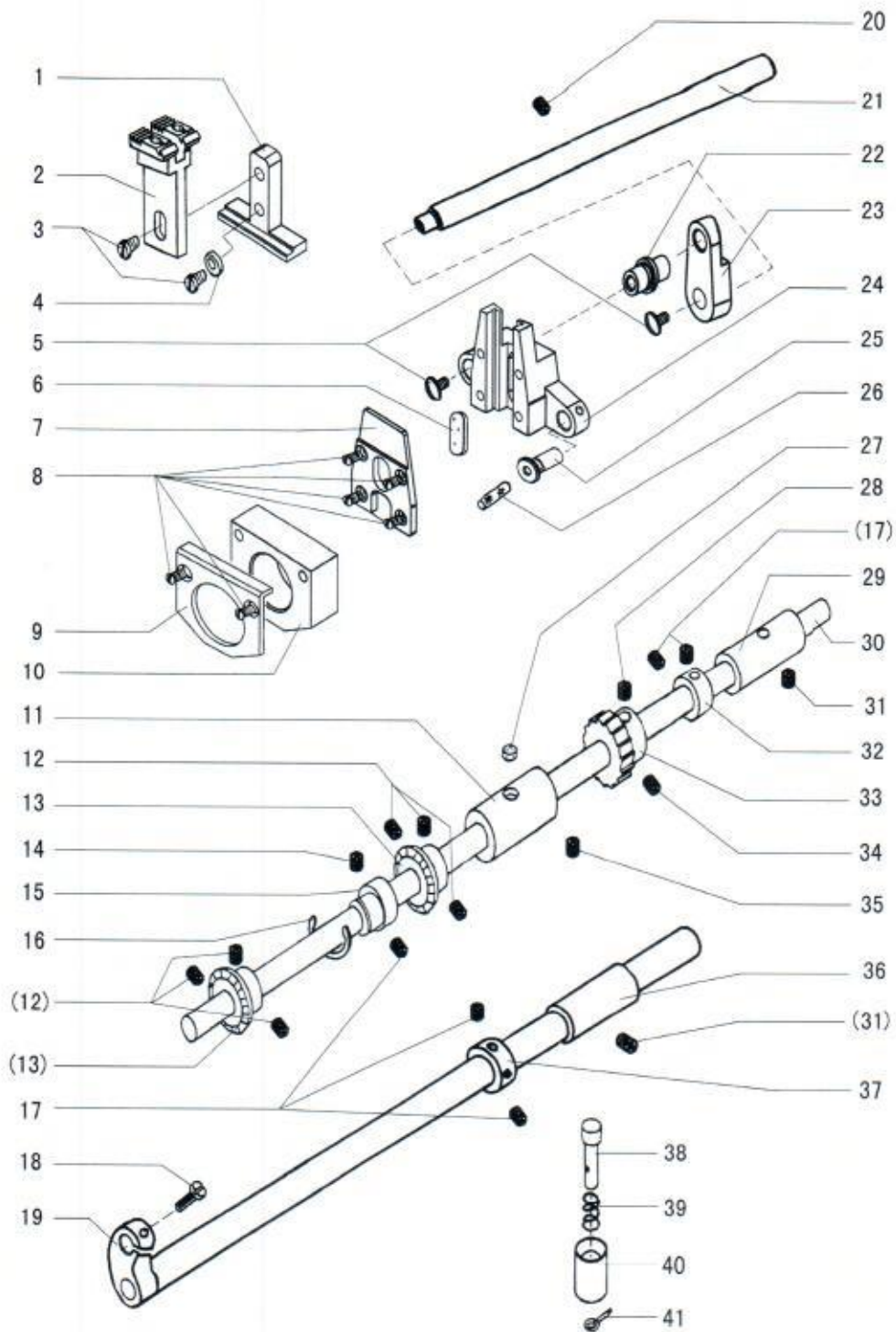
## E. STITCH REGULATOR MECHANISM

Pig. No.	Part No.	Description	Pcs	Remarks
E01	HA720F0686	Screw	1	SM3/16 (28) × 12
E02	HA720F0685	Bushing	1	
E03	H5341H8001	Plate for stitch length	1	
E04	HA7421F120	Dial	1	
E05	HA720F0683	Stopper pin releasing lever	1	
E06	HA720F0687	Coil spring	1	
E07	HA700F2030	Stopper pin	1	
E08	HA100F2090	Spring for stopper pin	1	
E09	HA109F0674	Seal	1	14 × 2.4
E10	HA720F0681	Screw bar	1	
E11	HH61F18001	Feed regulator crank	1	
E12	HH70F88001	Feed reversing lever shaft	1	
E13	HA104F0654	Screw	1	SM15/64 (28) × 10
E14	HA113F0684	Screw	4	SM15/64 (28) × 8.5
E15	HH71F08001	Baffle	1	
E16	HA100H2150	Screw	1	SM9/64 (40) × 11
E17	H005004050	Washer	1	
E18	H5330H8001	Spring retainer	1	
E19	HG207G8001	Spring	1	
E20	H5329H8001	Screw	1	SM9/64 (40) × 4
E21	H5327H8001	Feed reversing lever shaft crank	1	
E22	H5343H8001	Screw	1	SM3/16 (32) × 16
E23	HA3411D308	Set screw	2	SM15/64 (28) × 7
E24	H4939L8001	Spring	1	
E25	HH70F98001	Feed reversing lever	1	
E26	H4937L8001	Screw	1	SM15/64 (28) × 6
E27	H4938L8001	Rubber ring	1	
E28	H4936L8001	Lever	1	
E29	H5333H8001	Screw	1	SM3/16 (32) × 8.5
E30	HH60F98001	Link lever	1	
E31	H5324H8001	Screw	1	SM3/16 (32) × 13.5
E32	H5325H8001	Nut	1	SM3/16 (32) × 3.6
E33	HH70F68001	Reverse block shaft crank	1	
E34	HA111G0683	Screw	1	SM11/64 (40) × 12
E35	H5320H8001	Screw	1	SM15/64 (28) × 23.5
E36	HBF6252081	Link lever	1	
E37	H2010J0066	Nut	2	SM9/32 (28) × 3.6
E38	HH60F68001	Link lever	1	
E39	H5317H8001	Screw	2	SM9/32 (28) × 13.3
E40	H5315H8001	Crank shaft	1	
E41	H5309H8001	Slide block	2	
E42	H5313H8001	Link lever	1	
E43	HA711B0681	Screw	2	SM9/64 (40) × 4.5
E44	H5311H8001	Shaft for reversing block slide block	1	

## E. STITCH REGULATOR MECHANISM

Pig. No.	Part No.	Description	Pcs	Remarks
E45	H5312H8001	Oil wick	1	
E46	HBF6251081	Crank	1	
E47	HA700F2100	Screw	1	SM11/64(40) × 7
E48	HA800F2020	Screw	1	SM15/64(28) × 13.5
E49	HH170F48001	Reverse block shaft	1	
E50	HA100C2020	Set screw	1	SM15/64(28) × 10
E51	H5305H8001	Reverse block	1	
E52	H5306H8001	Reverse block shaft	1	
E53	HA100F2130	Screw	1	SM15/64(28) × 5
E54	HA300B2080	Set screw	1	SM15/64(28) × 6.8
E55	H5307H8001	Bushing for reverse block shaft	1	

## F. FEEDING AND FEED LIFTING & ROTATING HOOK SHAFT MECHANISM

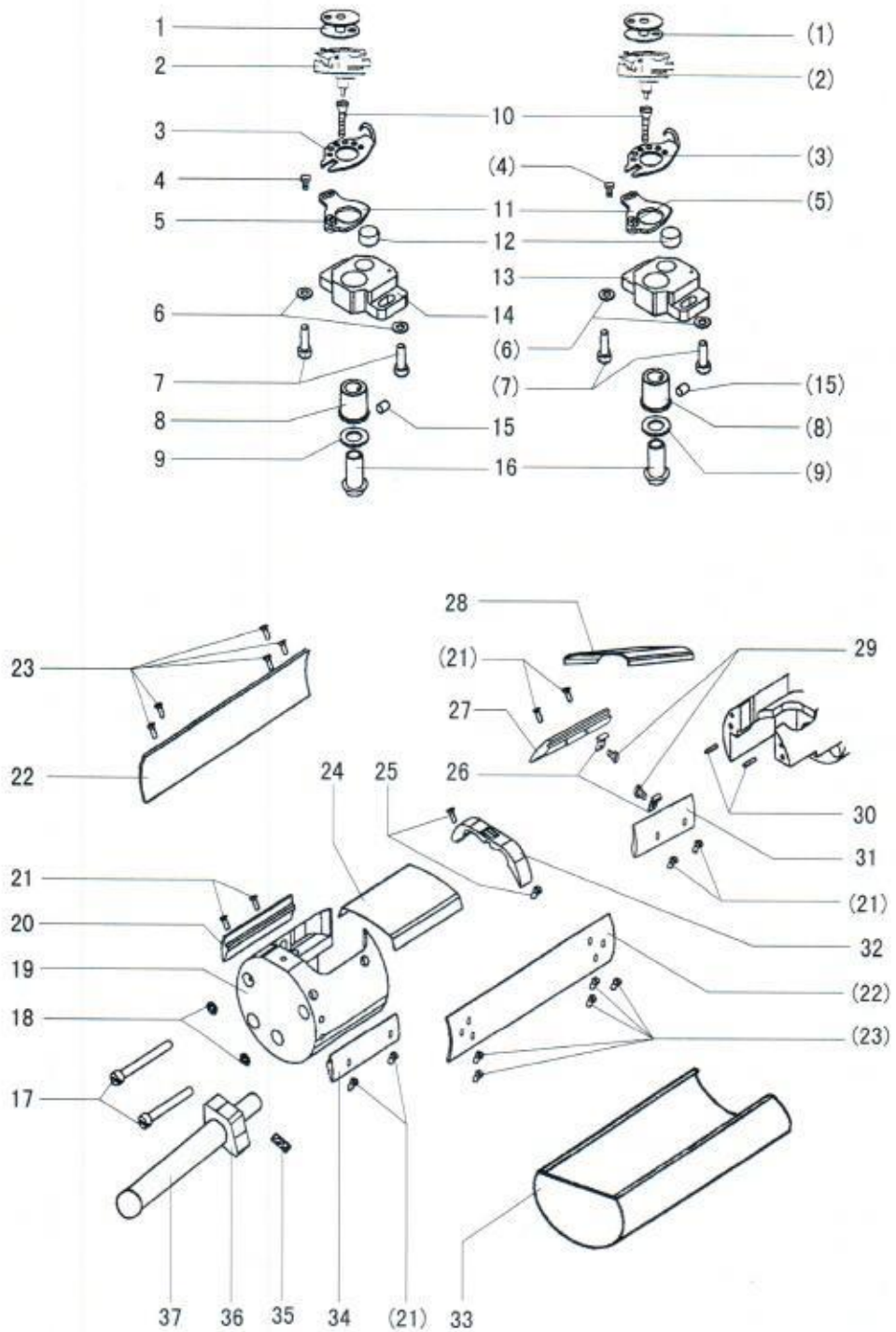




## F. FEEDING AND FEED LIFTING & ROTATING HOOK SHAFT MECHANISM

Fig. No.	Part No.	Description	Pcs	Remarks
F01	HBG6255081	Slide block for crank	1	
F02	HN20G88001	Feed dog	1	
F03	H4967K8001	Screw	2	SM11/64(40) × 7.2
F04	HBG6260081	Washer	1	
F05	HA100G2100	Screw	2	
F06	HBG6254081	Felt	1	
F07	HN21G18001	Panel	1	
F08	HA7311C306	Screw	6	
F09	HBG6258081	Panel	1	
F10	HBG6257081	Feed arm	1	
F11	HE111D8001	Rotating hook shaft bushing (left)	1	
F12	HG214G8001	Set screw	6	东诺 SM1/4(40)
F13	HE110D8001	Bevel gear for hook shaft	2	
F14	HE105C8001	Set screw	1	SM13/64(32) × 4.7
F15	HBG6251081	Feed eccentric	1	
F16	HF909H8001	C-type stop ring	1	
F17	HE013H8001	Screw	5	SM13/64(32) × 4.3
F18	HE119E8001	Screw	1	SM5/32(40) × 9
F19	HN20G57101	Feed rock shaft	1	
F20	HA100C2130	Screw	1	SM11/64(40) × 2.7
F21	HN20G98001	Shaft	1	
F22	HA111G0682	Pin	1	
F23	HBG6263081	Bell crank	1	
F24	HN21G08001	Feed rock shaft crank	1	
F25	HE116E8001	Pin	1	
F26	HE117E8001	Oil wick	1	
F27	HE112D8001	Felt	1	
F28	HE043C8001	Screw	1	
F29	HH70G58001	Bushing	1	
F30	HN20G48001	Rotating hook shaft	1	
F31	HE034G8001	Screw	2	SM1/4(32) × 7
F32	HE105D8001	Rotating hook shaft collar	1	
F33	HE106D8001	Recessed wheel	1	
F34	HE107D8001	Screw	1	
F35	HE013C8001	Screw	1	SM17/64(24) × 6.5
F36	H5321E8001	Bushing	1	
F37	H4105D0651	Rotating hook shaft collar	1	
F38	HN21D28001	Safe clutch shaft	1	
F39	H4107D0672	Safe clutch spring	1	
F40	HN21D18001	Safe clutch bushing	1	
F41	H601016100	Safe clutch shaft pin	1	

## G. HOOK SADDLE MECHANISM

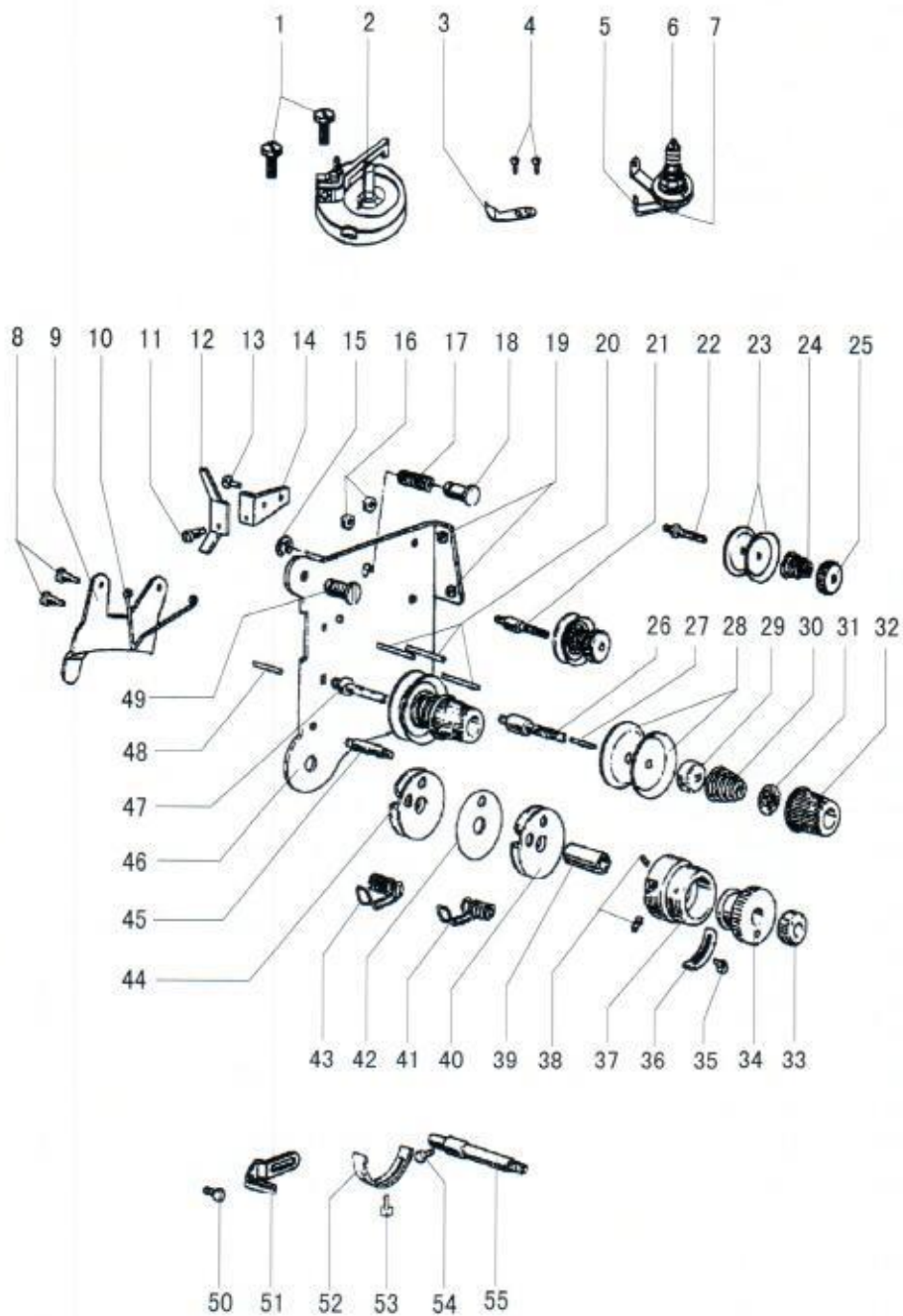


## G. HOOK SADDLE MECHANISM

Pig. No.	Part No.	Description	Pcs	Remarks
G01	HD80618001	Bobbin	2	
G02	HH60H67101	Rotating hook	2	KRT8-BL
G03	HE117B8001	Rotating position guide	2	
G04	HE046C8001	Screw	2	SM0. 1339 (36) × 6
G05	HE116B8001	Guide plate slide block	2	
G06	HE121B8001	Washer	4	
G07	HE120B8001	Washer	4	SM13/64(32) × 16.5
G08	HE125B8001	Bushing	2	
G09	HE124B8001	Washer	2	
G10	H240410652	Screw	2	SM9/64(40)
G11	HE127B7101	Guide plate	2	
G12	HE126B8001	Felt	2	
G13	HE147B8001	Rotating hook bracket	1	
G14	HE119B8001	Rotating hook bracket	1	
G15	HE028E8001	Screw	2	SM7/32(32) × 7
G16	HE123B8001	Bevel	2	
G17	HE143B8001	Screw	2	SM13/64(32)
G18	H005009050	Washer	2	
G19	HE113B8001	Connecting frame	1	
G20	HH61H28001	Front guide plate	1	
G21	HE130B8001	Screw	8	SM0. 1339 (36) × 8. 2
G22	HE144B8001	Connecting plate	2	
G23	HE145B8001	Screw	10	SM11/64(40) × 9
G24	HH60H97101	Front slide plate	1	
G25	HE137B8001	Set screw	2	SM11/64(32) × 10
G26	HN20H98001	Spring plate	2	
G27	HN22H08001	Back guide plate	1	
G28	HN22H28001	Cover	1	
G29	H5727B8001	Screw	2	SM1/8(44) × 3. 4
G30	HE142B8001	Connecting plate	2	
G31	HN21H98001	Back guide plate	1	
G32	HN22H38001	Needle plate	1	
G33	HN21H08001	Slide plate	1	
G34	HH61H38001	Front guide plate	1	
G35	HE114B8001	Needle plate	1	M4 × 4
G36	H4111E0682	Felt	1	
G37	HE115B8001	Slide plate	1	

## H. PARTS FOR THREAD TENSION

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## H. PARTS FOR THREAD TENSION

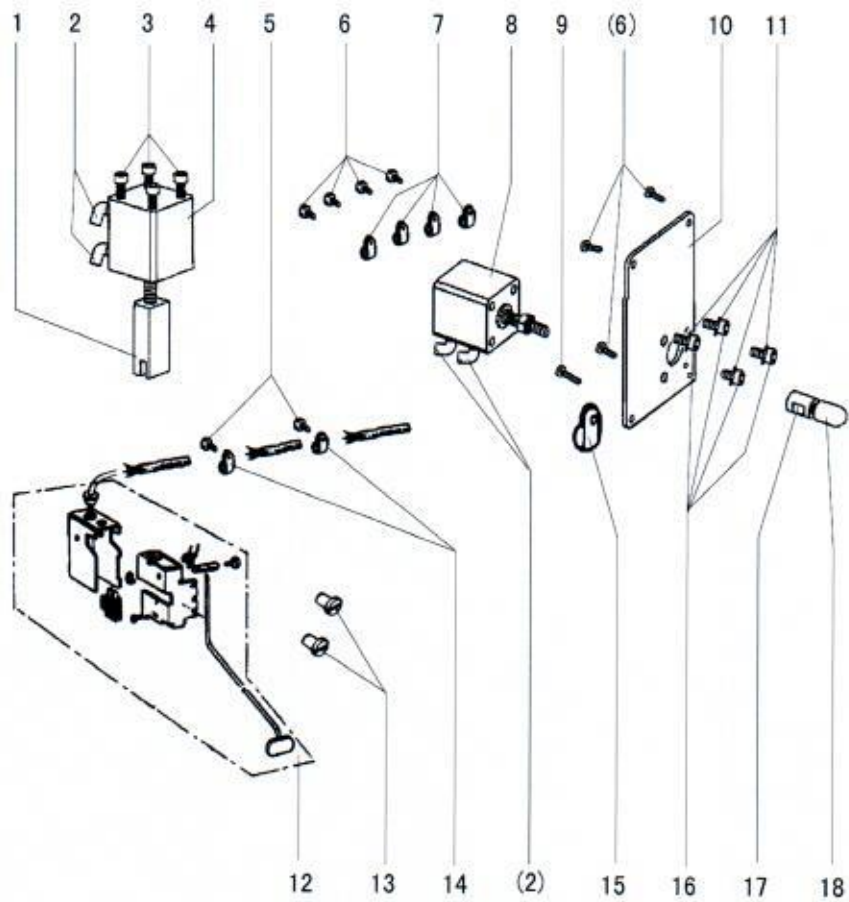
Pig. No.	Part No.	Description	Pcs	Remarks
H01	H3107G0662	Screw	2	
H02	H7007D7101	Bobbin complete	1	
H03	H6756B8001	Cut plate	1	
H04	HA500C2070	Screw	2	SM9/64 (28) × 5
H05	H6662B8001	Thread guide	1	
H06	H7014D7101	Down-lead complete	1	
H07	H7016D8001	Washer	1	
H08	H3221B6811	Screw	2	SM9/64 (40) × 3
H09	H3221B3142	Tension releasing plate	1	
H10	H3221B6812	Tension releasing spring	1	
H11	H4705C8001	Screw	1	
H12	H4706C8001	Lever	1	
H13	HA7311C306	Screw	1	SM9/64 (40) × 7
H14	H4707C8001	Mounting plate	1	
H15	H007013050	Stop ring	1	
H16	H3221B6810	Nut	2	
H17	H4708C8001	Spring	1	
H18	H4709C8001	Push button	1	
H19	H3221B0681	Porcelain cluct	2	
H20	H3221B0682	Pin	3	
H21	H3221B0685	Thread tension stud	1	
H22	H3221B0683	Thread tension stud	1	
H23	HA112B0693	Thread tension disc	4	
H24	H3221B0684	Spring	2	
H25	HA710B0671	Thumb nut	2	SM11/64 (40) × 6
H26	H3221B0689	Thread tension stud	1	
H27	H3221B6816	Pin	1	
H28	HA310B0705	Thread tension disc	4	
H29	HA310B0702	Thread tension releasing disc	2	
H30	H4710C8001	Spring	2	
H31	HA115B7010	Thumb nut complete	2	
H32	HA310B0701	Thumb nut revolution stopper	2	
H33	H32481B721	Thumb nut	1	SM1/4 (40) × 4.5
H34	H32481B621	Take-up spring guard	1	
H35	H32481BC21	Screw	1	SM9/64 (40) × 6
H36	H32481BB21	Stopper	1	
H37	H32481B921	Thread tension post	1	
H38	H32481B521	Screw	2	SM11/64 (40) × 10
H39	H32481B821	Bush	1	
H40	H32481BF21	Plate complete	1	
H41	H4712C8001	Thread take-up spring	1	
H42	H32481BE21	Plate	1	
H43	H4713C8001	Thread take-up spring	1	
H44	H32481BD21	Plate complete	1	

## H. PARTS FOR THREAD TENSION

Pig. No.	Part No.	Description	Pcs	Remarks
H45	H32481B421	Screw	1	
H46	H3221B6820	Mounting plate	1	
H47	H3221B0686	Thread tension stud	1	
H48	H3221B6817	Pin	1	
H49	HA300C2030	Screw	1	SM11/64(40)×8
H50	HA106B0676	Screw	1	SM9/64(40)×6
H51	H3306B0661	Oil check window	1	
H52	H3221B6819	Stopper	1	
H53	H3200B2100	Screw	1	SM9/64(40)×6.5
H54	H3230K0751	Screw	1	SM11/64(40)×10
H55	H32481B121	Thread tension stud	1	

# I. PNEUMATIC CONTROL UNIT

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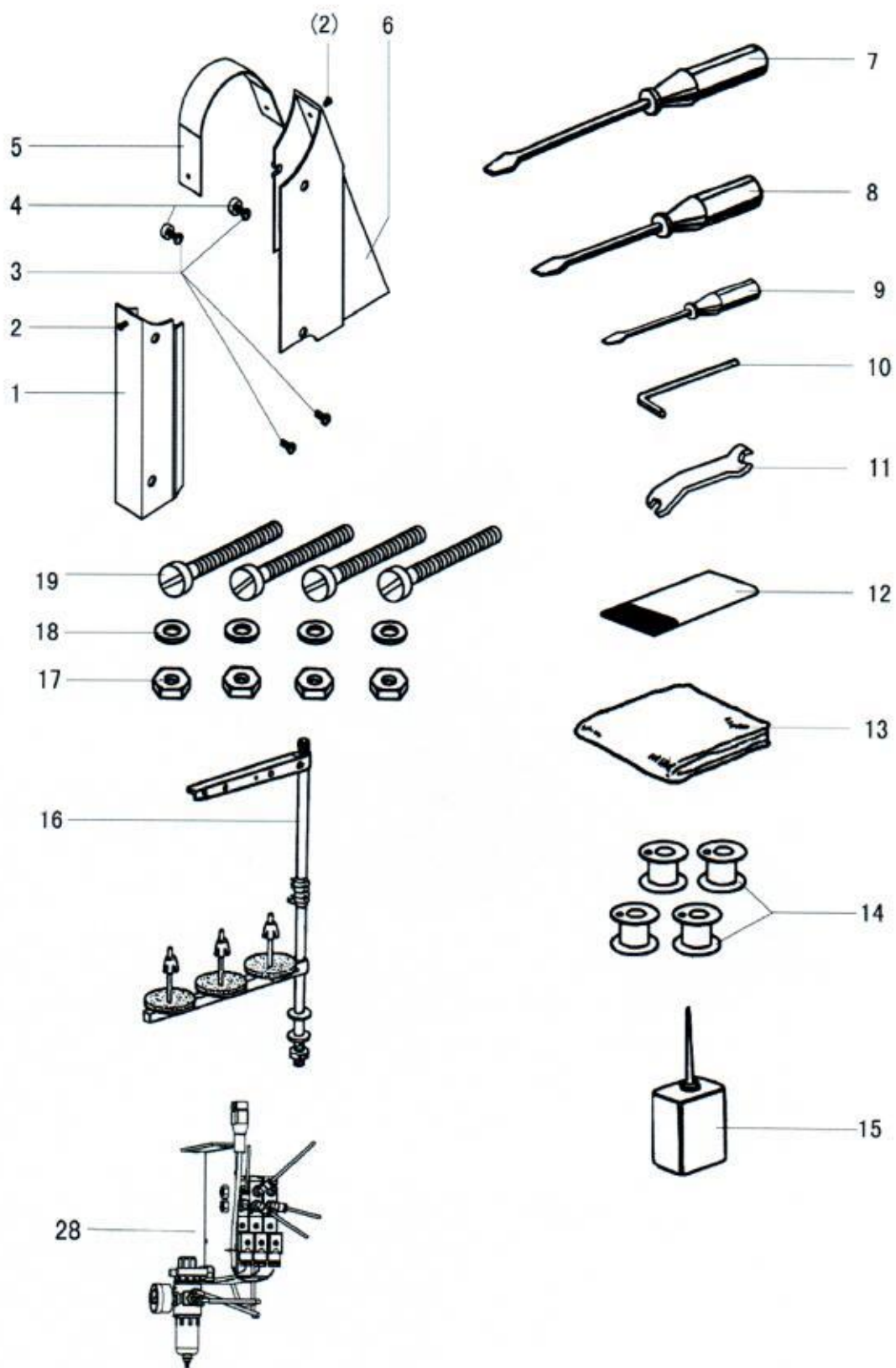
# I. PNEUMATIC CONTROL UNIT

Pig. No.	Part No.	Description	Pcs	Remarks
101	H0606N8001	Support block	1	
102	H4916G8001	Windpipe joint	4	φ 6-M5
103	H415050450	Screw	4	
104	H0607N8001	Pump	1	SDA25×25-B
105	HA300B2130	Screw	2	SM11/64(40)×5.5
106	HA300B2170	Screw	7	SM11/64(40)×9
107	HA700Q0050	Holder	4	
108	H4915G8001	Pump	1	SDA25×25-B
109	HA10012090	Screw	1	SM11/64(40)×13
110	HN20J78001	Arm side cover	1	
111	H005008060	Spring Washer	4	发黑
112	HN20J57101	Touth switch complete	1	
113	H4918L8001	Screw	2	
114	H4980K8001	Holder	1	
115	HD44JM8001	Holder	1	
116	H415060200	Screw	4	发黑
117	H4914G8001	Link	1	
118	H4913G8001	Coupling	1	



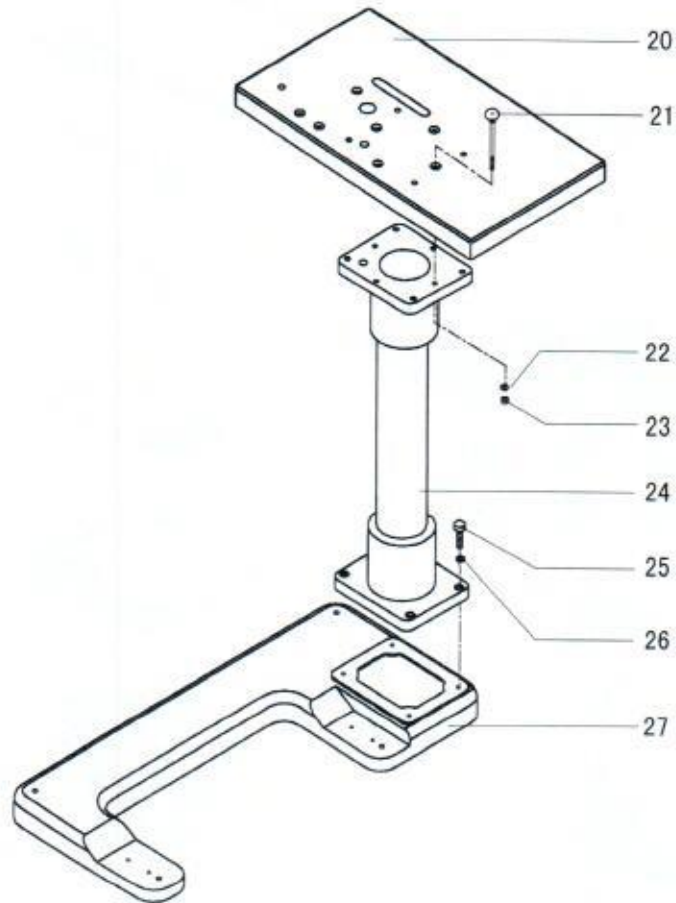
## J. ACCESSORIES

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## J. ACCESSORIES

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## J. ACCESSORIES

Pig. No.	Part No.	Description	Pcs	Remarks
J01	HH70168001	Belt cover (left)	1	
J02	H200000360	Screw	2	SM11/64(40) × 6
J03	H020718001	Screw	4	SM15/64(28) × 18
J04	H6760B8001	Washer	2	
J05	H6307L8001	Belt cover (upper)	1	
J06	HN22K08001	Belt cover (right)	1	
J07	HA300J2070	Screw driver (larger)	1	
J08	HA300J2200	Screw driver (middle)	1	
J09	HA300J2210	Screw driver (small)	1	
J10	HB00001060	Socket wrench	1	
J11	HE10518001	Spanner	1	
J12	JZDP1700G2302	Needle	6	DP × 17 23#
J13	HF104K8001	Cover	1	
J14	HD80618001	Bobbin	4	
J15	H200400069	Oil tank	1	
J16	H3200L0120	Thread stand assay	1	
J17	H003002120	Nut	4	
J18	H005001120	Washer	4	
J19	H103120120	Screw	4	M12 × 120
J20	HH70J98001	Bedplate	1	
J21	H125100900	Screw	4	M10 × 90
J22	H005001100	Washer	4	
J23	H003002100	Nut	4	
J24	H8915K8001	Operation pillar	1	
J25	H103120500	Screw	4	M12 × 50
J26	H005008120	Washer	4	
J27	H8911K8001	Operation base	1	
J28	GJD-2	pneumatic assy	1	