

***ENGLISH***

**MF-7900-E11  
INSTRUCTION MANUAL**

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## 1. SPECIFICATIONS

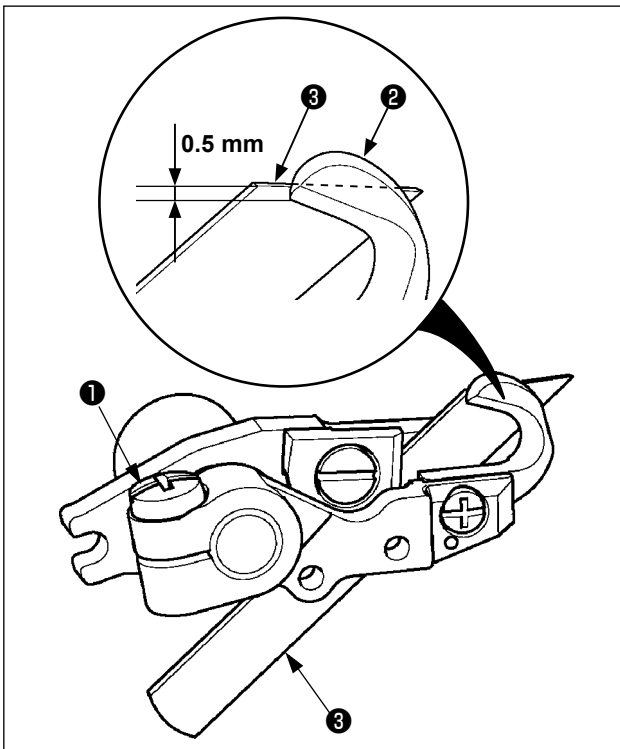
Model		MF-7900-E11
Class name		Right-hand fabric undertrimmer for pre-closed elastic attaching with tension roller
Application		Pre-closed waist elastic attaching of men's brief, trunks, etc. (Waist elastic width up to 40 mm)
Sewing speed		Max. 5,000 sti/min (provided with PL12 or PL13)(at the time of intermittent operation) Speed of stitch at the delivery. 4,000 sti/min(provided with PL12 or PL13) (at the time of intermittent operation)
Needle gauge	3-needle	5.6 mm, 6.4 mm
	2-needle	4.0 mm
Feed ratio		1 : 0.7 to 1 : 1 (Pitch less than 2.5 mm)
Stitch length		0.9 to 3.6 mm (Adjustable up to 4.5 mm)
Noise		- Equivalent continuous emission sound pressure level (L <sub>pA</sub> ) at the workstation: A-weighted value of 78.5 dB; (Includes K <sub>pA</sub> = 2.5 dB); according to ISO 10821- C.6.2 -ISO 11204 GR2 at 4,000 sti/min.

## 2. ADJUSTMENT PROCEDURE OF ENGAGEMENT AMOUNT OF KNIVES



### WARNING :

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



When adjusting the engagement, perform the work after confirming regarding the height of fixed knife ③ that the upper surface of the fixed knife is flush with the upper surface of the throat plate or the former is installed slightly lower than the latter.

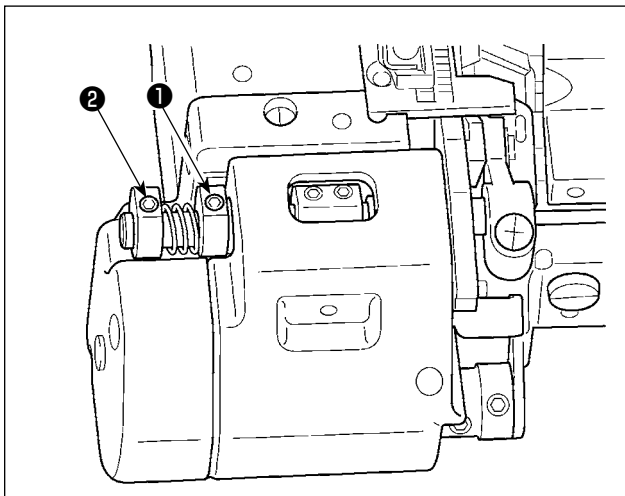
Loosen setscrew ① in the state that moving knife ② comes down to its lowest position, and adjust the engagement amount of the moving knife and fixed knife ③ to approximately 0.5 mm.

### 3. ADJUSTMENT PROCEDURE OF THE KNIFE PRESSURE



**WARNING :**

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



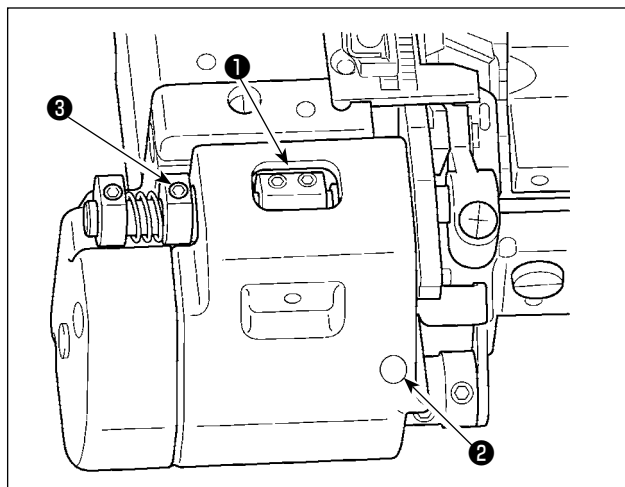
Make the engagement pressure of moving knife and fixed knife as low as possible within the range of smooth cutting of fabric. Loosen setscrew ① of striker A and setscrew ② of striker B in the written order. Shift striker B to the right and tighten setscrew ② to increase the knife pressure. Once the desired knife pressure is achieved, tighten set-screw ① .

### 4. ADJUSTMENT PROCEDURE OF KNIFE CUTTING POSITION



**WARNING :**

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



Adjust the distance between the right needle and the cutting position as described below.

- 1) Loosen setscrews ① , ② , and ③ , and move moving knife and fixed knife to the right and left to adjust the distance.(The knife will not move unless setscrews ① and ② are loosened.)
- 2) After the adjustment, tighten setscrew ② and setscrew ① in the written order.

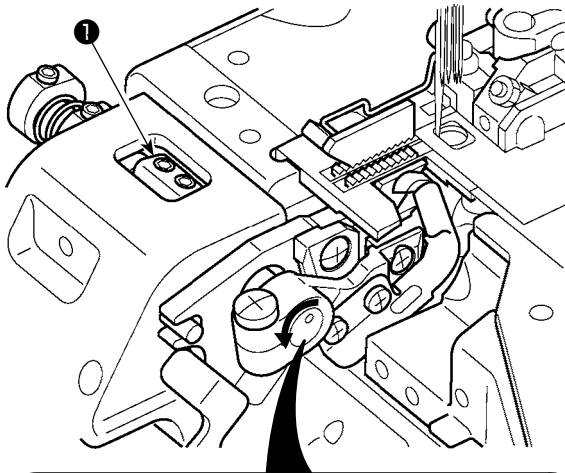
After the adjustment, the knife pressure changes. Adjust the knife pressure appropriately referring to "[3. ADJUSTMENT PROCEDURE OF THE KNIFE PRESSURE](#)"p.2.

## 5. ADJUSTING THE ENGAGEMENT ANGLE OF THE KNIFE



### WARNING :

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.

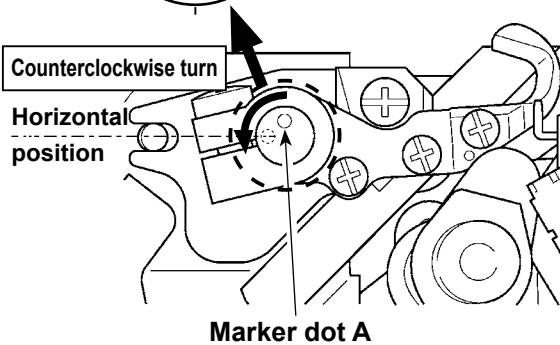
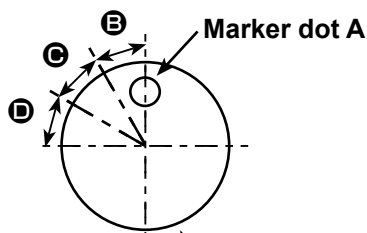


Ⓑ: Standard adjustment angle

Ⓒ: Angle adjusted for hard-to-sew materials

Ⓓ: Angle adjusted when the knife has worn

\* If the knife engagement angle is adjusted to Ⓓ from the start, the knife can wear earlier than the case where the angle is adjusted the standard one.



- 1) Loosen setscrew ❶ of the adjusting lever. Adjust the sharpness of the knife by turning the adjusting lever counterclockwise according to the sharpness of the knife.
- 2) After the adjustment of the knife sharpness, tighten set-screw ❶ of the adjusting lever.
- 3) After the adjustment of the engagement, carry out "**3. ADJUSTING THE UPPER KNIFE PRESSURE**" p.2 and "**2. ADJUSTMENT PROCEDURE OF ENGAGEMENT AMOUNT OF KNIVES**" p.1.
- 4) In the delivered state of the sewing machine, the position of marker dot A orients to the 12 o'clock direction, as observed from the pulley side, when the knife is in its lower dead point. Adjust to decrease the angle of mesh bit by bit such as from 12 o'clock to 11 o'clock, then to 10 o'clock.



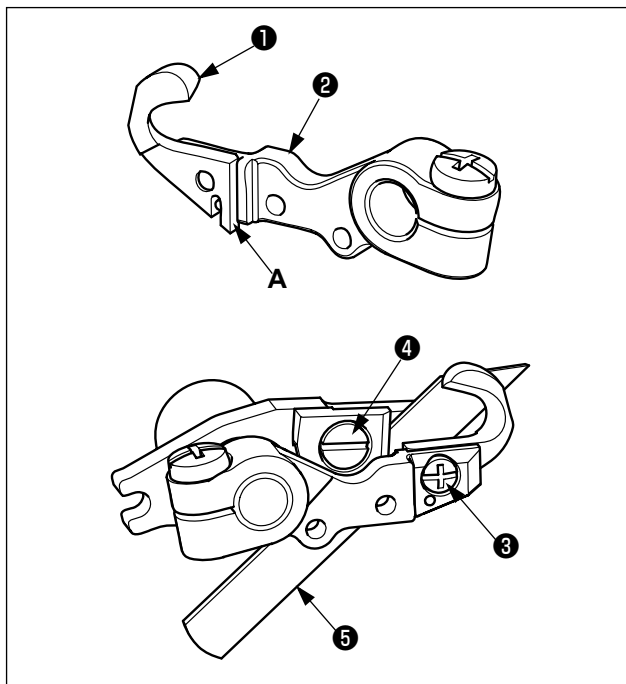
1. The extent of the adjustment of the angle of mesh is until marker dot A is turned counterclockwise to reach the horizontal position. If the lever is turned beyond the above, the angle between the upper knife and the lower knife will increase.
2. If the depth of engagement is excessively increased, the knife can wear.
3. Adjust the knife so that it cuts well and the depth of engagement is not excessive

## 6. REPLACEMENT PROCEDURE OF MOVING KNIFE AND FIXED KNIFE



### WARNING :

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



Remove setscrew ③ and remove the old moving knife. Press arrow mark plane A of new moving knife ① to the machined plane of knife holder ②, and tighten it with setscrew ③.

When replacing fixed knife ⑤, loosen setscrew ④, and remove the fixed knife in the lower direction. Insert the new fixed knife from the lower direction and fix it. At this time, fix the fixed knife with setscrew ④ after confirming regarding the height of fixed knife that the upper surface is flush with the throat plate or slightly lower than the throat plate.

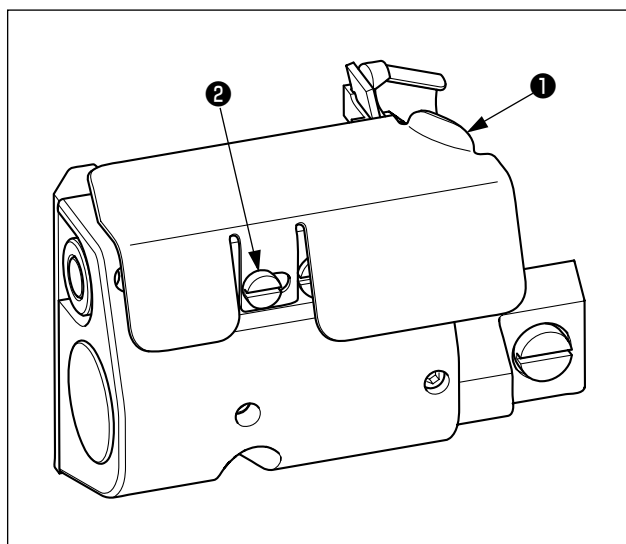
When knife holder ② is removed, perform the adjustment of engagement again.

## 7. ADJUSTMENT PROCEDURE OF CLOTH GUIDE



### WARNING :

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



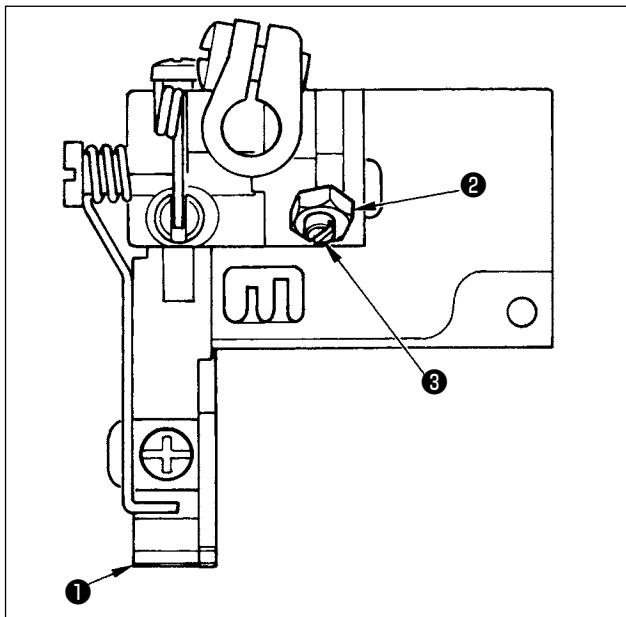
Adjust the position of cloth guide ① in accordance with the kinds and thickness of the fabric so that the hook knife can cut the material end at a fixed width. Loosen setscrew ②, and move the cloth guide to the right and left to adjust the position.

## 8. ADJUSTMENT PROCEDURE OF FRONT-UP AMOUNT OF THE PRESSER FOOT



### WARNING :

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



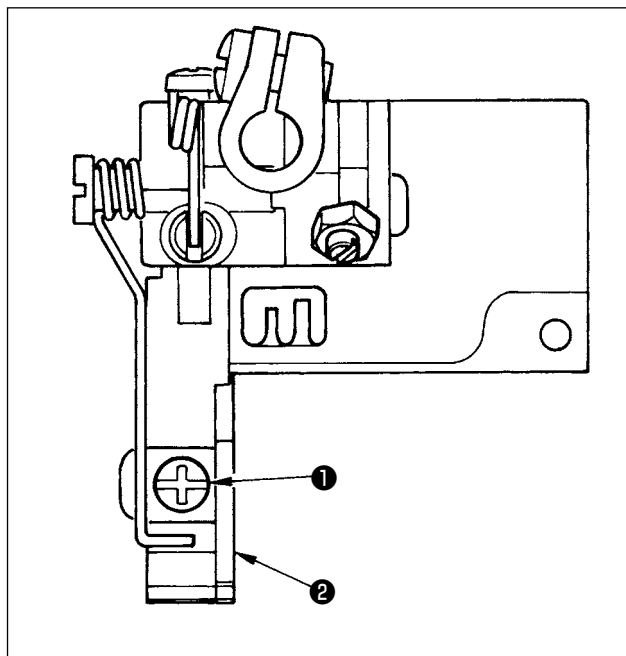
When sewing a thick rubber sheet or the like together, fabric can be smoothly fed by raising the front of presser foot ①. Loosen nut ②, turn setscrew ③ to the right (clockwise), and raise the front of presser foot for adjustment.

## 9. ADJUSTMENT PROCEDURE OF THE POSITION OF THE TAPE GUIDE



### WARNING :

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



Loosen setscrew ①, and move tape guide base ② to the right and left to adjust the position of the tape.

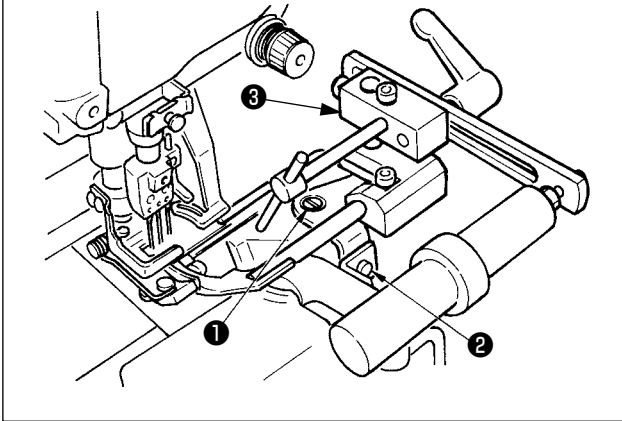
## 10. INSTALLING THE ACCESSORIES (TAPE GUIDE BASE, TENSION ROLLER AND SUCTION PIPE) SUPPLIED WITH THE MACHINE



### WARNING :

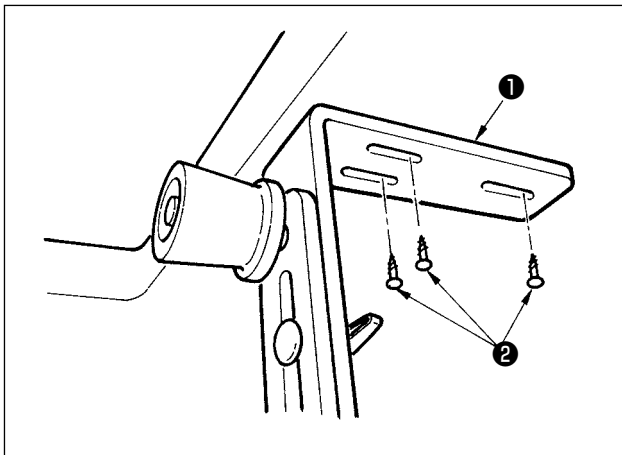
To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.

### (1) Installing the guide roller



- 1) Adjust presser guide asm. **3** to the installing hole, and fix it with screws **1** and **2**.

### (2) Installing the bottom roller of the tension roller

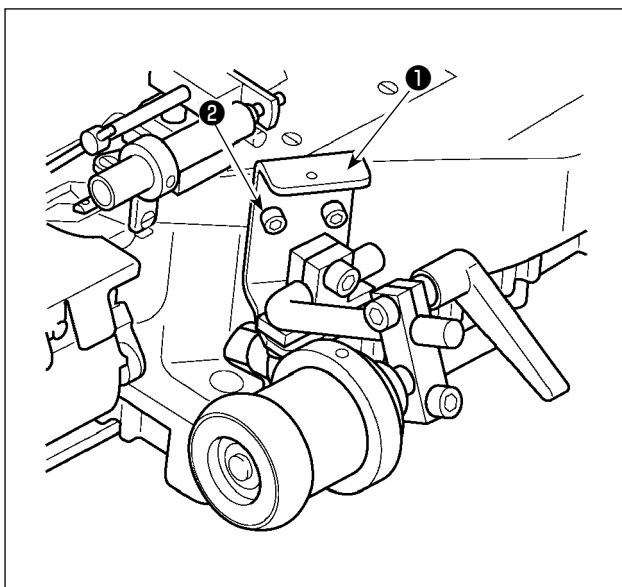


- 1) Install bottom roller plate **1** with three wood screws **2**.



For the installing position of the bottom roller plate, refer to the drawing of the table.

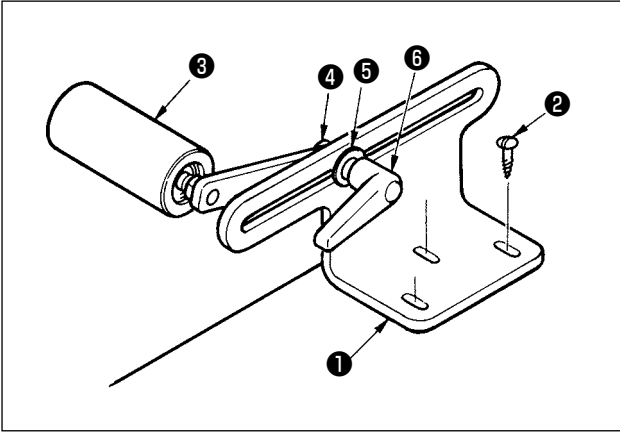
### (3) Installing the front roller



- Fix front roller general asm. **1** with setscrew **2**.



(4) Installing the rear roller



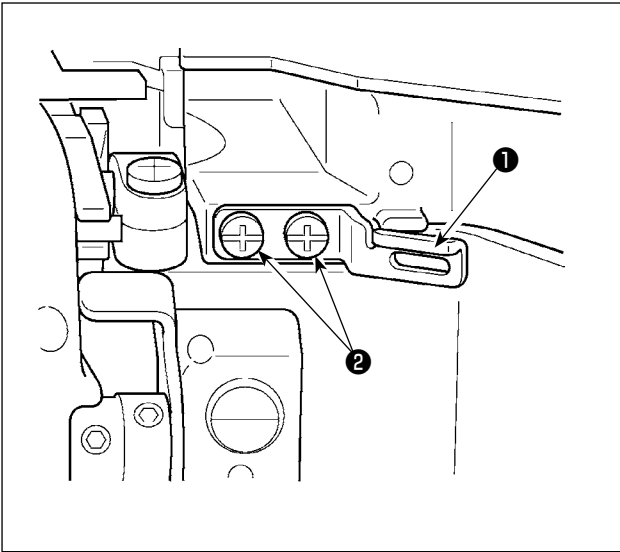
1) Fix rear roller plate base **1** with three wood screws **2**.



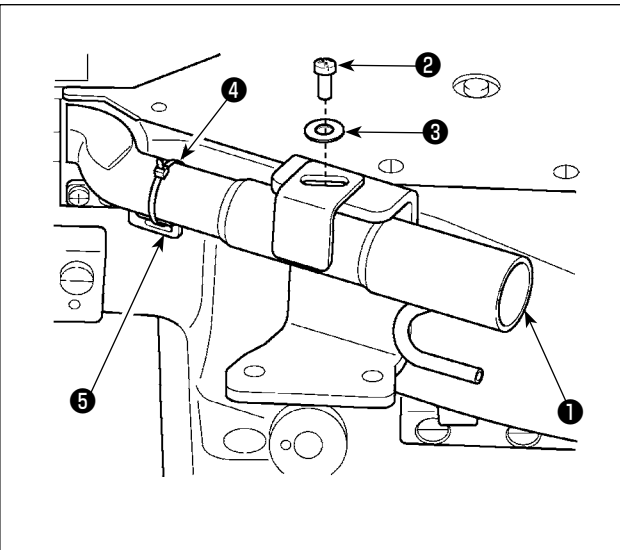
For the installing position of the rear roller plate base, refer to the drawing of the table.

2) Install rear roller asm. **3** to rear roller plate base **1** with screw **4** (M8), washer **5** and clamp lever **6**.

(5) Installing the suction pipe



1) Fix suction pipe retaining plate **1** with setscrews **2**.



2) Install suction pipe **1** with screw **2** and washer **3**. Secure suction pipe retaining plate **5** and suction pipe **1** with cable clip **4**.

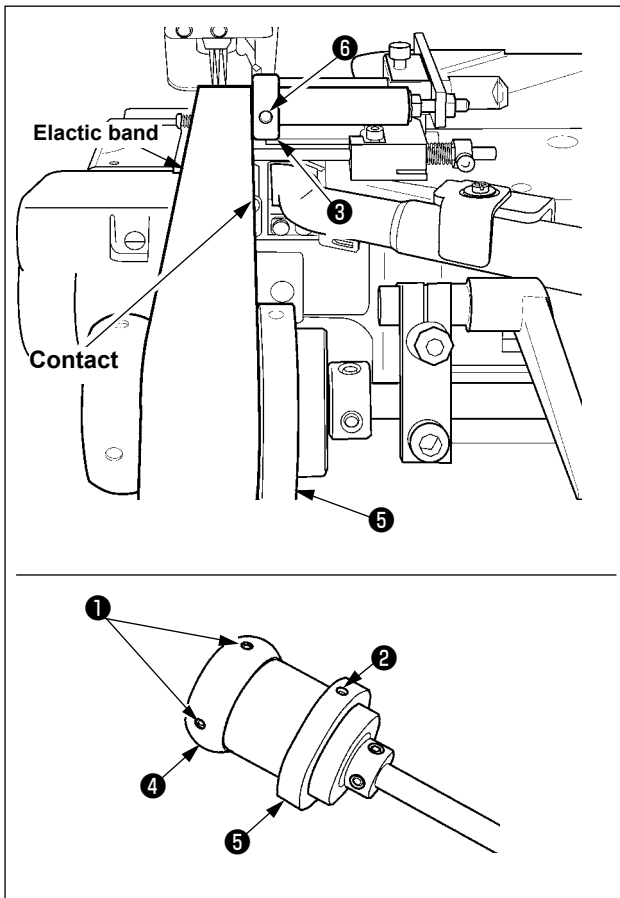
## 11. ADJUSTING PROCEDURE OF THE POSITION OF THE TENSION ROLLER



### WARNING :

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.

### (1) Adjusting the lateral position



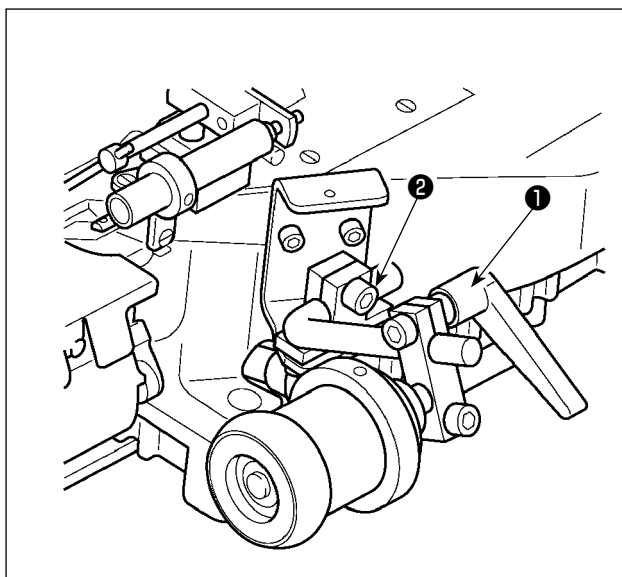
Adjust so that the right-hand end of the elastic band meets the left-hand side of collar ⑤ of the front roller and collar ③ of the intermediate roller when putting straight the elastic band on the front roller. Adjust in accordance with the procedure below.

- 1) Loosen two screws ①, adjust elastic band guide ④ to the elastic band width, and tighten two screws ①.
- 2) Loosen screw ②, adjust collar ⑤ to the position of the right-hand end of elastic band, and tighten screw ②.
- 3) Loosen screw ⑥ in collar ③ of the intermediate roller, and move collar ③ to the right or left in accordance with the elastic band width. At this time, make sure that the elastic band is put straight. Then tighten screw ⑥.



**Do not excessively tighten screws ① and ⑥. Deformation of collars will be caused.**

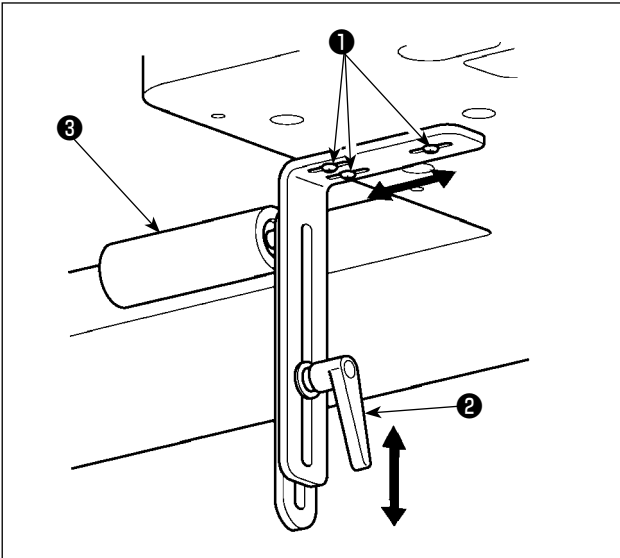
### (2) Adjusting the vertical position and longitudinal position of the tension roller



Loosen clamp lever ① and screw ②. Adjust the height and longitudinal position of the front roller.

After the adjustment, tighten clamp lever ① and screw ②.

(3) Adjusting the longitudinal position



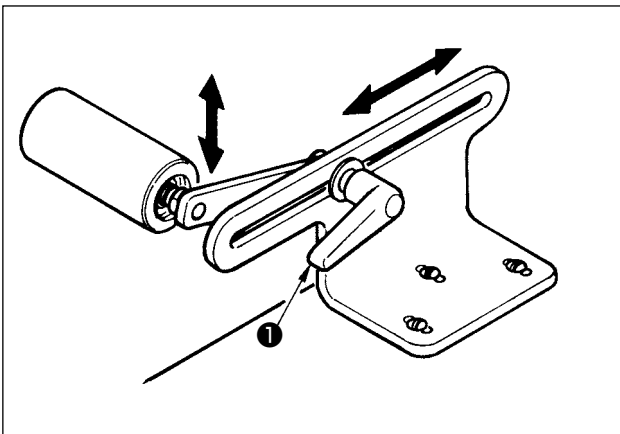
1) Adjusting the lateral position

Loosen three screws ❶, adjust the bottom roller so that the elastic band is put straight, and tighten three screws ❶.

2) Adjusting the vertical position

Loosen clamp lever ❷, adjust the position so that the elastic band is appropriately in accordance with the length of it, and tighten clamp lever ❷.

(4) Adjusting the position of the bottom roller



Adjusting the longitudinal and vertical positions

Loosen clamp lever ❶, adjust the position so that the elastic band is appropriately tense in accordance with the length of it, and tighten clamp lever ❶.

## 12. ADJUSTING PROCEDURE OF THE POSITION OF THE TAPE GUIDE BASE



### WARNING :

To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.

### (1) Adjusting the position of the guide roller

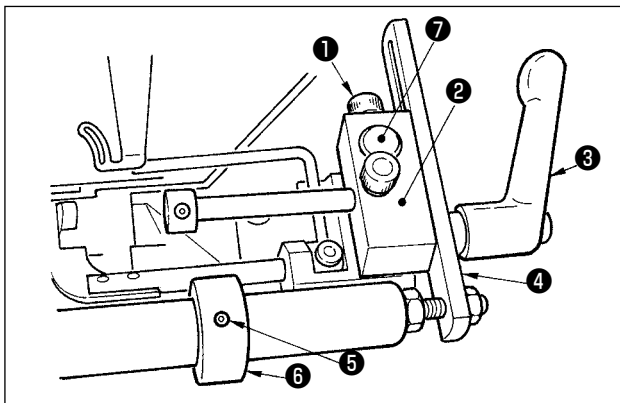


Fig.1

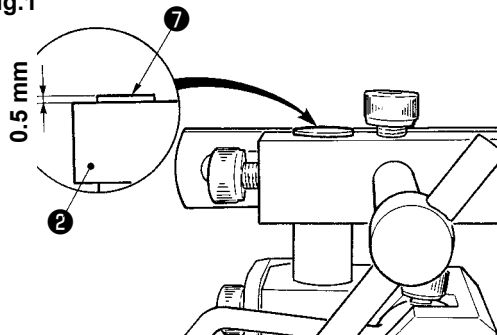
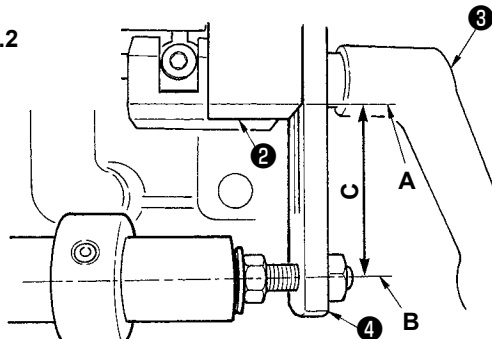
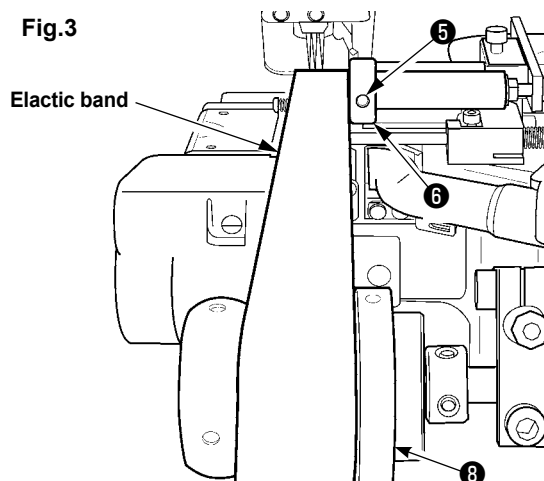


Fig.2



C : Approx. 30 mm

Fig.3



#### 1) Adjusting the vertical position

Loosen screw ①, and adjust so that the top surface of support bracket ② is lower by 0.5 mm than the top surface of bracket ⑦. Then tighten screw ①. (Fig. 1)

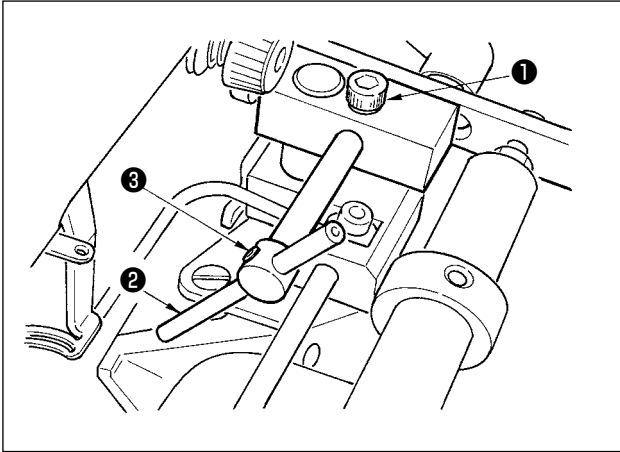
#### 2) Adjusting the longitudinal position

Loosen lever ③, and adjust bracket ④ so that distance C between front end A of support bracket ② and shaft center B of the roller is approx. 30 mm. Then clamp lever ③. (Fig. 2)

#### 3) Adjusting the lateral position

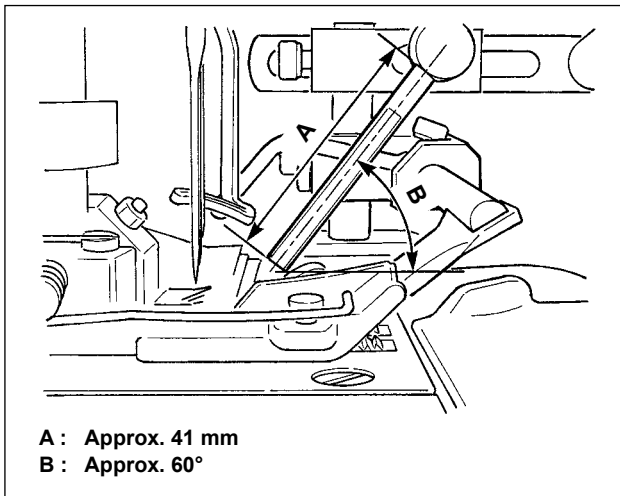
Loosen screw ⑤, adjust the left edge of collar ⑥ to the right-hand side of the elastic, and tighten screw ⑤. At this time, adjust so that left-hand edge ⑧ of front roller aligns with the elastic guide of the presser. (Fig. 3)

## (2) Adjusting the elastic guide



### 1) Adjusting the lateral position

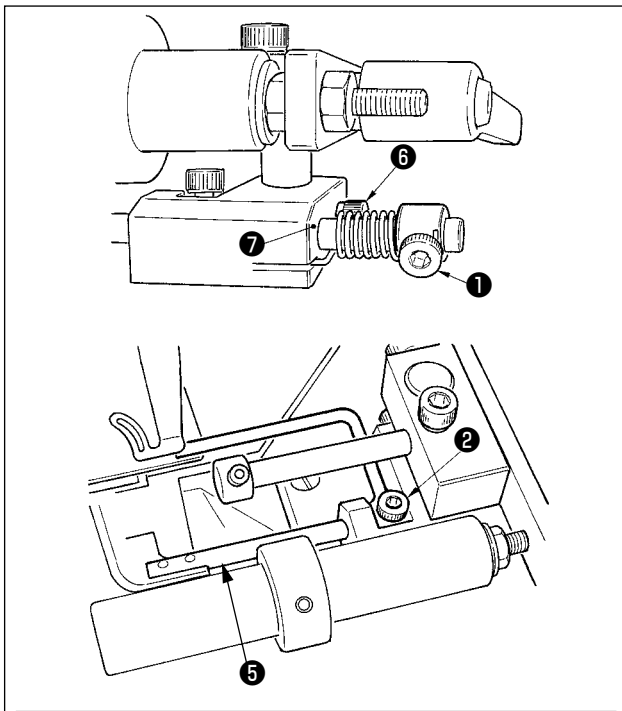
Loosen screw **1** , adjust presser guide **2** to the right-hand side of the elastic band, and tighten screw **1** .



### 2) Adjusting the angle and length

Loosen screw **3** , and adjust presser guide **2** so that the distance from the bottom of installing section is approx 41 mm and the inclination from the horizontal position is approx 60°. Then tighten screw **3** .

(3) Adjusting the elastic band presser plate



1) Adjusting the lateral position

Loosen screw ① and screw ②, and adjust presser bar ⑤ so that the clearance between cloth presser ③ and knife ④ is 0.5 mm. Then tighten screw ① and screw ②. (Fig.1)

Fig.1

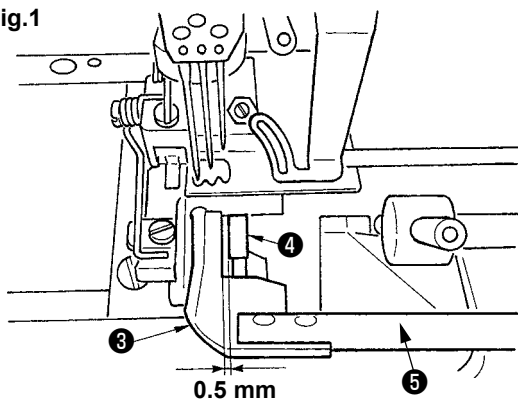
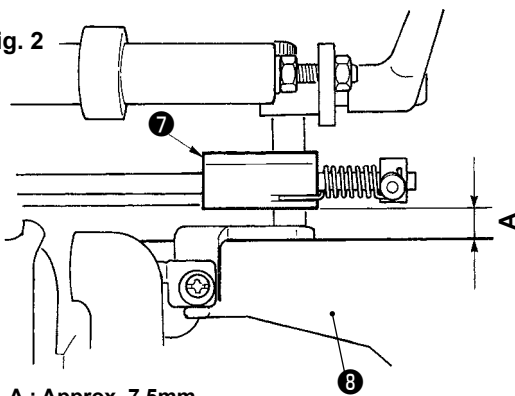


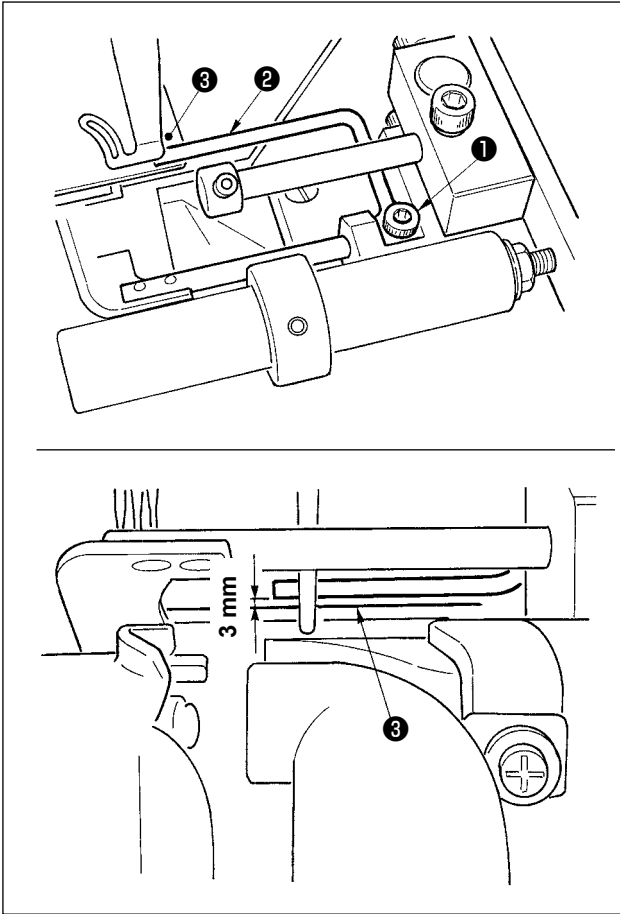
Fig. 2



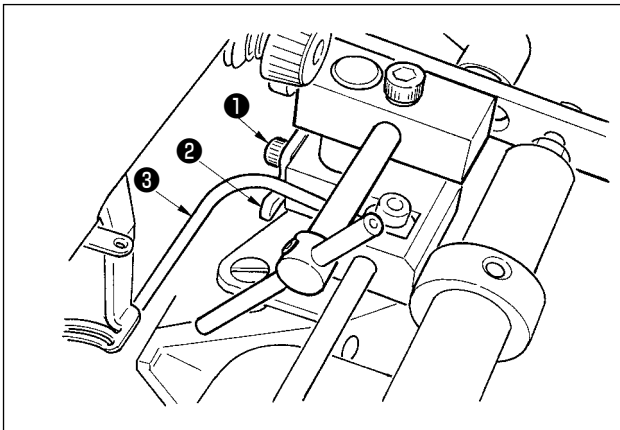
A : Approx. 7.5mm

2) Adjusting the vertical position

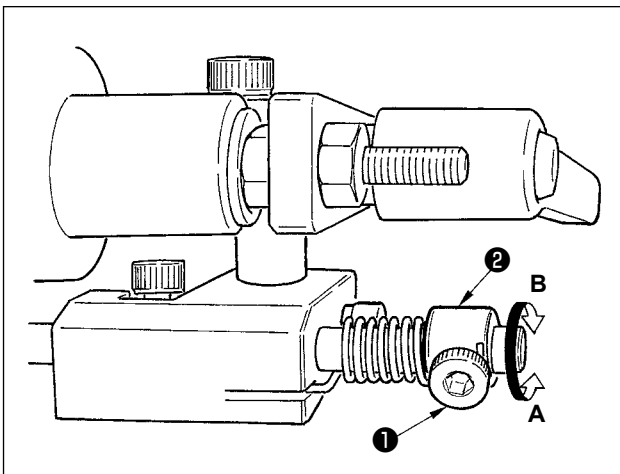
Loosen screw ⑥, and adjust bracket ⑦ to the position of approx. 7.5 mm from the top surface of the cover ⑧. Then tighten screw ⑥. (Fig.2)



- 3) Adjusting the position of lever ②  
 Loosen screw ①, and adjust so that the clearance between lever ② and the top surface of presser ③ is 3 mm. Then tighten screw ①.



- 4) Position of the stopper ②  
 Loosen screw ①, and adjust stopper ② to the position before it comes in contact with lever ③. Then tighten screw ①.



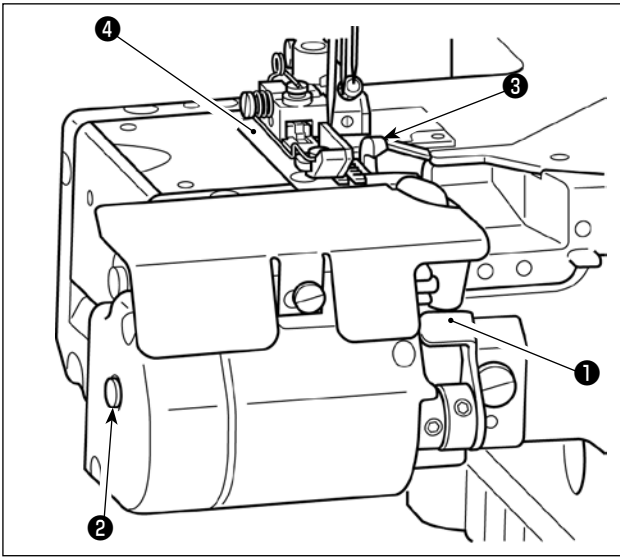
- 5) Adjusting the presser plate pressure  
 Adjust the presser pressure by loosening screw ① and turning collar ②.
- When collar ② is turned to side A, the presser pressure is increased.
  - When collar ② is turned to side B, the presser pressure is decreased.
- After the adjustment, tighten screw ① to fix the collar.

### 13. HOW TO USE THE KNIFE CANCELLING MECHANISM



**WARNING :**

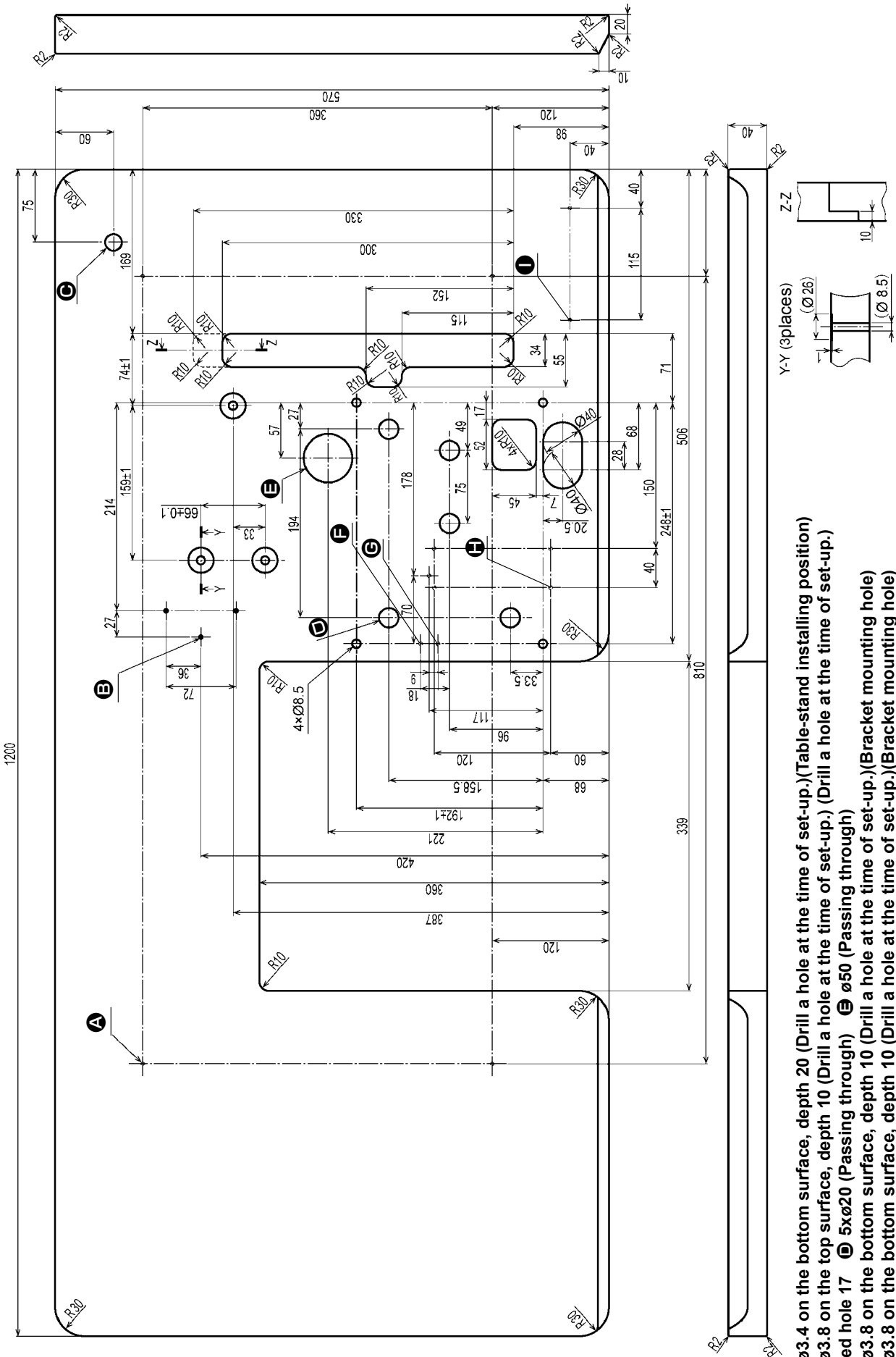
To protect against possible personal injury due to abrupt start of the machine, be sure to start the following work after turning the power off and ascertaining that the motor is at rest.



- 1) Depress lever **1** until it will go no further. Moving knife **3** moves to the position which is lower than throat plate **4** .
- 2) Keeping lever **1** held in the fully-depressed position, press button **2** to release lever **1** .
- 3) Moving knife **3** is fixed in the aforementioned position which is lower than the throat plate **4** . To use moving knife **3** again, slightly depress lever **1** . Moving knife **3** will be brought to the previous position and lever **1** and button **2** will be returned to their home position by the spring.







- A** 4 x Ø3.4 on the bottom surface, depth 20 (Drill a hole at the time of set-up.)(Table-stand installing position)
- B** 4 x Ø3.8 on the top surface, depth 10 (Drill a hole at the time of set-up.) (Drill a hole at the time of set-up.)
- C** Drilled hole 17 **D** 5xØ20 (Passing through) **E** Ø50 (Passing through)
- F** 3 x Ø3.8 on the bottom surface, depth 10 (Drill a hole at the time of set-up.)(Bracket mounting hole)
- G** 2 x Ø3.8 on the bottom surface, depth 10 (Drill a hole at the time of set-up.)(Bracket mounting hole)
- H** 2 x Ø3.8 on the bottom surface, depth 10 (Drill a hole at the time of set-up.)(Bracket mounting hole)
- I** 2 x Ø3.8 on the bottom surface, depth 10 (Drill a hole at the time of set-up.)(Pushbutton switch mounting position)