ENGLISH

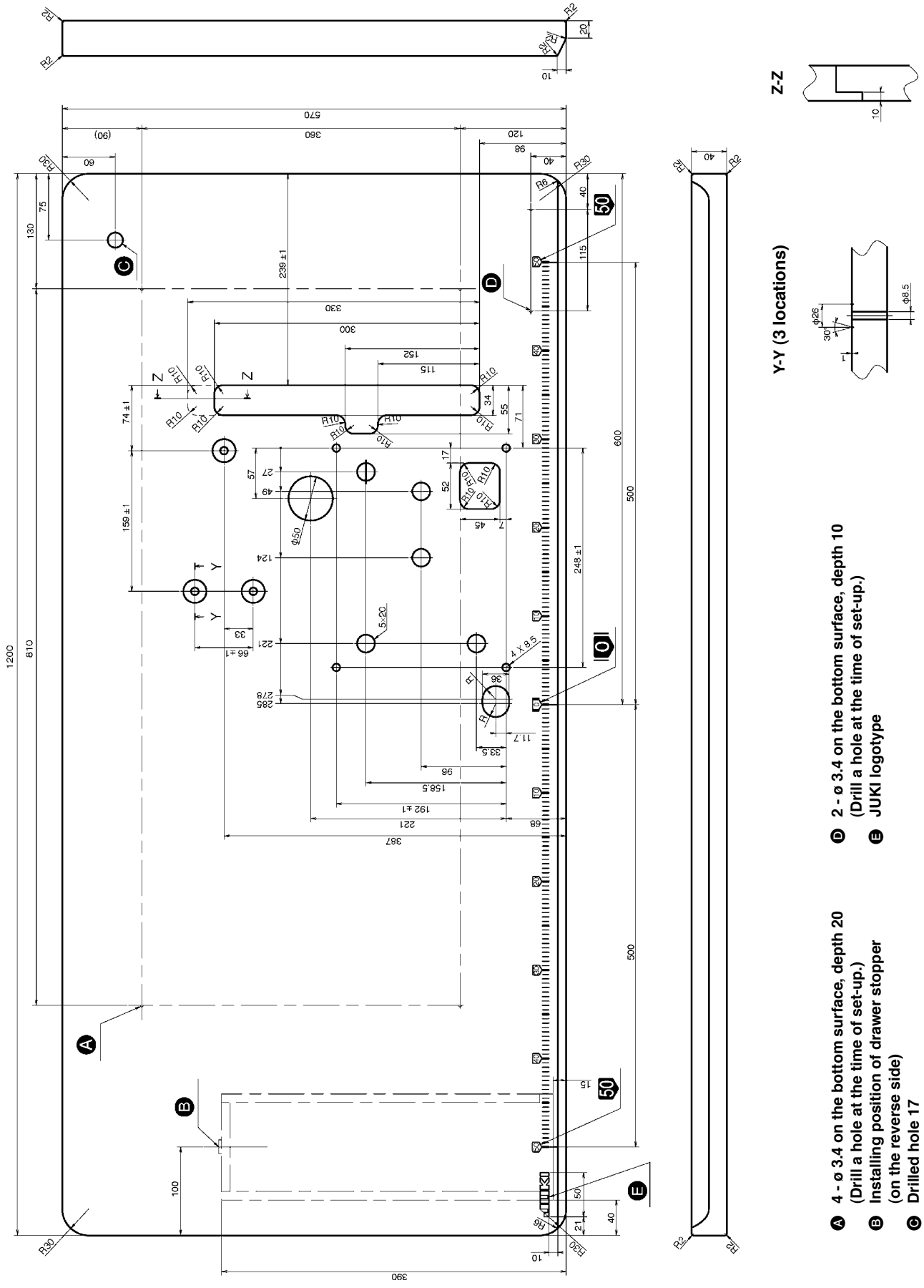
MF-7900-H22,23
INSTRUCTION MANUAL

CONTENTS

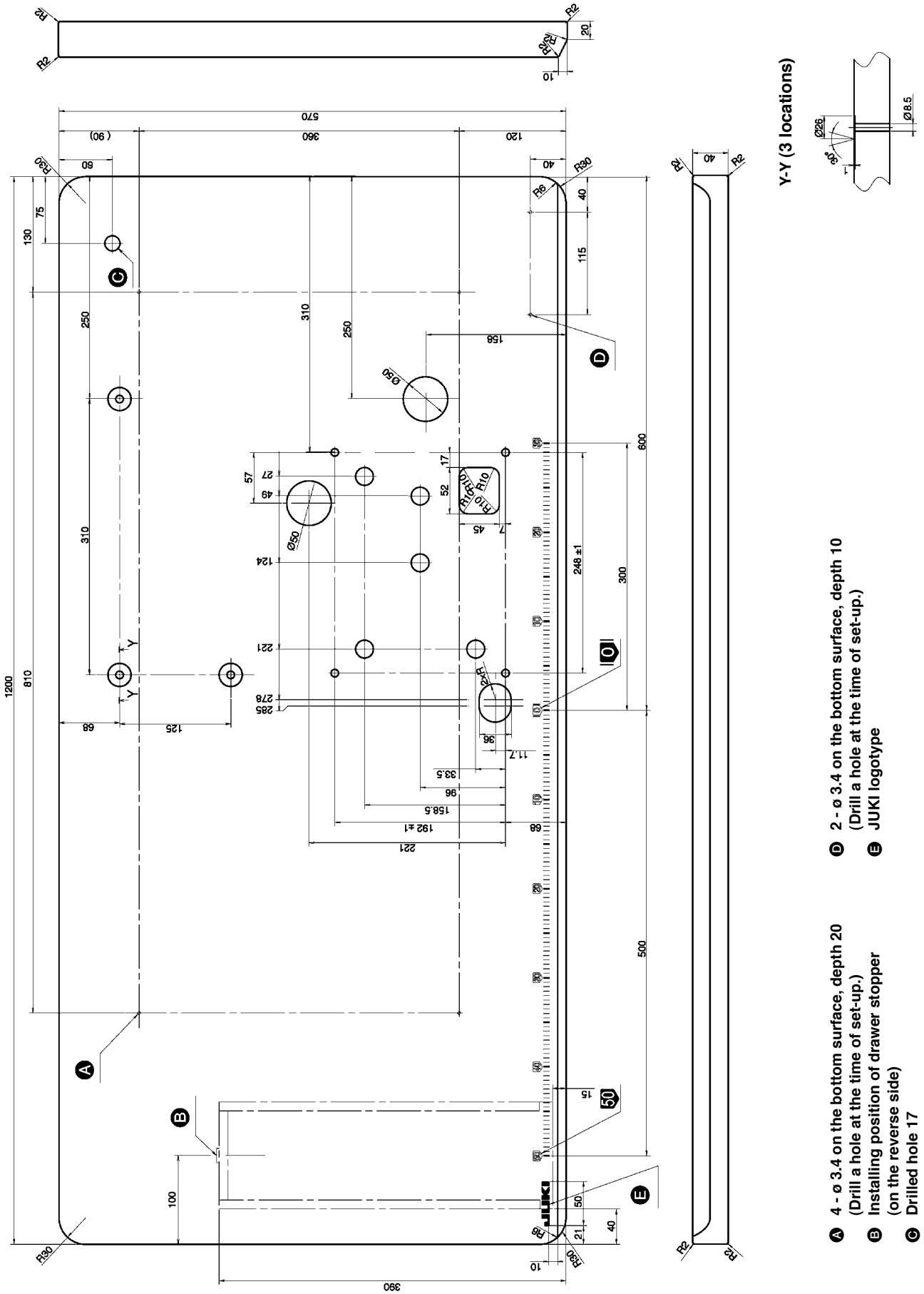
1. SPECIFICATIONS

Model		MF-7900-H22	MF-7900-H23
Class name		Covering stitch machine with left hand fabric undertrimmer (for light-weight materials)	Covering stitch machine with left hand fabric undertrimmer (for medium-weight materials)
Application		Hemming of knit and jersey products	
Sewing speed		Max. 6,000 sti/min (at the time of intermittent operation) Speed of stitch at the delivery. 4,500 sti/min (at the time of intermittent operation)	
Needle gauge	3-needle	5.6 mm, 6.4 mm	
	2-needle	4.0 mm, 4.8 mm	
Differential feed ratio		1 : 0.9 to 1 : 1.8 (stitch length : less than 2.5 mm) (1:0.6 to 1:1.1, when the differential link hinge screw is changed) Micro-differential feed adjustment mechanism is provided. (Micro-adjustment)	
Stitch length		0.9 to 3.6 mm (Adjustable up to 4.5 mm)	
Noise		- Equivalent continuous emission sound pressure level (L_{pA}) at the workstation : A-weighted value of 79.5 dB; (Includes K_{pA} = 2.5 dB); according to ISO 10821- C.6.2 -ISO 11204 GR2 at 4,500 sti/min.	

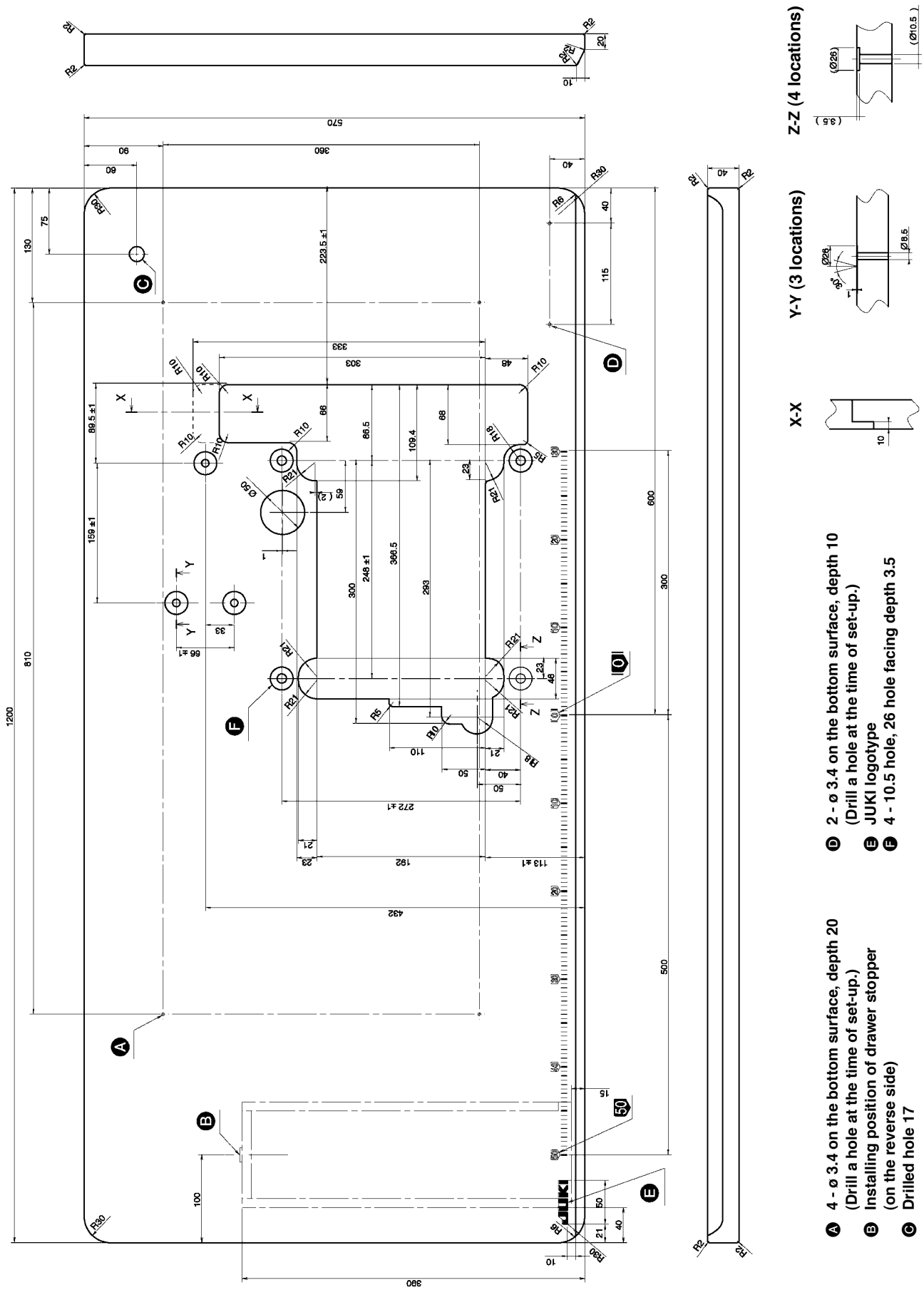
2. DRAWING OF TABLE (TABLE-FIXED TYPE / V-BELT TYPE)



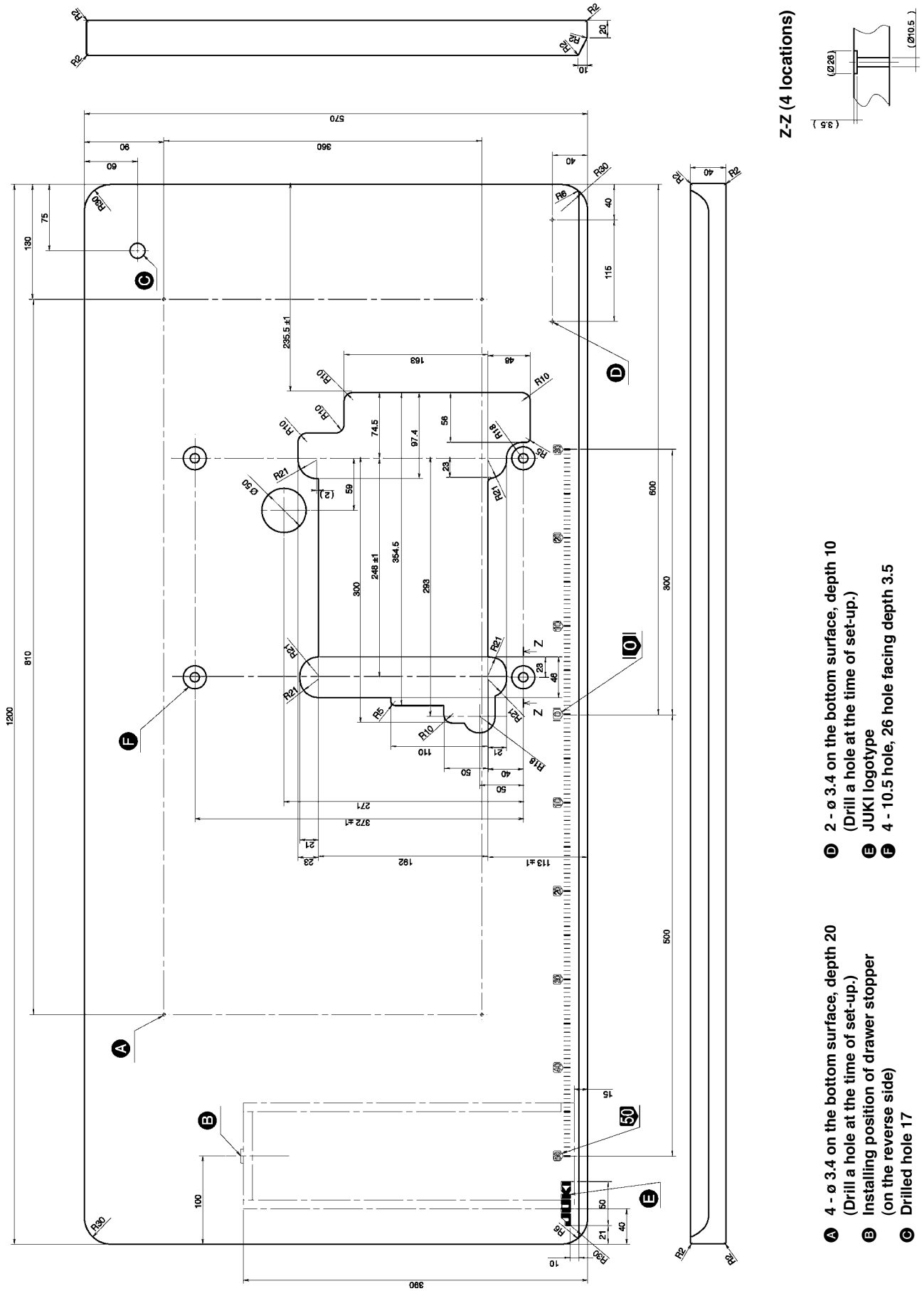
3. DRAWING OF TABLE (TABLE-FIXED TYPE / DIRECT-DRIVE TYPE)



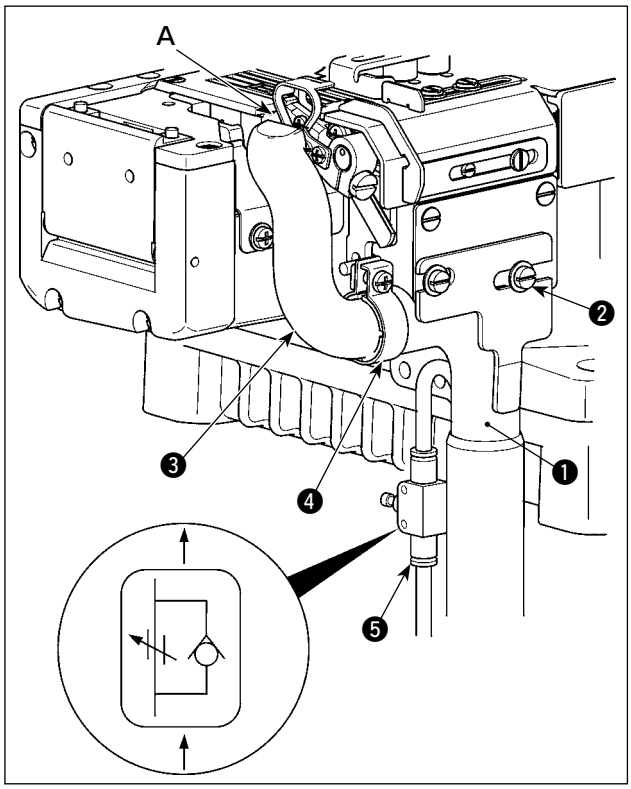
4. DRAWING OF TABLE (SEMI-SUBMERGED TYPE / V-BELT TYPE)



5. DRAWING OF TABLE (SEMI-SUBMERGED TYPE / DIRECT-DRIVE TYPE)



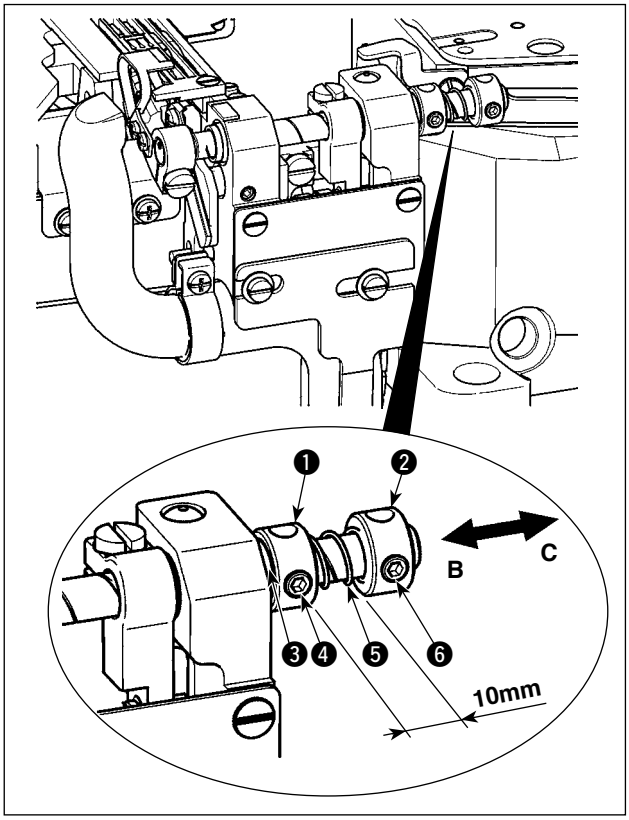
6. INSTALLING THE WASTE CLOTH PIPE



1) Fix waste cloth pipe asm. ❶ with waste cloth pipe setscrews ❷.
2) Insert waste cloth pipe ❸ into waste cloth pipe asm. ❶, and fix it with joint asm. ❹.
3) Connect the dust collection hose from the dust collection device to dust collection pipe asm. ❶. When connecting it, use speed controller (accessories) ❺.

When installing waste cloth pipe ❸, install it so as not to interfere with section A of the upper knife holder.

7. ADJUSTING THE UPPER KNIFE PRESSURE



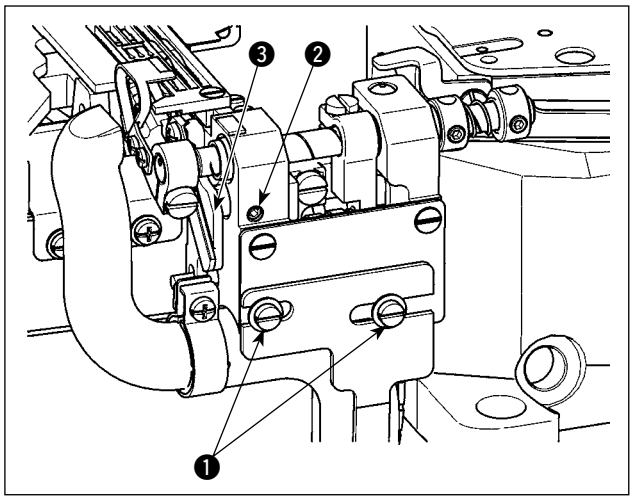
Standard adjustment position of thrust collars ❶ and ❷ is such that a clearance of 10 mm is provided between them. Place thrust collar ❶ between spring ❺ and bushing ❸. Press thrust collar ❶ against the end face of bushing ❸ and Fix thrust collar ❶, using setscrew ❹, with pressed against the end face of bushing ❸.

1) To increase the knife pressure
   Move thrust collar ❷ to the left (in direction **B**). Then, tighten setscrew ❻. Loosen setscrew ❹ of thrust collar ❶ once. Tighten setscrew ❹ to fix thrust collar ❶ with pressed against the end face of bushing ❸ by the spring pressure.
2) To decrease the knife pressure
   Move thrust collar ❷ to the right (in direction **C**). Then, tighten setscrew ❻. Loosen setscrew ❹ of thrust collar ❶ once. Tighten setscrew ❹ to fix thrust collar ❶ with pressed against the end face of bushing ❸ by the spring pressure.

* Standard assembly procedure of the thrust collar for the MF-7900-H22,23:
Assemble the thrust collar, spring and thrust collar in the written order.

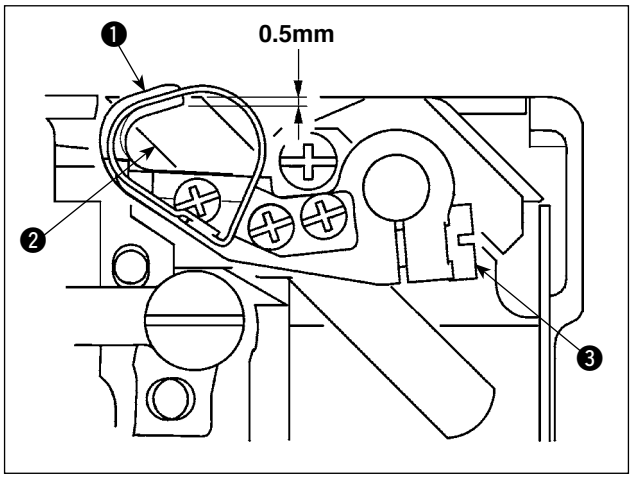
Set the knife pressure as low as possible within the range where cloth is smoothly cut for use.

8. ADJUSTING THE LATERAL POSITION OF THE LOWER KNIFE



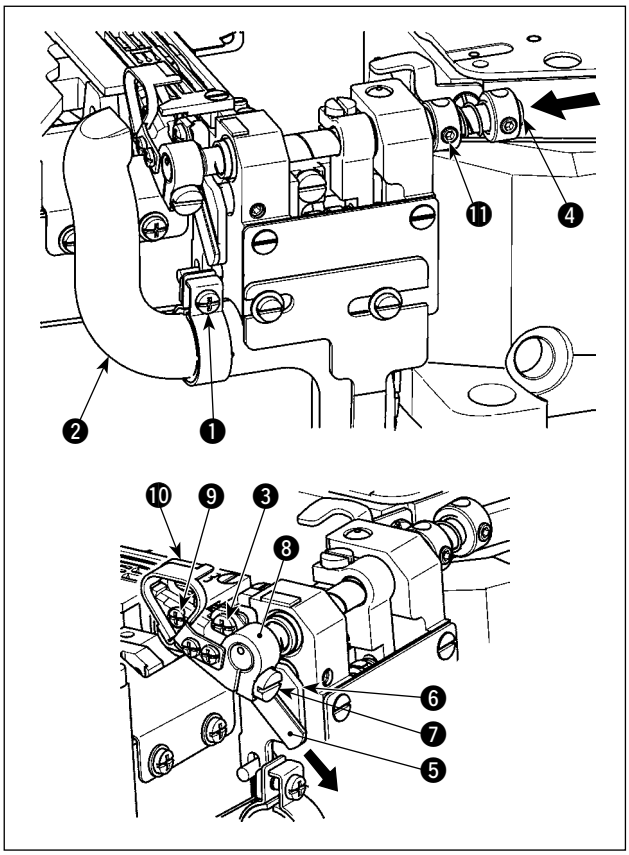
1) Loosen waste cloth pipe setscrews ❶.
2) Loosen lower knife holder setscrew ❷, and move lower knife holder ❸ in the lateral direction to adjust.
3) After the adjustment, fix it with lower knife holder setscrew ❷, and perform **"7. ADJUSTING THE UPPER KNIFE PRESSURE" p.6**.
4) Perform the adjustment of the position of waste cloth pipe with waste cloth pipe setscrews ❶.

9. ADJUSTMENT PROCEDURE OF ENGAGEMENT AMOUNT OF KNIVES



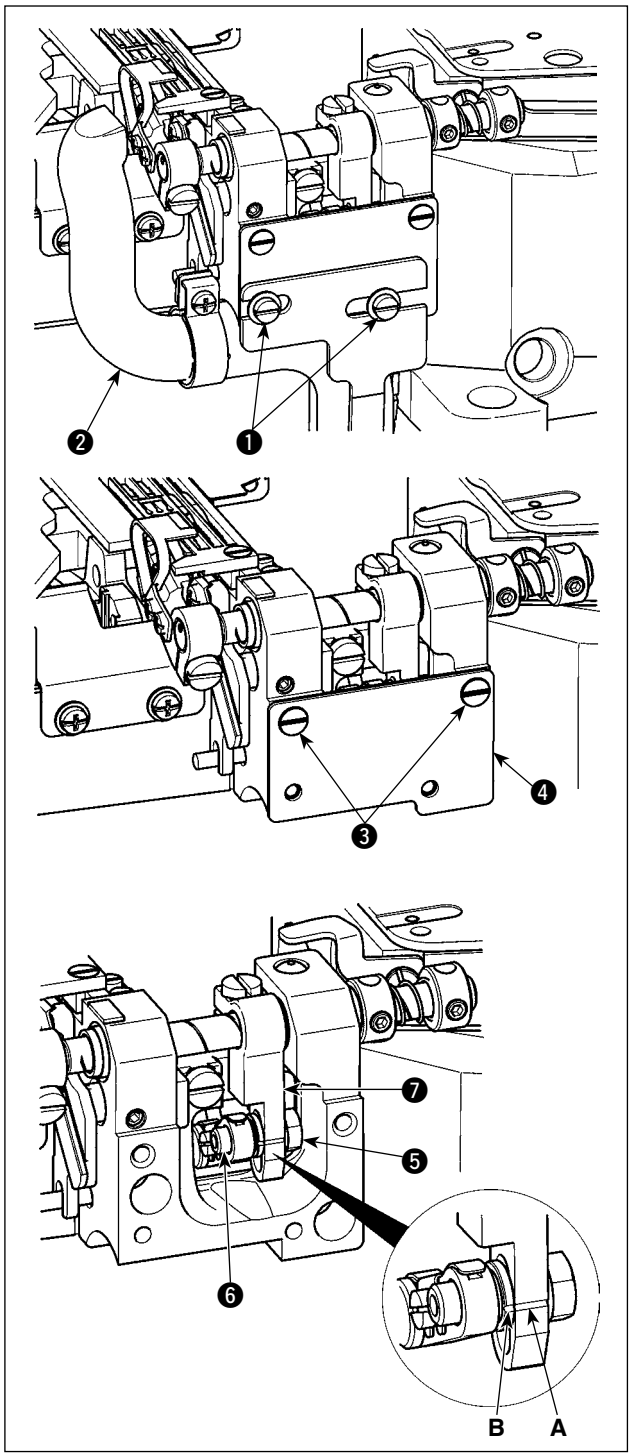
1) Loosen setscrew ❸ in the upper knife holder and adjust so that the engagement amount of the top end of the upper knife and lower knife ❷ is approximately 0.5 mm when upper knife ❶ is in its lowest position.
2) After the adjustment, perform **"7. ADJUSTING THE UPPER KNIFE PRESSURE" p.6**.

10. REPLACEMENT PROCEDURE OF UPPER KNIFE AND LOWER KNIFE



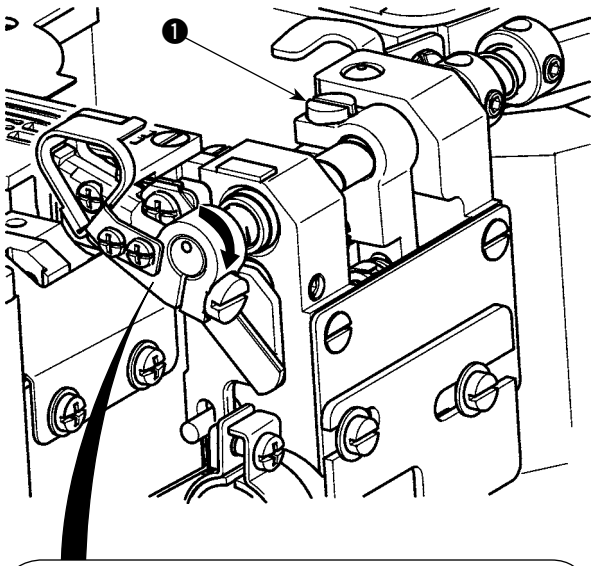
1) Loosen setscrew ❶ in the joint asm., and remove waste cloth pipe ❷.
2) Loosen setscrew ⓫ and keep in that state. Loosen lower knife keep plate setscrew ❸. Draw out lower knife ❺ in the direction of the arrow with knife shaft ❹ pressed in the direction of the arrow.
3) Insert a new lower knife in the groove of lower knife holder ❻, and tighten setscrew ❸ in the lower knife presser plate in the state that the blade point is aligned with the top surface of the throat plate.
4) When replacing the upper knife, loosen setscrew ❼ in the upper knife holder, remove upper knife holder ❽, loosen setscrew ❾ in the upper knife, and remove upper knife ❿.
5) Fix new upper knife ❿ with setscrew ❾ in the upper knife.
6) After replacing the upper knife, align the left end face of upper knife holder ❽ and the left end face of knife shaft ❹, and tighten setscrew ❼ in the upper knife holder.
7) After replacing the upper knife, perform **"7. ADJUSTING THE UPPER KNIFE PRESSURE" p.6** and **"9. ADJUSTMENT PROCEDURE OF ENGAGEMENT AMOUNT OF KNIVES" p.7**.

11. ADJUSTING THE UPPER KNIFE STROKE

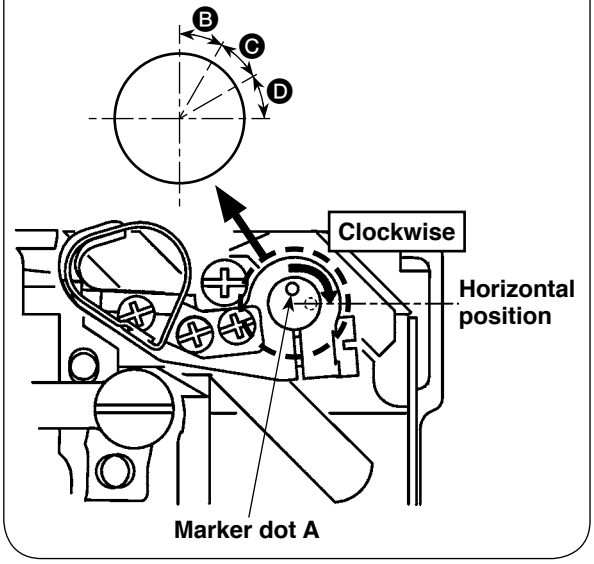


1) Loosen setscrews ❶ in the waste cloth pipe and remove waste cloth pipe ❷.
2) Remove setscrews ❸ in the installing base cover, and remove installing base cover ❹.
3) Loosen lock nut ❺ of the adjustment pin and move adjustment pin ❻ up or down to adjust the stroke of the upper knife.
4) The standard adjustment position is the position where the engraved marker line **A** of adjustment lever ❼ aligns with the engraved marker line **B** of adjustment pin ❻. Loosen nut ❺ and raise adjustment pin ❻ to increase the stroke of the upper knife, and lower it to decrease the stroke. After the adjustment, perform **"9. ADJUSTMENT PROCEDURE OF ENGAGEMENT AMOUNT OF KNIVES" p.7**.

12. ADJUSTING THE ENGAGEMENT ANGLE OF THE KNIFE



Ⓑ : 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 adjusting lever setscrew ❶. Turn the adjusting lever clockwise depending on the knife sharpness to adjust it.
2) After the adjustment of the knife sharpness, tighten adjusting lever setscrew ❶.
3) After the adjustment of the engagement, carry out **"7. ADJUSTING THE UPPER KNIFE PRESSURE" p.6** and **"9. ADJUSTMENT PROCEDURE OF ENGAGEMENT AMOUNT OF KNIVES" p.7**.
4) At the time of shipment, the knife has been factory-adjusted so that the knife is positioned at its upper dead point and marker dot **A** points to 12 o'clock direction as observed from the frame side.
Adjust in such a way to increase the angle gradually from 12 o'clock direction to 1 o'clock direction, then to 2 o'clock direction.

1. **The engagement angle can be adjusted until marker dot A is brought to the horizontal position by turning the adjusting lever clockwise.**
If the adjusting lever is turned further, the angle between the upper and lower knives will be increased.
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.**