

Yamato[®]

Instruction Manual

HIGH SPEED FLAT BED INTERLOCK STITCH MACHINE
WITH RIGHT HAND FABRIC TRIMMER AND METERING DEVICE

CF2339M-1

This instruction manual shows adjustments different from those of CF2300M.

Read this manual and that of CF2300M.

SAVE ALL the INSTRUCTION MANUALS. READ and UNDERSTAND them THOROUGHLY for SAFE USE.



YAMATO SEWING MACHINE MFG. CO., LTD.

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Attention

- ◇ This instruction manual is designed mainly for technicians, but it is advisable that also operators read the instructions with  mark to use the machine properly.
- ◇ The numbers in lower left corners of figures are figure numbers. We use them in texts as needed for your reference.

Attention

The description in this instruction manual is subject to change for improvements of the commodity without notice.

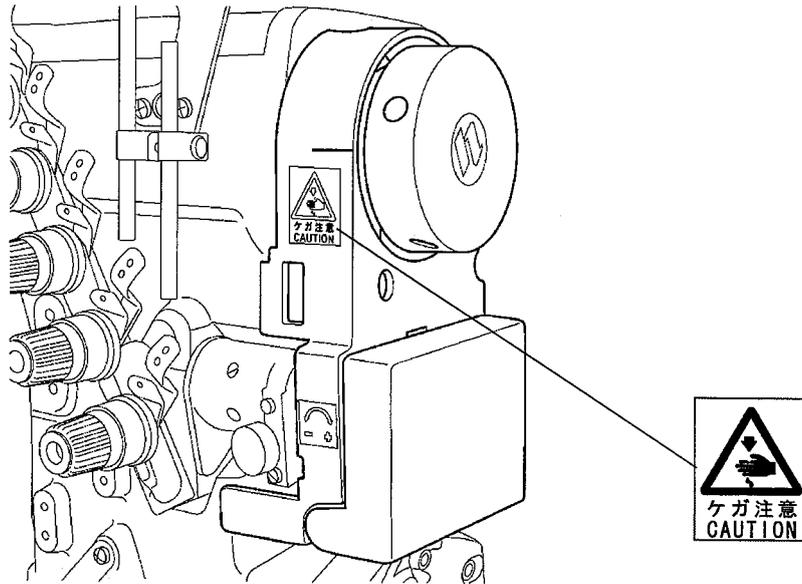


Safety instructions



Warning label on sewing machine

metering device



1. Sewing speed

Maximum sewing speed is 5000 rpm and standard speed is 4500 rpm.

Run a new machine at 4300 rpm during the first 200 hours (for about one month) so that the machine can offer a long service life in good condition.

2. Installation

2.1 Supporting board (Semi-submerged type)

Install a machine correctly referring to Figs. 1, 2, and 3.

Set the screws in the supporting board and cover the screws with the rubber cushions. Fix the the supporting board to the machine table and install a machine securely on the rubber cushions.

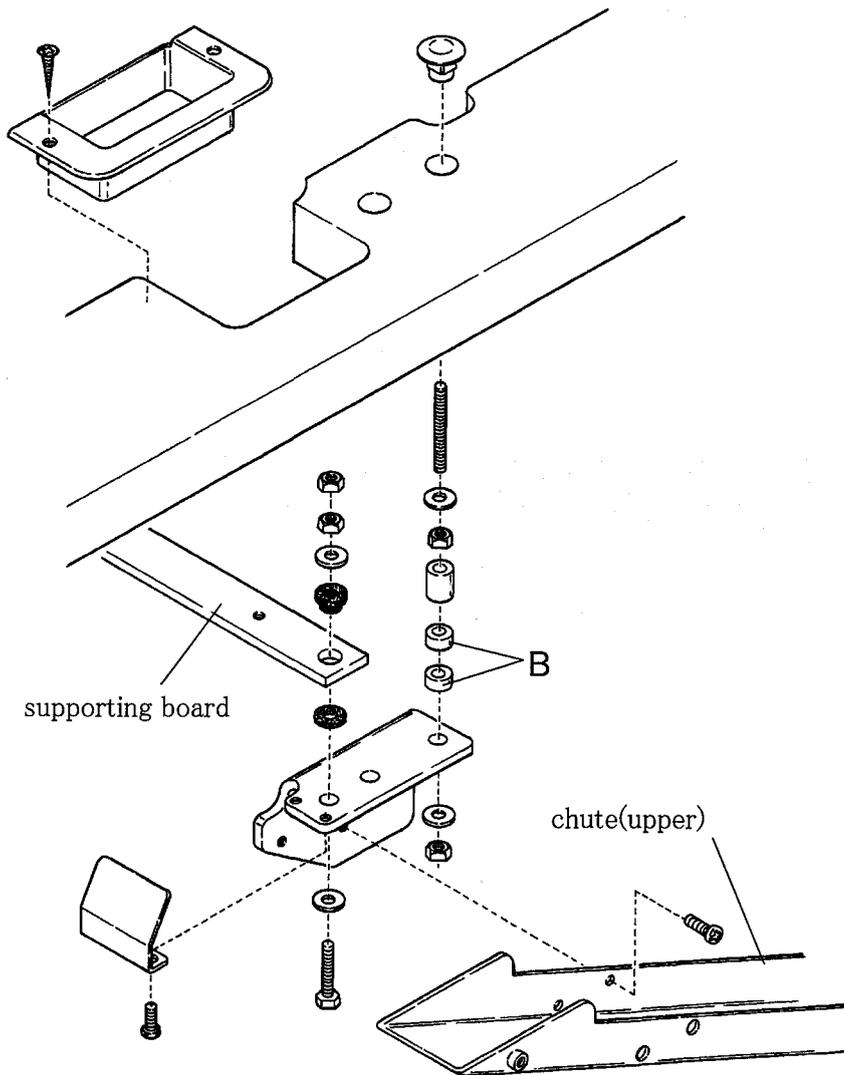


Fig. 1

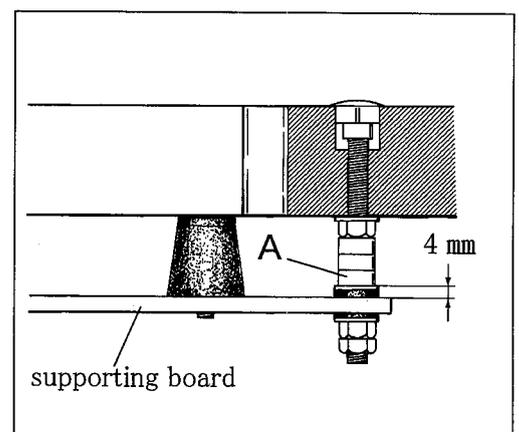


Fig. 2

Thickness of table	Pcs. of A	Pcs. of B
40 mm	3 pcs. × 3 = 9	2 pcs. × 2 = 4
45 mm	2 pcs. × 3 = 6	1 pc. × 2 = 2
50 mm	1 pc. × 3 = 3	0

Table 1

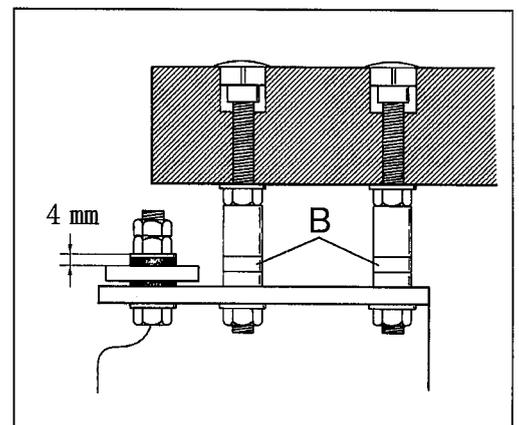


Fig. 3

3. Proper operation

3.1 Threading



WARNING

Before operating, ALWAYS turn the motor switch OFF and check that the motor has already stopped.

Set the needle thread retainer disc to the needle clamp on this machine.

Thread through the needles as shown in Fig. 5.

When not threaded, thread correctly as shown in Fig. 7.

When threaded, rethread after knotting preset threads.

A: Needle thread

Pull out the thread until it is in front of the needle. Then cut off the knot before needle eye to rethread.

Thread correctly for the left needle in the inmost position as shown in Fig.7.

B: Top cover thread

Pull the thread until the knot is out.

C: Looper thread

Pull the thread until the knot is out. Then cut off the knot.

Tighten needle thread, when light material is sewing. The following thread as shown in a right Fig.6.

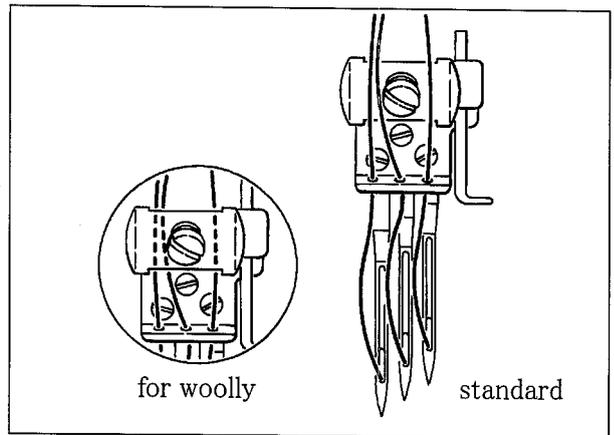


Fig. 5

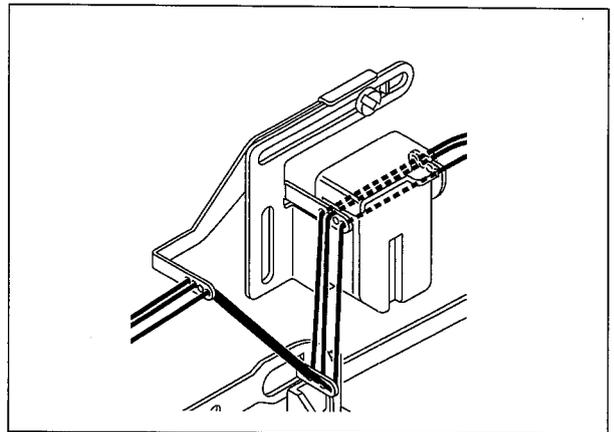


Fig. 6

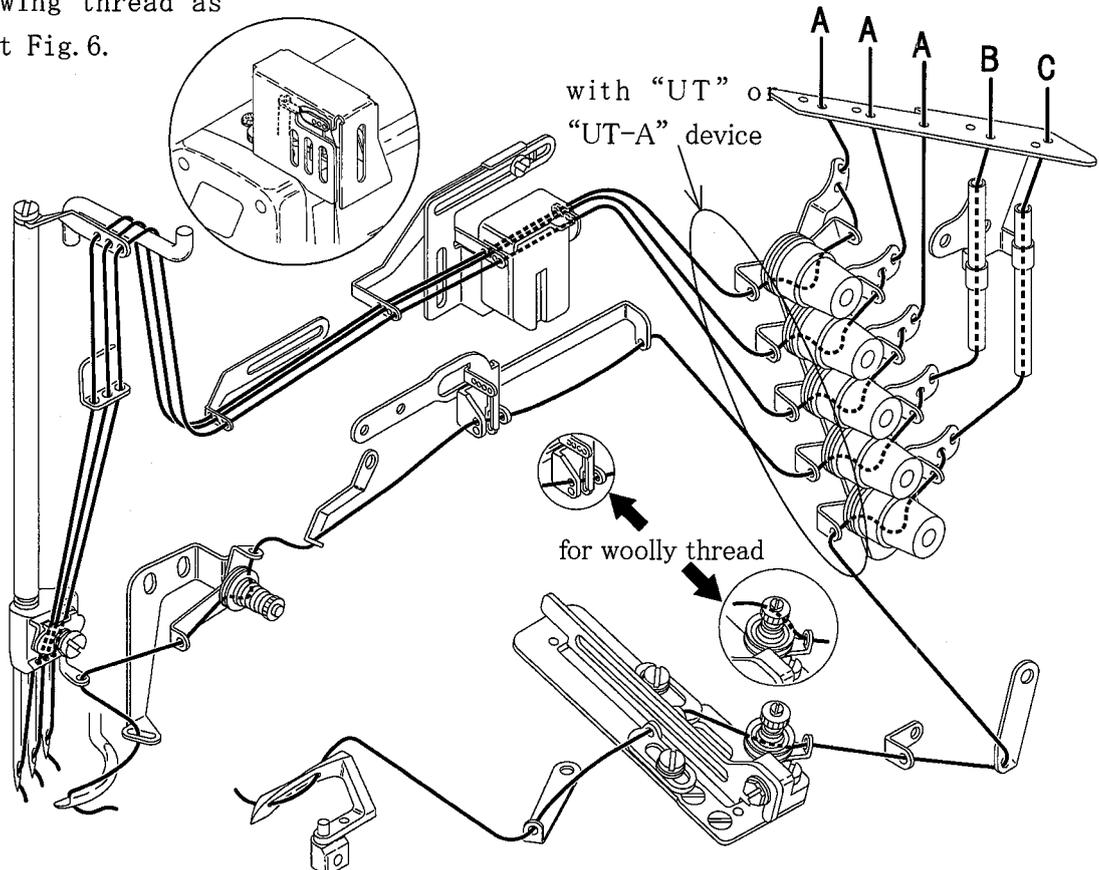


Fig. 7

3.2 Setting elastic tape

Set a tape correctly referring to Fig. 10.

Pressing the roller lever ① will make a clearance between the rollers .

Pull a tape through the bottom of the presser foot ② .

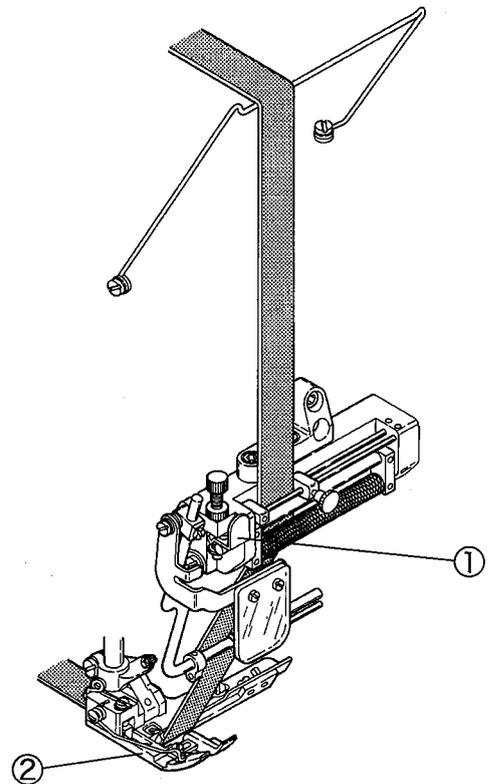


Fig. 8

3. Proper operation

3.3 Feeding amount of elastic tape

Loosen the nut ① and adjust feeding amount while checking the pointer ② and the graduations of the clutch lever ③ as below.

- To increase feeding amount, turn the adjusting screw ④ clockwise and move the pointer ② in the direction "L".
- To decrease feeding amount, turn the adjusting screw ④ counterclockwise and move the pointer ② in the direction "S".

Note: After tightening the nut ①, turn the adjusting screw ④ clockwise to tighten it securely without play.

If required feeding amount cannot be obtained, loosen the screw ⑤ and adjust it as below.

- To decrease feeding amount, turn the adjusting screw ⑥ clockwise.
- To increase feeding amount, turn the adjusting screw ⑥ counterclockwise.

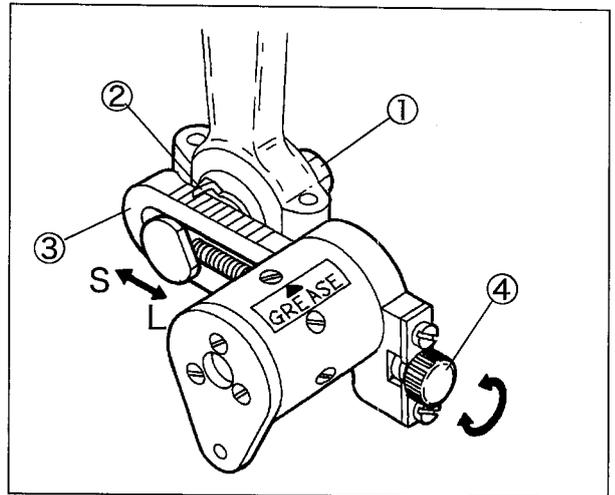


Fig. 9

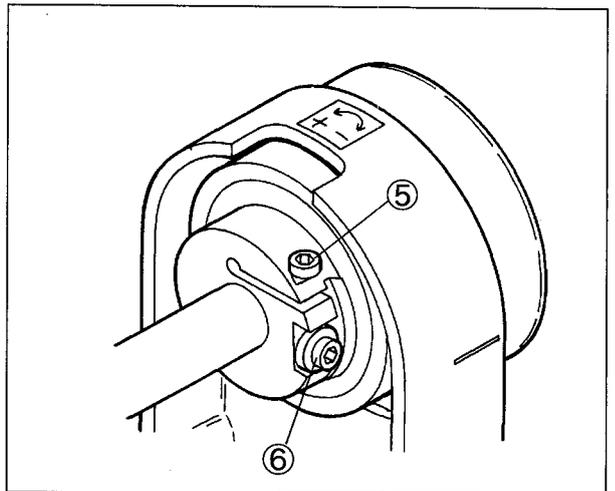


Fig. 10

4. Adjustments

WARNING

Before adjusting, ALWAYS turn the motor switch OFF and check that the motor has already stopped.

4.1 Chip guard and presser foot tape guide

Adjust the lace guide(left)① right or left depending on the needle distance and a part to be sewn on a tape.

Set the lace guide(right)② depending on a tape width.

Loosen the screws ③④ to adjust them.

Set the chip guard ⑤ depending on a trimming width.

Loosen the screw⑥ to set it near the upper knife as closely as possible.

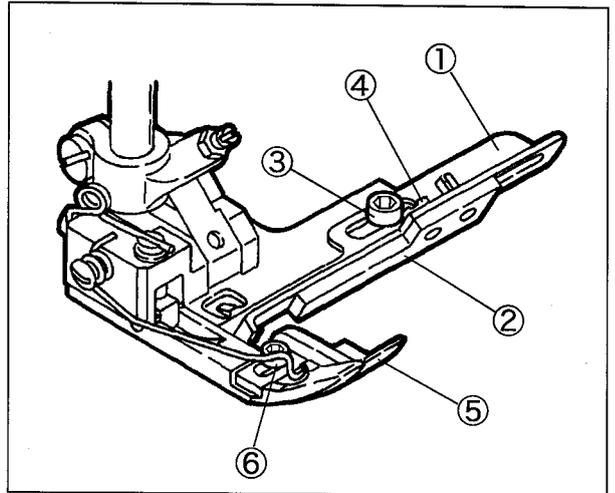


Fig. 11

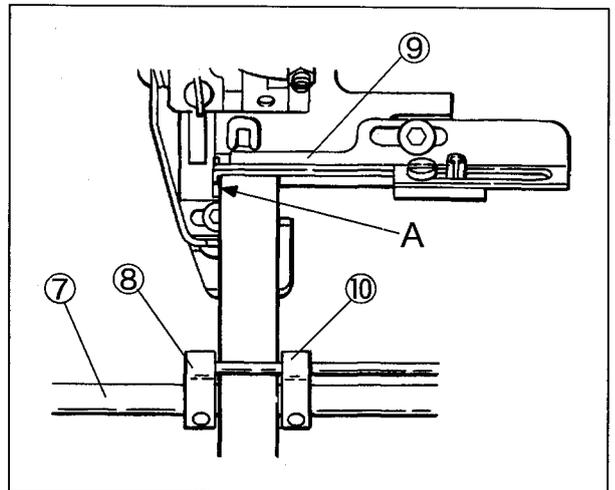
4.2 Tape guide

(1) Set the tape guide bar(long)⑦ to a low position enough for sewing.

(2) Set the inside of the tape guide, c. set ⑧ along "A" on the lace guide(left)⑨. Set the tape guide ⑩ to guide a tape smoothly depending on a tape width.

(3) After positioning the tape guide bar(long)⑦, loosen the screw ⑪ to position the tape guide stopper ⑫.

It prevents the needle bar from touching the tape guide, c. set ⑧ and makes the position of the tape guide bar (long) ⑦.



Fug. 12

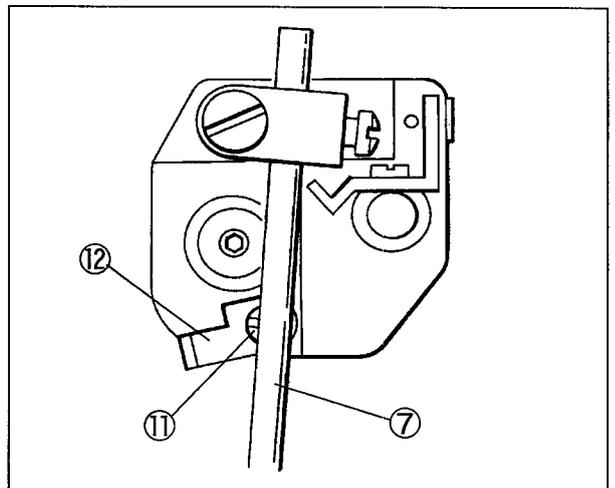


Fig. 13

4. Adjustments

WARNING

Before adjusting, ALWAYS turn the motor switch OFF and check that the motor has already stopped.

4.3 Pressure of elastic feed roller

To adjust the pressure of elastic tape with tension roller (small) ①, loosen the lock nut ② and turn the adjusting screw ③.

● To increase the pressure, turn the adjusting screw ③ clockwise.

● To decrease the pressure, turn it counterclockwise.

Keep the pressure as low as possible.

Too tight or loose pressure can cause uneven feeding of a tape.

REFERENCE

Too much change in tension of a tape from the bobbin may occur uneven sewing finish size even if the tension roller (large) feeds an elastic tape correctly.

An automatic elastic feeder "AEF-31" can feed an elastic tape smoothly and constant sewing finish can be obtained.

4.4 Maintenance of metering device

Replacement and repair:

Improper installation of the metering device can cause improper feeding of an elastic tape, skip stitch, needle breakage, bad sewing performance and others.

Carefully install the device as following points:

- (1) Check that the roller shaft turns smoothly after setting it. Loosen the screws ④ and ⑤ and make interlining to adjust it.
- (2) Set the tension roller (small) ① to turn smoothly like a top. Improper turning of it can cause irregular feeding of a tape.
- (3) Set the tension link ⑥ and its shaft to turn smoothly.
- (4) Set the tension spring pressure of the tension roller (small) ① as low as possible so that it can follow the rotation.

Lubrication:

Remove the screws ⑦ on the roller shaft to supply with grease on each part several times a year.

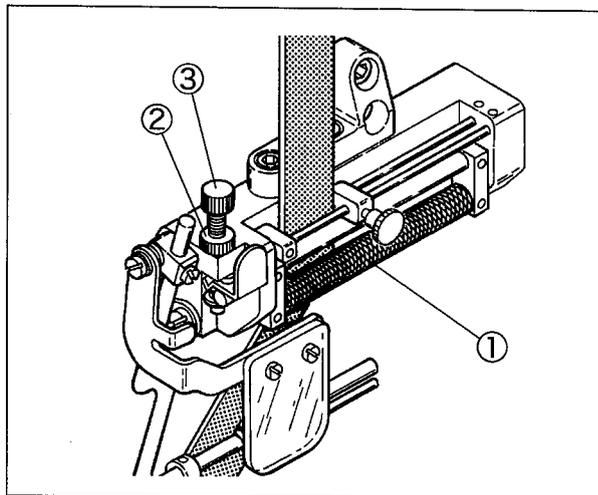


Fig. 14

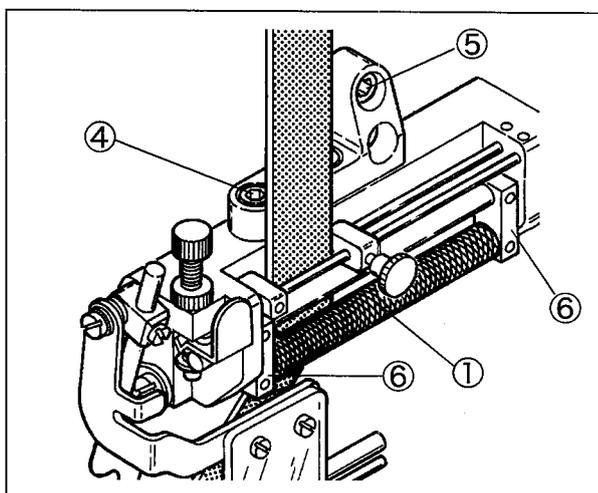


Fig. 15

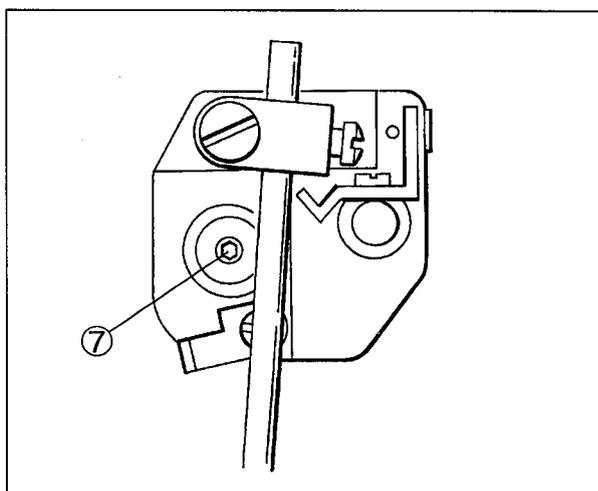


Fig. 16

⚠ WARNING

Before adjusting, ALWAYS turn the motor switch OFF and check that the motor has already stopped.

4.5 Trimming width

Open the side cover and loosen the screw ①. Then, the upper and lower knife holders move right and left at the same time.

Tighten the screw ① after adjusting the position.

(Supply a few drops of oil into the oil hole ② if needed.)

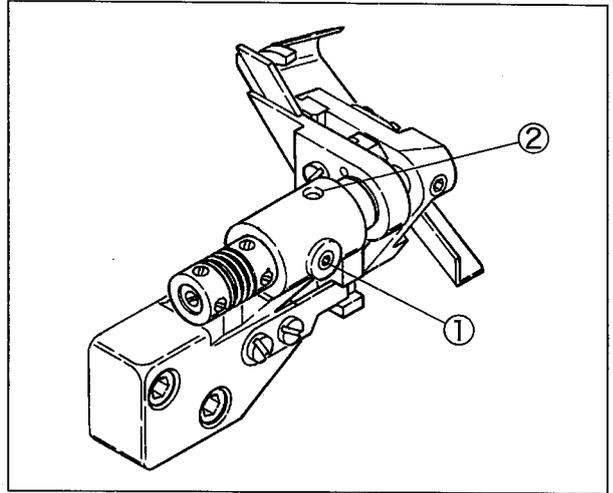


Fig. 17

4. Adjustments

WARNING

Before adjusting, ALWAYS turn the motor switch OFF and check that the motor has already stopped.

4.6 Trimming mechanism

4.6.1 Installing and removing lower knife

Removing lower knife:

- (1) Loosen the screws ① of the collar(right).
- (2) Push the collar(left)② to the right to make the clearance between the upper and lower knives.
- (3) Tighten the screws ① slightly.
- (4) Loosen the screw ③ of the lower knife clamp and pull it out the lower knife ④ .

Installing lower knife:

- (1) Position the lower knife ④ tip even with the top of the stitch plate and tighten the screw ③ securely.
- (2) Loosen the screws①. (The upper knife engages with the lower knife by the spring.)
- (3) Put a thread between the upper and lower knives to check the sharpness of them while turning the pulley manually.
- (4) Tighten the screws ① securely.
- (5) Recheck the sharpness of the knives.

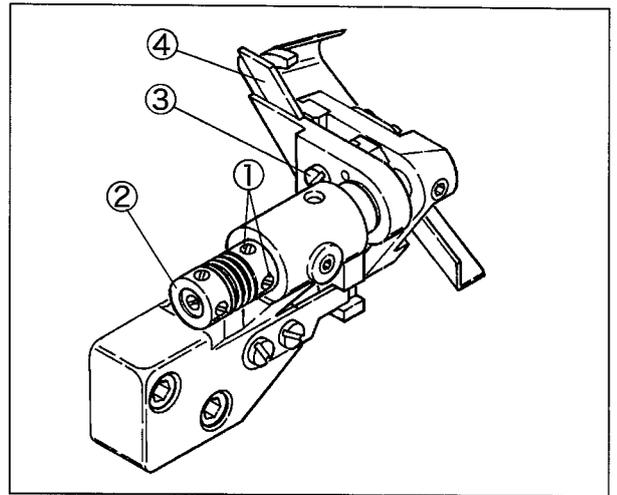


Fig. 18

4.6.2 Installing and removing upper knife

Removing upper knife:

- (1) Loosen the screws ① .
- (2) Push the collar(left)② to the right to make the clearance between the upper and lower knives.
- (3) Tighten the screws ① slightly.
- (4) Loosen the screw ⑤ to remove the upper knife ⑥ .

Installing upper knife:

- (1) Install the upper knife ⑥ with the screw ⑤ .
- (2) Loosen the screws①. (The upper knife engages with the lower knife by the spring.)
- (3) Put a thread between the upper and lower knives to check the sharpness of them while turning the pulley manually.
- (4) Tighten the screws ① securely.
- (5) Recheck the sharpness of the knives.

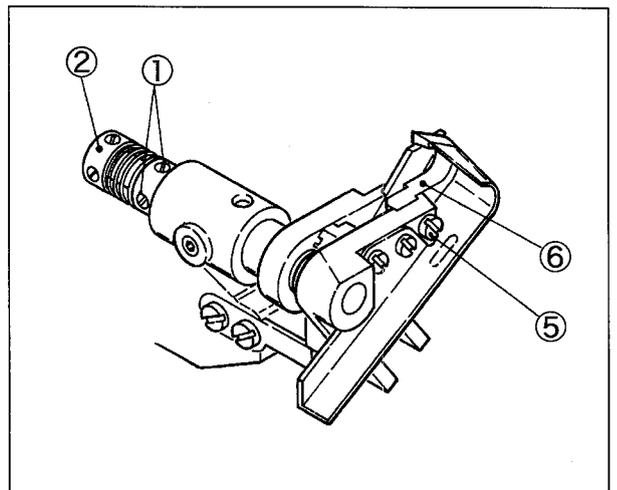


Fig. 19

⚠ WARNING

Before adjusting, ALWAYS turn the motor switch OFF and check that the motor has already stopped.

4.6.3 Engagement between upper and lower knives

The upper knife ② engages with the lower knife ① as shown in Fig. 25 when the upper knife moves to the lowest point.

Loosen the screw ③ and move the upper knife ② and the upper knife holder up or down to adjust it.

Hold the upper knife driving shaft bushings ⑥ with the upper knife driving shaft lever(right) ④ and the spacer ⑤ without palying the upper knife shaft ⑦ right or left.

Then, tighten the screw ③ securely.

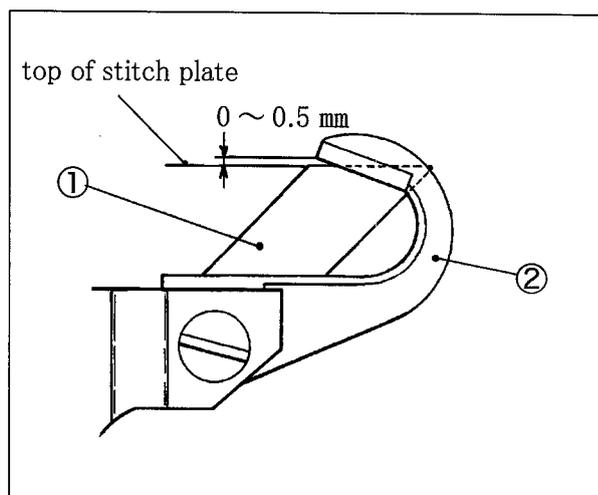


Fig. 20

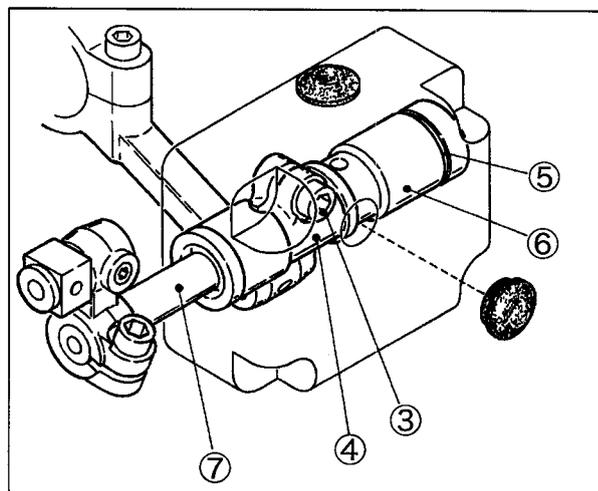


Fig. 21

4.6.4 Sharpening knives

If the lower knife cuts badly, re-sharpen it. (See Fig. 22)

The upper knife made of super hard alloy is unnecessary to re-sharpen for about one year and normal grinder is not useful for re-sharpening it.

Keep another upper knife for spare.

If needed, contact us directly or the dealer for re-sharpening it.

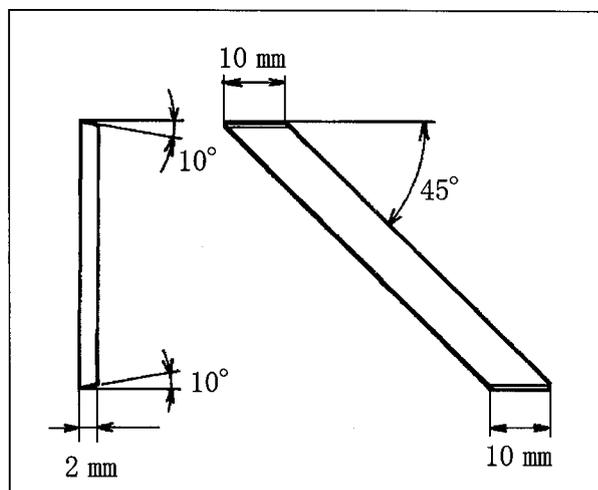


Fig. 22



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