

4. Moving knife standby position

4-1. ATH lever position

[Prior to diagnosis procedure]

1. Remove the table (assembly), the base cover rear-L and the base cover front-L.
(See:page.61[Framings etc.])
2. Remove the needle plate.
(See:page.66[Remove the rotary hook])
3. Turn ON the power supply.
4. Operate the thread trimmer by pressing the thread trimming key on the operation panel.

[Diagnosis]

1. Check the LED is on.
2. Remove the 4 set screws (a), and remove the rear cylinder bed cover.(Fig. 1)
3. Measure the clearance (A) between the ATH lever and the stopper when the moving knife has returned to the standby position after completing the thread trimming.(Fig. 2, 3)

[Standard]

A = 0.5 mm (Fig. 3)

* Make adjustment if the diagnosis result fails to meet the standard.

[Adjustment]

1. Adjust the clearance to the stopper by loosening the ATH lever set screw (b).(Fig. 3)
2. Tighten the set screw (b).

[Note]

- At this time, the vertical position of ATH lever must be within the range of 0 to 0.1 mm from the motor spacer.

* Repeat the adjustment till the standard is met.

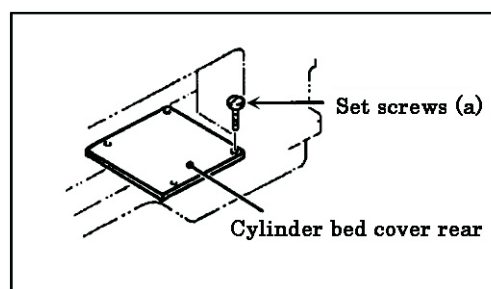


Fig.1

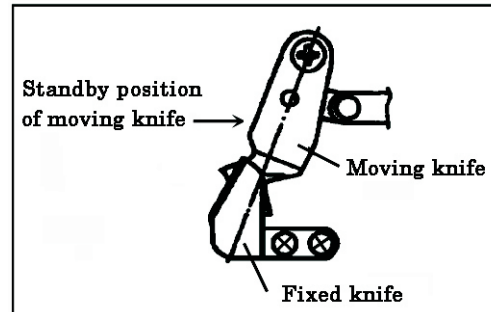


Fig.2

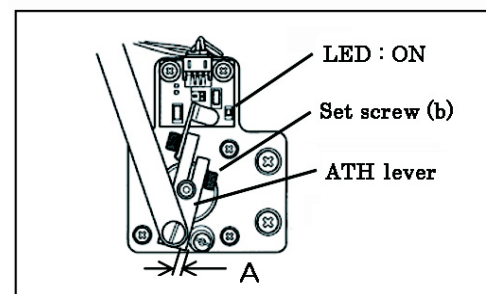


Fig.3

4-2. Moving knife standby position

[Prior to diagnosis procedure]

1. Remove the table (assembly).
(See:page.61[Framings etc,])
2. Remove the needle plate.
(See:page.66[Remove the rotary hook])
3. Turn ON the power supply.
4. Operate the thread trimmer by pressing the thread trimming key on the operation panel.

[Diagnosis]

1. Measure the clearance (A) between the moving and fixed knives when the moving knife has returned to the standby position after completing the thread trimming.(Fig. 1, 2)

[Standard]

$A = 0 \pm 0.5 \text{ mm}$ (Fig.1)

- * Make adjustment if the diagnosis result fails to meet the standard.

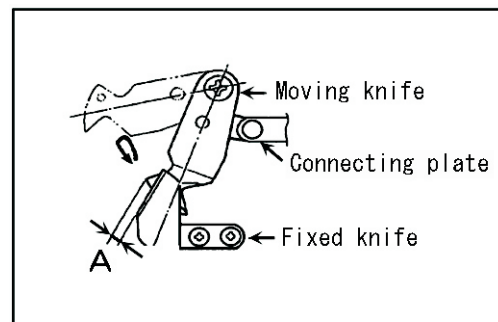


Fig.1

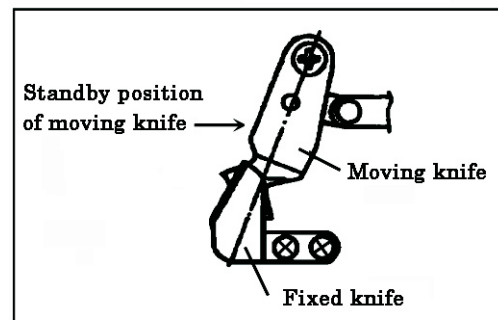


Fig.2

[Adjustment]

1. Remove the table (assembly), the base cover rear-L and the base cover front-L.
(See:page.61 and after)
2. Remove the 4 set screws (a), and remove the rear cylinder bed cover.(Fig. 3)

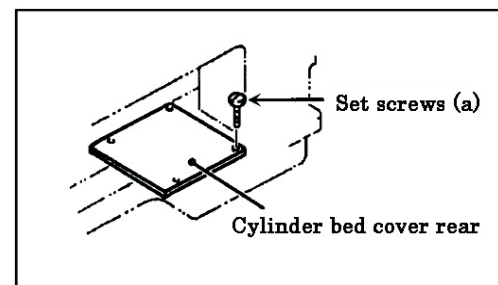


Fig.3

3. Loosen the set screws (b).(Fig. 4)
4. Adjust the moving knife standby position.
(Fig. 1)
5. Tighten the set screw (b).

- * Repeat the adjustment till the standard is met.

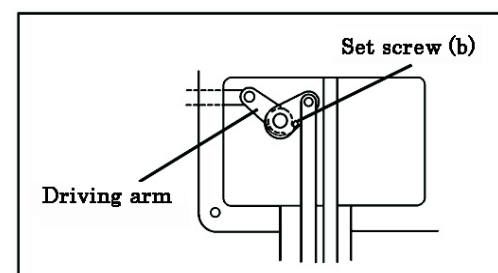


Fig.4

5. Knife blade pressure

5-1. Parallelism of fixed knife

[Prior to diagnosis procedure]

1. Remove the table (assembly).
(See:page.61[Framings etc.])
2. Remove the needle plate.
(See:page.66[Remove the rotary hook])
3. Remove the 4 set screws, and remove the rear cylinder bed cover.(Fig. 1)

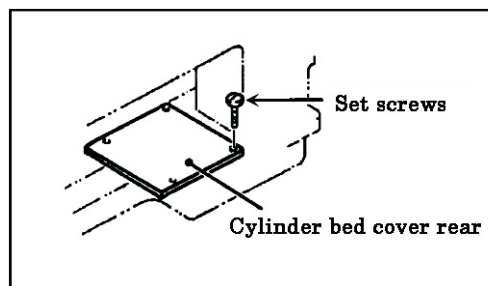


Fig.1

4. Remove the knife connecting plate from the thread trimming lever pin. Move it slightly toward you.(Fig. 2)

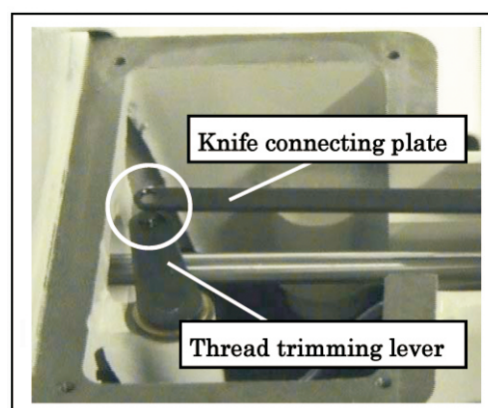


Fig.2

5. Put a mark with a water-color marker on the moving knife.(Fig. 3)

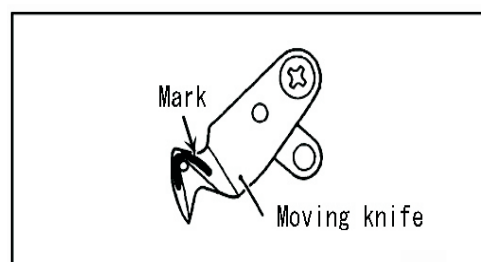


Fig.3

[Diagnosis]

1. Check what happens to the marking on the moving knife when the thread is trimmed by pressing the knife connecting plate with your finger.(Fig. 4)

[Standard]

Marking on the moving knife must be scraped off evenly. (C of Fig. 4)

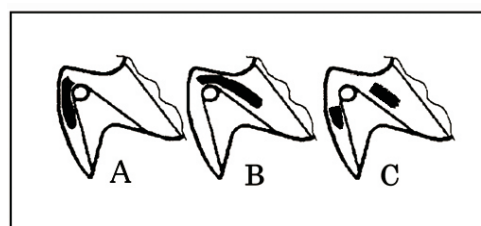
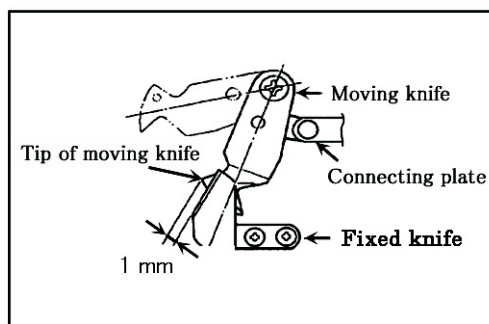


Fig.4

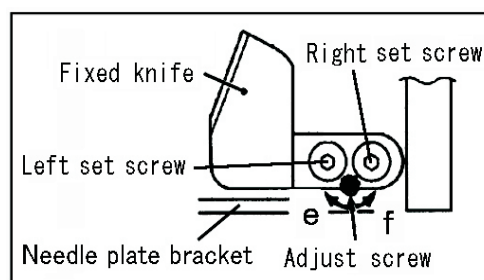
* Make adjustment if the diagnosis result fails to meet the standard.

[Adjustment]**1. When the marking on the moving knife is as shown in "A of Fig. 4"**

- (1) Move the connecting plate by hand, and let the moving knife point protrude about 1 mm from the fixed knife. (Fig. 5)

**Fig.5**

- (2) Loosen the right set screw slightly. (Fig. 6)
- (3) Turn the adjust screw slightly in "f" direction. (Fig. 6)
- (4) Holding down on the fixed knife, turn the adjust screw in "e" direction until it touches the needle plate bracket. (Fig. 6)
- (5) Holding down on the fixed knife, tighten the set screws alternately little by little and fix the fixed knife. (Fig. 6)

**Fig.6****2. When the marking on the moving knife is as shown in "B of Fig. 4"**

- (1) Move the connecting plate by hand, and let the moving knife point protrude about 1 mm from the fixed knife. (Fig. 5)
- (2) Loosen the left set screw slightly. (Fig. 6)
- (3) Turn the adjust screw slightly in "f" direction. (Fig. 6)
- (4) Holding down on the fixed knife, turn the adjust screw in "e" direction until it touches the needle plate bracket. (Fig. 6)
- (5) Holding down on the fixed knife, tighten the set screws alternately little by little and fix the fixed knife. (Fig. 6)

* Repeat the adjustment till the standard is met.

[Note]

- If the fixed knife parallelism is within the standard, or after adjustment, adjust the knife blade pressure shown in the next paragraph.

5-2. Knife blade pressure

[Prior to diagnosis procedure]

1. Remove the table (assembly).
(See:page.61[Framings etc,])
2. Remove the needle plate.
(See:page.66[Remove the rotary hook])
3. Remove the 4 set screws, and remove the rear cylinder bed cover.(Fig. 1)

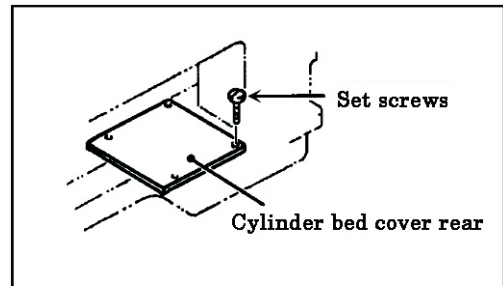


Fig.1

4. Remove the knife connecting plate from the thread trimming lever pin.(Fig. 2)

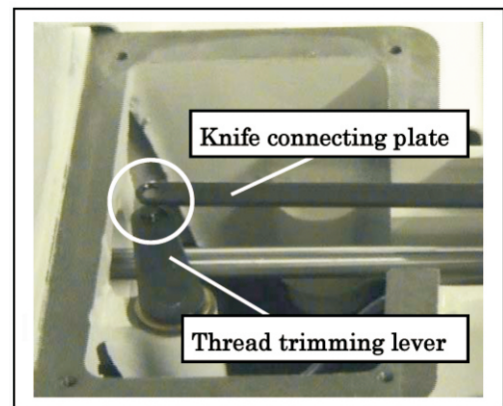


Fig.2

[Diagnosis]

1. Measure the distance (A) between the fixed and moving knives when they have contacted each other by moving the knife connecting plate with your finger.(Fig. 3)

[Standard]

A = 2 to 3 mm (Fig. 3)

- * Make adjustment if the diagnosis result fails to meet the standard.

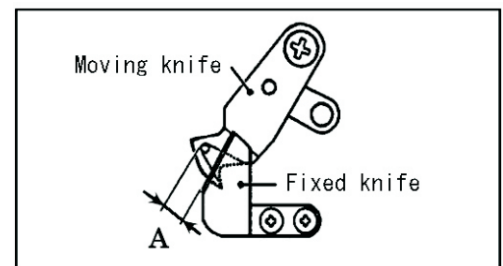


Fig.3

[Adjustment]

1. When the distance A = 3 mm or more
(1) Move the connecting plate by hand, and let the moving knife point protrude about 1 mm from the fixed knife.(Fig. 4)

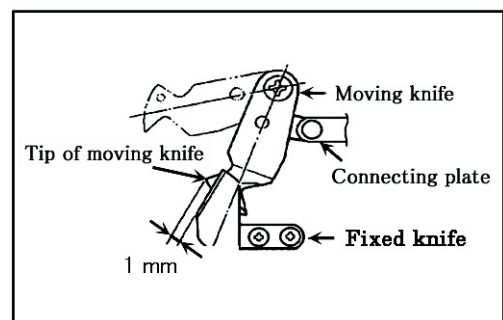


Fig.4