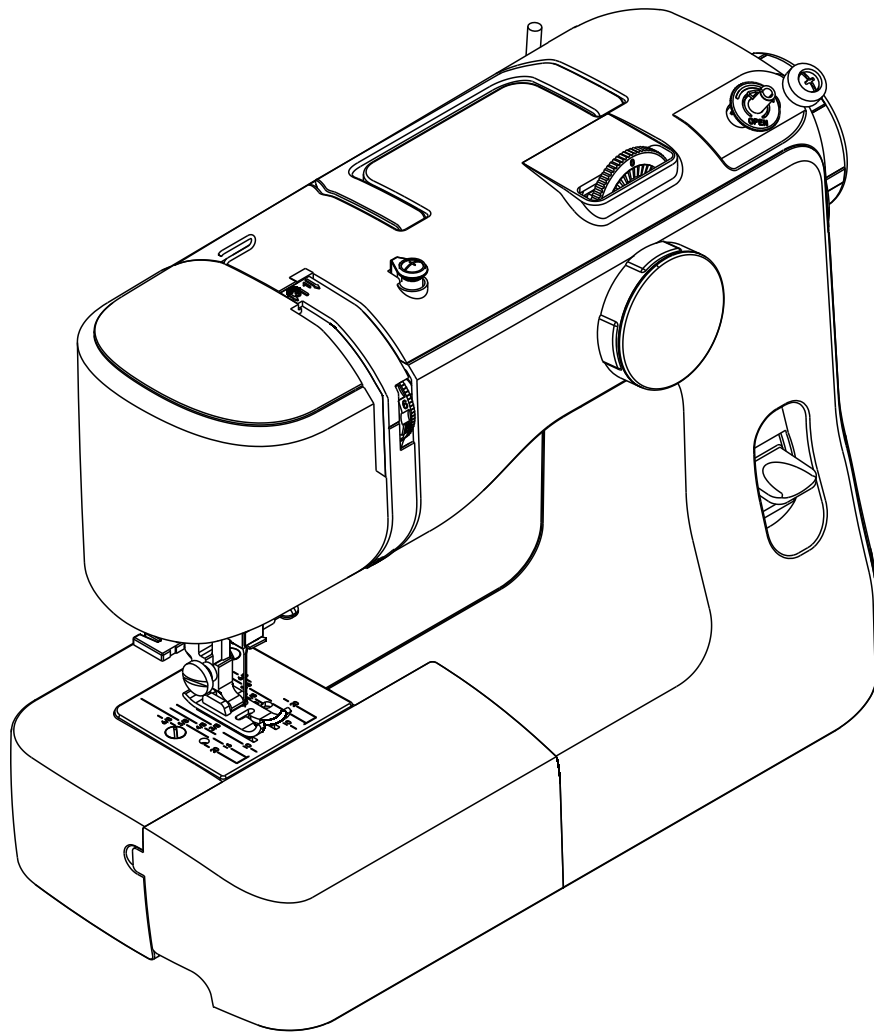


SERVICE MANUAL

MODEL: Texi Joy 13



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DISASSEMBLY AND ASSEMBLY FOR COVER

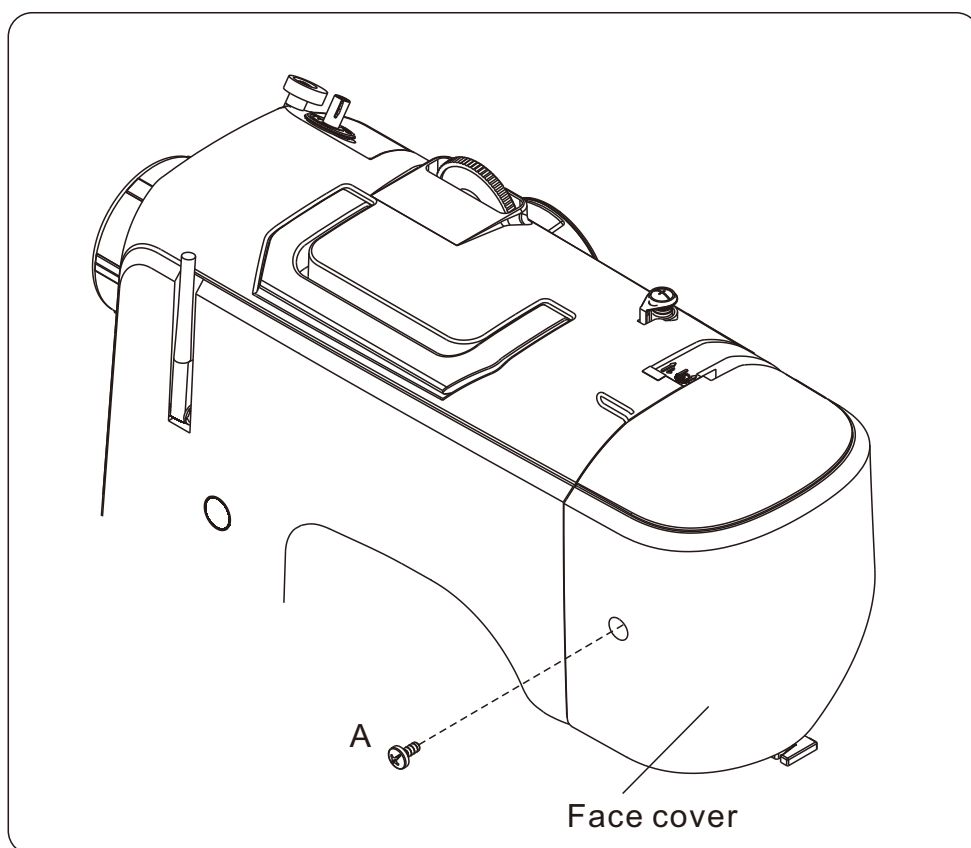
FACE COVER

TO REMOVE

Remove the setscrew (A) to remove the face cover.

TO ATTACH

Attach the face cover in reverse procedure of the removing.



DISASSEMBLY AND ASSEMBLY FOR COVER

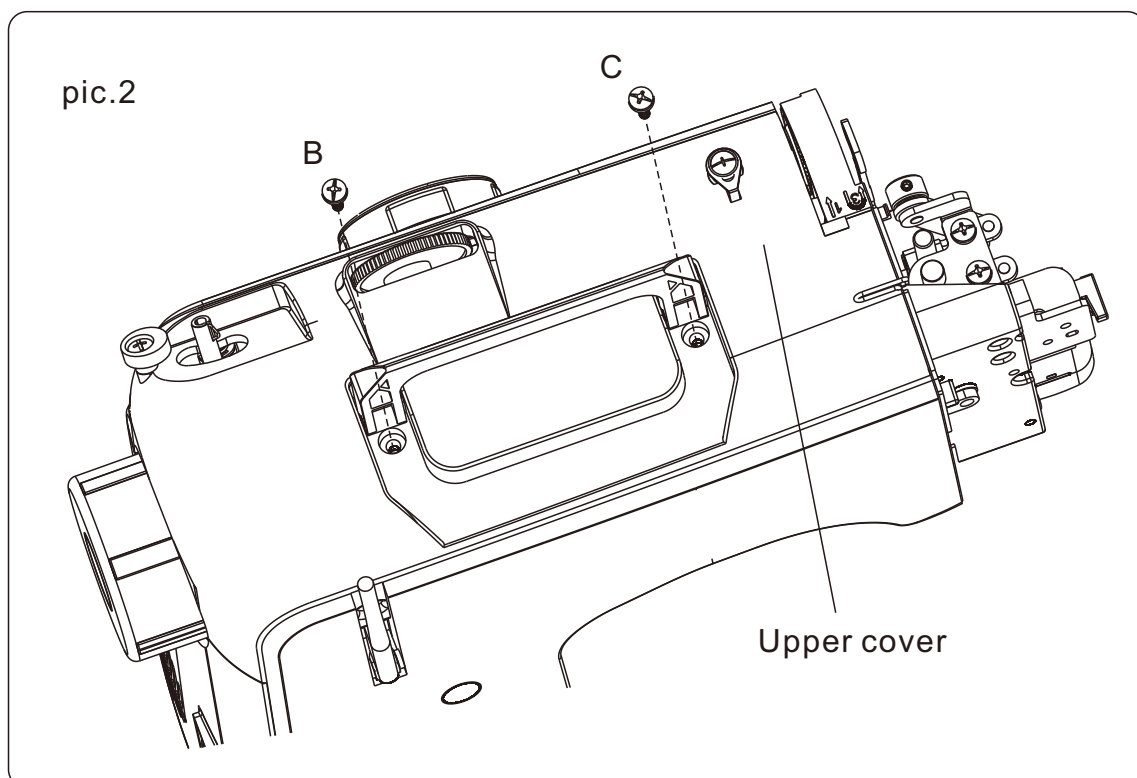
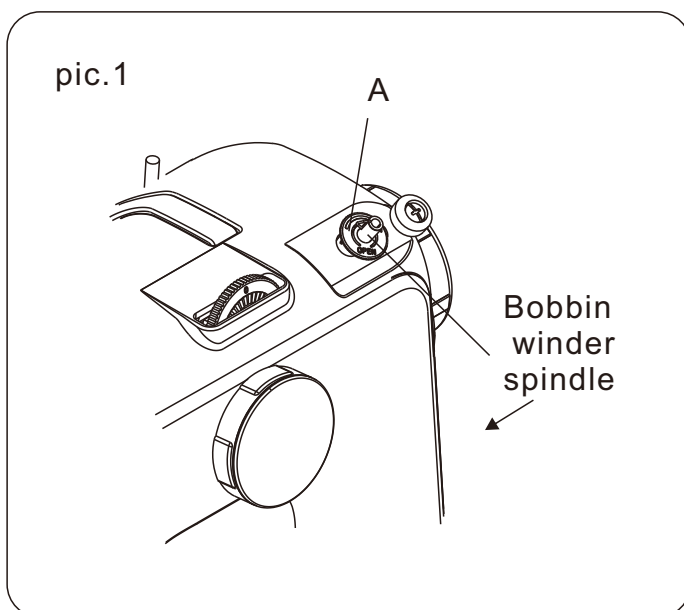
UPPER COVER

TO REMOVE

- 1.Ensure the bobbin winder spindle position is on the left. If not, push the bobbin winder spindle to the left. And then dial-out the pad (A) of bobbin winder spindle.(See pic.1)
- 2.Remove the setscrews (B) and (C) to remove the upper cover. (See pic.2).

TO ATTACH

Attach the upper cover in reverse procedure of the removing.



DISASSEMBLY AND ASSEMBLY FOR COVER

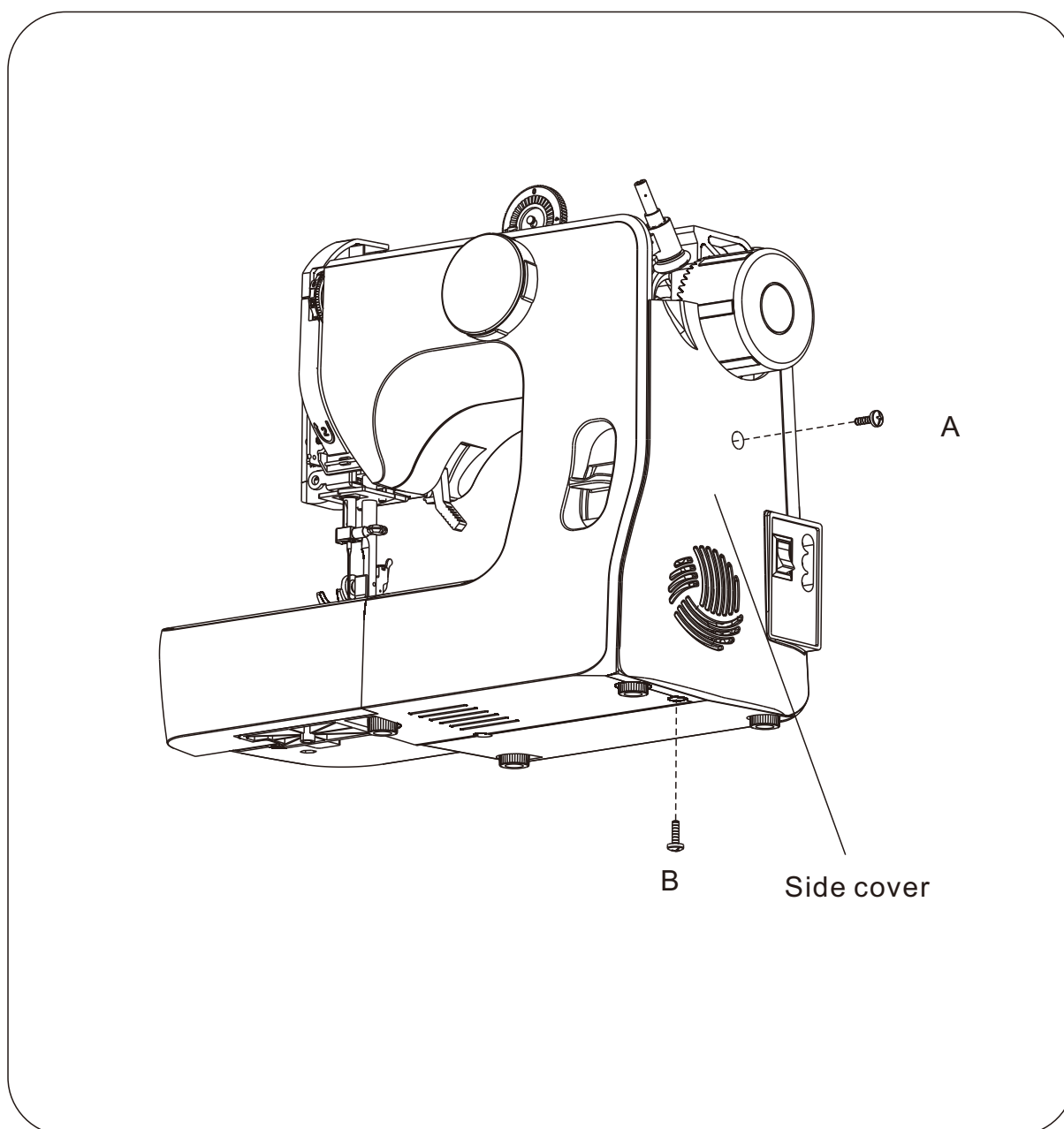
SIDE COVER

TO REMOVE

Remove the setscrews (A) and (B) to remove the side cover.

TO ATTACH

Attach the side cover in reverse procedure of the removing.



DISASSEMBLY AND ASSEMBLY FOR COVER

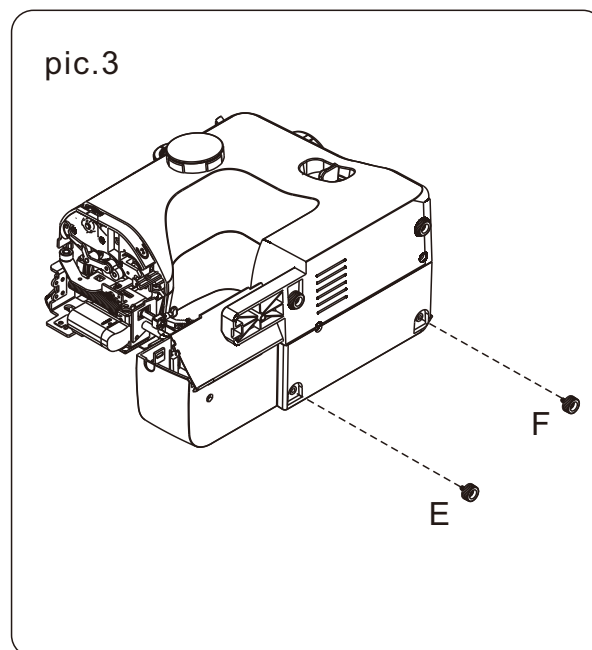
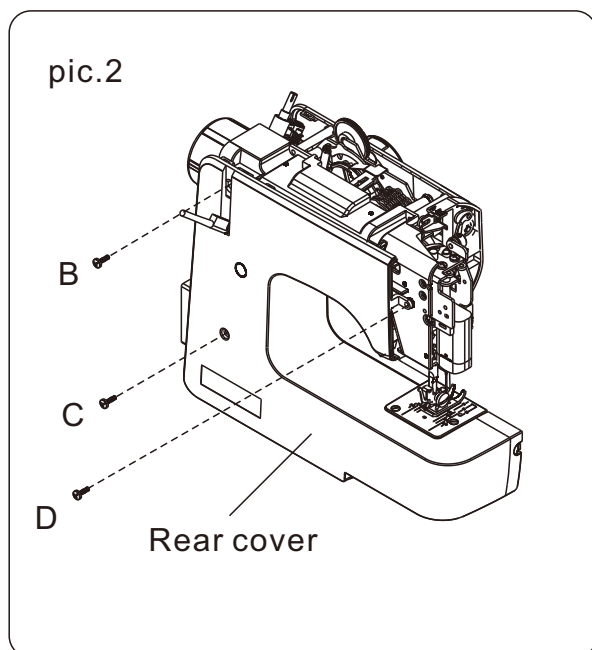
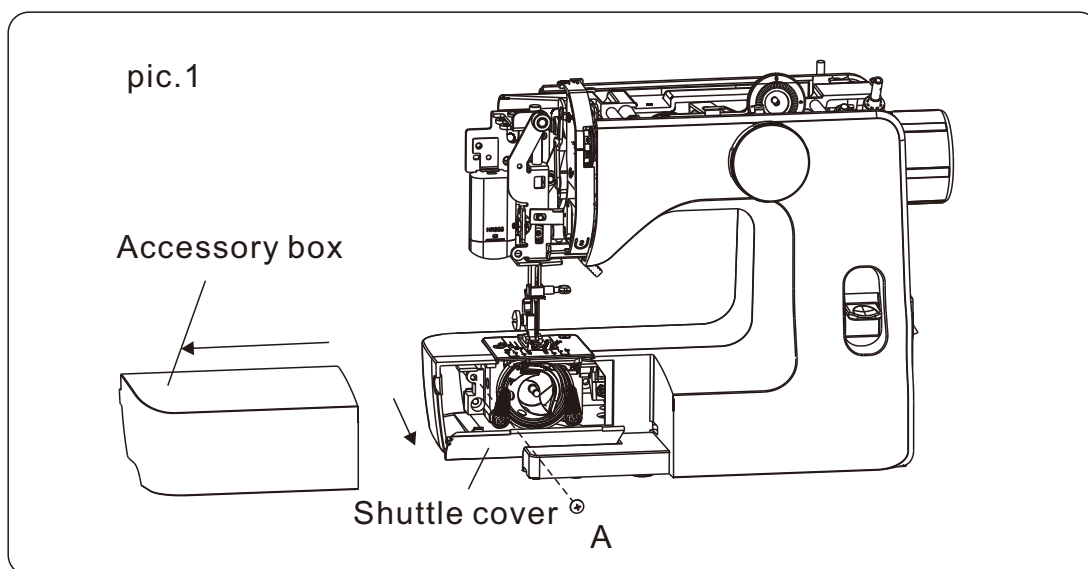
REAR COVER

TO REMOVE

- 1.Remove the accessory box and open the shuttle cover, and then remove the setscrew(A).
- 2.Remove the setscrews (B), (C), (D). (See pic.2)
- 3.Remove the setscrew of foot pad (E) and (F).(See pic.3)
- 4.Lower the presser foot arm and remove the rear cover.

TO ATTACH

Attach the rear cover in reverse procedure of the removing.



DISASSEMBLY AND ASSEMBLY FOR COVER

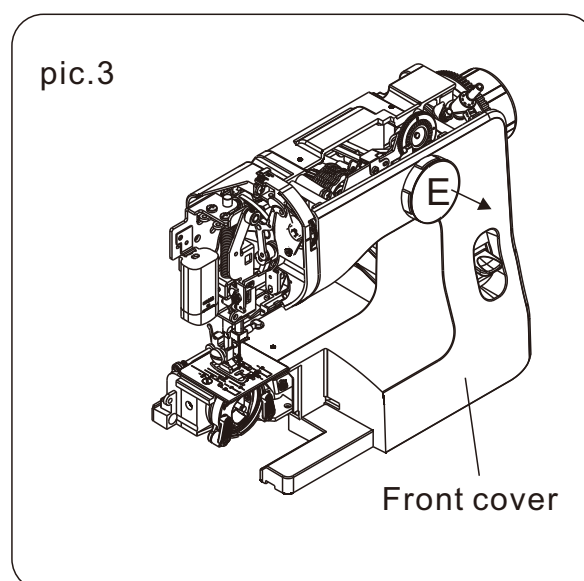
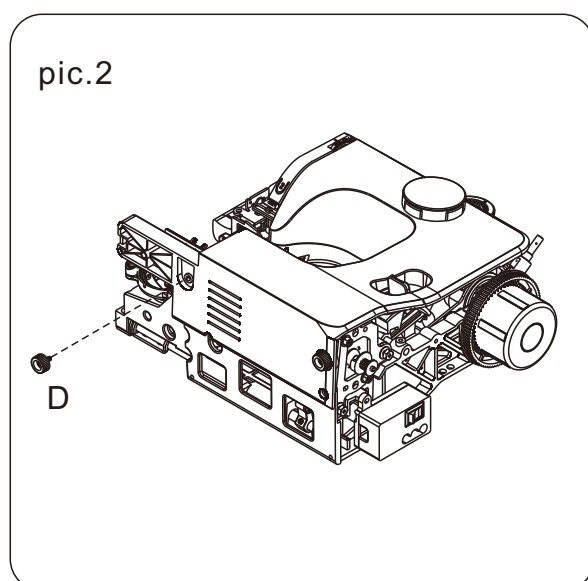
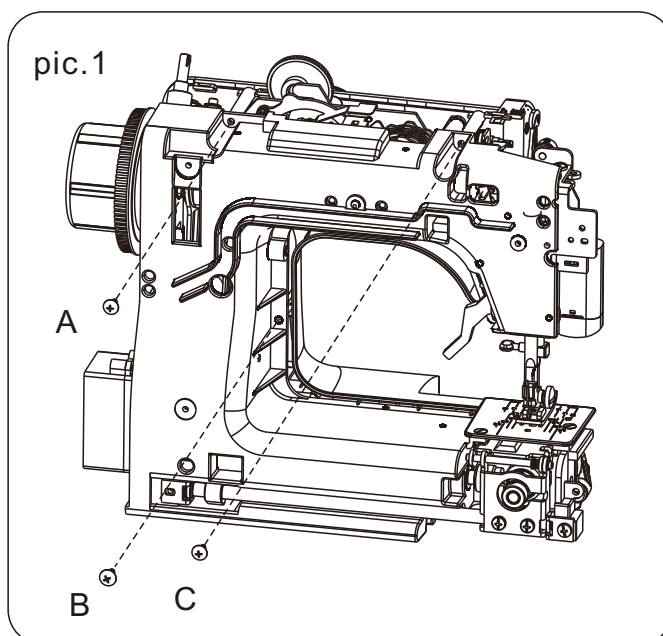
FRONT COVER

TO REMOVE

- 1.Remove the setscrews (A), (B), (C). (See pic.1)
- 2.Remove the setscrew (D). (See pic.2)
- 3.Remove the knob (E). (See pic.3)
- 4.Remove the front cover.

TO ATTACH

Attach the front cover in reverse procedure of the removing.



MECHANICAL ADJUSTMENT

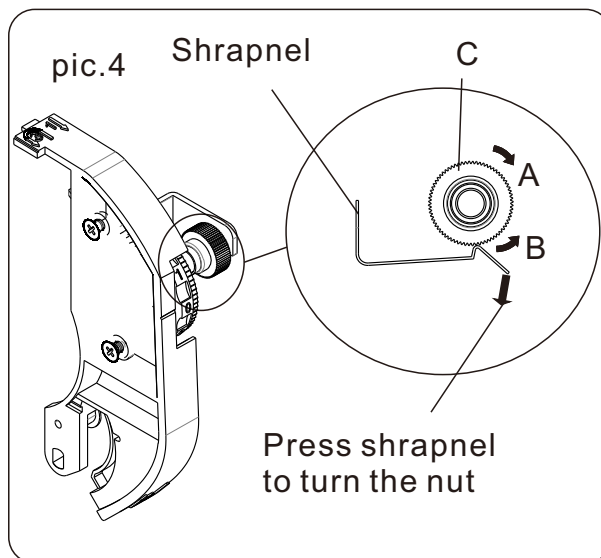
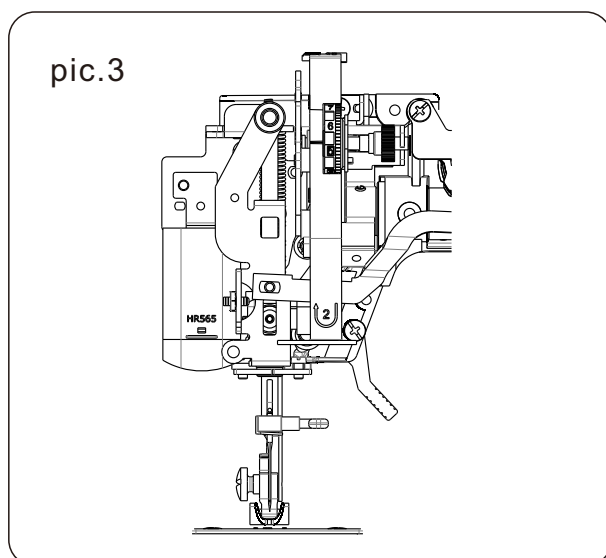
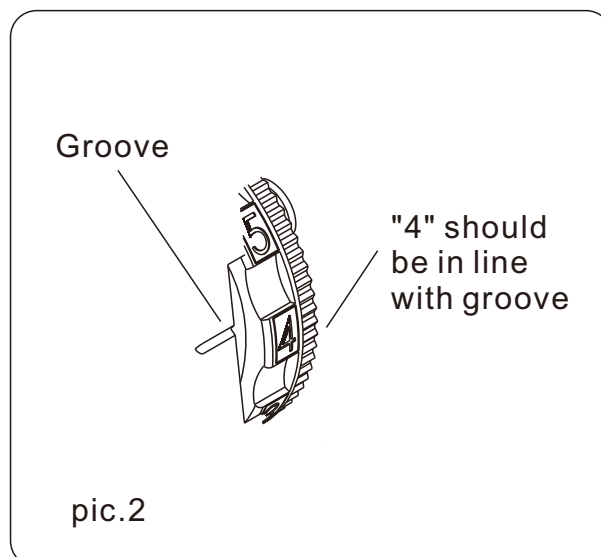
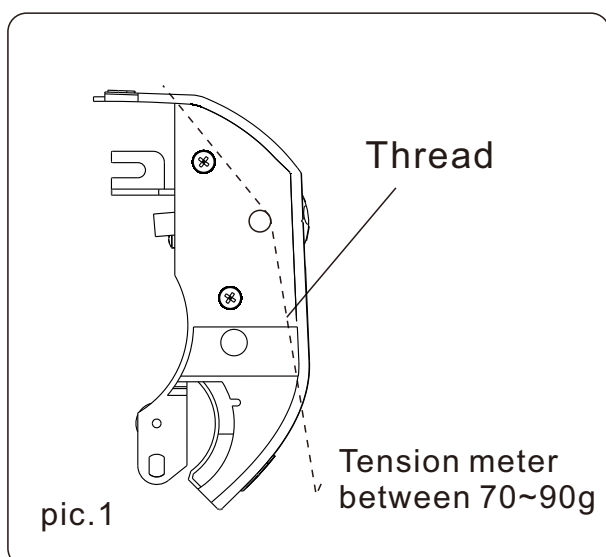
TOP TENSION

TO CHECK

The top tension should be between 70~90g when pulling the thread up. (See pic.1)
If it is not within above limit, adjust as follows:

ADJUSTMENT PROCEDURE :

- 1.Remove all machine covers (See page 2-6).
- 2.Set the tension dial at "4". (See pic.2)
- 3.Lower the presser foot (See pic.3)
- 4.Check the tension of top thread by a tension meter.
If the top tension is too loose, turn the nut (C) in the direction (A). (See pic.4)
If the top tension is too tight, turn the nut (C) in the direction (B). (See pic.4)
- 5.Check the top tension .
6. Attach the front cover.



MECHANICAL ADJUSTMENT

BOBBIN TENSION

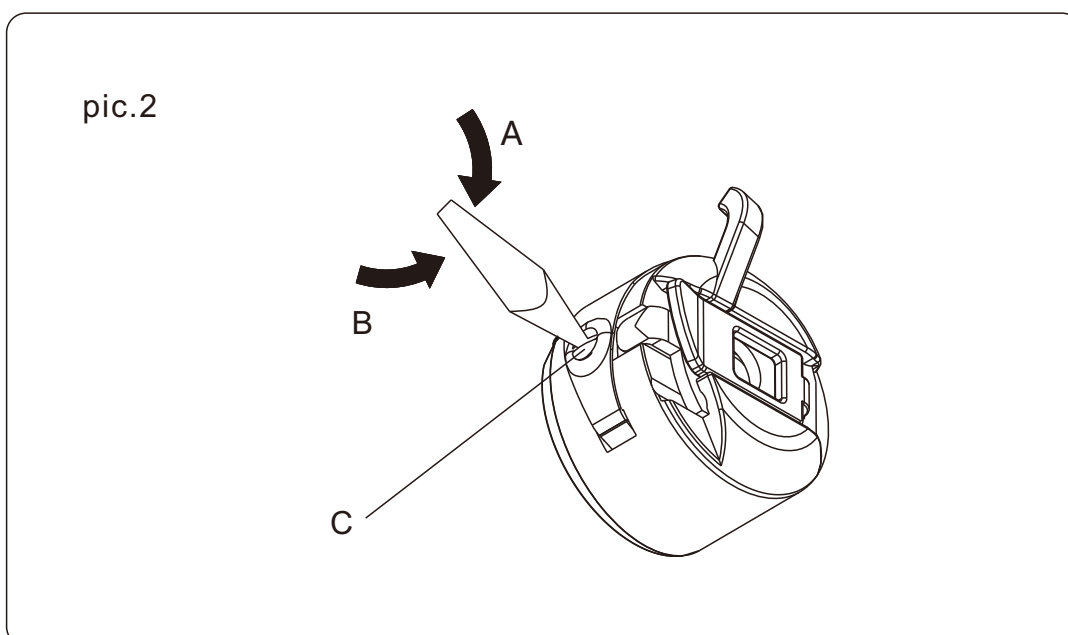
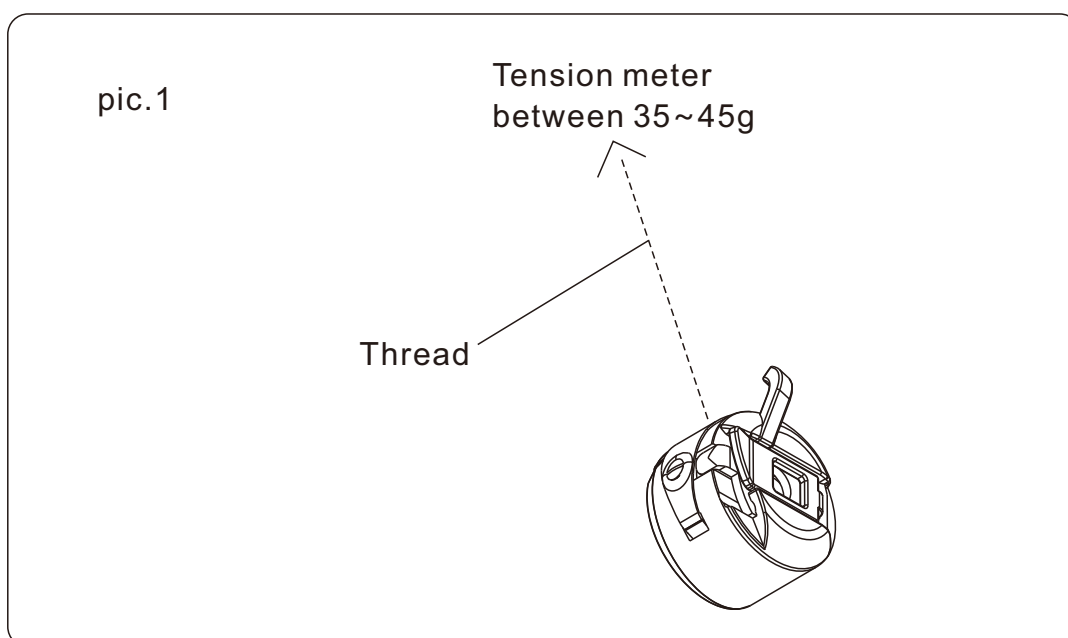
TO CHECK:

The bobbin thread tension should be between 35~45g when pulling the thread by a tension meter.

If the tension is out of the range, adjust it as follows:

ADJUSTMENT PROCEDURE :

1. Turn the adjusting screw (C) in the direction of (B) when the bobbin thread tension is too tight.
2. Turn the adjusting screw (C) in the direction of (A) when the bobbin thread thread tension is too loose.



MECHANICAL ADJUSTMENT

PRESSER BAR HEIGHT AND ALIGNMENT

TO CHECK:

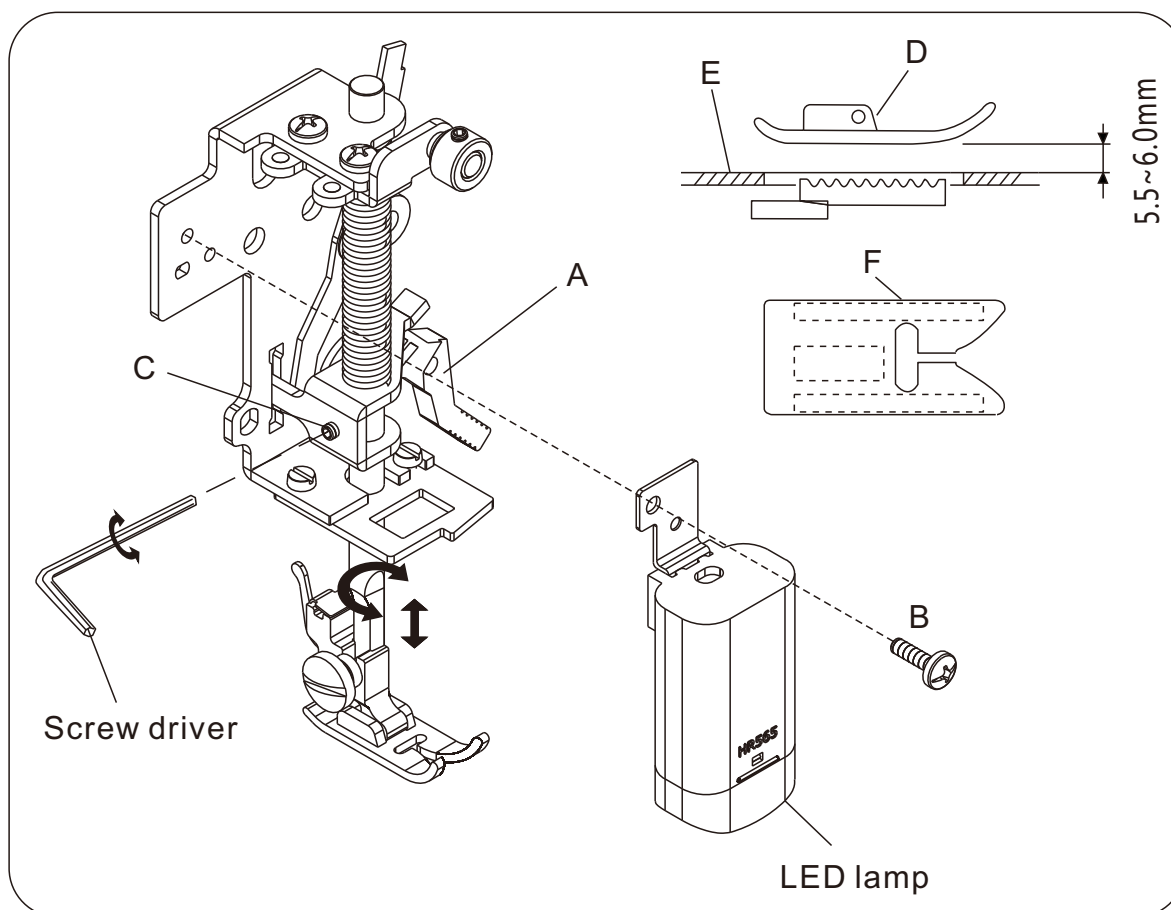
1. The distance between the presser foot (D) and the needle plate (E) should be between 5.5~6.0mm when lift the presser foot lever (A).
2. The presser foot should be cover the feed dog slots (F) and parallel with it when you put down the presser foot lever (A).

If the requirement non-compliance, adjust it as follows:

ADJUSTMENT PROCEDURE :

1. Remove the face cover (See page 2).
 2. Loosen the setscrew (B) to remove the LED lamp.
 3. Raise the presser foot lever (A) and loosen the setscrew (C) on presser bar holder.
- * Push up and down the presser bar to adjust the high of presser foot.
 - * Horizontal rotation the presser bar to adjust the parallelism of presser foot.
4. Tighten the setscrew (C) after adjustment.
 5. Attach the LED lamp and the face cover.

NOTE: When you tighten the setscrew (C), make sure that both sides of the presser foot are parallel to the feed dogslots (F) on the needle plate.



MECHANICAL ADJUSTMENT

NEEDLE SWING

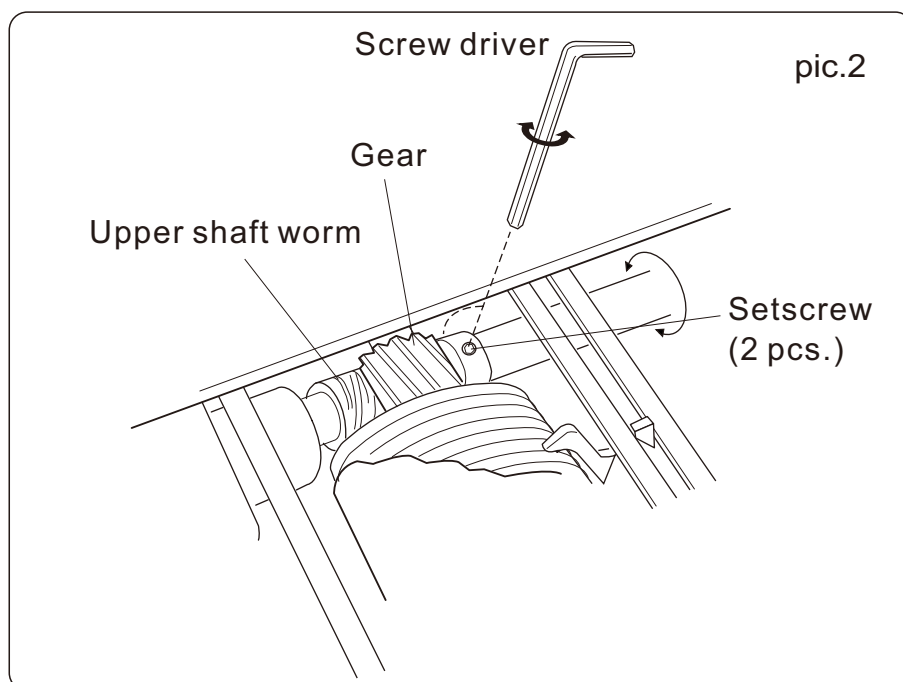
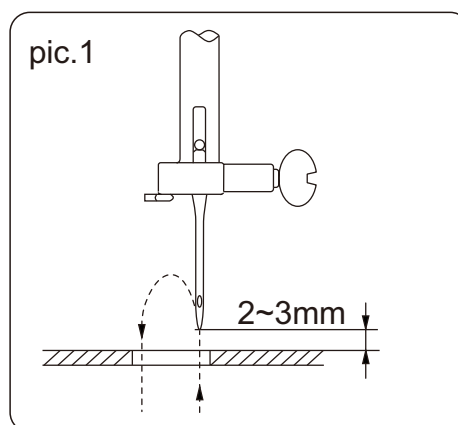
TO CHECK:

Adjust the needle swing according to the following procedure, if the needle bar starts moving sideways while the needle is in the fabric when sewing the zigzag pattern (with maximum zigzag width).

ADJUSTMENT PROCEDURE:

1. Turn the pattern knob to "C" (Σ).
2. Remove all machine covers (See page 2-6).
3. Loosen two setscrews.
4. Adjust the needle swing by turning the handwheel while holding the worm so as not to rotate it, until the needle swing starts at 2~3mm above the needle plate after the needle has come out of the right side of the needle hole.
5. Tighten two setscrews.
6. Recheck the needle swing.
7. Attach all machine covers.

NOTE: After adjusting the needle swing, check that the upper shaft worm and gear rotate smoothly without any backlash between them.



MECHANICAL ADJUSTMENT

M POSITION

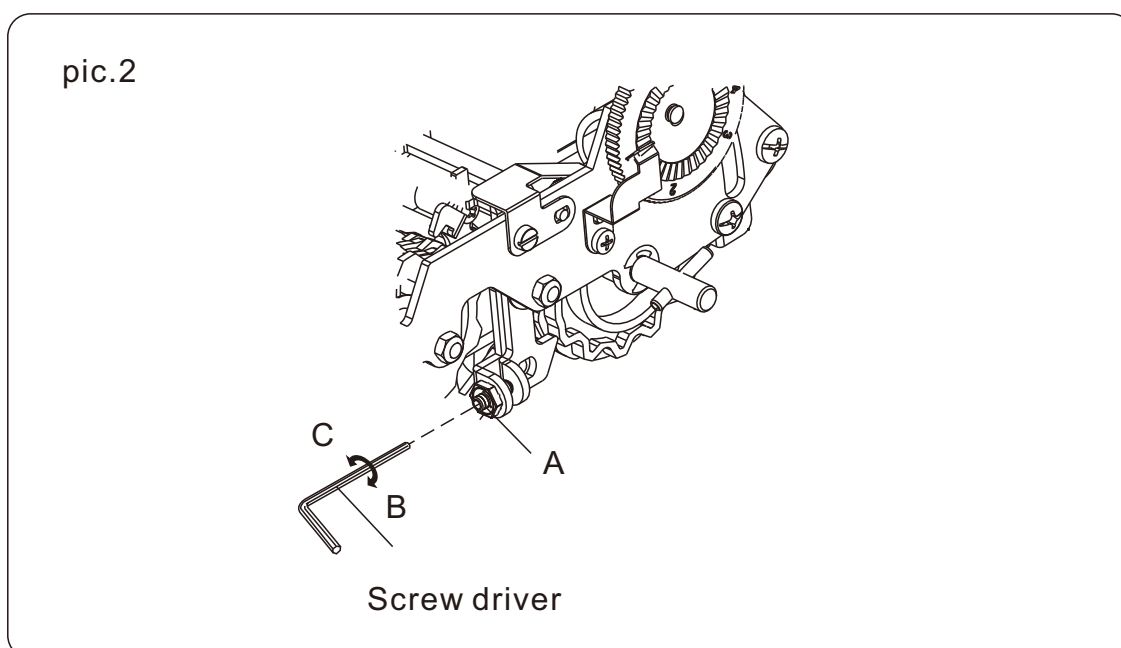
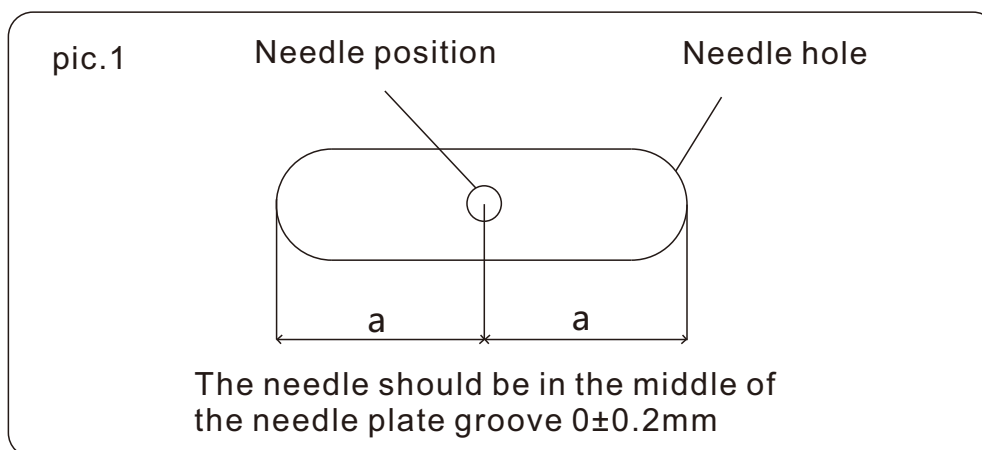
TO CHECK:

When the needle is on A (♯) position, the needle should be in the middle of the needle plate groove $0 \pm 0.2\text{mm}$.

If not, adjust as below:

ADJUSTMENT PROCEDURE:

1. Turn the pattern knob to "A" (♯).
2. Remove all machine covers (See page 2-6).
3. Turn the setscrew (A) to adjust the M position. (See pic.2)
If the needle is too right, turn the setscrew (A) in the direction (B).
If the needle is too left, turn the setscrew (A) in the direction (C).
4. Recheck the M position.
5. Attach the face cover.



MECHANICAL ADJUSTMENT

NEEDLE DROP

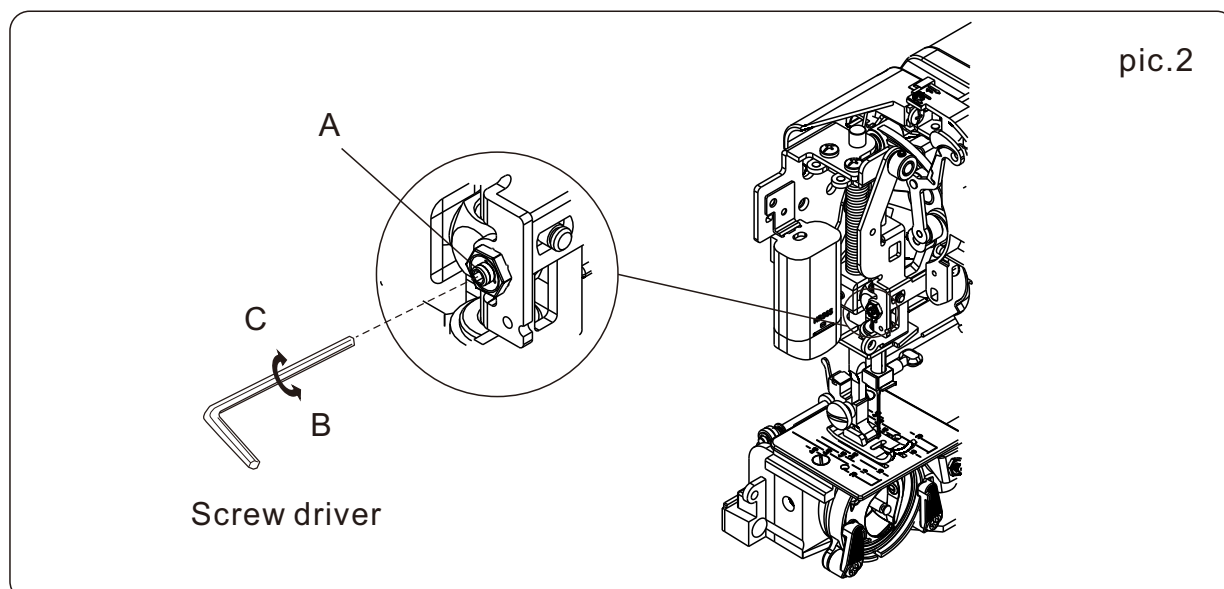
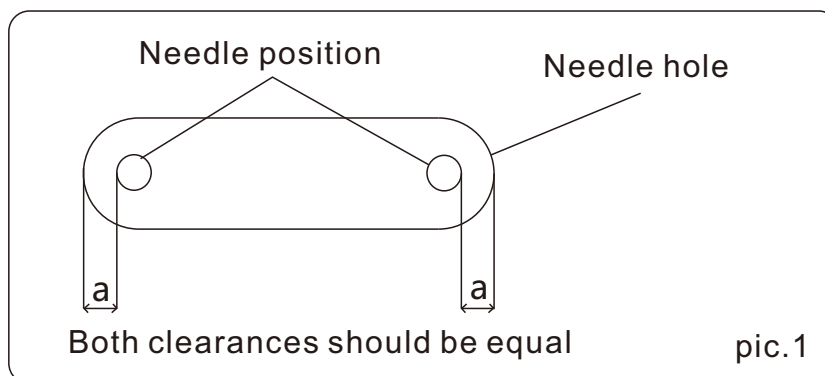
TO CHECK:

When the needle swings in maximum zigzag width, the distance between both ends of the needle hole on the needle plate and the needle drop positions should be equal.

If not, adjust as below:

ADJUSTMENT PROCEDURE:

1. Remove the face cover (See page 2).
2. Turn the pattern knob to "C" (\leq).
3. Loosen the setscrew (A) to adjust the needle drop.
4. To check the distance between both ends of the needle hole on the needle plate and the needle drop positions should be equal.
 - * If the distance on right is larger than the distance on left, turn the setscrew (A) in the direction (B).
 - * If the distance on left is larger than the distance on right, turn the setscrew (A) in the direction (C).
5. Recheck the needle drop.
6. Attach the face cover.



MECHANICAL ADJUSTMENT

CLEARANCE BETWEEN NEEDLE AND HOOK (ADJUSTMENT METHOD NO.1)

TO CHECK:

The clearance between the needle and shuttle race should be 0~0.1mm.
If not, adjust as below:

ADJUSTMENT PROCEDURE:

- 1.Remove the face cover (Refer to page 2), open the shuttle cover, then remove the shuttle race cover and the bobbin case.
- 2.Set the pattern select dial at "B" (☐). .
- 3.Loosen the setscrews (A) and (B) as pic. 2.
- 4.Move the needle bar supporter fixed plate (C) in the direction of the arrows to adjust the clearance.

If clearance is too wide, move the needle bar supporter to direction (D).

If clearance is too narrow, move the needle bar supporter to direction (E).

NOTE: After this adjustment, check the clearance between the needle and needle plate.

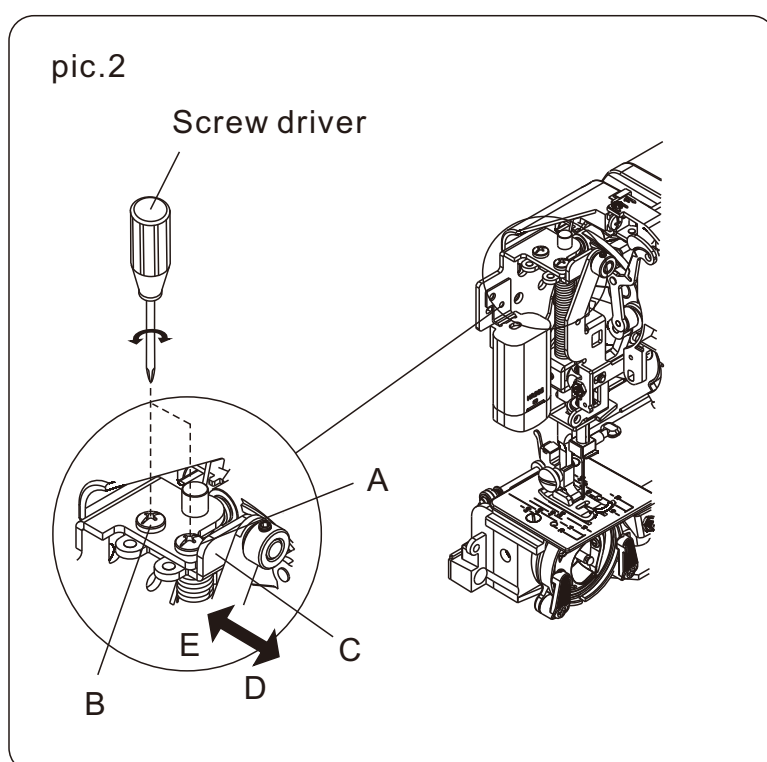
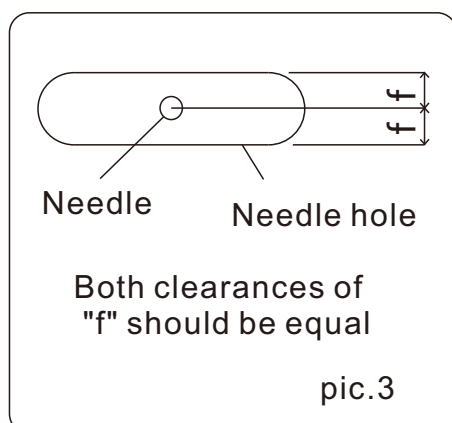
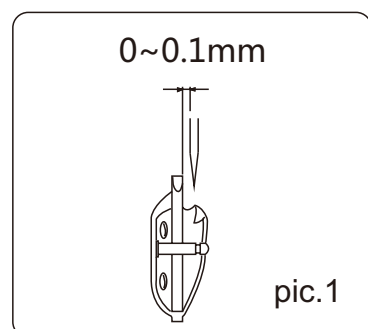
* If it is correct and same as pic.3, then the adjustment is finished.

* If not same as pic.3, adjust according to above procedure firstly and adjust the clearance between needle and shuttle race by using adjustment method No. 2 (see next page).

5.Tighten the setscrews (A) and (B).

6.Recheck the clearance.

7.Attach the face cover.



MECHANICAL ADJUSTMENT

CLEARANCE BETWEEN NEEDLE AND HOOK (ADJUSTMENT METHOD NO.2)

To check:

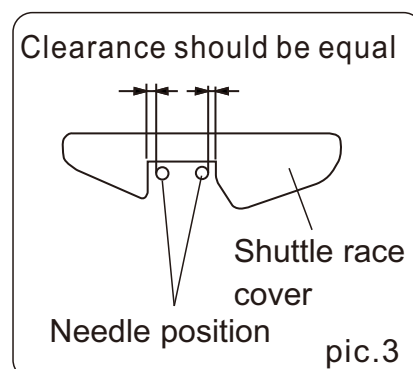
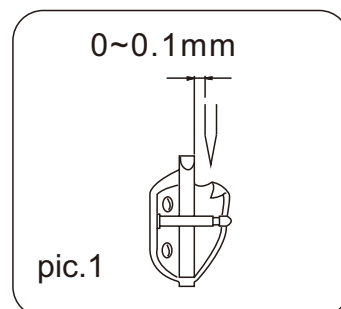
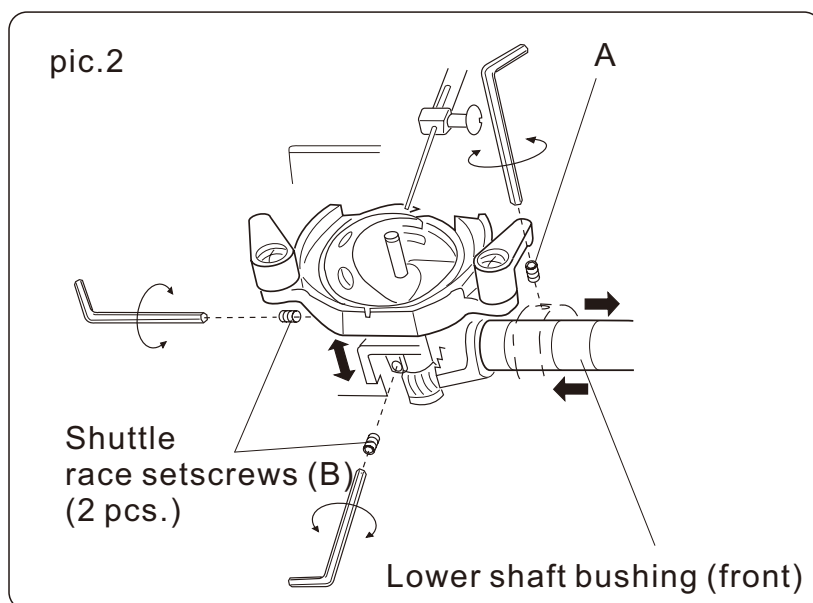
Use this adjustment method NO. 2 if the clearance cannot be adjusted by the method NO.1.

The clearance between the needle and shuttle race should be 0~0.1 mm.

Adjustment procedure :

1. Set the pattern selector dial at "B" (☐▷).
2. Remove all covers (See page 2-6) and remove the shuttle and the shuttle race cover.
3. Loosen the setscrew (A) on the lower shaft bushing and slide the gear about 0.5 mm to the right to create some slack between the gears.
4. Lower the needle and loosen the two shuttle race setscrews (B).
Move the shuttle race unit axially either forward or backward to adjust the clearance between the needle and the shuttle race in the range of 0~0.1 mm.
5. Set the pattern select dial at "C" (◁), turn the handwheel to check if the clearance between the needle and inner edges of the shuttle race spring at the left and right needle drops are equal.
If not, adjust by turning the shuttle race unit.
6. Tighten the two shuttle race setscrews (B).
7. Loosen the setscrew on the lower shaft bushing and slide the gear back to the original position while adjusting the backlash.
8. Tighten screw (A) firmly.
9. Attach all the covers.

**NOTE: The rotary play of the tip of the shuttle driver should be less than 0.3 mm and the lower shaft should turn smoothly.
After the adjustment, check the hook timing.**



MECHANICAL ADJUSTMENT

FEED DOG HEIGHT

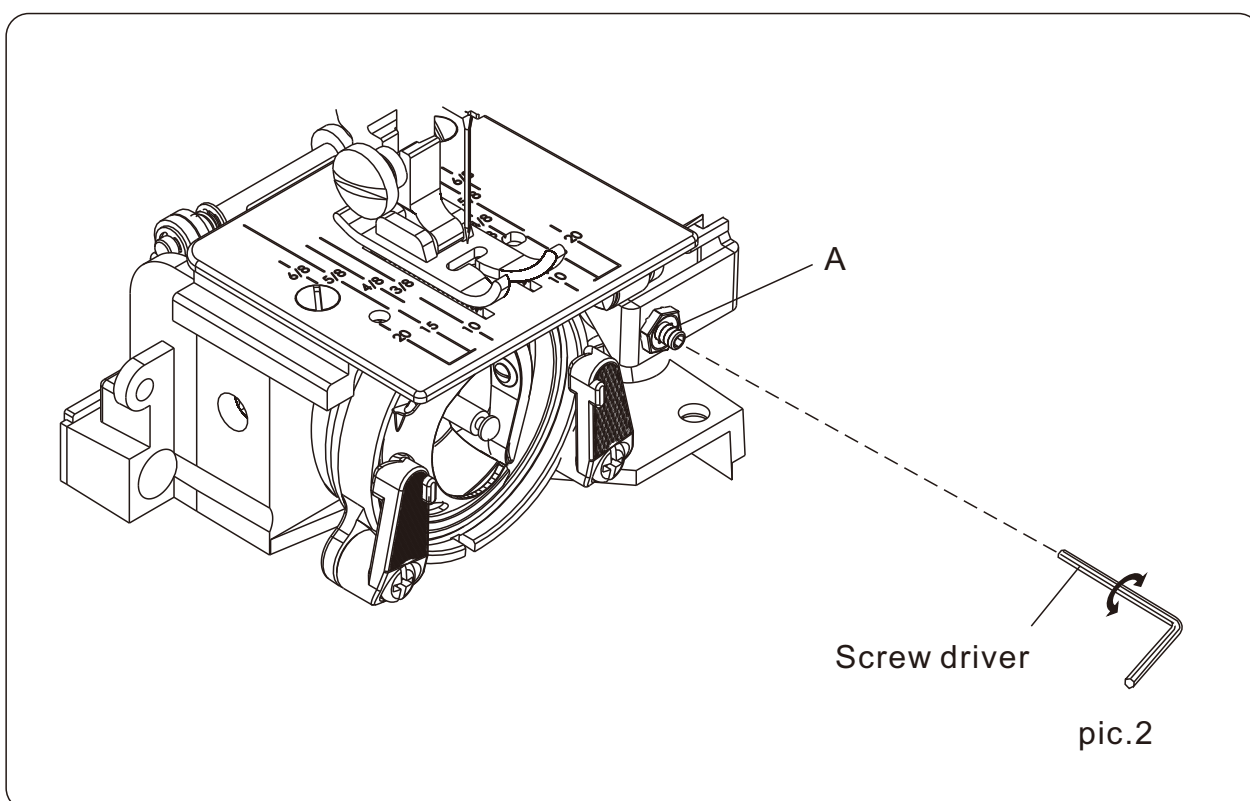
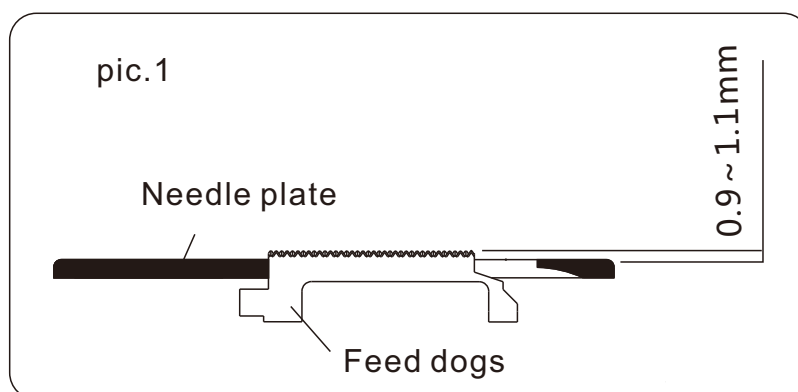
TO CHECK:

Lift the presser foot and turn the hand wheel towards you to bring the feed dog to its highest position. The height of the feed dog from the needle plate should be between 0.9~1.1mm. (Pic.1)

If it is not in the range, adjust as follows:

ADJUSTMENT PROCEDURE:


- 1.Lift the presser foot and turn the hand wheel towards you to bring the feed dog to its highest position.
- 2.Remove the accessories box and open the shuttle cover.
- 3.Turn the setscrew (A) to adjust the height of feed dog.
- 4.Turn the handwheel toward you to recheck the height of the feed dog.
- 5.Attach the accessories box.



MECHANICAL ADJUSTMENT


NEEDLE HEIGHT

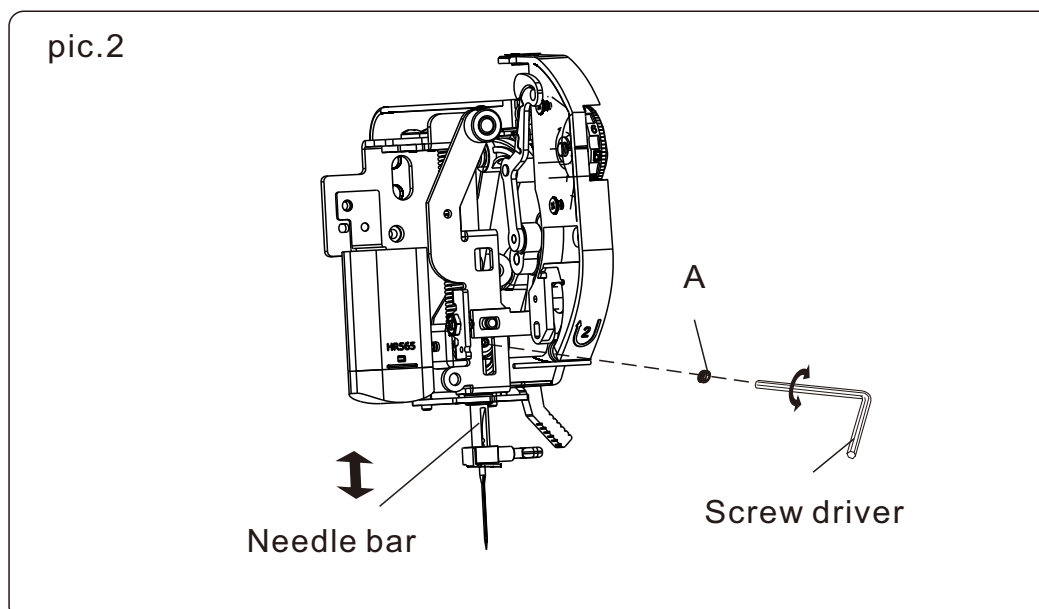
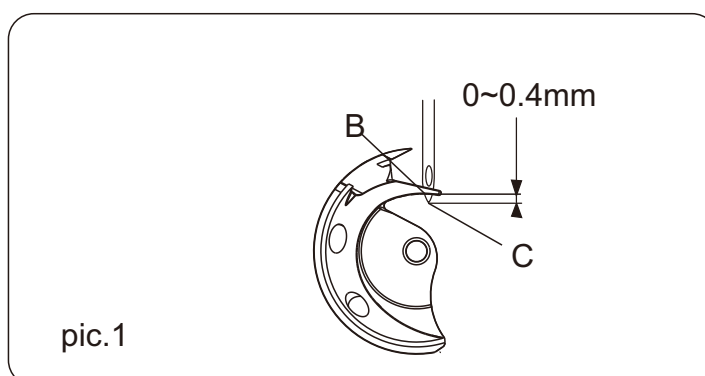
TO CHECK:

Turn the pattern dial to “B” (), then turn the handwheel until the needle is in its left and lowest position, the distance between the tip of the needle (C) and the inner hole wall of shuttle (B) should be in the range of 0~0.4mm.

If it is not in the range, adjust as follows:

ADJUSTMENT PROCEDURE:

- 1.Remove the face cover (See page2), open the shuttle cover, remove the shuttle and the shuttle race cover.
- 2.Turn the pattern dial to “B” ().
- 3.Turn the handwheel toward you until the needle is in its left and lowest position.
- 4.Loosen the setscrew (A), Adjust the height of needle by moving the needle bar upward or downward without turning it.
- 5.Tighten the setscrew (A).
- 6.Recheck the needle height.
- 7.Attach the shuttle race cover and shuttle, close the shuttle cover and attach face cover.



MECHANICAL ADJUSTMENT

NEEDLE TIMING TO SHUTTLE

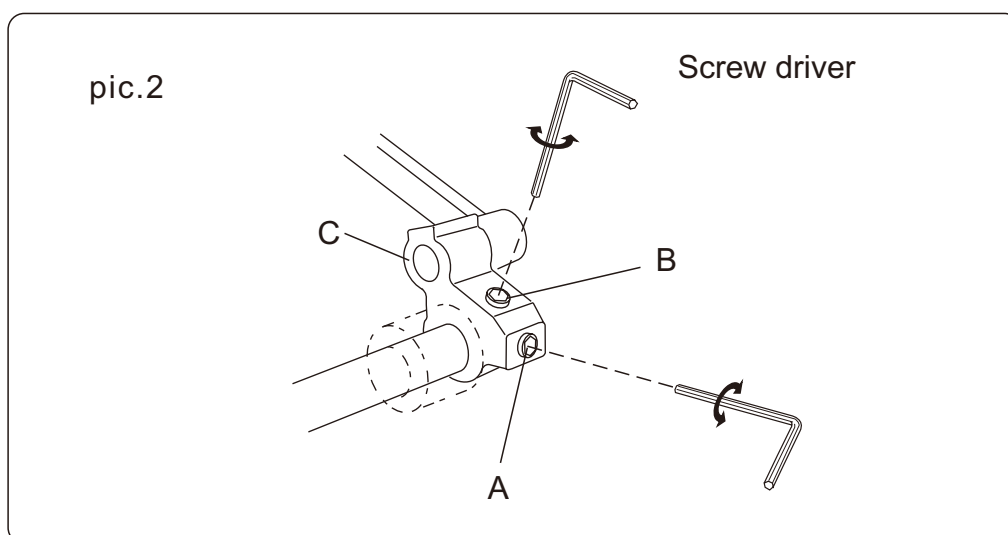
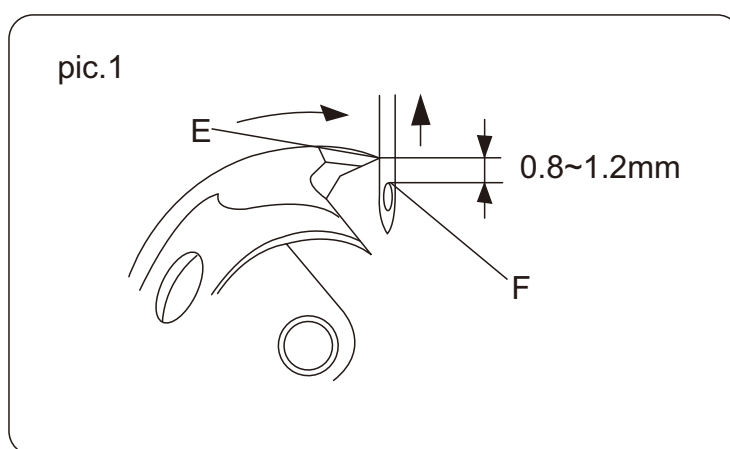
TO CHECK:

When the needle is at the right needle position, when the tip of the shuttle hook (E) meets the right side of the needle in ascending travel of the needle from its right and lowest position, the distance between the top of the needle eye (F) and the tip of the shuttle hook (E) should be in the range of 0.8~1.2mm.

If it is not in the range, adjust as follows:

ADJUSTMENT PROCEDURE:

1. Remove the face cover (See page 2), open the shuttle cover, remove the shuttle and the shuttle race cover.
2. Turn the pattern dial at "C" (ㄨ).
3. Loosen the setscrews (A) and (B), Turn the lower shaft crank to adjust the needle timing.
4. Tighten the setscrews (A) and (B).
5. Recheck the needle timing.
6. Attach the shuttle cover and shuttle, close the shuttle cover and attach the face cover.



MECHANICAL ADJUSTMENT

BUTTONHOLE FEED BALANCE

TO CHECK:

When sewing buttonhole, the stitches on each side of buttonhole should be the same stitch density.

If it is same as A or B on pic 1, adjust as follows:

ADJUSTMENT PROCEDURE:

1.Remove the cap on top of front cover.

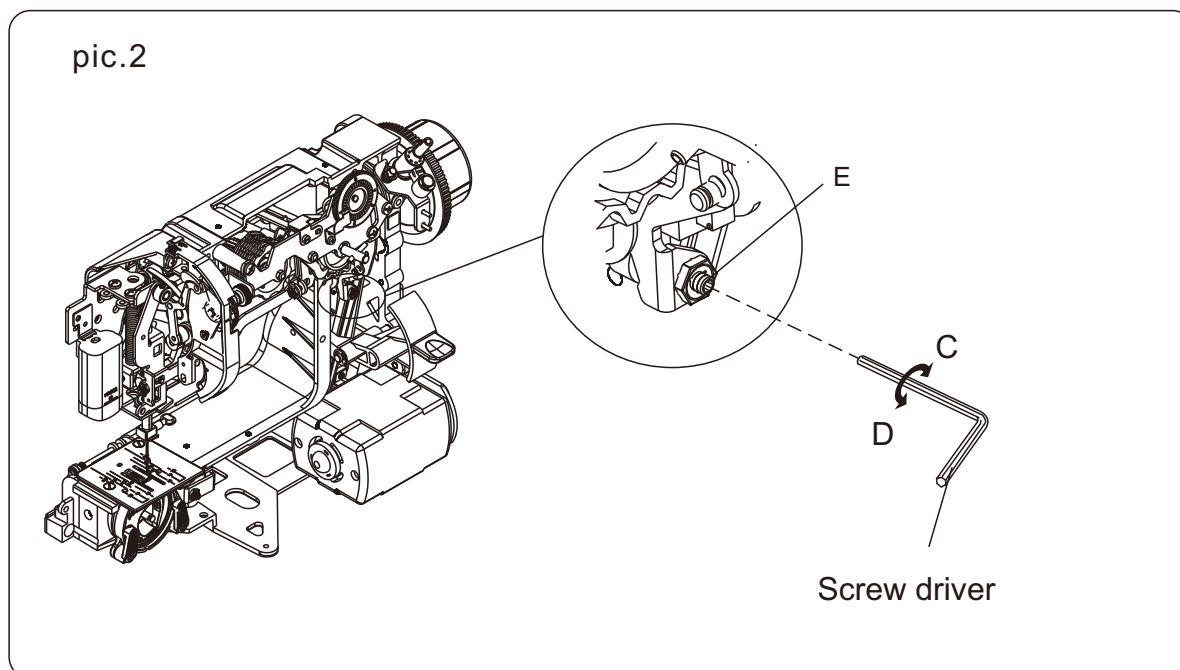
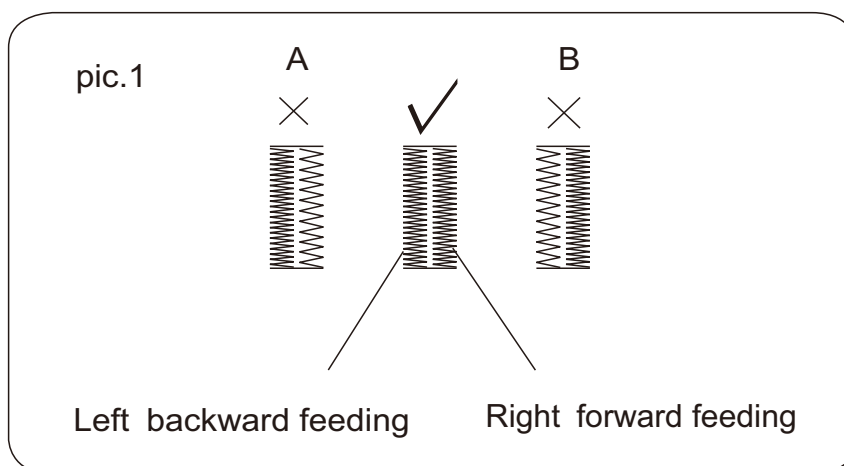
2.Turn the adjusting screw (E).

* If same as A, turn the pattern knob to **3**, turn the screw (E) in the direction (C).

* If same as B, turn the pattern knob to **1**, turn the screw (E) in the direction (D).

3.Recheck the buttonhole density.

4.Attach the cap.



MECHANICAL ADJUSTMENT

FOOT PAD HEIGHT

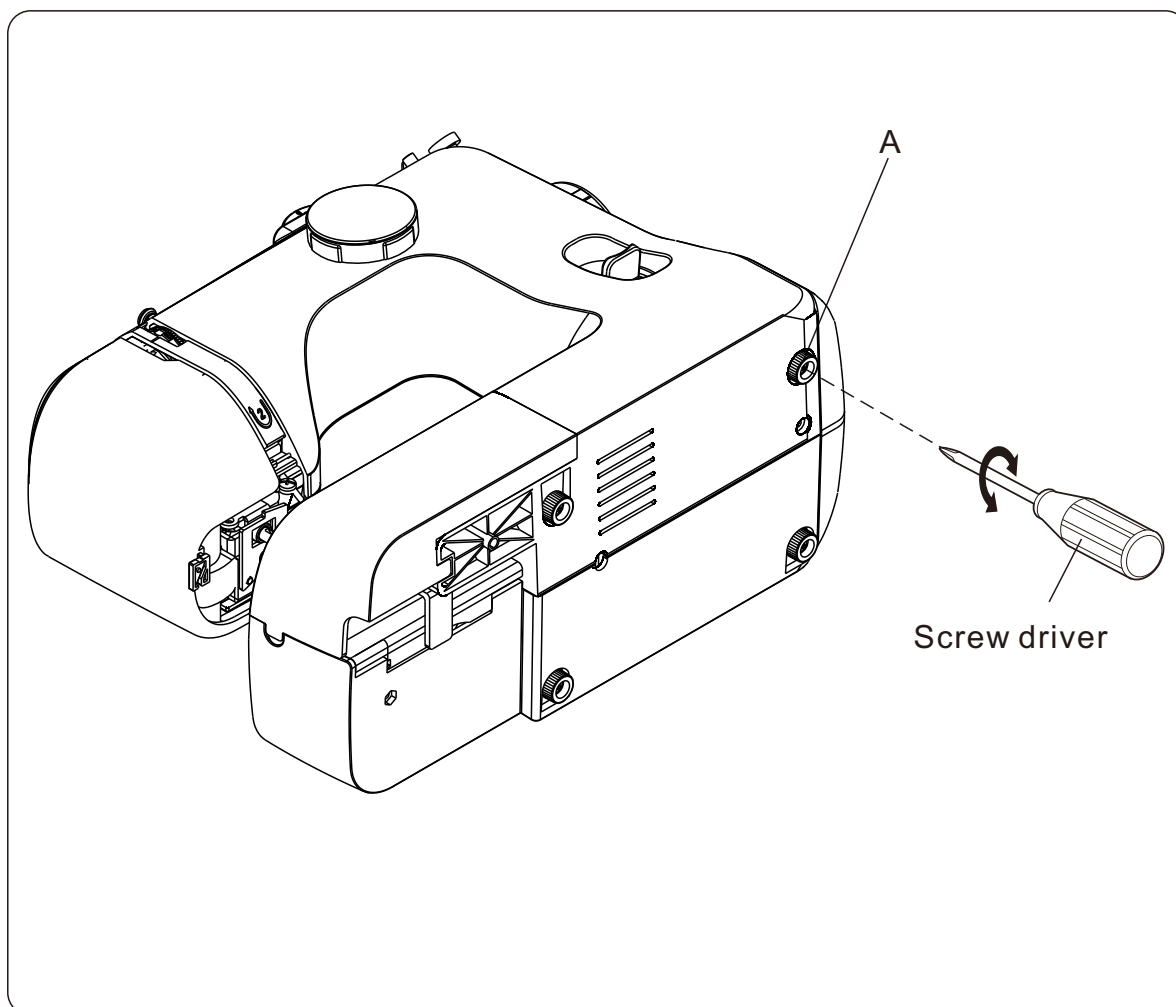
TO CHECK:

Put the machine on a plain level, gently shaking the machine, the sewing machine should be no vibration.

If there is vibration, adjust as follows:

ADJUSTMENT PROCEDURE:

1. Turn the foot pad (A) to adjust the height of the foot pad.
2. Recheck the machine.



MECHANICAL ADJUSTMENT

BOBBIN WINDING

TO CHECK:

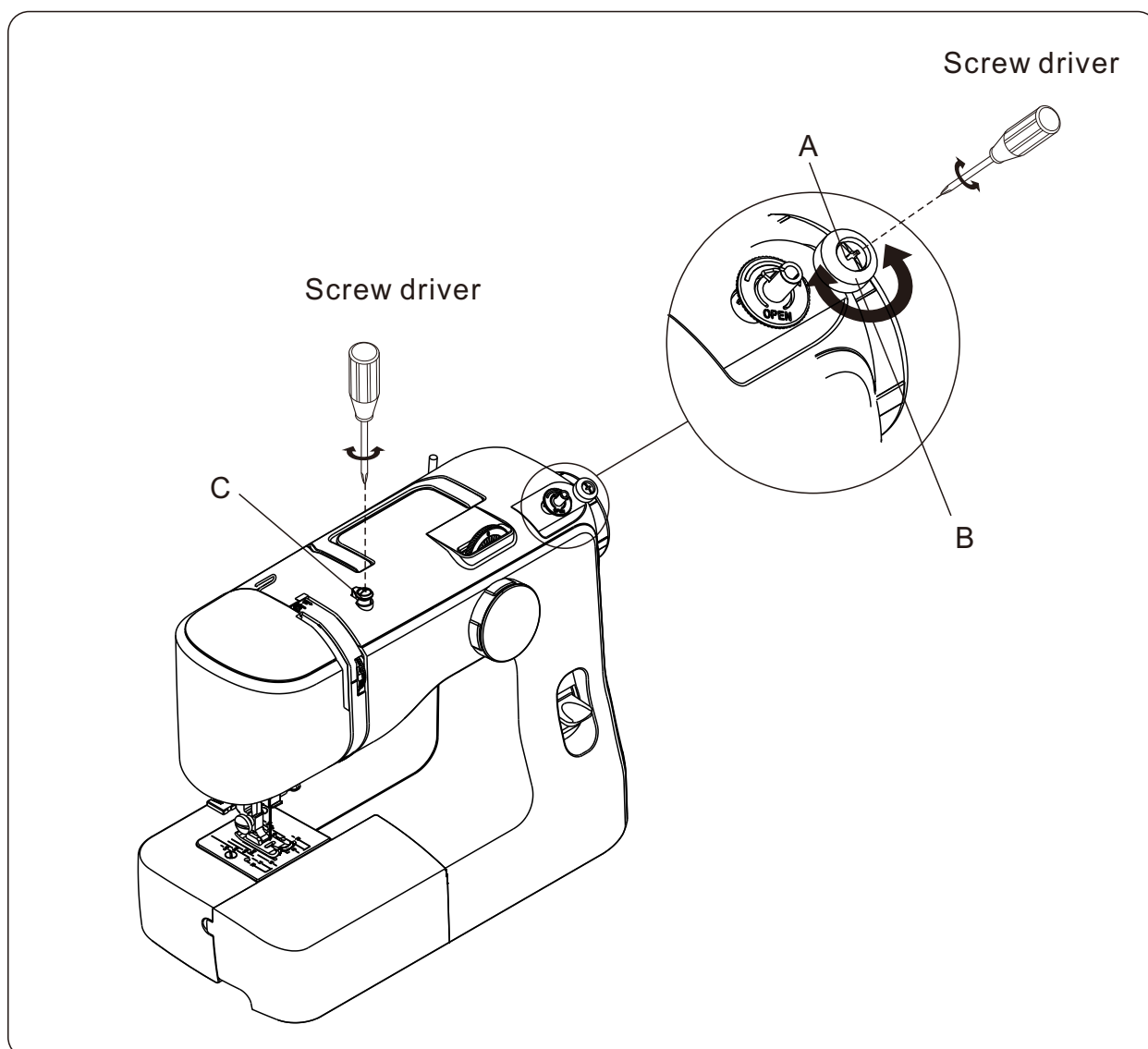
The bobbin winding volume should reach 80%-90%, and no uneven winding surface.

If cannot reach above requirement, adjust as follows:

ADJUSTMENT PROCEDURE:

1. Loosen the setscrew (A).
2. Turn the position limit block (B) to adjust the bobbin winding volume.
3. Tighten the setscrew (A).
4. Recheck.

***If the winding surface is uneven, adjust the height of the bobbin winding adjusting unit (C).**



MECHANICAL ADJUSTMENT

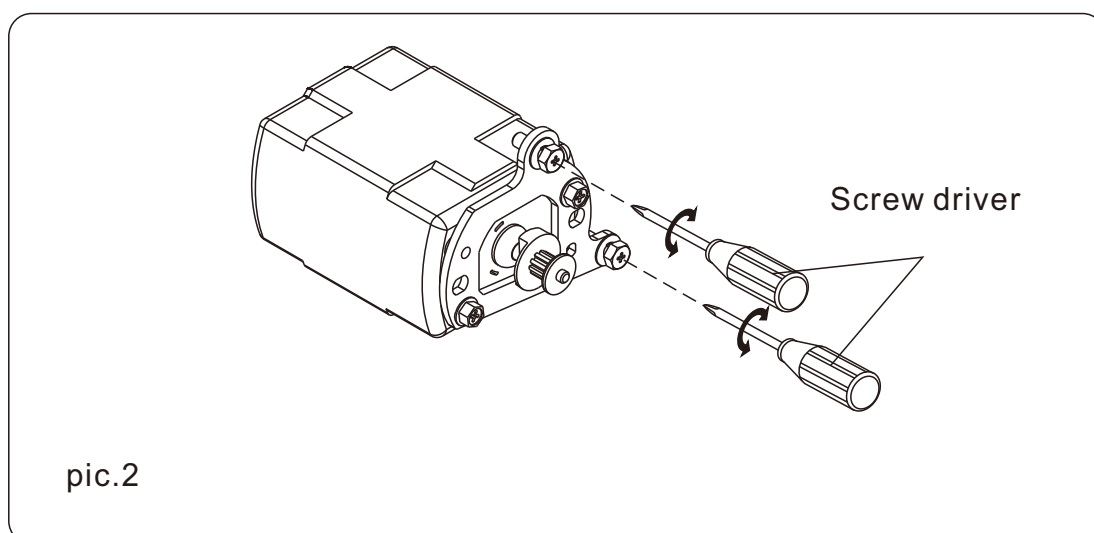
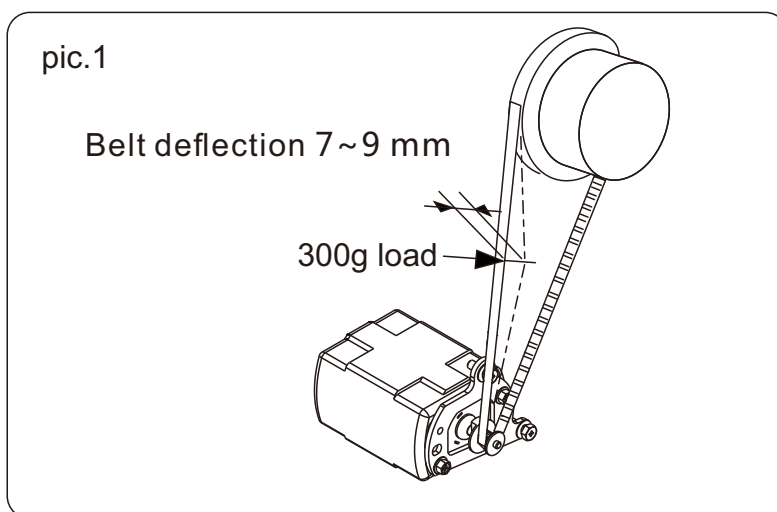
MOTOR BELT TENSION

TO CHECK:

- 1.If the motor belt tension is too tight or too loose, it can cause a belt noise.
If the tension is too tight, it can cause the machine to run slowly and the motor to overload.
If the tension is too loose, it can cause the belt teeth on the motor pulley to jump.
- 2.The correct motor belt tension is when the deflection of motor belt is about 7mm ~ 9mm. (When pushing the motor belt by finger with a 300 gram load.)
If belt tension is not suitable, adjust as follows:

ADJUSTMENT PROCEDURE:

- 1.Remove the front cover (See page 4).
- 2.Loosen the screws as pic.2.
- 3.Move the motor up or down to adjust the deflection about 7mm ~ 9mm.
- 4.Tighten the screws.
- 5.Attach front cover.



CAVEAT

WIRING FOR SOCKET UNIT

- 1.Remove the side cover (Refer to page 2).
- 2.Remove the screws (A) and (B) as pic. 1, and remove socket.
- 3.Remove the screws (C) and (D) as pic. 2, and open the socket top cover.
- 4.Wiring as pic. 3.
- 5.Attach the socket and side cover in reverse procedure of the removing.

