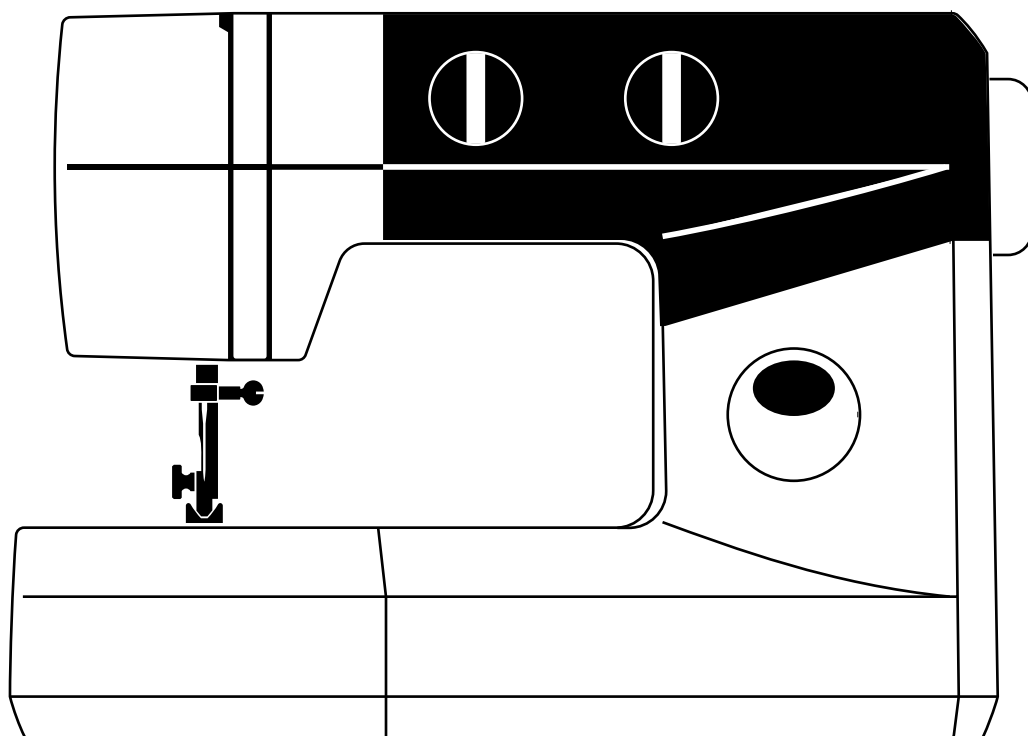


Service manual



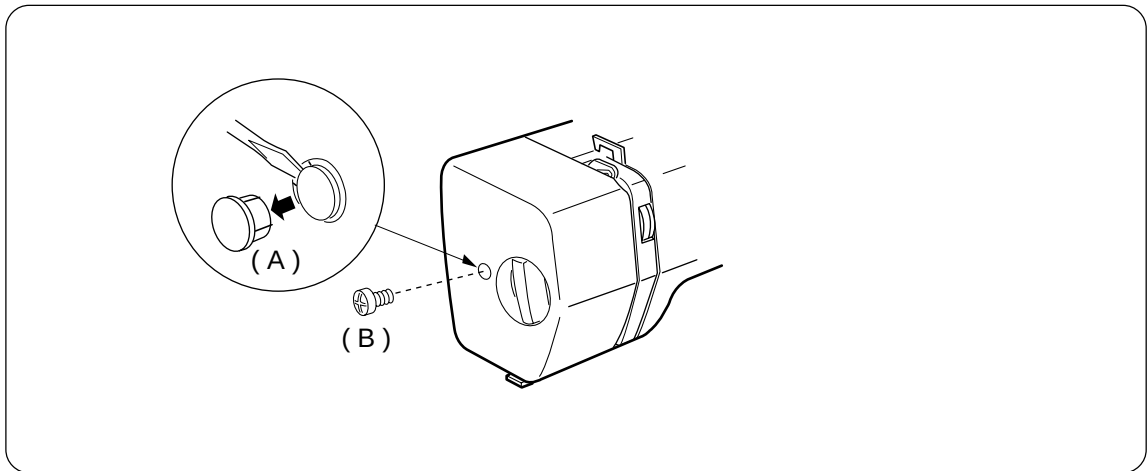
Huskystar 207/215

Typ B

Contence

FACE COVER	3
MOTOR COVER	3
BASE PLATE	4
FRONT COVER	5
REAR COVER	6
LOWER THREAD TENSION	7
UPPER THREAD TENSION	8
PRESSER BAR HEIGHT AND ALIGNMENT	9
TURNING MOVEMENT OF THE NEEDLE IN ZIG-ZAGAND THE PLAY OF THE WORM GEAR	10
NEEDLE DROP	11
CLEARANCE BETWEEN NEEDLE AND HOOK (ADJUSTMENT METHOD NO. 1- Sewing head)	12
CLEARANCE BETWEEN NEEDLE AND HOOK (ADJUSTMENT METHOD NO.2- HOOK)	13
FEED DOG HEIGHT	14
NEEDLE BAR HEIGHT	15
NEEDLE TIMING TO SHUTTLE	16
BUTTONHOLE FEED BALANCE	17
BARTACK FEED OF BUTTONHOLE	18
FEED BALANCE ON STRETCH STITCH	19
CAM FOLLOWERS LIFTING HEIGHT (For Model 215 only)	20
CAM FOLLOWERS LIFTING HEIGHT- (For Model 207 only)	21
ZEROING THE NEEDLE -(For Model 215 only)	22
MOTOR BELT TENSION	23
WIRING	24

FACE COVER



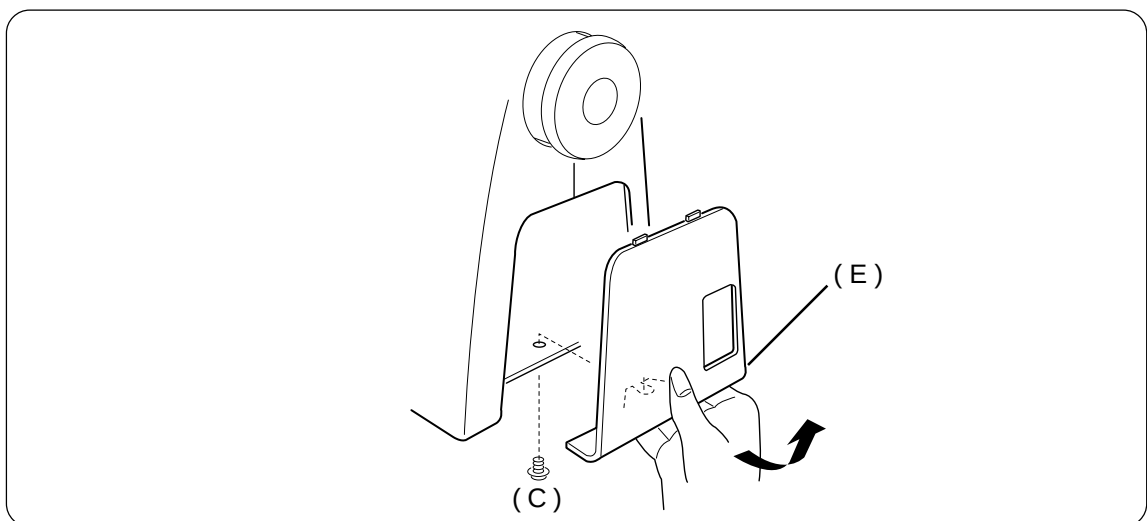
To remove.

1. Remove the face cover (D) by removing the cap (A) and screw (B).

To attach.

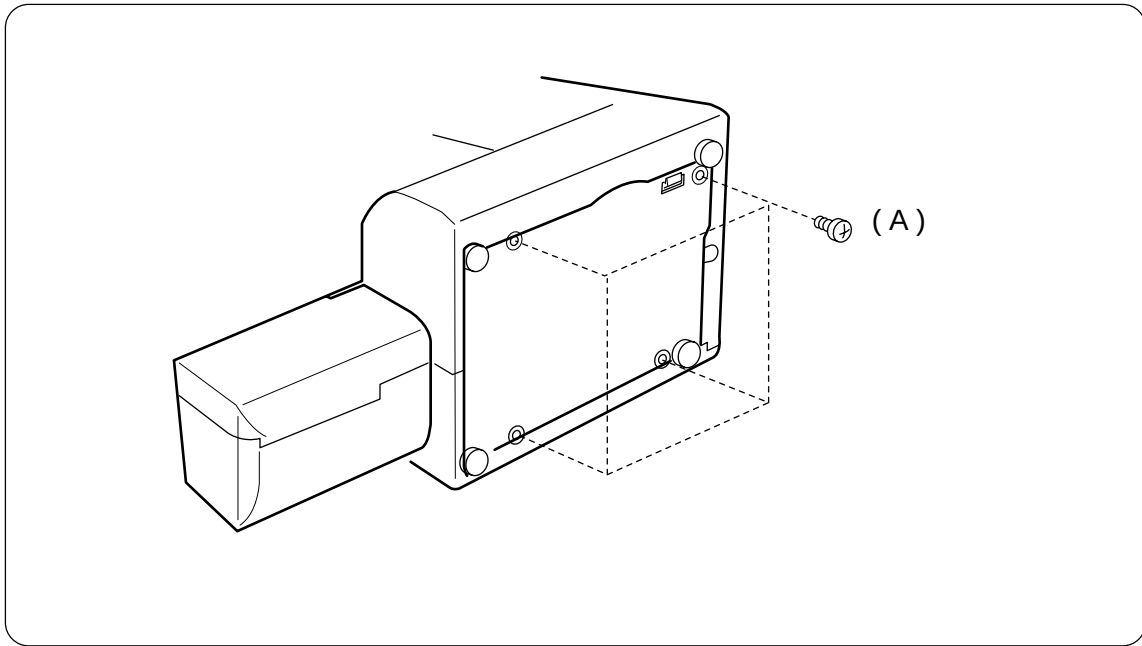
2. Attach the face cover (D) with the set screw (B), then, attach the cap (A).

MOTOR COVER



1. Loosen screw (C).
2. Take the motor cover away.

BASE PLATE



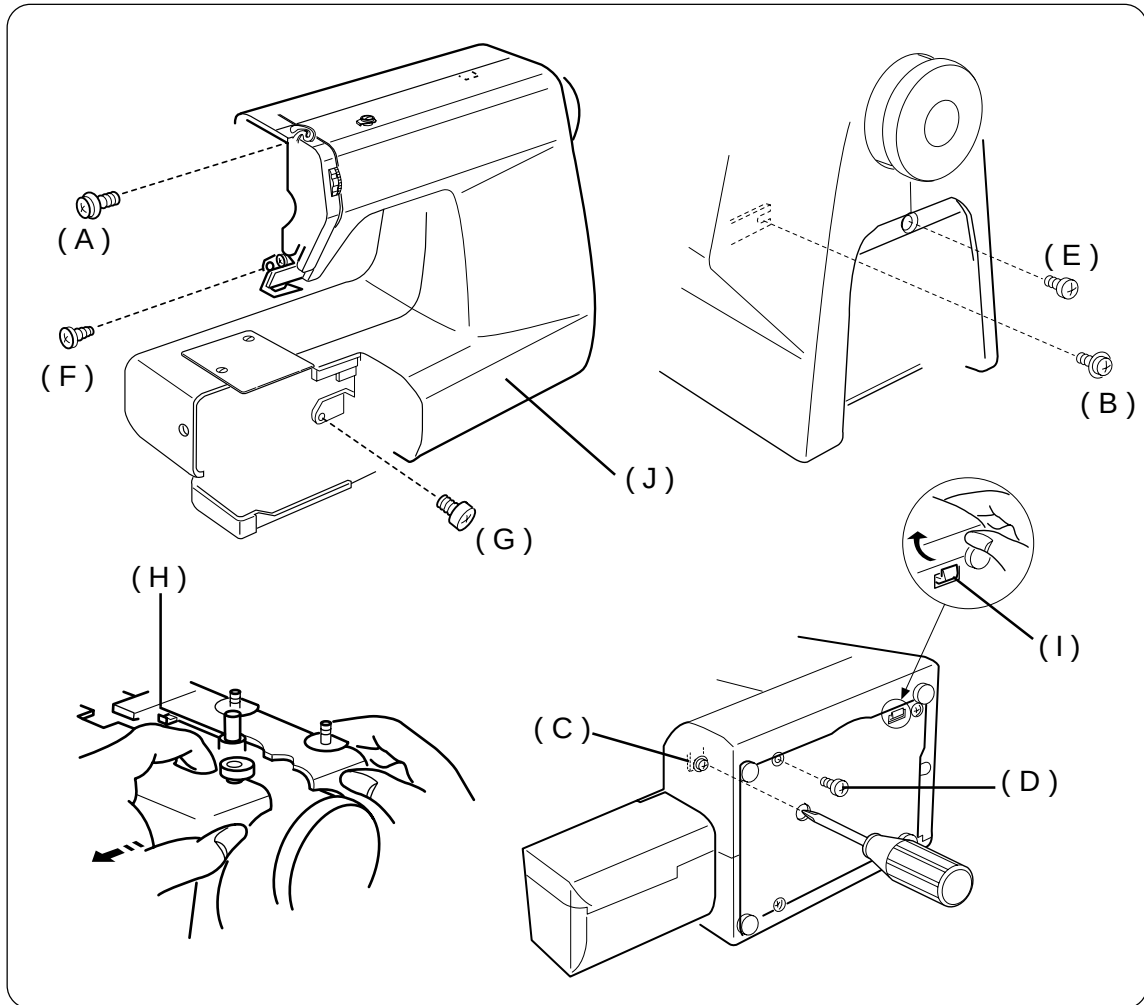
To remove.

1. Remove 4 screws (A).
2. Remove the base plate.

To attach.

3. Follow the above procedure in reverse.

FRONT COVER

**To remove.**

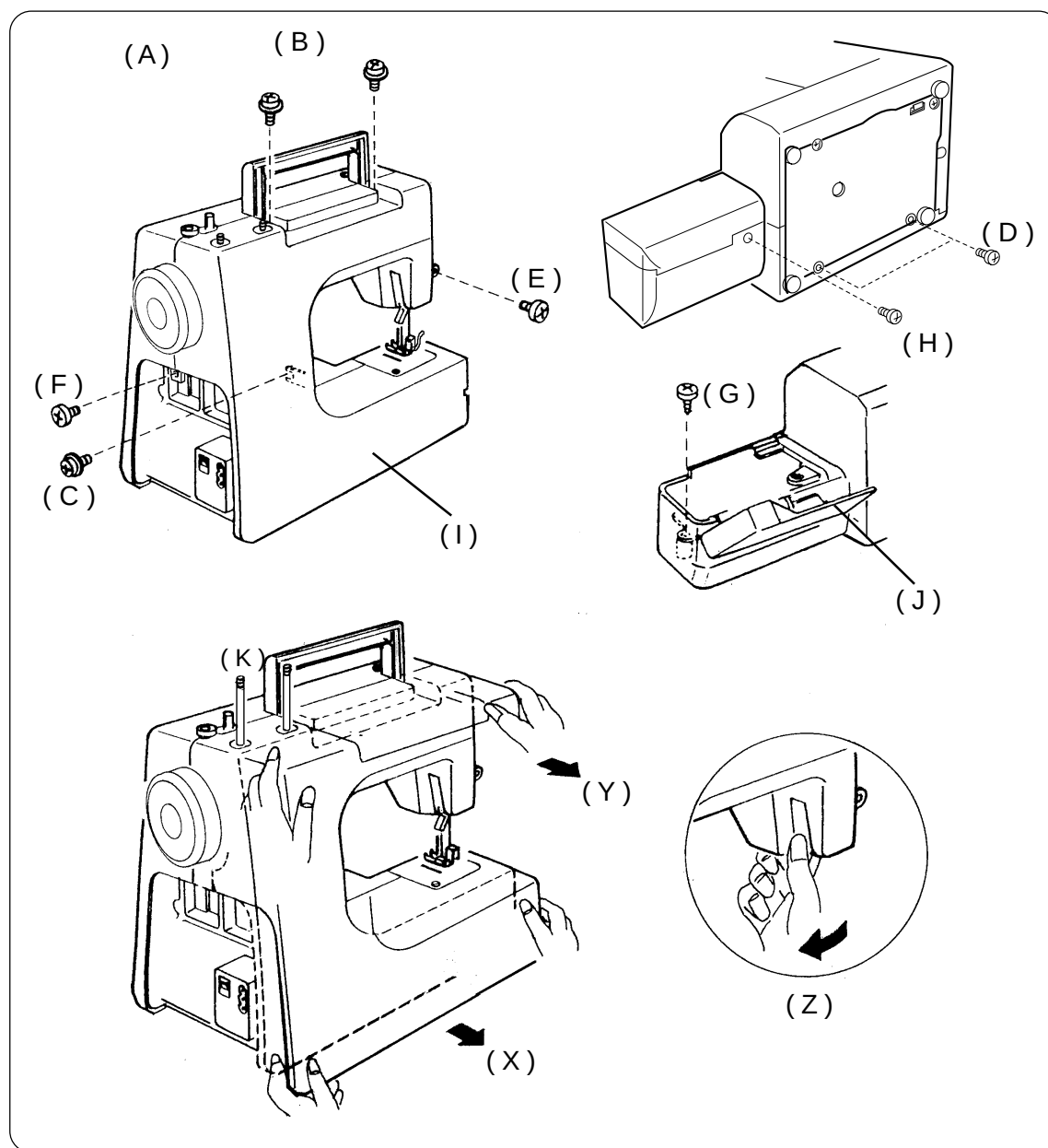
1. Remove the face cover, and motor cover.
2. Loosen set screws (A), (B), (C), (D) and then, remove the front cover (J) by removing set screws (E), (F) and (G).

Note! Remove the hook (H) first, then hook (I).

To attach.

3. Follow the above procedure in reverse.

REAR COVER



To remove.

1. Remove the face cover and motor cover.
2. Pull up the spool pins (K).

Loosen set screws (A), (B), (C) and (D: 2 pcs.), then remove the rear cover (I) by removing the set screws (E), (F), (G) and (H).

Note! Remove the rear cover in the order of lower part (X), upper part (Y) and presser bar lifter part (Z).

Note! Remove the bed cover plate (J) together.

To attach.

3. Follow the above procedure in reverse.

LOWER THREAD TENSION

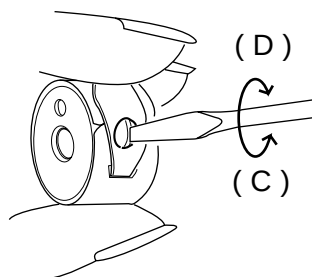
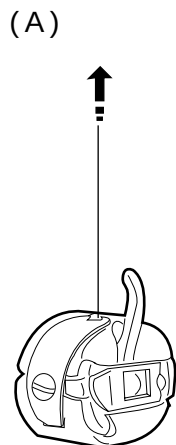
Check.

Set the bobbin in the bobbin case and pass a thread through the tension spring.

The lower thread tension should be between 25 and 35 grams when pulling the thread in the direction of (A).

Adjustment.

1. If the lower thread tension is too tight, turn the adjusting screw (B) in the direction of (C).
2. If the lower thread tension is too loose, turn the adjusting screw (B) in the direction of (D)

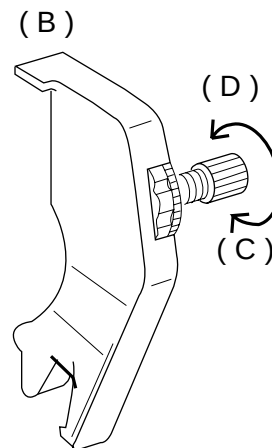
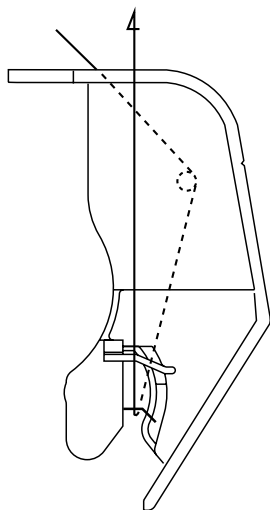


UPPER THREAD TENSION

The standard upper thread tension should be between 65 and 95 grams when pulling a cotton size 50 thread in the direction of (A) with the tension dial at “3”. The presser foot should be lowered when checking the upper thread tension.

Adjustment

1. Remove the front cover.
2. Turn the adjusting nut (B) in the direction of (C) when the upper thread tension is too tight. Turn the adjusting nut (B) in the direction of (D) when the upper thread tension is too loose.
3. Attach the front cover.



PRESSER BAR HEIGHT AND ALIGNMENT

Check.

1. Raise the presser bar lifter (A).
2. The distance between the presser foot (D) and the needle plate (E) should be 6.0 mm.

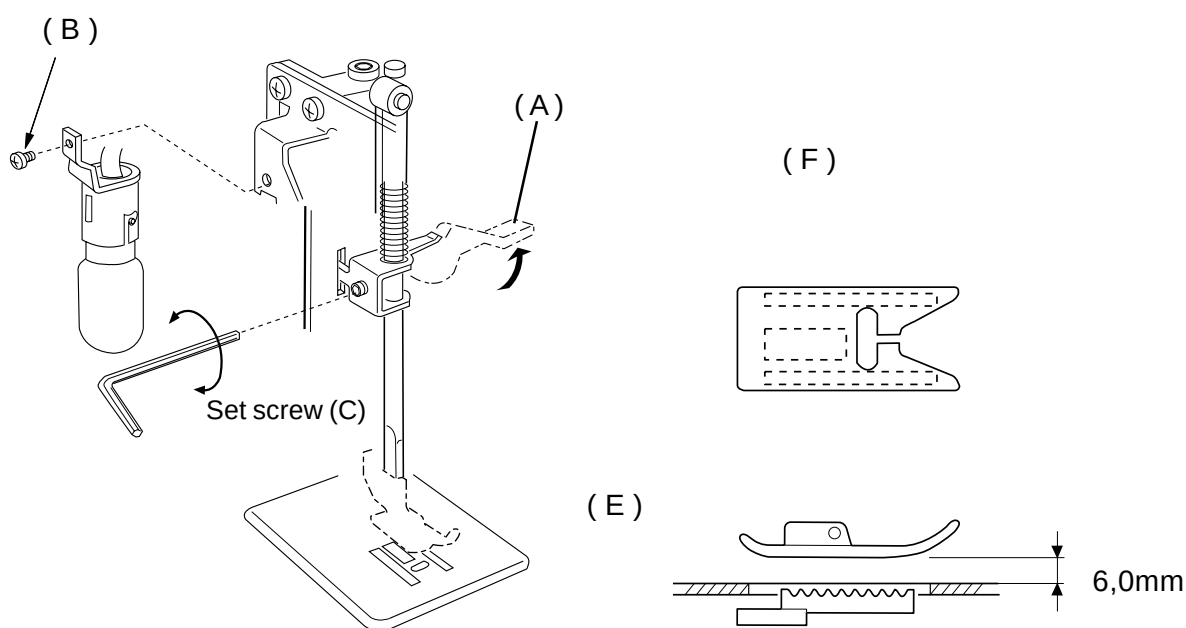
Adjustment.

1. Remove the face cover.
2. Remove the screw (B) and take the lamp socket off.
3. Raise the presser foot lever and loosen the hexagon socket screw (C) on the presser bar holder.

Adjust the distance between the zigzag foot (D) and the needle plate (E) to 6.0 mm.

4. Tighten the screw (C) securely.
5. Tighten the screw (B) to secure the lamp socket.
6. Attach the face cover.

Note! When you tighten the screw (C), make sure that both sides of the presser foot are parallel to the feed dog slots (F) on the needle plate.



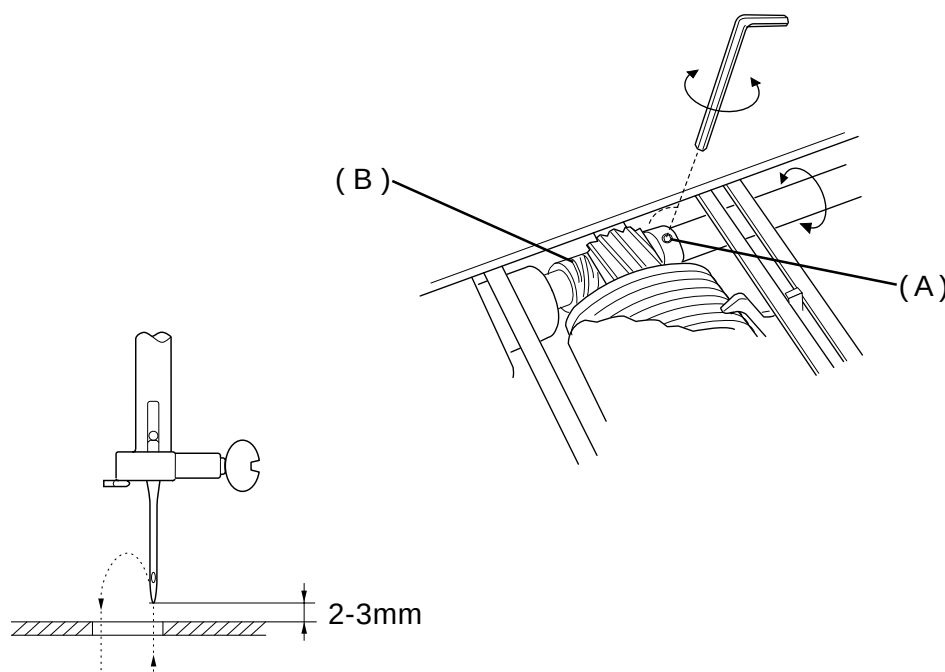
TURNING MOVEMENT OF THE NEEDLE IN ZIG-ZAG AND THE PLAY OF THE WORM GEAR

In sewing zigzag zigzag stitch (with maximum zigzag width), if the needle bar starts moving sideways while the needle is in the fabric, adjust the needle swing according to the following procedure:

To adjust.

1. Set the stitch selector dial with maximum zigzag width, and remove the front cover.
2. Loosen the two set screws (A).
3. Adjust the needle swing by turning the hand wheel while holding the worm gear (B) so there is no rotation until the needle swing starts at 2 to 3 mm above the needle plate after the needle has come out of the right side of the needle plate hole.
4. Tighten two set screws (A).
5. Mount the front cover.

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



NEEDLE DROP

To check.

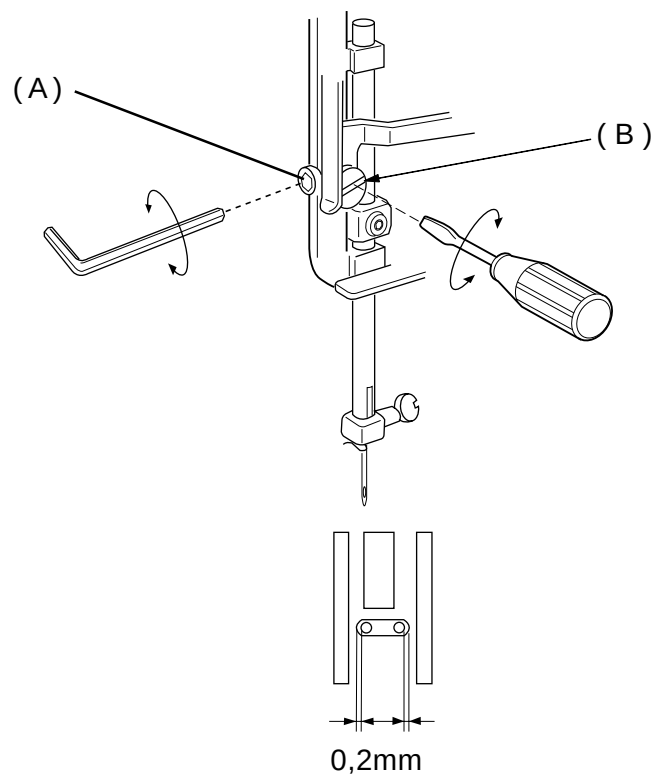
When the needle swings in maximum zigzag width, the distance between both ends of the needle hole on the needle plate and the needle drop positions should be more than 0.2mm and equal (C).

If not, adjust as follows:

To adjust.

1. Remove the face cover.
2. Set the stitch selector dial at maximum zigzag width.
3. Loosen the hexagon socket screw (A).
4. Turn the eccentric pin (B) to adjust the needle drop.
5. Tighten the hexagon socket screw (A).
6. Attach the face cover.

Note! Check the hook timing after this adjustment.



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

The clearance between the needle and tip of shuttle hook should be -0.05 to +0.10 mm (F).
If not, adjust as follows:

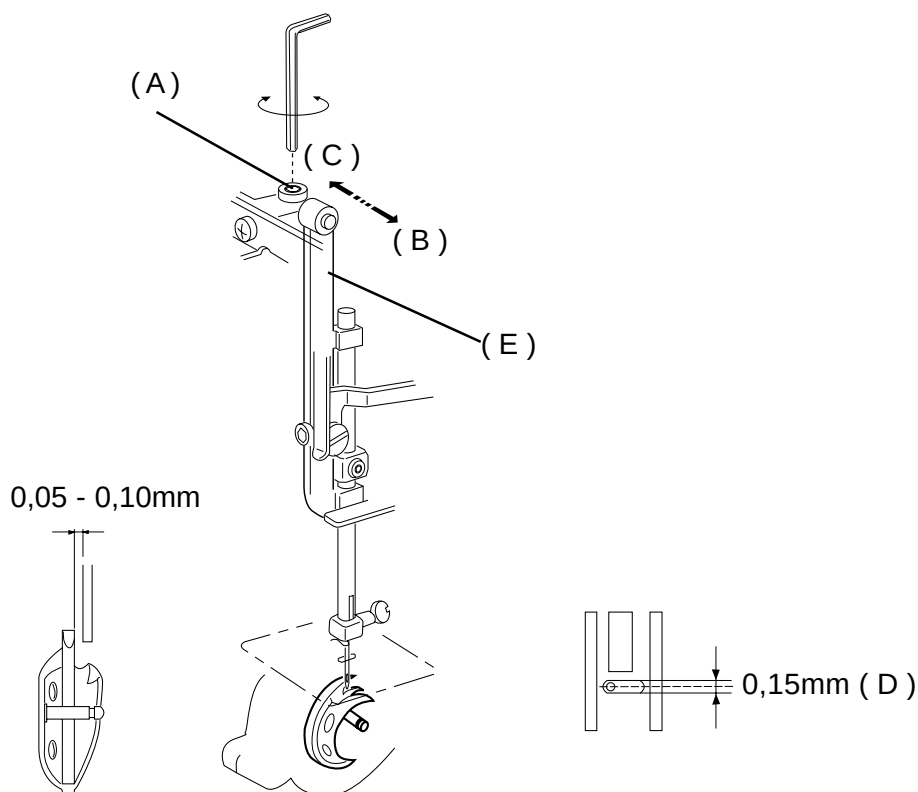
To adjust.

1. Remove the face cover.
2. Insert a new # 90 needle.
3. Set the stitch selector dial at straight stitching (needle in left position) for Model 207. For Model 215 set it at (needle in left position) and zigzag dial at "0".
4. Loosen set screw (A), and move the needle bar supporter (E) in the direction of the arrows to obtain the clearance between 0.05 to +0.10 mm (F).
If the clearance is too wide, move the needle bar supporter (E) to the direction of (B).
If clearance is too narrow, move the needle bar supporter (E) to the direction of (C).

Note!After the above adjustment, check that the clearance between the needle and needle plate is more than 0.15 mm as shown in figure (D).

If not, adjust the clearance between needle and shuttle hook by using adjustment method No:2 on the next page

5. Attach the face cover.



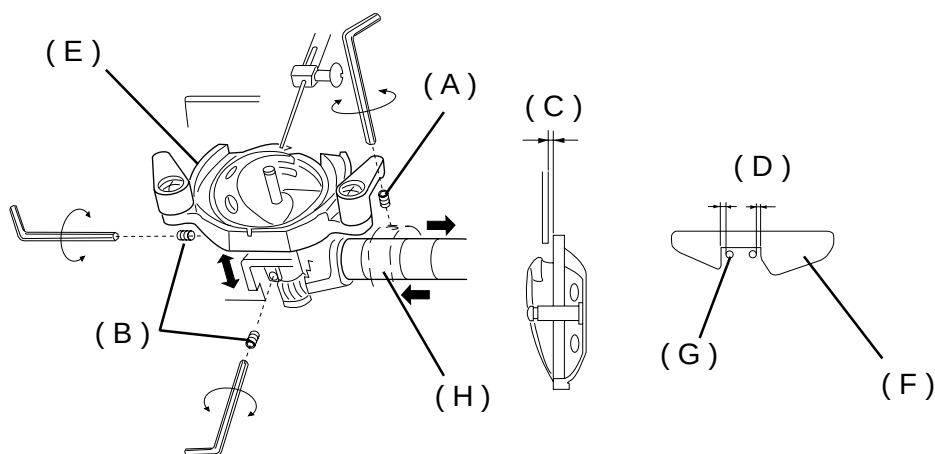
CLEARANCE BETWEEN NEEDLE AND HOOK (ADJUSTMENT METHOD NO.2- HOOK)

Use this adjustment method No. 2 when method No.1 cannot be used.

The clearance between the needle and shuttle race should be -0.05 to +0.10 mm.

To adjust.

1. Set the stitch selector dial at dial at straight stitching (needle in left position)for Model 207.
For Model 215, set the dial at straight stitching (needle in left position)and zigzag width at "0".
2. Insert a new # 90 needle.
3. Remove the rear cover and the shuttle race ring.
4. Loosen the hexagon socket screw (A) on the bushing (H) and slide the bushing about 0.5 mm to the right to create some slack between the lower shaft gear and hook drive gear.
Then tighten the hexagon socket screw (A) slightly.
5. Lower the needle and loosen the two hexagon socket screws (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 0.05 to +0.10 mm (C).
6. Set the stitch selector dial at zig-zag for Model 207.
For Model 215, set it at zig-zag and zigzag width at "5".
Turn the hand wheel to check if the clearance (D) between the needle (G) and inner edges of the shuttle race spring (F) at the left and right needle drops are equal.
If not, loosen the 2 hexagon socket screws (B) and adjust by turning the shuttle race unit (E).
7. Tighten the 2 screws (B).
8. Loosen the set screw on the lower shaft bushing and slide the bushing back to the original position while adjusting the backlash.



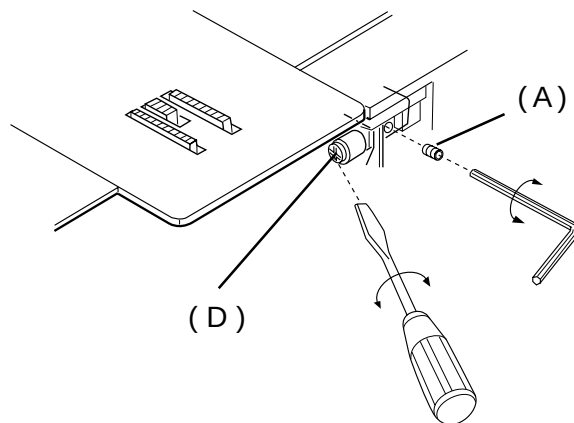
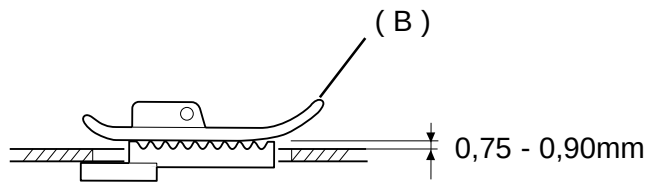
FEED DOG HEIGHT

To check.

1. Lower the zigzag foot (B).
2. Turn the hand wheel towards you until the feed dog comes to its highest position. In this condition the height of the feed dog should be between 0.75 and 0.90mm (C).

To adjust.

1. Open the bed cover plate.
2. Lower the zigzag foot and turn the hand wheel toward you until the feed dog comes to its highest position.
3. Loosen the hexagon socket screw (A).
4. Turn the feed lifting pin (D) to adjust the height of feed dog between 0.75 and 0.90mm (C).
5. Tighten the hexagon socket screw (A).
6. Turn the hand wheel towards you to recheck the height of feed dog.

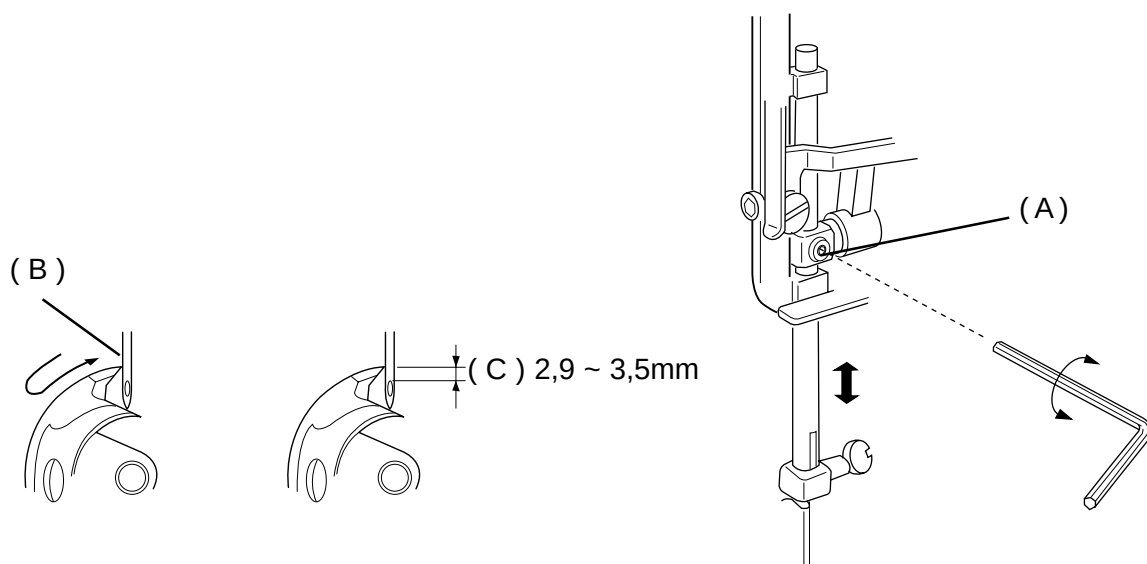


NEEDLE BAR HEIGHT

When the tip of shuttle hook meets the left side of the needle (B) in ascending travel of the needle from its left and lowest position, the distance between the top of the needle eye and the tip of the shuttle hook should be in the range of 2.9 and 3.5mm (C).

To adjust.

1. Remove the face cover.
2. Set the stitch selector dial at () for Model 207. For Model 215, set it at () and zigzag dial at "0".
3. Open the bed cover plate.
4. Remove the shuttle race ring.
5. Turn the hand wheel toward you until the tip of the shuttle hook meets the left side of the needle (B).
6. Loosen the hexagon socket screw (A).
7. Adjust the height of the needle bar by moving the needle bar (D) upward or downward without turning it.
8. Tighten the screw (A).
9. Attach the shuttle race ring.
10. Attach the face cover.



NEEDLE TIMING TO SHUTTLE

The height of the needle from its lowest point (A) of travel should be in the range of 1.45 and 1.95 mm (B) when the tip of the shuttle hook just meets the left side of the needle at the left needle position.

Adjustment.

1. Set the stitch selector dial at straight stitching (needle in left position)

For Model 215, set it at dial at straight stitching (needle in left position) and zigzag width at "0".

2. Remove the base plate.

3. Open the bed cover plate.

4. Remove the shuttle race ring.

5. Turn the hand wheel towards you until the tip of the shuttle hook meets the left side of the needle.

6. Loosen the 2 hexagon socket screws (C).

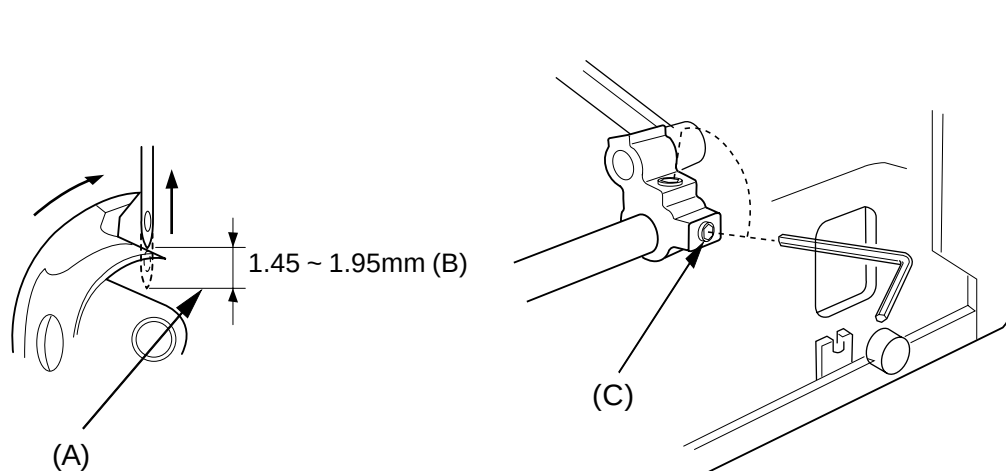
While holding the shuttle hook, turn the hand wheel towards you until the needle comes to its lowest position. Then, continue to turn the hand wheel to raise the needle about 1.7 mm from its lowest position.

8. Tighten the 2 screws (C).

9. Turn the hand wheel toward you to check if the height is in the range of 1.45 and 1.95 mm.

10. Attach the shuttle race ring.

11. Attach the base plate.

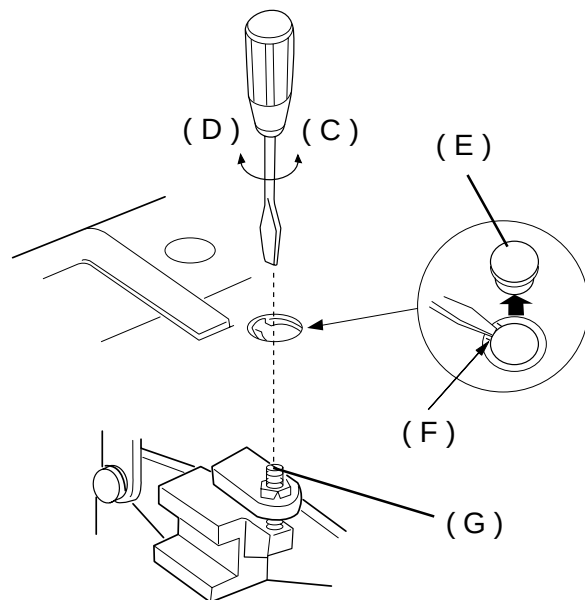
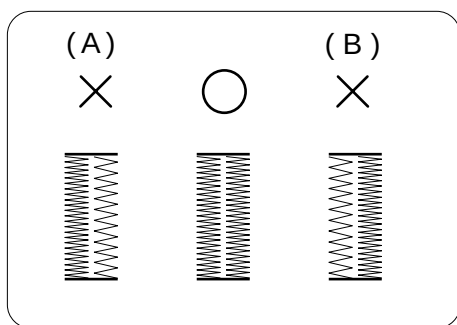


BUTTONHOLE FEED BALANCE

When sewing a buttonhole, the stitches on each side of the buttonhole should be of the same stitch density. A range of 9 to 12 stitches in the backward feeding right side row paired with 10 stitches in the forward feeding left side row is considered acceptable.

To adjust.

1. Sew a buttonhole.
2. Remove the cap. (E) by inserting a screwdriver into the notch (F).
3. Turn the adjusting screw (G) in the direction of:
 - (C) in case of (A) (right stitches are coarse)
 - (D) in case of (B) (left stitches are coarse).
2. Attach the cap.



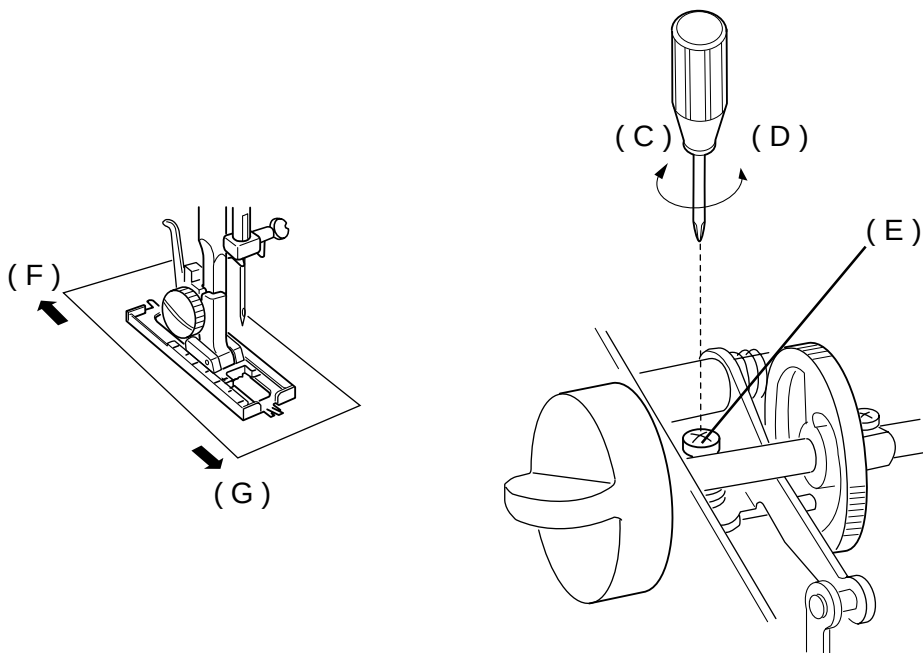
BARTACK FEED OF BUTTONHOLE

If the material is fed forward or backward when sewing the bartack on a buttonhole, adjust as follows:

To adjust.



1. Set the stitch selector dial  at and the stitch length dial at "4".
2. Remove the front cover.
3. Place a piece of paper under the foot and turn the hand wheel
4. Turn the adjusting screw (E) in the direction of:
(C) if the paper is fed forward (F).
(D) if the paper is fed backward (G).
5. Attach the front cover.

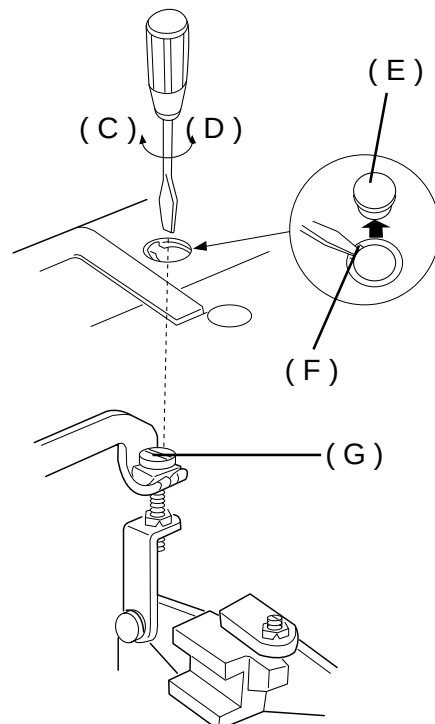
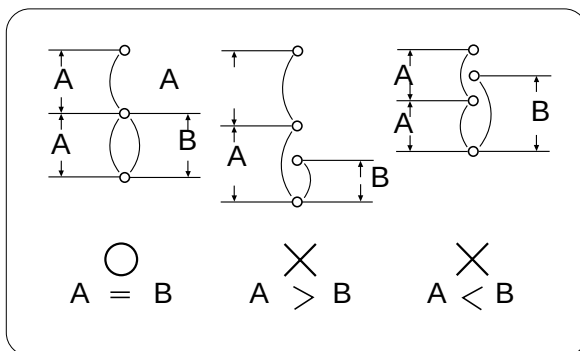


FEED BALANCE ON STRETCH STITCH

If the stretch stitch is distorted when setting the stitch length dial at "stretch", adjust as follows:

To adjust.

1. Remove the cap (E) by inserting a screwdriver into the notch (F).
For Model 215, set it at stretchstitch and the stitch length dial at "stretch".
2. Turn the adjusting screw (G) in the direction of
(C) when $A > B$
(D) when $A < B$.
3. Attach the cap (E).



CAM FOLLOWERS LIFTING HEIGHT (For Model 215 only)

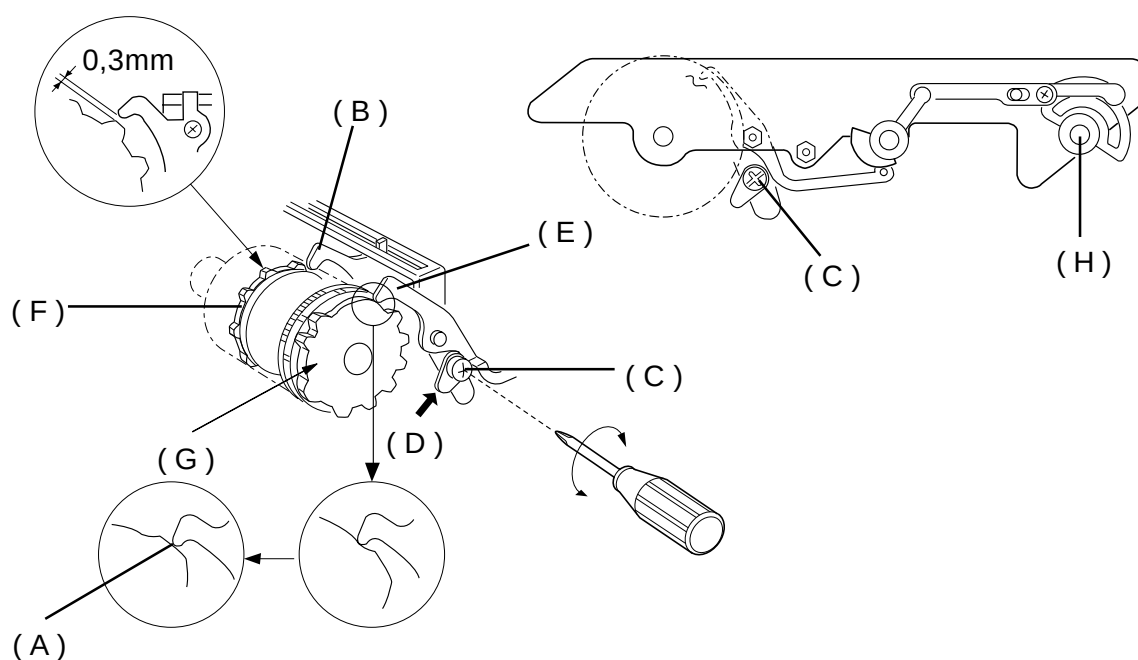
Too narrow clearance between the cam follower (B) and the top convex of the zigzag cam (F) may make it difficult to turn the stitch selector dial to select the correct stitch or may cause zigzag stitch in straight stitch setting.

To adjust.

1. Remove the front cover.
2. Set the machine at zigzag stitching and stitch width dial at "5".
3. Turn the hand wheel to bring the cam follower onto the top convex of the zigzag cam (F).
4. Loosen the screw (C).
5. Push the adjusting plate (D) to the direction of the arrow until the cam follower releasing arm (E) touches position (A) of the stitch select cam (G), then tighten the set screw (C).

Note! After the adjustment, check that the clearance between the zigzag cam and the cam follower is 0.3 mm when the cam follower releasing arm is moved to the position (B) by turning the stitch selector dial counterclockwise.

6. Attach the front cover.



CAM FOLLOWERS LIFTING HEIGHT - (For Model 207 only)

To check.

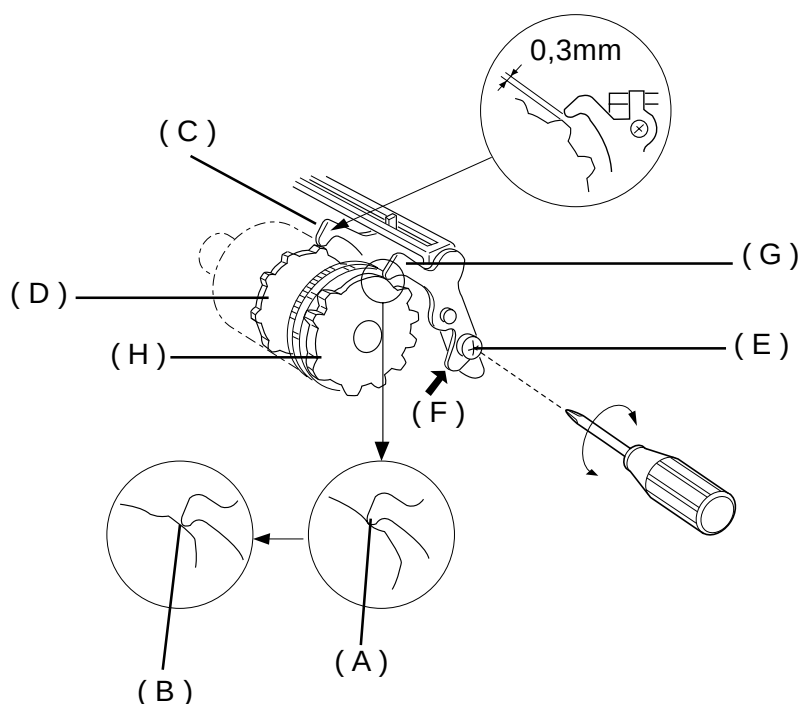
Too narrow clearance between the cam follower (C) and the top convex of the zigzag cam may make it difficult to turn the stitch selector dial, to select the correct stitch or may cause zigzag stitches in straight stitch setting.

To adjust.

1. Pull out the stitch selector dial.
2. Remove the front cover.
3. Attach the stitch selector dial, and set it at straight stitch needle in left position.
4. Turn the hand wheel to bring the cam follower onto the top convex of the zigzag cam (D).
5. Loosen the set screw (E).
6. Push the adjusting plate (F) to the direction of the arrow until the cam follower releasing arm (G) touches position (A) of the stitch select cam (H), then tighten the set screw (E).

Note! After the adjustment, check that the clearance between the zigzag cam (D) and the cam follower (C) is 0.3 mm when the cam follower releasing arm (G) is moved to the position (B) by turning the stitch selector dial counterclockwise.

7. Pull out the stitch selector dial, and attach the front cover.
8. Attach the stitch selector dial.



ZEROING THE NEEDLE

-(For Model 215 only)

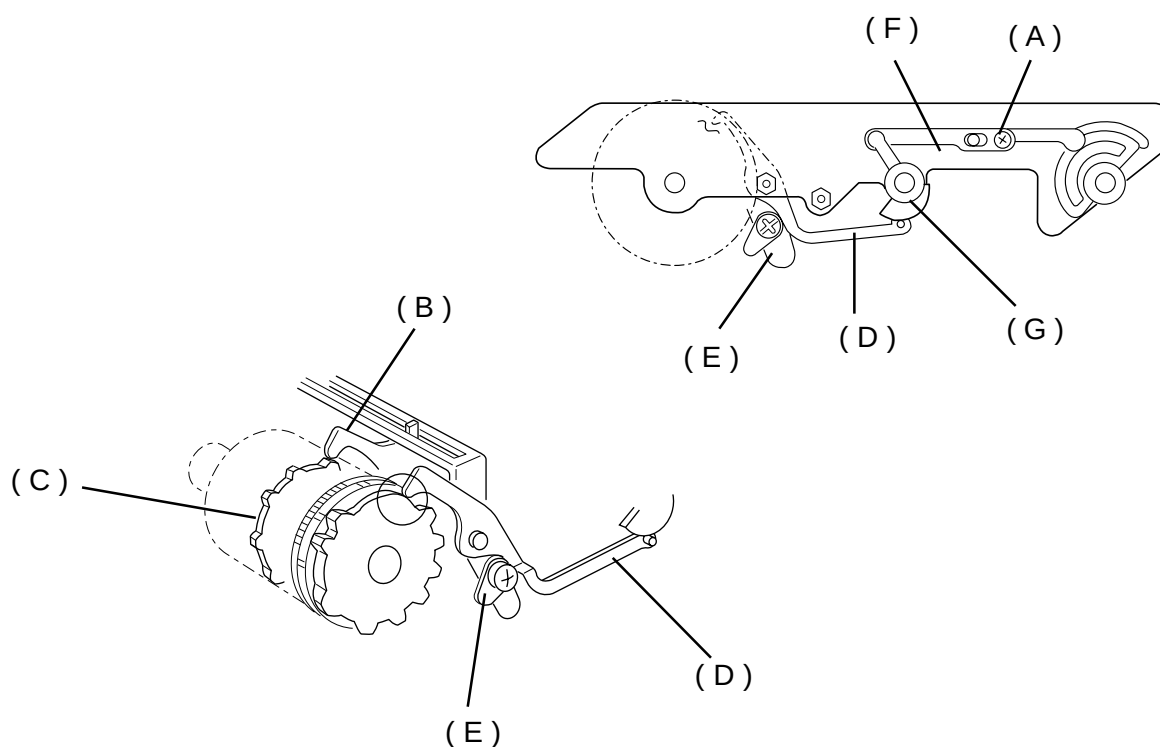
If the needle is performing a slightly zig-zag movement when the stitch selector dial is set at (needle in left position) and the zigzag dial at "0", adjust as follows.

To adjust.

1. Set the stitch selector dial at zig-zag and the stitch width dial at "0".
2. Remove the front cover.
3. Loosen the set screw (A).
4. Turn the hand wheel toward you until the cam follower (B) comes to the convex part of the zigzag cam (C).
5. Push the zigzag arm (D) until it touches the adjusting plate (E) and while holding it, move the zigzag link (F) to the left until the cam (G) touches the zigzag arm (D). Then tighten the set screw (A).

Note! After the adjustment, check that the needle dosent perform zig-zag and that the distance between needle stitch plate is wider then 0,2mm also check the needle position.

6. Attach the front cover.



MOTOR BELT TENSION

Too tight or too loose motor belt tension can cause belt noise.

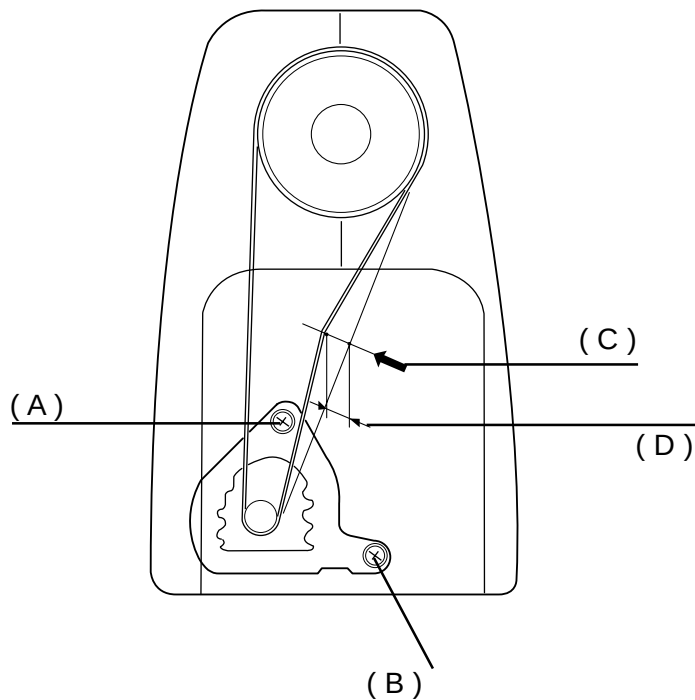
Too tight motor belt tension can make the machine to run slow and overload the motor.

Too loose motor belt tension may cause jumping of the belt teeth on the motor pulley.

When pushing the motor belt with a finger at about 300 grams load (C), the deflection of the motor belt should be about 7mm to 9mm.

To adjust.

1. Remove the motor cover.
2. Loosen the set screws (A) and (B).
3. Move the motor up or down to adjust the deflection about 7mm to 9mm (D).
4. Tighten the set screws (A) and (B).
5. Attach the motor cover.



WIRING

220-240V area

- Blue (A)
- Brown (B)
- To Motor (C)
- To Lamp (D)

110-120V area

- With ridge (E)
- Without ridge (F)
- To Motor (G)
- To Lamp (H)

