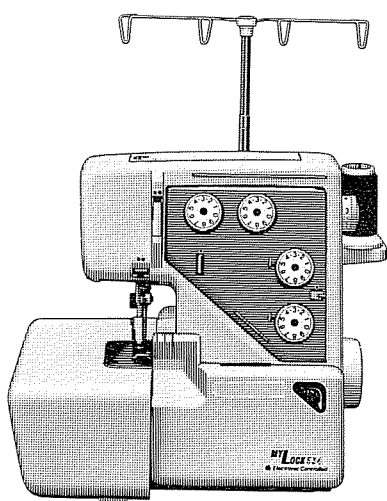
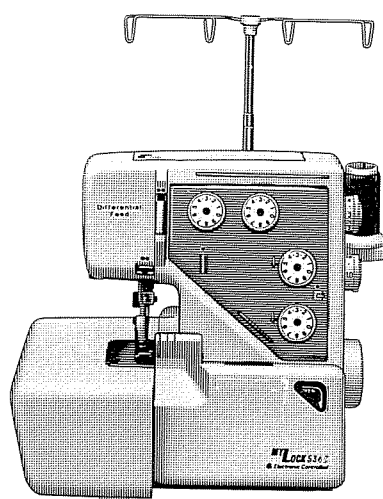


SERVICING MANUAL



MY/LOCK 534
 *Electronic Controlled*



MY/LOCK 534D
 *Electronic Controlled*

SERVICE MANUEL AND PARTS LIST FOR MODELS 534,534D

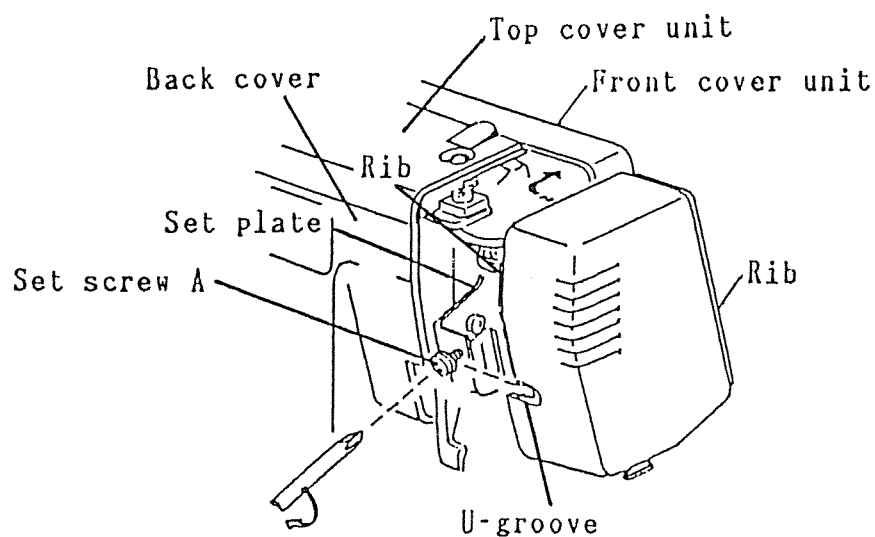
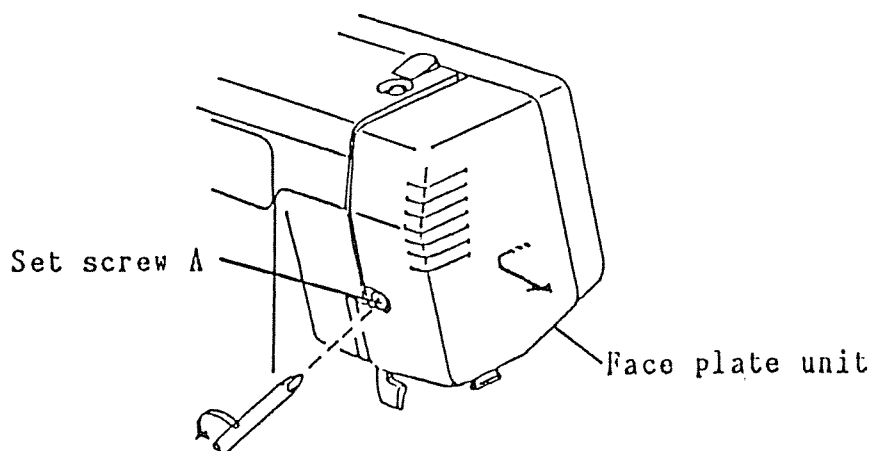
DESCRIPTION	PAGE
-----	----
(TO CHANGE THE ENCLOSURE PARTS)	
TO CHANGE THE FACE PLATE UNIT	1
TO CHANGE THE BELT COVER UNIT	2
TO CHANGE THE TOP COVER UNIT	3
TO CHANGE THE FRONT COVER UNIT	4
TO CHANGE THE SIDE COVER UNIT	5
TO CHANGE THE MACHINE BASE	6
TO CHANGE THE MACHINE SOCKET	7
(TO ADJUST THE HEIGHT, TIMING, CLEARANCE AND POSITION, ETC.)	
TO ADJUST THE NEEDLE HEIGHT	8
TO ADJUST THE PRESSER BAR HEIGHT	9
TO ADJUST THE FEED DOG HEIGHT	10
TO ADJUST THE TIMING OF THE NEEDLE AND THE FEED DOG	11
TO ADJUST THE TIMING OF THE NEEDLE AND THE UPPER KNIFE	12
TO ADJUST THE HEIGHT OF THE LOWER LOOPER	13
TO ADJUST THE CLEARANCE BETWEEN THE NEEDLE AND THE LOWER LOOPER / NEEDLE GUARDS	14
TO ADJUST THE CLEARANCE BETWEEN THE NEEDLE AND THE FIXED NEEDLE GUARD	15
TO ADJUST THE POSITION OF THE CHAINING FINGER	16
TO ADJUST THE POSITION OF THE UPPER LOOPER	17
TO ADJUST THE TIMING OF THE NEEDLE AND THE LOWER LOOPER	18
TO ADJUST THE TIMING OF THE UPPER & LOWER LOOPERS	19
TO ADJUST THE CLEARANCE BETWEEN THE LOOPERS	20
TO ADJUST THE CLEARANCE BETWEEN THE NEEDLE AND THE UPPER LOOPER	21
TO ADJUST THE POSITION OF THE KNIVES	22
TO ADJUST THE POSITION OF THE LOWER LOOPER GUIDE	23
TO ADJUST THE STITCH LENGTH	24
TO ADJUST THE THREAD TENTION DIALS	25
(PARTS LIST)	
PARTS LIST	26 - 34

To remove:

1. Loosen set screw A and remove the face plate unit.

To attach:

2. Fit the U-groove of the face plate between the set screw A and set plate, put the rib of face plate into the front cover unit and back cover unit and tighten the set screw.

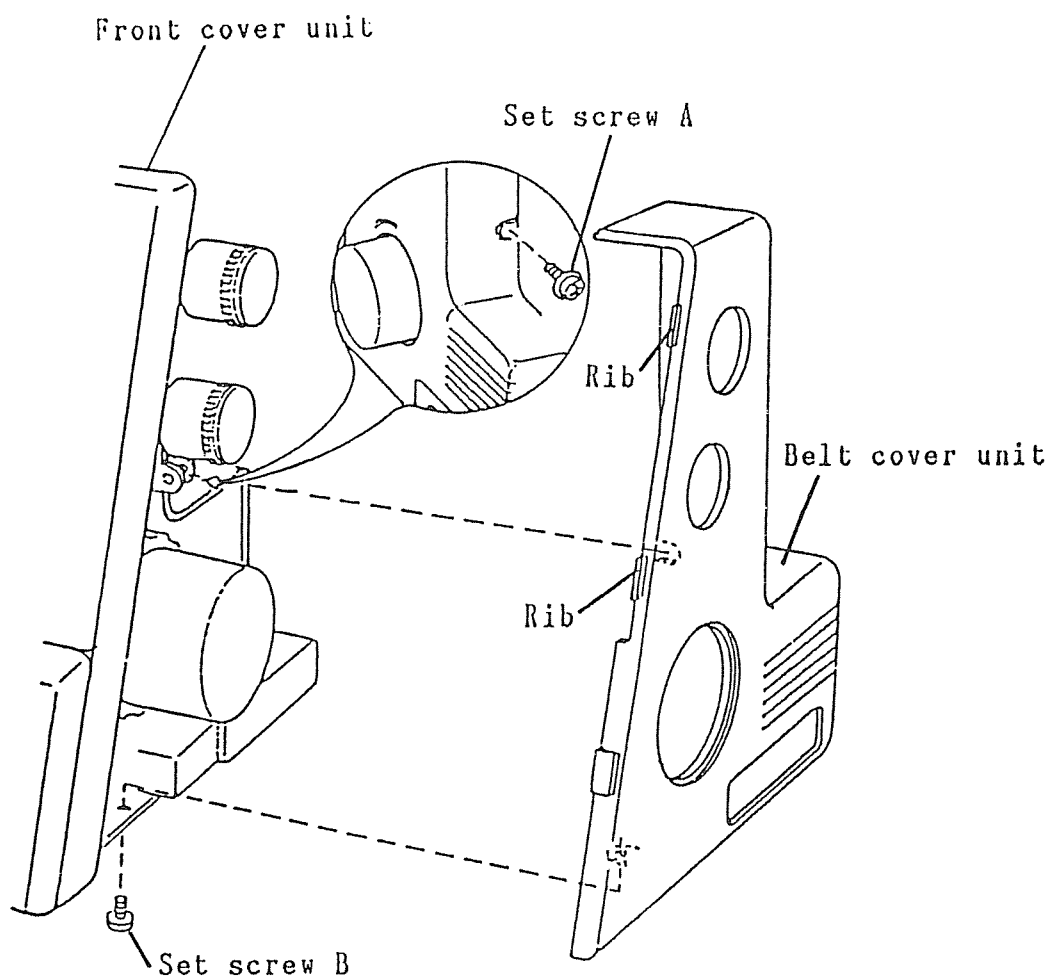


To remove:

1. Loosen set screw A and remove the set screw B.
2. Remove the belt cover unit.

To attach:

3. Put the ribs of belt cover into front cover unit and tighten set screws A and B.

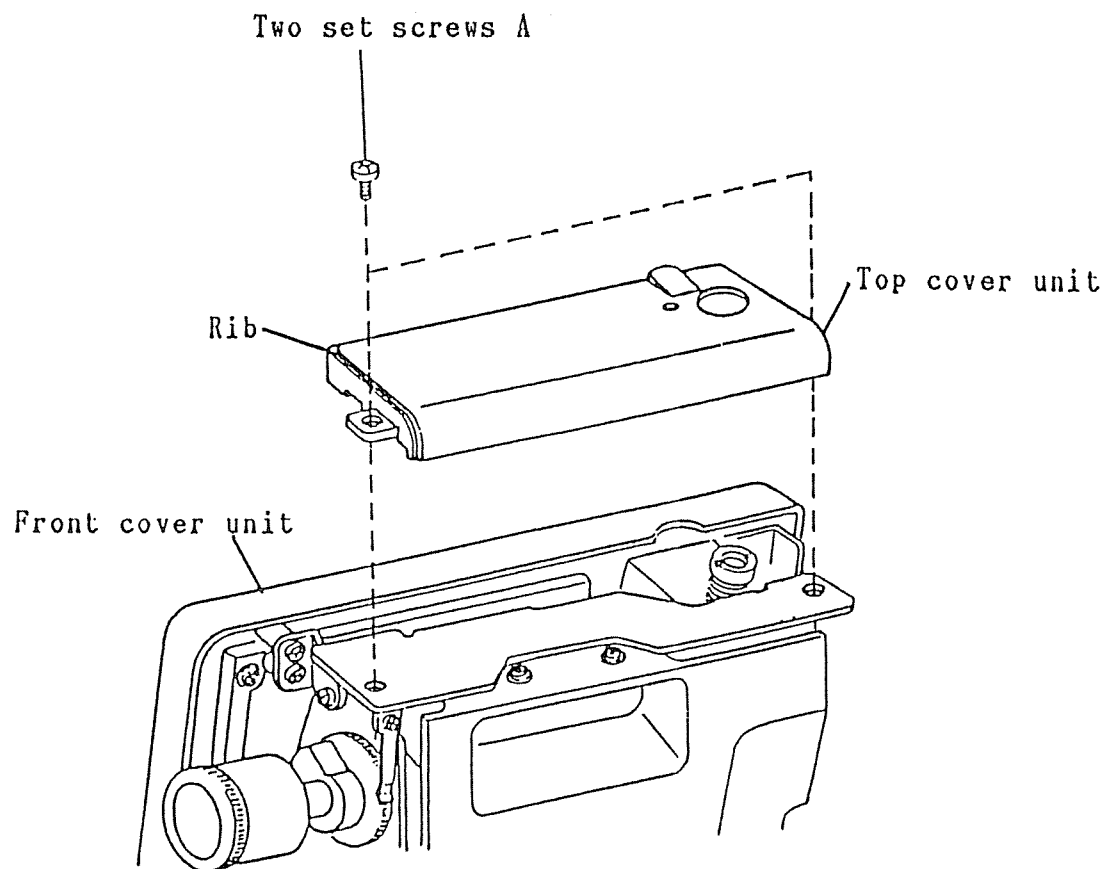


To remove:

1. Remove the face plate unit and belt cover unit (see pages 1 and 2).
2. Remove two set screws A and remove the top cover unit.

To attach:

3. Put the ribs of top cover into front cover unit and tighten set screws A.

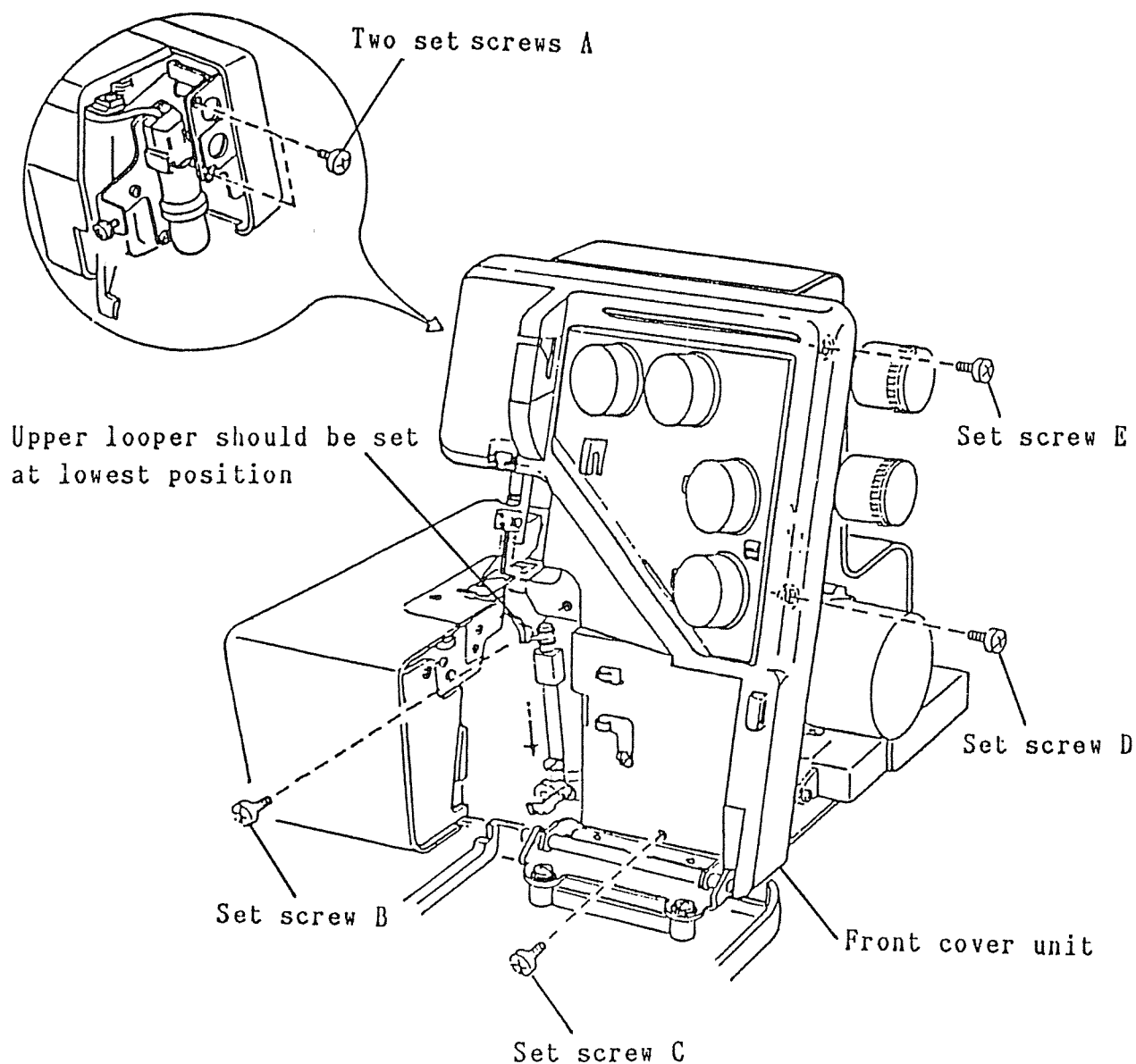


To remove:

1. Remove the face plate unit and the belt cover unit (see pages 1 and 2).
2. Turn the balance wheel toward you with your hand, and set the upper looper at lowest position, remove set screws A, B, C, D and E, and remove front cover unit.

To attach:

3. Attach the front cover unit with set screws A, B, C, D and E.
4. Attach the belt cover unit and face plate unit.

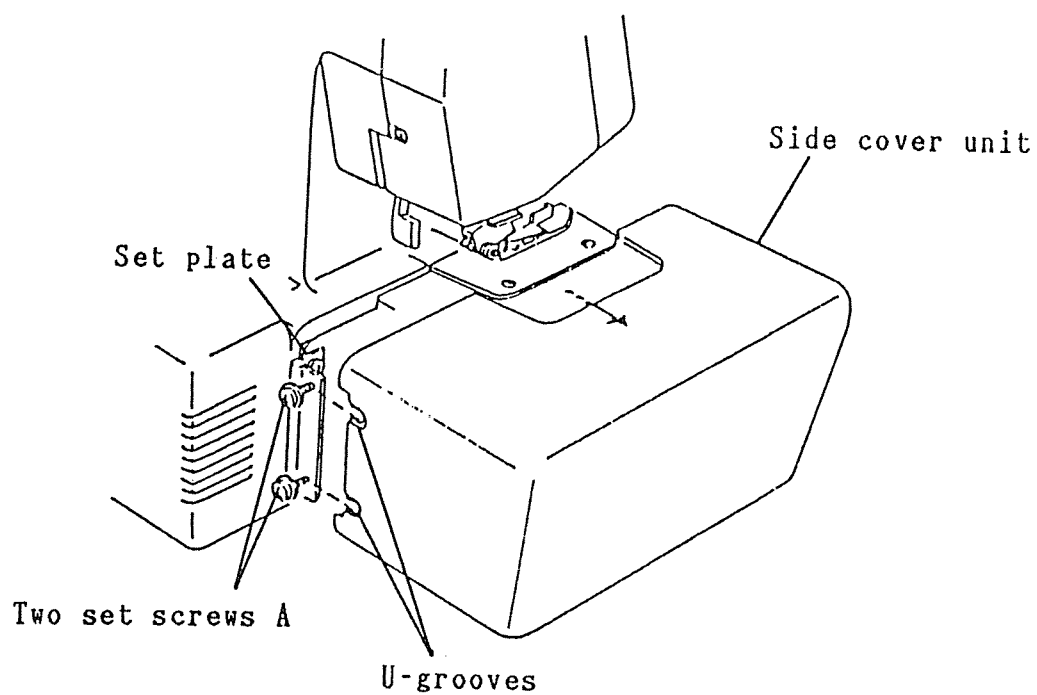


To remove:

1. Loosen set screws A and remove the side cover unit.

To attach:

2. Fit the U-grooves of side cover between set screws A and set plate.
3. Tighten set screws A.



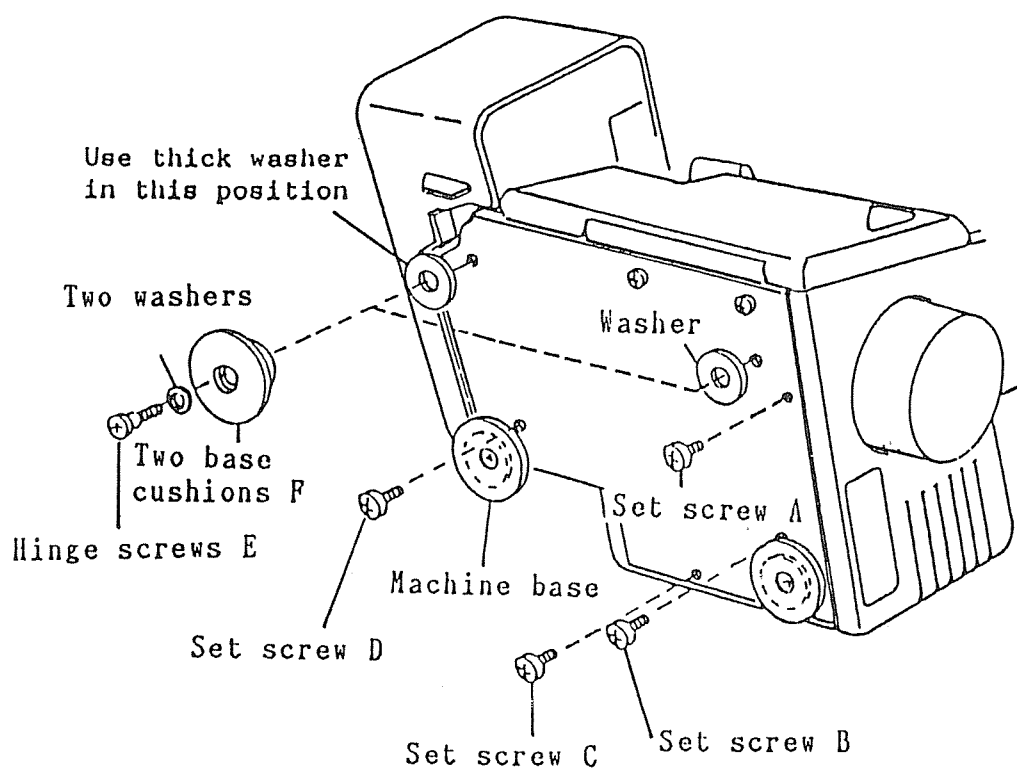
To remove:

1. Remove screws A, B, C, D and two hinge screws E, and remove two base cushions F.
2. Remove the machine base.

NOTE: Do not remove another two base cushions.

To attach:

3. Attach the machine base, and tighten screws A, B, C and D.
4. Attach the two base cushions F, washers, and tighten hinge screws E.

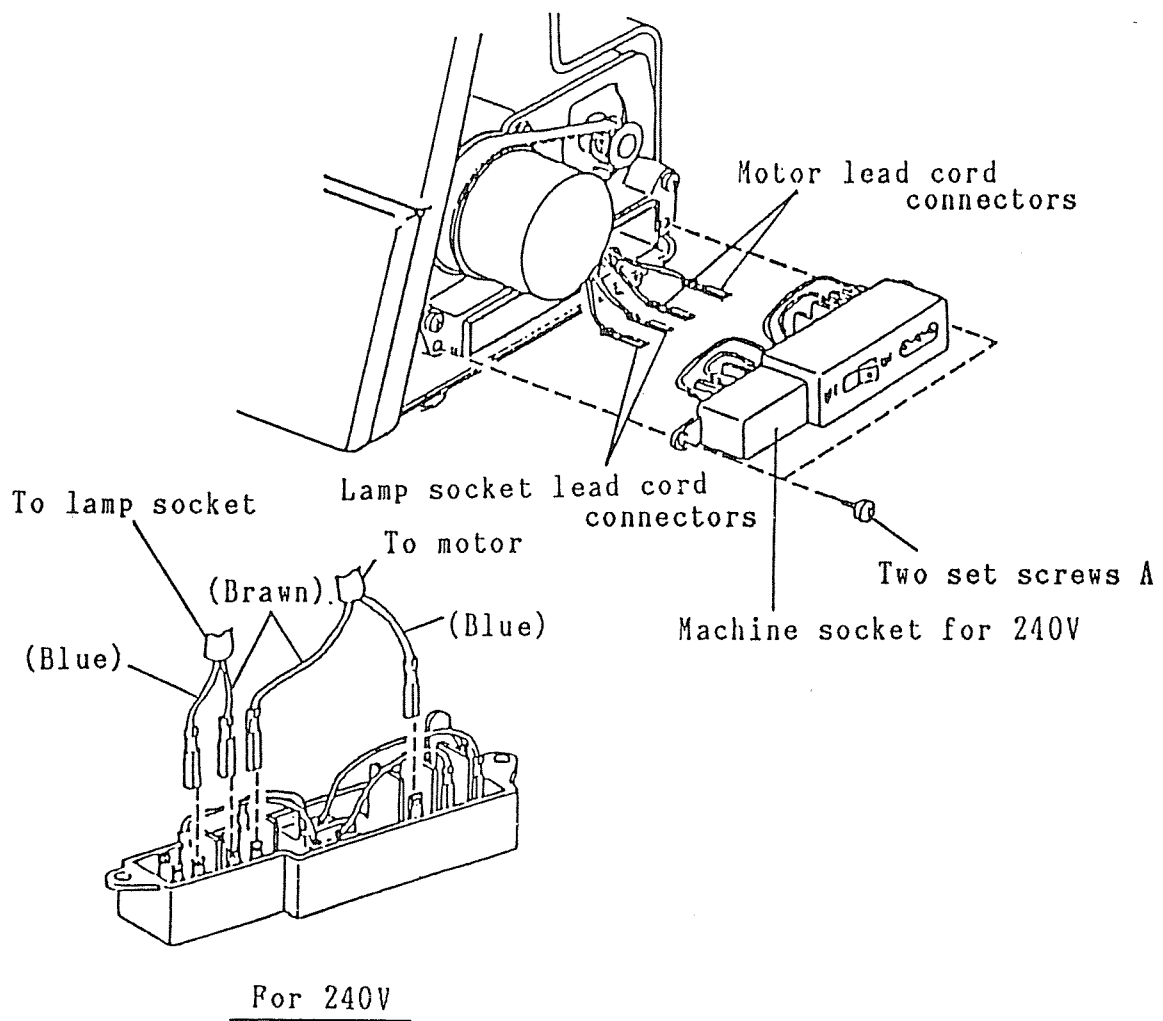


To remove:

1. Remove the belt cover (see page 2).
2. Remove two set screws A, and pull out the cord connectors.

To attach:

3. Insert the cord connectors as shown below.
4. Attach the machine socket, and tighten two set screws A.
5. Attach the belt cover unit.

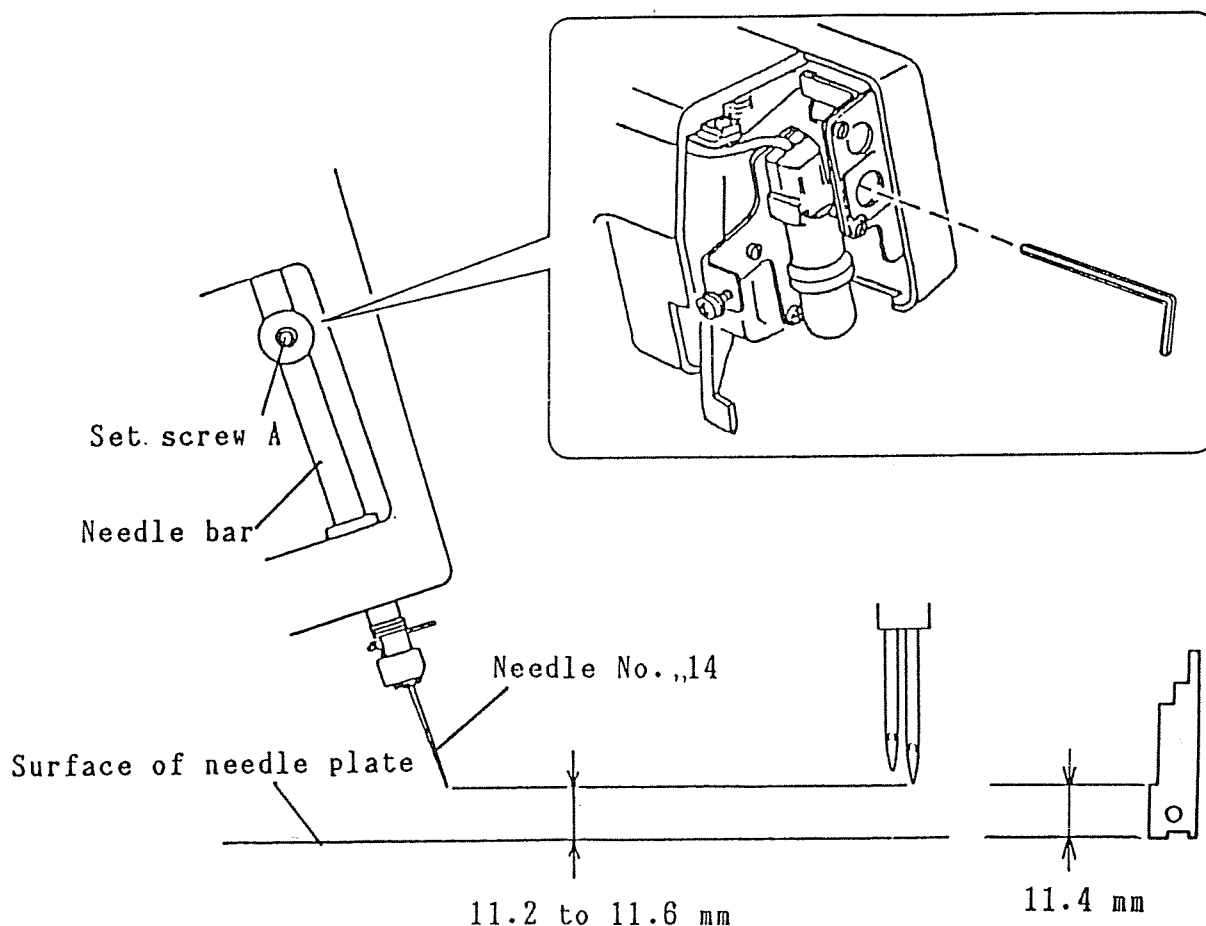


Correct Setting:

The distance between the tip of needle on the right and the surface of needle plate should be 11.2 to 11.6 mm when the needle bar is at the highest position.

To adjust:

1. Remove the face plate unit (see page 1).
2. Turn the balance wheel toward you with your hand, and set the needle bar at the heighest position.
3. Loosen set screw A to adjust the height, and tighten set screw A after the adjustment is done.
4. Turn the balance wheel toward you one cycle, and recheck the needle bar height.
5. Attach the face plate unit.



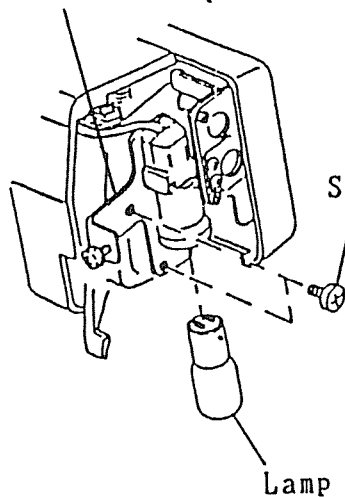
Correct Setting:

The distance between the surface of needle plate and bottom of presser foot should be 4.7 to 5.3 mm (47/256 to 53/256") when the presser bar lifter is raised.

To adjust:

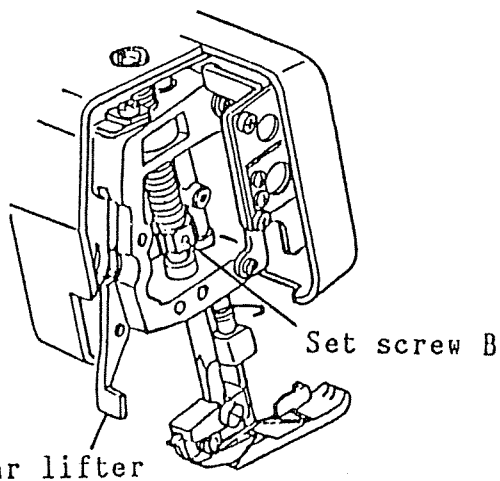
1. Remove the face plate unit (see page 1).
2. Remove set screws A to move the lamp socket unit.
3. Raise the presser bar lifter, and loosen set screw B.
Then adjust the presser bar height. the side of presser foot should be parallel with the hole of needle plate.
4. Tighten set screw B.
5. Tighten set screws A.
6. Attach the face plate unit.

Lamp socket set plate



Set screws A

Lamp

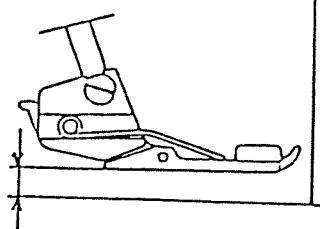


Set screw B

Presser bar lifter

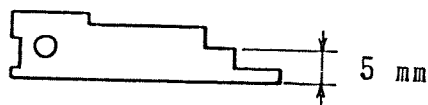
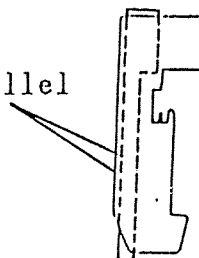
(Direction of presser foot)

Top surface of needle plate



4.7 - 5.3 mm

To be parallel



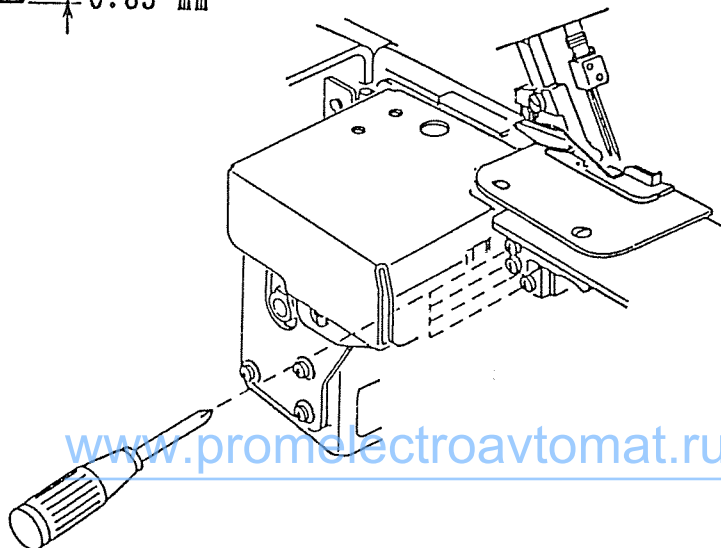
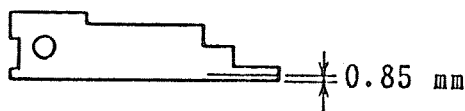
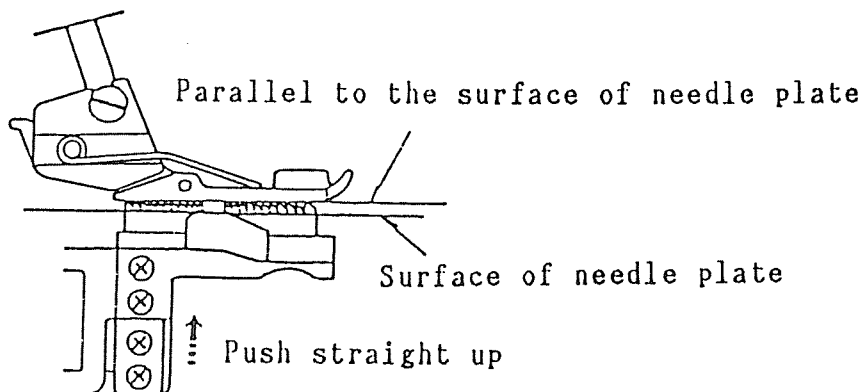
5 mm

Correct Setting:

When the presser foot is lowered and feed dogs are at their highest position, the distance between the surface of needle plate and bottom of presser foot should be 0.75 to 0.95 mm.

To adjust:

1. Set the stitch length dial at "3" and the differential feed dial at "1.0".
2. Lower the presser foot and raise the feed dogs to their highest position by turning the balance wheel.
3. Loosen the main & sub feed dog screws (4 pcs.).
4. Push the main feed dog straight upward and adjust the distance between the surface of needle plate and bottom of presser foot, then tighten set screws (2 pcs.).
5. When the top of the main feed dog is level to the top surface of needle plate in its downward motion by turning the balance wheel. Push the sub feed dog straight upward until its top surface is to be level to the top surface of needle plate. Then tighten set screws of sub feed dog.
6. Check if these feed dogs are attached in parallel to the surface of needle plate while turning the balance wheel.

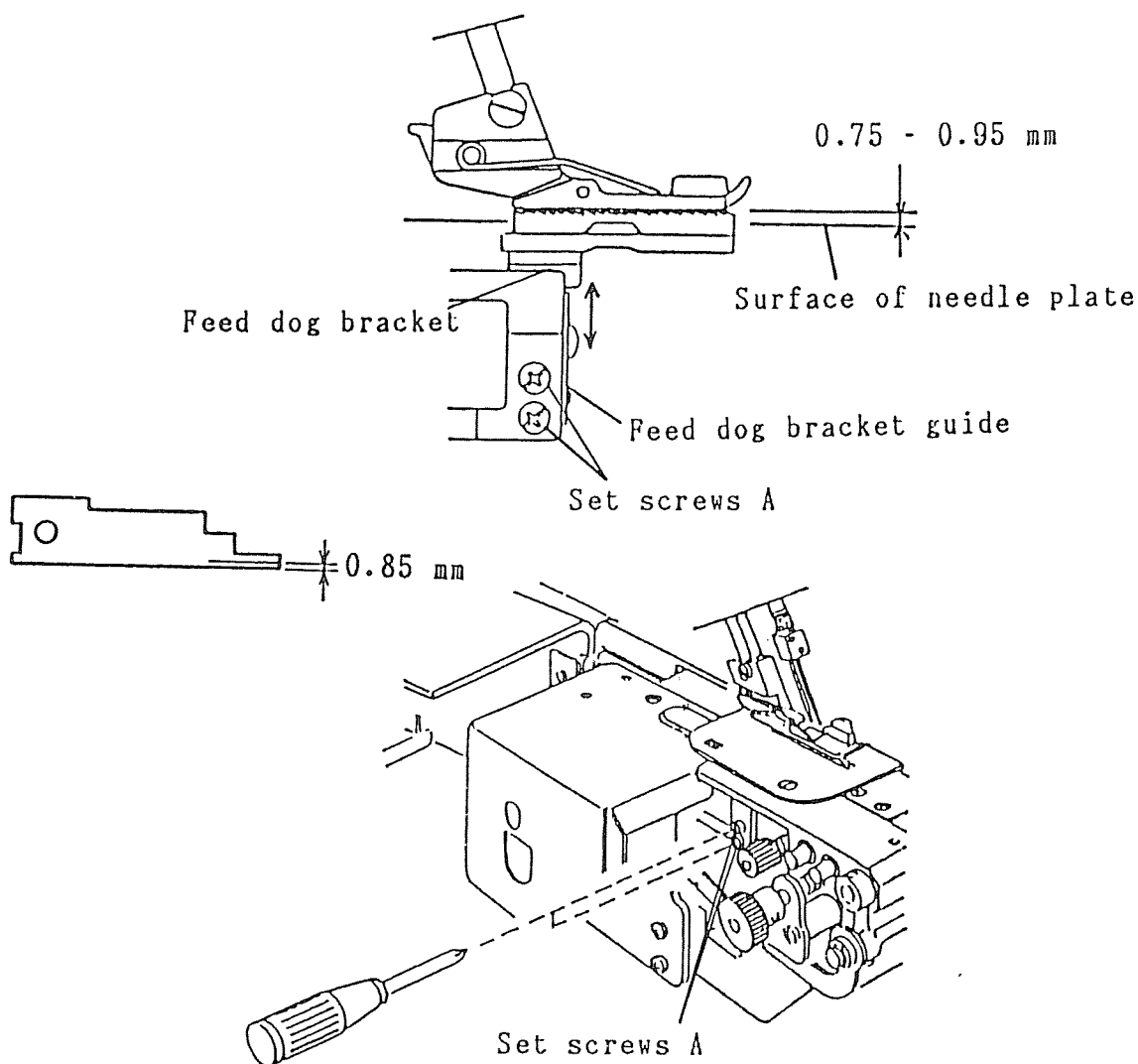


Correct Setting:

When the presser foot is lowered and the feed dog is at the highest position, the distance between the surface of needle plate and bottom of presser foot should be 0.75 to 0.95 mm.

To adjust:

1. Set the stitch length dial at "3".
2. Lower the presser foot and raise the feed dog to its highest position by turning the balance wheel.
3. Loosen two set screws A.
4. Push the feed dog straight upward with touching feed dog bracket to feed dog bracket guide & adjust the distance between the surface of needle plate and bottom of presser foot to 0.75 to 0.95 mm.
5. Tighten set screw A.



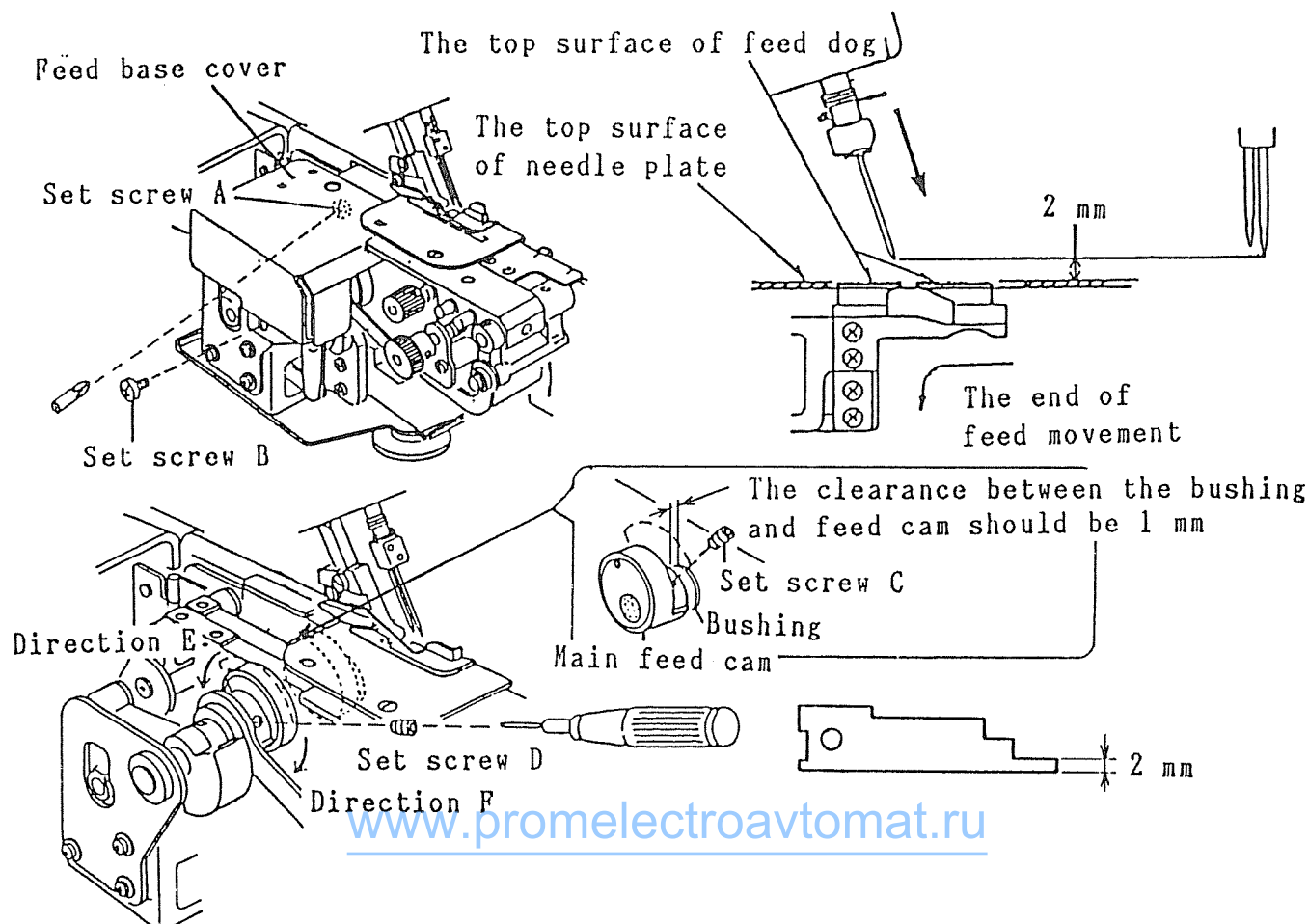
Correct Setting:

When the tip of right needle is at 2 mm above the needle plate in its downward motion, and lowered presser foot, the top of the feed dog teeth should be level to the top surface of needle plate at their rearmost position.

Before adjustment, check if needle bar height and feed dog height are correct.

To adjust:

1. Loosen set screw A and remove set screw B, remove feed base cover.
 2. Set the stitch length dial at "3" and differential feed dial at "1.0".
 3. Raise the presser foot and move the tip of right needle at 2 mm above the needle plate in its downward motion by turning the balance wheel.
 4. Lower the presser foot, and loose two set screws C for main feed cam, two set screws D for sub feed cam, and adjust the position of the sub feed cam and tighten set screws D.
 - # Turn the sub feed cam to the direction E if the feed dog is lower than the surface of the needle plate.
 - # Turn the sub feed cam to the direction F if the feed dog is higher than the surface of the needle plate.
 5. Set the main feed cam to keep the clearance between the bushing and main feed cam to 1 mm, and tighten two set screws C.
- Attach the feed base cover with set screws A and B.



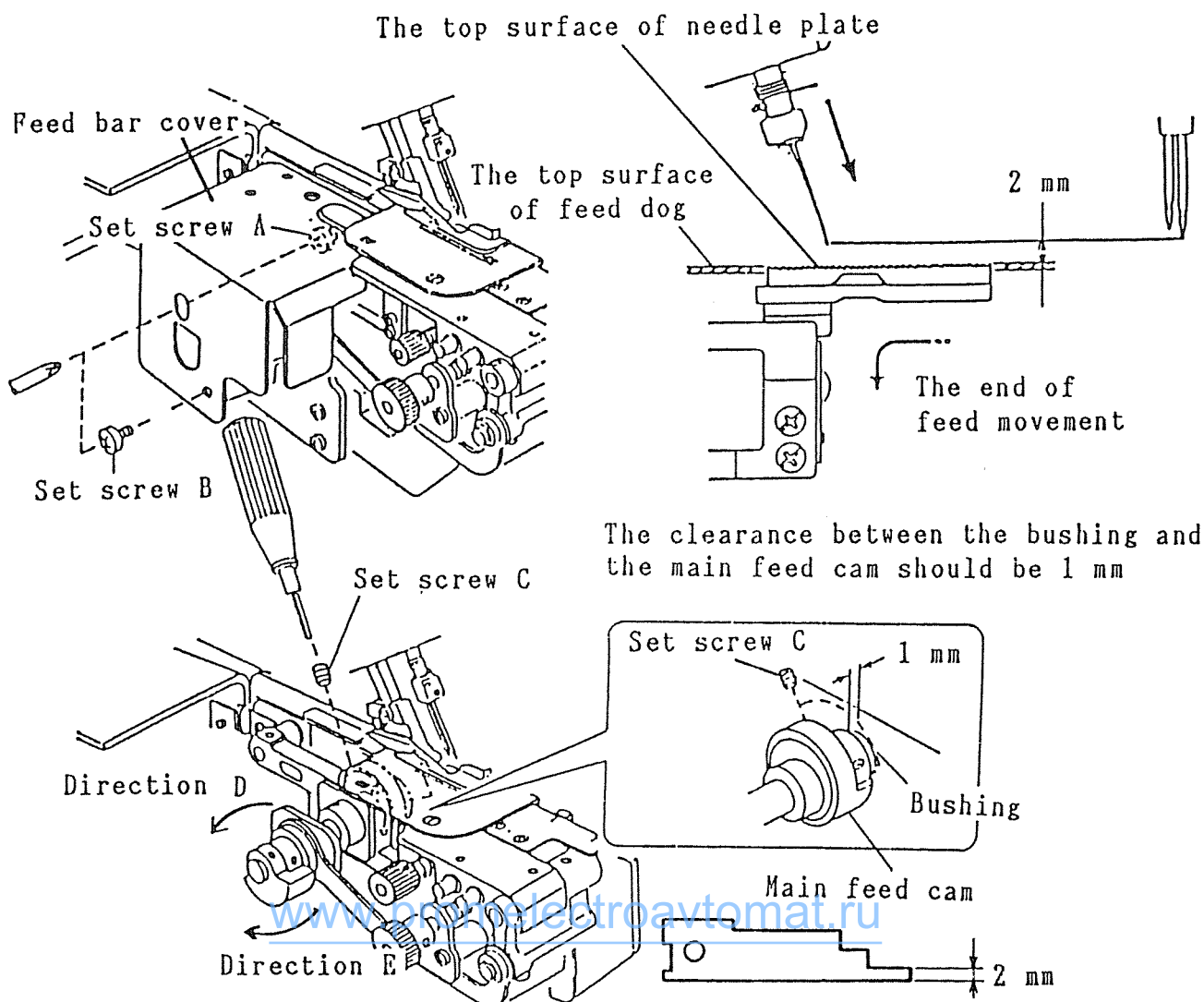
Correct Setting:

When the tip of right needle is at 2 mm above the needle plate in its downward motion, and lowered presser foot, the top of the feed dog teeth should be level to the top surface of needle plate at their rearmost position.

Before adjustment, check if needle bar height and feed dog height are correct.

To adjust:

1. Loosen set screw A and remove set screw B, remove feed base cover.
2. Set the stitch length dial at "3".
3. Raise the presser foot and move the tip of right needle at 2 mm above the needle plate in its downward motion by turning the balance wheel.
4. Lower the presser foot, and loose two set screws C and adjust the position of the feed cam and tighten set screws C.
 - # Turn the feed cam to the direction D if the feed dog is lower than the surface of the needle plate.
 - # Turn the feed cam to the direction E if the feed dog is higher than the surface of the needle plate.
5. Attach the feed base cover.



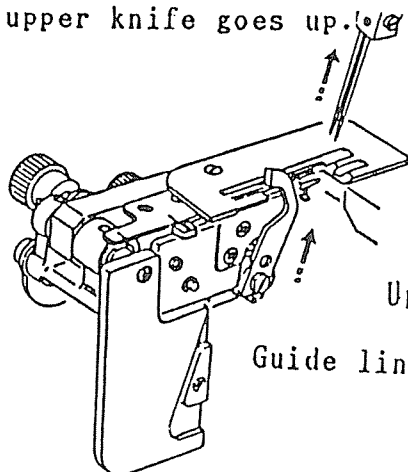
Correct Setting:

The upper knife timing is the same as that of the needle bar. In fact, when the needle bar is at highest position, the upper knife should be also at its highest position.

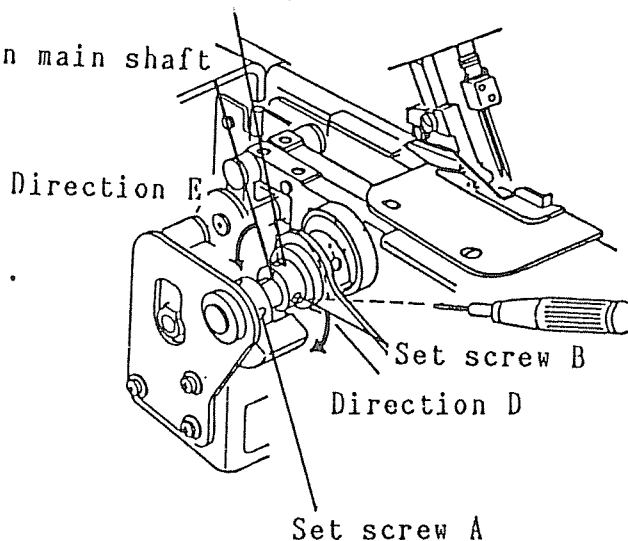
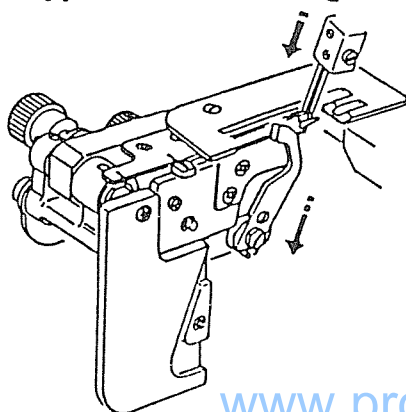
To adjust:

1. Remove the feed base cover (see page 11).
2. Loosen two set screws A, and move the balance weight to left.
3. Loosen two set screws B, and adjust the needle and upper knife timing.
 - # Turn the upper knife drive cam to the direction D when the upper knife timing is being delay.
 - # Turn the upper knife drive cam to the direction E when the upper knife timing is too soon.
4. Tighten two set screws B firmly, move the balance weight to right and set to guide line on the balance weight is in line with the one on main shaft and tighten two set screws A.
5. Turn the balance wheel toward you one cycle, and recheck the needle and the upper knife timing.
6. Attach the feed base cover.

When the needle bar goes up,
the upper knife goes up.



When the needle bar goes down,
the upper knife also goes down.



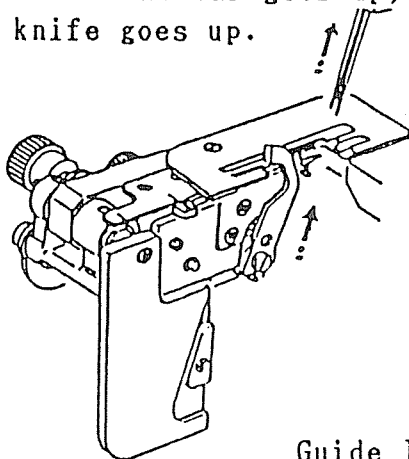
Correct Setting:

The upper knife timing is the same as that of the needle bar. In fact, when the needle bar is at highest position the upper knife should be also at its highest position.

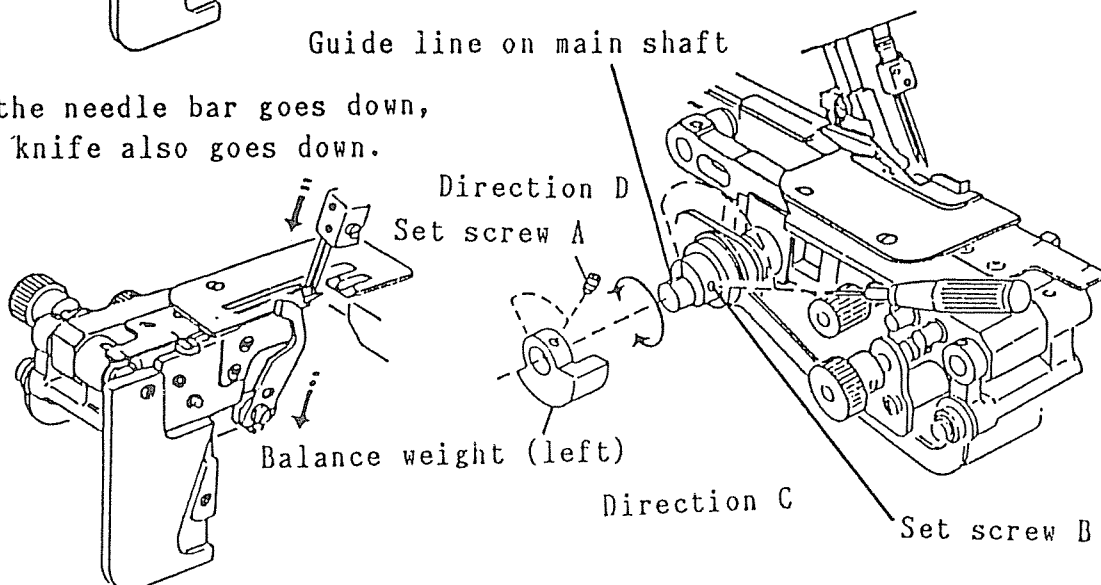
To adjust:

1. Remove the feed base cover (see page 11).
2. Loosen two set screws A, and remove the balance weight.
3. Loosen two set screws B, and adjust the needle and upper knife timing.
 - # Turn the upper knife drive cam to the direction C when the upper knife timing is being delay.
 - # Turn the upper knife drive cam to the direction D when the upper knife timing is too soon.
4. Tighten two set screws B firmly, attach the balance weight and set to guide line on the balance weight is in line with the one on main shaft and tighten two set screws A.
5. Turn the balance wheel toward you one cycle, and recheck the needle and the upper knife timing.
6. Attach the feed base cover.

When the needle bar goes up,
upper knife goes up.



When the needle bar goes down,
upper knife also goes down.



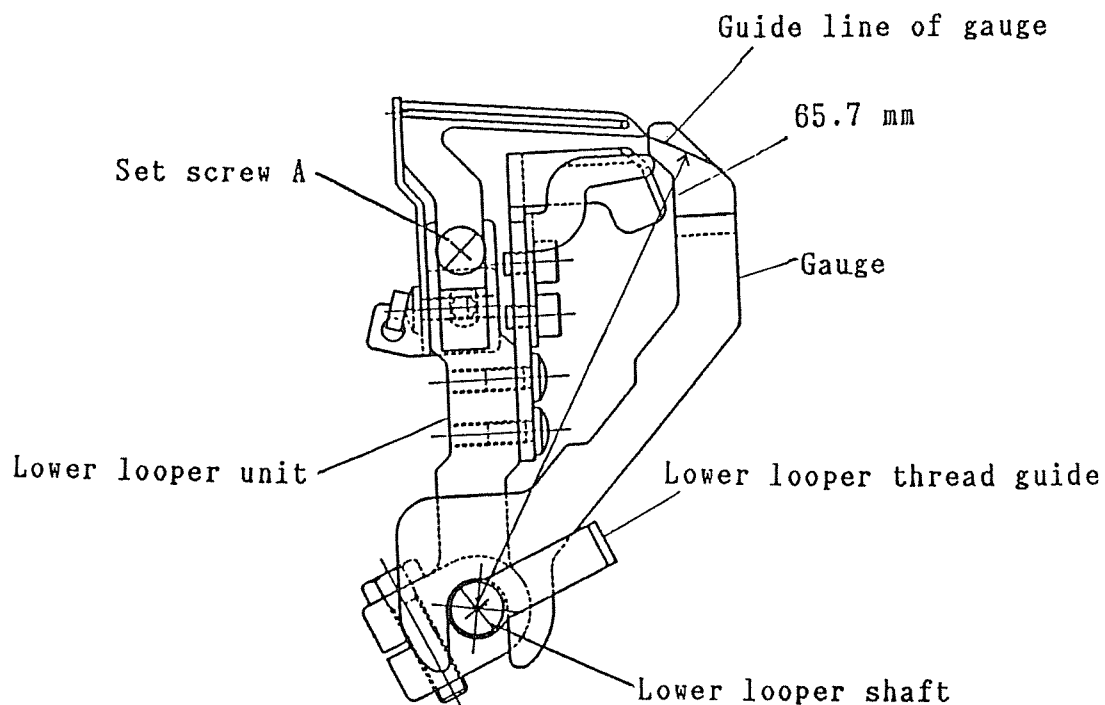
Correct Setting:

The height of lower looper is 65.7 mm from center of lower looper shaft as shown in Illustration.

To adjust:

1. Set the upper knife in down position to loose set screw A.
2. Turn the balance wheel to get the lower looper in rightmost position.
3. Replace the lower looper.
4. Turn the balance wheel to get the lower looper in leftmost position.
5. Insert the gauge downwards into the lower looper shaft as shown.
6. Loosen set screw A, and move the lower looper up or down to get the tip of lower looper is in line with guide line of gauge.
7. Tighten set screw A.
8. Remove the gauge and set the upper knife in up position.

NOTE: You can adjust the height of lower looper without removing the lower looper thread guide.



Correct Setting:

When use needle #11, the tip of lower looper comes from the left just behind the needle on the left or right, the clearance between both needles and lower looper should be 0 to 0.05 mm. For the needle #14, The clearance should be 0 - 0.05 mm when the needle was pushed slightly by front needle guard.

In this condition, the clearance between both needles and rear needle guard should be 0 to 0.2 mm.

To adjust:

1. Remove the presser foot and needle plate, insert the needle #11 on the right.
 2. Turn the balance wheel toward you with your hand to bring the tip of lower looper just behind the needle on the right from the left.
 3. Loosen hexagon socket screws A, move front needle guard to get clearance between front needle guard and needle.
 4. In this condition, the clearance between right needle and lower looper is 0 - 0.05 mm. if not, loosen hexagon bolt B just enough to move lower looper driving arm, and move it to back or front to get the proper clearance between lower looper and needle on the right (should be 0 - 0.05 mm).
 5. Insert the needle #11 on the left.
 6. Turn the balance wheel toward you with your hand to bring the tip of lower looper just behind the needle on the left from the left.
 7. In this condition, the clearance between left needle and lower looper is 0 - 0.05 mm. if not, loosen set screw C just enough to move the needle bar and turn the needle bar to the direction D or E to get proper clearance between both needle and lower looper, and tighten set screw C firmly.
- this time, be careful not to change the needle height.

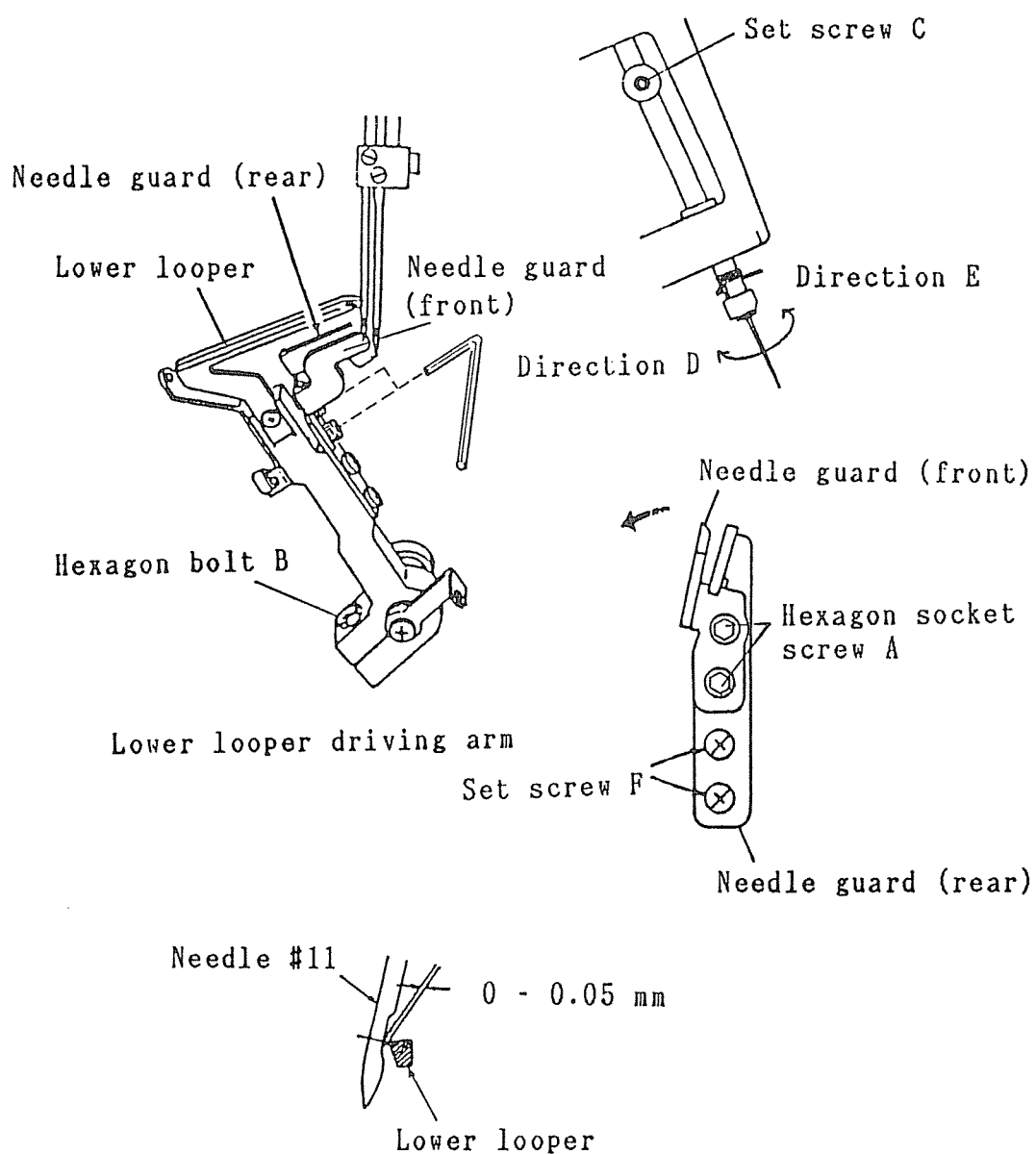
To adjust the position of front needle guard;

8. Replace two needles #14 with needles #11.
9. Push the front needle guard slightly to adjust the clearance between needles #14 and lower looper to 0 - 0.05 mm. tighten hexagon socket screw A.

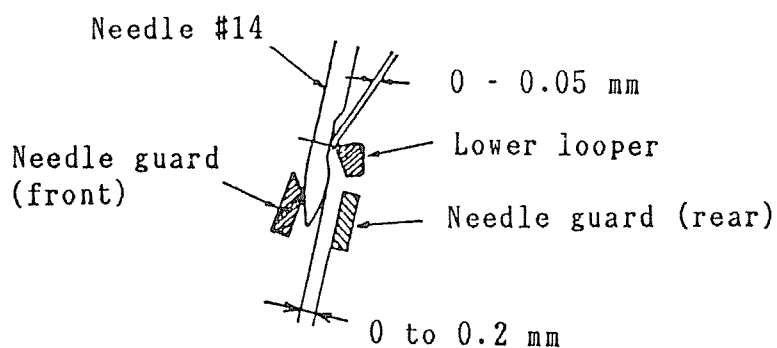
NOTE: No need to adjust the position of rear needle guard.

10. Check the lower looper position.
11. Check the clearance between the needle and lower looper.
12. Attach the needle plate and presser foot.

Illustration is showing in following page



Standard adjustment



Correct Setting:

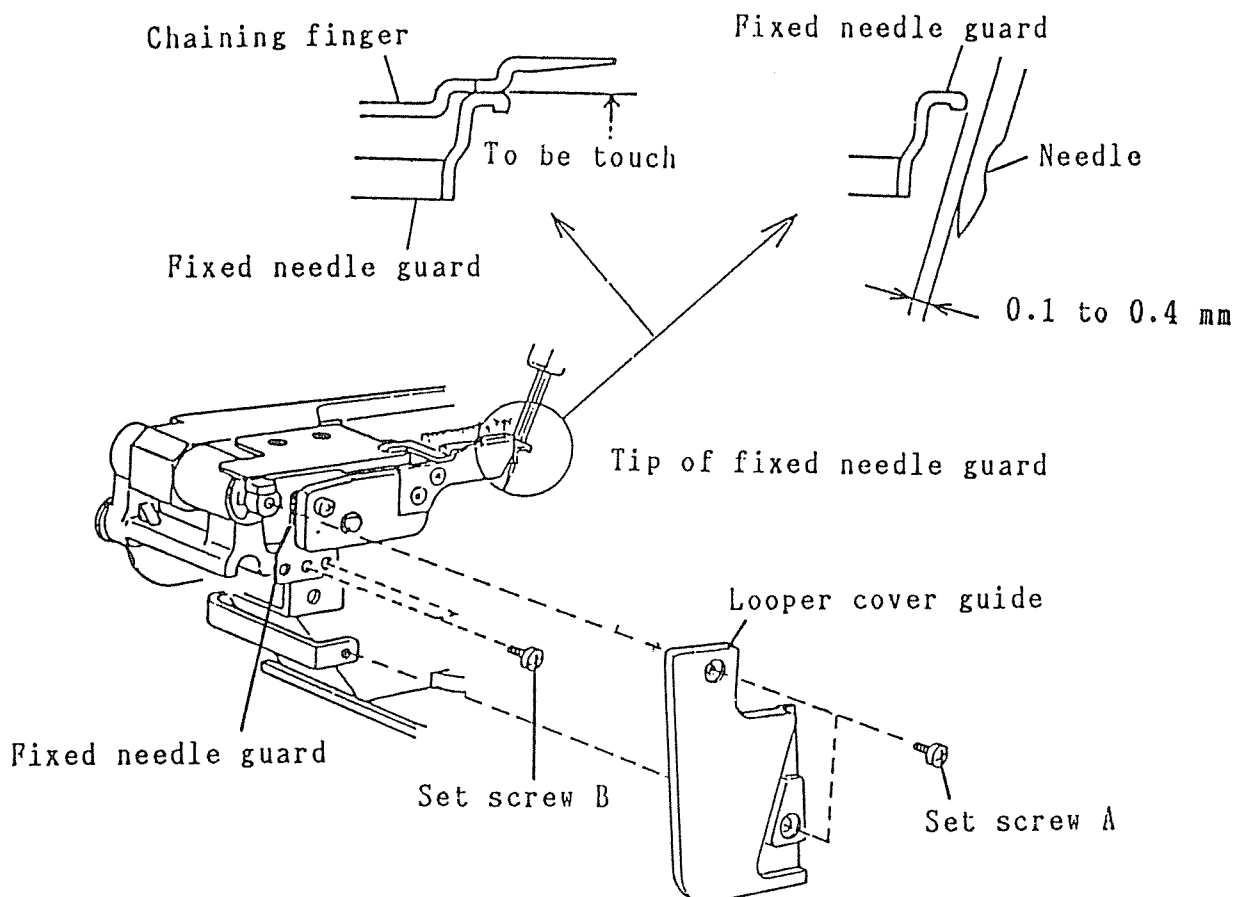
The clearance between needle and the fixed needle guard should be 0.1 to 0.4 mm.

To adjust:

1. Remove the presser foot and the needle plate, and lower the needle to its lowest position.
2. Loosen set screw A, and remove looper cover guide.
3. Loosen set screw B, and adjust the position of the fixed needle guard.
4. Tighten set screw B.
5. Attach the looper cover guide with set screw A.
6. Attach the needle plate and the presser foot.

(Needle plate setting
knob is to be "S")

The clearance between the needle
and fixed needle guard

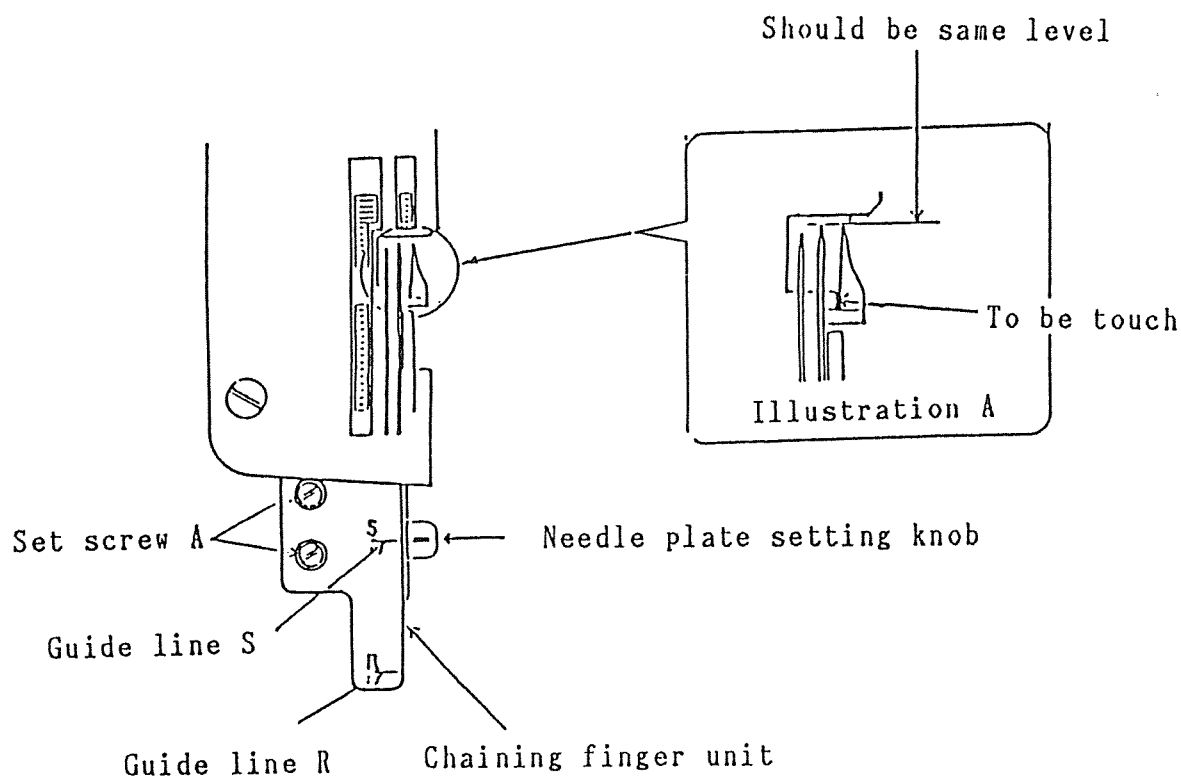


Correct Setting:

When set the needle plate setting knob to guide line S, chaining finger should be touch to side of needle palte and tip of chaining finger should be same level to tip of needle plate (illustration A).

To adjust:

1. Remove the presser foot.
2. Set the needle plate setting knob to guide line S on needle plate.
3. Loosen two set screws A, and move chaining finger unit to correct position. (illustration A).
4. Tighten two set screws A.
5. Set the needle plate setting knob to guide line S and R on needle plate, and check the position of chaining finger unit.
6. Attach the presser foot.

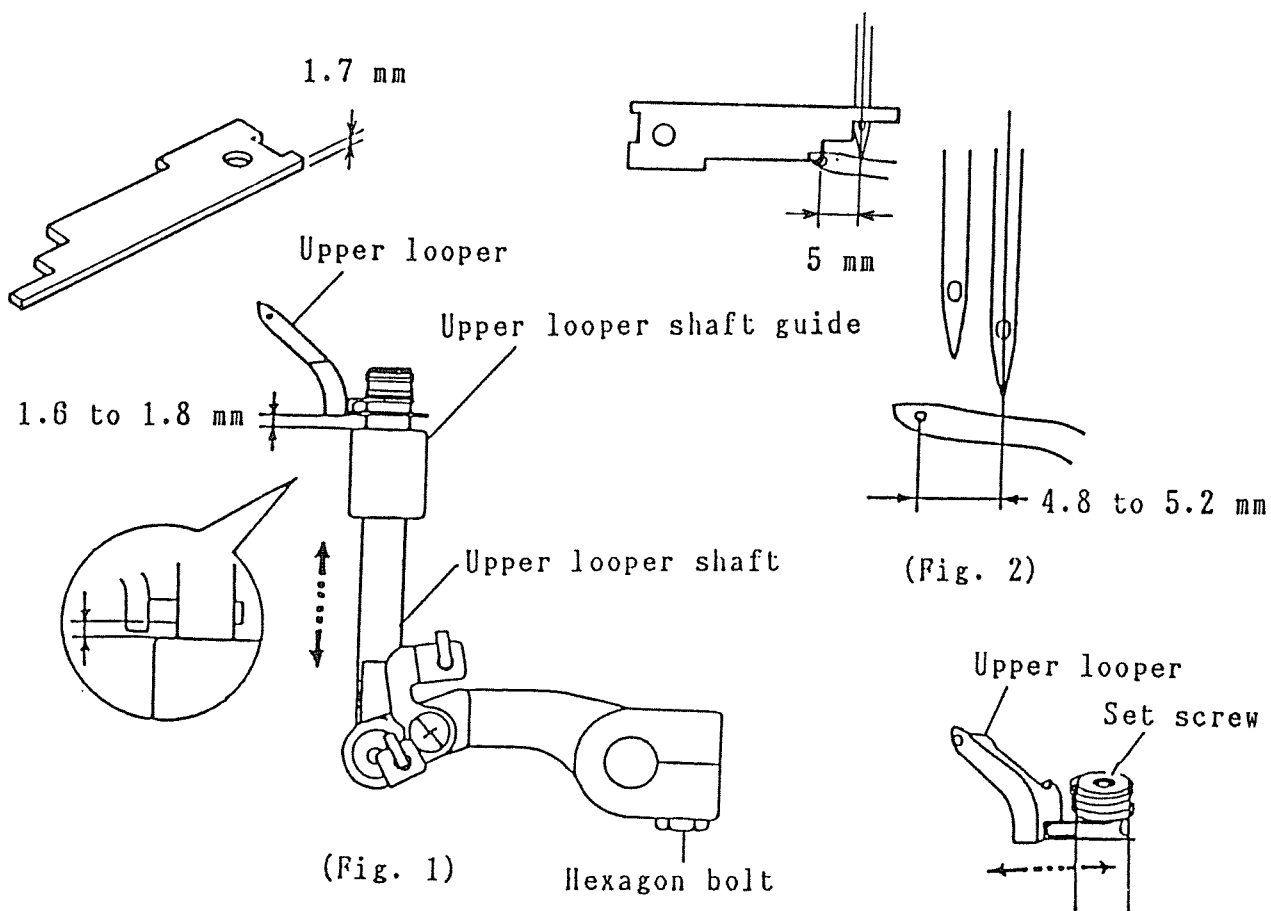


Correct Setting:

When the upper looper is at the leftmost position, the distance between the center of needle on the right and the center of looper eye should be 4.8 to 5.2 mm.

To adjust:

1. Remove the machine base (see page 6).
2. Make sure that the marking-off line on the upper looper drive cam is in line with the one on the main shaft.
3. Loosen the hexagon bolt, and adjust the distance between upper looper shaft guide and bottom of upper looper, The distance should be 1.6 to 1.8 mm when the upper looper is at the lowest position as shown in Fig. 1.
4. Tighten the hexagon bolt, be careful not to tighten too much, otherwise the upper looper driving arm will be cracked.
5. Turn the balance wheel and bring the upper looper to the leftmost position.
6. Loosen the hexagon socket screw, and adjust the distance between the center of needle and center of upper looper eye as shown in Fig. 2 and Fig. 3.
7. Tighten the hexagon socket screw.
8. Check the upper and lower looper timing (see page 18) and clearance between upper and lower loopers (see page 20).



Correct Setting:

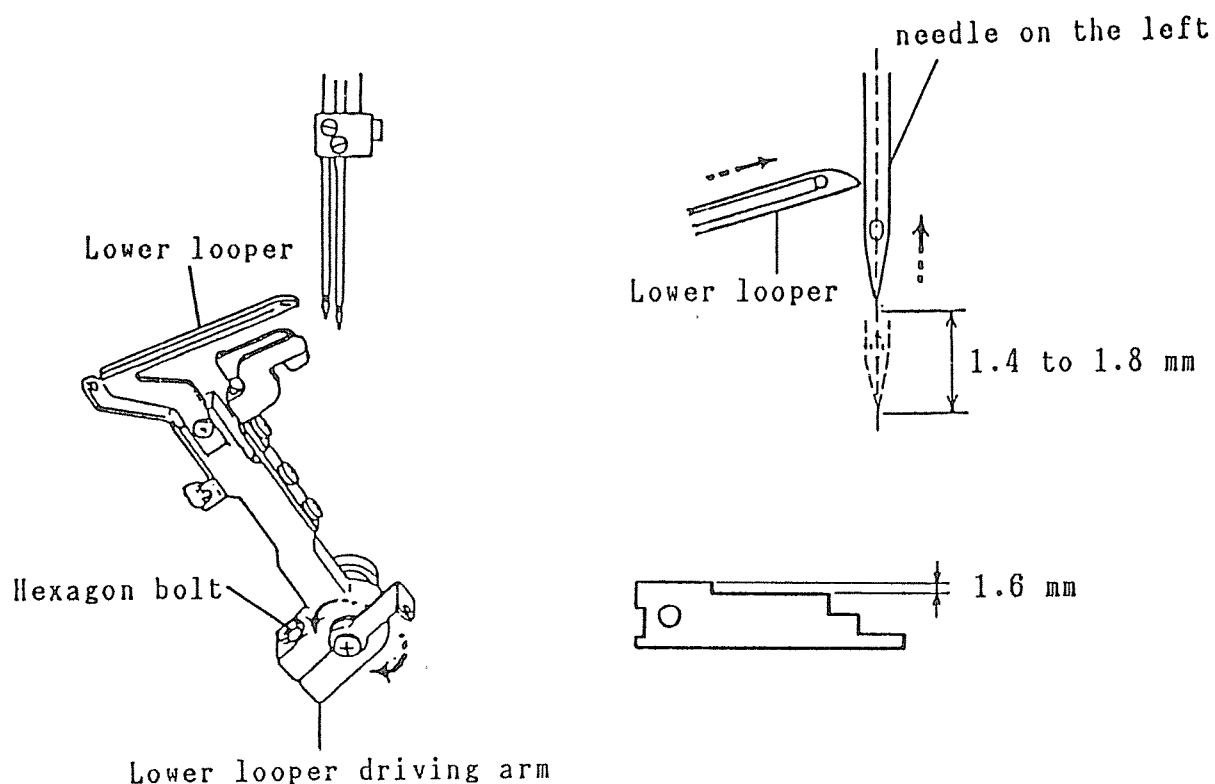
When the needle comes up 1.4 to 1.8 mm from its lowest position, the tip of lower looper comes just to left side of needle on the left.

To adjust:

1. Remove the presser foot and the needle plate.
2. Turn the balance wheel toward you with your hand to bring the needle comes up 1.4 to 1.8 mm from its lowest position. loose the hexagon bolt just enough to move the lower looper driving arm, and move it until the tip of lower looper comes just to left side of needle on the left.
3. Tighten the hexagon bolt, Check if the needle and the lower looper timing is correct.

Check the clearance between the needle and lower looper / needle guards.

4. Attach the presser foot and the needle plate.

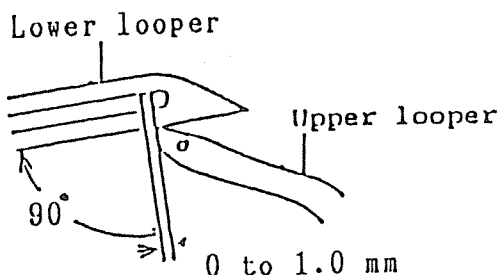


Correct Setting:

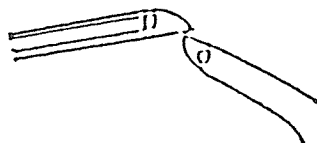
When lower looper moves to the right, the lower looper meets the upper looper within 1 mm from the left of lower looper eye at a right angle as shown in Fig. 1.

To adjust:

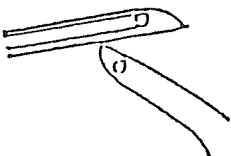
1. Before proceeding with this adjustment, check the lower looper timing (see page 18) and the position of upper looper (see page 17).
2. Remove the machine base (see page 6).
3. Loosen two set screws, and adjust the timing by turning the upper looper drive cam in the direction of:
 - A if the timing of upper looper is advanced as shown in Fig. 3.
 - B if the timing of upper looper is delayed as shown in Fig. 4.
 The allowance is 1 mm from the left edge of lower looper eye as shown in Fig. 1.
4. Tighten two set screws.
5. Check the clearance between the loopers (see page 20).
6. Attach the machine base.



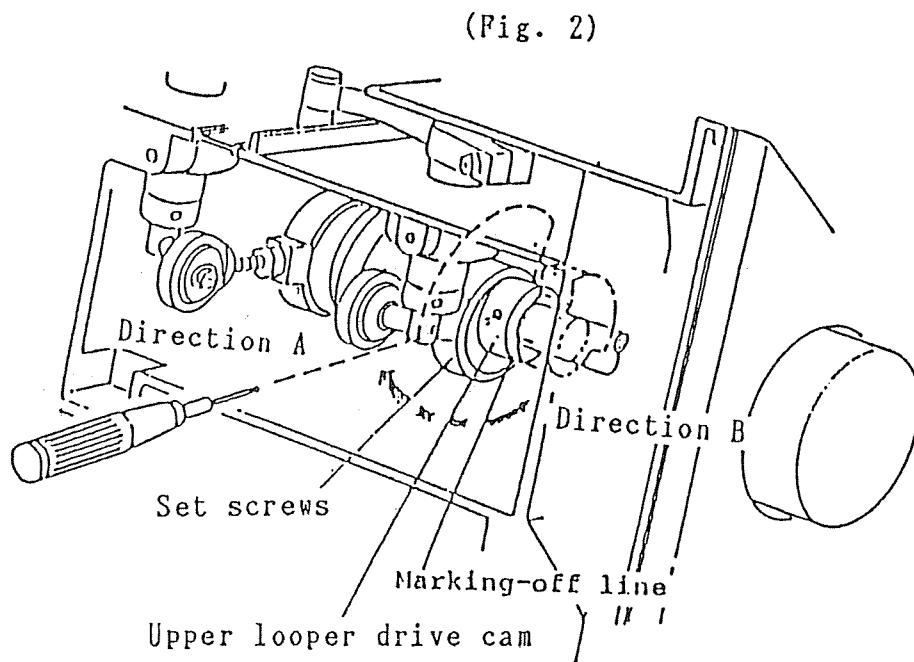
(Fig. 1)



(Fig. 3)



(Fig. 4)



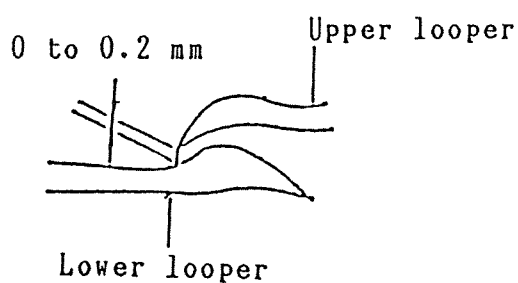
(Fig. 2)

Correct Setting:

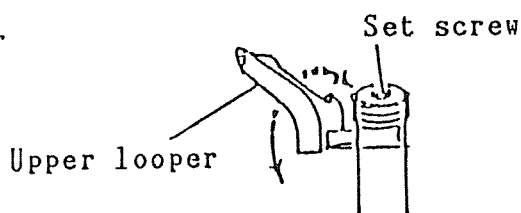
When the loopers meet as shown in Fig. 2, the clearance should be 0 to 0.2 mm as shown in Fig. 1.

To adjust:

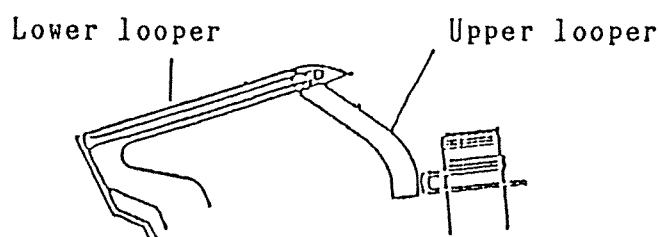
1. Remove the presser foot and needle plate.
2. Turn the balance wheel toward you with your hand to bring the loopers as shown in Fig. 2.
3. Loosen set screw, and adjust the clearance by moving the upper looper to the back or front as shown in Fig. 3.
4. Tighten set screw firmly.
5. Check the clearance between the upper looper and the needle (see page 21).
6. Attach the needle plate and presser foot.



(Fig. 1)



(Fig. 3)



(Fig. 2)

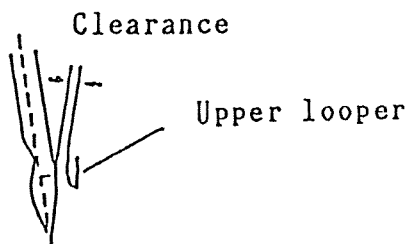
Correct Setting:

When the upper looper meets with needle. clearance should be:

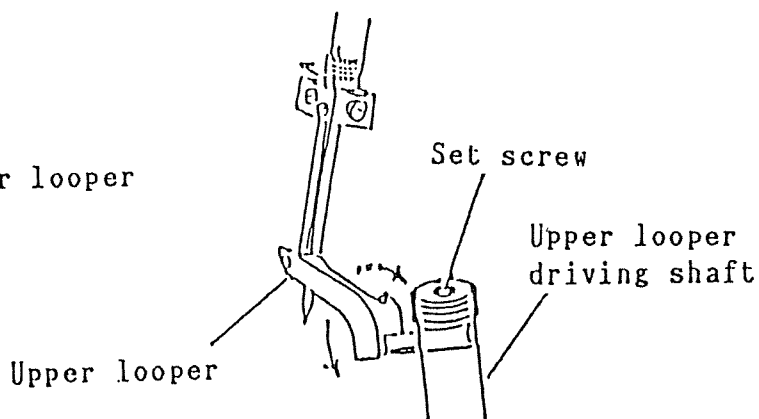
- 0.1 to +0.15 at the needle on the left.
- 0.2 to +0.05 at the needle on the right.

To adjust:

1. Turn the balance wheel toward you with your hand to bring the needle just behind the upper looper in downward travel.
2. Loosen set screw, and adjust the clearance between the both needles and upper looper.
3. Tighten set screw.
4. Check the clearance between the loopers (see page 20).



(Fig. 1)



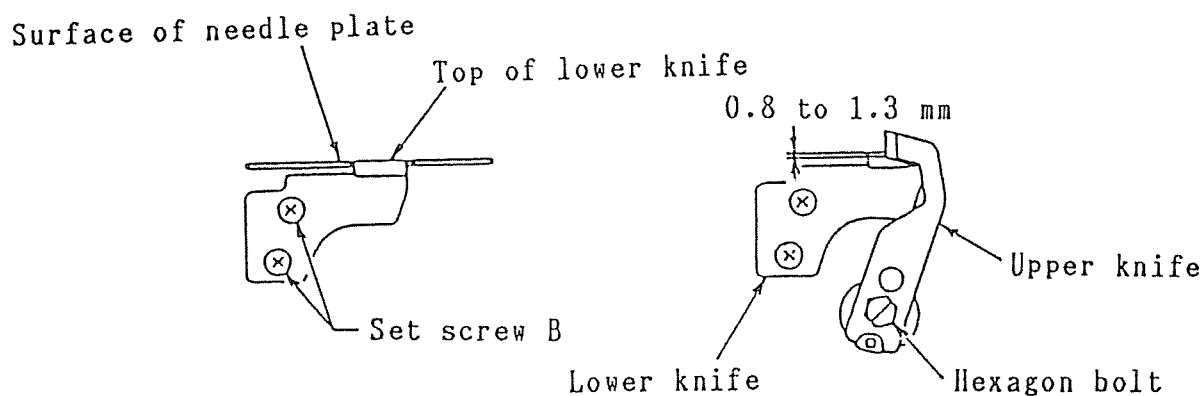
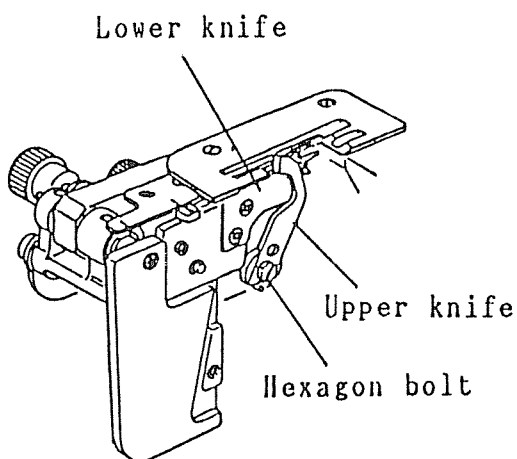
(Fig. 2)

Correct Setting:

The tip of the lower knife should be levelled with the surface of needle plate. When the upper knife is at the lowest position, the front lower corner of upper knife should be 0.8 to 1.3 mm below the edge of lower knife.

To adjust:

1. Before proceeding with this adjustment, check the upper knife timing. (see page 12)
2. Loosen two set screws B, and adjust the lower knife position.
3. Turn the balance wheel to bring upper knife to the lowest position.
4. Loosen the hexagon bolt, and adjust the position of upper knife.
5. Tighten the hexagon bolt.



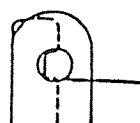
Lower Looper Thread Guide (3)

Loosen the set screw A, and adjust the lower looper thread guide so that the hole of thread guide is in line with the groove of lower looper as shown in Fig. 1.

NOTE: After adjustment, check that lower looper thread guide (3) does not touch to arm, feed dog and feed dog base.

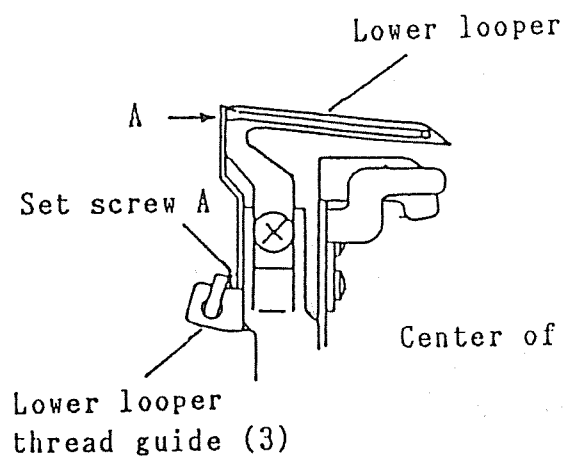
Looper Thread Guide (Lower)

Loosen set screw B, and adjust the position of thread guide so that the side of thread guide comes over the center of hole as shown in Fig. 2.

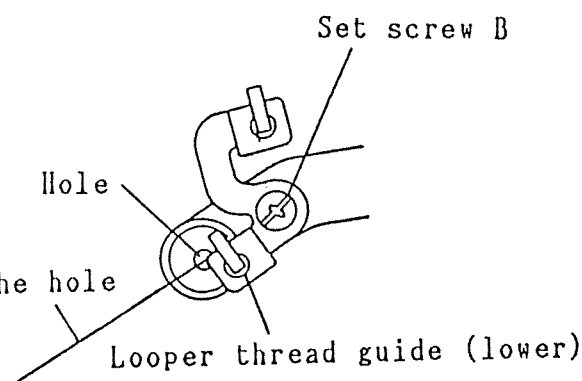


The hole is in line with
the groove of lower looper.

View from A



(Fig. 1)



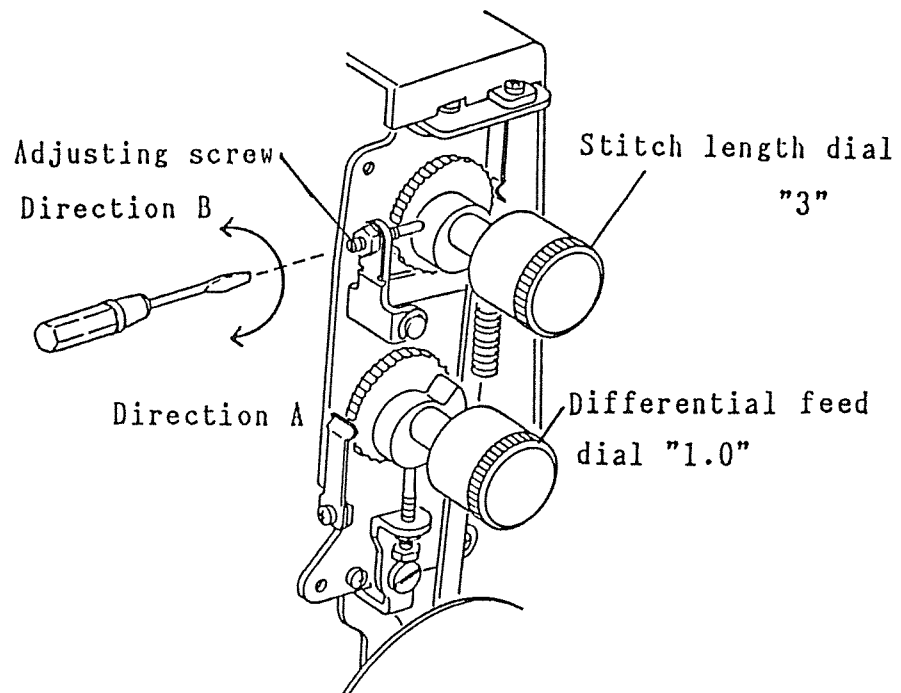
(Fig. 2)

Correct Setting:

The actual stitch length should be 2.8 - 3.0 mm when the stitch length dial is set at "3" and differential feed dial at "1.0".

To adjust:

1. Set the stitch length dial at "3" and differential feed dial at "1.0".
2. Remove the front cover unit (see page 4).
3. If the actual stitch length is longer than 3.0 mm, turn the adjusting screw in the direction A.
If the actual stitch length is smaller than 2.8 mm, turn the adjusting screw in the direction B.
4. Attach the front cover unit.

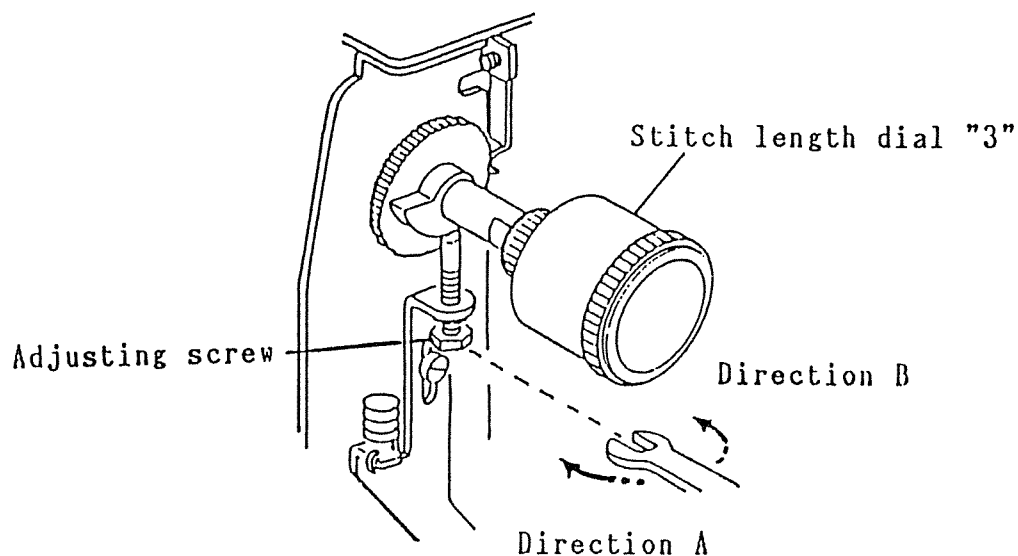


Correct Setting:

The actual stitch length should be 2.8 - 3.0 mm when the stitch length dial is set at "3".

To adjust:

1. Set the stitch length dial at "3".
2. Remove the belt cover unit (see page 2).
3. If the actual stitch length is longer than 3.0 mm, turn the adjusting screw in the direction A.
If the actual stitch length is smaller than 2.8 mm, turn the adjusting screw in the direction B.
4. Attach the belt cover unit.



Thread tension dials are already adjusted for general sewing at factory, however, if you want to adjust much stronger or weaker for special sewing, it can be adjusted as follow:

To adjust:

1. Pull out the thread tension dial.
2. Turn the dial knob leading screw to adjust the thread tension to direction of:
A to get weaker thread tension.
B to get stronger thread tension.
3. Set the tension dial number "3" with stopper, and insert the thread tension dial.

Correct Setting for general sewing:

When each dial is set at "3" and No. 50 polyester filament thread is used. the thread tension should be as follows;

Needle (left)	28 - 48 g
Needle (right)	13 - 23 g
Upper looper	5 - 15 g
Lower looper	20 - 30 g

When each dial is set at "9" and No. 50 polyester filament thread is used, the thread tension should be as follows;

Needle (Left)	130 g or more
Needle (right)	50 g or more
Upper looper	40 g or more
Lower looper	125 g or more

