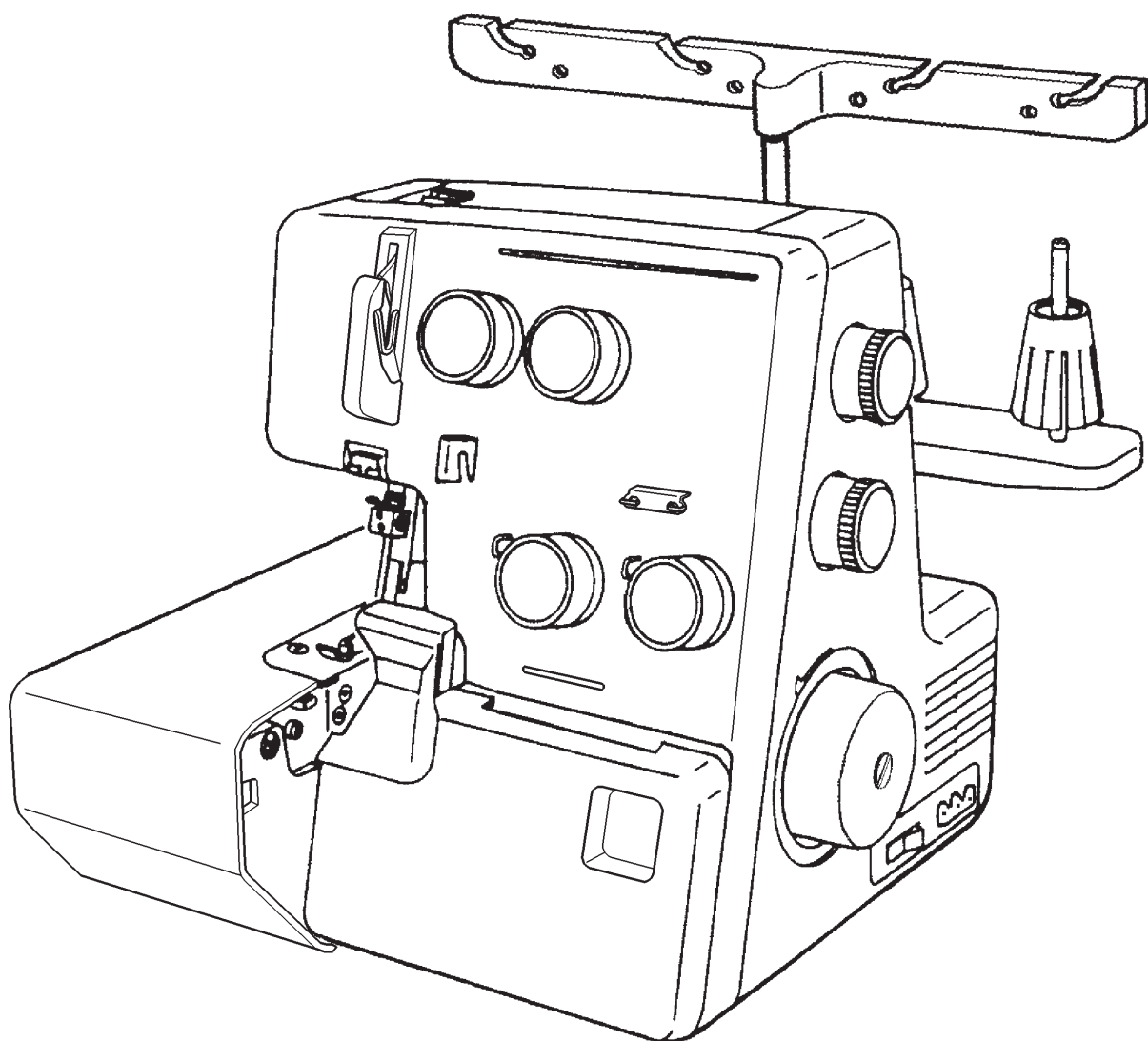


SERVICING MANUAL



MYLock 204D

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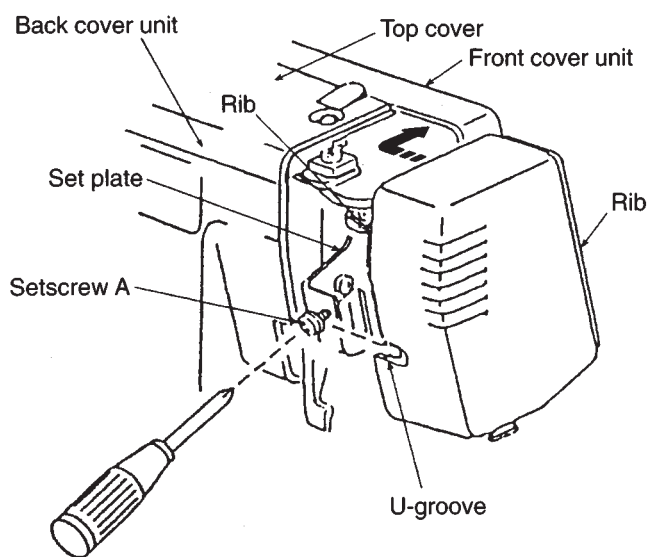
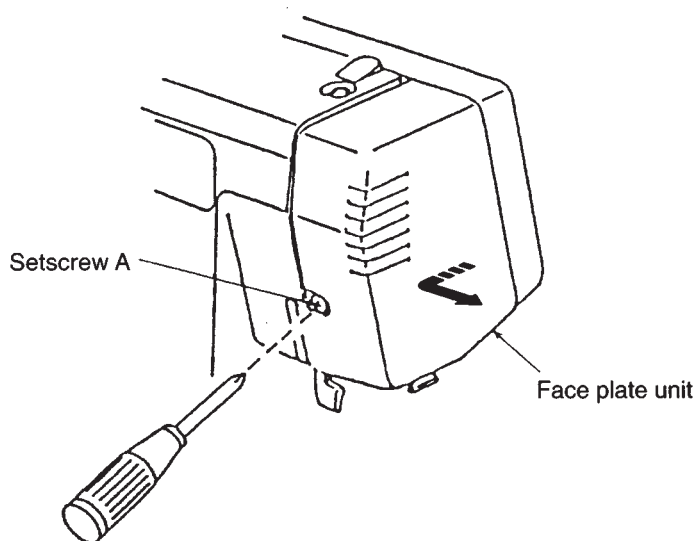
TO CHANGE THE FACE PLATE UNIT

To remove:

- 1: Loosen the 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 front cover unit and back cover unit and tighten the set screw.



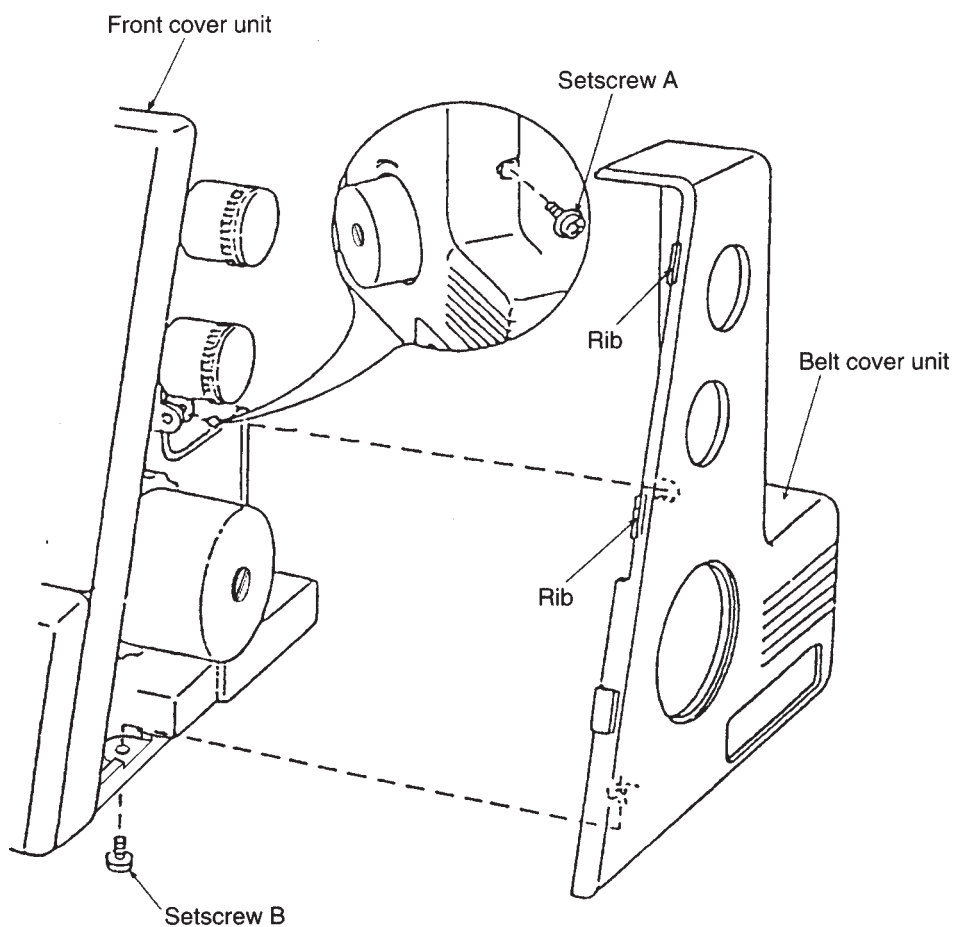
TO CHANGE THE BELT COVER UNIT

To remove:

- 1: Loosen the 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 the set screws A and B.



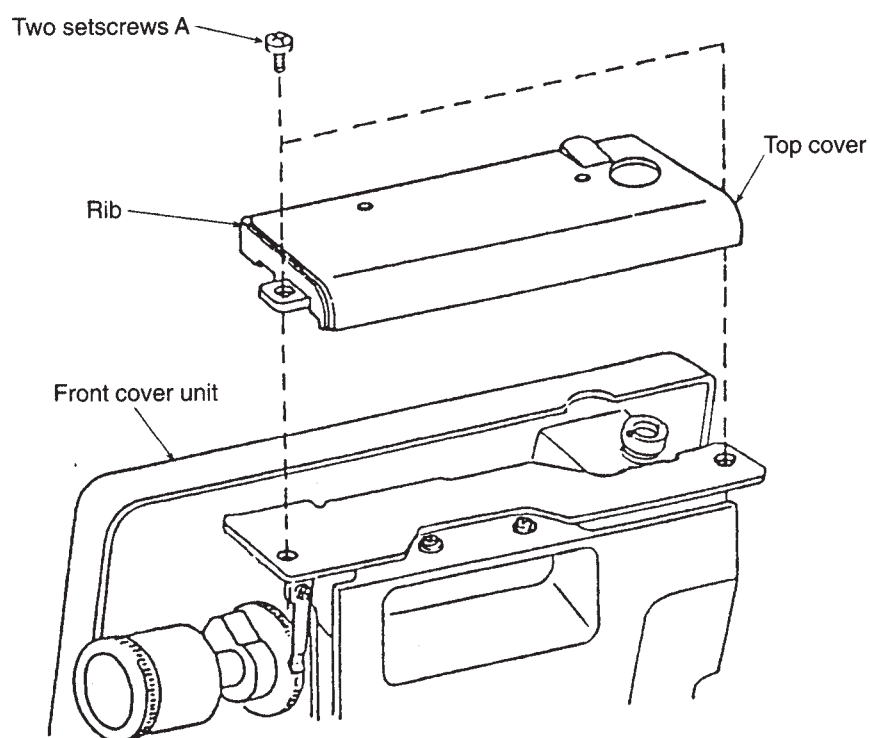
TO CHANGE THE TOP COVER

To remove:

- 1: Remove the face plate unit and belt cover unit.
- 2: Remove two set screws A and remove the top cover.

To attach:

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



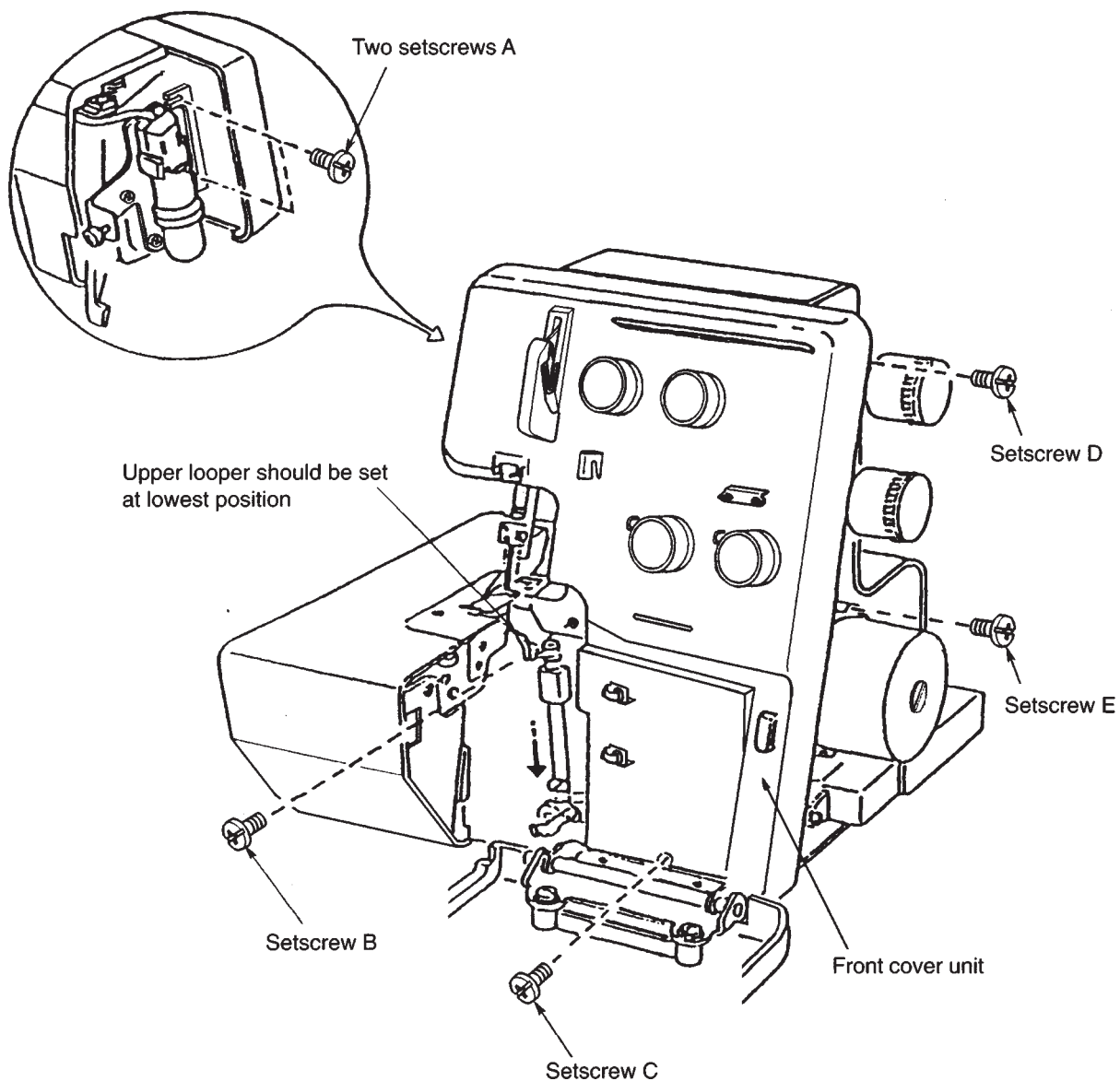
TO CHANGE THE FRONT COVER UNIT

To remove:

- 1: Remove the face plate unit and the belt cover unit.
- 2: Turn the handwheel 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.



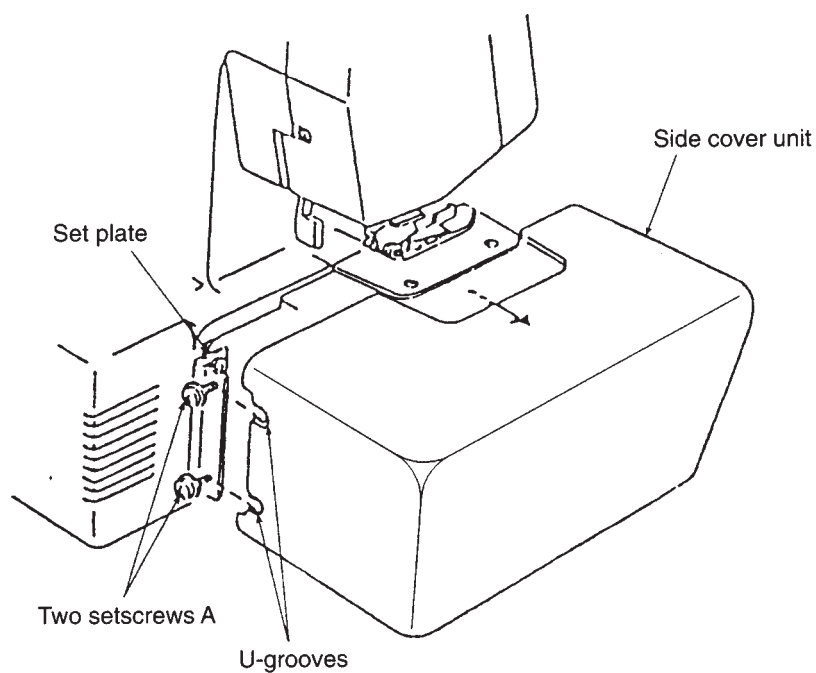
TO CHANGE THE SIDE COVER UNIT

To remove:

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

To attach:

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



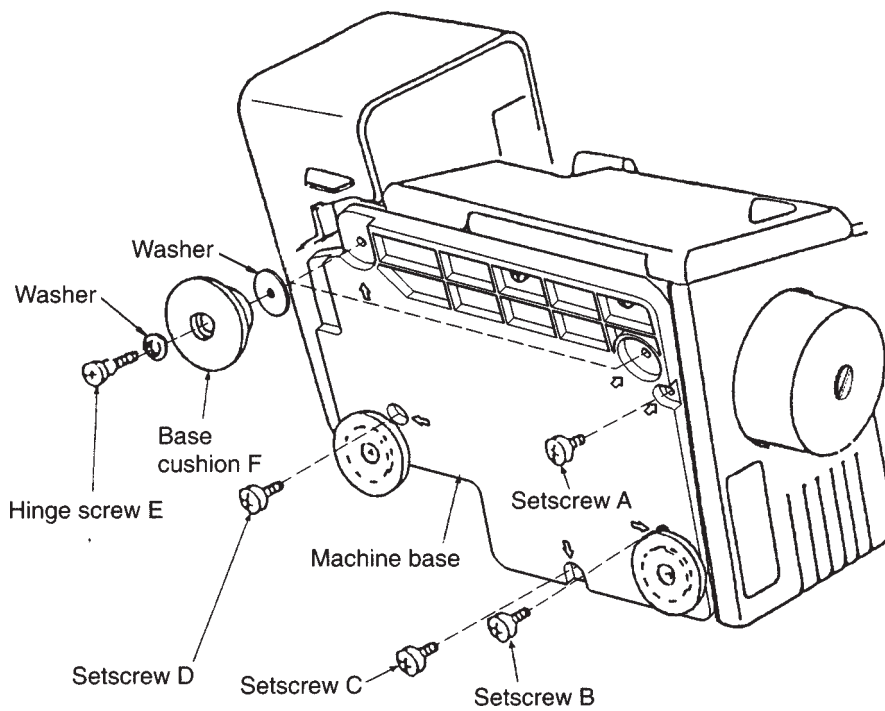
TO CHANGE THE MACHINE BASE

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.

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.



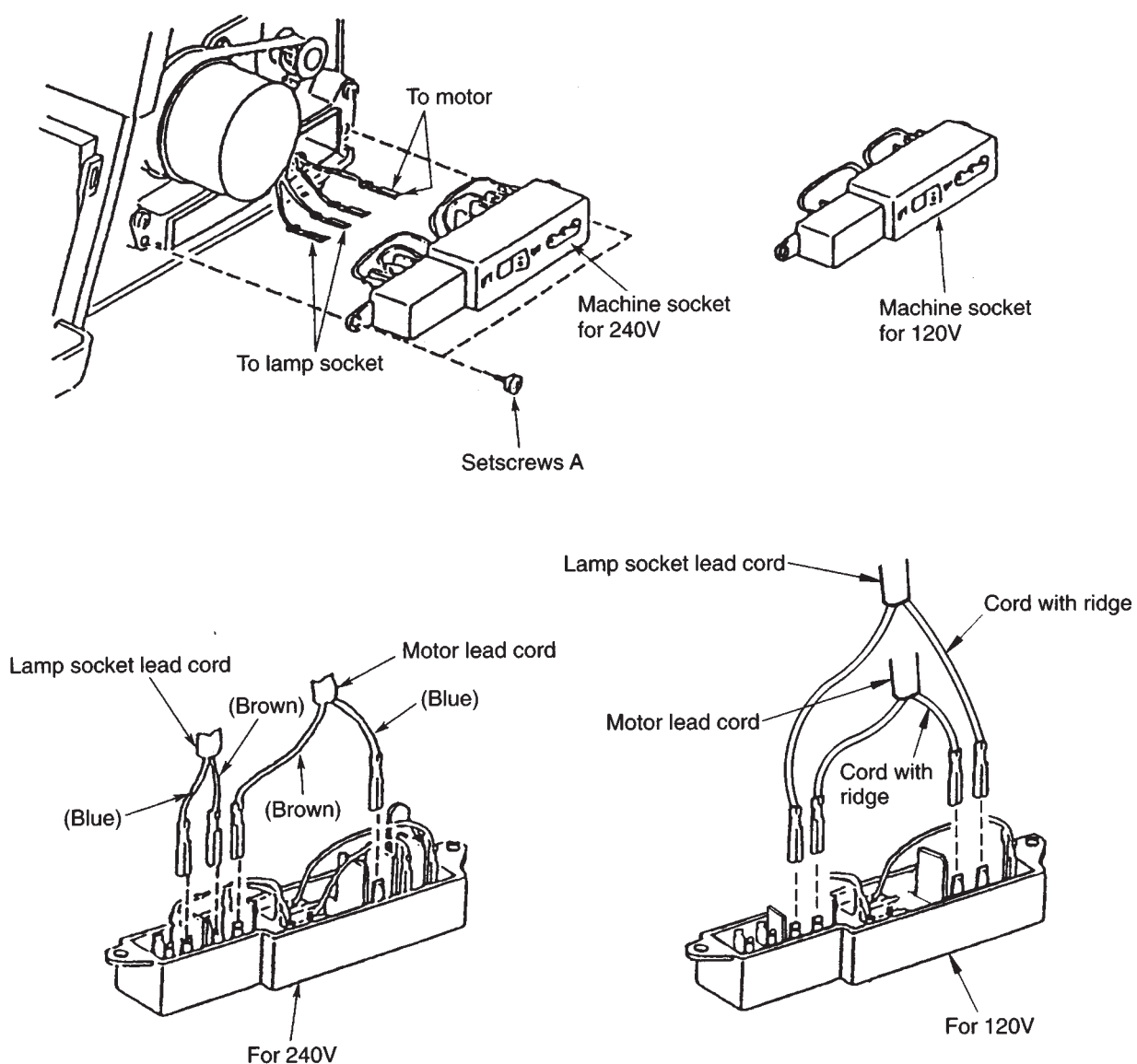
TO CHANGE THE MACHINE SOCKET

To remove:

- 1: Remove the belt cover unit.
- 2: Remove the two set screws A, and pull out the cord connectors.
- 3: Remove the machine socket

To attach:

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



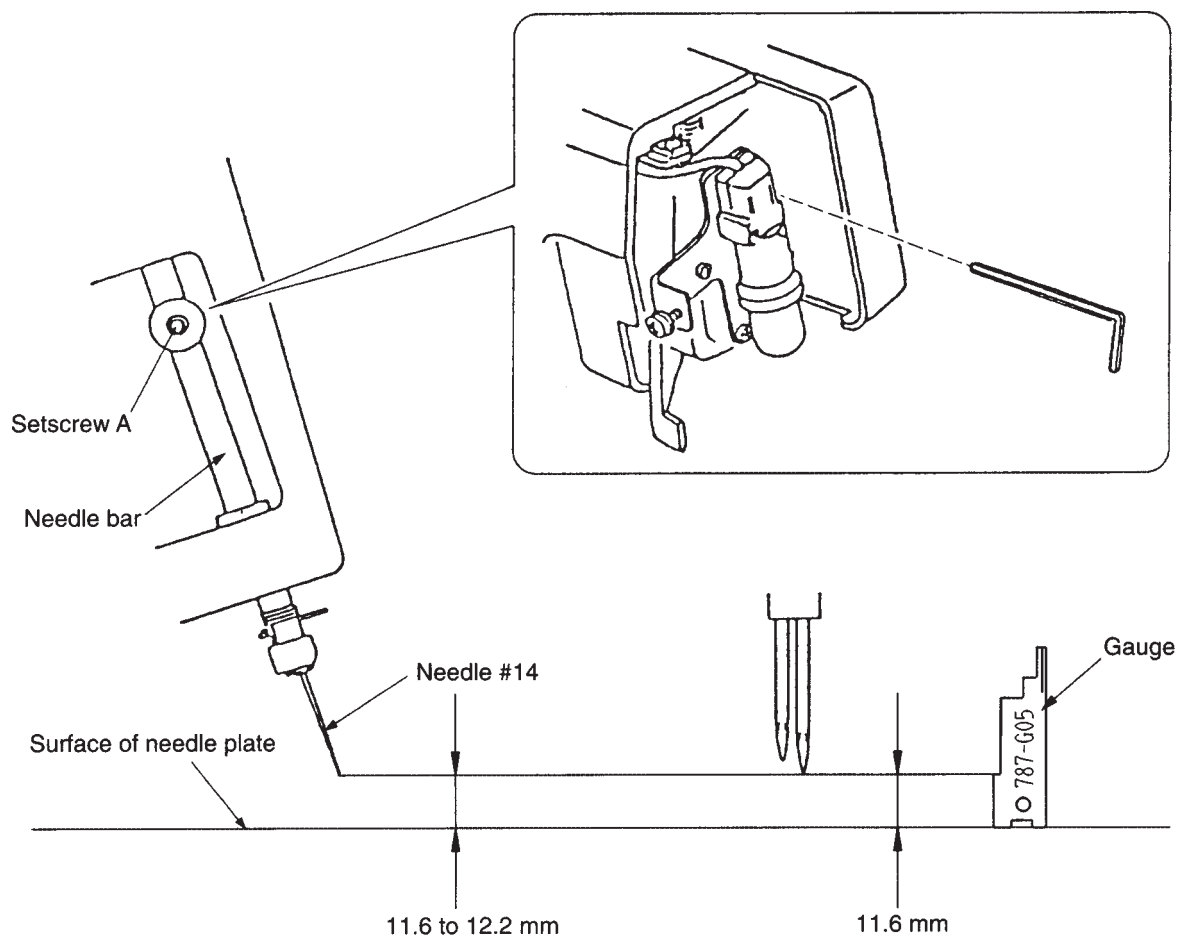
TO ADJUST THE NEEDLE HEIGHT

Correct setting:

The distance between the tip of needle on the right and the surface of needle plate should be 11.6 mm to 12.2 mm when the needle bar is at the highest position.

To adjust:

- 1: Remove the face plate unit.
- 2: Turn the handwheel toward you with your hand, and set the needle bar at the highest position.
- 3: Loosen the set screw A to adjust the height, and tighten set screw A after the adjustment is done.
- 4: Turn the handwheel toward you by one complete turn, and recheck the needle bar height.
- 5: Attach the face plate unit.



TO ADJUST THE PRESSER BAR HEIGHT

Correct setting:

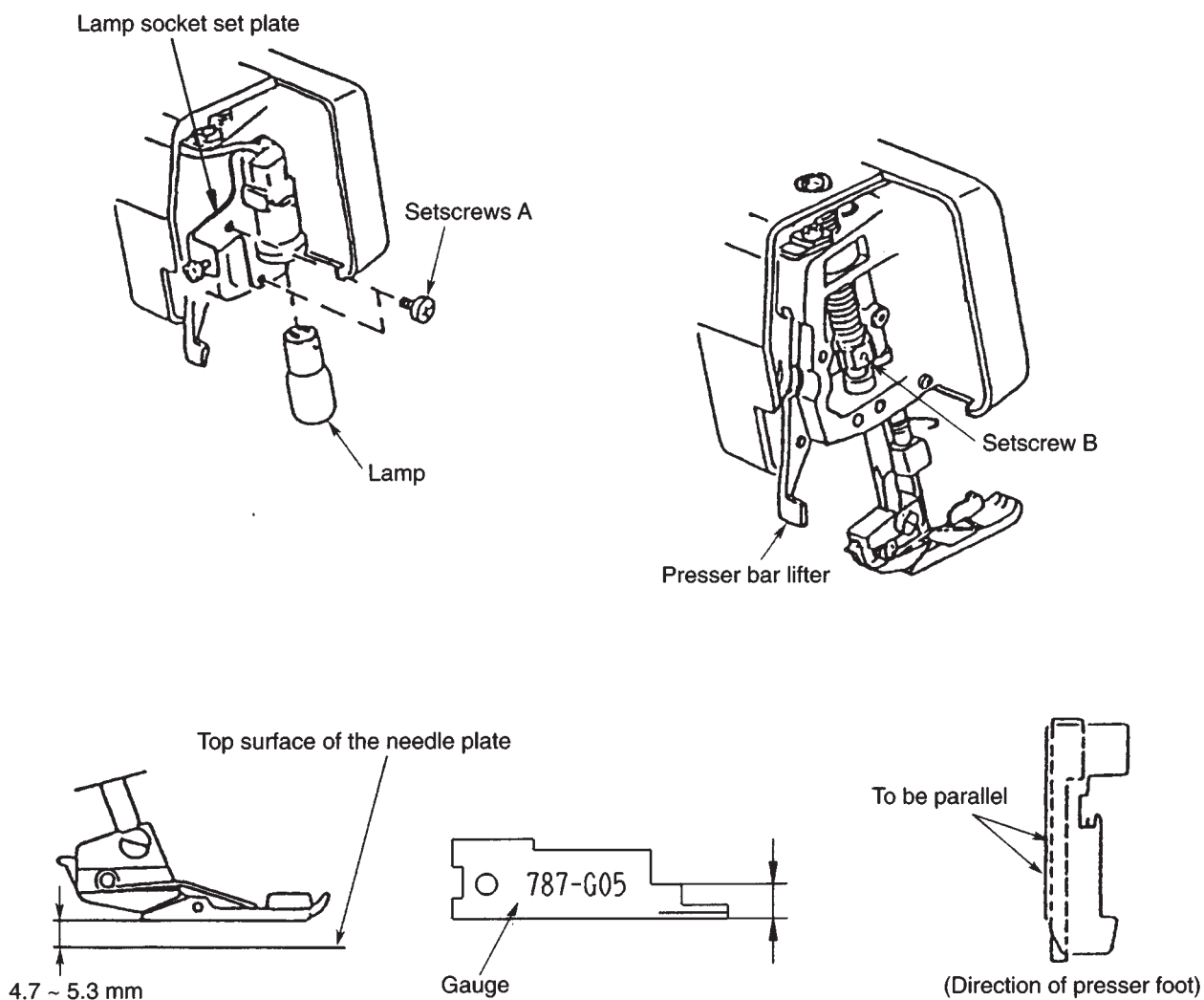
The distance between the surface of needle plate and bottom of presser foot should be 4.7mm to 5.3 mm when the presser bar lifter is raised.

To adjust:

- 1: Remove the face plate unit.
- 2: Remove set screws A to remove the lamp socket unit.
- 3: Raise the presser bar lifter, and loosen the set screw B.

Then adjust the presser bar height, the side of presser foot should be parallel with the slit of needle plate.

- 4: Tighten the set screw B.
- 5: Tighten the set screw A.
- 6: Attach the face plate unit.



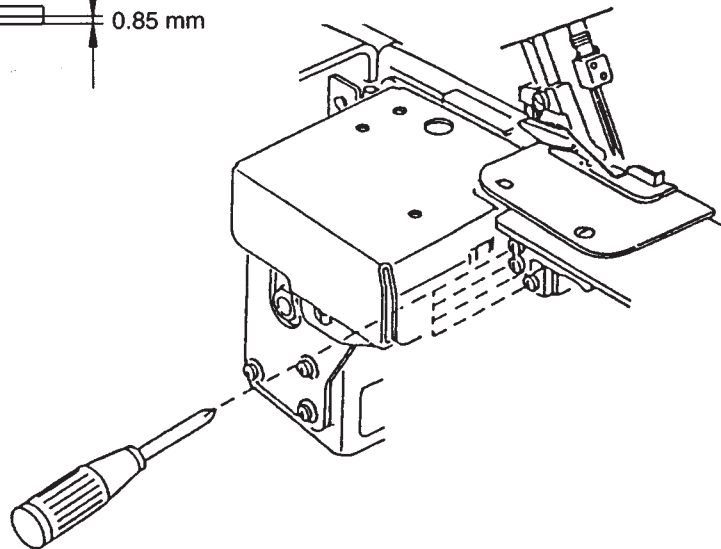
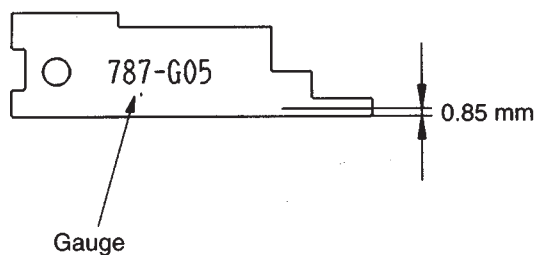
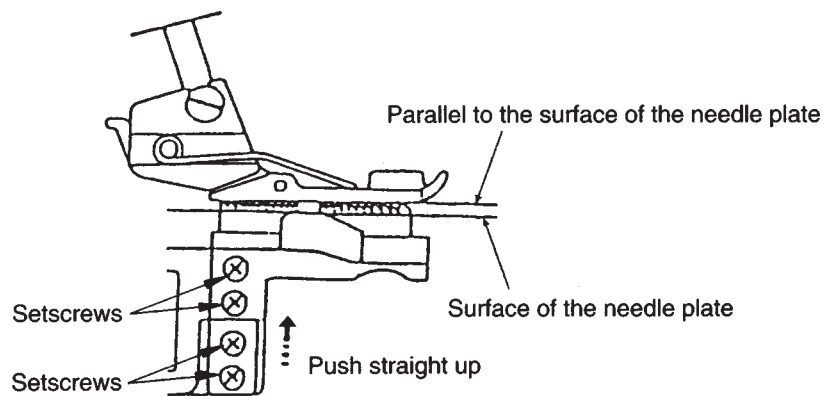
TO ADJUST THE FEED DOG HEIGHT

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 mm to 0.95 mm.

To adjust:

- 1: Set the stitch length dial at "34" 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 handwheel.
- 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 handwheel. 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 handwheel.



TO ADJUST THE TIMING OF THE NEEDLE AND THE FEED DOG

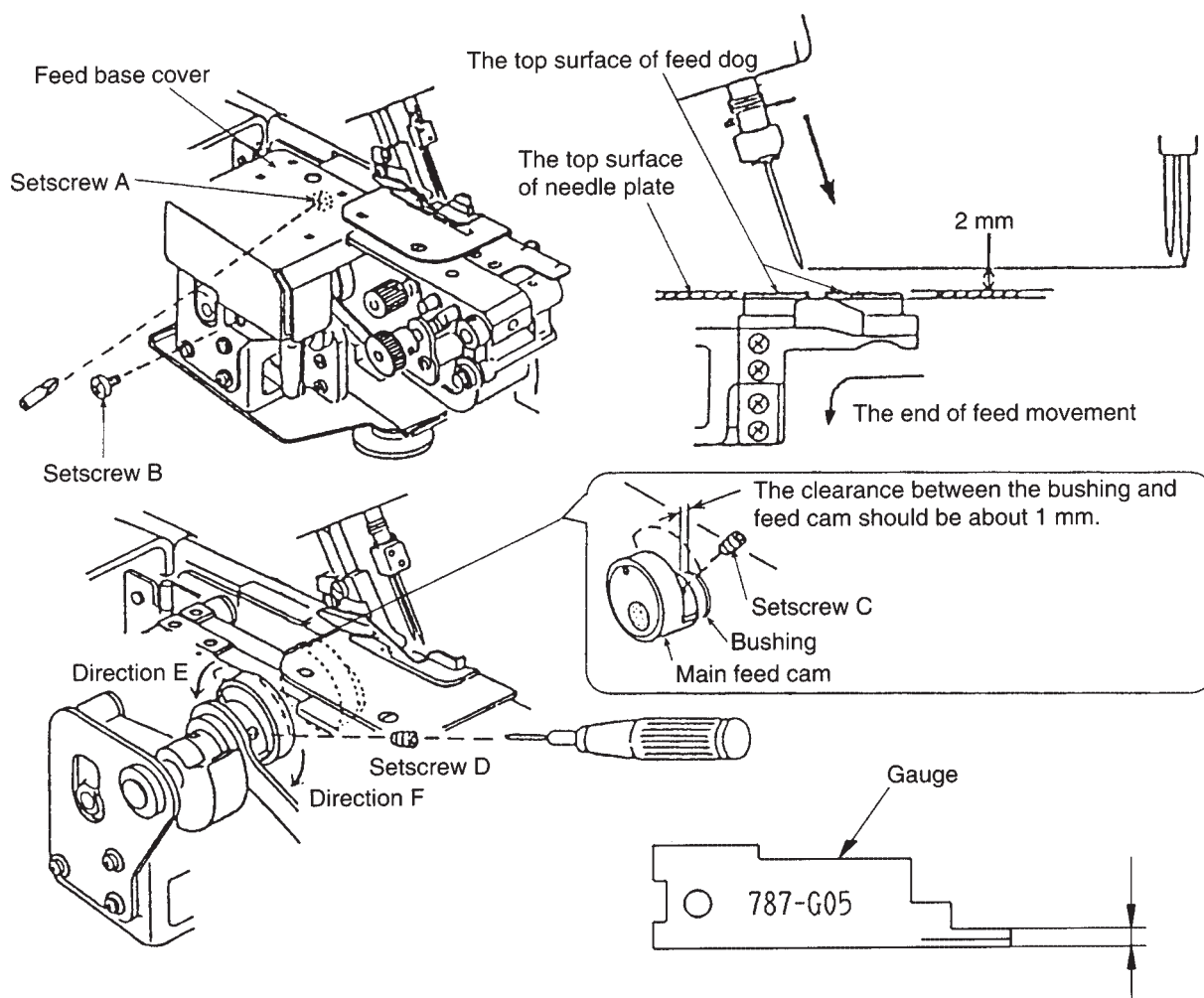
Correct setting:

When the tip of right needle is at 2 - 4 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 "3" and differential feed dial at "1.0".
- 3: Raise the presser foot and move the tip of right needle at 2 - 4 mm above the needle plate in its downward motion by turning the handwheel.
- 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.



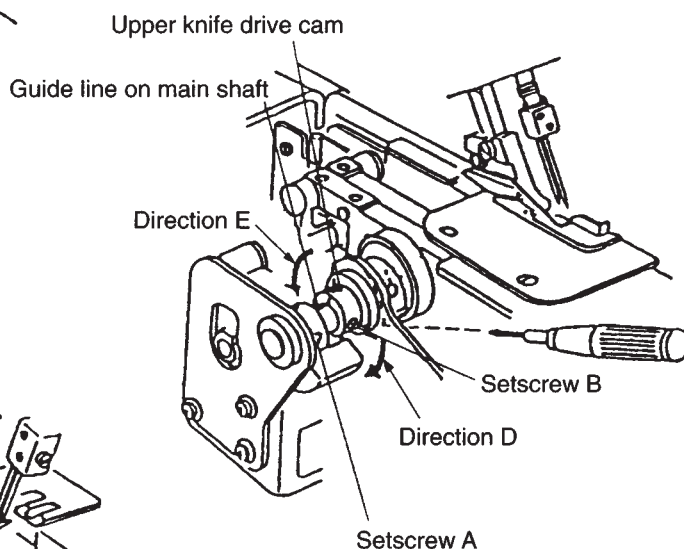
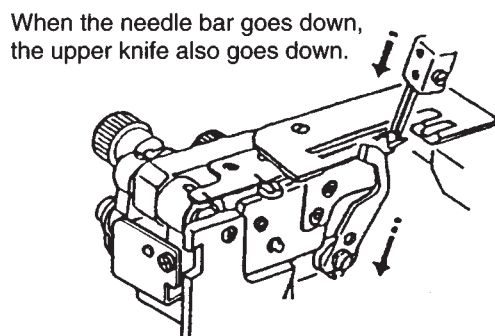
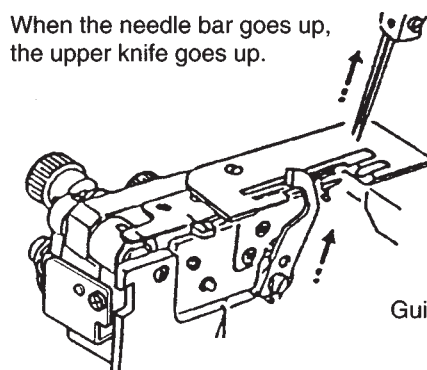
TO ADJUST THE TIMING OF THE NEEDLE AND THE UPPER KNIFE

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.
- 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 delayed.
 - * Turn the upper knife drive cam to the direction E when the upper knife timing is too soon.
- 4: Tighten the two set screws B firmly. Move the balance weight to right.
Match the guide line on the balance weight with the one of the main shaft correctly.
Then tighten the two screws A.
- : Turn the handwheel toward you by one complete turn, and recheck the needle and the upper knife timing.
- 6: Attach the feed base cover.



TO ADJUST THE HEIGHT OF THE LOWER LOOPER

Correct setting:

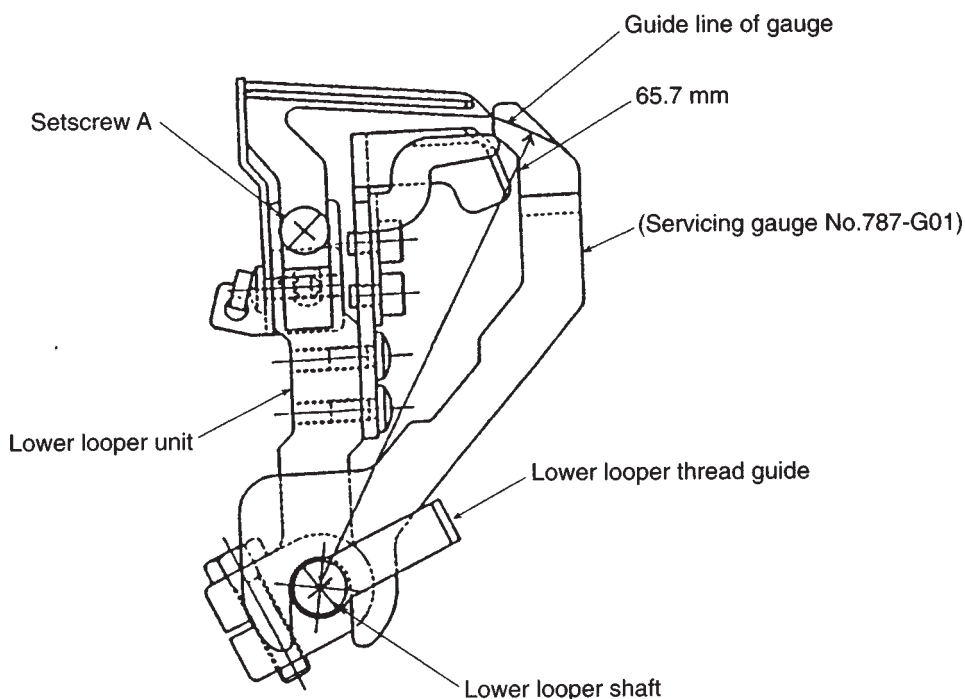
The height of lower looper is 65.7 mm from center of lower looper shaft as shown in illustration.

To adjust:

- 1: Set the upper knife in down position to loosen set screw A.
- 2: Turn the handwheel to get the lower looper in rightmost position.
- 3: Replace the lower looper.
- 4: Turn the handwheel 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.



TO ADJUST THE CLEARANCE BETWEEN THE NEEDLES AND THE LOWER LOOPER / NEEDLE GUARDS.

Correct setting:

Both right and left needles should have an equal clearance between the front edge of the needle holes on the needle plate.

The standard clearance between the left and right needle and the lower looper is 0 mm to 0.05 mm.

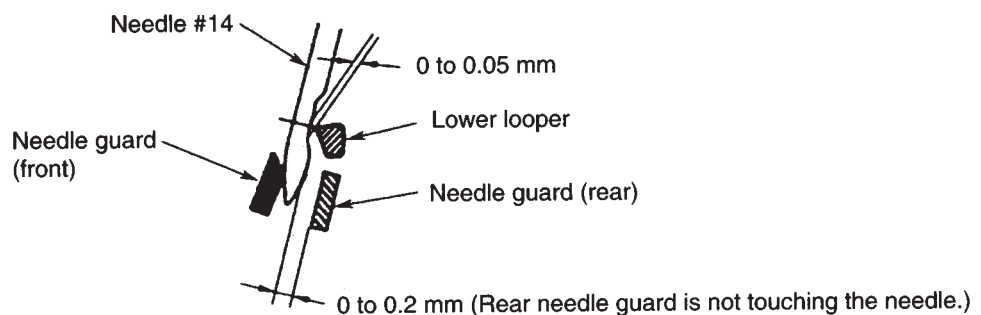
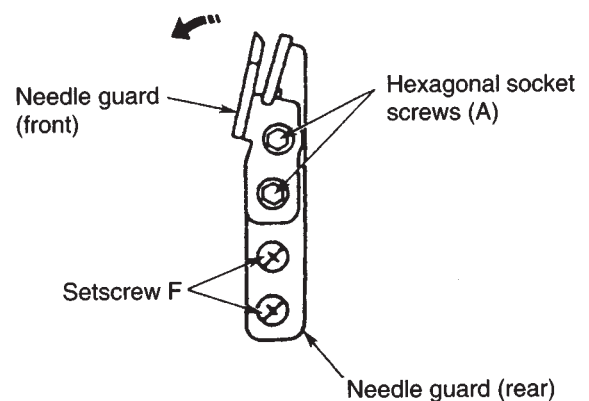
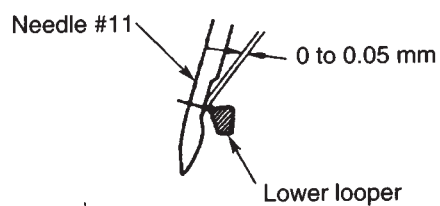
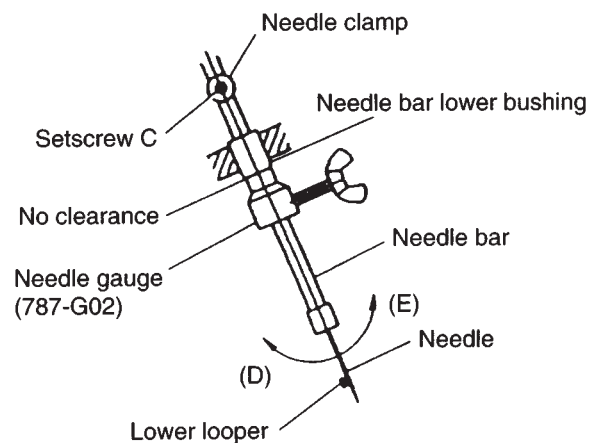
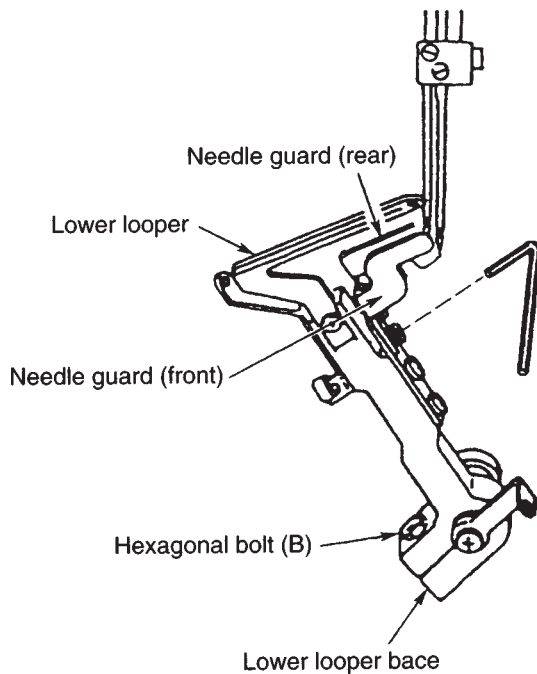
The standard clearance between the needles and the rear needle guard is 0 mm to 0.2 mm.

The above standard clearance allows the needle to slightly touch the front needle guard.

To adjust:

- 1: Remove the face plate unit, presser foot, needle plate and needles.
- 2: Before loosening set screw C, attach the needle gauge #787-G02 to prevent change of needle bar height during the adjustment.
Attach two #11 needles on the needle cramp and loosen the set screw C. Adjust the two needles, setting them parallel (clearance between the needles and the front edge of the needle holes on the needle plate should be equal) by turning the needle bar in the D or E direction while pushing up the needle bar to prevent change of needle bar height. Retighten the set screw C and remove the needle gauge.
- 3: Remove the left needle only.
- 4: Turn the handwheel towards you to bring the tip of the lower looper from the left hand to the rear side of the right needle.
- 5: Loosen the hexagonal socket screws A on the front needle guard and open a space between the front needle guard and the needle.
- 6: Next, loosen the hexagonal bolt B, and slide the lower looper unit to the front or to the back to adjust the clearance between the right needle and the lower looper. The clearance should be 0 mm to 0.05 mm.
- 7: Change the right needle from #11 to #14.
- 8: Push the right needle by the front needle guard to adjust the clearance between the needle and the lower looper. The clearance should be 0 mm to 0.05 mm.
- 9: Attach #14 needle on the left needle position and turn the handwheel towards you to check the clearance between the left needle and looper.
Make sure the front needle guard is touching the needle slightly and the rear needle guard is not touching the needle.
- 10: Check the timing between the needle and the lower looper.
- 11: Recheck the needle bar height and the clearance between the needle and the lower looper.

TO ADJUST THE CLEARANCE BETWEEN THE NEEDLES AND THE LOWER LOOPER / NEEDLE GUARDS.



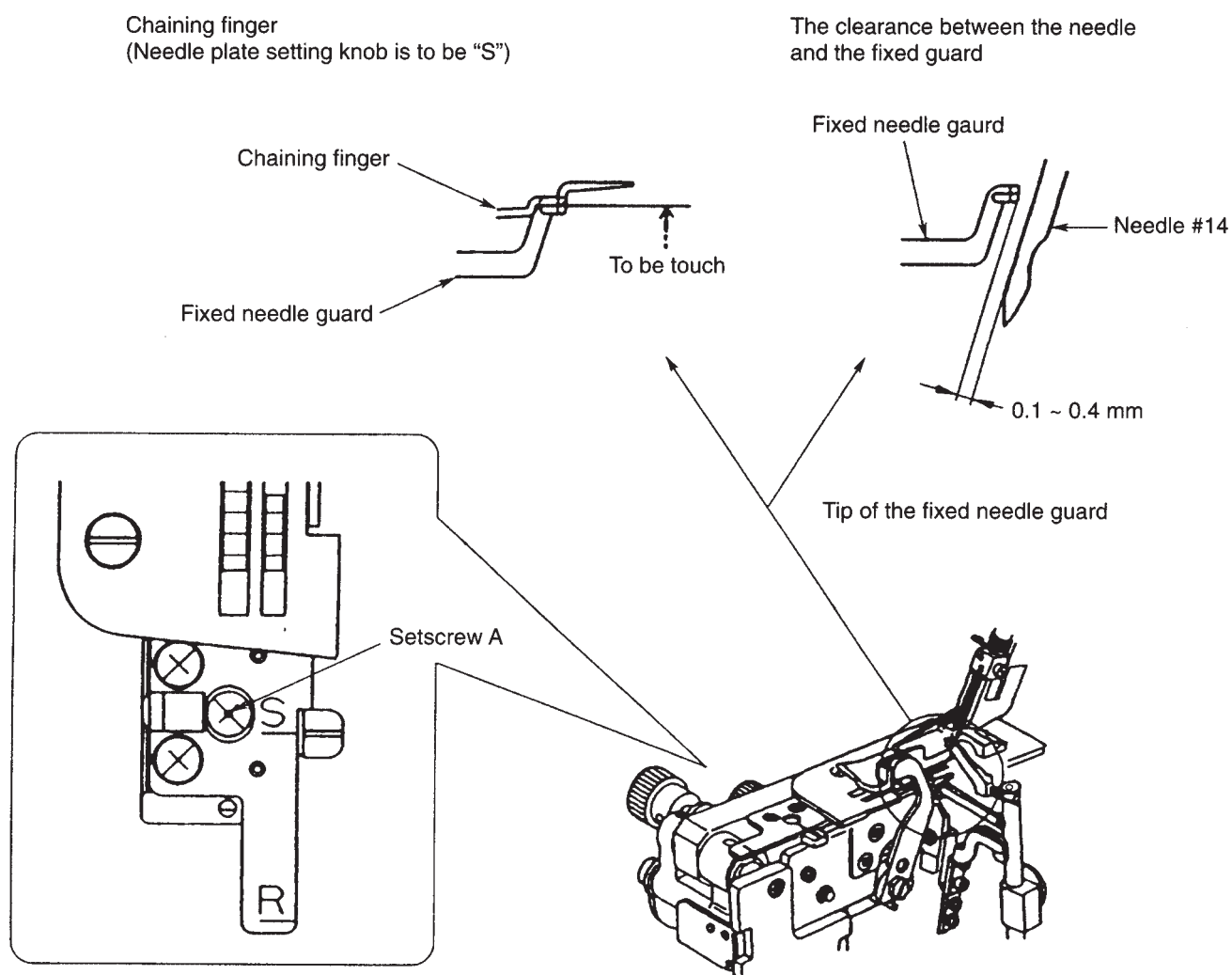
TO ADJUST THE CLEARANCE BETWEEN THE NEEDLES AND THE FIXED NEEDLE GUARD

Correct setting:

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

To adjust:

- 1: Remove the foot and needle plate and lower the needle to its lowest position.
- 2: Loosen the set screw A and adjust the position of the fixed needle guard.
- 3: Tighten the set screw A.
- 4: Attach the needle plate and the foot.



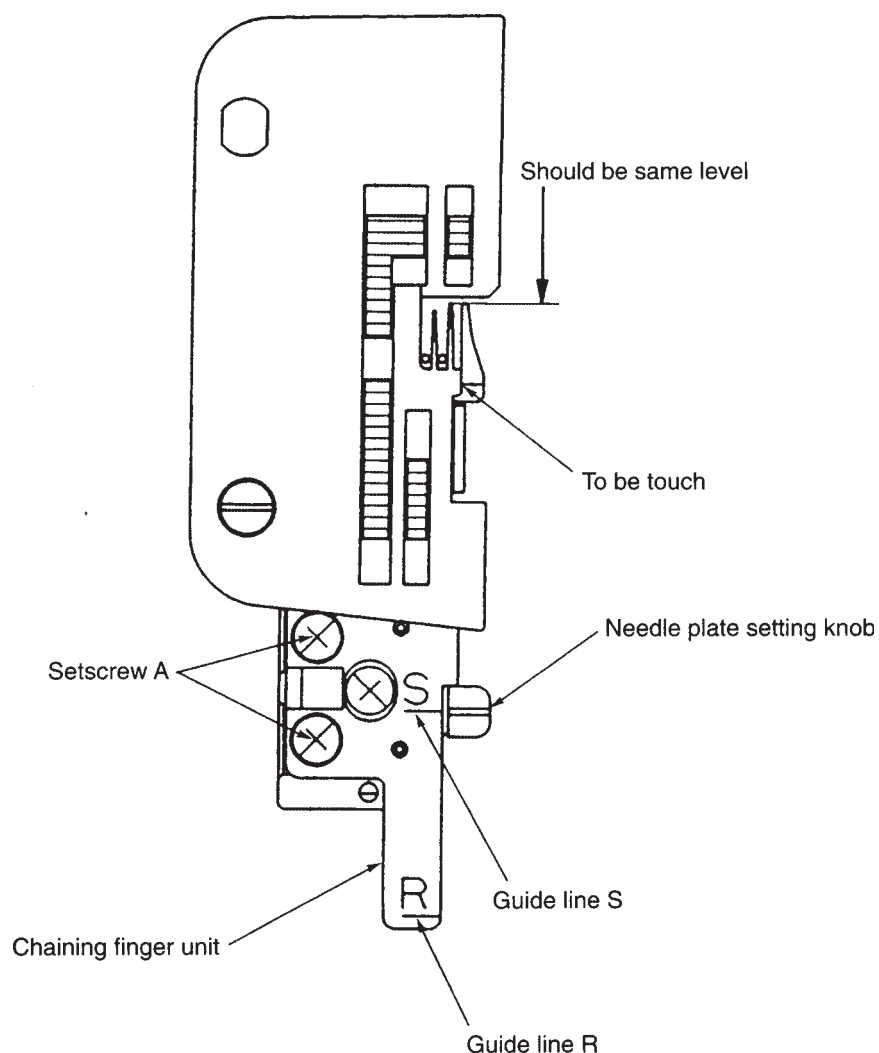
TO ADJUST THE POSITION OF THE CHAINING FINGER

Correct setting:

When setting the needle plate setting knob to guide line S, chaining finger should be touch to side of needle plate and tip of chaining finger should be same level to tip of needle on needle plate.

To adjust:

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



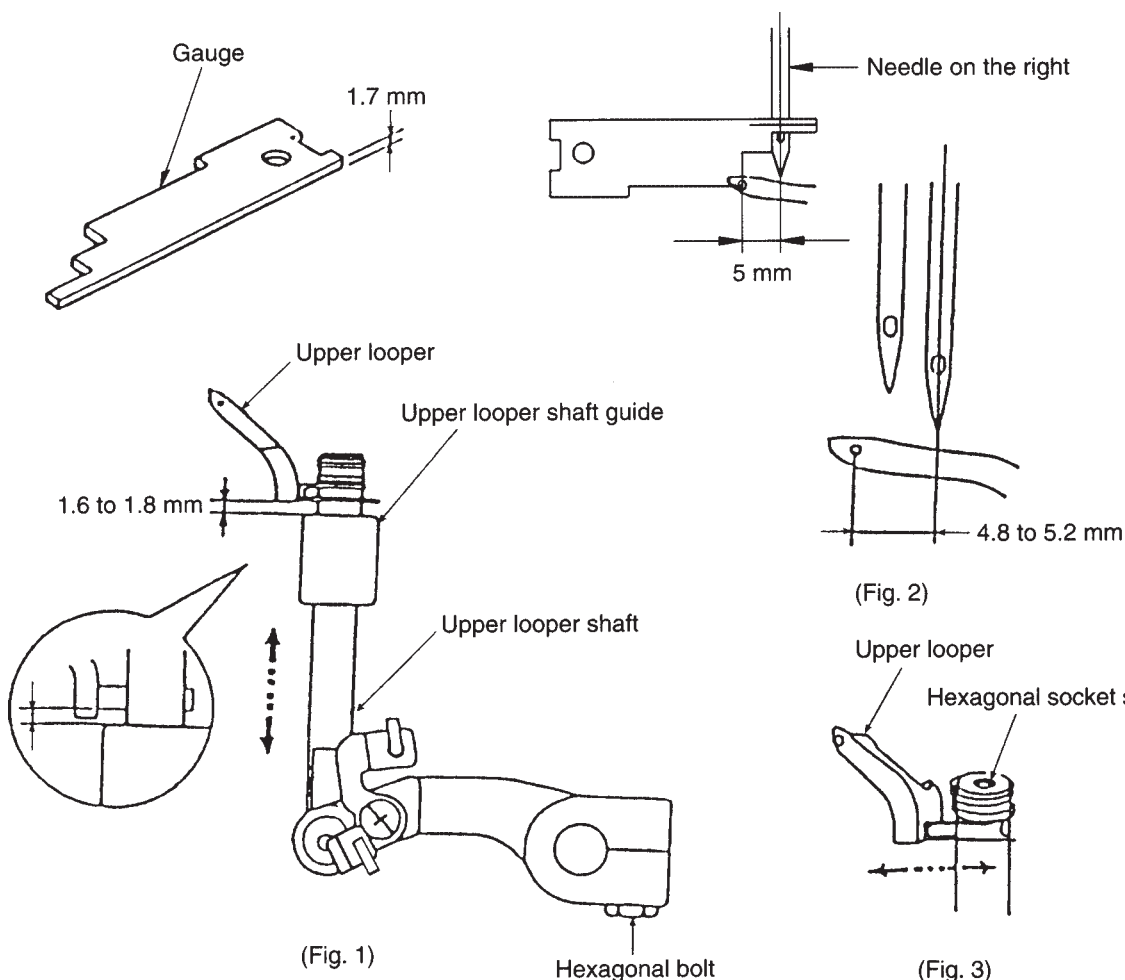
TO ADJUST THE POSITION OF THE UPPER LOOPER

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 mm to 8.2 mm

To adjust:

- 1: Remove the machine base.
- 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 hexagonal bolt, and adjust the distance between upper looper shaft guide and bottom of upper looper. The distance should be 1.6 mm to 1.8 mm when the upper looper is at the lowest position as shown in Fig. 1.
- 4: Tighten the hexagonal bolt, be careful not to tighten too much, otherwise the upper looper driving arm will be cracked.
- 5: Turn the handwheel and bring the upper looper to the leftmost position.
- 6: Loosen the hexagonal 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 hexagonal socket screw.
- 8: Check the upper and lower loopers timing and clearance between upper and lower loopers.



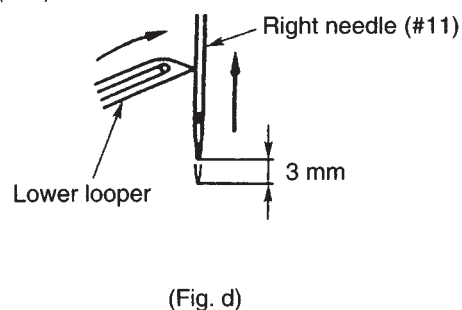
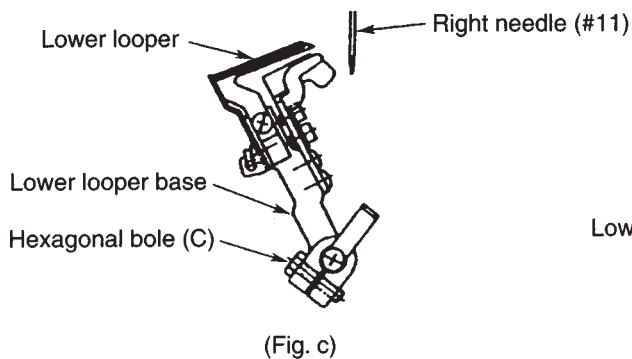
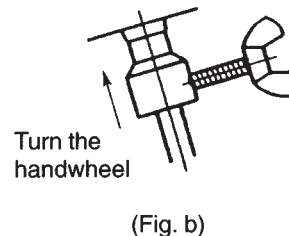
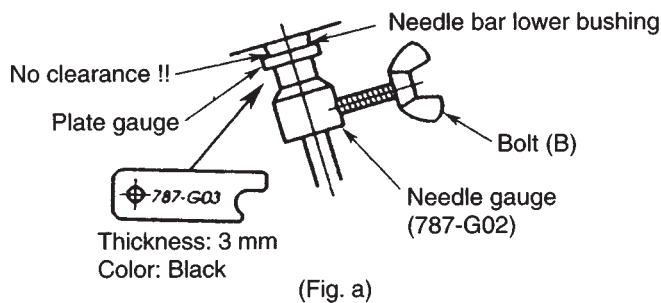
TO ADJUST THE TIMING OF THE NEEDLE AND THE LOWER LOOPER

Correct setting:

When the needle comes up 2.8 mm to 3.2 mm from its lowest position, the tip of the lower looper comes just left of the needle on the right.

To adjust:

- 1: Remove the presser foot, needle plate and left-side needle.
- 2: Replace right-side needle with a #11 one.
- 3: Turn the handwheel toward you to get the lowest needle position.
- 4: Set the two gauges #787-G02, #787-G03, as in Fig. a and tighten bolt B.
 - * This time, there should be no clearance between the gauges and the needle bar lower bushing.
- 5: Remove plate gauge #787-G03. Then turn handwheel toward you until it touches the needle bar lower bushing, as in Fig. b.
- 6: In this condition, loosen the hexagonal bolt C just enough to move the lower looper driving arm. Adjust the lower looper position in order to meet the tip of lower looper with left-side of needle #11. Tighten hexagonal bolt C, as in Fig. c and Fig. d.
- 7: Remove the gauge #787-G02.
 - * Check the clearance between the needle and lower looper.
 - * Check the clearance between the loopers.
- 8: Replace the right-side needle with a #14 one.
- 9: Attach the needle, needle plate and presser foot.
 - * Be careful not to tighten bolt (B) too much.



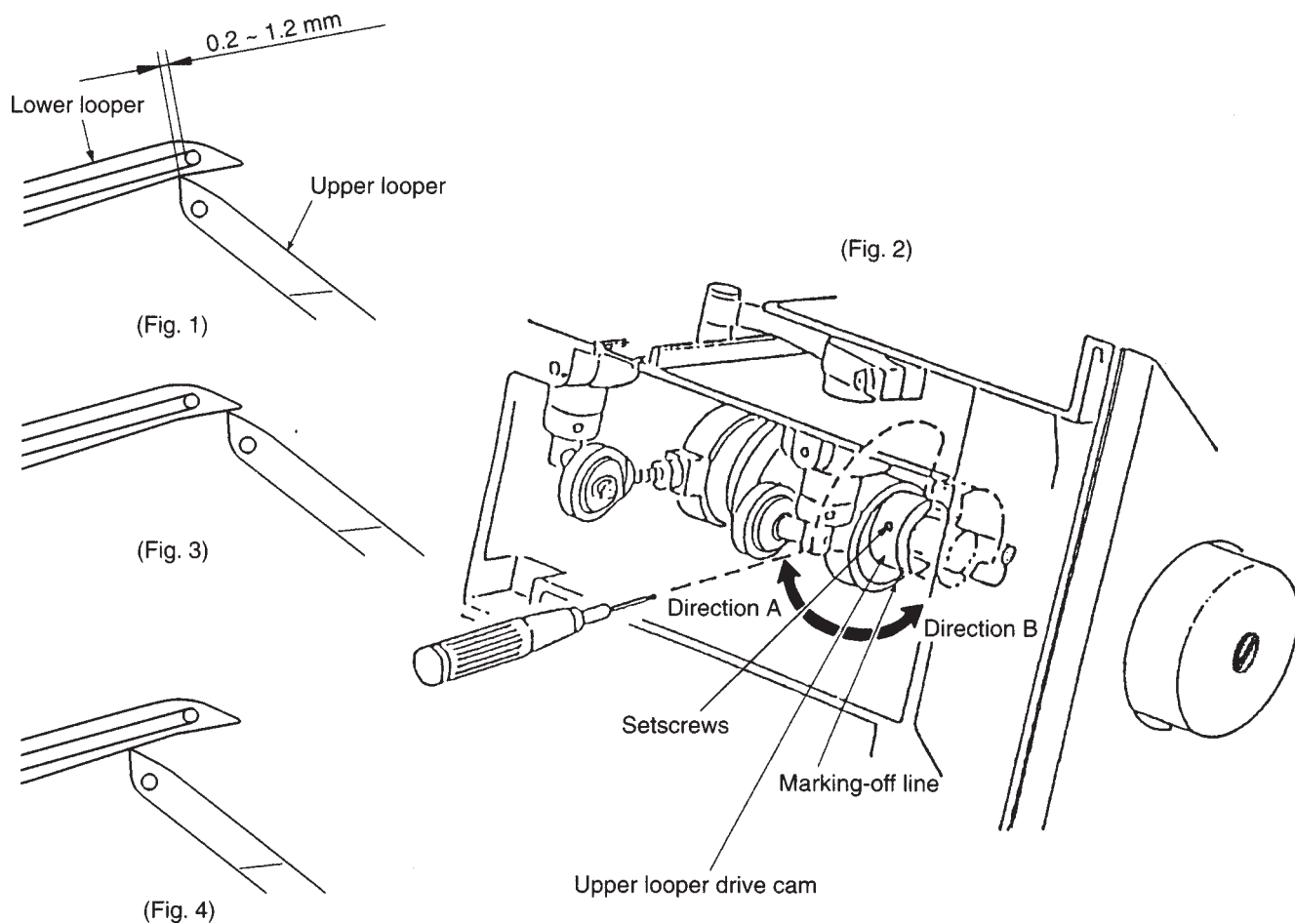
TO ADJUST THE TIMING OF THE UPPER & LOWER LOOPERS

Correct setting:

When lower looper moves to the right, the lower looper meets the upper looper within 0.2 mm to 1.2 mm from the left of lower looper eye at the right angle as shown in Fig. 1.

To adjust:

- 1: Before proceeding with this adjustment, check the lower looper timing and the position of upper looper.
- 2: Remove the machine base.
- 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 the upper looper is too early as shown Fig. 3.
 - B: if the timing of the upper looper is too late as shown 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.
- 6: Attach the machine base.



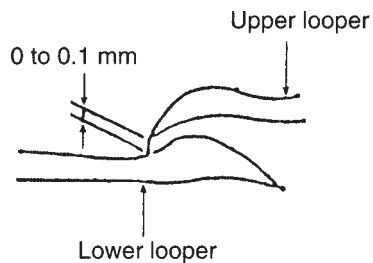
TO ADJUST THE CLEARANCE BETWEEN THE LOOPERS

Correct setting:

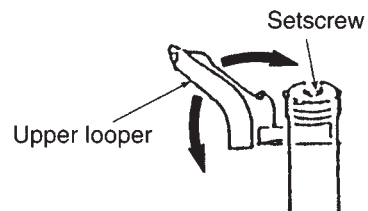
When the loopers meet as shown in Fig. 2, the clearance should be 0 mm to 0.1 mm as shown in Fig. 1.

To adjust:

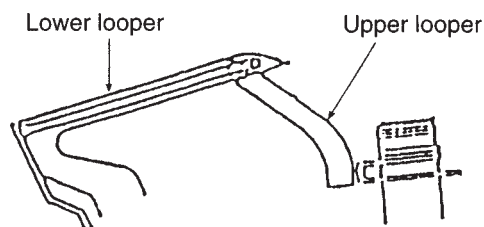
- 1: Remove the presser foot and needle plate.
- 2: Turn the handwheel toward you with your hand to bring the loopers as shown in Fig. 2.
- 3: Loosen set screw, and adjust the clearance by moving the upper looper to the back or front as shown in Fig. 3.
- 4: Tighten the set screw firmly.
- 5: Check the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



(Fig. 1)



(Fig. 3)



(Fig. 2)

TO ADJUST THE CLEARANCE BETWEEN THE NEEDLE AND THE UPPER LOOPER

Correct setting:

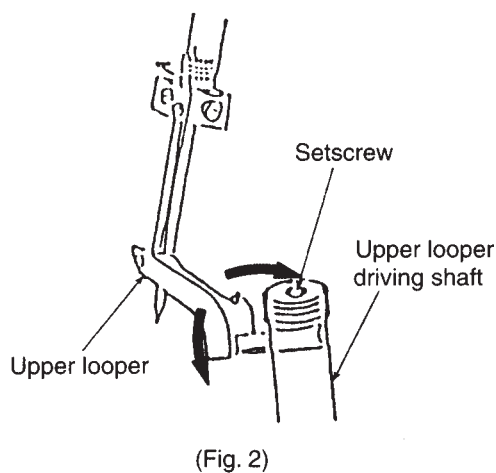
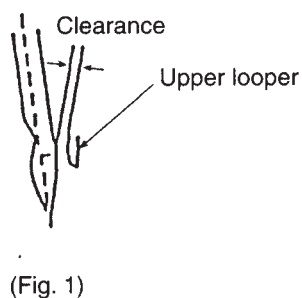
When the upper looper meets with needle. Clearance should be :

0 mm to +0.1 mm at the needle on the left.

-0.05 mm to +0.05 mm at the needle on the right.

To adjust:

- 1: Turn the handwheel toward you with your hand to bring the needle just behind the upper looper in downward travel.
- 2: Loosen the set screw, and adjust the clearance between the both needles and upper looper.
- 3: Tighten the set screw.
- 4: Check the clearance between the loopers.



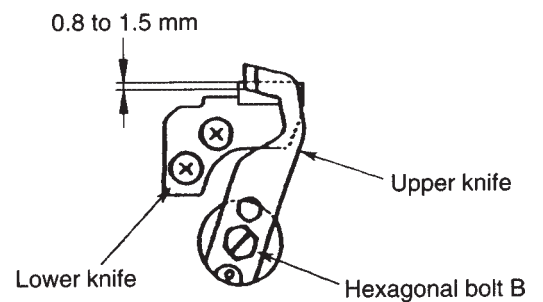
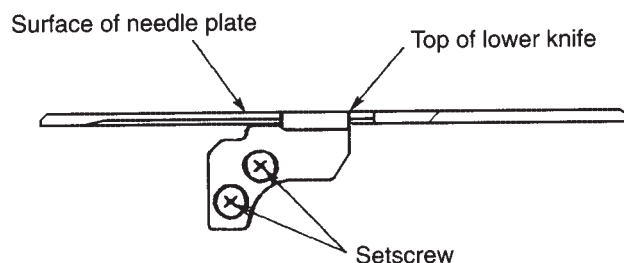
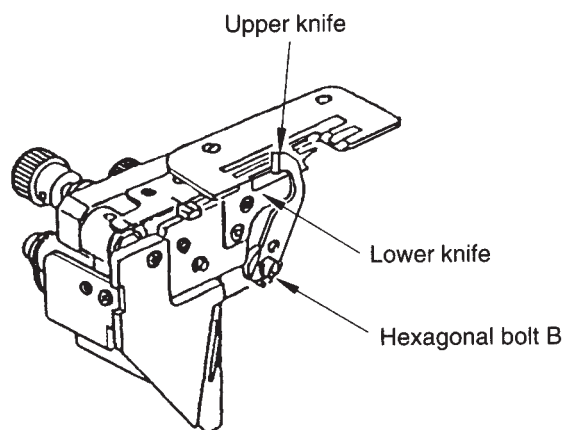
TO ADJUST THE POSITION OF THE KNIVES

Correct setting:

The top of the lower knife should be leveled 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 mm to 1.5 mm below the edge of lower knife.

To adjust:

- 1: Before proceeding with this adjustment, check the upper knife timing.
- 2: Loosen the two set screws A, and adjust the lower knife position.
- 3: Turn the handwheel to bring upper knife to the lowest position.
- 4: Loosen the hexagonal bolt B, and adjust the position of upper knife.
- 5: Tighten the hexagonal bolt.



TO ADJUST THE POSITION OF THE LOWER LOOPER THREAD GUIDE

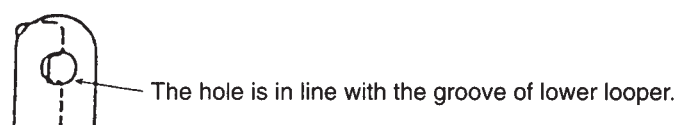
Lower Looper Thread Guide (3):

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.

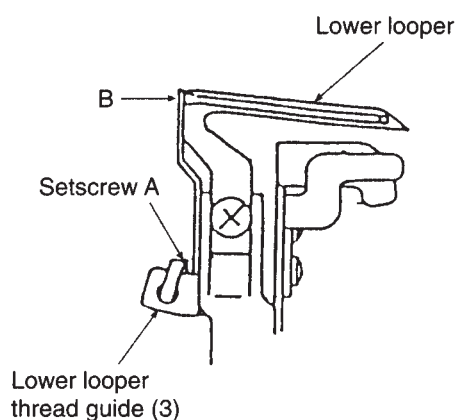
NOTE: After adjustment, check the lower looper thread guide (3) does not touch to arm, feed dog and feed dog base.

Looper Thread Guide (Lower):

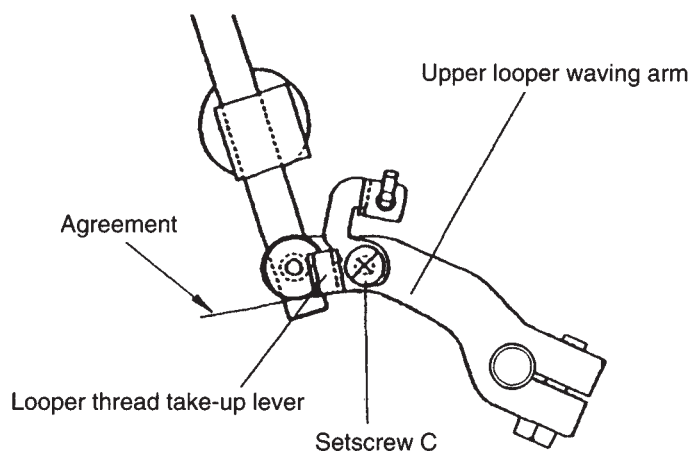
Loosen the set screw C, and adjust the position of thread guide so that the side of thread guide comes over the center of hole as shown in Fig. 2.



View from B



(Fig. 1)



(Fig. 2)

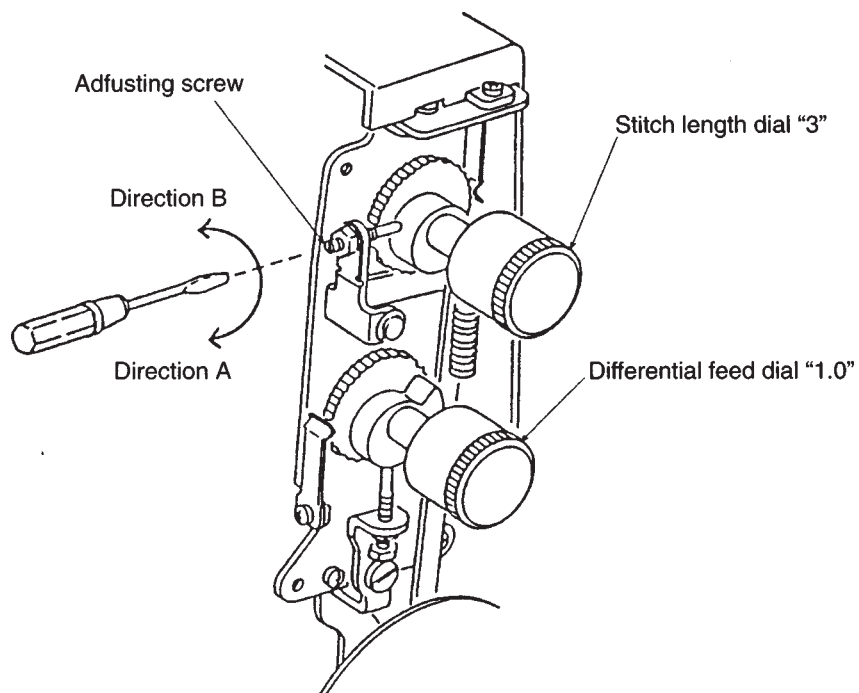
TO ADJUST THE STITCH LENGTH

Correct setting:

The actual stitch length should be 2.8 mm - 3.0 mm when the stitch length dial is set at "3" and differential feed dial at "0".

To adjust:

- 1: Set the stitch length dial at "3" and the differential feed dial at "1.0".
- 2: Remove the front cover unit.
- 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.



TO ADJUST THE THREAD TENSION DIAL

Thread tension dial 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 follows:

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)	: 33 - 53 g
Needle (Right)	: 14 - 24 g
Upper looper	: 11 - 21 g
Lower looper	: 23- 33 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)	: 150 g or more
Needle (Right)	: 57 g or more
Upper looper	: 45 g or more
Lower looper	: 140 g or more

