# **SERVICING MANUAL**



Memory Craft 8000

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# TO CHANGE THE FACE PLATE UNIT AND TOP COVER UNIT

#### **Face Plate Unit**

# **TO REMOVE**

1. Remove the two set screws, and remove the face plate.

#### TO ATTACH

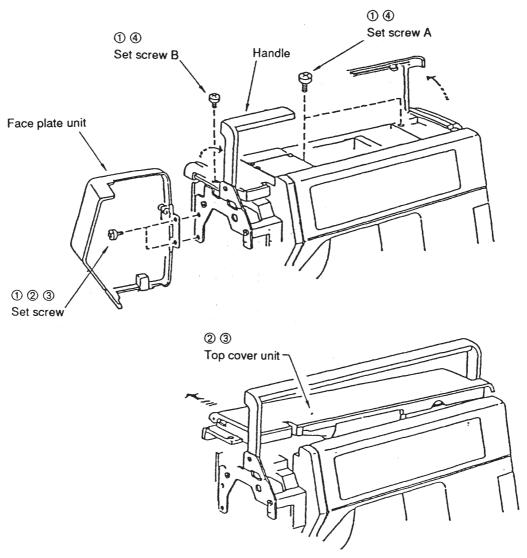
- 2. Tighten the two set screws slightly, and attach the face plate.
- 3. Close the face plate, and check the unevenness between the face plate and arm. Tighten the set screws securely.
- 4. Check if the face plate is normally opened and closed, and adjust the position of the face plate spring, if necessary.

# **Top Cover Unit**

#### **TO REMOVE**

- 1. Remove the two set screws A and raise the handle, and then remove the set screw B.
- 2. Close the top cover and raise the handle, and then pull out the top cover unit in the arrow direction.

- 3. Raise the handle, and insert the top cover unit from the rear side.
- 4. Attach the top cover unit by tightening the two set screws A and set screw B.

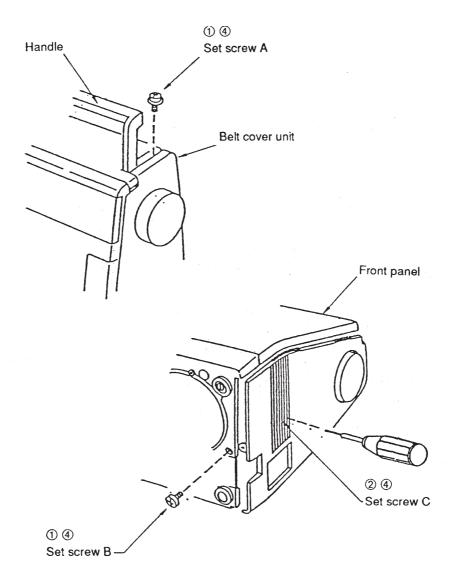


# TO CHANGE THE BELT COVER UNIT

# **TO REMOVE**

- 1. Loosen the set screw A and remove the set screw B.
- 2. Loosen the set screw C completely, and remove the belt cover unit.

- 3. Set the belt cover to the front panel.
- 4. Attach the belt cover unit by tightening the set screws A, B and C.



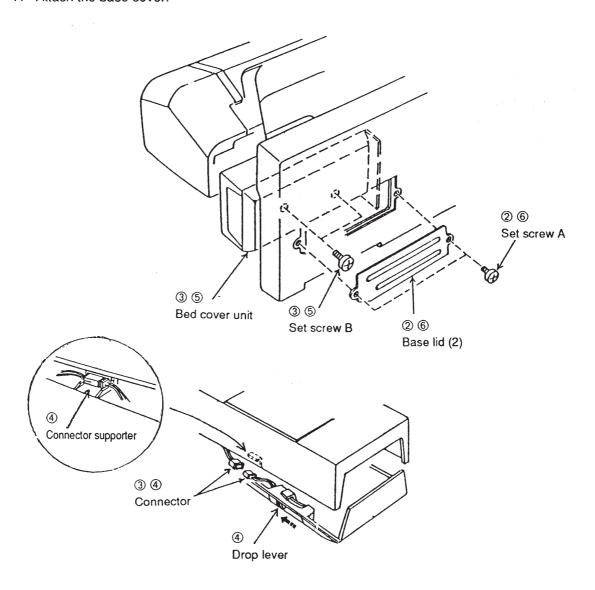
# TO CHANGE THE BED COVER UNIT

# **TO REMOVE**

- 1. Remove the base cover. (See page 4.)
- 2. Remove the two set screws A, and remove the base lid (2).
- 3. Remove the two set screws B, and remove the bed cover unit.

  Then pull out the connectors from the connector supporter and disconnect them.

- 4. Set the drop lever to the position shown in the figure below, and connect the connectors mutually. Then store them in the connector supporter.
- 5. Attach the bed cover unit with the two set screws B.
- 6. Attach the base lid (2) with the two set screws A.
- 7. Attach the base cover.

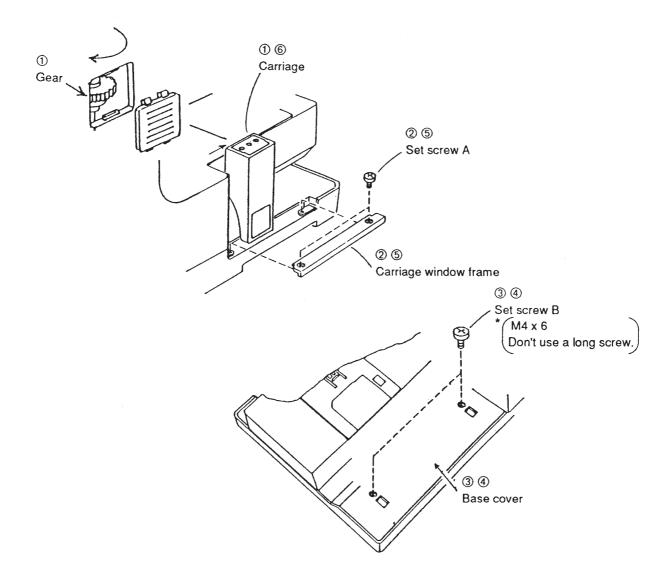


# TO CHANGE THE BASE COVER

# TO REMOVE

- 1. Remove the arm window, and turn the gear in the arrow direction with the finger to move the carriage.
- 2. Remove the two set screws A, and remove the carriage window frame.
- 3. Remove the two set screws B, and remove the base cover.

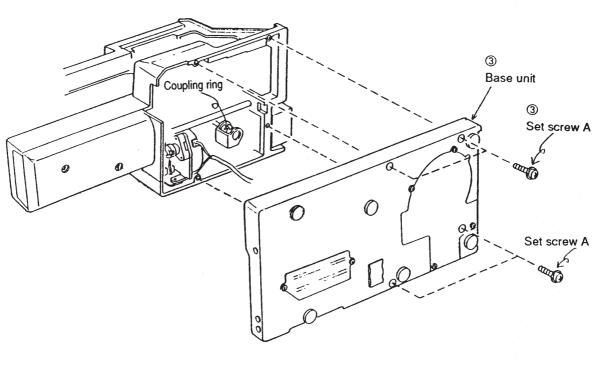
- 4. Attach the base cover with the two set screws B.
- 5. Attach the carriage window frame with the two set screws A.
- 6. Restore the carriage to the original position, and attach the arm window.

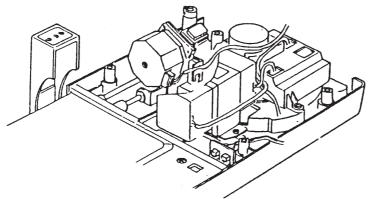


# TO CHANGE THE BASE UNIT (1)

# **TO REMOVE**

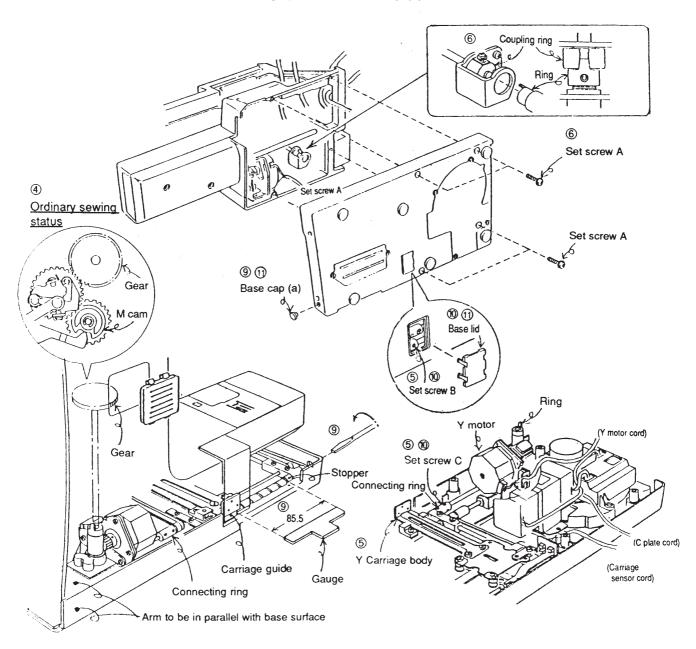
- 1. Turn on the power switch. Select the ordinary sewing, and check if the carriage moves to the right end. Then turn off the power switch.
- 2. Remove the front panel unit, and cord clamp, and pull out the machine socket (primary) connector. (See pages 7 and 15.)
- 3. Remove the four set screws A, and remove the base unit.
  - \* After removing the base, exercise utmost care not to change the position of the coupling ring.





#### TO CHANGE THE BASE UNIT (2)

- 4. Check if the stepping motor (zigzag) is set to the ordinary sewing status. (The follower is dropped into the hollow of M cam.)
- 5. Loosen the two connecting ring set screws B, C, and move the Y carriage body at the right end.
- 6. Engage the coupling ring with the ring, and attach the base to the arm with the four set screws A.
- 7. Insert the machine socket (primary) connector, and attach the front panel unit and cord clamp. (See pages 7 and 15.)
- 8. Turn off the power switch and insert the Memory Card (design). Turn on the switch and select the embroidery mode.
- 9. Insert the gauge (distance 85.5mm) between the carriage guide and stopper on the rear side of the base. Remove the base cap (a), and turn the feed screw clockwise until it touches the gauge. (The Y carriage body moves 53mm from the right end.)
- 10. Remove the base lid. Tighten the connecting ring set screw B. (Turn off the power switch and tighten the set screw C by turning the gear.)
- 11. Attach the base cover unit, carriage plate unit, base cap (a) and base lid.

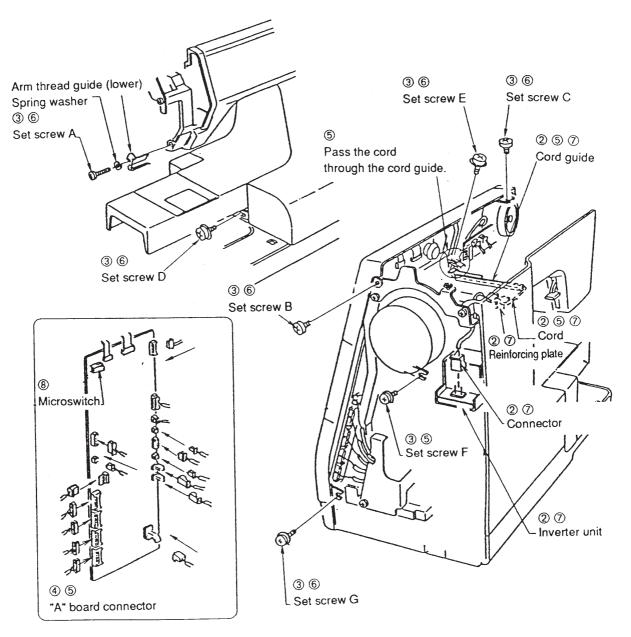


# TO CHANGE THE FRONT PANEL UNIT

#### TO REMOVE

- 1. Remove the top cover unit, belt cover unit, and bed cover unit. (See pages 1, 2 and 3.)
- 2. Pull out the LCD module connector from the inverter unit, and remove the cord from the reinforcing plate and cord guide.
- 3. Remove the set screws A and B, and loosen the set screws C, D, E, F and G.
- 4. Pull out the fourteen connectors from the "A" board unit and remove the front cover unit.

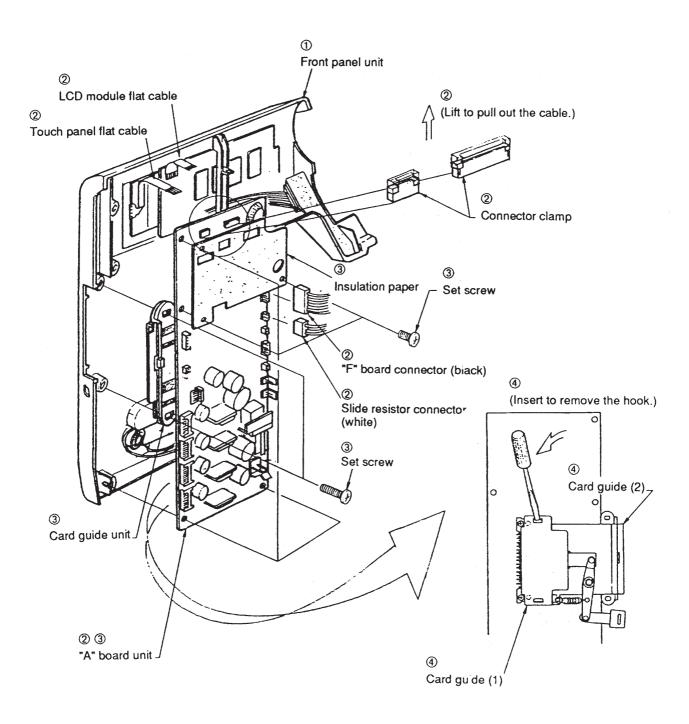
- 5. Insert the fourteen connectors into the "A" board unit, and tighten the set screw F while pushing the front panel unit to the arm. (Pass the LCD module cord through the cord guide in advance.)
- 6. Tighten the set screws A, B, C, D, E, F and G.
- 7. Pass the LCD module cord through the cord guide and reinforcing plate, and insert the connector into the inverter unit.
- 8. Move the bobbin winder spindle and check the operation of the microswitch.
- 9. Attach the bed cover unit, belt cover unit, and top cover unit.



# TO CHANGE THE "A" BOARD UNIT (1)

#### **TO REMOVE**

- 1. Remove the front panel unit. (See page 7.)
- 2. Pull out the flat cables of the LCD module and touch panel by lifting the connector clamps, and pull out the connectors of the 'F" board and variable resistor from the "A" board unit.
- 3. Loosen the seven set screws, and remove the "A" board unit, insulation paper and card guide unit.
- 4. Insert the screwdriver into the rectangular hole of the card guide (1) as shown in the figure below, and unhook to remove the card guides (1) and (2) from the "A" board unit.

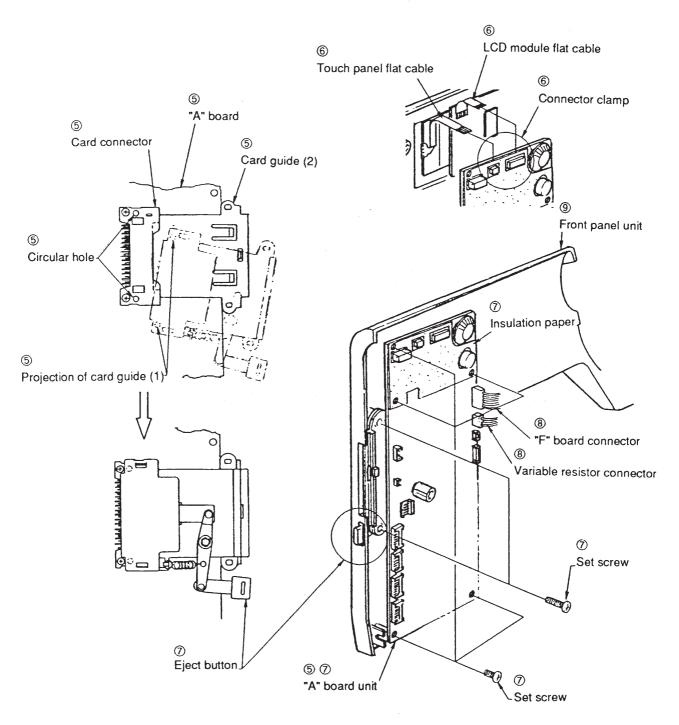


# TO CHANGE THE "A" BOARD UNIT (2)

# TO ATTACH

- 5. After putting the card guide (2) between the "A" board unit and card connector, push in the card guide (1) until it is hooked, while fitting the projection of the card guide (1) into the circular hole of the card connector, and attach it to the "A" board unit.
- 6. Insert the two flat cables into the connectors, and lower the connector clamps.
- 7. Attach the "A" board unit to the front panel with the seven set screws together with the insulation paper. (Cause the eject button to come out of the hole of the front panel.)
- 8. Insert the connectors of the "F" board and variable resistor into the "A" board unit.
- 9. Attach the front panel unit.

Note: After changing the "A" board unit, "adjust the touch panel". (See pages 44 and 45.)



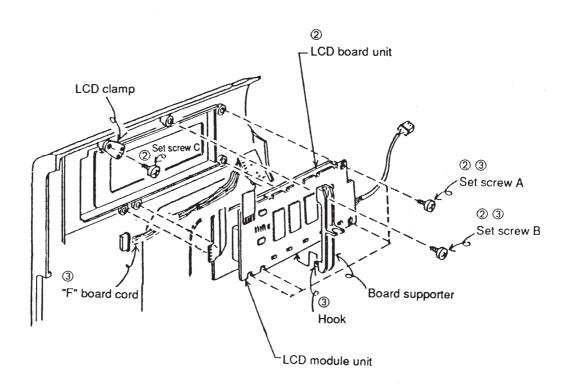
# TO CHANGE THE LCD BOARD UNIT

# **TO REMOVE**

- 1. Remove the front panel unit, and remove the "A" board unit. (See pages 7 and 8.)
- 2. Remove the four set screws A, and LCD board supporter set screw B, and loosen the set screw C. Then change the LCD board unit.

- 3. Hook the board supporting hook to the LCD module unit, and attach the LCD board with the set screws A, B and C.

  (Page the "F" board and between the board supporter and LCD board.) (The LCD plants is used.)
  - (Pass the "F" board cord between the board supporter and LCD board.) (The LCD clamp is used to hold the corner of the LCD module unit.)
- 4. Attach the "A" board unit, and the front panel unit.

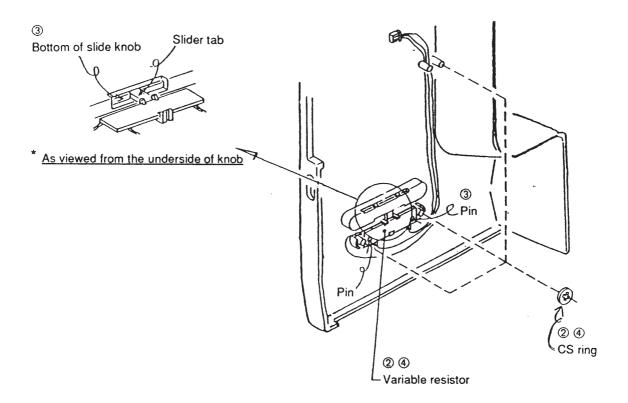


# TO CHANGE THE VARIABLE RESISTOR

# **TO REMOVE**

- 1. Remove the front panel unit, and remove the "A" board unit. (See pages 7 and 8.)
- 2. Remove the three CS rings and change the variable resistor.

- 3. Insert the slider tab into the lower hole of the slide knob, and attach the slider tab through the two pins.
- 4. Attach the variable resistor with the three CS rings.
- 5. Attach the "A" board unit and front cover unit.

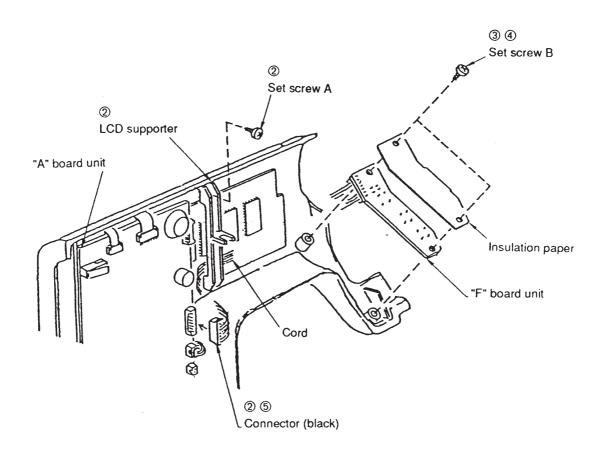


# TO CHANGE THE "F" BOARD UNIT

# TO REMOVE

- 1. Remove the front panel unit. (See page 7.)
- 2. Pull out the "F" board connector from the "A" board unit. Remove the set screw A, and loosen the LCD supporter. Then remove the cord.
- 3. Remove the two set screws B, and change the "F" board unit.

- 4. Attach the "F" board unit with the two set screws B together with the insulation paper.
- 5. Pass the cord under the LCD supporter, and tighten the set screw A. Then insert the connector into the "A" board unit.
- 6. Attach the front panel unit.



#### TO CHANGE THE THREAD TENSION UNIT

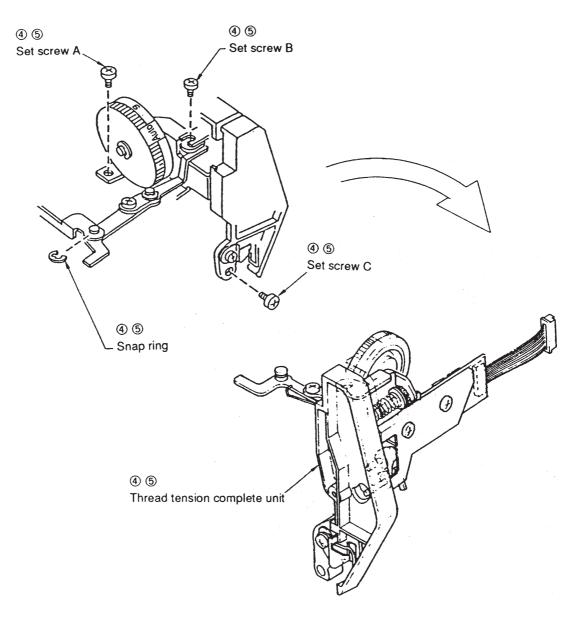
#### **TO REMOVE**

- 1. Remove the top cover unit. (See page 1.)
- 2. Lower the presser foot lifter, and open the face plate.
- 3. Loosen each set screw of the front panel unit and pull the upper side of the front panel to facilitate changing the thread tension unit.
- 4. Remove the snap ring and remove the set screws A, B and C. Then remove the thread tension complete unit.

# TO ATTACH

- 5. Attach the thread tension complete unit with the set screws A, B and C with the snap ring.
- 6. Fix the front panel unit with each set screw.
- 7. Attach the top cover unit.

Note: After changing the thread tension complete unit, "Adjust the Tension Release Mechanism". (See page 36.)

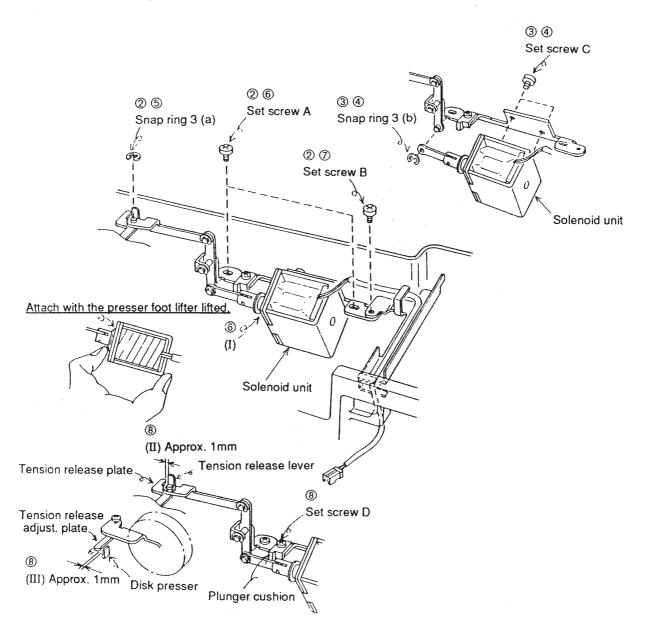


#### TO CHANGE THE SOLENOID UNIT

# **TO REMOVE**

- 1. Remove the front panel unit. (See page 7.)
- 2. Remove the two set screws A, and set screw B, and remove the snap ring 3 (a).
- 3. Remove the two set screws C and the snap ring 3 (b), and remove the solenoid unit.

- 4. Attach the solenoid unit with the set screw C and snap ring 3 (b).
- 5. Lift the presser foot lifter, and attach the snap ring 3 (a).
- 6. Attach the solenoid unit with plunger (I) fully inserted, by tightening the two set screws A.
- 7. Tighten the set screw B.
- 8. Loosen the set screw D and adjust the plunger cushion until the clearance (II) and (III) are approx. 1mm when the presser foot lifter is raised. Then tighten the set screw D.
- 9. Attach the front panel unit.

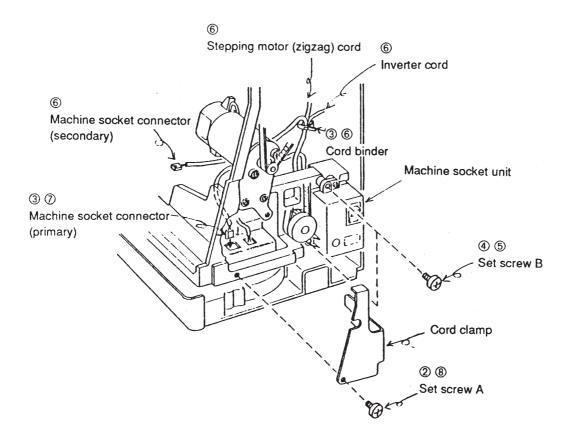


# TO CHANGE THE MACHINE SOCKET UNIT

# **TO REMOVE**

- 1. Remove the front panel unit. (See page 7.)
- 2. Remove the set screw A, and remove the cord clamp.
- 3. Pull out the machine socket connector (primary), and remove the cord binder.
- 4. Remove the two set screws B and remove the machine socket unit.

- 5. Attach the machine socket unit with the set screws B.
- 6. Bind the machine socket (secondary) cord with the cord binder together with the inverter cord, and stepping motor (zigzag) cord.
- 7. Insert the machine socket connector (primary) into the "C" board unit.
- 8. After attaching the front panel unit, attach the cord clamp with the set screw A.

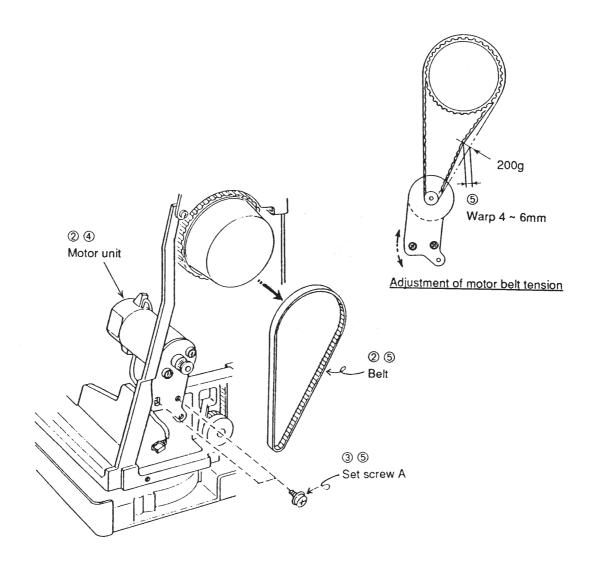


# TO CHANGE THE MOTOR UNIT

# **TO REMOVE**

- 1. Remove the belt cover and cord clamp. (See page 2.)
- 2. Remove the motor belt.
- 3. Remove the two set screws A, and remove the motor unit.

- 4. Attach the motor unit by tightening the two set screws A slightly.
- 5. Attach the motor belt, and adjust the belt tension. Then tighten the two set screws A securely.
- 6. Attach the belt cover unit and cord clamp.

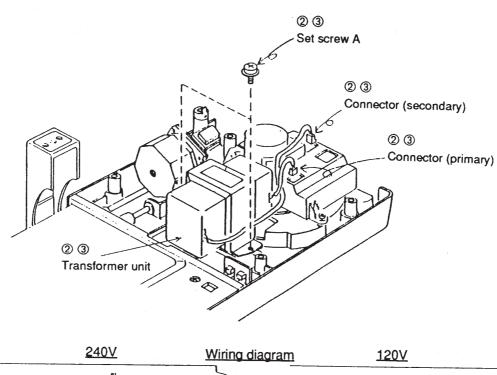


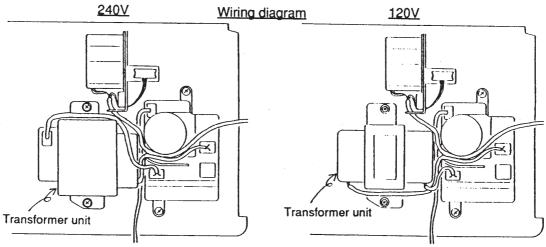
# TO CHANGE THE TRANSFORMER UNIT

# TO REMOVE

- 1. Remove the base unit. (See pages 5 and 6.)
- 2. Pull out the transformer connectors (primary) (secondary), and remove the two set screws A. Then remove the transformer unit.

- 3. Attach the transformer unit with the two set screws A and insert the transformer connectors (primary) (secondary).
- 4. Attach the base unit.



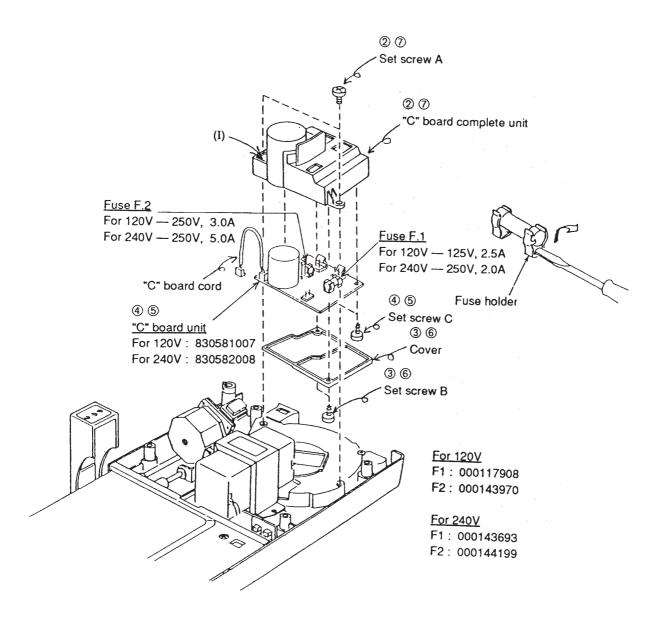


# TO CHANGE THE "C" BOARD UNIT.

#### **TO REMOVE**

- 1. Remove the base unit, and pull out the transformer connectors from the "C" board complete unit. (See pages 5 and 6.)
- 2. Remove the two set screws A and remove the "C" board complete unit.
- 3. Remove the two set screws B and remove the cover from the "C" board complete unit.
- 4. Remove the two set screws C, and remove the "C" board unit from the circuit case.

- 5. Attach the "C" board unit with the two set screws C. (Pass the cord through the hole (I).)
- 6. Attach the cover with the two set screws B.
- 7. Attach the "C" board complete unit with the two set screws A.
- 8. Insert the transformer connectors into the "C" board complete unit, and attach the base unit.
- \* To change each fuse, remove the fuse from both sides of the fuse holder on the "C" board, using a screwdriver, and set a new fuse to it. Make sure to check the rating of fuses when changing them.

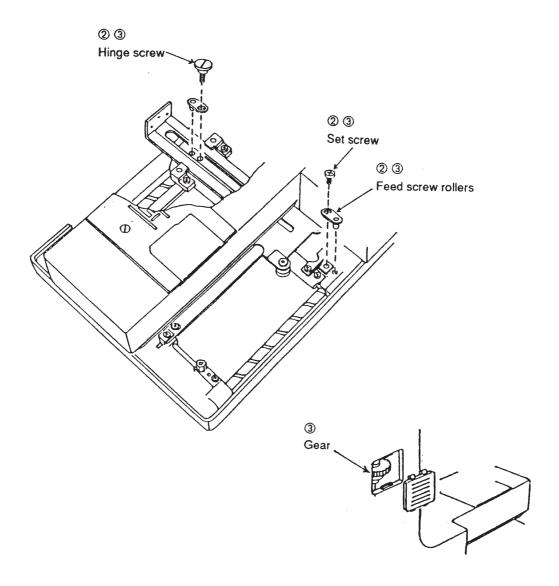


# TO CHANGE THE FEED SCREW ROLLERS

# **TO REMOVE**

- 1. Remove the base cover. (See page 4.)
- 2. Remove the hinge screws and set screws, and remove the feed screw rollers one by one.

- 3. After changing the feed screw rollers, attach them with the hinge screw and set screws. Check if they are moved smoothly, while turning the gear with the finger.
- 4. Attach the base cover.

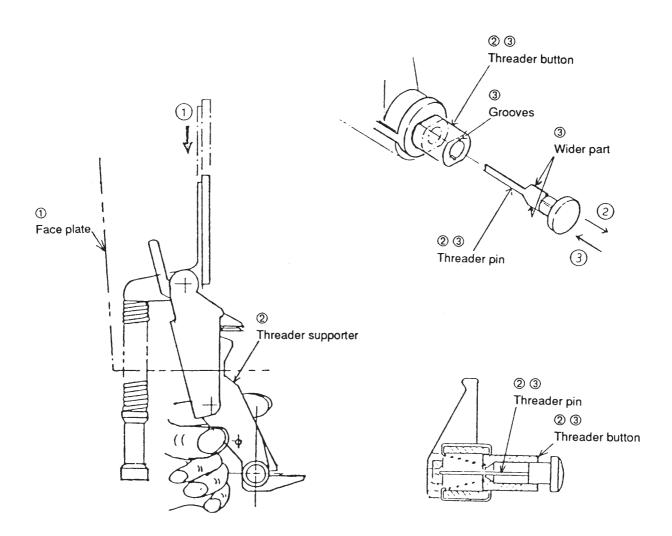


#### TO CHANGE THE THREADER PIN

# **TO REMOVE**

- 1. Pull down the needle threader.
- Hold the threader supporter with your left hand, and pull out the threader pin. You may use a pair of pliers. Be careful not to bend the needle threader.
  - If a part of threader pin is stuck in the threader button, pull it out with a nail clipper or a pair of nippers.

- 3. Push the threader button and hold. Then insert a new threader pin, guiding the wider part of threader pin to the grooves inside of threader button, into the needle threader while pushing the threader button.
  - DO NOT force to push in, otherwise the threader pin will be bent.
- 4. Thread the machine, and check the needle threader.



#### TO CHANGE THE FOOT SENSOR UNIT

# **TO REMOVE**

- 1. Remove the top cover. (See page 1.)
- 2. Loosen the set screw, and remove the foot sensor from the front base plate.
- 3. Pull out the connector (blue) of the foot sensor unit from the "I" board unit attached to the rear side of the thread tension unit, and pull out the cord from the front panel supporter, and cord guides (1) and (2). Then remove the foot sensor unit.

#### TO ATTACH

- 4. Pass the cord through the front panel supporter, and cord guides (1) and (2), and insert the connector of the foot sensor unit into the blue connector of the "I" board unit.
- 5. Attach the foot sensor unit with the set screw at a position where the shield plate does not interfere with the sensor (check by swinging the shield plate).
- 6. Attach the top cover unit.

After changing the foot sensor unit, "adjust the foot sensor". (See pages 41 and 42.) 25 235 Set screw Foot sensor unit 2 (5) Front base plate 25 Front base plate Shield plate. 34 Cord guide (2) 3 4 34 Cord guide (1) Blue connector 34 Front panel supporter Connector (blue) of foot sensor "I" board unit

# TO CHANGE THE BH LEVER UNIT

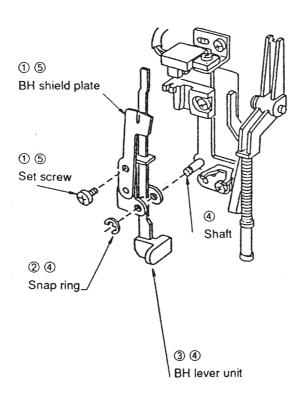
# **TO REMOVE**

- 1. Remove the set screw, and remove the BH shield plate.
- 2. Remove the snap ring.
- 3. Pull the BH lever unit toward you, and remove it.

# TO ATTACH

- 4. Insert the shaft into the holes of the BH lever unit (with the BH shield plate removed), and attach the BH lever with the snap ring.
- 5. Attach the BH shield plate with the set screw.

Note: After changing the BH lever unit, "adjust the BH lever". (See page 43.)

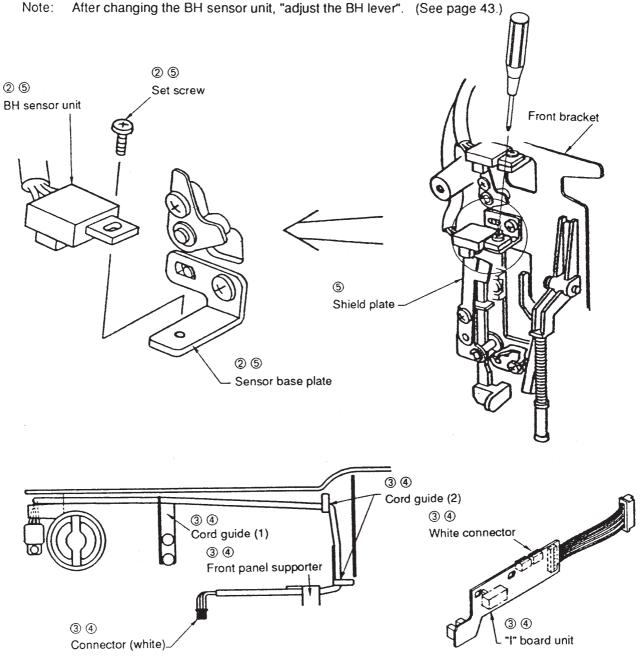


#### TO CHANGE THE BH SENSOR UNIT

#### **TO REMOVE**

- 1. Remove the top cover unit. (See page 1.)
- 2. Loosen the set screw, and remove the BH sensor from the sensor base plate.
- 3. Pull out the connector (white) of the BH sensor unit from the "I" board unit attached to the rear side of the thread tension unit, and pull out the cord from the front panel supporter and cord guides (1) and (2). Then remove the BH sensor unit.

- 4. Pass the cord through the front panel supporter and cord guides (1) and (2), and insert the connector of the BH sensor unit into the white connector of the "I" board unit.
- 5. Attach the BH sensor unit to the sensor base plate with the set screw at a position where the shield plate does not interfere with the sensor (check by swinging the shield plate).
- 6. Attach the top cover unit.



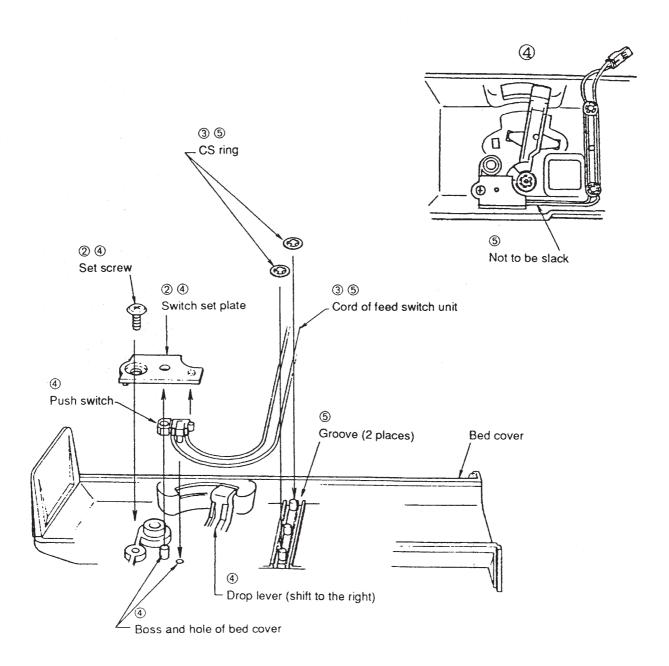
#### TO CHANGE THE FEED SWITCH UNIT

#### **TO REMOVE**

- 1. Remove the bed cover unit. (See page 3.)
- 2. Loosen the set screw, and remove the switch set plate.
- 3. Cut the two CS rings with a cutting nipper, and remove the feed switch unit.

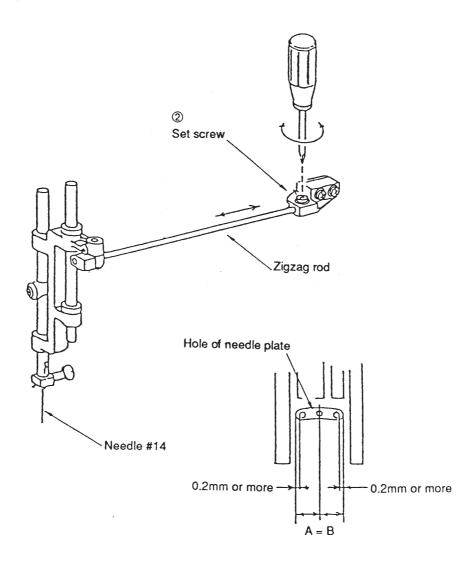
- 4. Set the drop lever at the position shown in the figure below, and insert the hole and boss of the push switch into the boss and hole of the bed cover, respectively.

  Then fix the switch set plate with the set screw.
- 5. Fit the cords of the feed switch unit into the two grooves of the bed cover and fix the cords with the two CS rings to prevent them from slacking.
- 6. Attach the bed cover unit.



#### TO ADJUST THE NEEDLE POSITION

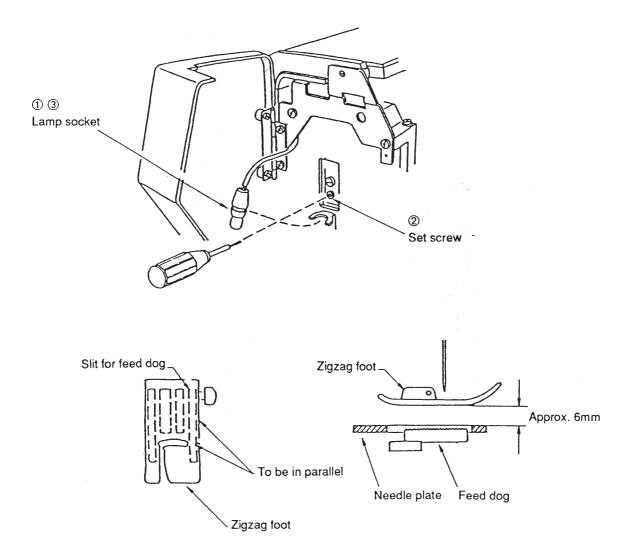
- \* When the straight stitch (#2) is selected, the needle should be at the center of hole of the needle plate.
  - When the zigzag stitch is selected with the zigzag width set to the maximum (7.0), the clearance between the side of the needle and the edge of hole of the needle plate at the left and right needle position should be 0.2mm or more.
- 1. Remove the top cover unit. Select the straight stitch (#2), and turn the balance wheel toward you to bring the needle bar at the lower position. (See page 1.)
- 2. Loosen the set screw, and move the zigzag rod left or right to set the needle at the center of hole of the needle plate. Then tighten the set screw.
- 3. Select the zigzag stitch (#4), and set the zigzag width to the maximum (7.0).
- 4. Turn the balance wheel toward you, and check if the clearance between the side of the needle and the edge of hole of the needle plate at the left and right needle position is 0.2mm or more.
- 5. Attach the top cover unit.



#### TO ADJUST THE PRESSER BAR HEIGHT AND DIRECTION

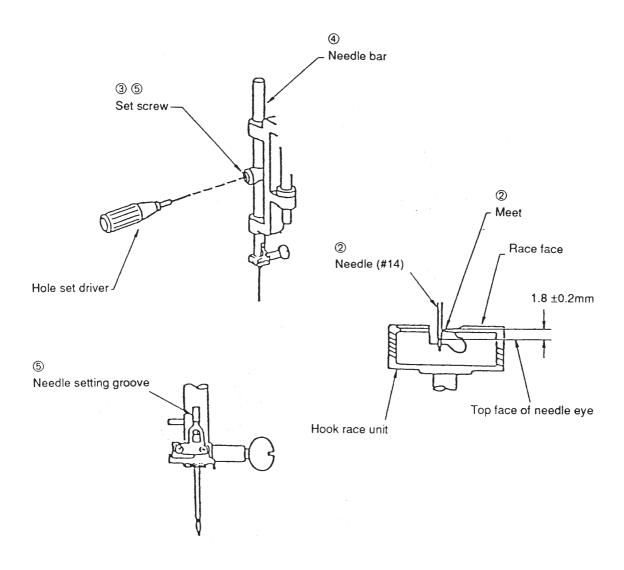
- \* When the presser foot lifter is raised, the distance between the surface of the needle plate and the bottom of the presser foot should be 6.0mm.
- \* The setting direction of the presser bar should be such that the side edge of the zigzag foot is in parallel with the edge of the slit for the feed dog of the needle plate, when the presser foot lifter is lowered.
- 1. Open the face plate, and pull out the lamp socket with the finger.
- 2. Raise the presser foot lifter and loosen the set screw. Adjust the height and direction of the presser foot, and tighten the set screw securely.
- 3. Insert the lamp socket and attach it.

Note: After adjustment, check "the height of the embroidery foot P" (see page 40) and "the foot sensor" (See pages 41 and 42).



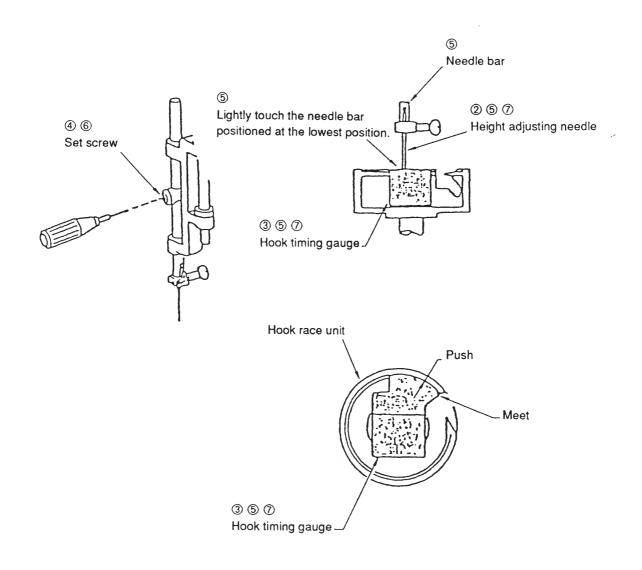
#### TO ADJUST THE NEEDLE BAR HEIGHT

- \* The needle bar height means the distance between the upper edge of the point of hook and the upper edge of the needle eye when the point of hook meets with the right side of the needle in the upward travel of the needle bar from the lowest position with the pattern [ ] selected.
- \* The standard of the needle bar height is 1.8 ±0.2mm.
- Remove the needle plate and bobbin holder.
   Turn on the power switch and select the pattern [ ].
- 2. Turn the balance wheel toward you until the point of hook meets with the right side of the needle.
- 3. Insert a hole set driver through the work hole of the front bracket, and loosen the set screw with it.
- 4. Adjust the needle bar height while moving up and down the needle bar.
- 5. Tighten the set screw, placing the needle setting groove of the needle bar in the front.
- 6. Make sure that the point of needle does not interfere with the bottom of the hook race, while turning the balance wheel.
- 7. Insert the bobbin holder and attach the needle plate.



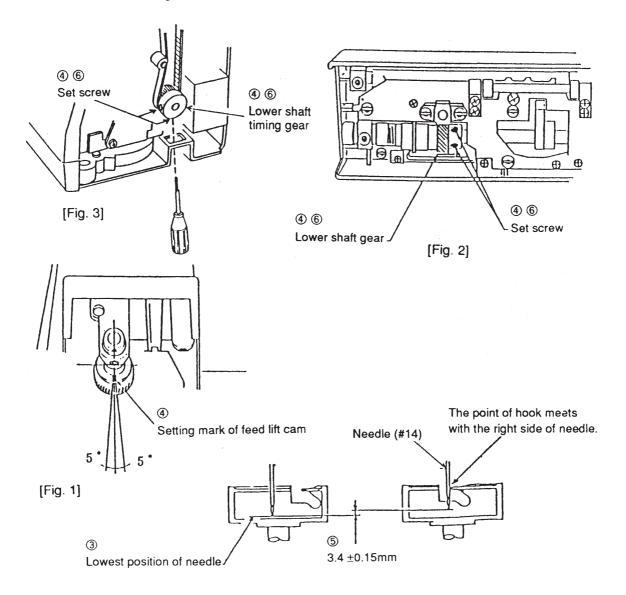
# TO ADJUST THE NEEDLE BAR HEIGHT (with gauge)

- \* Although the needle bar height should be adjusted in accordance with the specification given on page 27, it can also be adjusted more simply in the procedure given below.
- 2. Attach the height adjusting needle.
- 3. Attach the hook timing gauge to the hook race.
- 4. Turn the balance wheel toward you, and set the needle bar to the lowest position. Then loosen the set screw.
- 5. Move up and down the needle bar to make the point of the height adjusting needle touch the hook timing gauge slightly.
- 6. Tighten the set screw, while positioning the needle setting groove of the needle bar in the front.
- 7. Remove the hook timing gauge and height adjusting needle, and attach the bobbin holder and needle plate.



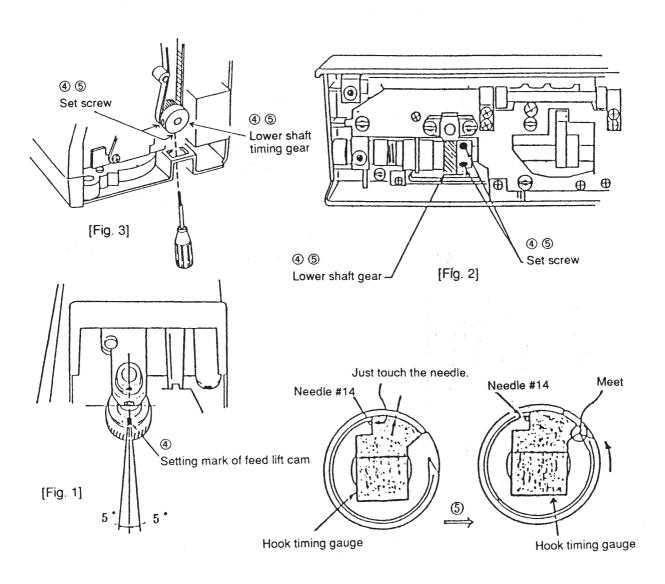
#### TO ADJUST THE HOOK TIMING

- 1. Remove the belt cover, gear lid, bed cover and base cover. (See pages 2, 3 and 4.)
- 3. Turn the balance wheel toward you, and set the needle bar to the lowest position.
- 4. In this condition;
  - If the setting mark on the feed lift cam is right under the center of the lower shaft (Fig. 1), loosen the two set screws on the lower shaft gear (Fig. 2).
  - If the setting mark is not right under it, loosen the two set screws on the lower shaft timing gear (Fig. 3).
- 5. Raise the needle bar further  $3.4 \pm 0.15$ mm from the lowest position.
- 6. Turn the lower shaft gear until the point of hook meets with the right side of the needle, and tighten the two set screws on the lower shaft gear or the lower shaft timing gear.
- 7. Attach the belt cover, gear lid, bed cover and base cover.



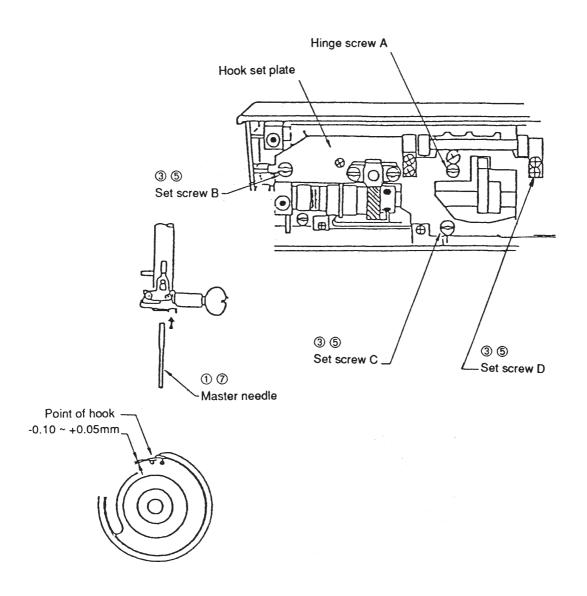
# TO ADJUST THE HOOK TIMING (with gauge)

- 1. Remove the belt cover, gear lid, bed cover, base cover, needle plate, and bobbin holder. (See pages 2, 3 and 4.)
- 3. Turn the balance wheel toward you, and plate the needle bar at the lowest position.
- 4. In this condition;
  - if the setting mark on the feed lift cam is right under the center of the lower shaft (Fig. 1), loosen the two set screws on the lower shaft gear (Fig. 2).
  - if the setting mark on the feed lift cam is not right under it, loosen the two set screws on the lower shaft timing gear (Fig. 3).
- 5. Set the hook timing gauge to the hook so that the left side of the gauge just touches the needle. Then turn the lower shaft gear until the point of hook meets with the right side of the gauge, and tighten the two set screws on the lower shaft gear or the lower shaft timing gear.
- 6. Remove the hook timing gauge, and attach the bobbin holder, needle plate, bed cover, gear lid, belt cover, and base cover.



# TO ADJUST THE CLEARANCE BETWEEN NEEDLE AND HOOK

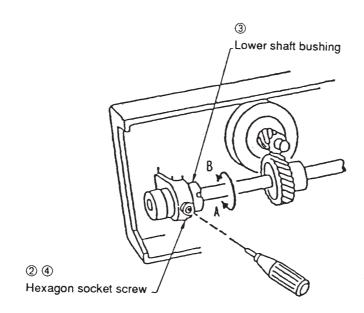
- \* The clearance between the needle and the point of hook should be -0.1 to +0.05mm.
- 1. Remove the needle plate, bobbin holder, base cover, base lid (2), and bed cover unit, and replace the needle with the Master needle. (See pages 3 and 4.)
- 2. Turn on the power switch, and select the pattern [ ].
- 3. Loosen the set screw B, C and D, and slightly tighten the hinge screw A.
- 4. Turn the balance wheel toward you, and adjust the clearance between the Master needle and the point of hook in the left and right needle positions to -0.1 to +0.05mm by moving the hook set plate up or down.
- 5. Tighten the set screws B, C and D, and the hinge screw A securely.
- Check the backlash of the hook drive, gear and lower shaft gear.
   If the backlash is too much or not enough, adjust the backlash in accordance with "To Adjut the Backlash of Hook Drive Gear and Lower Shaft Gear". (See page 32.)
- 7. Attach the bed cover unit, base cover, base lid (2), needle plate, and bobbin holder, and remove the Master needle. (See pages 2 and 3.)

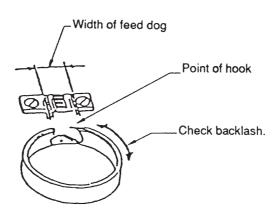


#### TO ADJUST THE BACKLASH OF HOOK DRIVE GEAR AND LOWER SHAFT GEAR

- \* The backlash of gears should be smooth and should be less than 0.8mm when the point of hook is within the width of the feed dog as shown below.
- 1. Remove the base cover, base lid (2), bed cover unit, needle plate and bobbin holder. (See pages 3 and 4.)
- 2. Loosen the hexagon socket screw.
- 3. (A) If the backlash is too much, turn the lower shaft bushing to the direction of A.
  - (B) If the backlash is not enough, turn the lower shaft bushing in the direction of B.
- 4. Tighten the hexagon socket screw.
- 5. Attach the bobbin holder, needle plate, bed cover unit, base cover, and base lid (2).

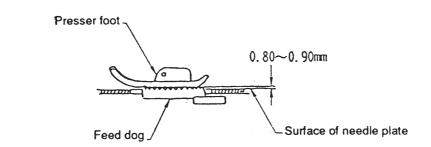
Note: After adjusting the backlash, be sure to check and adjust the "Hook Timing" and the "Feed Dog Height". (See pages 29 and 33.)

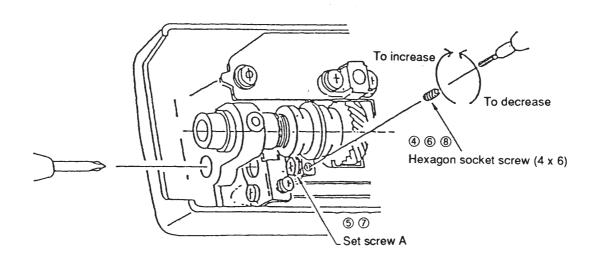




#### TO ADJUST THE FEED DOG HEIGHT

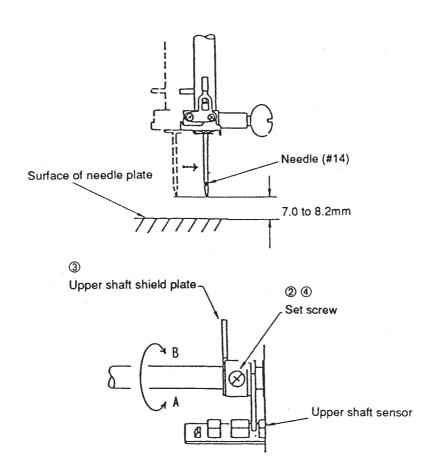
- \* When the pressure dial is at "3" and the presser foot is lowered, the highest position of the feed dog should be 0.80 to 0.90mm from the surface of the needle plate.
- 1. Remove the base cover, base lid (2), and bed cover unit. (See pages 3 and 4.)
- 2. Set the pressure dial at "3", and lower the presser foot. Then turn on the power switch.
- 3. Turn the balance wheel toward you until the feed dog comes to its highest position.
- 4. Insert a hexagon socket screw 4 x 6 as far as it will go. (This hexagon socket screw is not in the machine.)
- 5. Loosen the set screw A. (Note: Left hand screw)
- 6. Adjust the feed dog height to 0.80 to 0.90mm by turning the hexagon socket screw 4 x 6.
- 7. Tighten the set screw A.
- 8. Loosen the hexagon socket screw and remove it.
- 9. Attach the bed cover unit, base cover and base lid (2).





#### TO ADJUST THE UPPER SHAFT SHIELD PLATE POSITION

- \* When the machine is set for zigzag stitching, the needle should start to swing 7.0 to 8.2mm above the surface of the needle plate.
- 1. Remove the top cover unit. (See page 1.)
- 2. Turn on the power switch. Then select the pattern zigzag (#4).
- 3. Turn the balance wheel toward you slowly with your hand until the needle starts to swing.
  - (A) If higher than 8.2mm, loosen the set screw and turn the upper shaft shield plate in the direction of A.
  - (B) If lower than 7.0mm, loosen the set screw and turn the upper shaft shield plate in the direction of B.
- 4. Push the upper shaft shield plate as close as possible to the left. (It should not touch the upper shaft sensor). Then tighten the set screw.
- 5. Turn the balance wheel toward you, and check the start point of needle swing. Attach the top cover unit.



### TO ADJUST THE NEEDLE THREAD TENSION

- 1. Set the thread tension dial to "AUTO".
- 2. Open the face plate and adjust the thread tension with a screwdriver in the direction of:
  - to loosen the tension.
  - "B" to tighten the tension.
- 3. Close the face plate.

1

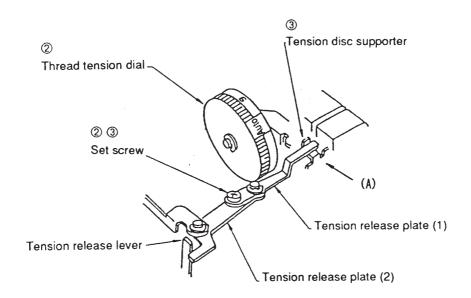
Thread tension dial "AUTO"

Loosen

Tighten

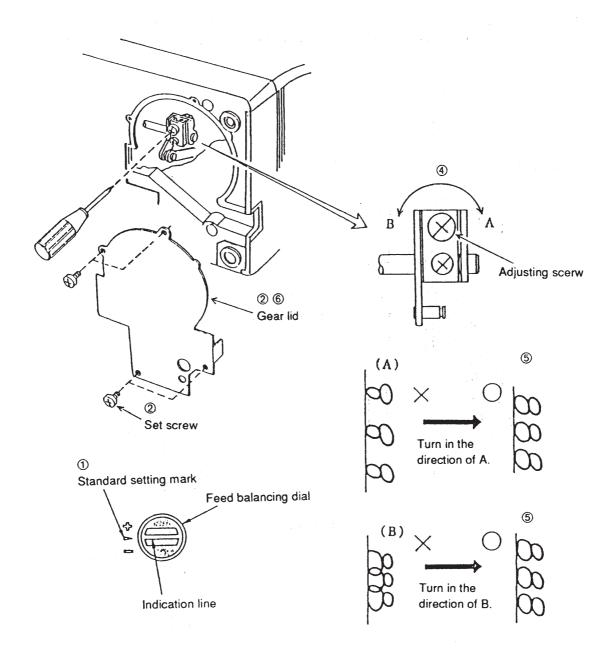
#### TO ADJUST THE TENSION RELEASE MECHANISM

- \* When the presser foot lifter is raised, the tension disc supporter should move by approx. 1.0mm.
- 1. Remove the top cover unit. (See page 1.)
- 2. Lower the presser foot lifter, and set the thread tension dial at "9". Then loosen the set screw.
- 3. Adjust the mechanism so that the tension disc supporter moves approx. 1.0mm in the direction of (A) by the tension release plate (1) when the presser foot lifter is raised, and tighten the set screw securely.
- 4. While setting the thread tension dial at "9", raise the presser foot lifter, and check if the tension disc supporter moves approx. 1.0mm.
- 5. While setting the thread tension dial at "0", lower the presser foot lifter, and check if there is a clearance between the tension release plate (1) and tension disc supporter.
- 6. Attach the top cover unit.



#### TO ADJUST THE STRETCH STITCH FEED BALANCE

- \* When pattern "8" is sewn with the feed balancing dial set at the standard setting mark [▶] on the belt cover, the sewn pattern should be as indicated in the O mark in the following figure.
- 1. Set the slit of the feed balancing dial at the standard setting mark [ > ] on the belt cover.
- 2. Remove the four set screws and remove the gear lid.
- 3. Turn on the power switch, and sew several patterns "8".
- 4. (A) When the pattern is extended, turn the adjusting screw in the direction of A.
  - (B) When the pattern is compressed, turn the adjusting screw in the direction of B.
- 5. Sew patterns "8" and check the result.
- 6. Attach the gear lid.

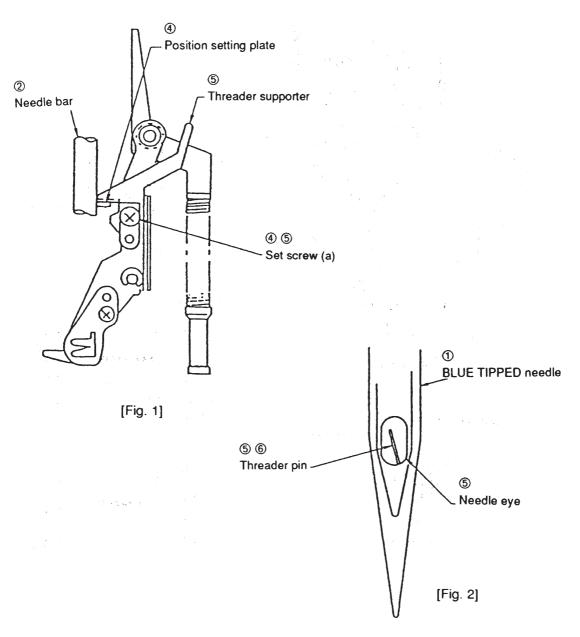


### TO ADJUST THE THREADER (1)

- \* If the threader pin does not go into needle eye, adjust it as follows.
- 1. Change the needle to BLUE TIPPED needle.
- 2. Turn the balance wheel to bring needle bar to the highest position.
- 3. Pull down the needle threader as far as it will go.
- 4. Loosen the set screw (a) until the position setting plate becomes loose.
- 5. Push and hold threader pin in needle eye. In this condition, tighten the set screw (a) temporally while pull down the threader supporter lightly.
- Release the threader pin, and tighten the set screw (a).

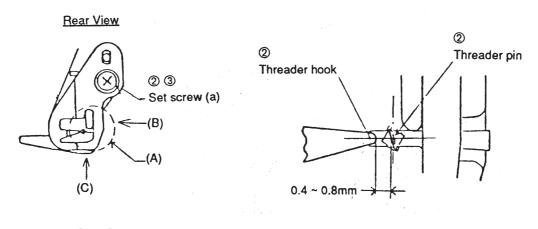
  6. Check the position of threader pin. (Fig. 2)

Note: The needle threader has been adjusted at the factory for Janome/Organ needle. If the other brand of needle is used, the adjustment for needle being used may be required.



## TO ADJUST THE THREADER (2)

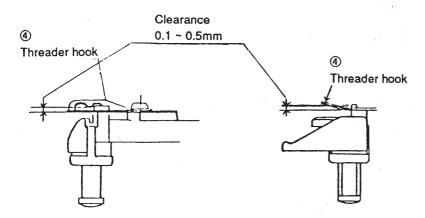
- \* If the threader hook does not pick up the loop of thread, adjust it as follows.
- 1. Change the needle to BLUE TIPPED needle.
- 2. Loosen the set screw (a), and adjust the position of threader hook so that the threader hook is in line with the center of threader pin as shown in Fig. 2.
- 3. Tighten the set screw (a).
- 4. Bend the point of threader hook with a pair of long nose pliers to adjust clearance of the threader hook as shown in Fig. 3.



[Fig. 1]

Enlargement of part A

[Fig. 2]



View from the direction of B

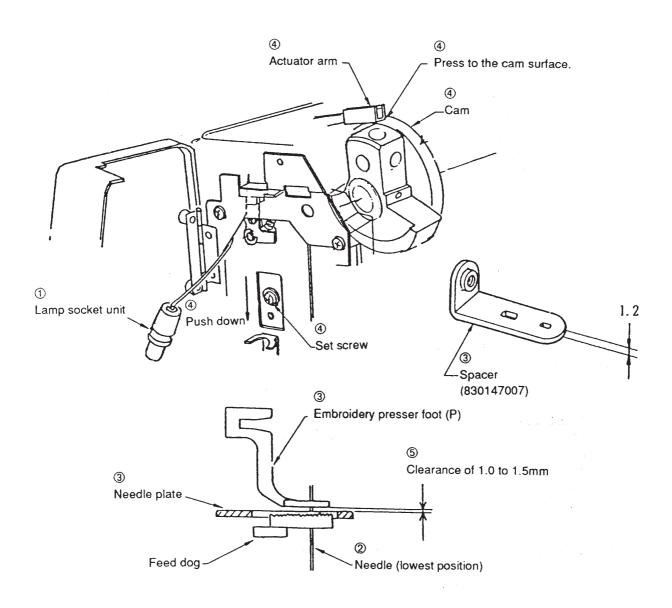
View from the direction of C

[Fig. 3]

# TO ADJUST THE HEIGHT OF EMBROIDERY PRESSER FOOT (P)

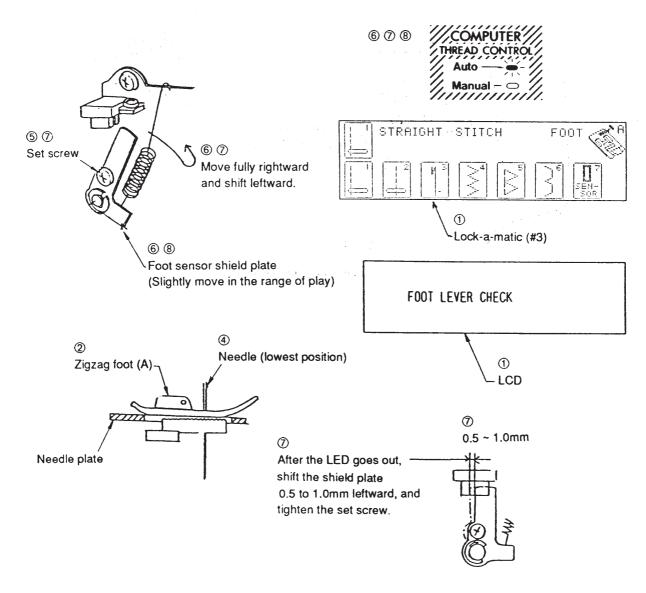
- 1. Remove the top cover, and lamp socket unit. (See page 1.)
- 2. Set the needle bar to the lowest position, and lower the presser foot lifter. Then set the pressure dial to "2".
- 3. Insert the spacer 1.2mm thick between the presser foot (P) and needle plate.
- 4. Loosen the set screw press the actuator arm to the cam surface. Then tighten the set screw while pushing it down.
- 5. Check if the clearance is 1.0 to 1.5mm.
- 6. Attach the lamp socket unit and top cover unit.

Note: After this adjustment, be sure to "adjust the foot sensor". (See pages 41 and 42.)



### TO ADJUST THE FOOT SENSOR (1)

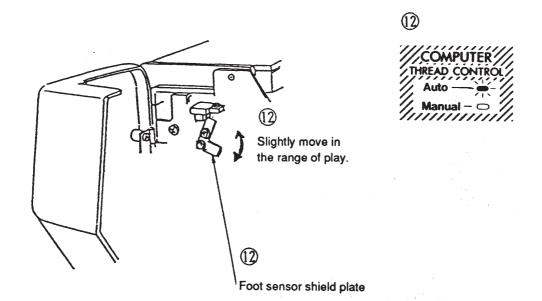
- 1. While pressing the R button, turn on the power switch, and immediately select the lock-a-matic straight stitch (#3).
  - ("FOOT LEVER CHECK" is indicated on the LCD.)
- 2. Attach the zigzag foot (A).
- 3. Set the pressure dial to "3", and lower the presser foot lifter.
- 4. Set the needle bar to the lowest position.
- 5. Loosen the set screw of the foot sensor shield plate.
- 6. Shift the foot sensor shield plate fully to the right. (The AUTO LED lights up.)
- 7. Move the foot sensor shield plate to the left until the LED goes out. Shift the foot sensor shield plate 0.5 to 1mm leftward from this position, and tighten the set screw there.
- 8. Check if the AUTO LED flickers when the foot sensor shield plate is moved slightly in the range of play.
  - LED does not light up ...... Check the procedure of 9 to 12.
  - LED remains flickered or lit up .... After adjusting the height of the embroidery presser foot (P), make readjustment in the procedure of 1 to 7.



### TO ADJUST THE FOOT SENSOR (2)

- 9. Set the pressure dial to "1".
- 10. Change the embroidery presser foot (P), and lower the presser foot lifter slowly.
- 11. Turn the balance wheel and set the needle bar to the lowest position.
- 12. Check if the AUTO LED flickers, when the foot sensor shield plate is moved slightly in the range of play.
  - LED remains lit up ....... Adjustment is finished. Turn off the power switch.
  - LED remains flickered or does not light up ......

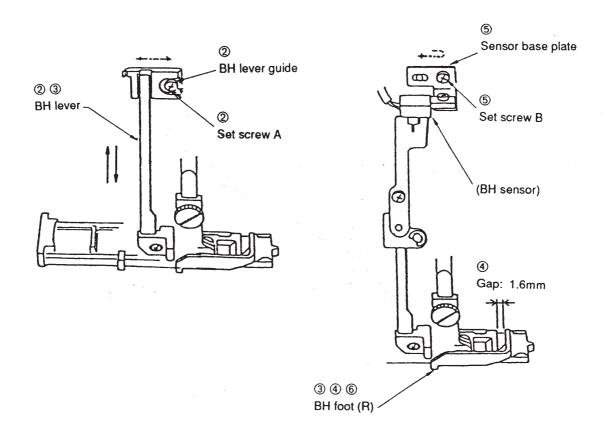
After adjusting the height of the embroidery presser foot (P), make readjustment in the procedure of 1 to 8.



#### TO ADJUST THE BH LEVER

- 1. While pressing the R button, turn on the power switch, and immediately select the Straight stitch (#2). ("BH LEVER CHECK" is indicated on the LCD.)
- 2. Loosen the set screw A and move the BH lever guide, until the AUTO LED lights up when the BH lever is lifted or lowered. Then tighten the set screw A.
- 3. Attach the BH foot (R), and lower the BH lever.
- 4. Set the gap of the BH foot (R) to 1.6mm.
- 5. Loosen the set screw B, and move the sensor base plate from right to left until the AUTO LED goes out. Then tighten the set screw B.
- 6. Check if the AUTO LED goes out when the gap of the BH foot (R) is 1.4mm, and it lights up when 1.8mm.

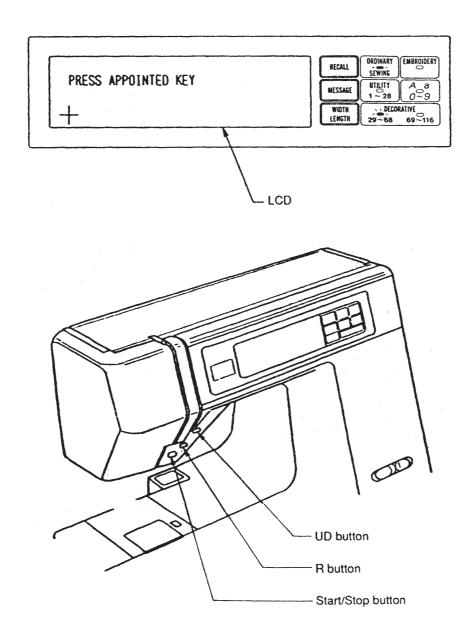




## TO ADJUST THE TOUCH PANEL (1)

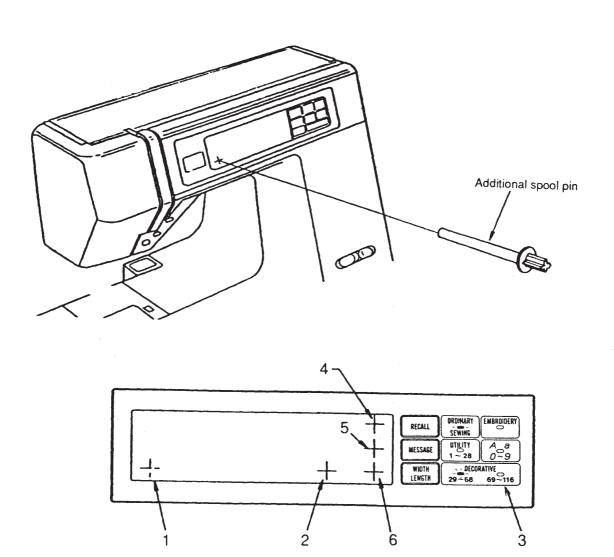
1. Turn on the power switch while pressing the UD button, R button, and Start/Stop button simultaneously.

"PRESS APPOINTED KEY" and a "+" mark are indicated on the LCD at a time.



# TO ADJUST THE TOUCH PANEL (2)

- 2. Push the center of the "+" mark with the point of the additional spool pin attached. The "+" mark moves as shown in the figure below every time it is pushed. Push the center of the relocated "+" mark in turn. In the third step push at the center of LED. When the sixth "+" mark is pushed lastly, "SELF-CHECK END" is indicated on the LCD.
- 3. Turn off the power switch.
- 4. Turn on the power switch to check the adjustment result.
- 5. Press the "DECORATIVE" (#29 to #68) keys in turn, check if all the keys can be selected properly.
- If the adjustment is not satisfactory, repeat steps 1 to 5 for readjustment.



## **MEMORY CRAFT 8000 Diagnosis Chart**

[CHECKING]

Turn on power switch.

• If nothing is happened on the machine; ① Check all wire connections. Rep. ② Socket ③ A-board ④ C-board ⑤ Transformer • If LCD back light doesn't turn on; Rep. ① LCD ② Inverter ③ A-board • If LCD shows nothing; Rep.① LCD ② A-board • If LCD shows "STEPPING MOTOR ERROR", turn off power switch and advance next step.

[NOTE]

- Be cautions in checking operation since the machine may suddenly start running.
- Recheck after replacing defective parts at any steps except step 02.

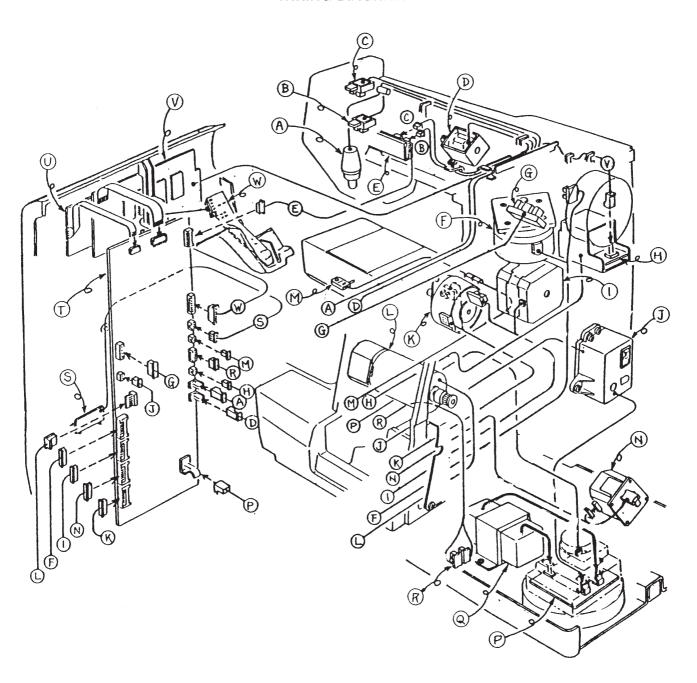
#### [PREPARATION]

- 1] Turn off power switch. Open top cover and attach Diagnosis Chart to the additional spool pin.
- Set the bobbin winder spindle to the left. Raise feed dog. Shift speed setting slide lever to the left.
- Detach the presser foot and raise presser foot lifter. Move needle bar to up position. Connect the foot control. Lower the BH lever.

TEST	CORRECT CONDITION	DEFECT CONDITION & CORRECTION
Turn on power switch while pressing (en) key, then press key.	(LCD shows "SELF-CHECK START STEPPING MOTOR CHECK".)  • Buzzer sounds.  • Stepping motors for tension, needle bar and vertical movement are initial-set.	ORDINARY SEWING key lights up.  Rep. F-board  Rep. Touch panel  Rep. A-board
Turn balance wheel to bring needle bar to down position.		Buzzer sounds and LCD shows "ERROR A & TENSION MOTOR".  Rep. A-board Rep. Stepping motor (tension)
		Buzzer sounds and LCD shows "ERROR A & BIGHT MOTOR".  Rep. A-board Rep. Stepping motor (zigzag)
		Buzzer sounds and LCD shows "ERROR A & Y MOTOR".  Rep. A-board Rep. Stepping motor (y)
	<ul> <li>Stepping motor for feed is initial- set.</li> <li>Buzzer sounds a time and step advances.</li> </ul>	Buzzer sounds and LCD shows "ERROR A & FEED MOTOR".  Rep. A-board Rep. Stepping motor (feed)
	(LCD shows "LED CHECK".)  • All LEDs except needle position LEDs blink for 3 seconds.  • Needle position LEDs blink for 3 seconds.  [NOTE] STEP 02 advances STEP 03 whichever correct condition or defect condition.	Some LEDs don't light up or light out.  Rep. LCD Rep. F-board Rep. A-board
Press (*) key. Press start/stop key.	(LCD shows 'PRESS U/D. S/S KEY ".) • Buzzer sounds each time and step advances.	Buzzer doesn't sound either or both.  Rep. F-board
• Press keys [1] ~ [3] sequentially.	(LCD shows "PRESS AP- POINTED KEY" and "[1] ~ [3]".) • Buzzer sounds each time and step advances.	Buzzer sounds 1 and 2 only or buzzer doesn't sound all three.
	ing (a) key, then press key.  Turn balance wheel to bring needle bar to down position.  • Press (a) key.  • Press start/stop key.  • Press keys [1] ~	CHECK".)  Buzzer sounds. Stepping motors for tension, needle bar and vertical movement are initial-set.  Turn balance wheel to bring needle bar to down position.  Stepping motor for feed is initial-set.  Buzzer sounds a time and step advances.  (LCD shows "LED CHECK".) All LEDs except needle position LEDs blink for 3 seconds. Needle position LEDs blink for 3 seconds. [NOTE] STEP 02 advances STEP 03 whichever correct condition or defect condition.  Press & key. Press start/stop key. Press keys [1] ~  [3] sequentially.  (LCD shows "PRESS AP-POINTED KEY" and "[1] ~ [3]".) Buzzer sounds each time and "Buzzer sounds each t

STEP	TEST	CORRECT CONDITION	DEFECT CONDITION & CORRECTION
05) Bobbin wind switch tests	<ul><li>Shift bobbin winder spindle to right.</li><li>Shift bobbin winder spindle to left.</li></ul>	(LCD shows "SPOOL CHECK".)  Buzzer sounds each time and step advances.	Buzzer doesn't sound either or both. Rep. A-board
06) Tension dial tests	(LCD shows "TENSION DIAL CHECK".)  • Set tension dial to "AUTO" and make sure that LED "AUTO" lights up. Then advance the next.		• Each LED doesn't light up correctly. ① Rep. I-board ② Rep. A-board
	Set tension dial to "LIGHT WEIGHT" and make sure that LED "MANUAL" Lights up. Then advance the next.		
	Set tension dial to "0" and make sure that LEDs     "AUTO" and "MANUAL" light up. Then advance the     next.		
	1	9" and make sure that LED b. Then press On key and 7.	
07) Drop feed lever switch tests	<ul> <li>Set drop feed lever to "DOWN" posi- tion.</li> <li>Set drop feed lever to "UP" position.</li> </ul>	(LCD shows "FEED DOG CHECK".)  • Buzzer sounds each time and step advances.	Buzzer doesn't sound either or both.
08) Speed setting slide lever tests	Shift speed setting slide lever to right, then turn back to left.	(LCD shows "SLIDING VOL- UME CHECK".)  • Buzzer sounds when the lever is at the right and left, and step advances.	Buzzer doesn't sound either or both.
09) Presser foot sensor tests	Down presser foot lifter.     Up presser foot lifter.	(LCD shows "FOOT LEVER CHECK".)  • Buzzer sounds each time and step advances.	Buzzer doesn't sound either or boh.         ① Rep. Presser foot sensor         ② Rep. I-board         ③ Rep. A-board
10) BH sensor tests	Move the BH lever back and forth slowly.	(LCD shows "BH LEVER CHECK".)  • Buzzer sounds two times and step advances.	Buzzer doesn't sound either or both.         ① Rep. BH sensor         ② Rep. I-board         ③ Rep. A-board
11) Foot control tests	Press foot control fully and release it.	(LCD shows "CONTROLLER CHECK".)  • Buzzer sounds when pressing the foot control fully and releasing it.	Buzzer doesn't sound either or both.
motor tests	Press start/stop key.	(LCD shows "DC MOTOR CHECK PRESS S/S key".) • Needle bar stops at the highest position after machine runs slow, then fast.	LCD shows "OVERLOAD".
			Needle doesn't stop up position.     Or machine doesn't run smoothly.
	When correct condition is confirmed, press (a) key finally.	(LCD shows "SELF-CHECK END".)	

### **WIRING DIAGRAM**



- \* The connectors of the electrical components should be connected to the respective positions shown in the figure above.
  - (A) Lamp socket unit
  - (B) Button hole sensor unit
  - (C) Foot sensor unit
  - (D) Solenoid unit
  - (E) "I" board unit
  - (F) Stepping motor unit (zigzag)
  - (G) Upper shaft sensor unit
  - (H) Inverter unit
  - (I) Stepping motor unit (feed)
  - (J) Machine socket
  - (K) Stepping motor unit (thread)
  - (L) DC motor unit

- (M) Feed dog down switch unit
- (N) Y-axis stepping motor unit
- (P) "C" board unit
- (Q) Transformer unit
- (R) Carriage sensor unit
- (S) Variable resistor unit
- (T) "A" board unit
- (U) Touch panel unit
- (V) LCD module unit
- (W) "F" board unit