

# Rose Head to Toe

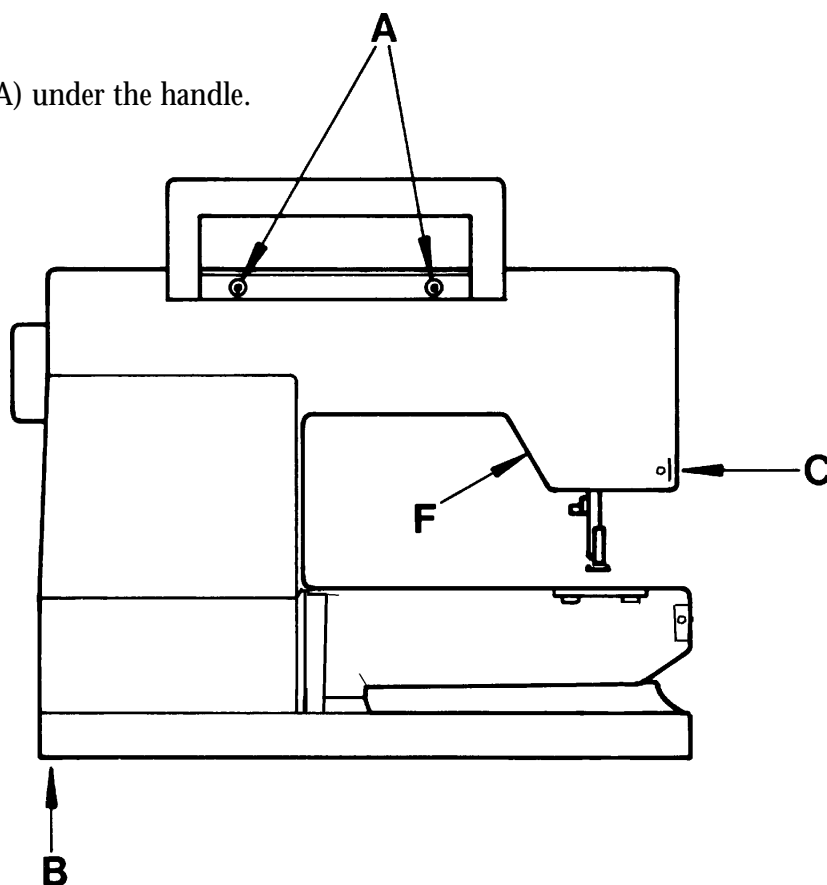
*Bernt Ståhl , Husqvarna Factory  
Las Vegas, July 1998*

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## Dismount the upper rear cover

1. Remove the two screw's (A) under the handle.



2. Remove the screw (B) in the rear corners of the base plate

3. Remove the screw (C) at the thread knife of the Sewing head.

4. Expose the hook (F).

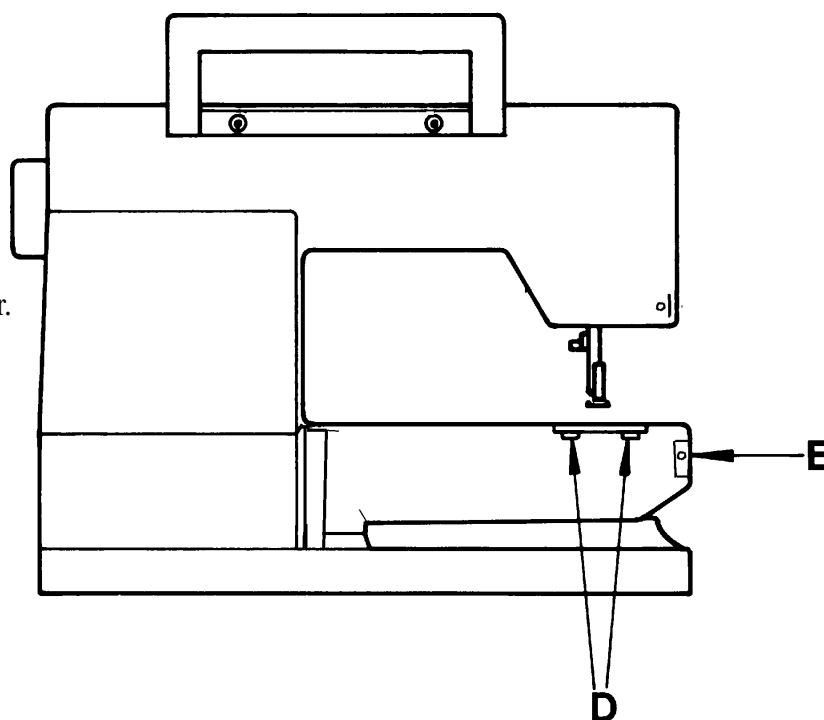
5. Raise the presser bar.

6. Remove the rear cover by pushing out the lower left side of the cover and then pull the cover straight back.

## Dismount the lower rear cover

1. Remove screw (E).
2. Cautiously bend with a screwdriver in the two socket's (D) under the stitch plate in order to expose the hook.

3. Remove the lower rear cover.

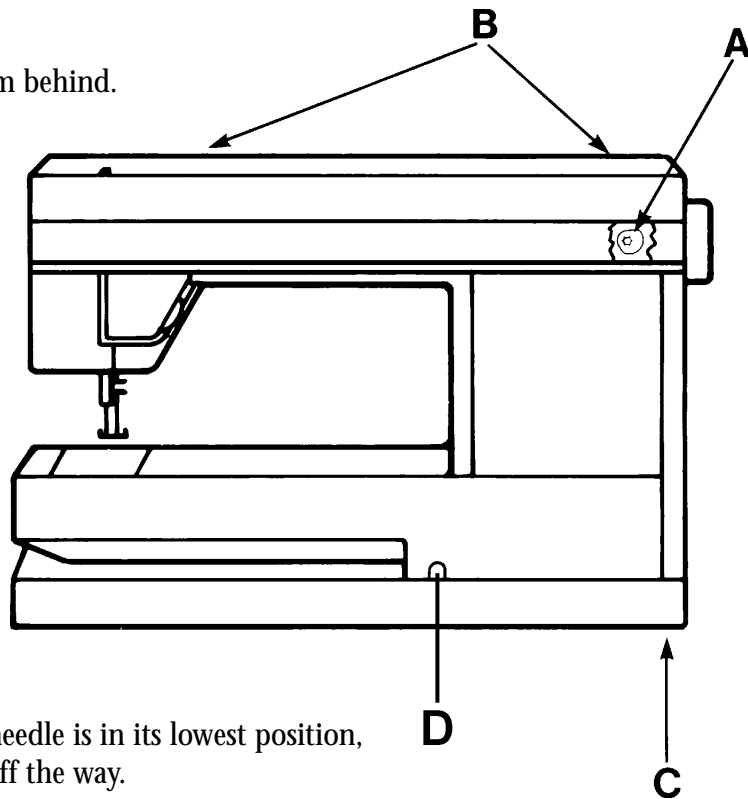


4. Remove the embroidery connector from lower rear cover by pushing the connector from the outside.

## Front cover

1. Loosen the button for the off-switch, winding (A), by pulling it straight out.

2. Remove the two screw's (B) from behind.



3. Turn the hand wheel until the needle is in its lowest position, so the thread take up lever is out off the way.

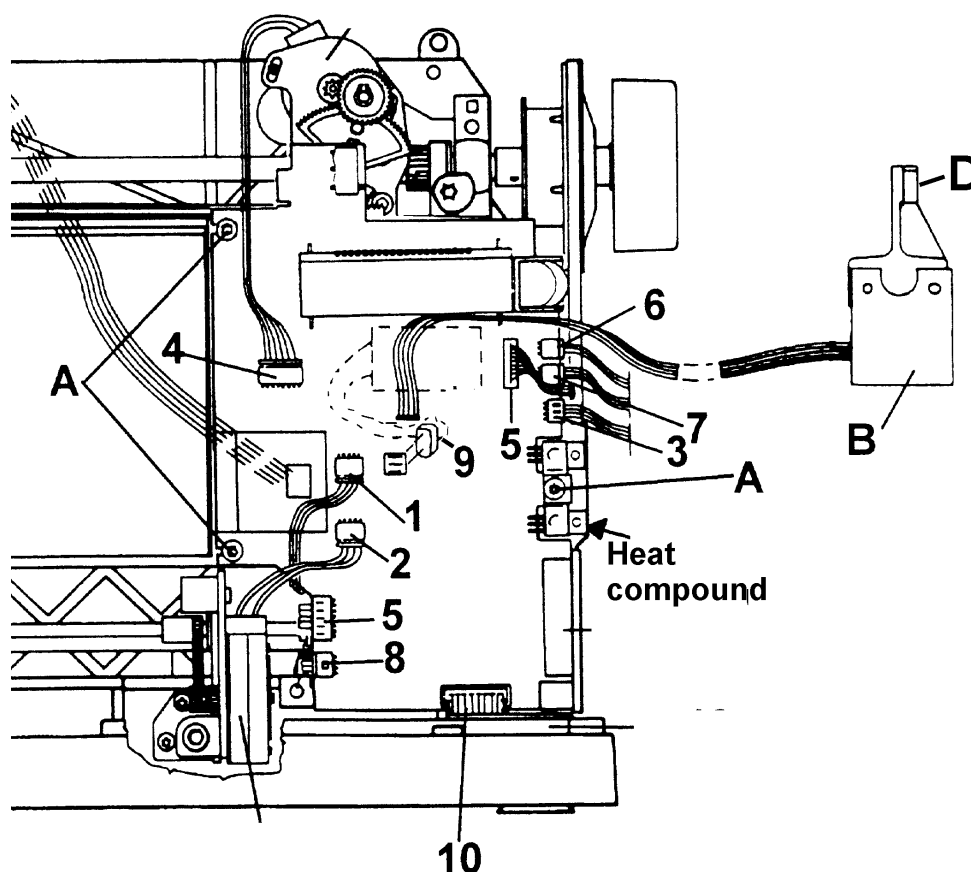
4. Carefully bend away the front cover from the hand wheel,

5. Remove the front cover while holding a finger on the cover (D) until it pops out, lift the cover over the connector sensor and the step motor cables. Then pull it down and out off the hook cover .

5 .Remove the band cable of the foil keyboard from the circuit board by pulling the outer covering of the white switch outwards.

## Circuit board - Circuit diagram- Dismounting

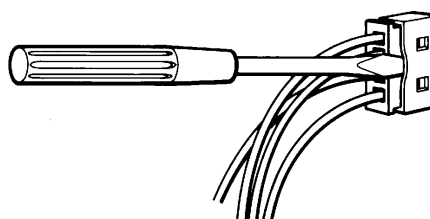
1. Remove the screw (D) of the arm shaft sensor circuit board (B).
2. Remove the 3 screws (A) holding the circuit board and the cooling plates



3. Loosen the cables from the circuit board.

**Note!** Contacts (1), (2), (3), (5) and (6) can be loosened by cautiously bending away the outer covering with a thin screwdriver.

- (1) The step motor of the needle.
- (2) The step motor of the feeding unit.
- (3) The thread guard
- (4) The step motor of the thread tension
- (5) XY-connection (2)
- (6) Microswitch
- (7) Buttonhole counter
- (8) Lamp.
- (9) Motor "mounted from the rear", red cable down.
- (10) Transformer

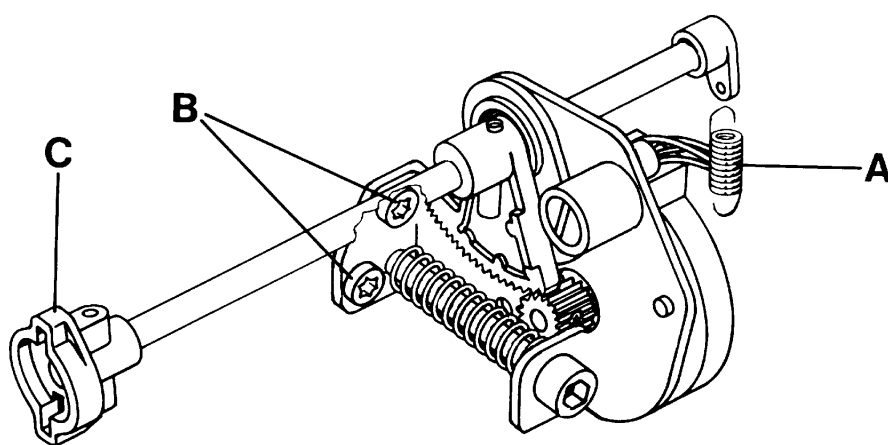


4. Lift the board out from the machine.

## Removing the step motor compl.

1. Unhook spring (A) at the end of the segment shaft.

2. Remove the screw's (B) of the step motor frame,

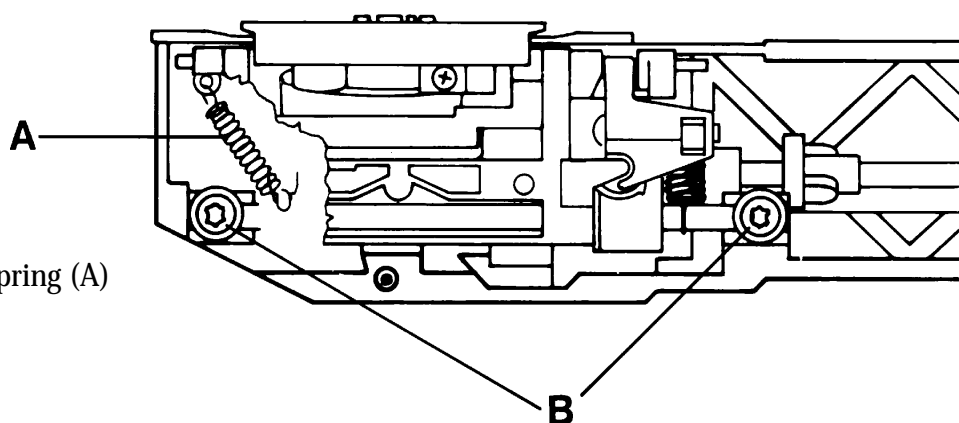


3 .Expose the connection (C) between the segment shaft of the step motor and the feeding unit by pushing the shaft to the right.

4 .Remove the stepmotor contact from the circuit board and lift the step motor compl. out of the machine.

## Dismount feeding unit

1. Remove the needle.
2. Remove the presser foot holder.
3. Remove the 3 screws of the hook cover and then remove it the hook cover.
4. Set the needle bar in the lowest position (Set the feeding eccentric straight backwards).



5. Unhook spring (A)

6. Remove screw's (B).

7. Lift out the complete feeding unit.

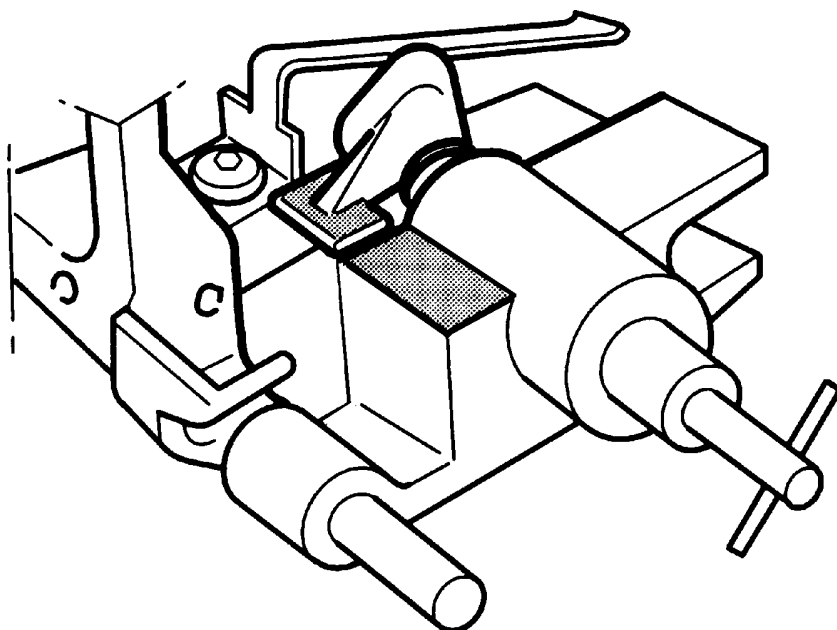


## Mounting feeding unit

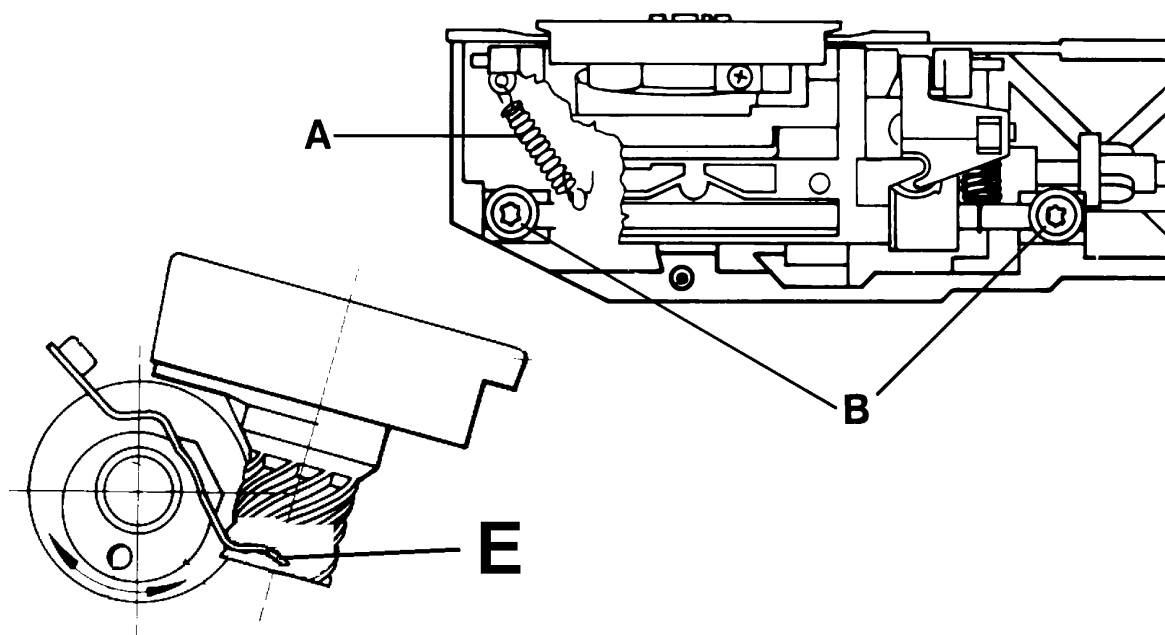
1. Set the needle bar in the lowest position  
(Set feeding eccentric straight backward).

2. Insert feeding unit.

**Note!** Location of the guide . Do not turn 180 degrees wrong!



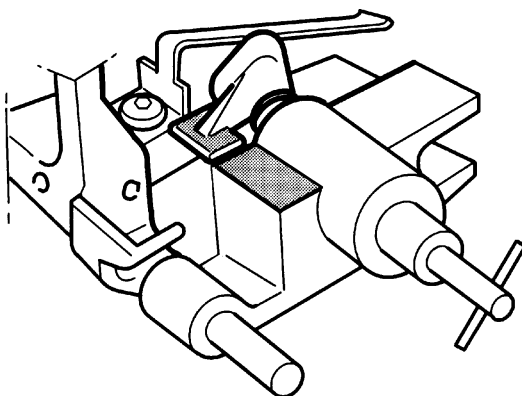
3. Tighten screw's (B) and hook the spring (A) onto the clamp (E).



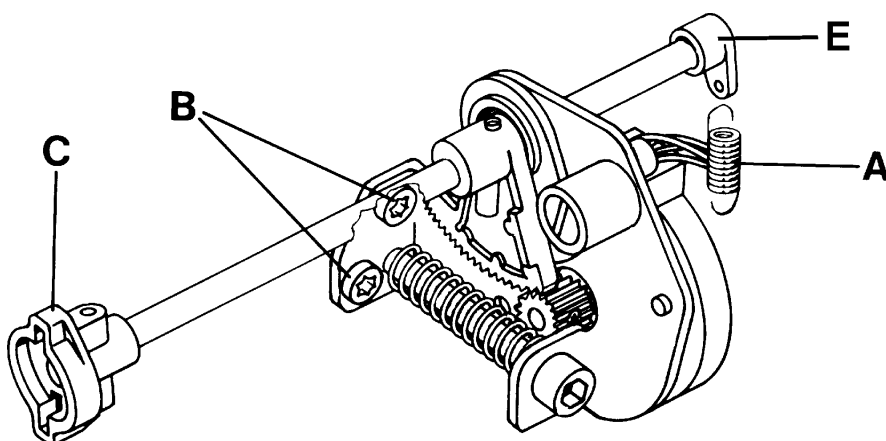
## Mount the step motor compl.

1. Connect the connection (C) between the segment shaft of the step motor and the feeding unit.

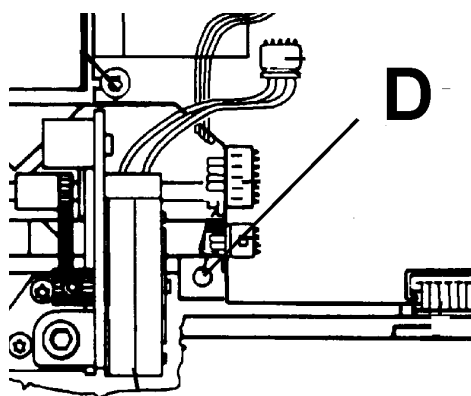
**Note! Location of the guide . It can have turned 180 degrees wrong!**



2. Tighten screw's (B)

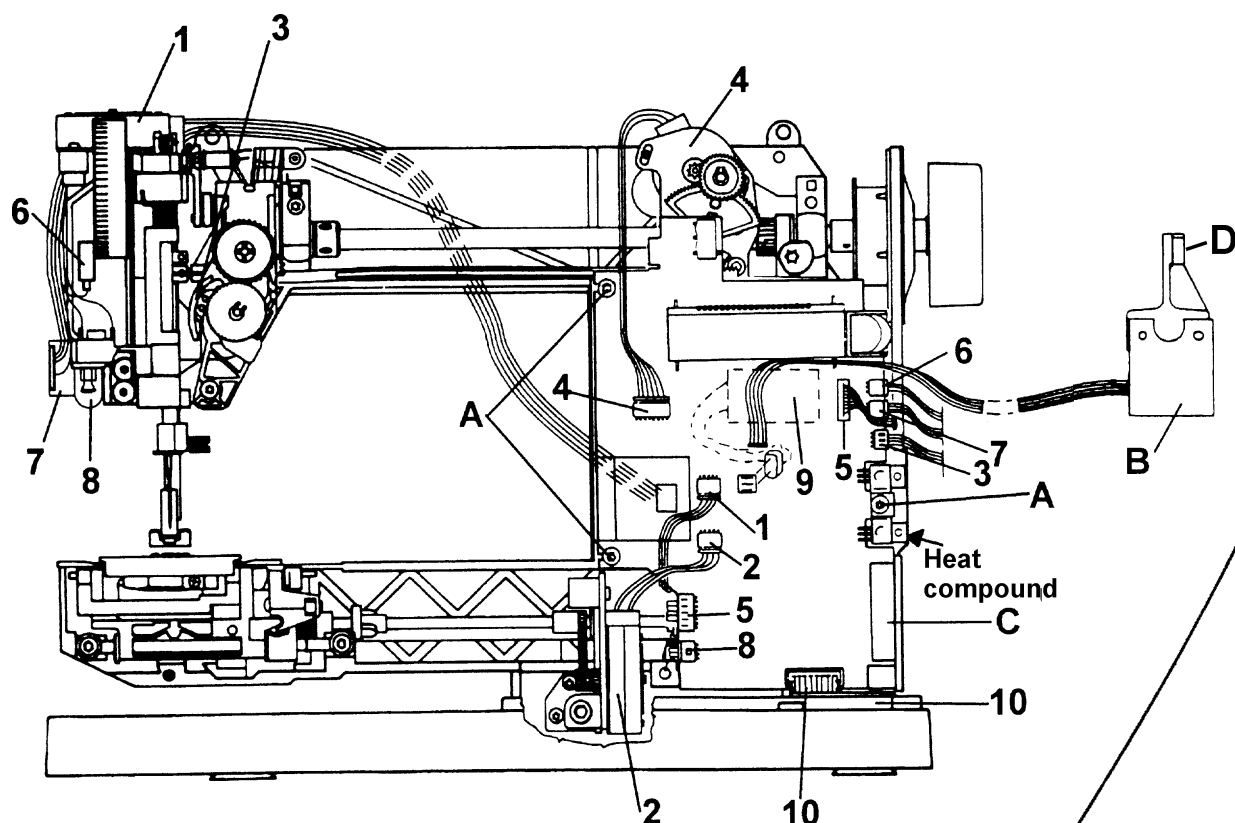


3. Mount the fastener (E) on the shaft and the spring (A) in the fastener and the hole off the frame (D).



## Mount the PC-Board

1. Reattach the PC-board.

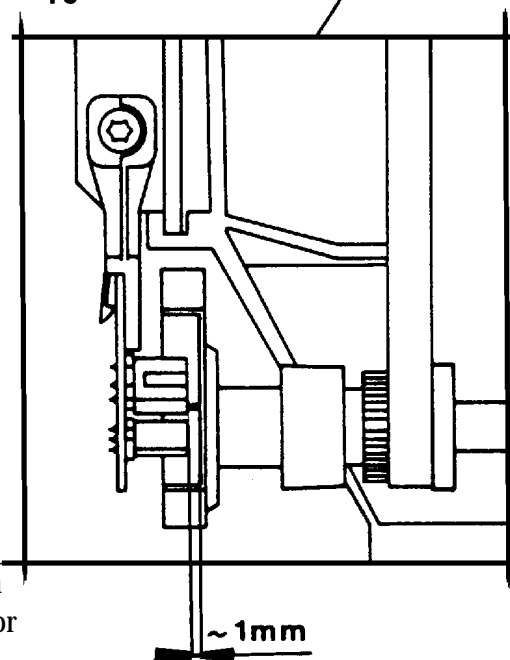


2. Mount the cables to the circuit board.

- (1) The step motor of the needle.
- (2) The step motor of the feeding unit.
- (3) The thread guard
- (4) The step motor of the thread tension
- (5) XY-connection (2)
- (6) Microswitch
- (7) Buttonhole counter
- (8) Lamp.
- (9) Motor "mounted from the rear", red cable down.
- (10) Transformer

3. Mount the screw (D) of the arm shaft sensor circuit board (B). Check that the lower shaft sensor is mounted at a distance of approx. 1 mm from the screen, lower shaft sensor

4. Mount the 3 screws (A) holding the circuit board and the cooling plates



## Setting of the feed dog in relation to the presser foot.

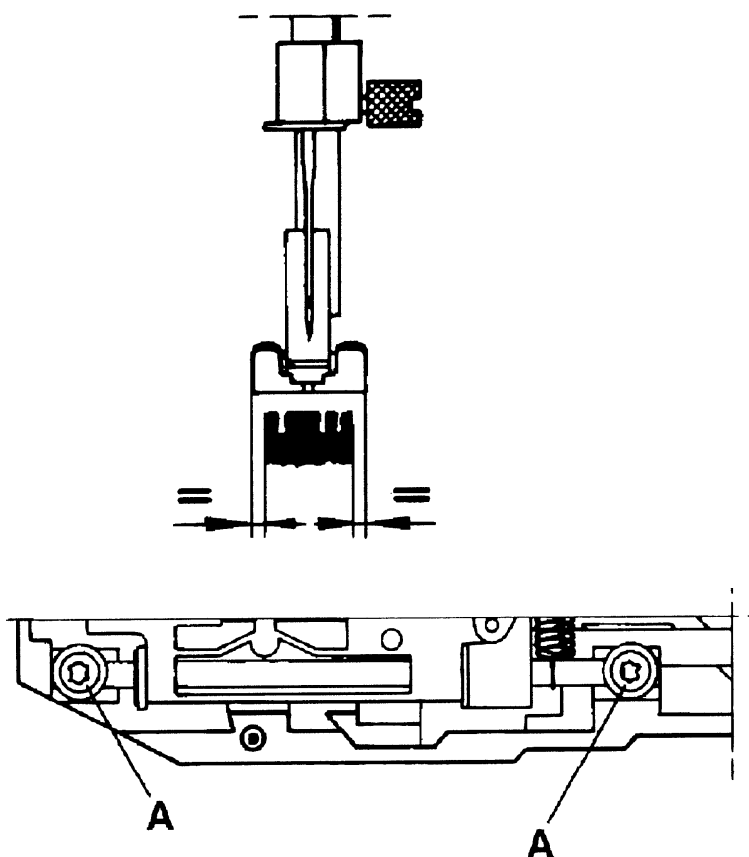
Mount the presser foot holder and adjust the setting of the feed dog in relation to the presser foot.

### Check

1. Sideways the hook should be symmetrically set in relation to the presser foot.

### Adjustment

1. Loosen the 2 screws (A) in the feeding device.
2. Move the feeding device sideways until the feed dog is right below the presser foot.
3. Tighten the screws.



**A. Set the stitch plate (hook cover) in relation to the needle in the feeding direction.**

**B. Set the sideways setting of the stitch plate (hook cover) in relation to the feed dog and tighten screws.**

1. Insert a new # 90 needle.
2. Mount the hook cover without tightening the screw's

#### Check

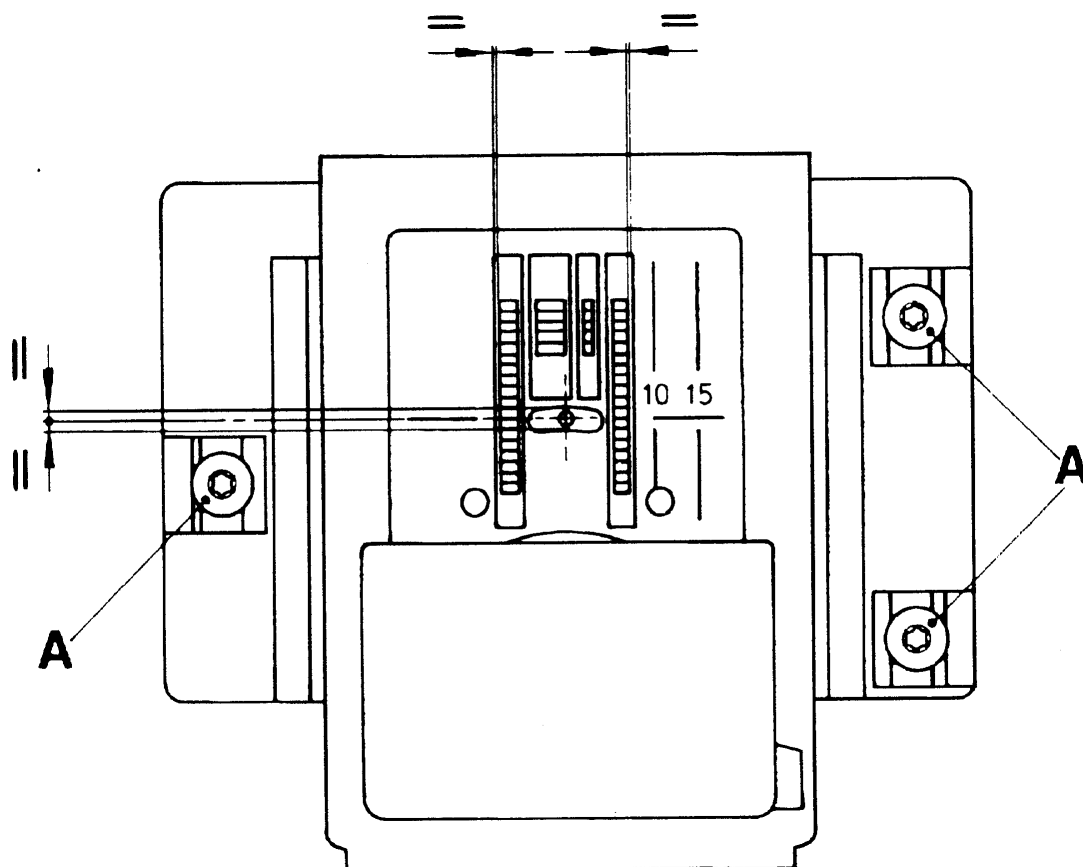
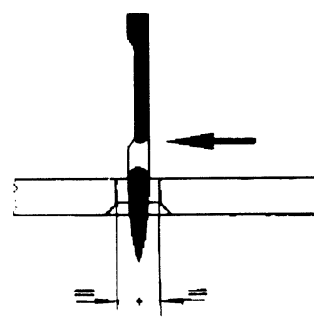
**A.** In the feeding direction the needle should descend right into the middle of the needle hole of the stitch plate.

**B.** The feed dog must not touch the stitch plate at any point.

#### Adjustment

Loosen the 3 screws (A) of the hook cover and move it so that:

- the needle sideways descends in the middle of the stitch plate.
- the feed dog does not touch the stitch plate.



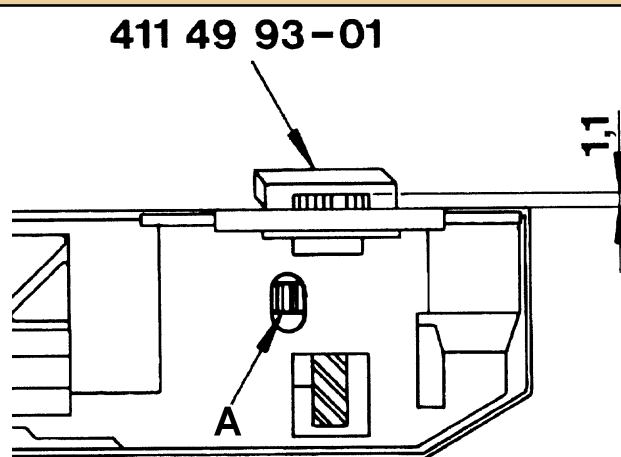
## Feed dog height

Set the feed dog height.

### Check

1. Bring feed dog to its highest position.
2. The top of the feed dog should be 0.9-1.1 mm above the stitch plate.

Check with setting gauge 411 49 93-01



### Adjustment

1. Bring feed dog to its highest position.
2. Adjust with a screw driver the adjustment nut (A) until a correct feed dog height (0.9-1.1 mm) is obtained.

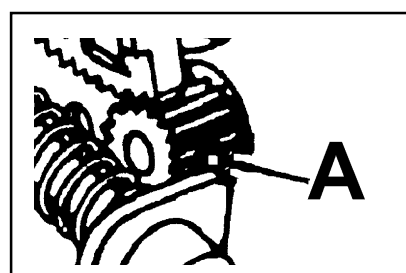
## Stitch length balance basic setting

Set stitch length balance, basic setting.

### Check

1. Get into the service mode of the machine by pressing the reverse feed button and minus (-) stitch length while the mains switch is turned on.

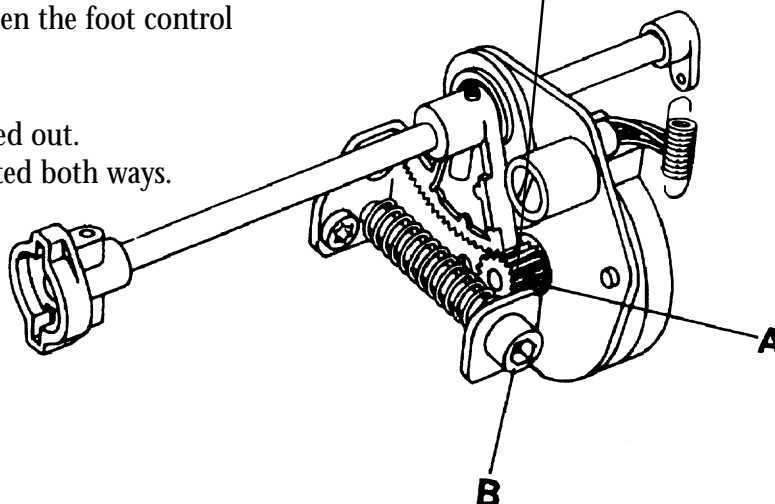
2. Press button nr 5, the feed dog shall now stand still when the foot control is pressed (0-feeding).



### Adjustment

3. Loosen the screw (A) of the cog wheel and turn it until the feed dog comes to a stand-still when the foot control is pressed.

**Note!** If a basic setting has to be carried out. Check that set screw (B) can be adjusted both ways.



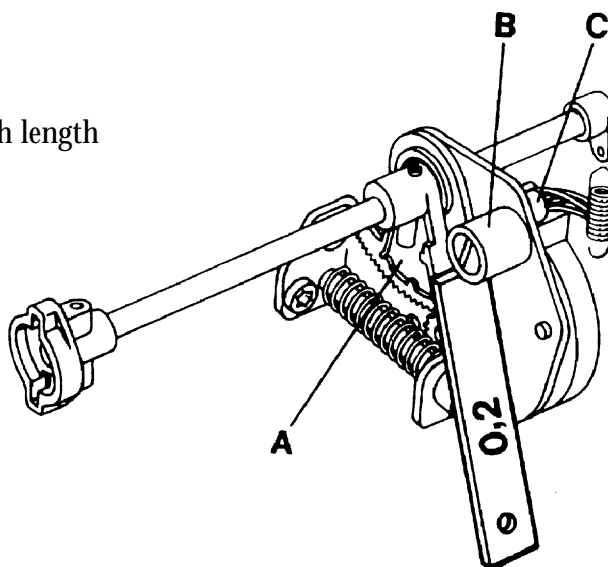
## Pre-setting the step motor of the feed dog

### Check

1. Get into the service mode of the machine by pressing the reverse feed button and minus (-) stitch length while the mains switch is turned on.
2. Turn the hand wheel until the needle arrives at its lower turning position. Press key nr. 8.
3. The gap between the segment (A) and the calibration stop (B) should now be  $(0.2 \pm 0.3 \text{ mm})$ .

### Adjustment

4. Get into the service mode of the machine by pressing the reverse feed button and minus (-) stitch length while the mains switch is turned on.
5. Press key nr. 6.
6. Loosen screw (C).
7. Turn the eccentric calibration stop (B) until the gap between segment (A) and the calibration stop (B) is  $0.2 \pm 0.3 \text{ mm}$ .
8. Check by pressing key nr. 8 several times. The motor should now run smoothly and the gap should remain 0.2 mm.



Check with distance gauge 412 38 85-01.

## Set stitch length balance using the fine adjustment.

### Check

- A. Both columns of the buttonhole shall be of the same density.
  - B. The machine shall sew a motif according to the symbol.
  - C. The darning stitch n 11 shall look according to ill. (Use the service program - button n 18)
- Note!** When controlling or adjusting the stitch length balance the buttonhole balance shall be zeroed.

### Buttonhole balance (In Rose Operating Manual page 57)

Can be carried out on any of the buttonholes.

Press  $\leq$  and  $\geq$  simultaneously until the text BAL flashes in the left part of the display.

Instead of the stitch length a balance value is shown:

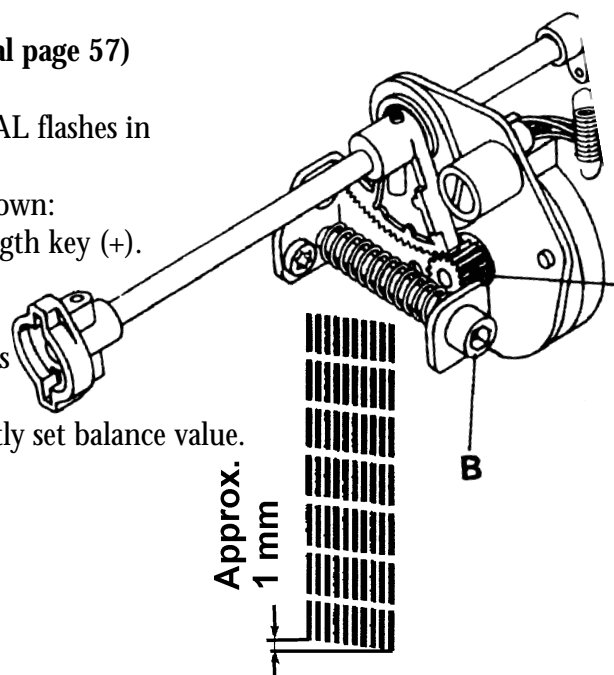
If you want a denser left column press stitch length key (+).

If you want a less dense left column press (-).

The balance can be set between -5 and +5.

The balance value in the display changes in steps each time you press.

The machine always remembers the most recently set balance value.



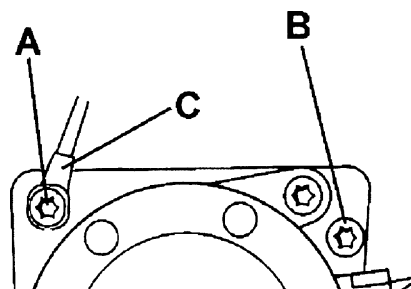
### Fine adjustment

1. Press key nr. 18 of the service program.
2. Turn screw (B) until the machine sews mending stitch nr. 11 acc. to ill.

## The step motor of the needle

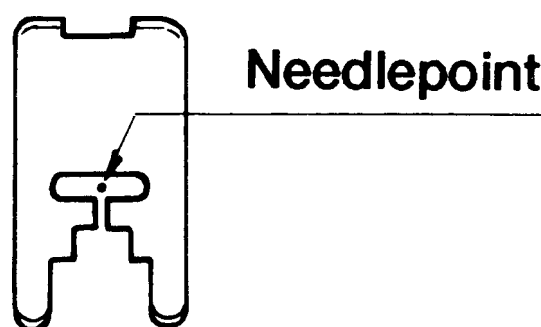
### Dismounting

1. Loosen the screws (A) and (B) which hold the mounting plate of the step motor in the arm.

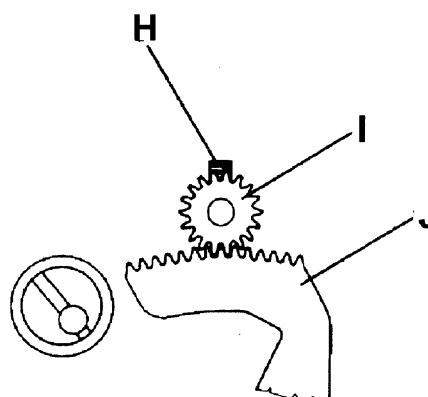


### Mounting

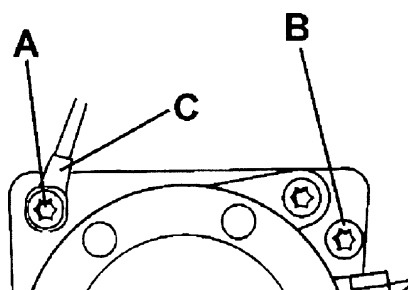
2. Set the needle in the center position into the pressar foot by moving the needle bar.



3. Mount the step motor and make sure that the screw (H) is facing straight backwards on the cog wheel (I) of the step motor.  
**Note!** The screw (H) shall not descend into the cog segment (J) on a complete zig-zag movement.



4. Mount the screws (A) and (B).  
**Note!** The earth cable (C) shall be mounted under the screw (A).



5. Check the position the step motor and tighten the screws.

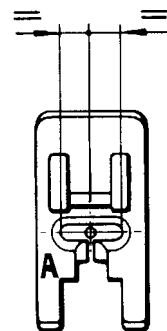


Set:

## The centre position of the needle on straight stitching

## The pre-setting of the step motor of the sewing head.

1. Insert a new needle 90 in the machine.
2. When the machine is set for straight stitching centre position, the needle should sideways descend into the centre of the needle hole of the presser foot.



### Check

1. Get into the service mode of the machine by pressing the reverse feed button and minus (-) stitch length while the mains switch is turned on.

2. Turn the hand wheel until the needle arrives at its upper turning position.

**For check press key nr. 7.**

3. The needle should now descend sideways into the needle hole of the presser foot.

**For check press key nr. 8.**

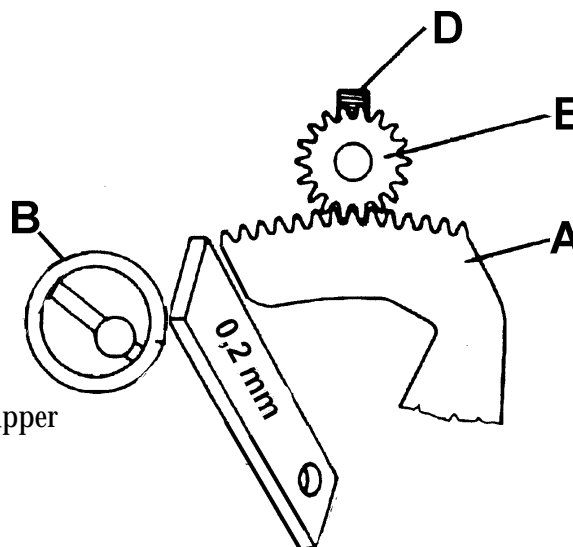
4. The gap between the segment (A) and the calibration stop (B) should now be  $(0.2 \pm 0.3 \text{ mm})$ . **Note!** The position on the eccentric.

### Adjustment

1. Get into the service mode of the machine by pressing the reverse feed button and minus (-) stitch length while the mains switch is turned on.

2. Turn the hand wheel until the needle arrives at its upper turning position.

**For adjusting press key nr. 3.**



3. Loosen screw (D) in the cog wheel (E) on the step motor shaft. Turn the cog wheel until the needle is in the centre of the presser foot. **For adjusting press key nr. 4.**

4. Loosen screw (C) in the calibration stop (B) and turn it until the gap is correct  $(0.2 \pm 0.3 \text{ mm})$ . The eccentricity of the stop should point obliquely backwards to the left.

Check by pressing key nr. 8 several times. The motor should now run smoothly and the gap should remain 0.2 mm.

Check with distance gauge 412 38 85-01.

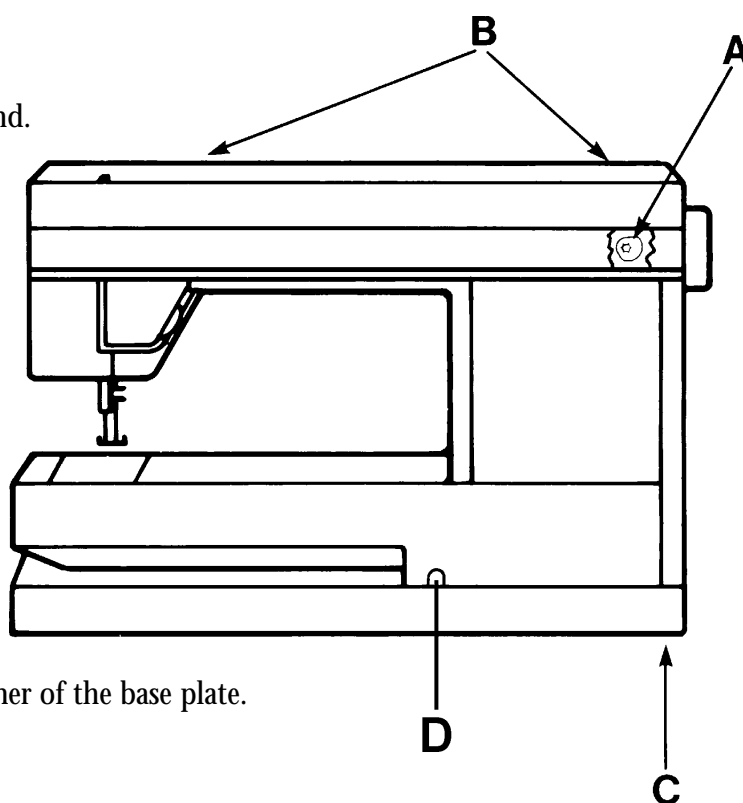
## Mounting front cover

1. Attach the band cable of the foil keyboard to the circuit board and push in the outer covering of the white switch.

2. Turn the hand wheel until the needle is in its lowest position, so the thread take up lever is out off the way.

3. Slide the cover in the hook cover and lift it over the connector sensor and the step motor cables and push it in its correct position.

4. Mount the two screw's (B) from behind.



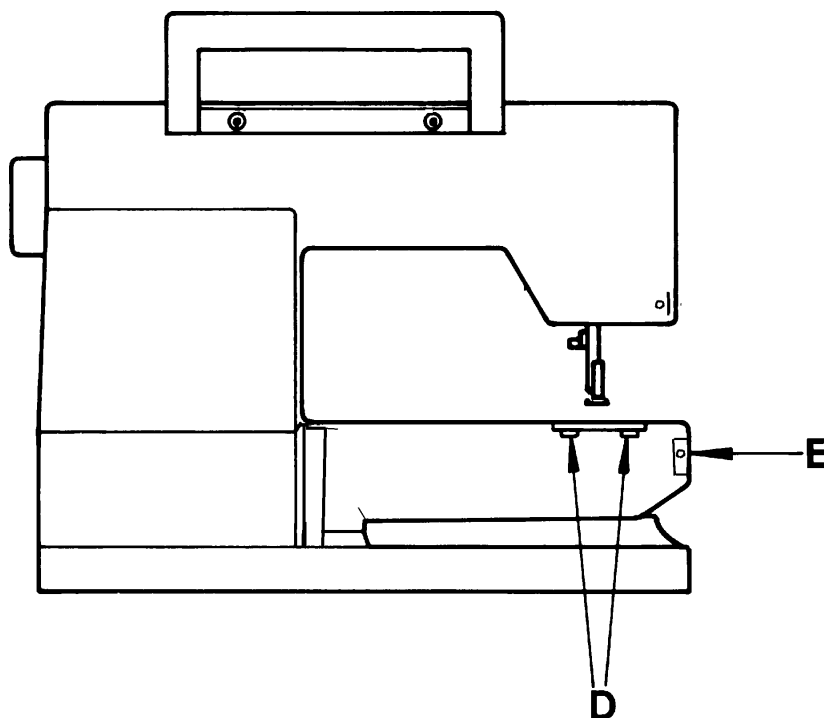
5. Mount the screw (C) in the front corner of the base plate.

6. Attach the button for the off-switch, winding (A), by pushing it straight in.  
To set the bobbin winding stop you can use a pre-made correctly winded bobbin.

7. Snap on cover (D).

## Mounting the lower rear cover

1. Insert the embroidery connector in the lower rear cover.

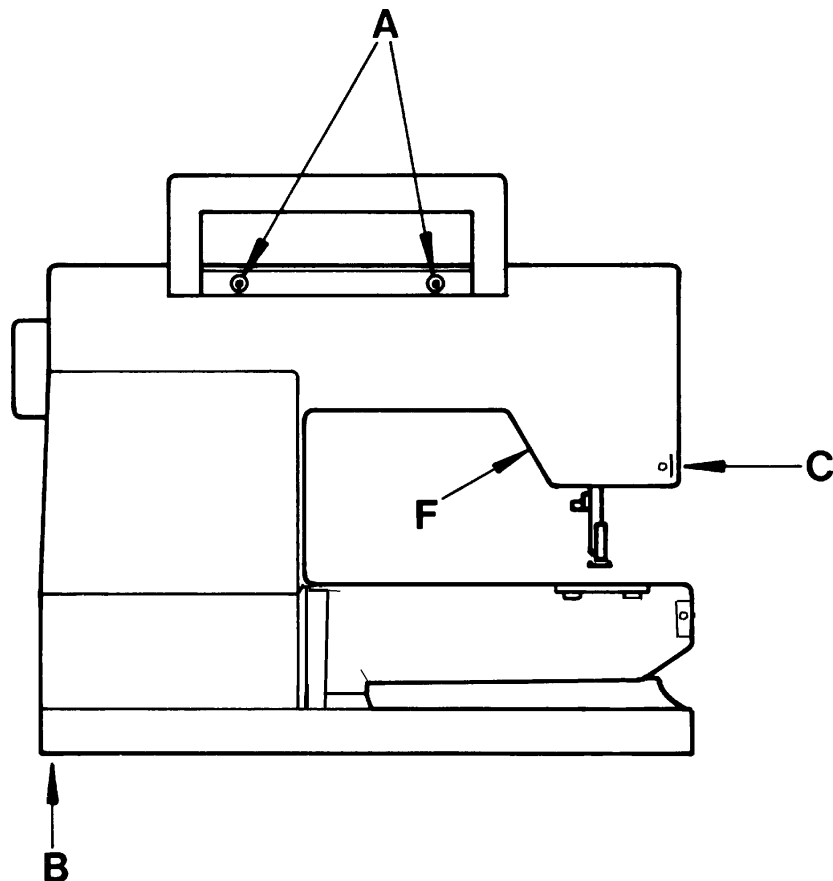


2. Attach the lower rear cover making sure it is snapped on in it's correct position all the way around.

3. Insert screw (E).

## Mounting the upper rear cover

1. Raise the presser bar,



2. Mount the cover by first snapping on the hook and then the top of the cover working your way around to the bottom.

3. Mount the two screw's (A) under the handle

- 4 . Mount the screw (B) in the rear corner of the base plate

5. Mount the screw (C) at the thread knife of the Sewing head.