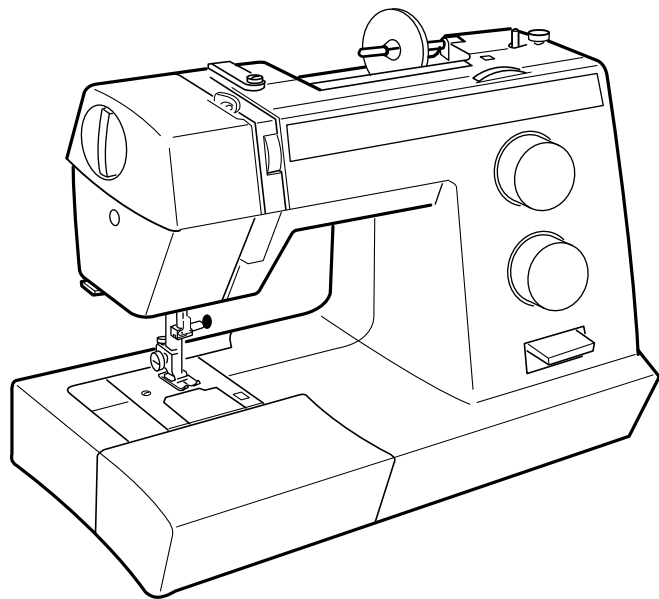


PFAFF

hobby

1122 - 1142

Service Manual



Contents

Foreword	3
Notes on the sewing machine with regard to ambient conditions,treatment, cleaning and safety	4
Removing the housing covers	5
Face plate	5
Base cover	5
Front cover	6
Rear cover	7
Adjustment of the sideways movement of the needle in zigzag	8
Adjustment of the play in worm gear	9
Adjustment of the needle in center position	10
Adjustment of the hook to needle clearance	11
Adjustment of the timing of the hook in relation to the needle	12
Adjustment of the play in the hook gear	14
Adjustment of the needle bar height	15
Adjustment of the feed dog height	16
Adjustment of the presser bar height and alignment	17
Adjustment of the bobbin thread tension	18
Adjustment of needle thread tension	19
Adjusting of the zero feed on the buttonholes bartack	20
Adjustment of buttonhole feed balance - The columns	21
Adjustment of the buttonhole length	22
Adjustment of equal stitch length for the forward/reverse-controlled utility stitches - Stretch stitch balance (MODEL1142 and 1132)	23
Replacing and Adjusting Threader (MODEL1142)	24
Replacing Motor and Adjusting Motor Belt Tension	25

Foreword

The purpose of this service manual is to assist you in quick and correct repairing of the machines. Adjustments should only be made if the settings deviate from the requirements described herein. When checking or adjusting a machine, always proceed in the order of the worksteps prescribed. For easier reference every workstep is marked with a dot.

When assembling dismantled machines, adjust the machine to approximately the right settings. This facilitates the subsequent fine adjustments.

Unless otherwise specified, the handwheel must always be turned forward.

When carrying out maintenance work on live parts or in their proximity, the machine is to be separated from the power supply by unplugging the lead cord from the electrical socket.

For the proper adjustment of the machine, the following gauges and tools are required:

Needle rise clamp	61-111 600-35/000
Spacer	63-102 600-18/000
Needle rise gauge	61-111 600-02/000
1,5 mm Allen key	07-433 005-28/000
2 mm Allen key	07-433 005-30/000
2.5 mm Allen key	07-433 005-40/000

Subject to alterations in design and dimensions.

Notes on the sewing machine with regard to ambient conditions, treatment, cleaning and safety

Ambient conditions

The recommended ranges are:

Ambient temperature 10° to 40°C (50° to 104°F)

Air humidity 20 % to 80 %

Storage temperature -25°C to + 60°C (-13° to +140°F)

The machine is insensitive to interference according to the international laws; however, it should not be used in the direct vicinity of electronic appliances such as radios, televisions, personal computers, radio transmitters etc.

This sewing machine is a high-quality electro-mechanical appliance; it is a machine for supervised use in the home. It should be operated in such a way that it is not subjected to: dust, severe dampness, direct sunlight, static electricity, heat-producing objects, corrosive chemicals or liquids.

To permit adequate ventilation the machine must be kept unblocked and used on a firm and even surface.

Treatment

Always make sure not to damage your machine by knocking it over or dropping it.

Cleaning

Housing:

To clean the housing, use a dry, clean, soft, lint-free cloth. To remove any stubborn dirt, use a soft cloth with a neutral cleansing agent for plastic materials.

Please Note!

Never use insecticides or chemical products such as petrol (gas) or thin chemicals to clean the housing.

Display:

If necessary, clean display with a soft cloth moistened with a little water.

Safety:

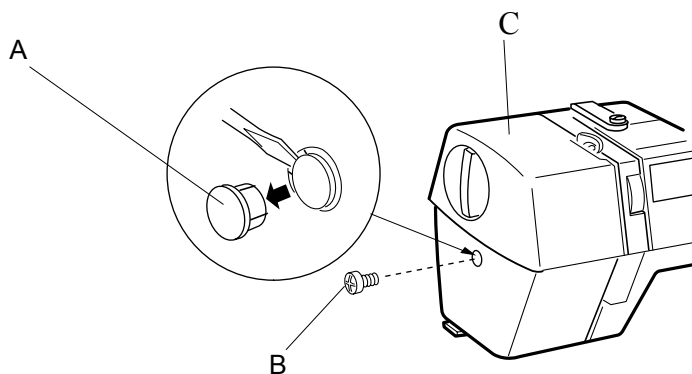
1. The machine should be put into operation as indicated on the specification plate.
2. Do not place any objects in openings on the machine.
3. Do not use the sewing machine if:
 - there is visible damage,
 - its function is defective,
 - it is wet, e.g. with condensation.
4. Do not pull the lead cord out of the socket by its cord.
5. If this appliance is used for another purpose than that intended or if it is wrongly operated, we cannot accept any liability for any damage caused.
6. To avoid the risk of electric shock, do not open the machine. There are no parts inside the machine which the user can repair. This is the exclusive responsibility of our qualified service staff.
7. Be sure to use only original PFAFF parts.

Removing the housing covers

Face plate

Face cover:

1. Remove cap (A).
2. Unscrew screw (B) of the face cover.
3. Remove face cover (C) .



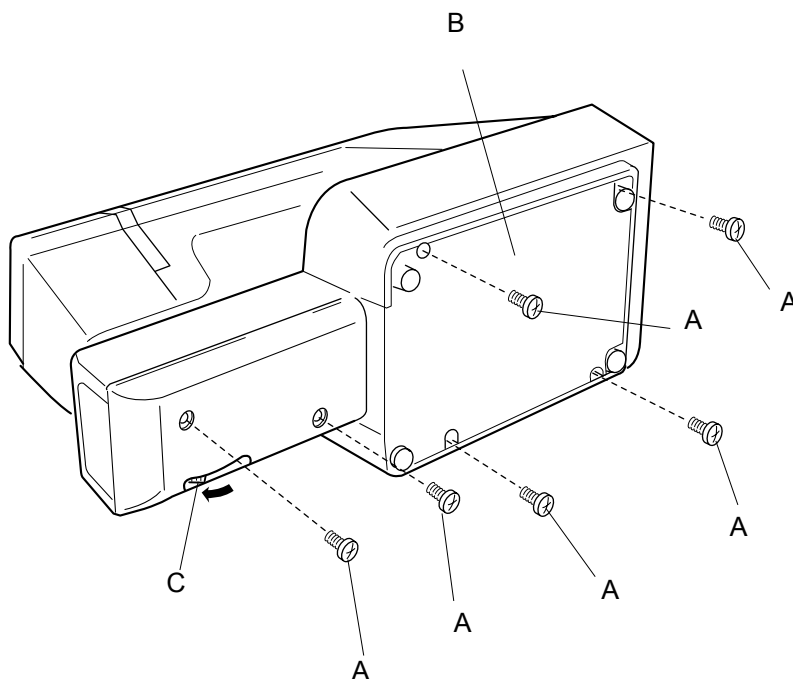
Base cover

1. Remove the six set screws (A)
2. Remove the base cover (B).

To attach

Shift the drop feed lever (C) in the direction of the arrow.

Attach the base cover with setscrews.



Front cover

1. Remove the face plate and base cover

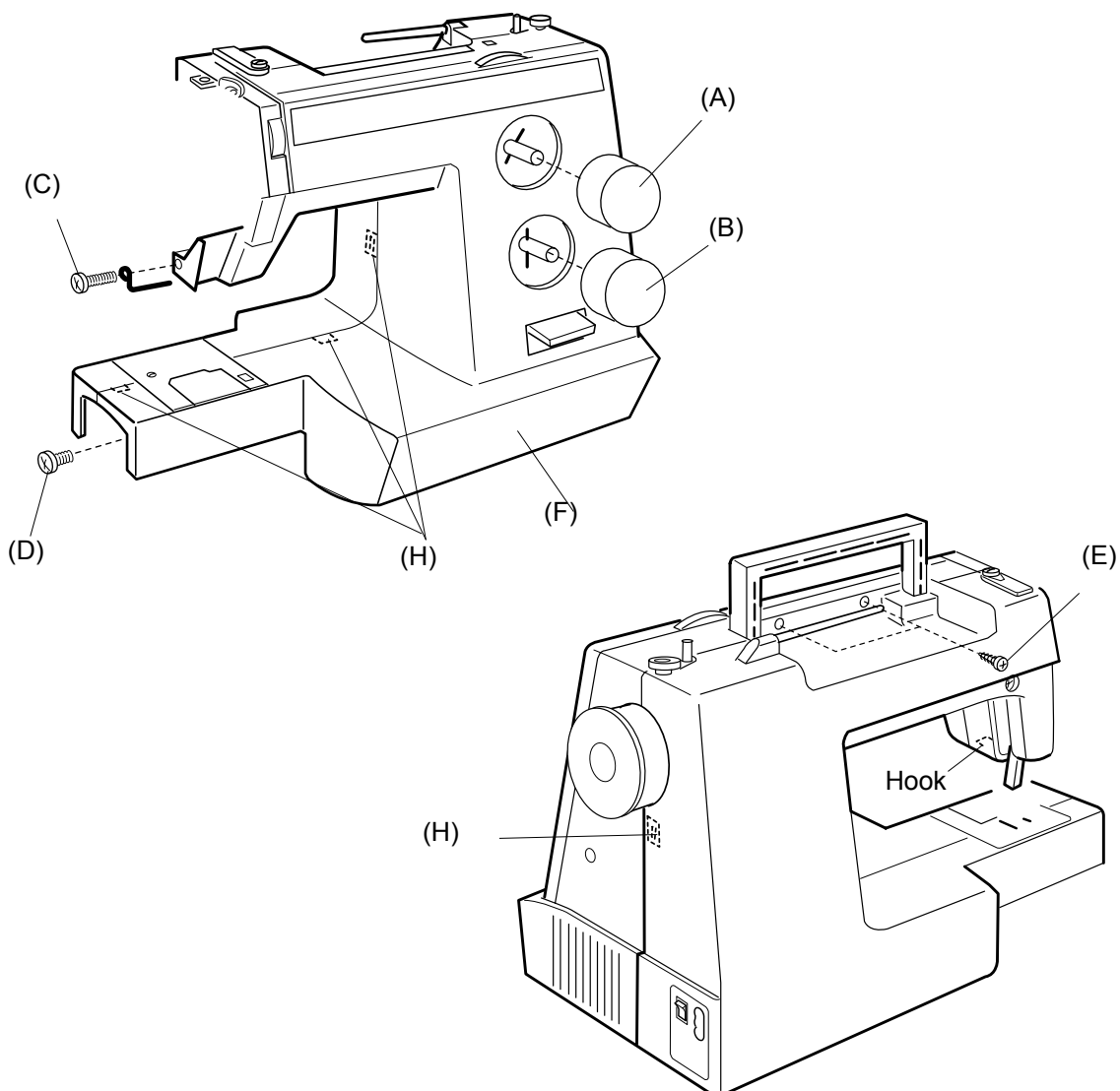
Pull out the pattern selector dial (A) and stitch length dial (B).

Remove the setscrews (C), (D) and (E) (two off).

Remove the front cover (F), unlocking all the hooks (H).

To attach

Follow the above procedure in reverse.



Rear cover

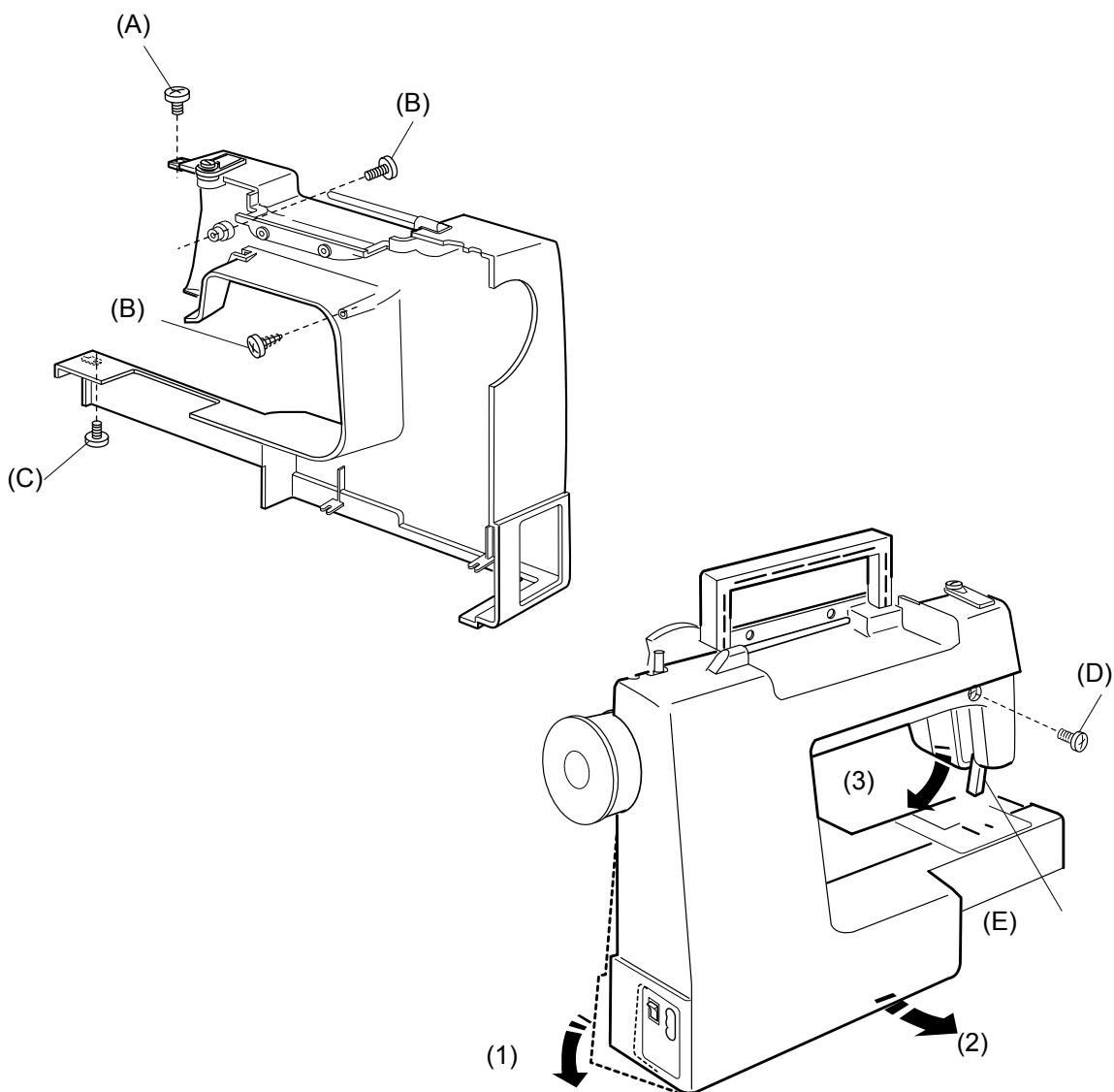
Remove the face plate, base cover and front cover.

Remove the set screws (A), (B), (C) and (D).

Lower the presser foot lifter (E) and pull away the rear cover from the machine, clearing the parts (1), (2) and (3), in this order.

To attach

Follow the above procedure in reverse.



Adjustment of the sideways movement of the needle in zigzag


Requirement:

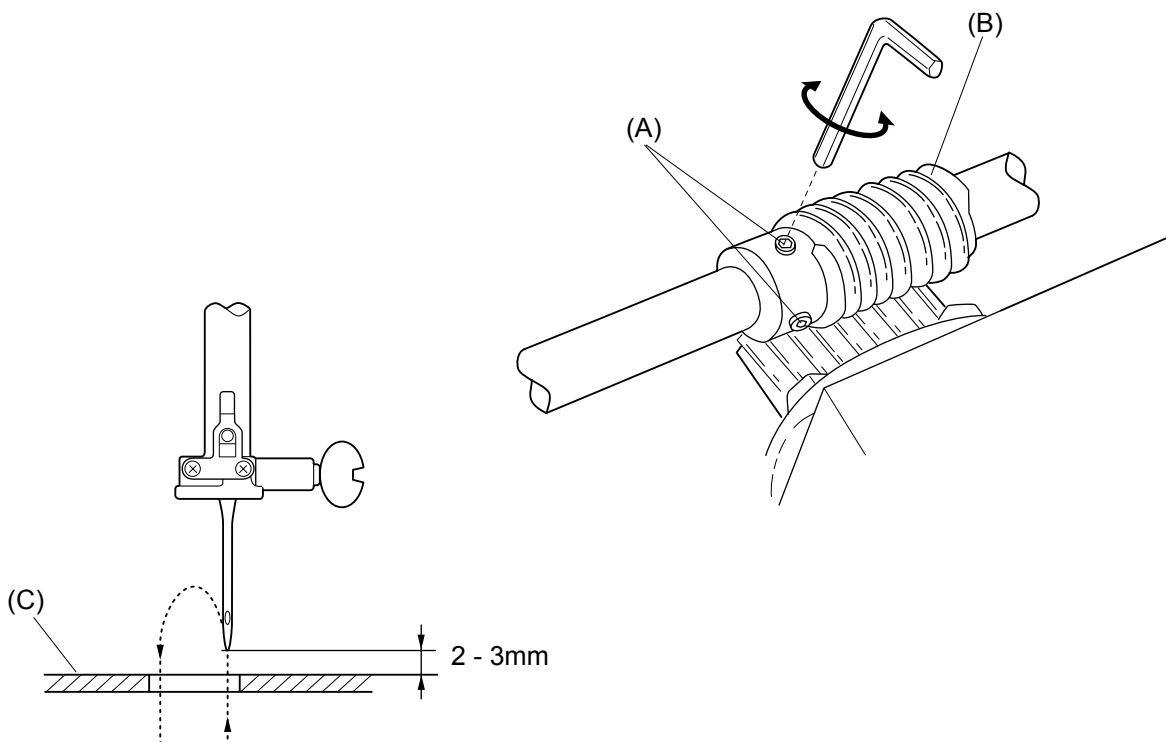
For zigzag sewing the sideways movement of the needle must take place with the needle at a position higher than the maximum fabric thickness.

Check

The needle must begin its sideways movement when its point is approx. 2-3 mm above the needle plate. It must finish its sideways movement before it enters the fabric again

Adjustment

- Remove the front cover
 - Select the maximum width zigzag stitch ().
 - Loosen the setscrews (A) on the worm (B).
 - Holding the worm so it cant rotate, with an Allen key in one of the set screws (A).
 - Turn the handwheel so that the needle starts its sideways movement 2-3 mm above the needle plate (C) in upward travel as shown below.
 - Tighten the setscrews (A) on the worm (B) securely.
- Note! Make sure the worm does not move sideways when turning the handwheel, otherwise the play in the worm gear will change.
- Attach the front cover.



Adjustment of the play in worm gear

Requirement

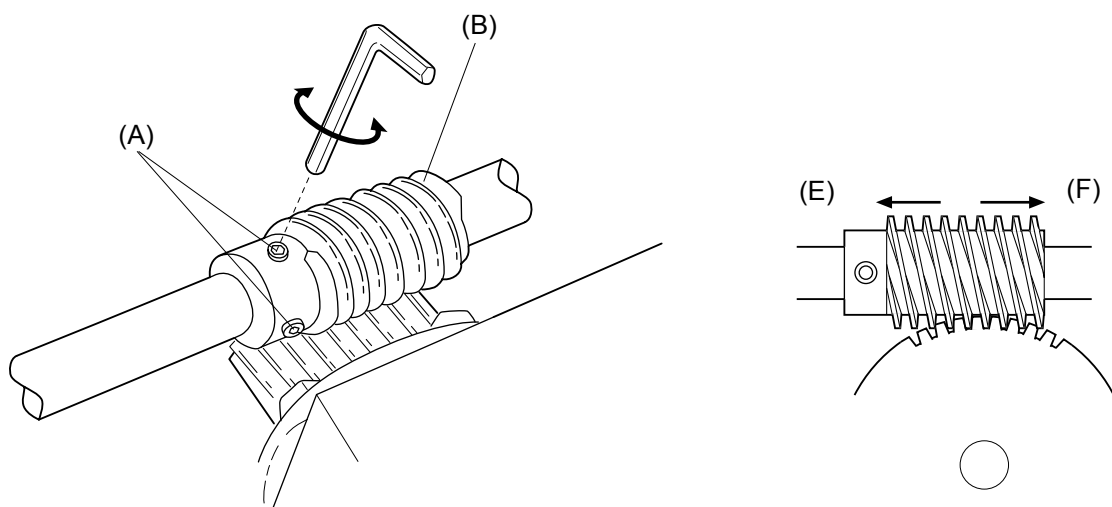
It is impossible to obtain an equally large play in one rotation of the gear wheel (C), but it should be as small as possible at the tightest spot during the revolution.

Check

Rotate the gear wheel (C) back and forth and check the play. It should be zero or as small as possible.

Adjustment

- Remove the front cover
- Loosen the 2 setscrews (A) and move the worm :
 - to increase the play, move the worm (D) to the direction of (E).
 - to decrease the play, move the worm (D) to the direction of (F).
- Tighten the setscrews (A) on the worm (B) securely.
- Check that the setting "Adjustment of the sideways movement of the needle in zigzag" hasn't changed.
- Attach the front cover.





Adjustment of the needle in center position

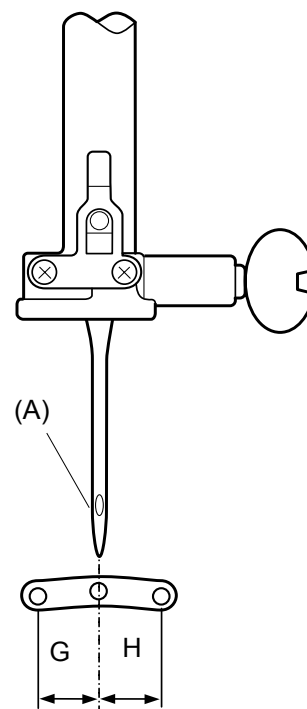
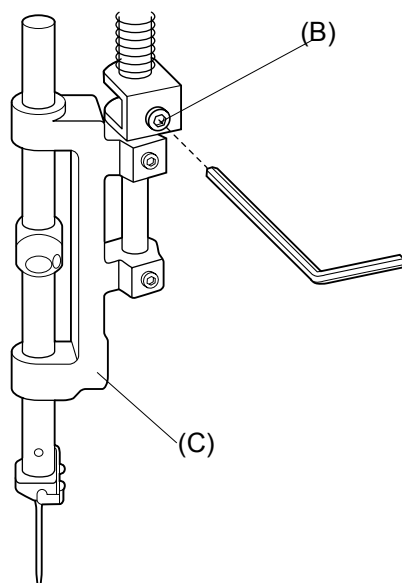
Requirement:

When the machine is set for straight stitch position the needle must enter exactly in the center of the needle hole.

At the for the widest zigzag stitch setting must be at the same distance from the left (G) and right side (H) of the needle slot

Adjustment:

- Remove the face plate
- Select the straight stitch (), so the needle comes to it's centre position.
- Loosen the setscrew (B).
- Move the needle bar supporter so that the needle drops in the center of the needle hole. Tighten the setscrew.
- Select the maximum width zigzag stitch () and check the clearance between needle and side edges of the needle hole.
- Attach the face plate.




Adjustment of the hook to needle clearance

Requirement:


The standard clearance between the needle and hook point should be -0.10 to $+0.05$ mm.

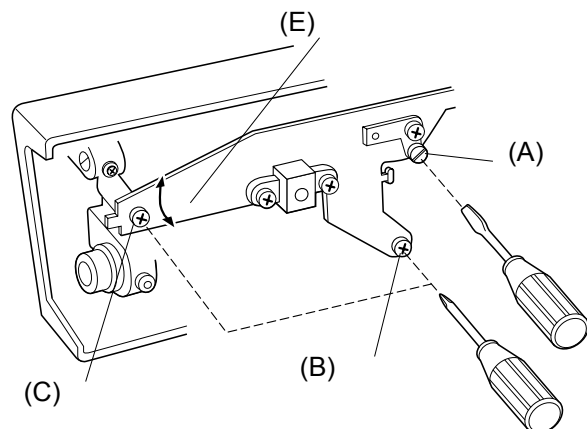
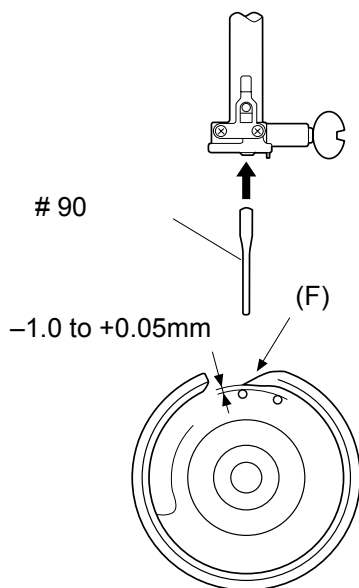
Check

- Insert a new # 90 needle in the machine
- Select the maximum width zigzag stitch ().
- Remove the needle plate and bobbin holder.
- Rotate hand wheel until the point of the hook arrives behind the needle in the left position.
- Check the gap by pressing a small screw driver against the needle.

The gap should be between -0.1 and $+0.05$ mm .

Adjustment

- Remove the needle plate and bobbin holder.
- Insert a new #90 needle.
- Select the maximum width zigzag stitch (). Rotate hand wheel until the point of the hook arrives behind the needle in the left position
- Turn the machine to the back and remove the base cover.
- Loosen the screws (B) and (C).
- Loosen the screw (A), then tighten it slightly so that the hook can be moved.
- Move part (E) up or down to set the clearance between needle and the tip of hook (F) between -0.1 and $+0.05$ mm at the right and left sides.
- Tighten the 3 set screws (A) (B) and (C).
- Check the Play of the hook gear
- Attach the base cover, bobbin holder and needle plate.



Adjustment of the timing of the hook in relation to the needle

Requirement:

Set the machine on straight stitching. The needle (H) should travel 2,5 \pm 0,15 mm from its lowest position (D) before the tip of the hook (A) exactly meets the right side of the needle.

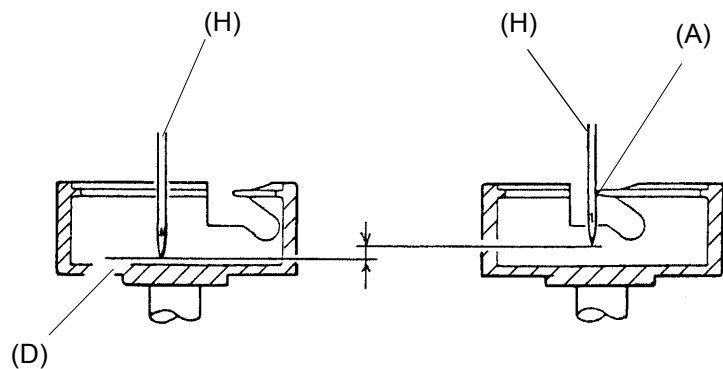
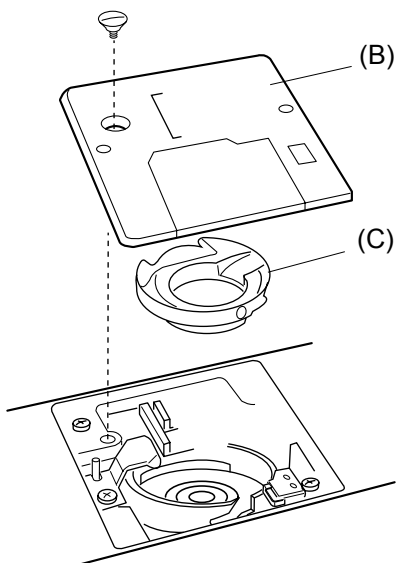
Check

- Remove the needle plate (B) and bobbin holder (C).
- Select the straight stitch, so the needle comes to its centre position.

Bring the needle bar to its lowest position.

- Place the needle rise clamp (61-111 600-35/000) over the needle bar and secure it lightly.
- Place a 2,5 mm feeler gauge (61-111 600-02/000) between the clamp and the needle bar frame.
- Loosen the clamp screw and push the needle risen clamp against the feeler gauge and tighten the clamp screw. Make sure its NO play between the feeler gauge, the clamp and the needle bar frame.

- Remove the feeler gauge
 - Turn the hand wheel in sewing direction until needle bar frame is against the needle risen clamp.
 - The tip of the hook (A) should now exactly meet the right side of the needle.
- and the needle have risen 2,5 mm from the lowest needle position



Adjustment

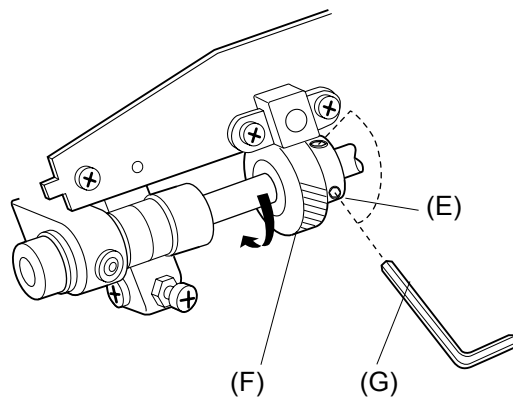
- Remove the stitch plate (B) and bobbin holder (C).
- Select the straight stitch, so the needle comes to it's centre position.
- Remove the base cover.
- Loosen the 2 hexagon set screws (E) on the lower shaft gear (F).
- Bring the needle bar to its lowest position.

Note! At this point make sure the feed dog is in its down stroke position.

- Place the needle rise clamp (61-111 600-35/000) over the needle bar and secure it lightly.
- Place a 2,5 mm feeler gauge ((61-111 600-02/000) between the clamp and the needle bar frame.
- Loosen the clamp screw and push the needle risen clamp against the feeler gauge and tighten the clamp screw. Make sure its NO play between the feeler gauge, the clamp and the needle bar frame.

- Remove the feeler gauge
- Turn the hand wheel in sewing direction until needle risen clamp is against the needle bar frame. and the needle have risen 2,5 mm from the lowest needle position
- Insert the allen key (G) into one of the hexagon socket screw (E) and turn the lower shaft gear (F) until the tip of the rotary hook meets the right side of the needle (H).
- Tighten the 2 hexagon socket screws (E).

Attach the base cover, bobbin holder (C) and stitch plate (B).



Adjustment of the play in the hook gear

Requirement

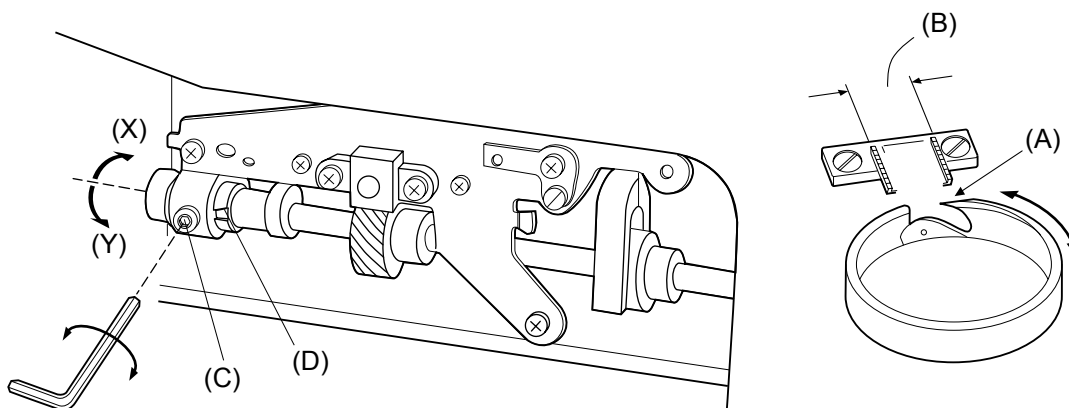
It's impossible to obtain an equal large play in one rotation of the cogwheel, but it should be as small as possible at the tightest spot during the revolution.

Check

- Remove the needle plate and bobbin holder.
- Turn the hand wheel in the sewing direction you until the tip of the hook (A) comes between both ends (B) of the feed teeth
- Turn the hook back and forth and check the play

Adjustment

- Remove the needle plate and bobbin holder.
- Remove the base cover and loosen the hexagon setscrew (C).
- Turn the grooved part (D) of the lower shaft bushing (eccentric bushing) in the direction of
 - (X) If there is a tight spot.
 - (Y) when the play is too much.
- Tighten hexagon socket screw (C).
- Check the timing of hook and feed dog height.
- Attach the base cover, bobbin holder and stitch plate.



Adjustment of the needle bar height

Requirement

Set the machine on maximum zigzag width . When the needle from its lowest right hand position exactly meets the tip of the hook the distance between the upper edge of the needle eye (H) and the ring of the hook (H) should be 3,0 to 3,3 mm.

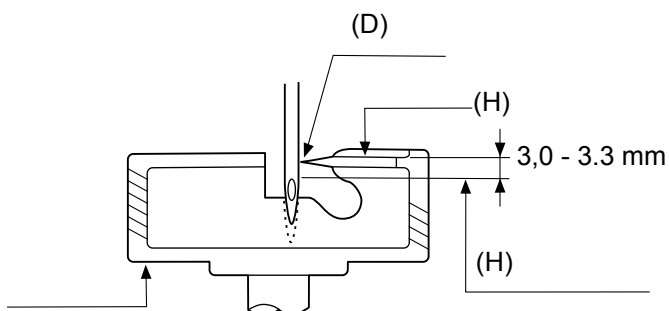
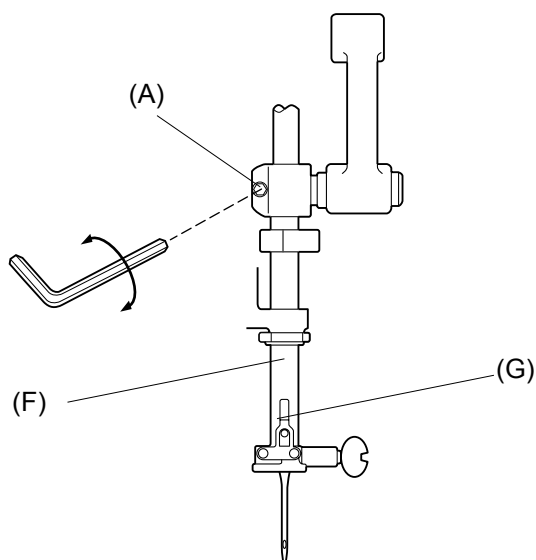
Check

- Remove the stitch plate and bobbin holder
- Set the machine on maximum zigzag width .
- Turn the hand wheel toward you until the tip of hook (D) exactly meets the right hand side of the needle at the left needle drop position
- The distance between the upper edge of needle eye (H) and the ring of the hook (I) should now be 3,0 to 3,3 mm.

Adjustment

Note! Before performing this adjustment, check "Adjustment of the timing of the hook in relation to the needle".

- Remove the face plate.
- Remove the needle plate and bobbin holder
- Set the machine on maximum zigzag width .
- Loosen the screw (A).
- Turn the hand wheel toward you until the tip of hook (D) exactly meets the right hand side of the needle at the left needle drop position.
- Loosen the screw (E).
- Set the distance between the upper edge of needle eye (H) and the ring of the hook (I) to 3,0 to 3,3 mm by moving the needle bar (F).
- Tighten the screw of the needle bar connecting stud. The groove (G) should come to the front.
- Attach the bobbin holder and needle plate.



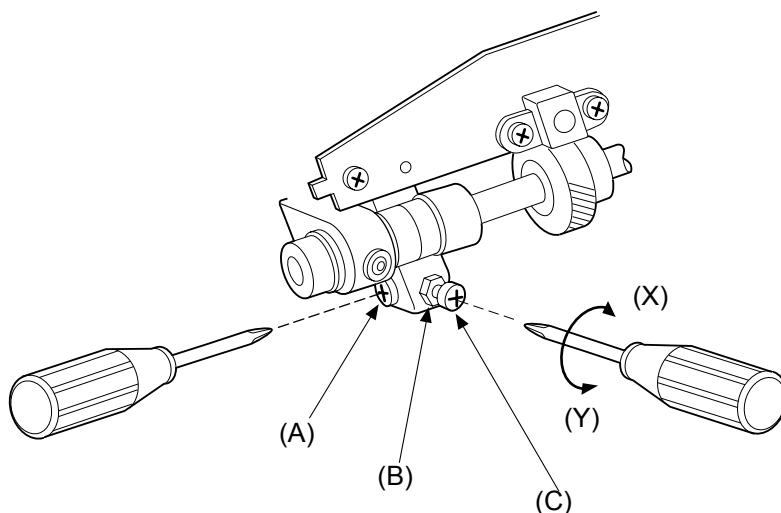
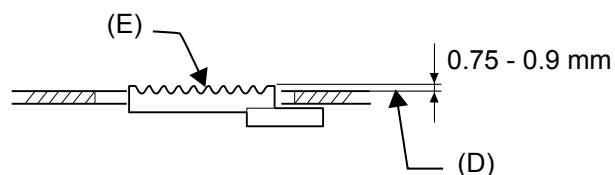
Adjustment of the feed dog height

Check

When the feed dog is in its highest position. The Feed dog teeth top (E) should be 0.75 to 0.9 mm from the surface of the needle plate (D).

Adjustment

- Select the machine's longest stitch length setting
- Turn the hand wheel until the feed dog (D) comes to its highest position.
- Remove the base cover.
- Loosen the screw (A) and nut (B).
- Turn the adjusting screw (C) so that the feed dog height is between 0.75 mm to 0.9 mm from the surface of the needle plate (D).
 - (X) To raise
 - (Y) To lower
- Tighten the nut (B).
- Tighten the screw (A).
- Attach the base cover.



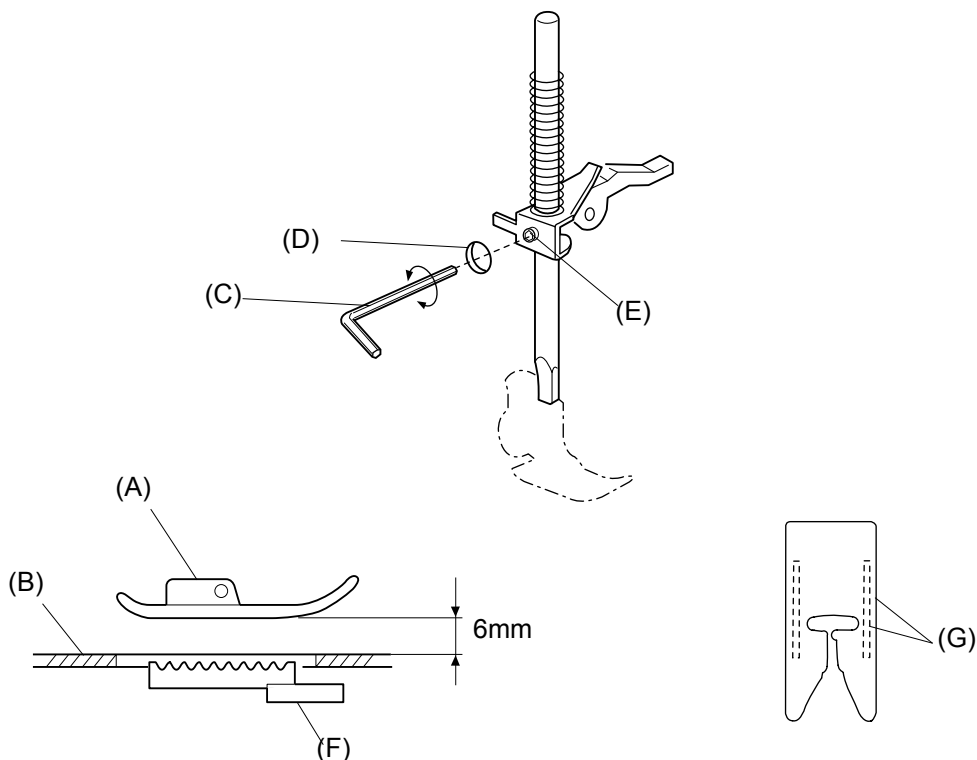
Adjustment of the presser bar height and alignment

Check

When the presser foot (A) is raised, the distance between the zigzag foot (A) and stitch plate (B) should be 6.0 mm.

Adjustment

- Remove the face cover.
- Raise the zigzag foot.
- Pass the allen key (C) through the hole (D) of the supporter.
- Loosen the hexagon socket screw (E).
- Adjust the distance between the zigzag foot (A) and stitch plate (B).
- Tighten the hexagon socket screw (E).
- Check if the presser foot is parallel with the feed dog (F) as shown below (G).
If not, loosen the hexagon socket screw (E), and adjust the direction.
- Attach the face cover.



Adjustment of the bobbin thread tension

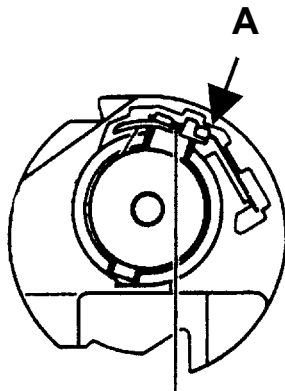
Check

- Insert a full bobbin into the bobbin basket.
- The thread tension spring of the bobbin basket shall give a resistance of $15 \pm 2g$ when pulling the thread slowly.

Adjustment

Turn screw (A) until the correct thread tension is obtained.

NOTE! Remove any loose pieces of thread or fluff from under the spring.



Adjustment of needle thread tension

Requirements:

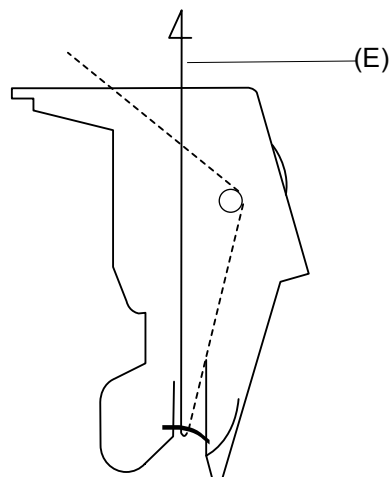
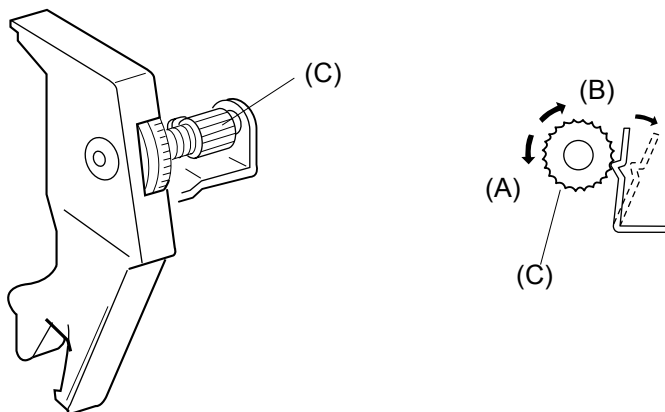
A correct interlacing of the needle and bobbin thread tension must be obtained, when the thread tension dial is set at "4", at straight stitching and zig-zag when sewing in cotton fabric with a polyester thread #50 (E).

Check

- Set the thread tension dial at "4" and sew a zig-zag stitch.

Adjustment

- Remove the face cover and Front cover
- Set the thread tension dial at "4".
- Sew a zig-zag stitch and turn the adjusting dial (C) in the direction of:
 - A if tension is too tight.
 - B if tension is too loose.
- Attach front cover and the face cover .



Adjusting of the zero feed on the buttonholes bartack

Requirements

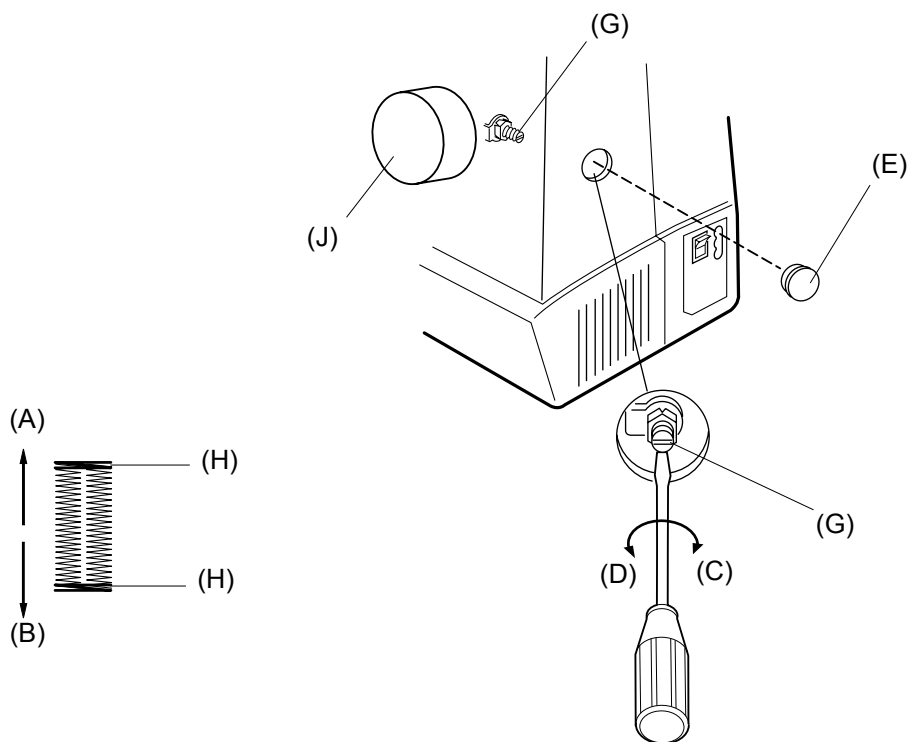
When a button hole's bartack is selected there should be no feeding.

Adjustment

- Sew a buttonhole to check if the fabric is fed while sewing the bartacks.
- Remove the cap (E).
 - If the fabric is fed forward (A), turn the adjusting screw in the direction (C).
 - If the fabric is fed backward (B), turn the adjusting screw in the direction (D).
- Attach the cap (E).

H = Bartack

J = Stitch length dial



Adjustment of buttonhole feed balance - The columns

Requirements

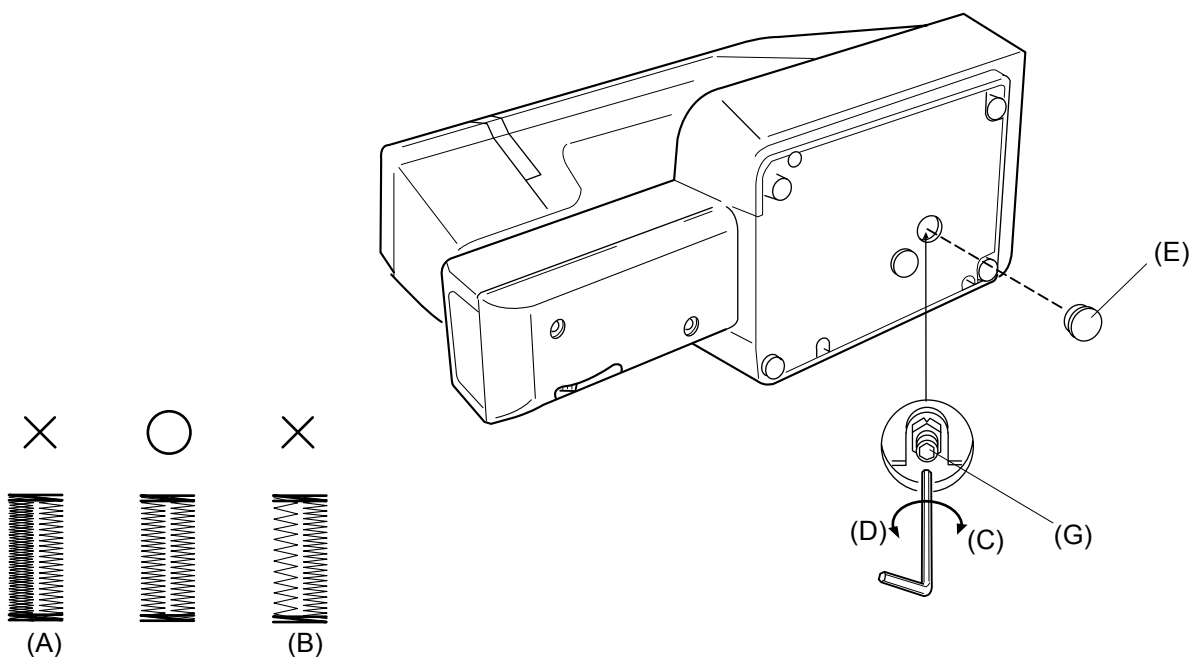
When sewing a buttonhole, the stitches on each side of the buttonhole should be the same density.

Check

- Select the bartrack on the Buttonhole indication
- Attach the buttonhole foot (R).
- Sew a buttonhole.
- The stitches on each side of the buttonhole should be of the same stitch density.

Adjustment

- Remove the cap (E).
- If the left row is denser (A), turn the adjusting screw (G) in the direction (C).
- If the right row is denser (B), turn the adjusting screw (G) in the direction (D).
- Attach the cap (E).



Adjustment of the buttonhole length

Requirements

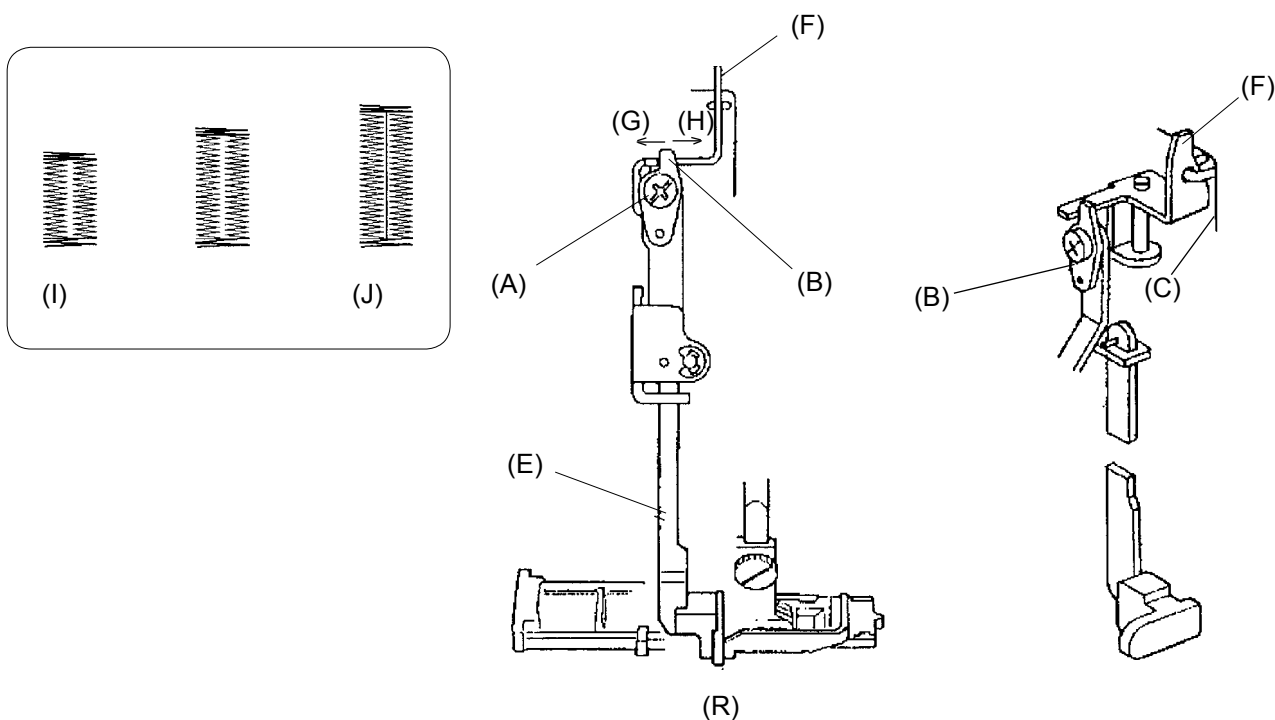
A buttonhole sewn with the buttonhole foot (R) must be 3mm longer than the actual button.

Check

- With a button in the measurement slot, attach the special buttonhole foot (One-Step-Buttonhole) to the machine.
- Place a piece of fabric under the buttonhole foot.
- Sew a buttonhole
- Check the buttonhole length in relation to the button size, making sure the buttonhole is 3.00 mm longer than the button diameter.

Adjustment

- Remove the face cover.
- Attach the buttonhole foot (R) and lower the feed dog by turning the hand wheel, then lower the buttonhole foot.
- Loosen the screw (A).
- Pull down the buttonhole lever (E) until it touches foot (R), and plate (F) touches the supporter (C).
- In this condition the buttonhole lever adjusting plate (B) should touch the plate (F).
- Tighten the screw (A).
- Raise the feed dog and sew a buttonhole. If the buttonhole is:
 - too short (I), move the buttonhole lever adjusting plate (B) to the direction of (H).
 - too long (J), move the buttonhole lever adjusting plate (B) to the direction of (G).



Adjustment of equal stitch length for the forward/reverse-controlled utility stitches - Stretch stitch balance (MODEL1142 and 1132)


Requirements

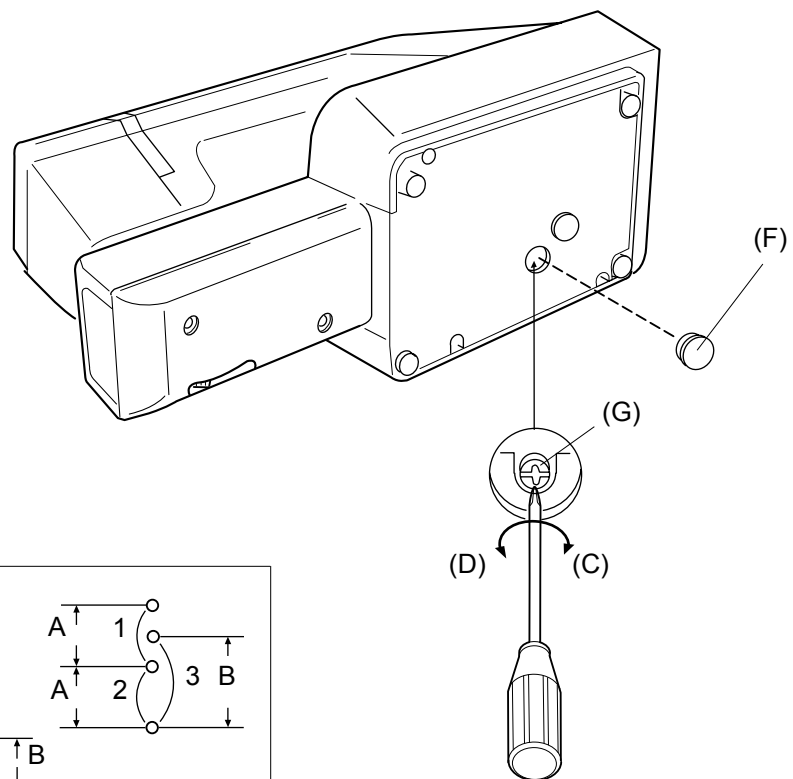
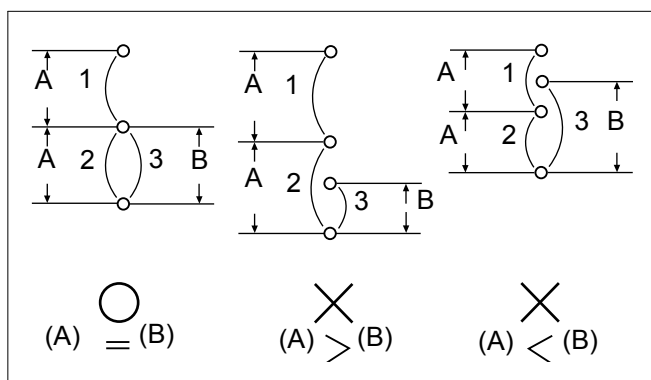
The forward feeding (A) and backward feeding (B) should be equal when sewing stretch stitch pattern.

Check

When a stretch stitch is sewn the forward feeding (A) and backward feeding (B) should be equal when sewing stretch stitch pattern.

Adjustment

- Select the triple lock straight stitch 
- Put a piece of paper under the presser foot, and turn the hand wheel to check the needle drop position in forward (A) and backward feeding (B).
- Remove the cap (F).
- If $(A) > (B)$, then turn the adjusting screw (G) in direction (C).
- If $(A) < (B)$, then turn the adjusting screw (G) in direction (D).
- Attach the cap (F).



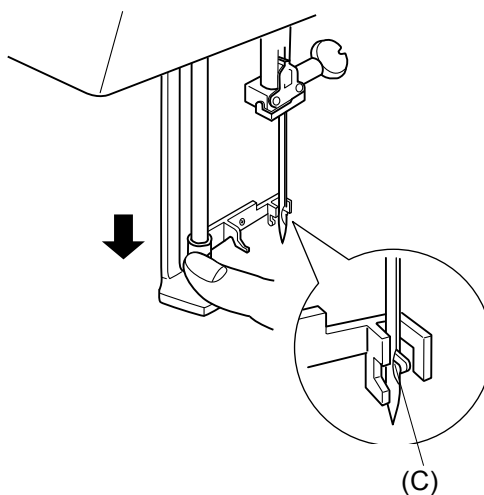
Replacing and Adjusting Threader (MODEL1142)

Replacing the needle threader

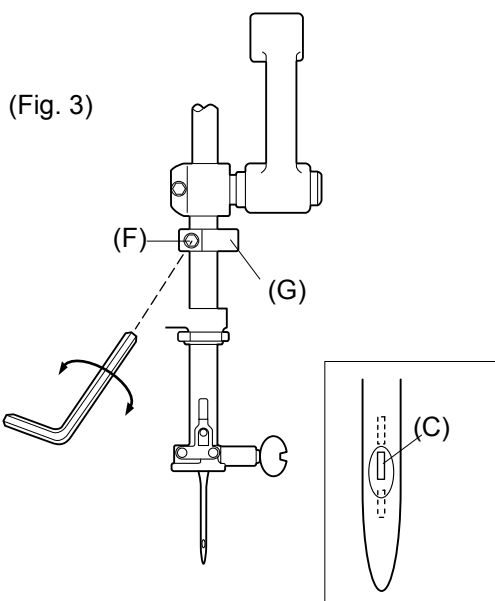
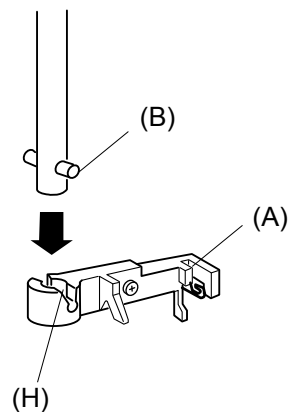
- Remove the face plate
- Pull the threader guard (A) away from the threader shaft.
- Align the groove (H) on the threader guide with the pin (B) on the threader shaft and push the threader guide up to snap it in place. (see Fig. 1).

Adjustment

- If the hook (C) hit against the side edge of the needle eye, loosen the setscrew (D) and adjust the lateral position of the threader palte (see Fig. 2).
- If the hook (C) hit against upper or lower edge of the needle eye, remove the face plate and loosen the setscrew (F) and move the positioning base (G) up or down so that the hook enters through the needle eye (see Fig. 3).



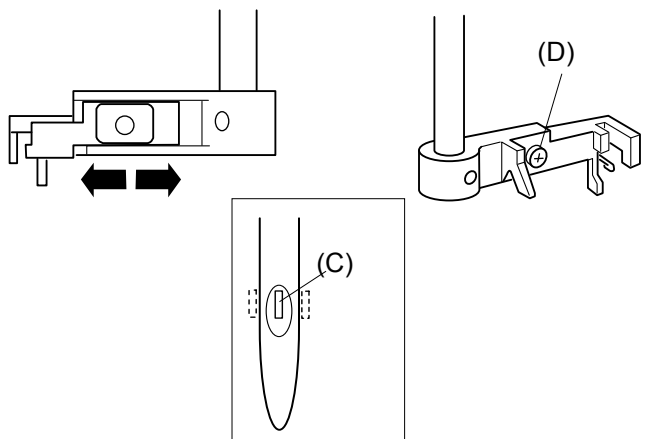
(Fig. 1)



(Fig. 3)

View X

(Fig. 2)



Replacing Motor and Adjusting Motor Belt Tension

Removing the motor

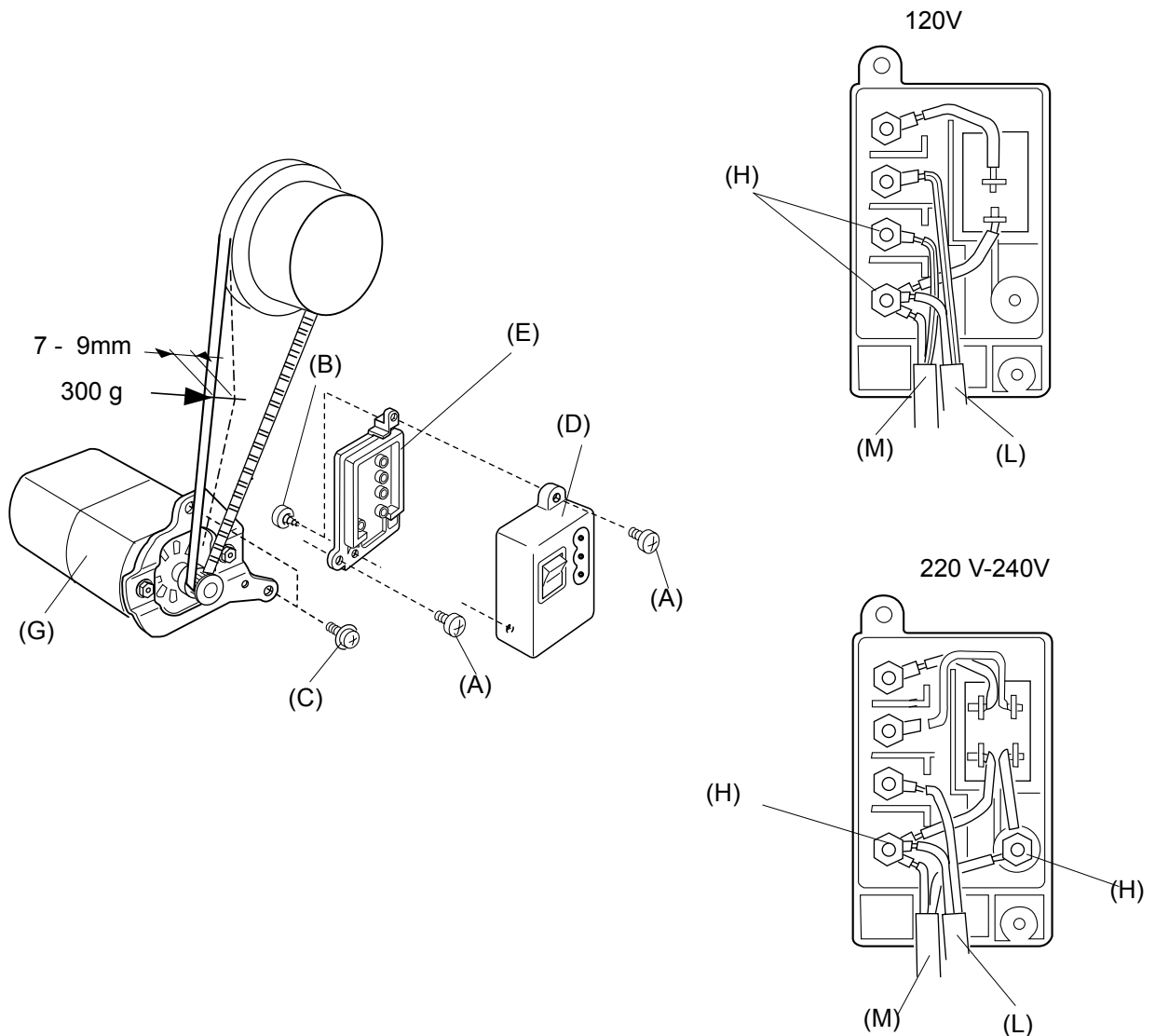
- Remove the face plate, base cover, front cover and rear cover.
- Remove the setscrews (A) and machine socket (D). Remove the setscrews (B) and machine socket lid (E).
- Remove the nuts (H) and disconnect the motor cord (M).
- Remove the setscrews (C) and motor (G).
- To attach the motor, follow the above procedure in reverse.

Adjustment

- Slightly loosen the setscrews (C).
- While pushing the middle of the motor belt with a 300 grams load, move the motor up or down so that the belt deflects 7 to 9 mm.
- Tighten the setscrews (C) securely.

M = Motor Cord

L = Lamp Cord



PFAFF

Technische Änderungen vorbehalten
Subject to alterations in design
Sous toute réserve de modifications
techniques
Salvo modificaciones técnicas
Con riserva di modifiche tecniche
Nr. 104 72 62-26 - englisch
© 2005 Feb - Copyright VSM-Group AB
All rights reserved.