

**SERVICE MANUAL  
HUSKYLOCK**

**Model**

**905**

**910**

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## DIRECTIONS FOR USE

These service instructions are intended to be used by service workshop personnel, or by salesmen who carry out servicing their own districts. They assume a thorough knowledge of the handling of precision appliances and accessibility to service tools.

The manual is divided into two sections and covers all service operations and checks which should be carried out when making a complete overhaul of a overlock machine.

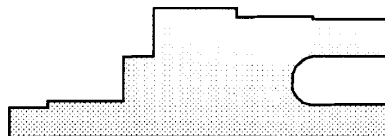
Before carry out any setting always make sure that the machine is not connected to mains.

## SPECIFICATION

|                     |                                         |
|---------------------|-----------------------------------------|
| Type of sewing      | 4-thread overlock sewing with 2 needles |
| Needles             | 130/705H # 75 - 90                      |
| Stitch length       | Maximum: 5,0 mm<br>Minimum: 0.8 mm      |
| Cutting width       | ~ 7.0 mm                                |
| Presser foot lifter | Lever type                              |
| Motor               | Built-in the body                       |
| Sewing speed        | ~1400 rpm                               |

## SERVICE TOOLS

1. Gauge  
Ref. No 415 53 69-01.



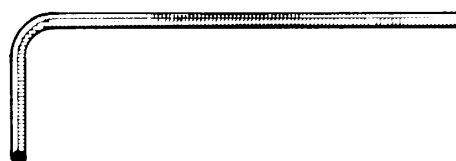
2. Distance gauge  
Ref. No 412 38 85-01



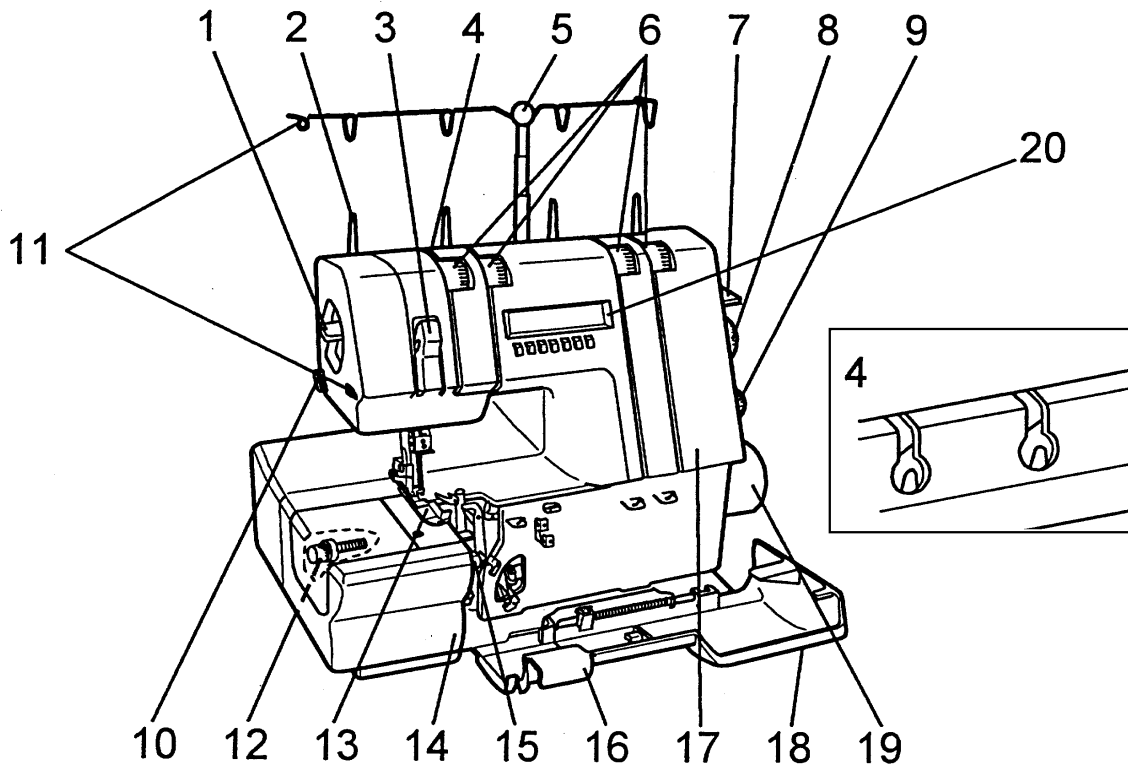
3. Adam key 2.5 mm  
Ref. No 411 86 01-01

4. Adam Key 2 mm  
Ref. No 411 86 00-01

5. Adam Key 1,5 mm  
Ref. No 411 66 89-01

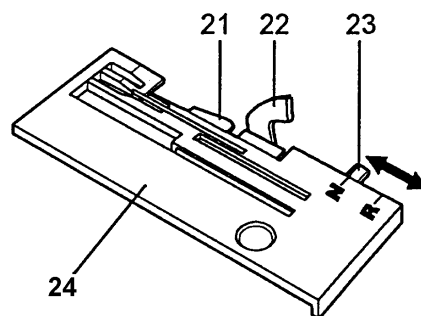


## MACHINE PARTS



### Model 905-910

1. Pressure adjustment lever
2. Spool pin
3. Thread take-up lever cover
4. Thread guide
5. Telescopic thread stand
6. Thread tension dials
7. Presser foot lift
8. Differential feed dial
9. Stitch length dial
10. Thread cutter
11. Thread holders for decorative thread /cording thread
12. Upper cutter knob
13. Presser foot
14. Sewing surface, flat bed cover
15. Cutting width / stitch width adjusting dial
16. Cutter cover
17. Front panel
18. Front cover
19. Handwheel
20. Liquid crystal display (LCD) -only 910



## GENERAL DISMOUNTING

To carry out all the recommended settings in this service manual the following parts should be dismantled first.

1. Remove support bed (1) and free arm (2).
2. Remove upper side cover (3) by loosen the screw (A) .
3. Remove lower side cover (4) by loosen the three screws (B) .
4. Loosen screws (D, E,F,G,H and I) then open front cover, and remove base plate (5) towards left side.
5. Remove presser foot lifter (9).
6. Loosen the two screws (C) and loosen the motor cover (6).
7. Remove rear cover (7) by loosen screw (J) .
8. Disconnect the contact CN6 from the circuit board and remove the motor cover (6).
9. Loosen the screw (K), remove the micro switch cover(8) and disconnect micro switch contact(L) from the front cover.

### Huskylock 905

10. Loosen screws (M,N) and remove front cover.

NOTE ! Set the needle in its lowest position.

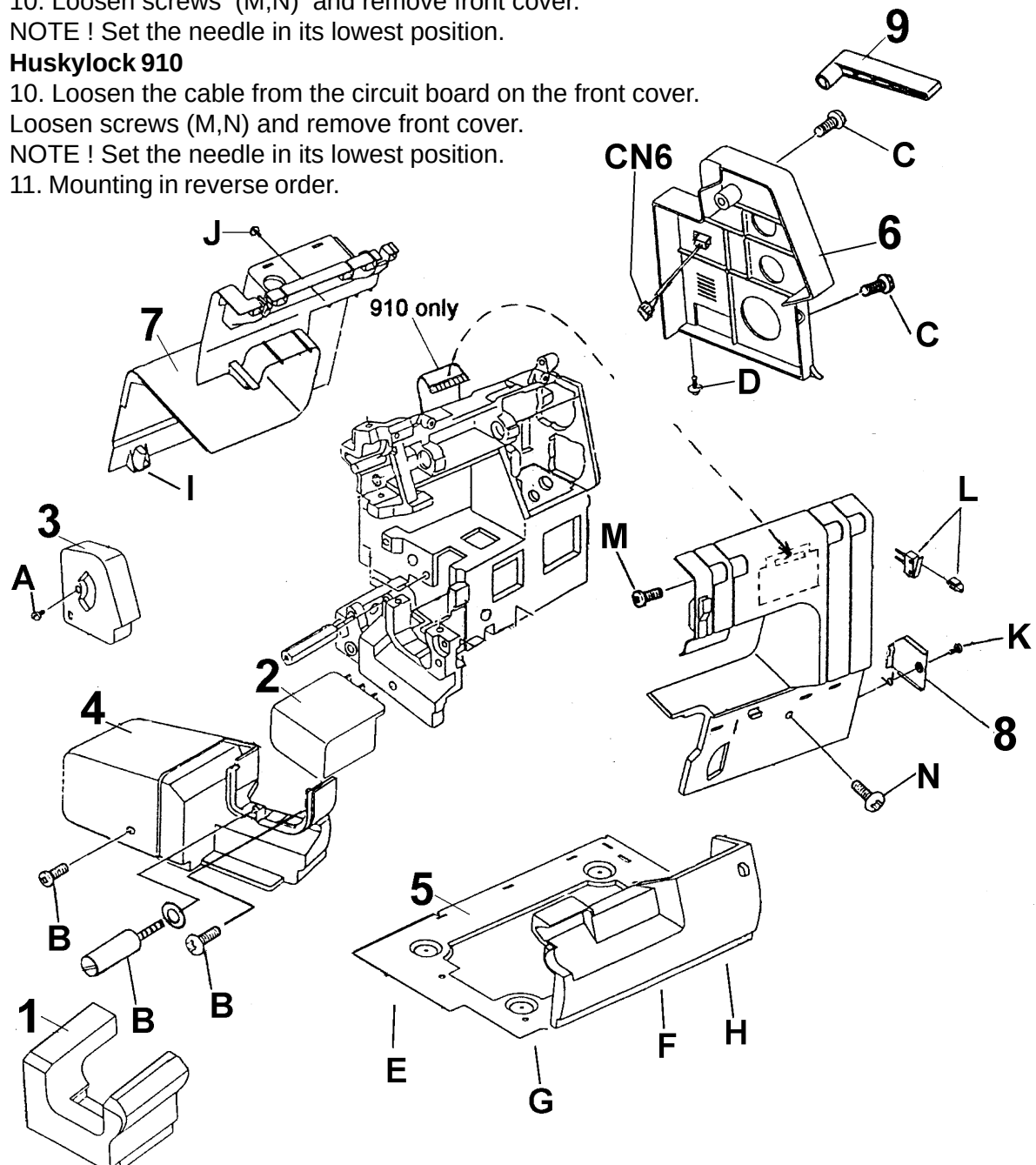
### Huskylock 910

10. Loosen the cable from the circuit board on the front cover.

Loosen screws (M,N) and remove front cover.

NOTE ! Set the needle in its lowest position.

11. Mounting in reverse order.



## 1. PRESSERFOOT HEIGHT

### Check

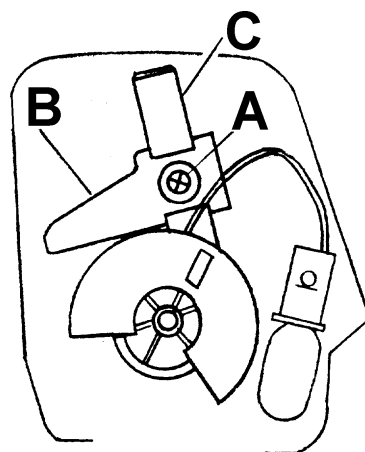
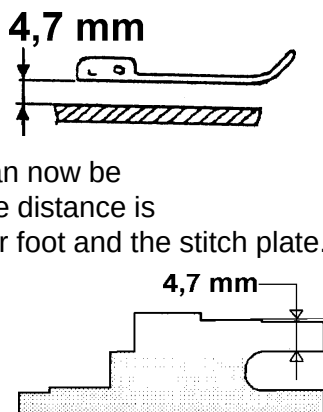
When the presser foot is in it's highest position the distance between the stitch plate and the presser foot should be 4,7 mm.

### Adjustment

1. Loosen the screw (A).

2. The presser bar height can now be adjusted up or down until the distance is 4,7 mm between the presser foot and the stitch plate.

3. Tighten the screw (A).



## 2. CLEARANCE BETWEEN LOWER LOOPER AND NEEDLES

### CHECK

When point of lower looper is behind the needle, the clearance between needle and lower looper should be 0 - 0.03 mm.

### ADJUSTMENT

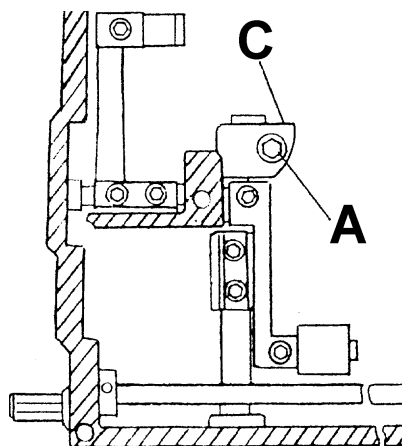
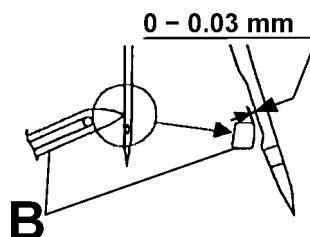
1. Then set point of lower looper behind centre line of the needle by turning the handwheel towards you.

2. Loosen screws (A) on the lower looper and adjust clearance between needle and point of looper by moving the lower looper until it is 0 - 0.03 mm.

3. Tighten screws.

B = Lower looper

C = Lower looper stand



**ATTENTION!** If needle bar is twisted, clearance between lower looper and needles may differ.

### 3. END POSITION OF LOWER LOOPER - SETTING OF THE LOWER LOOPER IN RELATION TO THE NEEDLE

#### CHECK

When lower looper is positioned at end of left side, the clearance between its needle hole and left side of left needle should be  $3.0 \pm 0.2$  mm.

#### ADJUSTMENT

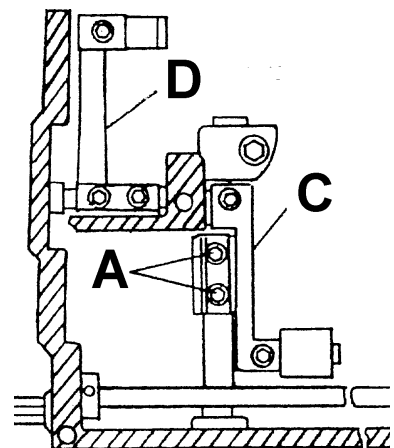
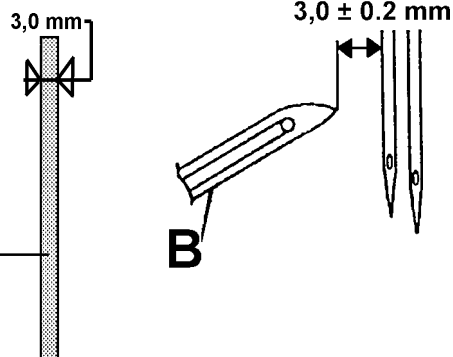
1. Move lower looper to its left end position by turning the handwheel towards you.

2. Loosen screws of the lever (A) of the lower looper. Adjust distance between left side of the needle and the needle hole of the lower looper to  $3.0 \pm 0.2$  mm.

3. Tighten screws.

B = Lower looper  
C = Cutter link (1)  
D = Cutter link (2)

Setting gauge  
415 53 69-01



### 4. NEEDLE HEIGHT - SETTING OF NEEDLE AND LOWER LOOPER

#### CHECK

When point of lower looper is 0,9 mm outside right side face of right needle should the centre of the needle hole of the left hand needle (A) be aligned with the centre of the needle hole of the lower looper.

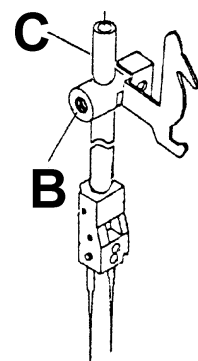
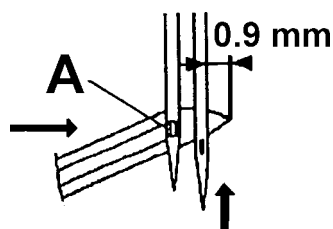
#### ADJUSTMENT

1. Move lower looper by turning the handwheel in such a way that its point comes into a position 0,9 mm on the right side face of right hand needle.

2. Loosen screw (B) holding the needle bar. Move needle bar until the centre of the needle hole of the left hand needle is aligned with the centre of the needle hole of the lower looper.

3. Tighten screw.

C = Needle bar



**ATTENTION!** If needle bar is twisted, clearance between lower looper and needles may differ.

## 5.SETTING OF UPPER LOOPER IN RELATION TO THE NEEDLE

### CHECK

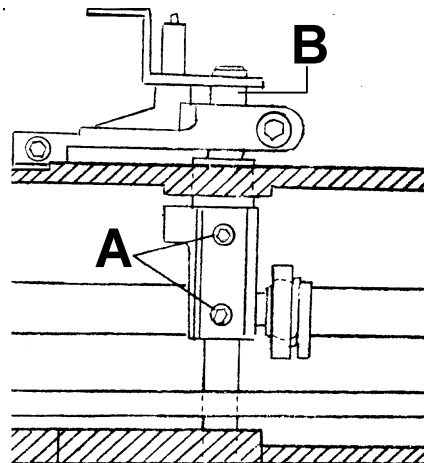
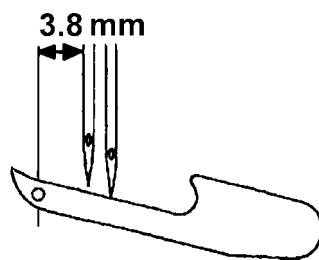
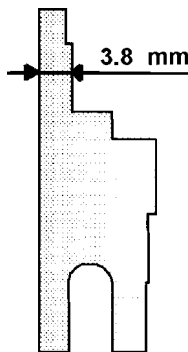
When upper looper is set at its highest position the clearance between the hole of the upper looper and the left side face of the left needle should be 3.8 mm.

### ADJUSTMENT

1.Move upper looper to its highest position by turning the handwheel towards you.

2.Loosen screw (A) of the link arm of the upper looper lever (B) and adjust the looper so that the clearance between the needle hole of the looper and the left side face of the left needle is 3.8 mm.

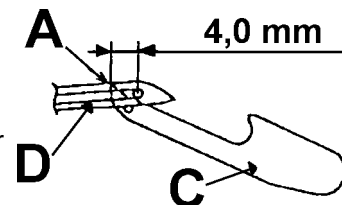
3.Tighten screws (A).



## 6. TIMING OF UPPER LOOPER AND LOWER LOOPER

### CHECK

When point of upper looper (A) is aligned with back of upper end of lower looper, the clearance between the point of the upper looper and the hole of the lower looper should be 4,0 mm.



### ADJUSTMENT

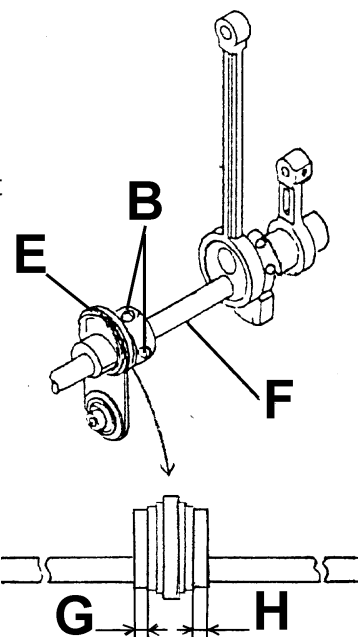
1.Align the point of the upper looper with back of upper end of the lower looper by turning the handwheel towards you.

2.Loosen the screws (B) on the driver cam (E) and adjust the position of the upper looper so that the clearance between the point of the upper looper and the surface of the lower looper is 4,0 mm.

3.Tighten screw (B).

N.B. That (G) is equal to the distance (H).

C= Upper looper  
D= Lower looper  
F= Lower shaft



## 7. CLEARANCE BETWEEN UPPER LOOPER AND LOWER LOOPER

### CHECK

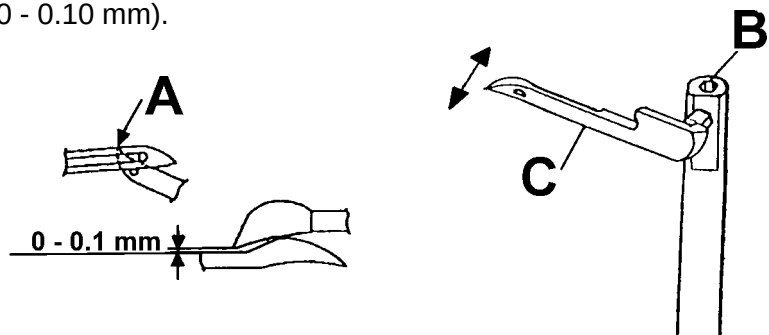
The clearance between upper looper and lower looper should be 0 - 0.10 mm. See ill.

### ADJUSTMENT

1. Align point of upper looper (A) with back of upper end of lower looper by turning the hand wheel towards you.
2. Loosen fixing screw (B) of the upper looper and adjust the clearance between upper looper and lower looper. (0 - 0.10 mm).

3. Tighten screw (B).

C = Upper looper



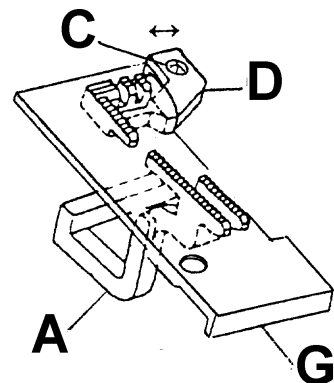
## 8. CLEARANCE BETWEEN FEED DOG AND STITCH PLATE - SIDEWAYS

### CHECK

The feed dogs shall not at any point touch the stitch plate.

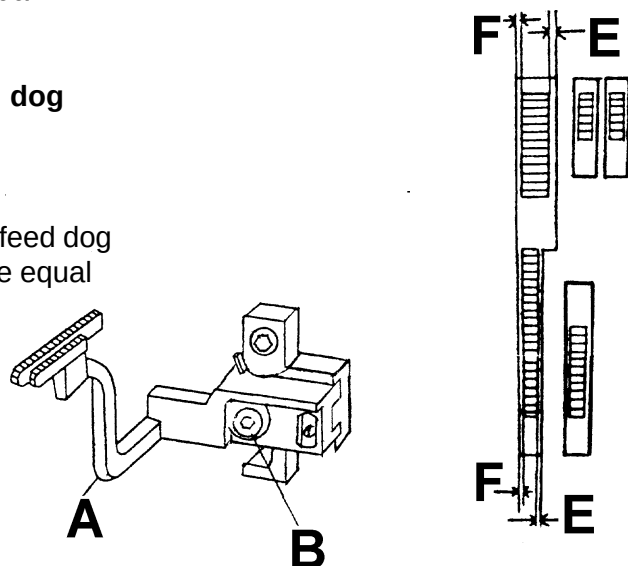
### ADJUSTMENT- Rear feed dog

1. Loosen screw (C).
2. Adjust the distance between the feed dog and the stitch plate so that (E) is be equal to the distance (F).



### ADJUSTMENT- Differential feed dog

1. Loosen screw (B).
2. Adjust the distance between the feed dog and the stitch plate so that (E) is be equal to the distance (F).



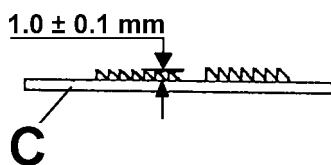
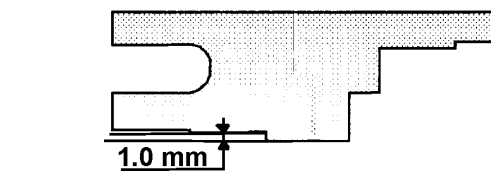
## 9. FEED DOG HEIGHT

### CHECK - Rear feed dog

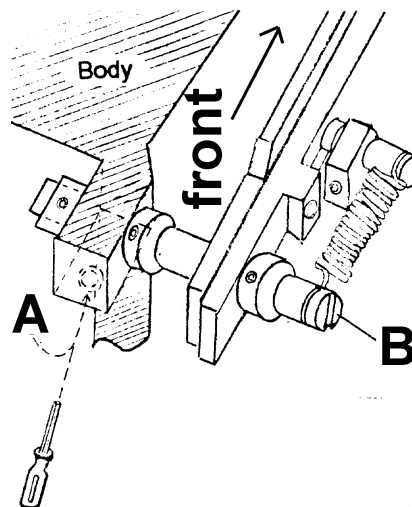
Height of rear feed dog above the stitch plate should be  $1 \pm 0.1$  mm.

### ADJUSTMENT - Rear feed dog

1. Move feed dog to its highest position by turning the handwheel towards you.
2. Loosen screw (A) and turn screw (B) so that the rear feed dog is  $1 \pm 0.1$  mm above the stitch plate.
3. Tighten screw (A).



C = Stitch plate

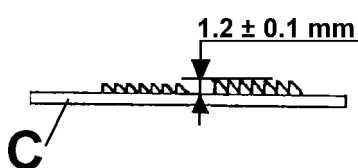
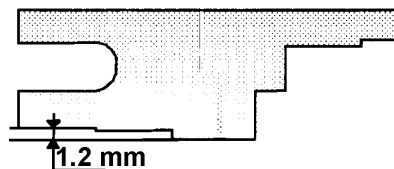


### CHECK - Front feed dog

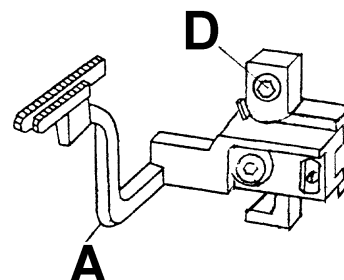
Height of front feed dog above the stitch plate should be  $1.2 \pm 0.1$  mm.

### ADJUSTMENT - Front feed dog

1. Move feed dog to its highest position by turning the handwheel towards you.
2. Loosen screw (D) and adjust so that the front feed dog (A) is  $1.2 \pm 0.1$  mm above the stitch plate (C).
3. Tighten screw (D).



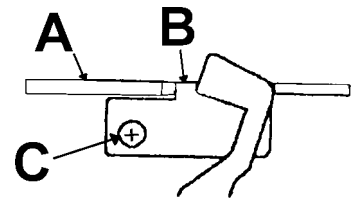
C = Stitch plate



## 10. POSITIONS OF LOWER KNIFES

### CHECK - LOWER KNIFE

1. The lower knife cutting edge (B) should be aligned with the surface of the stitch plate (A).



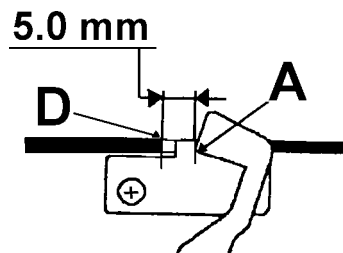
### ADJUSTMENT

Loosen screw (C). Adjust so the lower knife cutting edge is aligned with the surface of the stitch plate.

## 10. POSITIONS OF UPPER KNIFES

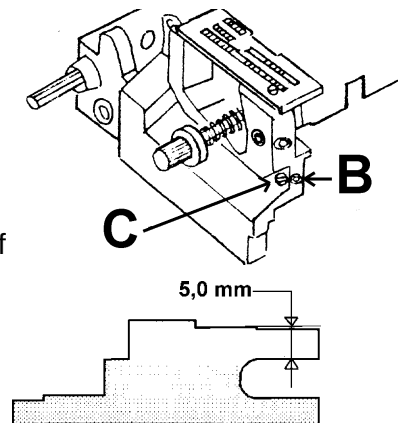
### CHECK - 1. UPPER KNIFE

When upper knife is in its lowest position, its cutting edge (A) should be positioned 5.0 mm from the stitch plates knife opening (D).



### ADJUSTMENT

1. By turning handwheel towards you, move upper knife to its lowest position.
2. Loosen lower knife fixing screw (B). Adjust by turning the eccentric screw (C) until the distance between the stitch plates knife opening (D) and the cutting edge of the upper knife (A) is 5.0 mm
3. Tighten screw (B).

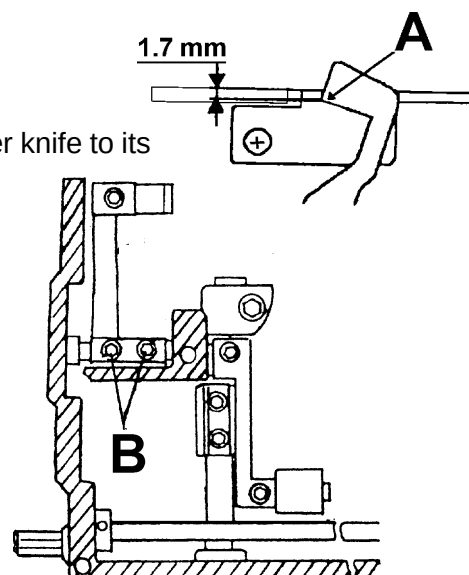


### CHECK - 2. UPPER KNIFE

When upper knife is in its lowest position, its cutting edge (A) should be positioned 1.7 mm lower than the cutting edge of the lower knife.

### ADJUSTMENT

1. By turning handwheel towards you, move upper knife to its lowest position.
2. Loosen upper knife fixing screws (B).
3. Adjust position of upper knife downwards 1.7 mm from the cutting edge of the lower knife.
4. Tighten the screws (B).



## 11. CLEARANCE BETWEEN NEEDLES SUPPORT AND NEEDLE

### CHECK

When needle is in its lower turning position the needle shall not at any point touch the front needle support (D) or the rear needle support (E) .

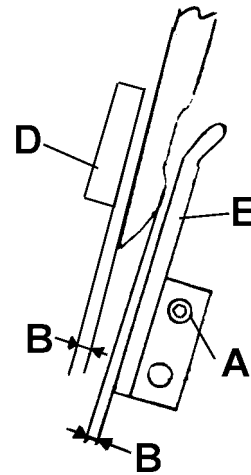
Valid for Schmetz #90.

### ADJUSTMENT

1. Loosen screw (A) of the needle support
2. Adjust the needle support until the clearance to the needle (B) is inbetween 0.0 - 0.10 mm.
3. Tighten screw (A).

D = Front needle support

E = Rear needle support



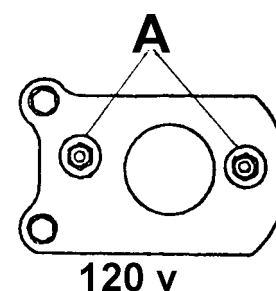
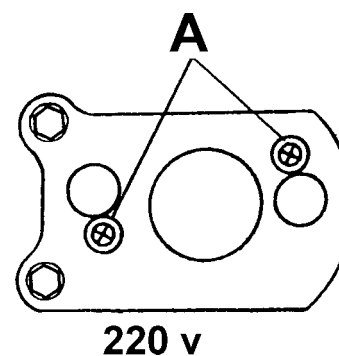
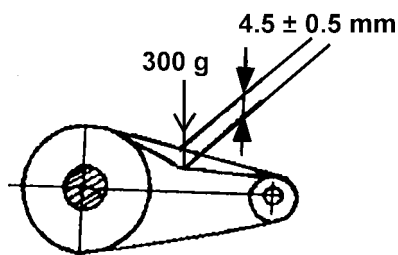
## 12. BELT TENSION

### CHECK

It should be possible to push down the belt  $4 \pm 0.5$  mm when applying a pressure of 300 g .

### ADJUSTMENT

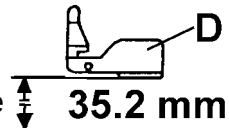
1. Loosen both screws (A) holding the motor.
2. Adjust belt tension by moving the motor back or forth
3. Tighten the screws.

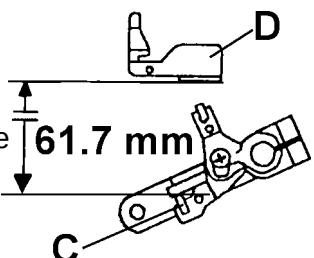


### 13. SETTING BETWEEN THREAD TAKE-UP AND UPPER / LOWER THREAD GUIDE

#### CHECK

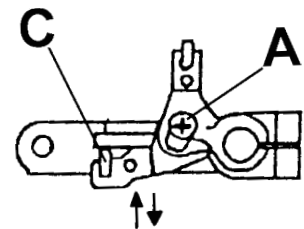
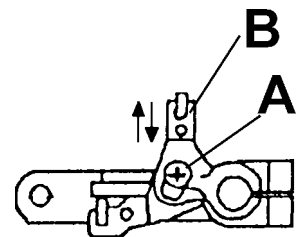
When the upper looper is in its lowest position the distance between the upper looper thread guide (D) and...

the upper looper thread take-up (B) should be  **35.2 mm**

the lower looper thread take-up (C) should be  **61.7 mm**

#### ADJUSTMENT

1. Move the upper looper to its lowest position by turning the handwheel towards you.
2. Loosen the screw (A).
3. Adjust the distance between the thread guide (D) and the upper looper thread take-up (B) so it's 35.2 mm.
4. Adjust the distance between the thread guide (D) and the lower looper thread take-up (C) so it's 61.7 mm.
5. Tighten the screw (A).



NOTE ! Both upper and lower thread take-up is adjusted at the same time.

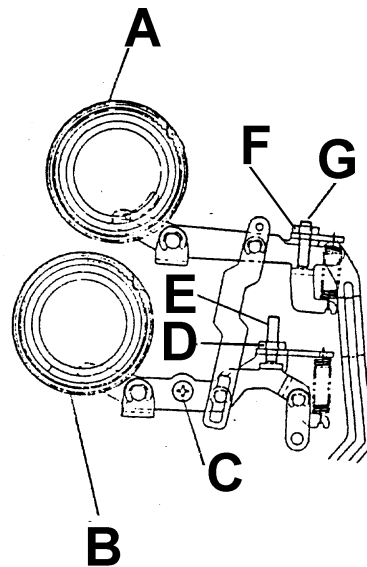
## 14. STITCH LENGTH

### CHECK

When stitch length dial (B) is set on "N" the stitch length should be  $2,5 \pm 0,3$  mm.

### ADJUSTMENT

1. Stitch length dial on "N".
2. Loosen the screw (C).
3. Loosen the nut (D).
4. Adjust the stitch length by turning the screw (E) so it will be  $2,5 \pm 0,3$  mm.
5. Tighten the nut (D) and the screw (C).
5. Check.



## 15. DIFFERENTIAL FEEDING

### CHECK

When differential feeding dial (A) is set on "N" the feeding shall not be more than  $0 \pm 0.2$  mm.

### ADJUSTMENT

1. Loosen the nut (F).
2. Adjust with screw (G) until the differential feeding is  $0 \pm 0.2$  mm.
3. Tighten the nut (F).
4. Check.

## 16. THREAD TENSION

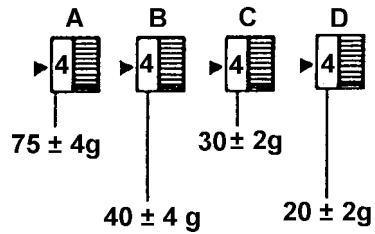
### CHECK

Check thread tension according to manual.

Thread : Cotton # 60/3

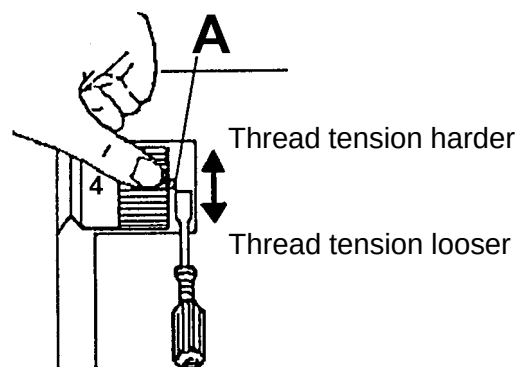
Power of thread tension

|   |             |
|---|-------------|
| A | $75 \pm 4g$ |
| B | $40 \pm 4g$ |
| C | $30 \pm 2g$ |
| D | $20 \pm 2g$ |



### ADJUSTMENT

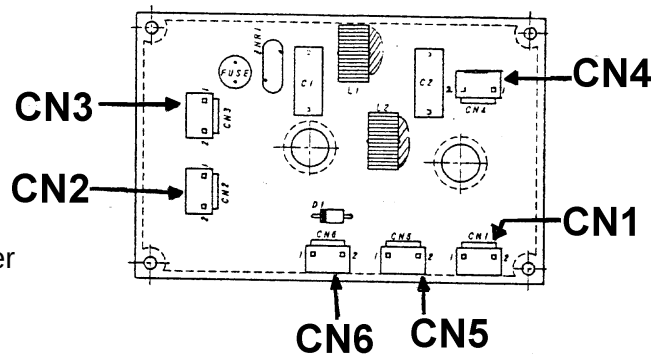
1. Set thread tension dial at normal position "4".
2. The basic setting may be adjusted by blocking the plate sheet at the edge of the thread tension dial by means of a small screw driver while moving the thread tension dial.



## 17. CIRCUIT BOARD / CIRCUIT DIAGRAM - 905

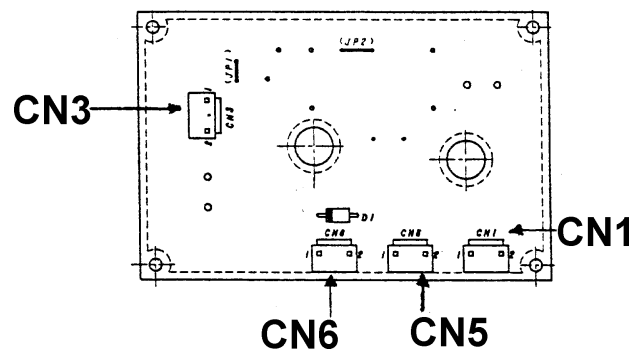
### CIRCUIT BOARD - 220 V

- CN1: Motor
- CN2: AC power IN
- CN3: Foot controller power IN
- CN4: Lamp
- CN5: Security switch / front cover
- CN6: Speed



### CIRCUIT BOARD - 120 V

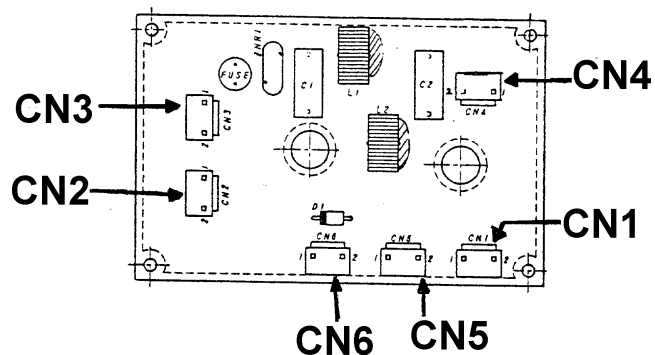
- CN1: Motor
- CN3: Foot controller power IN
- CN5: Security switch / front cover
- CN6: Speed



## 17. CIRCUIT BOARD / CIRCUIT DIAGRAM - 910

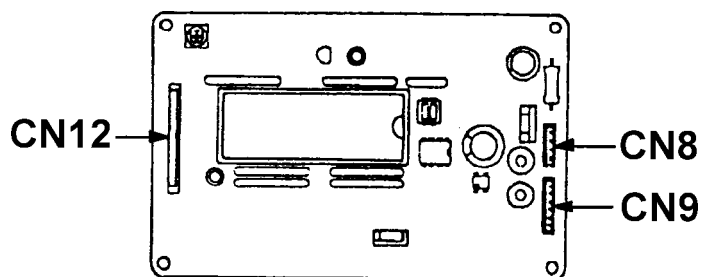
### CIRCUIT BOARD - 220V AND 120 V

- CN1: Motor
- CN2: AC power IN
- CN3: Foot controller IN
- CN4: Transformer power OUT
- CN5: Security switch / front cover
- CN6: Speed



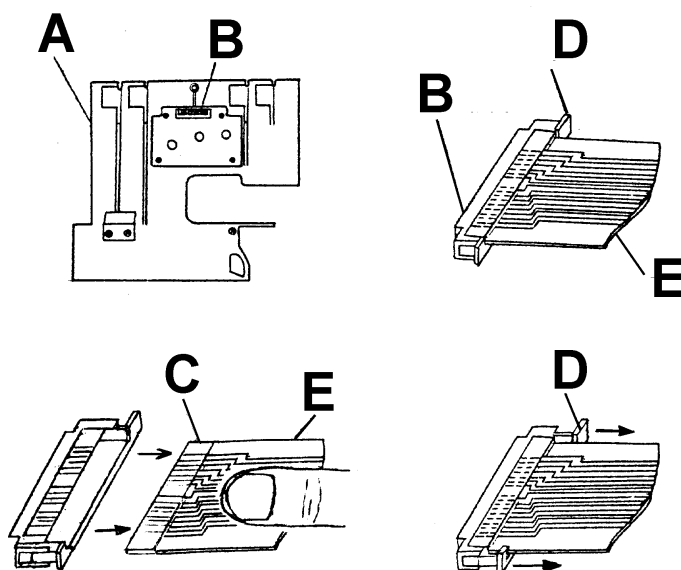
### LCD - BOARD

- CN8: Lamp
- CN9: Transformer power IN
- CN12: LCD unit



### DISCONNECT PROCESS - 910

- A : Front cover
- B : LCD unit
- C : Lead side
- D : Foil cable stopper
- E : Foil cable



# Fault finding diagram

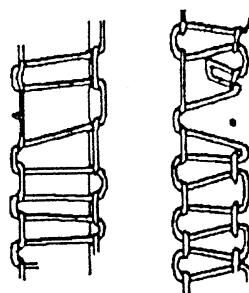
## 1. Skipped stitches - Lower looper can't catch the needle thread

### Make sure that...

- the needle is a SCHMETZ 130/705 H.
- the needle is set correctly.
- the needle is not bent.

### Check or adjust the following settings

- A. 2. Clearance between lower looper and needles
- B. 11. Clearance between needle supports and needle.
- C. 3. Setting of the lower looper in relation to the needle.
- D. 4. Needle height - setting between needle and lower looper.
- E. The point of the lower looper has been broken - change looper



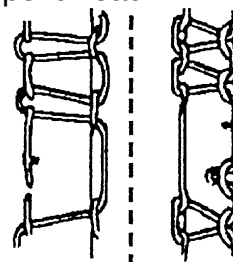
## 2. Skipped stitches - the needle can't catch upper looper thread

### Make sure that...

- the needle is set correctly.
- the needle is not bent.

### Check or adjust the following settings

- A. 5. Setting between upper looper in relation to the needle.
- B. 4. Needle height - setting between needle and lower looper.
- C. 6. Timing of upper looper and lower looper.
- D. 7. Clearance between upper looper and lower looper.



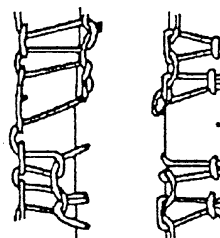
## 3. Skipped stitches - Lower looper can't catch upper looper thread

### Make sure that...

- the threading is correctly

### Check or adjust the following settings

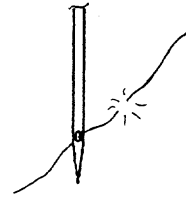
- A. 6. Timing of upper looper and lower looper
- B. 7. Clearance between upper looper and lower looper.
- C. The point of the lower looper has been broken - change looper



#### 4. Needle thread breaks

##### Make sure that...

- the thread is an overlocker thread
- the threading is correctly
- the thread guide isn't damaged - change thread guide



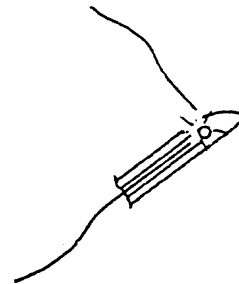
##### Check or adjust the following settings

- A. 2. Clearance between lower looper and needles
- B. 3. Setting of the lower looper in relation to the needle
- C. 4. Needle height
- D. 11. Clearance between needle supports and needle.

#### 5. Looper thread breaks

##### Make sure that...

- the threading is correctly
- the thread guide isn't damaged - change thread guide



##### Check or adjust the following settings

- A. 13. Setting between thread take up and upperlooper thread guide
- B. 13. Setting between thread take up and lower looper thread guide
- C. 6. Timing of upper looper and lower looper.
- D. 7. Clearance between upper looper and lower looper.

#### 6. Needle breaks

##### Make sure that...

- the thread is an overlocker thread.
- the needle is set correctly.
- the thread is inside of the thread guide.
- the needle is not bent.



##### Check or adjust the following settings

- A. 2. Clearance between lower looper and needles.
- B. 11. Clearance between needle support and needle.
- C. 4. Needle height
- D. 6. Timing of upper looper and lower looper.
- E. 7. Clearance between upper looper and lower looper.

## 7. Feeding is not correctly

### Make sure that...

- the stitch length is set correctly.
- the pressure foot pressure is set correctly
- the differential feeding is set correctly

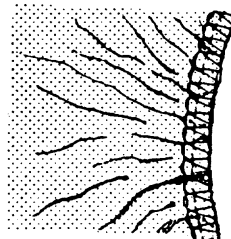
### Check or adjust the following settings

- A. 9. Feed dog height
- B. Stitch plate isn't damaged.
- C. Presser foot isn't damaged.
- D. 10. Position of upper / lower knife

## 8. Fabric is shrinking

### Make sure that...

- the differential feeding is set correctly
- the thread tension is set correctly.
- the threading is correctly.



### Check or adjust the following settings

- A. 16. Thread tension
- B. 15. Differential feeding
- C. 13. Setting between thread take up and lower looper.
- D. 13. Setting between thread take up and upper looper.

## 9. Thread tension

### Make sure that...

- the thread tension is set correctly.

### Check or adjust the following settings

- A. 16. Thread tension
- B. 13. Setting between thread take up and upper looper thread guide
- C. 13. Setting between thread take up and lower looper thread guide

## **10. Motor is not running**

### Make sure that...

the front cover closes correctly.  
the power cord is correctly connected.

### Check or adjust the following settings

- A. 12. Belt tension - motor belt.

## **11. Cutting of the knives**

### Make sure that...

the upper knife is set correctly.  
the upper knife is set tightly.

### Check or adjust the following settings

- A. 10. Position of upper / lower knife
- B. The upper knife isn't damaged - change knife
- C. The lower knife isn't damaged - change knife

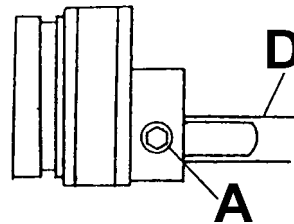
## ?.TIMING OF LOWER LOOPER AND NEEDLE

### CHECK

When lower looper is aligned with left side face of left hand needle, the needle should have travelled 2.9 mm upwards from its lowest position.

### ADJUSTMENT

1. Move needle to its lowest position.
2. Put setting gauge on needle bar with distance washer between tool and body.
3. Remove distance washer and move needle upwards by means of handwheel until setting tool touches body.
4. Loosen screw (a) in cam of lower looper. Align point of lower looper with left side face of left hand needle.
5. Tighten screw.



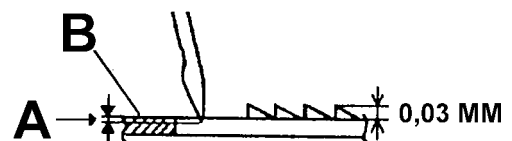
## ?.FEED TIMING

### CHECK

When the needle is moving upwards and the needle point is aligned with the underside of the needle plate (max. 2 mm under), the feed dog should be aligned with surface of the needle plate.

### ADJUSTMENT

1. Turn handwheel towards you so that the needle point is aligned with the underside of the needle plate.
2. Loosen feed dog cam screw (a) and adjust feed dog so that it is aligned with surface of the needle plate.
3. Tighten screw.



## **? . CLEARANCE BETWEEN FRONT NEEDLE SUPPORT AND NEEDLE**

### **CHECK**

Clearance between front needle support and needle shall be  $0.15 \pm 0.15$ . Valid for Schmetz # 90.

### **ADJUSTMENT**

1. Loosen both needle support screws (a) and move needle support until its clearance is  $0.15 \pm 0.15$  mm.
2. Tighten screws.