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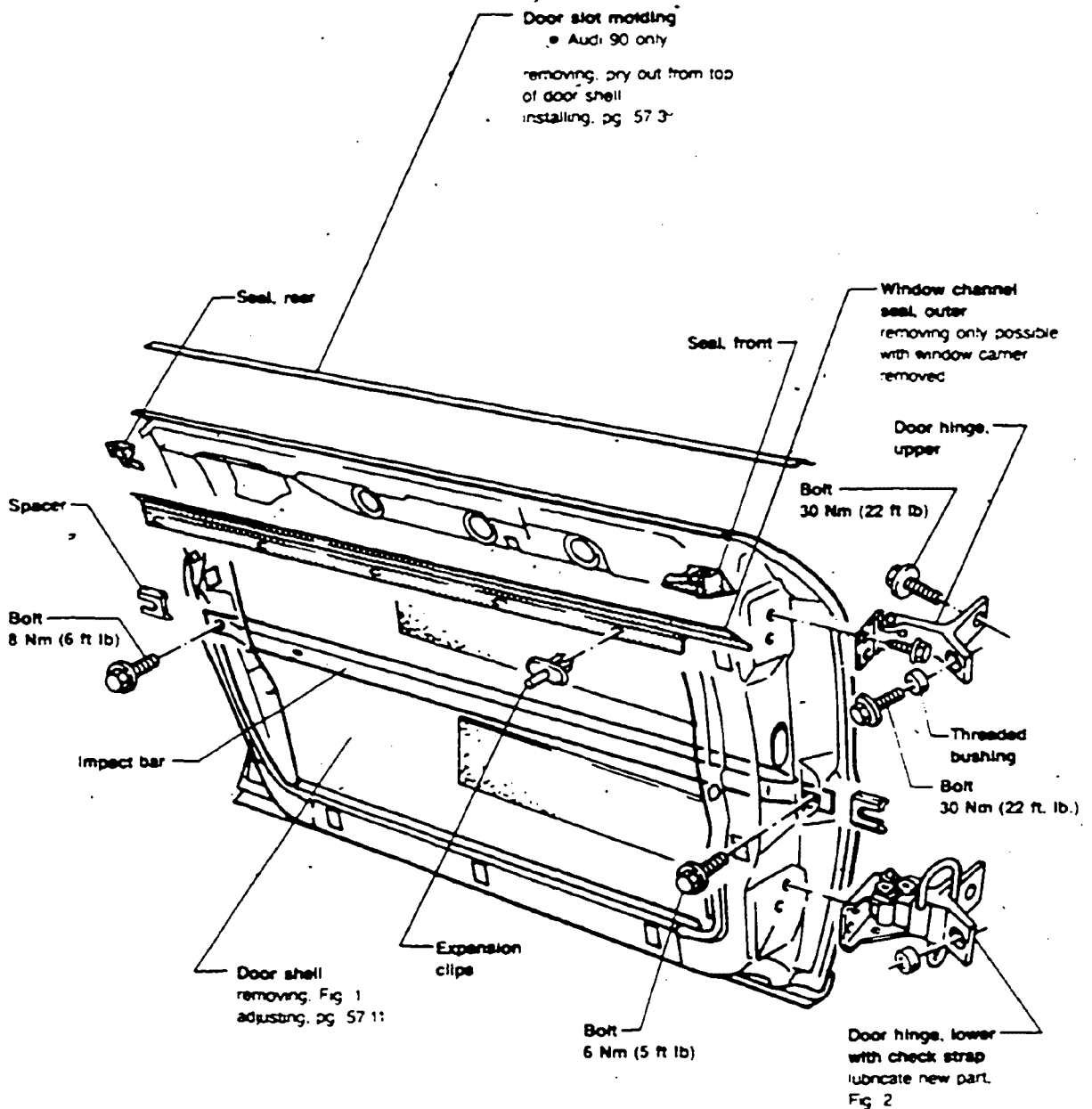
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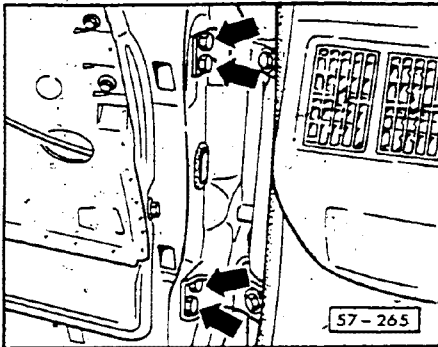
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★ **NEW INFORMATION** since last filming



57.323



► Fig. 1 Front door, removing/installing

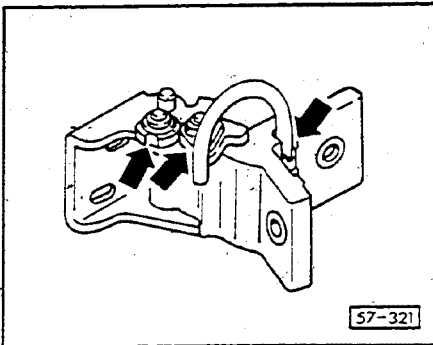
Removing

- remove hex head bolts (arrows)

Installing

Install in reverse order, note the following:

- install hex head bolts, see page 57.15



► Fig. 2 Lower door hinge, lubrication

- apply lubricant AOS 126 000 05 or equivalent to points shown

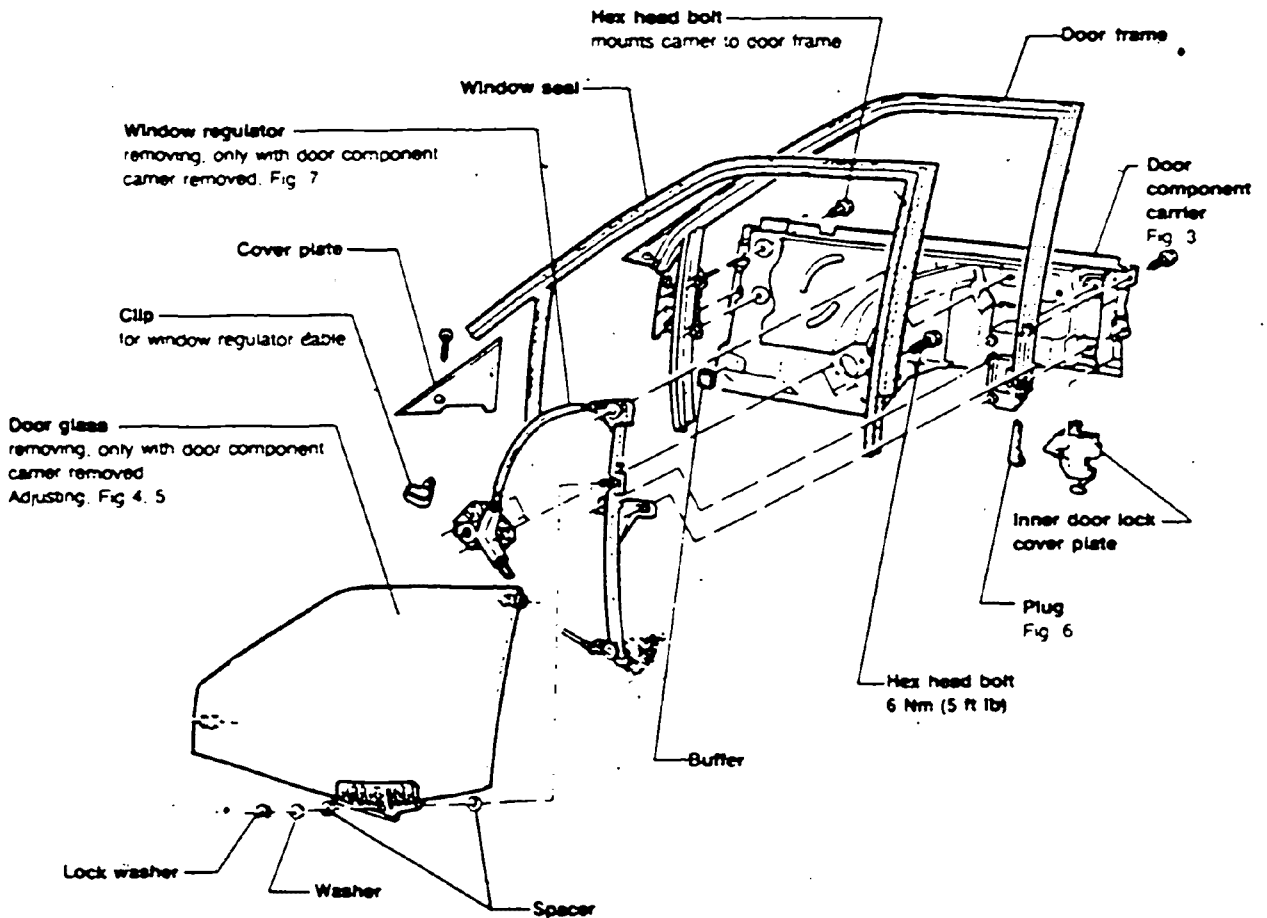
Door slot molding, removing/installing

Removing

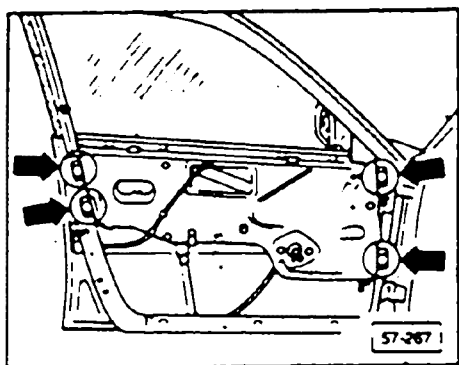
- pry out from top of door shell

Installing

- clean molding channel with 3M® General Purpose Adhesive Cleaner or equivalent
- place 3.0 mm (1/8 in.) bead of AKD 476 KD 505 into molding channel
- position molding onto door shell
- press molding into place



57-255



► Fig. 3 Carrier for door components, removing/installing

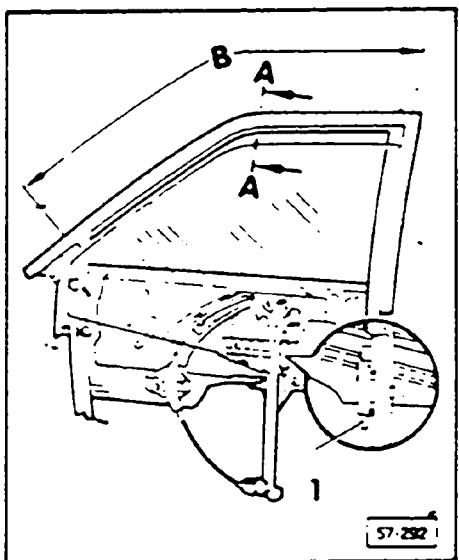
Removing

- remove front door trim panel (see Repair Group 70)
- remove Bowden cable from inner door opening mechanism

Installing

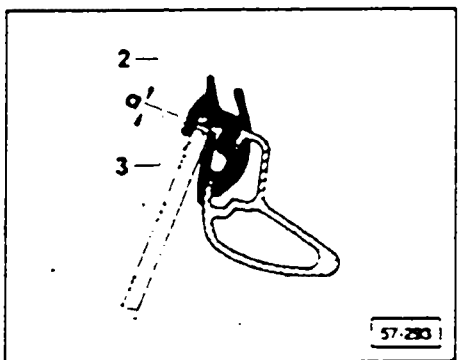
Install in reverse order, note the following:

- check door shell adjustment, adjusting page 57.15
- adjust door component carrier support, page 57.15
- torque hex head screws (arrows) 20-Nm (15 ft lb)



► Fig. 4 Adjusting window in carrier

- section A-A
- adjust window stop from window lifter 1
- contact area B of window to inner window weatherstrip

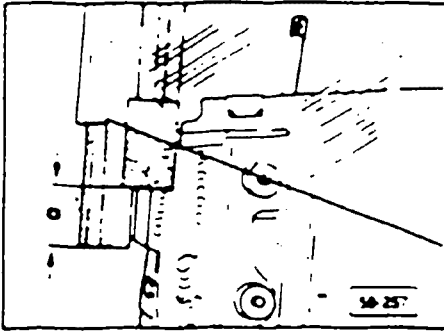


► Fig. 5 Adjusting window glass

- adjust window glass with door closed
- adjust upper stop of window regulator so inner sealing lip 2 in area B (see Fig. 4) contacts upper edge of window
a = 0.5 mm (1/32 in.)

Note

A minimum pre-load of 0.5 mm (1/32 in.) when sealing lip 2 contacts window will eliminate leaks.

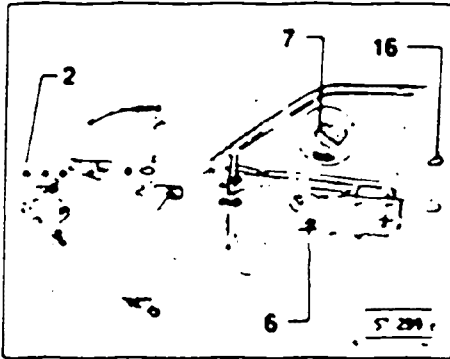


► Fig. 6 Plugs

- insert into window guide from below
 - $a = 65 \text{ mm (2.6 in)}$
 - measured from end of window channel

Note

The plug is used as a seal and an anti-noise measure



► Fig. 7 Window regulator, removing/installing

Removing

- remove camber for door components Fig. 3
- remove lock washer 2
- remove mounting washer, buffer
- pull out window from window lifter bolt
- bend clip 7 in direction of arrow and press Bowden cable out of clip
- unscrew hex head nuts 6
- unscrew hex head bolts 16

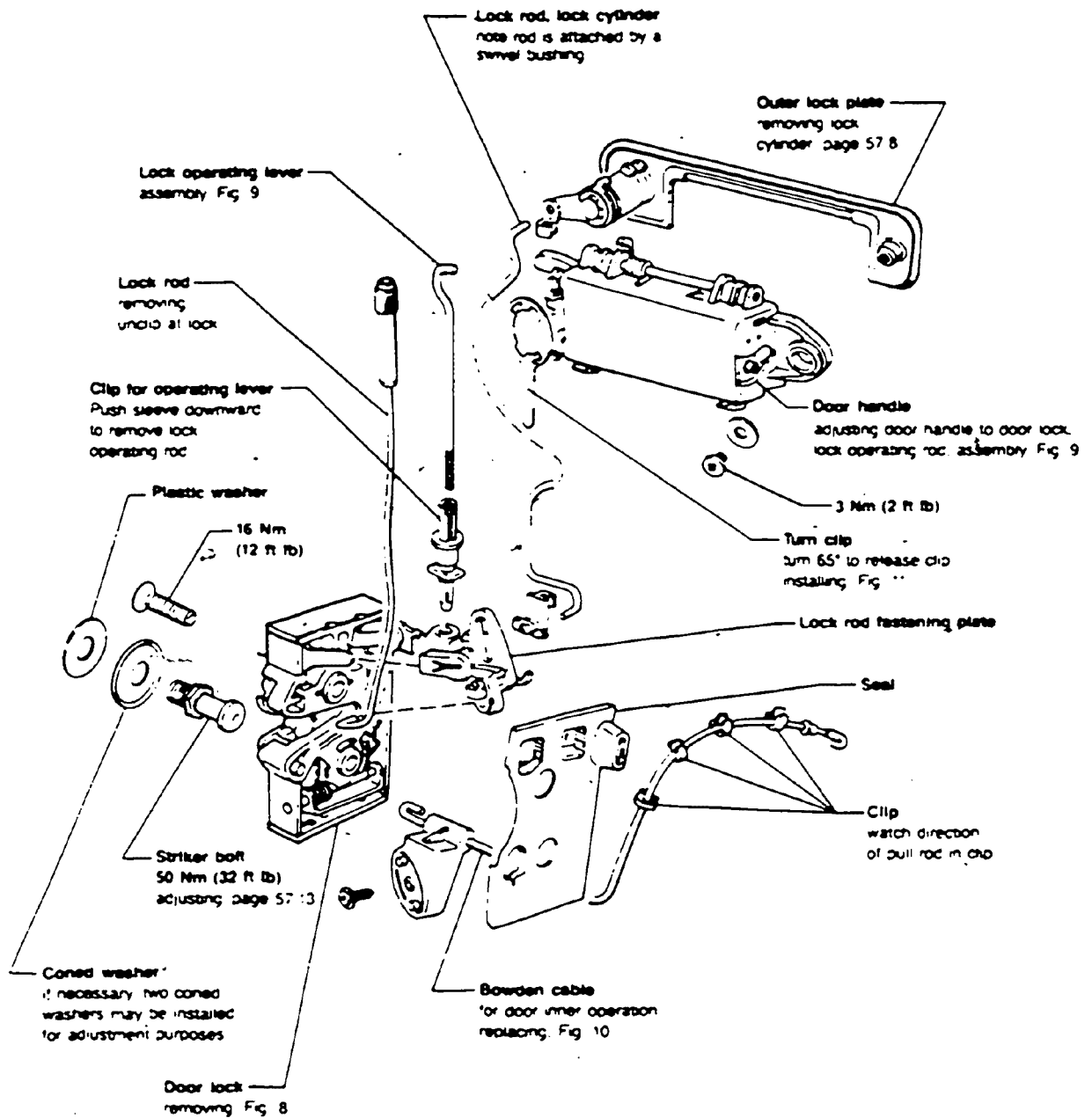
Installing

Install in reverse order, note the following

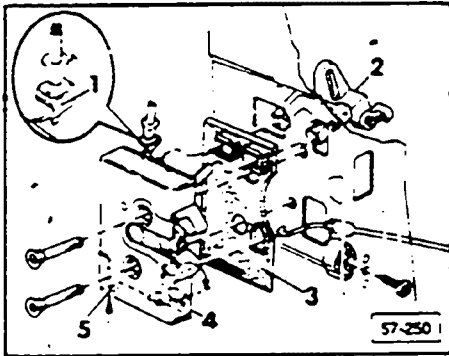
- install hex head bolts
 - 6 Nm (5 ft lb)
- place buffers between window and camber
- check and adjust window if necessary, Fig. 4, 5

THIS FRAME INTENTIONALLY LEFT

BLANK



57.324



► Fig. 8 Door lock, removing/installing

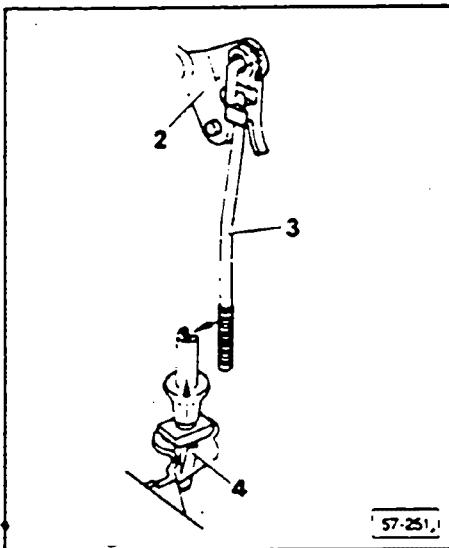
Removing

- remove front door trim (see Repair Group 70)
- release operating rod clip and pull out operating rod
- unhook bowden cable
- pull out door lock from part 2
- remove seal 3

Installing

Install in reverse order. Note the following:
To re-hook bowden cable, pull lever 4 in direction of **arrow**. Insert screwdriver into hole 5 to lock cable into place.

- torque all bolts to 16 Nm (12 ft lb)



► Fig. 9 Lock operating rod, removing/installing

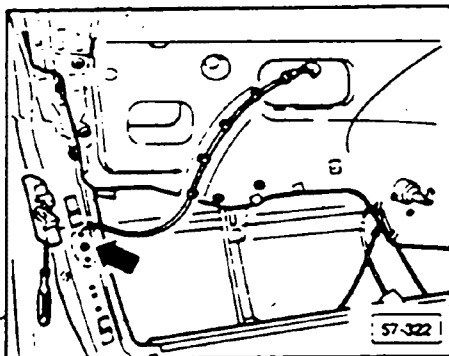
Removing

- place bushing into operating rod 2
- put operating rod 3 into lever
- insert mounting clip 4 into door lock release lever
- check operating rod free play in clip 4, without putting undue strain on the door lock release lever
 - 1.0 mm (3/64 in.) maximum free play

Installing

Install in reverse order.

- to adjust move sleeve upwards on operating clip 4



► Fig. 10 Replacing inner door lock bowden cable

Removing

- remove door trim (see Repair Group 70)
- unclip bowden cable
- pull bowden cable and lock door lock with screwdriver, Fig. 8
- unhook bowden cable (arrow)

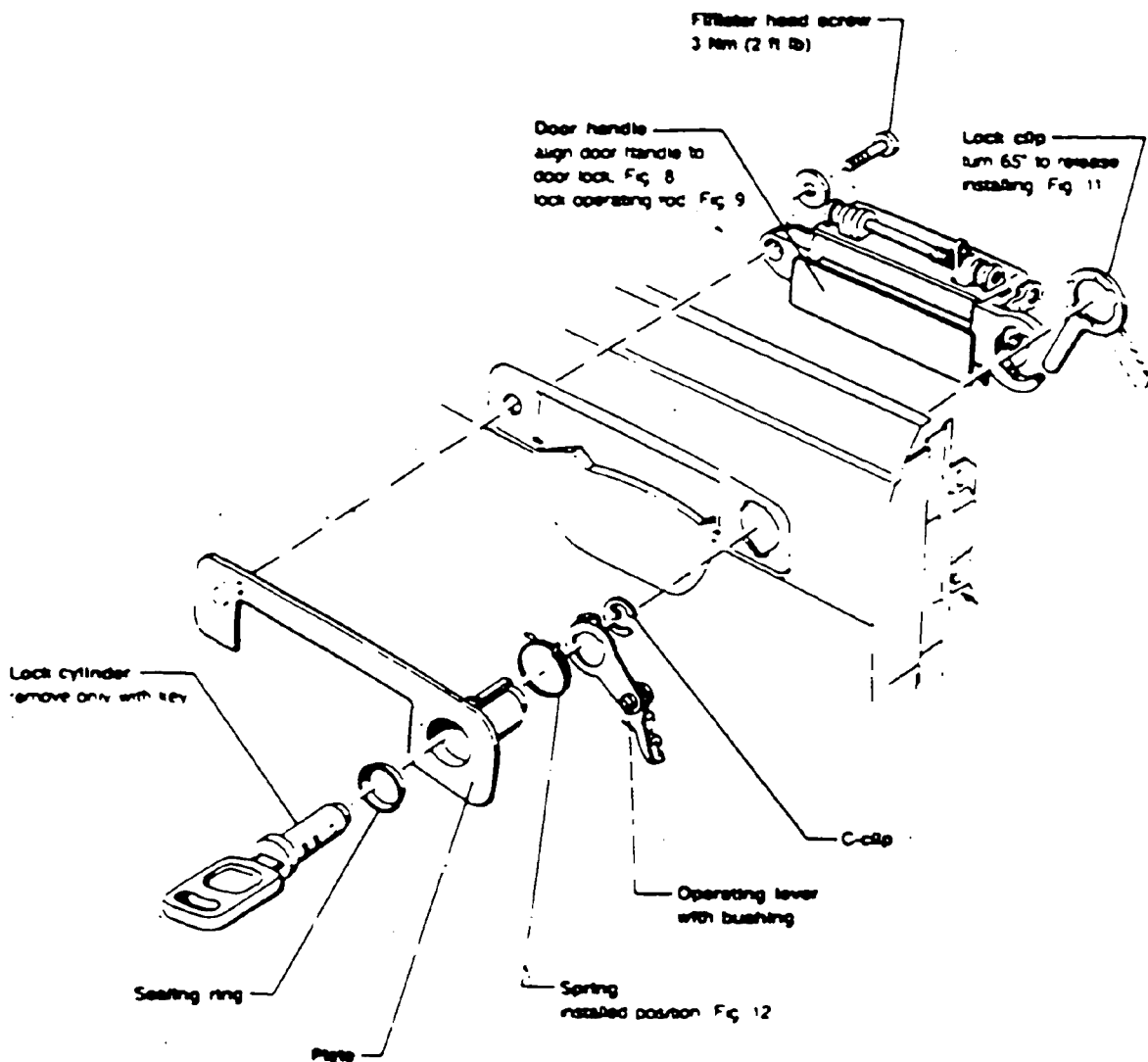
Installing

Install in reverse order.

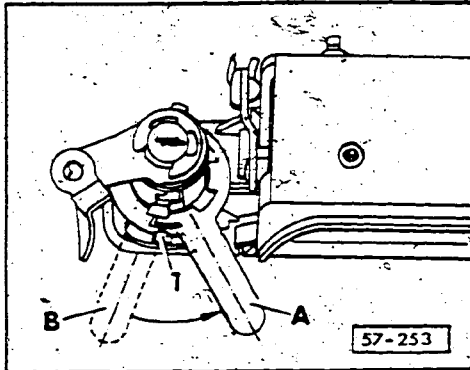
- note how bowden cable is place

Note

- door component carrier is installed
- door trim panel removed
- operating rod is detached at operating lever



57-300

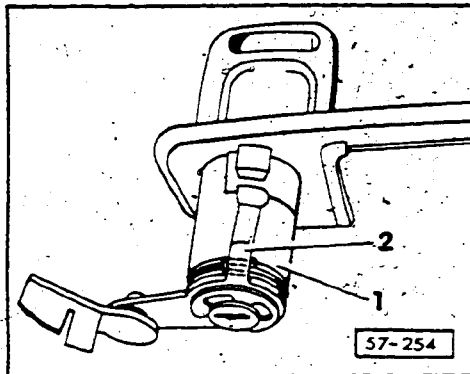


► Fig. 11 Turn clip, installing

A = lock clip tight in locked position

B = lock clip released

■ indentation 1 in lock clip must line up

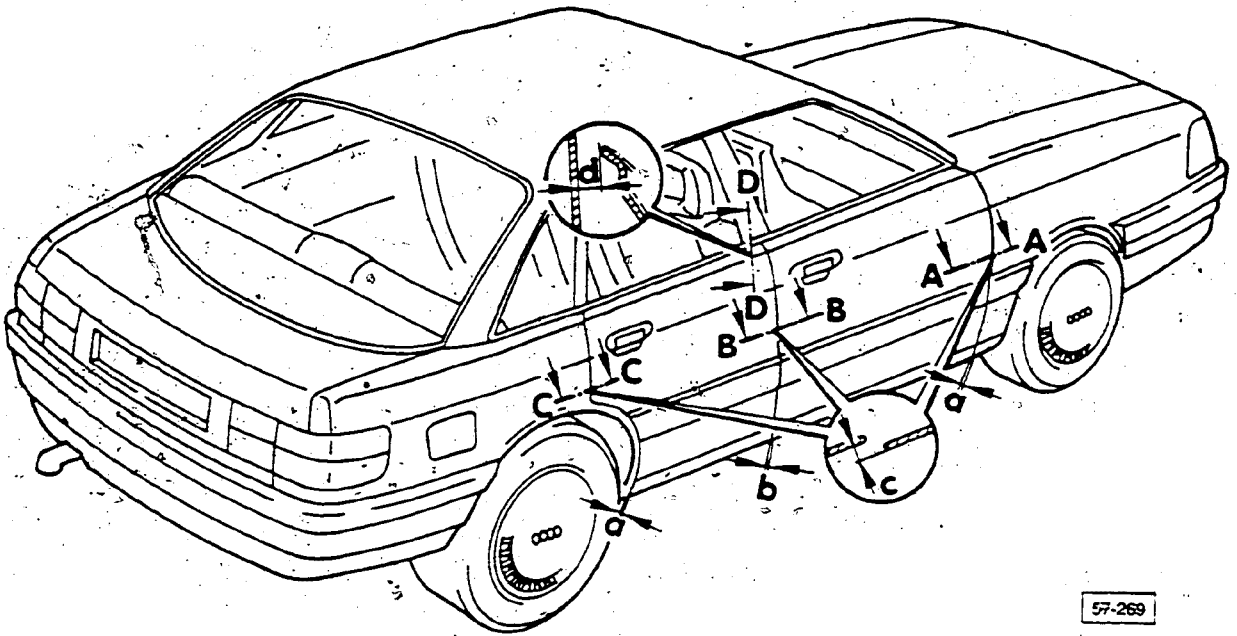


► Fig. 12 Position spring, installing

Note

When tensioned, the ends of the spring 1 must be positioned to left and right of operating lever 2.

Pre-tensioning always pushes the operating lever and lock cylinder into center position.



Doors, adjusting

- adjust gap by moving doors with hinges
— Fig. 13, 14

$$a = 5 + 1 \text{ mm } (13/64 + 3/64 \text{ in.})$$

$$b = 5.5 + 1 \text{ mm } (7/32 + 3/64 \text{ in.})$$

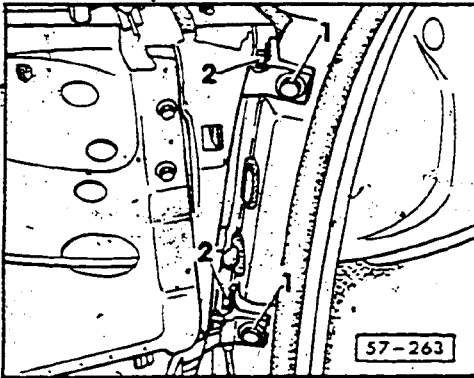
- align height with contour of body
Adjust at hinges (extra-large holes in hinge at the point where hinge fastens to A/B pillar) Fig. 15
- to prevent to wind noises, adjust at door mounting hinges or in rear of doors at striker pin, Fig. 16, 17

Section A-A, B-B, C-C:

$$c = 0.5 + 0.5 \text{ mm } (1/64 + 1/64 \text{ in.})$$

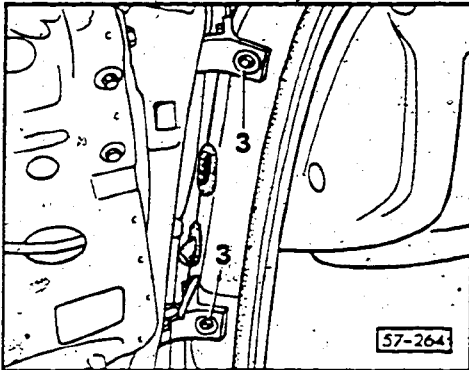
Section D-D:

$$d = 14.5 \text{ mm } (9/16 \text{ in.})$$

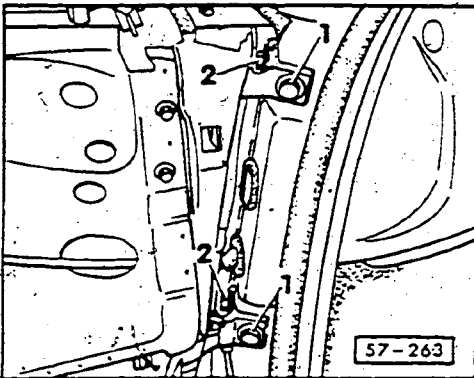


► Fig. 13 Door gap, adjusting

- with bolts 1 removed, screw out threaded bushing behind until it no longer contacts A-pillar
- loosen bolts 2, close door and adjust gap by moving the door
 - $a = 5 + 1 \text{ mm} (13/64 + 3/64 \text{ in.})$
- loosen or tighten with angle wrench US 2598

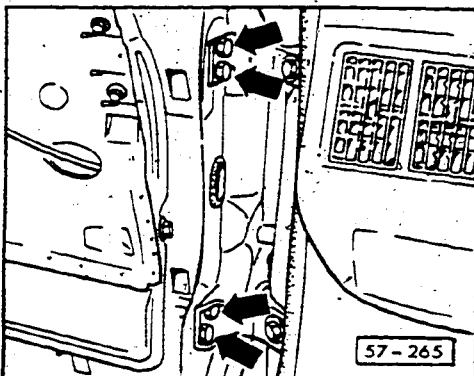


- Fig. 14
- screw in threaded bushing 3 until it makes contact with A-pillar
 - screw in bolts and tighten to 30 Nm (22 ft lb)
 - check gap



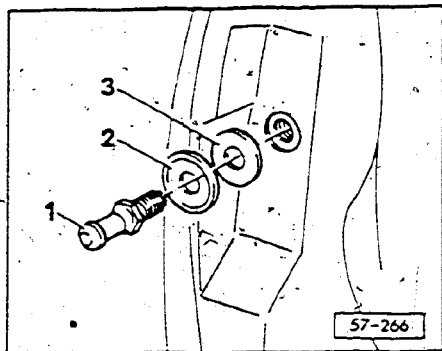
► Fig. 15 Height adjustment

- loosen bolts 1, 2
- loosen or tighten with angle wrench US 2598
- move door with hinge
- tighten bolts
 - 30 Nm (22 ft lb)



► Fig. 16

- loosen bolts (arrows), move door as required
- tighten bolts
 - 30 Nm (22 ft lb)



► Fig. 17 Prevention of wind noises

- adjust the striker pins at the rear of the door

- striker pin 50 Nm (37 ft lb)

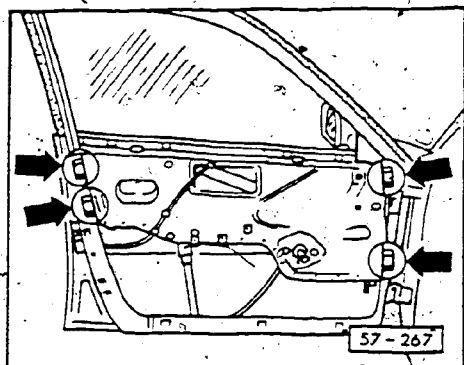
1 = striker pin

2 = dished washer

3 = washer

Note

If necessary, two dished washers can be used.



► Fig. 18 Door component carrier, adjusting

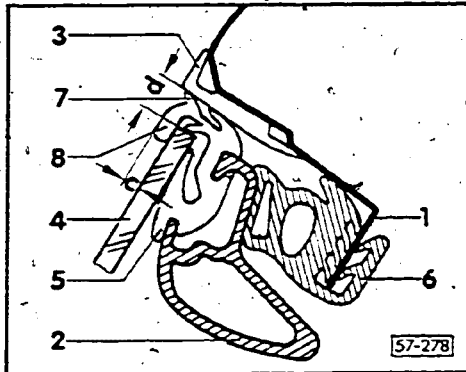
Note

Window and door shell must be adjusted first.

- loosen bolts (arrows)
- close door

Two technicians will be required. Do not press door shell inwards while performing adjustment.

- press carrier tightly against roof and pillar
 - exert slightly more force than required. Rubber seal will return carrier to proper position
- have second technician (from inside vehicle) tighten first upper then lower bolts
 - 20 Nm (15 ft lb)



► Fig. 19 Door component carrier dimensions

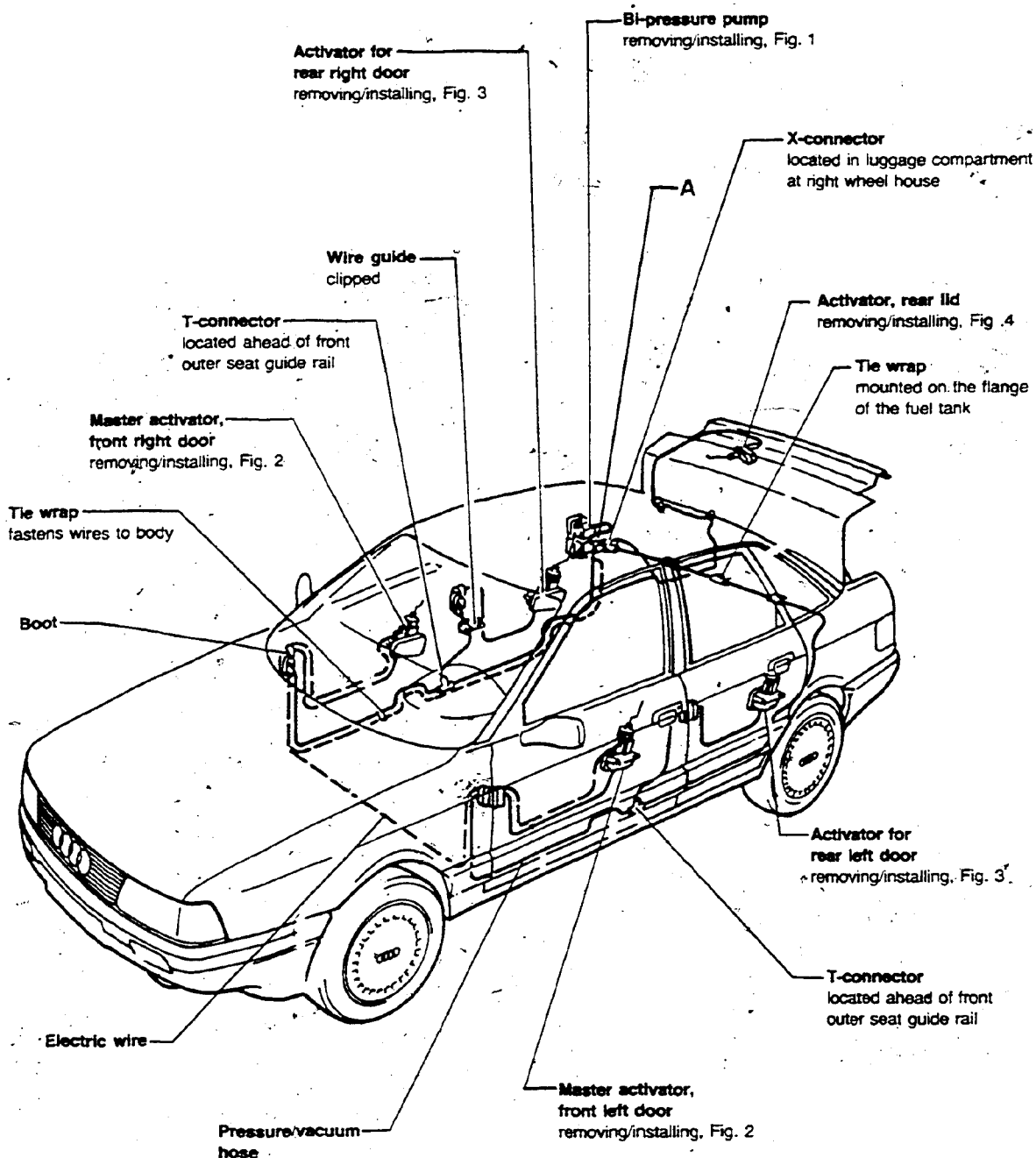
● left door cross section shown

- the outer sealing lip 7 must make contact along the contour of the pillar and roof trim moulding 3
- the outer window sealing lip 8 must not project outwards above the roof trim moulding 3

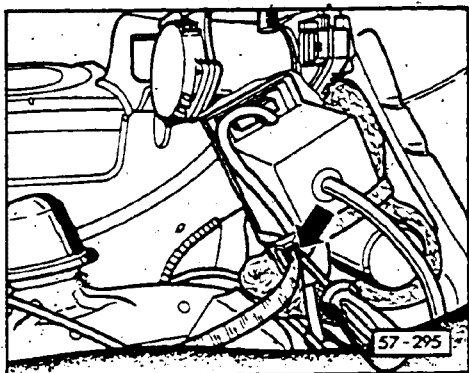
$$c = 3.5 + 1 \text{ mm } (9/64 + 3/64 \text{ in})$$

$$d = 8.1 + 1 \text{ mm } (5/16 + 3/64 \text{ in})$$

- 1 — sealing flange
- 2 — door frame
- 3 — roof trim moulding
- 4 — window
- 5 — window seal
- 6 — inner door seal
- 7 — sealing lip
- 8 — sealing lip on window

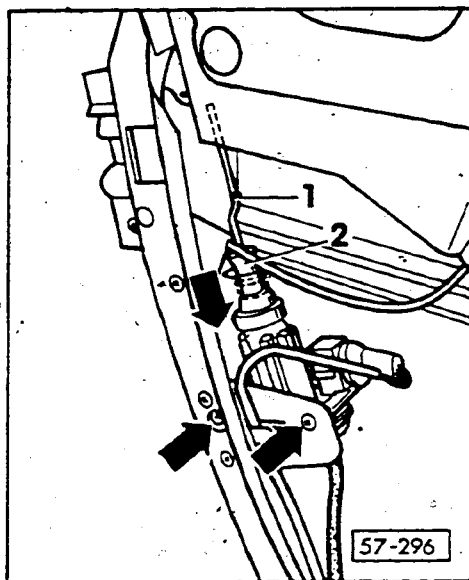


57-294



► Fig. 1 Bi-pressure pump removing/installing

- unscrew bolt for luggage compartment trim right
- press trim downward
- open retaining strap (arrow) by pressing the retaining tab back with screwdriver
- pull out connector wires



► Fig. 2 Master activator, removing/installing

Removing

- remove door trim (see Repair Group 70)

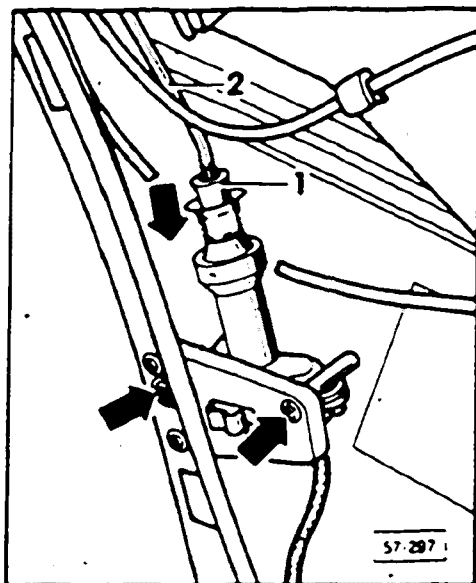
Operating rod 1 and master activator must be in **door open** position to loosen the locking ring.

- push locking ring 2 downward while holding operating rod 1
- pull operating rod out of activator
- remove pressure/vacuum hose and unscrew mounting bolts
- remove multi-terminal connector

Installing

Install in reverse order, note the following:

- put operating rod 1, lock and master activator in **door open** position
- press operating rod 1 in while pushing the locking ring 2 upwards



► Fig. 3 Activator for rear doors, removing/ installing

Removing

- remove door trim (see Repair Group 70)

Note

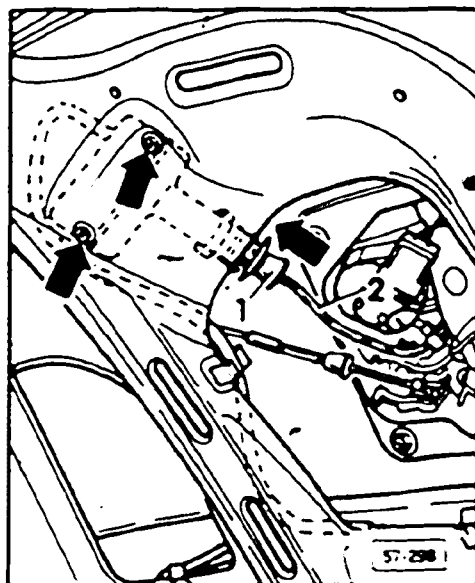
Operating rod 2 and activator must be in **door open** position to loosen the lock ring.

- push locking ring 1 downward, while holding operating rod 2 securely
- pull operating rod out of activator
- remove pressure/vacuum hose and mounting bolts

Installing

Install in reverse order, note the following:

- put operating rod 2, lock and activator in **door open** position
- push the operating rod 2 in while pulling the locking ring 1 upwards



► Fig. 4 Activator for rear lid, removing/installing

Removing

- remove trim for right rear taillamp

Note

Activator must be in **door open** position, in order to loosen the locking ring.

- push locking ring 1 downward, while holding operating rod 2 securely
- pull operating rod out of activator
- unscrew mounting bolts and remove pressure/vacuum hose

Installing

Install in reverse order, noting the following:

- pressure/vacuum hose must be **between** lock operating rod, and inner part of hatch
- to assemble operating rod 2, both lock and activator must be in open position
- push operating rod 2 while pulling lock pin 1 upwards

Fuel tank flap activator, removing/installing

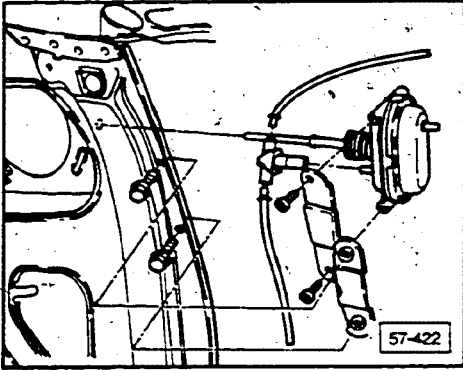
Removing

- open trunk
- pull back luggage compartment trim from around fuel filler neck
- remove hex screws, disconnect pressure/vacuum hose from activator
- remove activator toward rear

Installing

Reinstall in reverse order noting the following:

- torque hex screws 4.0 Nm (35 in lb)



Central locking system, troubleshooting

Electrical

Refer to appropriate wiring diagram.

Test conditions

- fuse 19 OK
- battery OK
- open rear lid
 - bi-pressure pump located on right side of luggage compartment
- pull insulating material away from pump
- pull off plug connector from pump

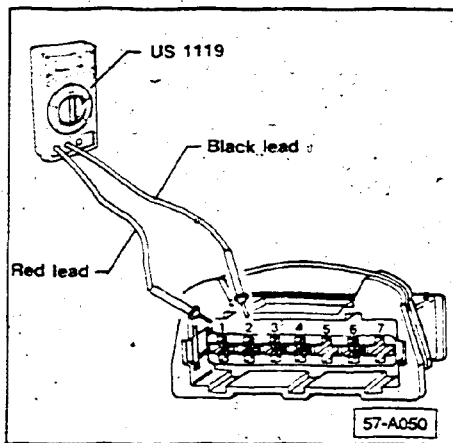
Tools required

Use multimeter **US 1119** for all testing.

Note

As you look at the end of the plug connector, the cavities are numbered **one** through **seven** starting from the left. Cavities **five** and **seven** are **blank**.

Bi-pressure pumps are supplied by different vendors. Disregard pin positions in pumps.



Check current supply to bi-pressure pump

- connect red lead of **US 1119** to cavity 1 of plug connector
- connect black lead of **US 1119** to cavity 2 of plug connector

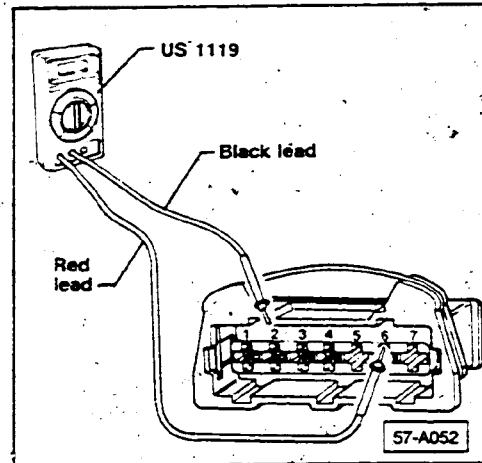
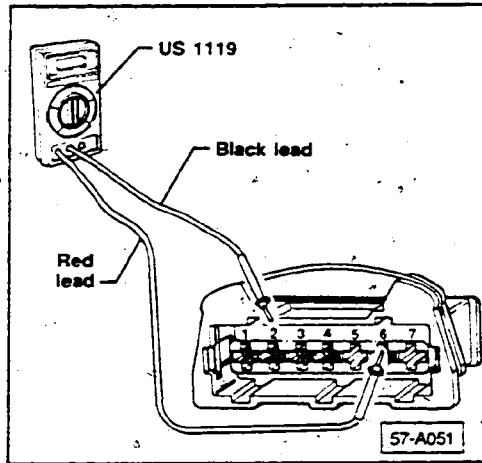
US 1119 registers approx. 12.0 Volts

US 1119 does not register 12.0 Volts

check electrical wiring for break in continuity

End

Go to **(B)**
page 57.19



(B)

Check current supply from ignition lock to bi-pressure pump

- insert key into ignition starter lock
do not turn key
- connect red lead of US 1119 to cavity 6 of plug connector
- connect black lead of US 1119 to cavity 2

US 1119 registers approximately 12.0 Volts

US 1119 does not register 12.0 Volts

Check electrical wiring for break in continuity
or
replace ignition starter lock

End

Check ignition starter lock

- remove ignition key
- connect red lead of US 1119 to cavity 6 of plug connector
- connect black lead of US 1119 to cavity 2 of plug connector

US 1119 registers 0.0 Volts

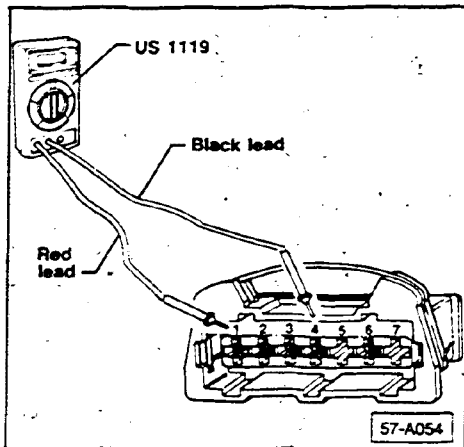
US 1119 registers more than 0.0 Volts

Replace ignition starter lock

Go to (C) on page 57.20

End

Ⓒ



Check driver's door master activator switch to lock door

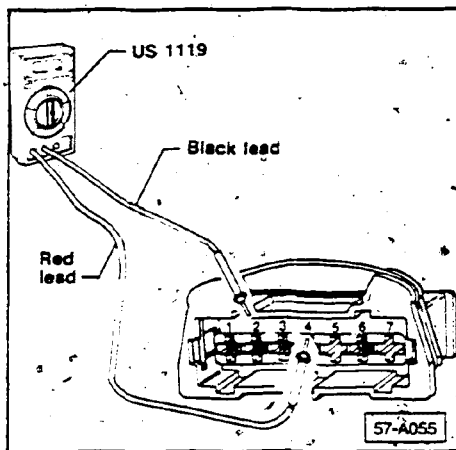
- connect red lead of US 1119 to cavity 1 of plug connector
- connect black lead of US 1119 to cavity 4 of plug connector
- push down driver's door locking button (locked position)

US 1119 registers approximately 12.0 Volts

US 1110 does not register 12.0 Volts

Check electrical wiring for break in continuity or replace driver's door master activator switch

End



Check driver's door master activator switch to open door

- connect red lead of US 1119 to cavity 4 of plug connector
- connect black lead of US 1119 to cavity 2 of plug connector
- pull up driver's door locking button (open position)

US 1119 registers approximately 12.0 Volts

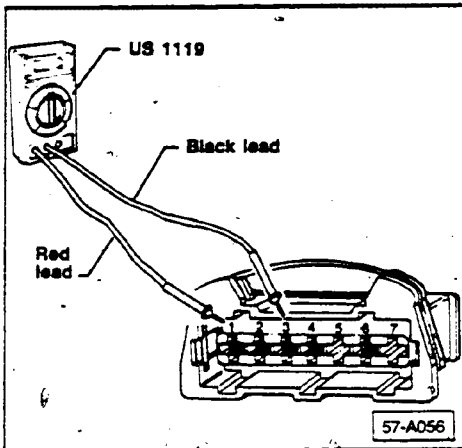
US 1119 does not register 12.0 Volts

Check electrical wiring for break in continuity or replace driver's door master activator switch

Go to Ⓓ on page 57.21

End

(D)



Check right front door master activator switch to **lock door**

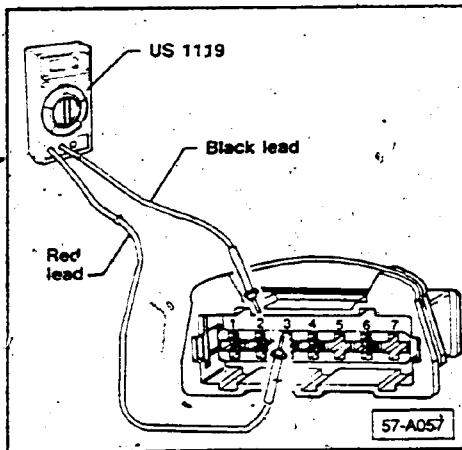
- connect red lead of **US 1119** to cavity 1 of plug connector
- connect black lead of **US 1119** to cavity 3 of plug connector
- push down right front door locking bottom (**locked position**)

US 1119 registers approximately 12.0 Volts

US 1119 does not register 12.0 Volts

Check electrical wiring for break in continuity or, replace right front door master activator switch

End



Check right front door master activator switch to **open door**

- connect red lead of **US 1119** to cavity 3 of plug connector
- connect black lead of **US 1119** to cavity 2 of plug connector
- pull up right front door locking button (**open position**)

US 1119 registers approximately 12.0 Volts

US 1119 does not register 12.0 Volts

Replace defective bi-pressure pump

End

Check electrical wiring for break in continuity or replace right front door master activator switch

End

Troubleshooting — bi-pressure system

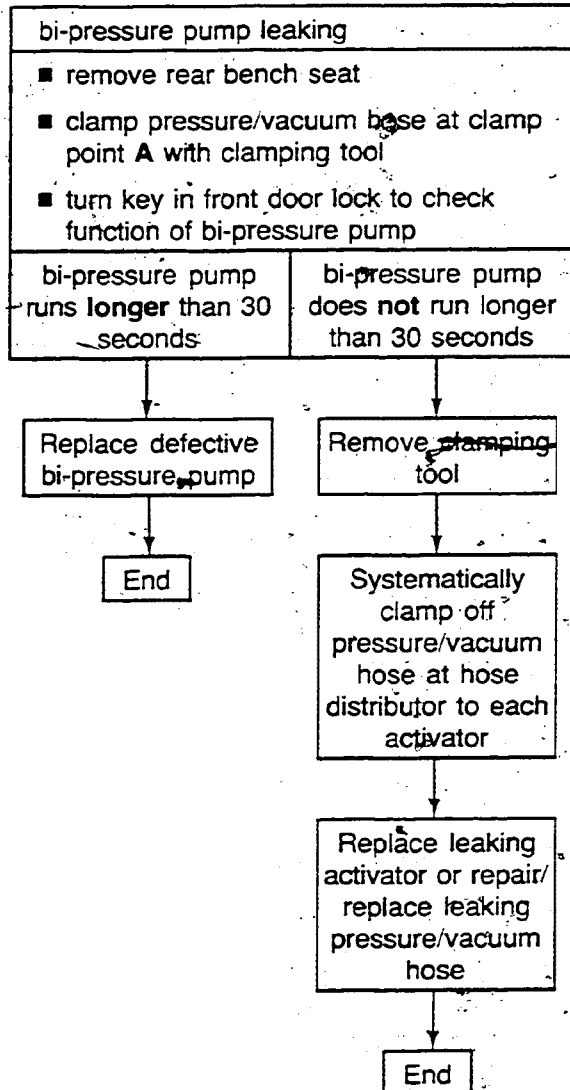
Test condition

- electrical system OK

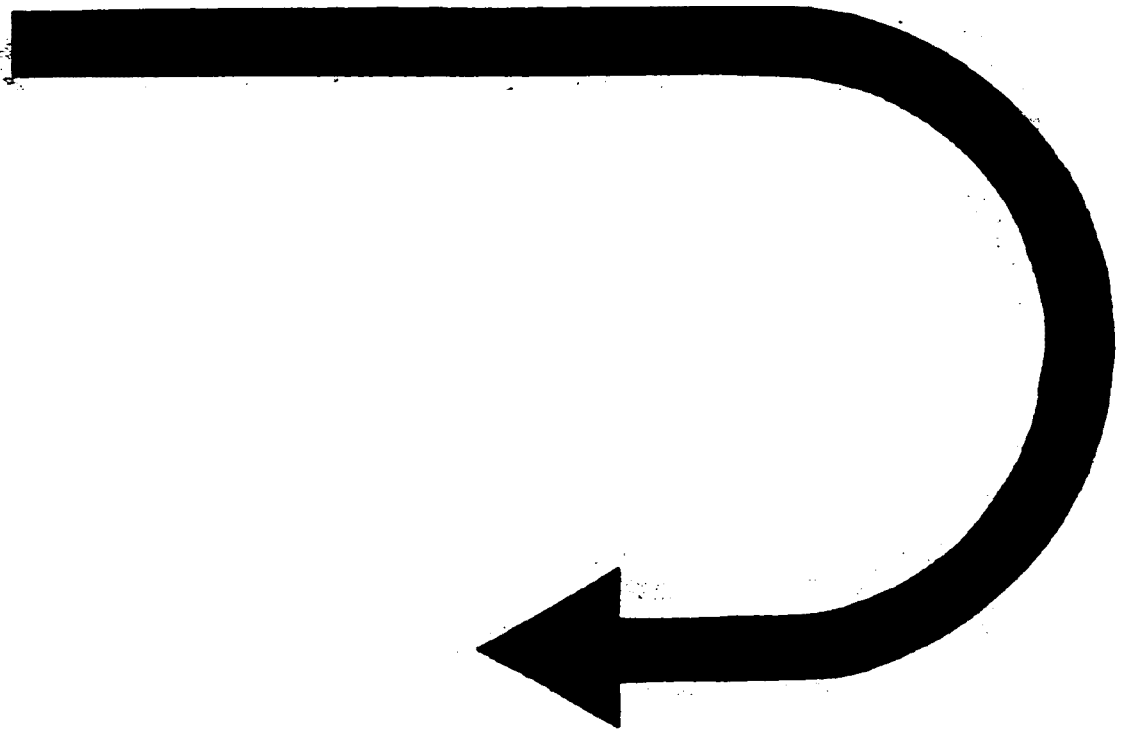
Note

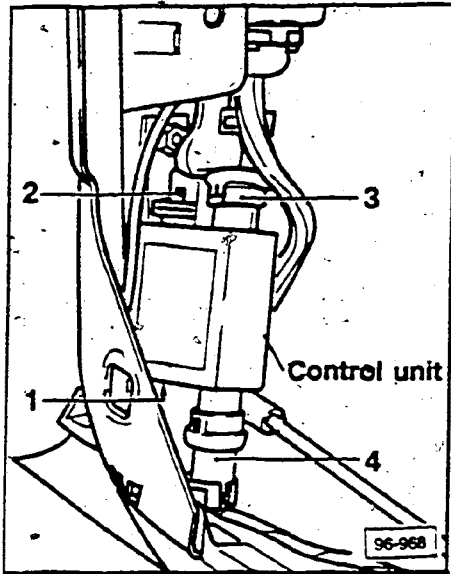
If central locking system has not been activated for an extended period, key must be turned in lock several times to activate system.

When properly functioning, all locks must close within three to seven seconds.



CONTINUED IN THE
BEGINNING OF NEXT ROW





Heated lock cylinders, troubleshooting

Electrical

Note

Refer to appropriate wiring diagram.

1. test button
2. connector for microswitch
3. connector for heating element
4. connector voltage supply line

Test conditions

- battery OK
- fuse 19 OK

Tools required

- multimeter US 1119

Checking voltage at cavities 30 (+), 31 (-)

- pull off plug connector 4 to control unit
- set US 1119 to voltage scale
- connect tester US 1119 to cavities 30 (+), 31 (-) of plug connector 4
- measure voltage
 - 12.0V

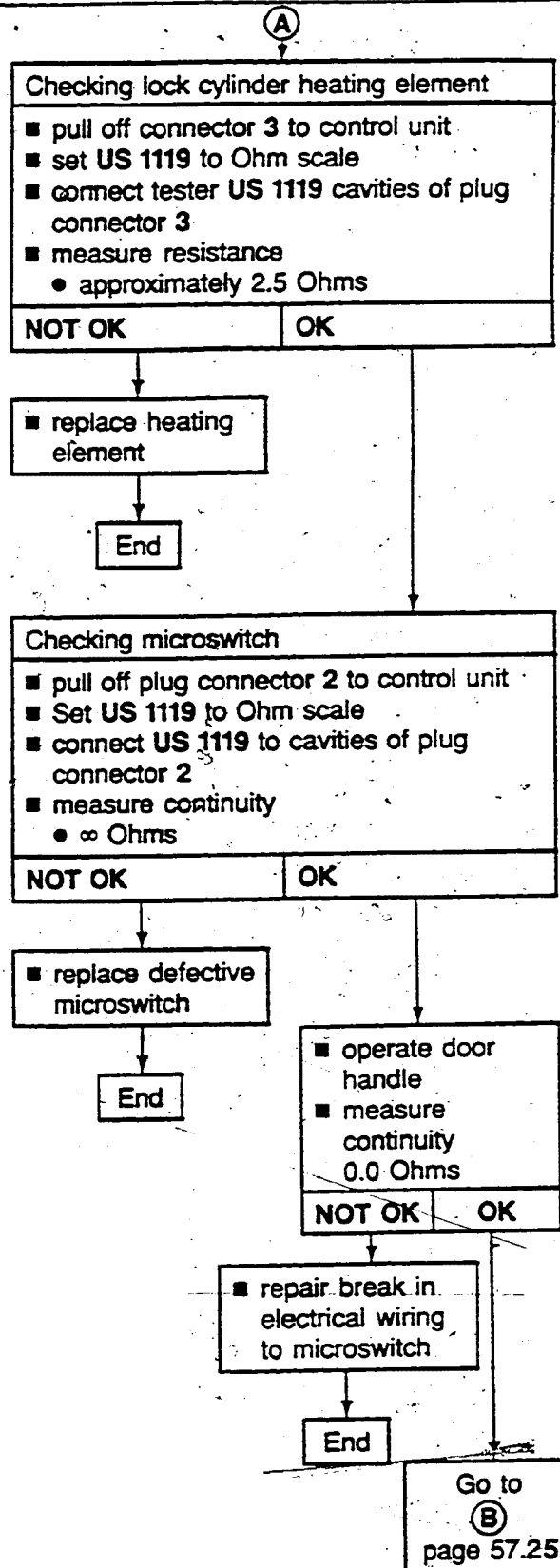
NOT OK

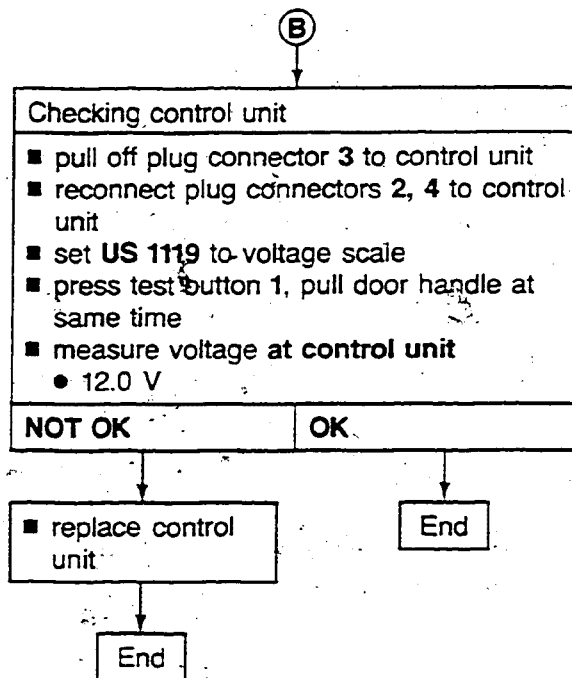
OK

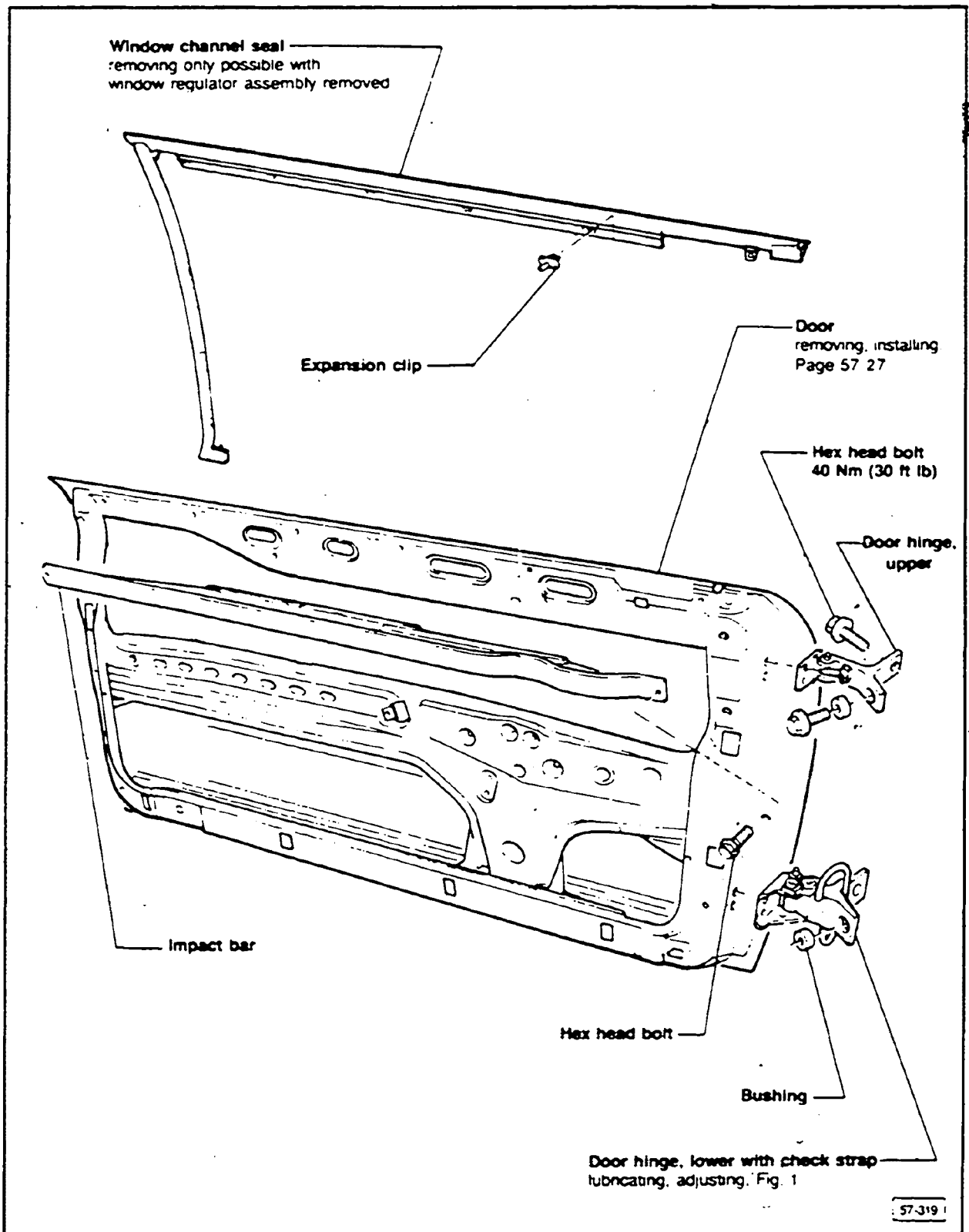
- repair break in electrical wiring

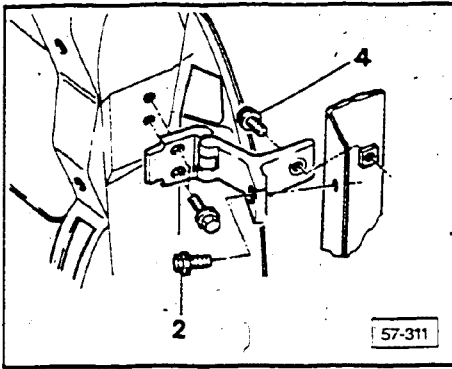
End

Go to
A
page 57.24



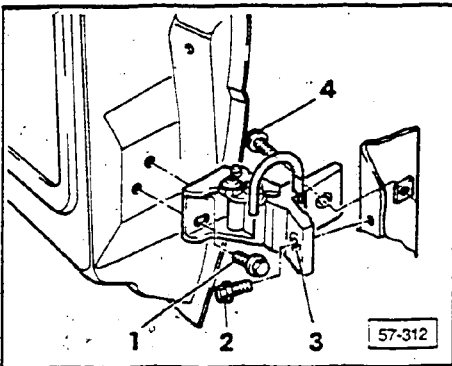






Front door, removing

- remove door trim panel, see Repair Group 70
- disconnect electrical wiring to power window regulator, door locks and mirror
- remove hex head bolts **2,4** from upper hinge with angle wrench **US 2598** or equivalent

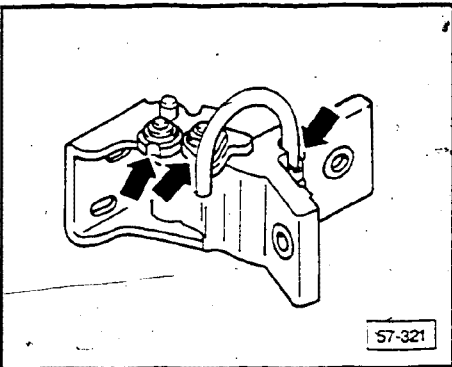


- remove hex head bolts **2,4** from lower hinge with angled wrench **US 2598** or equivalent

Front door, installing

Reinstall all components in reverse order of removal, noting the following:

- align and adjust door, see page 57.33
- check and adjust the window regulator as required
- reconnect all electrical connectors
- check all power window, mirrors and door locks for proper function



► Fig. 1. Lower door hinge, lubrication

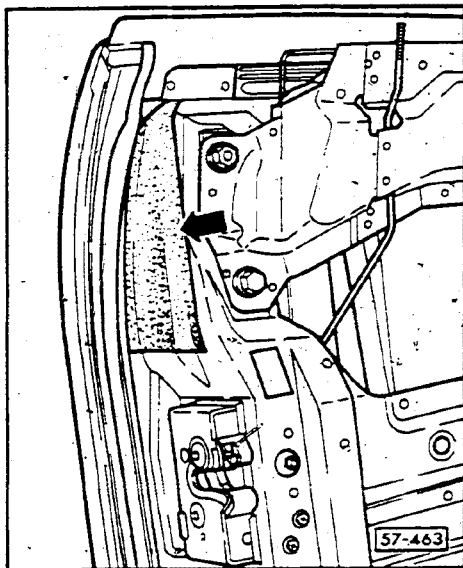
- apply lubricant **AOS 126 000 05** or equivalent to points shown (arrows)

Front door, replacing

Note

From VIN 8B MA 008 401, the door shell has been changed. Only the new style door will be available as a replacement part. When installing a new style door to an older vehicle, the following parts must also be installed/replaced:

- 1 – door trim panel, see Repair Group 70
- 2 – window regulator
- 3 – outside door seal
- 4 – flat nut/washer, page 57.28, callout 16
- 5 – mounting trim cover, Fig. 2
- 6 – outside mirror mount base, Fig. 3

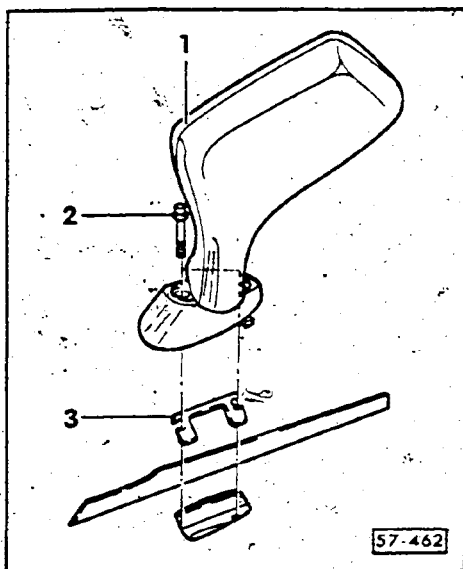


► Fig. 2 Mounting trim cover, installing

Note

Door surface must be free of dirt or grease for good seal. Install wrinkle free.

- glue cover (arrow) to door shell as shown

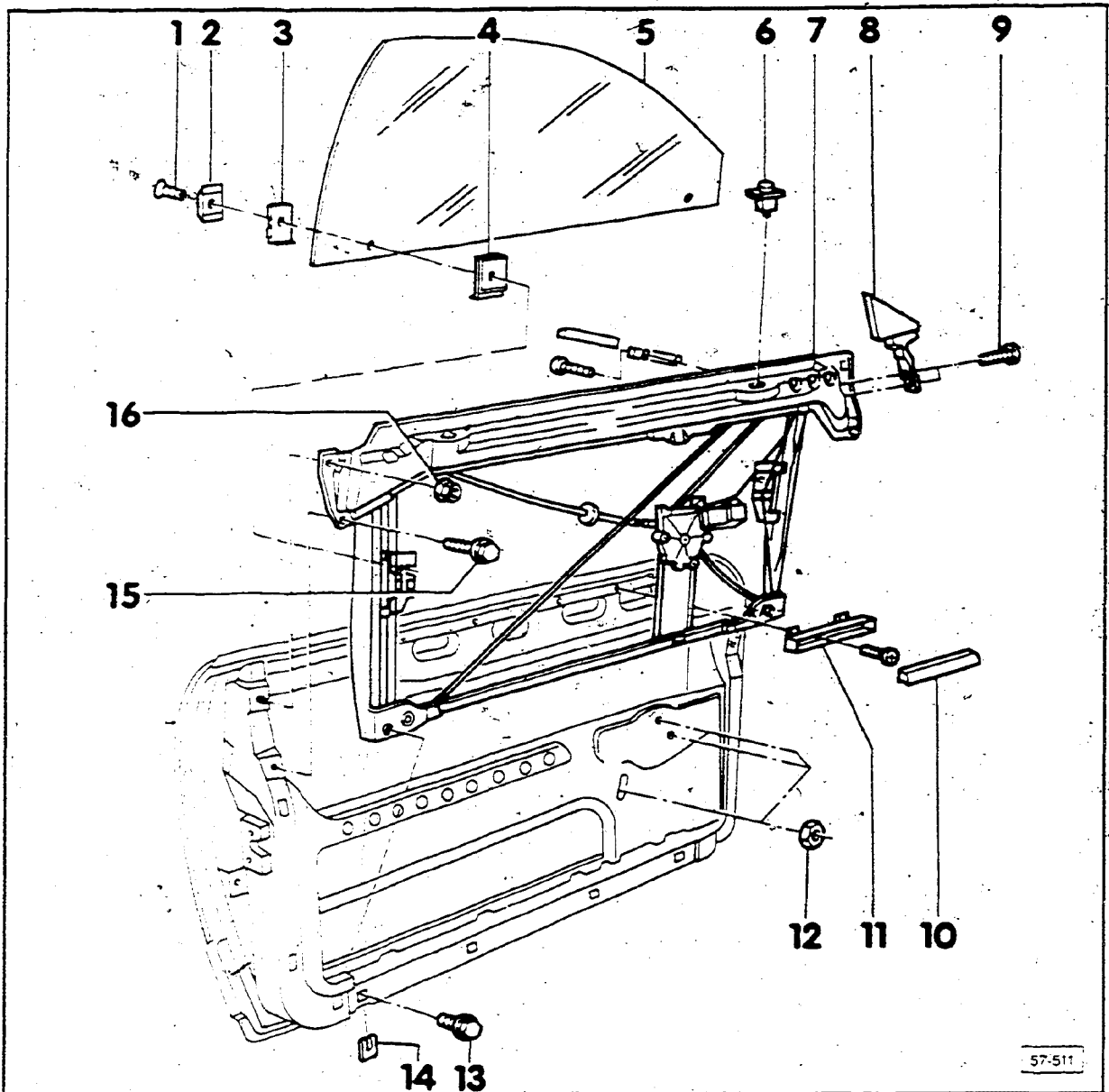


► Fig. 3 Outside mirror mount base, installing

Note

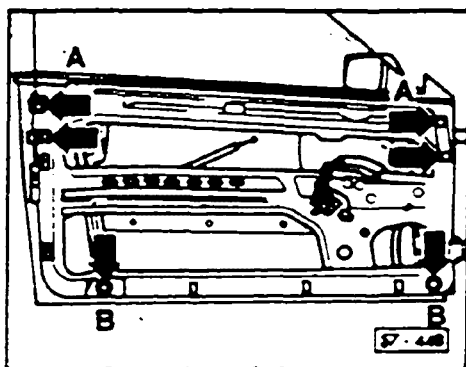
Only install mirror base 3 if old outside mirror assembly is being reused.

- glue mirror base 3 to mirror bracket
- install mirror assembly 1 with bolts 2
 - 4 Nm (35 in. lb)



- 1 – Torx screw – 20 Nm (15 ft lb)
- 2 – Aluminum clamping piece
- 3 – Fastener, outside
- 4 – Fastener, inside
- 5 – Door glass
removing/installing, page 57.31
- 6 – Adjusting clip
for height adjustment, see Repair Group 70
- 7 – Window regulator
 - removing/installing, page 57.29
 - adjusting, page 57.32

- 8 – Cover plate
adjusting, 57.32
- 9 – Torx screw – 20 Nm (15 ft lb)
- 10 – Buffer
- 11 – Bracket
- 12 – Nut – 6 Nm (53 in. lb)
- 13 – Bolt – 15 Nm (11 ft lb)
- 14 – Adjustment shim
install as required
- 15 – Bolt – 15 Nm (11 ft lb)
- 16 – Flat nut/washer – 15 Nm (11 ft lb)



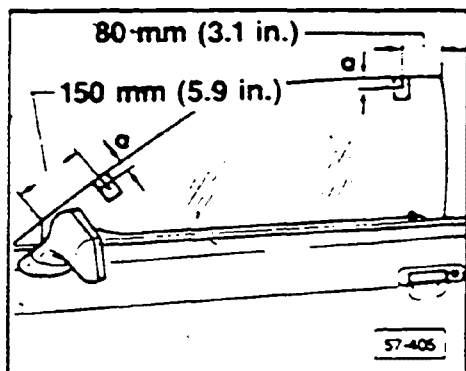
Window regulator, removing

- remove door trim panel, see Repair Group 70
- mark location of four upper window regulator bolts (arrows A)
- unbolt window regulator motor

Note

Location of spacers must be marked prior to removal of window regulator assembly. Spacers must be reinstalled at same location.

- loosen lower window regulator bolts (arrows B)
- remove spacers
- remove all six window regulator bolts
- remove window regulator from door



Window regulator, installing

- glue adhesive strips, as shown, to glass
 - mark dimension a = 20 mm (25/32 in.) with pencil
- reinstall window regulator into door shell
- insert lock rod with lock button
- install all window regulator bolts, and hand tighten
 - note position of upper bolts as marked
- close door, check dimensions:
 - b = 19.5-21.00 mm (49/64-53/64 in.)
 - c = 12.0-15.0 mm (15/32-19/32 in.)
 - 15.0 mm is standard

If not: move window regulator in door shell until dimensions are attained.

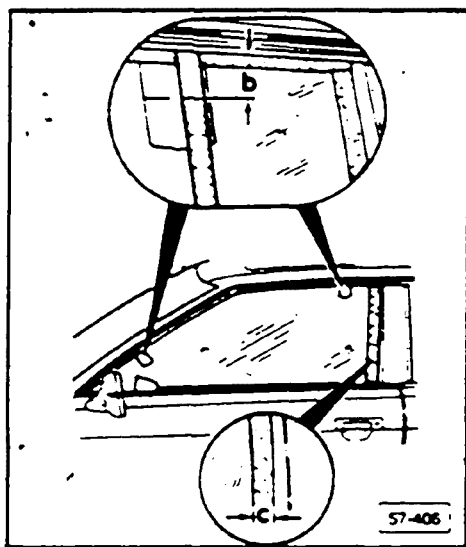
Note

If window regulator cannot be positioned with the aid of oversized holes, the glass must be pushed into carners, see installing glass, page 57.31

- insert spacers under bolts
- close door, check tension of glass to body
 - door must close easily

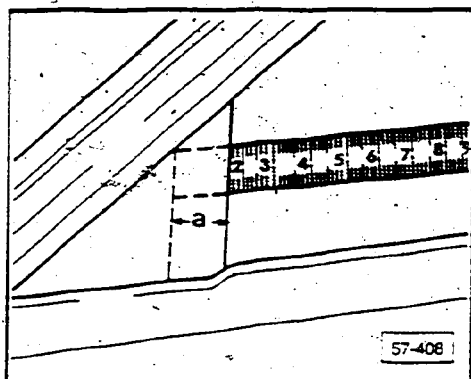
CAUTION

Uneven pressure of glass in area of B-pillar or not achieving dimensions b or c will cause wind noises and leaks.



- open door
- rub B-pillar edge of glass with chalk
- close and reopen door
- check impression left by chalk on door seal
 - if impression is full length of seal, door glass is properly adjusted

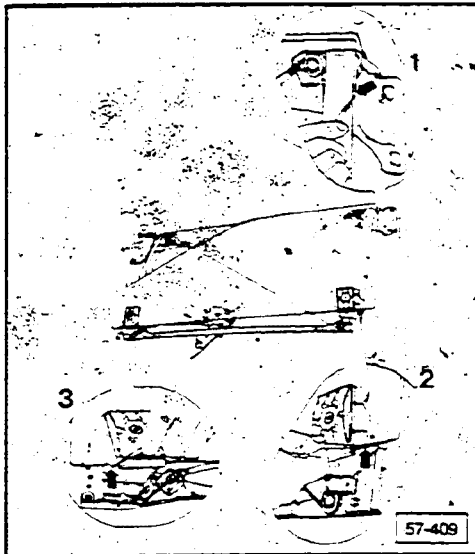
If not: add or remove spacers, as required, and recheck



- close door, window
- insert steel ruler from outside as shown
 - $a = 17-18 \text{ mm}$ ($43/64-45/64 \text{ in.}$)

Cover plate can be adjusted to achieve dimension a

- reinstall door trim panel, see Repair Group 70
- check vehicle for wind noise and leaks



Door glass, removing

- fully lower window glass
- mark position of glass to frame and carrier, as shown (insets)

- 1 — B-pillar, upper
- 2 — B-pillar, position on carrier
- 3 — A-pillar, position on carrier

- raise window halfway
- loosen torx bolts on carrier
- remove aluminum clamping pieces with gaskets
- remove door glass

Door glass, installing

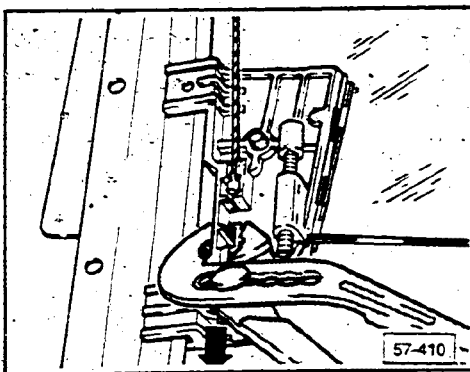
Note

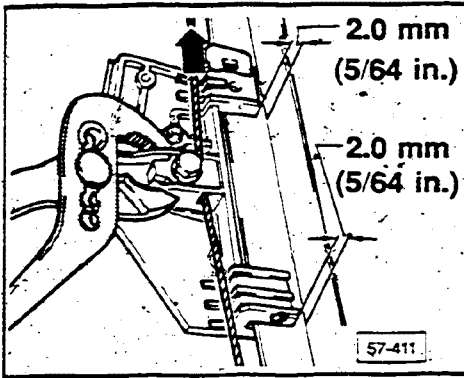
On vehicles up to **VIN 8BKA 008300** black plastic base must be replaced with white plastic base.

- position plastic base
- position glass and align to marks on frame and carrier

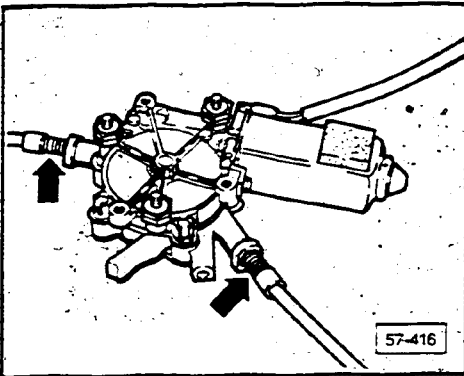
If original glass was missing (broken) initially place glass between threaded holes.

- carefully press glass onto carrier, front and rear
- install plastic base
- install aluminum clamping pieces
- hand tighten torx head screws
- align rear carrier (B-pillar side) parallel to guide rail
- press downward with wrench (**arrow**) until spring in cable is completely compressed
- fully tighten torx bolts
 - 20 Nm (15 ft lb)

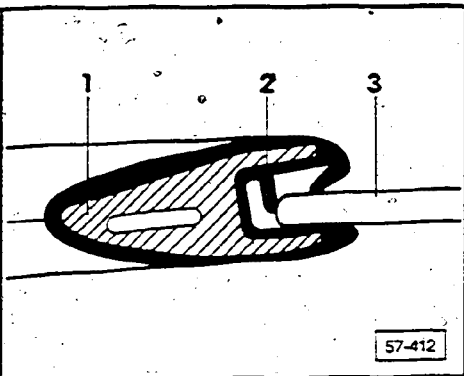




- align front carrier (A-pillar side) parallel to guide rail
- adjust gap between carrier and rail to 2.0 mm (5/64 in.) and push carrier upwards



- second spring in cable (arrows) must be completely compressed
 - maximum play 4.0 mm (5/32 in.)



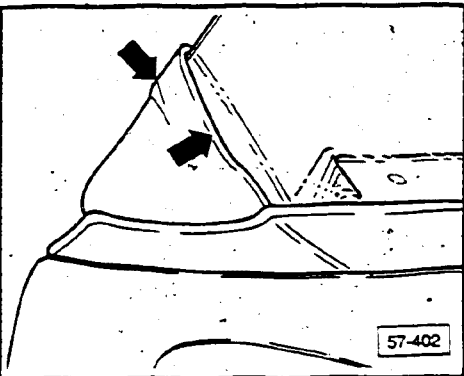
- tighten torx screw
 - 20 Nm (15 ft lb)
- raise glass fully
- front edge of glass 3 must touch the inner sealing lip 2 of cover plate 1
- If **Not**: move glass forward 1.0 mm (3/64 in.), realign carrier

Note

Cover plate must be replaced if glass still cannot be made to contact sealing lip 2.

- install and adjust window regulator

Cover plate, adjusting



- fully raise door glass
- upper edge of glass and cover trim must form one line
- outside of glass must not cause buckling
- rubber must have smooth contact with glass (arrows)

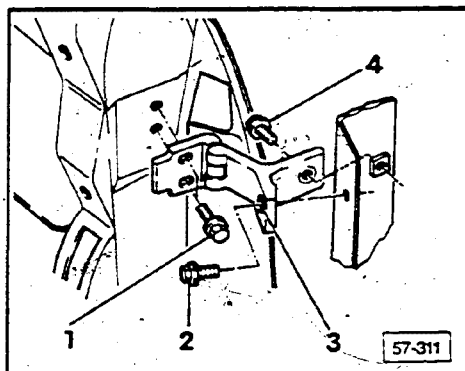
Note

Elongated holes allow for range of adjustment of cover plate.

- check and adjust, see Page 57.30

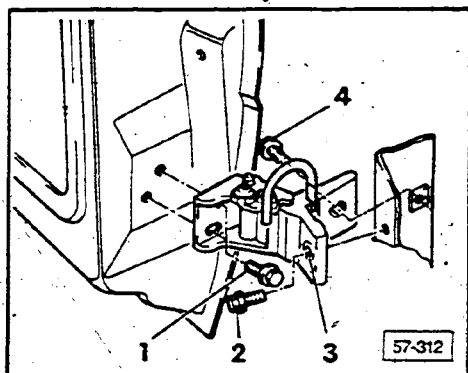
Doors, adjusting

- adjust door gap by moving doors with hinges, Fig. 1
- align door height (contour of body) Adjust at hinges (extra-large holes in hinge at the point where hinge fastens to A-pillar, Fig. 2
- to prevent wind noises, adjust at door mounting hinges or in rear of doors at striker plate, Figs. 3, 4
- adjusting window regulator assembly, Fig. 5

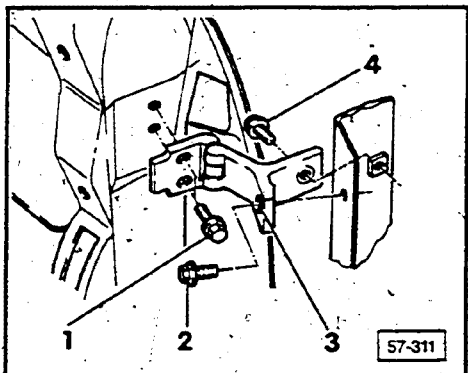


► Fig. 1 Door gap, adjusting

- loosen bolts 2, 4 with angle wrench US 2598 or equivalent
- unscrew threaded bushing on bolts 2 away from A-pillar
- close door, move door to adjust gap

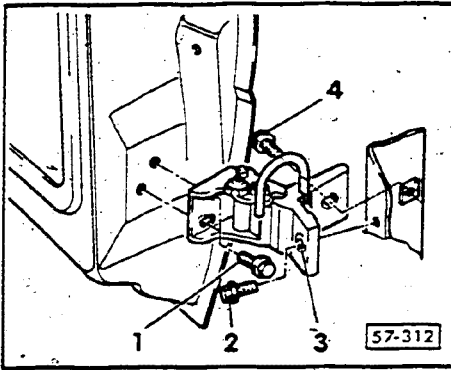


- screw in threaded bushing 3 until it makes contact with A-pillar
- screw in bolts and tighten to 30 Nm (22 ft lb)
- recheck gap



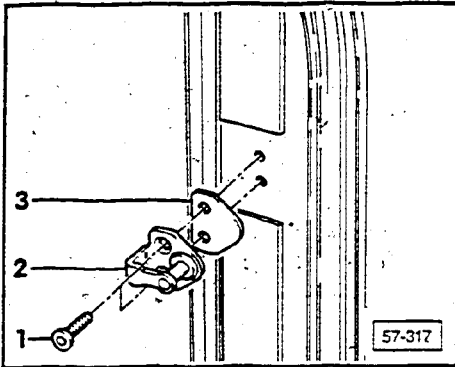
► Fig. 2 Height adjustment

- loosen bolts 2, 4 with angled wrench US 2598 or equivalent
- unscrew threaded bushing on bolts 2 away from A-Pillar
- close door
- move door with hinge
- tighten bolts to 40 Nm (30 ft lb)



► Fig. 3 Front of door wind noises, prevention

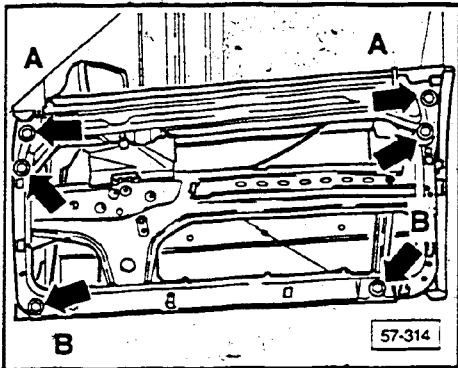
- loosen bolts 1
- move door as required
- tighten bolts 30 Nm (22 ft lb)



► Fig. 4 Striker plate wind noises, prevention

- adjust the striker pins at the rear of door
 - striker pin 16 Nm (12 ft lb)

- 1 — striker pin
- 2 — striker plate
- 3 — base plate
 - more than one may be used to achieve proper adjustment



► Fig. 5 Window regulator, adjusting

Note

Window and door shell must be adjusted first.

- loosen bolts (arrows)
- close door

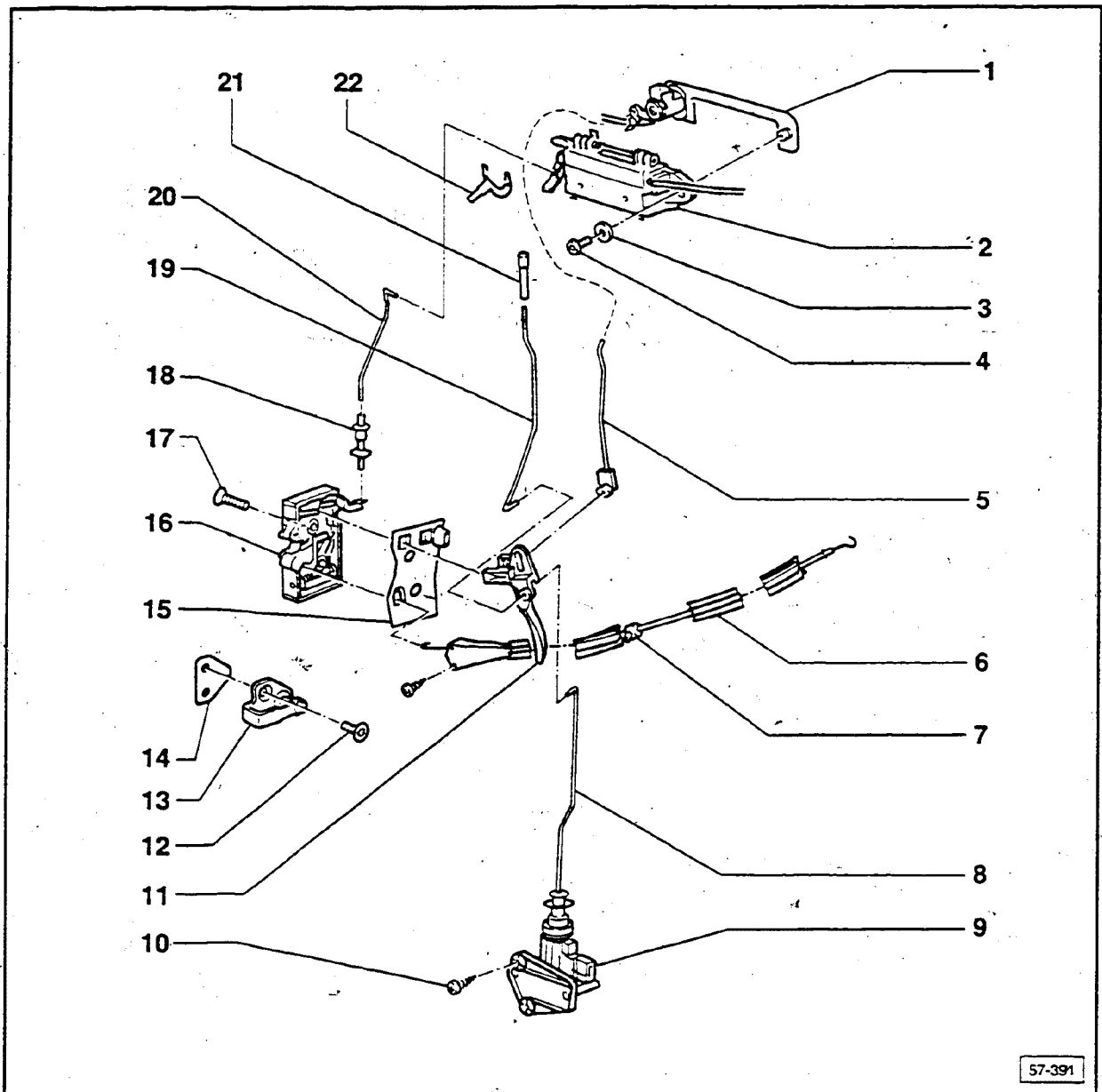
Two technicians will be required.

- press carrier tightly against roof and pillar
 - exert slightly more force than required.

Rubber seal will return assembly to proper position
- have second technician (from inside vehicle) place spacers between door shell and window regulator
- install bolts from below and tighten
 - 15 Nm (11 ft lb)

THIS FRAME INTENTIONALLY LEFT

BLANK

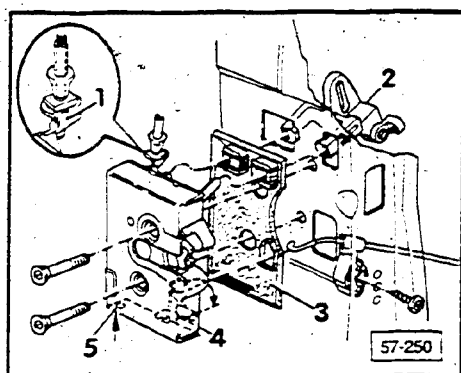


57-391

- 1 — Outer lock plate
removing lock cylinder, Fig. 1
- 2 — Door handle
adjusting lock operating rod, Fig. 3
- 3 — Washer
- 4 — Torx head screw
5 Nm (3.7 ft lb)
- 5 — Lock rod — lock cylinder
removing, move swivel bushing
- 6 — Bowden cable
for door inner opening mechanism

- 7 — Clip
note proper installation of pull rod in clip
- 8 — Lock rod
removing, Fig. 3
- 9 — Door lock
removing, Fig. 1
- 10 — Phillips head screw
- 11 — Lock rod fastening plate
- 12 — Screw
16 Nm (12 ft lb)
- 13 — Striker
adjusting, Page 57.34

- 14 — **Striker base plate**
more than one may be used
- 15 — **Seal**
- 16 — **Door lock**
removing, Fig. 1
- 17 — **Pan head tapping screw**
16 Nm (12 ft lb)
- 18 — **Clip for operating lever**
push sleeve downward to remove lock
operating rod
- 19 — **Lock rod**
removing, unclip at lock
- 20 — **Lock operating lever rod**
assembly, Fig. 3
- 21 — **Locking knob**
removing, see Repair Group 70
- 22 — **Turn clip**
loosen/installing, Page 57.40



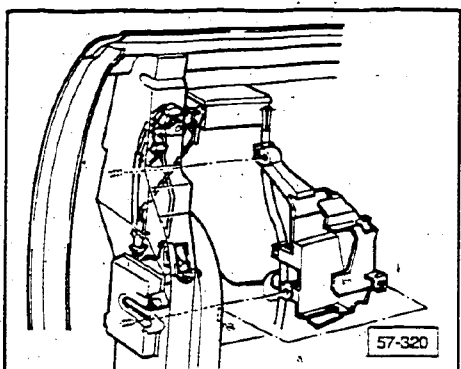
► Fig. 1 Door lock, removing

- remove front door trim panel, see Repair Group 70
- release operating rod clip and pull out operating rod
- unhook bowden cable
- pull out door lock from part 2

Door lock, installing

Install all components in reverse order, noting the following:

- re-hook the bowden cable by pulling lever 4 in direction of **arrow**
- insert screwdriver into hole 5 to lock bowden cable into place
- torque all bolts to 16 Nm (12 ft lb)

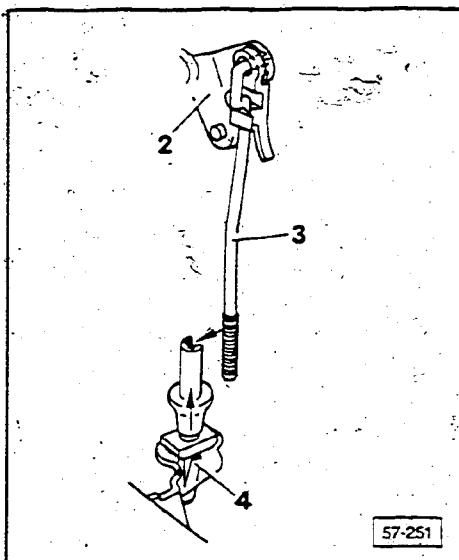


► Fig. 2 Door lock covering, removing

- unclip covering from door shell
- pry covering off with screwdriver from bolt

Door lock covering, installing

Install in reverse order of removal.



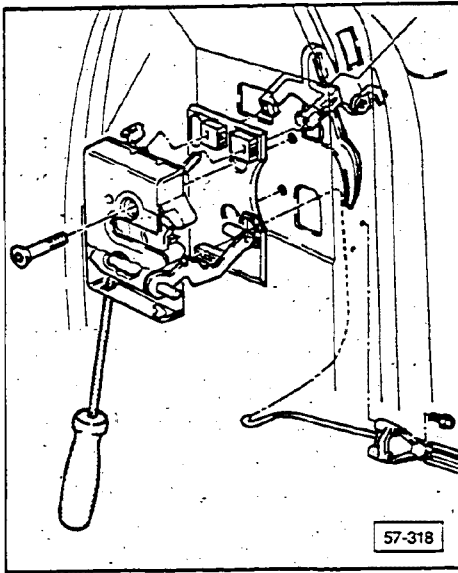
► Fig. 3 Lock operating rod, removing

- install bushing into lever 2
- hook operating rod 3 into lever
- insert mounting clip 4 into door lock release lever
- check operating rod free play at clip 4, without putting undue strain on the door lock release lever
 - 1.0 mm (3/64 in.) maximum free play

Lock operating rod, installing

Install all components in reverse order of removal, noting the following:

- to adjust, move sleeve upwards on operating clip 4

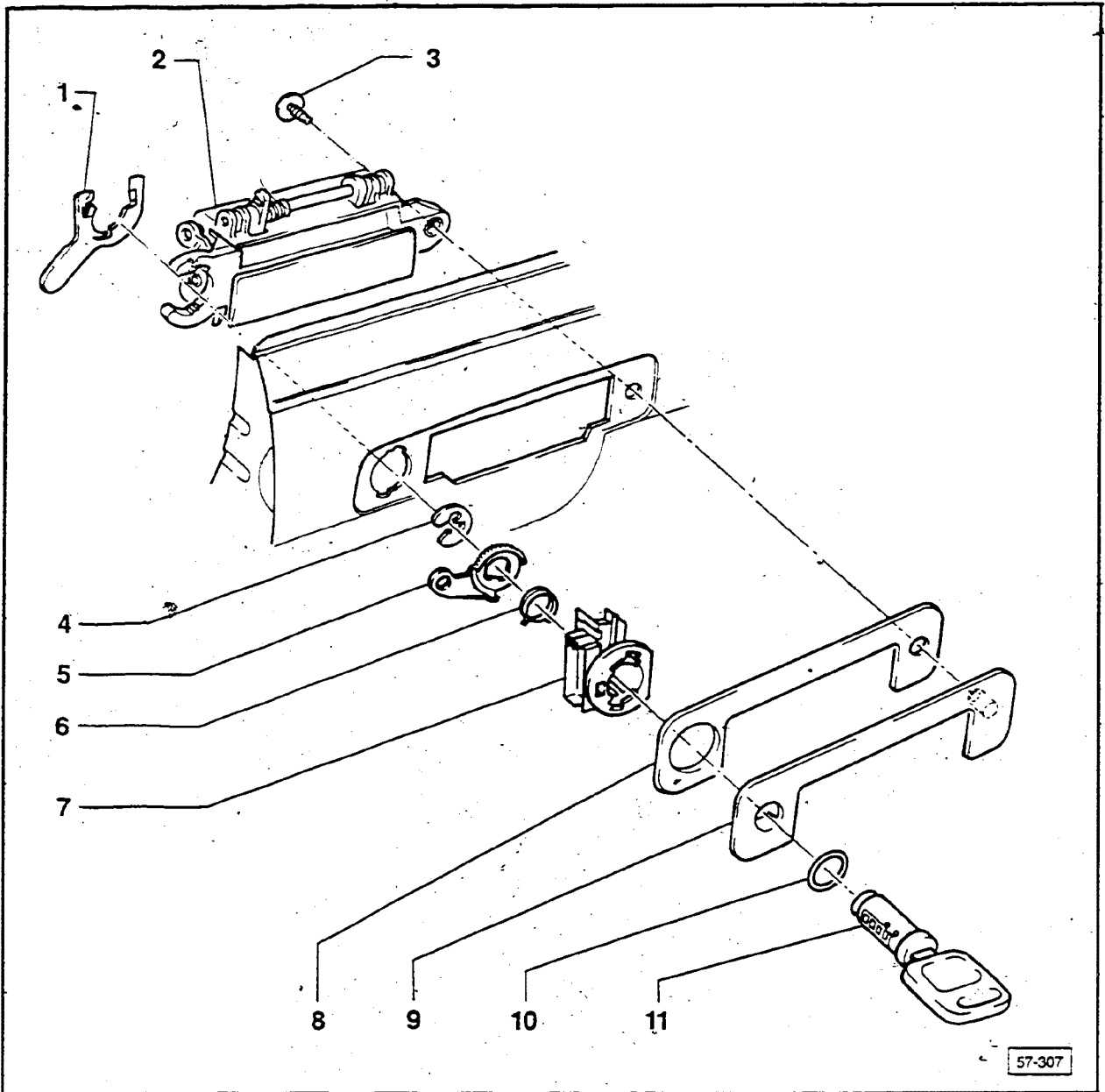


► Fig. 4 Inner door lock bowden cable, removing

- remove door trim panel, see Repair Group 70
- unclip bowden cable
- pull bowden cable and lock door lock with screwdriver, see Fig. 1
- unhook bowden cable

Inner door lock bowden cable, installing

- Install in reverse order of removing, noting how bowden cable is placed in clips.



Note

Remove door trim panel before removing door handle.

Remove window regulator assembly.

1 — Lock clip
removing/installing, Fig. 1

2 — Door handle
align door handle to door lock

3 — Torx head screw
5 Nm (45 in. lb)

4 — C-clip

5 — Operating lever

6 — Spring
installed position, Fig. 2

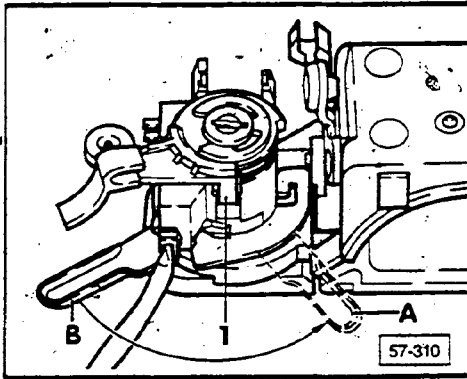
7 — Heated lock cylinder housing

8 — Plate

9 — Trim cover
removing, Fig. 3

10 — Sealing ring

11 — Lock cylinder
remove only with key

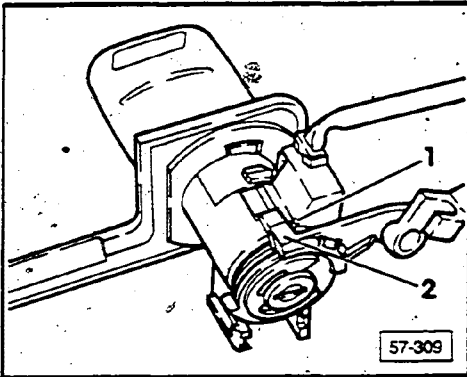


► Fig. 1 Turn clip, installing

A = lock clip tight in locked position

B = lock clip released

- indentation 1 in lock clip must line up

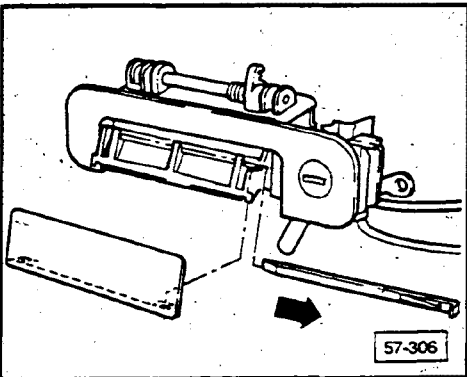


► Fig. 2 Position spring, installing

Note

When tensioned, the ends of the spring 1 must be positioned to left and right of operating lever 2.

Pre-tensioning always pushes the operating lever and lock cylinder into center position



► Fig. 3 Door handle trim cover, removing

Note

Door handle trim **must** be removed before removing door handle to prevent damage to paint on handle trim.

- pull up door handle
- pull out locking pin in direction of arrow
- remove trim cover

Note

If central locking system has not been activated for an extended period, or bi-pressure pump has been replaced, key must be turned in lock to activate system.

When properly functioning, all locks must close after two seconds.

Bi-pressure pump with control unit

- removing:
- remove side trim, see Repair Group 70
 - remove pump with retaining strap
 - open retaining strap by pressing the retaining tab back with a screwdriver
 - disconnect wiring to pump

T-connector
located behind
right side trim panel

Activator, rear lid
removing/installing, Fig. 2

Master activator
front right door
removing/installing, Fig. 1

Boot

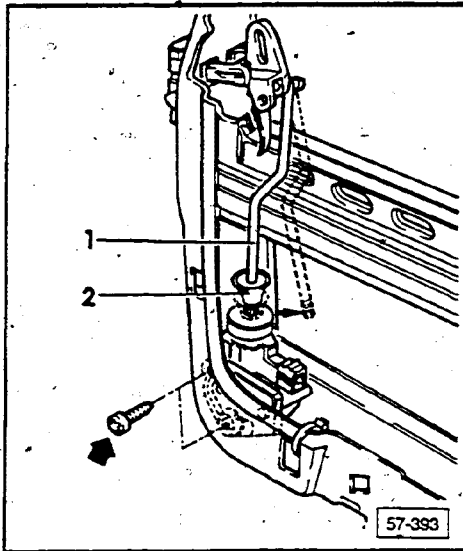
T-connector
located in right
front footwell

Pressure/vacuum hose

Wire clip

Master activator
front left door
removing/installing, Fig. 1

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► Fig. 1 Master activator, removing

- remove door trim panel, see Repair Group 70

Operating rod 1 and master activator must be in **door open** position to loosen the locking ring.

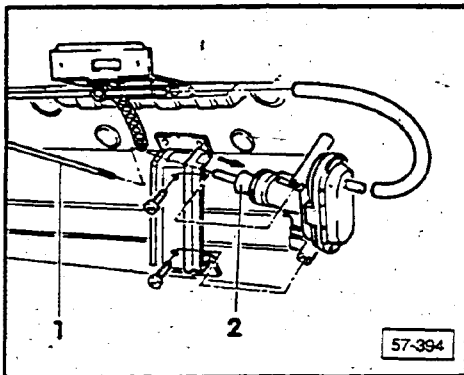
push locking ring 2 downward while holding operating rod 1

- pull operating rod out of activator (arrow)
- remove pressure/vacuum hose and unscrew mounting bolts (arrow)
- remove multi-terminal connector

Master activator, installing

Install all components in reverse order of removal, noting the following:

- put operating rod 1, lock and master activator in **door open** position
- press operating rod 1 in while pushing the locking ring 2 upwards



► Fig. 2 Rear lid activator, removing

- remove lid trim panel, see Repair Group 70

Operating rod must be in **door open** position to loosen the lock ring.

- push lock ring 2 in direction of arrow while holding operating rod securely
- pull operating rod out of activator
- remove pressure/vacuum hose and mounting bolts

Rear lid activator, installing

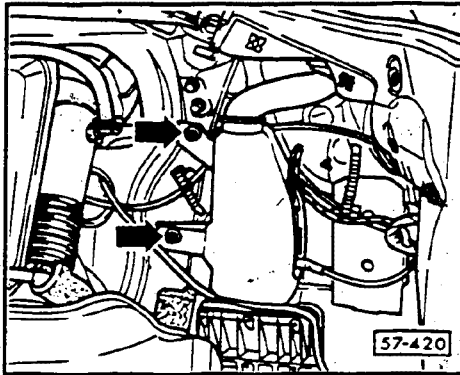
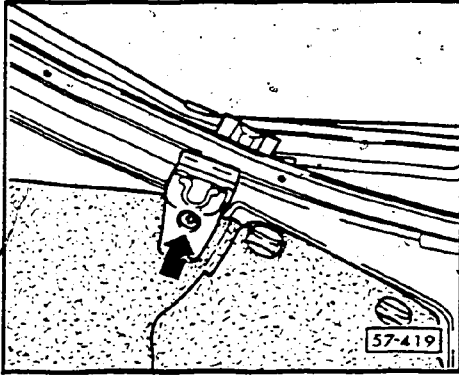
Install all components in reverse order of removal, noting the following:

- pressure/vacuum hose must be between rod, lock and lid trim panel
- to assemble operating rod 1, lock and activator must be in **door open** position
- push in operating rod, lock ring upward
 - do not tension operating rod

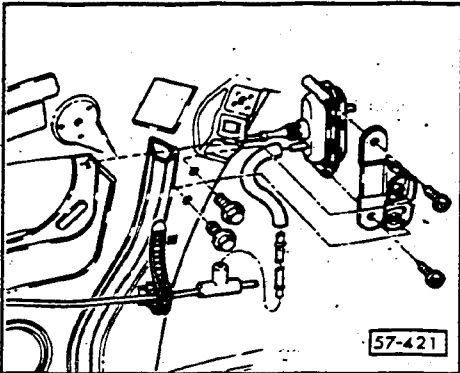
Fuel tank flap activator, removing/installing

Removing

- open rear hatch, pull out rear shelf
- remove screw (arrow), take off right rear buffer
- pull back trim from around fuel tank filler neck



- remove screws (arrows), take out rear window washer fluid container toward rear



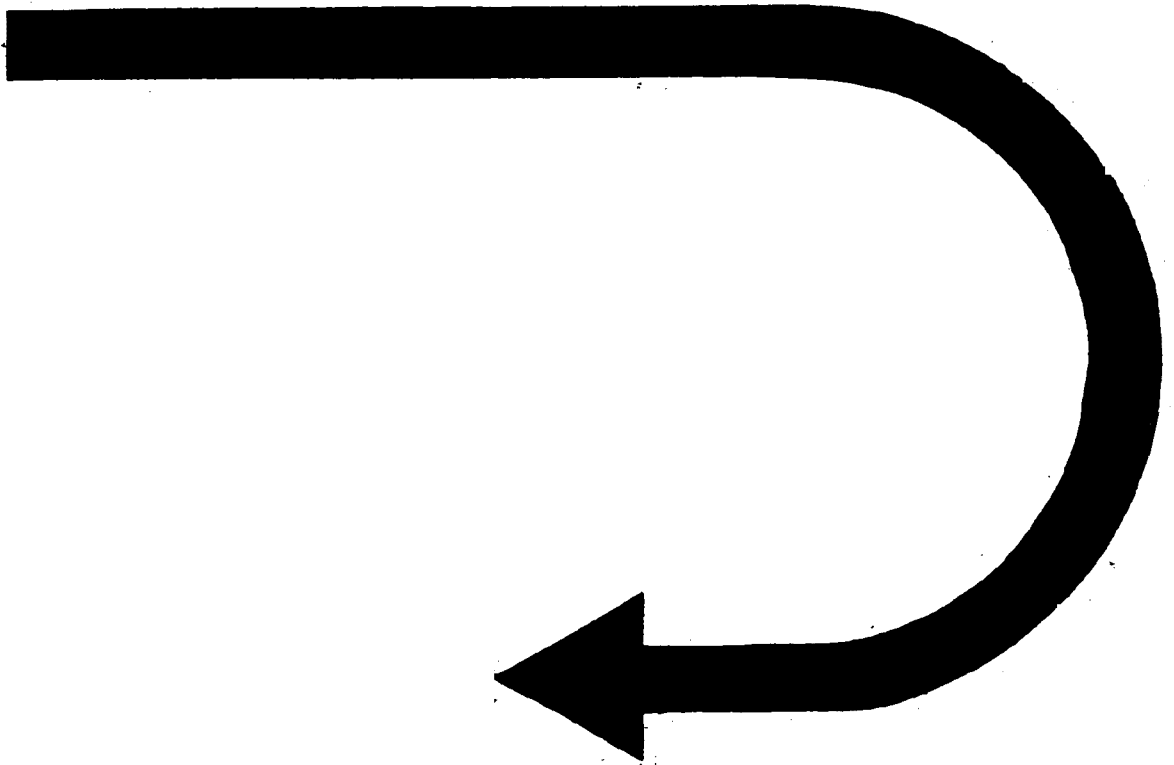
- remove activator mounting screws, pull out activator
- disconnect pressure/vacuum hose

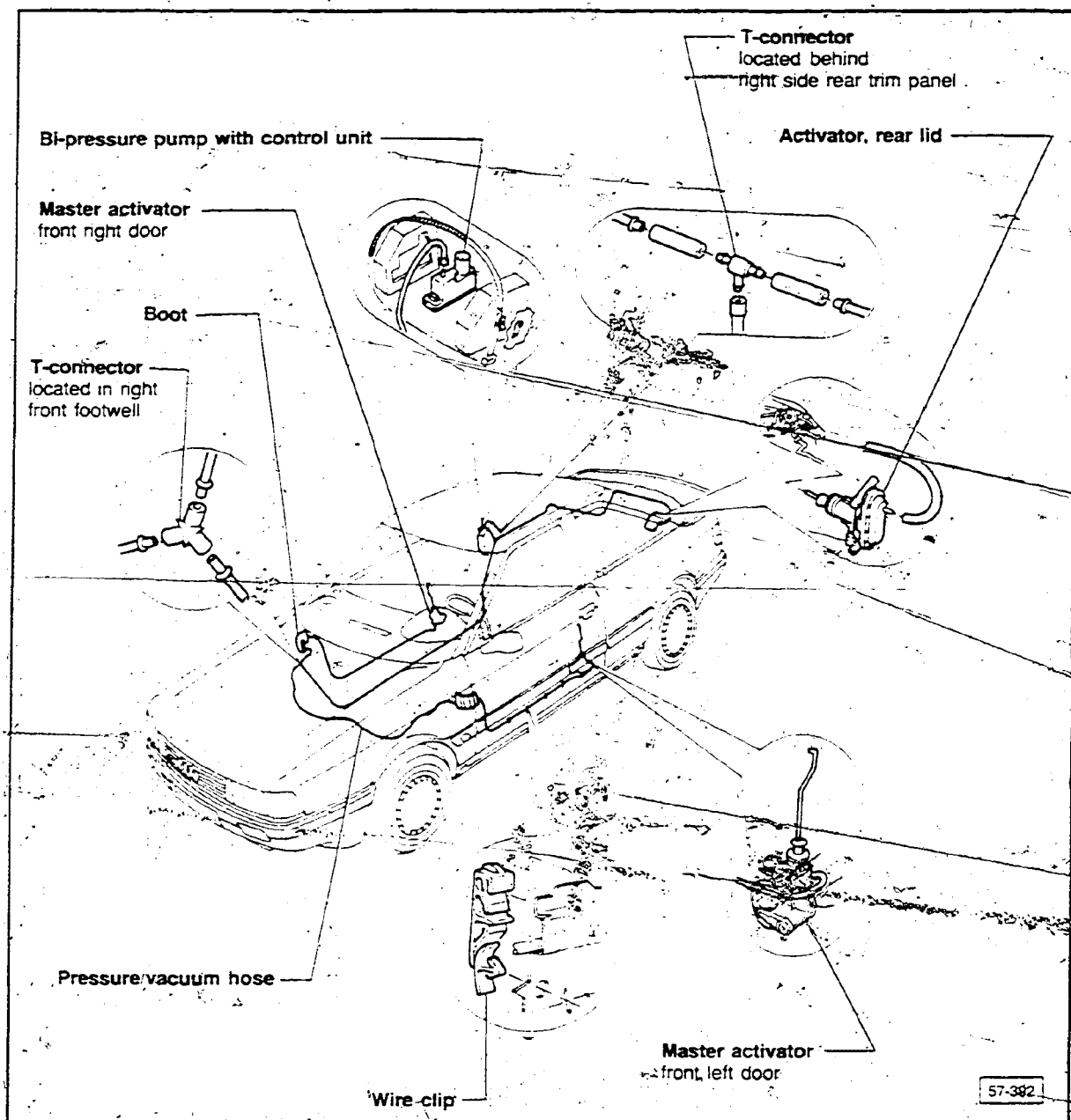
Installing

Reinstall all components in reverse order, noting the following:

- torque fuel tank flap activator mounting screws 4.0 Nm (35 in. lb.)
- check central locking system for proper function

CONTINUED IN THE
BEGINNING OF NEXT ROW





Central door locking, troubleshooting

Electrical

Refer to appropriate wiring diagram.

Test conditions

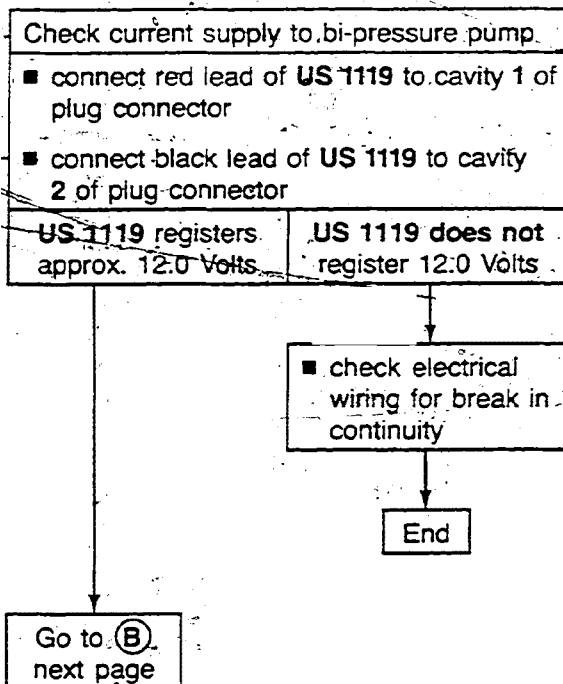
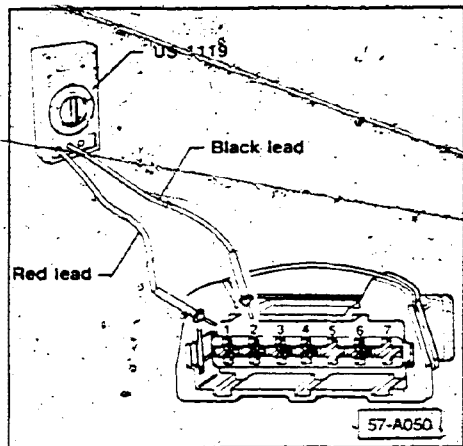
- fuse 19 OK
- battery OK
- remove right rear side trim
 - bi-pressure pump located on right side of luggage compartment
- pull insulating material away from pump
- open retaining strap by pressing the retaining tab back with a screwdriver
- pull off plug connector from pump

Tools required

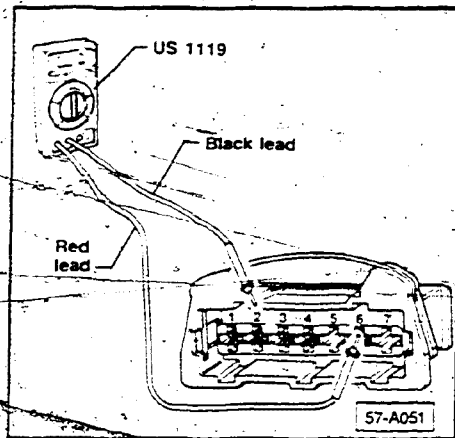
Use multimeter **US 1119** for all testing.

Note

As you look at the end of the plug connector, the cavities are numbered **one** through **seven** starting from the left. Cavities **five** and **seven** are **blank**.



Ⓑ



Check current supply from ignition lock to bi-pressure pump

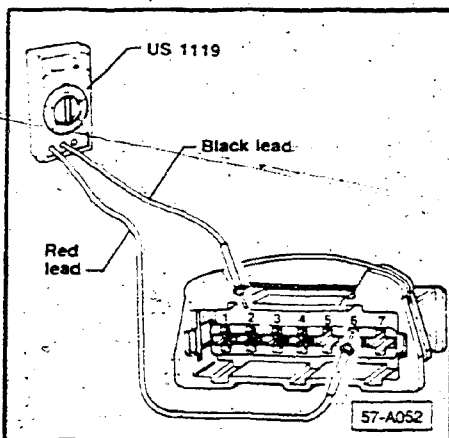
- insert key into ignition starter lock
- do not turn key**
- connect red lead of US 1119 to cavity 6 of plug connector
- connect black lead of US 1119 to cavity 2

US 1119 registers approximately 12.0 Volts

US 1119 does not register 12.0 Volts

- check electrical wiring for break in continuity or
- replace ignition starter lock

End



Check ignition starter lock

- remove ignition key
- connect red lead of US 1119 to cavity 6 of plug connector
- connect black lead of US 1119 to cavity 2 of plug connector

US 1119 registers 0.0 Volts

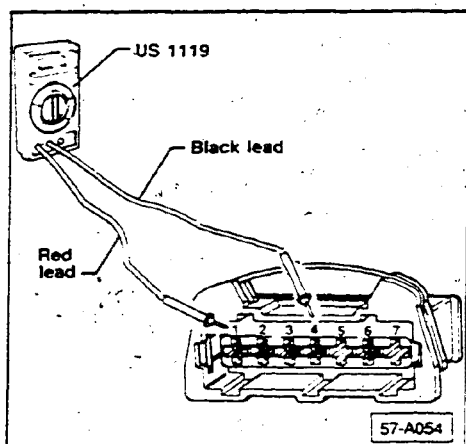
US 1119 registers more than register 0.0 Volts

- replace ignition starter lock

End

Go to Ⓒ next page

Ⓒ



Check driver's door master activator switch to **lock door**

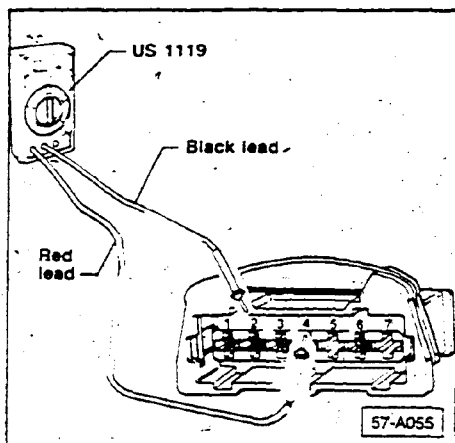
- connect red lead of **US 1119** to cavity 1 of plug connector
- connect black lead of **US 1119** to cavity 4 of plug connector
- push down driver's door locking button (**locked position**)

US 1119 registers approximately 12.0 Volts

US 1110 does not register 12.0 Volts

- check electrical wiring for break in continuity
or
- replace driver's door master activator switch

End



Check driver's door master activator switch to **open door**

- connect red lead of **US 1119** to cavity 4 of plug connector
- connect black lead of **US 1119** to cavity 2 of plug connector
- pull up driver's door locking button (**open position**)

US 1119 registers approximately 12.0 Volts

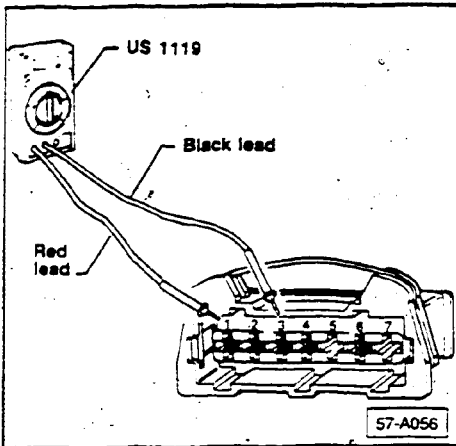
US 1119 does not register 12.0 Volts

Go to Ⓓ next page

- check electrical wiring for break in continuity
or
- replace driver's door master activator switch

End

(D)



Check right front door master activator switch to **lock door**

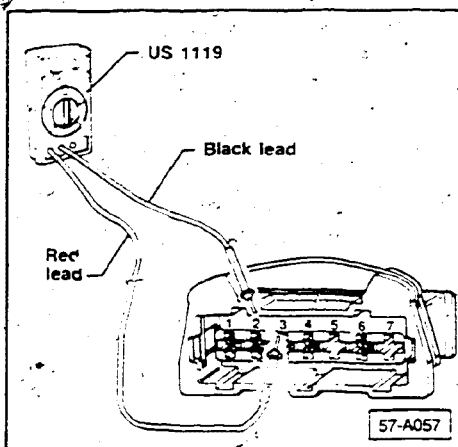
- connect red lead of **US 1119** to cavity 1 of plug connector
- connect black lead of **US 1119** to cavity 3 of plug connector
- push down right front door locking bottom (**locked position**)

US 1119 registers approximately 12.0 Volts

US 1119 does not register 12.0 Volts

- check electrical wiring for break in continuity
or
- replace right front door master activator switch

End



Check right front door master activator switch to **open door**

- connect red lead of **US 1119** to cavity 3 of plug connector
- connect black lead of **US 1119** to cavity 2 of plug connector
- pull up right front door locking button (**open position**)

US 1119 registers approximately 12.0 Volts

US 1119 does not register 12.0 Volts

- replace defective bi-pressure pump

End

- check electrical wiring for break in continuity
or
- replace right front door master activator switch

End

Troubleshooting — bi-pressure system

Test condition

- electrical system OK

Note

If central door locking system has not been activated for an extended period, key must be turned in lock several times to activate system.

When properly functioning, all locks must close within approximately **two** seconds.

If bi-pressure pump runs longer than **five** seconds, system is leaking.

