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DOORS**DESCRIPTION**

The door features a particularly sturdy and resistant structure to compensate the absence of the upper glass restrainer frame. Two anti-intrusion bars and the generous size of the underdoor sidemember offer a high level of protection against side shocks.

The accurate design of the door "surround" seals and the presence of a lock striker (two for the Spider) ensure safe and precise mating between the door and the body.

The window winding device has been newly designed. The electric motor controls a rack and pinion coupling. The rack and pinion which accomplishes an

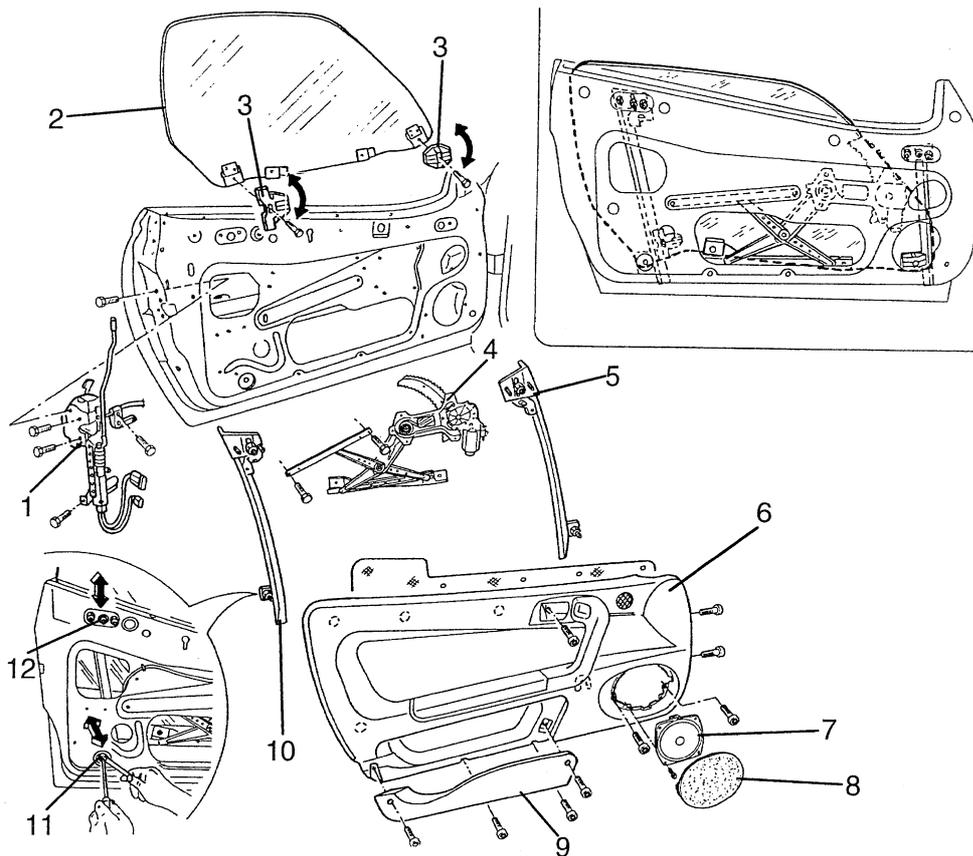
arc of circumference trajectory and is connected to a jointed system which allows a purely translating motion of the lower rod to which the glass is fixed.

The window stroke is controlled by two vertical guides which are adjustable crosswise and house the vertical mechanical stopper, which is also adjustable.

Also the mating position between the sliding pads along the guides and the stay brackets on the glass is adjustable.

The glass runs on the outside of the guides and the stay brackets are retained on the glass.

Access can be gained to the guide adjustment screws without having to remove the door panel.



1. Closing/opening

2. Glass

3. Pads

4. Window winding device

5. Front guide

6. Door panel

7. Speaker

8. Plate

9. Door utility compartment

10. Rear guide

11. Guide crosswise adjustment

12. Glass vertical stroke adjustment

COMPLETE DOOR

REMOVAL/REFITTING

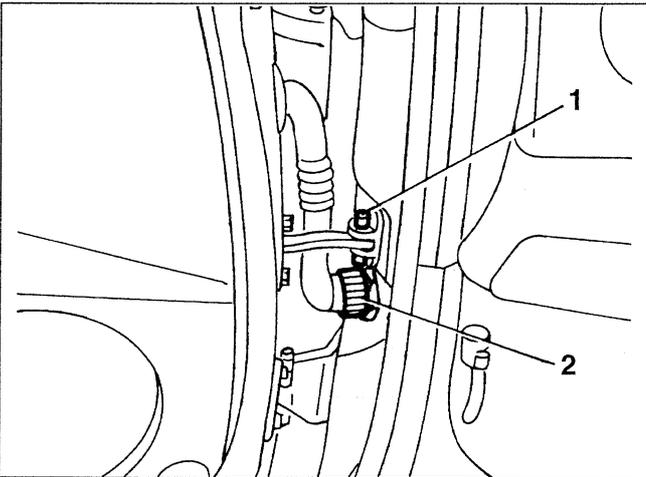
NOTE: During removal (or refitting) avoid damaging the paintwork.

Open the bonnet.

– Lower the window and then disconnect the battery.

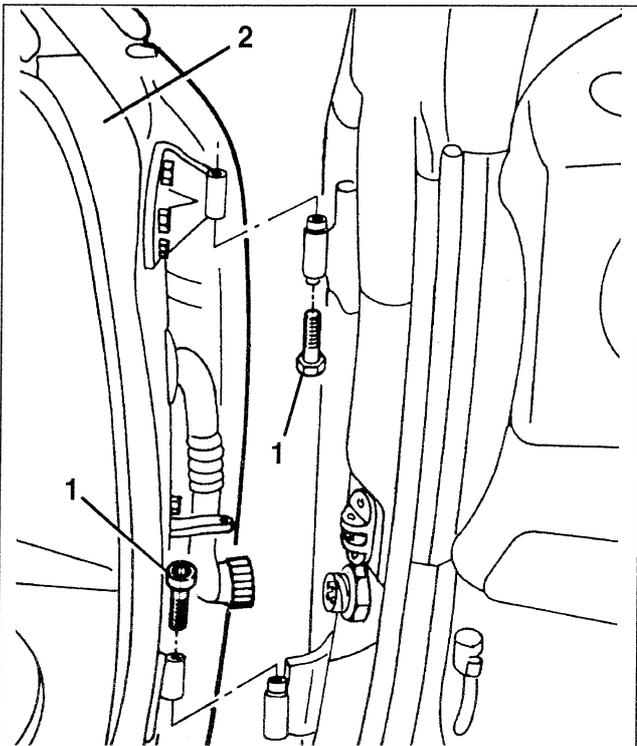
1. Remove the door check rod pin upwards. Close the door slightly to allow the entry of the rod, then reopen the door.

2. Slacken the locknut and disconnect the connector.



1. Slacken the two screws fastening the door to the hinge.

2. Raise the door to remove the hinge taper pins from their housings, then remove the door.



Refit the door reversing the sequence followed for removal. Adjust the door position.

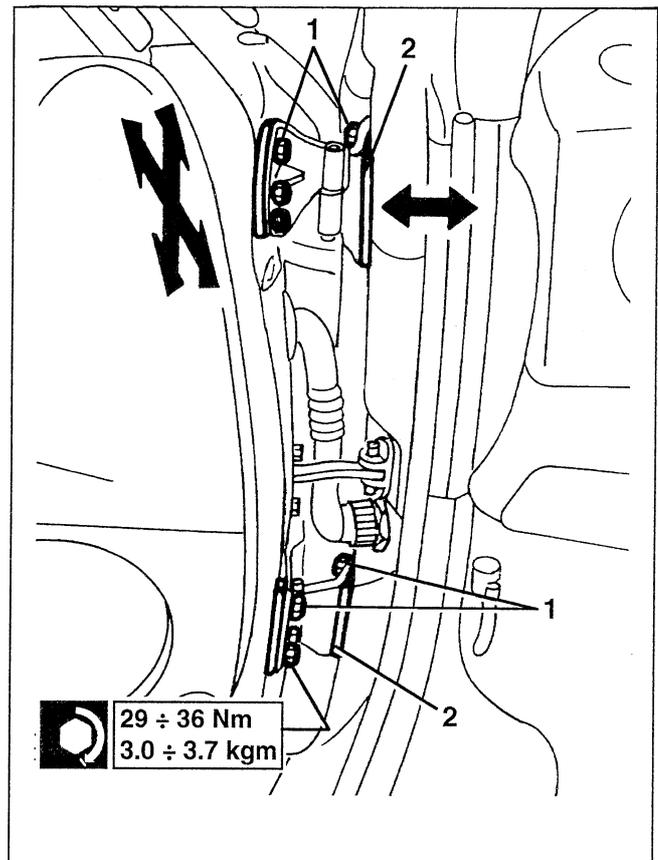
ADJUSTMENT

1. Loosen the screws fastening the hinges to the door and/or body and adjust the door in height and longitudinally.

2. If necessary, place suitable thicknesses under the hinges to adjust the position of the door.

– Tighten the screws to the specified torque.

NOTE: The upper hinge also supports the bonnet connection bracket. If the coupling position of this hinge with the bonnet needs changing, adjust the door together with bonnet alignment.

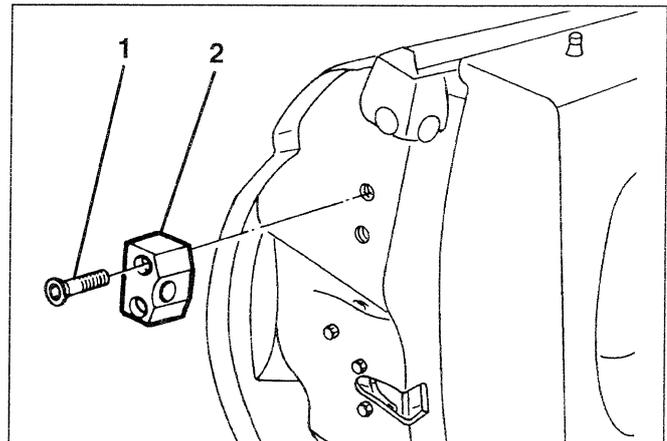


DOOR STRIKER (Spider only)

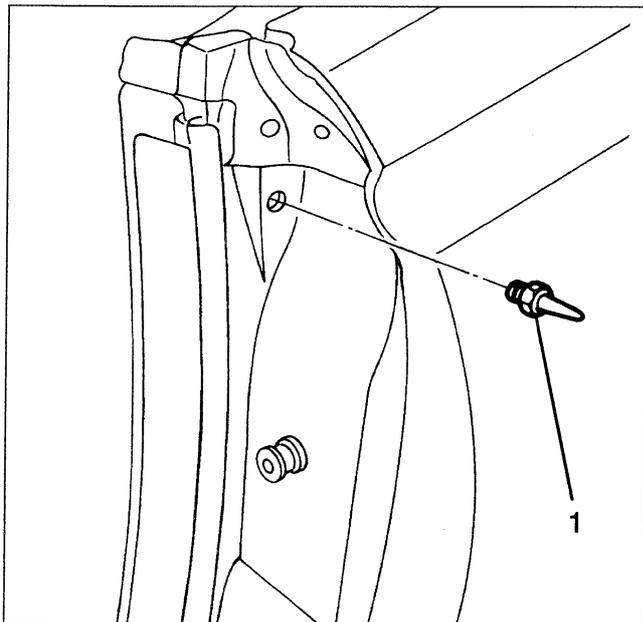
REMOVAL/REFITTING

1. Slacken the two screws.

2. Remove the striker block.



1. Slacken and remove the striker pin



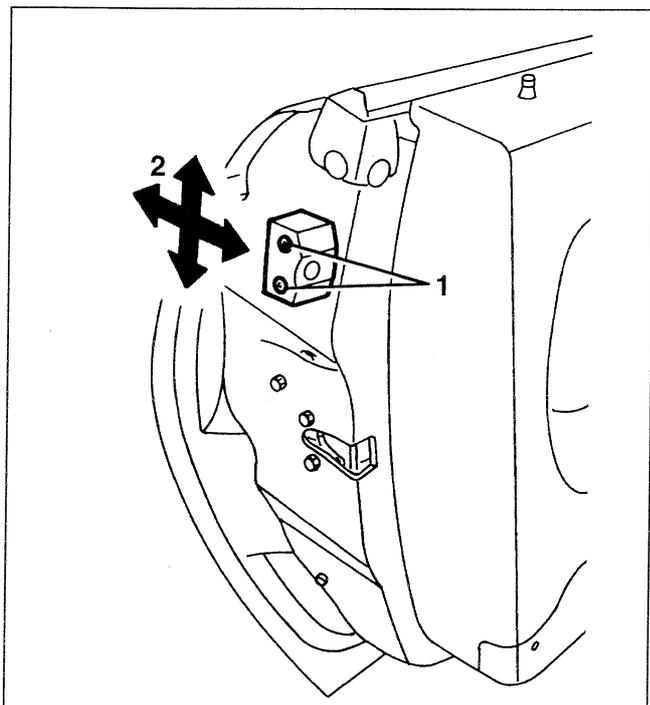
Refit, reversing the sequence followed for removal.

ADJUSTMENT

The striker may only be adjusted after checking that the door is perfectly aligned.

1. Loosen the two block screws,
2. Change the position of the striker block to obtain perfect mating with the striker pin which is in a fixed position. Then tighten the screws.

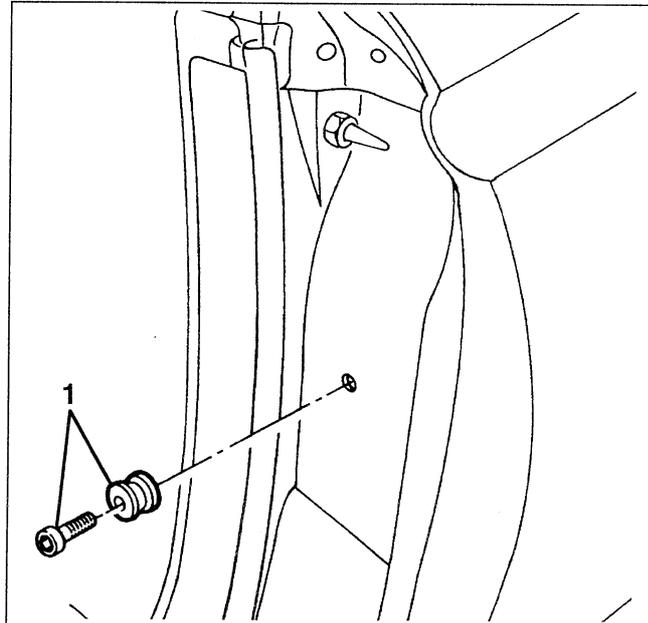
Check for perfect mating between the lock and the striker, adjust appropriately if necessary (see specific paragraphs).



LOCK STRIKER

REMOVAL/REFITTING

1. Slacken the centre screw and remove the lock striker.



Refit, reversing the sequence followed for removal.

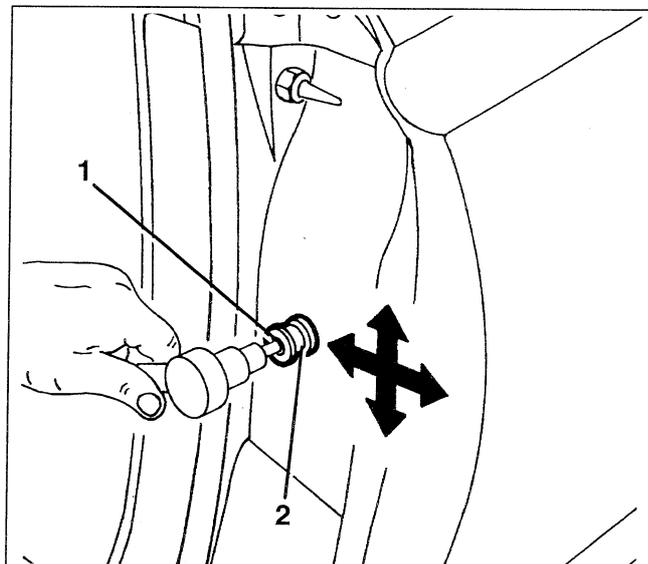
ADJUSTMENT

The striker lock may be adjusted only after checking the perfect alignment of the door and mating with the door striker.

1. Loosen the striker screw.
2. Change the position of the striker to obtain perfect mating with the door closing device. Then tighten the screw.

NOTE:

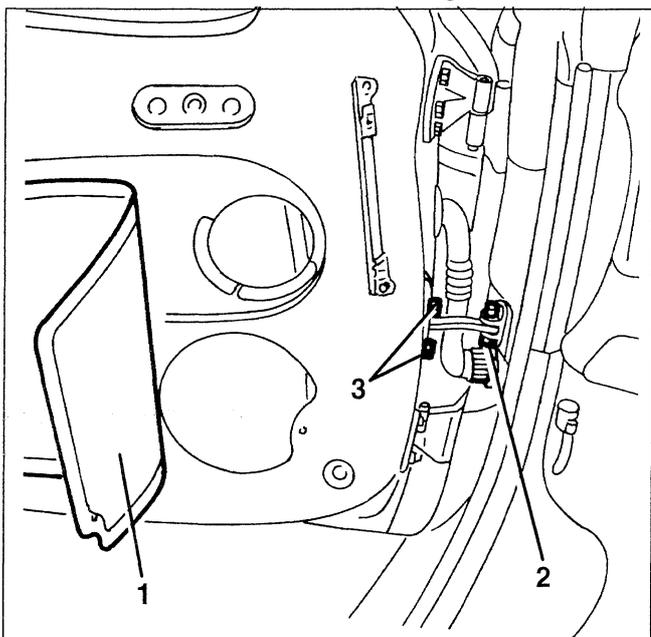
Direct the notches on the striker surface towards the inside of the car.



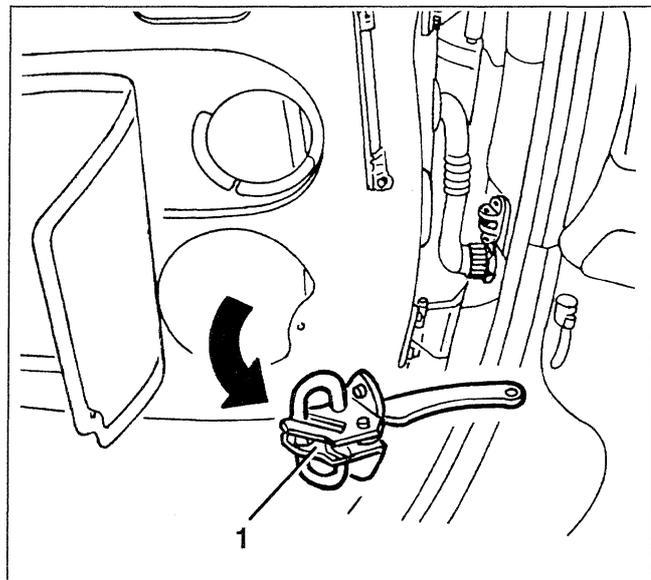
DOOR CHECK ROD

REMOVAL/REFITTING

- Remove the door panel (see specific paragraph)
- 1. Partially remove the interior trim, taking care not to damage it.
- 2. Remove the door check rod pin upwards. Close the door slightly to allow the entry of the rod, then reopen the door.
- 3. Slacken the two screws fastening the check rod.



1. Withdraw the check rod from the inner door.



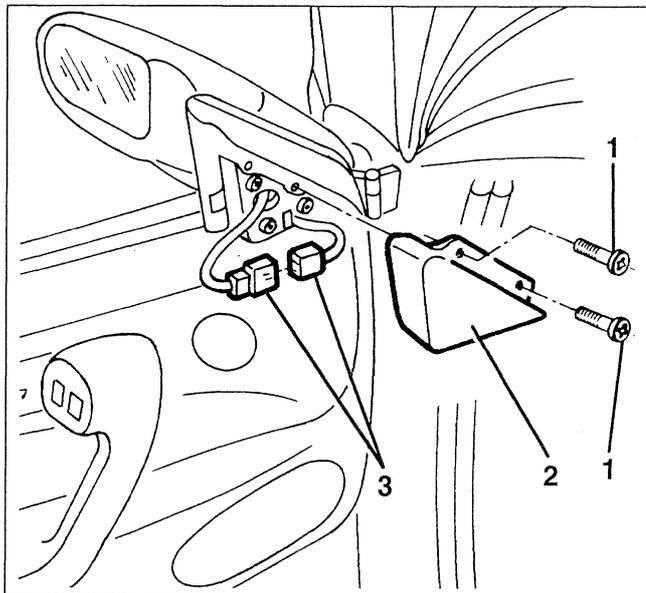
When refitting reverse the sequence followed for removal following the instructions given below:

- Before refitting the door check rod, treat the contact area with Primer.
- If the interior trim glue no longer ensures perfect adherence, change it.

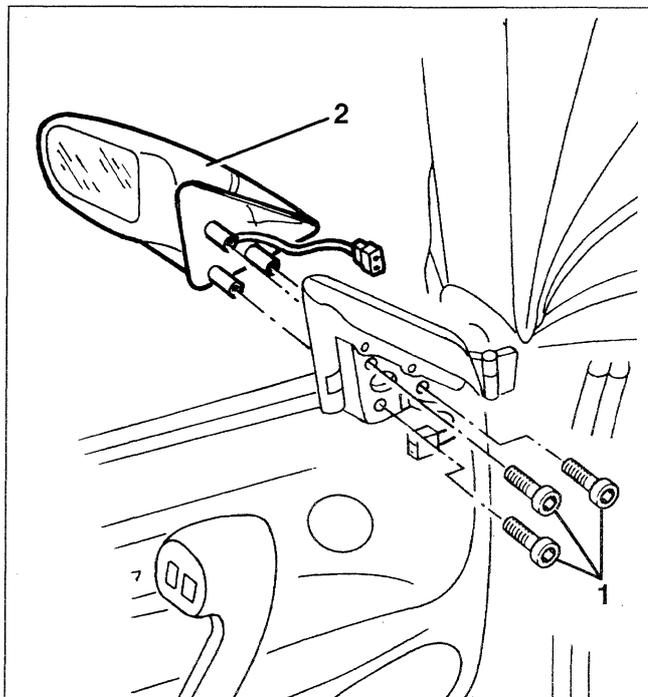
DOOR MIRROR

REMOVAL/REFITTING

- Lower the window and disconnect the battery.
- 1. Slacken the two screws.
- 2. Remove the plate.
- 3. Disconnect the electrical connection.



- 1. Slacken the three door mirror fastening screws.
- 2. Remove the door mirror releasing the wiring.

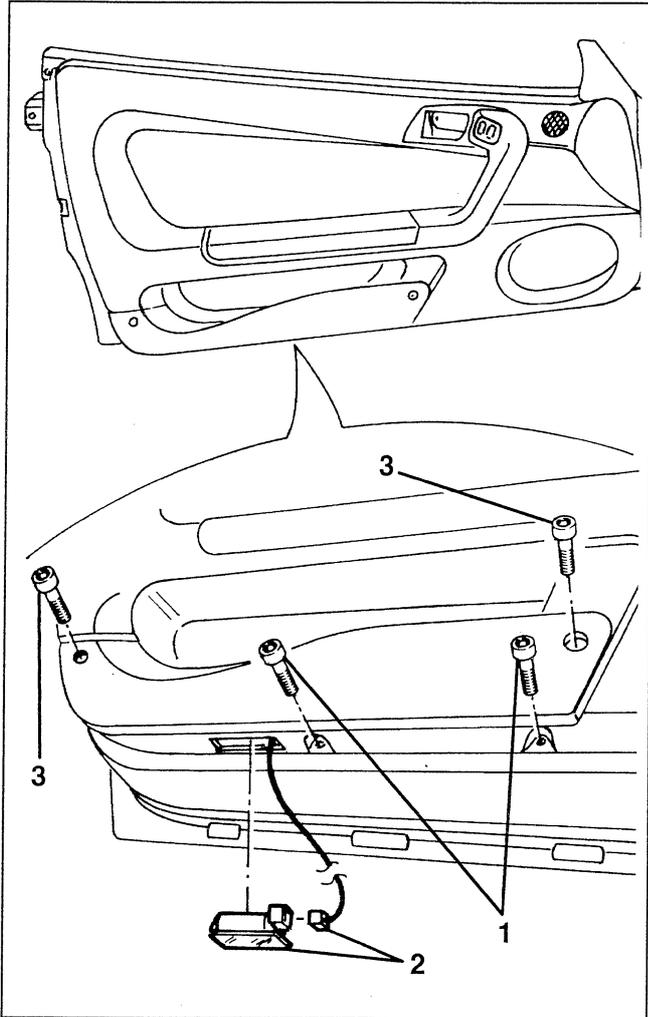


Refit the door mirror reversing the sequence followed for removal.

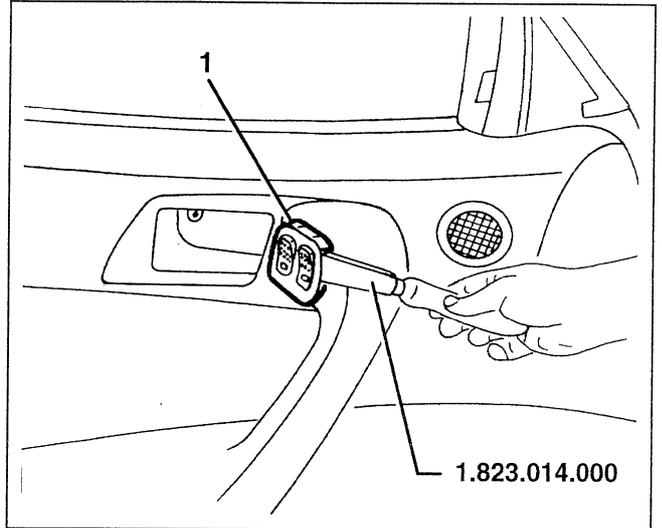
DOOR PANEL

REMOVAL/REFITTING

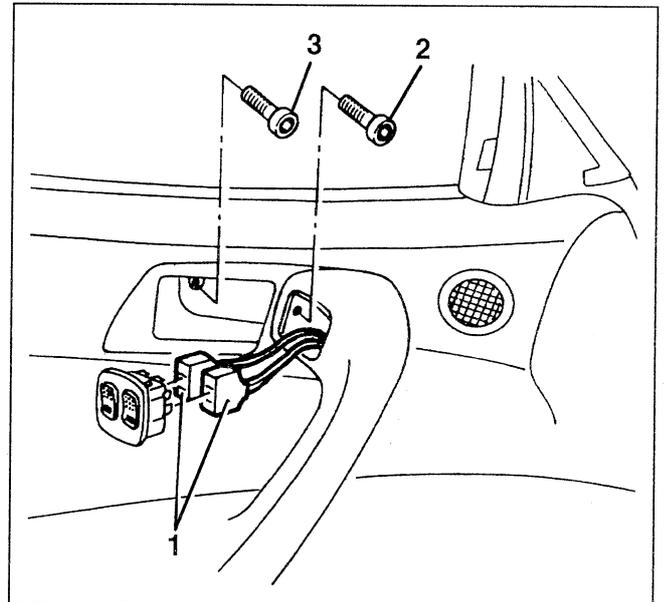
- Disconnect the battery.
- Remove the front speaker (see Group 55 - Electric system).
- 1. Slacken the two lower screws.
- 2. Withdraw and disconnect the lamp.
- 3. Slacken the two screws and remove the door utility pocket withdrawing it downwards.



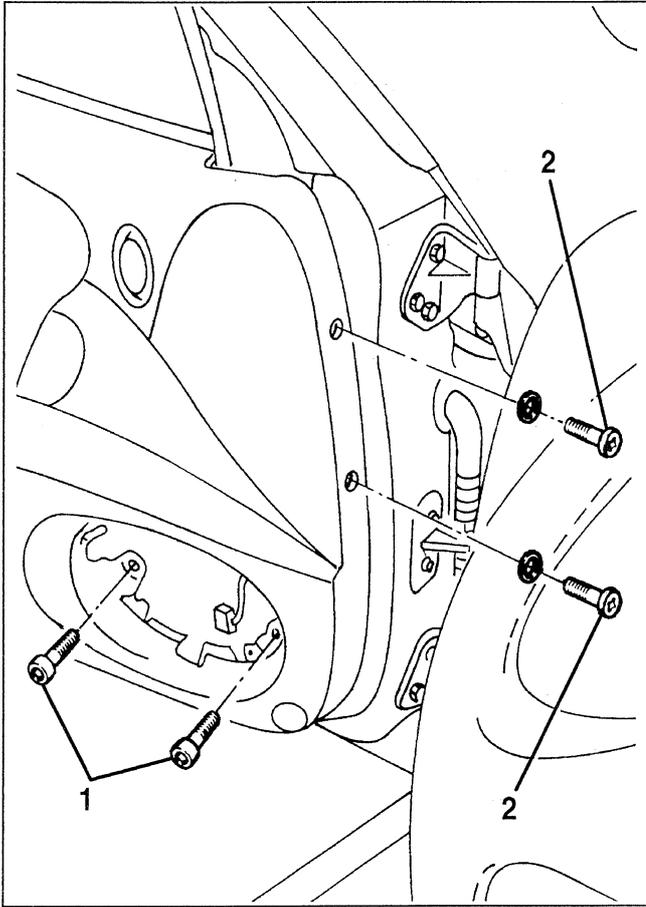
1. Using tool 1.823.014.000, remove the power window switches, complete with plate, from their housing.



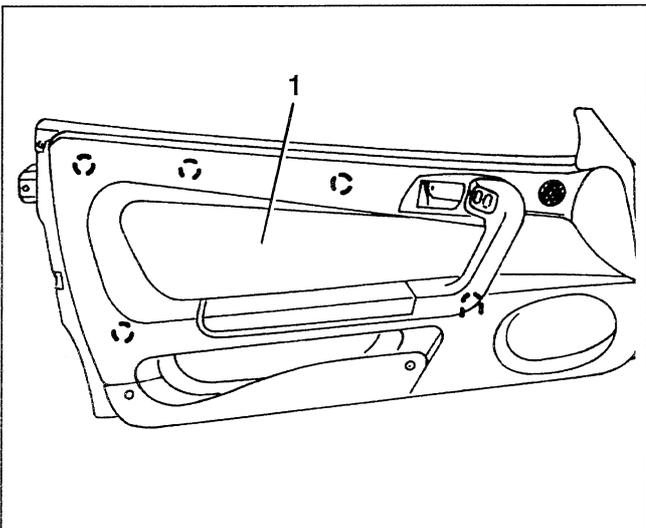
1. Disconnect the electrical connections from the power window switches and remove the switches.
2. Slacken the fastening screw located in the switch opening.
3. Slacken the fastening screw under the inner door opening handle.



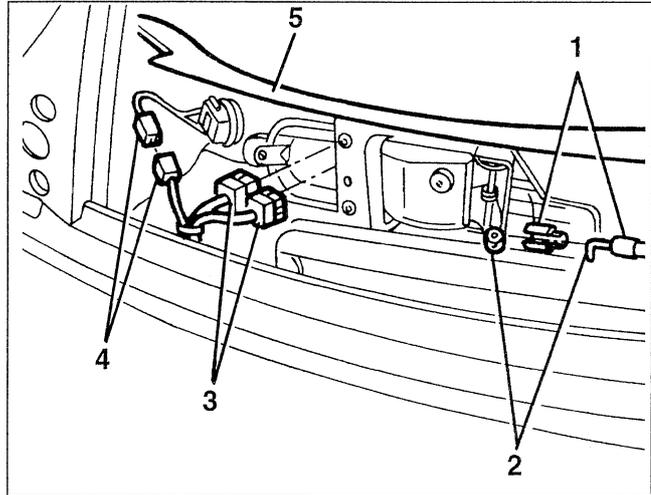
1. Slacken the two fastening screws in the speaker compartment.
2. Slacken the two front panel fastening screws.



1. Raise the panel and prise it off the pins positioned as illustrated. Do not remove it but move it away only slightly from the door.



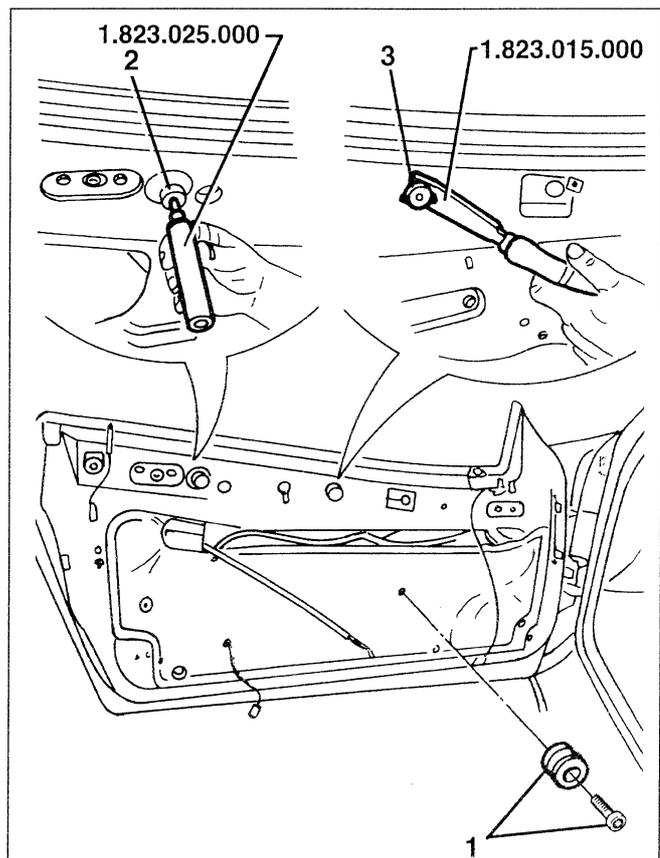
1. Remove the door opening handle cable sheath from the retainer clip.
2. Withdraw the cable from the handle bracket.
3. Release the power window switch connectors.
4. Disconnect the tweeter speaker connection.
5. Remove the door panel.



Refit the door panel reversing the sequence followed for removal.

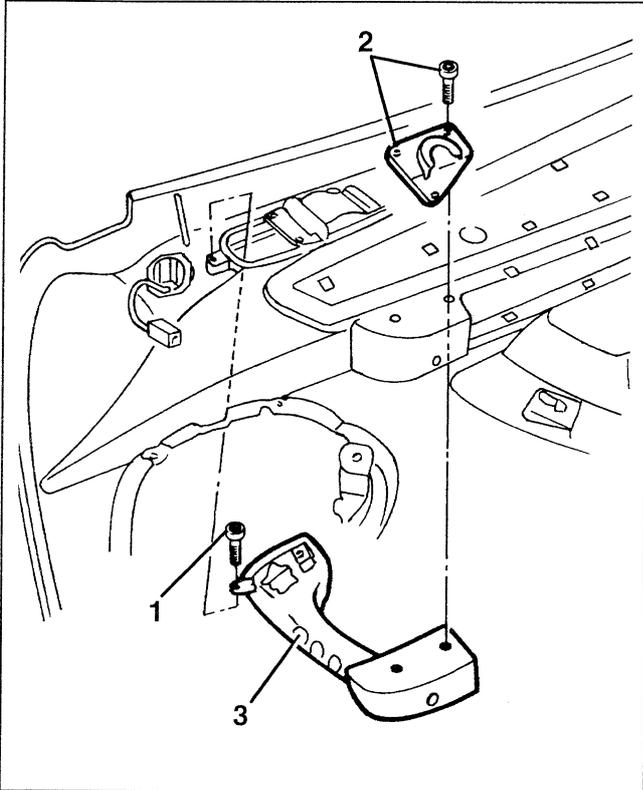
REPLACING THE DOOR PANEL STAY PINS

1. Slacken the screw and remove the centre pin.
2. Using tool 1.823.025.000 press the centre nail out of the peripheral pins.
3. Using tool 1.823.015.000 remove the peripheral pins and retrieve the centre plastic nails.

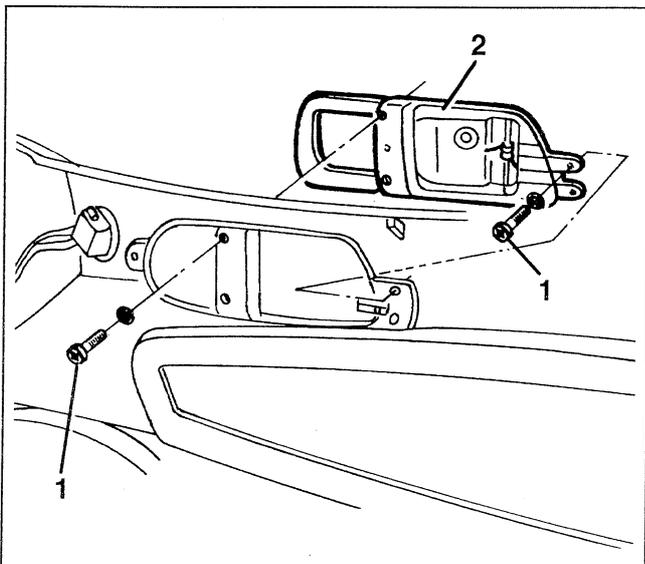


DIS-ASSEMBLY

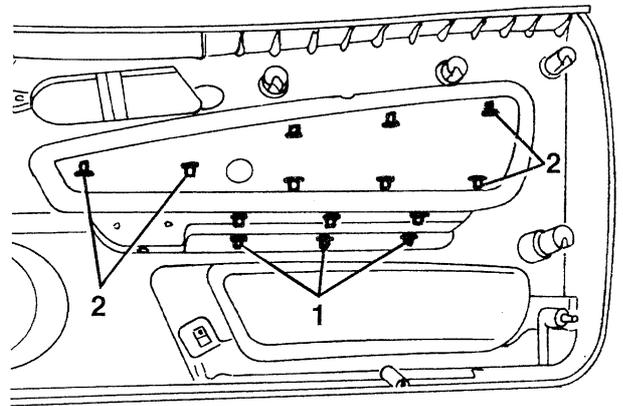
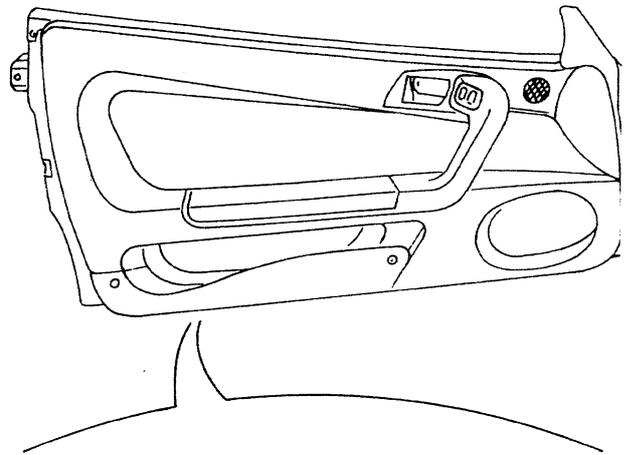
1. Slacken the upper fastening screw.
2. Slacken the three lower screws and remove the retainer bracket.
3. Remove the inner handle.



1. Slacken the four screws.
2. Remove the door opening inner handle plate.



1. Straighten the tabs and remove the armrest.
2. Straighten the tabs and remove the trim panel.



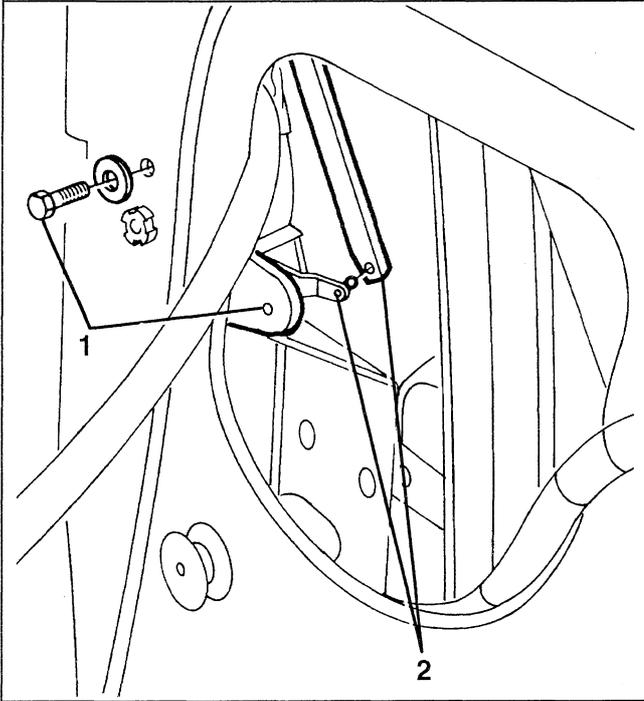
Re-assemble the door panel reversing the sequence followed for dis-assembly.

LOCK UNIT

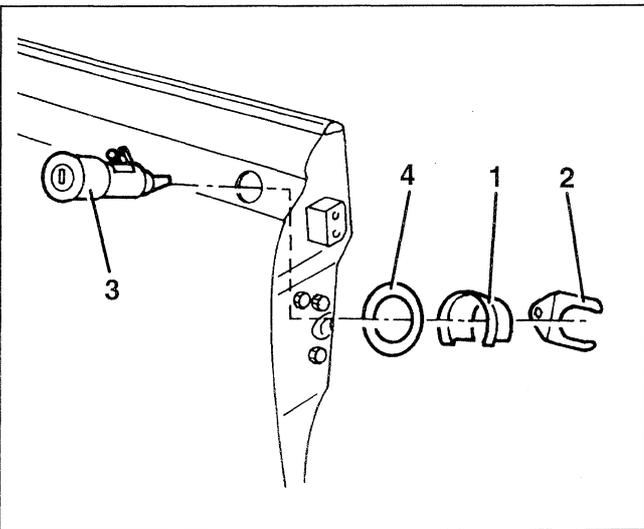
REMOVAL/REFITTING

– Remove the door panel (see specific paragraph).
Move aside the interior trim.

1. Remove the lock control bracket.
2. Disconnect the tierod coupling the lock unit to the lock device.



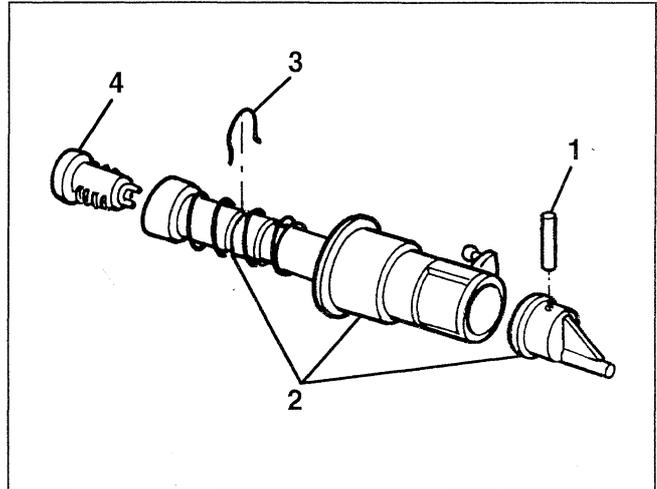
1. Withdraw the locking.
2. Withdraw the retainer clip.
3. Remove the lock unit from the outside of the door.
4. Remove the ring.



Refit the lock device reversing the sequence followed for removal.

DISASSEMBLY

1. Withdraw the retainer pin.
2. Dis-assemble the unit.
3. Remove the retainer clip.
4. Remove the unit.



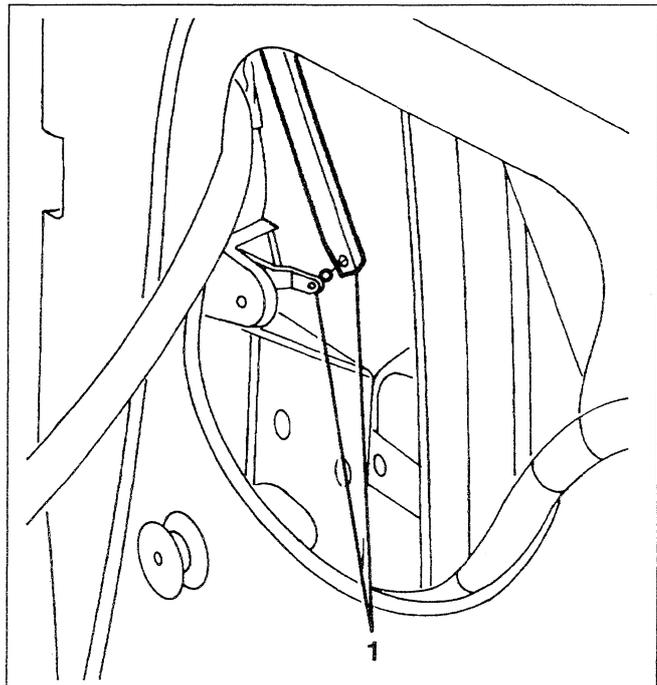
Re-assemble the lock unit reversing the sequence followed for dis-assembly.

LOCK DEVICE

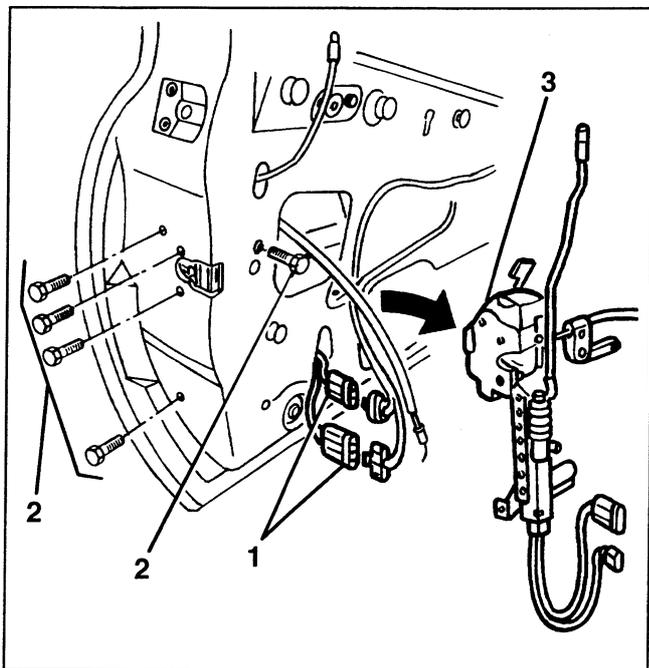
REMOVAL/REFITTING

- Raise the window and disconnect the battery.
- Remove the door panel (see specific paragraph).
- Move aside the interior trim.

1. Disconnect the tierod of the lock unit from the lock device.

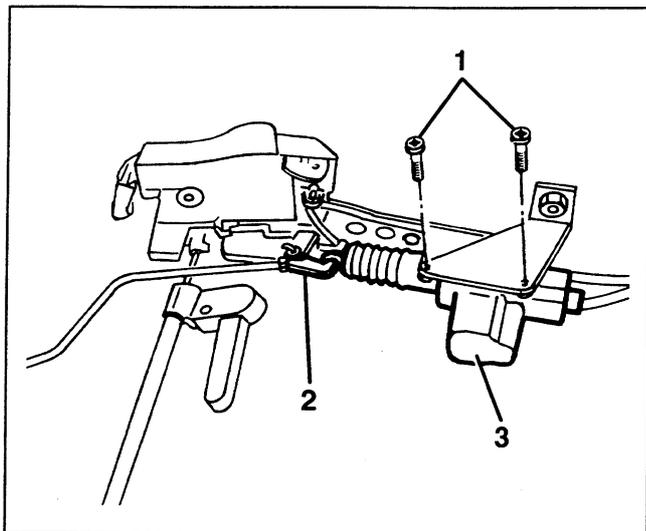


1. Disconnect the two electrical connections.
2. Slacken the five screws
3. Remove the lock device from the inside of the door.



If necessary:

1. Slacken the two screws.
2. Release the catch.
3. Remove the door locking actuator.



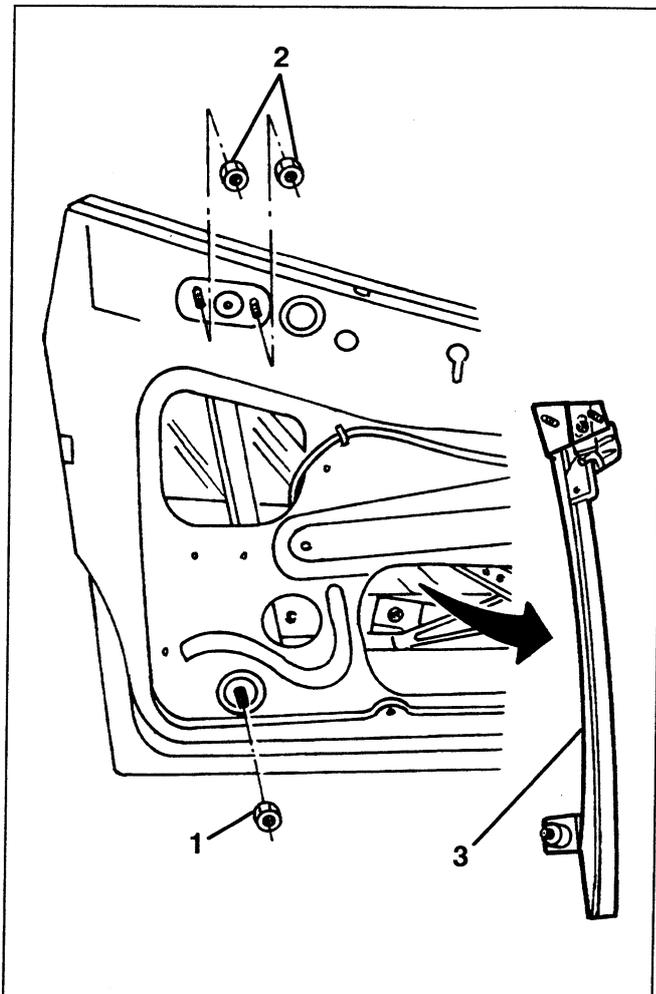
Refit the lock device reversing the sequence followed for removal.

WINDOW GUIDES

REMOVAL/REFITTING

- Remove the window (see specific paragraph)

 1. Slacken the lower nut.
 2. Slacken the upper nuts.
 3. Remove the guide.

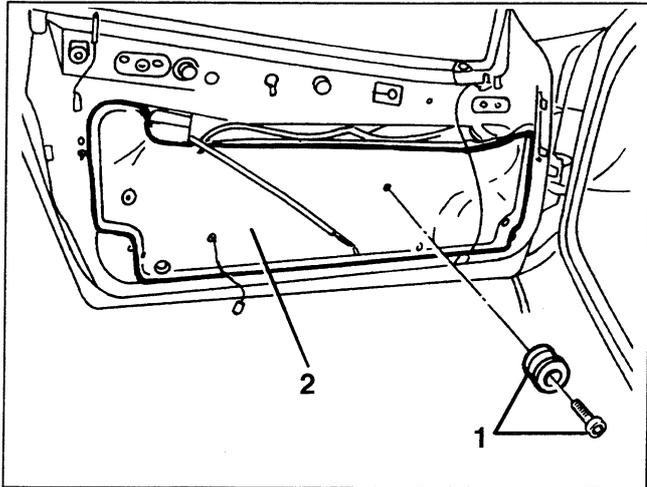


When refitting reverse the sequence followed for removal and adjust the position of the guides.

**WINDOW
REMOVAL**

Remove the door panel (see specific paragraph).

1. Slacken the screw and remove the centre panel stay pin.
2. Detach the interior trim, taking care not to damage it.

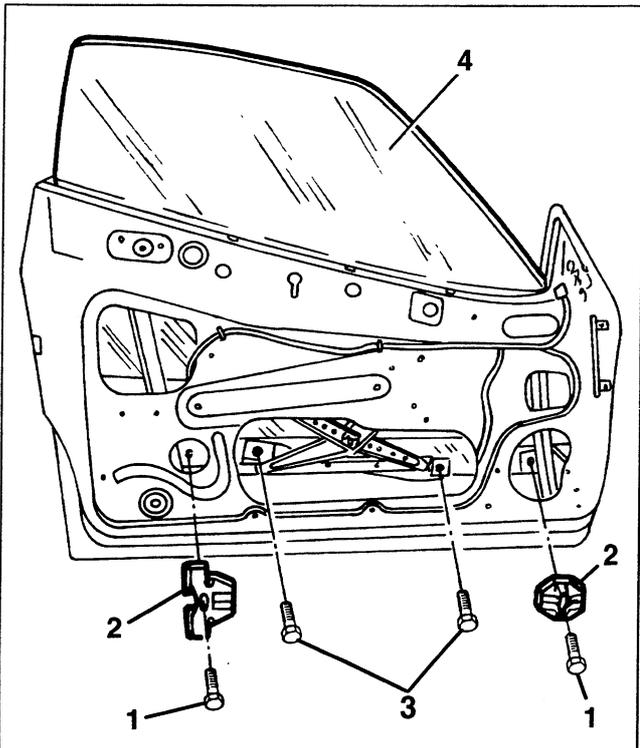


– Reconnect the power window switches and the battery.

– Move the window to an intermediate position in which access is possible to the four window anchoring screws.

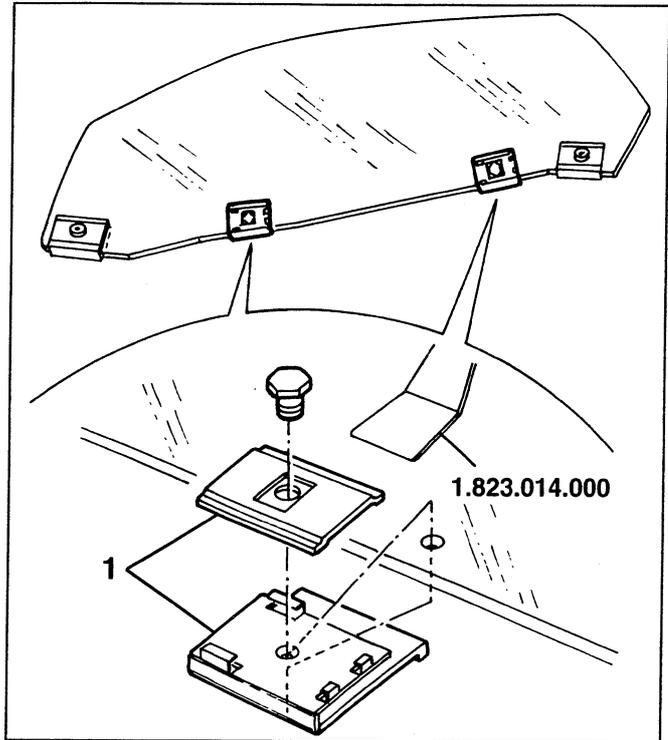
– Remove the inner glass wiper seal (see specific paragraph).

1. Slacken the screws fastening the window to the pads of the guides.
2. Remove the guide pads.
3. Slacken the screws fastening the window to the window winding device.
4. Remove the window from above.



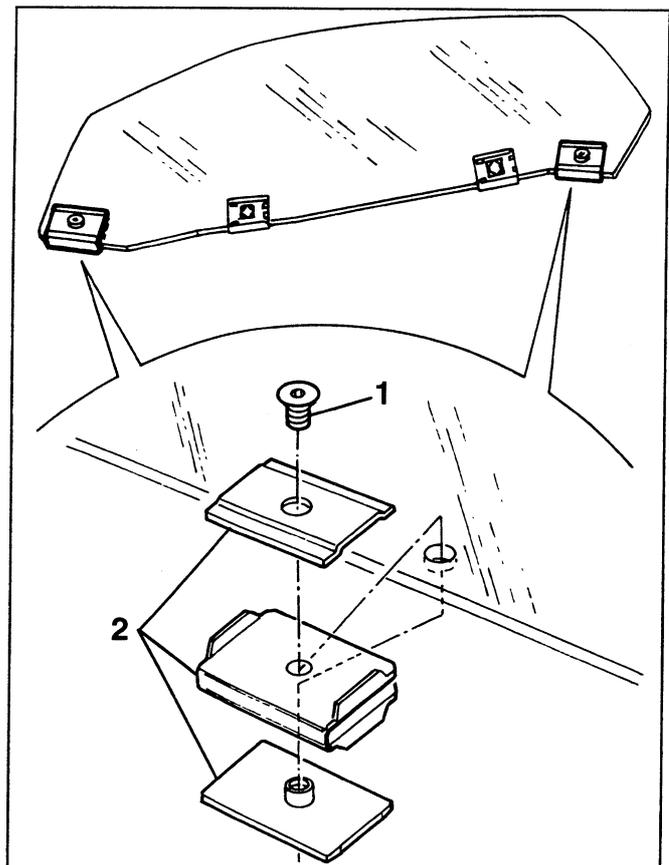
If necessary:

1. Prise out and open the plastic seats with electric window attachment plate using tool 1.823.014.000



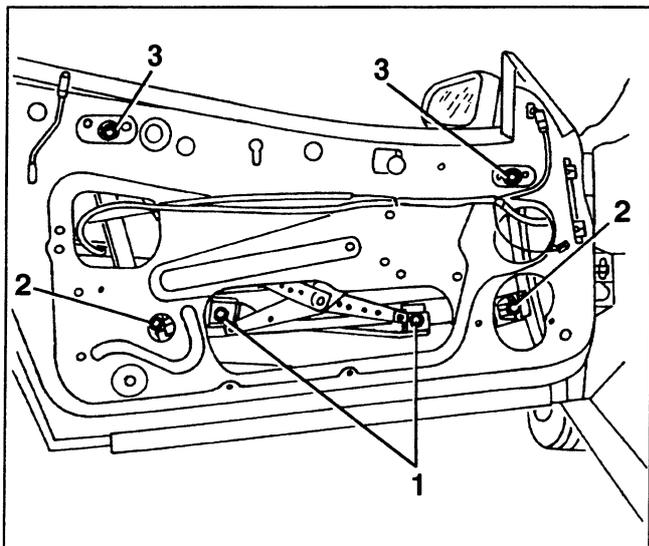
– If necessary:

1. Undo the retaining bush.
2. Remove the plastic seats with window slide pad attachment plate

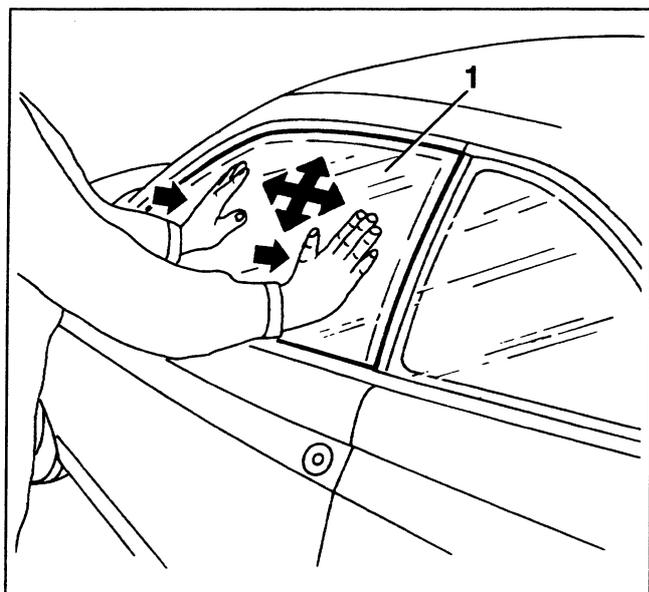


REFITTING

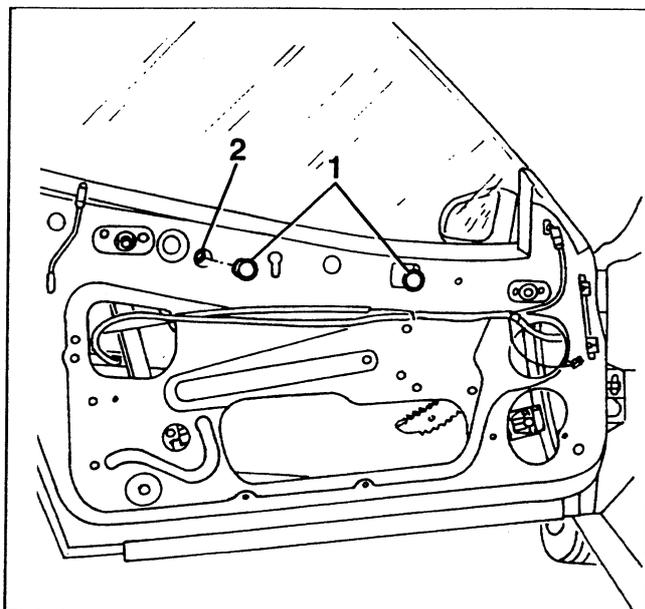
- Re-position the window in its housing.
- 1. Tighten the window fastening screws to the window winding device, without locking them.
- 2. Tighten the screws that fasten the runners to the glass, without locking them.
- 3. Move the glass to the raised position and slacken the lock nuts of the stops.



- Shut the door
- 1. Working as illustrated, press the glass and settle it in place in its housing in contact with the seals.

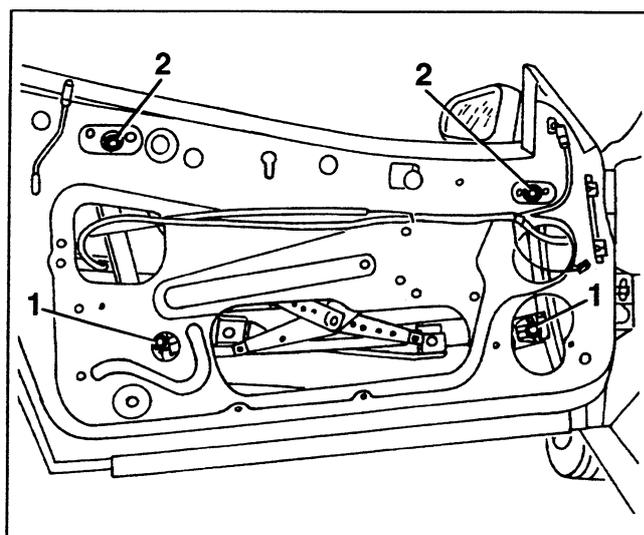


- 1. Working from the passenger compartment (without opening the door) remove the two rubber caps.
- 2. Tighten the screws that fasten the window to the window winder.



- Lower the window to the position in which the screws that fasten the window to the runners are accessible.

- 1. Tighten the screws fastening the runners to the window.
- 2. Check the position of the upper stop and tighten the corresponding nuts.
- Carry out the adjustment procedure (see following paragraph).
- Carry out the up-down device device adjustment procedure (see specific paragraph).

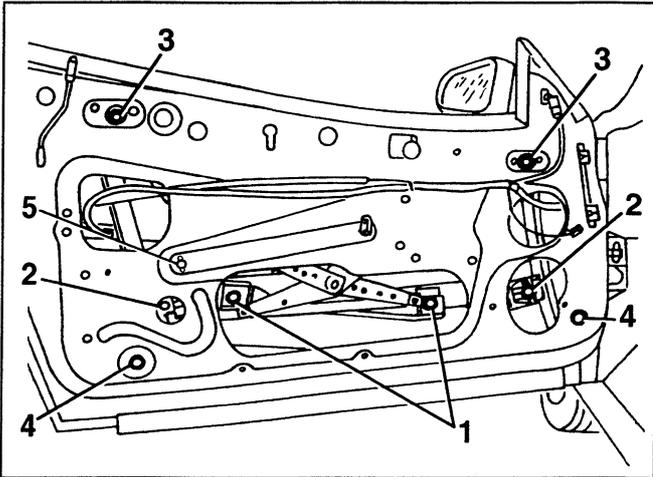


WINDOW ADJUSTMENT

Adjustment of the glass position is fundamental in ensuring correct mating of the door in its surround and perfect air and water tightness.

The absence of the glass contour frame in fact, imposes perfect adjustment of the mating between glass and seals, with the door closed and the window up, to avoid wind noise and leaks.

The window adjustment points are the following:

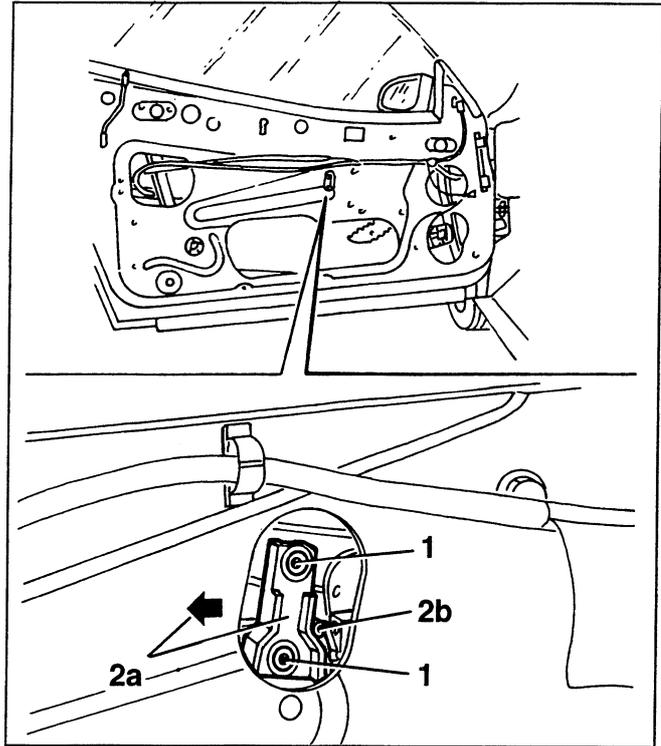


1. Glass fastening points on lower window winder rod (longitudinal adjustment).
2. Mating of runners - glass (crossways and partly vertical adjustment).
3. Runner stops (vertical adjustment).
4. Lower guide connection points (crossways adjustment). These adjustment points should be taken to the nominal dimension and serve solely for small final adjustments of the glass transversal position.
5. Window winder pad anchor point (adjustment of window up/down trajectory).

NOTE: before adjusting the window, disable the up-down device as described below.

– remove the door panel and interior trim (see specific paragraph).

1. Loosen the cam retaining bolts.
 2. Move cam (2a) away from microswitch (2b) and secure.
- Once adjustment is complete, adjust the up-down device (see specific paragraph).

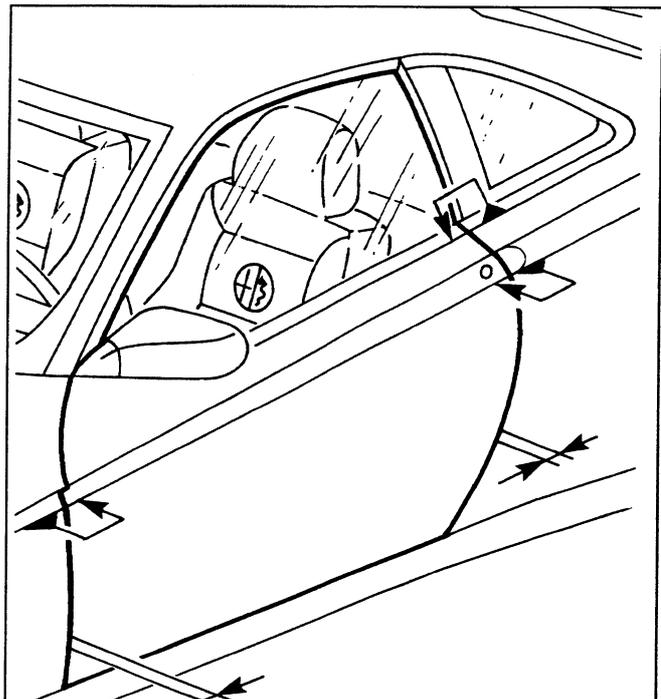


Checks and inspections

Before carrying out the window adjustment procedure it is necessary to carry out certain checks to locate the cause of malfunctioning.

A) Check the up-down device is correctly adjusted (Group 70 - Body - Doors - UP-DOWN device - Adjustment).

B) Check the correct alignment of the door. For adjustment refer to Repair Manual - Group 70 - Body - Doors - Door Complete - Adjustment).



C) Additionally for Spider: check the correct mating between the three sections of hood seal (A), between

the rear edge and the door surround seal (B) and between the front edge and the windscreen pillar seal (C).

Also check that the hood is closed correctly and centred in relation to the windscreen and that between the front edge of the hood and the crossmember above the windscreen there is a constant distance of 6 to 7 mm for correct pressure of the seal (D).

NOTE:

If the reason for adjustment is replacement of the window, there is no need for checks C), D) and E). In this case, continue with the adjustment procedure.

Conversely, in the case of faults noted during use of the vehicle (noise, draughts of air/water leaks), proceed with checks C), D) and E) and then carry out the adjustment procedure.

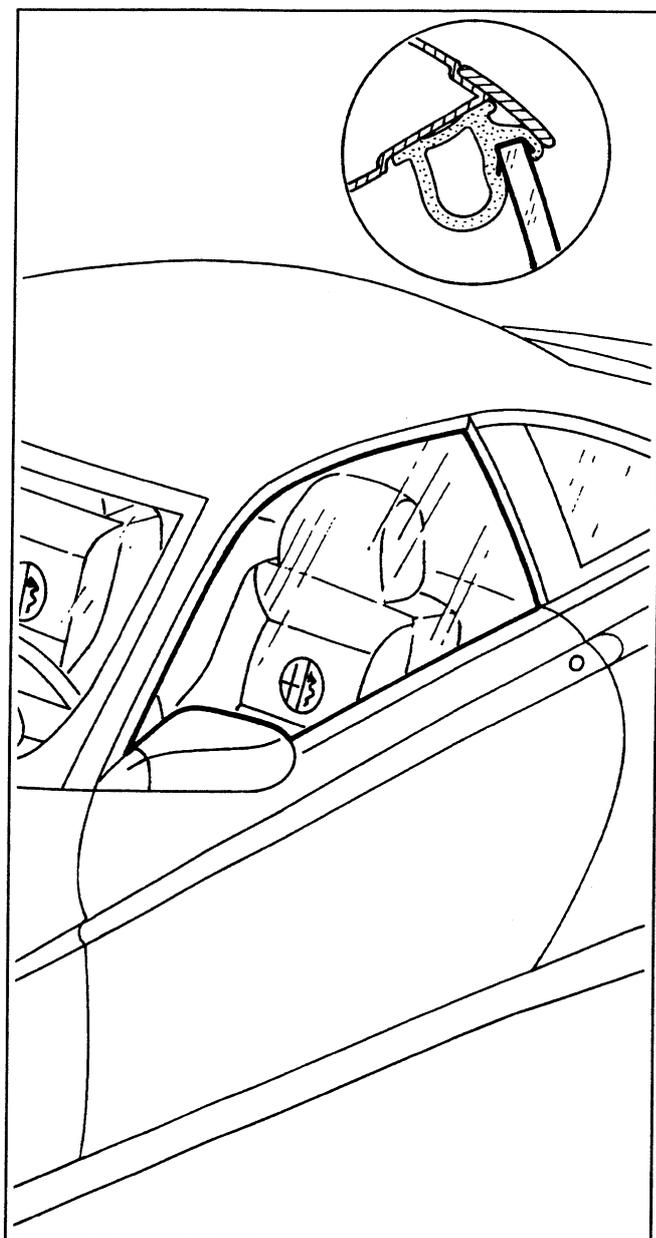
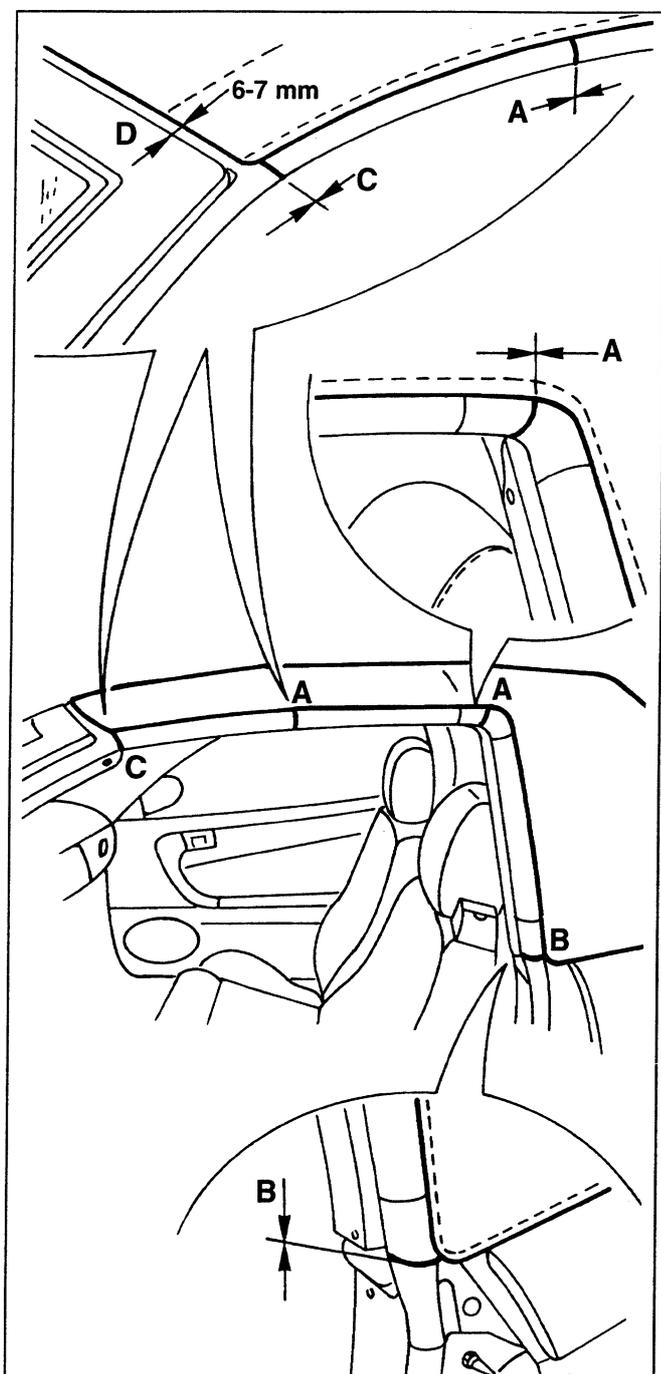
Checks C), D) and E) should then be carried out at the end of the adjustment procedure to make sure that the operations have been carried out correctly.

D) Open the door, raise the window, close the door and check that the window adheres properly to the seals and that the gaps are correct. Also check that the glass is correctly inserted under the upper seal so that the grinding of the upper edge of the glass remains concealed at each point.

E) Keeping the door shut, lower and raise the window. Check that the stroke is even and that, with the window raised, the gaps as per point C) are measured.

F) Accurately test the car to precisely find any malfunctions of the window.

With the window closed, travel at different speeds to see if air enters the car.

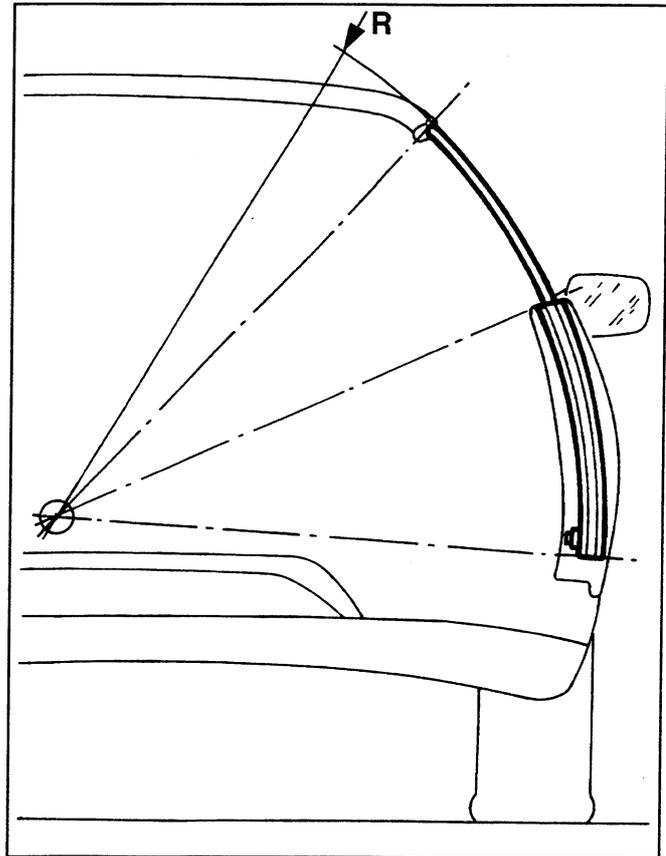
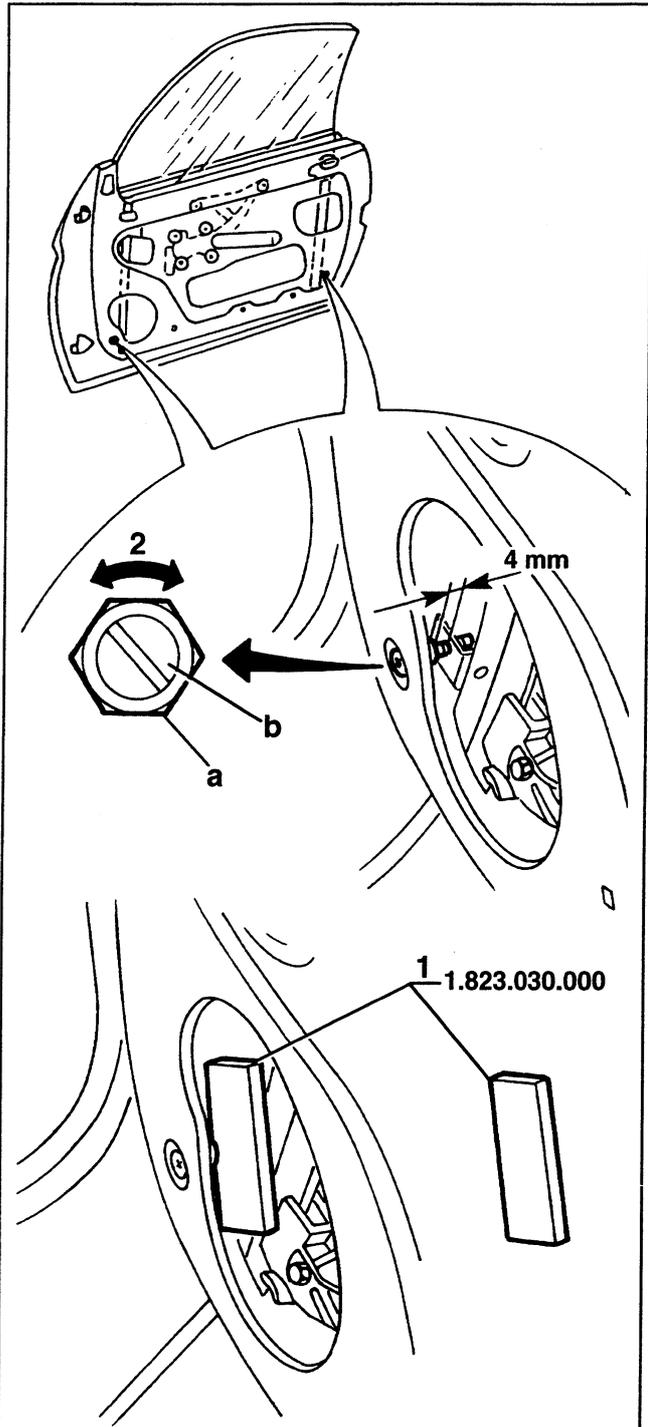


Adjustment procedure - Gtv

- Remove the door panel (see Repair Manual - Group 70 - Body - Doors - Door Panel).
 - Remove the protective inner trim taking care to avoid damage to it.
 - Re-connect the power window switch.
1. Using the gauge of tool kit 1.823.030.000 check the correct distance (nominal) between the lower bracket of the window guide and the corresponding spacer.
 2. If necessary, adjust the distance slackening the lock nut (a) and working on the centre nut (b).

Note: This check, and, if necessary, restoring the nominal dimension in mating between the guides and the door frame is a necessary condition for correct adjustment of the window.

In fact the correct restoring of this dimension allows the guides to have the same centre of curvature as the body profile, optimising smooth functioning of the window and correct pressure on the seals.

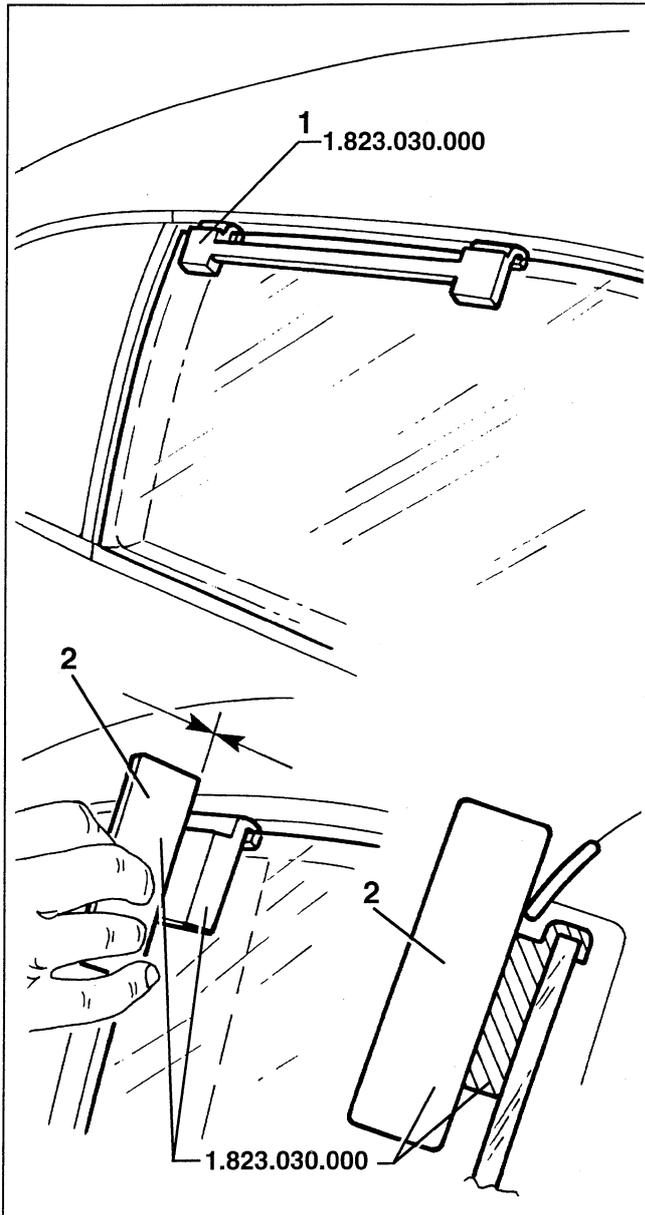


- Remove the door surround seal (see Repair Manual - Group 70 - Body - Interior trim - Door surround seal).

1. With the window up, open the door and position the control tool 1.823.030.000 on the upper profile of the glass.

- Close the door and keep it aligned with the side panel.

2. Using the gauge-tool, check alignment of the outer surface of the blocks and the edge of the door surround weatherstrip.



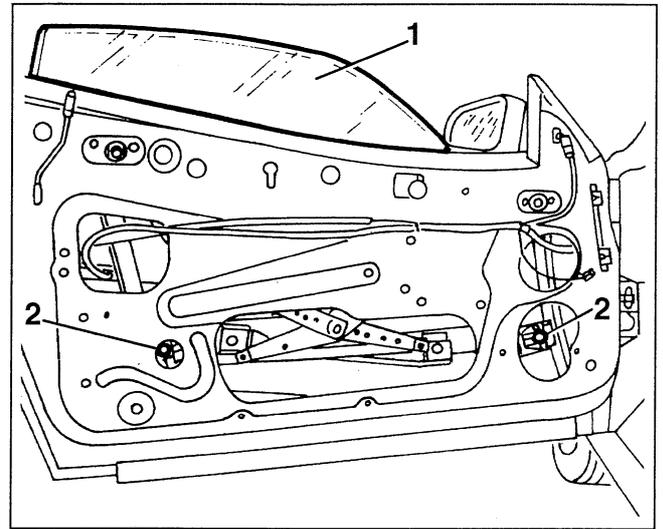
If alignment is not noted in one or both positions of measurement, work on the glass/guide coupling runners, proceeding as follows:

1. Move the glass to an intermediate position in order to gain access to the runner screws.

2. Slacken the screws that fasten the runners to the window.



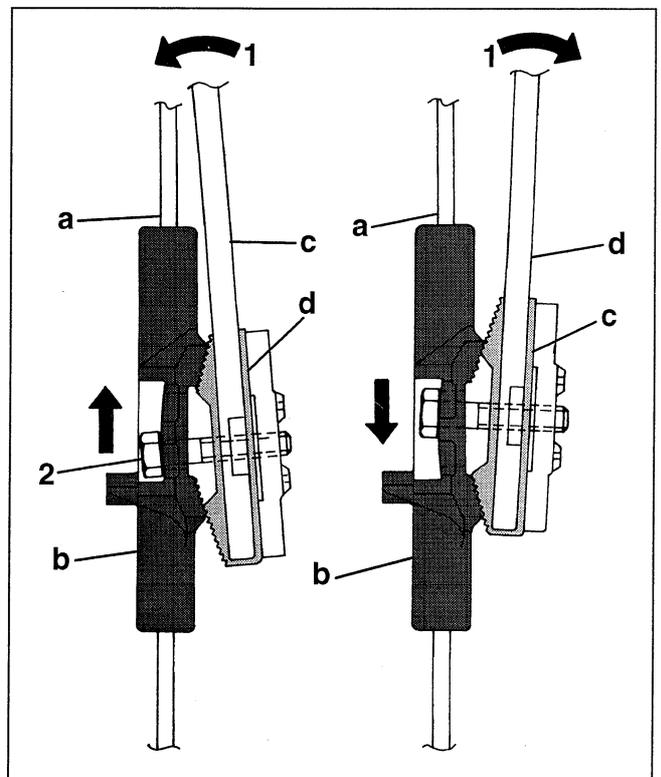
Adjustment may be carried out also on one runner only, depending on the misalignment measured with the tools during the previous stage.



1. Change the mating position between runner and window. The two mating profiles have been designed especially to create a broad possibility if crosswise adjustment of the glass.

In particular, highering the window, it will move inwards or vice versa.

2. Tighten the screw and repeat the alignment test with tools 1.823.030.000.



a. Vertical guide
b. Runner

c. Window brackets
d. Window

Note: The mating profile between runner and glass is toothed. The movement of a tooth corresponds to a crossways movement of appr. 4 mm of the upper edge of the glass with the window raised.

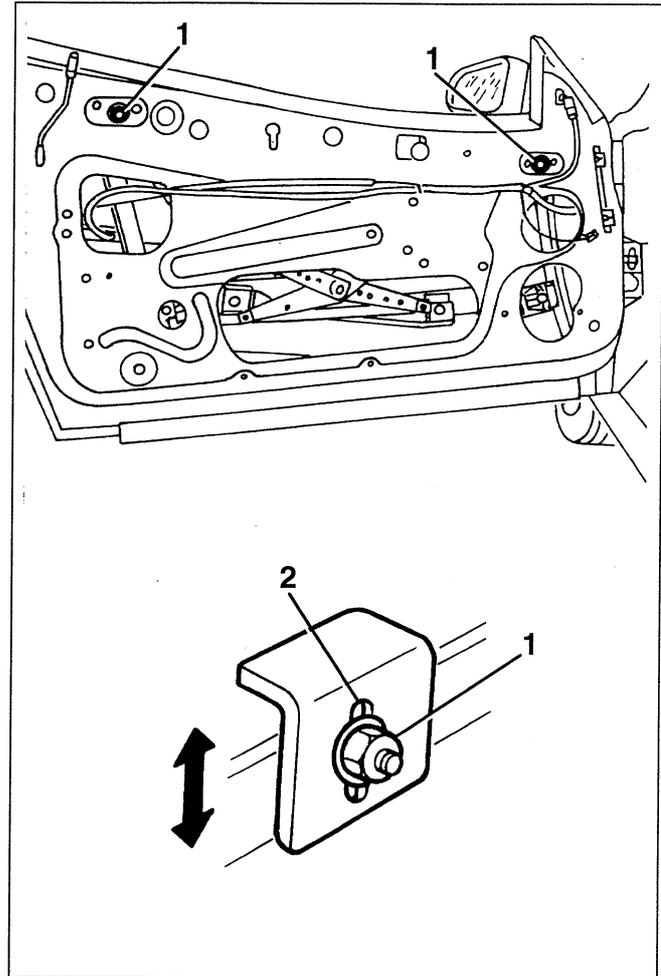
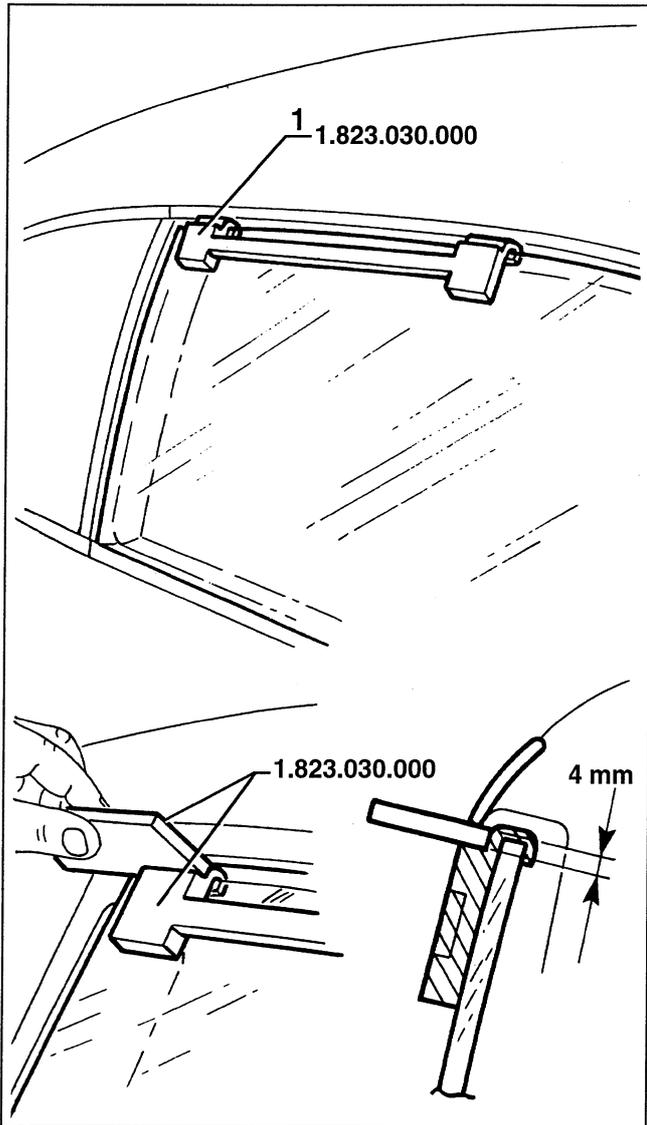
Carry out adjustment of mating between runner and window.

Return the window to the position of measurement with tools 1.823.030.000 (window raised).

1. Using gauge-tool 1.823.030.000, check the correct distance between the upper surface obtained on the blocks and the door surround profile.

If the correct distance is not measured in the measurement position, it is necessary to act on both window stops as follows:

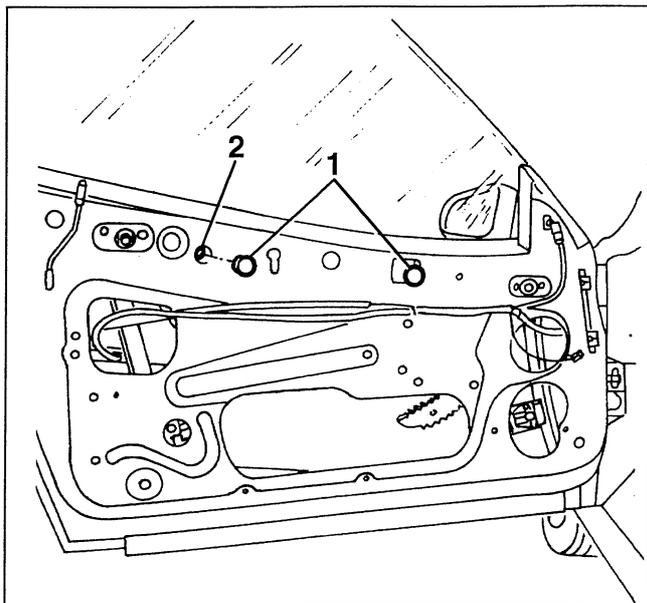
1. Slacken the nuts that lock the stops.
 2. Raise or lower the stops according to the values measured previously with the tools.
- Tighten the nuts and repeat the measurement with the tools.



Also check that when rising, the window reaches the two stops contemporaneously (if not, it is noted clearly that one stop is reached before the other).

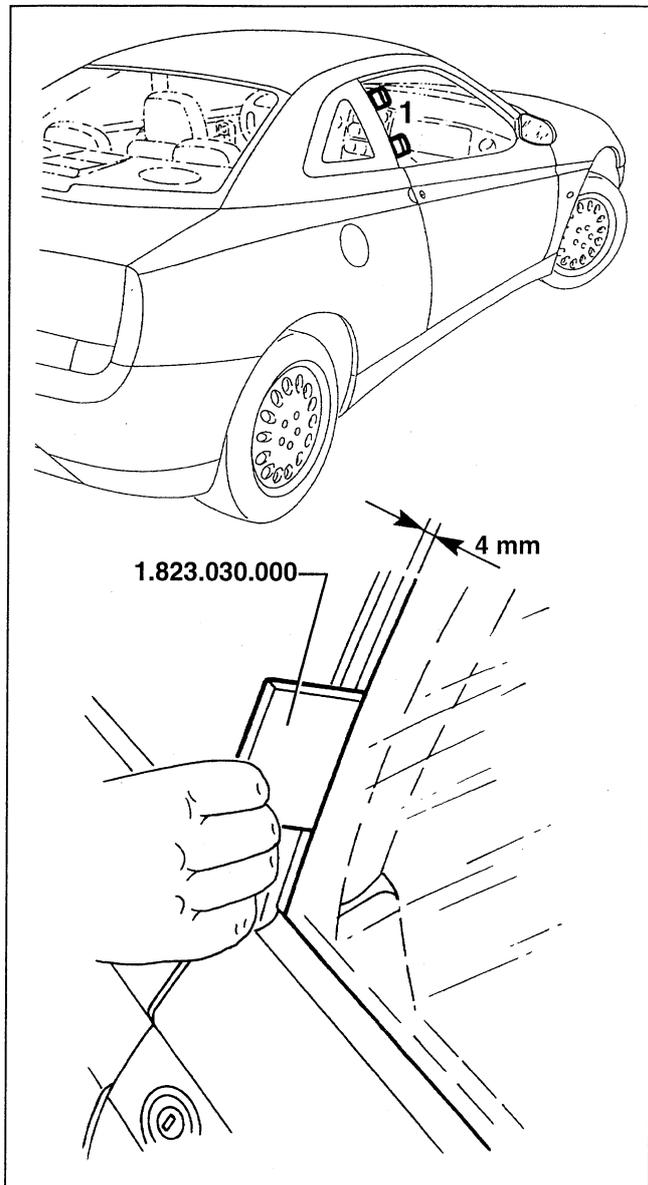
If this fails to take place, proceed as follows:

1. Keep the window in the raised position and remove the two rubber caps.
 2. Slacken the two screws which fasten the glass to the window winder device, thereby allowing the window to settle.
- Tighten the screws and repeat the check.



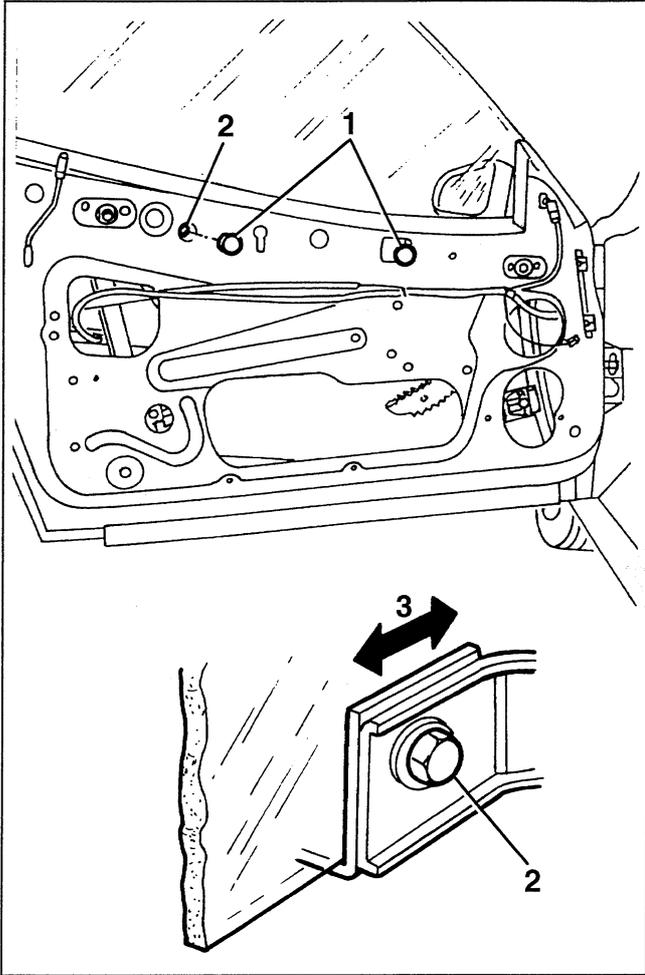
After adjustment of the window stop, take the window back to the measurement position.

1. Using gauge-tool 1.823.030.000, check the correct distance between the rear edge of the window and the profile of the fixed glass in the upper and lower areas.



If the correct distance is not found, it is necessary to act on the fastening points of the window to the window winder device, proceeding as follows:

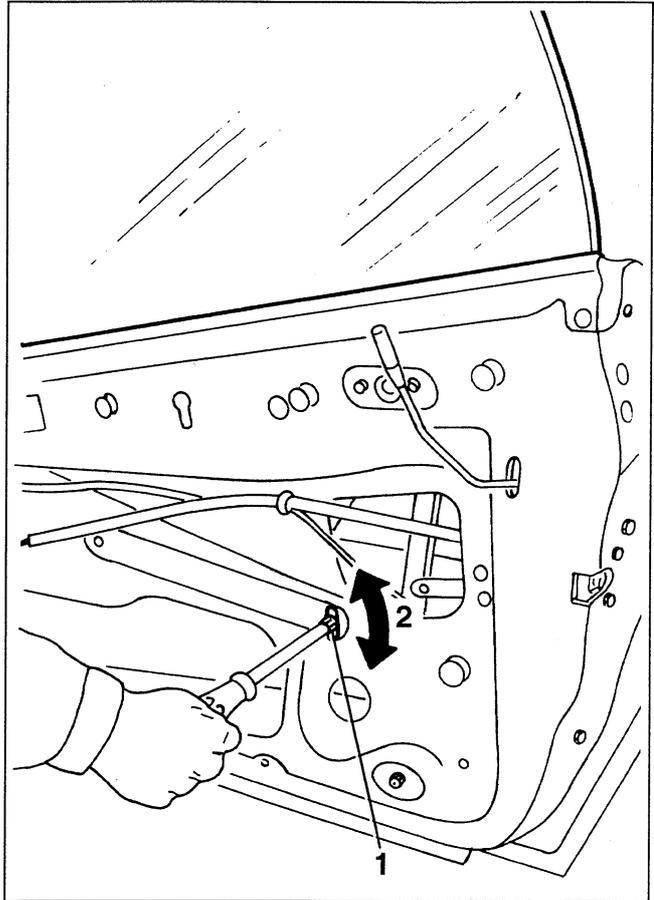
1. Keep the window in the raised position and remove the two rubber caps.
 2. Slacken the two screws that fasten the window to the winder device.
 3. Move the glass forwards or backwards depending on the measurements found with the gauge.
- Tighten the screws and repeat the measurement.



- Refit the door surround seal.
- Repeat "checks and inspections C), D) and E)" from the start of the adjustment procedure.

If these checks are still unsatisfactory and in particular if the window tends to stick when rising, failing to reach the correct position (initial check-point E), it is possible to intervene on the window up/down trajectory as follows:

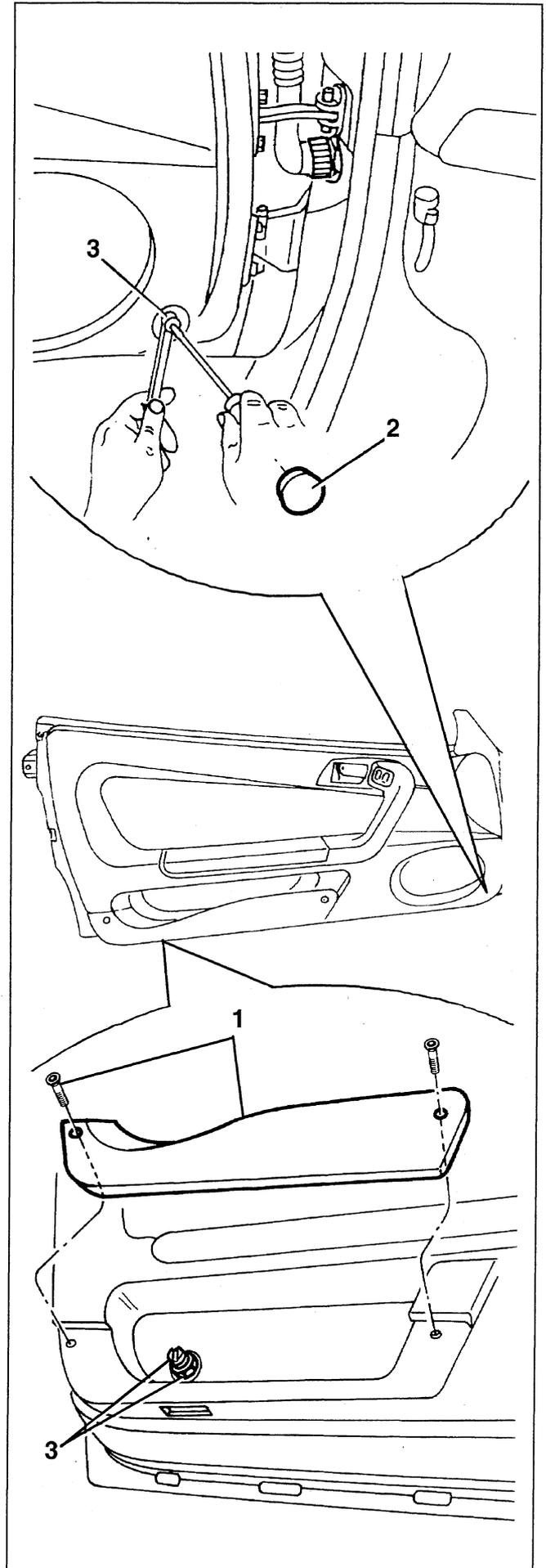
1. With the window in the raised position, slacken the adjustment screw of the window winder device.
 2. Slightly lower the window so that the screw settles along the slot.
- Retighten the screw and repeat the checks.



Upon completion of the adjustment procedure it is still possible to fine-tune the crossways position of the window working on the lower guide connection screws.

You are recommended to use these adjustment points only for small corrections, as it involves changing the nominal window positioning dimension.

1. If the door panel is fitted, slacken the two screws and remove the utility pocket, pulling it downwards.
 2. Remove the protective front cover.
 3. Slacken the lock nut and work on the adjustment screw.
- Re-tighten the lock nut and repeat the checks.



Adjustment procedure - Spider

For the Spider vehicle, the windows have the same adjustment points as the Gtv.

However, it is important to consider that the window must ensure tightness with the seals of the hood, which is, in turn, subject to possible adjustments.

It is not possible however to provide geometrical inspection dimensions as for the Gtv.

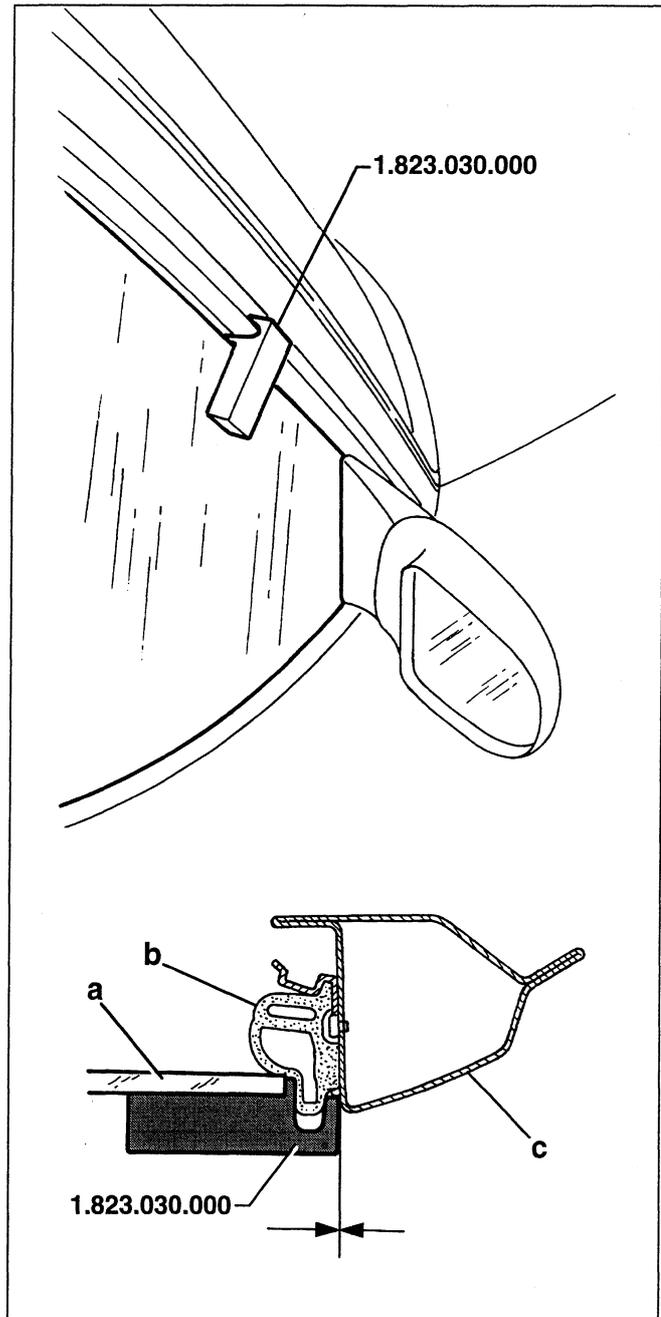
Therefore, adjustment of the window is to be carried out only for obvious malfunctions (air draughts and/or water leaks) after accurate inspection in order to locate the cause of the fault (low crossways pressure on the seals, stop in low position with respect to the hood profile, etc.).

Thus, make the most suitable correction (crossways, vertically or longitudinally) working on the corresponding adjustment points, each time verifying the effect of the correction made until reaching the best condition possible.

For the operating procedures and the consequent effects on the window, refer to the previous paragraph on adjustment for the Gtv (previous paragraph).

At all events use the special gauge of kit 1.823.030.000 to check the correct distance between the profile of the glass and the windscreen pillar.

If an optimum condition is not reached, it is necessary to consider re-positioning the hood (see Repair Manual - Group 70 - Body - Hood).



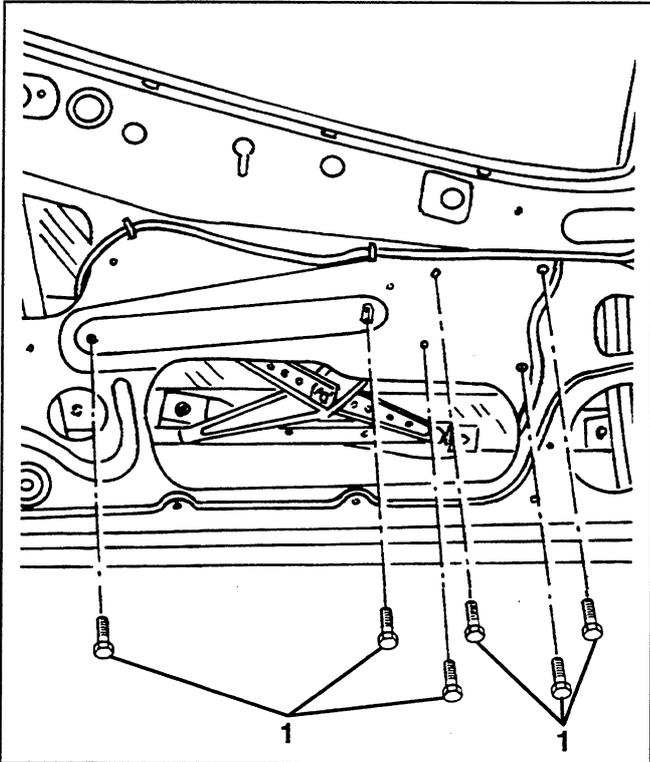
- a. Window
- b. Seal
- c. Windscreen pillar

WINDOW WINDING DEVICE

REMOVAL/REFITTING

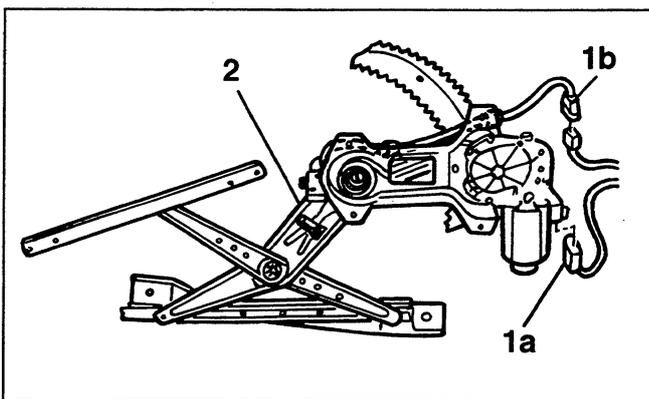
Remove the window (see specific paragraph)

1. Slacken the six screws fastening the device.



1. Disconnect electric window device electrical connection (1a) and up-down device electrical connection (1b).

2. Remove the window winding device.



Refit the window winding device reversing the sequence followed for removal.

NOTE:

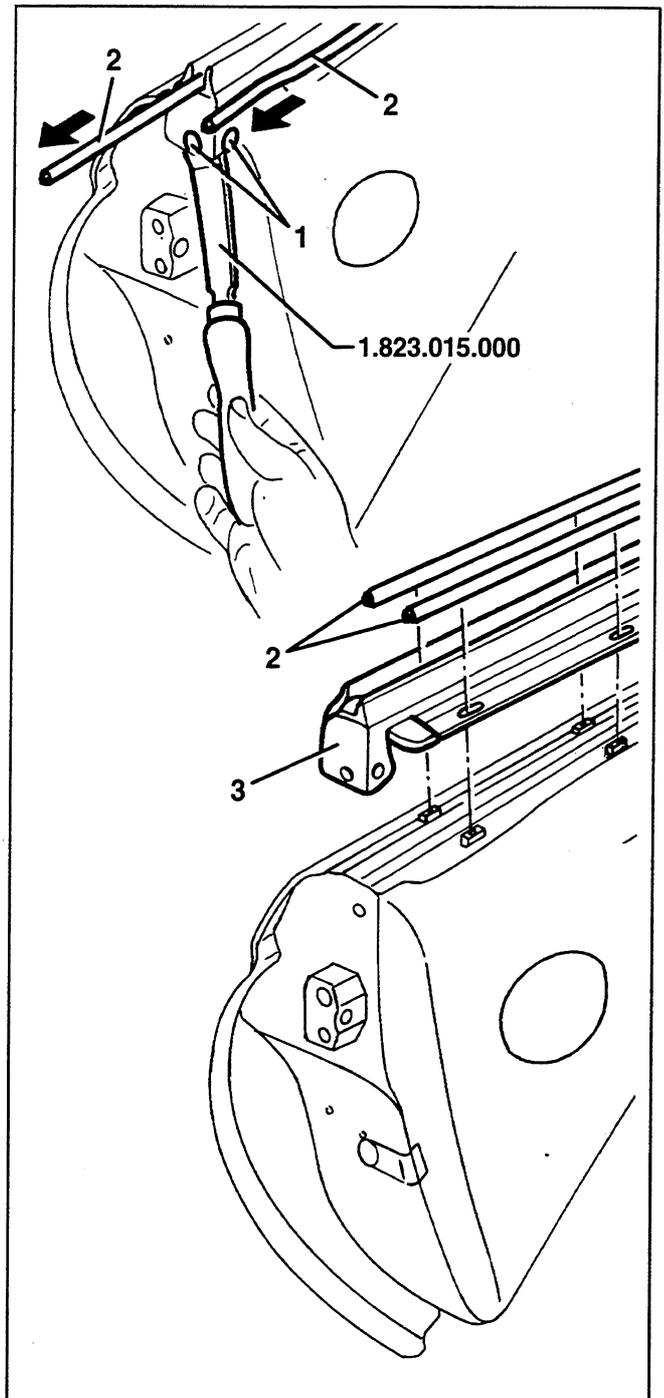
Before refitting the door interior trim and door panel, adjust the up-down device (see specific paragraph).

WINDOW WIPER SEAL

REMOVAL/REFITTING

– Remove the door panel (see specific paragraph)

1. Using tool 1.823.015.000 remove the two fastening buttons.
2. Withdraw the retainer moulding.
3. Retrieve the seal.



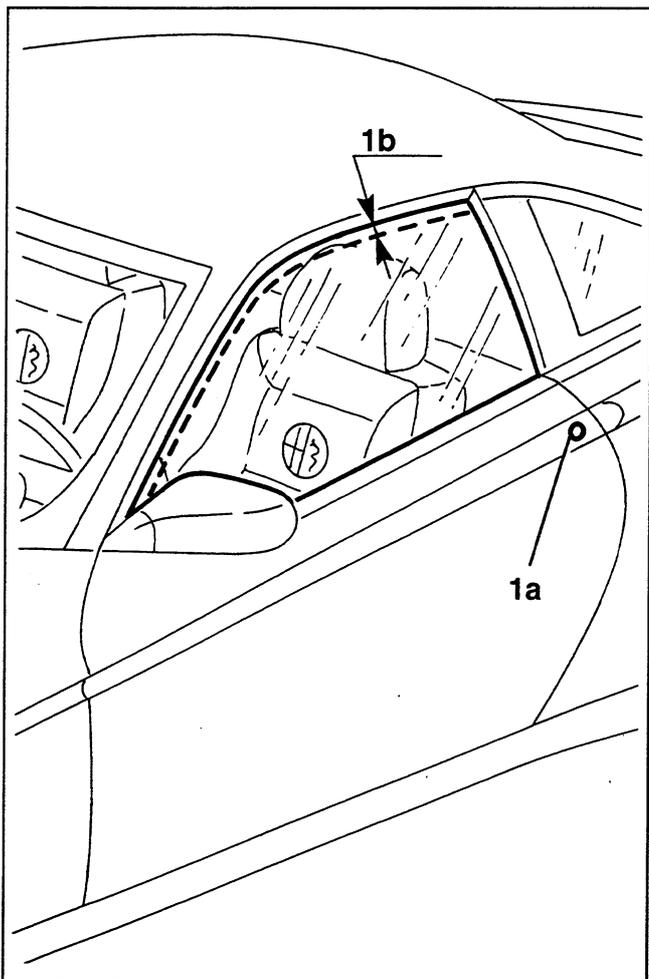
When refitting, press the retainer moulding onto the catches.

UP-DOWN DEVICE**CHECK E ADJUSTMENT**

– Adjust the glass if necessary (see specific paragraph)

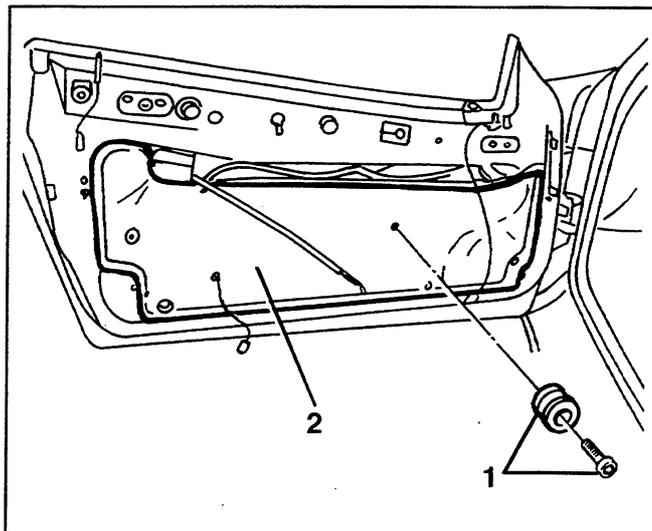
1. Starting with the door closed and the window fully raised, press catch button (1a) and ensure that the window lowers (1b) (due to the up-down device) by 4 mm.

If not, adjust as described below.

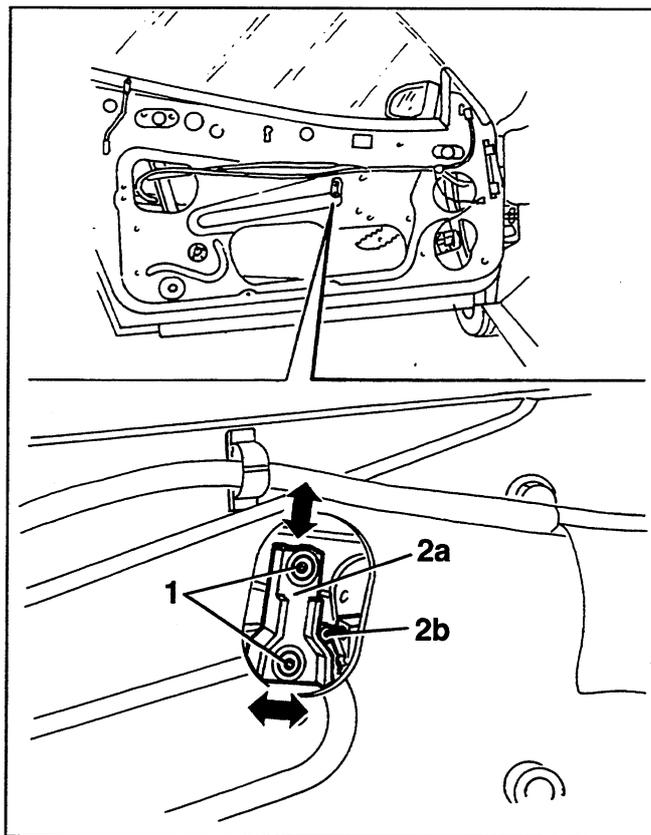


– Remove the door panel (see specific paragraph).

1. Unscrew the bolt and remove the central panel anchorage pin.
2. Remove the interior trim, taking care to avoid damaging it.



1. Loosen the cam retaining bolts.
 2. Adjust the position of cam (2a) in relation to microswitch (2b) until the above condition is achieved (window lowered by 4mm during door opening). The arrows indicate possible movements.
- Tighten bolts (1).

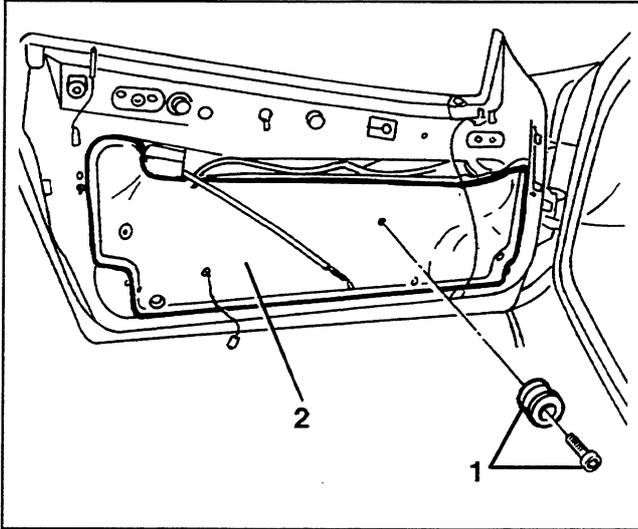


– Refit the water protections and door panel (see specific paragraph).

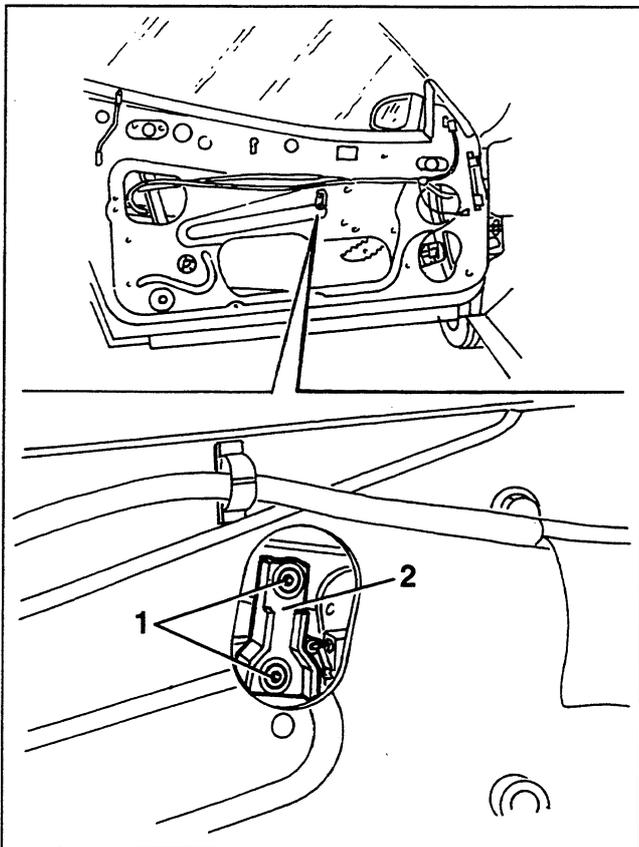
UP-DOWN DEVICE CAM

REMOVAL

- Remove the door panel (see specific paragraph)
- 1. Unscrew the bolt and remove the central panel anchorage pin
- 2. Remove the interior trim, taking care to avoid damaging it.

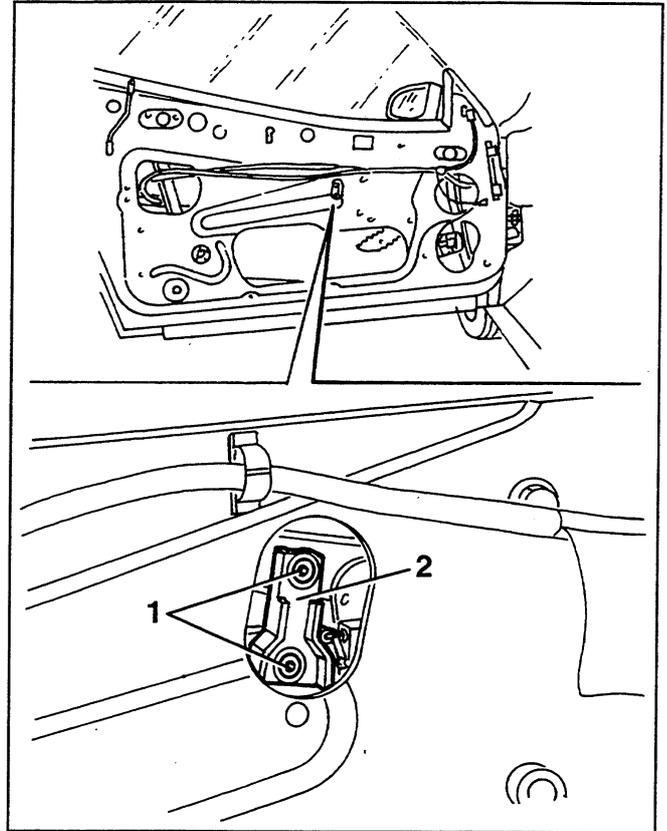


- 1. Unscrew the cam retaining bolt.
- 2. Remove the up-down device cam



REFITTING

- 1. Fit the cam in its seat.
- 2. Screw in the bolts without tightening.

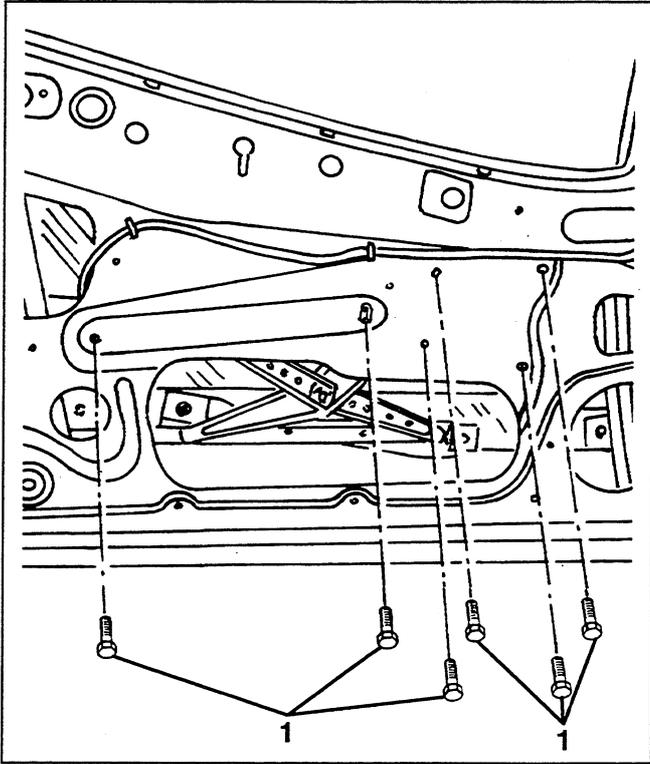


- Adjust the up-down device (see specific paragraph).
- Refit the interior trim and door panel by carrying out removal instructions in reverse order.

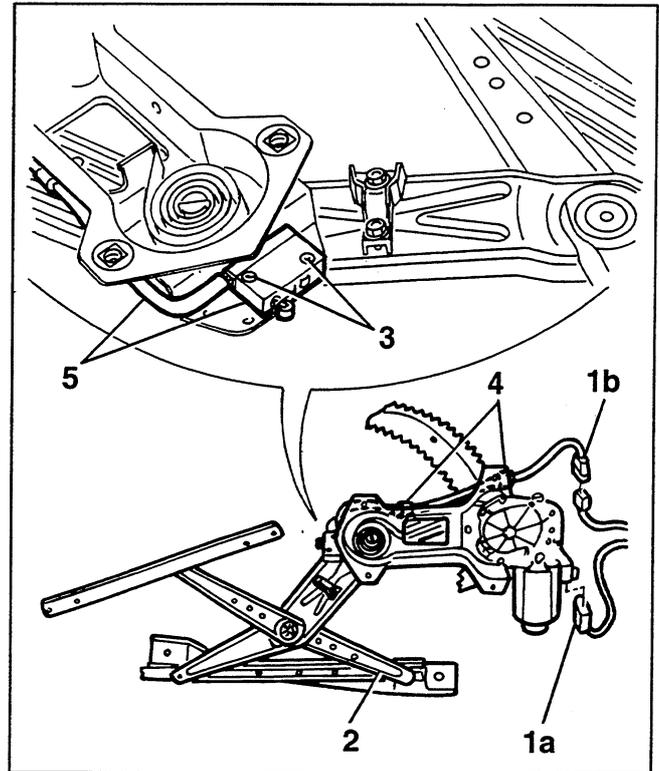
UP-DOWN DEVICE MICROSWITCH REMOVING/REFITTING

– Remove the window (see specific paragraph)

1. Unscrew the six bolts securing the electric window device.



1. Disconnect electric window device electrical connection (1a) and up-down device electrical connection (1b).
2. Recover the electric window device.
3. Drill out the microswitch retaining rivets.
4. Undo the retaining clips.
5. Remove the microswitch with wiring



– Refit by carrying out removal instructions in reverse order.

NOTE:

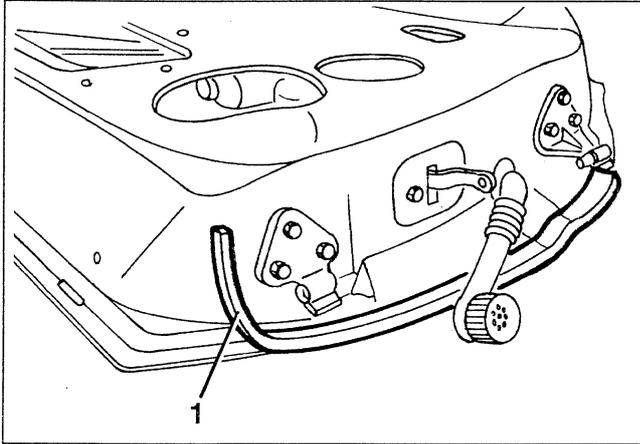
Before refitting the door interior trim and door panel, adjust the up-down device (see specific paragraph).

FRONT WIND SEAL

REMOVAL/REFITTING

– Remove the complete door (see specific paragraph).

1. Remove the seal on the front edge of the door.

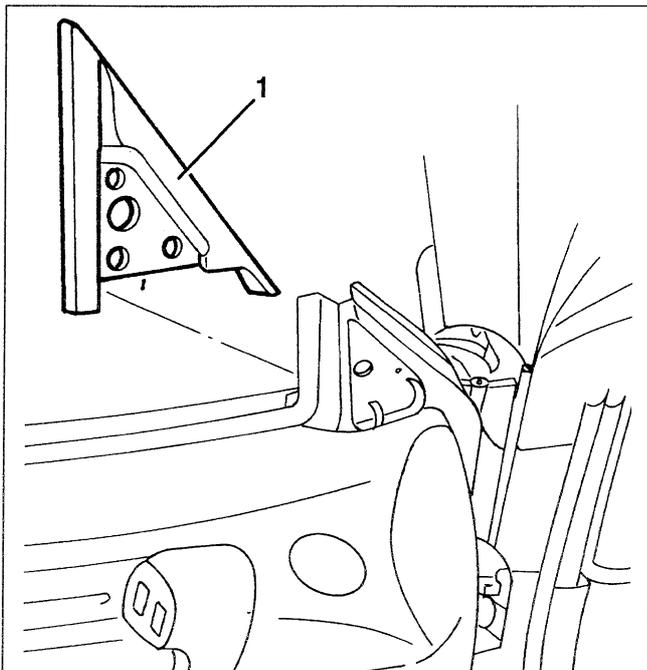


When refitting reverse the sequence followed for removal. Clean and degrease the contact surface and make sure that the bi-adhesive of the seal adheres perfectly.

MIRROR TRIANGLE SEAL

– Remove the door mirror (see specific paragraph)

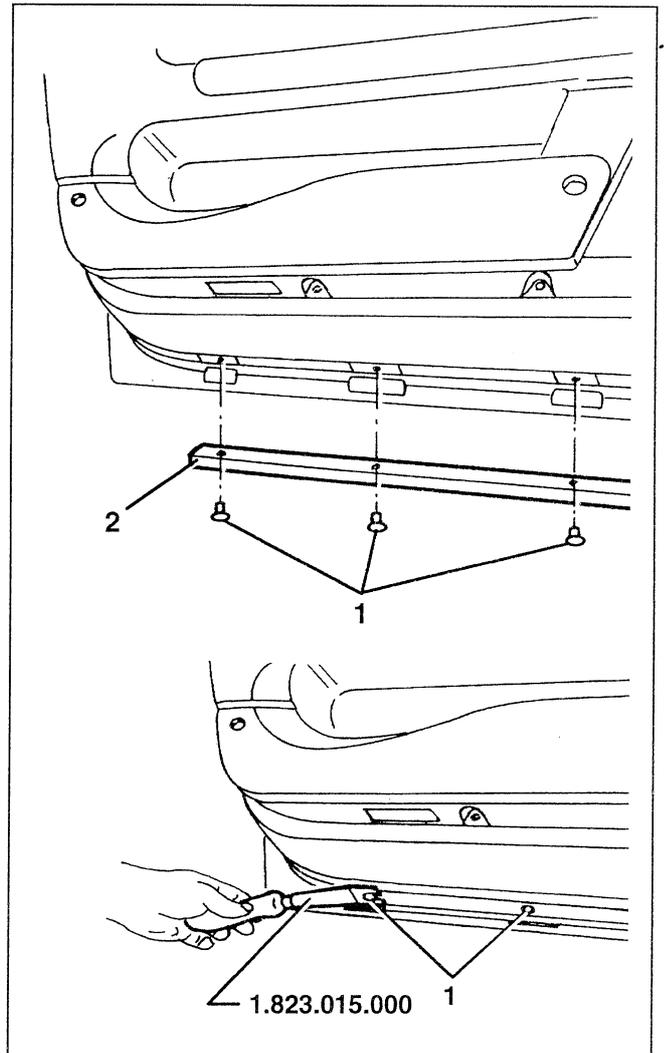
1. Remove the seal and detach the front bi-adhesive side.



Refit the seal reversing the procedure followed for removal.

DOOR LOWER MOULDING

1. Using tool 1.823.015.000 remove the five fastening plugs.
2. Retrieve the seal.



Refit the seal reversing the procedure followed for removal.

BONNET

COMPLETE BONNET

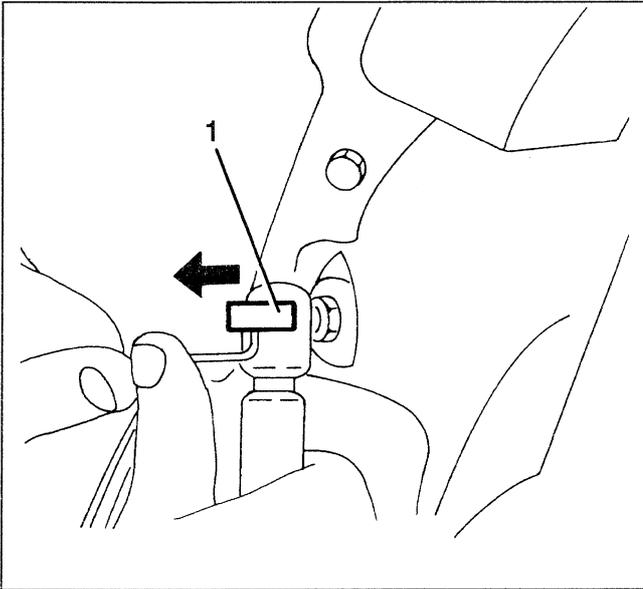
REMOVAL/REFITTING

CAUTION:

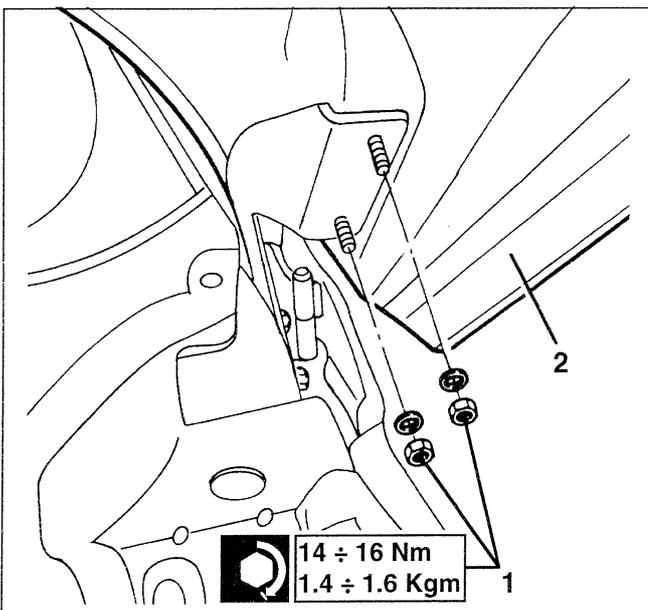
During removal (or refitting) avoid damaging the paintwork.

– Support the bonnet appropriately.

1. Open the retainer clips and disconnect the heads of the telescopic props from the ball pins.



1. Slacken the two nuts fastening the bonnet to each hinge
2. Remove the bonnet.



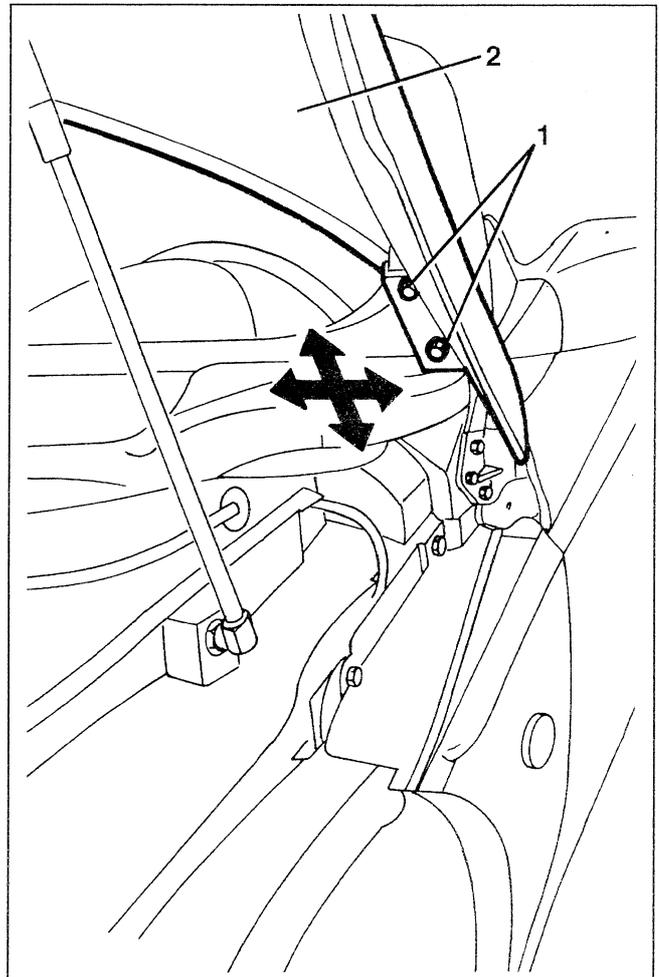
Refit the bonnet reversing the sequence followed for removal. Adjust the position of the bonnet.

ADJUSTMENT

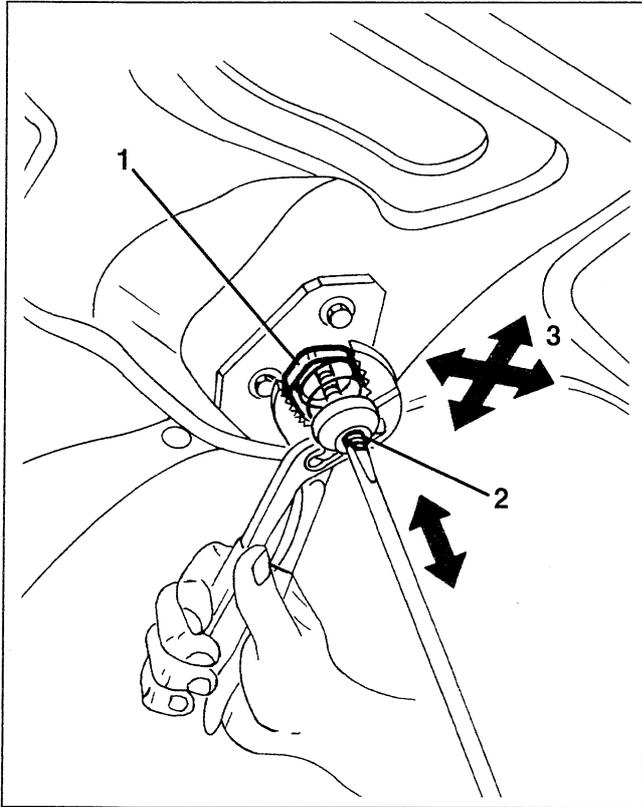
NOTE: The position of the bonnet should be adjusted together with that of the bumpers (see specific paragraph).

Should it be necessary to adjust the position of the bonnet, firstly act on the bonnet fastening screws. If this is not sufficient, work on the upper door-bonnet hinges (see specific paragraph).

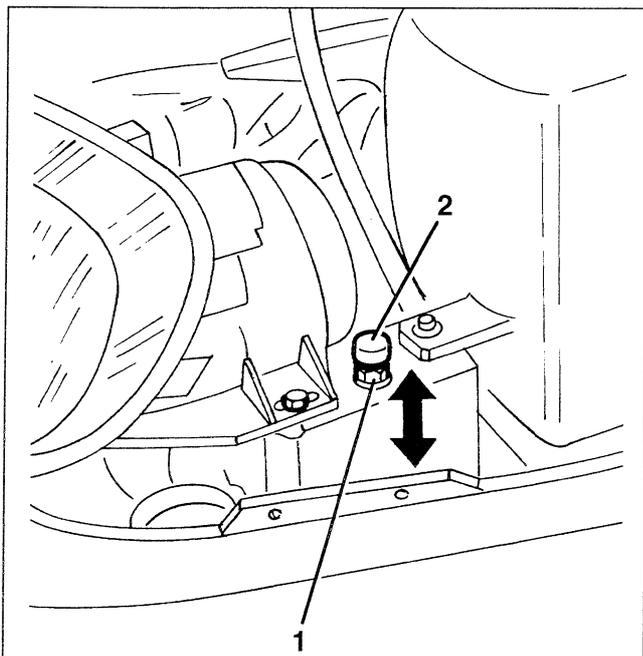
1. Loosen the bonnet fastening screws, on both sides.
 2. Change the position of the bonnet.
- Tighten the screws



1. Loosen the locking of each of the adjustment pins.
2. Slacken or tighten the adjustment pin, for bonnet height adjustment.
3. Move the adjustment pin for horizontal adjustment.
– Tighten the adjustment pin locking, after making sure that the bonnet is correctly positioned.

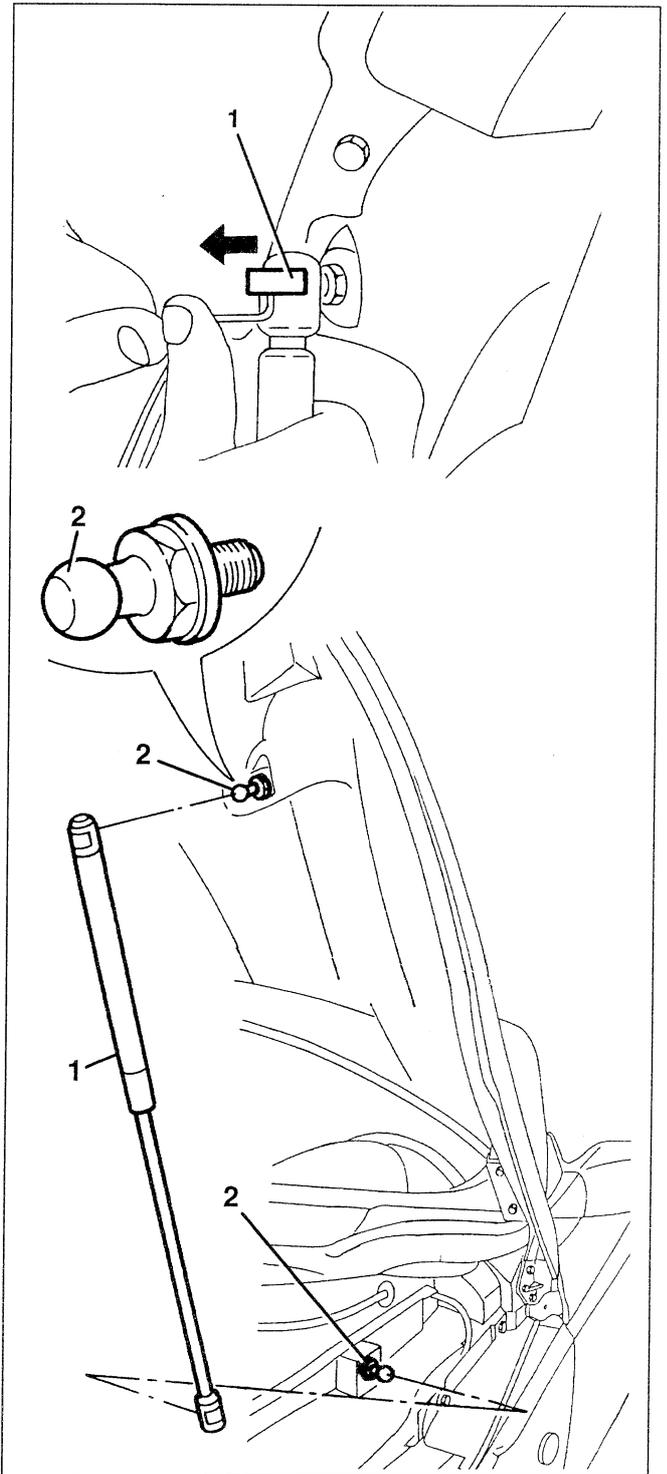


1. Loosen the pad locking nut.
2. Slacken or tighten the pad by hand depending on necessity; tighten the locking nut.



TELESCOPIC PROPS REMOVAL/REFITTING

1. Open the bonnet, support it appropriately, then open the clamps and remove the prop releasing it from the fastening pins.
2. If necessary slacken and remove the two ball pins.



Refit reversing the sequence followed for removal.

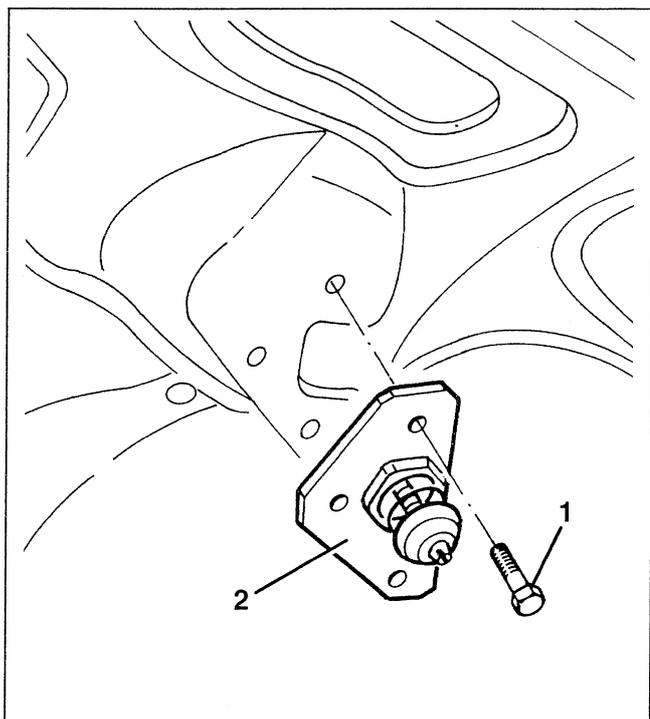
BONNET CLOSING DEVICE

REMOVAL/REFITTING

There are two bonnet closing pins on the front of the bonnet itself.

One of the pins supports the safety device with release catch.

1. Slacken the three screws
2. Remove the complete bracket.



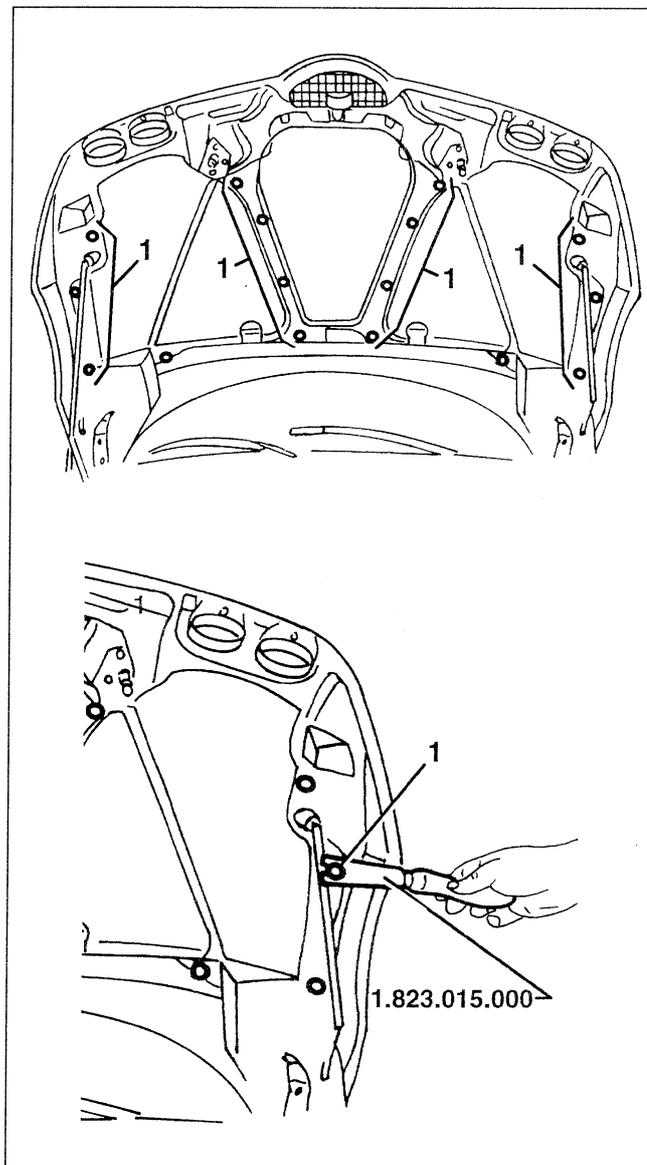
Refit reversing the sequence followed for removal. Adjust the position of the bonnet (see specific paragraph).

BONNET INNER COVER

REMOVAL/REFITTING

1. Using tool **1.823.015.000** remove the plastic nails fastening the inner cover.

2. Remove the inner cover.

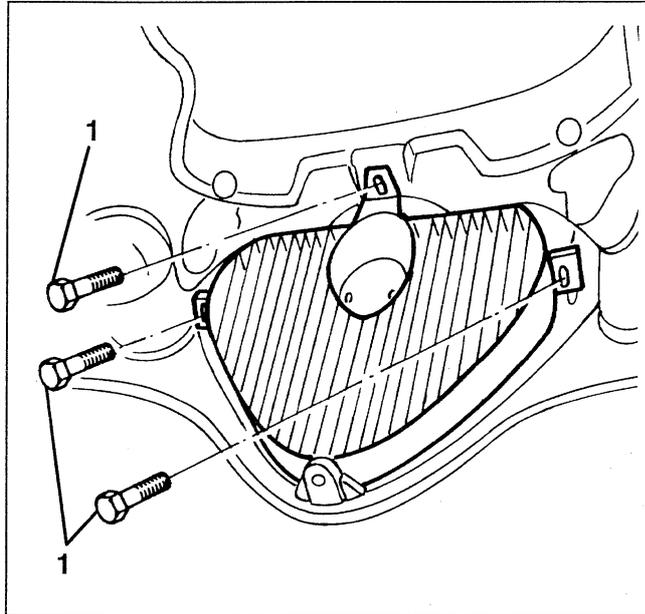


Refit the inner cover reversing the sequence followed for removal.

SHIELD

REMOVAL/REFITTING

1. Working from inside, slacken the three screws.
2. Remove the shield, from the outside.

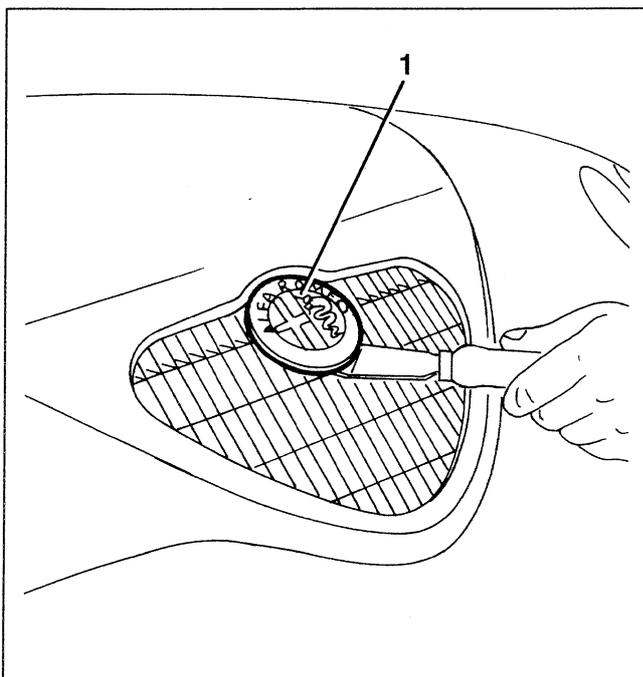


Refit reversing the sequence followed for removal.

FRONT TRADEMARK

REPLACEMENT

1. Using tool 1.823.014.000 remove the trademark.



BONNET OPENING CONTROL CABLE

REPLACEMENT

1. Working from the engine compartment, slacken the end bushing of the cable.
2. Withdraw the cable from the eyelet of the locking lever.

