



77 Sliding roof

	Job No.
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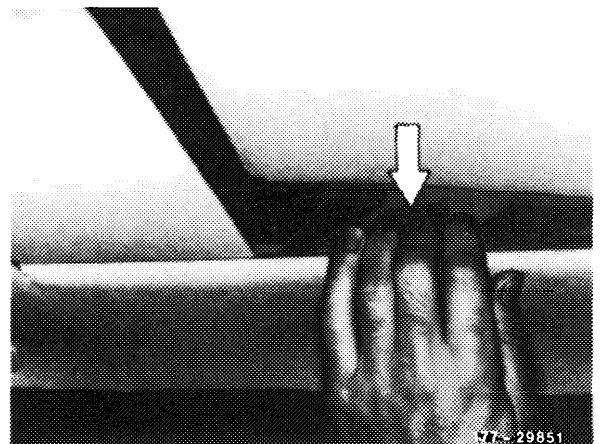
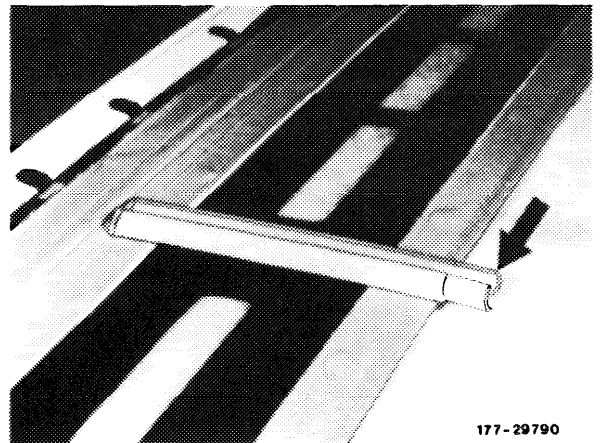
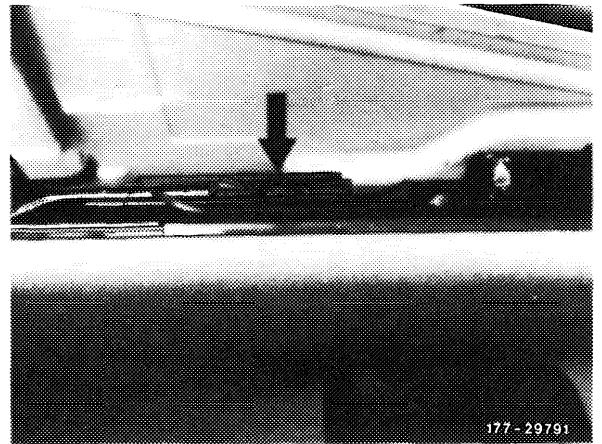
77-050 Removal and installation of headlining on sliding-lifting roof

Removal

- 1 On sliding roof opened to $\frac{3}{4}$, remove sliding roof headlining front from clips (4 clips).
- 2 Completely open sliding roof.
- 3 Pull out sliding roof headlining toward front in upward direction.
- 4 Check upper halves of clips on sliding roof headlining.
- 5 Check lower halves of clips on sliding roof.

Installation

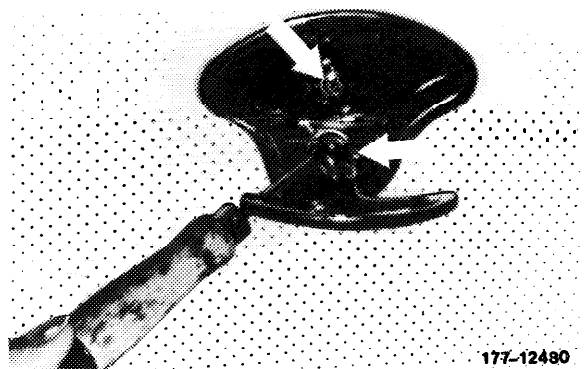
- 6 Close sliding roof and set both slide pieces horizontally.
- 7 Completely open sliding roof.
- 8 Slip-in sliding roof headlining from front top until clips are knocking against sliding roof, while introducing teleflex tube into protective tube on sliding roof headlining.
- 9 Close sliding roof by half and insert sliding roof headlining audibly at front into clips (4 clips).
- 10 Close sliding roof, lift approximately by half at the rear and in this position check whether lateral screening can be perfectly pulled out and in.



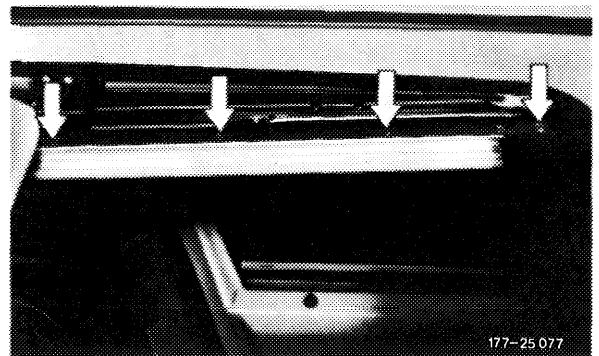
A. Sliding roof, mechanical

Removal

- 1 Unlock sliding roof and remove closing lever as well as trough.
- 2 With the sliding roof opened to three quarters, unclip sliding roof headlining at front and pull out in upward direction.



- 3 Completely open sliding roof and remove sliding rail left and right.
- 4 Lift off sliding roof in upward direction.



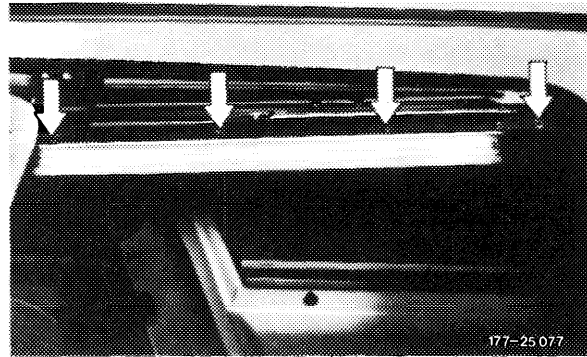
Installation

- 5 Prior to installation, thoroughly cover all sliding jaws and sliding rails with MB sliding paste 000 989 31 51 using a piece of felt or brush attached to an extension.
- 6 Introduce sliding roof from above and install sliding rails.
- 7 For further installation proceed vice versa.

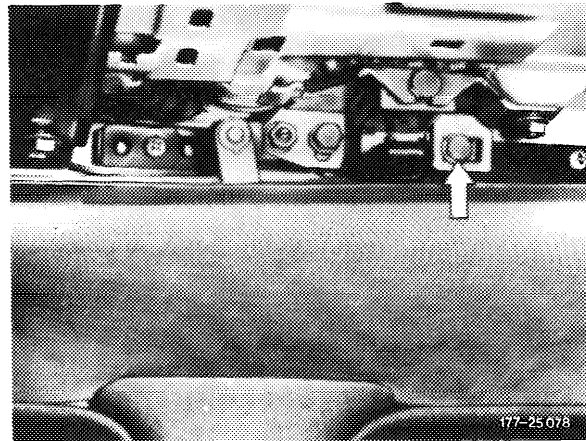
B. Sliding roof, electrical

Removal

1 With sliding roof opened by 3/4, unclip sliding roof headlining at the front and remove in upward direction.

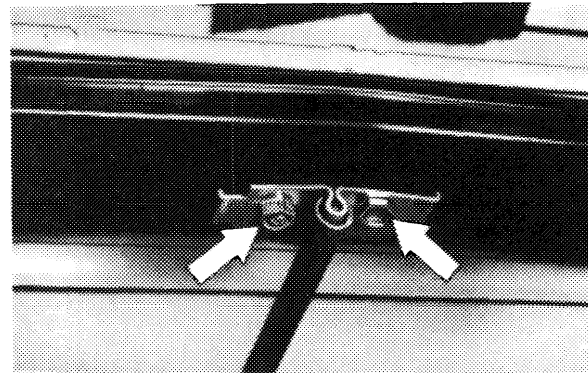


2 Open sliding roof completely and remove slide rail at the left and right.



3 Close sliding roof and unscrew locking screw left and right.

4 Unscrew guide plate at rear of sliding roof frame and remove.



5 Remove sliding roof cover in forward and upward direction.

Installation

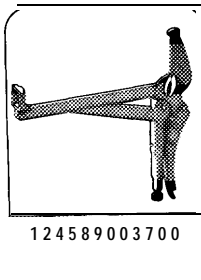
6 Thoroughly clean and coat slide jaws and slide rails prior to installation with MB slide paste, part No. 001 989 14 51.

7 For further installation proceed vice versa.

Note: Prior to installation of sliding roof headlining, adjust slide angle brackets and sliding roof cover (77-I 10).

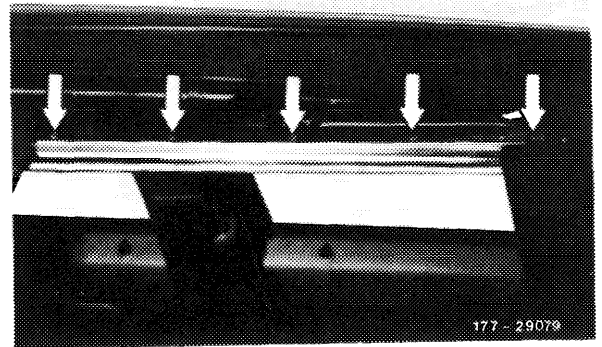
C. Sliding-lifting roof

Special tool

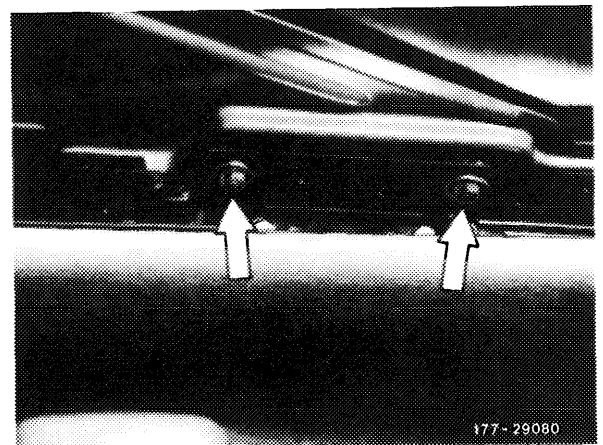


Removal

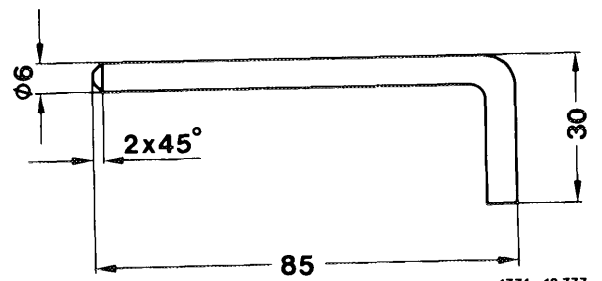
- 1 Remove sliding-lifting roof headlining (77-050).
- 2 Remove slide rail left and right.
- 3 Close sliding-lifting roof.



- 4 Unscrew nuts at left and right.
- 5 Remove sliding-lifting roof cover in upward direction.

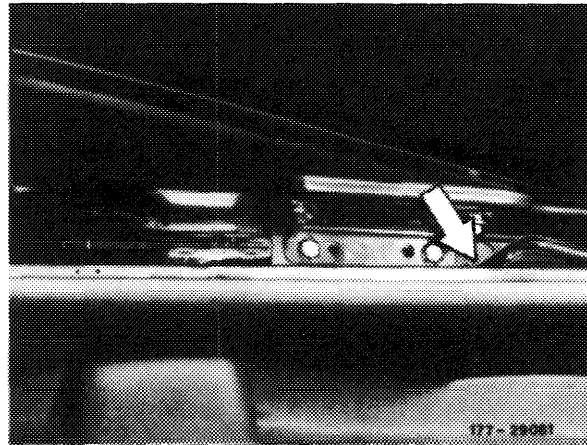


- 6 Make two centering bolts (unless already available).



7 Insert centering bolt into centering bore at left and right.

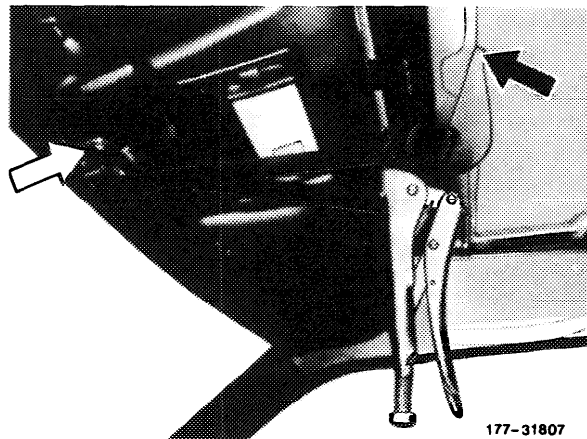
8 Remove rear view mirror, inside.



Installation

9 Insert sliding-lifting roof cover from top, position nuts, pretighten sliding-lifting roof cover with special tool, part No. 124 589 00 37 00 and tighten nuts.

10 For further installation proceed vice versa.



77-I 10 Adjustment of sliding roof cover

A. Sliding roof, mechanical

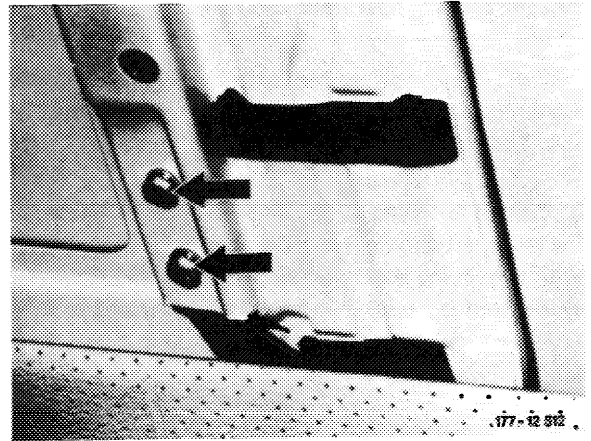
Note

Wind noise on sliding roofs can be prevented by adjusting the sliding roof cover in such a manner that the front edge is 0 to 1 mm deeper and the rear edge 0 to 1 mm higher than the outer skin of the roof.

Adjusting sliding jaws front and rear

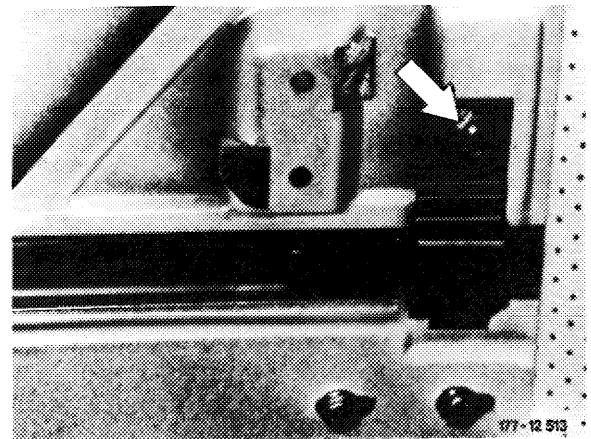
- 1 Remove sliding roof headlining.
- 2 Loosen fastening screws on slide angle brackets and push brackets inwards until the sliding jaws are seated laterally and the sliding roof is located accurately in center of cutout.

Note: Since the sliding roof frame has tolerances with regard to its total width, the lateral clearance should be checked at several points. Make sure that the sliding roof can be efficiently operated.

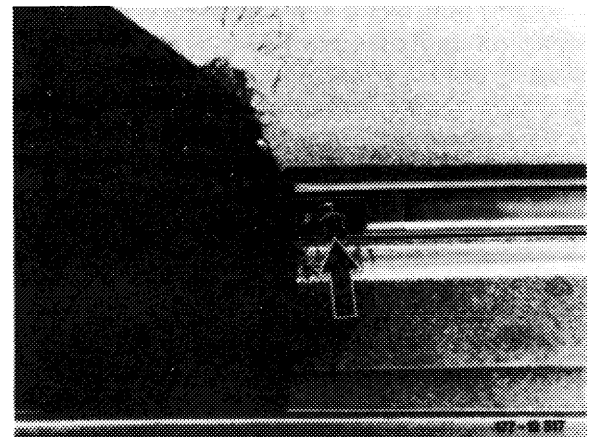


Adjusting stop rods

- 3 Loosen hex. nut on mounting bracket of stop rod left and right and adjust sliding roof cover in longitudinal direction in such a manner that the sliding roof has a perfect seal at the front edge.



- 4 With the sliding roof opened by half, loosen screw on stop rod inside left and right and adjust in such a manner that the sliding roof can be locked in any position and the closing lever operated applying normal effort. At the same time, make sure that the sliding roof is located in center of cutout.



B. Sliding roof, electrical

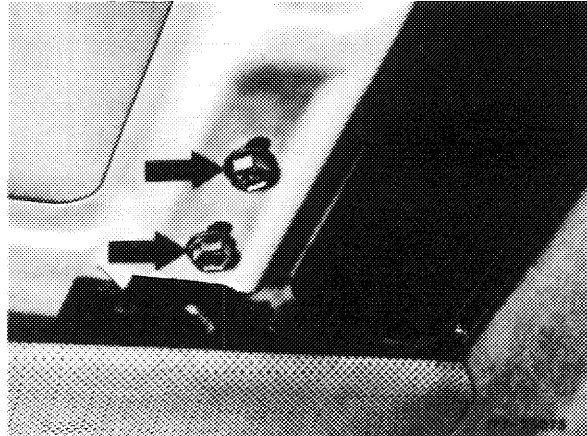
Note

Wind noise can be prevented on sliding roofs by adjusting the sliding roof cover in such a manner that the front edge is 0 to 1 mm deeper and the rear edge 0 to 1 mm higher than the outer skin of the roof.

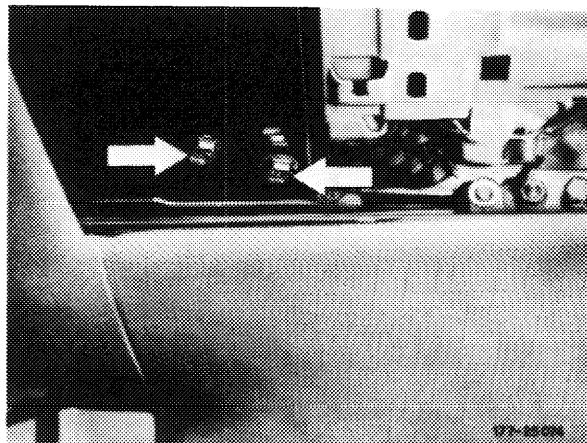
Adjusting sliding jaws front and rear

1 With sliding roof opened by $\frac{3}{4}$, unclip sliding roof headlining at the front and remove in upward direction. Then close sliding roof.

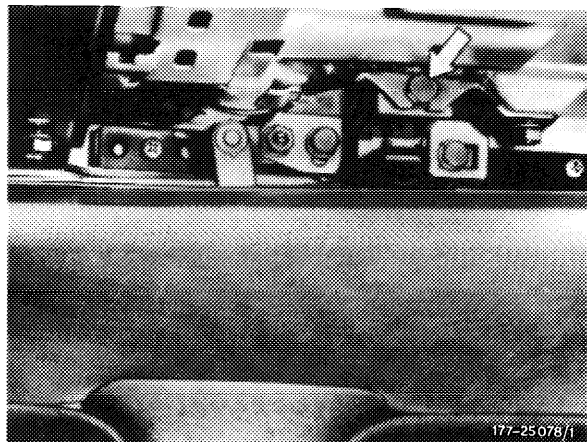
2 Loosen fastening screws on slide angle brackets at the front left and right and push brackets inwards until the sliding jaws are seated laterally and the sliding roof is located accurately in center of cutout.



3 Loosen fastening screws at slide angle brackets of transportation bridge rear left and right and adjust brackets in the same manner as those in front.



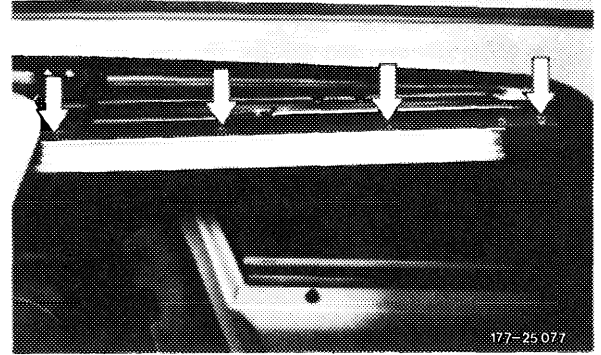
4 Slightly open sliding roof and position rear slide angle brackets of sliding roof cover by turning the adjusting screw inwards until the sliding jaws are seated laterally and the sliding roof is located accurately in center of cutout.



Note: Since the sliding roof frame has tolerances with regard to its total width, the lateral clearance should be checked at several points. Make sure that the sliding roof can be efficiently opened and closed.

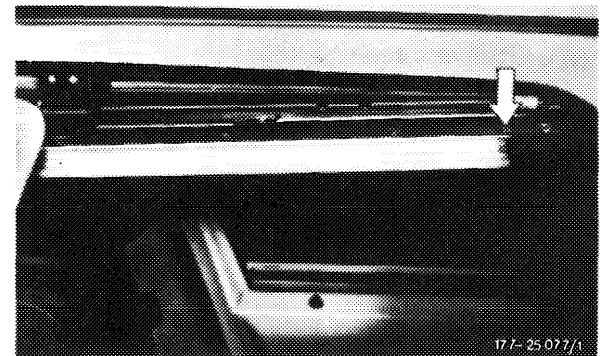
Front height adjustment

5 Open sliding roof and loosen fastening screws on slide rails.



6 Adjust height adjusting screw at the left and right in such a manner that the front edge of the closed sliding roof is 0 to 1 mm deeper than outer skin of roof.

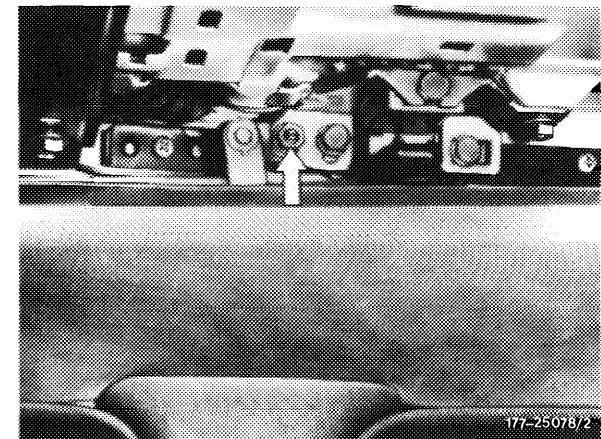
7 Tighten fastening screws of slide rails.



Rear height adjustment

8 Close sliding roof.

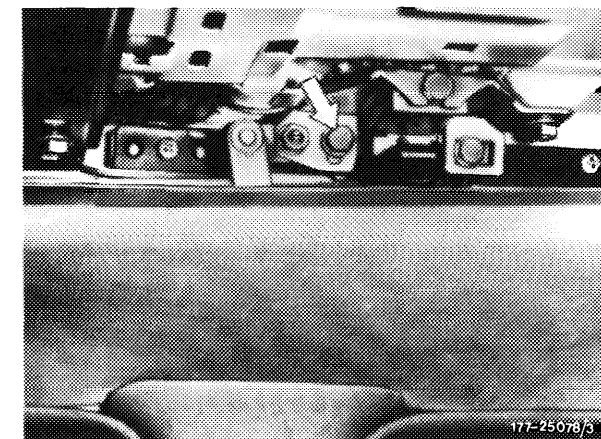
9 Loosen nut on lifting bracket.



10 Loosen screw on lifting bracket and adjust sliding roof cover in such a manner that the rear edge of the sliding roof cover is 0 to 1 mm higher than outer skin of roof.

11 Tighten nut and screw on lifting bracket.

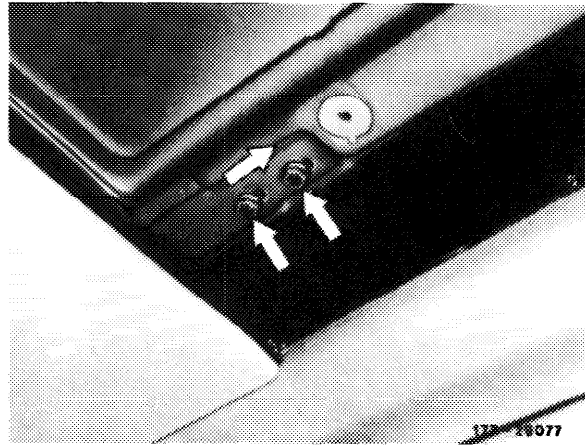
12 Install headlining of sliding roof.



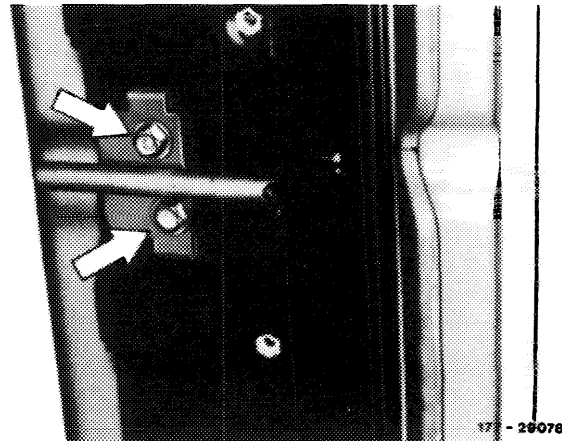
C. Sliding-lifting roof

Adjusting slide shoes at front

- 1 Remove sliding-lifting roof headlining (77-050).
- 2 Loosen fastening screws on slide angle brackets front left and right and push slide angle brackets in inward direction until the slide shoes are abutting laterally and the sliding-lifting roof is seated accurately in center of cutout.

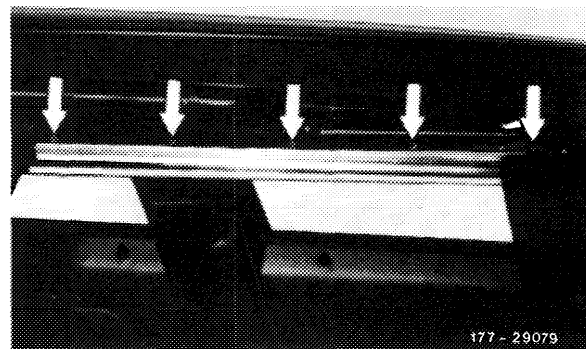


- 3 Since the sliding-lifting roof frame has tolerances in its total width, the lateral clearance must be checked at several points. For this purpose, unscrew teleflex control in transporting bridge and shift sliding-lifting roof cover manually.



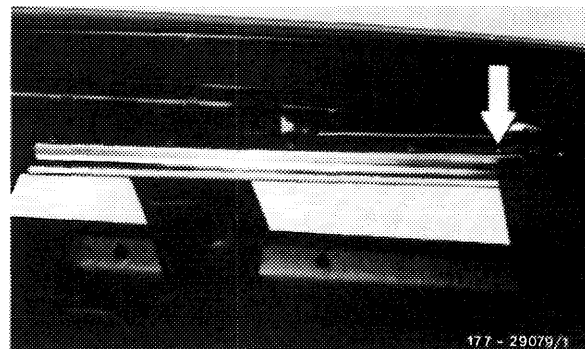
Height adjustment, front

- 4 Open sliding-lifting roof and loosen fastening screws on slide rails.



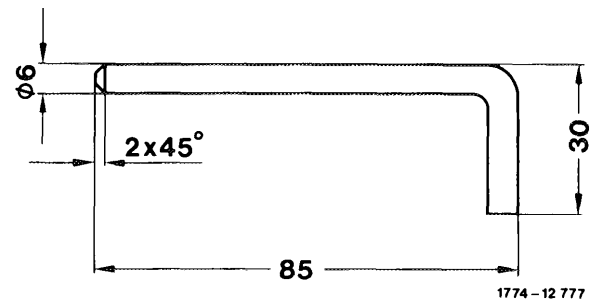
- 5 Adjust height adjusting screw **at left and right in such a manner that the front edge of the closed sliding-lifting roof is approx. 0 to 1 mm deeper than the outer skin of roof.**

- 6 Tighten fastening screws of slide rails.

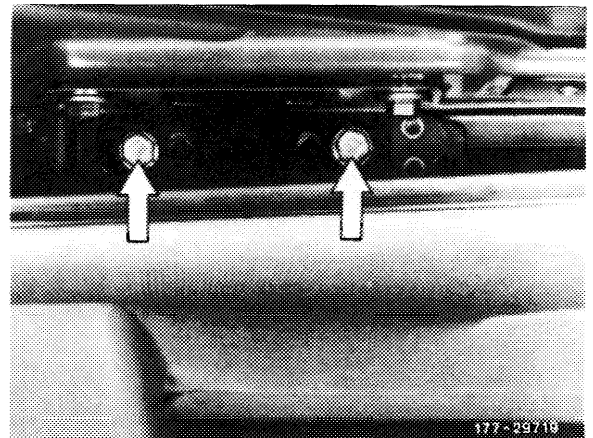


Height adjustment, rear

- 7 Make two centering bolts (unless already available).
- 8 Remove sliding-lifting roof headlining (77-050). Then close sliding roof.



- 9 Loosen screws on angle bracket left and right.

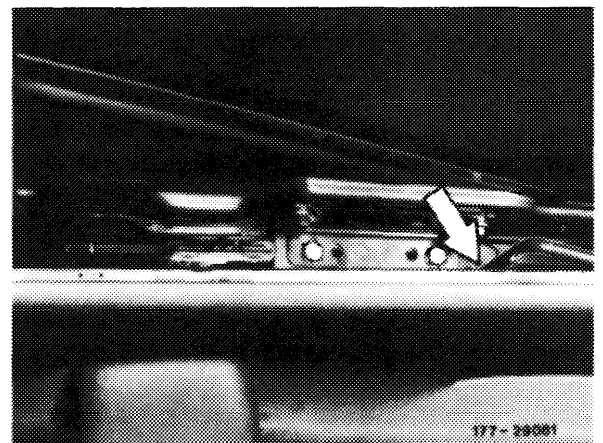


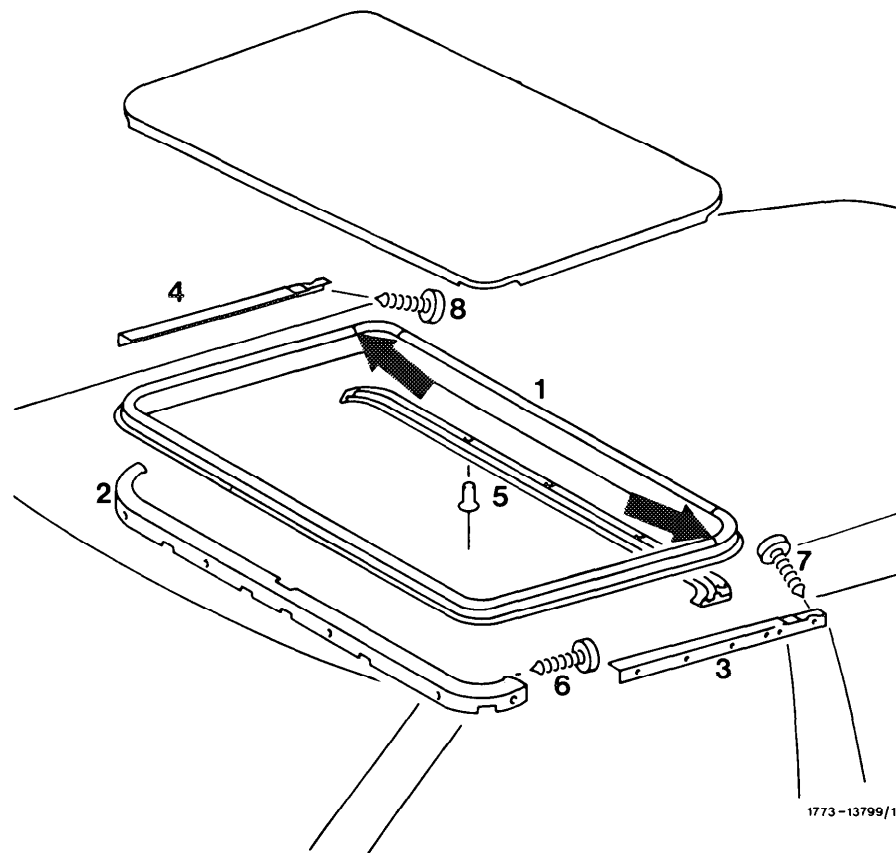
- 10 Insert centering bolts into centering bore left and right.

- 11 Adjust sliding-lifting roof cover in such a manner that starting from sliding position at the rear it is flush with roof or up to 1 mm deeper in radius range.

- 12 Tighten screws on angle bracket left and right.

- 13 Pull out centering bolts and install sliding-lifting roof headlining.





Sliding roof	Open, do not remove.
Installation position of sealing	Mark on roof cutout at connecting points (arrows).
Sealing (1)	Pull out of holding rail 2, 3, 4 and 5.
Wind deflector	Remove and install (77-250).
Screw (6)	Screw 6 each out and in.
Holding rail (2)	Remove and install (refer to installation instructions).
Screw (7) and (8)	Screw 8 each out and in.
Holding rail (3) and (4)	Slide toward the rear and remove in upward direction.
Holding rail (5)	Can be removed and installed only after removing sliding-lifting roof frame and drilling-out rivets (1 1 each).
Sealing (9)	Push into holding rail 2, 3, 4 and 5. The grooves on plug-in molding should face upwards.

Installation note

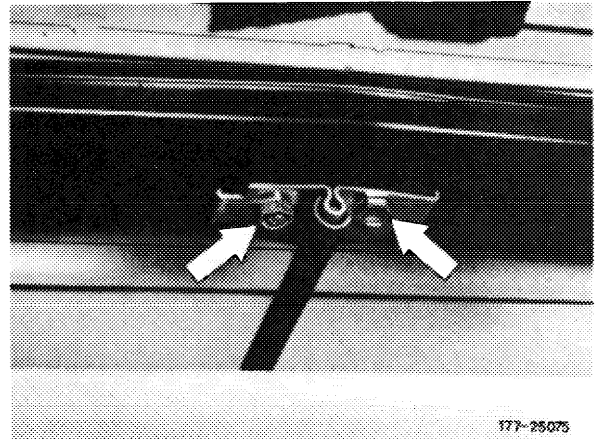
To make sure that the sealing (1) obtains an adequate hold in holding rail 2, 3 and 4, hold a 3 mm gap gauge in-between holding rail and roof paneling.

A. Sliding roof, electrical

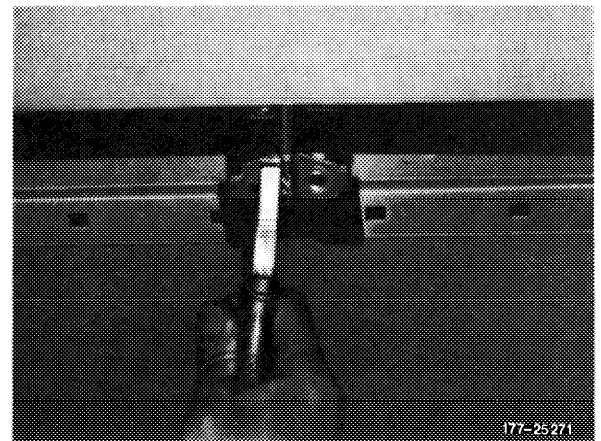
Removal

- 1 Remove sliding roof headlining (77-100).
- 2 Close sliding roof.
- 3 Unscrew guide plate on transporting bridge and disengage.
- 4 Actuate sliding roof switch in direction "closing", permit teleflex control to move completely forward and pull out.

Note: If the teleflex control cannot be moved with the electric drive, use emergency crank.



- 5 If the teleflex control cannot be operated in this manner either, remove teleflex control by means of a suitable flat-jawed pliers by turning in clock-wise direction and pulling at the same time.
- 6 If too much force is required, do not continue turning, since this might unwind the teleflex control and distort the teleflex tube. In such a case, disassemble gears of electric drive (77-1 80).



- 7 If, upon disassembly of gears, the teleflex control still cannot be removed, it has become distorted in the teleflex tube, which then also must be removed (77-150).

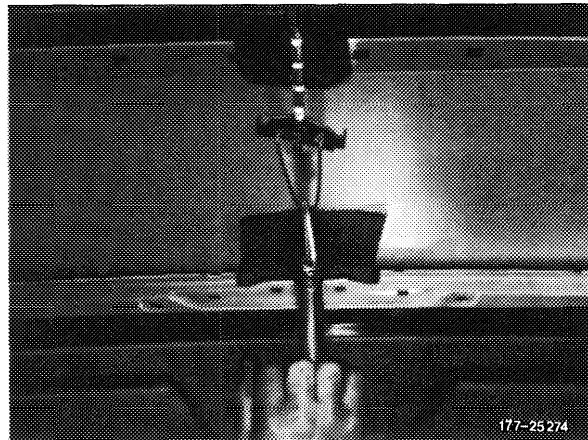
Installation

8 Thoroughly coat coil at end of new teleflex control with MB slide paste, part No. 001 989 14 51 and carefully introduce into teleflex tube.

9 The teleflex control should permit sliding inside of teleflex tube with a force of max. 50 N. **Check by means of a spring scale.**

10 Insert teleflex control completely into teleflex tube and permit to run into gears of electric drive by actuating sliding roof switch in direction "open".

11 For further installation proceed vice versa.



B. Sliding-lifting roof

Removal

1 Remove sliding-lifting roof headlining (77-050).

2 Unscrew guide plate on transporting bridge and disengage.

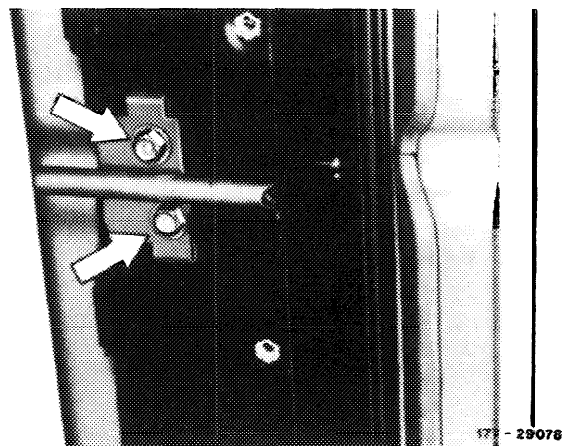
3 Push actuating switch to „Dach heben“ (lift roof) and let teleflex control run out of gears.

4 Pull out teleflex control in forward direction,

Note: If the teleflex control cannot be moved with the electric drive, use emergency crank.

5 If the teleflex control cannot be pulled out, disassemble gear unit of electric drive (77-180).

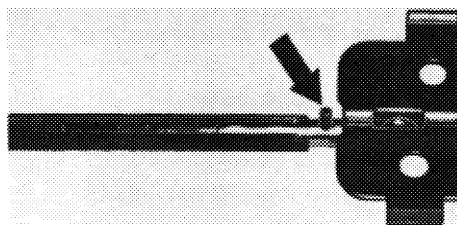
6 If the teleflex control can still not be removed after disassembling gear unit, it is binding in teleflex tube and should be removed together with tube (77-150).



Installation

7 Coat coil at end of teleflex control with MB slide paste, part No. 001 989 14 51, and introduce into teleflex tube.

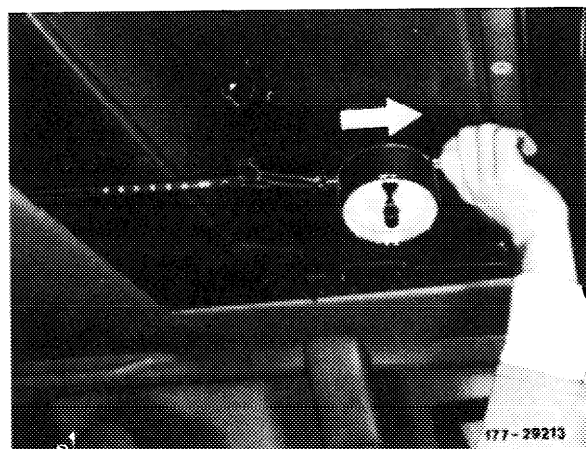
Note: When installing teleflex control, make sure that the guide member on teleflex control slides into opening of teleflex tube.



177-33808

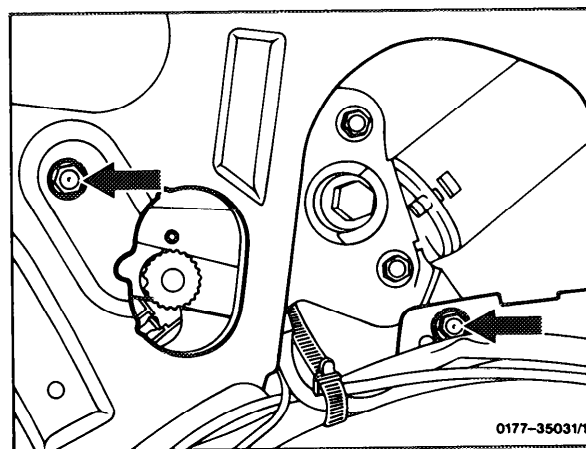
8 The force required for pulling out teleflex control should amount to max. 80 N. Make test with a spring scale.

9 Slide teleflex control completely into teleflex tube and push actuating switch to „Dach senken” (lower roof) and let control run into gearbox until the bores of guide plate and transporting bridge are overlapping.



177-29213

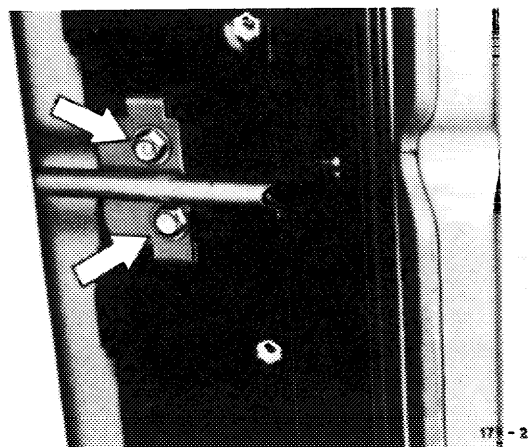
Note: If the teleflex control is not running into gearbox, loosen fastening screws on holder of drive unit.



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10 Screw guide plate to transporting bridge.

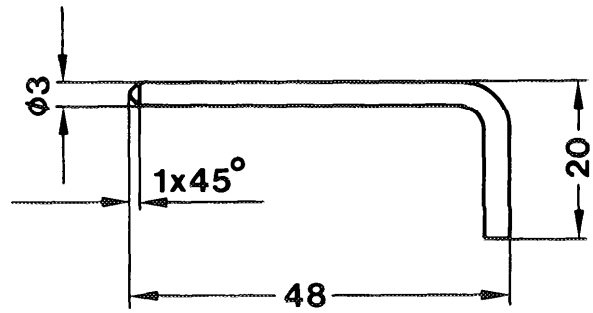
11 Install sliding roof headlining.



177-29078

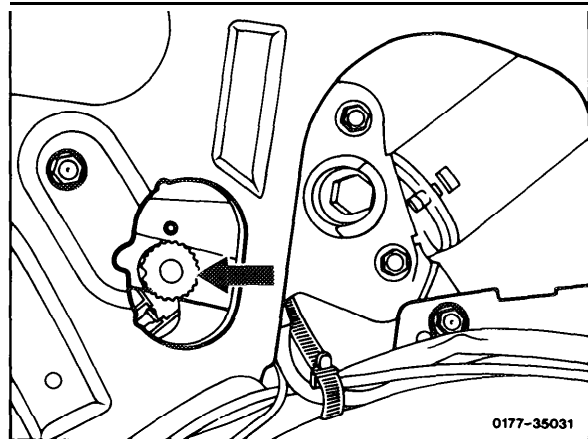
Adjusting

- 1 Make centering bolt (unless already available).
- 2 Remove trim on rear fender inside left.
- 3 Push actuating switch to „Dach heben“ (lift roof) until the sliding roof cover is completely lifted,



1774-12 766

- 4 Move adjusting knob into adjusting position (pull out up to stop and push in for approx. 3 mm).



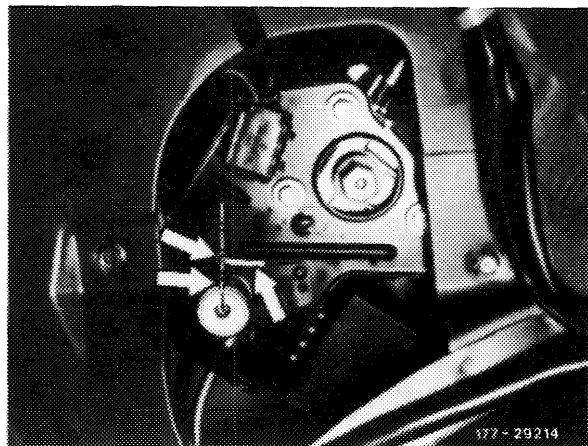
- 5 Turn adjusting knob until the centering bolt can be completely inserted into centering bore and the notch on knob points in direction of bore.

- 6 Push in adjusting knob and remove centering bolt.

Attention!

Do not actuate sliding roof motor with centering bolt inserted or adjusting knob pulled, since otherwise the control unit will be damaged and adjustments may be maladjusted.

Shown on model 124



- 7 If the sliding roof is not accurately closing with this basic adjustment, move adjusting knob again into adjusting position and turn knob for precision adjustment.

Turning knob clockwise = Sliding roof forward
Turning knob counterclockwise = Sliding roof rearward

Reference values:

One turn of knob changes location of sliding roof by approx. 45 mm.

- 8 Push adjusting knob and actuate sliding roof switch.

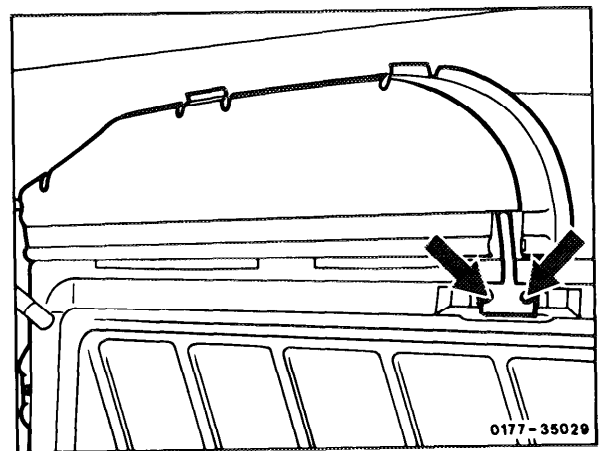
- 9 Mount trim on rear fender inside left.

77-150 Removal and installation of teleflex tube (sliding roof electrical, sliding-lifting roof)

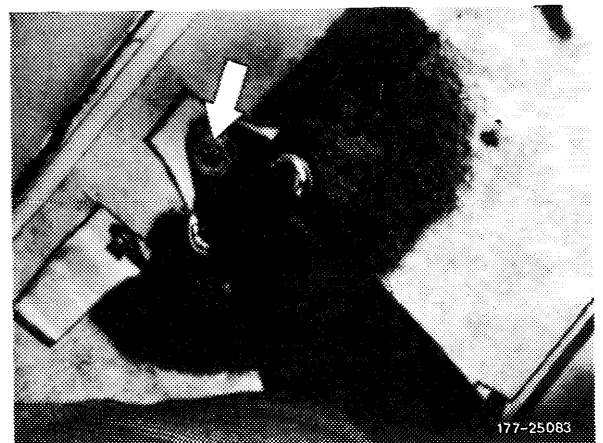
Removal (without removing back window)

- 1 Remove sliding roof cover (77-100).
- 2 Remove teleflex control (77-140).
- 3 Remove holder with motor and gear unit (77-180).
- 4 Remove headlining up to back window (68-430).

- 5 Force off cover over teleflex tube.
- 6 Unscrew fastening screws on holding plate for teleflex tube on sliding roof frame.



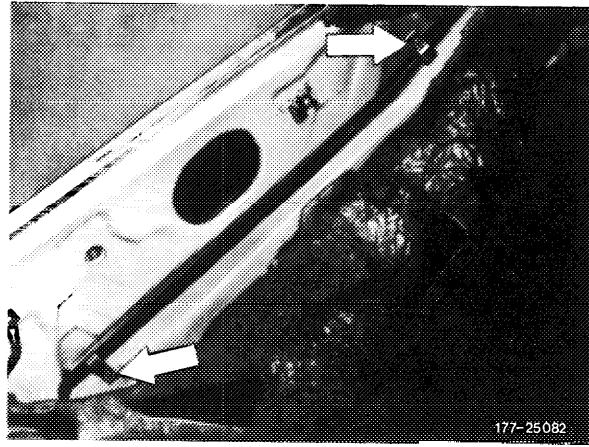
- 7 Unscrew screw on belt guide fitting rear left and put aside.
- 8 Pull off damping on rear pillar rear left.



9 Unscrew fastening clamps for teleflex tube on rear pillar.

10 Slip teleflex tube toward the rear and into trunk to the extent that it can no longer be pulled out of sliding roof frame.

11 Pull teleflex tube forward into vehicle interior and remove.



Installation

12 Introduce new teleflex tube from inside vehicle first into trunk and then into sliding roof frame.

Attention!

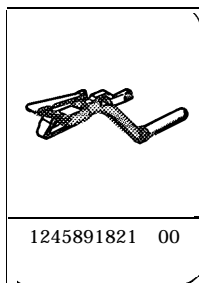
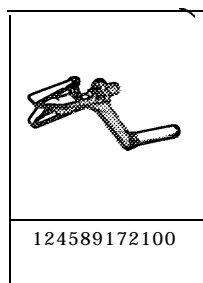
Do not bend teleflex tube during installation, since the teleflex control will then bind.

13 Install holder with motor and gear unit.

14 Fasten teleflex tube to sliding roof frame and to rear pillar.

15 For further installation proceed vice versa.

Special tools

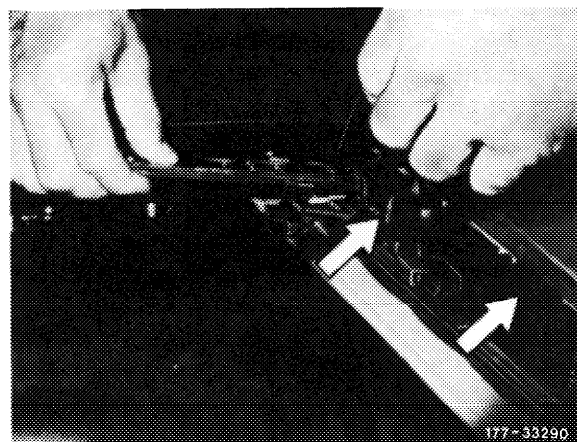
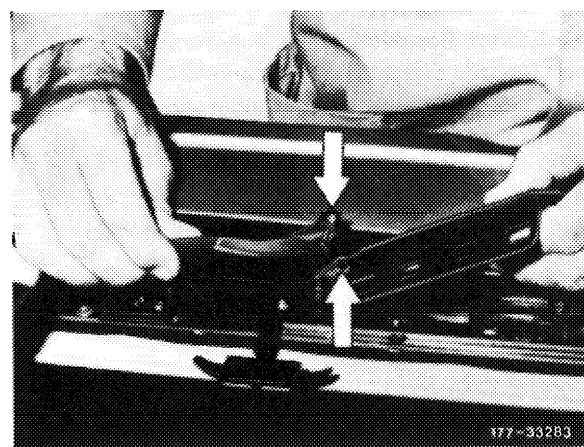
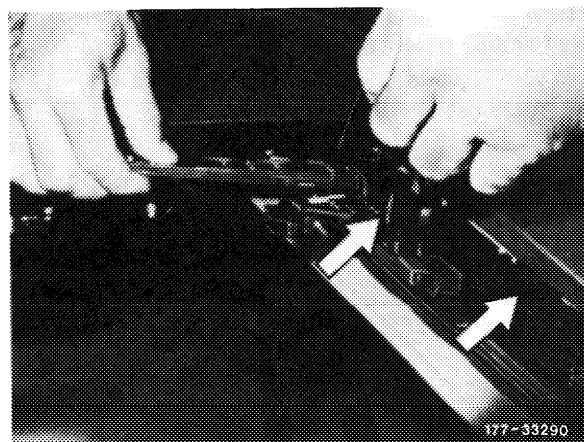


Removal

Attention!

Prior to removing lifting angle, unscrew lateral guide (slotted plate) from sliding-lifting roof frame (lower arrow).

- 1 Remove sliding-lifting roof cover (77-100).
- 2 Unscrew teleflex control from transporting bridge.
- 3 Remove fastening angle for sliding-lifting roof cover from lateral guide (slotted plate) in upward direction and remove water gutter.
- 4 Unscrew transporting bridge and remove.
- 5 Slide lifting angle up to stop in forward direction, tilt in upward direction and remove diagonally in inward direction.

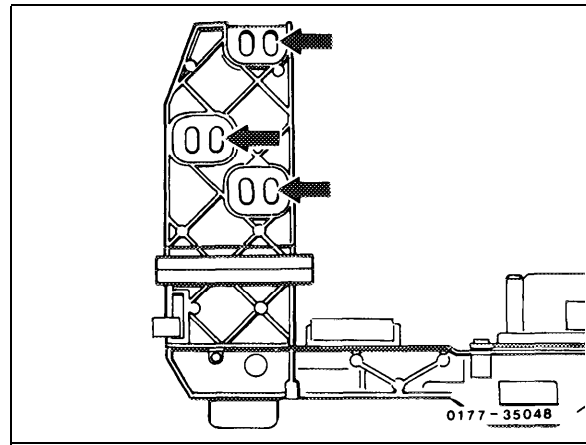


Installation

Attention!

During installation of lifting angle, pay attention to correct hole pattern (arrows).

6 Grease lifting angle prior to installation with MB slide paste, part No. 001 989 14 5 1, on slide shoes and moving parts.

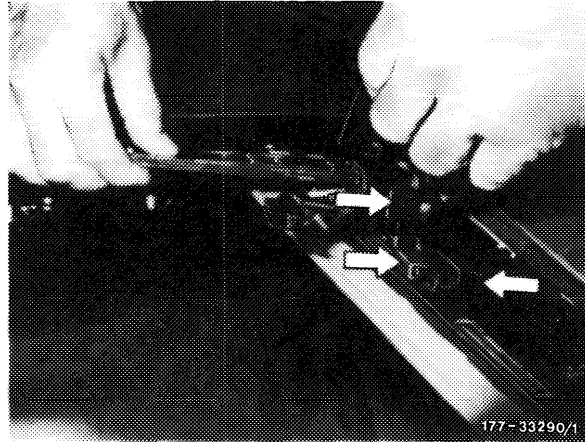


Note: During installation, pay attention to correct seat of slide shoes (arrows).

7 Install lifting angle.

8 Install transporting bridge, while pushing lifting angle slightly in outward direction by means of screwdriver and tighten.

9 Install water gutter.



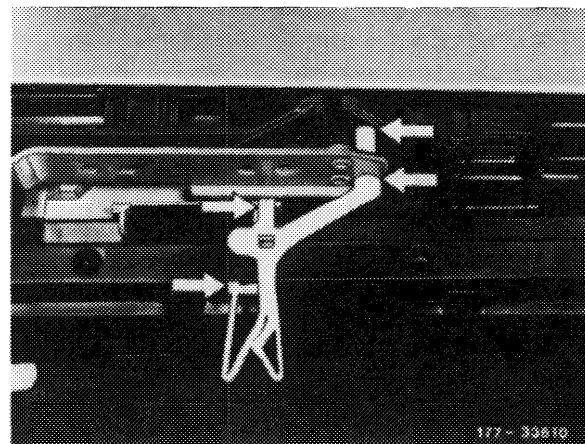
10 Perform basic adjustment on lifting angle mechanism. For this purpose, insert adjusting gauges, part No. 124 589 17 21 00 left and 124 589 18 21 00 right into guide plate (lateral guide) and groove in lifting angle.

Attention!

Pull off adjusting gauges only after sliding-lifting roof cover has been installed.

11 Install sliding-lifting roof cover (77-100).

Shown with sliding-lifting roof holding angle screwed off



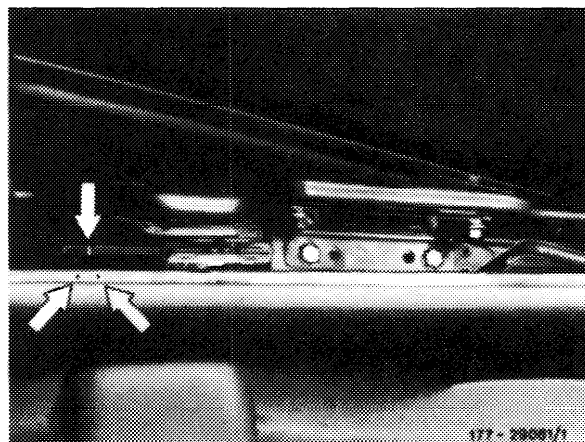
12 Screw teleflex control to transporting bridge.

13 Actuate sliding-lifting roof cover several times in all positions.

14 Check mark on holder of sliding-lifting roof headlining for marking on slide rail.

Note: If the mark is outside notches on slide rail, readjust teleflex control as required (77-140).

15 For further installation proceed vice versa.

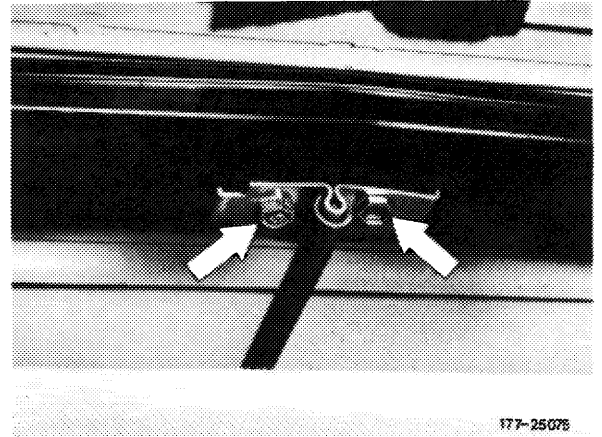


77-180 Removal and installation of motor and gearbox (sliding roof electrical, sliding-lifting roof)

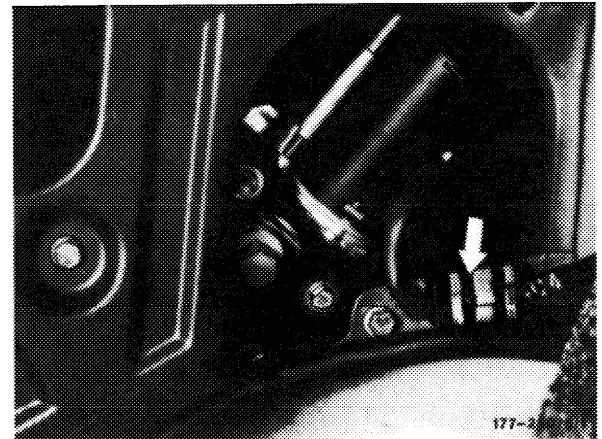
A. Teleflex control can be removed

Removal

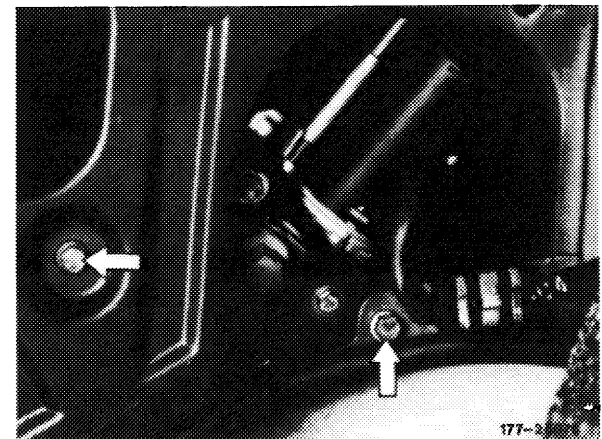
- 1 Remove sliding roof headlining.
- 2 Unscrew guide plate from transporting bridge and disengage.
- 3 Permit teleflex control to run in forward direction out of gear unit of sliding roof motor.
- 4 Remove cover in trunk on lefthand side.



- 5 Disconnect electric wires on sliding roof motor.

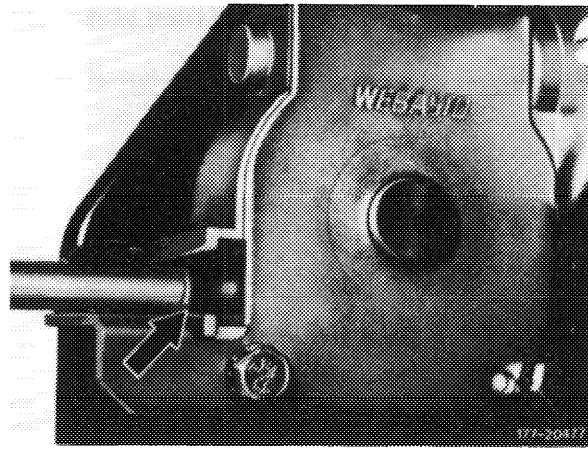


- 6 Unscrew fastening screws on mounting bracket.



7 Detach teleflex tube as well as extension tube at gear unit.

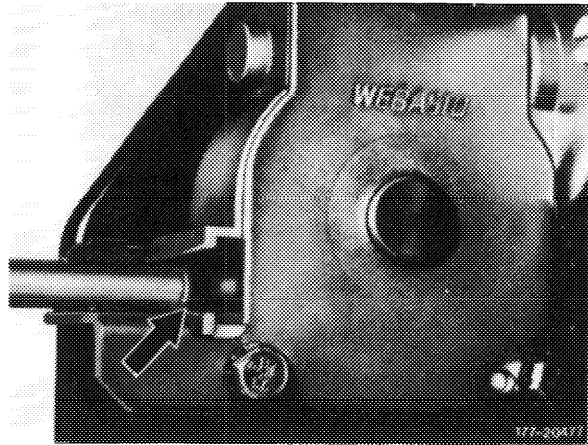
8 Remove mounting bracket with motor and gear unit.



Installation

Note: When clipping the teleflex and extension tubes, make sure that the bead at the tube is inserted into groove on gear unit.

9 For installation proceed vice versa.



Attention!

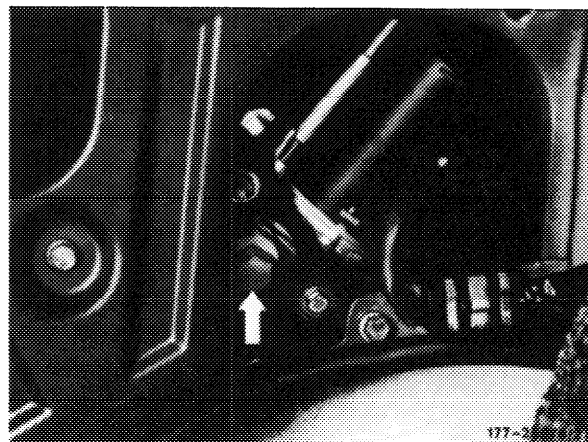
If the teleflex control is stuck, disassemble the drive gear.

B. Teleflex control cannot be removed

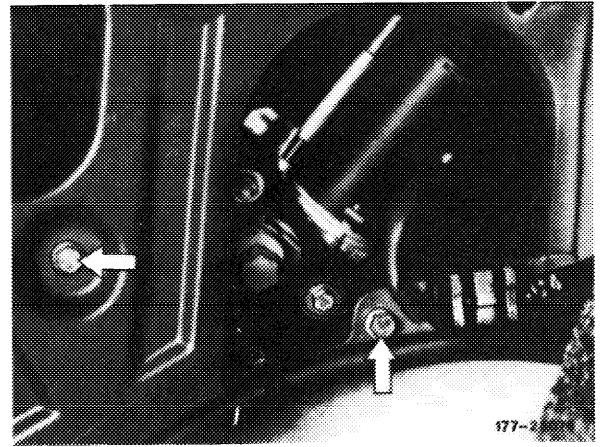
Removal

1 Remove cover in trunk onlefthand side.

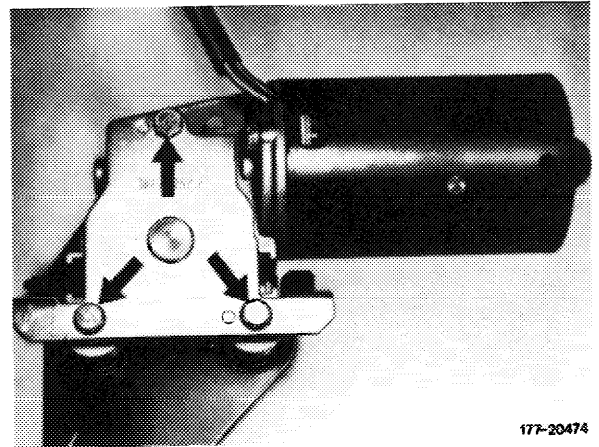
2 Press off plastic cap for emergency crank drive and unscrew hex. nut (17 mm) underneath, while holding gear axle with a fork wrench (6 mm) at the point provided therefor.



- 3 Unscrew fastening screws on mounting bracket.

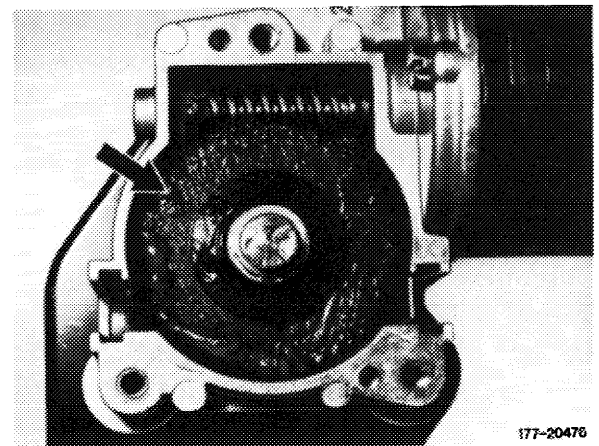


- 4 Slightly turn mounting bracket together with motor and unscrew cover on back of gear housing.



Shown with motor removed

- 5 Remove gear cover and take out large worm gear.
- 6 Remove mounting bracket with motor and gear unit.

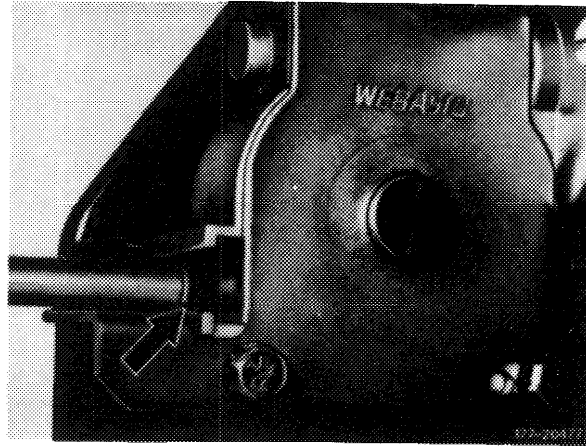


Shown with motor removed

Installation

- 7 Assemble gear unit.
- 8 Install mounting bracket with motor and gear unit.
- 9 For further installation proceed vice versa.
- 10 Set slip clutch on gear unit (77-195).

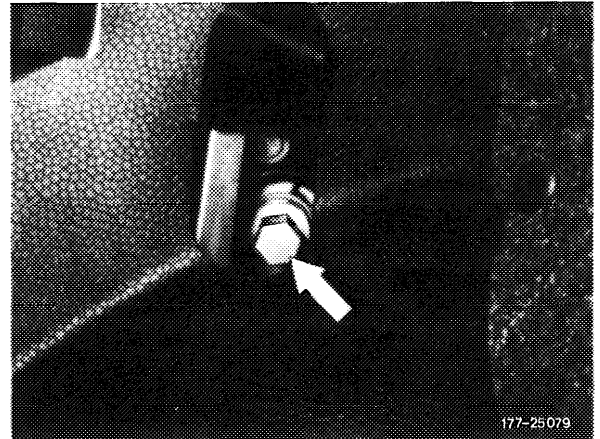
Note: When clipping teleflex and extension tube, make sure that bead on tube is slipped into groove on gear unit.



77—195 Testing and adjusting slip clutch of sliding roof motor (sliding roof electrical, sliding-lifting roof)

Checking

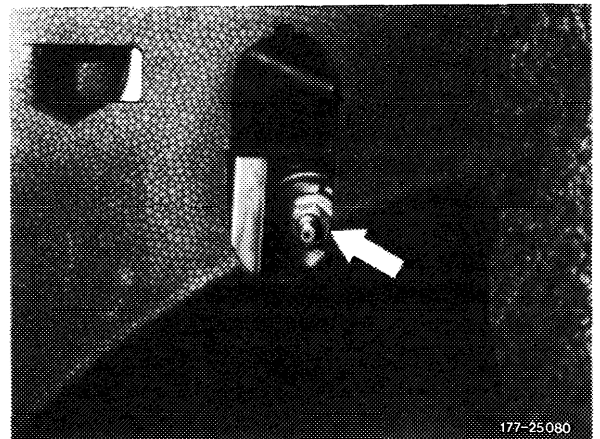
- 1 Open sliding roof by half.
- 2 Pull off cover above emergency crank drive and plug socket 16 mm (long) onto emergency crank drive.
- 3 Plug torque wrench onto socket and hold in place.
- 4 Let a helper operate sliding roof switch and read torque. Nominal value 5-6 Nm.
(Sliding-lifting roof nominal value 4-5 Nm).
- 5 Pull off socket and close opening above emergency crank drive.



Drive

- 1 Open cover above emergency crank drive.
- 2 Pull off grey plastic cap for emergency crank drive and screw-in hex. nut underneath to increase torque, and screw out to reduce torque.

Note: Hold gear shaft with an open end wrench (6 mm) at the spot provided for this purpose to keep shaft from turning along.



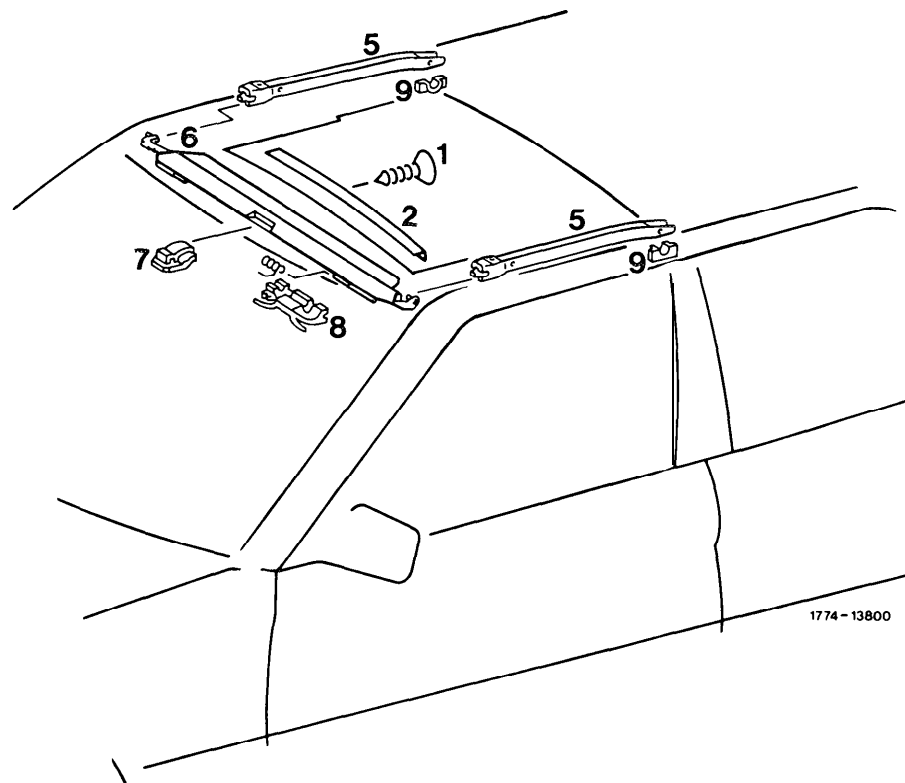
- 3 Turn hex. nut max. by 60° , then push-on grey plastic cap and check torque. Adjust torque, if required.

Attention!

Make sure that slip clutch is not obstructed.

- 4 Close opening above emergency crank drive.

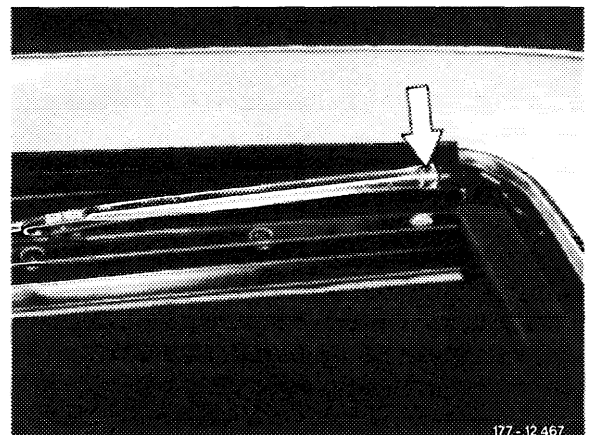
**77-250 Removal and installation of wind deflector on sliding roof
(sliding roof mechanical, electrical, sliding-lifting roof)**



- | | |
|----------------------------------|---|
| Screw (1) | Screw 6 each out and in |
| Chrome-plated rail (2) | Remove and install |
| Hold-down (5) | Remove and insert 2 each from bearing (9) and pull out of wind deflector (6) toward the rear. |
| Wind deflector (6) | Pull out of center bearing (7). |
| Wind deflector (6) | Carefully push out of shaft including bearing (8) at left and right by means of screwdriver. |
| Wind deflector (6) | Remove in upward direction. |

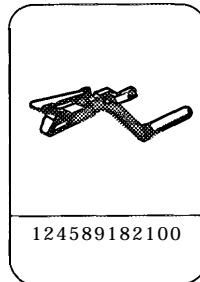
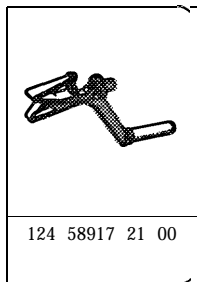
Adjustment

If the wind deflector wipes against sliding-lifting roof cover when entering recess, the height adjustment can be changed by readjusting on adjusting screw (arrow). If the wind deflector rattles in center bearing, the deflector can be slightly pre-tensioned. For this purpose, hold wind deflector in place at outer bearings, pull out of center bearing in center range and bend slightly in upward direction. Gap dimension when closing between cover and wind deflector 5 mm.



77-300 Removal and installation of sliding roof frame (sliding roof electrical, sliding-lifting roof)

Special tools (sliding-lifting roof)

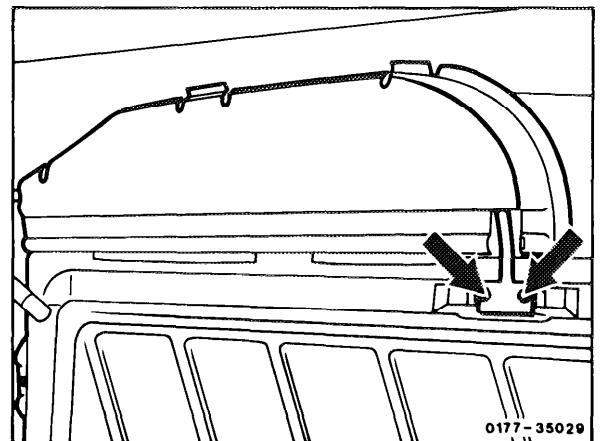


Removal

- 1 Remove sliding roof cover (77-100).
- 2 Remove teleflex control (77- 140).
- 3 Remove headlining up to back window (68-430).

4 Force off cover above teleflex tube.

5 Unscrew fastening screws on holding plate for teleflex tube on sliding roof frame rear.



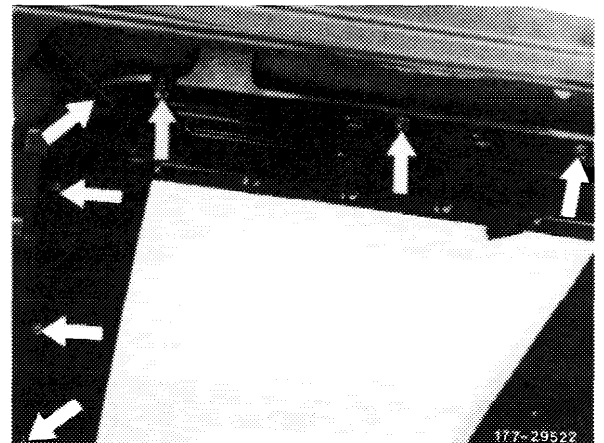
6 Pull off water drain hoses and unscrew screws.

7 Lower sliding roof frame at front and push in driving direction, while moving out teleflex tube at sliding roof frame rear.

Attention! (Sliding-lifting roof)

Risk of injury when removing sliding-lifting roof frame caused by transporting bridge. For this purpose, be sure to wear protective gloves.

8 Remove sliding roof frame through rear side door.



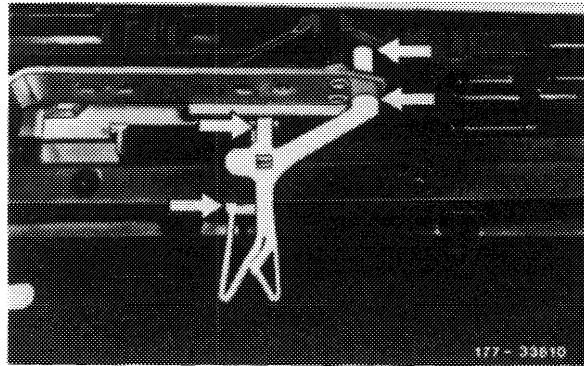
Installation

Attention! (Sliding-lifting roof)

Prior to installation of sliding roof frame, insert adjusting gauges part No. 124 589 17 21 00 left and 124 589 18 21 00 right into guide plate (lateral guide) and groove in lifting angle.

Pull off adjusting gauges only after installing sliding-lifting roof cover.

Shown with sliding-lifting roof holding angle removed



9 Lift sliding roof frame through rear side door opening into vehicle interior.

Note: The two rear fastening screws have metric threads. To make sure that the sliding roof frame will be centered in relation to sliding roof cutout, tighten the two front fastening screws at left and right first.

10 Fasten teleflex tube to sliding roof frame rear and install cover.

11 For further installation proceed vice versa.