

# 601 Sunroof

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## GENERAL

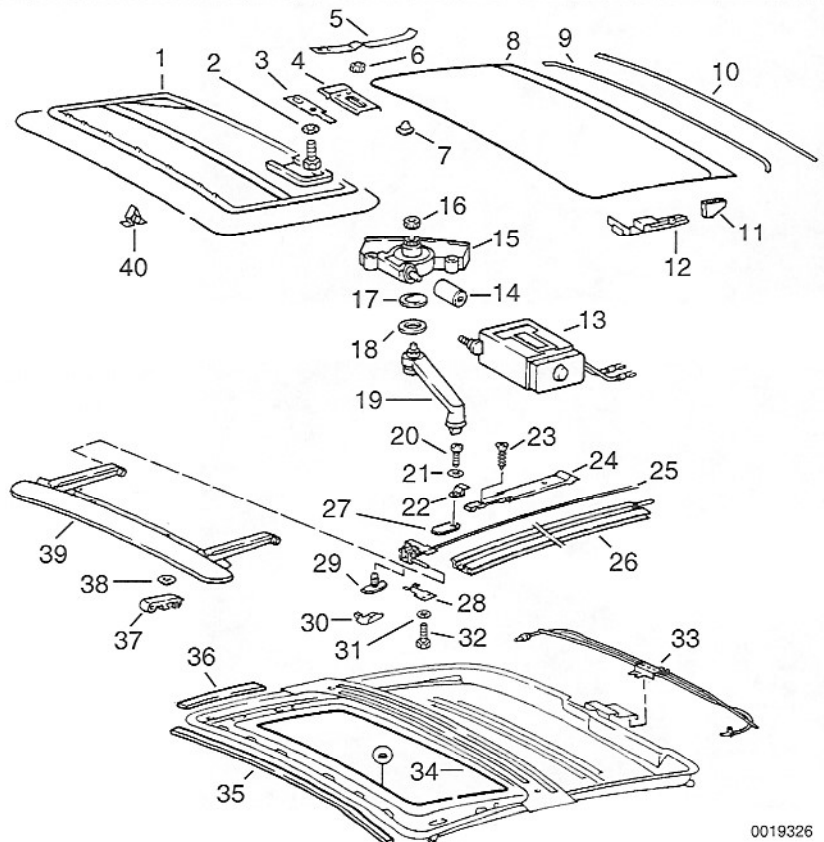
The electric sunroof is operated by a motor drive and drive cables. The sunroof panel can be adjusted with out removing it from the car. Replacement of the sunroof liner or components such as the cable assembly require that the sunroof panel be removed. The sun roof drive motor is protected from damage by a slip coupling fitted between the motor and the drive.

### NOTE —

Be sure to check the front and rear drains in the corners of the sunroof for blockage. If water is entering through the sunroof one of more of these drains are usually plugged.

### Sunroof assembly

- |                    |                        |
|--------------------|------------------------|
| 1. Frame           | 21. Washer             |
| 2. Washer          | 22. Terminal piece     |
| 3. Lock plate      | 23. Screw              |
| 4. Guide           | 24. Intermediate piece |
| 5. Leaf spring     | 25. Cable              |
| 6. Knurled nut     | 26. Guide rail         |
| 7. Plug            | 27. Threaded plate     |
| 8. Cover           | 28. Reinforcement      |
| 9. Velvet strip    | 29. Plug               |
| 10. Sealing rubber | 30. Guide piece        |
| 11. Guide shoe     | 31. Lock washer        |
| 12. Support        | 32. Bolt               |
| 13. Motor          | 33. Cable guide        |
| 14. Clutch         | 34. Beading            |
| 15. Transmission   | 35. Front seal         |
| 16. Drive pinion   | 36. Side seal          |
| 17. Cap            | 37. Clip               |
| 18. Washer         | 38. Protection cap     |
| 19. Hand crank     | 39. Wind deflector     |
| 20. Screw          | 40. Clamp              |



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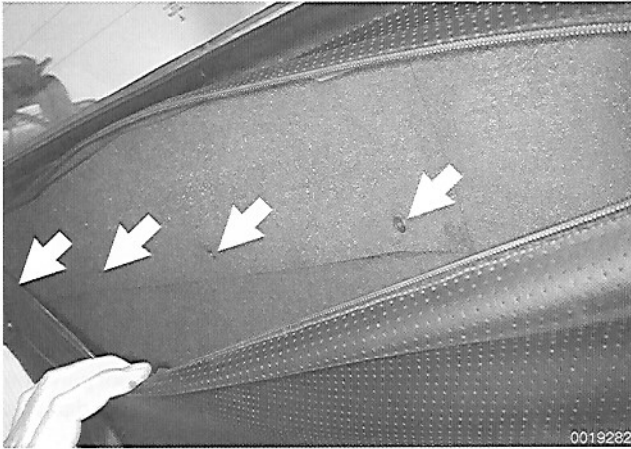
### SUNROOF ASSEMBLY

The motor and drive unit are located in the roof just ahead of the rear window. Access to the motor and drive is a zipper opening in the headliner.

#### Sunroof panel, emergency closing

Working in rear headliner, just forward of top of rear window, open zipper in headliner.

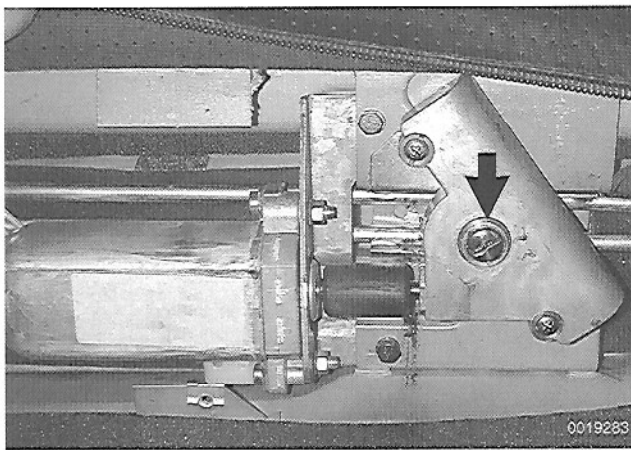
- Remove sunroof drive assembly access panel screws (arrows). Remove panel.



Remove screw from drive unit (arrow). Makes sure spacer(s) come off with screw.

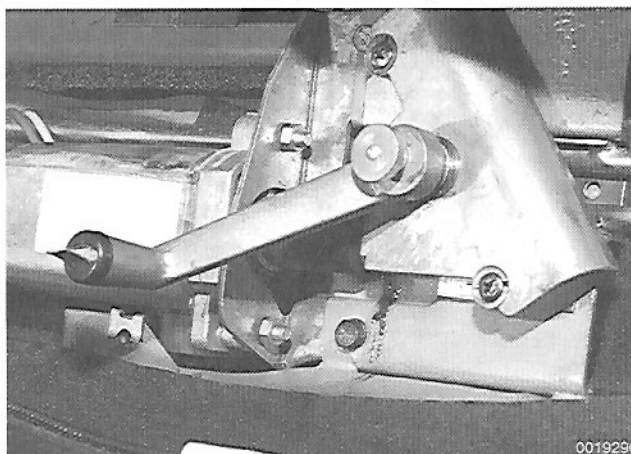
#### NOTE —

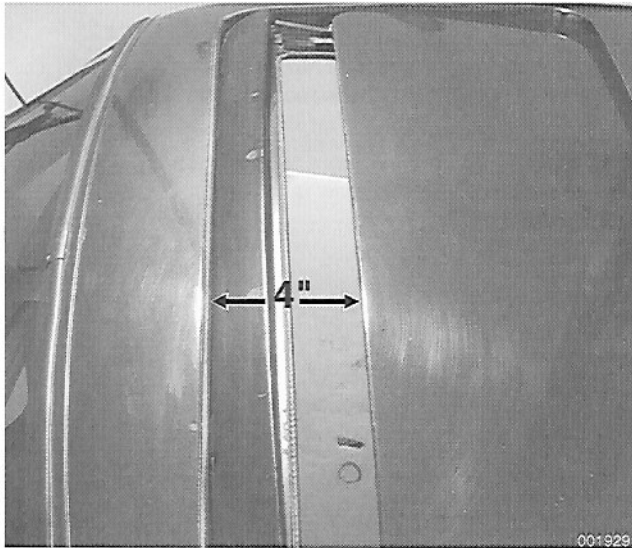
The hand crank for closing the sunroof can usually be found in the glove box or in the tool kit.



Insert handcrank into drive unit while aligning drive keys in handcrank with drive slots in drive unit. Tighten knurled screw to secure crank to drive unit.

- Turn hand crank to close sunroof.



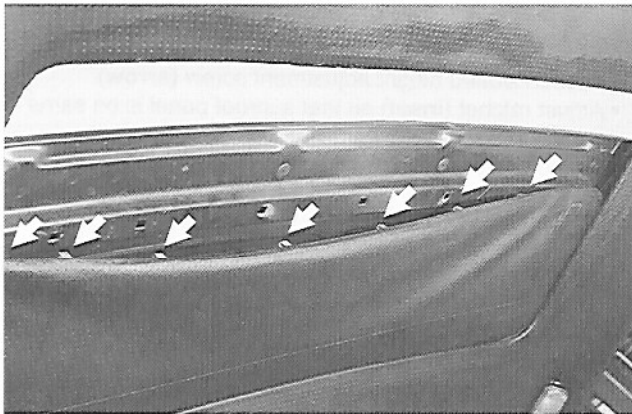


### Sunroof panel, adjusting height

The sunroof panel should be adjusted:

- If the top of the closed sunroof becomes misaligned with the roof of the car;
- If it does not close squarely;
- If there are wind noises at speed;
- If there are water leaks;
- If the sunroof has been removed.

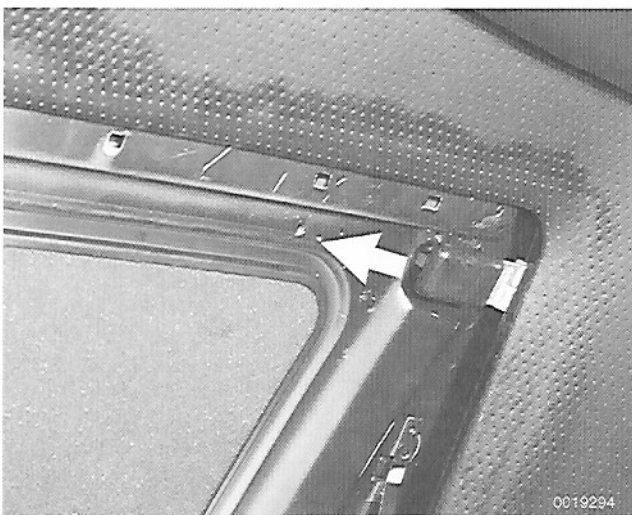
➤ Open sunroof approximately 100 mm (4").



➤ Carefully pull down on front of trim panel to free securing clips.

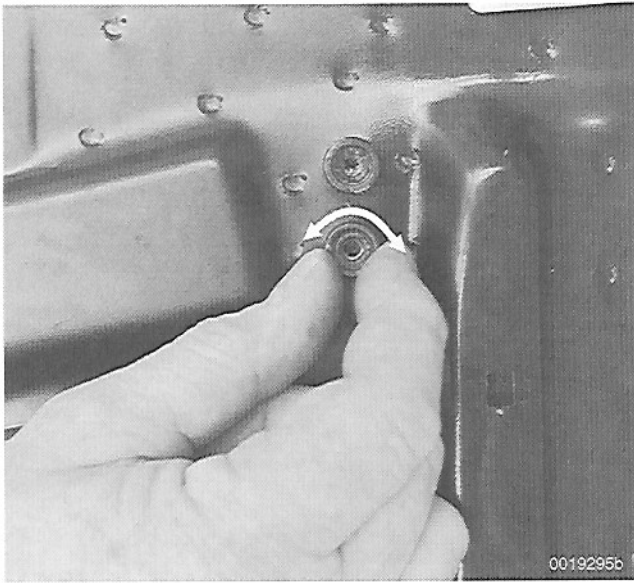
— Slide headliner panel back into roof cavity.

— Close sunroof.



➤ Remove plastic caps covering front guide screws on left and right sides. Left side is shown (arrow).

## 601-4 SUNROOF

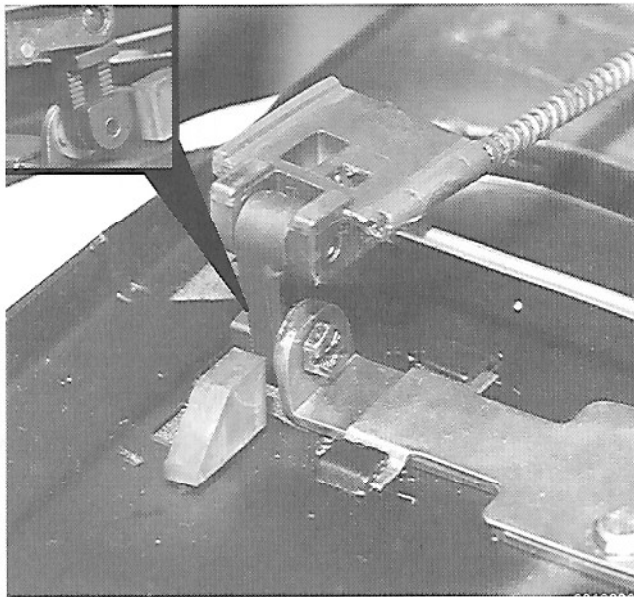


◀ To adjust front height of sunroof panel:

- Remove front guides.
- Turn knurled nuts to adjust height (**arrow**).
- Reinstall guides and check roof adjustment.

**NOTE —**

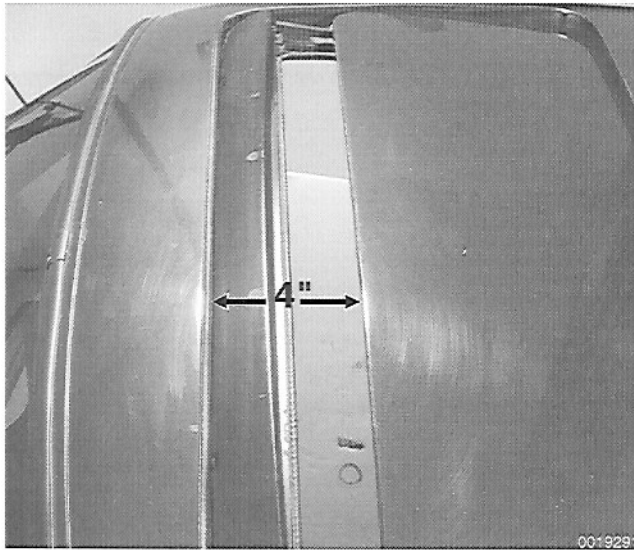
*Adjust front height so that panel is on same plane as roof or just slightly lower.*



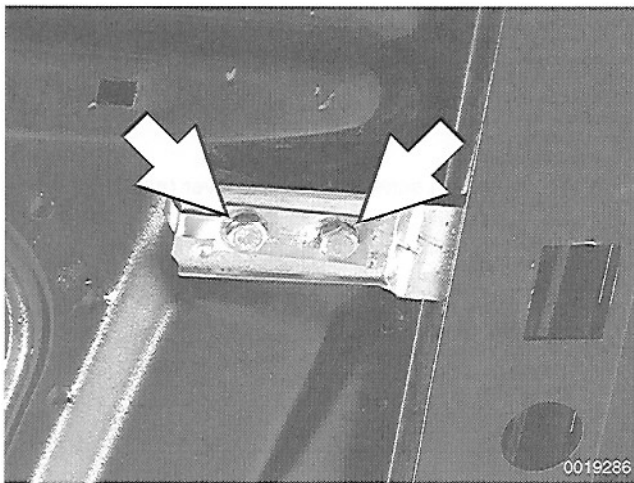
◀ To adjust rear height of sunroof panel:

- Loosen slotted height adjustment screw (**arrow**).
  - Adjust ratchet (**inset**) so that sunroof panel is on same plane as roof or just slightly higher.
  - Tighten screws.
- Open sunroof approximately 100 mm (4").
  - Slide headliner trim panel forward and snap clips into place.
  - Check operation of sunroof.

**Sunroof panel, removing and installing**



- ◀ Open sunroof lid approximately 100mm (4").
- Carefully pull down on front of trim panel to free securing clips.
- Slide sunroof headliner panel back into roof.
- Close sunroof.



- ◀ Remove guide bracket covers from front guide brackets (left and right sides). Remove front guide bracket mounting bolts (arrows).

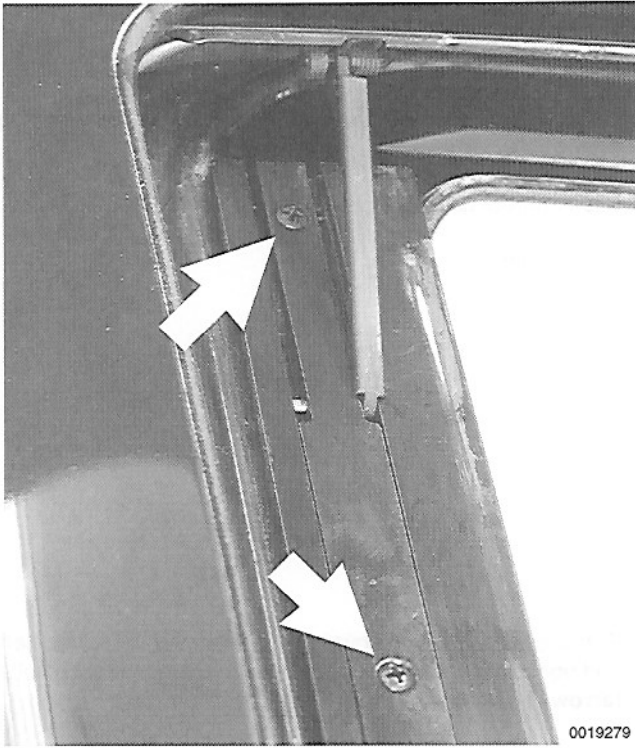
**NOTE —**

*Place a strip of masking tape cross front of sunroof opening to protect the paint when removing sunroof parts.*



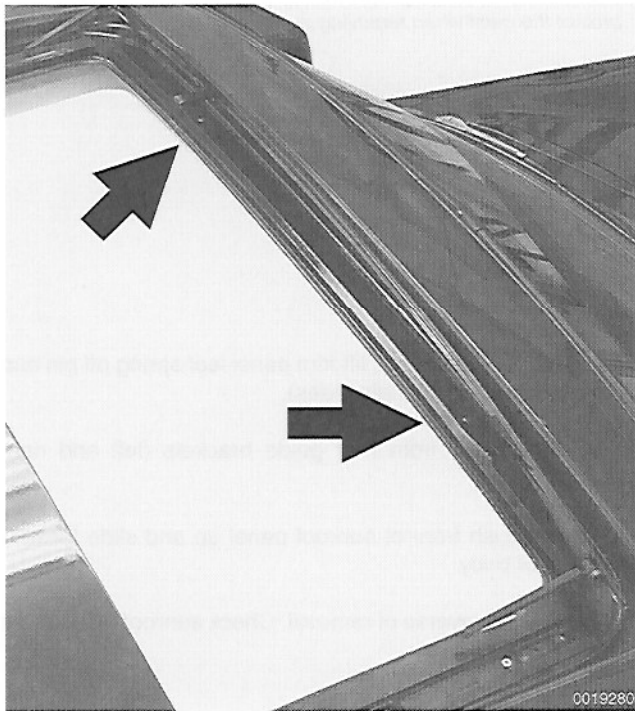
- ◀ Working a rear of panel, lift trim panel leaf spring off pin and turn to side (left and right sides).
- Remove screws from rear guide brackets (left and right sides).
- Carefully push front of sunroof panel up and slide forward and out of body.
- Installation is reverse of removal. Check sunroof adjustment as described earlier.

## 601-6 SUNROOF



### Wind deflector, removing and installing

- Open sunroof.
- ◀ Remove intermediate plate screws (**arrows**) and remove plate (left and right sides).



- ◀ Remove mounting screws from trim cover (**arrows**).



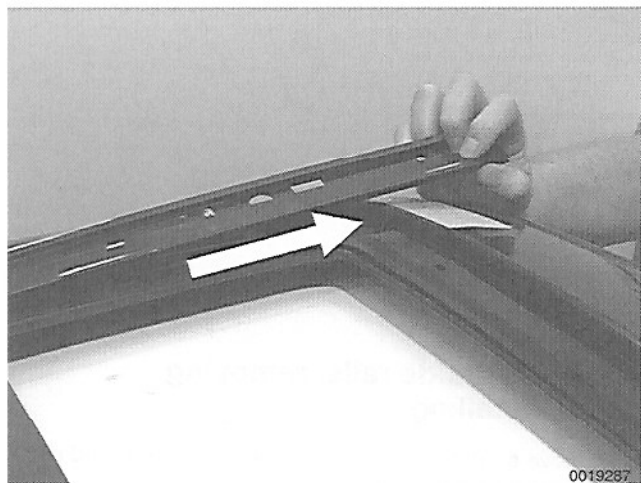
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While lifting up cover, carefully pry up on rear of deflector clip (1) and slide forward clip off cover (2). Remove wind deflector with clips.

— Installation is reverse of removal.

## Sunroof cables, replacing

- Remove sunroof panel, described later.
- Remove sunroof drive motor, described earlier.
- Remove wind deflector, described earlier.



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Pull sunroof guide rails straight forward and out of sunroof opening to remove.

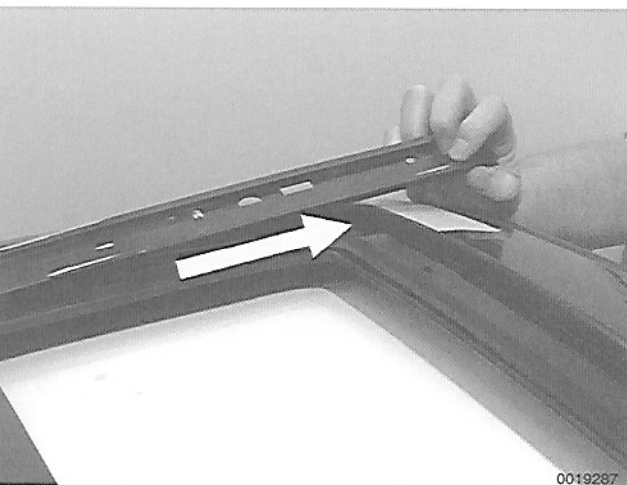
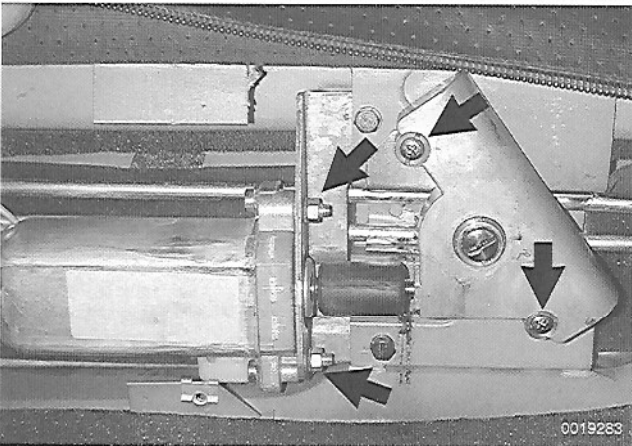
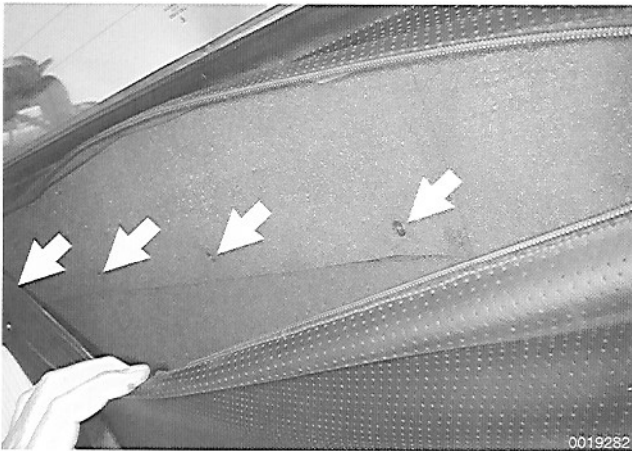
- Pull sunroof cables from guides.
- Clean guide rails with hot soapy water and wipe dry.

### **NOTE —**

*Do not use a lubricant on sunroof cables.*

- Installation is reverse of removal
  - Inspect all parts for wear and replace as necessary.
  - Adjust sunroof height as described earlier.

## 601-8 SUNROOF



### Sunroof motor and drive unit, removing and installing

Working in rear headliner, just forward of top of rear window, open zipper in headliner.

- Remove sunroof drive assembly access panel screws (arrows). Remove panel.

Disconnect electrical harness connector. Remove sunroof drive assembly mounting screws (arrows). Lower drive assembly with motor.

- Installation is reverse of removal.

### Sunroof guide rails, removing and installing

- Remove sunroof panel, sunroof drive unit and wind deflector as described earlier.

Pull sunroof guide rails straight forward out of sunroof opening to remove.

- Installation is reverse of removal.

