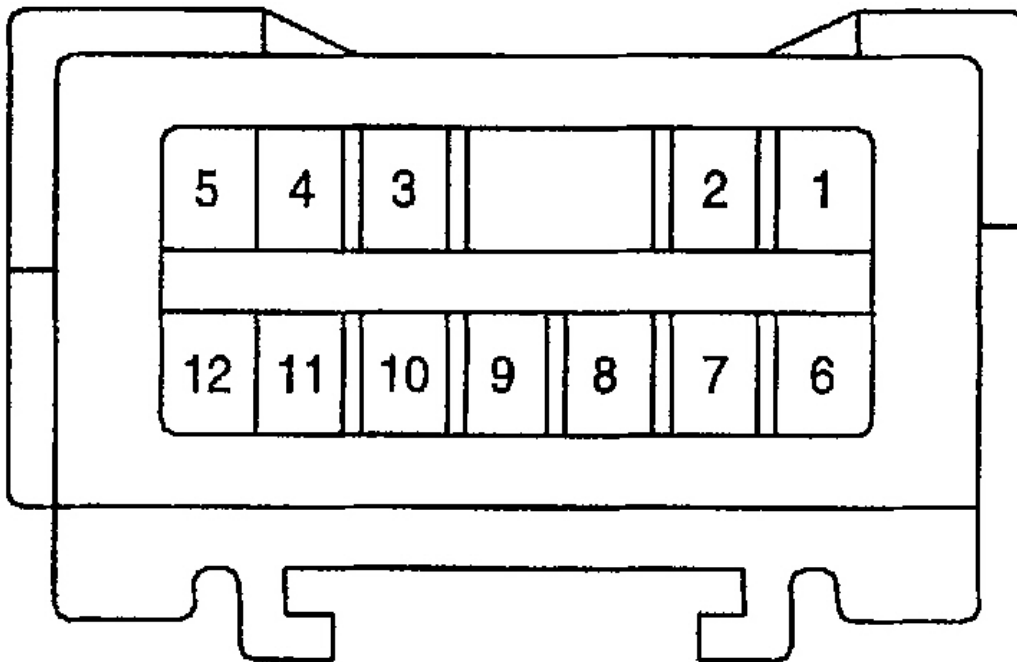


Sunroof - Sedona

## SUN ROOF SWITCH


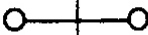


### INSPECTION

1. Operate the switch and check for the continuity between the terminal.
2. If the continuity is not as specified, replace the switch.



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**Fig. 1: Illustrating Switch Connector**  
Courtesy of KIA MOTORS AMERICA, INC.

Terminal		2	8	9	10	11
Condition	Open					
	Close					
Tilt	Up					
	Down					

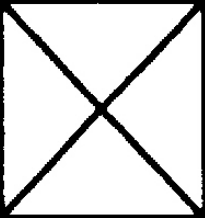
G00379243

**Fig. 2: Illustrating Terminal Testing Chart**  
Courtesy of KIA MOTORS AMERICA, INC.

SUN ROOF MOTOR

INSPECTION

- 1. Apply battery voltage to the terminals 1 & 8 and ground terminal 3.

4	3		2	1
9	8	7	6	5

G00379244

**Fig. 3: Testing Sunroof Motor Operation**  
Courtesy of KIA MOTORS AMERICA, INC.

2. Apply the battery voltage to terminals as below table, and check that the sunroof unit operates as below table.

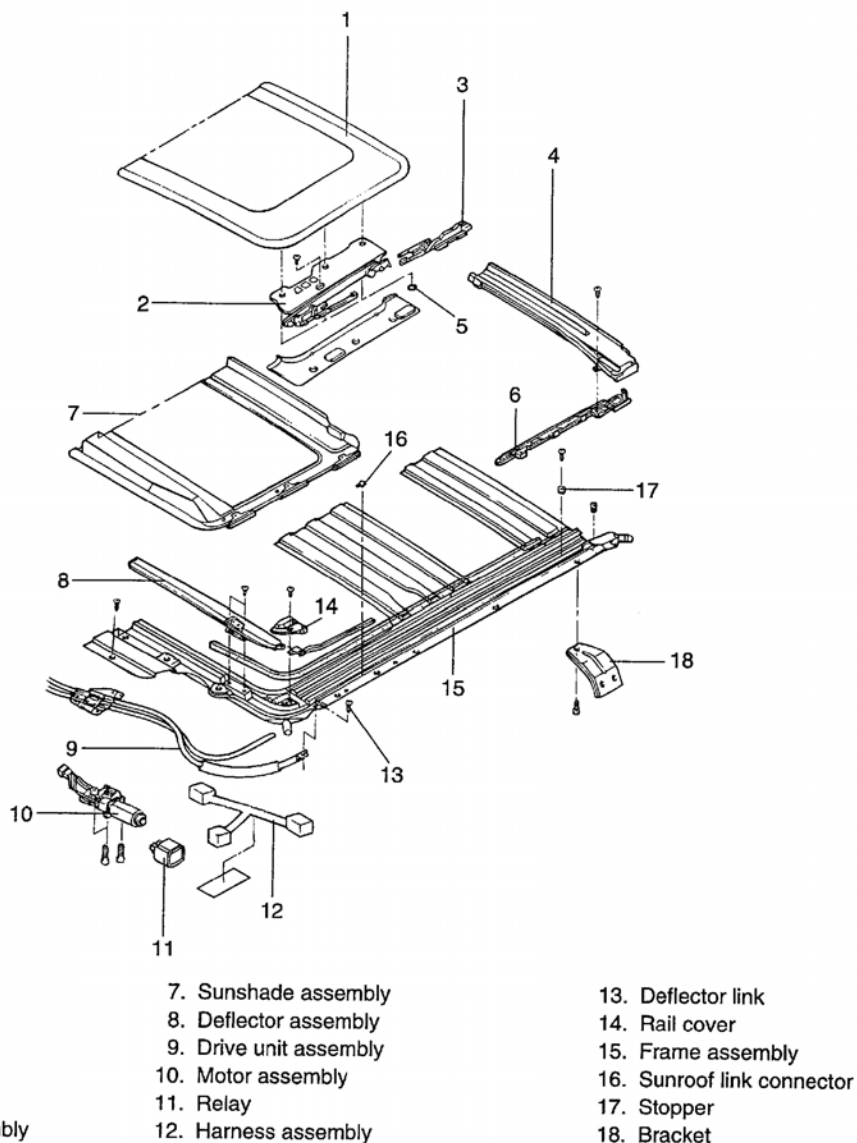
<div>Terminal</div> <div>Function</div>	4	5	6	7
Tilt up	⊕			
Tilt down		⊕		
Slide open			⊕	
Slide close				⊕

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**Fig. 4: Motor Testing Chart**  
Courtesy of KIA MOTORS AMERICA, INC.

**REMOVAL & INSTALLATION**

**REMOVAL**

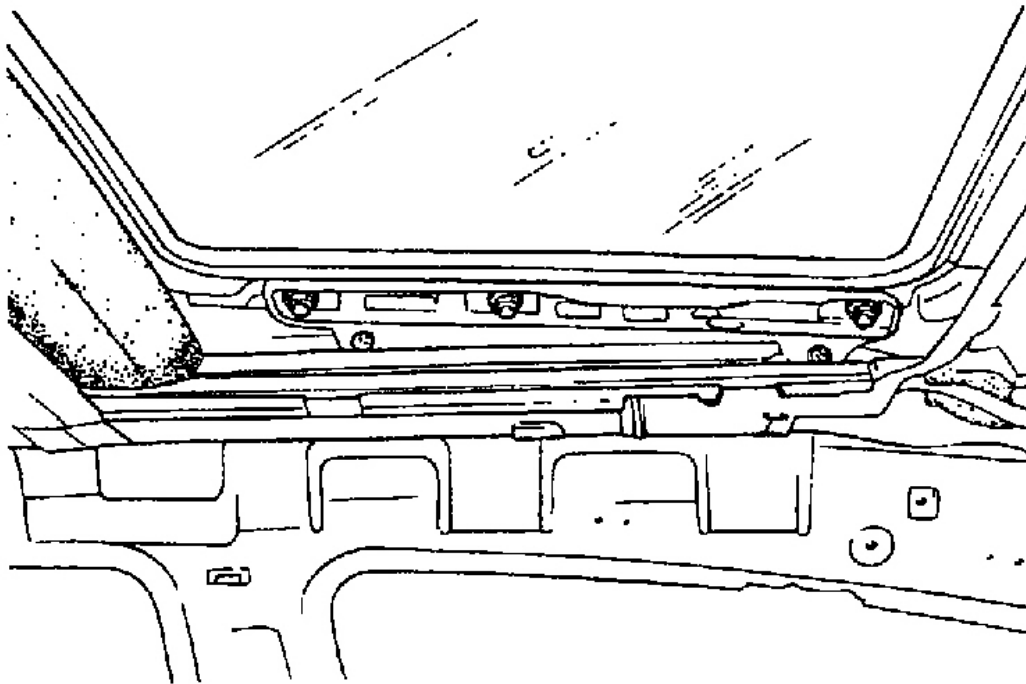


G02177586

**Fig. 5: Identifying Sunroof Components**  
**Courtesy of KIA MOTORS AMERICA, INC.**

1. Remove headliner. See **REMOVAL & Installation** .
2. Remove glass panel.

Tighten glass mounting nuts to 4-6 N.m (40-60kg.cm, 35-52 lb.ft)

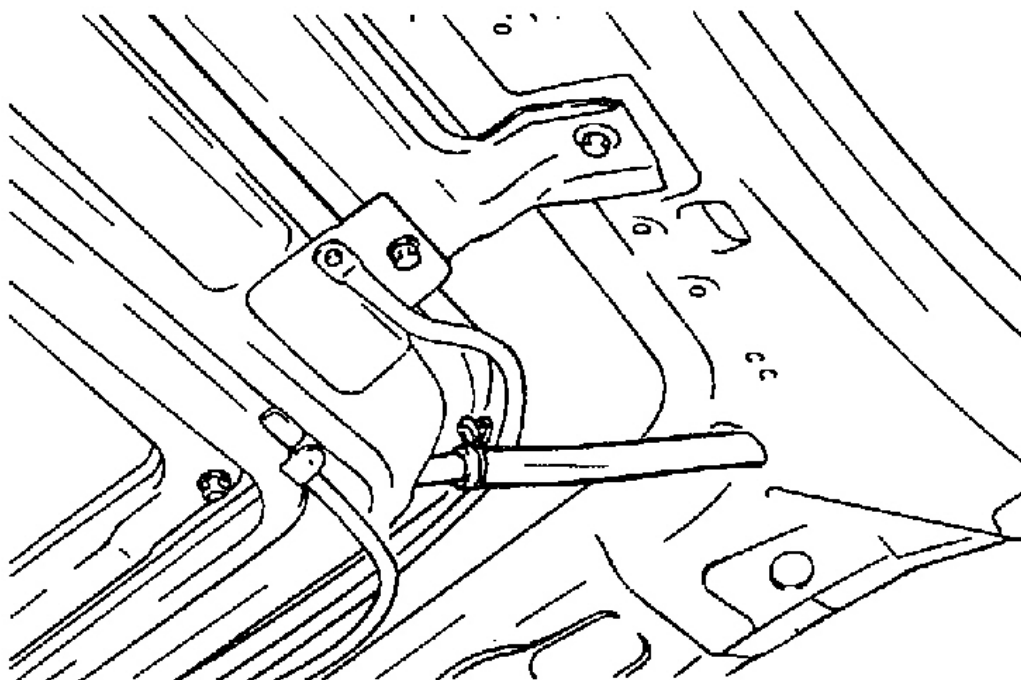


G02177587

**Fig. 6: Removing Glass Panel**

Courtesy of KIA MOTORS AMERICA, INC.

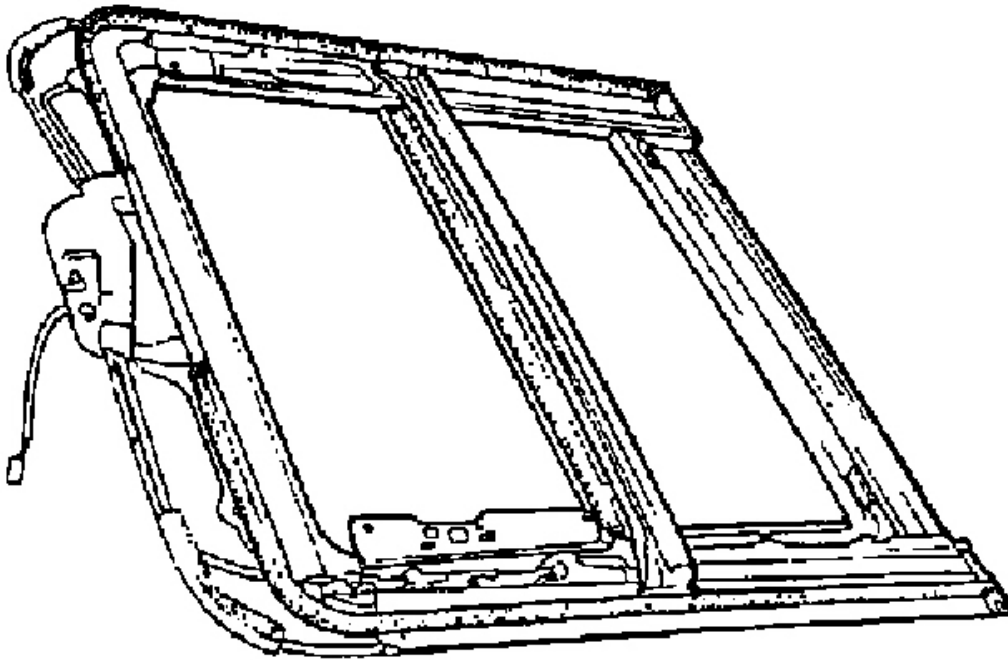
3. Disconnect the drain hose.



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**Fig. 7: Disconnecting Drain Hose**  
Courtesy of KIA MOTORS AMERICA, INC.

**NOTE:** When removing the sunroof assembly, carefully pull out the sunroof assembly to avoid damage to the other parts.



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**Fig. 8: Removing Sunroof Assembly**  
**Courtesy of KIA MOTORS AMERICA, INC.**

4. Remove the sunroof mounting bolts and nuts, and remove the sunroof assembly.

Tighten sunroof mounting bolts to:

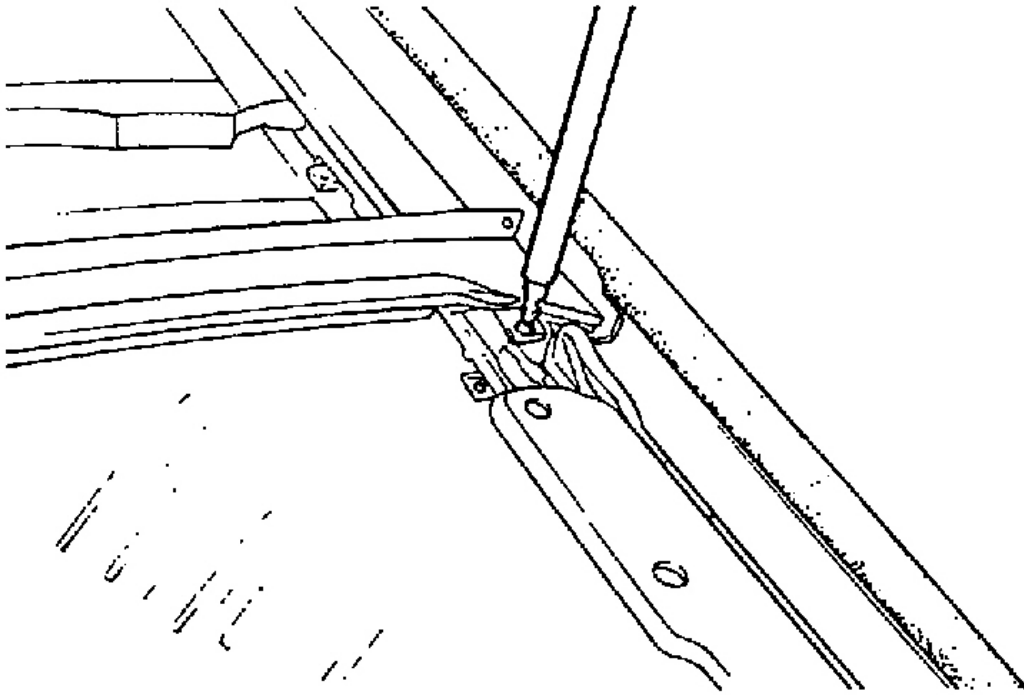
7-11 N.m (70-110 kg.cm, 61-95 lb.ft)

Tighten sunroof mounting nuts to:

4-6 N.m (40-60 kg.cm, 35-52 lb.ft)

## **DISASSEMBLY & ASSEMBLY**

1. Remove the drip rail.

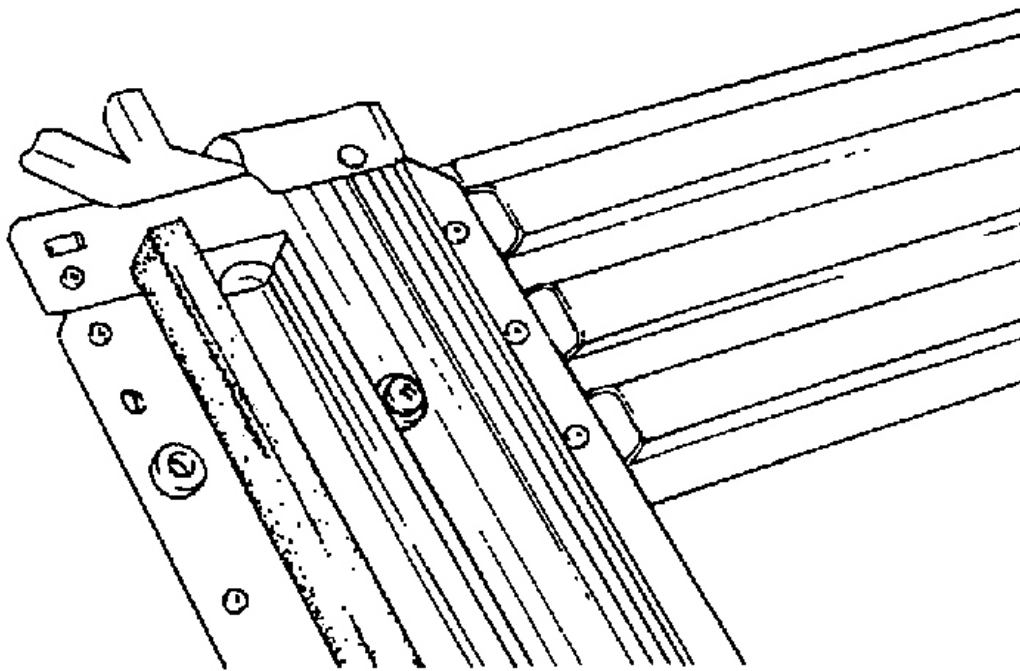


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**Fig. 9: Removing Drip Rail**  
Courtesy of KIA MOTORS AMERICA, INC.

2. Remove the stopper.

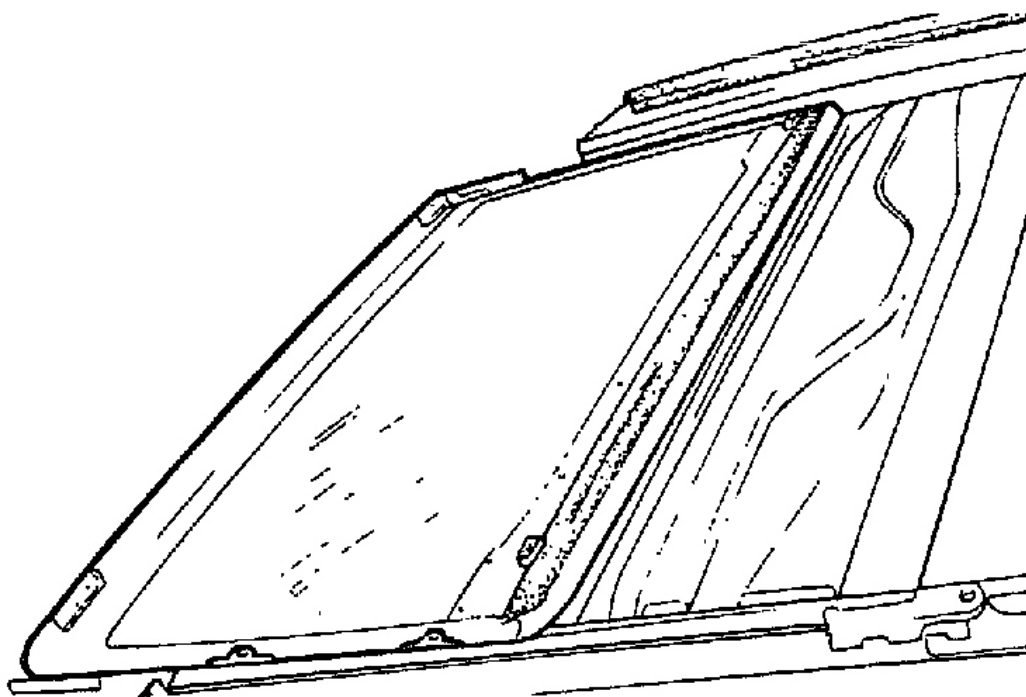




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**Fig. 10: Removing Stopper**  
Courtesy of KIA MOTORS AMERICA, INC.

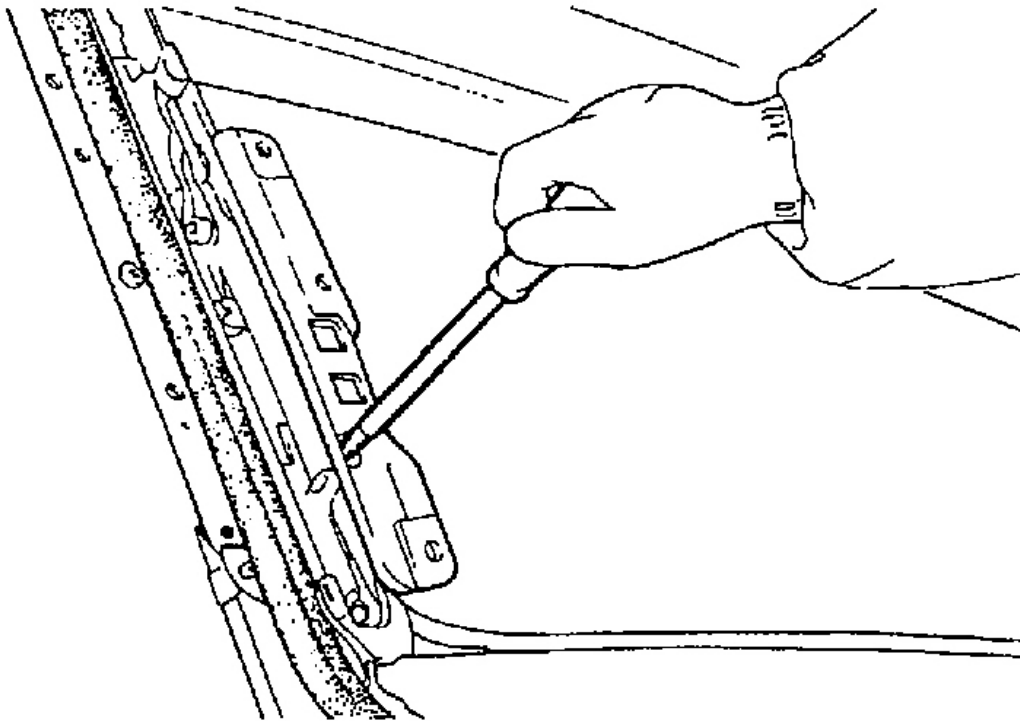
3. Remove the sunshade.



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**Fig. 11: Removing Sunshade**  
Courtesy of KIA MOTORS AMERICA, INC.

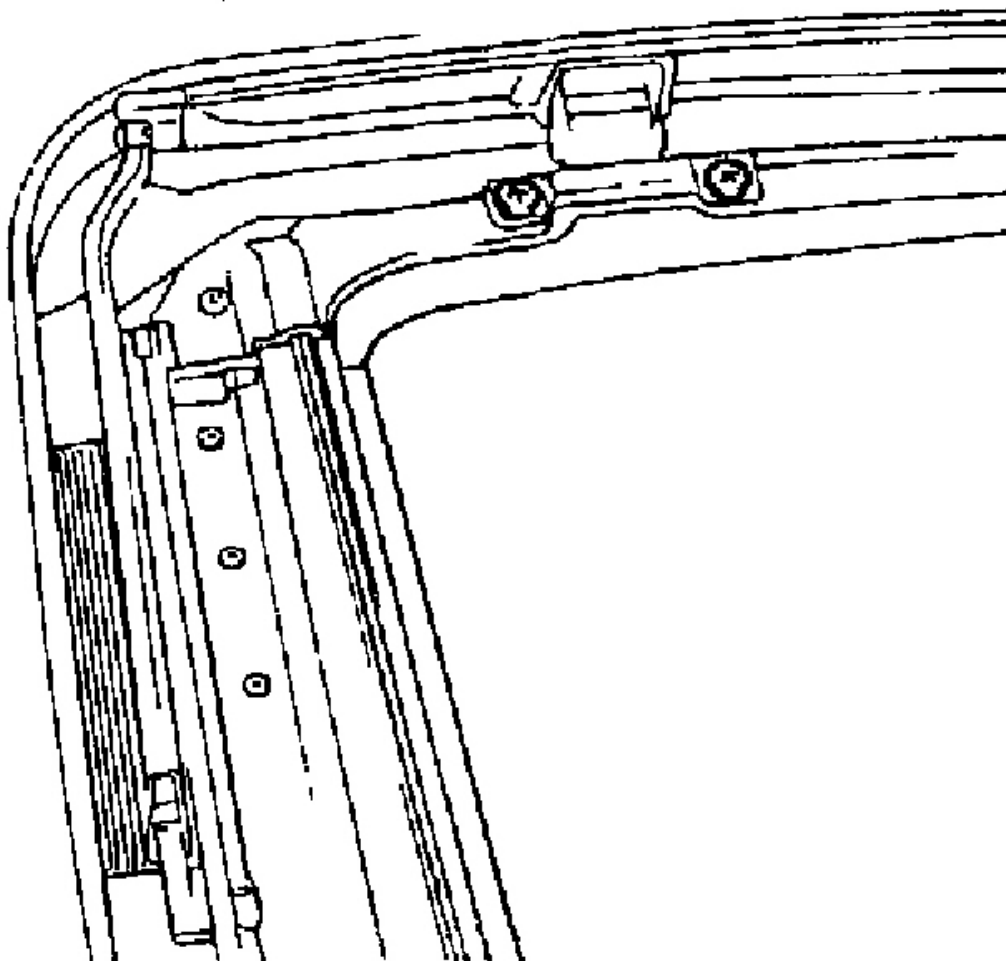
4. Remove the guide assembly.



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**Fig. 12: Removing Guide Assembly**  
Courtesy of KIA MOTORS AMERICA, INC.

5. Remove the deflector.

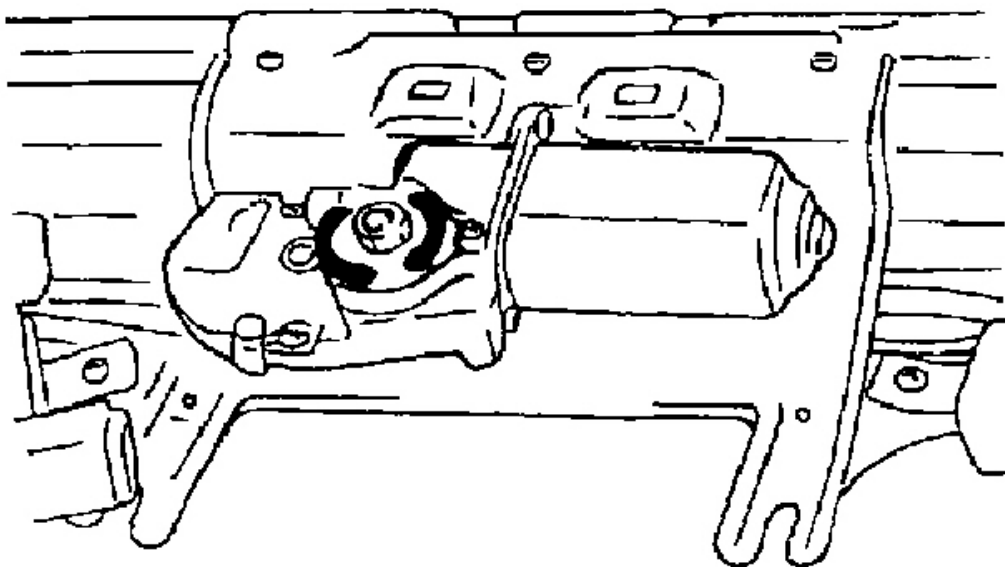


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**Fig. 13: Removing Deflector**

Courtesy of KIA MOTORS AMERICA, INC.

**CAUTION:** When removing the motor, the slider assembly should always be in the fully closed position. If there is a discrepancy between the glass position and the motor ring fully closed position, the sunroof will not operate correctly.



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**Fig. 14: Removing Sunroof Motor**  
Courtesy of KIA MOTORS AMERICA, INC.

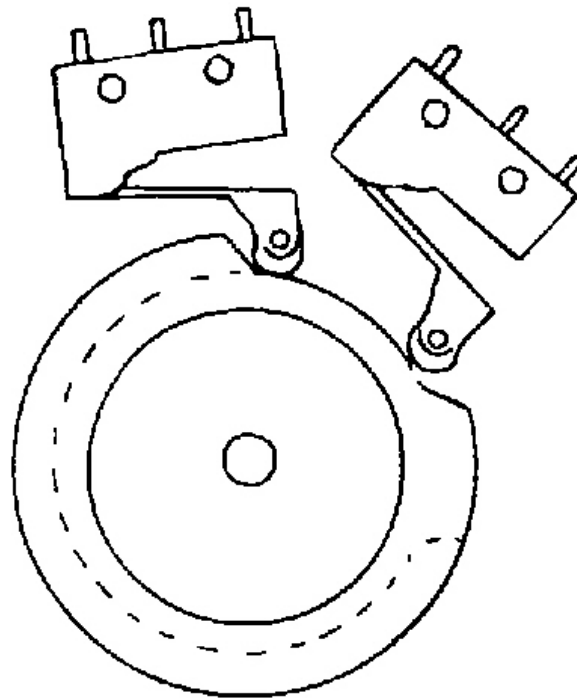
6. Remove the motor assembly.
7. Assembly is the reverse of disassembly.

## INSTALLATION

**NOTE:** Check that the limit switches (LS1 and LS2) of the motor are at the fully closed position. Align the guide roller center and slider mating mark at the fully closed position.

Installation is the reverse of removal.

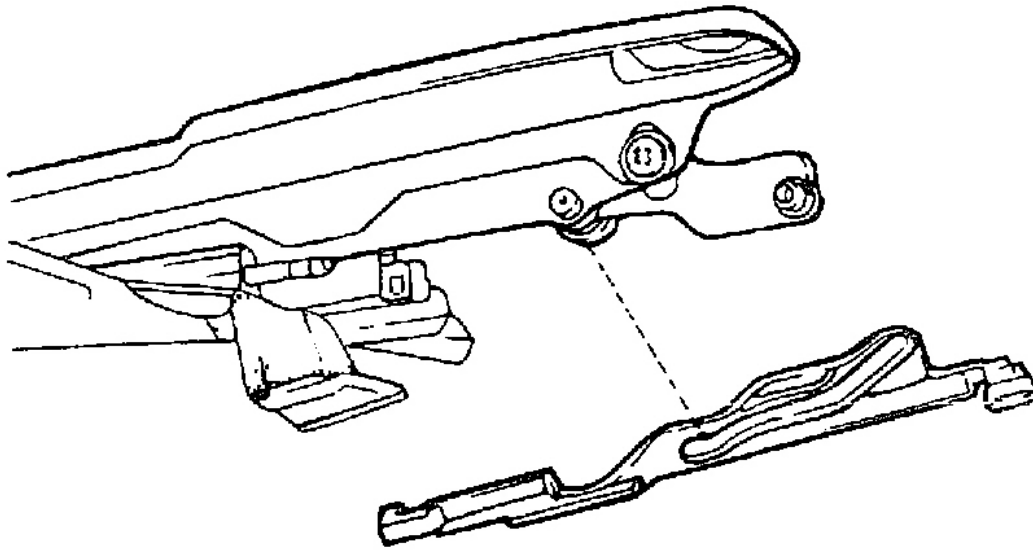
LS1



LS2

G02177596

**Fig. 15: Identifying Limit Switches**  
Courtesy of KIA MOTORS AMERICA, INC.



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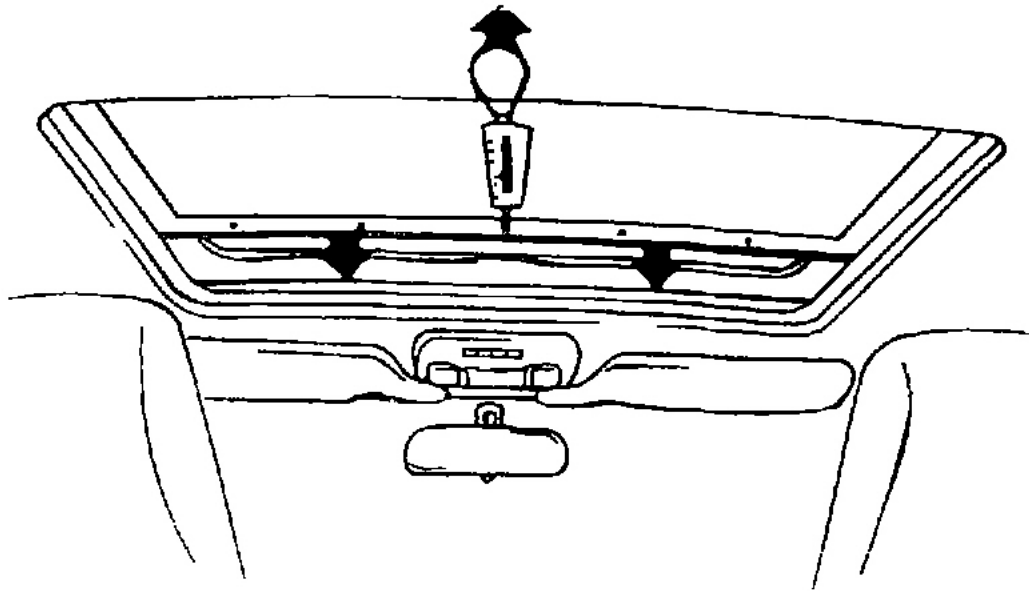
**Fig. 16: Aligning Guide Roller & Slider Mark**  
Courtesy of KIA MOTORS AMERICA, INC.

### **CHECK OPERATING CONDITION AFTER INSTALLATION**

1. If the glass panel movement is difficult, check and adjust. See **ADJUSTMENT** .
  1. Make sure the battery voltage is normal.
  2. Make sure that the sunroof sliding unit is free of foreign material.

**NOTE:**      **If the stopper is moved forward too far, it may cause malfunction or leaks. Make sure the gap between the glass panel and roof panel is not more than 0.3 mm.**

3. Make sure that, when the glass panel opens, the rear position of panel dose not interfere with the roof panel.
4. Measure the driving force of the motor, and adjust it to 15-25 kg (33.1-55.7 lb) with the torque adjustment nut on the motor.
5. To measure, use the deep hole in the center of the lid lower panel.

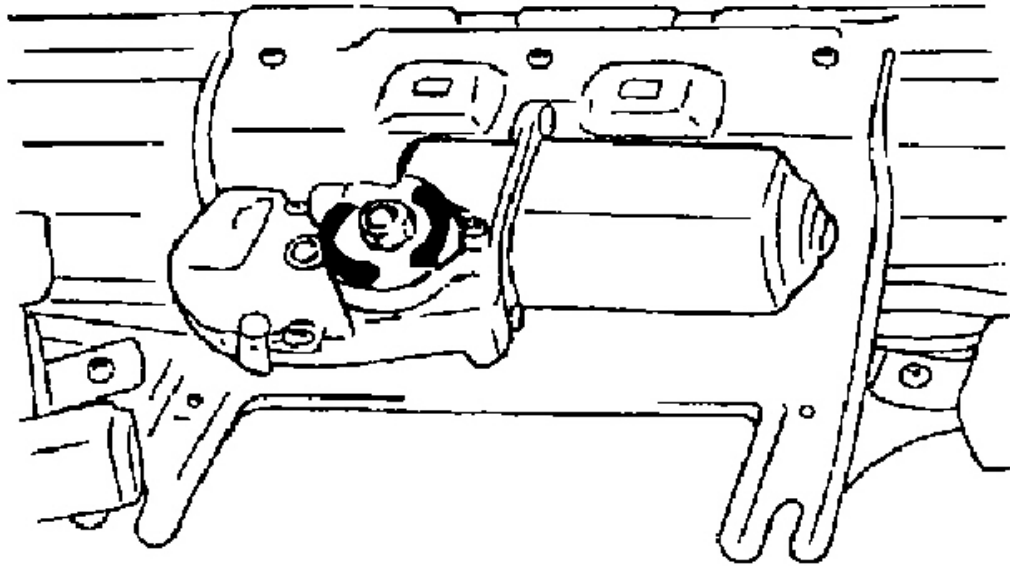


G02177598

**Fig. 17: Measuring Motor Driving Force**  
Courtesy of KIA MOTORS AMERICA, INC.

6. After adjustment, be sure to sure to lock the nut with the pawl washer.





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**Fig. 18: Locking Nut With Pawl Washer**  
**Courtesy of KIA MOTORS AMERICA, INC.**

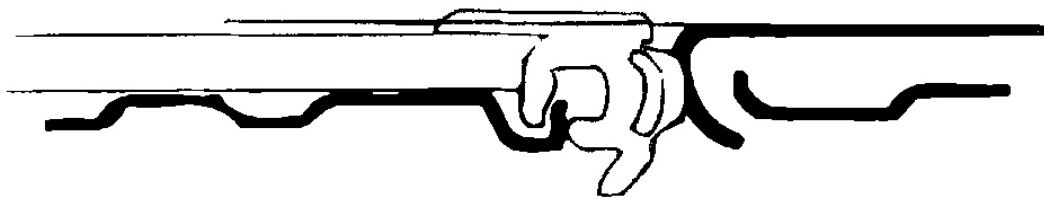
## **ADJUSTMENT**

1. Adjust the difference between the height of the glass panel and the roof panel.

Front side : -1-0 mm

Rear side : 0-1 m

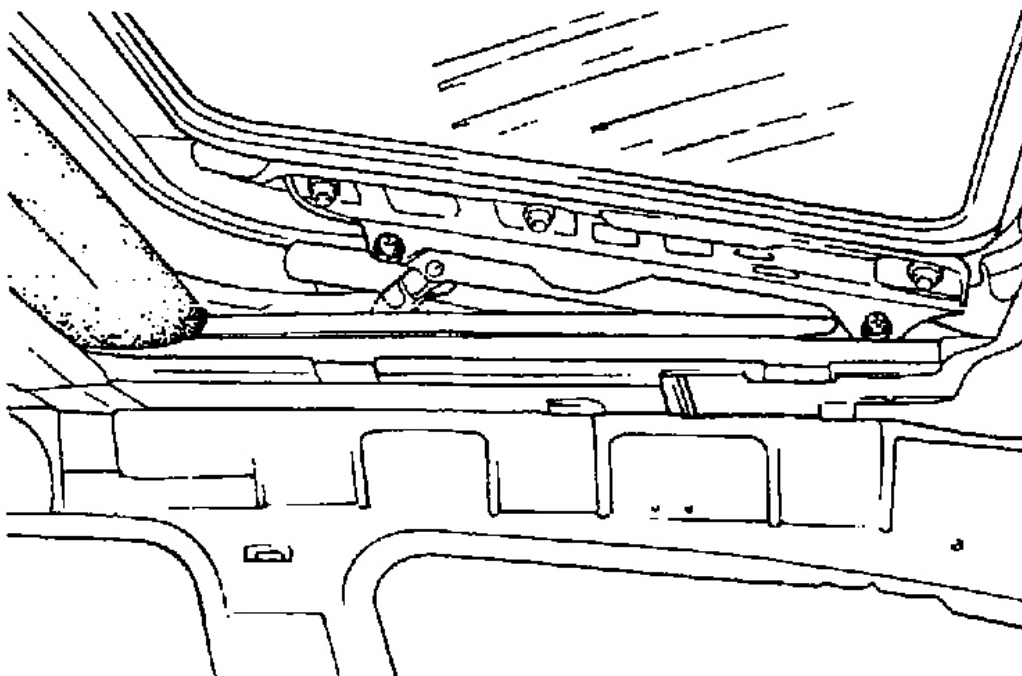
If the difference is not as specific, adjust using the following procedure.



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**Fig. 19: Adjusting Glass Height**  
 Courtesy of KIA MOTORS AMERICA, INC.

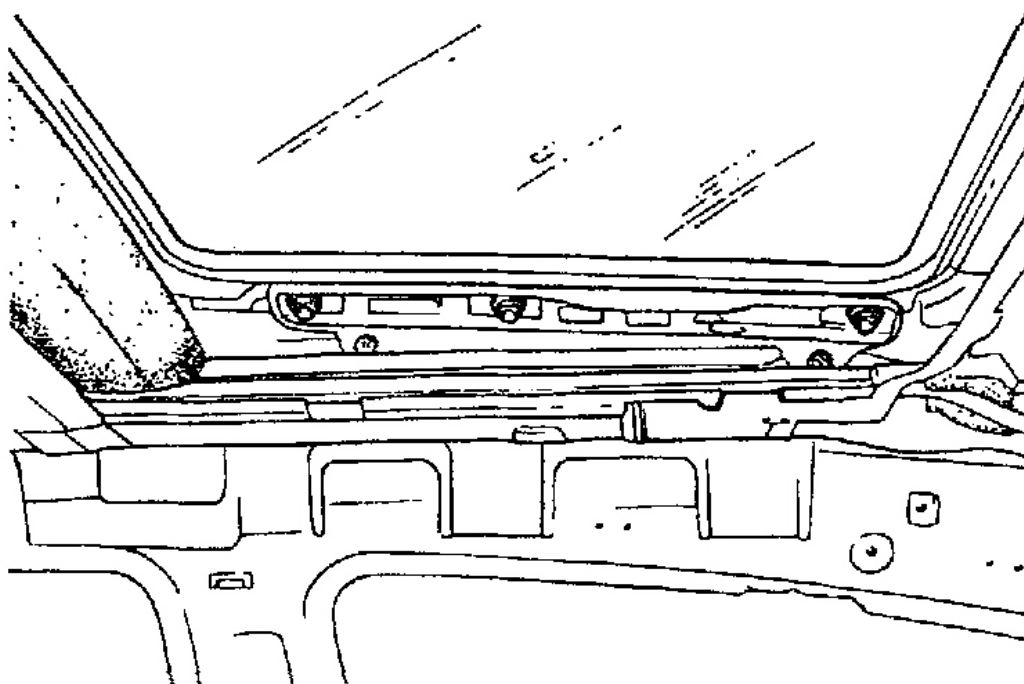
1. Loosen the front screw and rear screw and adjust the height between the glass panel and roof panel.



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**Fig. 20: Adjusting Height Between Glass Panel & Roof Panel**  
 Courtesy of KIA MOTORS AMERICA, INC.

2. Loosen the glass panel mounting nuts and adjust the gap between the glass panel and roof panel.






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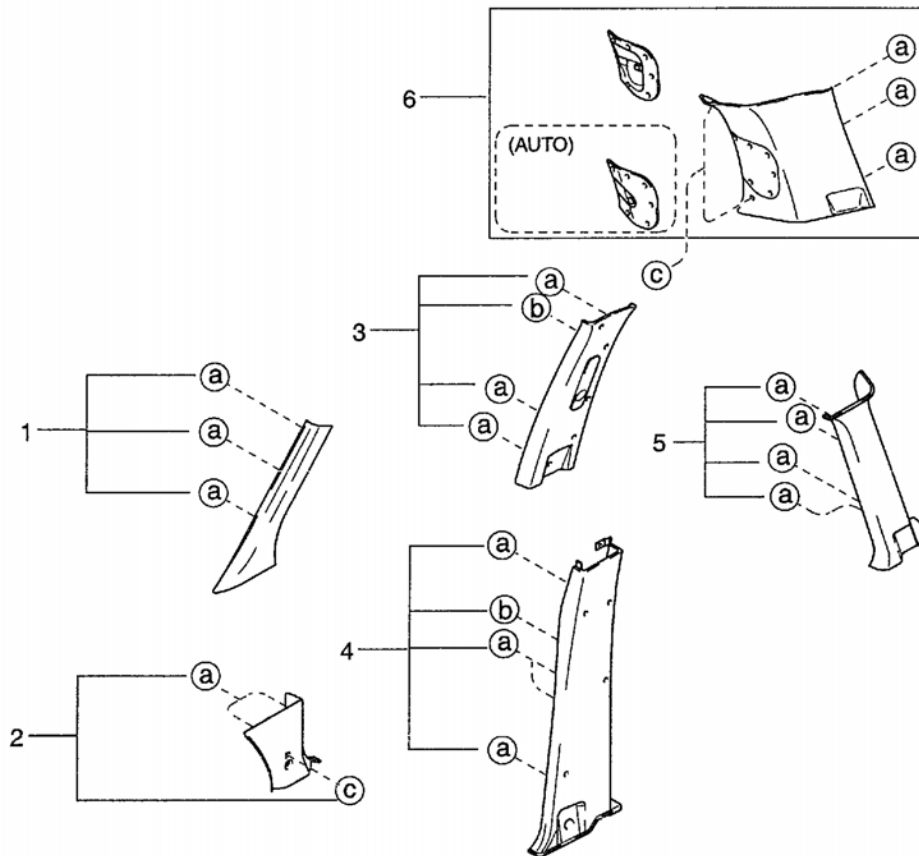
**Fig. 21: Adjusting Gap Between Glass Panel & Roof Panel**  
**Courtesy of KIA MOTORS AMERICA, INC.**

## **INTERIOR TRIM**

### **Removal & Installation**

The trim is a plastic component thermosetting molding and is used to cover the interior of the vehicle. It assists vehicle insulation by covering it in addition to hiding the vehicle metal frame. It also acts as a sound barrier. It is used on all four doors of the vehicle door opening sills, A, B, C and D pillars, rear quarter area, rear hatch, and rear hatch opening sill. All door trim on the vehicle includes armrests. Each trim on the front two doors provides a pocket for keeping maps, etc.

(a)	(b)	(c)
		



1. A-pillar upper trim
2. A-pillar lower trim
3. B-pillar upper trim

4. B-pillar lower trim
5. C-pillar trim
6. D-pillar trim

G02177620

**Fig. 22: Removing & Installing Interior Trim**  
**Courtesy of KIA MOTORS AMERICA, INC.**