

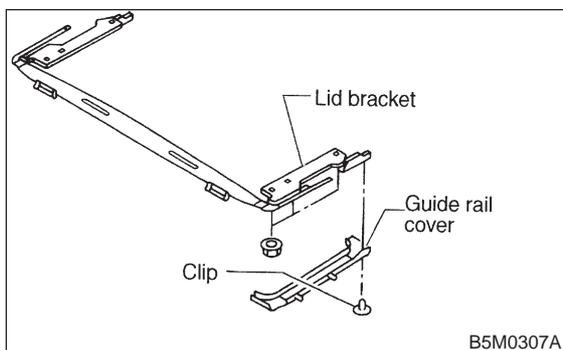
16. Sunroof

A: REMOVAL AND INSTALLATION

1. SEDAN AND WAGON REAR (EXCEPT OUTBACK)

1) Glass lid assembly:

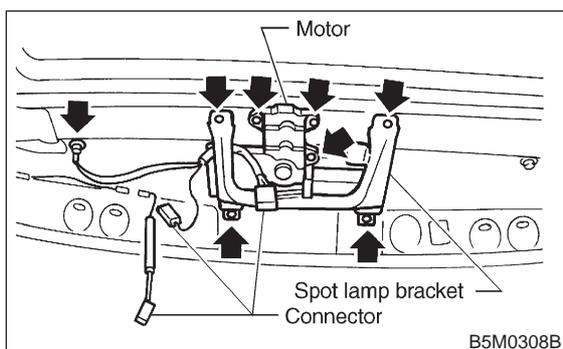
- (1) Completely open sun shade. (Push it back far.)
- (2) Remove a clip and detach guide rail cover.
- (3) Remove six nuts from the left and right lid bracket.
- (4) Working inside, slightly raise glass lid assembly until it is disengaged from lid bracket.



- (5) Hold both ends of glass lid assembly and remove it at an angle.
- (6) Installation is in the reverse order of removal.

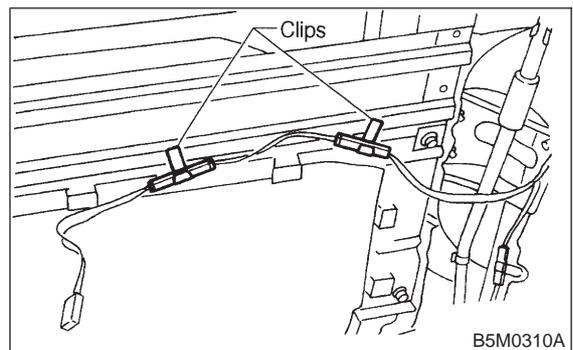
2) Sunroof motor and relay:

- (1) Remove center pillar trim upper. <Ref. to 5-3 [W5A3].>
- (2) Remove front pillar trim upper. <Ref. to 5-3 [W5A4].>
- (3) Remove assist grip on left side.
- (4) Remove sunvisor with hook.
- (5) Remove sunroof switch.
- (6) Remove rearview mirror.
- (7) While rolling up roof trim, disconnect harness clips and connector.
- (8) While rolling up roof trim, remove spot lamp bracket and sunroof motor.
- (9) Installation is in the reverse order of removal.



3) Sunroof frame:

- (1) Remove sunroof switch, center and rear room lamps.
- (2) Remove roof trim, rear quarter trim, pillar trim, etc. <Ref. to 5-3 [W5A0].>
- (3) Remove glass lid assembly.
- (4) Remove two harness support clips.



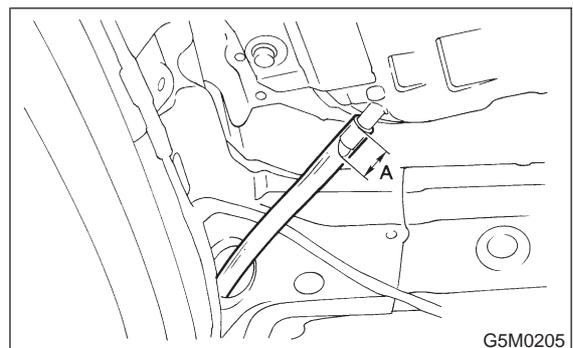
- (5) Disconnect harness clips and connector of sunroof motor.
- (6) Disconnect front and rear drain tubes.

CAUTION:

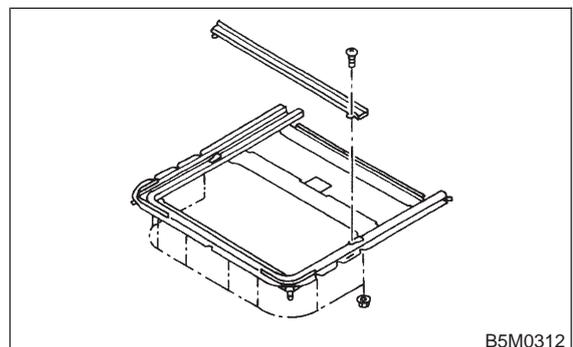
When installing drain tube, insert it securely into drain pipe.

Length A:

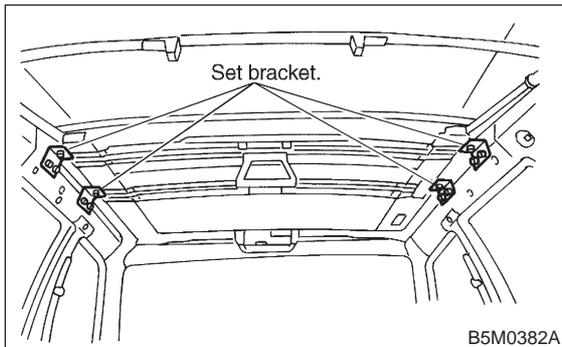
15 mm (0.59 in) or more



- (7) Remove eight nuts.



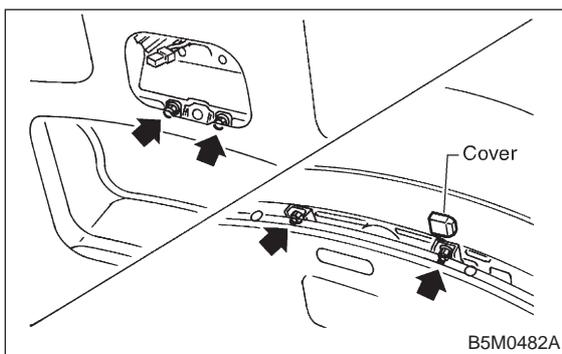
- (8) Remove set bracket mounting bolts.
- (9) Remove sunroof frame.



(10) Installation is in the reverse order of removal.

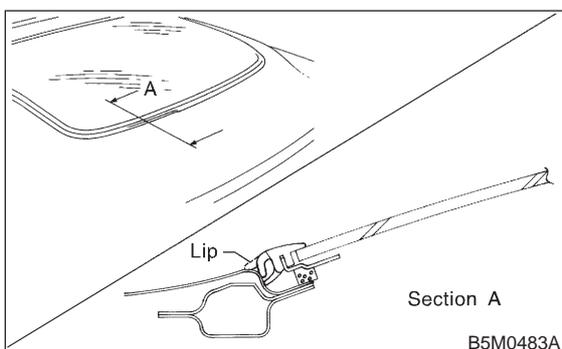
2. WAGON FRONT (OUTBACK)

- 1) Sunroof panel:
 - (1) Tilt up the front sunroof (Most upper position).
 - (2) Disconnect ground cable from battery.
 - (3) Remove sunroof switch then remove two bolts.
 - (4) Remove cover then remove two nuts from tilt up assembly.
 - (5) Take off the sunroof panel from body.

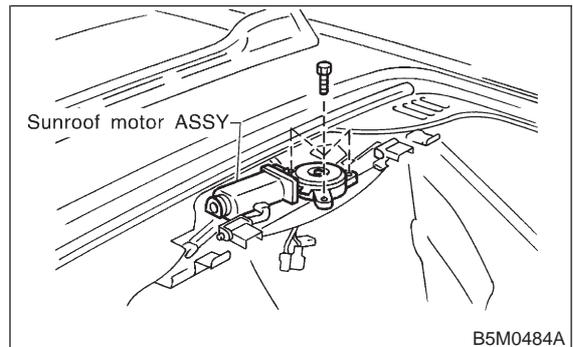


(6) Installation is in the reverse order of removal.

CAUTION:
When installing sunroof panel, ensure not to pinch its panel end lip.



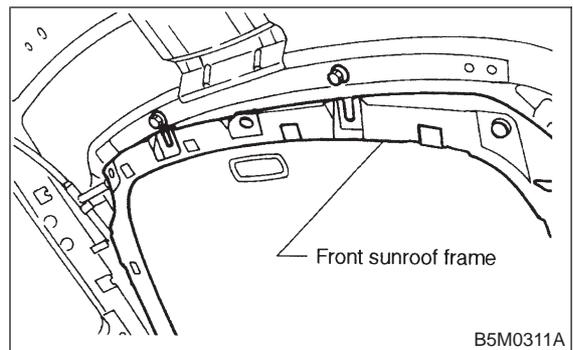
- 2) Sunroof motor assembly:
 - (1) Remove sunroof panel. <Ref. to 5-1 [W16A2].>
 - (2) Remove motor cover.
 - (3) Disconnect connector then remove sunroof motor assembly.



(4) Installation is in the reverse order of removal.

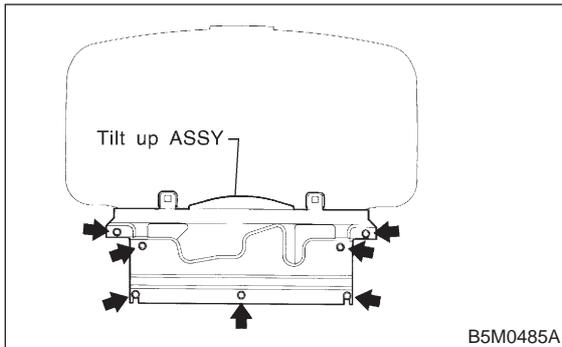
- 3) Sunroof flame:
 - (1) Remove sunroof panel. <Ref. to 5-1 [W16A2].>
 - (2) Remove roof trim panel. <Ref. to 5-3 [W5A9].>
 - (3) Remove sunroof flame.

NOTE:
To facilitate installation, leave the two front mounting bolts on the body.



(4) Installation is in the reverse order of removal.

- 4) Tilt up assembly:
 (1) Remove sunroof flame. <Ref. to 5-1 [W16A2].>
 (2) Remove tilt up assembly.



(3) Installation is in the reverse order of removal.

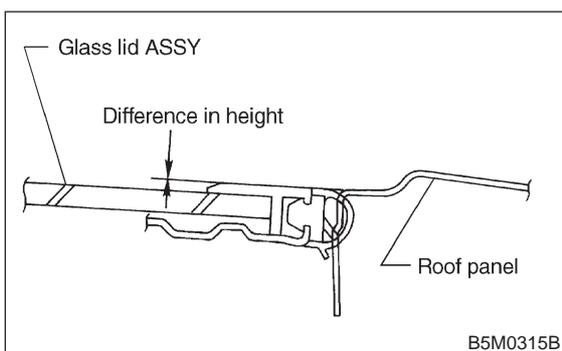
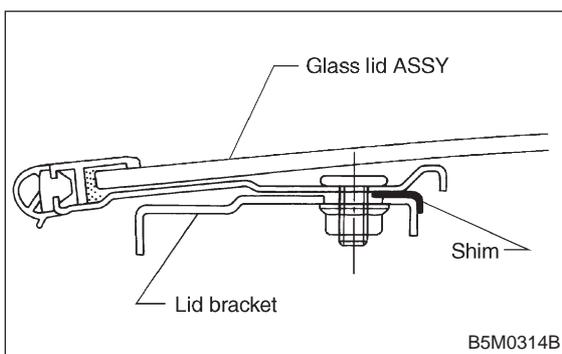
B: ADJUSTMENT

1. SEDAN AND WAGON REAR (EXCEPT OUTBACK)

- 1) Alignment of height between glass lid assembly and roof panel:
 (1) Remove guide rail cover.
 (2) Loosen nuts and adjust height by adding (Max: two pieces) and extracting (Max: one piece) shim(s) (Standard: one piece) between glass lid assembly and lid bracket.

Difference in height between glass lid assembly and roof panel:

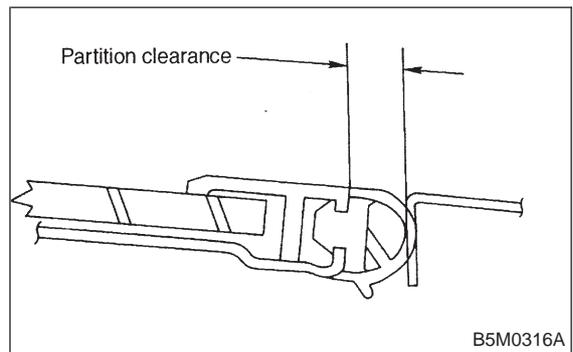
$0 \pm 0.5 \text{ mm } (0 \pm 0.020 \text{ in})$



- 2) Alignment of glass lid assembly with roof panel:
 (1) Remove guide rail cover.
 (2) Loosen nuts and move glass lid assembly to either side to adjust front, rear, right, and left side partitions.

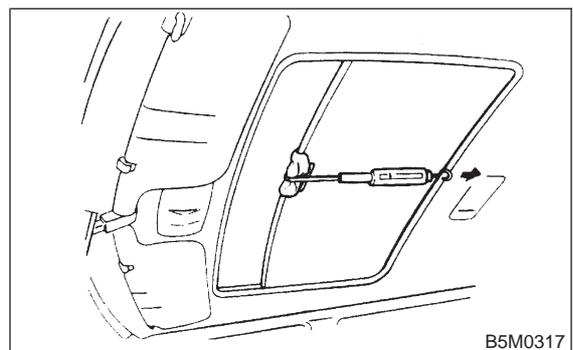
Partition clearance:

$7.0 \pm 0.5 \text{ mm } (0.276 \pm 0.020 \text{ in})$



- 3) Checking for movement of glass lid assembly itself:

- (1) Before installing sunroof motor, check glass lid assembly for movement.
 (2) Place a cloth on glass lid assembly and sun shade, and attach a spring scale to glass lid assembly edge using the cloth.



- (3) Pull spring scale to measure force required to move glass lid assembly.

Force required to move glass lid assembly and sun shade trim:

$\text{Less than } 196 \text{ N } (20 \text{ kg, } 44 \text{ lb})$

Considerable effort is required to start glass lid assembly moving, so take scale reading while glass lid assembly is moving smoothly.

- (4) If force required exceeds specifications, check the following points:

- Glass lid assembly, sun shade and deflector and guide rail assembly for improper installation
- Cable for seizure

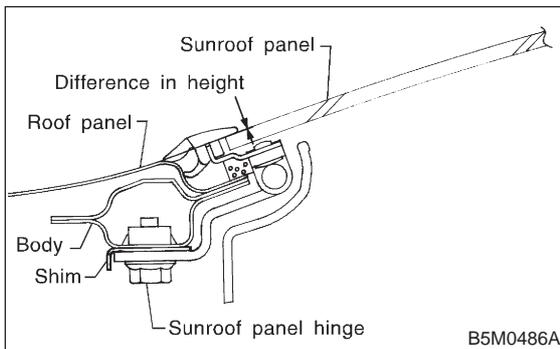
2. WAGON FRONT (OUTBACK)

1) Alignment of height between sunroof panel and roof panel

Loosen sunroof panel installation bolts and nuts then adjust height by adding (Max: two pieces) and extracting (Max: one piece) shim(s) (Standard: one piece) between sunroof panel hinge and body.

Difference in height between sunroof panel and roof panel:

0±1.0 mm (0±0.039 in)

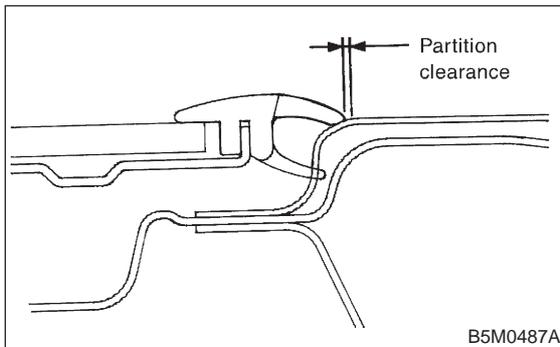


2) Alignment of partition clearance

Loosen sunroof panel installation bolts and nuts then move glass to either side to adjust front, rear, right, and left side partitions.

Partition clearance:

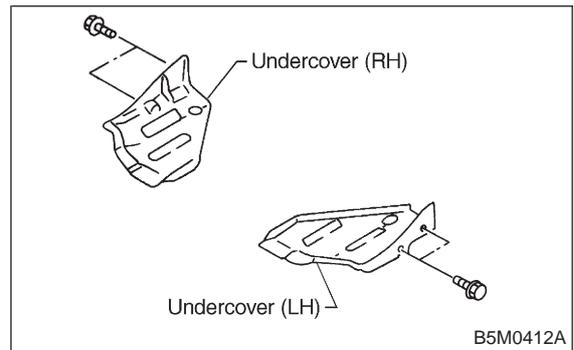
1±1.0 mm (0.04±0.039 in)



17. Undercover

A: REMOVAL AND INSTALLATION

1) Remove undercover mounting bolts.



2) Installation is in the reverse order of removal.

NOTE:

Undercover is bolted along with mud guard.