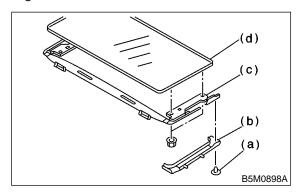
15. Sunroof

A: REMOVAL AND INSTALLATION

1. GLASS LID (SEDAN BODY)

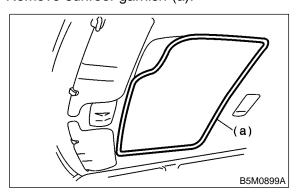
- 1) Completely open sun shade. (Push it back far.)
- 2) Remove a clip (a) and detach guide rail cover (b).
- 3) Remove four nuts from the left and right lid bracket (c).
- 4) Working inside, slightly raise glass lid (d) until it is disengaged from lid bracket.
- 5) Hold both ends of glass lid (d) and remove it at an angle.



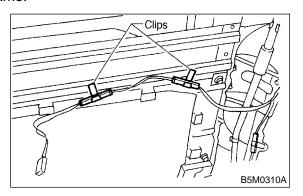
6) Installation is in the reverse order of removal.

2. SUNROOF FRAME (SEDAN BODY)

1) Remove sunroof garnish (a).



- 2) Remove roof trim. <Ref. to 5-3 [W5A4].>
- 3) Remove harness support clips from sunroof frame.

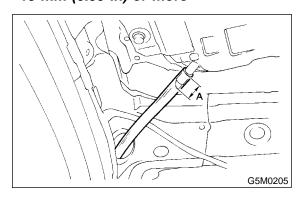


- 4) Disconnect connector of sunroof motor.
- 5) Disconnect front and rear drain tubes.

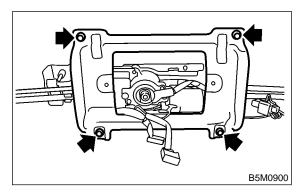
CAUTION:

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

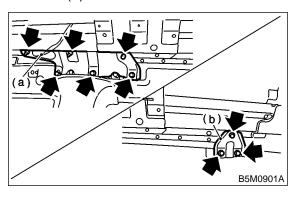
Length A: 15 mm (0.59 in) or more



6) Remove motor cover.

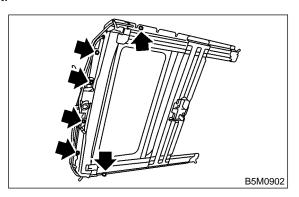


7) Remove front sunroof bracket (a) and rear sunroof bracket (b).

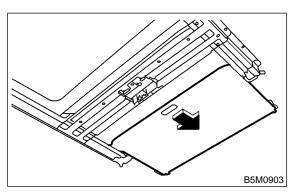


SERVICE PROCEDURE

8) Detach sunroof frame while removing mounting nut.



9) Pull out sun shade from sunroof frame.



10) Installation is in the reverse order of removal.

CAUTION:

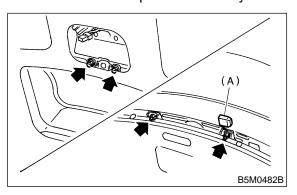
Be careful not to snag the harness.

NOTE:

Make sure to connect harness connector.

3. FRONT GLASS LID (WAGON BODY)

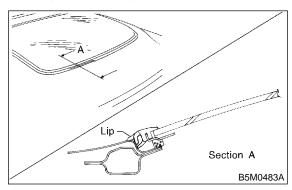
- 1) Tilt up the front sunroof (Most upper position).
- 2) Disconnect ground cable from battery.
- 3) Remove sunroof switch then remove two bolts.
- 4) Remove cover (A) then remove two nuts from tilt up assembly.
- 5) Take off the sunroof panel from body.



6) Installation is in the reverse order of removal.

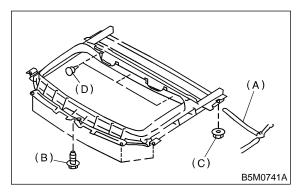
CAUTION:

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



4. FRONT SUNROOF FRAME (WAGON BODY)

- 1) Remove roof trim. <Ref. to 5-3 [W5A10].>
- 2) Remove front glass lid. <Ref. to 5-1 [W15A3].>
- 3) Disconnect drain tubes (A) from front sunroof frame.
- 4) Disconnect sunroof harness.
- 5) Remove bolts (B), nuts (C) and clips (D) then detach sunroof frame.



6) Installation is in the reverse order of removal.

SERVICE PROCEDURE

CAUTION:

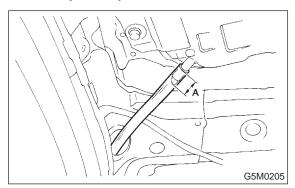
Be careful not to snag the harness.

NOTE:

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

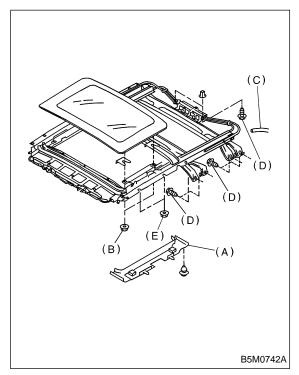
Length A:

15 mm (0.59 in) or more



5. REAR GLASS LID (WAGON BODY)

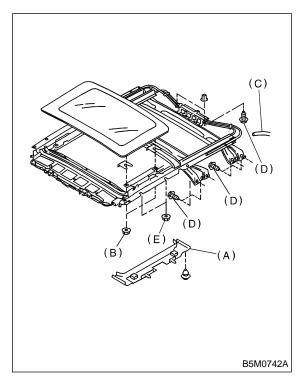
- 1) Completely close glass lid and open sunshade.
- 2) Detach covers (A) and then remove nuts (B).



- 3) Carefully remove rear glass lid.
- 4) Installation is in the reverse order of removal.

6. REAR SUNROOF FRAME (WAGON BODY)

- 1) Remove roof trim. <Ref. to 5-3 [W5A10].>
- 2) Remove rear glass lid. <Ref. to 5-1 [W15A5].>
- 3) Disconnect drain tubes (C) from rear sunroof frame.
- 4) Disconnect sunroof harness connector.
- 5) Remove installation bolts (D) and nuts (E) and then detach sunroof frame.



6) Installation is in the reverse order of removal.

CAUTION:

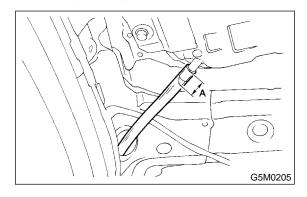
Be careful not to snag the harness.

NOTE:

- Make sure to connect harness connector.
- When installing drain tube, insert it securely into drain pipe.

Length A:

15 mm (0.59 in) or more



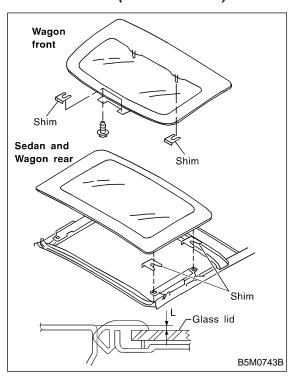
B: ADJUSTMENT

1. ALIGNMENT OF HEIGHT BETWEEN SUNROOF GLASS LID AND ROOF PANEL

Loosen sunroof glass lid installation nuts and then adjust height by adding (max: two pieces) and extracting (max: one piece) shim(s) (standard: one piece) between sunroof glass lid and body.

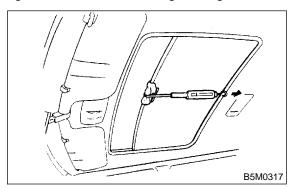
Difference in height between sunroof rear glass lid and roof panel: L

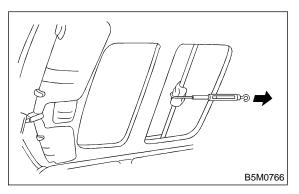
L: 2.0±0.5 mm (0.079±0.020 in)



2. CHECKING FOR MOVEMENT OF SUNROOF PANEL ITSELF

1) Place a cloth on rear sunshade, and attach a spring scale to sunshade edge using the cloth.





2) Pull spring scale to measure force required to move rear sunshade.

Force required to move rear sunshade: Less than 24.5±4.9 N (2.5±0.5 kg, 5.5±1.1 lb)

NOTE:

Considerable effort is required to start rear sunshade moving, so take scale reading while sunroof panel is moving smoothly.

3) If force required exceeds specifications, check the following points:

Sunroof rear glass lid, rear sunshade and guide rail assembly for improper installation