

NUMBER: 23-017-14

GROUP: Body

DATE: July 10, 2014

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THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 14-051. ALL APPLICABLE SOLD AND UN-SOLD RRT VIN'S HAVE BEEN LOADED. TO VERIFY THAT THIS RRT SERVICE ACTION IS APPLICABLE TO THE VEHICLE, USE VIP OR PERFORM A VIN SEARCH IN TECHCONNECT. ALL REPAIRS ARE REIMBURSABLE WITHIN THE PROVISIONS OF WARRANTY.

### SUBJECT:

Sunroof Module Replacement

#### **OVERVIEW:**

This bulletin involves specific vehicles that have a damaged sunroof frame due to a rework process at the port. These specific vehicles will require sunroof frame replacement, and shimming of the sunroof frame. The sunroof glass panel will require inspection for scratches, and replacement if scratched.

### MODELS:

2014 MK

Compass (China Market ONLY)

NOTE: This bulletin applies to China Mainland (sales code 8BL) vehicles built on or after July 14, 2013 (MDH 0714XX) and on or before November 07, 2013 (MDH 1107XX) equipped with Power Sunroof (sales code GWG).

#### SYMPTOM/CONDITION:

Specific vehicles have a damaged sunroof frame due to a rework process at the port and may also have scratched sunroof glass.

### DIAGNOSIS:

If a customer's VIN is listed in VIP or your RRT VIN list, perform the Repair Procedure.

# NOTE: Only vehicles listed in VIP or your RRT VIN list are covered by this service bulletin.

### PARTS REQUIRED:

Qty.	Part No.	Description
1	05183170AC	FRAME, Sunroof
1 (AR)	05183171AB	GLASS, Sunroof

#### **REPAIR PROCEDURE:**

- 1. Clean the sunroof glass and inspect for scratches on the top exterior surface (Fig. 1). Were straight front to back directional scratches found on sunroof top exterior surface?
  - a. YES>>> Obtain new glass specified in the PARTS REQUIRED section of this bulletin.
  - b. NO>>> Reuse the existing glass.

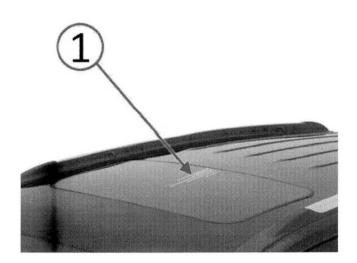


Fig. 1 Sunroof Glass Scratch

1 - Scratch

- Remove the sunroof assembly. Refer to the detailed repair procedures available in: DealerCONNECT> TechCONNECT under: Service Info> 23 - Body> Sunroof> SUNROOF> Removal.
- 3. Replace the sunroof frame with frame specified in the PARTS REQUIRED section of this bulletin.
- 4. Transfer all components except glass to the new sunroof frame.
- 5. Install the sunroof assembly, do NOT install the glass panel or headliner at this time. Refer to the detailed repair procedures available in: DealerCONNECT> TechCONNECT under: Service Info> 23 - Body> Sunroof> SUNROOF> Installation.
- 6. Obtain two 2.0 mm (0.08 in.) thick washers or combination of washers equaling 2.0 mm (0.08 in.) thick. Inner diameter of washers must be a minimum of 6 mm (0.24 in.) and outer diameter can range between 16 mm 25.4 mm (0.63 in. 1.00 in.).

## NOTE: Perform the following sunroof module shim procedure on only one side at a time. Right side shown left side similar.

7. Using a 10 mm socket, remove fastener (1) and set aside. Loosen but do not remove fasteners (2) and (3) (Fig. 2).

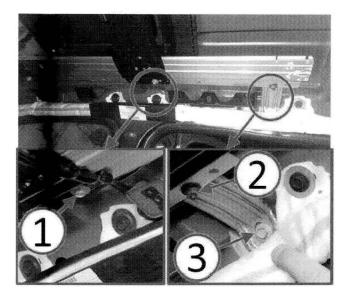


Fig. 2 Sunroof Module Fasteners

- 1 Bolt
- 2 Nut
- 3 Bolt
- 8. At location where fastener was removed in previous step, slide one 2.0 mm (0.08 in.) thick washer into position between the sunroof module and the roof reinforcement so that the hole in the washer aligns with the hole in the sunroof module and U-clip nut in the roof reinforcement (Fig. 3).

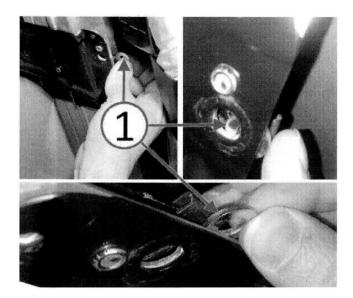


Fig. 3 Shim Sunroof Module

1 - Washer

9. Hand start fastener (3) and verify alignment through washer (1) and into U-clip nut (2). Tighten fastener (3) to 9 N⋅m (80 in. lbs.) (Fig. 4).

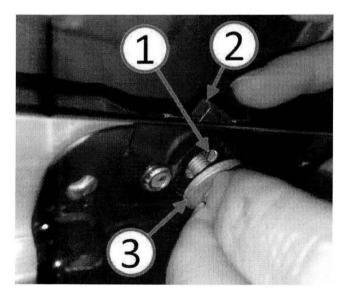


Fig. 4 Install Sunroof Module Fastener

1 - Washer

- 2 U-clip nut
- 3 Bolt

Slide the rear bracket down to bottom of the slotted hole (1) at fastener locations (2 and 3). Gently pull down on the bracket and tighten nut (2) then fastener (3) to 9 N⋅m (80 in. lbs.) (Fig. 5).

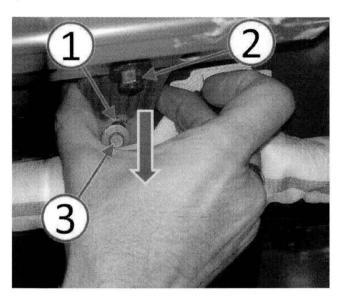


Fig. 5 Tighten Sunroof Module Fasteners

1 - Slot

2 - Nut

3 - Bolt

11. Repeat the sunroof module shimming procedure Step #7 thru Step #10 for the opposite side of the sunroof module.

NOTE: Mopar branding on glass panel goes toward rear of vehicle (Fig. 6).

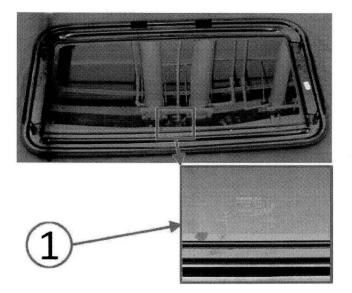


Fig. 6 Sunroof Glass Panel Mopar Branding Stamp

1 - Mopar Branding

12. Carefully lower the sunroof panel into the roof opening (Fig. 7).

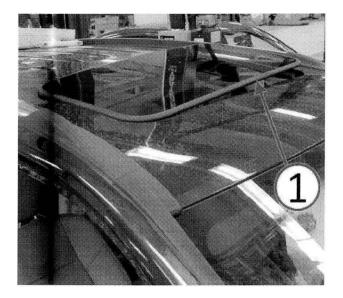


Fig. 7 Sunroof Glass Panel Installation

1 - Sunroof Glass Panel

13. Verify that all four sunroof glass panel mounting tabs (1) are inboard of the sunroof module (2) (Fig. 8).

14. Align the holes in sunroof glass mounting tabs to the nuts in sunroof module, then install all four screws (3) but do not tighten the screws at this time (Fig. 8).

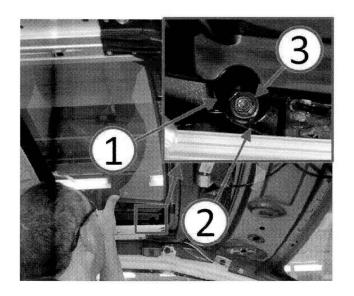


Fig. 8 Sunroof Glass Panel Mounting Tab Inspection

- 1 Sunroof Mounting Tabs
- 2 Sunroof Module
- 3 Screws
- 15. Center the sunroof glass panel in the roof opening; visually verify that the space between the glass panel and the roof opening appears equal on all sides (1, 2, 3, 4) (Fig. 9).

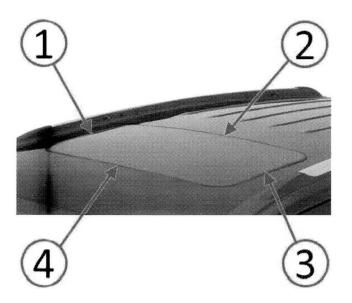


Fig. 9 Center Sunroof Glass Panel In Opening

- 1 Right Side
- 2 Rear Side
- 3 Left Side
- 4 Front Side

# NOTE: Adjust only one corner at a time while setting flushness of sunroof glass panel. Use hand tools only.

16. Use a non-marring straight edge and feeler gauge or equivalent tool to measure flushness of the sunroof glass panel (2) in relation to the vehicle roof surface (1) while performing the following flushness adjustment steps (Fig. 10).

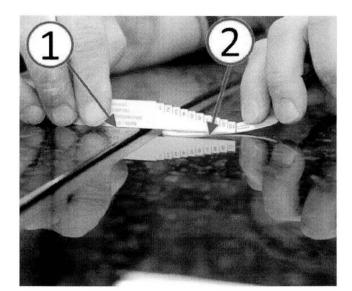


Fig. 10 Sunroof Glass Panel Flushness Measurement

- 1 Vehicle Roof Surface
- 2 Sunroof Glass Panel
- 17. Using a T-25 star head driver or 8 mm socket, tighten the sunroof set screws to 3 N⋅m (26 in. lbs.) as each corner is set to the proper flushness specification per the following flushness adjustment steps (Fig. 11).

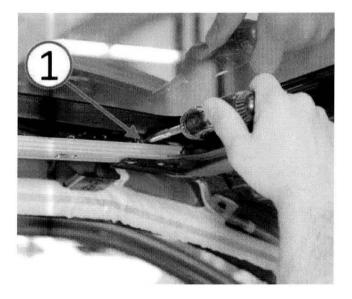


Fig. 11 Sunroof Glass Panel Set Screw

1 - Screw

- 18. Adjust the rear corners (1) and (3) so that the glass is flush 0.0 mm (0.0 in.) to the roof. Measure the lowest point along the rear edge (2), if it exceeds 1.0 mm (0.04 in.) underflush, raise up rear corners (1) and (3) evenly until the low point along the rear edge (2) is 1.0 mm (0.04 in.) underflush. Corners (1) and (3) cannot exceed 2.0 (0.08 in.) overflush (Fig. 12).
- 19. Adjust the front corners (4) and (6) to flush or underflush. Measure the lowest point along the front edge (5), if it exceeds 3.5 mm (0.14 in.) underflush, raise up front corners (4) and (6) evenly until the low point along the front edge (5) does not exceed 2.5 mm (0.10 in.) underflush (Fig. 12).

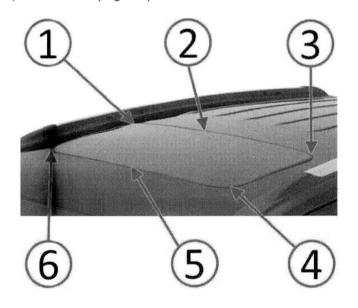


Fig. 12 Sunroof Glass Panel Measurement Points

- 1 Right Rear Corner
- 2 Rear Edge
- 3 Left Rear Corner
- 4 Left Front Corner
- 5 Front Edge
- 6 Right Front Corner
- 20. Open the sunroof glass panel (1) to 220 mm (8.5 in.) relative to the front roof opening flange (2) (Fig. 13).

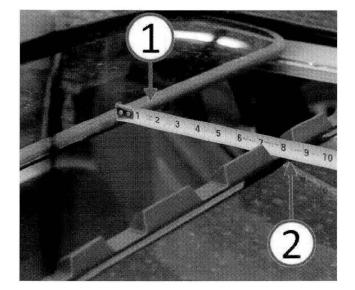


Fig. 13 Sunroof Opening Measurement

1 - Sunroof Glass Panel

2 - Sunroof Opening Flange

21. Use a 1.0 mm (0.04 in.) non-marring feeler gauge (1) to check for clearance between the underside of the vehicle roof and topside of the sunroof glass. Depending on the feeler gauge used, it may be necessary to tape a temporary extension handle (2) to the feeler gauge in order to reach to the back edge of the sunroof glass. The temporary handle must be made of a non-marring material of thinner dimension than the 1.0 mm (0.04 in.) feeler gauge (Fig. 14).

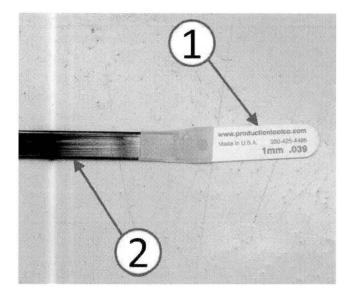


Fig. 14 Feeler Gauge With Temporary Extension

- 1 Feeler Gauge
- 2 Temporary Extension
- 22. Insert the 1.0 mm (0.04 in.) non-marring feeler gauge between the underside of the vehicle roof and topside of the sunroof glass. Sweep the feeler gauge from side to side over the entire surface of the sunroof glass to check for interferences (Fig. 15).

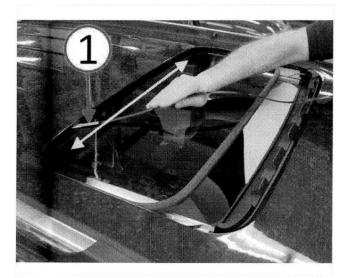


Fig. 15 Sweep Feeler Gauge Side To Side

1 - Feeler Gauge

- 23. Has 1.0 mm (0.04 in.) clearance between underside of roof and topside of glass been achieved?
  - a. YES>>> Continue with Step #24.
  - b. NO>>> Return to Step #16 and repeat glass flushness adjustment setting glass as low a possible.
- 24. Temporarily connect the sunroof switch and perform the sunroof motor teach procedure. Refer to the detailed procedures available in: DealerCONNECT> TechCONNECT under: Service Info> 08 Electrical> 8N Power Systems> Power Top> MOTOR, Sunroof Standard Procedure.
- 25. Install the headliner. Refer to the detailed repair procedures available in: DealerCONNECT> TechCONNECT under: Service Info> 23 - Body> Interior> HEADLINER> Installation.

### POLICY:

Reimbursable within the provisions of the warranty.

#### TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
23-30-56-9H	Replace Sunroof Frame / Shim Sunroof Module / Adjust & Verify Clearance (2 - Skilled)		2.5 Hrs.

#### FAILURE CODE:

ZZ	Service Action	
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