



GROUP
BODY

MODEL
2012-2013MY
Optima (QF)

NUMBER
103

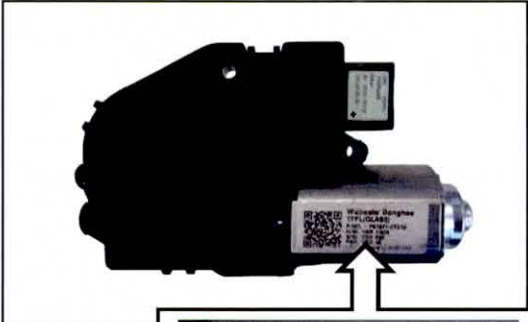

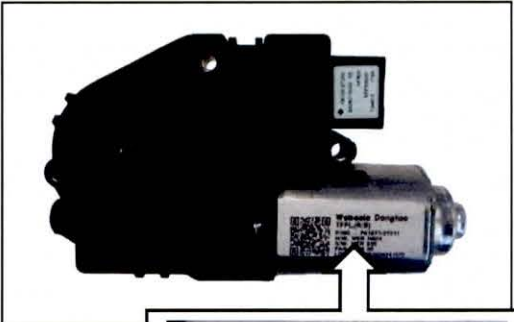

DATE
September 2013

TECHNICAL SERVICE BULLETIN

SUBJECT: PANORAMA SUNROOF & SUNSHADE MOTOR REPLACEMENT

This bulletin provides the procedure to replace the panorama sunroof and sunshade motors on some 2012-2013MY Optima (QF) vehicles, produced from August 9, 2011 to August 14, 2013, which may exhibit a loss of the "one-touch" open/close feature of the sunshade and/or panorama roof. This condition may be attributed to the exposure of the ECU in each motor to static electricity, causing a loss of initialization memory. To correct this concern, install the new sunroof and sunshade motors by following the procedure outlined in this bulletin.

Refer to the table below to differentiate between the sunroof and sunshade motors.

Sunroof Motor P/N 81671 2T210	Sunshade Motor P/N 81671 2T211
 	 

* NOTICE

VINs which start with KNA are designated Optima (TF/TF HEV) and built in South Korea. VINs that start with 5XX are designated Optima (QF) and built in the United States. This TSB applies to Optima (QF) only.

File Under: <BODY>

Circulate To: General Manager Service Manager Parts Manager
 Service Advisors Technicians Body Shop Manager Fleet Repair

SUBJECT: PANORAMA SUNROOF & SUNSHADE MOTOR REPLACEMENT

*** NOTICE**

After replacing the panorama sunroof & sunshade motors, perform the panorama sunroof motor initialization.

Service Procedure:

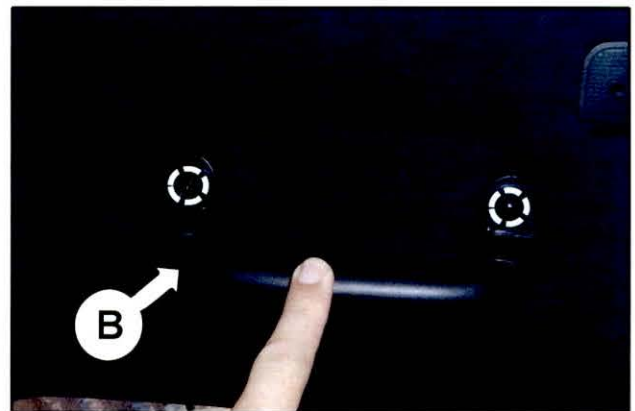
1. Remove the weather-stripping (A) from the front and rear doors.

CAUTION

Wear disposable gloves to avoid damaging the headliner.



2. Remove two screws securing the grab handles (B). Make sure to remove all four (4) grab handles.



3. Use a plastic prying tool to remove the lenses from the rear dome light (C). Remove two screws securing the rear dome light body and disconnect the electrical connector.



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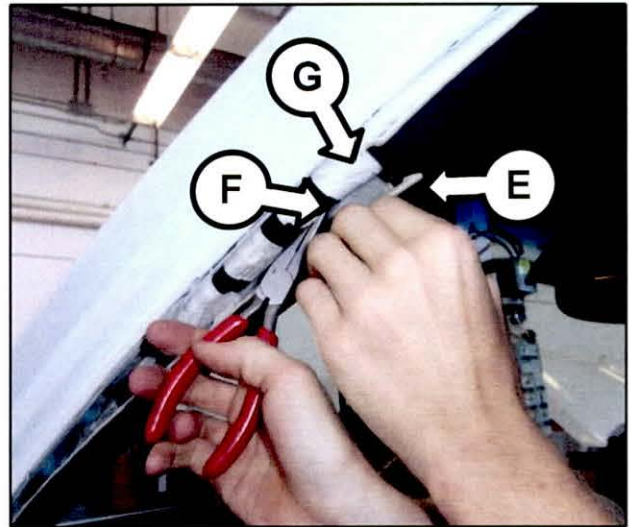
- Open the sunglass holder and remove two screws securing the front dome light (D). Gently pull down on the front of the dome light to release the mounting clips, disconnect the electrical connector and carefully remove the dome light from the headliner.



- Partially detach the A-pillar trim panel (E) using both hands. Then, use a pair of needle nose pliers to rotate and detach the mounting clip (F), as shown.

**CAUTION**

Avoid damaging the side curtain airbag (G) while removing the A-pillar trim panel.



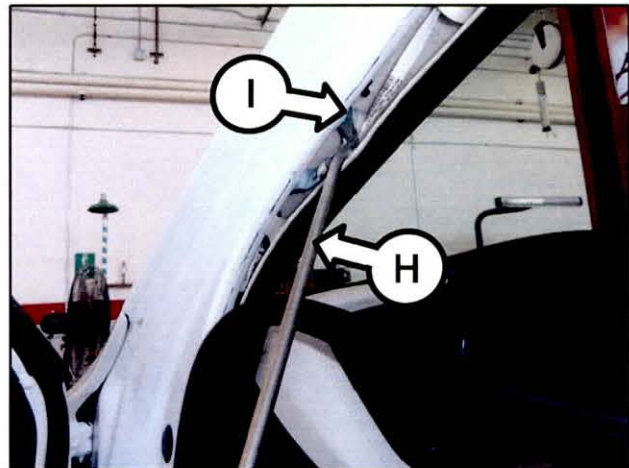
- Use a panel remover (H) to gently detach the lower attachment point (I) for the A-pillar trim panel.

*** NOTICE**

Make sure to replace any broken clips before reinstalling the A-pillar trim panel.

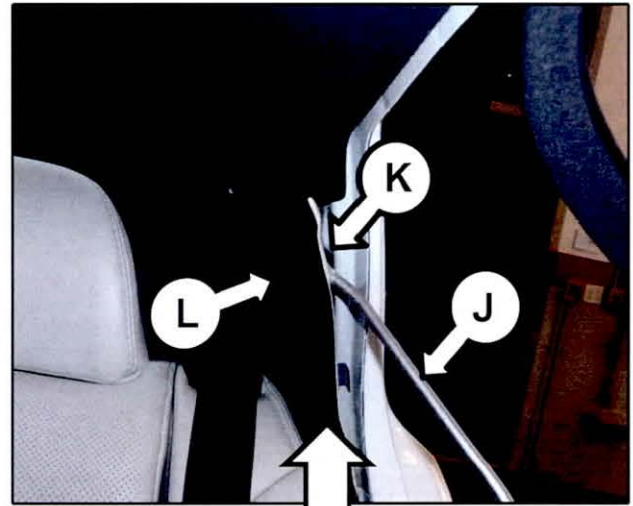
P/N: 82315 33020

Description: Fastener-DR Trim



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- 7. Use a trim panel remover (J) with a long shaft to pry-off the upper attachment point (K) for the C-pillar trim panel (L), as shown.



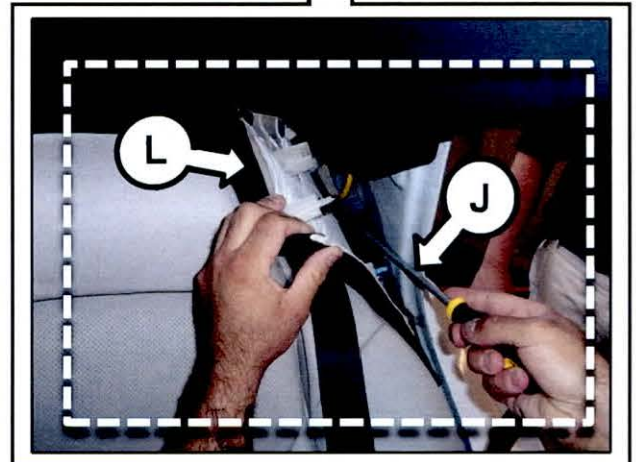
- 8. Continue using the panel remover (J) to gently detach all other mounting locations for the C-pillar trim panel (L).

★ NOTICE

Make sure to replace any broken clips before reinstalling the C-pillar trim panel.

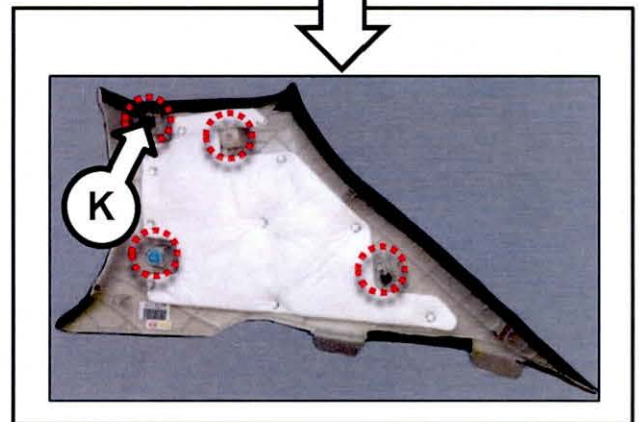
P/N: 82315 33020

Description: Fastener-DR Trim



★ NOTICE

Examine all mounting clip locations for the C-pillar panel.



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9. Move the front seat as far forward as possible and use a plastic prying tool to remove the front door threshold panel (M).

*** NOTICE**

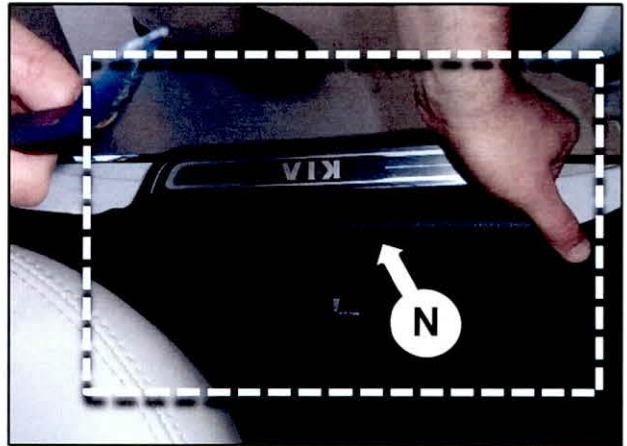
Make sure to re-install any clips that may fall off the panel following removal.



10. Use a plastic prying tool to remove the rear door threshold panel (N).

*** NOTICE**

Make sure to re-install any clips that may fall off the panel following removal.



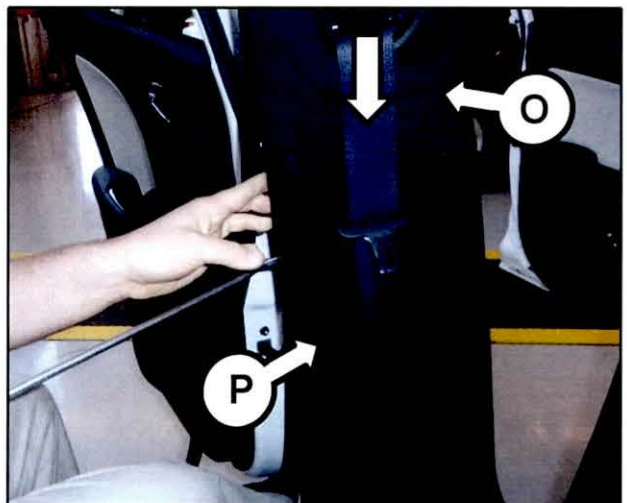
11. Lower the safety belt to its lowest setting and use a trim panel remover to detach all mounting locations for the upper (O) and lower (P) B-pillar trim panels.

*** NOTICE**

Make sure to replace any broken clips before reinstalling the B-pillar trim panels.

P/N: 82315 33020

Description: Fastener-DR Trim



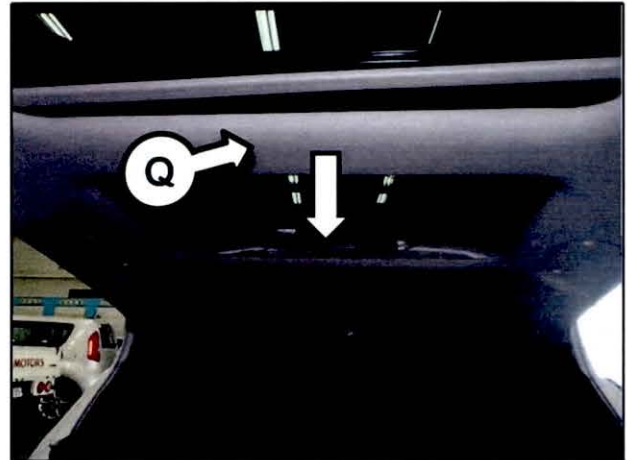
SUBJECT: PANORAMA SUNROOF & SUNSHADE MOTOR REPLACEMENT

12. Gently apply downward pressure to the headliner (Q) to create an access gap to the sunshade and the sunroof glass motors.

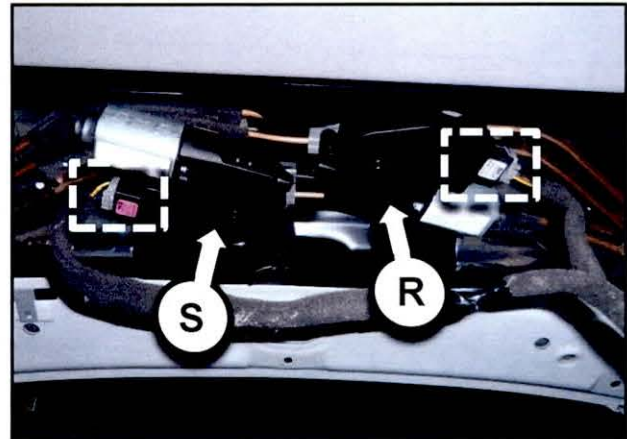
*** NOTICE**

Make sure to replace any broken clips before reinstalling the headliner.

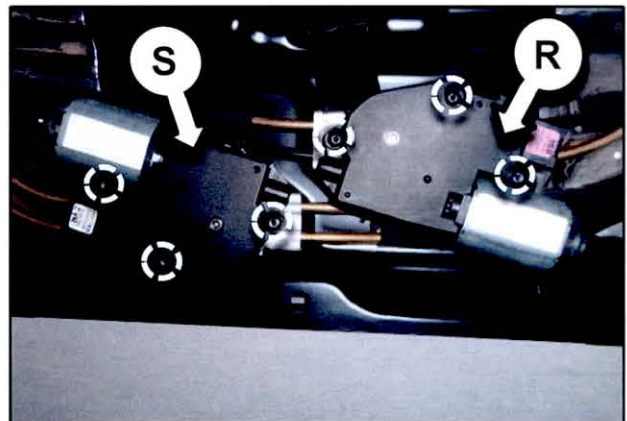
P/N: 85849 1M000AS
Description: Clip-Trim MTG



13. Disconnect the power connectors from the sunshade (R) and sunroof (S) motors.



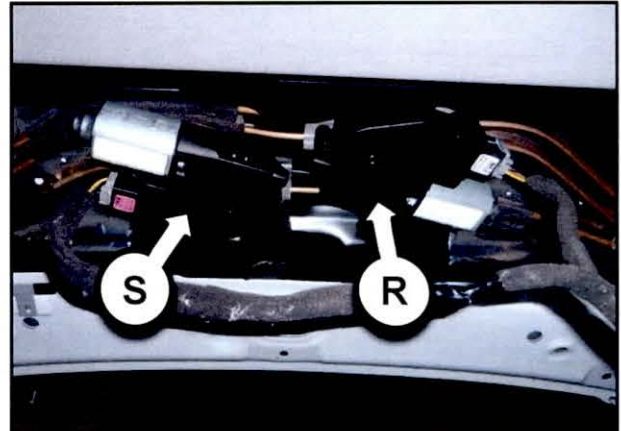
14. Remove three T20 Torx® head screws securing the sunshade motor (R) and three T20 Torx® head screws securing the sunroof motor (S).



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15. Install the new sunshade motor (R) and sunroof motors (S) using the original T20 Torx® head screws and reconnect the electrical connectors.

T20 Torx® Screw Tightening Torque:
2.8 lb-ft (3.8 Nm)





16. Install all other removed components by reversing the order of removal.
17. Perform the panorama sunroof initialization procedure as follows:
 1. Turn the ignition switch to the ON position and close the sunroof completely.
 2. Release the control lever.
 3. Push and hold the control lever forward (for more than 10 seconds) until the sunroof tilts and slightly moves. Then, release the lever.
 4. Push the sunroof control lever forward in the direction of close until the sunroof operates as follows:

SUNSHADE OPEN → TILT OPEN → SLIDE OPEN → SLIDE CLOSE → SUNSHADE CLOSE → Then, release the control lever.

When this is complete, the sunroof system is reset.

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REQUIRED PART:

Part Name	Part No.	Qty.	Figure
Sunroof Motor	81671 2T210	1	
Sunshade Motor	81671 2T211	1	

AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range
Optima (QF)	August 9, 2011 to August 14, 2013

WARRANTY INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	81671 2T210	1	N66	C13	(BOD 103) Panorama Sunroof & Sunshade Motor Replacement	81631F00	0.8 M/H	81671 2T211	1

Include P/N 82315 33020 and P/N 85849 1M000AS, as needed, in this claim.

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