

Service Bulletin

PRELIMINARY INFORMATION

Subject: Rear Window Defogger Inoperative

Models: 2008-2012 Chevrolet Malibu 2006-2010 Pontiac G6

2007-2010 Saturn AURA

Condition/Concern

In rare cases, some customers may comment that the rear window defogger is inoperative.

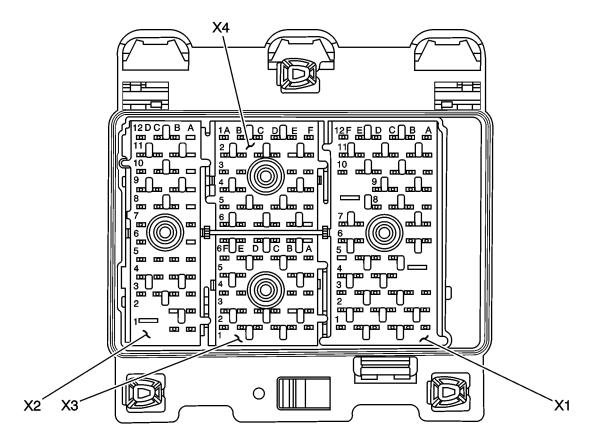
Upon further inspection, it may be observed that the rear window defogger fuse is blown and the rear junction (fuse) block may show signs of localized damage near the fuse.

This condition may be caused by an increase in resistance though the terminal in the body side harness connector and the junction (fuse) block.

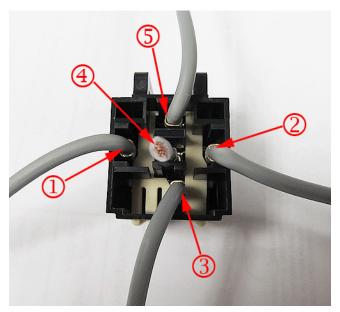
Recommendation/Instructions

Replace the rear junction (fuse) block if damage has been observed and install an external fuse and relay circuit to feed the rear window defogger using the procedure below.

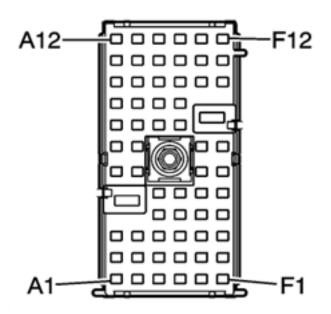
- 1. Disconnect the negative battery cable.
- 2. Remove the left rear compartment side trim access panel.
- 3. Release the rear junction (fuse) block from the body.



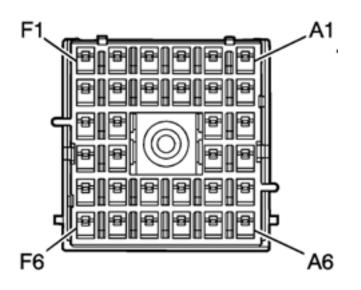
- 4. Remove the X1 and X4 connectors from the block.
- 5. Connect the five lead connector, P/N 88987189 to the relay, P/N 13500118.



- 6. To aid in the installation, mark the connector leads with the corresponding relay cavity numbers. Cut off the cavity 4 lead not being used.
- 7. Open the harness by removing any tape. Use a sewing seam ripper, available from sewing supply stores, to cut open the harness in order avoid wire insulation damage.



- 8. On the X1 connector, locate circuit 42 (red/black wire, cavity F8) and remove a 25 mm (0.5 in) strip of wire insulation approximately 51 mm (2 in) up from the connector.
- 9. Splice the relay lead from cavity 3 into circuit 42 using a splice clip. Solder and tape the splice.
- 10. If the vehicle is equipped with heated outside mirrors:
 - 10.1. Install the 10 amp fuse, P/N 88861353 and 30 amp fuse, P/N 88861354 into the fuse connectors, P/N 12101917.
 - 10.2. Splice the relay lead from cavity 5 to one lead of both fuse connectors.
 - **10.3.** On the X1 connector, locate circuits 293 (purple wire, cavity C12) and 606 (two white wires, cavity B12). Cut the wires approximatel 25 mm (1 in) up from the connector.
 - **10.4.** On the harness side, strip approximately 7.5 mm (0.313 in) of insulation from each of the three wires to be spliced.
 - **10.5.** Splice the other lead of the 10 amp fuse connector to circuit 606 (two white wires). Due to the smaller gauge white wires, also splice in a looped section of wire.
 - 10.6. Splice the other lead of the 30 amp fuse connector to circuit 293 (purple wire).
- **11.** If the vehicle is NOT equipped with heated outside mirrors:
 - 11.1. Install the 30 amp fuse, P/N 88861354 into the fuse connector, P/N 12101917.
 - **11.2.** Splice the relay lead from cavity 5 to one lead of the fuse connector.
 - 11.3. On the X1 connector, locate circuit 293 (purple wire, cavity C12). Cut the wire approximately 25 mm (1 in) up from the connector.
 - 11.4. On the harness side, strip approximately 7.5 mm (0.313 in) of insulation from the wire to be spliced.
 - 11.5. Splice the other lead of the 30 amp fuse connector to circuit 293 (purple wire).
- 12. On the X1 connector, locate circuit 193 (white wire, cavity B8). Cut the wire approximately 25 mm (1 in) up from the connector.
- **13.** On the harness side, strip approximately 7.5 mm (0.313 in) of insulation from the wire to be spliced.
- 14. Splice the relay lead from cavity 1 to circuit 193 (white wire). Due to the smaller gauge white wire, also splice in a looped section of wire.



- **15.** On the X4 connector, locate circuit 1350 (black wire, cavity F2) and remove a 25 mm (0.5 in) strip of wire insulation approximately 51 mm (2 in) up from the connector.
- 16. Splice the relay lead from cavity 2 into circuit 1350 using a splice clip. Solder and tape the splice.
- 17. Install the rear junction (fuse) block.



- **18.** Secure the relay and fuses to the existing wiring harness with tape and tie straps.
- 19. Install the left rear compartment side trim access panel.
- 20. Connect the negative battery cable.

Parts Information

Part Number	Description	Qty
20997644 (With Power Sun Roof (RPO CF5))	Block, Wiring Harness Junction	1
20997645 (Without Power Sun Roof (RPO CF5))	Block, Wiring Harness Junction	1
13500118	Relay	1

88987189	Connector (Five Leads)	1
12101917	Connector (Two Leads)	1 or 2*
88861353 (If Equipped with Heated Outside Mirror (RPO DD0 or DL8))	10 Amp Fuse	1
88861354	30 Amp Fuse	1

*If the vehicle is equipped with Heated Outside Mirrors (RPO DD0 or DL8), two will be required.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time		
N9697*	Installation of External Fuse and Relay Circuit to Feed Rear Window Defogger	1.3 hrs		
*This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.				

Additional Keywords: Defrost, Defroster, de-frost, de-froster.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from information.



WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION