

Bulletin No.: 03-08-44-005G

Date: March 09, 2007

TECHNICAL

Subject:

Poor Radio Reception or Radio Static/Increased Interference with Rear Window Defogger On or Some Rear Window Defogger Grids May Be Inoperative (Diagnose and Repair Rear Window Defogger Heating Grid)

Models:

1997-2005 Buick Century, LeSabre, Park Avenue, Regal
2005-2007 Buick Allure (Canada Only), LaCrosse
1997-2001 Cadillac Catera
1997-2002 Cadillac Eldorado
1997-2004 Cadillac Seville
1997-2005 Cadillac DeVille
2003-2007 Cadillac CTS
2004-2007 Cadillac SRX
2005-2007 Cadillac STS
1997-2004 Chevrolet Corvette
2000-2007 Chevrolet Impala, Monte Carlo
2004-2007 Chevrolet Aveo, Epica, Malibu, Optra
1997-2003 Oldsmobile Aurora
1998-2002 Oldsmobile Intrigue
1999-2004 Oldsmobile Alero
1997-2006 Pontiac Grand Am
1997-2007 Pontiac Grand Prix
2004-2005 Pontiac GTO
2005-2007 Pontiac G6, Wave (Canada Only)
2006-2007 Pontiac Solstice
2007 Saturn Aura, Sky

Supersede:

This bulletin is being revised to add the Saturn Aura to the model list. Please discard Corporate Bulletin Number 03-08-44-005F (Section 08 - Body and Accessories).

Condition

Some customers may comment that the radio has poor reception or radio static/increased interference when the rear window defogger is turned on. Also, some rear window defogger grids may be inoperative.

Cause

This condition may be due to microscopic cracks in the electrically heated grids of the rear window defogger. These cracks may cause electrical interference when the rear defogger is on and this could affect radio reception.

Background

The addition of vertical grid lines to the heated back window defogger circuits has made it difficult to detect broken defogger grid lines. In the past, it was a simple matter to use a voltmeter to check the continuity of each grid line in order to locate a non-functional line. New design back windows have two vertical grid lines that connect all of the horizontal grid lines together, thereby providing alternate routes for the electrical current to follow. This makes the old test method ineffective.

Materials Required

Permatex Quick Grid, P/N 12346001, or equivalent

A small ball of fine steel wool Type 00, or

Optional - A strip of liquid crystal heat sensitive paper, 51 mm x 305 mm (2 in x 12 in) or similar size (Contact Edmund Scientific at 800-728-6999 for part number CR30723-70 or go to [Edmund Scientific: educational toys, gifts, hobby supplies & science equipment](#)), or

Optional - A portable infrared thermometer, GE-46819, available from Kent-Moore (1-800-345-2233), or equivalent.

Correction

There are three distinct zones across the back window that must be checked. They are:

the driver's side outboard of the two vertical lines the passenger side outboard of the two vertical lines the central zone that falls between the two vertical lines

To detect a broken grid line in any of the above three zones and to isolate the exact location of the break, perform the following:

Approved safety glasses and gloves should be worn when performing this procedure to reduce the chance of personal injury.

Cover the rear shelf area to prevent damage to the interior trim material.

Start the engine and turn on the back window defogger.

The first place to check should be the driver side segment 2 to 3 lines up from the bottom about 380-385 mm (15-15.2 in) from the buss bar.

Take the ball of fine steel wool and twist one end to a point. Move the point slowly across each grid line. Be sure to start at the far side of the zone and move it to the opposite side of the zone. When you bridge the grid line break with the steel wool, you will see a small spark. Repeat the test over the same area to be sure you have accurately located the break. Mark the exact location of the grid line break. Repeat this portion of the test for each grid line. If you do not see a spark at any point, it is possible that there are two breaks in the same line and zone. Close visual inspection using a magnifying glass may be the only way to locate breaks in this case.

The following are provided as a alternative way to detect a non-functional grid line. If available, use in addition to the steel wool.

Method using liquid crystal heat sensitive paper.

The first part of the test must be completed quickly before the entire surface of the back window becomes warm.

From outside the vehicle, place the heat sensitive paper (dull surface in contact with the glass) against the top driver side grid line. Start the engine and turn on the back window defogger. A distinct color change will take place at each conductive grid line. Repeat for the bottom grid lines until they have all been checked in the driver side zone.

Repeat the process for the passenger side and center area zones.

If no color change is noted for a grid line, place a crayon or china marker check mark beside it. Mark each grid line in the zone where it is non-conductive and therefore not heating up. More than one broken grid line may be found.

Method using a portable infrared thermometer.

Start the engine and turn on the rear back window defogger.

From inside the vehicle, start at the top driver side grid line and slowly run the portable infrared thermometer vertically down the rear window contacting each grid line. You should be able to see a distinct variation in temperature readings.

Mark each grid line in the zone where it is non-conductive and, therefore, not heating up. More than one broken grid line may be found.

Repeat the process for the passenger side and center area zones.

Use Permatex Quick Grid, P/N 12346001, or equivalent, to repair each broken grid line. Follow the manufacturer's instructions.

Wait 24 hours before turning the defogger on, or the repair can be fast cured using a heat gun, 260°C - 371°C (500°F - 700°F). Hold the heat gun within 25-51 mm (1-2 in) from the repair point for 2 to 3 minutes.

Recheck the grid line with the heat sensitive paper or a portable infrared thermometer to ensure that the line is now functional and that the repair was successful.