

Bulletin No.: 13136 Date: May 2013







PRODUCT SAFETY RECALL

SUBJECT: Loss of Battery Charge – Inspect Generator Control Module

MODELS: 2012-2013 Buick LaCrosse, Regal

2013 Chevrolet Malibu Eco Equipped with eAssist

All involved vehicles that are in dealer inventory must be held and not delivered to customers, dealer traded, or used for demonstration purposes until the repair contained in this bulletin has been performed on the vehicle.

Vehicles that were involved in Service Update 12238 but have not yet had the repair performed have been transferred to this recall. Vehicles that had parts replaced under Service Update 12238 prior to Nov 15, 2012, have also been transferred to this recall.

CONDITION

General Motors has decided that a defect, which relates to motor vehicle safety, exists in **certain** 2012-2013 model year Buick LaCrosse and Regal, and 2013 model year Chevrolet Malibu Eco vehicles, equipped with eAssist. Some of these vehicles have a condition in which the Generator Control Module (GCM) may not function properly. This could cause a gradual loss of battery charge and the illumination of the malfunction indicator light. If these warnings are ignored, eventually, the engine will stall and/or the vehicle will not start. In addition, there may be a burning or melting odor, smoke, and possibly a fire in the trunk.

CORRECTION

Dealers are to inspect and, if necessary, replace the GCM.

VEHICLES INVOLVED

All involved vehicles are identified by Vehicle Identification Number on the Investigate Vehicle History screen in GM Global Warranty Management system. Dealership service personnel should always check this site to confirm vehicle involvement prior to beginning any required inspections and/or repairs. It is important to routinely use this tool to verify eligibility because not all similar vehicles may be involved regardless of description or option content.

For dealers with involved vehicles, a listing with involved vehicles containing the complete vehicle identification number, customer name, and address information has been prepared

and will be provided to dealers through the GM GlobalConnect Recall Reports. Dealers will not have a report available if they have no involved vehicles currently assigned.

The listing may contain customer names and addresses obtained from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall is a violation of law in several states/provinces/countries. Accordingly, you are urged to limit the use of this report to the follow-up necessary to complete this recall.

PART INFORMATION

Parts required to complete this recall are to be obtained from General Motors Customer Care and Aftersales (GMCC&A). Please refer to your "involved vehicles listing" before ordering parts.

Only a small number of vehicles are expected to require replacement of the generator control module. Parts can only be ordered from the Product Quality Center (PQC) when the service procedure determines that it is necessary to replace the generator control module. Orders placed without PQC approval will automatically cancel.

Note: Approximately 1% of vehicles will require replacement of the Generator Control Module.

Part Number	Description	Quantity/Vehicle
24267940	MODULE, GEN CONT (all 2012 MY & 2013 Malibu)	1 (If Req'd)
24267941	MODULE, GEN CONT (2013 LaCrosse, Regal)	1 (If Req'd)

SERVICE PROCEDURE

Caution: This service procedure is intended to fully stress the generator control module beyond normal customer use. This stress, in rare cases, may result in smoke and thermal damage to the generator control module. For the extended idle portion of the service procedure (Steps 8 and 12), the vehicle should be located outdoors, with the right rear seat back down, and with the location of the power pack in view of an observer in the left rear seat during the complete idle portion. Do not remove any trim panels. If smoke is observed or smelled, even a trace level, or a popping or unusual noise is heard from the power pack, immediately turn off the engine and exit the vehicle. Continue to observe vehicle for 10 minutes, making sure event has subsided. Connect GDS2 tool, key on to RUN, and acquire freeze frame data from ECM and HPCM. Turn the key to the off position and disconnect 12V battery while vehicle waits for repair.

Note: Install GDS2 to vehicle. Enter current vehicle make model. Perform a Vehicle Wide DTC check and record any Freeze Frame records. Select Module Diagnostics / HPCM / Data Display / 14V Power Module menu. Leave GDS2 connected and on this menu throughout the drive cycle. If any one of the following DTCs P0CA2, P1AF0 P1B0B P1E0C P1E12 is set, replace the Generator Control Module (GCM). Refer to *Generator Control Module Replacement* in SI.

Note: Perform the Generator Control Module inspection to determine if the Generator Control Module requires replacement. The inspection will take about 3 hours to complete.

- If the generator control module is replaced, it will **not** be necessary to repeat a 3 hour drive cycle. However, a charging system voltage output test must be performed. Complete one of the following tests:
 - Option A: Perform a DC Power Conversion Test. Refer to DC Power Conversion Test in SI.
 - Option B: Using the DIC and a voltmeter at the 12V battery, monitor the charging system voltage while a load is applied by turning on the vehicle accessories listed in Step 7 of this bulletin.

Note: Verify the 175 amp fuse torque and APM cable crimp at the UBEC stud end of the cable prior to performing the inspection below.

- Install GDS2 to vehicle. Start engine and confirm the vehicle has enough fuel for the drive cycle and 2 hour idle test. A quarter-tank of fuel is required to complete the test. Add fuel as required.
- 2. If the Service Hybrid System DIC message is displayed at any time, follow service instructions in SI for the particular DTC or tell tale that is set.
- 3. Change the driver information center to show Power Flow Display or use center console display.
- 4. Set parking brake and place shifter in Neutral position. Increase engine speed to 2,000 RPM.
- 5. Run in this mode until battery shown in Power Flow Display is completely filled.
- 6. Shift back to Park and release parking brake.
- 7. Turn on 12V loads.
 - Head lamps on with high beams
 - Air conditioning set to 78°F (25°C), Eco mode (green snowflake LED), recirc., BiLevel (foot / floor -- do not want Defrost enabled)
 - Cabin blower to high speed
 - Radio on, with sound muted.
 - Heated seats, if equipped
 - Rear defog, it will time out, no need to reinitiate
- 8. Allow vehicle to idle for approximately 15 minutes.
- 9. Perform drive cycle maintaining high 12V loads and air conditioning settings specified in Step 7.

- 10. The drive cycle should contain the following maneuvers.
 - Perform at least 10 moderate to heavy accelerations followed by, brake regen events, with 15% brake apply (light to moderate). Perform these tasks from a vehicle speed of greater than 30 mph (50 km/h) down to at least 5 mph (8 km/h).
 - Perform at least 3 key off / key on cycles with a 2 minute off time, spread out throughout drive cycle. Note: you will need to turn high beams and heated seats back on after each key cycle.
- 11. Return vehicle to dealership (testing continues outside). Set parking brake and place shifter in Neutral and operate engine at 2,000 RPM until hybrid battery display shows full.
- 12. Place shifter in Park, release parking brake, and allow vehicle to idle for 2 hours with the following 12V loads on:
 - Head lamps with high beams
 - Cabin blower on highest setting
 - Air conditioning set to 78 deg. F (25 deg. C), Eco mode (green snowflake LED), recirc., Bi Level (foot / floor -- do not want Defrost enabled)
 - · Heated seats on high
 - Windows up
 - Radio on, with sound muted
 - 4 way flashers on
 - Dome lights on
- 13. Turn off engine and all 12 V loads, headlamps, dome lamps, and hazard lamps. Wait 2 minutes, then restart engine.
- 14. If the Service Hybrid System DIC message is displayed at any time, follow service instructions in SI for the particular DTC or tell tale that is set.
- 15. FOR CALIFORNIA VEHICLES ONLY: Install a Recall Identification Label and complete a "Proof of Correction" certificate upon recall completion.

RECALL IDENTIFICATION LABEL - California Vehicles Only

Place a Recall Identification Label on each vehicle corrected in accordance with the instructions outlined in this Product Recall Bulletin. Each label provides a space to include the recall number and the five-digit dealer code of the dealer performing the recall service. This information may be inserted with a ballpoint pen.

Put the Recall Identification Label on a clean and dry surface of the radiator core support in an area that will be visible to people servicing the vehicle.

When installing the Recall Identification Label, be sure to pull the tab to allow adhesion of the clear protective covering. Additional Recall Identification Labels for US dealers can be obtained from Dealer Support Materials by ordering on the web from DWD Store, www.gmglobalconnect.com, and then click on the DWD Store link. Request Item Number S-1015 when ordering.



COURTESY TRANSPORTATION - For US and Canada

The General Motors Courtesy Transportation program is intended to minimize customer inconvenience when a vehicle requires a repair that is covered by the New Vehicle Limited Warranties. The availability of courtesy transportation to customers whose vehicles are within the warranty coverage period and involved in a product program is very important in maintaining customer satisfaction. Dealers are to ensure that these customers understand that shuttle service or some other form of courtesy transportation is available and will be provided at no charge. Dealers should refer to the General Motors Service Policies and Procedures Manual for Courtesy Transportation guidelines.

WARRANTY TRANSACTION INFORMATION

Submit a transaction using the table below. All transactions should be submitted as a ZFAT transaction type, unless noted otherwise.

Labor		Labor	Net
Code	Description	Time	Item
9100017	Inspect GCM – No Further Action Req'd	3.0	*
9100018	Inspect & Replace GCM (inc testing of new module)		*
	- Malibu, Regal	5.5	
	- LaCrosse	6.0	

Submit the cost of ½ tank (15 litres) of gasoline required to perform the test in the Net Item field, not to exceed \$16.00 USD, \$24.00 CAD.

<u>CUSTOMER NOTIFICATION</u> – For US and Canada

General Motors will notify customers of this recall on their vehicle (see copy of customer letter included with this bulletin).

<u>CUSTOMER NOTIFICATION</u> – For Export

Letters will be sent to known owners of record located within areas covered by the US National Traffic and Motor Vehicle Safety Act. For owners outside these areas, dealers should notify customers using the attached sample letter.

<u>DEALER RECALL RESPONSIBILITY</u> – For US and Export (US States, Territories, and Possessions)

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

The US National Traffic and Motor Vehicle Safety Act provides that each vehicle that is subject to a recall of this type must be adequately repaired within a reasonable time after the customer has tendered it for repair. A failure to repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the customer may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation. To avoid having to provide these burdensome remedies, every effort must be made to promptly schedule an appointment with each customer and to repair their vehicle as soon as possible. In the recall notification letters, customers are told how to contact the US National Highway Traffic Safety Administration if the recall is not completed within a reasonable time.

DEALER RECALL RESPONSIBILITY - All

All unsold new vehicles in dealers' possession and subject to this recall <u>must</u> be held and inspected/repaired per the service procedure of this recall bulletin <u>before</u> customers take possession of these vehicles.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided in this bulletin for your use in contacting customers. Recall follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this recall enters your vehicle inventory, or is in your dealership for service in the future, you must take the steps necessary to be sure the recall correction has been made before selling or releasing the vehicle.

Dear General Motors Customer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

General Motors has decided that a defect, which relates to motor vehicle safety, exists in certain 2012-2013 model year Buick LaCrosse and Regal, and 2013 model year Chevrolet Malibu Eco vehicles, equipped with eAssist. As a result, GM is conducting a safety recall. We apologize for this inconvenience. However, we are concerned about your safety and continued satisfaction with our products.

IMPORTANT

- Your vehicle is involved in safety recall 13136.
- Schedule an appointment with your GM dealer.
- This service will be performed for you at no charge.

Why is your vehicle being recalled?

Your vehicle may have a condition in which the Generator Control Module (GCM) may not function properly. This could cause a gradual loss of battery charge and the illumination of the malfunction indicator light. If you continue to drive the vehicle, the loss of battery charge will cause the engine to stall and/or the vehicle will not start. In addition, there may be a burning or melting odor, smoke, and possibly a fire in the trunk.

What will we do?

Your GM dealer will inspect and, if necessary, replace the GCM. This service will be performed for you at **no charge**. Because of service scheduling requirements, it is likely that your dealer will need your vehicle longer than the actual inspection time of 3 hours. If the GCM requires replacement, an additional 2 hours and 30 minutes up to 3 hours will be needed.

If your vehicle is within the New Vehicle Limited Warranty, your dealer may provide you with shuttle service or some other form of courtesy transportation while your vehicle is at the dealership for this repair. Please refer to your Owner Manual and your dealer for details on courtesy transportation.

What should you do?

You should contact your GM dealer to arrange a service appointment as soon as possible.

California Residents: The state of California requires the completion of recalls on emission related parts prior to vehicle registration renewal. In addition, the state requires that every vehicle must pass an emission test (SMOG Check) every two years and before it is sold. Without the completion of this no-charge recall, your vehicle may be more likely to fail this test. At the time of the recall completion, your dealer will issue you a "Proof of Correction Certificate". Keep this certificate and, if required, present it to the Department of Motor Vehicles when renewing your registration as

proof of recall completion.

Do you have questions?

If you have questions or concerns that your dealer is unable to resolve, please contact the appropriate Customer Assistance Center at the number listed below.

Division	Number	Text Telephones (TTY)
Buick	1-800-521-7300	1-800-832-8425
Chevrolet	1-800-222-1020	1-800-833-2438
Guam	65-6267-1752	
Puerto Rico – English	1-800-496-9992	
Puerto Rico – Español	1-800-496-9993	
Virgin Islands	1-800-496-9994	

If after contacting your dealer and the Customer Assistance Center, you are still not satisfied we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, DC 20590, or call the toll-free Vehicle Safety Hotline at 1.888.327.4236 (TTY 1.800.424.9153), or go to http://www.safercar.gov. The National Highway Traffic Safety Administration Campaign ID Number for this recall is 13V173.

Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Jim Moloney
General Director,
Customer and Relationship Services

GM Recall #13136