



GENERAL MOTORS LLC  
Vehicle Safety and Crashworthiness

September 9, 2013

Scott Yon, Chief  
Vehicle Integrity Division  
Office of Defects Investigation  
National Highway Traffic Safety Administration  
1200 New Jersey Ave, SE, Room W46-409  
Washington, DC 20590

N130136

NVS-212eer  
RQ13-003

Dear Mr. Yon:

This letter is General Motors' (GM) partial response to your Recall Query (RQ13-003) to investigate Generator Control Module (GCM) overheating that could lead to smoke and/or fire. The overheating occurs in certain model year (MY) 2012-2013 Buick Regal and LaCrosse, and MY 2013 Chevrolet Malibu Eco vehicles, equipped with eAssist, manufactured by General Motors LLC (GM).

As you agreed, in an email dated August 29, 2013, this is a partial response containing the responsive information to request numbers 1- 6, 7a, 7b, 8 and 11. The remainder of the response will be provided by September 23, 2013.

Your requests and our corresponding replies are as follows:

1. **State, by model and model year, the number of subject vehicles GM has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by GM, state the following:**
  - a. **Vehicle identification number (VIN);**
  - b. **Make;**
  - c. **Model;**
  - d. **Model Year;**
  - e. **Subject component part numbers and design versions installed as original equipment;**
  - f. **Date of manufacture;**
  - g. **Date warranty coverage commenced;**
  - h. **The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease); and**
  - i. **Whether the vehicle received the service update prior to the recall notification on May 13, 2013.**

**Provide the table in Microsoft Access 2010, or a compatible format, entitled "PRODUCTION DATA."**



GM is providing the number of subject vehicles produced by GM for sale or lease in the United States by make, model and model year in Table 1-1 below:

MAKE	MODEL	2012 MY	2013 MY	TOTAL
BUICK	REGAL	2,625	2,803	5,428
BUICK	LACROSSE	14,391	11,010	25,401
CHEVROLET	MALIBU ECO	0	30,198	30,198
TOTAL		17,016	44,011	61,027

TABLE 1-1 SUBJECT VEHICLES

The production information requested in 1a-1i is provided on the ATT\_1\_GM disk; folder labeled "Q\_01". Refer to the Microsoft Access 2010 file labeled "Q\_01\_PRODUCTION DATA".

2. State the number of each of the following, received by GM, or of which GM is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:
  - a. Consumer complaints, including those from fleet operators;
  - b. Field reports, including dealer field reports;
  - c. Reports involving a crash, injury or fatality;
  - d. Reports involving a fire;
  - e. Property damage claims;
  - f. Third-party arbitration proceedings where GM is or was a party to the arbitration; and
  - g. Lawsuits, both pending and closed, in which GM is or was a defendant or codefendant.

For subparts "a" through "g," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items "c" through "g," provide a summary description of the alleged problem and causal and contributing factors and GM's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "f" and "g," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

GM is providing reports containing an indication that the GCM or any of its components overheats, which may be manifested by odor, melting, smoke or fire as defined by 49 CFR 579.4(c). The "fire" column in table 2-1 indicates reports where there was an allegation of fire and/or flames.

Table 2-1 below summarizes records that may relate to the alleged defect in the subject vehicles that GM has identified to date. GM has organized the records by the GM file number within each attachment. Refer to access database "Q\_03\_REQUEST NUMBER TWO DATA" for categories prescribed by the NHTSA.

GM's search for records is continuing and any additional responsive records will be provided with the September 23, 2013, response.

TYPE OF REPORT	GM REPORTS	SUBCATEGORIES			
		NUMBER WITH PROPERTY DAMAGE	NUMBER WITH CRASH	NUMBER WITH FIRE	NUMBER WITH INJURIES/ FATALITIES*
Owner Reports	14	0	0	1	0/0
Field Reports	53	0	1	1	0/0
Not-In-Suit Claims	3	0	0	1	0/0
Subrogation Claims	0	0	0	0	0/0
Third Party Arbitration Proceedings	0	0	0	0	0/0
Product Liability Lawsuits	0	0	0	0	0/0
Total Reports (Including Duplicates)	70	0	1	3	0/0
Total Vehicles with Reports (Unique VIN)	67	0	1	2	0/0

TABLE 2-1: REPORT CLASSIFICATION –  
RECORDS THAT MAY RELATE TO THE ALLEGED DEFECT

In response to requests 2c-2f, GM reviewed the incidents with their associated non-privileged records that may have been related to the alleged defect. GM is including those that may be related. GM is providing those non-privileged records and associated documentation that were reviewed in making that assessment which speak for themselves and may contain information regarding the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

The sources of the requested information and the last date the searches were conducted are in Table 2-2 below.

Source System	Last Date Gathered
Customer Assistance Center	7/26/2013
Technical Assistance Center	7/26/2013
Field Information Network Database (FIND)	7/31/2013
Field Product Report Database (FPRD)	7/26/2013
Company Vehicle Evaluation Program (CVEP)	7/26/2013
Captured Test Fleet (CTF)	7/26/2013
Early Quality Feedback (EQF)	7/26/2013
Legal/Employee Self Insured Services (ESIS)/Product Liability Claims/Lawsuits	8/13/2013

TABLE 2-2: DATA SOURCES

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:
  - a. GM's file number or other identifier used;
  - b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
  - c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
  - d. Vehicle's VIN;
  - e. Vehicle's make, model and model year;
  - f. Vehicle's mileage at time of incident;
  - g. Incident date;
  - h. Report or claim date;
  - i. Whether a crash is alleged;
  - j. Whether a fire is alleged;
  - k. Whether property damage is alleged;
  - l. Number of alleged injuries, if any; and
  - m. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

The requested information is provided on the ATT\_1\_GM disk; folder labeled "Q\_03". Refer to "Q\_03\_COMPLAINT\_TWO\_DATA".

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method GM used for organizing the documents.

Copies of the records summarized in Table 2-1 are embedded in the file provided in ATT\_1\_GM disk; folder labeled "Q\_03". Refer to the Microsoft Access file labeled "Q\_03\_COMPLAINT\_TWO\_DATA". GM has organized the records by the GM file number within each attachment.

5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by GM to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Separately, for each such claim, state the following information:

- a. GM's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g. Labor operation number;
- h. Problem code;
- i. Replacement part number(s) and description(s);
- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA."

Table 5-1 summarizes regular warranty claims, Motors Insurance Corporation (MIC) extended service contract claims and Universal Warranty Corporation (UWC) extended service contract claims of hybrid-powertrain-system GCM component replacement that may be related to the alleged defect in the subject vehicles. GM was informed by MIC and UWC that there were no claims related to replacement or repair of the GCM. GM has organized the records by the GM file number within each attachment. Refer to access database "Q\_05\_Warranty\_Data" included on the ATT\_1\_GM disk.

	REGULAR		MIC		UWC		
	MODEL YEAR		MODEL YEAR		MODEL YEAR		
MAKE/MODEL	2012	2013	2012	2013	2012	2013	TOTAL
BUICK LACROSSE	21	3	0	0	0	0	24
BUICK REGAL	0	0	0	0	0	0	0
CHEVROLET MALIBU	0	80	0	0	0	0	80
TOTAL	21	83	0	0	0	0	104

TABLE 5-1: REGULAR WARRANTY CLAIMS, MIC EXTENDED SERVICE CONTRACT CLAIMS,  
AND UWC EXTENDED SERVICE CONTRACT CLAIMS

The sources of the requested information and the last date the searches were conducted are tabulated in Table 5-2 below.

SOURCE SYSTEM	LAST DATE GATHERED
GART - Regular Warranty	7/25/2013
Motors Insurance Corporation (MIC) - Service Contract Claims	7/26/2013
Universal Warranty Corporation (UWC) - Service Contract Claims	7/25/2013

TABLE 5-2: DATA SOURCES

For this response, GM searched the GM Global Analysis and Reporting Tool (GART-regular warranty), the MIC – service contract claims and the UWC – service contract claims databases to collect the warranty and service contract claims data.

GM's warranty database does not contain the vehicle owner's name or telephone number. Some of the replacement part numbers; part descriptions and customer concern code descriptions are not included in the GM warranty database. In response to requests 5j and 5k, GM is providing all available verbatim text. The verbatim texts are optional fields in the GM warranty system for the dealer to enter any additional comments that may be applicable to the warranty claim. The verbatim text fields are not required to be completed for every warranty claim.

The warranty data provided has limited analytical value in analyzing the field performance of a motor vehicle component. The warranty records do not contain sufficient information to establish the condition of the part at the time of the warranty correction; and service personnel may not consistently use the appropriate labor and trouble codes. Warranty numbers represent claims by our dealers for reimbursement for parts and labor costs incurred in performing warranty service for our customers.

A summary of the GM warranty and goodwill claims for the subject vehicles, including the information requested in 5(a-k), is provided on the Att\_1\_GM disk in the folder labeled "Q\_05"; refer to the Microsoft Access file labeled, "Q\_05\_WARRANTY DATA".

6. Describe in detail the search criteria used by GM to identify the claims identified in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by GM on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that GM offered for the subject vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.

For this response, GM searched the labor codes listed in Table 6-1 which are used for hybrid-powertrain-system generator control module replacement.

5031440	Generator Control Module Replacement
N5866	Generator Control and Battery Module Replacement and Shipping Preparation
N5875	Generator Control Module Replacement

TABLE 6-1: LABOR CODES USED IN REGULAR WARRANTY AND MIC SEARCH

After identifying claims using the above labor codes, GM reviewed the causal code description, customer complaint code description, service case comment text, general verbatim, customer verbatim, causal verbatim and correction verbatim in each warranty claim to identify those warranty claims that may be related to the alleged defect.

UWC does not use labor codes or trouble codes.

The GCM in the subject vehicles are covered by a Powertrain new vehicle warranty for five years or 100,000 miles, whichever occurs first. In addition to the powertrain warranty, the Buick subject vehicles are covered by a bumper-to-bumper new vehicle limited warranty for four years or 50,000 miles, and the Chevrolet subject vehicles are covered by a bumper-to-bumper new vehicle limited warranty for three years or 36,000 miles, whichever occurs first.

Many different extended warranty options are available through GM dealerships. They are offered at different prices and for varying lengths of time, based on customer's preference, up to 7 years from the date of purchase or up to a total of 100,000 vehicle miles.

The number of extended service contracts on the subject vehicles that have been sold by MIC as of July 26, 2013 and UWC as of July 25, 2013, regardless of status (in-force, expired or cancelled) is contained in Table 6-2.

	MIC		UWC		
	MODEL YEAR		MODEL YEAR		
MAKE/MODEL	2012	2013	2012	2013	TOTAL
BUICK LACROSSE	8,470	3,795	31	10	12,306
BUICK REGAL	5,037	1,339	3	0	6,379
CHEVROLET MALIBU	0	3,861	0	126	3,987
TOTAL	13,507	8,995	34	136	22,672

TABLE 6-2: SUBJECT VEHICLES: MIC AND UWC EXTENDED SERVICE CONTRACTS SOLD  
(REGARDLESS OF STATUS: IN-FORCE, EXPIRED OR CANCELLED)

**7. Produce the following:**

- a. Copies of all service, warranty, and other documents that relate to, or that may relate to, the alleged defect in the subject vehicles, that GM has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, and communications with service, sales and parts departments of dealers or other documents or communications, with the exception of standard shop manuals; and
- b. All versions of GM Bulletins 12238, PIC5520 and 12013, regardless of whether the documents are in interim, draft, or final form, up to and including the most recent version. Also include the latest draft copy of any communication that GM is planning to issue within the next 120 days.

GM is providing the service, warranty and other documents requested in item 7a, in the ATT\_1\_GM disk; in the folder labeled "Q\_07\_A".

GM is providing a copy of all versions of GM Bulletins 12238, PIC5520 and 12013 in the ATT\_1\_GM disk; in the folder labeled "Q\_07\_B", as requested. However, Service Bulletin 12013 – Service Update for Inventory Vehicles Only Battery Drain – Replace Battery Power Inverter Module is not related to the alleged defect.

GM is not planning to issue within the next 120 days any service, warranty or other technical documents or communications to its dealers, regional or zone offices, regarding the subject condition in the subject vehicles.

This information was provided by GM Customer Care and Aftersales on August 2, 2013.



- 8. GM Service Bulletin No. PIC5520 stated that "the Generator Control and Battery Module for the eAssist Buick LaCrosse and Buick Regal (GM part number 24259770) is being placed on restriction through the GM Technical Assistance Center (TAC)." Produce all documents related to the restriction referred to in PIC5520, as well as any other restrictions that relate to, or that may relate to, the subject component.**

As part of the ongoing GM quality improvement process, new technology and existing technology in new application, is placed on part restrictions to gain important product feedback including service diagnostics, repair procedures and accelerated root cause analysis for continuous improvements.

GM is providing copies of all versions of PIC5520 in the ATT\_1\_GM disk; in the folder labeled "Q\_07\_B".

GM is also providing documents related to the restriction referred to in PIC5520 that relate to the subject component in the ATT\_1\_GM and ATT\_2\_GM\_CONF disks; in the folder labeled "Q\_08".

**11. Provide the following:**

- a. A block diagram of the hybrid-powertrain system in the subject vehicles along with a description of the component's function(s);**
- b. A diagram that describes the functions and location of the subject component;**
- c. A glossary of all terms GM uses with respect to the hybrid-powertrain system in the subject vehicles. The glossary shall define designated acronyms and provide a description of the system and system components including the component's physical location and function. The glossary should also indicate when more than one term, name, or acronym is used to identify (or refers to) the same component or device (i.e., which terms/names mean the same thing); and,**
- d. Describe the relationship among the term Generator Control Module as used in the May 3, 2013 recall notification letter (NHTSA Recall No. 13V-173) and the terms eAssist Powerpack and the BAS Power Inverter (BPIM)/Accessory Power Module (APM).**

The requested information is provided in the ATT\_1\_GM disk; in the folder labeled "Q\_11".

\* \* \*

This response is based on searches of General Motors (GM) locations where documents determined to be responsive to your request would ordinarily be found. As a result, the scope of this search did not include, nor could it reasonably include, "all of their past and present officers and employees, whether assigned to their principal offices or any of their field or other locations, including all of their divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of GM (including all business units and persons previously referred to), who are or, in or after January 2006, were involved in any way with any of the following related to the alleged defect in the subject vehicles:

- a. Design, engineering, analysis, modification or production (e.g. quality control);
- b. Testing, assessment or evaluation;
- c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
- d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers."

This response was compiled and prepared by this office upon review of the documents produced by various GM locations, and does not include documents generated or received at those GM locations subsequent to their searches.

Please contact me if you require further information about this response or the nature or scope of our searches.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Carmen Benavides". The signature is stylized with a large, looped "M" and a cursive "Benavides".

M. Carmen Benavides, Director  
Product Investigations and Safety Regulations

Attachments