



April 17, 2013

Scott Yon, Chief
Vehicle Integrity Division
Office of Defects Investigation
National Highway Traffic Safety Administration
1200 New Jersey Ave, SE, Room W48-314
Washington, DC 20590

N130036

NVS-212eer
RQ13-001

Dear Mr. Yon:

This letter is General Motors' (GM) response to your Recall Query (RQ), received February 13, 2013, regarding allegations of brake lamp malfunctions on model year (MY) 2005 through 2010 Pontiac G6, MY 2004 through 2011 Chevrolet Malibu and MY 2007 through 2009 Saturn Aura vehicles manufactured for sale or lease in the United States.

On March 28, 2013, GM responded to request numbers 1, 7, 9, and 10. As agreed upon in your email dated March 22, 2013, this is a partial response containing the responsive information to request numbers 2-6, 8 and 11. Unless otherwise noted, it does not include data and documents previously provided in GM's response to PE08-054 sent November 12, 2008.

Your requests and our corresponding replies are as follows:

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;**
 - b. **Field reports, including dealer field reports;**
 - c. **Reports involving an injury, or fatality, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject component, property damage claims, consumer complaints, or field reports;**
 - d. **Property damage claims;**
 - e. **Third-party arbitration proceedings where GM is or was a party to the arbitration; and**
 - f. **Lawsuits, both pending and closed, in which GM is or was a defendant or codefendant.**



For subparts “a” through “d” 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 “f,” 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 “c through f” 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.

Table 2-1 below summarizes records that may relate to the alleged defect in the subject vehicles. Note that some of these records and their corresponding documents may have been submitted for PE08-054 as well. 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.

Type of Report	GM Reports	Subcategories			
		Corresponding to NHTSA Reports	Number with Property Damage	Number with Crashes	Number with Injuries/Fatalities
Owner Reports	688	55	0	2	0/0
Field Reports	1,689	15	0	1	0/0
Not-In-Suit Claims	1	0	0	0	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)	2,378	70	0	3	0/0
Total Vehicles with Reports (Unique VIN)	2,268	61	0	3	0/0

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

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

In response to requests 2c-2f, GM reviewed the incidents with their associated records for those 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.

Source System	Last Date Gathered
Customer Assistance Center	2/25/2013
Technical Assistance Center	2/21/2013
Field Information Network Database (FIND)	2/22/2013
Field Product Report Database (FPRD)	2/25/2013
Company Vehicle Evaluation Program (CVEP)	2/21/2013
Captured Test Fleet (CTF)	2/21/2013
Early Quality Feedback (EQF)	2/21/2013
Legal/Employee Self Insured Services (ESIS)/Product Liability Claims/ Lawsuits	2/26/2013

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 property damage is alleged;
 - k. Number of alleged injuries, if any; and
 - l. 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 for subparts "a" through "l" is provided on the ATT_1_GM disk; folder labeled "Q_03". Refer to the Microsoft Access 2010 file labeled "Q_03_REQUEST NUMBER 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_REQUEST NUMBER TWO DATA". GM has organized the records by the GM file number within each attachment. GM is still reviewing additional attachments for the reports summarized in response to Request 2. Those additional responsive attachments will be provided as soon as that review is complete.

- 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 subject component, regardless of why the claim was made, 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. This specifically includes, but is not limited to, repairs made in accordance to TSB 09-05-22-009C.**

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 or replacement 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. Whether glass fracture is alleged;**
- k. Concern stated by customer; and**
- l. Comment, if any, by dealer/technician relating to claim and/or repair or replacement.**

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

GM searched the GM Global Analysis and Reporting Tool (GART-regular warranty), the Motors Insurance Corporation (MIC-extended service contract

claims) and the Universal Warranty Corporation (UWC-extended service contract claims) databases to collect the warranty data for this response.

For the subject vehicles, regular warranty and extended service contract claims related to the repair or replacement of C2 or X2 connectors of the Body Control Module (BCM) are provided on the ATT_1_GM disk; folder labeled "Q_05": refer to the Microsoft Access 2010 file labeled "Q_05_WARRANTY DATA". Note that some of these records may have been submitted for PE08-054 as well. GM's warranty database does not contain the vehicle owner's name or telephone number. GM is providing a column labeled "Customer Verbatim" in response to request 5k. GM is providing four additional verbatim columns in response to request 5l. 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. 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 GM cannot verify that service personnel have used 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.

For request 5j regarding "Whether glass fracture is alleged", per a conversation with ODI of the NHTSA, on 2/22/13, subpart "j." of this response was requested in error and is not required. This was confirmed in a 2/25/13 email.

Summaries of the warranty claims which may have required the repair or replacement of the subject component in the subject vehicles, are provided on the ATT_1_GM disk; folder labeled "Q_05": refer to the file labeled "Warranty Summary Tables."

Many of the warranty claims provided in this response are not related to the brake lamp malfunction. Those warranty records that had a brake lamp malfunction verbatim are marked with a "B" in the last column of the "Q_05_WARRANTY DATA" file.

SOURCE SYSTEM	LAST DATE GATHERED
GART - regular warranty	2/19/2013
MIC - extended service contract claims	2/19/2013
UWC - extended service contract claims	2/19/2013

TABLE 5-5: DATA SOURCES

- 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.**

The GM Global Analysis and Reporting Tool (GART) regular warranty database and the MIC extended service contract claims database were searched using the labor codes that may be related to the alleged defect. These labor codes may be found in Table 6-1. It should be noted that many of the included records do not relate to the brake lamp malfunction condition. The following process was used to sort the warranty claims:

- A. All claims with labor code N9595 (TSB 08-05-22-009), N9613 (TSB 09-06-03-004), N4800 (Body Control Module Replacement) and V2045 (campaign 08317 reimbursements) were determined to be responsive to the alleged condition, even if no verbatim were provided.
- B. All claims for V2044 were excluded as part of General Motors campaign 08317.
- C. Each warranty record may have up to 5 verbatim fields. All available verbatim of the remaining claims were read and a claim was determined to be responsive if the verbatim indicated that the incident may have been caused by the BCM C2 or BCM X2 connector. In cases where it was specifically stated that a repair or replacement of the C2 or X2 did not correct the brake lamp problem, but a different component was repaired or replaced to correct the problem, those claims were not counted. Some of the claims for BCM C2 or BCM X2 connectors may have been provided in the previous response PE08-054. The remaining records with all blank verbatim fields are not counted in the attached summary tables 5-1 through 5-4, but are provided in the ATT_1_GM disk; folder labeled "Q_05", in a file named "Q_05_Blank Verbatim".

Labor Code	Description
N9595	BCM C2 or X2 Connector Repair
N9613	Lubricate Body Control Module (BCM) Connector with Dielectric Lubricant
N6612	Exterior Lighting Wiring and/or Connector Repair or Replace
N6616	Serial DATA/DLC/STAR Connect Wiring and/or Connector Repair or Replace
N6651	Connector Kit Repair
N6652	Connector with Leads Assembly Replace
N2700	Switch, Stop Lamp – Adjust
N4800	Body Control Module Replacement
H2640	Pedal and/or Bushing, Brake – R&R or Replace
H2642	Sensor, Brake Pedal Position – Replace
H2643	Brake and Accelerator Pedal Adjuster Switch Replacement
H9991	Customer Concern Not Duplicated
Z1241	Personal Property Damage
Z1242	RPR/Reimbursement – Product Allegation
Z1243	Inspection – Product Allegation Resolution
V2044	Apply Dielectric Lubricant to C2 Connector (08317)
V2045	Customer Reimbursement (08317)

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

All of the 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 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 and UWC as of March 19, 2013, regardless of status (in-force, expired, or cancelled) are contained in Tables 6-2 and 6-3.

Make	Model	2004	2005	2006	2007	2008	2009	2010	2011	Total
Chevrolet	Malibu	3739	8241	8726	5878	11977	10518	3343	2401	54823
Chevrolet	Malibu Maxx	1873	2842	2370	743	0	0	0	0	7828
Pontiac	G6	0	4118	11955	10422	7709	3555	350	0	38109
Saturn	Aura	0	0	0	9109	6652	1696	0	0	17457
	Total	5612	15201	23051	26152	26338	15769	3693	2401	118217

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

Make	Model	2004	2005	2006	2007	2008	2009	2010	2011	Total
Chevrolet	Malibu	930	1649	1613	899	1434	1273	1104	1049	9951
Chevrolet	Malibu Maxx	348	546	425	147	0	0	0	0	1466
Pontiac	G6	0	925	2313	1865	1677	791	253	0	7824
Saturn	Aura	0	0	0	496	452	203	0	0	1151
Total		1278	3120	4351	3407	3563	2267	1357	1049	20392

TABLE 6-3: SUBJECT VEHICLES: UWC EXTENDED SERVICE CONTRACTS SOLD
 (REGARDLESS OF STATUS: IN-FORCE, EXPIRED, OR CANCELLED)

8. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, GM. For each such action, provide the following information:

- a. Action title or identifier;
- b. The actual or planned start date;
- c. The actual or expected end date;
- d. Brief summary of the subject and objective of the action;
- e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
- f. A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

The information listed in Table 8-1 below is a summary of actions that have been conducted, are being conducted, are planned, or are being planned by or for GM regarding the alleged defect in the subject vehicles as of March 8, 2013. Documents and additional supporting information are included in the attachments as noted in the table. GM is continuing to review documents that may be responsive to this request and will provide any additional responsive documents when that is complete.

General Motors requested assistance and documents from a supplier in responding to this question and this response included those documents and the information received from this supplier.

GM's previously submitted presentation sent to the NHTSA on July 30, 2012, is not included in the following actions.

<p>Action 8-A: GM Internal Investigation Start Date: August 1, 2012 End Date: Ongoing Engineering Group: GM Engineering Attachments: ATT_1_GM disk; folder labeled "Q_08" ATT_2_GM_Conf disk; folder labeled "Q_08" Description: GM's ongoing Investigation of the alleged defect in the subject vehicles and related documentation. Summary of Action: Additional information that may relate to the alleged condition, completed since the November 8, 2008 submission to the NHTSA. Internal presentations and documents related to this subject.</p>
<p>Action 8-B: Delphi Engineering Studies Start Date: June 2, 2009 End Date: March 10, 2011 Engineering Group: Delphi Engineering Attachments: ATT_1_GM disk; folder labeled "Q_08" ATT_3_Delphi_Conf disk; folder labeled "Q_08" Description: Delphi documents presented during GM meetings and reviews. Summary of Action: Engineering study data related to BCM vibration testing.</p>

TABLE 8-1 SUMMARY OF ACTIONS THAT HAVE BEEN CONDUCTED

11. Furnish GM's assessment of the alleged defect in the subject vehicles, including:

- a. **The causal or contributory factor(s);**
- b. **The failure mechanism(s);**
- c. **The failure mode(s);**
- d. **The risk to motor vehicle safety that it poses;**
- e. **What warnings, if any, the operator and other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and**
- f. **The reports included with this inquiry.**

The suspected causal or contributing factor(s), failure mechanism(s) and the associated failure mode(s) are described in the following summary:

The Body Control Module (BCM) receives a Brake Apply Sensor (BAS) signal voltage and uses that signal to activate or deactivate the brake lamps. The suspected failure mechanism is fretting corrosion at the terminal interface between the BCM and the instrument panel harness of the BAS circuits. Fretting corrosion causes an increase in resistance resulting in a lower BAS signal voltage to the BCM.

Warnings that fretting corrosion may be affecting the signal voltage may include: 1) the transmission converter clutch may not engage, 2) the cruise control may not engage and 2) the driver may have difficulty shifting out of PARK. According to

GM's supplier of the BCM, C2/X2 connectors and the wiring harness, vibration and thermal expansion/contraction are the primary sources of fretting motion which may contribute to corrosion.

Of the 323 VOQs included with this inquiry, 318 appear to be related to the alleged defect and 88 indicated some warning prior to or at the time of failure. In most cases, that warning included a statement that the cruise control would not operate. Of these 318 records, there were 2 alleged crashes with no injuries noted. In the GM reports, there were 3 alleged crashes and no injuries.

GM is continuing its investigation into this issue.

* * *

GM claims that certain information, in documents that are part of lawsuit and claims files maintained by the GM Legal Staff, is attorney work product and/or privileged. That information includes notes, memos, reports, photographs, and evaluations by attorneys (and by consultants, claims analysts, investigators, and engineers working at the request of attorneys). GM is producing responsive documents from claims files that are neither attorney work product nor privileged, and withholding those that are attorney work product and/or privileged.

This response is based on searches of 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 predecessor corporations, and all of its past and present officers and employees, whether assigned to principal offices or any field or other location, including all divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of 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, on or after 2000, were involved in any way with any of the following related to the subject condition in the subject peer 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 fluid and cursive, with the first name "M." and last name "Benavides" clearly distinguishable.

M. Carmen Benavides, Director
Product Investigations and Safety
Regulations

Attachments

RQ13-001

GM

4/17/2013

Q_05

WARRANTY SUMMARY
TABLES

MAKE	MODEL	MODEL YEAR								TOTAL
		2004	2005	2006	2007	2008	2009	2010	2011	
Chevrolet	Malibu	5809	4739	2461	1308	3490	4002	4318	995	27122
Chevrolet	Malibu Maxx	1813	1607	815	218	0	0	0	0	4453
Chevrolet	Malibu Classic	0	0	0	0	288	0	0	0	288
Pontiac	G6	0	3561	3963	3147	2647	1774	689	0	15781
Saturn	Aura	0	0	0	1938	1370	1086	0	0	4394
TOTAL	----	7622	9907	7239	6611	7795	6862	5007	995	52038

TABLE 5-1: REGULAR AND GOODWILL WARRANTY CLAIMS THAT RELATE TO THE C2 AND X2 CONNECTORS OF THE BCM REGARDLESS OF THE REASON FOR THE REPLACEMENT IN THE SUBJECT VEHICLES

MAKE	MODEL	MODEL YEAR								TOTAL
		2004	2005	2006	2007	2008	2009	2010	2011	
Chevrolet	Malibu	428	307	241	97	350	299	116	5	1843
Chevrolet	Malibu Maxx	157	138	97	19	0	0	0	0	411
Chevrolet	Malibu Classic	0	0	0	0	16	0	0	0	16
Pontiac	G6	0	281	327	324	193	104	16	0	1245
Saturn	Aura	0	0	0	212	130	68	0	0	410
TOTAL	----	585	726	665	652	689	471	132	5	3925

TABLE 5-2: MIC EXTENDED SERVICE CONTRACT CLAIMS THAT RELATE TO THE C2 AND X2 CONNECTORS OF THE BCM REGARDLESS OF THE REASON FOR THE REPLACEMENT IN THE SUBJECT VEHICLES

MAKE	MODEL	MODEL YEAR								TOTAL
		2004	2005	2006	2007	2008	2009	2010	2011	
Chevrolet	Malibu	9	20	9	3	10	1	1	1	54
Chevrolet	Malibu Maxx	2	3	2	0	0	0	0	0	7
Chevrolet	Malibu Classic	0	0	0	0	1	0	0	0	1
Pontiac	G6	0	14	16	8	6	2	0	0	46
Saturn	Aura	0	0	0	3	0	1	0	0	4
TOTAL	----	11	37	27	14	17	4	1	1	112

TABLE 5-3: UWC EXTENDED SERVICE CONTRACT CLAIMS THAT RELATE TO THE C2 AND X2 CONNECTORS OF THE BCM REGARDLESS OF THE REASON FOR THE REPLACEMENT IN THE SUBJECT VEHICLES

MAKE	MODEL	MODEL YEAR								TOTAL
		2004	2005	2006	2007	2008	2009	2010	2011	
Chevrolet	Malibu	34	74	136	113	755	728	754	46	2640
Chevrolet	Malibu Maxx	8	23	38	18	0	0	0	0	87
Chevrolet	Malibu Classic	0	0	0	0	5	0	0	0	5
Pontiac	G6	0	96	285	561	677	443	69	0	2131
Saturn	Aura	0	0	0	485	386	209	0	0	1080
TOTAL	----	42	193	459	1177	1823	1380	823	46	5943

TABLE 5-4: REGULAR AND GOODWILL WARRANTY CLAIMS THAT RELATE TO THE C2 AND X2 CONNECTORS OF THE BCM AND NOTE A BRAKE LAMP MALFUNCTION IN THE VERBATIM.

(NOTE: TABLE 5-4 IS A SUBSET OF TABLES 5-1, 5-2 AND 5-3 AND ARE ALREADY INCLUDED IN THOSE COUNTS)