



*Handwritten:* 11/19/07

RECEIVED  
NVS-210

October 31, 2007

2007 NOV -2 P 12: 14

Kathleen C. DeMeter, Director  
Office of Defects Investigation  
National Highway Traffic Safety Administration  
1200 New Jersey Ave., S. E., Room W46-409  
Washington, D.C. 20590

OFFICE OF DEFECTS  
INVESTIGATION  
N070035A Complete

NVS-213kmb  
EA07-008

Dear Ms. DeMeter:

This letter is General Motors' (GM) response to Questions 7 and 8 of your information request (IR), dated August 3, 2007, regarding allegations of a non-crash related fire originating in the engine compartment in certain 1999 through 2002 model year (MY) vehicles that are equipped with a 3.8L supercharged (L67) engine and manufactured by General Motors Corporation (GM). GM responded to Questions 1-6 on September 21, 2007.

GM is also providing peer vehicle information for 1999 through 2002 MY vehicles manufactured with a 3.8L normally-aspirated (L36) engine.

The data collection was completed on October 30, 2007

Your questions, 7 and 8, and our corresponding replies are as follows:

**7. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations including, but not limited to, product and design development tests (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.**

**Action 7-1:** L67 and L36 Underhood thermal Climatic Wind Tunnel (CWT) testing  
**Start Date:** March 2007  
**End Date:** August 2007  
**Engineering Group:** General Motors Engineering  
**Attachment:** The responsive files are included on Att\_2\_GM confidential disc in the folder labeled Q\_07\_01  
**Description:** Vehicles (L67 and L36 engines) were tested at the GM CWT to determine underhood component temperatures during various driving schedules  
**Summary of Action:** Test reports and results are included in the above attachments

<p><b>Action 7-2:</b> L67 and L36 Underhood thermal DPG testing <b>Start Date:</b> March 2007 <b>End Date:</b> August 2007 <b>Engineering Group:</b> General Motors Engineering <b>Attachment:</b> The responsive files are included on Att_2_GM confidential disc in the folder labeled Q_07_02 <b>Description:</b> Vehicles (L67 and L36 engines) were tested at the GM Desert Proving Grounds to determine transmission fluid temperatures during various driving schedules and simulated TCC lockup conditions <b>Summary of Action:</b> Test reports and results are included in the above attachments</p>
<p><b>Action 7-3:</b> 3.8L (L67) Project Actions and Status Summaries <b>Start Date:</b> May 2007 <b>End Date:</b> Ongoing <b>Engineering Group:</b> GM Engineering <b>Attachments:</b> The responsive files are included on Att_2_GM confidential disc in the folder labeled Q_07_03 <b>Description:</b> Spreadsheets and documents <b>Summary of Action:</b> Ongoing project actions and review meeting summaries</p>
<p><b>Action 7-4:</b> GM Field Vehicle Inspections, This information is a continuation of Action 8-1 as reported in PE07-006. <b>Start Date:</b> May 2007 <b>End Date:</b> Ongoing <b>Engineering Group:</b> GM Engineering <b>Attachments:</b> Photographs and documents are included on Att_1_GM disc in the folder labeled Q_07_04 and on Att_2_GM confidential disc in the folder labeled Q_07_04. Video tapes are included in Att_4_GM video. <b>Description:</b> GM Engineers inspected field vehicles that allegedly experienced the subject condition <b>Summary of Action:</b> Observations of field inspections summarized.</p>
<p><b>Action 7-5:</b> Transmission Oil Cooler (TOC) Line Analysis. This information is a continuation of Action 8-3 as reported in PE07-006. <b>Start Date:</b> May 2007 <b>End Date:</b> Ongoing <b>Engineering Group:</b> GM Engineering, Bend All Corp. <b>Attachment:</b> Test reports and summaries are included on Att_3_Bend All confidential disc in the folder labeled Q_07_05. <b>Description:</b> Bend All built and tested original and over crimped TOC lines from the same rubber hose material used in the subject vehicles. <b>Summary of Action:</b> Test reports and results are included in the above attachments</p>
<p><b>Action 7-6:</b> L67 Engine Component Review and Analysis <b>Start Date:</b> September 2007 <b>End Date:</b> October 2007 <b>Engineering Group:</b> General Motors Powertrain Engineering <b>Attachment:</b> The responsive files are included on Att_2_GM confidential disc in the folder labeled Q_07_06 <b>Description:</b> Analysis and review of a field vehicle (L67) engine components <b>Summary of Action:</b> Reports and results are included in the above attachments</p>

**Action 7-7: L67 Field Vehicle and Project Review and analysis**

**Start Date:** September 2007

**End Date:** Ongoing

**Engineering Group:** General Motors Field Performance Analysis Group

**Attachment:** The responsive files are included on Att\_1\_GM disc in the folder labeled Q\_07\_07 and on Att\_2\_GM confidential disc in the folder labeled Q\_07\_07

**Description:** Analysis and review of a field vehicle (L67 engine) compared to an exemplar vehicle that experienced an incident similar to the alleged condition

**Summary of Action:** Reports and results are included in the above attachments

**Action 7-8: Problem Resolution Tracking System Issues for Brakes and Cruise Control System**

**Start Date:** September 2007

**End Date:** September 2007

**Engineering Group:** General Motors Engineering

**Attachment:** The responsive files are included on Att\_2\_GM confidential disc in the folder labeled Q\_07\_08

**Description:** GM reports for issues related to brakes and cruise control systems that may effect the transmission mode of operation

**Summary of Action:** See documents

**8. 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. Provide a detailed description of GM's investigation of non-crash engine compartment fires in the subject vehicles to date, including a chronology of all completed actions and a schedule for completing all ongoing and planned actions;
- e. If the information requested in Requests 8.a-c are not known by GM, describe all completed, ongoing and planned actions to determine that information;
- f. Identify all causal factors that GM has considered thus far in its investigation, including any that GM has eliminated, and describe the evidence that GM has collected and analyzed for each;
- g. The incident rates and trends of non-crash engine compartment fires in the subject vehicles and peer vehicles, both collectively and for any specific causal factors identified in response to Request 8.a;
- h. The risk to motor vehicle safety that it poses, including the risk of fire in parked, unattended vehicles; and
- i. The reports included with this inquiry.

GM's Response is as follows:

- a. The causal or contributory factor(s);
- b. The failure mechanism(s);
- c. The failure mode(s);

a-c. The information available to date is included in Action 7-7

- d. Provide a detailed description of GM's investigation of non-crash engine compartment fires in the subject vehicles to date, including a chronology of all completed actions and a schedule for completing all ongoing and planned actions;**

To date, GM has investigated underhood components related to the fuel system, electrical system, transmission and transmission oil cooler line systems, engine hardware and engine sealing systems. A detailed list of the current actions and projected completion dates are included in Action 7-3.

- e. If the information requested in Requests 8.a-c are not known by GM, describe all completed, ongoing and planned actions to determine that information;**

GM is concentrating on two areas of the under hood compartment that may be related to the alleged condition. These areas are the top of engine compartment and lower front of the engine compartment. Details are included in Actions 7-3 and 7-7.

- f. Identify all causal factors that GM has considered thus far in its investigation, including any that GM has eliminated, and describe the evidence that GM has collected and analyzed for each;**

As stated above GM is focusing on two areas of potential origin. Details are included in the Att\_2\_GM confidential disc, in Actions 7-3 and 7-7.

- g. The incident rates and trends of non-crash engine compartment fires in the subject vehicles and peer vehicles, both collectively and for any specific causal factors identified in response to Request 8.a;**

The current incident rates are based on field reports and legal records and are included in Action 7-7 on Att\_1\_GM disc in the folder labeled Q\_07\_07.

- h. The risk to motor vehicle safety that it poses, including the risk of fire in parked, unattended vehicles; and**

GM is continuing its investigation.

- i. The reports included with this inquiry.**

GM reviewed the NHTSA reports associated with this information request. With the limited information included with the reports, GM is unable at this time to determine which reports are related to the alleged condition.

\* \* \*

General Motors requested assistance and documents from suppliers in responding to items 7 and 8 and this response includes those documents received from suppliers.

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.

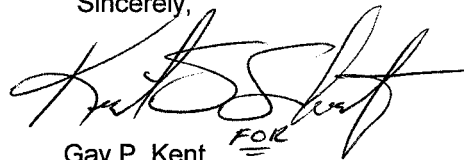
This response is based on searches of General Motors Corporation (GM) locations where documents determined to be responsive to your request would ordinarily be found. As a result, the scope of this search did not include, nor could it reasonably include, "all of its divisions, subsidiaries (whether or 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 1, 1998, 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,



Gay P. Kent  
Director

Product Investigations

Attachments

**N070035A COMPLETE  
EA07-008**

**GM CONFIDENTIALITY LETTER**

**GM CONFIDENTIALITY LETTER  
HAS BEEN REMOVED FROM THIS  
ATTACHMENT AND SUPPLIED TO  
THE OFFICE OF THE CHIEF COUNSEL**

**N070035A COMPLETE  
EA07-008**

**SUPPLIER CONFIDENTIAL LETTER**

**SUPPLIER CONFIDENTIAL LETTER  
HAS BEEN REMOVED FROM THIS  
ATTACHMENT AND SUPPLIED TO  
THE OFFICE OF THE CHIEF COUNSEL**

**N070035A COMPLETE  
EA07-008**

**ATTACHMENT "1"**

**GM NON-CONFIDENTIAL MATERIAL**



**N070035A COMPLETE  
EA07-008**

**ATTACHMENT "2"**

**GM CONFIDENTIAL MATERIAL**

**GM CONFIDENTIAL MATERIAL  
HAS BEEN REMOVED FROM THIS  
ATTACHMENT AND SUPPLIED TO  
THE OFFICE OF THE CHIEF COUNSEL**

**N070035A COMPLETE  
EA07-008**

**ATTACHMENT "3"**

**BEND ALL AUTOMOTIVE  
CONFIDENTIAL MATERIAL**

**BEND ALL AUTOMOTIVE  
CONFIDENTIAL MATERIAL  
HAS BEEN REMOVED FROM THIS  
ATTACHMENT AND SUPPLIED TO  
THE OFFICE OF THE CHIEF COUNSEL**

**N070035A COMPLETE**

**EA07-008**

**ATTACHMENT "4"**

**GM VIDEO (3 VHS video tapes)**

**NON-CONFIDENTIAL MATERIAL**