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NVS-212

February 22, 2006

FEB 24 P 4: 23

Thomas Z. Cooper, Chief  
Vehicle Integrity Division  
Office of Defects Investigation  
NHTSA Enforcement  
Room #5328  
400 Seventh Street, S.W.  
Washington, D.C. 20590

OFFICE OF DEFECTS  
INVESTIGATION

GM-684

NVS-212mbs  
PE05-065

Dear Mr. Cooper:

This letter is General Motors' (GM) response to your information request (IR); dated December 21, 2005, regarding allegations of brake lamp switch failures resulting in loss of brake lamp illumination (and resulting in constant brake lamp illumination), in 2005 MY Chevrolet Colorado and GMC Canyon vehicles manufactured by General Motors Corporation.

Your questions 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. Date of manufacture;
  - f. Date warranty coverage commenced; and
  - g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 2000, or a compatible format, entitled "PRODUCTION DATA."

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

MAKE	MODEL	2005MY
Chevrolet	Colorado	136,985
GMC	Canyon	38,149
	Total	176,144

TABLE 1 VEHICLE PRODUCTION

The production information requested in 1a-1g is provided on the in the Attachment 1 CD, in the folder labeled: "Response for Q1;" refer to the Microsoft Access 2000 file labeled PRODUCTION DATA. GM is providing the state where the vehicle was shipped in response to request 1g. For some of the subject vehicles, which have incomplete warranty files, the GM warranty system does not contain a warranty start date or state where the vehicle was shipped and therefore these fields are blank in the Microsoft Access 2000 file.



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, 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 vehicle, property damage claims, consumer complaints, or field reports;
  - d. Property damage claims; and
  - 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" and "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 could relate to the subject condition. GM has organized the records by the GM file number within each attachment.

TYPE OF REPORT	GM REPORTS	SUBCATEGORIES				
		CORRESPONDING TO NHTSA REPORTS	NUMBER WITH PROPERTY DAMAGE	NUMBER WITH CRASH	NUMBER WITH INJURIES/FATALITIES	NUMBER WITH FINES*
Owner Reports	2	0	0	0	0	0
Field Reports	8	0	0	0	0	0
Not-In-Suit Claims	0	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)	10	0	0	0	0	0
Total Vehicles with Reports (Unique VIN)	10	0	0	0	0	0

TABLE 2-1: REPORT BREAKDOWN

To date, GM's investigation of the alleged defect has not included an assessment of the cause(s) of each incident responsive to Request No. 2. Some incident reports may not contain sufficient reliable information to accurately assess cause. Assessments of other incidents (from lawsuits and claims) may be attorney work product and/or privileged. Therefore, information and documents provided in this response, if any, consist only of non-attorney work product and/or non-privileged material for incidents that have been investigated and assessed.

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

SOURCE SYSTEM	LAST DATE GATHERED
Corporate Central File	01/13/2006
Customer Assistance Center	01/08/2006
Technical Assistance Center	01/13/2006
Field Information Network Database (FINID)	01/12/2006
Company Vehicle Evaluation Program (CVEP)	01/13/2006
Field Product Report Database (FPRD)	01/12/2006
Legal / Employee Self Insured Services (ESIS) / Product Liability Claims and Lawsuits	01/05/2006

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 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA"

GM is providing the requested information in 3(a-l) in Attachment 1 CD, folder labeled "Response for Q3;" refer to Microsoft Access file named "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 Attachment 1 CD GM; folder labeled "Response for Q3," refer to the Microsoft Access file. 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 2000, or a compatible format, entitled "WARRANTY DATA."

The regular and extended warranty claims for the subject vehicles that may be responsive to this request, are summarized in Table 5-1 below. A summary of these warranty reports is provided in Attachment 1 CD; refer to the folder labeled, "Response for Q5."

MAKE/Model	2005 MY REGULAR WARRANTY	2005 EXTENDED WARRANTY	TOTAL
Chevrolet Colorado	1044	2	1046
GMC Canyon	228	0	228
Total	1272	2	1274

TABLE 5-1 WARRANTY 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
GM CARD -regular warranty	01/09/2008
Motors Insurance Corporation (MIC) - extended warranty	01/04/2008
Universal Warranty Corporation (UWC) - extended warranty	01/08/2008

TABLE 5-2: DATA SOURCES

GM searched the GM North America Claim Adjustment Retrieval Database (CARD-regular warranty), the Motors Insurance Corporation (MIC - extended warranty), and the Universal Warranty Corporation (UWC - extended warranty) databases to collect the warranty data for this response.

A summary of warranty claims that may relate to the subject condition is provided on the Attachment 1 CD, in the folder labeled Response to Q5; refer to the Microsoft Access 2000 file labeled "REQUEST NUMBER FIVE - WARRANTY DATA."

GM's warranty database does not contain the following information: vehicle owner's name or telephone number, replacement part number description, or customer concern statement. GM is providing a field labeled "Verbatim Text" in response to request 5K (dealer/technician comment). The verbatim text is an optional field in the GM warranty system for the dealer to enter any additional comments that may be applicable to the warranty claim. The verbatim text field is 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.

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 regular warranty, MIC and Universal Warranty Corporation (UWC) claims that may relate to the subject condition were collected by searching for the labor codes listed in Table 6-1 below. The list of trouble codes used during the search is included in Table 6-2 below.

LABOR CODE	DESCRIPTION:
N2440	Switch Stop Lamp- Replace
N2380	Switch Park Brake Lamp - Replace*
N2700	Switch Stop Lamp - Adjust

TABLE 6-1 LABOR CODES USED IN WARRANTY SEARCH

\*INCLUDES ONLY CLAIMS USING BRAKE SWITCH PART NUMBER 16188470

TROUBLE CODE	DESCRIPTION:
1D	Broken
1E	Burned
1H	Clogged/Restricted/Blocked
2E	Clearance - Excessive
2F	Clearance - Too Tight
2W	Loose
3A	Misadjusted/Misaligned
3D	Missing
3L	Out of Calibration
3X	Regulators Incorrectly
4X	Worn
6C	Component - Inoperative
6D	Component - Intermittent
6F	Component - Open
6G	Component - Shorted

TABLE 6-2 TROUBLE CODES USED IN WARRANTY SEARCH

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.

The subject vehicles are covered by a bumper-to-bumper new vehicle 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 customers' preference, up to 7 years from the date of purchase or up to a total of 100,000 vehicle miles. GM's warranty system does not contain information on the number of vehicles that have extended warranty coverage.

7. Produce copies of all service, warranty, and other documents that relate to, or 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, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that GM is planning to issue within the next 120 days.

GM has found three past service, warranty and/or other informational documents that may relate to the subject condition that have been issued to dealers, regional or zone offices, field offices, fleet purchasers or other entities.

The communications are included on the Attachment 1 CD, in the folder labeled "Response to Q7." The data collection was completed on January 16, 2008. The preceding information was collected from GM Service Operations.

GM is planning to issue a communication to dealers instructing them to replace the brake switch retainer anytime the brake switch is replaced. This communication will be issued by February 28, 2008, no draft version has been written to date.

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 performed by or for GM regarding the subject condition on the 2005 MY GMT 356 Colorado/Canyon vehicles. Documents and additional supporting information is included on the Attachment 1 CD, in the "Response to Q6" files.

<p><b>Action:</b> Component Validation <b>Start Date:</b> 10/2002 <b>End Date:</b> 5/2003 <b>Engineering Group:</b> GM Internal/External Electrical Components/Mallory Controls <b>Attachment:</b> Confidential Attachment 2 CD, Response 8-1A (Validation Documentation) <b>Description:</b> Brake switch validation test plan, procedures and reports. <b>Summary of Action:</b> The part meets all engineering performance requirements (e.g., Sub System Tech. Spec., Comp. Tech Spec., Solar, Validation). Reference page 2 of Mallory Controls Automotive Production Validation Plan and Report dated 5/22/03.</p>
<p><b>Action:</b> Warranty Parts Return Summary <b>Start Date:</b> 3/2004 <b>End Date:</b> 1/2005 <b>Engineering Group:</b> GM Warranty Parts Return Center/Mallory Controls <b>Attachment:</b> Attachment 1 CD, Response 8A (Warranty Return Report #1) <b>Description:</b> Warranty Returned Parts Listing - brake switches <b>Summary of Action:</b> Brake switches returned under warranty were analyzed for customer concerns and 80% were functional or no problem found.</p>
<p><b>Action:</b> Manufacturing Plant Visit <b>Start Date:</b> 12/2004 <b>End Date:</b> 12/2004 <b>Engineering Group:</b> GM Internal/External Electrical Components/Mallory Controls <b>Attachment:</b> Attachment 1 CD, Response 8B (trip report) <b>Description:</b> Investigative trip to Shreveport Assembly Plant <b>Summary of Action:</b> Misadjusted switches found in assembly plant</p>
<p><b>Action:</b> Manufacturing Plant Visit <b>Start Date:</b> 12/2004 <b>End Date:</b> 8/2005 <b>Engineering Group:</b> GM Internal/External Electrical Components/FlexNgate <b>Attachment:</b> Attachment 1 CD, Response 8C (trip report), Response 8D (Old PAD), Response 8E (New PAD) <b>Description:</b> Investigative trip to Shreveport Assembly Plant <b>Summary of Action:</b> Misadjusted switches found in assembly plant, PAD instructions not followed, PAD modified to clarify adjustment process.</p>
<p><b>Action:</b> Warranty Parts Return Report #2 <b>Start Date:</b> 1/2005 <b>End Date:</b> 1/2005 <b>Engineering Group:</b> GM Internal/External Electrical Components/Mallory Controls <b>Attachment:</b> Attachment 1 CD, Response 8F (Warranty Return Part Analysis) <b>Description:</b> Analysis report of returned brake switches <b>Summary of Action:</b> Indication that 7 of 11 switches were improperly adjusted.</p>

<p><b>Action:</b> Warranty Parts Return Report #3 <b>Start Date:</b> 2/2005 <b>End Date:</b> 2/2005 <b>Engineering Group:</b> GM Internal/External-Electrical Components/Mallory Controls <b>Attachment:</b> Attachment 1 CD, Response-BG (Warranty Return Part Analysis) <b>Description:</b> Analysis report of returned brake switches <b>Summary of Action:</b> Of the 13 switches analyzed all had contacts that got very hot and exhibited excessive contact material transfer.</p>
<p><b>Action:</b> Red X study on brake switches <b>Start Date:</b> 7/2005 <b>End Date:</b> 7/2006 <b>Engineering Group:</b> GM Warranty Engineering <b>Attachment:</b> Attachment 1 CD, Response BH (Red X report) <b>Description:</b> Developmental Red X study of warranty and returned brake switches. <b>Summary of Action:</b> Red-X is the melted &amp; deformed plunger ramp causing short plunger travel. Root cause not identified. Test not representative of production or design because the test used 16 amps the maximum rating for this switch, however, the current used in production and design is between 7-8 amps.</p>
<p><b>Action:</b> PRTS 189777 Switch - Stop Lamp - Customer Complaint: Stop lamps are inoperative or on all the time <b>Start Date:</b> 9/2005 <b>End Date:</b> Open <b>Engineering Group:</b> GM Engineering Mid Size truck Vehicle Integration/Warranty &amp; Vehicle Assembly/Vehicle Warranty Engineering <b>Attachment:</b> Attachment 1 CD, Response 8I (PRTS 189777) <b>Description:</b> Problem Resolution Tracking Report <b>Summary of Action:</b> The cathode plating thickness is one eighth to one tenth of the plating thickness on other high current switches. Determination made that this silver plating thickness should be increased to increase durability and proper conductivity in the switch. Root cause analysis continues.</p>
<p><b>Action:</b> Milford Proving Grounds Road Testing <b>Start Date:</b> 12/2005 <b>End Date:</b> 12/2005 <b>Engineering Group:</b> GM Internal/External Electrical Components/GM Proving Grounds <b>Attachment:</b> Attachment 1 CD, Response 8J (MPG Road Testing Report), Confidential Attachment 2 CD, Response 8K MPG Test Matrix <b>Description:</b> Switch activation on road system testing attempting to tease the switch <b>Summary of Action:</b> No unwanted switch activation occurring.</p>
<p><b>Action:</b> Milford Proving Grounds Current Trace Testing <b>Start Date:</b> 12/2005 <b>End Date:</b> 12/2005 <b>Engineering Group:</b> GM Internal/External Electrical Components/GM Proving Grounds <b>Attachment:</b> Attachment 1 CD, Response 8L (MPG Current Trace Testing Report) <b>Description:</b> Analysis of current flow through switch <b>Summary of Action:</b> Normal/expected current level and pattern.</p>
<p><b>Action:</b> Bulletin #PIT - (Dec 14, 2005) Engineering Investigation or Adjustment Procedure - Stop Lamp (Brake Lamp) Switch <b>Start Date:</b> 12/2005 <b>End Date:</b> Open <b>Engineering Group:</b> GM Internal/External Electrical Components Engineering <b>Attachment:</b> Attachment 1 CD, Response 8M (Bulletin PIT - Dec 14, 2005) <b>Description:</b> Bulletin to dealers requesting participation in Engineering Investigation, to acquire vehicles exhibiting condition before any repair or replacement of the brake switch. <b>Summary of Action:</b> Request continues to be open</p>
<p><b>Action:</b> Force Balance analysis of brake pedal <b>Start Date:</b> 12/2005 <b>End Date:</b> 12/2005 <b>Engineering Group:</b> GM Chassis Control Systems, Brakes &amp; Controls Engineering <b>Attachment:</b> Attachment 1 CD, Response 8N (GMT355 Brake Apply Force Balance) <b>Description:</b> Force balance measurement of GMT355 Brake pedal system. <b>Summary of Action:</b> No issues - minimum of 67N force keeps pedal from bouncing.</p>



<p><b>Action:</b> Analysis of Switch Contacts by Sherry laboratories <b>Start Date:</b> 1/2006 <b>End Date:</b> 1/2006 <b>Engineering Group:</b> Mallory Controls/Sherry Laboratories <b>Attachment:</b> Attachment 1 CD, Response 8O (Sherry Laboratories Analysis report) <b>Description:</b> Sherry Laboratories analyzed switch contacts for metallurgical content <b>Summary of Action:</b> The SEMEDS analysis detected copper in all six areas analyzed on both contacts.</p>
<p><b>Action:</b> GM Materials lab analysis of switch contacts of elemental content. <b>Start Date:</b> 1/2006 <b>End Date:</b> 1/2006 <b>Engineering Group:</b> GM Warren Materials Laboratory <b>Attachment:</b> Confidential Attachment 2 CD, Response 8P (GM Materials Laboratory Analysis report 20154 Preliminary Data II) <b>Description:</b> GM Laboratories analyzed switch contacts for metallurgical content <b>Summary of Action:</b> Some indication of possible contamination &amp; possible contact plating issue.</p>
<p><b>Action:</b> Assessment of the contamination risk at Mallory's Juarez Plant <b>Start Date:</b> 1/2006 <b>End Date:</b> 1/2006 <b>Engineering Group:</b> GMM Supplier Quality <b>Attachment:</b> Attachment 1 CD, Response 8Q (GM Mexico Supplier Quality Mallory Plant visit report) <b>Description:</b> GM Mexico Supplier Quality assessed the risk of contamination at Mallory's Juarez Plant. <b>Summary of Action:</b> No contamination found.</p>
<p><b>Action:</b> GM Materials lab analysis of switch contacts of elemental content and accelerated test procedure. <b>Start Date:</b> 1/2006 <b>End Date:</b> 2/2006 <b>Engineering Group:</b> GM Warren Materials Laboratory <b>Attachment:</b> Confidential Attachment 2 CD, Response 8R GM Materials Laboratory Analysis report (20287) and Accelerated Test Procedure. <b>Description:</b> GM Laboratories analyzed switch contacts for metallurgical content <b>Summary of Action:</b> 10 samples - New switches no exposure before accelerated test, 2 different build batches. Little difference in appearance seen between the anodes from each group and between the cathodes from each group. Little difference in spectra seen between the anodes from each group and between the cathodes from each group. Little difference in spectra was seen between the light and dark areas on blue cathode #2. No evidence of contamination found.</p>
<p><b>Action:</b> Status review with Chief Engineer <b>Start Date:</b> 1/2006 <b>End Date:</b> 1/2006 <b>Engineering Group:</b> GM Internal/External Electrical Components Engineering <b>Attachment:</b> Attachment 1 CD, Response 8S (GM Status review report) <b>Description:</b> The issue and testing/analysis/investigation related to the alleged defect was discussed with the Colorado/Canyon Chief Engineer <b>Summary of Action:</b> Root cause analyses to continue, examine customer vehicles that have had multiple warranty repairs, analyze vehicle related brake system issues.</p>
<p><b>Action:</b> In-vehicle GMT355 Brake Switch evaluation/analysis request to Mallory Controls on GM provided Canyon vehicle. <b>Start Date:</b> 1/2006 <b>End Date:</b> 1/2006 <b>Engineering Group:</b> GM Internal/External Electrical Components/Mallory Controls <b>Attachment:</b> Attachment 1 CD, Response 8T (Vehicle Testing request) <b>Description:</b> Request for testing, analysis and/or measurement by GM to Mallory Controls. <b>Summary of Action:</b> Mallory is proceeding with requested testing.</p>
<p><b>Action:</b> Switch Plate Angularity <b>Start Date:</b> 1/2006 <b>End Date:</b> 1/2006 <b>Engineering Group:</b> GM Chassis Control Systems, Brakes &amp; Controls Engineering/Flexgate <b>Attachment:</b> Attachment 1 CD, Response 8U ( Switch Plate Angularity Documents) <b>Description:</b> Supplier study of angle of switch mounting plate and plunger plate <b>Summary of Action:</b> Plates are within parallel limits.</p>

<p><b>Action:</b> GM Materials lab analysis of switch contacts of elemental content. <b>Start Date:</b> 2/2006 <b>End Date:</b> 2/2006 <b>Engineering Group:</b> GM Warren Materials Laboratory <b>Attachment:</b> Confidential Attachment 2 CD, Response 8V (GM Materials Laboratory Analysis report 20382) <b>Description:</b> GM Laboratories analyzed switch contacts for metallurgical content <b>Summary of Action:</b> 10 samples – after accelerated test 2 different build batches. Significant pitting found on the anode contact surfaces. The cathodes of these samples showed evidence of material transfer from the anode. The contact surfaces of sample Black 4 show evidence of cathode melting with significant material transfer to the anode.</p>
<p><b>Action:</b> GM Materials lab analysis of switch contacts of elemental content. <b>Start Date:</b> 2/2006 <b>End Date:</b> 2/2006 <b>Engineering Group:</b> GM Warren Materials Laboratory <b>Attachment:</b> Confidential Attachment 2 CD, Response 8W (GM Materials Laboratory Analysis report 20473) <b>Description:</b> GM Laboratories analyzed switch contacts for metallurgical content <b>Summary of Action:</b> Contact surface appearance was similar to that found on samples submitted on STR 20382. Pitting and melting found on the anode contact area of all samples. The cathodes of these samples showed evidence of material transfer. Energy Dispersive Spectra (EDS) gathered at 20KV from damaged areas of the contact surfaces contained strong Ag, C and O peaks. Sn peaks were present in two of these spectra. Definite Sn peaks were present in the areas of surface melting and pitting. Micro structural appearance of the anode was uniform across the polished cross section. No evidence of a coating layer was found. The SnO<sub>2</sub> appeared to be evenly dispersed within the Ag matrix.</p>
<p><b>Action:</b> Investigation Summary <b>Start Date:</b> 12/2005 <b>End Date:</b> Continuing <b>Engineering Group:</b> GM Internal Product Investigations <b>Attachment:</b> Confidential Attachment 2 CD, Response 8X (Investigation Summary) <b>Description:</b> GM Engineering Internal Product Investigations investigation of inoperative or continuously illuminated brake lamps. <b>Summary of Action:</b> Open</p>
<p><b>Action:</b> Future Actions <b>Start Date:</b> 2/2006 <b>End Date:</b> Continuing <b>Engineering Group:</b> GM Internal/External Electrical Components Engineering <b>Attachment:</b> No Document <b>Description:</b> On going investigation activities including acquisition of customer vehicles with multiple warranty repairs for full vehicle analysis, future testing to identify root cause of melting and deformed internal switch plunger. <b>Summary of Action:</b> Open</p>

9. Describe all modifications or changes made by, or on behalf of, GM in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:
- The date or approximate date on which the modification or change was incorporated into vehicle production;
  - A detailed description of the modification or change;
  - The reason(s) for the modification or change;
  - The part numbers (service and engineering) of the original component;
  - The part number (service and engineering) of the modified component;
  - Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;

- g. When the modified component was made available as a service component; and
- h. Whether the modified component can be interchanged with earlier production components.

Also, provide the above information for any modification or change that GM is aware of which may be incorporated into vehicle production within the next 120 days.

Summary documents of the component modifications, assembly information and process changes responsive to items 9 a-h, and the modifications that may be incorporated into vehicle production within the next 120 days, are included on the Attachment 2 CD GM Confidential; refer to the folder labeled "Response to Q9."

**10. Produce one of each of the following:**

- a. Exemplar samples of each design version of the subject component;
- b. Engineering drawings of each design version of the subject component;
- c. Field return samples of the subject component exhibiting the subject failure mode; and
- d. Any kits that have been released, or developed, by GM for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

Enclosure 10 contains, (a) an exemplar sample of the of the design version of the subject component, and (c) field return samples of the subject component exhibiting the subject failure mode. GM has not developed any kits for use in service repairs of the subject component that relates to the subject condition in the subject vehicles.

The (b) Engineering drawing of the subject component is contained in the Attachment 2 CD GM Confidential in the folder labeled "Response to Q10" attachment.

**11. State the number of each of the following that GM has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales):**

- a. Subject component; and
- b. Add any further requests or delete all, including requests for similar or substantially similar components; and
- c. Any kits that have been released, or developed, by GM for use in service repairs to the subject component/assembly.

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles of which GM is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

An electronic summary table of the requested service part information for the subject component is provided on the attachment 1 CD, in the folder labeled "Response to Q11;" refer to the Microsoft Excel file. GM does not offer any kits that have been released or developed for use in service repairs specifically related to the subject condition.

These sales numbers represent sales to dealers in the US and Canada. This data has limited analytical value in analyzing the field performance of a motor vehicle component because the records do not contain sufficient information to establish the reason for the part sale. It is not

possible from this data to determine the number of these parts that have been installed in the subject vehicles or the number remaining in dealer or replacement part supplier inventory.

This table contains service part numbers, part description, part usage information including the GM vehicles that contain the identical component, part sales figures by month and calendar year, and the supplier's name and address, contact name and phone number. The General Motors Service Parts System does not contain a title of a contact person for each component and is therefore unable to provide this information.

**12. 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 the 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 "actions" detailed in response to item-8 above, that have been and are being conducted by General Motors to evaluate and assess the alleged defect, indicate that some of the brake switches installed in the subject vehicles may exhibit;

- (1) a condition (failure mode) that can result in loss of brake lamp illumination, or
- (2) a condition (failure mode) that can result in constant brake lamp illumination.

GM continues to test and analyze the subject component to identify root cause of both these conditions.

- a. The potential causal or contributory factors identified to date include the following:
  1. Improperly adjusted brake switch.
    - If the failure to properly adjust the brake switch results in an over adjusted switch (switch adjusted too far into the retainer) the brake lamps may be delayed in illuminating beyond the onset of brake application.
    - If failure to properly adjust the brake switch results in under adjustment (switch not seated far enough into the retainer) may result in brake lamps that are continuously illuminated.
    - Under adjustment may also contribute to switch contact teasing (intermittent contact of short duration), resulting in increased internal heat, a sticking switch and potential failure of the brake lamps to illuminate.
  2. Inadequate silver plating thickness of the brake switch cathode (stationary contact).
    - If the silver plating on the brake switch cathode contact is not thick enough the contacts may develop exposed copper. If the exposed copper oxidizes it results in higher resistance, higher temperatures, a sticking switch and potential failure of the brake lamps to illuminate. This contributory factor may also result in constant illumination of the brake lamps; however, this outcome is less likely.
  3. Internal Switch Contamination.
    - If the brake switches become contaminated during the process of manufacturing the switch, shipping and/or during vehicle assembly the contaminants may contribute to higher resistance at the switch contacts, higher temperatures, a

sticking switch and potential failure of the brake lamps to illuminate. This contributory factor may also result in constant illumination of the brake lamps; however, this outcome is less likely.

4. Damaged brake switch retainer during vehicle assembly.

- A damaged brake switch retainer may not over time maintain the switch position, resulting in an under adjusted brake switch. Under adjustment may contribute to switch contact teasing (intermittent contact of short duration), resulting in increased internal heat, a sticking switch and potential failure of the brake lamps to illuminate.

b. The failure mechanisms:

Contributory factors 2 & 3 (Oxidation or Contamination) contribute to higher resistance at the anode and cathode contacts inside the switch. The higher resistance can result in elevated temperatures at the contacts. A rapid and repeated opening and closing of the switch contact, known as teasing, may also contribute to elevated temperatures at the contacts.

The resulting higher temperatures from one or more of the above mechanisms may cause either:

1. The contact spring terminal inside the switch to melt a divot in the switch plunger over time. When cooled, the contact spring terminal may then stick to the plunger and not allow the anode and cathode contacts to close when the brake is applied. Depending on the depth of the melted divot into the switch plunger it can also cause the anode and cathode contacts to stick in the closed position.
2. The back side of the anode (movable contact) to touch the switch housing when the brake pedal is in the at rest position. When experiencing higher temperatures in this condition, the contact may melt a small amount of the housing material which then can hold the contact apart when the material cools.

Contributory factors 1 & 4 (Under Adjusted Switch or Damaged Retainer) may contribute to the same failure mechanisms described above, higher temperatures at the anode and cathode contacts if the contact experience a rapid and repeated opening and closing of the switch contacts. The resulting higher temperatures can then cause either failure of the brake lamps to illuminate or the brake lamps to be constantly illuminated.

c. The failure modes:

The two failure modes related to the contributing factors identified in 12a may in some subject vehicles be; (1) failure of the brake lamps to illuminate and (2) brake lamps illuminated constantly.

d. Risk to motor vehicle safety:

General Motors continues to investigate the subject component and the effect of the alleged defect on vehicle performance to identify and assess the risk to motor vehicle safety.

e. Warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring:

Individuals outside the vehicle may notice that the brake lamps did not illuminate and advise the driver of the subject vehicle. There would be no indication to the driver from inside the subject vehicle that the alleged defect was occurring.

f. The reports included with this inquiry:

General Motors' assessment of the 3 reports included with this inquiry indicates that the condition reported may have resulted from the contributory factors noted above. GM has not examined the brake switches that are the subject of the reports; therefore, GM has not identified the specific contributory factors related to each of the alleged brake switch failures.

\* \* \*

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 2000, 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



U.S. Department  
of Transportation  
**National Highway  
Traffic Safety  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

*Original  
Received  
Jan. 3 2006*

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Ms. Gay P. Kent, Director  
Product Investigations  
General Motors Corporation  
Mail Code 480-111-E18  
30200 Mound Road  
Warren, MI 48090-9010

DEC 21 2005

NVS-212mbs  
PE05-065

Dear Ms. Kent:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened a Preliminary Evaluation (PE05-065) to investigate allegations of brake lamp switch fails resulting in loss of brake lamp illumination in MY 2005 Chevrolet Colorado and MY 2005 GMC Canyon manufactured by General Motors Corporation, and to request certain information.

This office has received 3 reports of brake lamp switch failure resulting in loss of brake lamp illumination in MY 2005 Chevrolet Colorado and MY 2005 GMC Canyon vehicles. An electronic copy of each report has been sent to your office.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject vehicles:** all MY 2005 Chevrolet Colorado and MY 2005 GMC Canyon manufactured for sale or lease in the United States.
- **Subject component:** all brake lamp switch manufactured on the subject vehicles.
- **GM:** General Motors Corporation, all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including 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 2000, were involved in any way with any of the following related to the alleged defect in



DOT AUTO SAFETY HOTLINE  
888-DASH-2-DOT  
888-327-4236

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.
- **Alleged defect:** brake lamp switch fails resulting in loss of brake lamp illumination.
  - **Document:** "Document(s)" is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by GM, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by GM or not. If a document is not in the English language, provide both the original document and an English translation of the document.



- **Other Terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as GM has previously provided a document to ODI, GM may produce it again or identify the document, the document submission to ODI in which it was included and the precise location in that submission where the document is located. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Please repeat the applicable request verbatim above each response. After GM's response to each request, identify the source of the information and indicate the last date the information was gathered.

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. Date of manufacture;
  - f. Date warranty coverage commenced; and
  - g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 2000, or a compatible format, entitled "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, 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 vehicle, property damage claims, consumer complaints, or field reports;

- d. Property damage claims; and
- 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" and "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.

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 2000, or a compatible format, entitled "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.
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 2000, or a compatible format, entitled "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.
7. Produce copies of all service, warranty, and other documents that relate to, or 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, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that GM is planning to issue within the next 120 days.
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.

9. Describe all modifications or changes made by, or on behalf of, GM in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:
  - a. The date or approximate date on which the modification or change was incorporated into vehicle production;
  - b. A detailed description of the modification or change;
  - c. The reason(s) for the modification or change;
  - d. The part numbers (service and engineering) of the original component;
  - e. The part number (service and engineering) of the modified component;
  - f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
  - g. When the modified component was made available as a service component; and
  - h. Whether the modified component can be interchanged with earlier production components.

Also, provide the above information for any modification or change that GM is aware of which may be incorporated into vehicle production within the next 120 days.

10. Produce one of each of the following:
  - a. Exemplar samples of each design version of the subject component;
  - b. Engineering drawings of each design version of the subject component;
  - c. Field return samples of the subject component exhibiting the subject failure mode; and
  - d. Any kits that have been released, or developed, by GM for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.
11. State the number of each of the following that GM has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales):
  - a. Subject component; and
  - b. Add any further requests or delete all, including requests for similar or substantially similar components; and
  - c. Any kits that have been released, or developed, by GM for use in service repairs to the subject component/assembly.

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles of which GM is aware that contain the identical component, whether

installed in production or in service, and state the applicable dates of production or service usage.

12. Furnish GM's assessment of the alleged defect in the subject vehicle, 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 the 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.

This letter is being sent to GM pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports and the production of things. It constitutes a new request for information. GM's failure to respond promptly and fully to this letter could subject GM to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) Please note that maximum civil penalties under 49 U.S.C. § 30165 have increased as a result of the recent enactment of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, Public Law No. 106-414 (signed November 1, 2000). Section 5(a) of the TREAD Act, codified at 49 U.S.C. § 30165(b), provides for civil penalties of up to \$5,000 per day, with a maximum of \$16,050,000 for a related series of violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. See 49 CFR 578.6 (as amended by 69 Fed. Reg. 57864 (Sept. 28, 2004)). This includes failing to respond to ODI information requests.

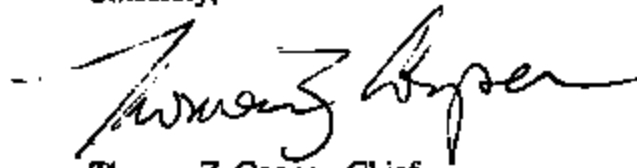
If GM cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, GM does not submit one or more requested documents or items of information in response to this information request, GM must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

GM's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by February 22, 2006. Please refer to PB05-065 in GM's response to this letter. If GM finds that it is unable to provide all of the information requested within the time allotted, GM must request an extension from me at (202) 366-5218 no later than five business days before the response due date. If GM is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information GM then has available, even if an extension has been granted.

If GM claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, GM must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, as amended (69 Fed. Reg. 21409 et seq; April 21, 2004), to the Office of Chief Counsel (NCC-113), National Highway Traffic Safety Administration, Room 5219, 400 Seventh Street, S.W., Washington, D.C. 20590. GM is required to submit two copies of the documents containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted.

If you have any technical questions concerning this matter, please call Mark Swanson of my staff at (202) 366-7020.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Z. Cooper". The signature is fluid and cursive, with a long horizontal stroke extending to the left.

Thomas Z. Cooper, Chief  
Vehicle Integrity Division  
Office of Defects Investigation

**GM684  
PE05-065**

**GM CONFIDENTIALITY LETTER**

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

**GM684**  
**PE05-065**

**ATTACHMENT "1"**

**GM NON-CONFIDENTIAL MATERIAL**



**GM684  
PE05-065**

**ATTACHMENT "2"  
GM CONFIDENTIAL MATERIAL**

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