



GENERAL MOTORS NORTH AMERICA
Structure & Safety Integration

March 22, 2005

RECEIVED
 NVC-212

2005 MAR 24 P 2:17

Kathleen C. DeMeter, Director
 Office of Defects Investigation
 NHTSA Enforcement
 Room #5326
 400 Seventh Street, S.W.
 Washington, D.C. 20590

OFFICE OF DEFECTS
 INVESTIGATION

GM-664A

NVS-212mjl
 EA04-035

Dear Ms. DeMeter:

This letter is General Motors' (GM) response to your information request (IR), dated January 28, 2005, regarding alleged turn signal/daytime running lamp failures in 2003-2004 model year (MY) Saturn Ion coupe vehicles. The upgrade IR has expanded the model years for the subject vehicles to include 2005 MY and has limited the subject vehicles to the coupe body style.

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."

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

MAKE/ MODEL/ BODY TYPE	2003 MY	2004 MY	2005 MY*	TOTAL
Saturn Ion Coupe	10,969	27,674	7,447	46,110

TABLE 1 VEHICLE PRODUCTION

* Data through January 31, 2005

The production information requested in 1a-1g is provided on the CD labeled Attachment 1; refer to the Microsoft Access 2000 file in the folder labeled "Response to Q1". 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.

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;
- 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 "f," 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 "e" 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.

The number of complaints listed below reflects the reports that GM has received since the response to PE04-061/GM664, dated October 15, 2004. Table 2-1 below summarizes records that could relate to the subject condition.

TYPE OF REPORT	COUNT (INCLUDING DUPLICATES)	GM REPORTS	LOCATION OF REPORTS (ATTACHMENT)	NUMBER WITH PROPERTY DAMAGE	NUMBER WITH CRASH	NUMBER WITH INJURIES/FATALITIES*
Owner Reports	23	23	2A	0	0	0
Field Reports & Technical Assistance System Reports	18	18	2B	0	0	0
Not-in-Suit Claims	0	0	N/A	0	0	0
Subrogation Claims	0	0	N/A	0	0	0
Third Party Arbitration Proceedings	0	0	N/A	0	0	0
Product Liability Lawsuits	0	0	N/A	0	0	0
Total (Including Duplicates)	41	41	N/A	0	0	0
Total (Excluding Duplicates)	35	35	N/A	0	0	0

TABLE 2-1: REPORT BREAKDOWN

N/A Not Applicable

* GM is not aware of any injuries or fatalities related to the subject condition.

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

SOURCE SYSTEM	LAST DATE GATHERED
Corporate Central File	2/16/2005
Customer Assistance Center	1/31/2005
Technical Assistance Center	1/31/2005
Field Information Network Database (FIND)	2/17/2005
Company Vehicle Evaluation Program (CVEP)	2/14/2005
Captured Test Fleet (CTF)	2/14/2005
Early Quality Feedback (EQF)	2/14/2005
Field Product Report Database (FPRD)	2/17/2005
Legal / Employee Self Insured Services (ESIS)	2/03/2005

TABLE 2-2: DATA SOURCES

In response to the additional information requested for items 2c-f, GM is providing copies of the documents related to each item within the scope of Request No. 2. These documents are provided electronically. See the response to Request No. 4.

Assessments of some incidents (from lawsuits and claims) may be attorney work product and/or privileged. Therefore, information and documents provided in this response consist only of non-attorney work product and/or non-privileged material for incidents that have been reported to GM. Assessments are otherwise included if recorded in some retrievable form in the case record or as part of an investigation—GM has not attempted to search for other assessments, including those that were not recorded. Many reports lack sufficient information to characterize the incident or to assess causal and contributory factors. Assessments were not found for each report.

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:
- GM's file number or other identifier used;
 - The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
 - Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
 - Vehicle's VIN;
 - Vehicle's make, model and model year;
 - Vehicle's mileage at time of incident;
 - Incident date;
 - Report or claim date;
 - Whether a crash is alleged;
 - Whether a fire is alleged;
 - Whether property damage is alleged;
 - Number of alleged injuries, if any; and
 - Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

An electronic summary of the records included in Request No. 2 is provided on the Attachment 1 CD; refer to the Microsoft Access 2000 folder labeled "Response to Q3".

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 identified in Request No. 2 are provided on the Attachment 1 CD; refer to the Microsoft Access 2000 folder labeled "Response to Q3". The records are viewable by accessing the "Document" and "Attachments" columns.

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 "SUBJECT VEHICLE WARRANTY DATA."

GM is providing an update of the regular warranty claims and extended warranty claims for the subject vehicles that may be responsive to this request. These counts are summarized by model year in Tables 5-1 and 5-2. A summary of these warranty claims is provided on the Attachment 1 CD; refer to the folder labeled "Response to Q5". Some of the warranty claims included on the CD may not be related to the alleged defect as explained in response to Request No. 6. There were no Universal Warranty Corporation (UWC) claims found.

GM's warranty database does not contain the vehicle owner's name or telephone number. Only some warranty records include the replacement part numbers, part descriptions, and customer concern code descriptions. 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.

Some of the VINs have multiple entries for various labor codes. The warranty claims reflect the number of labor operations used by dealers, which may be more than the number of actual visits to dealers for repairs.

SATURN ION COUPE	2003MY	2004MY	2005MY
Total	196	305	4

TABLE 5-1: REGULAR WARRANTY CLAIMS

SATURN ION COUPE	2003MY	2004MY	2005MY
Total	0	1	0

TABLE 5-2: EXTENDED WARRANTY CLAIMS

The source of the requested information and the last date the search was conducted is shown in Table 5-3 below.

SOURCE SYSTEM	LAST DATE GATHERED
GM Saturn Field Product Reporting (FPR- regular warranty)	1/31/2006
Motors Insurance Corporation (MIC - extended warranty)	2/23/2005

TABLE 5-3: DATA SOURCES

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. Provide a table showing all GM make, model and model year vehicles that use a combination DRL/turn signal feature. Also indicate on that table by make, model and model year vehicle, any and all warranty data collection systems that allow identification of warranty claims specific to the components of turn signal and/or DRL. Provide a description of the warranty data collection system for all warranty systems serving those vehicles shown in the table and the differences in those systems that affect the ability to analyze warranty data for the alleged defect.

Table 6-1 below indicates the warranty data collection systems that allow for identification of warranty claims specific to the park and turn signal bulb replace. The Saturn warranty system provided data for all models and model years shown on Table 6-2. For the CARD and MIC warranty systems, dealers were instructed to use the general labor code for exterior bulb replace from approximately January 2001- mid 2004. Warranty claims may exist in limited numbers for the CARD and MIC databases with the specific turn signal/ DRL labor codes since the codes were not canceled.

While GM covers bulbs under the standard warranty policy, it should be noted that bulbs are considered a wear out component and are not likely to be covered by an extended warranty contract. Also, see the discussion of the limitations of the warranty databases as an analysis tool.

The Universal Warranty Corporation (UWC- extended warranty) allows for identification of warranty claims specific to the park and turn signal socket replace. CARD and MIC have a general exterior socket replace.

MAKE	WARRANTY DATA COLLECTION SYSTEM
Saturn vehicles	GM Saturn Field Product Reporting (FPR- regular warranty) Optional: Motors Insurance Corporation (MIC -extended warranty)
All other GM vehicles	GM North America Claim Adjustment Retrieval Database (CARD-regular warranty) Optional: Motors Insurance Corporation (MIC- extended warranty)

TABLE 6-1: WARRANTY DATA COLLECTION SYSTEMS FOR VEHICLES ON TABLE 6-2

Table 6-2 below shows the GM vehicles from 1995-2005 MY that use the combination turn signal/DRL.

Make	Model	95MY	96MY	97MY	98MY*	99MY*	00MY*	01MY*	02MY*	03MY*	04MY*	05MY
Buick	Century			X	X	X	X	X	X	X	X	X
Buick	Regal			X	X	X	X	X	X	X	X	
Buick	Terraza											X
Cadillac	GTS									X	X	X
Cadillac	SRX										X	X
Cadillac	STS											X
Cadillac	XLR										X	X
Chevrolet	Camaro			X	X	X	X	X	X			
Chevrolet	Cobalt											X
Chevrolet	Colorado										X	X
Chevrolet	Corvette			X	X	X	X	X	X	X	X	X
Chevrolet	Express									X	X	X
Chevrolet	Malibu										X	X
Chevrolet	Uplander											X
Chevrolet	Venture			X	X	X	X	X	X	X	X	X
GMC	Canyon										X	X
GMC	Savana									X	X	X
Oldsmobile	Intrigue			X	X	X	X	X	X			
Oldsmobile	Silhouette			X	X	X	X	X	X	X	X	
Pontiac	Firebird			X	X	X	X	X	X			
Pontiac	G6											X
Pontiac	Grand Prix										X	X
Pontiac	Montana			X	X	X	X	X	X	X	X	X
Saturn	ION									X	X	X
Saturn	Relay											X

TABLE 6-2: 1995-2005MY GM VEHICLES THAT USE A COMBINATION TURN SIGNAL/DRL

* There are a limited amount of claims for the park and turn signal bulb replace labor codes for these model years. From approximately January 1, 2001- mid 2004 dealers were directed to use the general exterior lamp replace labor code.

GM is providing descriptions of the CARD, FPR, MIC, and UWC warranty data systems which serve those vehicles shown in Table 6-2 above. As previously stated in response to Request No. 5, the warranty data provided has limited analytical value in analyzing the field performance of a motor vehicle component.

The discussion below explains the characteristics of the CARD warranty database. Following this discussion is a specific example that relates to this investigation.

CARD Warranty Database- General system characteristics:

1. The CARD warranty system is basically a data warehouse. It receives data from the warranty reimbursement system (WINS-Warranty Information Network System) which processes claims from our dealers for reimbursement of parts and labor costs incurred in performing warranty service for our customers. The tool used to analyze the data in CARD is called QWIK (Quality with Information and Knowledge).
2. The WINS system allows dealers to enter any labor code to receive reimbursement for labor costs. A labor code has an associated time for the repair. Different labor codes have varying times associated with them. Based upon the repair, dealers are to select the most appropriate Labor Operation as published in the GM Labor Time or Service Bulletin.

3. The WINS system allows dealers to enter as many codes as desired to receive reimbursement for parts and labor costs. The WINS system can not restrict this, however, the GM Policies and Procedures Manual requires the dealer to submit the labor operation that best describes the repair. The person who enters the claim is not the technician who performed the repair.
4. The WINS system does not require that a part number is entered. Dealers may enter a miscellaneous code to get paid for warranty parts. Not all repairs require a claim.
5. WINS checks part number compatibility (by part group) to the labor operation to ensure accuracy.
6. Due to the service structure, a component may not be available and the entire assembly may be replaced.
7. The WINS system does not require dealers to enter specific details of the problem or the repair. Thus, the warranty records do not contain sufficient information to establish the reported problem or confirm how the problem was remedied. Dealership records contain information based on the requirements of the GM Policies and Procedures Manual.
8. The WINS system does not require dealers to return parts. The condition of the part at the time of the warranty correction is unknown. Note: GM may request parts to be returned for a specific issue or time period to provide engineering with field returns for analysis. Dealers are required to hold parts for 14 days after payment.
9. The data collected is under the terms of the warranty contract- typically this is 3 years/36,000 miles, whichever occurs first, for most GM vehicles and only for work performed by or through the dealership service department. Cadillac vehicles have 4 years/50,000 miles coverage.
10. Repairs made under goodwill are often done to retain customer loyalty, although there may have been issues regarding lack of proper maintenance or procedure.
11. Non-warranty dealer repairs (customer pays) are not entered in the warranty system. Policy adjustments are made on a case-by-case basis. MIC service contract claims are captured.
12. The warranty policy does not include normal wear out items. Wear out items like seal covers and tires are covered for defects. The warranty policy does not include normal maintenance items.
13. The labor codes available vary across model years and vehicle types. Times can vary by vehicle type and equipment.
14. Currently, the data that is available on-line for analysis in the CARD system utilizing the QWIK tool is 1999-2006 MY. Currently, archived warranty claim data is available for 1994-1998 MY, however, analysis must be done manually. The data is purged according to the current information retention guidelines. CARD maintains 10 years worth of data and WINS maintains 7 years of data, unless there are litigation holds.
15. QWIK data is used as a feedback tool and not a root cause analysis tool acknowledging the system limitations noted above.

EXAMPLE:

Using the front turn signal/DRL inoperative situation as a specific example, the logical choices for labor codes would be the "Bulb- Park & Turn Signal Lamp-Replace" labor codes. Choosing these labor codes should focus on the subject component.

- There are 4 labor codes in the WINS system (shown in the table below) that are appropriate for the front turn signal/DRL bulb replacement. The labor codes that are available in the system may vary by vehicle and model year.

N0680	Bulb,Right-Park & Turn Signal Lamp-Replace
N0681	Bulb,Left-Park & Turn Signal Lamp-Replace
N0686	Bulb,One-Park & Turn Signal Lamp-Replace
N0687	Bulb,1/All-Park & Turn Signal Lamp-Replace

There are at least 20 other labor codes that begin with the word "Bulb" for various other bulb replacements that could be chosen. The table below lists a couple of examples. The first labor code

is a general code and can be used for any exterior bulb replace (headlamp, turn signal, DRL, fog, tail lights, side markers). A dealer may choose any of the labor codes.

N0528	Bulb, Lamp Exterior Replace
N0760	Bulb, Right-Stop, Tail & Turn Lamp-Replace

- As part of the diagnostic/repair process, the dealer may choose a number of actions to determine the cause. The dealer may replace numerous parts ranging from the bulb, socket, fuses, wiring harness, hazard relay, turn signal relay, and headlamp assembly. Considering all the options in the diagnostic process, nearly 30 additional labor codes may be used by a dealer for the front turn signal/DRL inoperative condition.
- Considering the turn signal/DRL is incorporated in the headlamp assembly for certain vehicles, there may be instances where it may be necessary to replace the entire assembly. However, there are reported instances where the headlamp assembly was replaced instead of the bulb for a burnt out bulb. Including the "headlamp assembly-replace" labor codes in a warranty search would pull in claims for other issues, such as headlamp water leaks or cracked lenses. The warranty counts would not accurately reflect the magnitude of the turn signal/DRL inoperative issue.

For the reasons listed above, labor codes selected for a warranty search may include claims for repairs that are unrelated to the alleged defect. For this reason, the disclaimer that "the warranty data provided has limited analytical value in analyzing the field performance of a motor vehicle component" is included in response to the warranty information request.

SATURN FPR Warranty Database- General system characteristics:

In general, the points made for the CARD system also apply to the FPR system. However, the FPR system supports only Saturn vehicles. The data comes from the Retail Reimbursement Claims Validation System and the analysis tools available are QWIK or FPR. The Saturn FPR system provides more flexibility and options for searching the data. For example, warranty claims may be searched by labor code, part number, and/or keyword text mining in the comments field since dealer technicians enter this information more frequently.

MOTORS Insurance Corporation (MIC - extended warranty) Warranty Database- General system characteristics:

The MIC warranty database operates the same as the CARD system. The data is limited to the parts covered by the extended warranty policy. The turn signal/DRL socket would be covered. The bulb with no other issues would be considered a wear-out item.

UNIVERSAL Warranty Corporation (UWC - extended warranty) Warranty Database- General system characteristics:

The UWC warranty database system is limited to parts covered by the extended warranty policy. The turn signal/DRL lamp socket is covered and the bulb is not. The system utilizes unique loss codes. The loss codes are four digit codes with the first two digits denote various vehicle systems (engine, electrical, etc.) and the last two digits denote the part. Responsive claims may be identified by this code and when available, repair comments. There are a limited number of dealerships that offer this extended insurance.

7. For those make, model and model year vehicles identified in Request No. 6 above (not including the subject vehicles) that are served by a warranty system that collects claims data specific for turn signal and/or DRL, state, by make, model, model year and vehicle population (i.e., the number of vehicles that GM has manufactured for sale or lease in the United States), 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 all MY 1995 through 2006 GM vehicles (peer vehicles) that use a combination DRL/turn signal feature: 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. Make, model and model year (NOTE: this is a new item being requested that is not requested in Request No. 5);
- d. VIN;
- e. Repair date;
- f. Vehicle mileage at time of repair;
- g. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- h. Labor operation number;
- i. Problem code;
- j. Replacement part number(s) and description(s);
- k. Concern stated by customer; and
- l. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "PEER VEHICLE WARRANTY DATA."

As stated in response to Request No. 6, for the CARD and MIC warranty systems, dealers were instructed to use the general labor code for exterior bulb replace from the start of 2001 MY through mid-calendar year 2004. The Saturn warranty system provided data for all models and model years shown on Table 6-2. Some warranty claims may exist in the CARD and MIC databases with the specific turn signal/ DRL labor codes since the codes were not canceled. For this reason, warranty data for the bulb replace-park and turn signal labor codes for model years affected by this change (1998-2004MY), except Saturn, will not be a true reflection of occurrences.

GM is providing the regular warranty claims for 1997- 2005 MY models with the turn signal/DRL available in the CARD warranty database. The claims are provided in the folder labeled "Response to Q7" on the Attachment 1CD, see the file labeled "Peer Vehicle Warranty Data". The vehicle populations are provided in the folder labeled "Response to Q7" on the Attachment 1CD, see the file labeled "Production Table-Peer Vehicles".

GM's warranty database does not contain the vehicle owner's name or telephone number. Only some warranty records include the replacement part numbers, part descriptions, and customer concern code descriptions. GM is providing a field labeled "Verbatim Text" in response to request 7k (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.

SOURCE SYSTEM	LAST DATE GATHERED
GM North America Claim Adjustment Retrieval Database (CARD-regular warranty)	3/17/2005

TABLE 7: DATA SOURCE

8. Describe in detail the search criteria used by GM to identify the claims identified in response to Request Nos. 5 and 7, 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 and peer vehicles. State, by make, model and model year, the terms of the new vehicle warranty

coverage offered by GM on the subject and peer 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 and peer vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.

Search Criteria used in response to Request No. 5 (Subject vehicles)

For Request No.5, the GM Saturn warranty database, FPR, was searched using the following criteria:

- 1) The 6 labor codes shown in Table 8 below,
- 2) Any labor code between B0000-B9999 or N0000-N9999 and the complaint codes listed in the file called "Req No 5 Search Criteria", found in the folder "Response to Q8" on the Attachment 1 CD,
- 3) Any labor code between B0000-B9999 or N0000-N9999 and the word "bulb", or
- 4) The case type codes and the part numbers listed in the file called "Req No 5 Search Criteria", found in the folder "Response to Q8", on the Attachment 1 CD.

The majority of claims in the Saturn warranty database have verbatims. Since the search criteria were very broad, each verbatim was reviewed to determine if it was responsive to this investigation.

As stated in response to Request No. 5, many of the VINs have multiple entries for various labor codes. The warranty claims reflect the number of labor operations used by dealers, which may be considerably higher than the number of actual visits to dealers for repairs.

LABOR CODE	LABOR CODE DESCRIPTION
N0387	RESISTOR DAYTIME RUNNING LIGHTS-REPLACE
N0680	BULBS, RIGHT-PARK&TURN SIGNAL LAMP-REPLACE
N0681	BULBS, LEFT-PARK&TURN SIGNAL LAMP-REPLACE
N0760	BULBS, RIGHT-STOP, TAIL&TURN LAMP-REPLACE
N0761	BULBS, LEFT-STOP, TAIL&TURN LAMP-REPLACE
N8116	WIRING AND/OR CONNECTOR, CIGARETTE LIGHTER-REPLACE

TABLE 8

UWC extended warranty data was searched for the front park and turn signal lamp socket code.

Due to the generality of some of the GM labor code description categories regarding the specific component repaired or replaced under that labor code, some of the warranty claim records provided in response to Request No. 5 may not be related to failure of the turn signal/ DRL bulb to illuminate. For example, labor code "N0912 - Socket, Lamp Exterior - Replace" is not only used for warranty claims in which the front turn signal lamp socket is replaced but the same labor code is also used for replacement of other exterior bulb sockets such as those for headlamps, foglamps, rear lamps, and parking lamps.

Search Criteria used in response to Request No. 7 (Peer vehicles)

The data provided in response to Request No. 7, was obtained by searching the CARD database following labor operation codes:

N0680	Bulb, Right-Park & Turn Signal Lamp-Replace
N0681	Bulb, Left-Park & Turn Signal Lamp-Replace
N0686	Bulb, One-Park & Turn Signal Lamp-Replace
N0687	Bulb, 1/All-Park & Turn Signal Lamp-Replace

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.

Terms of the new vehicle warranty coverage offered by GM on the subject and peer vehicles

The subject vehicles, with the exception of the Cadillac vehicles, are covered by a bumper-to-bumper new vehicle limited warranty for three years or 36,000 miles whichever occurs first. The Cadillac subject vehicles are covered by a bumper-to-bumper new vehicle limited warranty for four years or 50,000 miles, whichever occurs first. This does not include adjustments and normal maintenance items. Many extended warranty options are available through GM dealerships. They are offered at different prices and for varying lengths of time, based on customer's preference, up to 7 years from the date of purchase or up to a total of 100,000 vehicle miles. GM is providing the number of subject and peer vehicles covered by an extended warranty policy in the folder labeled "Response to Q8", on the Attachment 1 CD; refer to the file labeled "Extended Warranty".

9. 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.

A bulletin that has been issued by GM that relates to, or may be related to, failure of the turn signal/DRL bulb to illuminate on the subject vehicles are identified in Table 9. A copy of the bulletin identified in Table 9 is included on the Attachment 1 CD; refer to the folder labeled "Response to Q8."

DOCUMENT I.D.	DOCUMENT TITLE	ISSUE DATE
1530890 (coupe, sedan)	Erratic Front Turn Signal Operation When Using a Cell Phone Charger in Either Accessory Power Outlet #03-05-42-009A	6/24/2004

TABLE 9 BULLETINS

10. Furnish copies of all communications between GM and each supplier of the subject components for the subject vehicles pertaining to the design, manufacture, performance, durability, quality, testing, or modification of the subject components that relate to, or may relate to, the alleged defect. If any communications on this subject were oral, provide a written transcript or summary of each such communication, and include a statement that identifies all participants and the date of the communication.

GM is providing the requested documentation in the attachments in response to Request No.13. For communications that are not related to the actions identified in Request No. 13, GM is providing this documentation in the folder labeled "Response to Q10", on the Attachment 1 CD.

11. Furnish copies of all engineering specifications, including but not limited to, all design and/or performance requirements, objectives and/or guidelines, for the subject components in the

subject vehicles. Your response should include, but is not limited to, material specifications (including thermal properties and temperatures required for safety) for the bulb socket and bulb base sleeves, and duty cycles required under normal, high and low temperatures.

GM engineering design and performance specifications are for the headlamp assembly. The material specifications for the individual components of that assembly are determined by the supplier. GM is providing the documentation as received from the suppliers for the coupe socket, the Federal Mogul bulb, and the Philips bulb. These documents are provided on the Attachment 1, 2 (GM Confidential) and 3 (Federal Mogul Confidential) CDs; refer to the folders labeled "Response to Q11" in each attachment.

12. Furnish copies of all final test reports of all design and/or product validation tests and/or analyses of the subject components in the subject vehicles that have been conducted by, or for, GM.

GM is providing validation test documentation that relates to the subject components in the folder labeled "Response to Q12", on the Attachment 2 CD.

13. Describe all assessments, analyses, tests, 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. Please provide a complete, stand-alone response to this question for the coupes only, even if GM has previously provided some or all of the responsive information in a prior submission. 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. If an action is not complete, provide a detailed schedule for the work to be done, tentative findings and/or conclusions, and provide an update within 10 days of completion of the action.

The information listed in Table 13-1 below is a summary of actions performed by GM regarding the alleged defect on the subject vehicles. The documents are provided as specified per action.

<p>Action title: PRTS+ N122492 Start Date: 5/09/2003 End Date: 3/21/2005 Engineering Group: GM, Valeo Attachment 1 CD, Response to Q13, Attachment 13C Attachment 2 CD, GM Confidential, Response to Q13- confidential, Attachment 13C Description: Front turn signals inoperative when using the auxiliary power outlet (cigarette lighter). Front turn signals would operate when the auxiliary load was removed and the vehicle was re-started. Summary of Action: Analysis determined that there were noise emissions generated by certain cell phones and chargers corrupting the sense feedback line to the front turn signal driver. The cell phone emissions exceeded the validation test requirements. The noise could not be filtered out without reducing the chance of finding a true fault from the turn signal. Based on this analysis, a new driver that uses an analog fault will be introduced to correct the issue.</p>

Action title: NHTSA presentation
Start Date: 1/13/2005
End Date: 1/13/2005
Engineering Group: GM
Attachment 2 CD, GM Confidential, Response to Q13- confidential, Attachment 13E
Description: GM gathered information on DRLs, bulbs, and warranty for discussion relative to this investigation.
Summary of Action: Presentation was made to NHTSA.

TABLE 13-1 SUMMARY OF ACTIONS -COUPE

The coupe and sedan share a common bulb for the turn signal/DRL and similar electrical circuitry; however, they have unique headlamp assembly designs and socket construction. For the actions listed in Table 13-2 below, there was no distinction made between body style (i.e. coupe and sedan) in the initial phase of data gathering. As the analysis progressed, the investigations focused on the sedans. The majority of warranty complaints and all the returned parts were from sedan vehicles.

GM provided the following actions that centered on the Saturn Ion sedan in response to Request No. 6 of PED4-061/GM664, dated October 15, 2004; refer to Request No. 6 for the attachments, except for the last action titled "PRR 85779". GM is providing documentation for the action titled "PRR 85779" in the attachment as stated below. The same bulb is used in the coupe and sedan. The bulb performance varied from the coupe and sedan due to the differences in the applications (socket material, lamp retention design, and socket location; the vehicle inputs- vibrations and voltage; heat exposure and venting of the lighting cavity).

Action title: PRTS+ N117173
Start Date: 10/11/2002
End Date: 7/27/2004
Engineering Group: GM, Guide Corp., Federal Mogul
Description: The warranty claims rate for the Ion front turn signal / daytime running lamp bulb is higher than the previous model. Note: the DRL for the previous model was the headlamp high beam.
Summary of Action: Warranty claims involve only the sedans. Requested returned parts for analysis. Supplier analyzed returned parts and internal scrap. Supplier determined that the bulb assembly process caused microfractures to the bulb while mating the bulb base to the bulb body. Revised fixture block and bulb sleeve to reduce potential of cracking bulb base.

Action title: Warranty analysis/ Product Improvement
Start Date: 10/11/2002
End Date: 10/01/2003
Engineering Group: GM, Guide Corp., Federal Mogul
Description: Examine the sedan turn signal bulb, socket, and assembly design and assembly process to reduce bulb related warranty.
Summary of Action: Investigating alternative materials, designs, assembly processes, suppliers, and development of a more comprehensive test, known as SAE/USCAR15.

Action title: PRTS+ N147602
Start Date: 10/01/2003
End Date: October 2004
Engineering Group: GM, Guide Corp., Federal Mogul
Description: Technician feedback on turn signal / DRL bulb inoperative. Finding the bulb collar, socket, or harness melted.
Summary of Action: Red X analysis determined heat to be the root cause. The operating temperature range at the turn signal/ DRL cavity exceeded the socket material specifications for the sedan front light assembly. Changed the socket material from Grivory to Zenite. Also, voltage to the turn signal /DRL bulb was reduced by 1.0 volt on sedans only to reduce heat buildup. Additional documentation regarding the voltage decrease can be found in the Response to Q9 attachments. Identified a warranty issue: the entire headlamp assembly has to

be replaced because the headlamp/turn signal wiring harness could not be ordered as a separate part.

Action title: PRR 85779

Start Date: October 2004

End Date: on-going

Engineering Group: GM, Guide Corp., Philips

Attachment 1 CD, Response to Q13, Attachment 13F

Description: The warranty claims rate for the Ion sedan front turn signal / daytime running lamp bulb is rising. Notified the bulb supplier to investigate a root cause for early bulb failures.

Summary of Action: The supplier identified a quality issue and has modified the tooling. This issue was only for the sedan headlamp.

TABLE 13-2 SUMMARY OF ACTIONS- BULB

14. 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 components or any other components, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. Please provide a complete, stand-alone response to this question for the coupes only, even if GM has previously provided some or all of the responsive information in a prior submission. 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.

The modification information responsive to items 14 a-h is summarized on the Attachment 1 CD; refer to the folder labeled "Response to Q14".

15. Produce two of each of the following:

- a. Exemplar samples of each design version of the subject components;
 - b. Field return samples of the subject components exhibiting the failure modes that relate to the subject vehicles described in GM's response to Request No. 12 of the letter dated October 14, 2004 to ODI and any other failure modes identified by GM or its suppliers since the response; and
 - c. 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.
- a. GM is providing a coupe socket, a Federal Mogul bulb, and a plastic base, Philips bulb.
b. GM does not have any coupe field return samples. GM is not aware of any coupe socket issues. GM normally does not request burned out bulbs to be returned. Photos of return parts from sedan headlamp assembly (the sedan turn signal/DRL socket and bulbs) were provided in response to

Request No. 8 PED4-061/GM684, dated October 15, 2004. These photos show the failure modes as described in GM's response.

- c. GM has not released any service repair kits for the subject components.

16. 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, if applicable):

- a. Subject components and any subcomponents of subject component; and
- b. Any kits that have been released, or developed, by GM for use in service repairs to the subject components.

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; refer to the Microsoft Excel file in the folder labeled "Response to Q16". The bulb is also used on the Saturn L100, L200, and L300 vehicles for 2003MY to present. The summary table lists parts for use in service repairs to the front and/or rear turn signal lamps. Some of these parts are also used on other vehicles, as noted on the table.

Monthly service part sales are available for the past 24 months. These sales numbers represent total sales to dealers worldwide. 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.

17. State whether GM ever considered an alternative design(s) or component(s) for the subject components in the subject vehicles due to, or in any relation to, the alleged defect in the subject vehicles. If so, identify and describe each such alternative design or component, and state:

- a. The date it was first proposed;
- b. The disposition of that proposal (i.e., approved, disapproved, or still being evaluated); and
- c. The reasons for that disposition.

For changes that were approved see the response to Request No. 14.

Studies regarding the effectiveness of DRLs in crash avoidance influenced GM to equip all its US vehicles with this option although it is not required by law or regulation. In 1998, a NHTSA Notice of Proposed Rule Making (NPRM) proposed eliminating the use of headlamps as DRLs. GM's initial design direction for DRL on the Saturn Ion vehicles was the reduced intensity low beam (RILB) headlamp. Influenced by this proposal, GM design direction was re-aligned to the NPRM to provide DRLs on future model vehicles utilizing the turn signal or where space/ styling allowed, dedicated DRL lamps. Due to packaging limitations, the park/ turn signal was used for the Saturn Ion vehicles.

18. 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; and
- 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.

See the response to Request No. 12 of PE04-061, dated October 15, 2004, for the failure modes, contributory factors, and failure mechanisms for the alleged defect.

Bulbs are a standard commodity item that is not specific to any vehicle manufacturer. Bulbs are a consumable, replaceable item that can burnout within the life of the vehicle. All lamps experience some level of bulb burnout within the warranty period. Even low usage functions have bulb burnout warranty, regardless of the rated bulb life due to early failures and/or random failures. GM utilizes the industry's longest rated life bulbs for the turn signal/DRL applications. The customer usage of a daytime running lamp is approximately twenty times the usage of a turn signal. Therefore, a bulb used as a park/turn signal/DRL will likely be replaced sooner and more often than one used as a park/turn signal. For the reasons cited above, GM covers bulb replacements during the warranty period.

The coupe turn signal/DRL feature is significantly different from the sedan based on: socket design and materials selected, headlamp assembly mounting, and thermal loads experienced within the coupe headlamp assembly. GM is not aware of any coupe socket issues. There have been no melted coupe sockets returned.

The early failures for the coupe turn signal/ DRL bulb were due to bulb quality issues that have been addressed. The improved bulbs were released for production in mid-2004 and the prior design bulbs were purged from the GM system. The 2003 and 2004 MY bulb warranty data reflect the impact of the improvements. The 2003 MY cumulative warranty has leveled off indicating that the bulb quality issue has passed. The 2003 MY incremental warranty, after 180 days exposure, is below 10 IPTV. The 2004 MY incremental warranty is under 3 IPTV. This is in the expected range for a bulb used as a park/turn signal/DRL, based on mature warranty data for the nine 1988 model vehicles with turn signal/DRLs. See the response to Request No. 13, Attachment 13E, NHTSA presentation documents.

There is indication to the driver of an inoperative front turn signal/ DRL bulb. When the front turn signal bulb is non-functional, the driver is notified on activation of the turn signal indicator, as required by FMVSS 108. The turn signal indicator arrow flashes and the audible feedback cycles significantly faster than usual. This feature is described in the owner's manual. Another indication reported by a customer was that he noticed the turn signal bulb did not flash when he used the key fob to unlock the doors. FMVSS 108 does not prescribe any durability or reliability requirements for bulbs, other than the bulbs used in replaceable bulb headlamps (part 584).

The Saturn Ion coupe turn signal/DRL is operating as intended and there is no defect as alleged. The key points that support this conclusion are:

- GM utilizes the industry's longest rated life bulbs in this application,
- DRL duty cycle is approximately twenty times that of a turn signal,
- Current warranty rate is as expected,
- No melted sockets have been returned through warranty,
- Low complaint rate of 4.8 IPTV and
- No reported consequences.

* * *

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.

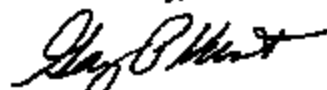
This response is based on searches of General Motors Corporation (GM) locations where documents determined to be responsive to your request would ordinarily be found. As a result, the scope of this search did not include, nor could it reasonably include, "all of their divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of GM (including all business units and persons previously referred to), who are or, in or after 2002, 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**

JAN 28 2005

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

GM-664A

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

*Original
Received
2-8-05*

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

NVS-212mj1
EA04-035

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 upgraded the Preliminary Evaluation (PE04-061) to an Engineering Analysis (EA04-035) to investigate allegations of turn signal/daytime running lamp failures in model year (MY) 2003 and 2004 Saturn Ion coupe vehicles manufactured by General Motors Corporation (GM), and to request certain information.

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

- **Subject vehicles:** All MY 2003 through 2005 Saturn Ion coupe vehicles manufactured for sale or lease in the United States.
- **Subject components:** The bulb, socket and wiring harness of the front turn signal/daytime running lamp assembly.
- **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 their divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of GM (including all business units and persons previously referred to), who are or, in or after 2002, 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); Testing, assessment or evaluation;



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

- 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:** Any alleged front turn signal and/or daytime running lamp failure or malfunction.
 - **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 an 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;
 - 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 "f," 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 "e" 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 a fire is alleged;
 - k. Whether property damage is alleged;
 - l. Number of alleged injuries, if any; and
 - m. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 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 "SUBJECT VEHICLE WARRANTY DATA."

- 6. Provide a table showing all GM make, model and model year vehicles that use a combination DRL/turn signal feature. Also indicate on that table by make, model and model year vehicle, any and all warranty data collection systems that allow identification of warranty claims specific to the components of turn signal and/or DRL. Provide a description of the warranty data collection system for all warranty systems serving those vehicles shown in the table and the differences in those systems that affect the ability to analyze warranty data for the alleged defect.
- 7. For those make, model and model year vehicles identified in Request No. 6 above (not including the subject vehicles) that are served by a warranty system that collects claims data specific for turn signal and/or DRL, state, by make, model, model year and vehicle population (i.e., the number of vehicles that GM has manufactured for sale or lease in the United States), a total count for all of the following categories of claims, collectively, that have been paid by GM to date that relates to, or may relate to, the alleged defect in all MY 1995 through 2005 GM vehicles (peer vehicles) that use a combination DRL/turn signal feature: 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. Make, model and model year (NOTE: this is a new item being requested that is not requested in Request No. 5);
- d. VIN;
- e. Repair date;
- f. Vehicle mileage at time of repair;
- g. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- h. Labor operation number;
- i. Problem code;
- j. Replacement part number(s) and description(s);

- k. Concern stated by customer; and
- l. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "PEER VEHICLE WARRANTY DATA."

8. Describe in detail the search criteria used by GM to identify the claims identified in response to Request Nos. 5 and 7, 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 and peer vehicles. State, by make, model and model year, the terms of the new vehicle warranty coverage offered by GM on the subject and peer 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 and peer vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.
9. 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.
10. Furnish copies of all communications between GM and each supplier of the subject components for the subject vehicles pertaining to the design, manufacture, performance, durability, quality, testing, or modification of the subject components that relate to, or may relate to, the alleged defect. If any communications on this subject were oral, provide a written transcript or summary of each such communication, and include a statement that identifies all participants and the date of the communication.
11. Furnish copies of all engineering specifications, including but not limited to, all design and/or performance requirements, objectives and/or guidelines, for the subject components in the subject vehicles. Your response should include, but is not limited to, material specifications (including thermal properties and temperatures required for safety) for the bulb socket and bulb base sleeve, and duty cycles required under normal, high and low temperatures.
12. Furnish copies of all final test reports of all design and/or product validation tests and/or analyses of the subject components in the subject vehicles that have been conducted by, or for, GM.
13. Describe all assessments, analyses, tests, 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. Please provide a complete, stand-alone

response to this question for the coupes only, even if GM has previously provided some or all of the responsive information in a prior submission. 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. If an action is not complete, provide a detailed schedule for the work to be done, tentative findings and/or conclusions, and provide an update within 10 days of completion of the action.

14. 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 components or any other components, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. Please provide a complete, stand-alone response to this question for the coupes only, even if GM has previously provided some or all of the responsive information in a prior submission. 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.

15. Produce two of each of the following:

- a. Exemplar samples of each design version of the subject components;
- b. Field return samples of the subject components exhibiting the failure modes that relate to the subject vehicles described in GM's response to Request No. 12 of the letter dated October 14, 2004 to ODI and any other failure modes identified by GM or its suppliers since the response; and

- c. 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.
16. 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, if applicable):
- a. Subject components and any subcomponents of subject component; and
 - b. Any kits that have been released, or developed, by GM for use in service repairs to the subject components.

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.

17. State whether GM ever considered an alternative design(s) or component(s) for the subject components in the subject vehicles due to, or in any relation to, the alleged defect in the subject vehicles. If so, identify and describe each such alternative design or component, and state:
- a. The date it was first proposed;
 - b. The disposition of that proposal (i.e., approved, disapproved, or still being evaluated); and
 - c. The reasons for that disposition.
18. 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; and
 - 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.

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 \$15 million for a related series of violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. 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 March 22, 2005. Please refer to EA04-035 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 Mr. Thomas Cooper 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 Mr. Michael Lee of my staff at (202) 366-5236.

Sincerely,



Kathleen C. DeMeter, Director
Office of Defects Investigation
Enforcement