



**GENERAL MOTORS NORTH AMERICA**  
**Structure & Safety Integration**

Inter-Organization

Date: August 12, 2004

## **GM-680 (EA03-012)**

### **On The Cover:**

**GM Assigned IR Number**  
**NHTSA Assigned Evaluation Number**  
**Number of Books**  
**Allegation Title, Model Year and Make**  
**Date Received from NHTSA**  
**GM Reply Date**

### **Book 1:**

**Tab (1).....GM Response Letter to NHTSA**  
**Tab (2)..... NHTSA Letter**  
**Tab (3)..... Attachment Q1 with (1) CD**  
**Tab (4)..... Attachment Q3 with (1) CD**  
**Tab (5)..... Attachment Q6 with (1) CD**  
**Tab (6)..... Attachment Q9 Confidential material removed and  
sent to Office of Chief Counsel**  
**Tab (7)..... Non-Confidential Attachment Q10 with (1) CD  
And confidential material omitted and sent to Office of  
Chief Counsel**  
**Tab (8)..... Non-Confidential Attachment Q11 with (1) CD  
And confidential material omitted and sent to Office of  
Chief Counsel**

RECEIVED  
MAY 23 2005  
2005 MAY 13 P 5:13  
NHTSA



GENERAL MOTORS NORTH AMERICA  
Structure & Safety Integration

August 11, 2004

8/12/04

RECEIVED  
NVS-210

AUG 13 P. 4 05

OFFICE OF DEFECTS  
INVESTIGATION

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

GM-680

NVS-213bby  
EA03-012

Dear Ms. DeMeter:

This letter is General Motors (GM) response to your information request (IR), dated May 26, 2004, regarding rear brake line leakage caused by corrosion or abrasion in 1995 - 1999 model year (MY) H-body and B-body vehicles.

The subject vehicles for this investigation are:

Buick Roadmaster and LeSabre, Chevrolet Caprice and Impala, Pontiac Bonneville and Bonneville SSE and Oldsmobile Eighty Eight.

Your questions and our corresponding replies are as follows:

1. State, by model, model year, and brake system (ABS or non-ABS) the number of subject peer vehicles GM has manufactured for sale or lease in the United States. Separately, for each subject peer vehicle manufactured to date by GM, state the following:
  - a. Vehicle identification number (VIN);
  - b. Make;
  - c. Model;
  - d. Brake system;
  - e. Model year;
  - f. Date of manufacture;
  - g. Date warranty coverage commenced; and
  - h. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the information for this request in a Microsoft Access 2000 table format (or a compatible format). Entitle the table "PRODUCTION DATA." See Enclosure 1, Data Collection Disk, for a pre-formatted table that provides further details regarding this submission.

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

**Product Investigations**

Mail Code: 480-106-304 • 30800 Mound Road • Warren, MI 48090-6056  
Phone: (586) 886-8029 • Fax: (586) 947-2318  
Quality Response



MODEL	1995 MY	1996 MY	1997 MY	1998 MY	1999 MY	TOTAL
Buick LeSabre (H body)	163,626	52,058	211,851	143,251	100,288	670,773
Buick Roadmaster (B body)	28,208	21,419	0	0	0	49,625
Chevrolet Caprice (B body)	62,213	37,567	0	0	0	99,780
Chevrolet Impala (B body)	18,523	32,056	0	0	0	50,579
Oldsmobile Eighty Eight (H body)	70,341	53,914	65,880	64,116	38,922	294,173
Pontiac Bonneville (H body)	60,852	61,568	61,287	58,411	48,866	310,783
Pontiac Bonneville SSE (H body)	10,990	7,893	12,728	7,054	4,678	43,343
<b>TOTAL</b>	<b>434,850</b>	<b>286,475</b>	<b>351,546</b>	<b>272,832</b>	<b>193,553</b>	<b>1,519,056</b>

TABLE 1 VEHICLE PRODUCTION

The production information requested in 1a-1c and 1a-1h is provided on the CD labeled Response to Q1; refer to the Microsoft Access 2000 file. All of the subject peer vehicles are equipped with ABS. The brake system information (1d), is provided in response to Item 11. The GM database that contains Vehicle Identification Number (VIN) information does not include information on the state where an individual vehicle was sold. GM is providing the state where the vehicle was shipped in response to request 1h. 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, by model and model year, 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 subject condition in the subject peer 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 the subject condition in a subject peer vehicle, property damage claims, consumer complaints, or field reports;
  - d. Third-party arbitration proceedings where GM is or was a party to the arbitration; and,
  - e. Lawsuits, both pending and closed, in which GM is or was a defendant or codefendant

For subparts "a" through "e," 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 "e," 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 "d" and "e", 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.

TYPE OF REPORT	COUNT (INCLUDING DUPLICATES)	GM REPORTS	GM REPORTS CORRESPONDING TO NHTSA REPORTS PROVIDED	LOCATION OF REPORTS (ATTACHMENT)	NUMBER WITH PROPERTY DAMAGE	NUMBER WITH INJURIES/FATALITIES*	NUMBER WITH CRASH
Owner Reports	20	20	0	2A	0	0	0
Field Reports and Technical Assistance System Reports	2	2	0	2B	0	0	0
Not-In-Suit Claims	0	0	0	N/A	0	0	0
Subrogation Claims	0	0	0	N/A	0	0	0
Third Party Arbitration Proceedings	0	0	0	N/A	0	0	0
Product Liability Lawsuits	0	0	0	N/A	0	0	0
Total (Including Duplicates)	22	22	0	N/A	0	0	0
Total (Excluding Duplicates)	22	22	0	N/A	0	0	0

TABLE 2-1: REPORT BREAKDOWN

N/A Not Applicable

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

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

SOURCE SYSTEM	LAST DATE GATHERED
Corporate Central File	06/10/2004
Customer Assistance Center	06/14/2004
Technical Assistance Center	06/08/2004
Field Information Network Database (FIND)	06/08/2004
Field Product Report Database (FPRD)	06/08/2004
Company Vehicle Evaluation Program (CVP)	06/07/2004
Captured Test Fleet (CTF)	06/07/2004
Early Quality Feedback (EQF)	06/08/2004
Legal / Employee Self Insured Services (ESIS)	06/23/2004

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. Type of failure (abrasion, corrosion, other, unknown);
- j. Front or rear brakes (if diagonal, what half)
- k. Whether a crash is alleged;
- l. Whether property damage is alleged;
- m. Number of alleged injuries, if any;
- n. Number of alleged fatalities, if any;
- o. Complaint summary; and,
- p. Consumer comments, if any;

The requested information is provided on the CD labeled Response to Q3; refer to the Microsoft Access 2000 file.

4. Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table designed for this submission.

The CD labeled Response to Q3 contains "this" information in Microsoft Access 2000.

5. 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 Item 2 are provided in the attachments listed in Table 2-1 on the CD labeled Response to Q3. GM has organized the records by the GM file number within each attachment.

6. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by GM to date that relate to, or may relate to, the subject condition in the subject peer 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." See Enclosure 1, Data Collection Disc, for a pre-formatted table designed for this submission.

The 320 regular warranty claims and 2 extended warranty claims for the subject peer vehicles that may be responsive to this request, are summarized by model and model year in Tables 6A and 6B. A summary of these warranty claims is provided on the CD labeled Response to Q8.

REGULAR WARRANTY CLAIMS FOR BRAKE LINE REPLACEMENT

MODEL	1995 MY	1996 MY	1997 MY	1998 MY	1999 MY	TOTAL
Buick LeSabre (H body)	23	94	43	12	5	177
Buick Roadmaster (B body)	2	1	0	0	0	3
Chevrolet Caprice (B body)	8	8	0	0	0	16
Chevrolet Impala (B body)	2	6	0	0	0	8
Oldsmobile Eighty Eight (H body)	17	8	7	4	2	38
Pontiac Bonneville (H body)	15	37	9	5	3	69
Pontiac Bonneville SSE (H body)	4	3	1	1	0	9
TOTAL	71	157	60	22	10	320

TABLE 6A

EXTENDED WARRANTY CLAIMS FOR BRAKE LINE REPLACEMENT

MODEL	1995 MY	1996 MY	1997 MY	1998 MY	1999 MY	TOTAL
Buick LeSabre (H body)	0	0	1	0	0	1
Buick Roadmaster (B body)	0	0	0	0	0	0
Chevrolet Caprice (B body)	0	0	0	0	0	0
Chevrolet Impala (B body)	0	0	0	0	0	0
Oldsmobile Eighty Eight (H body)	0	0	1	0	0	1
Pontiac Bonneville (H body)	0	0	0	0	0	0
Pontiac Bonneville SSE (H body)	0	0	0	0	0	0
TOTAL	0	0	2	0	0	2

TABLE 6B

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. The warranty data was last gathered on June 23, 2004.

GM's warranty database does not contain the vehicle owner's name or telephone number. Some of the replacement part numbers, part descriptions and customer concern code descriptions are not included in the GM warranty database. GM is providing a field labeled "Verbatim Text" in response to request 8K (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 required to be completed for every warranty claim.

The MIC extended warranty system does not contain the following information: repairing dealer code, vehicle owner information, trouble code, trouble code description, part number, part description or verbatim. The UWC extended warranty system does not use the GM labor code or labor code description and it does not contain the repairing dealer code, trouble code or trouble code description.

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.

7. 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 subject condition in the subject peer vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by GM on the subject 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) related to the subject condition that GM offered for the subject peer 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 data was collected by searching for the following labor and trouble codes. The MIC extended warranty data was collected by searching only for the labor codes.

LABOR CODE	DESCRIPTION:
H0910	Pipe, Brake-Axis Housing to Junction-Right Replace
H0911	Pipe, Brake-Block to Rear Wheel Cyl-Left Replace
H0799	Pipe, Brake-Repair
H0880	Pipe, Brake-Front to Rear-Replace
H0813	Pipe, Brake-Master Cyl to ABS Modulator Valve-Rear Replace
H0851	Pipe, Brake-ABS Modulator Valve to Proportioner Valve-Right Rear Replace
H0852	Pipe, Brake-ABS Modulator Valve to Proportioner Valve-Left Rear Replace
H0853	Pipe, Brake-Proportioner Valve to Wheel-Right Rear Replace
H0854	Pipe, Brake-Proportioner Valve to Wheel-Left Rear Replace
H0812	Pipe, Brake-Master Cyl to ABS Modulator Valve-Front Replace
H0816	Pipe, Brake-ABS Modulator Valve to Wheel-Right Front Replace
H0817	Pipe, Brake-ABS Modulator Valve to Wheel-Left Front Replace

TROUBLE CODE	DESCRIPTION:
1D	Broken
1K	Worn
2F	Clearance too Tight
3R	Porosity
3Z	Ruptured
4A	Scored
4X	Worn
5W	Rusted or Corroded

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 customer's preference, up to 7 years from the date of purchase or up to a total of 100,000 vehicle miles. The General Motors warranty system does not contain information on the number of vehicles that have extended warranty coverage.

8. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the subject condition in the subject peer 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 manufacturer's short name is planning to issue within the next 120 days.

GM is not aware of any service, warranty or other documents that relate to the subject condition, that GM has issued to dealers, regional or zone offices, field offices, fleet purchasers or other entities.

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

The preceding information was collected from GM Service Operations. The data collection was completed on June 9, 2004.

9. Furnish copies of the GM engineering specifications related to durability, routing, clearances, and/or corrosion resistance of the subject components on the subject peer vehicles.

The GM engineering specification related to material composition, durability and corrosion resistance of the subject components are Engineering Specifications GM123M and GM124M titled Automotive Steel Tubing for Fluid Handling, contained in Confidential Attachment 9A located on the CD labeled Response to Q8. A copy of the engineering specifications related to routing of the subject vehicle brakes lines is contained in Confidential Attachment 9B titled Design Best Practices Minimum Design Clearances - Brakes located on the CD labeled Response to Q8.

10. Provide the following information regarding the rear brake tubes used in the subject peer vehicles:

- a. The base material composition and manufacturing method (i.e., single-walled or double-walled);
- b. Tube coating systems;
- c. Tube nominal outer diameter;
- d. Tube outer diameter tolerances;
- e. Tube nominal wall thickness;
- f. Tube wall thickness tolerances;
- g. Tube design pressure;
- h. Tube maximum service pressures (ABS and non-ABS);
- i. Tube burst pressure;
- j. The minimum wall thickness necessary to contain maximum service pressures (include consideration with and without stress concentration factors representative

of corroded tube walls and state all calculations used and the values of all calculation parameters);

- k. Summaries and copies of corrosion performance test specifications - conditions (e.g., salt spray tests, cyclical corrosion tests) and end-of-test requirements;
- l. Summaries and copies of all corrosion performance test results; and
- m. Identify all suppliers by model and model years.

The information requested in items 10a-10m regarding the rear brake tubes used in the subject peer vehicles is contained in Attachment 10A on the CD labeled Response to Q10.

The Salt Spray Corrosion Test specifications GM4296P (Attachment 10B on the CD labeled Confidential Response to Q10) and the Humidity Test Corrosion Performance specifications GM4485P (Attachment 10C on the CD labeled Confidential Response to Q10) are provided in response to item 10k. The supplier conducts corrosion performance testing of the hydraulic brake line assemblies that demonstrate the brake lines in the subject peer vehicles meet the corrosion specifications of GM4296P and GM4485P.

The supplier does not provide GM corrosion test documentation, therefore, GM has not located corrosion performance test results. Mr. Bruce York, of your staff, has indicated in a phone conversation that the agency is not requesting summaries and copies of the brake line corrosion performance test results from GM.

**11. Provide the following information concerning the rear brake lines and fuel lines in the subject peer vehicles:**

- a. Describe the basic brake system design (e.g., system split front/rear or diagonal, ABS, front/rear disc, etc.);
- b. State whether the fuel and brake tubes are routed together;
- c. Furnish basic diagrams of the brake and fuel tube routing/retention in the subject peer vehicles; and
- d. Identify the material composition of the fuel lines.

Table 11 below summarizes the information regarding the basic brake system design; system split front/rear or diagonal, ABS, front/rear disc and whether the brake and fuel lines are routed together in the subject peer vehicles. The fuel and brake lines share common brackets where appropriate to maintain design clearances.

Model	Brake System Split	ABS or Non-ABS	Brake Design Front/Rear	Fuel & Brake Lines Together
Chevrolet Caprice (B body)	Split Front/Rear	ABS	Disc/Drum	Yes
Chevrolet Impala (B body)	Split Front/Rear	ABS	Disc/Drum	Yes
Buick Roadmaster (B body)	Split Front/Rear	ABS	Disc/Drum	Yes
Buick LeSabre (H body)	Split Diagonal	ABS	Disc/Drum	Yes
Oldsmobile Eighty Eight (H body)	Split Diagonal	ABS	Disc/Drum	Yes
Pontiac Bonneville (H body)	Split Diagonal	ABS	Disc/Drum	Yes
Pontiac Bonneville SSE (H body)	Split Diagonal	ABS	Disc/Drum	Yes

Diagrams of the subject peer vehicle brake and fuel line routing/retention are contained in the following Attachments;

- Attachment 11A: 1995-1996 B body Brake Line Product Assembly Documents (PADs)
- Attachment 11B: 1995-1999 H body Brake Line Product Assembly Documents (PADs)
- Attachment 11C: 1995-1996 B body Fuel Feed and Return Pipe Product Assembly Documents (PADs)
- Attachment 11D: 1995-1999 H body Fuel Feed and Return Pipe Product Assembly Documents (PADs)

The material composition specifications for the fuel lines are provided in Engineering Specification GM213M titled Low Permeation Fuel Lines: Multi-Layered Construction (Confidential Attachment 11E located on the CD labeled Response to Q11) and Engineering Specifications GM123M and GM124M titled Automotive Steel Tubing for Fluid Handling contained in Confidential Attachment 9A located on the CD labeled Response to Q9.

\* \* \*

General Motors requests that the documents stamped "GM Confidential" included in Attachments 9A, 9B, 10B, 10C and 11E be afforded confidential treatment by the NHTSA. This information is not customarily made public by General Motors and contains trade secrets and commercial information which is privileged or confidential under 5 U.S.C. Section 552(b)(4), 49 CFR Part 512 and 49 U.S.C. Section 30167(a).

Attachments 9A, 9B, 10B, 10C and 11E contain commercial information the disclosure of which would likely result in substantial competitive harm. General Motors treats the above material as confidential proprietary information available only to authorized General Motors personnel and not otherwise available to the public. The document is maintained under a record-keeping system which is intended to control dissemination of this material within General Motors, and to assure that it is not disseminated outside the Corporation, except as described in the attached certification made pursuant to 49 CFR Part 512.4(e).

To the best of our knowledge, no prior determinations of the confidentiality of this document has been made by the NHTSA, other Federal Agencies, or the Federal Courts. Document such as those contained in Attachments 9 and 11E, however, have, to the best of our knowledge, normally been granted confidential treatment by the NHTSA in the past.

The document subject to this request for confidentiality has been clearly stamped "GM CONFIDENTIAL". If a request for disclosure of any or all of this information is received by the NHTSA, General Motors requests notification of receipt of each such request and, if necessary, an opportunity to further explain the reasons why such material is trade secret and commercial information which should not be disclosed under the applicable statutes and regulations.

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, "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 1995, were involved in any way with any of the following related to the subject condition in the subject peer vehicles:

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

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

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

Sincerely,



Gay P. Kent  
Director  
Product Investigations

Attachments



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

MAY 26 2004

GM-660

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

Mark Deacon  
Tanner J. Fadel  
Original v. CD  
Received 6-2-04

NVS-213bby  
EA03-012

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

Ms. Gay F. Kent, Director  
Product Investigations  
General Motors Corporation  
30500 Mound Road - Mail Code 480-106-304  
Warren, MI 48090-9055

Dear Ms. Kent:

The Office of Defects Investigation (ODI) is conducting an investigation (EA03-012) of rear brake line failure in model year (MY) 1995 through 1997 Lincoln Town Car, Ford Crown Victoria, and Mercury Grand Marquis vehicles manufactured by Ford. To assist us with our investigation, we are requesting information concerning the brake line assemblies in certain General Motors vehicles.

- **Subject Peer Vehicles:** All MY 1995 through 1999 H- and B-body vehicles manufactured for sale or lease in the United States.
- **Subject Component:** All rear hydraulic brake line assemblies used on the subject peer vehicles.
- **GM:** General Motors Corporation, and 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 1995, were involved in any way with any of the following related to the subject condition in the subject peer vehicles:
  - a. Design, engineering, analysis, modification or production (e.g. quality control);
  - b. Testing, assessment or evaluation;
  - c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or

**NHTSA**  
National Highway Traffic Safety Administration

DOT AUTO SAFETY HOTLINE  
888-DASH-3-DOT  
888-327-4266

- 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.
- **Subject Condition:** Brake line failure resulting in brake fluid leakage.
  - **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 the manufacturer 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 in certain Lincoln Town Car, Ford Crown Victoria, and Mercury Grand Marquis vehicles, we are requesting information pertaining to certain GM vehicles 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. If requested information is unavailable, so state and provide a brief explanation. Along with your written response, please provide this information in Microsoft Word 2000, or a compatible format, entitled "IR Response."

1. State, by model, model year, and brake system (ABS or non-ABS) the number of subject peer vehicles GM has manufactured for sale or lease in the United States. Separately, for each subject peer vehicle manufactured to date by GM, state the following:
  - a. Vehicle identification number (VIN);
  - b. Make;
  - c. Model;
  - d. Brake system;
  - e. Model year;
  - f. Date of manufacture;
  - g. Date warranty coverage commenced; and
  - h. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

a.  
Provide the information for this request in a Microsoft Access 2000 table format (or a compatible format). Entitle the table "PRODUCTION DATA." See Enclosure 1, Data Collection Disk, for a pre-formatted table that provides further details regarding this submission.
2. State, by model and model year, 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 subject condition in the subject peer 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 the subject condition in a subject peer vehicle, property damage claims, consumer complaints, or field reports;

- d. Third-party arbitration proceedings where GM is or was a party to the arbitration; and
- e. Lawsuits, both pending and closed, in which GM is or was a defendant or codefendant

For subparts "a" through "e," 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 "e," 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 "d" and "e," 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. Type of failure (abrasion, corrosion, other, unknown);
  - j. Front or rear brakes (if diagonal, what half?);
  - k. Whether a crash is alleged;
  - l. Whether property damage is alleged;
  - m. Number of alleged injuries, if any;
  - n. Number of alleged fatalities, if any;
  - o. Complaint summary; and,
  - p. Consumer comments, if any;
4. Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table designed for this submission.
5. 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.
6. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by GM to date that relate to, or may relate to, the subject condition in the subject peer 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." See Enclosure I, Data Collection Disc, for a pre-formatted table designed for this submission.

7. 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 subject condition in the subject peer vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by GM on the subject 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) related to the subject condition that GM offered for the subject peer vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.
8. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the subject condition in the subject peer 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 manufacturer's short name is planning to issue within the next 120 days.
9. Furnish copies of the GM engineering specifications related to durability, routing, clearances, and/or corrosion resistance of the subject components on the subject peer vehicles.

10. Provide the following information regarding the rear brake tubes used in the subject peer vehicles:
- The base material composition and manufacturing method (i.e., single-walled or double-walled);
  - Tube coating systems;
  - Tube nominal outer diameter;
  - Tube outer diameter tolerances;
  - Tube nominal wall thickness;
  - Tube wall thickness tolerances;
  - Tube design pressure;
  - Tube maximum service pressures (ABS and non-ABS);
  - Tube burst pressure;
  - The minimum wall thickness necessary to contain maximum service pressures (include consideration with and without stress concentration factors representative of corroded tube walls and state all calculations used and the values of all calculation parameters);
  - Summaries and copies of corrosion performance test specifications - conditions (e.g., salt spray tests, cyclical corrosion tests) and end-of-test requirements;
  - Summaries and copies of all corrosion performance test results; and
  - Identify all suppliers by models and model years.
11. Provide the following information concerning the rear brake lines and fuel lines in the subject peer vehicles:
- Describe the basic brake system design (e.g., system split front/rear or diagonal, ABS, front/rear disc, etc.);
  - State whether the fuel and brake tubes are routed together;
  - Furnish basic diagrams of the brake and fuel tube routing/retention in the subject peer vehicles; and
  - Identify the material composition of the fuel lines.

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 July 22, 2004. Please refer to EA03-012 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) 366-5207 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, 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 Bruce York of my staff at (202) 366-6938.

Sincerely,



Kathleen C. DeMeter, Director  
Office of Defects Investigation  
Safety Assurance

Enclosure: One CD ROM titled Data Collection Disc containing three files.