



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

JUL 2 2003

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

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Lyndon R. Lie, Director
Product Investigations
General Motors Corporation
Mail Code 480-106-304
30500 Mound Road
Warren, MI 48090-9055

NVS-213C1a
EA03-005

Dear Mr. Lie:

This letter is to advise you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has upgraded its Preliminary Evaluation, PE02-086 of alleged failure of rear axle trailing arms in model year (MY) 1997 through 1999 Chevrolet Venture, Pontiac Trans Sport, and Oldsmobile Silhouette minivans to an Engineering Analysis, EA03-005. As part of the investigation, this letter requests additional information.

This office has received one additional complaint related to alleged rear axle trailing arm failures in MY 1997 to 1999 subject vehicles. A copy of the complaint is enclosed for your information (Enclosure 1). The complaint alleges that a rear axle trailing arm broke while the vehicle was in motion, causing the driver to lose directional control.

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

- **Subject vehicles:** All MY 1997 – 1999 Chevrolet Venture, Pontiac Tran Sport, and Oldsmobile Silhouette minivans.
- **Subject component:** Rear axle trailing arm used on the subject vehicles.
- **GM:** General Motors Corporation, all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of GM



(including all business units and persons previously referred to), who are or, in or after January 1, 1996, 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.

- **Alleged defect:** Fracture of a rear axle trailing arm.
- **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," "field report," "fleet," "goodwill," "make," "model," "model year," "property damage," "property damage claim," "type," "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 either produce it again or identify the document, the submission to ODI in which the document was included and the document's precise location in that submission. When documents are produced, they shall be produced in a readily identifiable and organized manner that corresponds with the information request letter (including the subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, their production shall be supplemented and accompanied by explanation.

If GM cannot respond to any specific request or subpart 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, 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.

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 no information is available, please state so.

1. State the number of each of the following items relating to the alleged defect in the subject vehicles and provide Bates numbered hard copies of all documents relating to these items, from all sources, either received or authorized by GM, or of which GM is otherwise aware:

- a. Owner and fleet reports;
- b. Field reports, including all reports and requests for technical assistance from dealer personnel and/or zone offices;
- c. Reports of, or requests for, roadside assistance or recovery;
- d. Property damage reports, including claims, that do not involve a crash or fire;
- e. Crash, injury and fatality reports;
- f. Subrogation claims;
- g. Third-party arbitration proceedings where GM is a party to the arbitration; and
- h. 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 "h" 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 f and g, 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.

2. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 1, state the following information:
 - a. GM's file number or other identifier used;
 - b. The category of the item, as identified in Request No. 1 (i.e., consumer complaint, field report, etc.);
 - c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
 - d. Vehicle's VIN;
 - e. Vehicle's make, model and model year;
 - f. Vehicle's mileage at time of incident;
 - g. Incident date;
 - h. Report or claim date;
 - i. Whether a crash is alleged;
 - j. Whether property damage is alleged;
 - k. Number of alleged injuries, if any; and
 - l. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 2, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

3. 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
4. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by GM to date, that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Separately, for each such claim, state the following information:

- a. GM's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g. Labor operation number;
- h. Problem code;
- i. Replacement part number(s) and description(s);
- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "WARRANTY DATA." See Enclosure 2, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

5. Describe in detail the search criteria used by GM to identify the claims identified in response to Request No. 4, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by GM on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) related to the alleged defect that GM offered for the subject

vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.

6. 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, technical service bulletins, service campaigns, 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.
7. Other than those identified in GM's January 27, 2003 response to NHTSA's information request in PE02-086, describe all, assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, GM. For each such action, provide the following information:
 - a. Action title or identifier;
 - b. The actual or planned start date;
 - c. The actual or expected end date;
 - d. Brief summary of the subject and objective of the action;
 - e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
 - f. A brief summary of the findings and/or conclusions resulting from the action.

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

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

- 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 of which GM is aware that may be incorporated into vehicle production within the next 120 days

9. Provide the following information concerning the change in design of the rear axle trailing arms from the Lumina APV/Oldsmobile Silhouette ("APV") solid blade design to the current U-van design:
 - a. The "APV" trailing arms did not include horizontally punched holes. Based on ODI's consumer information and GM's previously supplied failure data, the subject component failure always occurs forward of the axle through one of the horizontally punched holes located in the trailing arm. State the reason(s) for the change to the current rear axle trailing arm design and provide GM's assessment of the contribution of the change to the potential for the alleged defect condition to occur.
 - b. Describe the differences between the previous "APV" design and the current U-van design. Include the following information in the description: (1) material specifications, (2) component dimensions, (3) description of the manufacturing processes, and (4) material handling.
 - c. Describe and provide the results of any curb impact studies GM performed on the Lumina APV/Oldsmobile Silhouette vehicles.
 - d. State the impact speeds required to plastically deform an "APV" rear axle blade and a subject vehicle.
10. Provide copies of all engineering standards, specification, design guides and equivalent documents relating to the subject components. In addition, provide copies of all engineering drawings and related specification information for any prior, current, new, or proposed rear axle trailing arm, incorporated in the subject vehicles, that GM has produced, developed or is planning to develop. Please ensure this information includes any changes in material specifications for the rear axle trailing arm.
11. State the number of each of the following that GM has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (*including the cut-off date for sales, if applicable*):
 - a. Rear axle trailing arms; and
 - b. Rear axle assemblies; and

- c. Any kits that have been released, or developed, by GM for use in service repairs to the subject component/assembly.

For each of the subject components, please provide the part number with respect to each subject vehicle and identify what other GM vehicles, if any, to which the components will fit or for which the components were specified.

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

12. In its January 27, 2003 response to PE02-086, GM provided information regarding a study entitled "GMT200 Rear Axle Trailing Arm Investigation." The study identified the root cause of trailing arm failures as "Mishandling of parts prior to assembly." Provide the following additional information regarding GM's rear trailing arm study and the occurrence of damage to rear axle trailing arms in subject vehicles during the assembly process:
 - a. State the total number of rear axle assemblies that were removed from the assembly process prior to installation due to damaged trailing arms. Provide this information by plant and month of production.
 - b. State the total number of rear axle assemblies with damaged rear trailing arms that were detected after assembly onto a subject vehicle but before delivery to a consumer. Provide this information by plant, month of production, and VIN.
 - c. State the total number of rear axle assemblies with damaged rear trailing arms that have been identified by GM after delivery to a consumer. Provide this information by plant, month of production, VIN, and GM's assessment of the cause of the damage.
 - d. State what GM has done with the rear axle assemblies with damaged rear trailing arms detected at the assembly plant.
 - e. State whether any of the parts that were identified as excessively damaged were fixed and placed back into the assembly process.
 - f. Describe in detail the results of the long-term corrective actions that have been implemented based on the findings of GM's Rear Axle Trailing Arm Investigation in the subject vehicles including, but not limited to, the use of new container designs, material handling processes and shipping procedure changes.
 - g. Identify the following production ranges associated with potential assembly plant damage to rear trailing arms in the subject vehicles: (1) the period before GM identified the potential for assembly plant damage; (2) the periods from when GM identified the potential for trailing arm damage at the assembly to implementation of each countermeasure developed to address the issue; and (3) all production subsequent to the

implementation of the final countermeasure. Regarding Item (2), provide a chronology of all such process changes and state the approximate number of vehicles produced with each manufacturing process and the numbers of damaged units detected in vehicles produced in each range (see 12.a through 12.c).

13. Provide copies of all communications between GM and all suppliers of the subject components that relate in any way to the alleged defect condition.

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 require 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 August 27, 2003. Please refer to EA03-005 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. Jeffrey Quandt 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 Mr. Chris Lash of my staff at (202) 366-2370.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kd', with a long horizontal flourish extending to the right.

Kathleen C. DeMeter, Chief
Office of Defects Investigation
Enforcement

Enclosure 1, containing VOQ

Enclosure 2, One CD ROM titled Data Collection Disc containing three files