



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

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

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

**MAY 15 2006**

Stephen J. Speth, Director  
Vehicle Compliance & Safety Affairs  
DaimlerChrysler Corporation  
CIMS482-00-91  
800 Chrysler Drive  
Auburn Hills, MI 48236-2757

NVS-212mj1  
EA06-003

Dear Mr. Speth:

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 (PE05-061) to an Engineering Analysis (EA06-003) to investigate allegations of frame rail-mounted front air bag crash sensor failures due to corrosion on model year (MY) 2005 and 2006 DaimlerChrysler Minivans. At this time, it is our assessment that the front crash sensor failures can potentially result in either no deployment or delayed deployment of frontal air bags and improperly reduced level of air bag inflation in certain frontal crashes such as frontal offset and angular crashes in which the role of the front crash sensor may be critical.

This office has received 26 reports of alleged front air bag crash sensor failures or frontal air bag non-deployment in crashes involving MY 2005 and 2006 DaimlerChrysler Minivans since we last wrote to DaimlerChrysler. Many of the reports on front crash sensor failures indicate that the air bag warning lamp illuminated and the dealers replaced the front crash sensors to remedy the problem. An electronic image of each Vehicle Owner's Questionnaire report has been e-mailed to your office. A list of the reference number of each report is shown at the end of this letter.

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

- **Subject vehicles:** All MY 2005 and 2006 DaimlerChrysler Minivans (i.e., Dodge Caravan, Dodge Grand Caravan, and Chrysler Town and Country).
- **Subject components:** Front air bag crash sensors, including their connectors, mounted on the frame rails behind the front bumper.
- **DaimlerChrysler:** DaimlerChrysler 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



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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 DaimlerChrysler (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.

- **Alleged defect:** Any one or more of the following: alleged failure or malfunction of one or more subject components; unexpected illumination of the air bag warning lamp (unless it can be clearly shown that the subject component was not the cause of air bag warning lamp illumination); and allegation of non-deployment, delayed deployment and/or improperly reduced level of air bag inflation during a crash.
- **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 DaimlerChrysler, 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 DaimlerChrysler 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 DaimlerChrysler has previously provided a document to ODI, DaimlerChrysler 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 DaimlerChrysler'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 the subject vehicles DaimlerChrysler has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by DaimlerChrysler, 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 DaimlerChrysler, or of which DaimlerChrysler 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 DaimlerChrysler is or was a party to the arbitration; and
  - f. Lawsuits, both pending and closed, in which DaimlerChrysler 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 DaimlerChrysler'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. DaimlerChrysler's file number or other identifier used;
  - b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
  - c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
  - d. Vehicle's VIN;
  - e. Vehicle's make, model and model year;
  - f. Vehicle's mileage at time of incident;
  - g. Incident date;
  - h. Report or claim date;
  - i. Whether a crash is alleged;
  - j. Whether property damage is alleged;
  - k. Number of alleged injuries, if any; and
  - l. Number of alleged fatalities, if any.

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

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method DaimlerChrysler 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 DaimlerChrysler 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. DaimlerChrysler's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g. Labor operation number;
- h. Problem code;
- i. Replacement part number(s) and description(s);
- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

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

6. Describe in detail the search criteria used by DaimlerChrysler to identify the claims identified in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by DaimlerChrysler on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that DaimlerChrysler offered for the subject vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.
7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles that DaimlerChrysler 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 DaimlerChrysler is planning to issue within the next 120 days.

8. Produce copies of all communications between DaimlerChrysler and the supplier of the subject components that relate to, or may relate to, the alleged defect in the subject vehicles. 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.
9. Describe the purpose of the frame rail-mounted front crash sensors in the subject vehicles. Your response should include all types and severities of vehicle crashes in which the sensors are designed to perform, or may perform, a role in detecting a crash and, with respect to each crash type and severity, provide all time-to-fire measurements or calculations that have been made both with and without the sensors. Please organize your response by crash type and speed.
10. List and describe in detail all fault codes or diagnostic codes associated with a failure or malfunction of the subject components in the subject vehicles that could be stored in the air bag control module (i.e., Occupant Restraint Controller). State whether and how each such fault code can illuminate the air bag warning lamp intermittently, and whether and how it can illuminate the air bag warning lamp constantly. Also, describe the operation and functionality of a failed or affected front crash sensor while the air bag warning lamp is illuminating intermittently and while it is illuminating constantly.
11. List and describe in detail all restraint, crash and occupant data (e.g., air bag deployment status, deployed air bag inflator stages/levels, seat belt usage, vehicle deceleration, delta-V, occupant classification, air bag suppression status, etc.) stored by Occupant Restraint Controllers in the subject vehicles.
12. Produce copies of all documents relating to design and manufacturing specifications for the subject components in the subject vehicles.
13. Produce copies of all documents relating to design and performance requirements and/or guidelines that involve the subject components, frontal crash sensing, frontal air bag deployment/inflation levels, and/or frontal air bag occupant protection in the subject vehicles.

Separately, describe or state, and provide all documents related to the following:

- a. Crash sensing logic and algorithms;
- b. Frontal air bag inflator stage and/or combination of inflator stages and any time delay between successive inflator stages used;
- c. Air bag deployment thresholds in terms of change in velocity (delta-V), barrier equivalent velocity (BEV) and crash test mode;
- d. Time-to-fire for each deployment threshold and each crash test mode;
- e. Frontal air bag inflator deployment/inflation levels by delta-V, BEV and crash test mode; and
- f. All driver and passenger injury criteria.

In addition, for items "c" through "f," your response should include each performance target regardless of whether it is required, or not, by DaimlerChrysler or its suppliers (include in

your responses whether each outcome is explicitly required, implicitly required, or not required).

14. Describe in detail the MY 2005 frontal air bag system and the differences between the MY 2005 system and the MY 2006 system. Also, describe all other frontal restraint system changes that have been made and any vehicle changes that may affect the vehicle performance with respect to compliance with Federal Motor Vehicle Safety Standard (FMVSS) No. 208.
15. Describe and identify all vehicle tests, whether crash, sled, computer crash simulations, or otherwise, involving frontal crashes—except for air bag suppression and low risk deployment testing—conducted by, or for, DaimlerChrysler and that were used to develop or evaluate, for any reason, the frontal air bag systems in the subject vehicles. This should include, but is not limited to, all certification test data related to FMVSS 208, frontal offset, and frontal oblique testing conditions. For each such test, provide the following information:
  - a. Test number;
  - b. Test date;
  - c. Test vehicle or vehicle analyzed (state model, model year, VIN and date of manufacture);
  - d. Summary of the subject and objective of the test;
  - e. Engineering group(s)/supplier(s) responsible for designing and for conducting the test or analysis; and
  - f. Summary of the findings and/or conclusions resulting from the test, including but not limited to, all crash dummy injury measurements.

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

16. 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, DaimlerChrysler. 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.

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

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

18. Produce two of each of the following:
- a. Exemplar samples of each design version of the subject components;
  - b. Field-returned samples of the subject components exhibiting the subject failure mode; and
  - c. Any kits that have been released, or developed, by DaimlerChrysler for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.
19. State the number of each component/assembly of the subject components that DaimlerChrysler 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). Include any kits that have been released, or developed, by DaimlerChrysler for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

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 DaimlerChrysler is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.



20. On December 5, 2001, DaimlerChrysler submitted to NHTSA a Defect Information Report stating its intent to recall approximately 102,000 MY 2002 Jeep Liberty vehicles (NHTSA Recall No. 01V-373) to remedy a front crash sensor wiring condition that may be susceptible to damage during severe frontal crashes such as the Insurance Institute for Highway Safety's 40-mph offset frontal crash test. DaimlerChrysler stated that its analysis showed that loss of the front crash sensor early in the crash can cause delayed air bag deployment.

Please explain any similarities and differences between the Jeep Liberty vehicles and the subject vehicles in terms of frontal air bag system performance and occupant protection with a nonfunctional front crash sensor in frontal crashes, including but not limited to, frontal offset and frontal oblique crashes. Explain why DaimlerChrysler decided to recall the Jeep Liberty vehicles.

21. Furnish DaimlerChrysler's assessment of the failure progression of frame rail-mounted sensor failures due to corrosion. Your response should include, but not be limited to, a discussion explaining the causes of corrosion on the bushings and the effects of corrosion on the bushing, adjacent to the electrical terminal housing, and on the plastic sensor body near the bushing, including the plastic terminal housing.
22. Furnish DaimlerChrysler's assessment of the alleged defect in the subject vehicles, including:
- The causal or contributory factor(s);
  - The failure mechanism(s);
  - The failure mode(s);
  - The risk to motor vehicle safety that it poses;
  - 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 has occurred, or subject component was malfunctioning or has malfunctioned; and
  - The reports included with this inquiry.

For items "d" and "e," your response should include a discussion explaining the potential non-deployment, delayed deployment, and reduced inflation levels of the frontal air bags when one or both frame rail-mounted front crash sensors in the subject vehicles are not functional or malfunctioning. Also, given that the occupants of subject vehicles involved in a crash may be unaware of delayed deployment or reduced air bag inflation levels, please explain whether and how field performance of the subject vehicles can be reliably evaluated.

This letter is being sent to DaimlerChrysler 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. DaimlerChrysler's failure to respond promptly and fully to this letter could subject DaimlerChrysler to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) Please note that maximum civil penalties under 49 U.S.C. § 30165 have increased as a result of the recent enactment of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, Public Law No. 106-414 (signed November 1, 2000). Section 5(a) of the TREAD Act, codified at 49 U.S.C. § 30165(b), provides for civil penalties of up to

\$5,000 per day, with a maximum of \$16,050,000 for a related series of violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. This includes failing to respond to ODI information requests.

If DaimlerChrysler 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, DaimlerChrysler does not submit one or more requested documents or items of information in response to this information request, DaimlerChrysler 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.

DaimlerChrysler's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by July 7, 2006. Please refer to EA06-003 in DaimlerChrysler's response to this letter. If DaimlerChrysler finds that it is unable to provide all of the information requested within the time allotted, DaimlerChrysler must request an extension from Mr. Thomas Cooper at (202) 366-5218, no later than five business days before the response due date. If DaimlerChrysler 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 DaimlerChrysler then has available, even if an extension has been granted.

If DaimlerChrysler 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, DaimlerChrysler 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 (70 Fed. Reg. 53308 (Sept. 8, 2005)), to the Office of Chief Counsel (NCC-113), National Highway Traffic Safety Administration, Room 5219, 400 Seventh Street, S.W., Washington, D.C. 20590. DaimlerChrysler 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  
Office of Enforcement

## VOQ Reference Nos.:

10154856	10154177	10153991	10153683	10153210	10152745	10152248	10152216
10151990	10148278	10147343	10142858	10142734	10139243	10124004	10120375
10115160	10110820	10142711	10146730	10143623	10138152	10132801	10109149
10104550	10076042						