# DaimlerChrysler

DaimlerChrysler Corporation Stephan J. Speth Director Vehicle Compliance & Safety Affairs

September 11, 2006

Kathleen C. DeMeter
Office of Defects Investigation
National Highway Traffic Safety Administration
U.S. Department of Transportation
400 Seventh St., SW
Washington, D.C. 20590

Ref: NVS-212cag; EA06-011

Dear Ms. DeMeter:

This document contains DaimlerChrysler Corporation's ("DCC's") response to the referenced inquiry regarding allegations of fire or thermal events under the front seat in 2001 through 2003 model year Dodge Durango vehicles. By providing the information contained herein, DCC is not waiving its claim to attorney work product and attorney-client privileged communications.

DCC has completed its investigation and believes fluid may be spilled from the floor mounted cup holder in front 40-20-40 bench seat equipped 2001 through 2003 model year Dodge Durango vehicles and an unused console power outlet connector located under the front bench seat may become contaminated. If such an event occurs, it may not be readily apparent to the operator that contamination has taken place. This may allow development of a high resistance short circuit in the connector, causing localized heating, which could eventually lead to a fire.

This connector contains a fused B+ circuit that is powered with key off, a ground wire, and in a vehicle with front bucket seats would connect the vehicle wiring harness with the console power outlet. The connector is located rearward in vehicle of the cup holder located on the tunnel for vehicles equipped with the front bench seat. To reduce main body wiring harness complexity in the vehicle assembly plant, this unused connector is included on bench seat equipped vehicles.

DCC is unaware of any reports responsive to this investigation that allege a vehicle crash, injury or fatality.

Pre-2001 model year Dodge Durango vehicles did not utilize the subject connector, since the center console on bucket seat equipped vehicles in that period of time did not

contain a console power outlet. For the 2004 model year and forward, the Dodge Durango was completely redesigned and is not available with a front bench seat configuration and the unused console power outlet connector.

On September 6, 2006, DCC submitted to NHTSA ODI a Defect Information Report, complying with the requirements of 49 CFR Part 573, stating the Company's intent to conduct a voluntary safety recall to inspect and cap/seal the unused subject console power outlet connector on all 2001 through 2003 model year Dodge Durango vehicles equipped with the 40-20-40 front bench seat.

Sincerely,

Stephan J. Speth

Attachment and Enclosures

- 1. State, by model and model year, the number of subject vehicles DCC has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by DCC, state the following:
  - a. Vehicle identification number (VIN);
  - b. Type of front seat (i.e. 40-20-40 bench, bucket, etc);
  - c. Whether the front seat is heated;
  - d. Whether the front seat has a center console or fold down armrest; and
  - e. Whether the front seat has power or manual adjustment.

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

A1. The chart below lists the 2001 through 2003 model year ("MY") Dodge Durango (body designation "DN") sport utility vehicles that have been manufactured by DaimlerChrysler Corporation ("DCC") for sale or lease in the United States.

Model Year	2001	2002	2003
Volume	137,536	112,409	122,264
	To	tal Volume = 372,209	

The specific data requested in items a. through e. is provided in Enclosure 1 as a Microsoft Access 2000 table, titled "PRODUCTION DATA".

- d. Note: All subject DN vehicles are equipped with a floor console. Front bucket seat DN vehicles contain a center-floor console located between the front seats and extending forward in vehicle to the instrument panel. The center armrest is the top of the console. Front bench seat DN vehicles contain a front-floor mini console located on the tunnel between the front bench seat and instrument panel. The bench seat has a fold down armrest located in the front center seating position.
- 2. State the number of each of the following received by DCC, or of which DCC is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles, excluding those provided in response to the PE06-008:
  - 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. Reports involving a fire, 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;

- e. Property damage claims;
- f. Third-party arbitration proceedings where DCC is or was a party to the arbitration; and
- g. Lawsuits, both pending and closed, in which DCC 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 "g," provide a summary description of the alleged problem and causal and contributing factors and DCC'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.

A2. The following summarizes the non-privileged reports identified by DCC that relate to, or may relate to, the alleged condition ("a fire or thermal event under the front seat, including but not limited to smoke, smoldering and melting of the seat or components underneath the seat") for the subject components ("the front, 40-20-40 bench seat, with either manual or power adjustment, including but not limited to any wiring harnesses under the seat and the center console/armrest") in the subject vehicles ("all MY 2001-2003 Dodge Durango sport utility vehicles manufactured for sale or lease in the United States"). DCC has conducted a reasonable and diligent search of records kept in the ordinary course of business for such information.

Note: This response includes all applicable reports identified through August 2, 2006 (the date the Information Request for EA06-011 was received by DCC). The reports provided with the April 13, 2006 response to PE06-008 are included again in response to Questions 2-4 for completeness.

- a. There are a total of fourteen customer complaints for twelve unique vehicle identification numbers (VINs) that may relate to the alleged condition. These complaints are referred to as a Customer Assistance Inquiry Requests ("CAIRs").
- b. There are a total of three field reports for three unique VINs that may relate to the alleged condition, based on the limited text contained within the field reports and no

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associated photographs. No reports have been identified since the PE response was submitted.

- c. There are no reports alleging a crash, injury or fatality that are responsive to this investigation.
- d. There are no reports involving a fire, based on claims against DCC involving a death or injury or notices received by DCC alleging or proving that a death or injury was caused by a possible defect in a subject vehicle.
- e. There are no claims alleging property damage responsive to this investigation, i.e., where a customer alleged property damage and for which reimbursement was sought. DCC noted, however, two instances of minor property damage (aftermarket radio and compact disc) during response to the PE that were neither mentioned by the customer nor for which reimbursement was sought.
- f. There are no third party arbitration proceedings where DCC is, or was, a party to the arbitration, that are responsive to this investigation.
- h. There are six legal claims and no lawsuits involving DCC with allegation of vehicle interior fire which may be responsive to this investigation.

Model Year	Customer Complaints	Field Reports	Claims / Lawsuits	VOQs	Unique VINs
2001	6	1	3/0	4	8
2002	6	2	2/0	2	6
2003	2	0	1/0	1	2

Total unique VINs that may be related to the alleged condition = 16

- 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. DCC'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 model year;
  - f. Vehicle's mileage at time of incident;
  - g. Incident date;

- h. Report or claim date;
- i. Type of front seat;
- j. Whether the front seat is heated;
- k. Whether the front seat has a center console or fold down armrest;
- 1. Whether the front seat has power or manual adjustment;
- m. Whether a crash is alleged;
- n. Whether a fire is alleged;
- o. Whether property damage is alleged;
- p. Severity of vehicle damage;
- q. Number of alleged injuries, if any;
- r. Number of alleged fatalities, if any; and
- s. Summary providing the status of each report.

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

- A3. The information requested in items a through s is provided in Enclosure 2 as part of a Microsoft Access 2000 table titled "REQUEST NUMBER TWO DATA."
  - Produce copies of all documents related to each item within the scope of Request No.
     Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method DCC used for organizing the documents.
- A4. Copies of all documents within the scope of Request No. 2 are provided in Enclosure 3, titled "CUSTOMER COMPLAINTS, FIELD REPORTS, LEGAL CLAIMS and LAWSUITS."
  - 5. Produce one of each of the following:
    - a. Samples of the portion of the power seat wiring harness that extends out of the carpet underneath the driver's seat;
    - b. Samples of the portion of the wiring harness that extends out of the carpet underneath the center console/armrest;
- A5. Two wiring harness samples from the subject vehicles are being provided under separate cover. The "C248" power seat wiring harness circuit and connector extends out of the carpet underneath the driver's seat, and is attached to the seat when the vehicle is equipped with power seats. The "C301" console power outlet connector extends out of the carpet underneath the center console/armrest, and is attached to the console power outlet on front bucket seat equipped vehicles.

The C301 console power outlet connector changed in the 2002 MY to a two wire connector, from the previous four wire connector utilized in the 2001 MY. Two circuits that were intended to power a console storage box light were removed from the C301 connector. The C248 power seat connector did not change during the 2001-2003 model years.

- 6. Provide an exploded view drawing showing the vehicle floor pan, the front seat, and all wiring harnesses located underneath the front seat. Identify and label all circuits contained in each harness. Include in your response an explanation of how the circuits are powered (i.e. battery, key on, etc).
- A6. The subject DN vehicle main body wiring harness, which contains the power seat wiring harness that extends out of the carpet underneath the driver's seat as well as the portion that extends out of the carpet underneath the center console/armrest, is routed along the structural cross-car beam which runs from sill to sill in the vehicle. This cross-car beam serves as the front attachment point for the front seats and also provides secure mounting points for the body wiring harness. There are several circuits contained in the main body wiring harness that are not related to this investigation.

The following circuit descriptions are provided for the portions of the main body wiring harness located underneath the driver's seat and/or center console/armrest in the subject vehicles. The "C248" power seat wiring harness circuit and connector extends out of the carpet underneath the driver's seat, and is attached to the seat when the vehicle is equipped with power seats. The "C301" console power outlet connector extends through an opening in the floor carpet underneath the center seating position, just under the front edge of the seat on 40-20-40 bench seat equipped vehicles.

Photographs of a 2001 MY DN (which was included with the PE06-008 response) are included in Enclosure 5. Enclosure 5 also contains an exploded view drawing of the front seats that is taken from the DN Service Manual.

Assembly process sheets showing the location of the main body wiring harness on the vehicle floor pan and the connectors described above are being submitted under separate cover to the Office of General Counsel with a request for confidentiality.

The connector pinouts below identify the circuits associated with both connectors. The fused B+ circuits in these connectors are battery fed and powered continuously.

#### C248 Power Seat Connector

Cavity	Circuit	
1	Z1 12BK Ground	
2	F91 12GY/RD Fused B+	

### C301 Console Power Outlet Connector (2001 MY)

Cavity	Circuit	
1	A12 16RD/TN Fused B+	
2	M120 PK - Courtesy Circuit Fused B+	
3	Z1 16BK Ground	
4	Y158 20YL/VT - Courtesy Driver Circuit (Ground)	

### C301 Console Power Outlet Connector (2002-2003 MY)

Cavity	Circuit	
1	A12 16RD/TN Fused B+	
2	Z1 16BK Ground	

7. For all circuits identified in response to Request No. 6, state, by model year, a total count for all of the following categories of claims, collectively, that have been paid by DCC 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 claim, state the following information:

- a. DCC'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. Type of front seat;
- h. Whether the front seat is heated;
- i. Whether the front seat has a center console or fold down armrest;
- j. Whether the front seat has power or manual adjustment;
- k. Labor operation number;
- l. Problem code;
- m. Replacement part number(s) and description(s);
- n. Concern stated by customer; and
- o. Comment, if any, by dealer/technician relating to claim and/or repair.

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

- 7A. Warranty by circuit designation is not available. The DCC warranty system is only applicable for total harness replacement or wiring repair. Specific areas of repair of the harness require designation of a "00" labor operation time and explanation of the repairs. See the response to Question No. 8 for details of the warranty claims that may be responsive to this inquiry.
  - 8. Describe in detail the search criteria used by DCC to identify the claims identified in response to Request No. 7, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles.
- 8A. Warranty by Labor Operation (LOP) code was run against the population of vehicles with a 40-20-40 split bench seat (sales code CBE). The LOP 08907509 relates to replacement of the entire body wiring harness, of which the C301 and C248 connectors are a part. Failure codes X6 (terminal damage), 18 (circuit open) and 14 (short or open) were used for this search, which resulted in eight warranty claims that are included in Enclosure 4 titled "Warranty Data".

It is important to note that there are no LOP codes within the DCC warranty system that apply to any type of vehicle fire. Accordingly, there is no responsive warranty fire data. Reports of alleged fire events are generally received by the DCC Office of the General Counsel, the DaimlerChrysler Customer Assistance Center (as a CAIR) or from other DCC field organizations. If an alleged fire event comes to the attention of a dealer technician during a warranty repair, the dealership is required to notify DCC and a CAIR is created. These CAIRs, to the extent they may be responsive to this investigation, are included with the response to Question Nos. 2, 3 and 4.

- Explain in detail the differences and similarities in the front seat assembly and wiring configuration of the MY 2000-2001 Dodge Ram and the subject vehicles. Provide drawings and sketches.
- 9A. DCC understands from discussion with your staff that Request No. 9 is seeking information regarding the MY 2000-2001 Dodge Ram Van/Wagon. The power driver's seat connector in the MY 2000-2001 Ram Van/Wagon and the associated recall (DCC Recall Number 990) is unrelated to the current investigation. The power seat connector in the Ram Van/Wagon is located in the same plane as the driver's feet, is located on a rubber floor mat, and was susceptible to foot well wash. This wash may contain salts and/or dirt, which in the

presence of water and an electrically powered connector, could cause localized heating due to a high resistance short and potentially result in a vehicle fire.

The subject DN vehicle C248 and C301 connectors are each located significantly higher than the driver's feet. The C248 power seat connector is located inboard from the left sill and behind the cross-car beam. The beam is approximately 8 inches above the footwell at the driver's seat position. When equipped with manual adjustment seats, the C248 power seat connector is taped back to the main body wiring harness, positioned underneath the carpet and pad, and is completely inaccessible to the customer or footwell wash. The cross-car beam rises to approximately 10 inches above the foot well surface at the C301 console power outlet connector mounting location. The C301 connector is located approximately 27 inches inboard of the left sill of the vehicle and 10 inches above the footwell area, completely inaccessible to footwell wash. Front bench seat DN vehicles contain a front-floor mini console with cup holder located on the tunnel between the front bench seat and instrument panel. The C301 console power outlet connector is located rearward in vehicle of this mini console.

See Enclosure 6 for front seat assembly wiring configuration photographs and approximate dimensions for the subject DN vehicle as well as the Dodge Ram Van/Wagon.

- 10. Explain in detail the differences and similarities in the front seat assembly and wiring configuration of the subject vehicles with:
  - a. Dodge Durangos built in MY 1998; and,
  - b. Dodge Durangos built in MY 2004.

Provide drawings and sketches.

10A. The Dodge Durango (DN) vehicle was new for the 1998 MY. DN vehicles built in the 1998–2000 model years were not equipped with a power outlet in the center-floor console on front bucket seat equipped vehicles and the associated body wiring harness takeout. For the 2001 MY, the DN center-floor console was redesigned to include a power outlet inside the console. The C301 connector linked the main body wiring harness to the console power outlet. This power outlet was present on DN vehicles through the 2003 MY equipped with front bucket seats and the center-floor console. Front bench seat equipped DN vehicles contain a front-floor mini console with cup holder located on the tunnel between the front bench seat and instrument panel. The unused C301 console power outlet connector is located rearward in vehicle of this mini console.

For the 2004 MY, the Durango was completely redesigned (body designation "HB") and is not available with a front bench seat configuration. All HB vehicles have front bucket seats and a full center-floor console with power outlet. See Enclosure 7 for applicable photographs.

Assembly process sheets showing the HB vehicle full center-floor console are being submitted under separate cover to the Office of General Counsel with a request for confidentiality.

- 11. Explain in detail the purpose and function of the wiring harness under the center console. Provide a drawing showing the relationship between the power seat wiring harness and the center console wiring harness. State whether the center harness is protected by the same fuse as the power seat wiring and if not, identify the fuse that powers this wiring. State whether the center harness is continuously powered.
- 11A. The C301 connector and main body harness wiring take out located under the center console is utilized in front bucket seat equipped vehicles to power the outlet located inside the console in 2001-2003 MY DN vehicles. This circuit is protected by a 20 amp fuse located within the vehicle Power Distribution Center (PDC). The front power seat wiring circuit is protected by a separate 50 amp fuse within the PDC. Both circuits are continuously powered. See Enclosure 6 and Enclosure 8 for graphical representation.
  - 12. In consideration of any additional information accumulated and evaluated in the preparation of DCC's response to this letter, furnish an update of DCC's assessment of the alleged defect in the subject vehicle, including:
    - a. The causal or contributory factor(s);
    - b. The failure mechanism(s);
    - c. The failure mode(s);
    - d. The effect(s) of the failure on the subject components and/or systems in the vehicle:
    - e. The risk to motor vehicle safety that it poses;
    - f. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject components were malfunctioning;
    - g. A description of the analysis process used to assess "a" through "f"; and
    - h. The reports generated as a result of this inquiry.
- 12A. Initial investigation had focused on the unused power seat wire harness in vehicles with manual seats. However, it was subsequently determined that the vehicles identified as potentially related to this investigation were equipped with the 40-20-40 split front bench seat. These vehicles were a mix of manual and power seats. Additionally, it was determined that the 2001-2003 MY DN vehicles equipped with the 40-20-40 front bench seat contained an unused, unsealed C301 connector located under the center front edge of the seat. This connector contains a fused B+ circuit that is powered with key off, a ground wire, and in a vehicle with front bucket seats would connect the vehicle wiring harness with the console power outlet. The connector is located rearward in vehicle of the cup holder located on the

tunnel for vehicles equipped with the front bench seat. To reduce main body wiring harness complexity in the vehicle assembly plant, this unused connector is included on bench seat equipped vehicles.

DCC believes that if fluid is spilled from the floor mounted cup holder in front bench seat equipped vehicles, the unused C301 console power outlet connector located under the front bench seat may become contaminated. Several fire analysis reports indicated the presence of a sticky substance on the tunnel carpeting and near or in the unused console wiring connector. If such an event occurs, it may not be readily apparent to the operator of the vehicle that contamination may have taken place. This contamination may allow development of a high resistance short circuit in the connector, causing localized heating, which could eventually lead to a fire.

Pre-2001 MY DN vehicles did not utilize the subject connector since the center console on bucket seat equipped vehicles in that period of time did not have a console power outlet. For the 2004 MY and forward, the Dodge Durango was completely redesigned and is not available with a front bench seat configuration and unused console power outlet connector.

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