## DaimlerChrysler

September 8, 2005

Mr. Thomas Z. Cooper
Office of Defects Investigation
National Highway Traffic Safety Administration
U.S. Department of Transportation
400 Seventh Street, SW
Weshington, D.C. 20590

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

Reference: NVS-212/fa; PE05-039

Dear Mr. Cooper,

This document contains DaimlerChrysler Corporation's (DCC) response to the referenced inquiry dated July 19, 2005 regarding information concerning the electric motor driven engine cooling fan in 2002MY Jeep Grand Cherokee vehicles equipped with 4.0L engines. In reaching our analysis and conclusions, and by providing the information contained herein, DCC is not waiving its claim to attorney work product and attorney-client privileged communications.

As can be seen in the attached response, DCC's review of complaints, field reports, warranty claims, legal proceedings, and lawsuits has not identified any issue with the electric motor driven cooling fan integrity or performance characteristics. The relatively small number of non-injury claims concerning the alleged defect relate to vehicles built within a very narrow time frame of the subject population. DCC believes the scope is limited to 2002MY Jeep Grand Cherokees built within the months of February, March, and April of 2002. The lack of design change throughout the 2002MY indicates that no design issue is present. DCC is continuing to investigate the supplier process history and Intend a survey of subject vehicles built within this brief time frame.

The only stated consequence of the alleged defect is engine overheating. There have been no reports of property damage or injury related to the alleged defect. DCC contends that the cooling fan operates within a well protected environment and does not present an unreasonable risk to motor vehicle safety. The subject assembly is made of light weight plastic, significantly limiting the energy carrying capacity of any separated places. The vast majority of engine operation occurs with the hood closed. The likelihood of an event involving the alleged defect is much greater while driving than the potential of occurrence during servicing the vehicle.

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

In summary, DCC's review of this information has found no indication of any electric motor driven engine cooling fan performance issue with the subject vehicles. DCC believes that there is little or no risk to motor vehicle safety resulting from the alleged condition.

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Stephan J. Speth

Attachment and Enclosures

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- Q1. State the number of all subject vehicles DaimierChrysler has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by DalmierChrysler, state the following:
  - 2. Vehicle identification number (VIN):
  - Date of manufacture: b.
  - Date warranty coverage commenced; and C.
  - The State in the United States where the vehicle was originally d. sold or leased (or delivered for sale or lease).

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

During the 2002 model year, DaimlerChrysler Corporation ("DCC") A1. manufactured 131,575 Jeep Grand Cherokees (DCC body code) designation is "WJ") equipped with 4.0L engines for the US market.

The detailed response that lists the production data is provided in Enclosure 1 as a Microsoft Access 2000 file, titled "PRODUCTION DATA".

- Q2. State the number of each of the following, received by Dalmier Chrysler, or of which Dalmier Chrysler is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:
  - Consumer complaints, including those from fleet operators;
  - b. Field reports, including dealer field reports:
  - c. Reports involving an 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; and
  - f. Third-party arbitration proceedings where Daimler Chrysler is or was a party to the arbitration; and
  - g. Lewsuits, both pending and closed, in which Daimler Chrysler is, or was, a defendant or codefendant.

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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 Daimler Chrysler'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 received by DCC that relate to, or may relate to, the alleged condition in the subject vehicles. DCC has conducted a reasonable and diligent search of our normal repositories of such information.

<del></del>	TOTAL.	UNIQUE
CAIRs Partial separation of fan blade / possible damage to surrounding components	38	 
Possible partial separation of fan blade / damage to surrounding components	67	1
Other potential condition / no damage to surrounding components	12	]
Total	117	107
VOQs	4	1
Field Reports	0	0
Legal Claims	0	0

a. There are a total of 121 customer complaints (including 4 NHTSA VOQs) distributed over a volume of over 131,575 vehicles sold which are now over 4 years old. The 117 other (non-VOQ) customer complaints contain 107 unique vehicles.

The original list of VOQ's received from NHTSA contained 4 VOQ's. Three of these have related customer complaints in the DCC system. The remaining VOQ is a unique report which does not have a related complaint in the DCC system.

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b. There are no field reports that relate to the alleged condition.

- There are no reported injuries or fatalities that are responsive to this inquiry.
- d. There are no reported fires that are responsive to this inquiry.
- There is no reported property damage responsive to this inquiry.
- There are no third-party arbitration proceedings involving DCC that are responsive to this inquiry.
- g. There are no legal claims against DCC, or notice received by DCC, that is responsive to this inquiry. There are no lawsuits, pending or closed, involving DCC that are responsive to this inquiry.
- Q3. Separately, for each item (compliant, report, claim, notice, or matter) within the scope of the response to Request No. 2, state the following information:
  - Dalmier Chrysler'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.):
  - Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
  - d. Vehicle's VIN;
  - e. Vehicle's model and model year;
  - f. Vehicle's mileage at time of incident:
  - g. incident date;
  - h. Report or claim date:
  - Whether a crash is alleged:
  - j. Whether a fire is alleged:
  - k. Whether property damage is alleged;
  - I. Number of alleged injuries, If any; and
  - m. Number of alleged fatalities, if any.

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

A3. The detailed response that lists the customer complaints and field reports, from Request No. 2, as requested in Items a. through m. is provided in Enclosure 2 as a Microsoft Access 2000 table, entitled "REQUEST NUMBER TWO DATA".

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- Q4. 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 Dalmier Chrysler used for organizing the documents.
- A4. Copies of all documents within the scope of Request No. 2 are provided in Enclosure 2 – COMPLAINT DETAILS, folder "Customer Complaints".
- Q5. State a total count for all of the following categories of claims, collectively, that have been paid by Dalmier Chrysler 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 builetin or customer satisfaction campaign.

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

- Dalmier Chrysler's ciaim 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:
- Replacement part number(s) and description(s);
- J. Concern stated by customer, and
- k. Comment, if any, by dealer/technician relating to ciaim und/or repair.

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

A5. There have been 614 warranty claims that may relate to the alleged defect, of which 89 have corresponding narratives.

It is often not possible to determine whether each particular warranty claim is in any way related to the alleged condition. There are other random issues that are not related to this alleged condition, yet still trigger replacement of the subject components. DCC has concluded that the

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warranty data cannot be used to determine any trend related to the alleged condition.

The detailed response that lists the warranty claim details, as requested in items a, through k, is provided in Enclosure 3 as a Microsoft Access table, titled "WARRANTY DATA".

Q6. Describe in detail the search criteria used by Daimler Chrysler 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 the terms of the new vehicle warranty coverage offered by Dalmier Chrysler 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 Daimier Chrysler 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.

A6. The search criteria used by DCC to identify claims to Request No. 5 can be found in the chart below:

SUPPLEMENT OF FOREIGN THE PROPERTY OF THE PROP	recognition of the second of t
MODULE/FAN, ASSEMBLY - Replace	07-15-01 <u>-</u> 01
FAN/COOLING, ELECTRIC MODULE - Replace	07-15-02-01
FAN - Replace - All Enginee	07-20-01-09
FAN - Replace - Hydraulic	07-20-01-10

	Andreas Agent Commission of the Commission of th
11	Broken or Cracked
UC	Uncodeable
9R	Engine runs hot

The standard warranty provided by DCC for the 2002 MY W.I vehicles was 3 years or 36,000 miles. Additionally, DCC dealers often perform repairs at no charge to the customer on out-of-warranty vehicles as a goodwill gesture. Customers can also purchase additional extended service contracts at their option through third-party providers not affiliated with DCC. This service contract data is not available to DCC and is not included in this response.

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- Q7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that DalmierChrysler 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 Daimler Chrysler is planning to issue within the pext 120 days.
- A7. There are no service, warranty, and/or other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that DCC has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities.
- Q8. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that related 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, Dalmier Chrysler. For each such action, provide the following information:
  - Action title or identifier;
  - The actual or planned start date;
  - The actual or expected end data;
  - d. Brief summary of the subject and objective of the action;
  - Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and.
  - 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.

A8. The general requirements of the 2002MY WJ electric cooling fan are governed under DCC Performance Standard PF-8712. Compliance to this standard was demonstrated by the supplier, Bosch Automotive Motor Systems, through testing which began 10/15/97 and was completed and approved 02/27/98.

These documents have been summarized as requested and submitted in Enclosure 5 – Confidential - Test and Survey Documentation (CD-Rom) to Ms. Jacqueline Glassman, Office of the Chief Counsel, under separate cover with a request for confidential treatment of Information.

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Since the opening of PE05-039, DCC initiated a field parts return program to evaluate the material properties of electric cooling fens from vehicles within the subject population which may have demonstrated the atleged defect. To date, five warranty returns have been received. The disposition of these part returns are summarized by the chart below.

RETURN NUMBER	_Vina	STATUS
_ 1	2C	DCC MATERIALS ANALYSIS
2	2C:	DCC MATERIALS ANALYSIS
3	2C:	EXEMPLAR
4	202	SUPPLIER, BOSCH, ANALYSIS
5	2C:	DCC MATERIALS ANALYSIS

DCC also plans to conduct a survey of vehicles within the subject population. DCC will update NHTSA with test and survey results when available.

- Q9. Describe all modifications or changes made by, or on behalf of, DaimlerChrysler in the programming 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:
  - The date or approximate date on which the modification or change was incorporated into vehicle production;
  - A detailed description of the modification or change;
  - The reason(s) for the modification or change;
  - The part numbers (service and angineering) of the original component;
  - The part number (service and engineering) of the modified component;
  - 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

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 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.

- A9. A detailed summary of all pertinent design change information for the subject components is included as Enclosure 6 – Change History.
- Q10. Produce one of each of the following:
  - Exemplar samples of each design version of the subject components;
  - Field return samples of the subject component exhibiting the subject failure mode;
  - c. Any kits that have been released, or developed, by Dalmier Chrysler for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.
- A10. a. A sample of the subject component has been shipped to the attention of Mr. John Abbott on 08/25/05. Only one design version existed for the subject vehicles.
  - b. DCC initiated a warranty part return program for this investigation to obtain various components from vehicles that have allegedly experienced the subject failure mode. A field return sample from vehicle VIN 20202022 has been shipped to the attention of Mr. John Abbott on 08/25/05.
  - c. There have been no kits released, or developed, by DCC for use in service repairs to the electric motor driven cooling fan which relate, or may relate, to the alleged defect in the subject vehicles.
- Q11. State the number of each of the following that Dalmier Chrysler has sold that is used in the subject vehicles by component name, part number (both service and engineering/production), and the month/year of sale (including the cut off data for sales, if applicable):
  - a. Subject components:
  - Any kits that have been released, or developed, by Daimler Chrysler for use in service repairs to the subject component/assembly.

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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 which Dalmier Chrysler has produced that contain the identical subject components, whether installed in production or in service, and state the applicable dates of production or service usage.

A11. The part sales information has been included in Enclosure 7 – Part Sales. Identical service parts are also used on the 2001MY thru current Jeep Liberty vehicles equipped with 3.7L engines (DCC body code designation is "KJ"). DCC is not aware of any complaints or field reports on the 2001 – 2006MYJeep Liberty vehicles for the alleged condition. There have been no kits released or developed by DCC for use in service repairs to the autiject component/assembly.

In nearly all cases, it is impossible to determine what these part sales are for. There are other customer issues (i.e., customer damage, collision) that are not related to this alleged condition, yet still trigger sales/replacement of the subject components. DCC has concluded that the part sales cannot be used to determine any trend related to the alleged condition.

- Q12. Furnish Dalmier Chrysler's assessment of the alleged defect in the aubject vehicle, including:
  - a. The causal or contributory factor(s);
  - b. The fallure mechanism(s);
  - The failure mode(s);
  - d. The risk to motor vehicle safety that it poses;
  - e. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and
  - f. The reports included with this inquiry.
- A12. DCC's investigation into the allegations of separation of the plastic fan, or plastic blades, from the engine's electric motor driven cooling fan in 2002MY Jeep Grand Charokee vehicles established that customer complaints very widely, and may not be an accurate indicator of what, if any, abnormal event is actually occurring in the field. The largest portion of complaints is considered only "possible" due to the noted damage of surrounding components. It is not clear that these vehicles exhibited the alleged condition. In addition, DCC contends that the scope of the alleged defect is limited to subject vehicles built during a small window within the 2002MY. Out of the total population of unique allegations contained within this response, only 5 vehicles were built outside this time frame. While

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customers are understandably upset with the inconvenience associated with unplanted service to the vehicle, the only stated consequence of the fan fracturing is engine overheating, and DCC does not identify this as a potential safety defect. In the event the engine temperature rises to a sufficient temperature, both the temperature gauge and "check engine" lamp located on the instrument panel will warn the operator of the condition. It is important to note, with emphasis, that there are no allegations of injury, accident or property damage in any of the identified complaints.

DCC believes that the environment of the cooling fan is sufficiently guarded from the risk of injury to a vehicle operator or anyone in the vicinity of an open hood. The plastic cooling fan is guarded and housed by a protective fan module shroud. This assembly is then further guarded by an additional fan shroud equipped on all subject vehicles, covering both the electric cooling fan and mechanical engine fan when so equipped. Field parts have been returned with separated pieces still enclosed within the assembly, even as the vehicle continued to be driven (reference exempler field return). This is evidence that the environment is well contained, and that the most likely consequence is engine overheating. DCC also notes that unlike other NHTSA investigations of metal fan blade separation, the subject assembly is made of light weight plastic, significantly limiting the energy carrying capacity of any separated pieces. Any separated pieces that manage to traverse the necessary torturous path and fracture the surrounding shrouds are likely to have expended all of their kinetic energy in doing so, reducing the potential for any type of injury. Further supporting these observations, DCC is not aware of any allegations where separated pieces of the plastic cooling fan and/or shroud assemblies have damaged or left witness marks on the bood inner sheet metal. Also, since the vast majority of engine operation occurs with the hood closed, the likelihood of an event involving the alleged defect is much greater while driving than the potential of occurrence during servicing the vehicle.

For the reasons stated, DCC believes that there is little or no risk to motor vehicle safety resulting from the alleged condition.