Rec'd
1/26/06

DAIMLERCHRYSLER

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

January 20, 2006

Mr. Jeffrey Quandt
Office of Defects Investigation
National Highway Traffic Safety Administration
U.S. Department of Transportation
400 Seventh Street, SW
Washington, D.C. 20590

Reference: NVS-213swmc; PE05-056

Dear Mr. Quandt,

This document contains DaimlerChrysler Corporation's response to the referenced inquiry dated November 22, 2005 regarding the steering shaft couplings and bolts, and steering wheel bolts to steering shafts in 2004 and 2005 model year Dodge Durango and 2005 model year Dodge Dakota vehicles. In reaching the 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.

There have been no reports of intermediate shaft separation, no loss of vehicle control or accidents, injuries or property damage due to the alleged condition in the subject vehicles. For the vehicles identified in this inquiry alleging the subject condition, all provided observable feedback to the operator in the form of looseness or play in the steering. This existence of such feedback, as well as the presence of audible noise if the intermediate shaft bolts are below specified torque levels or even missing, was confirmed during steering system rotational lash studies referenced within.

DCC does not believe that a trend exists based on the low level of input for this condition occurring across two unique vehicles manufactured at two different assembly plants over multiple model years and involving four separate joints. Nevertheless, DCC will continue to investigate this issue.

Sincerely,

for Stephan J. Speth

Attachment and Enclosures

DaimlerChrysler Corporation
800 Chrysler Drive CIMS 482-00-91
Auburn Hills MI USA 48326-2757

Mr. Jeffrey Quandt
Reference: NVS 213 swmc; PE05-056
January 20, 2006

ATTACHMENT

1. **State, by model and model year, the number of subject vehicles DaimlerChrysler has manufactured for sale or lease in the United States. Separately, for each subject peer vehicle manufactured to date by DaimlerChrysler, state the following:**

   a. **Vehicle Identification Number (VIN);**
   b. **Model;**
   c. **Model Year;**
   d. **Date of manufacture;**
   e. **Date warranty coverage commenced; and**
   f. **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." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

   Note: Unless otherwise indicated in the question response, all data contained in this response is through November 22, 2005, date of the information request.

A1. During the 2004 and 2005 model years, DaimlerChrysler Corporation ("DCC") manufactured 244,609 Dodge Durango (body model designation "HB") and during the 2005 model year 113,846 Dodge Dakota (body model designation "ND") vehicles for sale or lease in the U.S. market.

For the 2004 model year, the HB began production on a new platform unique from the prior generation of Durango and Dakota vehicles. For the 2005 model year, the ND began production on a new platform unique from the HB and unique from the prior generation of Dodge Durango and Dakota vehicles.

The HB is manufactured at DCC's Newark (Delaware) Assembly Plant and the ND is manufactured at DCC's Warren (Michigan) Truck Assembly Plant.

Model Year	Make & Model (Designation)	U.S. Market Volume
2004	Dodge Durango (HB)	129,967
2005	Dodge Durango (HB)	114,642
2005	Dodge Dakota (ND)	113,846
Total Volume 358,455		

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

ATTACHMENT

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;

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 n a subject vehicle, property damage claims, consumer complaints, or field reports;
e. Property damage claims; and
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.

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 the normal repositories of such information.

a. There are four customer complaints that may relate to the alleged condition. Due to one complainant providing three separate inputs for the same condition, there are only two unique VINs associated with the four complaints.

Customer Complaints by Unique VIN

	Steering Wheel Bolt		Intermediate Shaft Bolt --> Low Torque				Intermediate Shaft Bolt --> Missing				Unknown Location
Model	Loose	Missing	@Column	Upper U-Joint	@Gear	Unknown	@Column	Upper U-Joint	@Gear	Unknown	
04HB	1	0	0	0	0	0	0	0	1	0	0
05HB	0	0	0	0	0	0	0	0	0	0	0
05ND	0	0	0	0	0	0	0	0	0	0	0

b. There are 26 field reports that contain 22 unique VINs that relate to, or may relate to, the alleged condition.

ATTACHMENT

2004 & 2005 model year HB Field Reports by Unique VIN

	Steering Wheel Bolt		Intermediate Shaft Bolt –> Low Torque				Intermediate Shaft Bolt –> Missing				Unknown Location
Model	Loose	Missing	@Column	Upper U-Joint	@Gear	Unknown	@Column	Upper U-Joint	@Gear	Unknown	
04HB	3	0	1	0	0	5	0	0	0	2	1
05HB	1	0	0	0	3	1	0	0	0	0	0

2005 model year ND Field Reports by Unique VIN

	Steering Wheel Bolt		Intermediate Shaft Bolt –> Low Torque				Intermediate Shaft Bolt –> Missing				Unknown Location
Model	Loose	Missing	@Column	Upper U-Joint	@Gear	Unknown	@Column	Upper U-Joint	@Gear	Unknown	
05ND	0	0	2	0	0	1	1	0	0	1	0

c. There are no reports involving crash, injury or fatality that are responsive to this inquiry.

d. There are no reports involving fire that are responsive to this inquiry.

e. There are no claims that allege property damage that are responsive to this inquiry.

f. There are no third party arbitration proceedings where DCC is, or was, a party to the arbitration, that are responsive to this inquiry.

g. There are no lawsuits, either pending or closed, against DCC, in which DCC is or was a defendant or codefendant, that are responsive to this inquiry.

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 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 a fire is alleged;
k. Whether property damage is alleged;
l. Number if alleged injuries, if any; and

ATTACHMENT

m. Number of alleged fatalities, if any.

Provide this information in Microsoft Aecess 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

A3. The detailed summary of all requested information in response to Request 2 is provided in Enclosure 3 as a Microsoft access 2000 compatible format, titled "Request Number 2 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 DCC used for organizing the documents.

A4. Copies of all documents within the scope of Request 2 are provided in Enclosure 4, titled "CAIR & Field Reports".

5. State, by model and 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 such 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. 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 compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

ATTACHMENT

A5.

Model Year	Dodge Durango	Dodge Dakota	Warranty Claims
2004	238	N/A	238
2005	99	218	317
Total Claims	**337**	**218**	**555**

It is often not possible to determine whether any particular warranty claim is in any way related to the alleged condition. There are other random issues, not related to the alleged condition, that trigger replacement of the subject components. DCC has concluded that warranty data cannot be used to determine any trend related to the alleged condition.

The detailed response that lists the warranty claim information is provided in Enclosure 5 as a Microsoft Access 2000 compatible format, titled "Warranty Data".

6. **Describe in detail the search criteria used by DCC 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 DCC 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 DCC 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 in response to Request No. 5 can be found in the chart below:

Repair Description	Labor Operation Code
Lower Coupling	19201200
Lower Coupling Steering Shaft	19201203
Intermediate Shaft	19208100
Steering Column Assembly	19208300
Steering Wheel	19850100

Failure Code	Description
51	Improperly Installed
54	Improperly Assembled
3R	High/Low Operating Effort
FA	Stripped
UC	Uncodeable

The standard warranty offered by DCC on all 2004 and 2005 model year HB and on all 2005 model year ND vehicles was 36 months / 36,000 miles. There was no extended warranty coverage option related specifically to the subject components. Owners may have purchased additional warranty coverage through third-party providers not affiliated with DCC. This warranty data is not available to DCC and is not included with this response.

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 DCC 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 DCC is planning to issue within the next 120 days.**

A7. There have been two Technical Service Bulletins (TSBs) issued that involve to the steering system of the subject vehicles.

Technical Service Bulletin #19-012-04 (issue date December 13, 2004)
Technical Service Bulletin #19-003-05 (issue date May 3, 2005)

Although these bulletins do not directly relate to the alleged condition, they have been included because the condition indicated is a snapping or ticking sound when the wheel is turned, or a small amount of in and out movement of the steering column due to the steering column upper bearing retainer, which may be incorrectly classified by the operator as a loose or missing steering system fastener. Copies of these communications are provided in Enclosure 7, titled "Communications".

8. **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, DCC. 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.**

ATTACHMENT

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. Quality Engineering Center Torque Study

DCC's Quality Engineering Center (QEC), located in Auburn Hills, Michigan, conducted an inspection of 2004 and 2005 model year HB and 2005 model year ND employee vehicles for intermediate shaft fastener torque. The QEC facility performs routine maintenance and service for employee vehicles. Also, as part of the QEC's normal operations, they perform quality audits on these vehicles for items such as fluid levels, torque, etc. One such audit, which began November 4, 2005 and ended January 9, 2006, examined 55 HB and ND vehicles for intermediate shaft fastener residual torque.

See Enclosure 8, titled "QEC HB & ND Torque Study" for results of the study.

Engineering Steering System Rotational Lash Study

DCC Engineering performed a steering system rotational lash evaluation on January 9, 2006. The purpose of the evaluation was to measure the steering "dead band" zone in HB and ND vehicles for the conditions of reduced fastener torque, as well as no fastener, at each of the three intermediate shaft fastener locations. Dead band is the on-center zone where no measurable steering reaction occurs when the steering wheel is turned. The evaluation showed that as fastener torque decreased, the dead band increased; but that this increased dead band was accompanied by an audible clunk that provided feedback to the operator. During the evaluation, no loss of steering was noted.

The results of this evaluation are provided in Enclosure 8, titled "ND HB Steering System Rotational Lash."

9. Describe all modifications or changes made by, or on behalf of, DCC in the design, material composition, manufacture, quality control, supply 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;**
- **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**

ATTACHMENT

h. Whether the modified component can be interchanged with earlier production components.

A9. There have been no modifications or changes pertaining to the design, material composition, manufacturing, quality control, supply or installation process that relate to, or may relate to, the alleged condition.

10. Provide the following information relating to the alleged defect in the subject vehicles;

a. A description of all torque specification verification processes involved in the assembly of the subject components and any other assembly verification/quality control procedures or checks relating to the assembly of the subject components; A copy of the in-plant history for the following VIN numbers;

i) 1D7HE42K65[redacted]
ii) 1D4HB58D25[redacted]
iii) 1D4HB48N25[redacted]
iv) 1D4HD58D24[redacted]
v) 1D4HD48N14[redacted]

b. The assembly plant dynamic torque data for the subject components in the vehicles identified in 10.c and the five vehicles built before and after each of the vehicles; and

c. Videos showing the assembly and verification/quality control processes relating to the subject components at each assembly plant (one video is sufficient if the processes are the same for all plants).

A10. a. The dynamic torque specification for the steering wheel attaching fastener and the three intermediate shaft assembly bolts are as follows:

	Steering Wheel Attachment	Upper I-Shaft to Column	Upper I-Shaft to Lower I-Shaft	Lower I- Shaft to Gear
HB	45 ft-lbs +9, -5	28 ft-lbs +8, -7	28 ft-lbs +8, -7	43 ft-lbs +6, -8
ND	47 ft-lbs +9, -5	43 ft-lbs +6, -8	43 ft-lbs +6, -8	43 ft-lbs +6, -8

Both assembly plants control the subject fastener torque through the use of torque guns that can record torque and angle. Additionally, they communicate with the PFS (Performance Feedback System) to confirm a pass / fail code for the subject fastener while the vehicle is within the work station.

b. The assembly plant dynamic torque data for the specified VINs, as well as the five vehicles prior and five vehicles post are contained in Enclosure 10, titled "HB Newark I-shaft VIN History" and "ND Warren I-shaft VIN History."

ATTACHMENT

c. Two video tapes are provided with this response and document the subject component assembly process for the HB at the Newark Assembly Plant and for the ND at the Warren Truck Assembly Plant.

11. State the number of each of the following that DCC 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. Subject component; and
b. Any kits that have been released, or developed, by DCC for use in service repairs to the subject component/assembly.

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

A11.a. Part sales information is provided in Enclosure 11, titled "Mopar Replacement Sales". It is impossible to determine what these part sales are for. There are other customer issues, e.g., customer induced damage, accident repair, etc. that are not related to this alleged condition, yet still trigger sales and replacement of the subject components. DCC has concluded that the part sales information cannot be utilized to determine any trend related to the alleged condition.

b. There are no 2004 and 2005 model year HB or 2005 model year ND intermediate shaft or steering wheel kits released or developed by DCC for use in service repairs. Beginning with the 2006 model year, the Mitsubshi Raider (body model designation "NM") is built at the Warren Truck Assembly Plant, and utilizes the same intermediate shaft as the ND.

Supplier contact information is provided in Enclosure 11, titled "Supplier Information".

12. Furnish 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 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

ATTACHMENT

f. The reports included with this inquiry.

A12. There have been no reports of intermediate shaft separation, no loss of vehicle control or accidents, injuries or property damage due to the alleged condition in the subject vehicles.

For the vehicles identified in question 10 (one 2005 model year Dakota, one 2004 model year Durango, and three 2005 model year Durango vehicles) all provided observable feedback to the operator in the form of looseness or play in the steering. This existence of such feedback, as well as the presence of audible noise if the intermediate shaft bolts are below specified torque levels or missing, was confirmed during steering system rotational lash studies referenced in question 8.

DCC does not believe that a trend exists based on the low level of input for this condition occurring across two unique vehicles manufactured at two different assembly plants over multiple model years and involving four separate joints. Nevertheless, DCC will continue to investigate this issue.