CHRYSLER

October 5, 2012

Mr. Jeffrey L. Quandt, Chief
Vehicle Controls Division (VCD), NVS-213
U.S. Department of Transportation

National Highway Traffic Safety Administration (NHTSA)
Office of Defects Investigation (ODI)
Room W48-312
1200 New Jersey Avenue SE
Washington, D.C. 20590

Reference: NVS-213hkb; PE12-021

Dear Mr. Quandt:

Attached is Chrysler Group LLC's response to the referenced inquiry. This response contains Questions 1-7, 9 and 11, which were previously submitted to NHTSA on September 21, 2012. In addition to responses to the remaining questions, it also repeats the response to Question 10, which was previously submitted on September 27, 2012, per your request. Note that Question 7 has been amended to include additional information.

In performing the analysis, reaching its conclusions and by providing the information contained herein, Chrysler Group LLC is not waiving its claim to attorney work product and attorney-client privileged communications.

Chrysler is continuing to investigate the potential root cause for the alleged defect in subject vehicles outside the M34 recall period. Upon completion of its testing and analysis, Chrysler will provide NHTSA with an update of the assessments discussed in Question 8.

Sincerely,

David D. Dillon

Attachment and Enclosures

Preliminary Statement

On April 30, 2009 Chrysler LLC, the entity that manufactured and sold the vehicles that are the subject of this Information Request, filed a voluntary petition for relief under Chapter 11 of Title 11 of the United States Bankruptcy Code.

On June 10, 2009, Chrysler LLC sold substantially all of its assets to a newly formed company now known as Chrysler Group LLC. Pursuant to the sales transaction, Chrysler Group LLC assumed responsibility for safety recalls pursuant to the 49 U.S.C. Chapter 301 for vehicles that were manufactured and sold by Chrysler LLC prior to the June 10, 2009 asset sale.

On June 11, 2009, Chrysler LLC changed its name to Old Carco LLC. The assets of Old Carco LLC that were not purchased by Chrysler Group LLC, as well as the liabilities of Old Carco that were not assumed, remain under the jurisdiction of the United States Bankruptcy Court – Southern District of New York (*In re Old Carco LLC, et al*., Case No. 09-50002).

Note: Unless indicated otherwise in the response to a question, this document contains information through August 6, 2012, the date the information request was received.

Chrysler is responding to questions 8, 12, and 13. In addition, Chrysler is amending the response and updating answers for question 7 to include additional information that has recently been discovered.

---

1. **State, by engine, transmission, rear axle ratio and model year, the number of subject vehicles Chrysler has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Chrysler, state the following:**

   a. Vehicle identification number (VIN);
   b. Make;
   c. Model;
   d. Model Year;
   e. Engine;
   f. Transmission;
   g. Rear Axle Ratio(n) and identification number (e.g., C235)
   h. Date of manufacture;
   i. Date warranty coverage commenced; and
   j. 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."

A1. The 2009 model year (MY) and 2010 MY Ram 1500 pickup US market vehicles are designated as the DS model and were built in the Warren Truck Assembly Plant (WTAP) in Warren, Michigan, or the St. Louis-North Assembly Plant in Fenton, MO, or at the Saltillo Truck Assembly Plant (STAP) in Saltillo, Coahuila, Mexico. The total number of 2009 MY and 2010 MY Ram 1500 pickups manufactured for sale or lease for the US market was 230,678. All subject vehicles are equipped with the Chrysler 9.25" rear axle.

The detailed response that lists the production data is provided in Enclosure 1 as Microsoft Access 2010 tables titled "PRODUCTION DATA (PE12-021).mdb".

2. **State the number of each of the following, received by Chrysler, or of which Chrysler 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 Chrysler was a party to the arbitration; and

f. Lawsuits, both pending and closed, in which Chrysler is or was a defendant or codefendant.

For subparts "a" through "d," 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 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 reports identified by Chrysler that relate to, or may relate to, the alleged condition in the subject vehicles. Chrysler has conducted a reasonable and diligent search of the normal repositories of such information. Per email dated August 10, 2012, with NHTSA, the scope of the subject components has been refined and does not include brake systems or axle tubes and suspension mounts.

a. There are 371 consumer complaints (Customer Assistance Inquiry Request, or CAIR) that may relate to the alleged condition for the subject vehicles, which represent 324 unique VINs.

b. There are a total 66 field reports (containing 69 VINs) that may relate to the alleged condition for the subject vehicles, which represent 67 unique VINs.

c. There are 18 reports (8 VINs) alleging crashes in the subject vehicles that may relate to the alleged condition. There are 3 reports of minor injuries requiring no medical treatment. There are no reports of fatality.

d. There are 15 reports (7 VINs) alleging property damage that may relate to the alleged condition in the subject vehicles.

e. There are no third-party arbitration proceedings involving Chrysler that may relate to the alleged condition for the subject vehicles.

f. There are 24 legal claims involving the subject vehicles that may relate to the alleged condition.

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. **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.);**
   c. **Vehicle owner or fleet name (and fleet contact person), address, and telephone number;**
   d. **Vehicle's VIN;**
   e. **Vehicle's make, model and model year;**
   f. **Vehicle's mileage at time of incident;**
   g. **Incident date;**
   h. **Report or claim date;**
   i. **Whether a crash is alleged;**
   j. **Whether property damage is alleged;**
   k. **Number of alleged injuries, if any; and**
   l. **Number of alleged fatalities, if any.**

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

A3. The detailed response that lists the customer complaints, field reports and legal claims from Request No. 2, as requested in Items a. through l. is provided in Enclosure 3 in a Microsoft Access 2010 table, titled "REQUEST NUMBER TWO DATA (PE12-021).mdb".

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 Chrysler used for organizing the documents.**

A4. Copies of all documents within the scope of Question No. 2 are provided in Enclosure 4 – Field Data. The documents for the subject vehicles contain CAIR reports, field reports and legal claims. The CAIR summaries are submitted in one .pdf file and the related documents are arranged in folders by CAIR number

5. **State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by 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 bulletin or customer satisfaction campaign.**

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

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

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

A5. The total number of warranty claims which may relate to the alleged defect in the subject vehicles is listed in the chart below.

Description of Repair	Labor Operation	2009 Claims	2010 Claims
Plug, rear axle filler – replace or reseal	03102501	7	10
Shaft, axle – replace all others-both	03200110	6	7
Bearing, axle shaft – replace all other axles - right	03200506	6	8
Bearing, axle shaft – replace all other axles - left	03200507	3	3
Bearing, axle shaft bearing, axle shaft replace right	03200550	2	1
Seal, axle shaft oil – replace all other axles - right	03202610	118	81
Seal, axle shaft oil – replace all other axles – left	03202611	16	12

Axle/differential, assembly, rear-replace 8.25-9.25 axles	03300101	85	93
Bearings, pinion bearing, pinion – all axles-replace	03400551	340	248
Bearings, differential side – replace 8.25-9.25 axles	03400801	208	109
Case, differential replace 8.25-9.25 axles-standard and Sure Grip	03401501	59	57
Gear set, differential side and pinion – replace all other axles	03404001	9	7
Ring gear and pinion set – replace all other axles	03500101	723	1,194
Differential, backlash adjustment, adjust all others	03500242	9	24
Bearings, pinion – replace all others	03500501	197	107
Flange, propeller shaft to rear axles – replace all others	03501502	27	24
Seal, drive pinion oil - replace	03502001	1,847	425
Bearing, propeller shaft center - replace	16100101	2	0
Propeller shaft, with universal joints – replace transmission to rear axle	16300101	227	129
Propeller shaft, with universal joints – replace rear axle to center bearing	16300102	1	8
Propeller shaft, with universal joints – replace transfer case to rear axle	16300104	75	40
Propeller shaft, with universal joints – replace transmission to center/front bearing	16300105	5	6
Yoke, propeller shaft sliding – replace at transmission	16301001	9	14
Yoke, propeller shaft sliding – replace transfer case to rear axle	16301004	9	1
Universal joints, single piece shaft – replace single piece shaft – one at rear axle	16500501	13	7
Universal joints, single piece shaft – replace single piece shaft – one transmission rear to rear axle	16500502	3	2
Universal joints, single piece shaft – replace single piece shaft – one transfer case rear to rear axle	16500504	11	1
Universal joints, single piece shaft – replace single piece shaft – both transmission to rear axle	16500511	4	4
Universal joints, single piece shaft – replace single piece shaft – both – transfer case to rear axle	16500512	13	1
Universal joints, two piece shaft – replace	16500603	1	1

one - at rear axle			
Universal joints, two piece shaft – replace u-joints – center bearing to rear axle shaft	16500611	10	3

Additionally, not all of the warranty claims are necessarily related to the alleged condition as there are other reasons for replacing these components. Therefore, the number of responsive warranty claims may be artificially high with regard to the alleged condition. Thus, Chrysler has not drawn conclusions regarding trends for the components within the alleged defect and warranty in the subject vehicles based on warranty data alone.

The detailed response that lists the warranty claims is provided in Enclosure 5 – "WARRANTY DATA (PE12-021).mdb".

6. **Describe in detail the search criteria used by 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, by make and model year, the terms of the new vehicle warranty coverage offered by 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 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 labor operation codes used by Chrysler to identify warranty claims are also listed. In conducting its search, Chrysler included warranty claims where:

- A the labor operation code was possibly related to the alleged defect
- A warranty claim narrative was potentially related to the alleged condition or as not clear enough for it to be ruled out.

Description of Repair	**Labor Operation**	**Failure Codes**
Oil, Axle - Add (Material only)	3000240	40-Fluid High or Low
Housing, rear axle - Replace 8.25-9.25 axles	3100101	6-BENT
		11-BROKEN OR CRACKED
		16-CASTING PROCESS DEFECT
		4K-TRUNNION TO TUBE LEAK
		4N-HOUSING SEAL BORE LEAKS
		52-IMPROPERLY MACHINED
		54-IMPROPERLY ASSEMBLED

		7X-WELD DEFECT
Cover, rear axle housing - Replace-Replace	3101001	11-BROKEN OR CRACKED
		27-DAMAGED
		65-LEAKS
Cover, rear axle housing - Reseal - Reseal	3101501	51-IMPROPERLY INSTALLED
		65-LEAKS
Vent, rear axle - Replace	3102001	X8-STRIPPED THREADS
		8-BLOCKED/RESTRICTED
		65-LEAKS
Plug, rear axle filler - Replace or reseal	3102501	X8-STRIPPED THREADS
		51-IMPROPERLY INSTALLED
		65-LEAKS
		68-NOISY
Plug, rear axle drain - Replace or reseal	3102601	X8-STRIPPED THREADS
		51-IMPROPERLY INSTALLED
		65-LEAKS
Shaft, axle - Replace All others-Both	3200110	5-BEARING DEFECT
		6-BENT
		9-BRINNELLED OR HARD SPOTS
		11-BROKEN OR CRACKED
		27-DAMAGED
		36-EXCESSIVE RUN OUT
		52-IMPROPERLY MACHINED
		54-IMPROPERLY ASSEMBLED
		93-SHAFT OR SPLINE DEFECT
Bearing, axle shaft Bearing, axle shaft-Replace Right	3200550	5-BEARING DEFECT
		6-BENT
		9-BRINNELLED OR HARD SPOTS
		11-BROKEN OR CRACKED
		27-DAMAGED
		36-EXCESSIVE RUN OUT
		52-IMPROPERLY MACHINED
		54-IMPROPERLY ASSEMBLED
		93-SHAFT OR SPLINE DEFECT
Bearing, axle shaft Bearing, axle shaft-Replace Left	3200551	5-BEARING DEFECT
		6-BENT
		9-BRINNELLED OR HARD SPOTS
		11-BROKEN OR CRACKED
		27-DAMAGED
		36-EXCESSIVE RUN OUT
		52-IMPROPERLY MACHINED
		54-IMPROPERLY ASSEMBLED
		93-SHAFT OR SPLINE DEFECT
Bearing, axle shaft-Replace All other axles-Right	3200506	7-BINDS, STICKS, OR SEIZED
		9-BRINNELLED OR HARD SPOTS

		11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR
		41-FOREIGN MATERIAL
		68-NOISY
Bearing, axle shaft - Replace All other axles-Left	3200507	7-BINDS, STICKS, OR SEIZED
		9-BRINNELLED OR HARD SPOTS
		11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR
		41-FOREIGN MATERIAL
		68-NOISY
Seal, axle shaft oil-replace All other axles-Right	3202610	65-LEAKS
Seal, axle shaft oil-replace All other axles-Left	3202611	65-LEAKS
Axle/Differential, assembly, Rear-Replace 8.25-9.25 axles	3300101	E1-HOUSING LEAKS
		F1-DRIVE GEAR AND PINION BEARING
		2A-DRIVE GEAR AND PINION DEFECT
		41-FOREIGN MATERIAL
		54-IMPROPERLY ASSEMBLED
		6E-HOUSING IMPROPERLY MACHINED
		60-INSUFFICIENT LUBRICATION
Axle Head assembly-Replace Axle Head assembly	3350101	E1-HOUSING LEAKS
		F1-DRIVE GEAR AND PINION BEARING
		2A-DRIVE GEAR AND PINION DEFECT
		41-FOREIGN MATERIAL
		54-IMPROPERLY ASSEMBLED
		6E-HOUSING IMPROPERLY MACHINED
		60-INSUFFICIENT LUBRICATION
Bearings, differential side-Replace 8.25-9.25 axles	3400801	11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR
		41-FOREIGN MATERIAL
		51-IMPROPERLY INSTALLED
		68-NOISY
Case, differential-Replace 8.25-9.25 axles-Standard and sure grip	3401501	H1-SURE GRIP NOISE
		R4-SURE GRIP - OTHER
		X8-STRIPPED THREADS
		1H-GEAR COUNTERBORE
		11-BROKEN OR CRACKED
		3H-DIFF PINION SHAFT DEFECT
		36-EXCESSIVE RUN OUT
		52-IMPROPERLY MACHINED
		54-IMPROPERLY ASSEMBLED
Gear set, differential side and pinion-Replace All other axles	3404001	N1-CENTER PIN WORN/BROKEN
		N6-THRUST WASHERS WORN/BROKEN
		X5-TEETH DAMAGED

		7-BINDS, STICKS, OR SEIZED
		11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR
		41-FOREIGN MATERIAL
		52-IMPROPERLY MACHINED
Ring Gear and Pinion Set-Replace All Other Axles	3500101	X5-TEETH DAMAGED OR WORN
		11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR
		41-FOREIGN MATERIAL
		52-IMPROPERLY MACHINED
		64-MISALIGNED OR MISMATCHED
		68-NOISY
Bearing, axle shaft Bearing,axle shaft-replace-Right	3200550	5-BEARING DEFECT
		6-BENT
		9-BRINNELLED OR HARD SPOTS
		11-BROKEN OR CRACKED
		27-DAMAGED
		36-EXCESSIVE RUN OUT
		52-IMPROPERLY MACHINED
		54-IMPROPERLY ASSEMBLED
		93-SHAFT OR SPLINE DEFECT
Bearing, axle shaft Bearing, axle shaft-replace-Left	3200551	5-BEARING DEFECT
		6-BENT
		9-BRINNELLED OR HARD SPOTS
		11-BROKEN OR CRACKED
		27-DAMAGED
		36-EXCESSIVE RUN OUT
		52-IMPROPERLY MACHINED
		54-IMPROPERLY ASSEMBLED
		93-SHAFT OR SPLINE DEFECT
Differential, backlash adjustment-Adjust All others	3500242	50-IMPROPER ADJUSTMENT
Bearings, pinion-Replace All others	3500501	37-EXCESSIVE WEAR
		51-IMPROPERLY INSTALLED
		64-MISALIGNED OR MISMATCHED
		68-NOISY
Flange, propeller shaft to rear axle - Replace All others	3501502	11-BROKEN OR CRACKED
		27-DAMAGED
		36-EXCESSIVE RUN OUT
		51-IMPROPERLY INSTALLED
Seal, drive pinion oil-Replace	3502001	65-LEAKS
Bearing, propeller shaft center - Replace	16100101	7-BINDS, STICKS, OR SEIZED
		11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR

		64-MISALIGNED OR MISMATCHED
		68-NOISY
Insulator, propeller shaft center bearing-Replace	16101501	37-EXCESSIVE WEAR
		51-IMPROPERLY INSTALLED
		68-NOISY
Propeller shaft, with universal joints-Replace Transmission to rear axle	16300101	M4-U-JOINT BROKEN OR CRACKED
		M5-TUBE TO YOKE -WELD DEFECT
		M6-TUBE TO SEAM-WELD DEFECT
		N2-TUBE TO YOKE-EAR BROKEN
		0X-WRONG PART
		11-BROKEN OR CRACKED
		2N-SLIP YOKE-EAR BROKEN
		2X-VIBRATION OR CHATTER
		32-DINGS OR DENTS
		41-FOREIGN MATERIAL
		5M-BUSHING CLAMP SCREW DEFECT
Propeller shaft, with universal joints-Replace Rear axle to center bearing	16300102	M4-U-JOINT BROKEN OR CRACKED
		M5-TUBE TO YOKE-WELD DEFECT
		M6-TUBE TO SEAM-WELD DEFECT
		N2-TUBE YOKE-EAR BROKEN
		0X-WRONG PART
		2N-SLIP YOKE-EAR BROKEN
		2X-VIBRATION OR CHATTER
		32-DINGS OR DENTS
		41-FOREIGN MATERIAL
		5M-BUSHING CLAMP SCREW DEFECT
Propeller shaft, with universal joints-Replace Transfer Case to Rear Axle	1600104	M4-U-JOINT BROKEN OR CRACKED
		M5-TUBE TO YOKE-WELD DEFECT
		M6-TUBE TO SEAM-WELD DEFECT
		N2-TUBE YOKE-EAR BROKEN
		0X-WRONG PART
		2N-SLIP YOKE-EAR BROKEN
		2X-VIBRATION OR CHATTER
		32-DINGS OR DENTS
		41-FOREIGN MATERIAL
		5M-BUSHING CLAMP SCREW DEFECT
Propeller shaft, with universal joints-Replace Transmission to center/front bearing	16300105	M4-U-JOINT BROKEN OR CRACKED
		M5-TUBE TO YOKE -WELD DEFECT
		M6-TUBE TO SEAM-WELD DEFECT
		N2-TUBE YOKE-EAR BROKEN
		2N-SLIP YOKE-EAR BROKEN
		2X-VIBRATION OR CHATTER
		32-DINGS OR DENTS
		41-FOREIGN MATERIAL
		5M-BUSHING CLAMP SCREW DEFECT

Yoke, propeller shaft sliding-Replace At transmission	16301001	11-BROKEN OR CRACKED
		52-IMPROPERLY MACHINED
		60-INSUFFICIENT LUBRICATION
		71-OIL LEAK
		89-SCORED OR SCRATCHED
Yoke, propeller shaft sliding-Replace Center bearing to rear axle	16301002	11-BROKEN OR CRACKED
		52-IMPROPERLY MACHINED
		60-INSUFFICIENT LUBRICATION
		71-OIL LEAK
		89-SCORED OR SCRATCHED
Yoke, propeller shaft sliding-Replace Transfer case to rear axle	16301004	11-BROKEN OR CRACKED
		52-IMPROPERLY MACHINED
		60-INSUFFICIENT LUBRICATION
		71-OIL LEAK
		89-SCORED OR SCRATCHED
Universal joints, single piece shaft - replace Single piece shaft-One At rear axle	16500501	7-BINDS, STICKS, OR SEIZED
		11-BROKEN OR CRACKED
		2X-VIBRATION OR CHATTER
		37-EXCESSIVE WEAR
		5M-BUSHING CLAMP SCREW DEFECT
		60-INSUFFICIENT LUBRICATION
		64-MISALIGNED OR MISMATCHED
Universal joints, single piece shaft-Replace Single piece shaft-One -Transmission rear to rear axle	16500502	7-BINDS, STICKS, OR SEIZED
		11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR
		5M-BUSHING CLAMP SCREW DEFECT
		60-INSUFFICIENT LUBRICATION
		64-MISALIGNED OR MISMATCHED
Universal joints, single piece shaft-Replace Single piece shaft-One -Transfer case rear to rear axle	16500504	7-BINDS, STICKS, OR SEIZED
		11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR
		5M-BUSHING CLAMP SCREW DEFECT
		60-INSUFFICIENT LUBRICATION
		64-MISALIGNED OR MISMATCHED
Universal joints, single piece shaft-Replace Single piece shaft-Both-Transfer case to rear axle	16500512	7-BINDS, STICKS, OR SEIZED
		11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR
		5M-BUSHING CLAMP SCREW DEFECT
		60-INSUFFICIENT LUBRICATION
		64-MISALIGNED OR MISMATCHED
Universal joints, two piece shaft-Replace One _At rear axle	16500603	7-BINDS, STICKS, OR SEIZED
		11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR
		5M-BUSHING CLAMP SCREW DEFECT
		60-INSUFFICIENT LUBRICATION

		64-MISALIGNED OR MISMATCHED
Universal joints, two piece shaft-Replace Both U-joints-Center bearing to rear axle shaft	16500611	7-BINDS, STICKS, OR SEIZED
		11-BROKEN OR CRACKED
		37-EXCESSIVE WEAR
		5M-BUSHING CLAMP SCREW DEFECT
		60-INSUFFICIENT LUBRICATION
		64-MISALIGNED OR MISMATCHED

The standard warranty coverage offered for the 2009 MY subject vehicles was 3 years or 36,000 miles. In addition to the standard warranty coverage, the 2009 MY subject vehicles received a lifetime powertrain warranty which covered the subject components, excluding the brakes (limited to the first registered owner or lessee). The standard warranty coverage offered for the 2010 MY subject vehicles was 3 years or 36,000 miles. In addition to the standard warranty coverage, the 2010MY subject vehicles received a 5 year or 100,000 mile powertrain warranty, which covered the subject components, excluding the brakes.

The total number of subject vehicles that are or have been covered by one of the service contract plans, is listed in Enclosure 6 - Extended Warranty Sales CONF BUS INFO which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

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

A7. There are no GPOP tech tips, Technical Service Bulletins or informational documents related to the alleged condition for the subject vehicles that have been issued to Chrysler dealers, Business Centers, fleet purchasers or other such entities. There are also no such communications or informational documents currently planned for the next 120 days.

A7. Amended Response

Subsequent to the initial submission, Chrysler has discovered one dealer communication that may be related to the alleged defect in the subject vehicles. Copies of the dealer communication within the scope of Question No. 7 are provided in Enclosure 7 – Dealer 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, Chrysler. 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.

A8. Chrysler has conducted or is conducting the following assessments related to the alleged condition.

Assessment 1: eCIMS (electronic Corporate Issue Management System) 273085,

Start Date	End Date	Engineering Group Responsible
06/29//2009	10/27/2009	Axle Manufacturing, SQA, Axle Engineering

Objective: : Identify and communicate that a Chrysler pre-production 2010 MY DS vehicle experienced pinion nut loosening after 90,950 miles of testing.

Analysis Results: Inspection confirmed that the nut had loosened and the driveshaft fell out of the vehicle. This issue was analyzed and documented under eCIMS 273661 (see below).

This document is provided in Enclosure 8a – ECIMS 273085 CONF BUS INFO which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

Assessment 2: eCIMS 273661

Start Date	End Date	Engineering Group Responsible
07/10/2009	11/13/2009	Axle Manufacturing, SQA, Axle Engineering

Objective: Identify and communicate the potential for loss of vehicle driveshaft during customer usage.

Analysis Results:
Engineering analysis revealed that the adhesive locking patch specified as part of the pinion nut was missing on one vehicle. A review of the supplier manufacturing process found inadequate process controls that could allow a nut to pass through without receiving the adhesive patch. Several potential causes were identified, including nuts trapped in the bins, depletion of the lock-patch chemical, or loss of pressure in the lock patch application process. The supplier installed additional equipment to detect a loss of pressure or empty chemical container and obtained redesigned bins to prevent nuts from being trapped inside.

This document is provided in Enclosure 8B – ECIMS 273661 CONF BUS INFO which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

Assessment 3: Returned Parts

Start Date	End Date	Engineering Group Responsible
07/13/2012	TBD	Axle Engineering

Objective: The two vehicles that experienced pinion nut loosening are being analyzed in order to determine the cause.

Analysis Results: The pinion, based on a "go/no go" gage spline evaluation, may have been out of specification (undersized) in each case. Because no actual spline measurements were taken, further analysis is required. Objective measurements of the spline are planned, but not yet complete.

This document is provided in Enclosure 8C – Returned Parts CONF BUS INFO which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

Assessment 4: Field Study

Start Date	End Date	Engineering Group Responsible
8/24/2012	TBD	Axle Engineering

Objective: Inspect a sampling of vehicles built with 9.25" axles to determine if the residual pinion nut torque meets the minimum requirement. If a pinion nut is found that has a residual torque value below the minimum requirement, then the axle will be removed for further root cause analysis.

DAP Pinion Spline Measurement Results: The results of the survey are TBD

Assessment 5: Junker Test

Start Date	End Date	Engineering Group Responsible
09/2012	TBD	Axle Engineering

Junker Test Objective: The Junker Test is an industry standard test to evaluate a bolted joint's resistance to loosening under shear loading caused by transverse vibration. Chrysler is contracting an outside firm to complete the testing in order to assess the effectiveness of the pinion nut with an adhesive patch to retain its torque.

Junker Test Results: TBD

Assessment 6: Stress Lab Cyclic Fatigue Test

Start Date	End Date	Engineering Group Responsible
08/28/2012	TBD	Stress Laboratory

Stress Lab Cyclic Fatigue Test Objective: The Stress Lab Cyclic Fatigue test applies a reversed cyclic torque to the axle companion flange/pinion assembly and attempts to duplicate nut loosening. Chrysler is completing these tests in order to assess the long term effectiveness of the pinion nut with an adhesive patch to retain its torque.

Stress Lab Cyclic Fatigue Test Results: TBD

9. Describe all modifications or changes made by, or on behalf of, Chrysler in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date for MY 2009 through current production Dodge Ram 1500 vehicles, 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 number(s) (service and engineering) of the original component;

e. The part number(s) (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 Chrysler is aware of which may be incorporated into vehicle production within the next 120 days.

A9. The requested information is provided in Enclosure 9 - Subject Component Changes – CONF BUS INFO which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

10. State the number of each of the following that Chrysler 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 components;
b. Drives/propeller shaft; and
c. Any kits that have been released, or developed, by Chrysler for use in service repairs to the subject components.

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

A10. The following response was provided to NHTSA on (DATE) and is incorporated herein.

The requested information for the subject components, specifically relating to the alleged defect, is provided in Enclosure 10 – Service Part Sales – CONF BUS INFO which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment. The table in Enclosure 10 includes all subject component, drive/propeller shaft, and service kit part sales, whether or not they are related to the alleged condition. It is difficult to determine whether the alleged condition prompted these part sales as there are unrelated circumstances that generate sales. In particular, the subject vehicles

are off-road vehicles and susceptible to damage from severe off-road driving. Subject component replacements due to customer induced damage, accidents or miscellaneous warranty claims will increase subject component part sales and are all unrelated to the alleged condition. It should also be noted that many of these service parts are backward compatible to previous model years and vehicles, thus Chrysler has concluded that the use of part sales data will not be conclusive to assess any trend related to the alleged condition.

11. Provide the following information for the subject vehicles and subject components:

a. Computer model design views of the driveshaft and rear axle assembly from front, side and bottom perspectives;
b. Exploded parts view diagram of the rear axle assembly with each component labeled;
c. All specifications for each rear axle assembly;
d. All engineering standards and design requirements related to testing of the rear axle assembly for durability and overload; and
e. Copies of all Failure Mode and Effects Analyses (FMEAs) for the subject components, identifying all failure modes that may result in rear wheel lock-up.

A11. The requested information is summarized below and refers to Enclosures as appropriate.

a. The requested computer design views are shown in Enclosure 11A - Computer Model Design Views.

b. The requested exploded parts view is shown in Enclosure 11B - Exploded Parts View Diagram. This exploded view represents an open differential 3.55 ratio 9.25” axle.

c. The requested specifications for each axle assembly is being provided in Enclosure 11C - Rear Axle Specifications – CONF BUS INFO which has been submitted under separate cover to the NHTSA Chief Counsel’s Office with a request for confidential treatment.

d. The requested engineering standards and design requirements is being provided in Enclosure 11D - Engineering Standards– CONF BUS INFO which has been submitted under separate cover to the NHTSA Chief Counsel’s Office with a request for confidential treatment.

e. The requested FMEA is being provided in Enclosure 11E - Failure Mode and Effects Analyses– CONF BUS INFO which has been submitted under

separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

12. Provide the following information related to Recall 10V-656:

a. Describe the differences in design and manufacture between the subject vehicles and the recalled vehicles;
b. Explain how the recall scope was determined;
c. Explain the purpose of the axle fluid drain-back flow restrictor;
d. Explain why the recall remedy required replacement of the rear axle cover with a modified cover with a revised fluid fill level access hole;
e. Detailed explanations of the failure mechanism;
f. Detailed explanation of the failure mode;
g. Detailed explanation of the safety consequences;
h. Copies of all complaints and field reports identified as part of the recall defect investigation; and
i. Copies of all documents used in the engineering review and recall decision making process, including presentations, reports and related graphics.

A12 The requested information is summarized below and refers to Enclosures as appropriate.

a. The subject vehicles, 2009 MY and 2010MY, were built using a Chrysler corporate rear axle, designated as the 9.25" light duty axle. The rear axle was manufactured by Detroit Axle Plant (Chrysler). The 2011 MY vehicles recalled under 10V-656 were built using a C235 rear axle, manufactured by ZF. The C235 axle incorporates changes to reduce friction to minimize parasitic losses. The C235 axle shares some components with the Chrysler 9.25" light duty axle.

b. The scope of recall 10V-656 included all DS vehicles built with the C235 axle, the start of the 2011 MY production up until the corrective action was implemented on December 4, 2010.

c. The purpose of the flow restrictor is to block the axle lubricant flow through the carrier center channel, which eliminated pressure build up. Eliminating the pressure allows more axle lubricant to flow through the tail bearing.

d. The rear axle covers needed to be replaced to because the rear axle lubricant volume was increased from 71 ounces to 91 ounces. Filling the axle to the bottom of the original oil fill hole results in an axle filled to less than the newly targeted 91 ounces of fluid. In order for a dealer to fill the axle with 91 ounces of lubricant volume, a fill hole was added to the rear cover, at a higher level to allow for the increased volume.

e. During cold weather operation the axle could develop a “pressure block” that would prevent axle lubricant from flowing through the tail bearing. The lack of axle lubricant creates metal to metal contact, which creates heat. The “pressure block” occurred only at certain speed and cold temperature conditions. The lack of axle lubricant causes the tail bearing to overheat and potentially fail.

f. When the tail bearing operates without adequate lubrication, heat is generated, which can cause the rollers to “micro weld” to the race. This can result in noise and/or seizure.
A secondary failure mode of a seized tail bearing could be fracturing the pinion stem. When the pinion stem is fractured, the axle to driveshaft attachment is lost.

g. Lack of adequate axle lubrication under certain driving conditions could cause the pinion bearing to seize and cause a loss of vehicle control and/or cause a crash without warning.

h. The requested complaints and field reports identified as part of the recall defect investigation is being provided in Enclosure 12H – Recall 10V-656 Field Inputs.

i. The requested documents used in engineering review and recall decision making are being provided in Enclosure 12I - Engineering Review Documents CONF BUS INFO which has been submitted under separate cover to the NHTSA Chief Counsel’s Office with a request for confidential treatment.

13. Furnish Chrysler’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
f. The reports included with this inquiry.

A13. Chrysler issued recall K36 (NHTSA 10V-656) in December of 2010 for 2011 MY Ram 1500 vehicles equipped with ZF C235 rear axles. The C235 was a new axle launched for the 2011 MY. The initial C235 axle design lubricated the pinion bearings with a bottom feed feature, as opposed to the side feed feature on the previous 9.25” axle. The bottom feed design resulted in inadequate lubrication to the pinion bearings under some cold weather conditions. The K36 recall was issued to address this inadequate pinion bearing lubrication. This lack of

lubrication condition could cause the pinion bearing to seize and cause a loss of vehicle control and/or cause a crash without warning.

On September 25, 2012, Chrysler determined the need for a safety recall, M34, for 2009 and 2010 MY Ram 1500 vehicles equipped with corporate 9.25" rear axles, built between July 1, 2009 and November 30, 2009. It was determined that at the end of the 2009 MY production, there were instances of 9.25" axles built with pinion nuts that were missing the adhesive patch. This recall was initiated to address vehicles which may have been built with pinion nuts missing the adhesive patch, which could result in a rear axle lock-up.

These two recalls are completely unrelated to one another as the failure mechanism identified in recall K36, was caused by insufficient lubrication to the pinion bearing in the ZF supplied C235 axle assembly (used on 2001 MY and later DS vehicles). The failure mechanism identified in recall M34 is loosening of the pinion nut on the 9.25" axle due to a missing adhesive patch.

Recall M34 was based on records indicating an issue with the pinion nut missing the adhesive patch on some vehicles. As a result, the rate of the alleged defect within the recall M34 population is significantly higher than the rates outside of the recall period. During the recall period, vehicles built with axle pinion nuts that were missing the adhesive patch could experience nut loosening. This nut loosening may allow the pinion gear to be drawn rearward into the axle carrier, resulting in lockup of the axle. The axle lockup could cause the vehicles to skid to a stop. As a result of axle locking, some vehicles could also experience secondary failures including broken transfer cases and/or driveshafts. A small number of vehicles also experienced failures caused by the broken driveshaft.

While the rates of the alleged defect are significantly lower in the build period outside the M34 recall period, these rates are cause for further evaluation. Chrysler notes that there are multiple potential causes of rear axle differential failures, not all of which are related to the vehicle as built. For example, during off road use the pinion input seal can be damaged, which may result in axle lubricant leakage, axle noise, or axle failure. As a result, Chrysler is continuing to investigate the potential root cause for the alleged defect in subject vehicles outside the M34 recall period. As indicated in Question 8, Chrysler is conducting a field study and multiple laboratory tests to evaluate the pinion/nut threaded joint integrity in an effort to determine if a manufacturing or design related defect exists.

In summary,

- The component design that resulted in Chrysler recall 10V-656 of 2011 model year light duty Ram vehicles is not present in the 9.25" axle;
- Recall M34 was initiated to address vehicles which may have been built with pinion nuts missing the adhesive patch;

- The rates of the alleged defect are significantly lower in the build period outside the M34 recall period;
- Chrysler is conducting a field study and multiple laboratory tests to evaluate the pinion/nut threaded joint integrity; and
- Chrysler is continuing to investigate the potential root cause for the alleged defect in subject vehicles outside the M34 recall period.

Upon completion of its testing and analysis, Chrysler will provide NHTSA with an update of the assessments discussed in Question 8.