



October 6, 2014

Mr. Jeffery L. Quandt, Chief
Vehicle Control Division
U.S. Department of Transportation

National Highway Traffic Safety Administration (NHTSA)
Office of Defects Investigation (ODI)
Room W48-314
1200 New Jersey Avenue SE
Washington, D.C. 20590

Reference: NVS-213swmc; PE14-019

Dear Mr. Quandt:

Pursuant to the August 20, 2014 agreement with the ODI, on August 25, 2014 Chrysler LLC submitted a full response to questions 1, 8, 10 and 13, and a partial response to questions 3, 4, 5, 9, 11, and 14 for PE 14-019. Attached is Chrysler's public response to the remaining questions and the complete public response to the partial prior responses identified above.

Chrysler Group LLC is submitting to the Chief Counsel's Office, via overnight mail for Tuesday delivery with a request for confidentiality, additional detailed information responsive to PE 14-019.

In performing the analysis and reaching 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.

Sincerely,



Philip Hartnagel

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: Pursuant to an agreement with ODI on August 20, 2014, Chrysler submitted a full response to questions 1, 8, 10, and 13 and a partial response to questions 3, 4, 5, 9, 11 and 14. This response contains Chrysler's response to the remaining questions and the complete response to the partial prior responses identified above.

1. **State, by model and model year, the number of subject and peer vehicles Chrysler has manufactured for sale or lease in the United States or federalized territories. Separately, for each subject vehicle manufactured to date by Chrysler, state the following:**
 - a. **Vehicle identification number (VIN);**
 - b. **Model;**
 - c. **Model Year;**
 - d. **Gear ratio;**
 - e. **Date of manufacture;**
 - f. **Date warranty coverage commenced; and**
 - g. **The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).**

Provide the table in Microsoft Access 2010, or a compatible format, entitled "PRODUCTION DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

A1.

The subject vehicle is the 2005 model year ("MY") Dodge Ram 1500 Pick-up ("DR") ("subject vehicles"). In its information request, NHTSA has defined the peer vehicles as any 2002 to 2008 model year vehicle equipped with a 9.25 inch rear axle assembly. Chrysler has identified the following vehicle families that meet the peer vehicle criteria:

- 2002 – 2003 MY Dodge Ram Van ("AB");
- 2002 – 2004 MY Dodge Dakota ("AN");
- 2002 – 2003 MY Dodge Durango ("DN");
- 2002 – 2008 MY Dodge Ram 1500 Pick-up ("DR");
- 2004 – 2008 MY Dodge Durango ("HB");
- 2005 – 2008 MY Dodge Dakota ("ND");
- 2006 – 2008 MY MMC Raider ("NM"); and
- 2007 – 2008 MY Chrysler Aspen ("HG").

PE14-019 Vehicle Volume for Model Year 2002 to 2005

2002 MY (Peer)		2003 MY (Peer)		2004 MY (Peer)		2005 MY (Subject)	
Vehicle Family	Volume	Vehicle Family	Volume	Vehicle Family	Volume	Vehicle Family	Volume
AB	27,229	AB	16,481	AN	55,102	DR	257,227
AN	66,927	AN	48,765	DR	313,751	HB	33,380
DN	96,104	DN	101,226	HB	35,761	ND	58,886
DR	287,846	DR	286,015				

PE14-019 Vehicle Volume for 2006 to 2008

2006 MY (Peer)		2007 MY (Peer)		2008 MY (Peer)	
Vehicle Family	Volume	Vehicle Family	Volume	Vehicle Family	Volume
DR	178,067	DR	184,065	DR	186,473
HB	25,146	HB	10,854	HB	5,487
ND	36,402	HG	13,244	HG	10,542
NM	3,203	ND	15,401	ND	11,828
		NM	317	NM	1

Detailed production data is provided in Enclosure 1 Production Data as Microsoft Access tables with the subject vehicles titled "PRODUCTION DATA PE14-019 – Subject.accdb" and the peer vehicles titled "PRODUCTION DATA PE14-019 - Peer.accdb".

Amended A1:

Database is being resubmitted with the correct information.

Detailed production data is provided in Enclosure 1 Production Data as Microsoft Access tables with the subject vehicles titled "AMENDED PRODUCTION DATA PE14-019 – Subject.accdb" and the peer vehicles titled "AMENDED PRODUCTION DATA PE14-019 - Peer.accdb".

2. **State, by model and model year, the number of subject and peer vehicles Chrysler has manufactured for sale or lease in the United States and federalized territories for which Chrysler sold an extended service plan. Separately, for each vehicle, state the following (if a vehicle had more than one plan, such as a maintenance plan and an extended service repair plan, then list the vehicle separately for each plan that it had):**
- a. **Vehicle identification number (VIN);**
 - c. **Model;**
 - d. **Model Year;**
 - e. **Name of the extended service plan;**
 - f. **The mileage at which the extended service plan expires; and**
 - g. **The number of months from the warranty start date at which the extended service plan expires.**

Provide the table in Microsoft 2010, or a compatible format, entitled “EXTENDED SERVICE PLAN DATA.” See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

A2.

The detailed response that lists the extended service plan for subject and peer vehicles Chrysler has manufactured for sale or lease in the United States including, but not limited to, the District of Columbia, and current U.S. territories and possessions, as requested in a. through g. is provided in Enclosure 2 Extended Service Plan Data CONF BUS INFO, which has been submitted under separate cover to the NHTSA Chief Counsel’s Office with a request for confidential treatment.

3. 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 and peer vehicles:

- a. **Consumer complaints, including those from fleet operators;**
- b. **Field reports, including dealer field reports;**
- c. **Reports involving a crash, injury or fatality;**
- d. **Reports involving a fire (as may occur due to fuel system damage from a loose driveshaft);**
- e. **Property damage claims;**
- f. **Third-party arbitration proceedings where Chrysler is or was a party to the arbitration; and**
- g. **Lawsuits, both pending and closed, in which Chrysler is or was a defendant or codefendant.**

For subparts “a” through “g,” 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 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.

A3.

Chrysler has identified the number of each of the following a. through g. that relate to, or may relate to, the alleged defect in the subject vehicles. (The peer vehicle data will be provided on or before October 6, 2014.) Chrysler has conducted a reasonable and diligent search of the normal repositories of such information.

- a. Chrysler has identified 115 consumer complaints (Customer Assistance Inquiry Requests or "CAIR") for the subject vehicles, representing 112 unique VINs for the subject vehicle.
- b. Chrysler has identified two field reports for the subject vehicles.
- c. Chrysler has identified two consumer complaints and two legal claims alleging a crash in the subject vehicle. Chrysler identified zero consumer complaints and one legal claim alleging injury in the subject vehicles. Chrysler identified zero fatalities in the subject vehicles. There are three unique VINs relating to crash and one unique VIN relating to injury.
- d. Chrysler has identified zero reports involving a fire for the subject vehicles.
- e. Chrysler identified six consumer complaints and two legal claims alleging property damage in the subject vehicles, representing six unique VINs.
- f. Chrysler identified zero third-party arbitration proceedings involving Chrysler for the subject vehicles.
- g. Chrysler identified six lawsuits or legal claims involving the subject vehicles.

In summary, there are 113 unique VINs involving the subject vehicles that relate to, or may relate to, the alleged defect.

Summary descriptions of the alleged defect, causal and contributing factors, and Chrysler's assessment of the problem, to the extent available, are included in Enclosure 4 Complaint Data in a Microsoft Access table, titled "COMPLAINT DATA (Subject).accdb".

Amended A3:

Chrysler has identified the number of each of the following a. through g. that relates to, or may relate to, the alleged defect in the peer vehicles. Chrysler has conducted a reasonable and diligent search of the normal repositories of such information.

- a. Chrysler has identified 220 consumer complaints (Customer Assistance Inquiry Requests or "CAIR" and Customer Promoter Score or "CPS") for the peer vehicles, representing 199 unique VINs for the peer vehicles.

- b. Chrysler has identified 19 field reports for the peer vehicles, representing 19 unique VINs for the peer vehicles.
- c. Chrysler has identified twelve consumer complaints and 13 legal claims alleging a crash in the peer vehicles. Chrysler identified six consumer complaints and twelve legal claims alleging injury in the peer vehicles. Chrysler identified zero fatalities in the peer vehicles. There are 20 unique VINs relating to crash and 14 unique VIN relating to injury in the peer vehicles.
- d. Chrysler identified one consumer complaint and three legal claims alleging fire in the peer vehicles, representing three unique VINs in the peer vehicles.
- e. Chrysler identified 12 consumer complaints and 14 legal claims alleging property damage in the peer vehicles, representing 20 unique VINs in the peer vehicles.
- f. Chrysler identified zero third-party arbitration proceedings involving Chrysler for the peer vehicles.
- g. Chrysler identified 30 lawsuits or legal claims involving the peer vehicles.

In summary, there are 232 unique VINs involving the peer vehicles that relate to, or may relate to, the alleged defect.

Summary descriptions of the alleged defect, causal and contributing factors, and Chrysler's assessment of the problem, to the extent available, are included in Enclosure 4 Complaint Data in a Microsoft Access table, titled "PE14-019 PEER COMPLAINT DATA.accdb".

- 4. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 3, state the following information:**
- a. **Chrysler's file number or other identifier used;**
 - b. **The category of the item, as identified in Request No. 3 (i.e., consumer complaint, field report, etc.);**
 - c. **Vehicle owner or fleet name (and fleet contact person), address, and telephone number;**
 - d. **Vehicle identification number (VIN);**
 - e. **Model;**
 - f. **Model year;**
 - g. **Vehicle's mileage at time of incident;**
 - h. **Incident date;**
 - i. **Report or claim date;**

- j. **Whether a crash is alleged;**
- k. **Whether a fire is alleged;**
- l. **Whether property damage is alleged;**
- m. **Number of alleged injuries, if any; and**
- n. **Number of alleged fatalities, if any.**

Provide this information in Microsoft Access 2010, or a compatible format, entitled "COMPLAINT DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

A4.

The detailed response for the subject vehicles that lists the customer complaints, field reports and legal claims from Request No. 3, as requested in Items a. through n., is provided in Enclosure 4 Complaint Data in a Microsoft Access table, titled "COMPLAINT DATA (Subject).accdb".

Amended A4:

The detailed response for the peer vehicles that lists the customer complaints, field reports and legal claims from Request No. 3, as requested in Items a. through n., is provided in Enclosure 4 Complaint Data in a Microsoft Access table, titled "PE14-019 PEER COMPLAINT DATA.accdb".

5. Produce copies of all documents related to each item within the scope of Request No. 3. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Chrysler used for organizing the documents. Describe in detail the search methods and search criteria used by Chrysler to identify the items in response to Request No. 3.

A5. Copies of all documents within the scope of Question No. 3 for the subject vehicles are provided in Enclosure 5 Request No. 3 Backup 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.

Amended A5:

Copies of all documents within the scope of Question No. 3 for the peer vehicles are provided in Enclosure 5 Request No. 3 Backup Data. The documents for the peer 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.

- 6. 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 and peer 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. Vehicle identification number (VIN);**
- d. Model;**
- e. Model year;**
- f. Repair date;**
- g. Vehicle mileage at time of repair;**
- h. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;**
- i. Labor operation number;**
- j. Problem code;**
- k. Replacement part number(s) and description(s);**
- l. Concern stated by customer;**
- m. Cause as stated on the repair order;**
- n. Correction as stated on the repair order; and**
- o. Additional comments, if any, by dealer/technician relating to claim and/or repair.**

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

A6.

The total number of warranty claims for all pinion kits and pinion nuts on the subject vehicles is 2,443 which relate to, or may relate to, the alleged defect. The total number of warranty claims for all pinion kits and pinion nuts on the peer vehicles is 19,688 which relate to, or may relate to, the alleged defect.

The warranty claim data requested is provided in Enclosure 6 Warranty Data PUBLIC.

- 7. Describe in detail the search methods and search criteria used by Chrysler to identify the claims in response to Request No. 6, 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 and indicate which plans would cover the subject component or alleged defect.

A7.

Chrysler used the part numbers for the pinion kits and pinion nuts, as there is no labor operation code directly relating to the alleged defect. If the alleged defect occurs on a vehicle, one of the parts needs to be replaced. A list of part numbers and part names is shown below.

Kit / Part Number	Part Name
05010321AC	3.92 RING AND PINION GEAR KIT
05010321AD	3.92 RING AND PINION GEAR KIT
05010321AE	3.92 RING AND PINION GEAR KIT
05010321AF	3.92 RING AND PINION GEAR KIT
05010321AG	3.92 RING AND PINION GEAR KIT
05010321AH	3.92 RING AND PINION GEAR KIT
05010322AC	3.55 RING AND PINION GEAR KIT
05010322AE	3.55 RING AND PINION GEAR KIT
05010322AF	3.55 RING AND PINION GEAR KIT
05010322AG	3.55 RING AND PINION GEAR KIT
05010322AH	3.55 RING AND PINION GEAR KIT
05010322AI	3.55 RING AND PINION GEAR KIT
05010322AJ	3.55 RING AND PINION GEAR KIT
05015358AB	3.21 RING AND PINION GEAR KIT
05015358AC	3.21 RING AND PINION GEAR KIT
05015358AE	3.21 RING AND PINION GEAR KIT
05015358AF	3.21 RING AND PINION GEAR KIT
05015358AG	3.21 RING AND PINION GEAR KIT

02070117	PINION WASHER
06028041	PINION NUT W/O WASHER
6036749AA	PINION NUT W/WASHER
06036572AA	PINION NUT W/WASHER
06036698AA	PINION NUT W/WASHER
06036749AA	PINION NUT W/WASHER

8. **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.**
- A8. Chrysler has not identified any GPOP tech tips, Technical Service Bulletins or other informational documents that relate to, or may relate to, the alleged defect 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.
9. **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 and peer vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Chrysler. Include any studies or comparisons done comparing nut torque measurement and field data comparisons comparing the subject and peer vehicles to those vehicles involved in recalls 13V-038, 12V-474 and 10V-656. 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.

A9.

Chrysler is working on the following studies and will provide the finding or status in the October 6, 2014 response.

Assessment 1: Returned Parts – Exhibiting Condition

Start Date	End Date	Engineering Group Responsible
07/03/2014	TBD	Axle Engineering

Objective: Measure and analyze dimensional information of returned parts (pinion nut and pinion) that may have exhibited a condition relating to the alleged defect. Also, if possible, determine whether the part is original or service.

Results: Dimensional information for two pinions returned to Chrysler indicates they may have been undersized. Objective measurements are planned, but not yet complete. Chrysler is unable to determine at this time whether the two return parts are original or service parts.

Assessment 2: Returned Parts – All

Start Date	End Date	Engineering Group Responsible
08/18/2014	TBD	Axle Engineering

Objective: Measure and analyze dimensional information of returned parts (pinion nut and pinion) that a dealer services under warranty or goodwill.

Results: The survey is not yet completed.

Assessment 3: Field Study

Start Date	End Date	Engineering Group Responsible
7/14/2014	TBD	Axle Engineering

Objective: Inspect a sampling of 2002 to 2008 subject and peer vehicles built with 9.25" axles, to determine if the current residual pinion nut torque meets the minimum requirement. If a pinion nut is found to have a residual torque value below the minimum requirement, the pinion and pinion will be removed for further root cause analysis.

Results: The survey is not yet completed.

Assessment 4: Salvage Yard Test

Start Date	End Date	Engineering Group Responsible
8/11/2014	TBD	Axle Engineering

Objective: Measure and analyze dimensional information of parts obtained from salvage yards (pinion nut, pinion and differential when available). When the full assembly is available the current residual torque of the pinion nut will be measured.

Results: The survey is not yet completed.

Amended A9:

Chrysler has performed and is continuing to conduct the following studies & assessments, which includes subject and peer vehicles with the status as of October 6, 2014. Data captured in Enclosure 9 Assessments CONF BUS INFO.

Assessment 1: Returned Parts – Exhibiting Condition

Start Date	End Date	Engineering Group Responsible
07/03/2014	TBD	Axle Engineering

Objective: Measure and analyze dimensional information of returned parts (pinion nut and pinion) that may have exhibited a condition relating to the alleged defect. Also, if possible, determine whether the part is original or service.

Results: Chrysler has had seven parts returned from dealers with comments to indicate that the part replacement was related to a loose pinion nut. All seven parts have had the pinion shaft gauge checked. Four of the seven were undersized; the remaining three were within design specification. The description and detailed information can be found in Enclosure 9 Assessments 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: Returned Parts – All

Start Date	End Date	Engineering Group Responsible
08/18/2014	TBD	Axle Engineering

Objective: Measure and analyze dimensional information of returned parts (pinion nut and pinion) that a dealer has serviced under either warranty or goodwill.

Results: A total of 36 parts have been returned as of September 29, 2014. There have been 34 of the 36 parts gauged checked. Of those gauge checked, 23 were undersized; the other 11 were within design specification. The description and detailed information can be found in Enclosure 9 Assessments 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: Field Study

Start Date	End Date	Engineering Group Responsible
7/14/2014	TBD	Axle Engineering

Objective: Inspect a sampling of 2002 to 2008 subject and peer vehicles built with 9.25" axles, to measure and record the pinion nut torque. If a pinion nut is found to have a torque value below 200ft-lbs, the pinion nut and pinion will be removed for further root cause analysis.

Results: To date, there have been 25 vehicles addressed in this survey with having found only one of the subject vehicles. There were six found to have torque values below 200ft-lbs. These six vehicles are having the parts removed and replaced to perform further root cause analysis. The survey remains ongoing with the intent to find more of the subject vehicles. The description and detailed information can be found in Enclosure 9 Assessments 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: Salvage Yard Test

Start Date	End Date	Engineering Group Responsible
8/11/2014	TBD	Axle Engineering

Objective: Measure and analyze dimensional information of axle assemblies obtained from salvage yards (pinion nut, pinion and differential when available). When a salvaged vehicle is found to have an intact axle assembly, the current torque of the pinion nut will be measured.

Results: A total of twenty vehicles with intact axle assemblies have been located with the axle assemblies being returned for analysis and to obtain dimensional information. Analysis of seventeen assemblies revealed these parts to be functional (not seized or broken). None of these seventeen assemblies showed evidence of the alleged defect. All seventeen pinion splines have been gauge checked. Twelve of the seventeen pinion splines were undersized. Sixteen of the twenty intact axle assemblies had the pinion nut torque measured. Twelve of the sixteen pinion nuts had a measured torque value exceeding 200ft-lbs. The description and detailed information can be found in Enclosure 9 Assessments CONF BUS INFO, which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

- 10. 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, which relate to, or may relate to, the alleged defect in the subject and peer 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.

A10.

The change history for the subject components for the subject and peer vehicles is provided in Enclosure 10 Change History CONF BUS INFO, which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment. Chrysler is not aware of any modification or changes that may be incorporated into the subject vehicle components within the next 120 days.

11. Produce two of each of the following:

- a. **Exemplar samples of each design version of the subject component;**
- b. **Field return samples of the subject component exhibiting the subject failure mode; and**
- c. **Any kits that have been released, or developed, by Chrysler for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.**

A11.

As agreed during an August 20, 2014, telephone call with ODI, only service parts for the pinion, pinion nut and crush sleeve from kits at two different levels are being provided. The kit part numbers these are from are 05010321AF and 05010321AG.

- a. To date, Chrysler has obtained only two field return parts from vehicles that may have exhibited a condition relating to the alleged defect. One of these parts came from a vehicle that ODI identified in a June 27, 2014 e-

mail involving VOQ #10606125. Because an engineering analysis is still ongoing with these parts, they are not being provided with this submission.

- b. The results of this analysis will be provided to ODI on or before October 6, 2014. As noted A9, Assessment 1, other field parts from vehicles exhibiting a condition relating to the alleged defect are being located and will be provided to ODI following Chrysler's analysis, which Chrysler anticipates will be concluded on or before October 6, 2014.
- c. There are no kits released for the subject components in the subject and peer vehicles.

Amended A11:

- a. In addition to the kit parts provided at the time of Chrysler's August 25, 2015 partial response, Chrysler will provide the 2002 through 2004 model year pinion nut and washer. Per discussion with ODI on August 20, 2014, Chrysler will not be shipping the pinion splines unless requested.
- b. Chrysler will provide the pinion and pinion nut from two peer vehicles, 2004 and 2008 model years Dodge Ram 1500 vehicles, exhibiting a condition relating to the alleged defect.
- c. No amendment.

12. State the number of each of the following that Chrysler has sold that may be used in the subject and peer 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. **Drive shafts; and**
- c. **Any kits that have been released, or developed, by Chrysler 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 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.

A12

The subject component parts are sold as kits, which includes the pinion nut. The pinion nut can also be purchased as a stand-alone item. Refer to change history in Enclosure 10 Change History CONF BUS INFO, which has been submitted

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

The supplier contact and readily accessible part sales information are included in Enclosure 12 MOPAR Part Sale CONF BUS INFO, which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment. Drive shaft data is also included in Enclosure 12 MOPAR Part Sale CONF BUS INFO.

13. Provide the following information related to the subject recalls:

- a. Describe all actions taken by Chrysler to investigate the defect conditions; and**
- b. Provide copies of all test reports, investigation reports, summaries and presentations related to the recalls and the associated internal investigations.**

A13.

- a. Chrysler initiated an internal investigation in August 2009 and the details of the investigation were produced in the final response to PE12-021 dated October 5, 2012. The preliminary portion of PE12-021 led to recall M34 (12V-474), for which the 573 Defect Report was submitted October 2, 2012. The materials submitted throughout the duration of PE12-021 were provided on September 21, 2012, September 27, 2012, October 5, 2012, December 14, 2012, January 10, 2013 and March 4, 2013. The final results of PE12-021 led to recall N08 (13V-038), for which Chrysler submitted the 573 Defect Report on February 5, 2013.
- b. Chrysler is providing a summary document of the pinion nut investigation history PE14-019, including a preliminary look at warranty data for the subject and peer vehicles. This summary is provided in Enclosure 13 Related to Subject Recalls CONF BUS INFO, which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

Chrysler provided copies of the available materials in relation to the subject recalls and PE12-021 to NHTSA on September 21, 2012, September 27, 2012, October 5, 2012, December 14, 2012, January 10, 2013, and March 4, 2013. The 573 Defect Report for recall M34 (12V-474) was provided on October 2, 2012 and the 573 Defect Report for N08 (13V-038) was provided on February 5, 2013.

14. Provide the following information for the subject vehicles:

- a. Provide computer model design views of the driveshaft and rear axle assemblies from front, side and bottom perspectives;**
- b. Provide an exploded part diagram of the rear axle assembly;**

- c. **Describe and provide copies of all engineering standards and design requirements related to pinion nut torque and torque retention;**
- d. **Describe the service procedure for removal and reinstallation of the pinion nut and provide copies of all related service procedures, including guidelines for reuse of the original pinion nut or requirements for using a new part;**
- e. **Provide computer aided design drawings from the bottom perspective for each body style and/or wheel base, showing the location of any other components that may be contacted by a loose driveshaft (e.g., fuel tank, EVAP canister, exhaust system);**
- f. **Describe the procedure for installation of the subject component and all quality control methods for verifying and documenting proper pinion nut torque used for the subject and peer vehicles; and**
- g. **Provide tables showing:**
 - i) **The production volumes, non-duplicative complaint and field report counts and resulting failure rates by model and model year for all MY 2002 through current Chrysler vehicles equipped with the subject axle assembly; and**
 - ii) **The production volumes, warranty claim counts related to loose pinion nuts and resulting claim rates by model and model year for all MY 2002 through current Chrysler vehicles equipped with the subject axle assembly.**

A14.

- a. The computer model design views for the subject vehicles have been included in Enclosure 14 Engineering Documents Public.
- b. The exploded part diagram of a rear axle is provided in Enclosure 14 Engineering Documents CONF BUS INFO, which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.
- c. The engineering standards and design requirements are in Enclosure 14 Engineering Documents 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 service procedure for the removal and installation of the pinion nut are in Enclosure 14 Engineering Documents Public.
- e. The computer aided design drawings for the subject vehicles have been included in Enclosure 14 Engineering Documents Public.
- f. Per agreement with ODI, the response to these subparts will be provided on or before October 6, 2014.
- g. Per agreement with ODI, the response to these subparts will be provided on or before October 6, 2014.

Amended A14:

- f. The documentation for the installation of the subject component and all quality control methods for verifying and documenting proper pinion nut torque applicable at the time of assembly of the subject and peer vehicles is no longer available. A general process description for axle drive pinion assembly and setup is as follows:

- Install the pinion head and tail bearing cups into the carrier bearing bores
- Measure appropriate components to determine proper head bearing cone shim thickness
- Install the head bearing cone shim and head bearing cone onto drive pinion stem
- Place collapsible spacer onto pinion stem
- Install the drive pinion subassembly into the carrier housing
- Install the tail bearing cone onto the pinion stem inside the carrier housing
- Assemble pinion seal to the carrier pinion seal bore
- Install the companion flange to the drive pinion stem – splines
- Install pinion nut onto the drive pinion stem – threads
- Tighten pinion nut until proper drive pinion bearing drag torque is achieved and confirm that the pinion nut is above the minimum torque level of 210ft-lbs.

The station that tightened the pinion nut used a DC motor to tighten the nut and performed a 100% checked the pinion bearing drag torque and the pinion nut torque. The station automatically rejected any assembly having a pinion nut torque below 210ft-lbs and routed to a repair bay. On rejected assemblies for torque below 210ft-lbs, the pinion nut was removed and replaced with a new nut and re-sequenced through the on line torque station.

- g. The tables showing production volumes, non-duplicative complaint and field report counts and resulting failure rates by model and model year for all MY 2002 through current Chrysler vehicles equipped with the subject axle assembly; and warranty claim counts related to loose pinion nuts and resulting claim rates by model and model year for all MY 2002 through current Chrysler vehicles equipped with the subject axle assembly. Is in Enclosure 14 Rate Based Field Data .

15. 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; and**
- 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.**

A15

Chrysler's investigation of rear axle lock-up or driveshaft detachment from the rear differential caused by loose pinion nuts (the "alleged defect") in the 2005 Dodge Ram 1500 ("subject vehicles") may be attributed to one or more of the following causal effects: 1) a change of the pinion nut and washer to a single piece flanged nut introduced in the 2005 model year; 2) a service action of the rear differential where the original nut was reused or a non-specified nut was installed; 3) a service action of the rear differential where a service nut without a torque prevailing crimp or adhesive patch was installed (NHTSA 12V-474; 4) a customer's negligence to have the rear differential serviced at the recommended service interval; 5) an undersized pinion shaft spline (NHTSA 13V-038); 6) customer vehicle usage or duty cycle such as exceeding the recommended towing capacity of the vehicle; and, 7) inadequate axle lubrication could cause pinion bearing to seize or fracture (NHTSA 10V-656).

1) Pinion Nut Design Changes:

In the 2005 model year, the pinion nut was changed from a two piece nut and washer assembly to a single piece flanged nut. An increase in the 2005 MY warranty and complaints may be attributed to a part or process change for that model year. Any causal or contributory factors for this change have yet to be determined but continue to be investigated.

2) Service Action Pinion Nut:

The production quality control measures and process at the axle plant would have ensured that each and every pinion nut is built to and retains the recommended design torque specification, having a minimum torque value of 210ft-lbs. However, vehicles surveyed and part return analysis has discovered the reuse of the original factory installed nut in some cases, and the torque value may have changed during service. The service repair manual specifically states to use a new nut (noted in bold font) for any repair that requires removal of the pinion nut. Reference Rear Pinion Seal Installation in Enclosure 14 Engineering Documents Public previously produced on August 25, 2014.

3) Service Action using non-torque prevailing nut:

Chrysler also discovered in its review of service part kits that a service nut (06036698AA) within the kit was released without having a torque prevailing

crimp. The combination of this nut and an undersized pinion shaft is currently under further investigation to evaluate the effects on torque retention.

4) Vehicle Duty Cycle:

Vehicles subjected to certain duty cycles such as trailer towing, stop and go driving, temperatures below freezing, driving in dusty defect, snow plowing, heavy loading, etc., are instructed in their Owner's Manual to follow Maintenance Schedule "B" which requires a rear axle fluid change at 30K intervals. Failure to adhere to the proper maintenance schedule for the rear differential at the recommended interval may result in overheating and subsequent failure to include the alleged condition. Furthermore, neglecting to properly maintain the fluid level or change interval may lead to leaks or axle noises which, in turn, require a new pinion shaft and ring gear or seal. These repairs may have been likely to have had a reused factory nut or service nut with the prevailing torque crimp. Reference Owner's Manual Scheduled Maintenance Interval in Enclosure 14 Engineering Documents Public.

5) Undersized Pinion Spline

Chrysler's evaluation of returned parts having the alleged defect has unexpectedly discovered the possibility of a much higher frequency of undersized pinion splines among the subject and peer vehicles. Review of Chrysler's field data suggests that pinion spline diameter may not be a single contributory factor to the alleged defect. The ongoing studies in A9 referenced in Assessments 1, 3, and 4, demonstrates that 39 of 58 return parts had undersized pinion splines, which were previously thought to be the causal factor (NHTSA 13V-038). If undersized pinion spline were the single contributory factory, a higher number of failures would be expected based on this ratio of undersized pinion splines returned. This is not the case. In addition, new evidence suggests that there may be other contributory factor(s). Further investigation work is necessary to determine whether pinion diameter is a contributory factor or not.

6) Vehicle Loading Conditions

Additionally, it has been noted in at least one of the vehicles surveyed in A9 Assessment 3 Field Study found to have a low pinion nut torque, that the vehicle usage far exceeded the vehicle load and towing limits. This is evident by the vehicle modifications with oversized wheels and tires and a fifth wheel hitch installed. Testing has confirmed that over loading and towing beyond the recommended capacity will compromise the pinion joint and may cause the nut to loosen.

7) Loss of Fluid / Lubrication

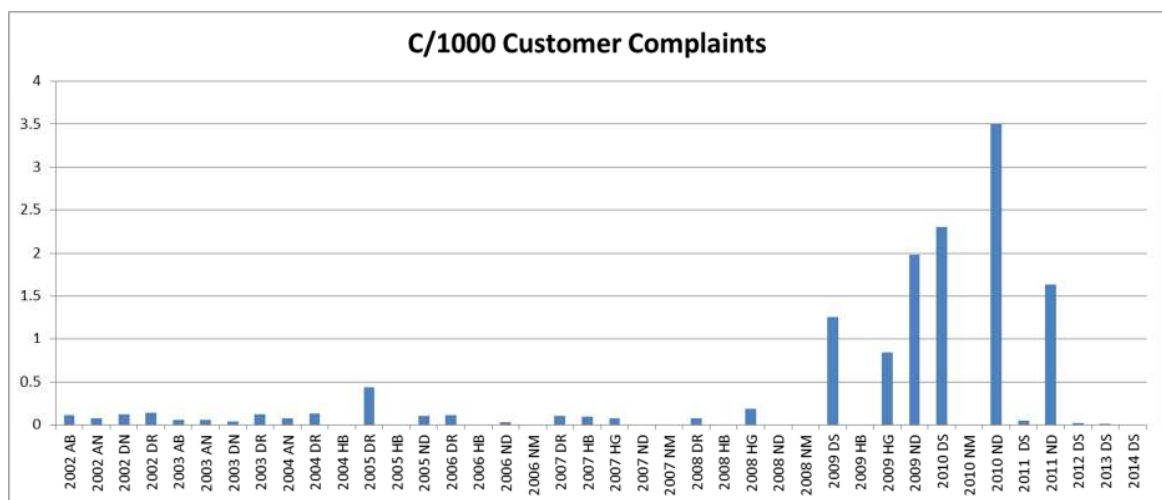
Finally, 15 of the 25 vehicle rear differential assemblies surveyed in the A9 Engineering Assessment 3 were found to have to have seal leaks or fluid

weeping, which in turn, will lower the fluid level and cause overheating of the rear differential resulting in the alleged defect.

Due to at least these seven potential causal effects or any combinations thereof, Chrysler is unable to make a final determination as to the failure mode(s) and is continuing its investigation. The investigation will continue to assess known failed parts returned from the field, analyze part returns, continue field studies where torque is measured on vehicles, and assess salvage yard components.

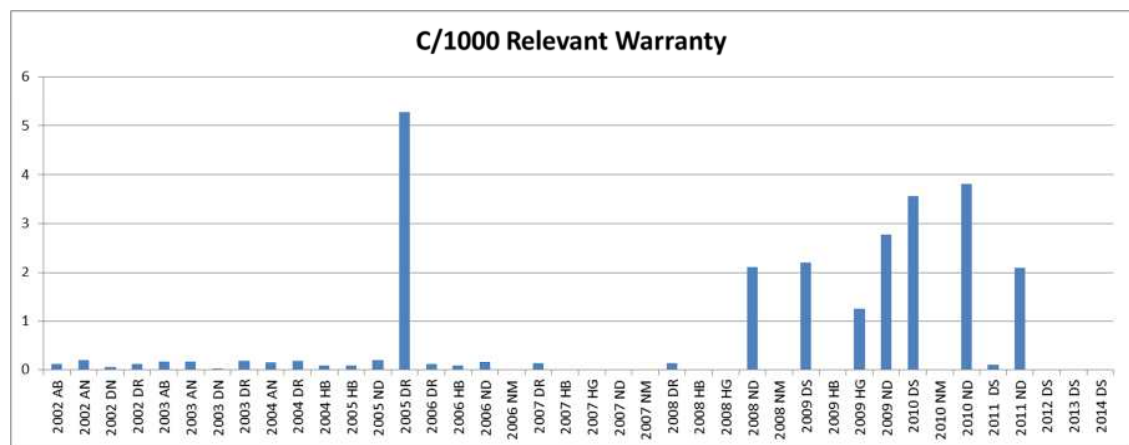
Chrysler is also continuing its investigation of the elevated number of warranty trends in the subject vehicles that may have resulted in the replacement of the pinion nut. Although stated in the repair procedure to use a new nut, there is evidence to support that repair technicians have reused the existing nut. Either the use of the original nut or an improper pinion nut may lead to a loss of torque, resulting in the alleged defect.

Despite the frequency of undersized pinion splines potentially in the field for subject and peer vehicles, there is a low rate of loose pinion nuts in field complaint and warranty repair data. Out of a population of 257,227, there were 113 unique VINs with customer complaints (CAIRs) or legal claims received by Chrysler that reported the alleged defect on the subject vehicles (a rate of 0.44 C/1,000). Out of a population of 2,108,503, there were 232 unique VINs with customer complaints (CAIRs) or legal claims received by Chrysler that reported the alleged defect on the peer vehicles (a rate of 0.11 C/1,000). The chart below reflects an analysis of the customer complaints and field reports by make, model and model year.



Out of a population of 257,227, there were 2,443 warranty claims received by Chrysler that relate to, or may relate to, the alleged defect on the subject vehicles (a rate of 9.5 C/1,000). Out of a population of 2,108,503, there were 19,688 warranty claims received by Chrysler that relate to, or may relate to, the alleged defect on the peer vehicles (a rate of 9.34 C/1,000). Not all warranty claims

necessarily relate to the alleged defect, as these components can be replaced for leaking seals, noise and/or gear set damage. An analysis of the available vehicle warranty narratives for the subject vehicles indicates that about 55% may relate to a missing or loose missing pinion or related condition. A similar analysis of the available peer vehicles warranty narratives indicates less than 2% may relate to a missing or loose pinion nut or related condition. The chart below reflects an analysis of these warranty narratives by make, model and model year.



There are only three crashes and one minor injury reported in the subject vehicles that relate to, or may relate to, the alleged defect. There are no fires that relate to, or may relate to, the alleged defect in the subject vehicles. Furthermore, some of Chrysler's field input narratives indicate a noisy rear axle noise or whine may warn the driver prior to the driveshaft or axle malfunction.

Chrysler's continued investigation will focus on the alleged defect in the subject vehicles and its potential effect on motor vehicle safety. Additionally, Chrysler will further investigate the effect, if any, of improper service and/or service parts.

PE14-019

CHRYSLER

10/7/2014

ENCLOSURE 14

PE14-019

CHRYSLER

10/7/2014

ENCLOSURE 14

PE 14-019 g for rates

		Production Volume	Customer Complaints	Warranty		C/1000 Customer Complaints	C/1000 Relevant Warranty
2005	DR	257227	113	1357		0.439300695	5.275495963
2002	AB	27229	3	3		0.11017665	0.11017665
	AN	66927	5	14		0.074708264	0.20918314
	DN	96104	12	6		0.12486473	0.062432365
	DR	287846	40	35		0.138963196	0.121592796
2003	AB	16481	1	3		0.06067593	0.18202779
	AN	48765	3	9		0.061519532	0.184558597
	DN	101226	4	3		0.039515539	0.029636655
	DR	286015	34	56		0.118874884	0.195793927
2004	AN	55102	4	8		0.072592646	0.145185293
	DR	313751	42	63		0.133864115	0.200796173
	HB	35761	0	3		0	0.083890272
2005	HB	33380	0	3		0	0.089874176
	ND	58886	6	12		0.101891791	0.203783582
2006	DR	178067	21	22		0.117933138	0.123549001
	HB	25146	0	2		0	0.079535513
	ND	36402	1	6		0.027471018	0.164826108
	NM	3203	0	0		0	0
2007	DR	184065	20	25		0.108657268	0.135821585
	HB	10854	1	0		0.092131933	0
	HG	13244	1	0		0.075505889	0
	ND	15401	0	0		0	0
	NM	317	0	0		0	0
2008	DR	186473	14	24		0.075077893	0.12870496
	HB	5487	0	0		0	0
	HG	10542	2	0		0.189717321	0
	ND	11828	0	25		0	2.113628678
	NM	1	0	0		0	0
2009	DS	110597	139	244		1.256815284	2.206208125
	HB	1256	0	0		0	0
	HG	2387	2	3		0.837871806	1.256807708
	ND	2521	5	7	3	1.983339944	2.776675922
2010	DS	120081	277	427		2.306776259	3.555933079
	NM	1	0	0		0	0
	ND	3147	11	12		3.495392437	3.813155386
2011	DS	152608	7	15		0.045869155	0.098291046
	ND	4288	7	9		1.632462687	2.098880597
2012	DS	219407	4	2		0.018230959	0.009115479
2013	DS	193491	3	1		0.015504597	0.005168199
2014	DS	327264	0	0		0	0

PE14-019

CHRYSLER

10/7/2014

ENCLOSURE 14

Owner's Manual Scheduled
Maintenance Interval

Schedule "B"

Follow schedule "B" if you usually operate your vehicle under one or more of the following conditions.

- Day or night temperatures are below 32° F (0° C).
- Stop and go driving.
- Extensive engine idling.
- Driving in dusty conditions.
- Short trips of less than 10 miles (16 km).
- More than 50% of your driving is at sustained high speeds during hot weather, above 90° F C (32°).
- Trailer towing.
- Snowplowing.
- Heavy Loading.
- Taxi, police, or delivery service (commercial service).

- Off-road or desert operation.

- **If equipped for and operating with E-85 (ethanol) fuel.**

NOTE: If ANY of these apply to you then change your engine oil every 3,000 miles (5 000 km) or 3 months, whichever comes first and follow schedule "B" of the "Maintenance Schedules" section of this manual.

NOTE: If ANY of these apply to you then flush and replace your engine coolant every 102,000 miles (163 000 km) or 60 months, whichever comes first and follow schedule "B" of the "Maintenance Schedules" section of this manual.

NOTE: If none of these apply to you, then change your engine oil at every interval shown on schedule "A" of the "Maintenance Schedules" section of this manual.

412 SCHEDULE "B"

Miles (Kilometers)	3,000 (5 000)	6,000 (10 000)	9,000 (14 000)	12,000 (19 000)	15,000 (24 000)
Change engine oil and engine oil filter at interval shown or 3 months, whichever comes first.	X	X	X	X	X
Lubricate Front Drive Shaft Fitting (2500/3500, 4X4).	X	X	X	X	X
Rotate tires.		X		X	
Lubricate outer tie rod ends 2500/3500 (4X4) models only.		X		X	
Change rear axle fluid.					X
Change front axle fluid (4X4).					X
Inspect brake linings.				X	
Inspect engine air cleaner filter, replace if necessary.					X

Miles (Kilometers)	18,000 (29 000)	21,000 (34 000)	24,000 (38 000)	27,000 (43 000)	30,000 (48 000)
Change engine oil and engine oil filter at interval shown or 3 months, whichever comes first.	X	X	X	X	X
Lubricate Front Drive Shaft Fitting (2500/3500, 4X4).	X	X	X	X	X
Rotate tires.	X		X		X
Lubricate outer tie rod ends 2500/3500 (4X4) models only.	X		X		X
Change rear axle fluid.					X
Change front axle fluid (4X4).					X
Check transfer case fluid level (4X4).					X
Inspect brake linings.			X		
Inspect engine air cleaner filter, replace if necessary.					X
Replace spark plugs.					X
Inspect PCV valve, replace as necessary. **					X

414 SCHEDULE "B"

Miles (Kilometers)	33,000 (53 000)	36,000 (58 000)	39,000 (62 000)	42,000 (67 000)	45,000 (72 000)
Change engine oil and engine oil filter at interval shown or 3 months, whichever comes first.	X	X	X	X	X
Lubricate Front Drive Shaft Fitting (2500/3500, 4X4).	X	X	X	X	X
Rotate tires.		X		X	
Lubricate outer tie rod ends 2500/3500 (4X4) models only.		X		X	
Change rear axle fluid.					X
Change front axle fluid (4X4).					X
Inspect brake linings.		X			
Inspect engine air cleaner filter, replace if necessary.					X

Miles (Kilometers)	48,000 (77 000)	51,000 (82 000)	54,000 (86 000)	57,000 (91 000)	60,000 (96 000)
Change engine oil and engine oil filter at interval shown or 3 months, whichever comes first.	X	X	X	X	X
Lubricate Front Drive Shaft Fitting (2500/3500, 4X4).	X	X	X	X	X
Rotate tires.	X		X		X
Lubricate outer tie rod ends 2500/3500 (4X4) models only.	X		X		X
Flush and replace engine coolant at 60 months, or 102, 000 miles (163 000 km) whichever comes first.					X
Drain and refill transfer case fluid (4X4).					X
Change rear axle fluid.					X
Change front axle fluid (4X4).					X
Change 6-spd manual transmission fluid 2500/3500 models only.					X
Inspect brake linings.	X				X

416 SCHEDULE "B"

Miles (Kilometers)	48,000 (77 000)	51,000 (82 000)	54,000 (86 000)	57,000 (91 000)	60,000 (96 000)
Inspect engine air cleaner filter, replace if necessary.					X
Replace spark plugs.					X
Replace ignition cables.					X
Inspect PCV valve, replace as necessary. **					X
Drain and refill automatic transmission fluid and change main sump filter*.					X