



August 9, 2013

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-213krh; PE13-016

Dear Mr. Quandt:

Attached is Chrysler Group LLC's response to the referenced inquiry Questions 9-13, as well as a restatement of Chrysler's responses to Questions 1-8, previously submitted. 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,

A handwritten signature in black ink that reads "Kristin Kolodge".

Kristin J. Kolodge

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 May 21, 2013, the date the information request was received.

This attachment restates responses to Questions 1-8, submitted by Chrysler Group LLC on July 12, 2013 and provides responses to Questions 9 – 13.

1. **State, by model, engine and model year, the number of MY 2006 Chrysler 300C, Dodge Charger and Magnum vehicles Chrysler has manufactured for sale or lease in the United States and federalized territories. Separately, for each subject vehicle manufactured to date by Chrysler, state the following:**
 - a. **Vehicle identification number (VIN);**
 - b. **Model;**
 - c. **Engine (displacement and engine code)**
 - d. **Model Year;**
 - e. **Date of manufacture; Date warranty coverage commenced; and**
 - f. **The State in the United States (or federalized territory) where the vehicle was originally sold or leased (or delivered for sale or lease).**

Provide the table in Microsoft Access 2003, 2007, or a compatible format, entitled "PE13_016_ PRODUCTION DATA."

- A1. The 2006 model year (MY) Chrysler 300C, Dodge Charger and Dodge Magnum US market vehicles are designated as the LX model and are built in the Brampton Assembly Plant in Brampton, Ontario, Canada. Included in the subject vehicles are all SRT versions of each model (i.e. Chrysler SRT8 is a 300C). The total number of subject vehicles manufactured by Chrysler for sale or lease for the United States and federalized territories was 153,820.

The detailed response that lists the production data is provided in Enclosure 1 – Production Data as Microsoft Access 2010 tables titled "PE13_016_PRODUCTION DATA.mdb".

2. **State, by model and model year, the number of MY 2006 Chrysler 300C, Dodge Charger and Magnum vehicles Chrysler has manufactured for sale or lease in the United States and federalized territories for which Chrysler has sold an extended service plan. For vehicles with more than one extended service plan, list the vehicle separately for each plan. Separately, for each vehicle, state the following:**
 - a. **Vehicle Identification number (VIN);**
 - b. **Model;**
 - c. **Model Year;**
 - d. **Name of extended service plan;**
 - e. **Mileage at which the extended service plan expires; and**
 - f. **Number of months from the warranty start date at which the extended service plan expires.**

Provide this information in Microsoft Access 2003 or 2007, or a compatible format, entitled "PE13_016_SERVICE PLAN DATA."

- A2. The requested information is provided in Enclosure 2 - Service Contracts CONF BUS INFO, including PE13_016_Service_Plan Data CONF BUS INFO.msb, which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.
3. **State, by model, engine and model year, 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 MY 2006 Chrysler 300C, Dodge Charger and Magnum 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 is or 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 "e" and "f," 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. The following summarizes the reports identified by Chrysler that relate to, or may relate to, the alleged defect in the subject vehicles. Chrysler has conducted a reasonable and diligent search of the normal repositories of such information.
- a. There are 388 consumer complaints (Customer Assistance Inquiry Request (CAIR) and Customer Promoter Score (CPS) narratives) that may relate to the alleged condition for the subject vehicle, which represent 357 unique VINs.

- b. There are 1,127 field reports that may relate to the alleged condition which represent 1,032 unique VINs.
- c. There are three consumer complaints and three legal claims alleging a crash in the subject vehicles that may relate to the alleged condition, which represent four unique VINs. There is one consumer complaint injury claim.
- d. There are three consumer complaints and three legal claims alleging property damage in the subject vehicles that may relate to the alleged condition, which represent four unique VINs.
- e. There are no third-party arbitration proceedings involving Chrysler for the subject vehicles.
- f. There are 60 legal claims involving the subject vehicles that may relate to the alleged condition.

Based on the analysis of these complaints for the subject vehicles, Chrysler has determined that all of the responsive reported data relates to 1,348 unique VINs.

Summary descriptions of the alleged condition, causal and contributing factors, and Chrysler's assessment of the problem, to the extent available, are included in Enclosure 5 – Field Data. These summaries include the significant underlying facts and evidence, when available.

- 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's VIN;**
 - e. Vehicle's model and model year;**
 - f. Vehicle's mileage at time of incident;**
 - g. Incident date;**
 - h. Report or claim date;**
 - i. Whether a crash is alleged;**
 - j. Whether 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 2003 or 2007, or a compatible format, entitled "PE13_016_REQUEST NUMBER FOUR DATA."

- A4. The detailed response that lists the consumer complaints, field reports and legal claims from Request No. 3, as requested in Items a. through l. is provided in Enclosure 4 – Request Number Three Data in a Microsoft Access 2010 table, titled “PE13_016_REQUEST NUMBER FOUR DATA.mdb”.
- 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.**
- A5. Copies of all documents within the scope of Question No. 3 are provided in Enclosure 5 – Field Data. The documents for the subject and peer vehicles contain consumer complaint reports, field reports and legal claims. The customer complaint summaries are submitted in one .pdf file and the related documents are arranged in folders by complaint number.
- 6. State, by model, engine and model year, total counts 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 MY 2006 Chrysler 300C, Dodge Charger and Magnum 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. Whether a claim for towing was made within five days of the claim date;
- f. Vehicle mileage at time of repair;
- g. Repairing dealer’s or facility’s name, telephone number, city and state or ZIP code;
- h. Labor operation number and description;
- i. Problem code and description;
- j. Replacement part number(s) and description(s);
- k. Concern stated by customer;
- l. Cause and Correction stated by dealer/technician; and
- m. Additional comments, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2003 or 2007, or a compatible format, entitled "PE13_016_WARRANTY DATA."

- A6. The total number of warranty claims that may relate to the alleged defect for the subject vehicles are listed below.

Description of Repair	Labor Operation	Fail Code	Number of Warranty Claims
Module, powertrain control (PCM) - Test and replace All other engines	08190601	DO – Die Out	1,102
Sensor, Oxygen - Test and replace 2.7-3.5-3.7-4.7-5.7-6.1 Liter Engine - Upstream - Right Side	25017014	DO – Die Out	0
Sensor, Oxygen - Test and replace 2.7-3.5-3.7-4.7-5.7-6.1 Liter Engine - Upstream - Left Side	25017015	DO – Die Out	0
Sensor, Oxygen - Test and replace 2.7-3.5-3.7-4.7-5.7-6.1 liter engine - Downstream - Right side	25017016	DO – Die Out	0
Sensor, Oxygen - Test and replace 2.7-3.5-3.7-4.7-5.7-6.1 liter engine - Downstream - Left side	25017017	DO – Die Out	6
Engine, Trouble Not Found - No repair/Trouble Not Found Engine	85410900	Y2 – Stalls	106
Exhaust, Trouble Not Found - No repair/Trouble Not Found Exhaust	85411100	Y2 – Stalls	1

It should be noted that there are no specific failure codes for "stall while driving" or "stall following refueling" and the above list contains the only failure codes that could reasonably be related to the alleged condition.

Not all of the warranty claims are necessarily related to the alleged condition as there are other reasons to replace certain components, such as the powertrain control module and oxygen sensor. The number of warranty claims that are being reported may be artificially high with regard to the alleged condition. Thus, Chrysler has not drawn conclusions regarding trends from the warranty data alone.

The detailed response that lists the warranty claims is provided in Enclosure 6 – Warranty Data, "PE13_016_WARRANTY DATA .mdb".

- 7. Describe in detail the search criteria used by Chrysler to identify the claims identified 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).**

- A7. Chrysler searched warranty labor operations that contained a failure code related to "die out" or "stall" and can be seen in the table below:

Description of Repair	Labor Operation	Fail Code
Module, powertrain control (PCM) - Test and replace All other engines	08190601	DO – Die Out
Sensor, Oxygen - Test and replace 2.7-3.5-3.7-4.7-5.7-6.1 Liter Engine - Upstream - Right Side	25017014	DO – Die Out
Sensor, Oxygen - Test and replace 2.7-3.5-3.7-4.7-5.7-6.1 Liter Engine - Upstream - Left Side	25017015	DO – Die Out
Sensor, Oxygen - Test and replace 2.7-3.5-3.7-4.7-5.7-6.1 liter engine - Downstream - Right side	25017016	DO – Die Out
Sensor, Oxygen - Test and replace 2.7-3.5-3.7-4.7-5.7-6.1 liter engine - Downstream - Left side	25017017	DO – Die Out
Engine, Trouble Not Found - No repair/Trouble Not Found Engine	85410900	Y2 – Stalls
Exhaust, Trouble Not Found - No repair/Trouble Not Found Exhaust	85411100	Y2 – Stalls

It should be noted that there are no specific failure codes for "stall while driving" or "stall following refueling" and the above list contains the only failure codes that could reasonably be related to the alleged condition.

The standard warranty coverage offered for the subject vehicles was 36 months / 36,000 miles. At the expiration of the 3 year/36,000 mile standard warranty, the manufacturer extended to the original purchaser or retail lessee of each 2006 model year subject vehicle sold and delivered on or after July 26, 2007 a limited powertrain warranty for the lifetime of that original purchaser or retail lessee.

- 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, bulletin, 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. 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.
- 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 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 The response to this request should include a detailed description of all past, present and future actions by any and all engineering working groups (e.g., engine stall task force) of which Chrysler is an active member or is

otherwise aware. This includes, at a minimum, all of the information requested in items “a” through “f.”

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 has conducted or is conducting the following assessments related to the alleged condition:

Assessment 1: Analysis of VOQ data, consumer complaints and field reports

Start Date	End Date	Engineering Group Responsible
06/23/2013	07/31/2013	Regulatory Affairs

Objective: Determine the existence of identifiable trends in the complaint vehicles (duplicate VINs removed).

Methodology: The data was broken-down to complaint type, and plotted by geographic location of the complaint VIN, date of complaint (open date), vehicle build date, vehicle months in service and mileage when the complaint occurred.

Analysis Results: A breakdown of the data showed all 54 of the NHTSA VOQs were stall after refuel condition. Chrysler identified a VOQ or complaint as “Stall after refuel” condition if the fuel tank was cited as being full during dealer diagnosis, or the customer complaint provides sufficient information to determine the vehicle stalled shortly after being refueled.

Chrysler identified a total of 1,192 complaints of stalling in the subject vehicles; these complaints were categorized in three groups of driving conditions and then subcategorized by the type of stall:

- Stall - 606 complaints indicate a stall occurred with no further explanation.
 - 211 complaints contain insufficient information to determine the likely cause for the stall.
 - 197 complaints contain enough information to determine the likely cause for the stall was refueling.
 - 198 complaints contain information indicating the cause of the stall was not related to refueling.
- Stall at Stop or Idle - 234 complaints indicate the vehicle was stopped or at idle at the time of the incident.
 - 134 complaints contain insufficient information to determine the likely cause for the stall.
 - 16 complaints contain enough information to determine the likely cause for the stall was refueling.

- 85 complaints contain information indicating the cause of the stall was not related to refueling.
- Stall while Driving - 352 complaints indicate the vehicle was being driven at the time of the incident.
 - 191 complaints contain insufficient information to determine the likely cause for the stall.
 - 18 complaints contain enough information to determine the likely cause for the stall was refueling.
 - 143 complaints contain information indicating the cause of the stall was not related to refueling.

As indicated above, the field data includes vehicles that had repairs unrelated to the fuel system, creating an artificially high number due to multiple repair attempts to resolve the condition. Since all 54 VOQ's and the largest confirmed population of field data relate to the stall after refuel condition, Chrysler narrowed the scope to this complaint. Graphic plots of the data relating to vehicles experiencing a stall after refuel condition show the rate of complaints increasing over time. Stall after refuel condition complaints begin to trend upward at approximately 55 months in service.

Documentation detailing Chrysler's Assessment 1 is provided in Enclosure 9a – Complaint Analysis.

Assessment 2: Verification of stall after refuel condition on vehicle with complaint

Start Date	End Date	Engineering Group Responsible
06/01/2013	06/20/2013	Fuel System Engineering / Regulatory Affairs

Objective: Verify and understand the stall after refuel condition.

Methodology: Chrysler Engineering conducted an inspection and road test of a vehicle with a complaint of stall after refuel condition (VIN - 2C3KK63H06H126858).

Analysis Results: Chrysler Engineering was able to repeatedly recreate the stall after refueling condition. The team preliminarily found that raw fuel was in the purge line after refuel. After installing a new fuel tank in the vehicle, the team was unable to recreate the stall after refuel condition. During the inspection and road test, the software and calibration functioned as expected. This lead the team to further analyze the fuel system hardware removed from the vehicle.

A trip report is provided in Enclosure 9b – Vehicle Validation CONF BUS INFO.

Assessment 3: Testing and analysis by Chrysler of vehicle hardware in Assessment 2

Start Date	End Date	Engineering Group Responsible
06/20/2013	06/24/2013	Fuel System Engineering

Objective: Understand how the fuel system was performing relative to original functional criteria.

Methodology: Analyze the performance and hardware of fuel tank assembly from the Assessment 2 vehicle by performing a fill test, X-Ray and vapor canister performance test.

Analysis Results: During the fill test, fuel was observed entering the purge line prior to initial shut off of the fill nozzle (file 20130627_PE13-016 Wet Fuels_test report.pdf). Since the tank was not functioning as expected (i.e., fuel was allowed to escape from the fuel tank assembly into the evaporative system), the multifunctional control valve (referred to as MFCV hereafter) was X-Rayed (PE 13-016 Report 144702mr [3].pdf). The MFCV has two floats, the grade vent float and the refueling float. The X-Ray showed the refueling float was stuck in an open position. The MFCV was provided to the supplier for additional analysis (Assessment 5). Performance of the vapor canister was tested and found to be functioning within design parameters.

These documents are provided in Enclosure 9c – Chrysler Hardware Analysis
CONF BUS INFO.

Assessment 4: Testing by Chrysler on additional field parts obtained for PE13-016

Start Date	End Date	Engineering Group Responsible
6/24/2013	8/02/2013	Fuel System Engineering

Objective: Make an initial determination of whether the refueling float is stuck in an open position before providing the MFCV to its supplier for additional analysis.

Methodology: Invert the MFCV to induce a normally functioning refueling float to close, and X-Ray the MFCV to determine whether the refueling float does, in fact, close.

The MFCVs X-Rayed are:¹

¹ Sample A represents the MFCV from the vehicle in Assessment 2. Since the testing and analysis results for this MFCV are set forth in Assessment 3, they are not repeated in the Analysis Results section of this Assessment.

Sample #	Location / Dealer part is from	Customer Issue	Vehicle Information						Comments
			MY	Platform	Mileage	Eng.	Vol. (gal)	VIN	
A	MO - GLENDALE CHRYSLER	Stall after refuel	2006	LX	43,562	5.7	19	2C3KK63H06	Used in Assessment 2 & 3
B	MI - Chrysler Quality Center	No Issue	2006	LX	85,563	6.1	19	2D8GV77336	
C	MI - Chrysler Quality Center	No Issue	2005	LX	72,685	3.5	18	2D4FV48V65	Different MFCV
D	WI - GRIFFIN'S HUB CHRYSLER	Stall after refuel	2006	LX	49,920	6.1	19	2C3LA73W66	
E	CA - SHAVER CHRYSLER	Stall after refuel	2006	LX	87,038	5.7	19	2B3LA53H16	Only MFCV returned
F	CA - CARL BURGER'S DODGE	Stall after refuel	2006	LX	44,111	5.7	19	2D4GV572X6	Only MFCV returned
G	TX- ALLEN SAMUELS DODGE	Stall after refuel	2006	LX	37,923	5.7	19	2C3LA63HX6	Only MFCV returned

Analysis Results: Results of the X-ray showed:

- 1) Sample B: the part functioned as designed (PE13-016 Report 144946mr [2].pdf).
- 2) Sample C: the part functioned as designed (PE13-016 Report 144900mr [2].pdf).
- 3) Sample D: the part functioned as designed (PE13-016 Report 144900mr [2].pdf).
- 4) Sample E: the refueling float for the MFCV was not functioning as designed as it did not move to a closed position when the part was inverted (PE13-016 Report 145026mr [2].pdf).
- 5) Sample F: the refueling float for the MFCV was not functioning as designed as it did not move to a closed position when the part was inverted (PE13-016 Report 145097mr [2].pdf).
- 6) Sample G: the refueling float for the MFCV was not functioning as designed as it did not move to a closed position when the part was inverted (PE13-016 Report 145155mr [1].pdf).

These documents are provided in Enclosure 9d – Chrysler Analysis of Additional Hardware CONF BUS INFO.

Assessment 5: Supplier analysis of fuel tank control valves

Start Date	End Date	Engineering Group Responsible
06/24/2013	08/20/2013	Stant USA

Objective: Collect and analyze MFCV information to possibly determine trends and identify scope of suspect MFCV population.

Methodology: Gather information relating to fuel tank assemblies returned from the field, including:

- 1) Fuel tank fill testing;
- 2) MFCV component measurements;
- 3) Material analysis of the refueling float in Assessment 3;
- 4) Build information (tool, tool cavity, build date); and
- 5) Any other data the team thought might be relevant to understanding why certain MFCV refueling floats were not functioning as designed.

Analysis Results:

Sample #	Analysis Done				Analysis findings on MFCV Function	Comments
	X-Ray	Parts Measured	Fuel Fill	Material analysis		
A	Y	Y	Y	Y	Out of Specification	From Assessments 2 & 3
B	Y	Y	Y	Y	Out of Specification	
C	Y	Y	Y	Y	Within Specification	Different MFCV – float housing
D	Y	Y	Y	N	Within Specification	
E	Y	Y	N	N	Out of Specification	Only MFCV returned
F	Y	Y	N	N	Out of Specification	Only MFCV returned
G	Y	In Process	N	N	Out of Specification	Only MFCV returned

- 1) The Sample A fuel tank assembly was disassembled to allow component measurement. The refueling float was found to have swelled to 2.7% of the original design. The current dimensions of the float are greater than the float travel space provided within the assembly; causing the float to stick and not properly function. Material analysis confirmed that the Sample A refueling float consisted of production intent material, and that the material was within specification.
- 2) The Sample B fuel tank assembly was tested for fuel fill and the data showed the fuel tank performed within design parameters. However, when the refueling float within the MFCV was measured, the interfacing parts were found in a dimensional line to line condition, which is not ideal for proper function.
- 3) The Sample C fuel tank assembly was tested for fuel fill and the data showed the fuel tank performed within design parameters.
- 4) The Sample D fuel tank assembly was tested for fuel fill and the data showed the tank performed within design parameters. Measurements of the components indicate it was within specification. This fuel tank assembly was then used for a fuel soak study to determine if the components increased in

size over time. After an initial soak of 7 days at 90°F, the parts continued to meet fuel fill requirements. The soak time has been increased and the study will be completed on 8/20/2013. Note: The Sample D fuel tank assembly was removed from the vehicle a few months prior to being sent to Chrysler, which could have allowed a swollen refueling float to contract.

- 5) Sample E, the first MFCV cut out of a fuel tank, showed the dimension of the refueling float had swollen, allowing the refueling float to stick and not properly function.
- 6) Sample F, the second MFCV valve cut out of a fuel tank, showed the dimension of the refueling float had swollen, allowing the float to stick and not properly function.
- 7) Sample G, the third MFCV cut out of a fuel tank, is currently being measured. It is expected that Sample G measurements will be completed on or about 8/20/2013.

A fuel and vapor soak test of components in different fuels is underway, and is expected to be analyzed by 9/30/2013. The data from this soak test may lead to additional studies.

Documentation of the results is provided in Enclosure 9e – Supplier Analysis
CONF BUS INFO.

Assessment 6: Analysis of material by material supplier

Start Date	End Date	Engineering Group Responsible
07/23/2013	08/02/2013	DuPont

Objective: Confirm that refueling float material composition is within specifications.

Methodology: Material supplier testing.

Analysis Results: The material supplier confirms that the MFCV floats from Samples A, B, and C are within the material specifications.

This document is provided in Enclosure 9f – Material Supplier Analysis.

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 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.

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 requested information is provided in Enclosure 10 – Component 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.

There is an on-going investigation to determine root cause for the alleged condition, but at this time Chrysler is not aware of any modification or changes which may be incorporated into the subject vehicle components within the next 120 days.

- 11. Produce one sample of each of the following:**
- a. Representative sample of a new MY 2006 fuel tank vapor vent valve(s);
 - b. Representative sample of a new MY 2007 fuel tank vapor vent valve(s); and
 - c. Field return sample of the MY 2006 subject components exhibiting the subject failure mode.

Include the following information about the parts provided in response to this request: (1) the vehicle identification number; (2) the repair claim number; and (3) copies of all documents related to analysis of the part.

- A11. The parts provided in response to this request are summarized below.

- a) Two fuel tank vapor vent valves, a grade vent valve and a MFCV, were used in the fuel tank assemblies of the subject vehicles. Chrysler was unable to locate a new 2006 MY grade vent valve, so a new representative part from a service tank is being provided. Chrysler is unable to locate a representative sample of a new 2006 MY MFCV, and no longer uses assemblies representing the 2006 MY design, but is providing a MFCV housing and the floats that represent what was used in 2006 MY production.

- b) Two fuel tank vapor vent valves, a grade vent valve and a MFCV, were used in the fuel tanks of the 2007 LX 5.7L and 6.1L vehicles. Chrysler is unable to locate a representative sample of a new 2007 MY grade vent valve or MFCV, but is providing a new grade vent valve and a new MFCV from a service fuel tank, which are representative of the 2007 MY production parts. Chrysler is also providing new MFCV housing and floats that are representative of what was used in the 2007 MY LX vehicles equipped with a 5.7L or 6.1L engine.
- c) Chrysler is providing a field return sample MFCV, which exhibits a swollen refueling float stuck in the MFCV housing. The vehicle identification number from which the part was removed is 2B3LA53H16H306896 (Sample E). The repair claim number for this is 371304. Copies of all the documents related to the analysis of the part are contained in Enclosure 9c - Chrysler Analysis of Additional Hardware CONF BUS INFO and 9d – Supplier Analysis CONF BUS INFO, which have been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

12. Provide a detailed description of the evaporate system hardware for the subject vehicles, including purge flow monitor, purge feedback system, system specific DTCs, fuel purging/metering control strategies and Chrysler's assessment of all factors that may contribute to engine stall after refueling in the subject vehicles.

- A12. The requested information is provided in Enclosure 12 - Evaporative System Description 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. An analysis of the field data indicates stall after refuel condition is the reason for the increasing complaints of stalling on the subject vehicles. Rate of complaints confirms the stall after refuel condition is increasing after 55 months in service as

stated in Assessment 1. When the stall after refuel condition occurs, there are no DTC's set. The lack of DTC's makes it difficult for the dealer to diagnose this condition and can lead to improper diagnosis of the issue during the early stages of refueling float swelling, resulting in the stall after refuel condition. If improperly diagnosed, the dealer may replace parts that, if malfunctioning, can cause a stall but are not related to the issue. Therefore, stall after refuel condition is the focus of Chrysler's investigation.

In Assessment 2, Chrysler preliminarily determined the stall after refuel condition is caused by fuel entering the purge line during the refueling process and remains there until purge begins after a restart. Assessment 3 confirmed fuel was entering the purge line during refuel. As part of Assessment 3, Chrysler x-rayed the MFCV and found the refueling float was stuck in an open position. Assessment 4 confirmed the outer diameter of the refuel float had swelled to a dimension that allowed it to become stuck in an open position. The root cause investigation is still ongoing and Chrysler is continuing to evaluate manufacturing tolerances and environmental conditions that may cause an otherwise robust and properly functioning MFCV to stick open.

Chrysler is aware of four legal claims alleging property damage and one minor injury. Chrysler does not believe the four claims are related to an engine stall condition after refuel, as there is no mention of refueling or a full fuel tank.

Data shows that stall after refuel incidents present a low risk of accident or injury. The majority of stall after refuel incidents occur at low speeds or when the vehicle is stopped. If a stall after refuel condition occurs, the vehicle has functioning steering and brake systems, allowing the customer to safely steer the vehicle to the side of the road and come to a stop. The vehicle will restart immediately after stalling.

The customer may experience a number of symptoms when the refueling float sticks open and allows fuel to enter into the purge line. These symptoms may include: the engine running rough, vehicle lurching, black smoke out of the exhaust, or an engine stall.

In summary, Chrysler is continuing to investigate root cause through testing. Meanwhile, the field data shows this condition, even when it occurs, presents a very low risk of accident or injury. To date, Chrysler is aware of 285 internal and external complaints of a stall after refueling condition in the subject vehicles and another 536 complaints lacking enough information to determine whether the stall occurred after refueling. Chrysler is unaware of any accident or injury resulting from a stall after refueling incident. Chrysler believes this issue poses a de minimis risk to motor vehicle safety, and looks forward to working with the ODI towards the successful resolution of this matter.