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OFFICE OF DEFECTS
INVESTIGATION

May 15, 2006

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

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

Dear Mr. Quandt:

Reference: NVS-213swcm; RQ06-002

This document contains DaimlerChrysler Corporation's ("DCC") response to the referenced inquiry regarding the 2004 through 2006 Chrysler Pacifica vehicles that have been manufactured for sale or lease in the United States. By providing the information contained herein, DCC is not waiving its claim to attorney work product and attorney-client privileged communications.

NHTSA has initiated this RQ inquiring whether the corrective action initiated and undertaken by DCC in its March 2004 voluntary recall 04V-113 has adequately addressed a stalling issue that DCC discovered as a result of its internal review of field data. That recall pertained to Pacifica vehicles built between January 2003 and July 2003 and a condition that lead to engine stalling during low speed, closed throttle cornering with a cold engine at cold ambient temperature. The corrective action undertaken by DCC in March 2004 was to install revised engine controller software in the affected Pacifica vehicles.

For reasons discussed in the response, DCC is convinced that the March 2004 corrective action eliminated the cause of the stalling condition that occurred in this particular population of Pacifica vehicles, as well as eliminating this same cause in all Pacifica vehicles built to date, and has concluded that the issue has been adequately addressed. Therefore, DCC requests that RQ06-002, which relates to the adequacy of the recall pertaining to Pacifica vehicles built between January 2003 and July 2003 be closed.

Sincerely,

S. J. Speth

Stephan J. Speth

Attachment and Enclosures

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

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

   a. **Vehicle identification number (VIN);**
   b. **Model;**
   c. **Model Year;**
   d. **Date of manufacture;**
   e. **Date warranty coverage commenced; and**
   f. **The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).**

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

A1. The chart below lists the production volumes for 2004 through 2006 MY Chrysler Pacificas that have been manufactured by DaimlerChrysler Corporation ("DCC") for sale or lease in the United States between July 2, 2003 and March 2, 2006.

Vehicle Type	2004 MY	2005 MY	2006 MY	Total
Pacifica	64,279	118,564	53,573	236,410

The detailed response listing the production data as requested in Items a. through f. is provided in Enclosure 1 as a Microsoft Access 2000 table, titled "PRODUCTION DATA".

2. **State the number of each of the following, received by DCC, or of which DCC is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:**

   a. **Consumer complaints, including those from fleet operators;**
   b. **Field reports, including dealer field reports;**
   c. **Reports involving a crash, injury, or fatality, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;**
   d. **Reports involving a fire, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;**
   e. **Property damage claims; and**
   f. **Third-party arbitration proceedings where DCC is or was a party to the arbitration; and**

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g. Lawsuits, both pending and closed, in which DCC 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 "g," provide a summary description of the alleged problem and causal and contributing factors and DCC's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "d" and "g," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

A2. The following summarizes the non-privileged reports identified by DCC that relate to, or may relate to, the alleged condition in the subject vehicles. DCC has conducted a reasonable and diligent search of records kept in the ordinary course of business for such information. Please note that only complaints, reports, etc. that were reported before March 2, 2006 are included in the summary below.

a. There are a total of 480 customer complaints (373 unique VINs) that may be related to the alleged condition based on text within the complaint narrative. DCC's analysis shows that these complaints are likely due to multiple causes, where any cause has been identified.

b. There are a total of 2189 field reports (1967 unique VINs), that may be related to the alleged condition based on text within the complaint narrative.

c. There are no reports involving an injury or fatality, there are three reports involving a crash that are based on consumer complaints and 1 report involving a crash that is based on a property damage claim, that may relate to the alleged condition.

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

e. There is one report that alleged property damage that is responsive to this inquiry. For the purposes of this response, "property damage" is defined as any non-vehicle component that was allegedly damaged during the reported incident.

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

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g. There are 6 lawsuits and 6 legal claims where DCC is, or was, a defendant or codefendant, that are responsive to this inquiry.

In summary, there are a total of 2,681 non-VOQ field inputs that relate or may relate to the alleged condition, of which 2,192 are unique vehicles.

Subject Vehicle Population 236,416					
Category Description	**CAIR**	**Field Reports**	**Claims/Lawsuits**	**VOQ's**	**Total Unique VINS**
Steady State Stalls > than 15 MPH	27	52	0 / 2	5	57
Low Speed Stalls < than 15 MPH	29	46	1 / 0	5	43
Turning	196	1410	3 / 2	29	1291
Decelerating or coming to a stop	13	105	1 / 0	8	101
Indeterminate	197	508	1 / 1	18[1]	623
Garage shift, idle, or stopped	15	50	0 / 1	2	59
Accelerating	3	18	0 / 0	1	18
Not related	9	63	1 / 1	0	60

[1] 7 of these allege stall but not enough information to categorize, 11 of them did not have VIN

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:

a. DCC's file number or other identifier used;
b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
d. Vehicle's VIN;
e. Vehicle's 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 a fire is alleged;
k. Whether property damage is alleged;
l. Number of alleged injuries, if any; and

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m. 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 pre-formatted table which provides further details regarding this submission.

A3. The information requested in Items a. through m, is provided in the detailed response to Question No. 2, Enclosure 2, as part of a Microsoft Access 2000 table, and titled "REQUEST NUMBER TWO DATA.

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method DCC used for organizing the documents.

A4. Copies of all documents within the scope of Question No.2 are provided in Enclosure 3 - CONSUMER COMPLAINTS, FIELD REPORTS, LEGAL CLAIMS AND LAWSUITS.

5. State, by model year, total counts for all of the following categories of claims, collectively, that have been paid by DCC to date that relate to, or may relate to, the alleged defect in the subject vehicles (including all claims for reprogramming, repairing or replacement of the subject components: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

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

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

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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. There are eight applicable labor operation codes (LOPs) that may apply to the alleged condition. The claims by vehicle count for the 2004 MY through 2006 MY Chrysler Pacificas that have been manufactured for sale or lease in the United States are shown in the tables below.

Labor Operation Code	2004 MY	2005 MY	2006 MY	Total Claims
08-19-06-01	231	178	8	417
08-19-06-50	0	0	0	0
14-50-01-00	11	32	0	43
14-50-01-07	136	911	6	1053
18-19-06-10	0	976	133	1109
85-41-08-00	179	276	4	459
85-41-09-00	109	199	0	308
85-41-14-00	104	233	3	340

DCC's warranty system is designed to compensate dealers for repairs made, and cannot be reliably used to determine any trend related to the alleged condition. It is impossible to determine the reason for each particular warranty claim. There are other random issues that are not related to the alleged condition, yet may still trigger replacement of the subject components. The warranty claims that are being submitted are what DCC has deemed to be representative of claims that may relate to the alleged condition.

Most warranty claims do not have associated narrative data. In the case where warranty narratives were available, a word search criteria was established to filter those narratives which do not relate to the alleged condition. The following is the word search criteria used:

Words that must be contained within the narrative

- stall, stalls, stalled, stalling
- die, dies, died, dying
- shut off, shuts off, shutting off
- shut down, shuts down, shutting down
- quit, quits, quitting
- cut out, cuts out, cutting out
- pcm
- ngc
- module
- flash

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- program
- TSB
- Fuel pump

Words that must not be contained within the narrative

- Radio
- Speaker
- Cruise
- Satellite
- Speed control
- Spd ctl
- Sirius
- Headlight
- Fog
- Cluster
- ATC

Any narratives that did not contain at least one of these words were not submitted. Additionally, since the warranty narratives must be entered for any "uncodeable" claims in order to be paid, the uncodeable claims that have been submitted per this response reflect only the claims which have narratives that match the word search criteria.

The detailed response that lists the warranty claims as requested in Items a. through k. is provided in Enclosure 4 as a Microsoft Access 2000 table, titled "WARRANTY DATA".

6. Describe in detail the search criteria used by DCC to identify the claims identified in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by DCC on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that DCC offered for the subject vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.

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

Labor Operation Code	Description
08-19-06-01	Replace powertrain/trans control module - All engines

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08-19-06-50	Module, Powertrain/Transmission Control (Ngc) ; Program Generic Powertrain Control Module With Software; Check and Adjust
14-50-01-00	Pump, Fuel/Level Unit;
14-50-01-07	Pump, Fuel/Level Unit; Right Side Fuel Pump Module
18-19-06-10	Reprogram Powertrain control module
85-41-08-00	Diagnostic LOP: electrical
85-41-09-00	Diagnostic LOP: engine
85-41-14-00	Diagnostic LOP: fuel

Note: The following table contains the problem codes that relate or may relate to the alleged condition, for all of the Labor Operation codes in the above table.

Problem Codes	**15**	**41**	**43**	**53**	**61**	**DO**	**DT**	**LW**	**NP**	**PI**	**R0**	**UC**	**Y2**	**Y4**	**YF**	**YH**	**ZZ**
LOP Qty	22	0	88	0	7	99	114	437	131	73	540	24	642	215	228	0	1109

Descriptions for each of the problem codes for the referenced labor operations are provided below. As stated above, DCC cautions against drawing any conclusions from warranty data.

Problem Code	**Description**
15	Calibration
41	Foreign material
43	Fuel leak
53	Improper pressure
61	Intermittent operation
DO	Die outs
DT	No response
LW	Level sender function
NP	Sags, hesitates and no power
PI	Poor idle
R0	Drivability
UC	Uncodeable
Y2	Stalls
Y4	Stumbles
YF	Improper idle
YH	Lack power
ZZ	Service Action

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The standard warranty offered on the 2004 MY through 2005 MY Chrysler Pacificas that have been manufactured for sale or lease in the United States is 3 years/36,000 miles for basic coverage and 7 years/70,000 miles for the powertrain. For 2006 MY Chrysler Pacifica both the basic and powertrain coverage is for 3 years/36,000 miles. The Powertrain Control Module (PCM) is covered under the 8 year/80,000 miles emission system warranty for all model years. The fuel pump modules are covered under the 3 year/36,000 miles basic warranty for all model years on vehicles equipped with Federal emissions (For vehicles equipped with California emissions: 3 yr/50,000 miles for 2004 and 2006 MY, 7 yr/70,000 miles for 2005 MY). There was no extended warranty coverage options related specifically to the subject components. Owners may have purchased additional warranty coverage through third-party providers not affiliated with DCC; this warranty data is not available to DCC and is not included in this response.

7. **Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that DCC has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that DCC is planning to issue within the next 120 days.**

A7. The following document is being provided in Enclosure 5 (summarized briefly below).

Technical Service Bulletin (TSB) # 18-039-05 - This bulletin outlines a change in the engine calibration for 2005 and 2006 MY Chrysler Pacifica vehicle. It involves reprogramming of the PCM in the case when a vehicle operator is experiencing rough idle or idle fluctuation.

8. **Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, DCC. For each such action, provide the following information:**
   a. **Action title or identifier;**
   b. **The actual or planned start date;**
   c. **The actual or expected end date;**
   d. **Brief summary of the subject and objective of the action;**
   e. **Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and**
   f. **A brief summary of the findings and/or conclusions resulting from the action.**

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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. Documents describing completed "actions" that may relate to the alleged defect are provided in Enclosure 0 under separate cover with a request for confidential treatment, to the NHTSA Office of the Chief Counsel. See non confidential documents titled "Q8 summaries" for subparts a. through f, which is provided in Enclosure 6.

9. State the number of post-remedy engine stall complaints and warranty claims DCC has received for vehicles recalled under 04V-113. Provide an electronic tabulation of all such complaints and claims that includes all of the information requested in Questions 3 and 5, as appropriate, and the recall 04V-113 completion date and mileage. Also, provide counts of vehicles repaired under recall 04V-113 by recall completion month from recall initiation to date.

A9. There have been 283 post remedy engine stall complaints and 428 post remedy warranty claims that DCC has received for vehicles that were recalled under 04V-113. Of these, 576 were unique vehicles.

There have been 39,019 vehicles repaired under recall 04V-113 since initiation of the recall through March 2, 2006.

Repair Month	MAR-04	APR-04	MAY-04	JUN-04	JUL-04	AUG-04
# Claims	11,300	10,062	3,634	2,570	1,910	1,266
Repair Month	SEP-04	OCT-04	NOV-04	DEC-04	JAN-05	FEB-05
# Claims	944	2,282	1,099	723	539	449
Repair Month	MAR-05	APR-05	MAY-05	JUN-05	JUL-05	AUG-05
# Claims	432	284	244	212	180	174
Repair Month	SEP-05	OCT-05	NOV-05	DEC-05	JAN-06	FEB-06
# Claims	136	163	122	100	105	89

The information requested in question 9 is provided in an electronic tabulation, Enclosure 7.

10. Describe all modifications or changes made by, or on behalf of, DCC in the programming, design, material composition, manufacture, quality control, supply, or

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installation of the subject component, from the start of production of MY 2004 Chrysler Pacifica vehicles 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 – for each change in programming, clearly state both the original and revised versions of the code/specifications;
c. The reason(s) for the modification or change;
d. The part numbers (service and engineering) of the original component;
e. The part number (service and engineering) of the modified component;
f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
g. When the modified component was made available as a service component; and
h. Whether the modified component can be interchanged with earlier production components.

Also, provide the above information for any modification or change that DCC is aware of which may be incorporated into vehicle production within the next 120 days.

A10. PDF files (Enclosure 8 - Change History) are provided to document the changes that have taken place during the subject model years on the subject components.

11. State the number of subject components that DCC has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales, if applicable).

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles of which DCC is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

A11. The requested part demand information has been included in Enclosure 10 - Part Info. It is impossible to determine the reason for each of these part sales. There are other issues that are not related to the alleged condition, yet may trigger sales/replacement of the subject components. In addition it is not possible to conclude that part demand is a reliable indicator of any trend related to the alleged condition.

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12. Furnish DCC's assessment of the alleged defect in the subject vehicles, including:

- **a. The causal or contributory factor(s) for the stalling experience in the subject vehicles listed in descending order of incident frequency;**
- **b. The failure mechanism(s) associated with each factor identified in response to 12.a;**
- **c. The failure mode(s) associated with each factor identified in response to 12.a;**
- **d. The risk to motor vehicle safety posed for each factor identified in response to 12.a;**
- **e. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have factor identified in response to 12.a;**
- **f. The factors identified in 12.a associated with each of the reports included with this inquiry;**
- **g. DCC's analysis of failure rates at 12 months in service for each of the conditions identified in 12.a; and**
- **h. Using warranty data provide DCC's analysis of projected failure rates at 3, 5 and 10 years in service for each of the conditions identified in response to 12.a. Provide detailed explanations of the statistical methods used to perform these analyses.**

A12. NHTSA has initiated this RQ inquiring whether the corrective action initiated and undertaken by DCC in its March 2004 voluntary recall 04V-113 has adequately addressed a stalling issue that DCC discovered as a result of its internal review of field data. That recall pertained to Pacifica vehicles built between January 2003 and July 2003 and a condition that lead to engine stalling during low speed, closed throttle cornering with a cold engine at cold ambient temperature. The corrective action undertaken by DCC in March 2004 was to install revised engine controller software in the affected Pacifica vehicles.

For reasons discussed below, DCC is convinced that the March 2004 corrective action eliminated the cause of the stalling condition that occurred in this particular population of Pacifica vehicles, as well as eliminating this same cause in all Pacifica vehicles built to date. DCC believes the more recent allegations in Pacifica vehicles are unrelated to the condition that originally prompted DCC to initiate the 04V-113 voluntary recall campaign. Moreover, DCC believes two different conditions behind the more recent reports have been identified and addressed by a technical service bulletin and a running design change. Therefore, no further field action is required.

Stalling Complaints in the Recalled Pacifica Vehicles

By way of background, the 04V-113 voluntary recall campaign pertained to the 2004 MY Pacifica vehicles ("early build" or "recall vehicles") that were equipped with a new engine controller – Next Generation Controller, Version 1, or the "NGC1." The NGC1 software

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protocol used to test the vehicle exhaust gas recirculation (EGR) system was found, in some situations, to lead to engine stalling during low speed, closed throttle cornering with a cold engine at cold ambient temperature. The production-released NGC1 was replaced by a new controller, NGC3, on July 2, 2003 for the remainder of the 2004 model year vehicles.

DCC's recent analysis of report and warranty data illustrates that the recall and implementation of the new NGC3 controller resolved the alleged condition in all 2004 MY vehicles.[1] This analysis reveals that DCC received a significant number of reports pertaining to the 2004 early build vehicles prior to the initiation of the recall. Following the recall, the number of reports pertaining to these vehicles, were reduced considerably, indicating that the recall repair was indeed effective. DCC also received very few reports alleging stalling on these vehicles after the recall had been performed. The 2004 MY build vehicles with the new NGC3 controller ("2004 non-recall vehicles") received a relatively small number of reports.[2] These few reports can be attributed to many factors including the publicity associated with the recall action, poor fuel quality, no fuel, incorrect calibration, ignition key off, and aftermarket equipment incompatibility. Based on calibration development experience, many times idle undershoot, hesitation, or stumbles can be misinterpreted as stalling.

Complaints in the Post-Recall Build Pacifica Vehicles

Despite DCC's confidence that it had resolved the cause of the stalling condition in both the recall population of Pacifica vehicles and those built thereafter, DCC continued to monitor drivability field data on its Pacifica vehicles. In July 2005, DCC noticed an increase in the number of field input alleging idle fluctuation and stalling in the post-recall population of Pacifica vehicles, particularly in 2005 model year vehicles.[3]

DCC Chassis Engineering, together with its fuel tank and fuel module suppliers (Inergy and Delphi, respectively), began to conduct an investigation into the possible causes of this input. Concurrently, DCC Powertrain Systems began to investigate whether the NGC3 control module programming was somehow contributing to the allegations.

a. Pacifica Idle Fluctuations

During its review of the recent field inputs alleging idle fluctuation, DCC identified an issue relating to a vapor spike in the fuel system purge canister in 2005 and 2006 MY Pacifica vehicles. In some instances, an idle undershoot could occur if: 1) The vehicle's fuel tank reading was approximately 5/8ths +/- 1/8th tank of fuel; 2) The seasonal fuel contained high RVP (winter type vapor pressure of the fuel); 3) The ambient temperatures were quite

[1] *See* Attachment _A_ and Attachment _B_
[2] *See* Attachment _A_ and Attachment _B_
[3] See Attachment _C_ and Attachment _D_

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warm, greater or equal to 70 degrees F (but not warm enough to "boil" the light ends of the fuel in the tank); 4) The vehicle was driven at constant speed/load to completely clean the purge canister of vapor (where the control system has maximum purge flow to clean the charcoal in the canister); and 5) The vehicle was put through an aggressive left hand turn maneuver with very light or no throttle input. After an aggressive left turn with a 1/2 to 5/8 filled reservoir, fuel sloshing creates differential pressure causing the control valve diaphragm to lift open and allow fuel vapors to get to the engine and cause drivability issues. Some fuel spills from the driver's "full" side to the passenger "empty" side on the left turn. The control valve in the fuel tank sees a pressure difference during these events and lifts off, releasing a large slug of vapor down the purge line, causing a rich undershoot.

This condition lead DCC to issue Technical Service Bulletin # 18-039-05 in December 2005. This bulletin outlines a change in the engine calibration for 2005 and 2006 model year Chrysler Pacifica vehicle and involves reprogramming of the Powertrain Control Module in the case when a vehicle exhibits a rough idle or idle fluctuation.

b. Recent Pacifica Complaints

DCC and its suppliers believe that a likely source of the increase in complaints alleging stalling (as opposed to simply rough idle or idle fluctuation) may relate to an issue that has been identified with the fuel pump. There appears to be an increase of fuel pump returns that correlate to fuel pump build dates in the summer of 2004, which is believed to be caused by a tooling issue at the supplier's plant.[4]

The Pacifica uses a saddle tank design in which fuel is constantly transferred from the passenger's side to the driver's side of the tank. After a lengthy investigation, it was determined that, in some instances, the jet pump brass fitting in the fuel pump module loosens and becomes dislodged from the reservoir tower which reduces fuel flow, thereby eliminating the ability to transfer fuel. (*See* Figure 1, Brass Fitting.) As a result, the only fuel that is able to be used is that in the driver's side of the tank and the fuel that spills over from the passenger's side on left hand turns.

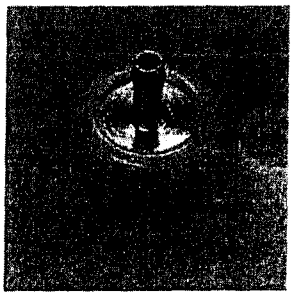

Figure 1, Brass Fitting

[4] *See* Attachment _E_ and Attachment _F_

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After much testing and analysis of return parts, it was determined that the brass fitting can become dislodged due to a combination of the following factors: incorrect barb tip radius (larger than maximum), incorrect barb diameter (smaller than minimum), insufficient press depth of the fitting to the tower, and significant temperature (hot/cold) variations and/or tower material swell . The purpose of the jet pump is to keep the reservoir full with fuel for low fuel drivability.

Delphi recommended changes to the fit of the brass fitting within the fuel pump module to remedy any tooling variations and ensure that the jet pump brass fitting is retained. (*See* Figure 2, Changes to Brass Fitting.) These changes were implemented in the fall of the 2005 calendar year, with the first of the corrective actions (sorting material for increased fitting interference) beginning in early August of 2005.

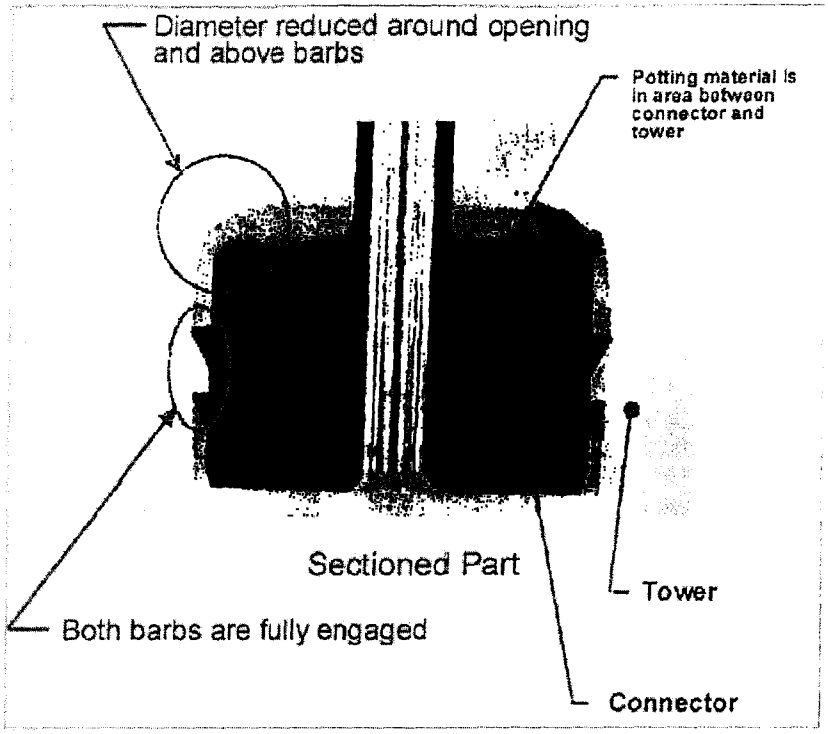

Figure 2, Changes to Brass Fitting

DCC has noticed a significant reduction in the number of alleged stalling complaints for 2005 MY vehicles and very few inputs for 2006 MY vehicles.[5] The empirical data suggests that the problematic fuel pumps built in the summer of 2004 have already

[5] *See* Attachment _G_

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manifested failure and have been replaced.[6] To the extent a customer was misreporting a "stalling" event (i.e., actually experiencing a rough idle or idle fluctuation condition) DCC believes that TSB #18-039-05 is the appropriate corrective measure.

DCC is continuing to monitor the extent to which the vapor spike in the fuel system purge canister and fuel pump issues contributed to the increase in inputs alleging rough idle, idle fluctuation and stalling. In the meantime, DCC has not received any responsive reports alleging injury or fatality and only one report alleging property damage caused by an accident. The vast majority of the reported incidents occurred when decelerating to a stop or at the end of a turn (as opposed to in the turn) and would restart.

DCC has concluded that the March 2004 corrective action taken in initiating voluntary recall 04V-113 has adequately addressed the issue leading to engine stalling during low speed, closed throttle cornering with a cold engine at cold ambient temperature. DCC will continue to monitor other drivability issues that are believed to be already resolved, yet are unrelated to recall 04V-113, and will take whatever appropriate action is needed. Therefore, DCC requests that RQ06-002, which relates to the adequacy of the recall pertaining to Pacifica vehicles built between January 2003 and July 2003 be closed.

Warranty projections

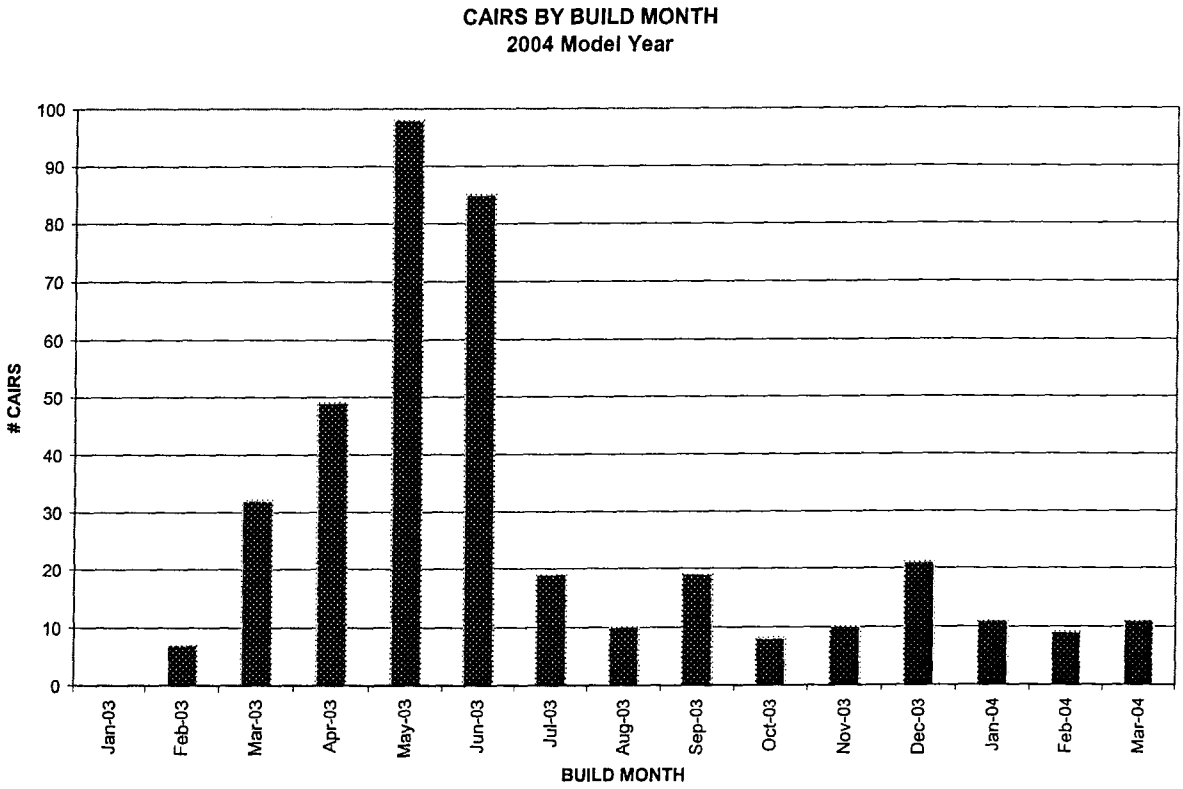
The warranty projection charts are provided in Enclosure 9.

1. The basis of the estimates is the distribution free Kaplan-Meier method of estimating the cumulative "failure" function. The number of conditions occurring in a time interval - one month for warranty data - is divided by the number of vehicles that have passed through that interval. These incremental rates are cumulatively summed with respect to months in service.
2. The resulting observed cumulative rate is then fitted to one of several known reliability distributions or models. Know reliability distributions include, but are not limited to, the Uniform, Lognormal, Weibull and Power Function distributions.
3. The model is extended to the time in service (month) of the forecast needed.
4. The Kaplan-Meier method is well described in the "Engineering Statistics Handbook" at www.itl.nist.gov/div898/handbook.
5. For both 2004 and the combined 2005-06 data "LOPs 14500107 (R0) & 85411400 (Y2)" a uniform distribution was used to model the cumulative C's/1000 for projections out to 120 months.
6. This distribution is also described in detail at the same above mentioned federal government site.

[6] *See* Attachment _F_ and Attachment _H_

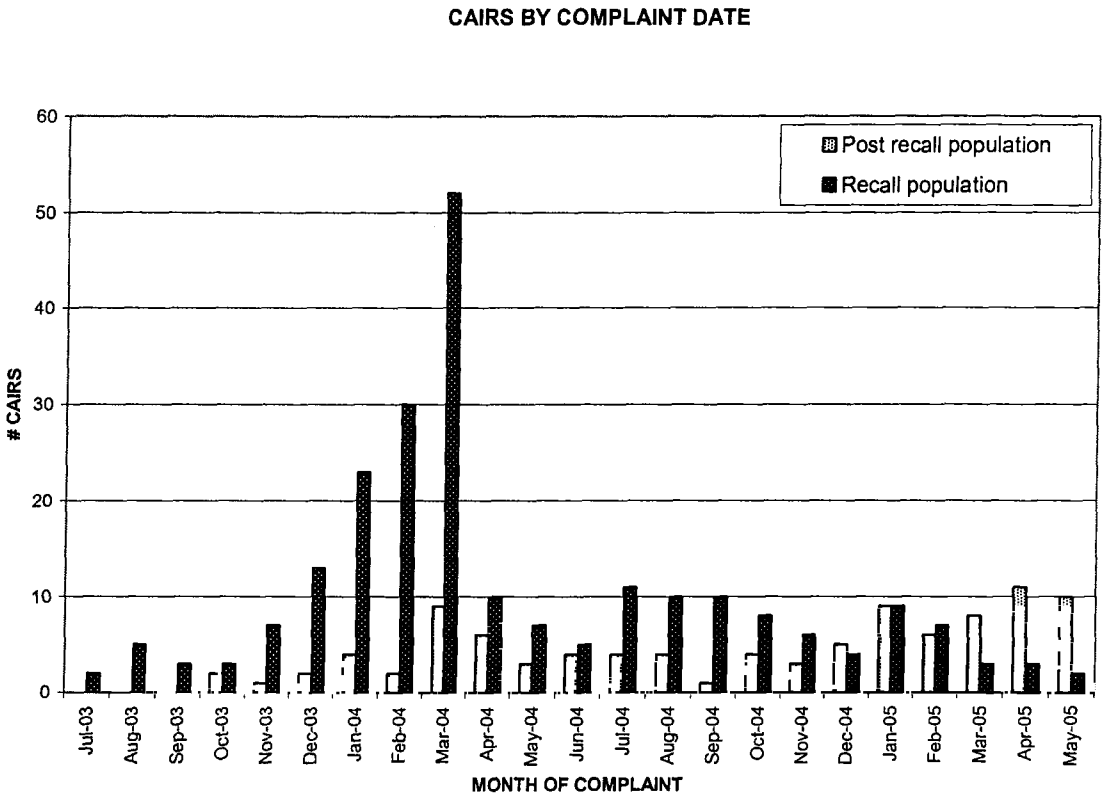
ATTACHMENT

ATTACHMENT A



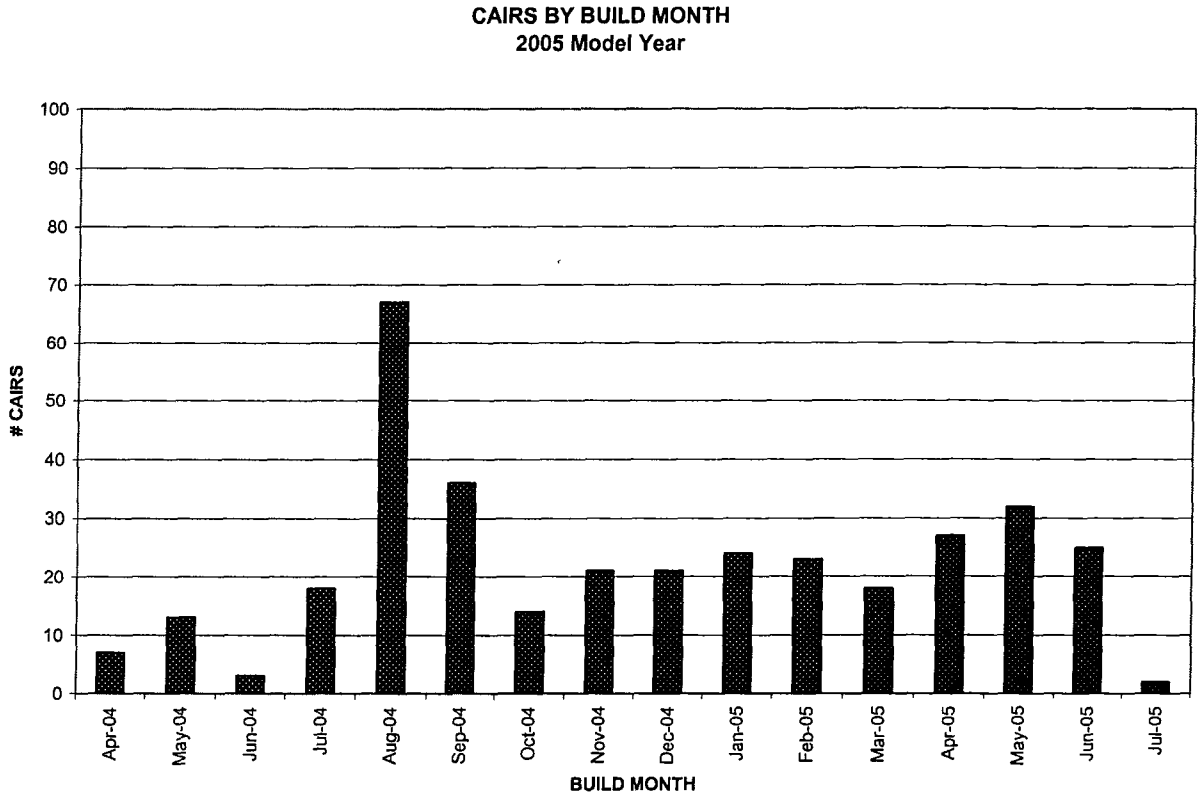
ATTACHMENT

ATTACHMENT B



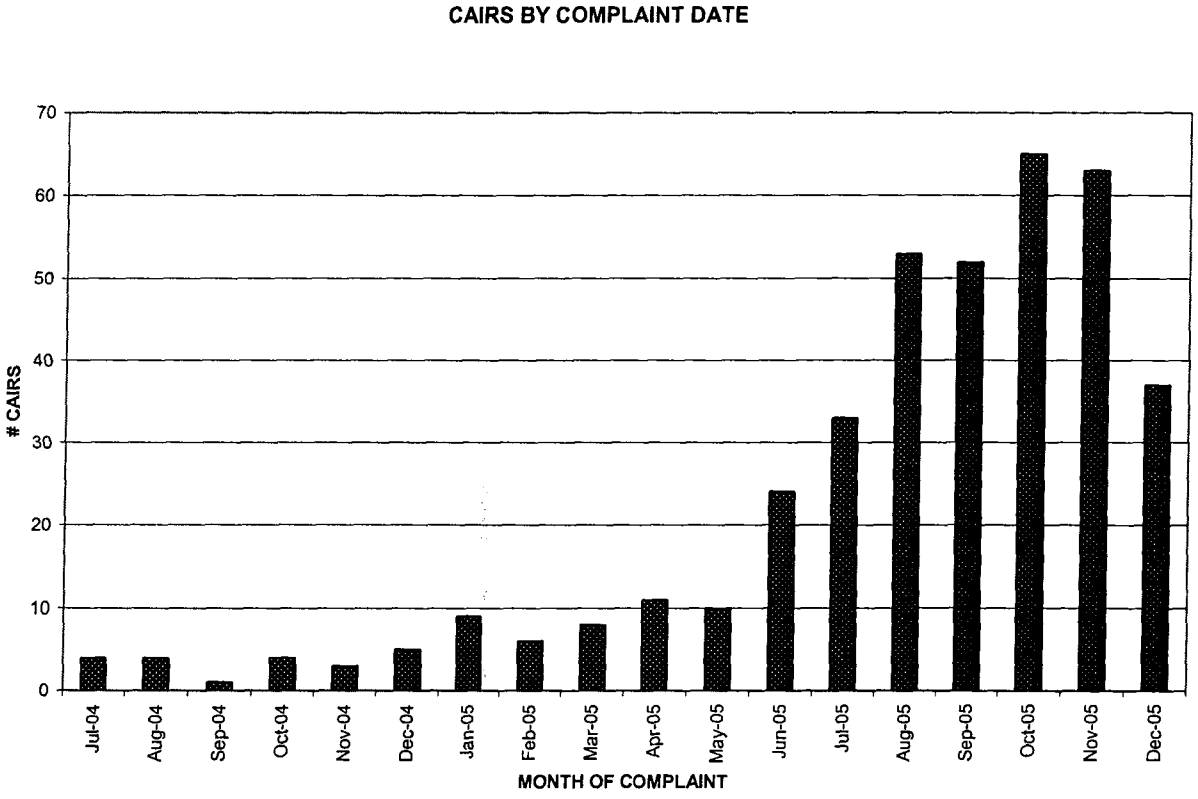
ATTACHMENT

ATTACHMENT C



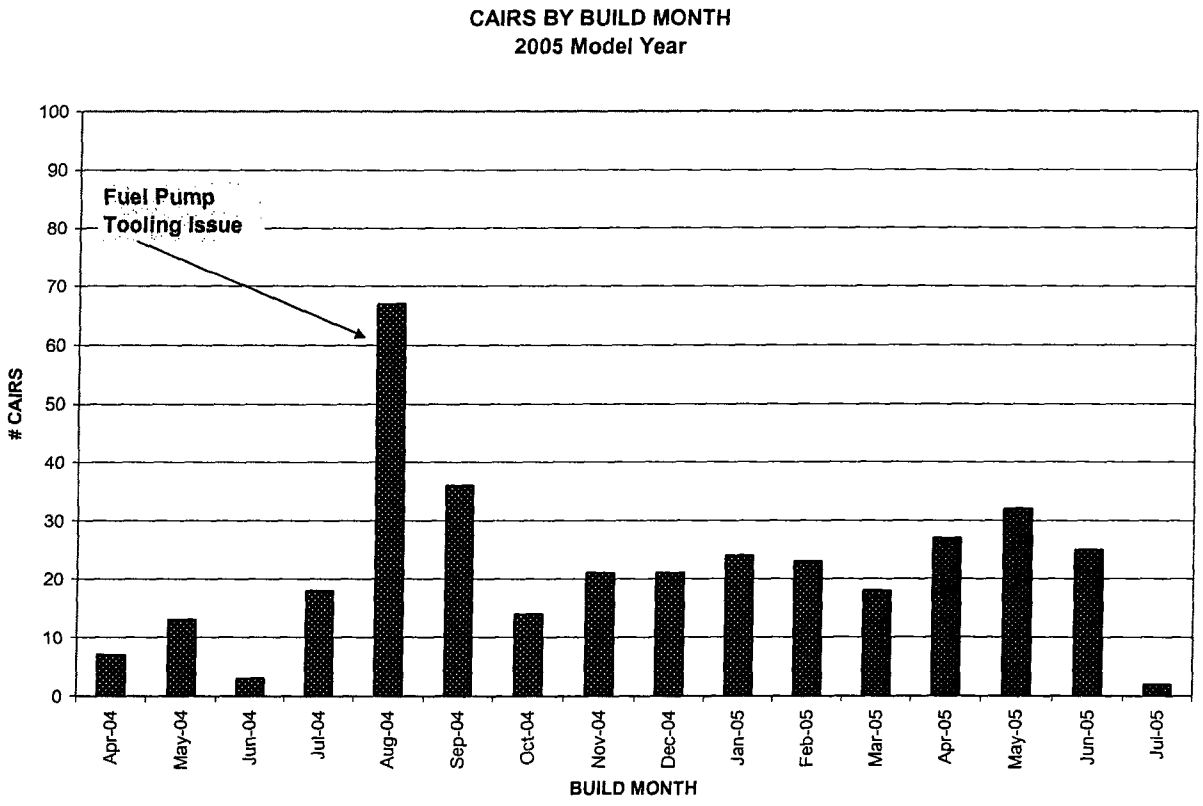
ATTACHMENT

ATTACHMENT D



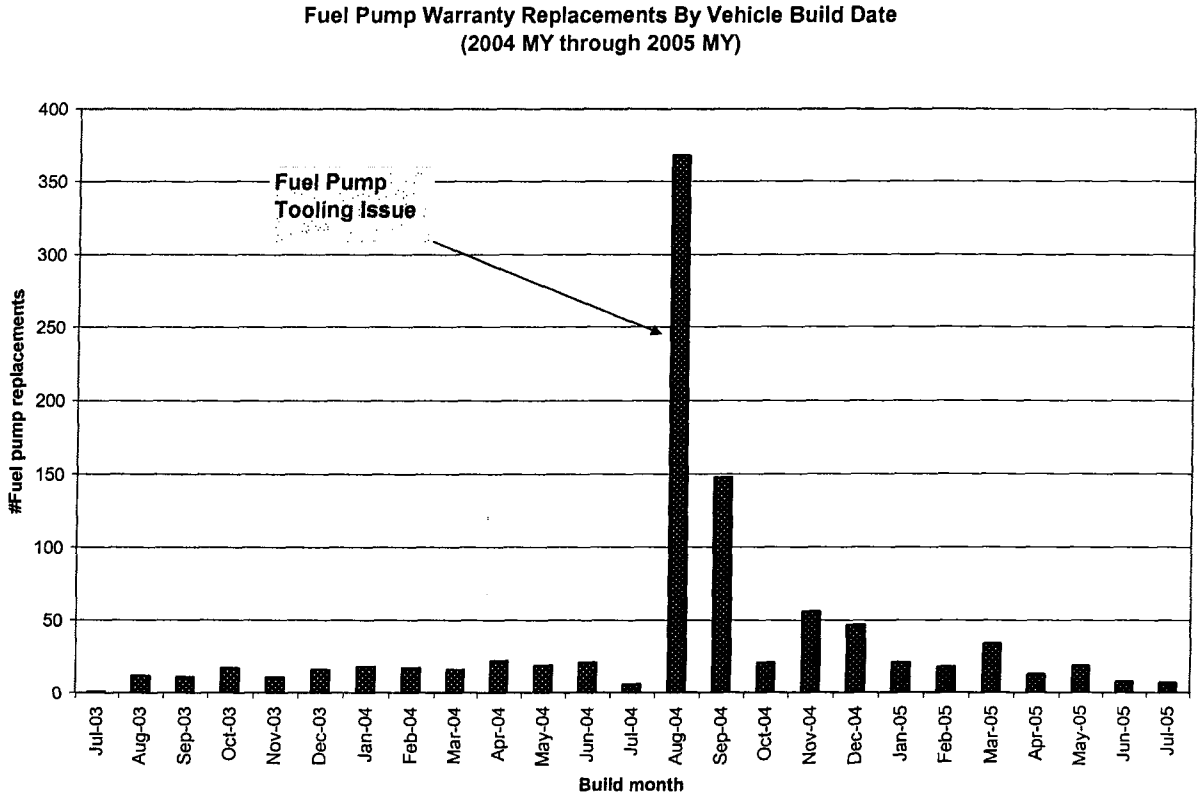
ATTACHMENT

ATTACHMENT E



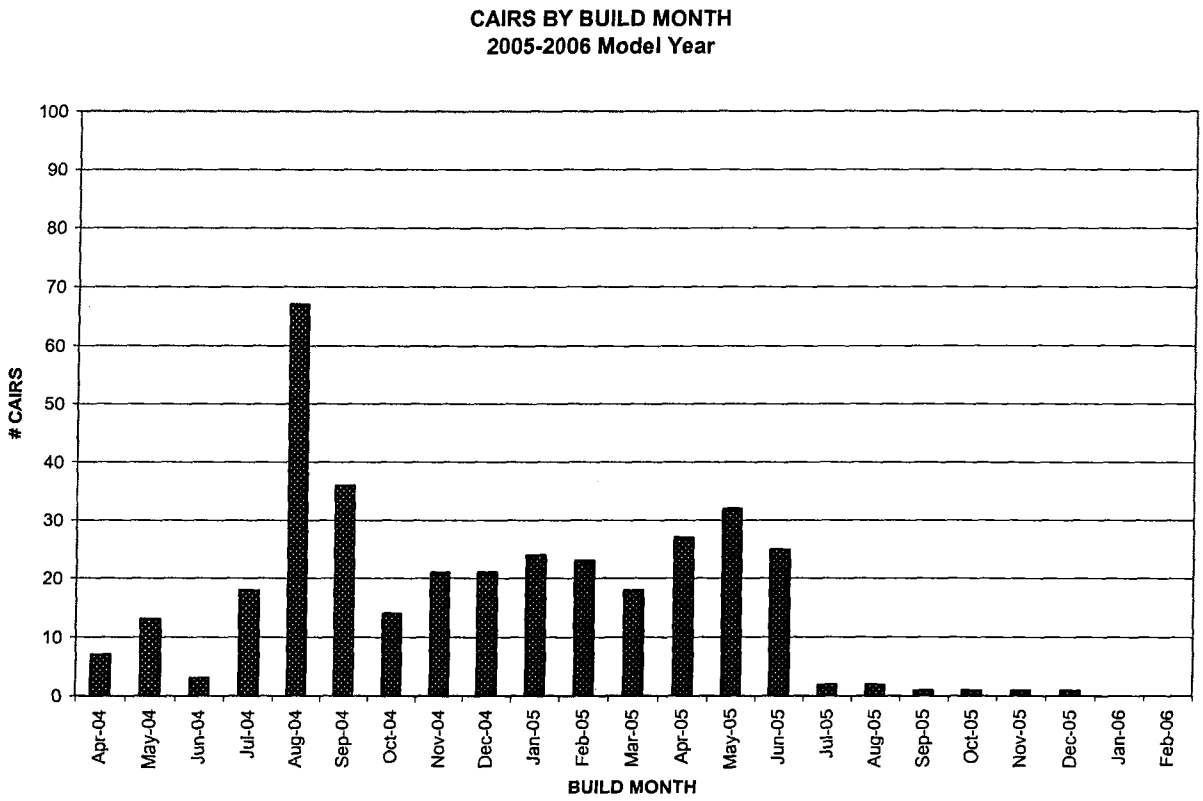
ATTACHMENT

ATTACHMENT F



ATTACHMENT

ATTACHMENT G



ATTACHMENT

ATTACHMENT H