

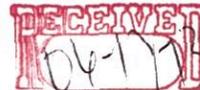


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June 11, 2013

Mr. Frank S. Borris, Director  
Office of Defects Investigation  
National Highway Traffic Safety Administration  
1200 New Jersey Avenue SE, Room W45-302  
Washington, DC 20590



Dear Mr. Borris:

Subject: PE12-017:NVS-213cnl Update

The Ford Motor Company (Ford) response to the agency's May 21, 2013 request for updated information concerning reports of alleged loss of power steering assist in 2011 and 2012 model year Ford Explorer vehicles is attached.

Ford continues to believe that loss of power steering assist in the subject vehicles does not present an unreasonable safety risk in these vehicles based on the following reasons:

- 1) In the unlikely event of loss of power steering assist, the steering system will default to manual steering mode allowing the vehicle to be steered in a safe and controlled manner
- 2) The mechanical linkage between the steering wheel and the road surface is maintained at all times, similar to other steering systems, both hydraulic and electric, used by Ford and other manufacturers for many years
- 3) The loss of power steering assist is unlikely to be associated with accidents at higher speeds because the amount of power assist supplied is inversely proportional to vehicle speed
- 4) Drivers are clearly informed of a change in the status of the steering system via both an audible chime and the display of a power steering assist fault message in the instrument cluster, and
- 5) The customer complaint rate remains low.

If you have any questions concerning this response, please feel free to contact me.

Sincerely,

  
Steven M. Kenner

Attachment

FORD MOTOR COMPANY (FORD) RESPONSE UPDATE TO PE12-017

Ford's response to this Preliminary Evaluation information request update was prepared pursuant to a diligent search for the information requested. While we have employed our best efforts to provide responsive information, the breadth of the agency's request and the requirement that information be provided on an expedited basis make this a difficult task. We nevertheless have made substantial effort to provide thorough and accurate information, and we would be pleased to meet with agency personnel to discuss any aspect of this Preliminary Evaluation.

Ford notes that some of the information being produced pursuant to this inquiry may contain personal information such as customer names, addresses, telephone numbers, and complete Vehicle Identification Numbers (VINs). Ford is producing such personal information in an unredacted form to facilitate the agency's investigation with the understanding that the agency will not make such personal information available to the public under FOIA Exemption 6, 5 U.S.C. 552(b)(6).

In a May 21, 2013 telephone conversation, Mr. Jeff Quandt, of the agency, requested that Ford provide an update to certain information contained in its August 29, 2012 response to the agency's July 12, 2012 information request pertaining to PE12-017. Accordingly, Ford is providing updated information in this response to the agency's July 12, 2012 Requests 2, 3, 4 and 5, and portions of Requests 6 and 12.

In a May 24, 2013 email, Mr. Chris Lash, of the agency, requested vehicle build date information for selected VINs. The requested information is provided in Appendix A.

Answers to your specific questions are set forth below. After each numeric designation, we have set forth verbatim the request for information, followed by our response. Unless otherwise stated, Ford has undertaken to provide responsive documents dated from July 13, 2012, the date after your prior request, up to and including May 21, 2013, the date of this request.

Request 2

State the number of each of the following, received by Ford, or of which Ford is otherwise aware, which relate to, or may relate to, the alleged defect in MY 2011 through 2012 Ford Explorer vehicles:

- a. Consumer complaints, including those from fleet operators;
- b. Consumer complaints, including those from operators, where a failure or malfunction of the EPAS system was reported;
- c. Field reports, including dealer field reports;
- d. Field reports, including dealer field reports where EPAS failure was claimed;
- e. 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;
- f. Property damage claims;

- g. Third-party arbitration proceedings where Ford is or was a party to the arbitration; and
- h. Lawsuits, both pending and closed, in which Ford is or was a defendant or codefendant.

For subparts "a" through "f" 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 "e" through "h," provide a summary description of the alleged problem and causal and contributing factors and Ford's assessment of the problem, with a summary of the significant underlying facts and evidence. For items g and h, 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.

Answer

For purposes of identifying reports of incidents that may be related to the alleged defect and any related documents, Ford has gathered "owner reports" and "field reports" maintained by Ford Customer Service Division (FCSD), and claim and lawsuit information maintained by Ford's Office of the General Counsel (OGC).

Descriptions of the FCSD owner and field report systems and the criteria used to search each of these are provided in Appendix B.

The following categorizations were used in the review of reports located in each of these searches:

Category	Allegation
A	Lack or loss of power steering assist or steering efforts too high
B	Ambiguous steering issue

We are providing electronic copies of reports categorized as "B" as "non-specific allegations" for your review because of the broad scope of the request. Based on our engineering judgment, the information in these reports is insufficient to support a determination that they pertain to the alleged defect.

Owner Reports: Records identified in a search of the FMC360 database, as described in Appendix B, were reviewed for relevance and sorted in accordance with the categories described above. The number and copies of relevant owner reports identified in this search that allege a loss of power steering assist or increased steering efforts in a 2011 or 2012 model year Ford Explorer are provided in the FMC360 portion of the database contained in Appendix C. The categorization of each report is identified in the "Category" field.

When we were able to identify that responsive (i.e., not ambiguous) duplicate owner reports for an alleged incident were received, each duplicate report was marked accordingly, and the group counted as one report. In other cases, certain vehicles may have experienced more than one incident and have more than one report associated with their VINs. These reports have been counted separately.

Legal Contacts: Ford is providing, in Appendix B, a description of Legal Contacts and the activity that is responsible for this information. To the extent that responsive (i.e., not ambiguous) owner reports indicate that they are Legal Contacts, Ford has gathered the related files from the Office of General Counsel (OGC). Non-privileged documents for files that were located that are related to the responsive owner reports are provided in Appendix D.

Field Reports: Records identified in a search of the Common Quality Indicator System (CQIS) database, as described in Appendix B, were reviewed for relevance and sorted in accordance with the categories described above. The number and copies of relevant field reports identified in this search that allege a loss of power steering assist or increased steering efforts in a 2011 or 2012 model year Ford Explorer are provided in the CQIS portion of the database contained in Appendix C. The categorization of each report is identified in the "Category" field.

When we were able to identify that responsive duplicate field reports for an alleged incident were received, each of these duplicate reports was marked accordingly, and the group counted as one report. In other cases, certain vehicles may have experienced more than one incident and have more than one report associated with their VINs. These reports have been counted separately. In addition, field reports that are duplicative of owner reports are provided in Appendix C but are not included in the field report count.

VOQ Data: In a May 24, 2013 email, the agency provided an attachment with 188 Vehicle Owner Questionnaires (VOQs) pertaining to 2011 and 2012 model year Ford Explorers. Ford made inquiries of its FMC360 database for customer contacts, and its CQIS database for field reports concerning the vehicles identified on the VOQs, and identified 46 Owner Reports and five field reports that are duplicative of VOQs. Ford notes that in some instances where the VOQ does not contain the VIN or the owner's last name and zip code, it is not possible to query the databases for owner and field reports specifically corresponding to the VOQs.

Crash/Injury Incident Claims: For purposes of identifying allegations of accidents or injuries that may have resulted from the alleged defect, Ford has reviewed responsive owner and field reports, lawsuits and claims, and warranty claims. Ford identified three claims alleging accidents that meet the agency's request. Copies of reports corresponding to these alleged incidents are provided in the FMC360 and Legal Claims/Lawsuits portions of the database provided in Appendix C and in the documents relating to matters shown on the Log of Lawsuits and Claims provided in Appendix D. Ford believes that all of these alleged accidents, that may relate to the alleged defect, likely occurred at low speeds based on the descriptions provided by the customers.

- One customer (VIN: 1FMHK8D80BG [REDACTED]) alleged that "the steering wheel locked" and that the vehicle contacted a utility pole. Although the customer initially reported that he went to the hospital in an ambulance, he later stated that he was not injured in the incident. Available information indicates that damage to the vehicle was minor and limited primarily to the hood, grille, and front fascia. While the customer alleges that "the steering wheel locked", Ford notes that loss of assist will not result in a "locked" steering system; steering functionality is maintained even if the EPAS system is not functioning.
- In another report (VIN: 1FMHK8D83CG [REDACTED]), the customer alleged that a loss of steering assist resulted in contact with a curb, causing damage to the left front tire and rim. The spare tire was reportedly installed and the vehicle was driven to the dealer.

- In another report (VIN: 1FMHK8F86BG[REDACTED]), the customer alleged that power steering was lost while turning in a parking lot, the vehicle "clipped a pole", and that the vehicle incurred body damage "below the bottom of the door."

Ford notes that the agency provided one VOQ (ODI# 10473047) in which the customer alleged that the steering wheel "locked", that they hit another vehicle, and that the vehicle was driven to a dealership for repairs to the radiator, front bumper, and grille. However, when the customer contacted Ford, they did not mention any accident or vehicle damage (contrary to their communication with the agency). Also, as previously stated, loss of EPAS will not result in a "locked" steering system.

Claims, Lawsuits, and Arbitrations: For purposes of identifying incidents that may relate to the alleged defect in a subject vehicle, Ford has gathered claim and lawsuit information maintained by Ford's OGC. Ford's OGC is responsible for handling product liability lawsuits, claims, and consumer breach of warranty lawsuits and arbitrations against the Company. Lawsuits and claims gathered in this manner were reviewed for relevance and sorted in accordance with the categories described above.

We are providing the requested detailed information, where available, on the responsive lawsuits and claims in our Log of Lawsuits and Claims, provided in Appendix C in the Legal Claim/Lawsuits tab. The number of relevant lawsuits and claims identified is also provided in this log. To the extent available, copies of complaints, first notices, or FMC360 reports relating to matters shown on the log are provided in Appendix D. With regard to these lawsuits and claims, Ford has not undertaken to contact outside law firms to obtain additional documentation.

### Request 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. Ford'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 any warning lights or sounds were illuminated or heard at the time the alleged defect occurred;
- j. Whether the vehicle was towed into the dealership;
- k. Whether the driver was able to restart the vehicle, and reset the EPAS system;
- l. If the EPAS was reset, did the failure occur more than once;
- m. Diagnostic Trouble Code(s) (DTCs) indicated at the time of repair;
- n. Repair(s) dealer made to the vehicle;
- o. Whether a crash is alleged;
- p. Whether property damage is alleged;
- q. Number of alleged injuries;

- r. Number of alleged fatalities; and
- s. A summary of the incident.

Provide this information in Microsoft Access 2003, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

#### Answer

Ford is providing owner and field reports in the database contained in Appendix C in response to Request 2. To the extent information sought in Request 3 is available for owner and field reports, it is provided in the database. To the extent information sought in Request 3 is available for lawsuits and claims, it is contained in either the Legal Claim/Lawsuits tab provided in Appendix C or in the documents relating to matters shown on the Log of Lawsuits and Claims provided in Appendix D.

#### Request 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 Ford used for organizing the documents.

#### Answer

Ford is providing owner and field reports in the database contained in Appendix C in response to Request 2. Copies of complaints, first notices, or MORS reports relating to matters shown on the Log of Lawsuits and Claims provided in Appendix C in the Legal Claim/Lawsuits tab are provided in Appendix D. To the extent information sought in Request 4 is available, it is provided in the referenced appendices.

#### Request 5

State, by model and model year, total counts for all of the following categories of claims, collectively, that have been paid by Ford to date that relate to repair or replacement of the subject system in MY 2011 through 2012 Ford Explorer vehicles: warranty claims; extended warranty claims; claims for good will services; and field, zone, or similar adjustments and reimbursements. This should include all claims made in accordance with procedures specified in any service bulletins issued by Ford related to the subject components.

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

- a. Ford'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. Whether there was a claim for towing within three days before or after the subject claim (yes/no);

- h. Whether there is any other reference to towing in the claim (yes/no);
- i. Labor operation number;
- j. Problem code;
- k. Diagnostic Trouble Code(s) (DTCs) indicated at the time of repair;
- l. Replacement part number(s) and description(s);
- m. Concern stated by customer;
- n. Comment, if any, by dealer/technician relating to claim and/or repair; and
- o. Ford's assessment of whether the claim was associated with an EPAS failure while driving.

Provide this information in Microsoft Access 2003, 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.

### Answer

As stated in our August 29, 2012 response, Ford has construed the subject system as the EPAS gear assembly which, on the subject vehicles, includes the torque sensor, power steering control module, position sensor, and motor.

Records identified in a search of the AWS database, as described in Appendix B, were reviewed for relevance and sorted in accordance with the categories described below:

Category	Allegation
A	Lack of power steering assist or steering efforts too high
B	Ambiguous steering issue
C	Instrument cluster warning only
D	Other allegations unrelated to steering efforts

The number and copies of relevant warranty claims identified in this search that relate to repair or replacement of the EPAS gear assembly for any cause in a 2011 or 2012 model year Ford Explorer are provided in the AWS portion of the database contained in Appendix C. The categorization of each report is identified in the "Category" field.

When we were able to identify that duplicate claims for an alleged incident were received, each duplicate claim was marked accordingly and the group counted as one report. In other cases, certain vehicles may have experienced more than one incident and have more than one claim associated with their VINs. These claims have been counted separately. Warranty claims that are duplicative of owner and field reports are provided in Appendix C but are not included in the report count.

Requests for "goodwill, field, or zone adjustments" received by Ford to date that relate to repair or replacement of the subject system (EPAS gear assembly) that were not honored, if any, would be included in the FMC360 reports identified above in response to Request 2. Such claims that were honored are included in the warranty data provided.

Additionally, the agency has requested information related to claims for vehicle towing within three days of the subject component repair claim and whether there is any reference to towing in the claim. Ford provides roadside assistance as part of the new vehicle limited warranty and certain optional extended service plans. The roadside assistance program is administered by an outside supplier and Ford does not have access to claims made for vehicle towing through this service. Recently, Ford has begun importing roadside assistance

claims into its FMC360 database. However, the claims do not indicate what type of assistance was required, only that assistance was requested. The customer and technician comments provided with warranty claims provide the best source of information regarding possible incident-related vehicle towing.

#### Request 6

Describe in detail the search criteria used by Ford 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.

#### Answer

Detailed descriptions of the search criteria, including all pertinent parameters, used to identify the claims provided in response to Request 5 are described in Appendix B. Lists of customer concern codes, customer concern code descriptions, condition codes, and condition code descriptions are also provided in Appendix B.

#### Request 12

Provide a table with the following information regarding actual and statistically estimated failure frequencies for each EPAS design level of the subject vehicles:

- e. Ford's estimate of the failure rates associated with the failure cause identified in 12.a that would occur at 12, 24, 36 and 48 months-in-service;
- f. A short description of the method/model used for the statistical analysis, including the bases for selecting each method, explanations for any differences in modeling methods for different populations; and
- g. Charts showing the model results for each population and model parametric values.

#### Answer

Ford is providing the requested information for subparts e), f), and g) in Appendix E with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR Part 512.

#### Summary

By design, the amount of steering assist provided by the power steering system is inversely proportional to the vehicle speed. The greatest amount of steering assist is provided during lower vehicle speeds, such as parking lot maneuvers. As vehicle speed increases, the amount of steering assist provided by the system decreases. Because the amount of power steering assist is greatest at low speeds, such as in parking lot maneuvers, and because it is lower at higher speeds, the loss of power assist is likely to have little impact on the ability of the driver to control the vehicle. Even in the unlikely event of loss of power steering assist, base steering functionality is maintained, including the mechanical linkage between the steering wheel and the road surface. In addition, the vehicle's braking functionality remains unaffected, providing effective means for the driver to control the vehicle. Ford notes that

there is no risk of fire as may be the case on a vehicle with a hydraulic power steering system that experiences loss of power steering assist because of a power steering fluid leak.

After reviewing and assessing the reports provided in this response, the majority of the complaints are related to part availability, which has been addressed by Ford, and costs associated with the repair. For example, replacement parts were not readily available for a period of time and some customers requested assistance with alternate transportation or compensation for downtime of their vehicle. Ford notes that the service part availability issue with the EPAS gear assembly has been resolved.

The overall complaint rate of 5.6/1000 vehicles remains very low, and includes many complaints that simply pertain to part availability or repair costs. Furthermore, the majority (76%) of the reports provided in this response are warranty claims for system service or compensation and are not complaints of safety concerns. The complaint rate of 5.6/1000 vehicles is substantially lower than the complaint rate of 12.6/1000 vehicles associated with investigation EA04-018 which the agency closed without action. More recently, the agency closed PE07-023 without action on vehicles with a complaint rate of 8.9/1000 vehicles and similar time in service relative to the vehicles that are the subject of this information request.

In summary, Ford continues to believe that loss of power steering assist in the subject vehicles does not present an unreasonable safety risk in these vehicles based on the following reasons:

- 1) Continued low rate of reports,
- 2) In the event of loss of power steering assist, the steering system will default to manual steering mode allowing the vehicle to be steered in a safe and controlled manner,
- 3) The mechanical linkage between the steering wheel and the road surface is maintained at all times, similar to other steering systems, both hydraulic and electric, used by Ford and other manufacturers for many years,
- 4) Drivers are clearly informed of a change in the status of the steering system via both an audible chime and the display of a power steering assist fault message in the instrument cluster, and
- 5) The loss of power steering assist is unlikely to be associated with accidents at higher speeds because the amount of assist supplied is greatest at low speeds, such as during parking lot maneuvers, and reduced as vehicle speed increases, and the reports included with this response continue to support this conclusion.

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