



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

1200 New Jersey Avenue SE.
Washington, DC 20590

MAY 15 2015

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Todd Fronckowiak, Assistant Global Director
Automotive Safety Office
Environmental and Safety Compliance
Ford Motor Company
330 Town Center Drive, Suite 400
Dearborn, MI 48126-2738

NVS-213cml
DP15-001

Dear Mr. Fronckowiak:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened Defect Petition DP15-001 to evaluate alleged deficiencies in the remedy procedure for a safety recall addressing a defect in the electric power steering system of certain model year (MY) 2008 through 2011 Ford Escape and Mercury Mariner vehicles (NHTSA 14V-284, Ford 14S05), and to request certain information.

This office has received a defect petition from a consumer alleging that the software update provided by Recall 14V-284 does not adequately remedy the defect conditions addressed by the recall (ODI No. 10670665). The petition provides the following description of the consumer's experience with receiving the recall remedy for 14V-284 in a MY 2008 Ford Escape vehicle and a subsequent failure of the electric power steering allegedly related to the defect condition addressed by the recall:

In November 2014, I took my vehicle to Sill Terhar Motors in Broomfield, Colorado, an authorized dealer under the Notice. Since, allegedly, no fault codes were pulled at the time my vehicle was brought in for the recall service, the dealership only performed the software update to the PCSM.

Soon thereafter, I started experiencing issues with my power steering (i.e. excessive shaking, loss of power steering). I took my vehicle back to the dealership in January 2015. According to the technician, my torque sensor failed and they needed to replace my entire steering column. Specifically, the technician pulled fault code B2277 at this time.

Pursuant to Exhibit E, if fault code B2277 is present at the time of the recall repair, Ford required dealerships to replace the steering column. However, since Ford considered the



software update performed in November 2014 the recall repair, it refused to pay for or reimburse me for this subsequent loss of power steering assist requiring steering column replacement.

I informed the dealership that the fault code they pulled was a direct result of Notice, and specifically listed on the Manufacturer's Notice to dealerships. I was told it this was a "secondary" problem of the recall and was not covered by Ford since my recall ticket had been closed (i.e. what Ford told dealerships to say in the Q&A portion of Exhibit E). I then contacted Ford and was told something very similar.

Not surprisingly, according to Ford Customer Care Center Supervisor, Ford would have paid to replace the entire steering column if the dealership had pulled fault code B2277 in November, but not now that it was January and the software update had been performed, it would not. Despite that this was the exact fault code related to the recall, and failure of the components subject to the recall as described therein, Ford refused to cover the cost of the steering column replacement because my recall ticket was "closed" and therefore, "repaired."

I discussed the issue with multiple Ford Customer Care Center representatives, each of whom told me they could not re-open that recall ticket but requested that I save my receipts for the entire steering column repair "in case" Ford "re-opened" the recall for such repairs following the software update." Several representatives indicated they had received multiple calls relating this very issue, that every call is recorded and sent to the NHSTA, and not so subtly implied that a "re-opening" of the recall ticket was likely given how prominent the issue had become. Despite this, Ford still has not acknowledged nor accepted responsibility for the inadequate remedy.

The software update costs approximately \$34. Replacing the torque sensor or steering column costs \$700-\$1,300.

A copy of the petition and supporting information are provided for your information.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject vehicles:** MY 2008 through 2011 Ford Escape and Mercury Mariner vehicles remedied under the subject recall.
- **Subject system:** The electric power steering system (EPS).
- **Subject component:** The EPS torque sensor.
- **Subject recall:** Recall 14V-284 (Ford 14S05).
- **Ford:** Ford Motor Company, all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of

their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Ford (including all business units and persons previously referred to), who are or, in or after January 1, 2000, were involved in any way with any of the following related to the alleged defect in the subject vehicles:

- a. Design, engineering, analysis, modification or production (e.g. quality control);
 - b. Testing, assessment or evaluation;
 - c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
 - d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.
- **Alleged defect:** Loss of power steering assistance while driving.
 - **Document:** “Document(s)” is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletin, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by Ford, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, “document(s)”

also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by Ford or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other Terms:** To the extent that they are used in these information requests, the terms “claim,” “consumer complaint,” “dealer field report,” “field report,” “fire,” “fleet,” “good will,” “make,” “model,” “model year,” “notice,” “property damage,” “property damage claim,” “rollover,” “type,” “warranty,” “warranty adjustment,” and “warranty claim,” whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as Ford has previously provided a document to ODI, Ford may produce it again or identify the document, the document submission to ODI in which it was included and the precise location in that submission where the document is located. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Please repeat the applicable request verbatim above each response. After Ford’s response to each request, identify the source of the information and indicate the last date the information was gathered.

1. State the numbers of vehicles covered by the subject recall by model, model year, recall completion status and recall labor operation, if applicable.
2. Provide the following information for each subject vehicle:
 - a. Vehicle identification number (VIN);
 - b. Model;
 - c. Model Year;
 - d. Subject recall completion date;
 - e. Subject recall labor operation code; and
 - f. EPS DTC, if applicable.

Provide the table in Microsoft Access 2010, or a compatible format, entitled "DP15_001_PRODUCTION DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

3. 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 the subject vehicles:
 - a. Consumer complaints, including those from fleet operators;
 - b. Field reports;
 - c. Reports involving a crash, injury or fatality;
 - d. Property damage claims;
 - e. Third-party arbitration proceedings where Ford is or was a party to the arbitration; and
 - f. Lawsuits, both pending and closed, in which Ford is or was a defendant or codefendant.

For each subpart, separately state the total number of each item (e.g., consumer complaints, field reports, etc.). 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).

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. Ford'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 2010, or a compatible format, entitled "DP15_001_INCIDENT DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

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, event data recorder reports, police reports, etc.) and describe the method Ford used for organizing the documents. Describe in detail the search methods and search criteria used to identify the items in response to Request No. 3.
6. State the number of the following components Ford has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (*including the cut-off date for sales, if applicable*):

- a. Torque sensor;
- b. Power steering control module (PSCM); and
- c. Steering column assembly.

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

7. Describe the original design and operation of the electric power steering system used in the subject vehicles, including a diagram of all component locations.
8. Provide the following information regarding the original (pre-recall) EPS system diagnostics and fault detection logic:
 - a. A table listing all diagnostic trouble codes associated with the EPS system;
 - b. The basic name/description for the trouble code;
 - c. A description of the specific fault detection logic for setting the code;
 - d. A description of all visual and audible warnings provided to the driver when the code is set;
 - e. A description of the failsafe operating mode when the code is set (e.g., steering reverts to manual mode);
 - f. For all failsafe operating modes involving transition to manual steering mode, state the time interval used to make the transition and identify any limits or restrictions on when the transition is made (e.g., any conditions in which transition cannot occur when torque is being applied to the steering wheel);
 - g. A description of the conditions necessary for clearing the warning lamps and failsafe operating mode; and
 - h. A description of the conditions necessary for clearing the DTC.
9. Provide the following warranty claim data and statistical estimates for each of the following in the vehicles covered by the subject recall: 1) torque sensor failures; 2) EPS motor failures; 3) EPS PSCM failures; and 4) other EPS system fault conditions:
 - a. Total warranty claim counts to date, including claims before the recall, recall repairs, and claims after the recall (provide this information by model and model year);
 - b. Estimated failure rates at 6 years in service; and
 - c. Estimated failure rates at 10 years in service.
10. Describe, provide copies of all documents related to, and summarize the results of, all testing performed by Ford either before production or since Job #1 related to the following in the vehicles covered by the subject recall:
 - a. Measuring steering efforts in assisted and manual steering modes in low speed steering maneuvers (less than 10 mph);
 - b. Measuring steering efforts in assisted and manual steering modes in cornering maneuvers (e.g., left and right turns at intersections);

- c. Measuring steering efforts in assisted and manual steering modes in curves representative of highway exit ramps;
- d. Measure steering efforts in assisted and manual steering modes in high-speed avoidance maneuvers; and
- e. Human factors testing to assess driver reaction to loss of power steering assistance in any of the maneuvers listed above, or any other driving maneuvers.

11. Provide the following information regarding the subject recall:

- a. Describe the root cause of the EPS defect condition addressed by the recall;
- b. Provide copies of all presentations, reports and briefing material related to the recall review process and final decision meeting;
- c. Explain why the remedy procedure provides for replacement of EPS torque sensor or steering column for fault codes associated with the torque sensor, EPS motor or EPS PSCM at the time the recall remedy is performed, but not after the recall has been performed;
- d. Describe in detail how the EPS system recalibration software used as the recall remedy functions to prevent or reduce the occurrence of loss of power steering assistance while driving;
- e. Describe all visual and audible warnings provided to the driver when EPS system faults occur after the recalibration has been performed;
- f. Describe all conditions which could result in a loss of power steering assist while driving after receiving the recall remedy; and
- g. State the numbers of incidents of loss of power steering assist while driving that have occurred in the subject vehicles after the remedy procedure for 14V-284 was performed due to: 1) EPS torque sensor failures; 2) EPS motor failures; 3) EPS PSCM failures; and 4) other EPS system fault conditions.

12. Provide Ford's assessment of the following:

- a. Each of the post-remedy failure allegations contained in the attachment ODI complaints, including the petitioner's; and
- b. The effectiveness of the remedy procedure for the subject recall.

Legal Authority for This Request

This letter is being sent to Ford pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports and the production of things. It constitutes a new request for information.

Civil Penalties

Ford's failure to respond promptly and fully to this letter could subject Ford to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, as amended, 49 U.S.C. § 30165(b), provides for civil penalties of up to \$7,000 per day, with a maximum of \$17,350,000 for a related series of violations, for failing or refusing to perform an

act required under 49 U.S.C. § 30166. *See* 49 CFR 578.6 (as amended by 77 Fed. Reg. 70710 (November 27, 2012)). This includes failing to respond completely to ODI information requests.

If Ford cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, Ford does not submit one or more requested documents or items of information in response to this information request, Ford must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

Confidential Business Information

All business confidential information must be submitted directly to the Office of Chief Counsel as described in the following paragraph and should not be sent to this office. In addition, do not submit any business confidential information in the body of the letter submitted to this office. Please refer to DP15-001 in Ford's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel.

If Ford claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, Ford must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, as amended, to the Office of Chief Counsel (NCC-111), National Highway Traffic Safety Administration, Room W41-227, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. Ford is required to **submit two copies of the documents containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted.** Please remember that the phrase "ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION" or "CONTAINS CONFIDENTIAL BUSINESS INFORMATION" (as appropriate) must appear at the top of each page containing information claimed to be confidential, and the information must be clearly identified in accordance with 49 CFR 512.6. If you submit a request for confidentiality for all or part of your response to this IR, that is in an electronic format (e.g., CD-ROM), your request and associated submission must conform to the new requirements in NHTSA's Confidential Business Information Rule regarding submissions in electronic formats. *See* 49 CFR 512.6(c) (as amended by 72 Fed. Reg. 59434 (October 19, 2007)).

If you have any questions regarding submission of a request for confidential treatment, contact Otto Matheke, Senior Attorney, Office of Chief Counsel at otto.matheke@dot.gov or (202) 366-5253.

Due Date

Ford's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by **June 26, 2015**. If Ford finds that it is unable to provide all of the information requested within the time allotted, Ford must request an extension from Jeff Quandt of my staff at (202) 366-5207 no later than five business days before the response due date. If Ford is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information Ford then has available, even if an extension has been granted.

Please send email notification to Chris Lash at chris.lash@dot.gov and to ODI_IRresponse@dot.gov when Ford sends its response to this office and indicate whether there is confidential information as part of Ford's response.

If you have any technical questions concerning this matter, please call Chris Lash of my staff at (202) 366-2370.

Sincerely,



Stephen Ridella
Acting Director, Office of Defects Investigation

Enclosure 1, one CD-ROM titled Data Collection Disc containing three Microsoft Access database template files.

Attachment A: Defect Petition from VOQ No. 10670665 and VOQ Numbers associated with post recall EPAS failures.

Attachment A**All petition complaint vehicles including supplemental submissions:**

NHTSA Ref. No. 10670665.

EPAS failed after recall 14V284 software update VOOs:

10691858	10689906	10690125	10681607	10679792	10679479
10678919	10676138	10703054	10661031	10659338	10658961
10691518	10671097	10690882	10680581	10638538	10683092
10622017	10676733	10702700	10652177	10659818	10678801
10681206	10659472	10682889	10669547	10672055	10654791
10661531	10621845	10633336	10690435	10654506	10682009
10691696	10659710	10679844	10664693	10681950	10683269
10680725	10659769	10650285	10648279	10632630	10682961
10660217	10681651	10658809	10621391	10679381	10691171
10652219	10667220	10670665	10659444	10633686	10702776
10667677	10660024	10654960	10638338	10663828	10673098
10676743	10690836	10701708	10682975	10681137	10632577
10671146	10679832	10671807	10672137	10672970	10680068
10641729	10670091	10694808	10679765	10700846	10683823
10653493	10618434	10618259	10680291	10672784	10679533
10678204	10667744	10690187	10661625	10678209	10689851
10670745	10683752	10681503	10693627	10692133	10631509
10653141	10679428	10652356	10692401	10681198	