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September 10, 2014

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: PE14-021:NVS-213cni

The Ford Motor Company (Ford) response to the Agency's July 18, 2014 letter concerning reports of alleged steering binding or increased efforts resulting from interference with the exhaust heat shield in 2004 through 2007 Crown Victoria, Grand Marquis, and Marauder vehicles is attached.

As part of this investigation, Ford performed a comprehensive search of its databases to identify allegations that may relate to the steering binding/increased effort due to the exhaust heat shield contacting the lower steering knuckle. The complaint rate of reports that relate to the alleged defect is extremely low at 0.016 r/1000 on vehicles with an average of 9 years in service.

Based on the testing conducted by Ford, our engineering assessment of the minimal impact this issues has on vehicle steering, and the low rate of reports of steering shaft / knuckle interference, Ford does not believe that this condition presents and unreasonable risk to motor vehicle safety. This is further supported by the lack of substantiated reports of accidents or injuries alleged to be attributed to this issue.

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

Sincerely,

A handwritten signature in black ink that reads "S. M. Kenner for".

Steven M. Kenner

Attachment

FORD MOTOR COMPANY (FORD) RESPONSE TO PE14-021

Ford's response to this Preliminary Evaluation information request 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.

The scope of Ford's investigation conducted to locate responsive information focused on Ford employees most likely to be knowledgeable about the subject matter of this inquiry and on review of Ford files in which responsive information ordinarily would be expected to be found and to which Ford ordinarily would refer. Ford notes that although electronic information was included within the scope of its search, Ford has not attempted to retrieve from computer storage electronic files that were overwritten or deleted. As the agency is aware, such files generally are unavailable to the computer user even if they still exist and are retrievable through expert means. To the extent that the agency's definition of Ford includes suppliers, contractors, and affiliated enterprises for which Ford does not exercise day-to-day operational control, we note that information belonging to such entities ordinarily is not in Ford's possession, custody or control

Ford has construed this request as pertaining to vehicles manufactured for sale in the United States, its protectorates, and territories. In a July 28, 2014 telephone conversation, Mr. Jeff Quandt of the agency informed Ford personnel that, for purposes of Request 8 of this investigation, Ford did not need to produce documents related to PE12-025 or the subsequent 13S08 campaign.

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).

Answers to your specific questions are set forth below. As requested, 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 up to and including July 18, 2014, the date of your inquiry. Ford has searched within the following offices for responsive documents: Sustainability, Environment and Safety Engineering, Ford Customer Service Division, Marketing and Sales Operations, Quality, Office of the General Counsel, North American Product Development.

Request 1

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

- a. Vehicle identification number (VIN);
- b. Make;
- c. Model;
- d. Model Year;

- e. Date of manufacture;
- f. Part number of the left side exhaust manifold heat shield as originally equipped;
- g. Part number of the lower intermediate shaft as originally equipped;
- h. Date warranty coverage commenced; and
- i. 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 2007, or a compatible format, entitled "PE14-021 PRODUCTION DATA." See Enclosure, A Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

#### Answer

Ford records indicate that the approximate total number of subject vehicles sold in the United States, (the 50 states and the District of Columbia) protectorates, and territories (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and Virgin Islands) is 502,410. The number of subject vehicles sold in the United States by model and model year is shown below

Model	2004 MY	2005 MY	2006 MY	2007 MY
Crown Victoria	74,454	69,481	53,307	53,655
Grand Marquis	89,126	69,876	49,570	39,763
Marauder	3,178			

The requested data for Request 1 points a,b,c,d,e,h and i for each subject vehicle is provided in Appendix A. The requested data for Request 1 points f and g are provided as part of the Appendix B.

#### 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 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. 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 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 Ford'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.

### Answer

For purposes of identifying reports 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 C.

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

Category	Allegation
A	Steering binding or increased effort due to exhaust heat shield
B	Steering binding or increased effort cause unknown

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 steering binding / increased effort due to the exhaust heat shield. We did not provide copies of reports where it was clear that the steering issue was caused by something not related to the exhaust heat shield. Examples would be PE12-025 (CVPI Steering Shaft), TSB 06-23-05 (momentary increase in steering effort), steering gear replacement, etc. If the Agency determines those records would assist in the investigation on the exhaust heat shield, please advise.

Owner Reports: Records identified in a search of the FMC360 database, as described in Appendix C, 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 steering binding/increased effort due to the exhaust heat shield in a subject vehicle are provided in the FMC360 portion of the database contained in Appendix D. 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 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.

Legal Contacts: Ford is providing, in Appendix C, 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 E. Ford notes that it was unable to locate 5 files.

Field Reports: Records identified in a search of the Common Quality Indicator System (CQIS) database, as described in Appendix C, 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 steering binding/increased effort due to the exhaust heat shield in a subject vehicle are provided in the CQIS portion of the database contained in Appendix D. 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 D but are not included in the field report count.

VOQ Data: This information request had an attachment that included five Vehicle Owner Questionnaires (VOQs), one of which was duplicative. Ford made inquiries of its FMC360 database for customer contacts, and its CQIS database for field reports regarding the vehicles identified on 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, and lawsuits and claims. Copies of reports corresponding to these alleged incidents are provided in the FMC360, CQIS, and Analytical Warranty System (AWS) portions of the database provided in Appendix D.

Ford is aware of one alleged accident report that is associated with VOQ 10578715 and a duplicative Ford claim. Ford is providing a copy of the police report for that accident as Appendix E. Ford notes that the VOQ was submitted two years after the accident occurred and that Ford's attempts to contact the attorney to arrange for inspection of the vehicle have not been successful. However the attached police report indicates there were no injuries and the accident did not include a vehicle rollover. In addition, the police report pictures appear to be inconsistent with the VOQ description.

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. Ford has also located other lawsuits, claims, or consumer breach of warranty lawsuits, each of which is ambiguous as to whether it meets the alleged defect criteria. We have included these lawsuits and claims as "non-specific allegations" for your review because of the broad scope of the request. Based on our engineering judgment, the information in these lawsuits and claims is insufficient to support a determination that they pertain to the alleged defect.

We are providing the requested detailed information, where available, on the responsive and ambiguous lawsuits and claims in our Log of Lawsuits and Claims, provided in Appendix D 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 F. 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.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.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. Vehicle's speed at time of incident;
- h. Incident date;
- i. Report or claim date;
- j. Whether a crash is alleged;
- k. Whether a fire is alleged;
- l. Whether property damage is alleged;
- m. Number of alleged injuries, if any; and
- n. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2007, or a compatible format, entitled "PE14-021 REQUEST NUMBER THREE DATA" See Enclosure, A 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 D 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 provided in the provided in Appendix D in the Legal Claim/Lawsuits tab.

### Request 4

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 Ford used for organizing the documents.

### Answer

Ford is providing owner and field reports in the database contained in Appendix D in response to Request 2. Copies of complaints, first notices, or FMC360 reports relating to matters shown on the Log of Lawsuits and Claims provided in Appendix D in the Legal Claim/Lawsuits

tab) are provided in Appendix F. 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, a total count for all of the following categories of claims, collectively, that have been paid by Ford to date that relate to, or may relate to, the alleged defect in the subject 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. 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. 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.

Provide this information in Microsoft Access 2007, or a compatible format, entitled "PE14-021 WARRANTY DATA." See Enclosure, A Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

#### Answer

Records identified in a search of the AWS database, as described in Appendix C, were reviewed for relevance and sorted in accordance with the categories described in the response to Request 2. The number and copies of relevant warranty claims identified in this search that allege steering binding/increased effort due to the exhaust heat shield in a subject vehicle are provided in the AWS portion of the database contained in Appendix D. We did not provide copies of reports where it was clear that the steering issue was caused by something not related to the exhaust heat shield. Examples would be PE12-025 (CVPI Steering Shaft), TSB 06-23-05 (momentary increase in steering effort), steering gear replacement, etc. 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 of these duplicate claims 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 D but are not included in the report count above.

Requests for "goodwill, field, or zone adjustments" received by Ford to date that relate to the alleged defect 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.

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. State by make and model year, the terms of the new vehicle warranty coverage offered by Ford 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 Ford 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.

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 C.

For 2004 through 2007 model year Crown Victoria and Grand Marquis vehicles, the New Vehicle Limited Warranty, Bumper-to-Bumper Coverage begins at the warranty start date and lasts for three years or 36,000 miles, whichever occurs first. There are no optional Extended Service Plans (ESPs) which cover the exhaust heat shield (9Y473) base part number.

Request 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 Ford 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 Ford is planning to issue within the next 120 days.

Answer

For purposes of identifying communications to dealers, zone offices, or field offices pertaining, at least in part, steering binding/increased effort due to the exhaust heat shield, Ford has reviewed the following FCSD databases and files: The On-Line Automotive Service Information System (OASIS) containing Technical Service Bulletins (TSBs) and Special Service Messages (SSMs); Internal Service Messages (ISMs) contained in CQIS; and Field Review Committee (FRC) files. We assume this request does not seek information related to electronic communications between Ford and its dealers regarding the order, delivery, or payment for replacement parts, so we have not included these kinds of information in our answer.

A description of Ford's OASIS messages, ISMs, and the Field Review Committee files and the search criteria used are provided in Appendix C.



OASIS Messages: Ford did not identify any SSMs that may relate to the Agency's request.

Service Bulletins: Ford has identified two TSBs that may relate to the Agency's request and is providing copies of them in Appendix G.

Internal Service Messages: Ford did not identify any ISMs that may relate to the Agency's request.

Field Review Committee: Ford did not identify any field service action communications that may relate to the Agency's request.

Ford currently has no plans to issue communications related to the subject of the Agency's investigation.

### Request 8

Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations (including field inspections), 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, Ford. For each such action, provide the following information:

- a. Action title or identifier;
- b. The actual or planned start date;
- c. The actual or expected end date;
- d. Brief summary of the subject and objective of the action;
- e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
- f. A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

### Answer

Ford is construing this request broadly and is providing not only studies, surveys, and investigations related to the alleged defect, but also notes, correspondence, and other communications that were located pursuant to a diligent search for the requested information. Ford is providing the responsive non-confidential Ford documentation in Appendix H.

On July 17, 2014, Ford obtained three exhaust heat shields for engineering analysis from a local salvage yard: two from 2005 model year vehicles and one from a 2007 model year. Two of the heat shields were used for vehicle testing and one was sent for laboratory analysis.

During July and August 2014, Ford conducted multiple drive evaluations to replicate the condition of an exhaust heat shield becoming dislodged and contacting the steering shaft. A vehicle was modified by removing the two bolts that attach the heat shield and replacing them with studs positioned in the exhaust manifold heat shield mounting holes. Driving over rough roads and parking lot surfaces dislodged the heat shield from the studs, allowing it to eventually contact the steering shaft. This testing determined the sequence of events that could allow a detached heat shield to contact the steering shaft and then the steering knuckle. When the high point of the steering knuckle contacted the dislodged heat shield, a slight

increase in steering efforts or notchiness was noticed during a small part of the steering wheel rotation. Photographs of the testing are provided in Appendix I.

Testing was conducted utilizing a new service heat shield, the original heat shield installed on the test vehicle, and a heat shield obtained at the salvage yard.

In each of the drive test scenarios the driver could feel a momentary increase in steering efforts as the knuckle contacted and deformed the sheet metal material of the heat shield, (construction of the heat shield is such that it easily deforms from the forces of the steering knuckle), and in all cases the vehicle remained easily controllable.

To the extent that the information requested is available, it is included in the documents provided. If the agency should have questions concerning any of the documents or testing, please advise.

Ford is submitting additional responsive documentation in Appendix K with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR Part 512. Redacted copies of the confidential documents will be provided under separate cover, on separate media, to the agency's Office of Chief Counsel as Appendix K – Redacted.

In the interest of ensuring a timely and meaningful submission, Ford is not producing materials or items containing little or no substantive information. Examples of the types of materials not being produced are meeting notices, raw data lists (such as part numbers or VINs) without any analytical content, duplicate copies, non-responsive elements of responsive materials, and draft electronic files for which later versions of the materials are being submitted. Through this method, Ford is seeking to provide the agency with substantive responsive materials in our possession in the timing set forth for our response. We believe our response meets this goal. If the agency would like additional materials, please advise.

#### Request 9

Describe all modifications or changes made by, or on behalf of, Ford in the design, material composition, manufacture, quality control, supply, or installation of the subject components or subject steering assemblies, from the start of production to date, which relate to, or may relate to, the alleged defect or subject condition 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
- b. vehicle production;
- c. The applicable models;
- d. A detailed description of the modification or change;  
The reason(s) for the modification or change;
- e. The part number(s) and a description (service and engineering) of the original components;
- f. The part number(s) and a description (service and engineering) of the modified components;
- g. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
- h. When the modified component was made available as a service component;

- i. A photograph or graphic showing each component, highlighting the design features that may relate to the alleged defect or subject condition; and
- j. Whether the modified component can be interchanged with earlier production components.

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

Answer

A table of the requested changes is provided in Appendix B.

Ford currently has no plans for modifications related to the subject components in the subject vehicles.

Request 10

State the number of the subject 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*).

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.

Answer

As the agency is aware, Ford service parts are sold in the U.S. to authorized Ford-Lincoln dealers. Ford has no means to determine how many of the parts were actually installed on vehicles, the vehicle model or model year on which a particular part was installed, the reason for any given installation, or the purchaser's intended use of the components sold.

Ford is providing the total number of Ford service replacement heat shield by part number (both service and engineering) and year of sale, where available, in Appendix L. Information pertaining to production and service usage for each part number, and supplier point of contact information, is also included in Appendix L.

Request 11

Provide the following information related to the alleged defect:

- a. Provide bottom, front, left side and right side views of the subject steering assembly
- b. components, the subject component in the design position and surrounding components; State the minimum design clearances for the subject steering assembly components;
- c. State the design clearance between the subject component and the steering system; and
- d. State the design life of the subject components and mounting hardware.

Answer

Ford is providing the requested information in Appendix M. The isometric views provided show the steering shaft, along with component views and clearances.

Request 12

Furnish Ford'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.

Answer

The agency's investigation encompasses 2004 through 2007 model year Ford Crown Victoria, Grand Marquis, and Marauder vehicles. As part of this investigation, Ford performed a comprehensive search of its databases to identify allegations that may relate to the steering binding/increased effort due to the exhaust heat shield contacting the lower steering knuckle.

As previously indicated, Ford is aware of one (VOQ 10578715 and a duplicative Ford claim) report of an accident that is alleged to have been caused by a loss of vehicle control as a result of the exhaust manifold heat shield contacting the lower steering knuckle. Ford understands that this investigation was generated out of concern from that accident allegation. Information provided to Ford and in the associated police report (Appendix E) does not appear to agree with information contained in the VOQ. Specifically, the VOQ alleges that the exhaust manifold heat shield caused a loss of steering control that resulted in the vehicle leaving the road and "rolling over three times." The VOQ also alleges that the operator was injured during the accident. The police report indicates that no injuries were reported. In addition, photographs of the vehicle in the police report do not appear to indicate a vehicle rollover occurred. Ford's attempts to contact the attorney to arrange for inspection of the vehicle have not been successful. Ford also notes that the VOQ was submitted two years after the accident.

Other than the unsubstantiated report discussed above Ford has not identified any other reports alleging impaired steering or an inability to control the vehicle due to this subject. While Ford has identified a small number of reports alleging steering binding or increased effort due to the contact with the exhaust heat shield, none of those reports indicate any impaired steering or inability to control the vehicle.

Ford conducted extensive vehicle testing to replicate the condition of an exhaust heat shield becoming dislodged and contacting (or being contacted by) the lower steering knuckle. There were no instances identified during that testing where the vehicle's steering was impaired and in all cases the vehicle was completely controllable. The sheet metal construction of the heat shield allows it to easily deform from the forces present when the steering knuckle contacts it. Ford evaluated this condition in the "Noticeable" category: "Disturbances that are noticed by

the driver, but which have only small effects on the driving task (if at all)" on the Neukem and Kruger Disturbance Rating Scale.

In summary, based on the testing conducted by Ford, our engineering assessment of the minimal impact this issues has on vehicle steering, and the low rate of reports of steering shaft / knuckle interference, Ford does not believe that this condition presents and unreasonable risk to motor vehicle safety. This is further supported by the lack of substantiated reports of accidents or injuries alleged to be attributed to this issue.

###