

INFORMATION Redacted PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552(B)(6)

Automotive Safety Office Environmental & Safety Engineering

September 9, 2011

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: PE10-019 Supplement: NVS-214jry

The Ford Motor Company (Ford) response to the agency's July 22, 2011 letter concerning reports of alleged accelerator pedal entrapment by out-of-position Ford all-weather floor mats in 2006 through 2011 model year Ford Fusion, Mercury Milan, Lincoln Zephyr and Lincoln MKZ vehicles is attached.

Floor mat to accelerator pedal interference in the subject vehicles can only occur if the floor mats are not properly secured. The designs of the accelerator pedals and floor mats in the subject vehicles are typical of those found throughout the industry and do not pose a unique risk of floor mat interference with the accelerator pedal. As the agency stated in recent Consumer Advisories, such as on September 26, 2007, "... depending on vehicle design, it is possible for unsecured floor mats to interfere with accelerator or brake pedals in a wide range of vehicles." Ford conducted a benchmarking study discussed in our August 2, 2010 response that reached a similar conclusion. Ford, and most other manufacturers, recognized the possibility of such interference well over a decade ago and began installing means to secure floor mats, thus providing a readily available and easy means for operators to avoid the condition. Further, Ford has pedal clearance and pedal package requirements, which these vehicles meet, that are intended to assure pedal clearance to a properly installed floor mat. There are very few reports of pedal interference in the vehicles subject to this investigation, with almost none received in the last eight months. Ford believes the relative lack of reports demonstrates that while the mat can be manually placed such that it will interfere with the accelerator pedal, it does not occur readily or easily in typical vehicle usage. In addition, if such contact occurs in real world vehicle usage, it is typically eliminated by a tap on the accelerator pedal or movement of the operator's foot on or from the mat, or the condition may last only briefly and correct itself with no operator input.

Ford has not seen a condition on these vehicles like the recalled Toyota vehicles in which the Vehicle Research Technical Center (VRTC) found that further depressing the accelerator pedal would ratchet the pedal, causing a firm engagement to the floor mat; an additional reason that there are no confirmed runaway vehicles like those for the recalled Toyota vehicles. And, as Ford has noted previously, the subject vehicles have a

conventional ignition key and an easily operable shift lever, unlike the recalled Toyota vehicles. VRTC found that Toyota's push button ignition and gated shifter caused some operators to be unable to turn the ignition off or shift to neutral when the accelerator pedal became entrapped by a floor mat.

Ford believes that consideration of all of the factors relating to this subject support a conclusion that contact between an out-of-position all-weather floor mat and the accelerator pedal does not represent a defect or present an unreasonable risk to safety in these vehicles. The reports Ford has provided in response to the agency's information requests do not indicate a defect in the subject vehicles. The alleged incidents do not occur under circumstances that, absent a defect, would not happen. To the contrary, the reports are typical of many vehicle designs in which unsecured floor mats are placed in the driver's footwell. Further, unlike the recent recalls conducted by Toyota related to floor mat interference with accelerator pedals, there are no engineering idiosyncrasies in the subject vehicles that caused or contributed to the reports Ford has produced in our responses. As mentioned above, Ford incorporates many design practices to help reduce the potential for misplacement of a floor mat and to provide clearance between the accelerator pedal and potentially misplaced floor mats.

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

Sincerely,

Steven M. Kenner

V. A. New

Attachment

FORD MOTOR COMPANY (FORD) RESPONSE TO PE10-019 SUPPLEMENT

Ford's response to this Preliminary Evaluation (PE) supplemental 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.

Ford noted in its August 2, 2010 response that the agency had provided clarification of the alleged defect as stated in their June 25, 2010 information request. Specifically, Ford's response stated:

"On June 29, 2010, Mr. Robert Young, of the agency, provided clarification of the alleged defect. We understand that allegations of unwanted acceleration in which there is no accelerator pedal driver input preceding the reported event, such as "vehicle accelerates on its own," do not meet the definition of the "alleged defect." We also understand that allegations of unwanted engine speed and/or power output failing to decrease as a result of driver inputs other than the accelerator pedal, such as "vehicle sped up when the brake pedal was depressed," or "... when the gear shift selector was placed in reversed..." do not meet the definition of the "alleged defect."

Because the agency did not express any concerns with this clarification, this response is also based on that clarification, i.e., unwanted acceleration in which there is no accelerator pedal driver input preceding the reported event, such as "...vehicle accelerates on its own...," does not meet the definition of the "alleged defect," and allegations of unwanted engine speed and/or power output failing to decrease as a result of driver inputs other than the accelerator pedal, such as "...vehicle sped up when the brake pedal was depressed...," or "... when the gear shift selector was placed in reverse..." does not meet the definition of the "alleged defect."

Ford also notes that the alleged defect in this supplemental information request has been modified by the agency to pertain not only to Ford all-weather floor mats, but also to "...all original equipment mats ... or aftermarket mats." Accordingly, Ford has modified its search

for information responsive to this expanded alleged defect definition, as clarified above. Ford also searched files that were reviewed in preparation of our August 2, 2010 and January 7, 2011 responses for reports that were not requested in the agency's original information request.

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 22, 2011, 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, Global Core Engineering, Office of the General Counsel, and North American Product Development.

Request 20

NHTSA's Information Request No. 1 of June 25, 2010, in connection with PE10-019 requested the following information:

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 state the following:

- a. Vehicle identification number (VIN);
- b. Model;
- c. Model Year;
- d. Date of manufacture;
- e. Date warranty coverage commenced:
- f. Whether the vehicle was built by Ford with an All Weather floor mat (AWM); and
- g. Selling dealer name and location.

As part of its August 2, 2010, response to this request, Ford provided Appendix A ("Appendix A").

This Information Request Number 20 requires Ford to supplement the information requested in Information Request No. 1: State, by model and model year, the number of Subject Vehicles Ford has manufactured for sale or lease in the United States not previously provided. Separately, for each Subject Vehicle manufactured to date that has not been included in Ford's prior response, state the following:

- a. Vehicle identification number (VIN);
- b. Model:
- c. Model Year;
- d. Date of manufacture:
- e. Date warranty coverage commenced;

- f. Whether the vehicle was delivered by Ford with a Ford accessory all-weather floor mat:
- g. Accelerator Pedal Assembly part number;
- h. Engine Type (I4 or a V6); and
- Selling dealer name and location.

Provide this information in a form as to supplement to Appendix A, including providing a separate table for each model year.

Answer

Ford records indicate that the approximate total number of 2006 through 2011 model year Ford Fusion, Mercury Milan, Lincoln Zephyr and Lincoln MKZ 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) not previously provided are as follows:

Model	2006 MY	2007 MY	2008 MY	2009 MY	2010 MY	2011 MY
Ford Fusion	16	14	20	22	34,432	205,887
Mercury Milan	4	7	5	9	4,888	6,293
Lincoln Zephyr	1	0	0	0	0	0
Lincoln MKZ	0	3	3	25	4,876	21,572

The requested data for each subject vehicle, where available, is provided in Appendix A. Ford notes that the accelerator pedal assembly part number requested by the agency for a particular vehicle can be determined by referring to the application chart provided in Appendix B in response to Request 21.

Request 21

Separately, by model and model year of the Subject Vehicles, provide the following information listed below:

- a. Identify the plant(s) along with the location where the Subject Vehicles were manufactured;
- b. State the identity of each supplier that supplied the accelerator pedal assembly to Ford and the address (city and country) and principal contact for that supplier;
- c. State the part number(s) for the overall accelerator pedal assembly or assemblies and for each component of the accelerator pedal assembly, including, but not limited to the accelerator pedal, accelerator pedal housing, lever/pivot point and return spring;
- d. State whether the overall accelerator pedal assembly or assemblies identified in your response to "c" above was installed in all of the vehicles of that model and model year. If the accelerator pedal assembly or components thereof is not the same throughout the model year production, state in detail which vehicles had which pedal assemblies. State how Ford determined which vehicle has which component (i.e. by trim level, hybrid system, etc.) and list which accelerator pedal assembly or component thereof is installed on which vehicle application.
- e. Provide the physical (not electrical) specifications for the accelerator pedal assembly or assemblies and each component thereof;

- f. Provide one or more exemplar drawings of physical specifications for the accelerator pedal assembly or assemblies and component(s) thereof;
- g. Provide drawings on the accelerator pedal swing, in relation to the floor above the carpet, with and without floor mats.

Insofar as there were different accelerator pedal assembly or assemblies on the Subject Vehicles in any model year, identify each of them (for example, if there was a change in part number or specifications over the course of production of a vehicle, such as a running change, state the initial part number and specification and applicable time period in which the Subject Vehicles were manufactured with that part and the subsequent part number and specification and applicable time period in which the Subject Vehicles were manufactured with that part). For each change to the accelerator pedal assembly and/or its components, state the name of the supplier of the new assembly, whether and when the revised component was made available as a service part, and whether the former component was removed from service part inventory, and if so, the date when such part was removed.

Answer

All of the subject vehicles have been produced at the Hermosillo Assembly Plant located in Hermosillo, Mexico.

The requested information pertaining to accelerator pedal assembly supplier names, addresses and principal contacts is provided in Appendix C.

Ford part numbers for accelerator pedal assemblies used in the subject vehicles are shown on the accelerator pedal assembly application chart in Appendix B. Supplier part numbers for accelerator pedal assemblies, and components of the accelerator pedal assemblies, where available, are shown on the engineering drawings provided in the Engineering Design Drawings folder in Appendix D with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR. Part 512.

An application chart that lists all Ford accelerator pedal assembly part numbers used in the subject vehicles, and which assembly is used in a particular subject vehicle is provided in Appendix B.

Physical specifications for the accelerator pedal assemblies are provided in the Engineering Design Specifications folder in Appendix D with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512.

Engineering drawings of the accelerator pedal assemblies used in the subject vehicles are provided in the Engineering Design Drawings folder in Appendix D with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512.

The requested information pertaining to accelerator pedal clearances in relation to the carpeted floor on the subject vehicles is provided in the Other Root Cause Analysis folder in Appendix D with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512.

The requested information pertaining to accelerator pedal assembly changes in the subject vehicles is provided in Appendix E.

Request 22

NHTSA's Information Request No. 2 of June 25, 2010, in connection with PE10-019 requested the following:

State the number of each of the following, received by Ford, or of which Ford is otherwise aware, where the subject vehicle was alleged to have experienced the alleged defect:

- 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 "f," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately for each model and model year. 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. As part of its August 2, 2010, response to this request, Ford provided Appendix C ("Appendix C"). Ford also provided a supplement to this request on January 7, 2011.

This Information Request Number 22 requires Ford to supplement the information requested in Information Request No. 2 by stating, separately, by make, model and model year of the Subject Vehicle, to the extent not previously provided, the number of each of the items requested in Information Request No. 2(a) through (f), received by Ford, or of which Ford is otherwise aware which relate to or may relate to the alleged defect in the Subject Vehicles (as the alleged defect is now defined in this supplemental IR).

Provide this information in a form as to supplement to Appendix C.

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 F.

Because the revised definition of the alleged defect in this information request now includes all floor mats, and the revised request for warranty claims in Request 26 no longer includes claims where the all-weather floor mat was replaced for reasons other than the alleged defect, the categories used in the review of reports in this response are not the same as the categories that were used in our prior responses. The following categorizations were used in the review of reports located in each of the aforementioned searches:

Category	Allegation				
A1	Allegation of engine speed or power output failing to decrease when the accelerator pedal was no longer depressed because of interference with a floor mat				
A2	Allegation of engine speed or power output failing to decrease when the accelerator pedal was no longer depressed				
A3	Allegation of a floor mat interfering with accelerator pedal operation				
B1	Allegation of engine speed or power output failing to decrease – ambiguous if it occurred after accelerator pedal was no longer depressed				
B2	Ambiguous allegation of engine speed or power output failing to decrease				
B3	Ambiguous allegation of a floor mat interfering with accelerator pedal operation				

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 Master Owner Relations Systems (MORS) database, as described in Appendix F, were reviewed for relevance and sorted in accordance with the categories described above. Additionally, Ford re-reviewed records identified in prior searches of the MORS database as described in Appendix B of our August 2, 2010 response and in our January 7, 2011 response for relevance under the agency's revised definition of the alleged defect to include all mats and sorted them in accordance with the categories described above. The number and copies of relevant owner reports identified in these searches that allege engine speed and/or engine power failing to decrease when the accelerator pedal was no longer depressed, or a floor mat interfering with accelerator pedal operation in a subject vehicle, are provided in the MORS III portion of the database contained in Appendix G. 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.

<u>Legal Contacts</u>: Ford is providing, in Appendix F, a description of Legal Contacts and the activity that is responsible for this information. Ford notes that no responsive (i.e., not ambiguous) owner reports indicated that they were Legal Contacts.

Field Reports: Records identified in a search of the Common Quality Indicator System (CQIS) database, as described in Appendix F, were reviewed for relevance and sorted in accordance with the categories described above. Additionally, Ford re-reviewed records identified in prior searches of the CQIS database as described in Appendix B of our August 2, 2010 response and in our January 7, 2011 response for relevance under the agency's revised definition of the alleged defect to include all mats and sorted them in accordance with the categories described above. The number and copies of relevant field reports identified in this search that allege engine speed and/or engine power failing to decrease when the accelerator pedal was no longer depressed, or a floor mat interfering with accelerator pedal operation, in a subject vehicle are provided in the CQIS portion of the database contained in Appendix G. The categorization of each report is identified in the "Category" field.

Ford identified one field report that alleged that the all-weather floor mats did not seem to fit properly in a 2011 model year Ford Fusion (VIN# 3FAHP0HA1BR Because Ford records indicate that this vehicle was ordered from the factory with the all-weather floor mats, Ford contacted the dealer for further information. In a phone conversation with the dealer on September 1, 2011, the dealer indicated that when this vehicle arrived at their dealership, the all-weather mat was incorrectly stacked on top of the carpeted mat. The dealer stated that they removed the carpeted mat and placed it in the trunk of the vehicle, and then properly installed the all-weather floor mat. Although the dealer was unable to verify the customer's complaint of throttle sticking, they stated that they believe that floor mat to accelerator pedal interference was the cause of the complaint. Accordingly, Ford has categorized this report as "A1" in the CQIS portion of the database contained in Appendix G. A duplicative warranty claim is also categorized as "A1" in the AWS portion of the database contained in Appendix G.

Ford also identified one field report that alleges that a properly installed Ford all-weather floor mat interfered with accelerator pedal operation in a 2010 model year Ford Fusion (VIN# 3FAHP0HA2AR Ford records indicate that this vehicle was not ordered from the factory with the optional all-weather floor mats. In a phone conversation with the dealer on April 13, 2011, the dealer explained that the customer was incorrectly attempting to install an all-weather floor mat with dual retention clips in a vehicle with only one retention hook. Ford has categorized this report as "A3" in the CQIS portion of the database contained in Appendix G.

Ford also notes that our re-review of records from the previously noted searches identified one record that was responsive to the alleged defect, and two records that were ambiguous, as defined in the agency's June 25, 2010 information request, but were erroneously not provided in our August 2, 2010 response. These records are also provided in the CQIS portion of the database contained in Appendix G.

Field reports that are duplicative of owner reports are provided in Appendix G but are not included in the field report count.

<u>Crash/Injury Incident Claims:</u> 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. No accidents or injuries are alleged in any reports that are

categorized as "A1." Ford located five reports categorized as "A2" that contain allegations of accidents, with no associated reports of injuries or fatalities. In one of these incidents involving a 2011 Lincoln MKZ (VIN# 3LNHL2GC8BF , the dealer stated that a rubber mat was found stacked on top of a carpeted mat; however, at the time of inspection the mat was not hitting, or even close to, the accelerator pedal. There is no mention of floor mat interference with the accelerator pedal in any of the other four reports. One additional report categorized as "A2" included in the Legal Claim/Lawsuits tab in Appendix G in this response that contains an allegation of an accident and two associated injuries is duplicative of a record included in the MORS portion of the database contained in Appendix A of our January 7, 2011 update response. Based on our engineering judgment, the available information is insufficient to support a determination that these incidents pertain to accelerator pedal interference with a floor mat. Two of these accident allegations are reports of low speed parking lot incidents, while the others are vague allegations of stuck accelerator pedals or throttles. These reports are not unlike the types of reports occasionally received on any vehicle, and may relate to a variety of causes including driver error, such as pedal misapplication, or may simply be incorrect allegations.

Copies of reports corresponding to these alleged incidents are provided in the MORS, CQIS, and Legal Claim/Lawsuits portions of the database provided in Appendix G.

<u>Claims, Lawsuits, and Arbitrations</u>: 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 one other claim which is ambiguous as to whether it meets the alleged defect criteria. We have included this claim as a "non-specific allegation" for your review because of the broad scope of the request. Based on our engineering judgment, the information in this claim is insufficient to support a determination that it pertains 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 G 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 MORS reports relating to matters shown on the log are provided in Appendix H. With regard to these lawsuits and claims, Ford has not undertaken to contact outside law firms to obtain additional documentation. Ford notes that it was unable to locate one claim file and, therefore, is unable to determine if the case is related to the alleged defect.

Request 23

Separately for each item (complaint, report, claim, notice, or matter) within the scope of your response to Information Request No. 22 above, state the following information:

- a. Ford's file number or other identifier used;
- b. The category of the item, as identified in Request No. 22 (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;
- Whether a crash is alleged;
- j. Whether property damage is alleged;
- k. Number of alleged injuries, if any;
- Number of alleged fatalities, if any;
- m. Brief summary of the complaint.

Provide this information in a form as to supplement to Appendix C.

Answer

Ford is providing owner and field reports in the database contained in Appendix G in response to Request 22. To the extent information sought in Request 23 is available for owner and field reports, it is provided in the database. To the extent information sought in Request 23 is available for lawsuits and claims, it is provided in the Log of Lawsuits and Claims provided in Appendix G in the Legal Claim/Lawsuits tab.

Request 24

For each item identified in response to NHTSA's June 25, 2010, Information Request No. 2 in connection with PE10-019 and/or in Information Request No. 22 above, to the extent not already provided, state the following:

- The Ford part number, supplier and supplier's part number, of the accelerator pedal installed on the vehicle;
- b. Whether the vehicle was equipped with a brake pedal override system;
- c. the engine type, including whether it was an I4 or a V6, and its rated horsepower;
- d. A description of the floor mat in the driver's side of the vehicle, including whether it was a Ford (including the Fusion, Milan, Zephyr and MKZ) original equipment or aftermarket mat, a non-Ford aftermarket mat (include the name of the manufacturer if not Ford), a description of the mat itself (e.g., all-weather, rug, cloth, rubber), and part number if it was a Ford mat.

Provide this information in a form as to supplement to Appendix C.

<u>Answer</u>

Ford notes that detailed part related information is typically not available in customer complaint, field report and lawsuit and claim information. However this information, where available, is provided in the database contained in Appendix G in response to Request 22 for customer complaints and field reports, and in Appendix H in response to Request 25 in the copies of complaints, first notices, or MORS reports relating to lawsuits and claims. Information pertaining to accelerator pedal assemblies originally installed in the subject vehicles is provided in the accelerator pedal assembly application chart in Appendix B. The supplier part numbers for the accelerator pedal assemblies are shown on the engineering drawings provided in the Engineering Design Drawings folder in Appendix D with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512.

Details regarding which subject vehicles are equipped with Ford's brake override system are provided in our response to Request 35.

The engine type for a specific subject vehicle included in our response to Request 20 is included in Appendix A. The engine type for a subject vehicle included in our August 2, 2010 response to Request 1 can be determined by referring to the VIN code reports provided in Appendix I. Additionally, the rated horsepower for all engines available in the subject vehicles are shown in the VIN code reports provided in Appendix I.

Information regarding the actual driver's side floor mat installed in a subject vehicle at the time of a particular report, where available, is provided in the database contained in Appendix G in response to Request 22 for customer complaints and field reports, and in Appendix H in response to Request 25 in the copies of complaints, first notices, or MORS reports relating to lawsuits and claims.

Request 25

To the extent not already provided, produce electronic copies of all documents related to each item within the scope of Information Request Nos. 22 thru 24 above. 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 G in response to Request 22. Copies of complaints, first notices, or MORS reports relating to matters shown on the Log of Lawsuits and Claims in Appendix G in the Legal Claim/Lawsuits tab are provided in Appendix H. To the extent information sought in Request 25 is available, it is provided in the referenced appendices.

Request 26

This Information Request Number 26 requires Ford to supplement the information requested in NHTSA's Information Request No. 5 of June 25, 2010, in connection with PE10-019 by stating, by model and model year, a total count for all of the following categories of claims not previously provided, collectively, that have been paid by Ford to date that relate to or may relate to the alleged defect in the Subject Vehicles (including any claims that would fall under the revised definition of alleged defect) including those where the vehicle was repaired for the alleged defect or the accelerator pedal assembly or component thereof was replaced: 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. Causal part (if identified);
- j. Replacement part number(s) and description(s);
- k. Concern stated by customer; and
- I. Comments, by dealer/technician relating to claim and/or repair.

Provide this in a form as to supplement Appendix C.

Answer

Records identified in a search of the AWS database, as described in Appendix F, were reviewed for relevance and sorted in accordance with the categories described in the response to Request 22. Additionally, Ford re-reviewed records identified in prior searches of the AWS database as described in Appendix B of our August 2, 2010 response and in our January 7, 2011 response for relevance under the agency's revised definition of the alleged defect to include all mats and sorted them in accordance with the categories described in the response to Request 22. The number and copies of relevant warranty claims identified in these searches that allege engine speed and/or engine power failing to decrease when the accelerator pedal was no longer depressed, or a floor mat interfering with accelerator pedal operation, in a subject vehicle are provided in the AWS portion of the database contained in Appendix G. The categorization of each report is identified in the "Category" field.

Ford notes that our re-review of records from the previously noted searches identified one record that was responsive, and one record that was ambiguous, to the alleged defect as defined in the agency's June 25, 2010 information request, but was erroneously not provided in our August 2, 2010 response. These records are also provided in the AWS portion of the database contained in Appendix G.

Warranty claims that are duplicative of owner and field reports are provided in Appendix G 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 MORS reports identified above in response to Request 22. Such claims that were honored are included in the warranty data provided.

Ford noted in its August 2, 2010 response that Technical Service Bulletins (TSB) 07-2-3 and 07-10-1 were issued, in part, to address complaints of high idle at start up or when the clutch pedal is depressed on 2006 and 2007 model year Ford Fusion, Mercury Milan and Lincoln Zephyr vehicles. Ford does not believe that complaints of high idle at start up or when the clutch pedal is depressed pertain to the alleged defect and, accordingly, are not within the scope or intent of the agency's request. Therefore, Ford is not providing warranty claims for reports of high idle at start up or when the clutch pedal is depressed, or reports of high idle or high engine RPMs where the stated corrective action was to perform one of the above referenced TSBs, or a TSB superseded by one of the referenced TSBs. Although not responsive to the agency's June 25, 2010 information request, Ford provided copies of the above referenced TSBs in Appendix F1 of its August 2, 2010 response for the agency's review and will provide the related warranty claims if the agency so desires.

Request 27

For each claim identified in your Response to NHTSA's June 25, 2010, Information Request No. 5 in connection with PE10-019 and/or Information Request No. 26 above, state the following information to the extent known:

- a. If the accelerator pedal assembly or a component thereof was replaced as part of the claim, state the Ford part number, supplier and supplier's part number of the removed accelerator pedal assembly or component thereof, and state the Ford part number, supplier and supplier's part number of newly installed accelerator pedal assembly or component thereof;
- b. Whether the vehicle was equipped with a brake pedal override system;
- the engine type, including whether it was an I4 or a V6, and horsepower installed on the vehicle;
- d. If available, a description of the floor mat(s) in the driver's side of the vehicle, including the part number if it was a Ford mat.

Provide this in a form as to supplement Appendix C.

Answer

Ford notes that warranty claim information typically does not provide detailed part number information related to the part that was removed or replaced as part of a warranty claim. However, information pertaining to accelerator pedal assemblies that were originally installed in the subject vehicles is provided in the accelerator pedal assembly application chart in Appendix B.

Ford is resubmitting the warranty claims that were previously provided in or August 2, 2010 response with the requested Ford accelerator pedal assembly part number for the newly installed accelerator pedal assembly in Appendix J. The requested Ford accelerator pedal assembly part number for the newly installed accelerator pedal assembly for warranty claims provided in response to Request 26 is provided in Appendix G. Supplier names and supplier accelerator pedal assembly part numbers are shown on the engineering drawings provided in the Engineering Design Drawings folder in Appendix D with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512.

Ford is providing details pertaining to which subject vehicles are equipped with Ford's brake override system in our response to Request 35.

The engine type for a specific subject vehicle included in our response to Request 20 is included in Appendix A. The engine type for a subject vehicle included in our August 2, 2010 response to Request 1 can be determined by the referring to the VIN code reports provided in Appendix I. Additionally, the rated horsepower for all engines available in the subject vehicles is shown in the VIN code reports provided in Appendix I.

Information pertaining to the actual driver's side floor mat installed in a subject vehicle at the time of the report, where available, is provided in the database contained in Appendix G.

Request 28

Describe in detail the search criteria used by Ford to identify the claims identified in response to Information Request No. 26, 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.

<u>Answer</u>

Detailed descriptions of the search criteria, including all pertinent parameters, used to identify the claims provided in response to Request 26 are described in Appendix F.

Request 29

To the extent not already provided, produce engineering drawing(s), that include a top view and a side view, which drawing(s) show the dimensions of all floor mats manufactured by Ford or one of its suppliers for use in the Subject Vehicles. If the foregoing views are not on one drawing, produce more than one drawing.

Answer

Ford uses a 3-Dimensional CAD data system as the master design source for the floor mats used in the subject vehicles, and that 2-Dimensional engineering release drawings are not available within Ford. Ford is providing 2-Dimensional representations of the 3-Dimensional CAD data in response to Request 29 in the Engineering Design Drawings folder in Appendix D with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512.

Request 30

To the extent not already provided, provide Ford's non-electrical engineering standards, drawings, criteria and/or directives related to the accelerator pedal assembly or components thereof, manufactured by Ford or one of its suppliers for use in the Subject Vehicles and state whether any of these consider the existence of a floor mat.

Answer

Ford is providing the requested information in the Engineering Design Specifications folder in Appendix D with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512.

Ford notes that the system design specifications for accelerator pedal assemblies do consider the existence of a floor mat.

Request 31

To the extent not already provided, produce engineering drawing(s), that include a top view and a side view, which drawing(s) show the dimensions of accelerator pedals used in the Subject Vehicles. If the foregoing views are not on one drawing, produce more than one drawing.

<u>Answer</u>

Ford is providing engineering drawings with the requested information, where available, in the Engineering Design Drawings folder in Appendix D with a request for confidentiality under separate cover to the agency's Office of the Chief Counsel pursuant to 49 CFR, Part 512.

Request 32

To the extent not previously provided, produce electronic 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 officers, 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 last draft copy of any communication that Ford is planning to issue within the next 120 days.

<u>Answer</u>

For purposes of identifying communications to dealers, zone offices, or field offices pertaining, at least in part, to alleged engine speed and/or engine power failure to decrease when the accelerator pedal is no longer depressed, or floor mat interference with accelerator pedal operation, in a subject vehicle, 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 F.

OASIS Messages: Ford has identified one SSM and no TSBs that may relate to the agency's request and is providing a copy of it in Appendix K.

Internal Service Messages: Ford has identified no ISMs that may relate to the agency's request.

<u>Field Review Committee</u>: Ford has identified no field service action communications that may relate to the agency's request.

On August 2, 2010 Ford issued an Electronic Field Communication (EFC) to all Ford and Lincoln Mercury dealers informing them that both the Vehicle Pre-Delivery Inspection Checklist and the Vehicle Delivery Checklist for all Ford, Mercury, and Lincoln vehicles had been revised to include instructions regarding proper floor mat installation. Ford is providing a copy of this EFC and sample copies of both the Vehicle Pre-Delivery Checklist and the Vehicle Delivery Checklist for the 2011 Ford Fusion in Appendix L.

Ford currently has no plans to issue any communications related to the subject of the agency's information request within the next 120 days.

Request 33

Provide a listing of each floor mat sold by Ford for use in the Subject Vehicles by type (carpet, all-weather etc.), correlating the part number of the floor mat with the vehicle application (model, model year, trim, etc.) it is intended for. Specifically state whether there are multiple vehicle applications for any type of floor mat sold by Ford for use in the Subject Vehicles, and if so, list the vehicle applications each floor mat is intended for.

Answer

Ford is providing the requested information in the floor mat application chart in Appendix M.

Request 34

Provide a count, by manufacturer, part number and year/month of sale of floor mats sold by Ford for use in the Subject Vehicles.

Answer

As the agency is aware, Ford service parts and accessories are sold in the U.S. to authorized Ford and 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 floor mats intended for use in the subject vehicles that were sold as service parts to dealers by service part number and year/month of sale, where available, in Appendix N.

Request 35

Describe Ford's brake pedal override system, and its functionality, as installed on certain of the Subject Vehicles. State which models and model years of the Subject Vehicles are equipped with the brake override system.

Answer

On subject vehicles with gasoline engines (non-hybrid) the Brake Over Accelerator (BOA) feature reduces requested accelerator pedal engine torque when all of the following conditions are present for approximately 1 second:

- The accelerator pedal is in an applied position and determined to be stationary such that it may be potentially stuck or entrapped,
- The brake pedal is applied as determined by brake pedal switches, and
- Vehicle speed is greater than approximately 10 mph.

Once these conditions are met, the accelerator pedal value used to calculate driver requested engine torque is reduced toward zero over the next approximately 1 second. This then results in a reduction in engine torque toward idle.

The reduction in engine torque resulting from activation of the BOA feature is removed when any of the following conditions are detected:

- The brake pedal is released as determined by the brake pedal switches,
- The accelerator pedal is determined to not be stationary, or
- The accelerator pedal is in a released position.

When any one of these conditions is detected, the accelerator pedal value used to calculate driver requested engine torque is ramped back toward the actual measured accelerator pedal position. This then results in the engine torque ramping back toward the driver requested engine torque.

The BOA feature on Hybrid Electric Vehicles (HEV) achieves a comparable result to the non-hybrid gasoline engine BOA feature by immediately removing the accelerator pedal requested torque as the brake pedal is pressed. In the HEV system the accelerator pedal requested torque is reduced in proportion to the amount of brake pedal travel such that the further the brake pedal is pressed, the more the accelerator pedal requested torque is reduced up to the point that all accelerator pedal requested torque is removed and the friction brakes are applied.

All of the subject vehicles built with the Hybrid gas/electric powertrain, available on 2010 and 2011 model year Ford Fusion and Mercury Milan vehicles and on 2011 model year Lincoln MKZ vehicles, are equipped with brake pedal override. All gasoline engine (non-hybrid) equipped subject vehicles built on or after October 26, 2010, are equipped with brake pedal override. Hybrid vehicles can be identified using the VIN code reports provided in Appendix I.

Request 36

Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to Ford accessory all-weather mats manufactured for use in the Subject Vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Ford to the extent not previously provided. For each such action, provide the following information:

- a. Action title or identifier;
- b. The actual or planned start date;
- 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 electronic 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.

<u>Answer</u>

Ford is construing this request as pertaining specifically to the alleged defect 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 O.

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, please advise.

Ford is submitting additional responsive documentation in Appendix P 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 to the agency's Office of Chief Counsel as Appendix P — Redacted.

Ford is producing one redacted document responsive to this request that is protected from disclosure by attorney-client privilege, work-product doctrine, or other applicable immunity. The document that is protected from disclosure on these bases is described in a privilege log contained in Appendix Q.

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.

A 2008 Ford Fusion was reviewed at Anderson Ford in Bellefontaine, Ohio in March 2011 by Ford personnel. Ford found that it was possible to manipulate the all-weather floor mat into a position where the accelerator pedal could get entrapped in the groove along the leading edge of the mat. The pedal could be easily released by pressing on the mat with the operator's foot. No contact with the accelerator pedal was possible when the floor mat was properly installed. There was no documentation of this vehicle review.

Request 37

Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to all original equipment or aftermarket floor mats manufactured for use or installed in the Subject Vehicles, including all actions related to pedal entrapment by such mats, that have been conducted, are being conducted, are planned, or are being planned by, or for, Ford to the extent not previously provided. 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 electronic 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.

<u>Answer</u>

Ford is construing this request as pertaining specifically to the alleged defect 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 O.

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, please advise.

Ford is submitting additional responsive documentation in Appendix P 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 to the agency's Office of Chief Counsel as Appendix P – 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 38

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 accelerator pedals manufactured for use or installed in the Subject Vehicles, including all actions related to pedal entrapment, 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 electronic 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.

<u>Answer</u>

Ford is construing this request as pertaining specifically to the alleged defect 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 O.

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, please advise.

Ford is submitting additional responsive documentation in Appendix P 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 to the agency's Office of Chief Counsel as Appendix P – 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 39

To the extent not already provided, describe in detail, in chronological order, each and every effort by Ford to inquire into, understand, investigate, assess, analyze, test, study, survey, simulate, evaluate, and/or determine contributing factors to and causes of (collectively, "actions") actual or alleged interference between the accelerator pedal and the floor mat in the Subject Vehicles, or a subset of them. For each such action, provide the following information:

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

For each action identified, provide electronic 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 as pertaining specifically to the alleged defect 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 O.

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, please advise.

Ford is submitting additional responsive documentation in Appendix P 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 to the agency's Office of Chief Counsel as Appendix P – 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 40

Identify and 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 floor mats manufactured by Ford or one of its suppliers and shipped to Ford dealers for use on the Subject Vehicles from the start of production of the Subject Vehicles to present. For each such modification or change, provide the following information:

- a. The model and model year vehicles that the floor mat is identified or specified for;
- The date or approximate date on which the modification or change was incorporated into production;
- c. A detailed description of the modification or change;
- The reason(s) for the modification or change;
- e. The part numbers (service and engineering) of the original floor mat;
- f. The part number (service and engineering) of the modified floor mat;
- g. Whether the original unmodified floor mat was withdrawn from production and/or sale, and if so, when;
- h. When the modified floor mat was made available as a service component; and
- i. Whether the modified floor mat can be interchanged with earlier production floor mats.

<u>Answer</u>

Because of the breadth of the information requested by the agency in Request 33, Ford is providing in Appendix R a more comprehensive list of floor mat changes, regardless of whether the change relates to, or may relate to, the alleged defect, to assist the agency in understanding floor mat usage in the subject vehicles.

Although not currently in production, Ford notes that it is proceeding with plans to revise the all-weather floor mats used in the subject vehicles. Ford believes that these robustness

actions will improve customer satisfaction and continue to minimize the possibility of an improperly installed all-weather mat interfering with the accelerator pedal. If the agency would like additional information regarding these planned revisions concerning the all-weather floor mats, please advise.

Request 41

Identify and describe all modifications or changes considered or made by, or on behalf of Ford, including the supplier(s) of accelerator pedals for the Subject Vehicles, in the design, material composition, manufacture, quality control, supply, or installation of the accelerator pedal assembly or component thereof, including related software and electronics, manufactured for use on the Subject Vehicles from the start of production of Subject Vehicle(s) to the present. For each such modification or change, provide the following information:

- The model and model year vehicles that the accelerator pedal assembly or component thereof is identified or specified for;
- b. The date or approximate date on which the modification or change was incorporated into production; including whether such change was made during a production;
- c. A detailed description of the modification or change;
- d. The reason(s) for the modification or change;
- e. The part numbers (service and engineering) of the original component;
- f. The part number (service and engineering) of the modified component;
- 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. Whether the modified component can be interchanged with earlier production components;
- j. If a change was made to one model of the Subject Vehicles (i.e. the Ford Fusion) but not made to the other model(s) of Subject Vehicle(s) (i.e. the Lincoln MKZ), provide an explanation as to why the change was not made to the other model(s).
- k. If the same or similar change was made to one model of the Subject Vehicles (i.e. the Ford Fusion) and another model of Subject Vehicle (i.e. the Lincoln MKZ), but the change was not incorporated into production at the same time, provide an explanation as to why the change was not incorporated into production at the same time.

Answer

Because of the breadth of the information requested by the agency in Request 21, Ford is providing in Appendix E a list of all accelerator pedal assembly changes concerning the subject vehicles where the Ford part number was changed, regardless of whether the change relates to, or may relate to, the alleged defect.

Request 42

To the extent not already provided, produce, in chronological order, all documents (as defined herein, including but not limited to emails, memoranda, notes, protocols, analyses, results and reports) whether draft, interim, or final, related to any and all modifications and/or changes made by, or on behalf of Ford, in the design, manufacture,

material composition, quality control, supply and/or installation of the accelerator pedal assembly or component thereof and/or floor mat from the start of production to present of each Subject Vehicle. In addition to internal documents, your response shall include documents from Ford to its suppliers and from such suppliers to Ford.

<u>Answer</u>

Ford is construing this request as pertaining specifically to the alleged defect 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 O.

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, please advise.

Ford is submitting additional responsive documentation in Appendix P 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 to the agency's Office of Chief Counsel as Appendix P — 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 43

Provide a listing of all safety recalls Ford conducted since January 1, 1991, for a condition where the throttle does not fully return to the idle position when the accelerator is released. For each such safety recall, provide the following information by vehicle model year/model:

- a. The recall number (including Ford's recall number and NHTSA's recall number);
- b. The number of vehicles recalled;
- c. The production period involved, and
- d. A description of the condition addressed by the recall.

<u>Answer</u>

Ford is providing the requested information in Appendix S. Ford notes that the information requested here was provided in Part 573 notifications to the agency contemporaneous with each action.

Request 44

By vehicle model year and model, state the number of each of the following, received by Ford, or of which Ford is otherwise aware, which it considered while deciding whether to conduct the recall(s) listed in response to Information Request No. 43 above, and found to be within the recall scope prior to submitting its Defect Information Report to the agency.

- 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 subject vehicle defect, 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.

<u>Answer</u>

Ford is providing the requested information, where available, in Appendix S. Ford notes that comprehensive searches for reports were not typically conducted by Ford for those recalls initiated in the absence of a NHTSA investigation. Rather, each and every recall noted was based on an analysis that found that the condition was occurring due to improper component manufacture, improper vehicle assembly, or failure of a component that could occur during proper use of a vehicle.

Request 45

Furnish Ford's assessment of the alleged defect in the Subject Vehicles, including:

- a. All causal or contributory factors;
- b. Any warning symptoms;
- c. The failure mode:
- d. The root cause of the failures;
- e. Its potential effect on occupant safety;
- f. The potential for future occurrences of the alleged defect in the Subject Vehicles.

<u>Answer</u>

Few New Reports, Outside Influence

Based on a review of the information provided in this response as well as in Ford's August 2, 2010 and January 7, 2011 responses to the agency's previous information requests, Ford continues to believe that the potential for accelerator pedal contact with an unretained, out-of-position Ford all-weather floor mat is a relatively rare occurrence and, if it does occur, is solely a result of improper installation of the mat. Only one additional report of an accelerator pedal not returning to idle as a result of contact with, or entrapment by, an out-of-position Ford all-weather floor mat has been received by Ford since our January 7, 2011 data update provided to the agency, confirming the rarity of the condition. Similarly, Ford's search of the

agency's Vehicle Owner Questionnaire (VOQ) database identified only three reports of alleged accelerator pedal contact with a floor mat in the subject vehicles since January 2011, two of which pertain to hybrid vehicles that have brake override. One of these three customers reported to the agency that this condition had not caused them any problems, while the other two reported that they were able to successfully control their vehicles and bring them to a stop along the side of the road. Additionally, consistent with our previous response, a few reports were located where there was unconfirmed speculation that accelerator pedal contact with a floor mat of some type may have been the cause of a customer's reported symptoms; however, Ford is not able to determine, based on the available information, whether mat contact with the pedal actually occurred.

Furthermore, the agency provided seven VOQs with their June 25, 2010 information request. Ford notes that four of these reports were concerning vehicles with the hybrid gas/electric powertrain that are all equipped with brake override, including one HEV customer that reported that the gas pedal got stuck on the floor and that the brakes did not stop the car until the gas pedal just came back up from the floor, which is totally inconsistent with the operation of the vehicle, suggesting that reports related to such conditions are not always entirely accurate or credible.

Appropriate Mats, Properly Installed

Floor mat interference with the accelerator pedal is not possible with a properly installed mat in the subject vehicles, and we are still not aware of any reports to the contrary. Ford's system design specifications for accelerator pedals take into account the existence of floor mats, and the subject vehicles with properly installed floor mats meet or exceed these specifications. In recognition of the importance of proper mat installation, Ford again notes that the agency has issued several Consumer Advisories and Safety Alerts concerning accelerator pedal entrapment by out-of-position floor mats. In two of those advisories (September 26, 2007, and May 28, 2010), the agency alerted drivers of <u>all vehicles</u> (emphasis added) that out-of-position floor mats could present a risk of accelerator pedal interference. Specifically, in the agency's September 26, 2007 Consumer Advisory, the agency warned:

".. depending on vehicle design, it is possible for unsecured floor mats to interfere with accelerator or brake pedals in a wide range of vehicles. Therefore, NHTSA reminds all drivers of all makes and models to check the driver-side floor mats for secure installation and to follow manufacturer instructions for installing the mats."

Ford agrees with the agency, which is why Ford (and most of the automotive industry) began installing floor mat retention systems many years ago to hold floor mats in place to minimize the potential for floor mat interference with an accelerator pedal, even in the absence of any Federal or industry standards. Today, a driver's side floor mat retention device can be found in virtually all vehicle makes and models sold in the United States that have standard or optional original equipment floor mats available. Ford provides a simple means of properly installing driver's side floor mats in all of its vehicles with either a single hook or, more recently, dual clips, either of which provide a secure method of installing mats and an effective means of properly locating them to ensure adequate clearance between the mat and all foot operated pedals. Either the carpeted floor mat or an available Ford all-weather mat can be secured in this manner. All-weather floor mats sold by Ford for use in the subject vehicles also contain a warning embossed on the top surface of the floor mat, instructing operators not to place an all-weather floor mat on top of an existing mat because only one mat can be secured on the retention hook/clips. The fact that the agency has issued several consumer advisories noting that the condition can occur "in a wide range of vehicles" indicates a state of

the art in vehicle design, not a vehicle defect, and that the issue of accelerator pedal interference with improperly installed floor mats should be addressed at the industry level for those vehicles in which a properly installed mat can not interfere with accelerator pedal operation.

To further inform Ford customers and dealers of the importance of proper floor mat installation and use of the retention devices that are provided, Ford issued an EFC on August 2, 2010, to all Ford and Lincoln Mercury dealers informing them that both the Vehicle Pre-Delivery Inspection Checklist and the Vehicle Delivery Checklist for all Ford, Mercury, and Lincoln vehicles had been revised to include instructions regarding proper floor mat installation. This EFC reminds dealers of the importance of reviewing the Vehicle Delivery Checklist, which includes instructions on proper floor mat installation, with the customer at the time of vehicle delivery. These measures are in addition to the previously existing instructions to customers that floor mats are to be properly installed and retained by the available retention devices.

Improper Installation

If the installation instructions and warnings are not followed and a Ford mat is installed without proper use of the retention devices, the mat may move over time and, though unlikely, has the potential to eventually make contact with the accelerator pedal. Extensive vehicle evaluations by both Ford and the agency have found that an unsecured all-weather mat can be intentionally positioned to contact the accelerator pedal either along the leading edge of the mat or in the groove along the leading edge of the mat. Contact along the leading edge of the mat appears to occur at part throttle and is not likely to inhibit the pedal's return to idle for more than a few seconds as the accelerator pedal return spring typically has sufficient force to overcome the resistance of the all-weather mat. Further, the nature of the mat and pedal interference is tenuous. Even in the unlikely event that an out-of-position mat makes contact with the accelerator pedal and consequently inhibits the pedal's return to idle, Ford's evaluations have found that the mat typically releases easily by simply tapping the pedal or mat with the driver's foot, eliminating any interference and allowing the pedal to immediately return to idle.

Ford and the agency also conducted evaluations where the mat was intentionally positioned such that the accelerator pedal contacted the groove along the leading edge of the mat. Initially, despite over half a year of investigation, neither the agency nor Ford were able manipulate an unretained Ford all-weather floor mat to hold the accelerator pedal in the groove of the mat, indicating that this condition doesn't occur easily. While contact of this type could theoretically cause the pedal's motion to be inhibited at a wider throttle opening, a review of the reports pertaining to this investigation shows that reports of alleged accelerator pedal interference with a floor mat typically indicate that either the interference corrects itself within a very short period of time, or that customers are able to bring their vehicle to a safe and controlled stop. This contrasts with the nature of the mat-and-pedal interference in vehicles recalled by Toyota in which, we understand, the Vehicle Research Technical Center (VRTC) found that the pedal had a propensity to remain stuck to the mat and that customers expressed difficulty slowing their vehicle, shifting to neutral, or turning off the ignition.

Reports

As previously noted, floor mat interference with the accelerator pedal is not possible with a properly installed all-weather mat, and is an extremely rare occurrence with an out-of-position all-weather floor mat in the subject vehicles. Ford has sold approximately 94,000 sets of all-weather floor mats for the subject vehicles and has received only 14 customer complaints and

field reports alleging an accelerator pedal did not immediately return to idle as a result of contact with an out-of-position Ford all-weather floor mat. None of these reports include an allegation of accident or injury. Ford also notes that all but one of these allegations occurred within the first 10 months/12,000 miles of vehicle service, possibly indicating that improper floor mat installation may be characterized as a short-term condition where customers are adjusting to and becoming familiar with their new vehicle and accessories. Because of the broad scope of the agency's request for consumer complaints and field reports, certain records provided in this response do not specifically mention or pertain to the Ford all-weather floor mat. For example, some records indicate that an aftermarket floor mat, the use of which is beyond Ford's control, was the alleged cause of accelerator pedal interference, or that the specific floor mat that is alleged to have interfered with the pedal is unclear. Others simply relate to more generic allegations that the vehicle did not decelerate as expected by the driver without specifically alleging that a floor mat interfered with the accelerator pedal.

Aftermarket Items

The agency expanded the definition of the alleged defect to include reports relating to the use of non-Ford, aftermarket mats. Obviously, aftermarket floor mats can be of many different shapes and sizes, and manufacturers have no means to anticipate the seemingly infinite array of potential effects to system interactions or component clearances. Further, manufacturers have no means by which to prevent the use of other aftermarket items that can affect accelerator pedal operation, such as pedal pads, or any other customization that may also affect pedal clearances. Nonetheless, as previously stated, Ford has established vehicle design specifications for pedal clearances that provide for robust vehicle operation under a wide variety of conditions. The subject vehicles meet or exceed those specifications. Consequently, Ford has found very few reports alleging that aftermarket floor mats have interfered with the accelerator pedal on the subject vehicles.

Circumstances Differ from Recent Recalls

The conditions described in the small number of reports of out-of-position mat to pedal interference on the subject vehicles continues to suggest a very different scenario than the conditions that were occurring on the vehicles that were subject of the recalls recently conducted by Toyota.

- 1. Ford's evaluation of reports provided in this and Ford's previous responses indicates that if an improperly installed mat interferes with the accelerator pedal, the pedal tends to be in a position that results in less than wide open throttle, where engine power output is less than full and braking effectiveness is less affected. This is in contrast with Ford's understanding of the nature of mat and pedal interference in vehicles recalled by Toyota in which an accelerator pedal could become entrapped by the mat, apparently including unstacked mats, and that tapping the pedal with a foot in an attempt to free the pedal could result in "ratcheting" of the pedal to a wider throttle opening, potentially (in the case of the original equipment all-weather mat) holding the pedal at wide open throttle where braking effectiveness could be significantly diminished because of the loss of brake vacuum assist;
- 2. The vehicles that are the subject of this information request have a traditional ignition key and cylinder, making it intuitively straightforward for the customer to shut the engine off while the vehicle is in motion, using the same method employed to shut the vehicle off after every drive. Based on our review of the reports responsive to this information request, customers are in fact able to turn off the engine while the vehicle

is in motion, in notable contrast to reports associated with vehicles that were the subject of Toyota's recall where, we understand, VRTC found that some drivers were unable to turn off the engine in an emergency situation when the vehicle was in motion;

3. Ford is not aware of any complaints of customer's inability to shift the subject vehicles into neutral, even on vehicles with the six-speed automatic transmission with the sequential shift feature. Based on our understanding of VRTC's findings, again, this is in notable contrast to reports of unsuccessful attempts to disengage the engine from the drive wheels during an emergency situation in vehicles that were the subject of the Toyota recall.

Ford believes all of these factors must be considered when evaluating the potential risk associated with out-of-position all-weather floor mats in these vehicles, and are the reasons that these vehicles can be readily controlled even in the rare instance that an unsecured all-weather floor mat contacts the accelerator pedal.

Brake Override System

Ford notes that some reports on 2010 model year subject vehicles alleging mat and pedal interference were on vehicles with the new hybrid gas/electric powertrain that are equipped with a brake override system. This brake override system monitors both the brake and accelerator pedal position. If the system detects an input from both pedals at the same time, the brake pedal input will override the accelerator pedal input. Therefore, even if the accelerator pedal does not return to idle for any reason, engine torque is reduced and full braking function is maintained. The vehicle can easily be slowed down or stopped by simply depressing the brake pedal with normal braking effort. Any allegation that the brakes become ineffective and will not slow or stop a hybrid gas/electric vehicle when the accelerator pedal is stuck in any position is not consistent with the system design.

Previous Recalls by Ford

The agency requested (in Request 43) "a listing of all safety recalls Ford conducted since January 1, 1991 for a condition where the throttle does not fully return to the idle position when the accelerator is released." Ford has provided a summary of each of these actions along with pertinent information that formed the basis for Ford's action in Appendix S. In each of these actions, Ford's decision to conduct a safety recall was based on a component or system that did not function as designed (e.g., due to a manufacturing issue, an assembly error, or a failing component) when the vehicle was used properly by the driver. Some of these recall actions were taken based on few, if any, reports from the field, once the aforementioned conditions were identified. Sometimes Ford becomes aware of potential safety concerns by means other than just field reports or complaints (e.g., supplier quality checks, or assembly plant audits). In those instances where a recall was initiated without an agency investigation, Ford typically does not conduct a comprehensive review for reports. Ford's decisions to conduct these recalls were not based solely on the numbers of reports, but primarily on the potential for the condition to exist in the field under proper vehicle usage conditions. Each of those actions differs from the subject of this investigation, in which pedal contact with a mat can only occur when Ford's installation instructions and warnings are ignored.

For example, in June 2001 Ford conducted a voluntary safety recall on certain 2000 and 2001 model year Windstar vehicles. This action was prompted by a single customer report,

identified through Ford's internal safety review process, of adjustable accelerator pedal interference with a floor mat that was properly installed on the retaining hook. More recently, in May 2010 Ford of Australia conducted a voluntary safety recall on certain accessory floor mats sold by dealers for use in Ford Territory vehicles that, when properly installed on the retaining hook, also could interfere with an adjustable accelerator pedal. This action was prompted by only two reports of floor mat interference with the accelerator pedal.

Investigations Closed by the Agency

Consistent with this viewpoint, the agency has previously closed investigations, without action, where vehicle controllability has not been adversely and/or significantly affected. For example, Engineering Analysis EA98-018, regarding accelerator pedal entrapment due to out-of-position driver's side floor mats on certain 1997 and 1998 model year Ford F-150 vehicles, was closed without action in September 1999 based in part, because "... the analysis of reported occurrences shows that when incidents have occurred in which the floor mat has contacted the throttle pedal, vehicle controllability of the subject vehicles as a class has not been adversely and/or significantly affected." More recently, in Ford's response to Preliminary Evaluation PE05-037, which was also closed by the agency, regarding alleged stuck throttle concerns on certain 2002 model year Ford Explorer and Mercury Mountaineer vehicles, Ford's investigation found that the majority of reports pertained to complaints of high idle or stuck throttle without allegation that the condition presented any type of concern with vehicle control.

Conclusion

Floor mat to accelerator pedal interference in the subject vehicles can only occur if the mats are not properly secured. As the agency has indicated on several occasions, unsecured floor mats can interfere with accelerator pedals (and even the brake pedal) in a wide range of vehicles. Such a statement clearly indicates that the subject vehicles are not different than those of other manufacturers. Ford, and most other manufacturers, recognized the possibility of such interference well over a decade ago and began installing means to secure floor mats, thus providing a readily available and easy means for operators to avoid the condition. Further, Ford has pedal clearance and pedal package requirements, which these vehicles meet, that are intended to assure clearance to a properly installed floor mat. There are very few reports of pedal interference in the vehicles subject to this investigation, with almost none received in the last eight months. Ford believes the relative lack of reports demonstrates that while the mat can be manually placed such that it will interfere with the accelerator pedal, it does not occur readily or easily in typical vehicle usage. In addition, if such contact occurs in real world vehicle usage, it is typically eliminated by a tap on the accelerator pedal or movement of the operator's foot on or from the mat, or the condition may last only briefly and correct itself with no operator input.

Ford has not seen a condition on these vehicles like the recalled Toyota vehicles in which VRTC found that further depressing the accelerator pedal would ratchet the pedal, causing a firm engagement to the floor mat; an additional reason that there are no confirmed runaway vehicles like those for the recalled Toyota vehicles. And as Ford has noted previously, the subject vehicles have a conventional ignition key and an easily operable shift lever, unlike the recalled Toyota vehicles. VRTC found that Toyota's push button ignition and gated shifter caused some operators to be unable to turn the ignition off or shift to neutral when the accelerator became entrapped by a floor mat.

Ford believes that consideration of all of the factors relating to this subject support a conclusion that contact between an out-of-position all-weather floor mat and the accelerator

pedal does not represent a defect or present an unreasonable risk to safety in these vehicles. The designs of the accelerator pedals and floor mats in the subject vehicles are typical of those found throughout the industry and do not pose a unique risk of floor mat interference with the accelerator pedal. As the agency stated in recent Consumer Advisories, such as on September 26, 2007, "... depending on vehicle design, it is possible for unsecured floor mats to interfere with accelerator or brake pedals in a wide range of vehicles." Ford conducted the benchmarking study discussed in our August 2, 2010 response that reached a similar conclusion. Similarly, the reports Ford has provided in response to the agency's information requests do not indicate a defect in the subject vehicles. The alleged incidents do not occur under circumstances that, absent a defect, would not happen. To the contrary, the reports are typical of many vehicle designs in which unsecured floor mats are placed in the driver's footwell. Further, unlike the recent recalls conducted by Toyota related to floor mat interference with accelerator pedals, there are no engineering idiosyncrasies in the subject vehicles that caused or contributed to the reports Ford has produced in our responses. As mentioned above, Ford incorporates many design practices to help reduce the potential for misplacement of a floor mat and to provide clearance between the accelerator pedal and potentially misplaced floor mats.

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