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

Mazda North American Operations



Mr. Frank S. Borris, Chief Office of Defects Investigation Room W48-312 National Highway Traffic Safety Administration 1200 New Jersey Avenue, SE Washington, DC 20590

November 23, 2011

Dear Mr. Borris:

Enclosed is Mazda's response to your information request for EA10-02 (NVS-213kmb) sent on 10/27/2011), regarding the effectiveness of recall 07V-157. The information is provided in duplicate, as you requested. We are not claiming confidential treatment for any of the enclosed information, however, some of the information contained in the attachments may include personal information for members of the public which NHTSA may not want to be released to the public in accordance with your internal guidelines.

If you have any questions regarding the enclosed response, please let me know. My telephone number is (313) 594-7778 and my e-mail address is drobertson@mazdausa.com.

Sincerely,

Dávid Robertson, Group Manager

Environmental, Safety and Powertrain Engineering

Mazda North America Operations

Encl: Two CD-Rs Titled EA10-02, Mazda Response, 11/23/2011

Mazda Response: NHTSA Inquiry NVS-213kbm, EA 10-002

Mazda has prepared this update to our original response to EA10-002 after a thorough search for the information requested and has made every effort to provide thorough and accurate information to support.

The answers to your questions are set forth below. In accordance to your request, the question is first cited, with the response directly following its question.

Mazda has based the scope of this search as follows:

Criteria: Subject Vehicles: All MY 2001-2004 Tributes manufactured for sale or lease in the US that are within the scope of the recall.

Alleged Defect: Any one or more of the following (Crash Related Fires are not to be included):

- Fires alleged to have originated in the engine compartment at or near the ABS module after recall inspection or repair completed.
- Fires alleged to have occurred due to a malfunction of one of the recall related components (i.e. ABS Module, electrical connector, associated wiring).
- Thermal (overheat or smoke) failure of any related component (e.g. wiring, connector)
- Smoke, fire or ignition of engine compartment (unknown or unspecified) materials after recall inspection or repair completed

Mazda notes that some of the documents and information that are provided in response to this updated inquiry might contain personal customer information such as customer names, addresses, telephone numbers as well as full Vehicle Identification Numbers (VINs). Mazda respectfully requests that such personal information not be made public under FOIA Exemption 6, 5 U.S.C. 552(b)(6).

Request1

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

- a. Vehicle identification number (VIN);
- b. Make:
- c. Model:
- d. Model year;
- e. Date of manufacture;
- f. Date warranty coverage commenced;
- g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale
- h. Date(s) subject recall repairs performed;
- i. Vehicle Mileage at time of repair;
- j. Repairing dealer's or facility's name, telephone number, city and state or ZIP code; and
- k. Labor operation number (s) for subject recall repairs.

If more than one repair attempt was made or if more than one labor operation number is applicable to a subject vehicle, please include a unique record for each repair attempt or labor operation. Provide the table in Microsoft Access 2000, or a compatible format, entitled "Production Data." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

Answer 1

Data collected in response to Request 1 was collected the week of November 7, 2011 and provides information that is current to that point of collection. The data table is provided separately in Microsoft Access format, entitled "Production Data" in Appendix 1.

Mazda records indicate that the approximate total number of 2001-2004 Model Year Mazda Tribute vehicles subject to NHTSA recall number 07V-157 located in the United States is 99,390.

The table that was provided in Mazda's last response to RQ09-002 provided to NHTSA in July, 2009 and EA10-002 submitted in January, 2010 has been updated in this "updated response" to EA10-002 to provide dates for all subject repairs performed to date and includes the additions of mileage at the time of repair, the repairing dealer or facility name, city and state (dealer telephone number is not maintained in

If more than one repair attempt was made or if more than one labor operation number is applicable to a single vehicle, a unique record has been made for each such repair attempt or labor operation. In addition, if more than one part number is applied, a unique record has been made.

- As of this query, 73,146 (approximately 74%) vehicles have completed recall inspection.
- 12 (~0.1%) vehicles returned at a later date for repair of concern that resulted in more extensive
 - 11 vehicles passed initial inspection and received grease only.
 - 1 vehicle initial inspection included reseated seals and grease.
- Table 1 (also included in Appendix 1) provides a list of the 12 vehicles with repeat repairs with total days between repairs.

YIN :		J0705A	J0705B	Repeat Re J0705C	SERVED TO SERVED AND RESIDENCE	4		AND STATE OF
4F2YU08122KI <mark>1</mark> 18		FALSE	TRUE	FALSE	30705D	1st Repair	2nd Repair	Days to Retu
4F2CU08151K M69	475	TRUE	FALSE	FALSE	TRUE	21-Nov-07	07-Mar-08	107
4F2CU08161KI	110	TRUE	FALSE		TRUE	12-Jun-07	24-Jan-08	226
4F2CU09111KI <mark>/</mark> 156	799	TRUE	FALSE	FALSE	TRUE	05-Jun-07	23-Aug-07	79
1F2YU09162K 100	767	TRUE	FALSE	FALSE	TRUE	12-Jun-09	10-Jul-09	28
\$F2CZ96193K	865	TRUE	FALSE	FALSE	TRUE	03-Aug-07	28-May-09	664
F2CU091X2K 1434		TRUE	FALSE	FALSE	TRUE	15-May-07	18-Apr-10	1069
F2YU08162KI 1634		TRUE		FALSE	TRUE	16-Jun-09	17-Sep-09	93
F2YZ04194KN 115		TRUE	FALSE	FALSE	TRUE	14-Jun-07	23-Jan-08	223
F2YU09162KN 471		TRUE	FALSE	FALSE	TRUE	14-Jun-07	31-Aug-07	<u>223</u>
F2YU08102KN 304		TRUE	FALSE	FALSE	TRUE	26-Mar-09	06-Apr-09	
F2CU09182KN 152			FALSE	FALSE	TRUE	26-Jun-07	18-Dec-07	
132	-10	TRUE	FALSE	FALSE	TRUE	27-May-07	08-Jul-11	<u>175</u> 1481

Table 1 - Repeat Repair

Request 2

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

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

For subparts "a" through "f," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint). For items "e" and "f," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

Answer 2

Data collection in response to Request 2 updates information provided in response to RQ09-002 and EA 10-002 submitted in January, 2011. Investigation update includes reports collected from the last week of December, 2010 through November 7, 2011. The results provided in the Chart 2 below represents the number of reports received and includes, in some cases, multiple reports of a single

Category	Updates to EA10-002	Original EA10-002	RQ09- 002	Grand Total
a Consumer Complaint	1	20		
b Field Report	6			23
d Property Damage	4	12	5	23
	4	2	1	. 7
f Lawsuit	== <u>-</u>	1	0	1
Grand Total	11	35	8	<u>-</u> 54

Chart 2 - Request Two Data Summary

For Category "f Lawsuit" 1, the complaint (outlined in our initial response to EA10-002) has been settled and the case was dismissed on 5/20/2011

In addition to the above updates, VOQ10403993 (included with this request) was researched and customer Mary Venturon has been found to own vehicle 4F2CU09181KM56718 that she purchased as new on March 8, 2002. The vehicle was last seen by a Mazda dealer on December 29, 2004 and Recall status for 4507C is open (never completed). As report is not consistent with the alleged defect outlined above, it is not included in the above count.

Request 3

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

- a. Mazda's file number or other identifier used;
- b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report,
- Vehicle owner or fleet name (and fleet contact person), address, and telephone number; C. d. Vehicle's VIN;
- e. Vehicle's Make, model and model year;
- Vehicle's Mileage at the time of incident; f.
- g. Incident date:
- h. Incident location;
- i. Report or claim date:
- Whether a vehicle fire is alleged; j.
- k. Whether a structure fire is alleged;
- Whether property damage is alleged. If yes, please provide the alleged damage amount in US
- m. Number of alleged injuries, if any;
- n. Number of alleged fatalities, if any;
- o. Whether the alleged fire resulted in the vehicle being declared a total loss or a partial loss;
- p. Whether Mazda received a subrogation claim regarding the incident (If so, please provide the name of the business and/or person who submitted the claim, their address, and telephone number, whether the claim was been paid, and the amount paid to settle the claim);
- q. Whether a fire investigation was performed by any party, that Mazda is aware of, to determine the origin and cause (If so, please provide a copy of the report);
- Alleged origin of the fire. If the exact origin is unknown or unspecified, please provide the alleged quadrant of the engine compartment where the fire started (front left, front right, rear left, rear s. Alleged cause of the fire;
- t. Whether the incident occurred with the engine "OFF" or the engine "ON";
- u. Ignition key position at time of incident;
- v. Complaint summary;
- w. Consumer comments; and
- x. Mazda's assessment of the allegation, including causal and contributing factors and a summary of the significant underlying facts and evidence.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a preformatted table which provides further details regarding this submission.

Answer 3

The requested information, to the extent it is available, for consumer complaints, field reports, property damage claims and lawsuits in response to 'Request 2' has been updated and is provided in Appendix 3 on the enclosed CD (filename: Appendix 3-Request Number Two Data). Appendix 3 contains data responsive to both RQ09-002, EA10-002 and the "Updated" EA10-002. The 3rd column (NHTSA #) of the Access data table contains the appropriate RQ number,EA number for original submission or shows "EA10-002 Update" for new information.

In summary, Appendix 3 provides a total of 54 reports and supporting documents.

Request 4

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

Answer 4

Documents responsive to this information request related to the consumer complaints and field reports in the NNS (*) database at MNAO identified in response to request 2 are provided electronically in the folder named Appendix 4. Appendix 4 provides all documents including those that were previously submitted in response to RQ09-002 and EA10-002 and contains sub-folders for each of the document categories. Reports that correspond to the itemized list provided in Appendix 3 are titled with the Mazda file number. Any additional follow-up or documentation in regard to the file is titled with appropriate VIN involved or Mazda file number.

(*)NNS: New National System is a database system maintained by Mazda North American Operations (MNAO). It is a core information system and supports various customer service activities such as customer relations, repair inquiry, warranty claim submission and others.

Request 5

State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Mazda to date that relate to, or may relate to, the subject recall: 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. Mazda's claim number:
- b. Vehicle owner or fleet name (and fleet contact person), address and telephone number;
- d. Repair date;
- Vehicle mileage at time of repair;
- Repairing dealer's or facility's name, telephone number, city and state of ZIP code; f.
- g. Labor operation number(s);
- h. Description of part(s) replaced, and
- Comment, if any, by dealer/technician relating to claim and/or repair.

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

Answer 5

In response to request 5, a search of the Mazda Global Warranty System has been completed and the results are provided in Appendix 5 - Warranty Data. The result provides 10 claims that might meet the requirements of the alleged defect. Six of those claims have additional reports that have been provided in response to Request 2. A column has been added at the end of the data sheet to

Please note that warranty claims are submitted to Mazda by dealers to seek payment for repairs, which they have made, and often contain insufficient information to accurately determine why a repair was made, if the repair was appropriate, or even if the repair was necessary.

Request 6

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

Answer 6

Mazda Global Warranty System was used to provide an initial search of all warranty claims that may have occurred since the time of our last response to EA10-002 (December 22 to present) and to RQ09-002 previously submitted to NHTSA. The same search criterion was used for RQ09-002, EA10-002, and for this Update to EA10-002.

Initial Search Criteria:

Model Year 2001-2004

Mazda Tribute, All Models

Repair Date: December 18, 2010 through present (Extraction completed November 7, 2011).

Part number of main cause or any associated part number is any of the following:

ABS Hydraulic Unit

6765X / 67650:

ABS Control Unit

67010:

Front Wiring Harness Assembly

67069 / 67SH0:

Short Harness (Pig Tail) Repair Kit

The result of this warranty data collection was then compared to recall completion records. The sort of warranty claims for those that occurred post recall inspection and/or repair to meet the "Alleged Defect" defined on Page 2 of EA10-002 has been provided in Appendix 5 in response the Request 5.

As reported in RQ09-002 and EA10-002, for 2001 and 2002 model year Tribute vehicles, Mazda provided warranty coverage of three years or 50,000 miles, whichever occurs first. For 2003 and 2004 model year Tribute vehicles, Mazda provided warranty coverage of four years or 50,000 miles,

Mazda understands this request to pertain to vehicles after completion of Mazda Recall 4507C. With respect to the alleged defect and scope of this investigation, Mazda North American Operations provides service parts/repair warranty through our 'Replacement Parts and Accessories Warranty' that would include recall repairs against part defects or workmanship for a period of 12 months or 12,000 miles, whichever occurs first. There is no additional extended warranty that has been provided for repairs completed as part of this field service action.

<u>Request 7</u>

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

Answer 7

Mazda previously provided the below listed 4 revisions of the dealer announcement for recall 07V-157 on and after its initiation. Mazda has also provided an additional letter to dealers *as a result of the continuous monitor activity) that was published on January 26, 2011. Appendix 7 of our previous submission contains copies of all documents listed below.

- 1. Dealer Letter for R4507C Original.pdf: Original dealer notification letter for the recall 4507C(07V-157) at the initiation in April 2007 2. Dealer Letter for R4507C_rev2.pdf:
- To note a revision of part number of the ABS Module and the service pig tail kit in October 2007. Another existing ABS control module has been introduced as a repair part in order to recover the parts shortage. For service pig tail kit, Ford has newly established another pig tail kit for their demand. Because it can be usable for Mazda vehicles, it has been introduced
- 3. Dealer Letter for R4507C 2nd Notif.pdf: To note sending the 2nd owner notification letter in August 2008.
- 4. Dealer Letter for R4507C 3rd Notif.pdf: To note sending the 3rd owner notification letter in May/June 2009.
- 5. Dealer Letter for R4507C Inspection Supplement.pdf
 - ...To stress the importance of proper inspection and complete repair... Publication January, 2011.

Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Mazda. For each such action, provide the following information:

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

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

Answer 8

With the exception of standard 'recall completion monitor activities' and 'fix it right the first time' monitor, Mazda has not conducted nor has current plans to conduct additional analyses, tests, studies, surveys, simulations, investigations, inquiries and/or evaluations that relate to, or may relate to, the alleged defect in the subject vehicles.

Request 9

Furnish Mazda's assessment of the alleged defect in the subject vehicles, including:

- a. The causal or contributory factor(s);
- b. The failure mechanism(s);
- c. The failure mode(s);
- d. The risk to motor vehicle safety that is poses; and
- e. The reports included with this inquiry.

Answer 9

After a review of all information pertaining to post Recall 4507C concerns and repairs, Mazda finds that a very low rate of concern repair exists post the completion of R4507C. In addition to the low occurrence rate, the few reports of smoke, melt, or fire localized, often found by the service technician

As the agency is aware, Mazda voluntarily initiated a safety recall 4507C (registered by NHTSA as 07V-157) for 2001 through 2004 Model Year Mazda Tribute vehicles equipped with ABS in May, 2007, simultaneously with the safety recall 07S51 (NHTSA number 07V-156) for Ford Escape vehicles conducted by Ford Motor Company, which is the builder of Mazda Tribute vehicles. Certain electrical wiring harness connectors for the ABS control module were manufactured with some components either missing or with wire seals improperly installed around a power supply or ground connection wire terminal on the ABS module connector. If the seal is missing or improperly installed, over time, contamination (brake fluid spill, road spray, car wash, for examples) may enter the electrical connection. The contamination may cause corrosion of the electrical pins in the connection and may result in an electrical path between the power supply and ground pins. This may result in an illuminated ABS warning indicator, or in rare cases, the electrical connector may overheat,

In this updated response to EA10-002, Mazda has merged all reports for post recall incidents that may meet the alleged defect with those provided in response to RQ09-002 and the initial response to EA10-002. A total of 63 incidents out of the 73,146 vehicle recall completions have been identified. This provides a concern ratio of 0.08%, which is significantly less than the industry standard of customer return for service repairs. See Table 9 below.

VIN Report	VIN Qty
Repeated Recall (Appendix 1)	12
Add'l VINs (Field/Consumer) - (Appendix 2)	40
warranty (not found on others) (Appendix 5)	4
ODI / VOQ (RQ09-002&EA10-002)	7
Total Potential Repeat Occurrence	63
Recall Completion Population Repeat Occurrence Ratio	73146
Table 9 Petronic	0.08%

Table 9 – Returning Concern Ratios

The results of vehicle recalls are monitored by Mazda to identify any concerns with the completion rates, parts availability, and 'Fix It Right the First Time'. As reported in RQ09-002 and in our January, 2011 response to EA10-002, Mazda has continued to monitor the field concerns and communicated with Ford to examine the necessity of additional action. Based on the results of that monitor, Mazda published additional notification to dealers on January 26, 2011 stressing the importance of proper wire seal inspection and/or repair procedures.

As reported in EA10-002, in examining the rate of repairs during the initial recall inspection, Mazda found that less than 1% of the inspections found a concern, which was less than expected. It was Mazda's expectation that by issuance of the last dealer communication (January 26, 2011) that the initial rate of concern repair would grow and that there would be a reduction in rate of vehicles that passed inspection with no concern (Labor Operation J0705A) to the connector mat cover, seals, or connector corrosion.

There have been approximately 700 inspections completed after the January 26, 2011 letter to dealers was published and while the volume of inspections is not statistically strong enough to judge the effectiveness of the letter, we have noted an increase in problem identification and repair in the post letter population (see Table 10 below).

Labor Code	Pre 1/26/2011	Pre 1/26/2011 Rate	Post 1/26/2011	Post 1/26/2011 Rate
J0705A – Pass Inspection	67,044	92.5%	631	90%
J0705B – Seals out of Position	4,635	6.4%	44	6%
J0705C – Missing seals or wrong mat cover	197	0.3%	6	1%
J0705D – Corroded connector pins	589	0.8%	18	3%
	Table 10 De	st Dealor Lotter Lak		

Table 10 – Post Dealer Letter Labor Operation Ratio

In the post January 26, 2011 recall repairs, one vehicle that had initially passed inspection in May, 2011 returned to the dealer with a melt condition that resulted in replacement of and collection of all related parts. Those parts have been provided to Ford to be included in their part collection evaluation and analysis. Mazda has not yet received documented results of the full analysis, but will continue to work with Ford in understanding and resolution of this matter.