



Mr. Jeffrey L. Quandt, Chief  
Vehicle Control Division  
Office of Defects Investigations  
Room 5326  
National Highway Traffic Safety Administration  
400 Seventh Street, SW  
Washington, DC 20590

January 25, 2007

Re: PE06-048, NVS-213kmb

Dear Mr. Quandt:

Enclosed are Mazda's responses to the inquiries included in your letter of November 21, 2006 regarding allegations of non-crash related fires in certain 2001 – 2003 model year Mazda Tributes. As requested, duplicate copies of responses and related information are enclosed and are contained on the two enclosed CD-ROMs.

If you have any questions regarding our responses or need further information, please let me know. My telephone number is (313) 594-7778 and my e-mail address is [drobotson@mazdausa.com](mailto:drobotson@mazdausa.com).

Sincerely,

David Robertson, Group Manager  
Environmental, Safety and Powertrain  
Engineering

Encl: Two CD-R titled PE06-048, Mazda Response, 1/25/07

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400 SEVENTH STREET, SW  
WASHINGTON, DC 20590

## Mazda's response: NHTSA Inquiry NVS-213kmb, PE06-048

### Request 1

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 the following:

- a. Vehicle identification number (VIN);
- b. Make;
- c. Model;
- d. Model Year;
- e. Date of manufacture;
- f. Date warranty coverage commenced;
- g. Assembly plant where the vehicle was manufactured;
- h. Whether ABS was installed as original equipment; and
- i. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

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

### Answer 1

Mazda records indicate that the approximate total number of subject Mazda Tribute vehicles sold in the United States (the 50 states and the District of Columbia) and its protectorates and territories (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, US Minor Outlying Islands, and Virgin Islands) is 152,463 including 78,249 equipped with ABS.

The number of subject Mazda Tribute vehicles sold in the United States by model and model year is shown below:

Model	2001 MY	2002 MY	2003 MY	Total
Mazda Tribute with ABS	9,857	38,368	30,024	78,249
Mazda Tribute without ABS	45,944	11,191	17,079	74,214
Total	55,801	49,559	47,103	152,463

The requested data for each subject vehicle is provided electronically in Appendix 1 (filename: PRODUCTION DATA(PE06-048).mdb) on the enclosed CD.

### 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;
- d. Property damage claims;
- 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).

In addition, for items "a" through "f," provide a summary description of the alleged problem and causal and contributing factors and Mazda's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "e" and "f," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

### Answer 2

#### Consumer complaints:

Records identified in a search of Mazda's Customer Assistance Center files maintained by the Technical Service Department (TSD) in Mazda North America Operations (MNAO), that relate or may relate to the alleged defect are provided electronically in Appendix 2 (filename: 2007-01-26 Appendix2.doc) on the enclosed CD.

#### Field Reports:

Records identified in a search of Mazda's Technical Hotline (HL) files maintained by the TSD in MNAO that relate or may relate to the alleged defect are provided electronically in Appendix 2. No records were identified in Mazda's Product Quality Information (PQI) files maintained by the TSD.

#### Property Damage Claims, Lawsuits

Records identified in a search of Mazda's legal files maintained by the Office of Counsel and Customer Mediation in MNAO, and the Office of Legal Affairs of Mazda that relate or may relate to the alleged defect are provided electronically in Appendix 2.

### 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, 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. Incident location;
- i. Report or claim date;
- j. Whether a vehicle fire is alleged;
- k. Whether a structure fire is alleged;
- l. Whether property damage is alleged;
- m. Number of alleged injuries, if any;
- n. Number of alleged fatalities, if any;

- o. 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);
- p. 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);
- q. Alleged origin of the fire;
- r. Alleged cause of the fire;
- s. Whether the incident occurred with the engine "OFF" or the engine "ON";
- t. Ignition key position at time of incident;
- u. Complaint summary;
- v. Consumer comments; and
- w. Mazda's assessment of the allegation.

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

#### Answer 3

The requested information, to the extent it is available, for the consumer complaints, field reports, property damage claims and lawsuits in response to request 2 is provided in Appendix 3 (filename: REQUEST NUMBER TWO DATA(PE06-048).mdb) on the enclosed CD.

#### 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

Information 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 is provided electronically in the folders named Appendix 4a (filename: Appendix 4a.xls; for Consumer Complaints) and Appendix 4b (filename: Appendix 4b.xls; for Field Reports) on the enclosed CD. Information related to the property damage claims is provided in the folder named Appendix 4c. Mazda notes that it was unable to locate information concerning case number 77686202. Information related to the lawsuits is provided in the folder named Appendix 4d on the enclosed CD.

(\*)NNS: New National System is a database system maintained by Mazda North America Operations (MNAO). It is core information system and supports various customer service activities such as customer relation, repair inquiry, warranty claim submission and the 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, (a) the subject components; or (b) brake fluid leakage from the master cylinder assembly in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

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

- a. Mazda'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. Whether smoke, arcing, melting or fire is identified;
- l. Concern stated by customer; and
- m. 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 details regarding this submission.

#### Answer 5

Records located during a search of Mazda's warranty records, that relate or may relate to the alleged defect, are provided electronically in Appendix 5 (filename: 2007-01-26 Appendix5.doc) on the enclosed CD.

Mazda notes that it is difficult to accurately determine from each warranty claim whether it relates to the alleged defect or brake fluid leakage. Please note that the 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. In our opinion, the information provided in these warranty claims is insufficient to support a determination if they relate to the alleged defect or brake fluid leakage in the subject vehicles.

To the extent that the requested information is available, it is included in the reports provided electronically in Appendices 5a (filename: WARRANTY DATA (a).mdb) and 5b (filename: WARRANTY DATA (b).mdb) on the enclosed CD.

#### 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 numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by Mazda on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that 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

Information provided in response to this information request is provided electronically in Appendix 5. For 2001 and 2002 model year Tribute vehicles, Mazda provided warranty coverage of three years or 50,000 miles, whichever occurs first. For 2003 model year Tribute vehicles, Mazda provided warranty coverage of four years or 50,000 miles, whichever occurs first. There was no extended warranty coverage offered by Mazda.

Request 7

Produce copies of all service, warranty, and other documents that relate to, or may relate to: (a) the alleged defect; or (b) brake fluid leakage from the master cylinder assembly, that Mazda has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities for the subject vehicles. 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 issued a service bulletin related to the master cylinder reservoir cap on November 15, 2002, and a Repair Information (RI) on November 18, 2002. Copies of relevant documents are provided electronically in Appendix 6a (filename: Appendix 6a (TSB).pdf) and 6b (filename: Appendix 6b (RI).xls) on the enclosed CD.

Request 8

Describe, and provide circuit diagrams of, the electrical circuit that contains the ABS electronic control module (2C219) in the subject vehicles. Include in this description the other components that are powered on this same circuit, all circuit protection devices and state the normal and transient current flow through the subject ABS harness wiring and connectors.

Answer 8

Please refer to Ford's January 12, 2007, response to PE06-048. Mazda Tribute vehicles equipped with ABS contain the same ABS components and function in the same manner as Ford Escape vehicles.

Request 9

Identify all of the components in the engine compartment that may receive electrical power when the ignition key is in the off position on the subject vehicles. Identify the quadrant in the engine compartment where the component is located (front left, front right, rear left, or rear right).

Answer 9

Please refer to Ford's January 12, 2007 response to PE06-048. Mazda Tribute vehicles share a common electrical architecture with the Ford Escape vehicles

Request 10

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:

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

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

Answer 10

Please refer to Ford's January 12, 2007 response to PE06-048. Mazda transferred engineering design

responsibility to Ford when the vehicle platform was introduced in the United States for production in Ford's assembly plants.

In addition, the Technical Service Department (TSD) in MNAO has issued a report, which may relate to the alleged defect and submitted it to a MNAO Quality office representative at the Ford Kansas City Assembly Plant (KCAP) where the subject vehicles were produced. Copies of the report document and tracking sheet are provided electronically in Appendices 7a (filename: Appendix 7a.pdf) and 7b (filename: Appendix 7b.pdf).

#### Request 11

Identify and describe all modifications or changes made by, or on behalf of, Mazda in the design, material composition, manufacture, quality control, supply, or installation of the ABS electronic control module, the associated electrical connector to the ABS electronic control module, and the electrical circuit containing the ABS electronic control module from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:

- a. The date or approximate date on which the modification or change was incorporated into vehicle production;
- b. A detailed description of the modification or change;
- c. The reason(s) for the modification or change;
- d. The part numbers (service and engineering) of the original component;
- e. The part number (service and engineering) of the modified component;
- f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
- g. When the modified component was made available as a service component; and
- h. Whether the modified component can be interchanged with earlier production components.

Provide the same information for any such changes made by, or on behalf of, Mazda regarding brake fluid leakage from the brake master cylinder assembly.

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

#### Answer 11

Please refer to Ford's January 12, 2007 response to PE06-048. Mazda is not aware of any unique design or modifications for Mazda Tribute vehicles related to this information request.

#### Request 12

Produce one of each of the following:

- a. Exemplar samples of the ABS electronic control module, the associated electrical connector, and the wiring harness that includes the electrical circuit containing the ABS electronic control module;
- b. Field return samples of any subject components that exhibited smoke, arcing, melting and/or fire;
- c. Field return samples of leaking master cylinder reservoir caps;
- d. Samples of master cylinder service replacement caps; and
- e. Any kits that have been released, or developed, by Mazda for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

Answer 12

Mazda understands that Ford provided the requested parts with its January 12, 2007 submission of their response to PE06-048. Because these components are common between Mazda Tribute and Ford Escape vehicles, Mazda assumes that the parts provided by Ford are sufficient for the agency's analysis and that duplicate parts are not desired by the agency.

Request 13

State the number of each of the following that Mazda has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales, if applicable):

- a. ABS electronic control modules;
- b. Wiring harnesses that include the electrical circuit containing the ABS electronic control module;
- c. Brake master cylinder reservoir caps; and
- d. Any kits that have been released, or developed, by Mazda for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

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

Answer 13

For supplier and supplier contact information please refer to Ford's January 12, 2007 response to PE06-048. Other information in response to this information request is provided electronically in Appendix 8 (filename: Appendix 8.xls).

Mazda service parts are sold to the authorized Mazda dealers in the U.S. and Distributors in the North American Market. Mazda has no means in which model year of Tribute the service parts have been sold/installed.

Mazda is providing the total number of Mazda service parts of ABS hydraulic unit, ABS parts ass'y and front wiring ass'y, and also providing the total number of reserve tank cap ass'y, reserve tank set and brake master cylinder ass'y. The total number shows the sales record of the service parts, which have been sold from 2000 (beginning of sales) through 2006.

Request 14

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

- a. The causal or contributory factor(s);
- b. The failure mechanism(s);
- c. The failure mode(s);
- d. The risk to motor vehicle safety that it poses;
- e. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or that one or more subject components was malfunctioning; and
- f. The reports included with this inquiry.

Answer 14

Please refer to Ford's January 12, 2007 response to PE06-048. Information contained in Ford's response is equally applicable to the subject Mazda Tribute vehicles.