

Mazda North American Operations

OFFICE OF DEFECTS &  
INVESTIGATIONS

2009 DEC 16  **mazda**

Mr. Jeffrey L. Quandt, Chief  
Vehicle Control Division  
Office of Defects Investigation  
Room W48-312  
National Highway Traffic Safety Administration  
400 Seventh Street, S.W.  
Washington, DC 20590

December 16, 2009

Dear Mr. Quandt:

Enclosed is a partial response, including sample parts, from Mazda to your information request for PE09-045 (NVS-213dlr dated 10/26/09). The information is provided in duplicate, as you requested. We are not claiming confidential treatment for any of the enclosed information. As we have discussed recently, Mazda is planning to provide the final response to this inquiry no later than January 15, 2010.

If you have any questions or need further information please let me know. My telephone number is (313) 594-7778.

Sincerely,



David Robertson, Group Manager,  
Environmental, Safety & Powertrain Engineering  
Mazda North American Operations

enclosures

## Mazda's response: NHTSA Inquiry NVS-213dlr, PE09-045

### Request 1

State, by 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; and
- g. 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 2003, or a compatible format, entitled "PE09-045 PRODUCTION DATA." Enclosure, A Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

### Answer 1

Mazda records indicate that the approximate total number of subject MazdaRX-8 vehicles manufactured for sale or lease in the United States (the 50 states and the District of Columbia) and its protectorates and territories ( Guam, Northern Mariana Islands, Puerto Rico) is 38,264 in amount. To state the number by model year, MY2004 is 24,745, MY2005 is 9,977, MY2006 is 3,562.

The requested data for each subject vehicle is provided electronically in Appendix\_01 (filename: PE09-045 PRODUCTION DATA.mdb) on the enclosed CD .

### Request2

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 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; and
- 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 "d" state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint). In addition, for items "c" through "f" provide a summary description of the alleged problem and causal and contributing factors and 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\_02 (filename: Appendix02.doc) on the enclosed CD.

**Field Reports:**

Records identified in a search of Mazda's Technical Hotline (HL) files and Product Quality Information (PQI) files maintained by the TSD in MNAO that relate or may relate to the alleged defect are provided electronically in Appendix\_02 (filename: Appendix02.doc) on the enclosed CD.

**Reports involving a crash, injury, fatality and fire**

There were no records identified through the search of CAC, HL and PQI files.

**Property Damage Claims, Third-party arbitration and Lawsuits**

There were no 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.

**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),
- d. Vehicle owner's address,
- e. Vehicle owner's telephone number;
- f. Vehicle's VIN;
- g. Vehicle's make, model and model year;
- h. Vehicle's mileage at time of incident;
- i. Incident date;
- j. Report or claim date;
- k. Whether a crash is alleged;
- l. Whether a fire is alleged;
- m. Whether property damage is alleged;
- n. Number of alleged injuries, if any; and
- o. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2003, or a compatible format, entitled "PE09-045 REQUEST NUMBER TWO DATA." Enclosure, A Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

**Answer 3**

The requested information, to the extent it is available, for the consumer complains and field reports in response to Request 2 is provided electronically in Appendix\_03 (filename: PE09-045 REQUEST NUMBER TWO DATA .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 the consumer complaints and field reports in the NNS (\*) database at MNAO identified in response to Request 2 is provided electronically in the folder named Appendix\_04 (filename: Appendix04a.xls for consumer complaints and Appendix04b.xls for field reports) on the enclosed CD.

(\*) NNS: New National System is a database system maintained by 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, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

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

- a. Mazda's claim number;
- b. Vehicle owner or fleet name (and fleet contact person)
- c. Vehicle owner's address
- d. Vehicle owner's telephone number;
- e. VIN;
- f. Repair date;
- g. Vehicle mileage at time of repair;
- h. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- i. Labor operation number;
- j. Problem code;
- k. Replacement part number(s) and description(s);
- 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 2003, or a compatible format, entitled "PE09-045 WARRANTY DATA." Enclosure, A Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

**Answer 5**

Records located, by model year, during a search of Mazda's warranty records, that may relate to the alleged defect, are provided electronically in Appendix 05 (filename: Appendix05.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. 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 in the subject vehicles.

To the extent that the requested information is available, it is included in the reports provided

electronically in Appendix 05 (filename: PE09-045 WARRANTY DATA.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\_05(filename: Appendix05.doc) on the enclosed CD.

The list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions ,may relate to the alleged defect is provided electronically in Appendix\_06 (filename: Appendix\_06a.xls) on the enclosed CD.

For 2004-2006 model year MazdaRX-8 vehicles, Mazda provides warranty coverage of four years or 50,000 miles, whichever occurs first. Especially for Powertrain components of 2004-2006 model year MazdaRX-8 vehicles, Mazda provides warranty coverage of five years or 60,000 miles, whichever occurs first.

The information in response to the request of extended warranty coverage option(s) is provided electronically in Appendix\_06 (filename:Appendix\_06b.xls) on the enclosed CD.

#### **Request 7**

Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that 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.

#### **Answer7**

Mazda has not issued any service documents that relate to, or may relate to, the alleged defect in the subject vehicles. Also there are no drafts of service documents planned to issue within the next 120 days.

#### **Request 8**

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 8**

Mazda will provide an answer by January 15,2009.

**Request 9**

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 subject components, 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.

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 9**

Mazda will provide an answer by January 15,2009.

**Request 10**

Produce one of each of the following:

- a. Exemplar samples of each design version of the subject component;
- b. Field return sample of the subject component exhibiting the subject failure mode; and
- c. 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.

**Request 10**

Produce one of each of the following:

- a. Exemplar samples of each design version of the subject component;
- b. Field return sample of the subject component exhibiting the subject failure mode; and
- c. 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 10**

- a. The current clutch Pedal component is enclosed.
- b. The field return sample part exhibiting the subject failure is enclosed.
- c. Mazda has not released any service kits that relate to, or may relate to, the alleged defect in the subject vehicles.

**Request 11**

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. Subject component; and
- b. Any kits that have been released, or developed, by Mazda for use in service repairs to the subject component/assembly.

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles of which 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 11**

The information in response to this request is provided electronically in Appendix 11 (filename Appendix\_11.xls)

#### **Request 12**

Provide copies of all documents related to the joint design represented by the clutch pedal mounting bracket, the fire wall (or bulkhead) and the attaching fasteners. Include metal thicknesses, fastener types and clamp loads (or bolt torque specifications).

#### **Answer 12**

Mazda will provide an answer by January 15, 2009.

#### **Request 13**

Provide the following information regarding the design of the subject component:

- a. A computer aided design (CAD) drawing of the clutch pedal assembly including the mounting bracket;
- b. A CAD model showing the attachment of the clutch pedal assembly to the firewall (or bulkhead);
- c. All finite element analyses conducted by or for Mazda of the clutch pedal assembly mounting brackets as assembled in vehicle position, including analyses at minimum and maximum attaching bolt torques and minimum and maximum driver force input; and
- d. All design and process FMEAs (Failure Mode Effects Analysis) related to the subject components including any FMEAs related to fatigue failures.

#### **Answer 13**

Mazda will provide an answer by January 15, 2009.

#### **Request 14**

Describe in detail all symptoms the operator may experience after the clutch pedal mounting bracket fails while the consumer is driving or shifting gears.

#### **Answer 14**

Mazda will provide an answer by January 15, 2009.

#### **Request 15**

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 – include separate assessments of the risks associated with loss of clutch function and the potential for interference with brake pedal travel;
- e. Mazda's estimate, using statistical analysis of the failure data (e.g., Weibull analysis), of the percentage of subject vehicles that would experience the alleged defect within 3, 6 and 10 years of service;

- f. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and
- g. The reports included with this inquiry.

**Answer 15**

Mazda will provide an answer by January 15,2009.