



December 18, 2015

DET-15-202

Mr. Paul A. Hemmersbaugh
Chief Counsel
National Highway Traffic Safety Administration
1200 New Jersey Ave, SE
Washington, DC 20590

Re: Request for Confidential Treatment for Information Submitted Under PE15-032

Dear Mr. Hemmersbaugh,

On behalf of Isuzu Motors Limited ("Isuzu Motors"), Isuzu Technical Center of America, Inc., (collectively "Isuzu"), submits this request for Confidential Treatment for certain information submitted in response to the Information Request in PE 15-032. After careful review, Isuzu has concluded that portions of the submission are competitively sensitive and should be withheld from public disclosure under 49 C.F.R. Part 512 and Exemptions 4 and 6 of the Freedom of Information Act ("FOIA"), 5 U.S.C. §§ 552(b)(4) and (6).

Specifically Isuzu seeks confidential treatment for the following: (1) Enclosure No. 9, which contains testing, analysis and evaluations conducted with regard to this investigation, (2) Enclosure No. 10, which shows detailed production and parts change information, (3) Enclosure No. 12, which shows information regarding the source of Isuzu's parts, and (4) Enclosures No. 7-1, which reflects Isuzu's marketing strategy.

The information for which Isuzu claims confidential treatment is entitled to protection under the test announced in *National Parks & Conservation Ass'n v. Morton*, 498 F.2d 765 (D.C. Cir. 1974), because disclosure of the information would likely cause competitive harm to Isuzu. These materials reveal significant information about how Isuzu developed its design and the factors that Isuzu takes into account in engineering for the light cargo van and larger truck markets. Disclosure of Isuzu's internal analyses would allow competitors to gain insight into those decisions, and how those decisions were met in the marketplace. Competitors would be able to gain valuable competitive insight into Isuzu's techniques and its evaluative process and to avoid the need to reverse engineer or to conduct their own analyses. As such this information is entitled to protection under Exemption 4.

Additionally, Enclosure Nos. 1, 3, 4, and 5 contain personal identifying information specifying Isuzu's owner base and their contact information. Revealing such information would violate the protections afforded by FOIA Exemption 6 and place the privacy of these persons at risk.

In some instances, entire documents consist of confidential material. In other instances, the confidential material is so intertwined with the rest of the document that redaction would be impracticable. As a result, Isuzu has withheld the relevant documents from the public set rather than attempting to redact them.

If you have any questions or require additional information, please contact me at 734-582-9262 or Scott Crafard of my staff at 734-582-9250.

Sincerely,



Jeffery A. Marsee
Chief Representative
Emissions and Safety
Isuzu Technical Center of America, Inc.


Enclosures: DVD with complete submission marked as Confidential
DVD with public submission excluding confidential documents
Certificate in Support of Request for Confidentiality

Certificate in Support of Request for Confidentiality

I, Jeffrey A. Marsee, pursuant to the provisions of 49 C.F.R. part 512, state as follows:

1. I am Jeffrey A. Marsee, and I am the Chief Representative, Emissions and Safety, and am authorized by Isuzu Motors Limited ("Isuzu Motors") and Isuzu Technical Center of America, Inc., (collectively "Isuzu") to execute this Certificate on its behalf;
2. I certify that the information contained in the enclosed attachments is confidential and proprietary data, in the form of confidential business information, and is being submitted with the claim that it is entitled to confidential treatment under 5 U.S.C. §§ 552(b)(4) and (6) (as incorporated by reference in and modified by 49 CFR Part 512);
3. I hereby request that the information contained in the enclosed documents be protected permanently or until such time as the information is no longer held confidential by the company;
4. This certification is based on the information provided by the responsible Isuzu personnel who have authority in the normal course of business to release the information for which a claim of confidentiality has been made to ascertain whether such information has ever been released outside Isuzu;
5. Based upon that information, to the best of my knowledge, information and belief, the information for which Isuzu has claimed confidential treatment has never been released or become available outside Isuzu;
6. I make no representations beyond those contained in this Certificate and, in particular, I make no representations as to whether this information may become available outside Isuzu because of unauthorized or inadvertent disclosure, except as noted in paragraph 5 above; and

I certify under penalty of perjury that the foregoing is true and correct. Executed on this 18th day of December, 2015.



Jeffrey A. Marsee

December 18, 2015

DET-15-202

2015 DEC - 1 A 10:00

Mr. Bruce York
Mr. Peter Kivett
Medium and Heavy Duty Vehicles Division
Office of Defects Investigation
National Highway Traffic Safety Administration
1200 New Jersey Ave, SE
Washington, DC 20590

Re: Response to Information Request associated with PE15-032

Dear Messrs. York and Kivett,

On behalf of Isuzu Motors Limited ("Isuzu Motors"), Isuzu Technical Center of America, Inc., (collectively "Isuzu"), hereby submits the following response to the Information Request dated October 20, 2015. As discussed with the agency, Isuzu is completing its evaluation and we look forward to sharing the final assessment with the agency by mid-January, 2016.

Preliminary Objections:

Prior to responding to the Information Request, Isuzu notes that it considers the definition of "document" in the Information Request to be unreasonably broad, vague, and ambiguous, and to exceed the scope of records that might reasonably be expected to bear relevant information.

Isuzu's response to the Information Request was based on searches of locations where documents determined to be responsive to the information request would normally be found and in consultation with current personnel knowledgeable about the information requested. As a result, the scope of this search did not include, nor could it reasonably include, "all of its past and present officers and employees, whether assigned to principal offices or any field or other location, including all divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Isuzu (including all business units and persons previously referred to), who are or, in or after January 1, 2008, were involved in any way with any of the following related to the alleged defect in the subject vehicles:

- a. Design, engineering, analysis, modification or production (e.g. quality control);
- b. Testing, assessment or evaluation;
- c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
- d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited people who have the capacity to obtain information from dealers."

Isuzu construes the Preliminary Evaluation as pertaining to vehicles manufactured for sale in the United States and its territories.

Responses to Information Requests:

Request No. 1

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

- a. Vehicle identification number (VIN);
- b. Make;
- c. Model;
- d. Model Year;
- e. Subject component part number and design version installed as original equipment;
- f. Date of manufacture;
- g. Date warranty coverage commenced; and
- h. 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 2010, or a compatible format, entitled "PE15-032 Enclosure I Production Information." A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

Response No. 1

Please refer to the table in Microsoft Access 2010 (Enclosure No. 1), entitled "PE15-032 Enclosure 1 PRODUCTION DATA" for more details. Isuzu has provided production and additional information beginning with MY 2011. The first field report provided by NHTSA in the Opening Resume related to a MY 2011 vehicle.

A summary of the subject vehicles is set out in the following table. The walk-in vans were first put into field service in MY 2012. Production of MY 2016 N-Series Diesel trucks began in April, 2015. Production of MY 2016 N-Series Gas trucks began in September, 2015. The production information is based on information as of October 30, 2015.

MAKE	BODY	ENG.	GVW	MODEL	11MY	12MY	13MY	14MY	15MY	16MY	S.TTL
ISUZU	TRUCK	DIE	12000	NPR-12K	2,639	577	1,179	1,119	242	-	5,756
			13000	NPR-13K	-	4	4	362	172	-	542
			14500	NPR-HD	3,743	3,500	4,191	4,955	5,491	3,736	25,616
			16000	NPR-XD	-	-	-	-	1,159	741	1,900
			17950	NQR	1,498	1,364	1,880	2,867	2,437	1,716	11,762
			19500	NRR	1,224	896	2,017	2,434	2,281	2,972	11,824
	GAS	12000	NPR-12K(EFI)	-	2,026	840	1,644	2,179	353	7,042	
		14500	NPR-HD(EFI)	-	3,474	2,481	3,794	5,776	808	16,333	
	WV	DIE	12000	NPR-12K(WV)	11	723	1,903	592	579	-	3,808
			13000	NPR-13K(WV)	-	151	252	2	0	-	405
					9,115	12,715	14,747	17,769	20,316	10,326	84,988

Request No. 2

State the number of each of the following, received by Isuzu, or of which Isuzu 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;
 - d. Reports involving a fire;
 - e. Property damage claims;
 - f. Third-party arbitration proceedings where Isuzu is or was a party to the arbitration; and
 - g. Lawsuits, both pending and closed, in which Isuzu is or was a defendant or codefendant.
- For subparts "a" through "f, / g," 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, / g," provide a summary description of the alleged problem and causal and contributing factors and Isuzu's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "e" and "f, / g," 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.

Response No. 2

Isuzu searched the following data sources within Model Years 2011-2016:

- CATS: Customer Relations Center database
- TAL: Techline/Technical Assistance database
- FPR: Field Product Report database
- TIR: Technical Information Report database
- Legal Department files

Isuzu searched the CATS, FPR, TAL, and TIR databases using the following words with an "or" convention:

- Wheel
- Bearing
- Hub
- Knuckle
- Spindle

For the TAL database, Isuzu used the labor codes in Enclosure No. 6 to further filter the data. Isuzu also individually reviewed all Legal Department claims involving an N-Series vehicle within the subject population.

The responses are based on information in these data sources as of September 30, 2015.

2-a: Consumer Complaints (CATS): 6

2-b: Field reports (TAL and FPR) and Technical Information Reports: 15 TALs and 14 FPRs. Isuzu has also identified 160 TIRs, each of which is duplicative of a TAL, FPR or warranty claim. All 189 reports have been included with Enclosure No. 4.

2-c: 0

2-d: 0, A few of the TIRs refer to smoke from the wheel hub area, but no fires resulted.

2-e: 0

2-f: 0

2-g: Isuzu has received one lawsuit alleging breach of warranty under New Jersey law and the Magnusson Moss Warranty Act, [REDACTED] v. Isuzu Commercial Truck of America, Inc., No. CAM-L-2396-14 (N.J. Superior Court, Camden County 2014). Although the lawsuit does not include any claim with regard to wheel bearings, an underlying customer complaint (CATS) with regard to the same vehicle does reference wheel bearings. A copy of the lawsuit is included in Enclosure No. 4 and has been resolved with the customer.

Isuzu has also included in Enclosure No. 4 additional correspondence regarding a claim for lost income relating to an alleged wheel bearing failure.

Request No. 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. Isuzu'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. Report or claim date;
- i. Whether a crash is alleged;
- j. Whether a fire is alleged;
- k. Whether property damage is alleged;
- l. Number of alleged injuries, if any; and
- m. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA." A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

Response No. 3

Please refer to the table in Microsoft Access 2010 (Enclosure No. 3), entitled "PE15-032 Enclosure 3 Field Information."

Request No. 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 Isuzu used for organizing the documents. Describe in detail the search methods and search criteria used by Isuzu to identify the items in response to Request No. 2.

Response No. 4

Enclosure No. 4 includes the back-up documentation, sorted by data source, underlying the data submission in response to Request No. 2.

Request No. 5

State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Isuzu 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. Isuzu's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g. Labor operation number;
- h. Problem code;
- i. Replacement part number(s) and description(s);
- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA." A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

Response No. 5

Please refer to the list in Microsoft Access 2010 (Enclosure No. 5), entitled "PE15-032 Enclosure 5 Warranty Data." The responses are based on information in these data sources as of September 30, 2015.

Request No. 6

Describe in detail the search methods and search criteria used by Isuzu to identify the claims 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 whether the trouble codes are automatically reported to the warranty database electronically or manually entered into the warranty database by a claims administrator.

Response No. 6

Isuzu searched its warranty database using labor codes in order to identify the claims in response to Request No. 5. Isuzu's list of labor codes searched is included in Enclosure No. 6. Isuzu also applied five separate words as search criteria, with an "OR" convention between the text:

- Wheel
- Bearing
- Hub
- Knuckle
- Spindle

Isuzu also screened its warranty data with related labor codes. A list of Isuzu warranty labor codes is attached in Enclosure No. 6.

Isuzu has provided all warranty claims found using the labor codes listed above. Isuzu has included in Enclosure No. 6 its Warranty Labor Time Guide, which provides the trouble codes. The trouble codes are manually entered by a claims administrator at the dealerships.

Request No. 7

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

Response No. 7

A description of the terms and conditions of the warranties and extended warranty options are provided in Enclosure No. 7:

- Enclosure No. 7-1 explains Isuzu's extended warranty options and provides data on the number of customers who have elected this coverage. Isuzu's extended warranty does not cover the subject component.
- Enclosure Nos. 7-2 – 7-7 include the warranty information booklets for the subject vehicles.

Request No. 8

Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Isuzu 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 Isuzu is planning to issue within the next 120 days.

Response No. 8

The owner's manual and the relevant section of the service manual for the subject vehicles are provided in Enclosure No. 8. Per the instructions, the wheel bearing grease should be changed

every 24 months or 30,000 miles. Dealer technicians are trained in the appropriate way to inspect wheel bearings and to replace the grease when required by the service schedule. Isuzu's service manual and training material is provided in Enclosure No. 8.

Isuzu is not planning to release any field communications within the next 120 days.

Request No. 9

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, Isuzu. 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.

Response No. 9

Isuzu identified a potential trend regarding wheel bearing failures in April 2014. At the time, Isuzu evaluated the manufacturing records to ensure that the hub nuts had not been over-torqued. Isuzu was already in the course of implementing a change to strengthen the attachment of the hub cap to the wheel hub, which also had the potential to reduce possible contamination into the wheel hub.

Isuzu continued to monitor the market. When wheel bearing concerns did not abate, the company tried to duplicate a wheel bearing seizure by inserting salt water into the wheel hub. This testing, completed in May 2015, concluded that salt water intrusion could potentially contribute to wheel bearing failure.

Upon review of the results, Isuzu conducted a field survey in the United States to see if water was intruding into the wheel hub. The field survey reviewed stored vehicles at the port as well as in-use vehicles at dealerships. The survey did not find water in the bearing grease but did find various other concerns relating to the grease. Dealerships stated that these concerns were resolved once the original grease was replaced with higher-temperature grease.

Returned parts analysis conducted after the survey revealed that the temperature of the grease appeared to exceed 200°C on two vehicles that experienced bearing seizure. Isuzu conducted downhill testing to revalidate that the grease conformed to the original specifications. Isuzu is currently conducting additional evaluations with regard to the actual braking heat in certain vehicles and the impact on the wheel bearings.

Specifically:

1. Isuzu is conducting testing to measure the brake pad temperature in two 14.5K GVWR diesel trucks.
2. The wheel bearing supplier is conducting testing to induce wheel bearing seizures in order to confirm that high temperature circumstances are leading to bearing failure.
3. Isuzu is additionally conducting computer simulations showing that the outer bearing becomes less lubricated as the grease degrades.

Copies of the test reports and field survey are provided in Enclosure No. 9. Isuzu will discuss the results of further testing with the agency when completed in mid-January.

Request No. 10

Describe all modifications or changes made by, or on behalf of, Isuzu in the design, material composition, manufacture, quality control, supply, or installation of the subject component, 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 number(s) (service and engineering) of the original component;
- e. The part number(s) (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 Isuzu is aware of which may be incorporated into vehicle production within the next 120 days.

Response No. 10

A list of engineering changes to the wheel hub and related assembly is provided in Enclosure No. 10.

Request No. 11

Produce one of each of the following:

- a. Exemplar samples of each design version of the subject component;
- b. Field return samples of the subject component exhibiting the subject failure mode; and
- c. Any kits that have been released, or developed, by Isuzu for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

Response No. 11

An illustration of the wheel hub and related assembly is provided in Enclosure No. 11.

Request No. 12

State the number of each of the following that Isuzu 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 cutoff date for sales, if applicable):

- a. Subject component; and
- b. Any kits that have been released, or developed, by Isuzu 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 Isuzu is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

Response No. 12

A summary of service part sales by model and model year as of October 30, 2015 is provided in Enclosure No. 12, along with the supplier information.

Request No. 13

Furnish Isuzu'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. The reports included with this inquiry.

Response No. 13

Isuzu's assessment to date suggests that wheel bearing failures may be related to heat levels generated at the brake rotors in certain vehicles. Isuzu is in the process of confirming this preliminary assessment.

Enclosure No. 13-1 shows the various N-Series vehicles, and the size of the bearings and disc brakes installed in them. The brake rotor temperatures for the walk-in vans tend to be higher because those vehicles are predominantly used as delivery vehicles, with frequent brake application. The 14.5K GVWR diesel truck is the largest subject vehicle with the 293 dia.X40 disc brake.

Enclosure No. 13-2 shows the warranty rates by model and model year. The warranty data confirms that wheel bearing failures are associated with the 14.5K GVWR diesel trucks and the walk-in vans. Warranty claims associated with the other N-Series vehicles are de-minimus.

The maintenance schedule for these vehicles mandates replacement of the grease every 24 months or 30,000 miles. In many cases, the wheel bearings and/or the grease have been replaced based upon visible inspections identifying burnishing on the wheel bearings. Incidents of wheel bearing seizure have largely occurred between 20,000 and 60,000 miles. Discussions with the customer responsible for the largest number of warranty claims associated with the 14.5K GVWR diesel trucks reveal that the customer was not, until recently, routinely replacing the grease as stated in the service schedule.

Isuzu does not believe this condition gives rise to an unreasonable risk to safety. In those cases where the wheel bearing has seized, the vehicle may continue to be driven for a number of miles, there tends to be a high-pitched squealing noise from the wheel hub, and the brake and ABS warning indicators may illuminate (with the rear brakes remaining operative). Drivers have been able to reach the roadside or other locations safely and there have been no reports of accidents or injuries.

Isuzu expects to complete its assessment by mid-January, at which point the company will confer with NHTSA as to an appropriate resolution of this issue.

If you have any questions or require additional information, please contact me at 734-582-9262 or Scott Crafard of my staff at 734-582-9250.

Sincerely,



Jeffery A. Marsee
Chief Representative
Emissions and Safety
Isuzu Technical Center of America, Inc.

Enclosures