

July 7, 2005

received  
7/7/05

Mr. Ronald Medford  
Senior Associate Administrator for Motor Vehicle Safety  
National Highway Traffic Safety Administration  
400 Seventh Street, S.W.  
Washington, DC 20590

05 V-317  
(2 pages)

Dear Mr. Medford:

Re.: Submission of Part 573 report for 2004 and 2005 model year Mazda RX-8 vehicles

Pursuant to Part 573 of Title 49 of the Code of Federal Regulations, "Defect and Noncompliance Reports," Mazda North American Operations (MNAO), on behalf of Mazda Motor Corporation of Hiroshima, Japan (Mazda), submits the following information concerning a safety-related recall action that it is initiating.

Sec. 573.6 (c)(1):

Mazda Motor Corporation with Designated Agent:

David G. Robertson  
Manager,  
Environmental and Safety Engineering  
Mazda North American Operations  
1500 Enterprise Drive, Allen Park  
Michigan 48101-2053

Sec. 573.6 (c)(2):

Some 2004 and 2005 model year Mazda RX-8 vehicles built between February 2003 and June 30, 2005 with the Vehicle Identification Number (VIN) range between JM1FE17\*\*\*0100087 and JM1FE17\*\*\*0157979

Sec. 573.6 (c)(3):

Approximately 56,000 vehicles

Sec. 573.6 (c)(4):

Unknown.

Sec. 573.6 (c)(5):

If an RX-8 is parked and the engine is operated at high RPMs for an excessive length of time, some of the parts around the exhaust system can melt and produce a variety of malfunctions. The problems caused by the excessive heat build up can range from inoperative oxygen sensor, neutral switch and back up lights, problems with the parking brakes, malfunctions of the gas gauge and in the worst case, possible fuel leaks resulting from heat damage to the fuel tank. To date there have only been two reports of fuel leaks and no reports of fires as a consequence to this defect.

Sec. 573.6 (c)(6):

Mazda first became aware of this matter as a result of field reports and owner reports in June 2004. Our initial investigation identified some melted components on the upper part of the fuel tank or deformation of the fuel tank as the likely cause of the problems. We also discovered some other locations around the exhaust pipe where excessive heat buildup had caused melting or deformation of plastic parts that resulted in failures to the circuit that powers the oxygen sensor, the neutral switch and the rear lamps. Additionally, we discovered that the parking brake line could be damaged as a result of excessive heat buildup.

However, we were not able to identify the root cause of the excessive heat levels. The problem did not occur under the full range of normal use, including high speed driving and long uphill runs that could be expected to raise the temperature of the exhaust pipe.

Eventually we determined that if the battery ran down and the vehicle was jump started, the fail safe function that would reduce high engine RPMs could be temporarily overridden, allowing the engine to idle at very high RPMs even when parked. This could occur if the vehicle was not turned off and restarted after jump-starting it. We also discovered that excessive heat could build up if the vehicle was parked and a driver maintained pressure on the accelerator pedal for a long period of time or if the vehicle was parked and there was a malfunction in the vehicle electric throttle control system that allowed the engine speed fail safe function to be overridden. All of these conditions could generate the heat buildup that could eventually lead to the problems identified earlier in this report.

In addition, we also determined that the heat resistance of the plastic fuel tank was not adequate to handle an excessive heat buildup.

On June 30, 2005, Mazda determined that this condition constituted a safety related defect and that a recall campaign is required.

Sec. 573.6 (c)(7):

Not Applicable

Sec. 573.6 (c)(8):

Owners of record will be notified of the defect by first class mail in August 2005 and be instructed to bring their vehicle to Mazda dealer. Repair will be performed at no cost to the vehicle owner.


A copy of the reimbursement plan to be sent to owners and dealers as an attachment to the owner notification letter will be provided when it becomes available. With respect to reimbursement, customers will be reimbursed based on the submission of a receipt indicating the amount paid by the customer to remedy this noncompliance.

Sec. 573.6 (c)(9) & (10):

A copy of the notification letter to owners will be provided when it becomes available.

Sec. 573.6 (c)(11):

Mazda has assigned recall number 3305G to this action.

Sincerely yours,  
Mazda North American Operations  
*Daniel V. Ryan*  
  
David G. Robertson  
Manager,  
Environmental & Safety Engineering