OMB Control No.: 2127-0004

# Part 573 Safety Recall Report

## 16V-793

**Manufacturer Name:** Mazda North American Operations

Submission Date: OCT 26, 2016 NHTSA Recall No.: 16V-793 Manufacturer Recall No.: 0516J



#### **Manufacturer Information:**

Manufacturer Name: Mazda North American Operations

Address: 1025 Connecticut Avenue, NW

Suite 910 Washington DC 20036

Company phone: 800-222-5500

## **Population:**

Number of potentially involved: 69,447 Estimated percentage with defect:

#### **Vehicle Information:**

Vehicle 1: 2004-2008 Mazda RX-8

Vehicle Type: LIGHT VEHICLES

Body Style: 4-DOOR Power Train: GAS

Descriptive Information: Plant information; Hiroshima plant of Mazda Motor Corporation in Japan.

Production Dates: APR 10, 2003 - FEB 08, 2008

VIN Range 1: Begin: JM1FE173540100053 End: JM1FE173340140891 VIN Range 2: Begin: JM1FE173350140892 End: JM1FE173950161178 VIN Range 3: Begin: JM1FE173760200013 End: JM1FE173660207471 VIN Range 4: Begin: JM1FE173870207473 End: JM1FE173570214011 VIN Range 5: Begin: JM1FE173580214012 End: JM1FE173980216619

Not sequential ■ Not sequential

Not sequential Not sequential ☐ Not sequential

## **Description of Defect:**

Description of the Defect: Mazda is recalling certain MY 2004-2008 RX-8 vehicles manufactured from

April 10, 2003 through February 18, 2008. Due to insufficient performance of heat resistance on top of the fuel tank, the fuel pump rings may deteriorate by exposure to heat from the engine and exhaust pipe. Therefore, continuous use may lead to eventual cracking of the fuel pump rings and subsequent fuel leakage. Note that a saddle-type fuel tank is used with two pump rings, one for the main fuel pump and the other is for the sub-tank fuel transfer pump

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: If there is an ignition source near the vehicle, fuel leakage may result in

increased risk of fire.

Description of the Cause: NR

Identification of Any Warning NR that can Occur :

## **Supplier Identification:**

## **Component Manufacturer**

Name: Kautex Japan

Address: Yano-shin-machi 1-3-50,

Aki-ku, Hiroshima FOREIGN STATES

Country: Japan

### **Chronology:**

September 16, 2013 Mazda received the first field report and started an investigation.

January 30, 2014 As a result of investigation of the returned part, Mazda decided that improper maintenance was the cause of failure and the investigation was closed.

October 8, 2014 Mazda received a second field report and started an investigation of returned parts.

January 26, 2015 As a result of additional field parts collections, five (5) cracked pump rings were confirmed.

February 2015 to June 2015

Mazda continued to investigate known good parts from the field, the production mold, and other potential causes of the failure.

July 3, 2015 Mazda confirmed that the crack occurred because of deterioration of the plastic material and it was clear that the color of failed parts was different from that of good parts.

September 14, 2015 It was determined that the color change of the pump ring was caused by prolonged exposure to heat.

November, 2015 As a result of the investigation, creep damage was confirmed due to heat and stress.

December 8, 2015 Mazda confirmed that adding thermal insulation reduced the potential of heat exposure damage.

March, 2016 Mazda started durability testing under the most severe condition.

May, 2016 Mazda confirmed that thermal insulation is sufficient to prevent recurrence under the most severe conditions. The range of affected vehicles were also verified.

June, 2016 Mazda continued to monitor occurrences in the field.

Mazda decided to conduct a recall for affected MY 2004-2008 RX-8 vehicles. October 24, 2016

#### **Description of Remedy:**

Description of Remedy Program: Owners of record will be notified of this issue and instructed to take their vehicles to a Mazda dealer for repair. The repair will be to replace the fuel pump ring set with a new one and add a thermal insulation pad to the fuel tank. The repair will be performed free of charge to vehicle owners. Mazda will conduct the field action for this recall campaign in two phases: (1) First, Mazda will notify all vehicle owners that a recall campaign will be conducted, and (2) secondly, vehicle owners will be re-notified to have the

repair performed when repair parts are available.

How Remedy Component Differs NR from Recalled Component:

Identify How/When Recall Condition NR was Corrected in Production :

### **Recall Schedule:**

Description of Recall Schedule: A draft of the planned owner letter will be provided when it becomes

available.

Planned Dealer Notification Date : NR - NR Planned Owner Notification Date : NR - NR

<sup>\*</sup> NR - Not Reported