

## Chronology of Defect

### **Fuel leak may occurred from fuel pump mounting rings on MY 2009 through MY2011 RX-8 and MY 2006 through 2007 MazdaSpeed6**

July, 2017: Mazda received the first field report of “The Fuel leak occurred by out of target” from outside the US market. The part supplier and Mazda started to investigate the root cause.

Note: the subject population at this time was included in NHTSA Recall 16V793 which affected 2004MY through 2008MY Mazda RX-8

August, 2017 through October, 2017: Mazda received second and third field reports from outside the US market. As a result of part investigation in the first case, creep fatigue damage on the fuel pump ring was confirmed through heat insulator discoloration by heat. In addition, the subject vehicle was a performance-modified vehicle. Based on the heat insulator discoloration estimation and thermal testing result, the temperature of surrounding fuel tank was higher than a normal vehicle. Accordingly, Mazda judged the cause as excessive heat exposure due to vehicle modifications. In the second case, the parts experienced the same condition but Mazda could not identify why excessive heat exposure occurred. In the third case, Mazda could not investigate the root cause due to unavailable part and unknown vehicle information. Mazda judged to monitor the field for more information.

April, 2018 through December, 2018: Mazda received 4<sup>th</sup> through 8<sup>th</sup> field reports from outside the US market, based on the part investigation the creep fatigue damage on the pump ring was confirmed but the cause of excessive heat exposure was still unknown. Mazda decided to conduct a vehicle go-and-see whenever subject vehicles visited a Mazda dealer for related concerns.

December, 2018: Mazda conducted employee surveys to confirm the difference in the fuel pump ring between normal and modified vehicles, as well as starting the re-validation of heat efficiency and material force testing.

February, 2019: Based on the employee surveys and part investigation, Mazda confirmed creep fatigue damage had occurred on the fuel pump ring in normal vehicles.

March, 2019 through August 2019: Mazda received 9<sup>th</sup> through 14<sup>th</sup> field reports from outside the US market.

September, 2019: Based on the re-validation result for RX-8, Mazda suspected insufficient margin of heat resistance performance. Therefore, the heat and material force margin study was expanded for other models.

October, 2019 through December 2019: Mazda received 15<sup>th</sup> through 18<sup>th</sup> field reports from outside the US market.

February, 2020: Based on the re-validation result, certain Mazdaspeed6 vehicles were also suspected to have insufficient material strength margin. Mazda began to study the effect of vehicle

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usage and environmental exposure factors on fuel pump ring deterioration.

June, 2020 through July 2020: Mazda received 19<sup>th</sup> through 20<sup>th</sup> field reports from outside the US market.

August, 2020: Based on the result of studying vehicle usage and environmental exposure factors, Mazda determined vehicles in any market may experience the defect. Mazda started to assess the necessity of proactive field action.

September, 2020 through August, 2021: Mazda received 21<sup>st</sup> through 31<sup>st</sup> field reports from outside the US market.

September, 2021: Considering the nature of the defect's root causes, Mazda was concerned about a possible increase in cases caused by this defect in the future. Accordingly, Mazda decided to judge whether to take proactive field actions.

September 20, 2021: Mazda held a Quality Audit Committee meeting to review all available information to date. Out of an abundance of caution, Mazda has determined to conduct a proactive field action on certain MY2009 through MY2011 RX-8 and MY2006 through 2007 Mazdaspeed6 vehicles in the US and US Territories.