- On June 16, 2016, through active field report monitoring, it was discovered that two Ram vehicles with Cummins 6.7L Turbo Diesel engines experienced fires which appeared to originate in the area of the water pump.
- On June 27, 2016, the FCA US LLC ("FCA US") Vehicle Safety and Regulatory Compliance ("VSRC") organization opened an investigation due to the two fires, which were analyzed and found to be of same origin and failure mode.
- On July 14, 2016, Cummins representatives reviewed the two returned water pumps at the Chrysler Technical Center. These pumps were then sent to Cummins for analysis on August 31, 2016.
- On September 28, 2016, the FCA US VSRC was notified of a third potentially related fire.
- On October 12, 2016, FCA US VSRC investigators inspected the vehicle involved in the third fire at the loss location.
- On October 18, 2016, an FCA US engineering team began efforts to duplicate the failure mode using warranty returned water pumps.
- On November 15, 2016, the FCA US Center of Excellence ("CoE") Engineering team became engaged with the investigation to help identify failure modes and corrective actions for quality improvement.
- On December 6, 2016, the FCA US engineering team started to collect warranty returned water pumps that displayed coolant leak through the nose of the water pump and specific characteristics of a bearing failure. These pumps were utilized during the attempt to duplicate the failure mode.
- On December 19, 2016, a returned engine from a fire related to the water pump failure was returned to the FCA US Quality Engineering Center and reviewed by FCA US engineering and Cummins representatives. Analysis revealed the origin to be similar to prior incidents (related to water pump failure).
- From January 20, 2017, through January 26, 2017, testing of the warranty returned parts was completed. No combustion occurred during testing, however temperatures were recorded at the water pump housing of 680˚ C.
- From February 7, 2017, through July 21, 2017, the FCA US VSRC monitored field reports for additional inputs.
- On August 7, 2017 testing was re-initiated to examine the warmer ambient summer conditions.
- On August 10, 2017, the FCA US engineering team recreated the fire using a warranty return water pump at the FCA US Chrysler Proving Grounds, demonstrating the water pump is capable of producing sustained combustion.
- On September 5, 2017, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.