

FCA US LLC Chronology  
Water Intrusion into the ABS Module  
Submitted on October 15, 2015

- On June 20, 2014, the FCA US LLC (“FCA US”) Quality organization alerted the Vehicle Safety and Regulatory Compliance (“VSRC”) organization of warranty concerns relating to ABS light illumination on certain 2014 MY Dodge Journey (“JC”) vehicles.
- On July 1, 2014, the 2014 MY ABS modules were put on retention at the Quality Engineering Center (“QEC”) where returned parts would be analyzed using the Parts Return Analysis System.
- On August 28, 2014, the VSRC opened an Investigation.
- From July 2014 through January 2015, approximately 90 ABS modules were returned to the QEC and analyzed.
- Of the approximately 90 returned ABS modules analyzed, approximately 40% indicated a failure due to water intrusion into the module, even though the module and connector is a fully sealed design.
- From June to February 2015 the VSRC monitored warranty claims and looked for returned parts that would give a good indication of the problem, including how and when the condition could occur.
- In February 2015, investigation showed, the ABS and ESC systems could be disabled as a result of water intrusion into the ABS module. At this time, the source of the water intrusion into the module was unknown.
- When the ABS and/or ESC systems become disabled, the corresponding MIL(s) will be illuminated within the instrument cluster. Most vehicles experiencing the ABS light also experienced an ESC MIL illumination.
- In late February 2015, analysis showed that water intrusion into the ABS module was believed to originate from the right strut tower mounted ground eyelet. A review of harness change history showed that dual wall shrink wrap was added to the ground eyelet for the start of the 2012 MY. In April 2012, a Common Change Document was issued to change from Dual wall to single wall shrink wrap, possibly allowing water to pool and migrate thru the wire and into the connector at the ABS Module.
- On February 14, 2015, the wiring harness was put on retention at the QEC to determine if water was potentially wicking through the ground strap and collecting in the ABS module.
- On August 11, 2015, the VSRC confirmed that water management off the windshield allowed water to stream across the strut tower and onto two ground eyelets, where it collected within the shrink wrap. One of the affected eyelets supported two ground wires to the ABS connector.
- The eyelets are oriented vertically, at approximately the six o’clock position.
- Right-hand drive vehicles are not affected because their ground eyelets are on the left strut tower, which does not directly expose them to windshield water run-off.
- On August 15, 2015, upon receiving a wiring harness from the QEC from a vehicle with reported ABS and ESC lights on, the FCA US VSRC was able to confirm, via laboratory analysis that water was wicking through the casing of the wire, through to the connector and into the ABS module.
- By August 28, 2015, there were approximately 72 field returned parts diagnosed out of 212 (37%) that indicated moisture inside the ABS module.
- The suspect period was established as April 21, 2012 (Start of Production for the 2012 MY) to April 14, 2015 when the wiring harnesses were revised to re-introduce the Dual-wall heat shrink wrap to the ground eyelets at Toluca Assembly Plant.
- As of September 28, 2015, FCA US has identified approximately 306 CAIRs related to ABS/ESC lights, zero VOQs, and 72 PRAS reports confirmed as ABS Module water intrusion.
- On October 9, 2015, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.