FCA US LLC Chronology
220 Amp Alternators
Submitted on October 11, 2016

- On July 7, 2015, the FCA US LLC ("FCA US") Vehicle Safety and Regulatory Compliance ("VSRC") organization opened an investigation as a result of reports of alternator failure by fleet customers.
- During the course of this investigation previous field inspections performed by FCA US Product Analysis and engineering on fleet vehicles were reviewed and analyzed. These previous field inspections were informative in that the issue complained of appeared to be similar to the issue under investigation. The conclusion of the prior inspections was that these fleet vehicles were improperly handled by the vehicle upfitter and that the single alternator the vehicle was originally built with was insufficient for the increased demand of these upfitted fleet vehicles. After inspection the vehicles were equipped by the upfitter with dual alternators and the condition did not reoccur. FCA US performed inspections on January 8, 2012, in Orlando Florida; January 24, 2012, in Orlando Florida; and September 17, 2012, in Long Beach California and Los Angeles California.
- Between July 2015 and April 2016 the investigation continued and field returned parts were requested from a fleet customer.
- On April 14, 2016, alternators that had not failed were returned from a fleet customer for review and given to the supplier for testing in an attempt to use current vehicle mileage and alternator condition to estimate the expected life remaining.
- Between April 14, 2016 and August 26, 2016, continued investigation revealed that Ram 2500 trucks ("DJ") and certain Dodge Charger ("LD") police fleet vehicles may experience a duty cycle similar to the heavy duty trucks and experience a similar failure mode.
- On September 20, 2016, thermal fatigue testing was completed on the alternators returned in April 2016. The testing performed on two units completed with failures at 5,883 cycles (Unit #2) and 5,513 cycles (Unit #5). Effective October 2014, new parts are tested to a test target of 10,000 cycles but with these parts already having experienced years of use in the field the testing was done to replicate failure mode. Failure in both units was a shorted diode with x-ray analysis showing melted solder.
- As of September 30, 2016, FCA US identified approximately 42 CAIRs, one VOQ and 16 field reports related to this issue.
- FCA US has identified approximately 300 instances of alternator failure, smoke and/or fire from fleet customers.
- As of September 30, 2016, total warranty is 1,246 at 13.28c/1000.
- As of September 30, 2016, FCA US is aware of one injury potentially related to this issue.
- On October 04, 2016, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.