

FCA US LLC Chronology
Power Steering Return Hose Retention 2015 MY MK Vehicles
Submitted on December 22, 2015

- On September 4, 2015, FCA US LLC (“FCA US”) opened an internal investigation into three incidences of vehicle fires on 2015 MY Jeep Compass and Jeep Patriot (“MK”) vehicles.
- All three failures took place at low mileage, 30 miles, 37 miles, and 50 miles respectively.
- All three vehicles were reported to have been executing parking maneuvers prior to the event.
- On September 8, 2015, engineering analysis of the field inputs determined the most likely failure mode to be a power steering hose leak.
- On September 9, 2015, a review of returned warranty parts identified potential failure modes.
- Continued analysis of warranty returned parts and field monitoring indicated a potential assembly plant process error, which could result in a power steering hose leak.
- On September 17, 2015, Belvidere Assembly Plant (“BVAP”) provided information regarding the power steering installation process.
- On October 2, 2015, FCA US engineering began read across of field input in prior model years.
- On October 20, 2015, read across confirmed no similar failures had taken place in prior model years.
- On October 21, 2015, vehicle level testing ruled out other potential suspect failure modes. The root cause was determined to be an incorrectly placed hose clamp, which can result in a detachment of the low pressure return hose, causing a large volume leak.
- This hose clamp could be improperly positioned if the operator did not follow procedure and did not slide the hose clamp into its appropriate location.
- On November 5, 2015, FCA US was notified of an additional failure in China, with 47 km (29 miles) on the vehicle. The China vehicle experienced only minor damage, confirming that the root cause was the misplaced hose clamp.
- On November 12, 2015, FCA US was notified of another failure in China (155 km / 96 miles), also with minor damage resulting from a misplaced hose clamp. Root cause was determined to be an incorrectly positioned hose clamp on the return power steering hose.
- If this condition is present, it may result in a power steering fluid leak or a vehicle fire very early in the life of the vehicle.
- Warranty data shows this misbuild condition becoming most prominent in the month of January 2015.
- This corresponds with a line balancing operation, which relocated the station during this time.
- Further investigation found that during the line balancing operation, the downstream check for proper hose clamp placement was inadvertently dropped.
- The suspect period was concluded on May 11, 2015, with reintroduction of downstream validation at BVAP to inspect for proper hose clamp placement.
- On December 15, 2015, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.