## FCA US LLC Chronology 2014-2018MY JC CAN-C U0001 Fault Reaction

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- In October, 2017, FCA US LLC ("FCA US") Powertrain Engineering recorded a test observation
  regarding the inability to cancel cruise control when the CAN-C bus was fully disabled (no
  communication among any control modules, indicated by a U0001 diagnostic code). This testing
  was conducted under a recently upgraded validation protocol; no such observations are known from
  past testing.
- On October 06, 2017, FCA US Powertrain Engineering Torque Security team advised the FCA US
   Vehicle Safety and Regulatory Compliance ("VSRC") office of the observation and a preliminary
   safety investigation (Phase 0) was opened. The FCA US VSRC Product Investigations Team initiated a
   two-part investigation approach: understand the technical aspects of the failure and conduct a
   comprehensive study of all available records to determine whether this type of event had been
   observed in the field among potentially affected vehicles.
- On March 02, 2018, the first and only identified field incident possibly associated with this condition
  was submitted to the National Highway Traffic Safety Administration ("NHTSA") in the form of a
  Vehicle Owner Questionnaire that described an event matching some of the characteristics
  associated with the test observation. This potential field event occurred in a 2017 MY Dodge
  Journey, in use at the time as an Avis rental vehicle.
- On March 05, 2018, the FCA US VSRC requested that Customer Care contact the individual who
  reported the incident to NHTSA. This information was relayed to engineering for their opinion of the
  relevance of the incident to the open investigation. Additional conversations between the customer,
  FCA US, and NHTSA have also taken place.
- On March 16, 2018, based on that single unconfirmed incident the VSRC product investigations team elevated the investigation to Phase 1.
- On March 20, 2018, FCA US disclosed the Phase 1 investigation to NHTSA. Conversations with NHTSA about the study have been ongoing since that time.
- In early April, 2018, FCA US purchased the vehicle for further study.
- Data continued to be gathered to assess the potential risk due to a CAN-C failure and inability to cancel cruise control. No additional field incidents have been found.
- It was determined that all vehicles have mitigation strategies available if an event of this nature were to occur use of the service brakes to bring the vehicle to a stop, and the ability to shift into Neutral and Park. Once placed in neutral or park, some of the vehicles will cancel cruise control when the engine hits a certain high-rpm threshold.
- On April 23, 2018, the condition was artificially created in a vehicle during a demonstration at NHTSA's facility in Ohio. In this test CAN-C bus communications were mechanically severed at the engine control module connector.
- On May 1, 2018, teardown inspection of the one suspected field incident vehicle (2017 MY Dodge Journey) found dead rodents, their nest in the driver's side front fender, and damaged wiring.
   Identification of the specific wiring and assessment of the outcome for a short circuit among those wires revealed that these wires could not have caused the CAN-C bus to stop communicating. The root cause analysis of this vehicle continues.
- In May, 2018, continued analysis of the suspect field incident vehicle revealed that some modules in
  the vehicle did have stored U0001 codes from a mileage that could be consistent with the timing of
  the customer complaint. However, no evidence of what may have caused the CAN-C bus to stop
  communicating has been found. Testing is ongoing.

- As of May 12, 2018, FCA US identified approximately no CAIRs, no STARS, one VOQ and no field reports potentially related to this issue.
- As of May 12, 2018, FCA US is aware of no accidents and no injuries potentially related to this issue.
- On May 12, 2018, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.