- The Engine Control Module ("ECM") safety software is designed with multiple layers of protection against vehicle level hazards such as unintended torque events. This software is a combination of level-one (powertrain diagnostics on safety critical electrical circuit/rationality/performance), level-two (diagnostics that detect engine control module defects through redundant/alternative calculations performed on safety critical algorithms), and level-three (main engine microprocessor diagnostics performed on a second/separate microprocessor).

- Consistent with custom and practice, during engine calibration development, the safety software implementation device was desensitized. Custom and practice dictates that the safety software be returned to production intent levels prior to production. However, when the line began producing 2016 MY Dodge Dart ("PF") vehicles equipped with the 2.0L engine and manual transaxle, the level-two torque security software released to the plant remained in a desensitized state. The incomplete software was also released to service corrupting any 2015 MY Dodge Dart vehicle equipped with the 2.0L engine and manual transaxle that was flashed between 9/15/15 and 1/12/16.

- If the level-two diagnostic calibrations are desensitized, there is a risk of not diagnosing certain module failure modes that would inhibit the software's ability to determine when the engine is producing more torque than what the driver is currently requesting.

- The suspect period was established based on the implementation device being discovered in developer mode on December 8, 2015. As a result of this discovery, a yard hold was implemented at the Belvidere Assembly Plant ("BVAP"). Eight vehicles were contained on yard hold.

- The suspect population was identified as the start of production of the 2016 PF, July 25, 2015 and continuing to December 16, 2015, when two vehicles from the yard hold were re-flashed at BVAP with the updated software and validated at the end of line as successful. The remaining vehicles were then re-flashed and the end of the suspect population was established with VIN GD606390.

- On December 15, 2015, the FCA US LLC ("FCA US") Vehicle Safety and Regulatory Compliance ("VSRC") organization opened an investigation as a result of a discussion regarding the December 8, 2015 yard hold at BVAP on December 7, 2015. On December 17, 2015, the investigation confirmed with BVAP that production was fully utilizing the updated software.

- On January 6, 2016, upon an internal review of the issue, further analysis was requested to better understand the failure mode and risk assessment.

- On January 11, 2016, an in-depth engineering analysis of the software architecture and potential failure modes was requested of the FCA US Software Engineering team.

- Review of the FCA US Software Engineering fault tree analysis was conducted to show that the likelihood of an unintended torque event was rare.

- On February 10, 2016, FCA US Software Engineering confirmed that in the unlikely event of an unintended torque event, depressing the clutch pedal would stop the transfer of torque to the wheels, and the engine rev limiter would still function. Software Engineering further determined that the brakes remained fully functional in such an event and were capable of overcoming any unintended throttle input, further assisting the operator in controlling the vehicle.

- On January 20, 2016, FCA US Software Engineering review of the failure was concluded.
- As of February 15, 2016 FCA US LLC ("FCA US") identified approximately zero CAIRs, VOQs and field reports related to this issue.
- As of February 15, 2016, FCA US is unaware of any accidents or injuries potentially related to this issue.
- On February 16, 2016, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.