

FCA US LLC Chronology
Steering Wheel Back Cover Wire Rub Through
Submitted on July 07, 2017

- On October 13, 2014, FCA US LLC (“FCA US”) Special Investigations (“SI”) notified the Vehicle Safety and Regulatory Compliance (“VSRC”) organization of a vehicle that experienced Driver air bag (“DAB”) Inadvertent Air Bag Deployment (“IAD”). This incident, and related information, prompted the VSRC to begin part return analysis to better understand the issue and monitor occurrence. Initial VSRC part return analysis related to a 2012 MY Dodge Grand Caravan suggested internally failed steering column clockspring conductor tape, which prompted further investigation.
- On January 30, 2015, Change Notification (“CN”) 50130-S00 was drafted to remove a plastic tab feature in the steering wheel back cover of Dodge Grand Caravan and Dodge Journey vehicles as a continuous improvement.
- On February 5, 2015, the VSRC advised engineering of the prior event and two earlier recorded customer allegations of DAB IAD on Dodge Journey vehicles.
- On March 25, 2015, FCA US engineering concluded that root cause was a shorted steering wheel wire harness from contact against the back edge of the metal horn plate. FCA US believed that the plastic tab feature, referenced above, may have contributed to the failure.
- On March 31, 2015, as a result of engineering input and occurrence research, the VSRC found a total of three incidents of DAB IAD on 2011-2015 MY Dodge Journey vehicles.
- On April 20, 2015, the VSRC opened an internal investigation to continue monitoring and documenting any additional incidents of DAB IAD.
- On May 1, 2015, FCA US engineering informed the VSRC that the implementation date of the tab removal CN (50130-S00) was April 21, 2015.
- On May 12, 2015, FCA US engineering advised that a Product Evaluation Run (“PER”) P0410-S15-02 planned for June 2015 was approved with a Material Required Date (“MRD”) of June 8, 2015 at the Toluca Assembly Plant (“TAP”) to test 27 parts with instrument panel (“I/P”) harness circuit protection on Dodge Journey vehicles.
- On July 15, 2015, FCA US engineering advised that PER P0410-S15-02 was successful and CN 50310-S20 was targeted to be approved on July 21, 2015, with an MRD of September 24, 2015, for implementation of I/P harness circuit protection on Dodge Journey vehicles.
- On September 22, 2015, Mopar Quality Engineering drafted a Service CN 50625-V05 to retrieve suspect “in stock” Mopar service steering wheel back covers for disposal.
- October 5, 2015 Mopar Quality Engineering advised that Service CN (50625-V05) was decisioned on October 1, 2015, and all suspect parts were quarantined.
- On January 4, 2016, the VSRC confirmed Dodge Journey circuit protection (CN 50310-S20) MRD at TAP was met and implemented on September 24, 2015.
- On February 23, 2016, a corporate vehicle request was submitted to conduct Dodge Journey vehicle inspections, which yielded 37 vehicle respondents.
- On March 16, 2016, 26 corporate vehicle inspections were completed for the Dodge Journey vehicles. Three vehicles had steering wheel wiring that indicated indentation or witness marks on the wiring tape wrap only.
- On April 5, 2016, a FCA US Quality Engineering Center (“QEC”) Field Engineering study began for Dodge Journey vehicle steering wheel wiring inspections that was targeted to conclude on May 5, 2016.
- On June 13, 2016, FCA US engineering advised that laboratory mechanical vibration testing was started. This included eight samples total; four samples with a back cover tab to duplicate the suspect vehicle configuration and four samples with the back cover tab removed.

- On July 27, 2016, FCA US engineering provided a test summary of the samples reviewed. FCA US engineering observed witness marking and tape degradation while testing both sample types.
- On August 30, 2016, FCA US engineering provided a summary of undocumented test result observations. It was noted that only tape rub through occurred, while wiring remained undamaged.
- On October 6, 2016, laboratory mechanical vibration testing was repeated to produce documented testing and ensure repeatable results.
- On November 3, 2016, the VSRC continued monitoring the investigation and expedited testing for end of year completion.
- On January 4, 2017, further analysis of returned parts indicated some IAD instances were attributed to other failure modes than the wire rub-through condition that was the subject of this investigation.
- On February 1, 2017, the VSRC confirmed that four of the returned parts had wire rub-through. Engineering analysis of suspect production representative parts indicated that this issue was limited in scope. FCA US closed the investigation and continued to monitor field data for 90 days.
- On February 13, 2017, an incident search update found one new potential instance for DAB IAD created on February 9, 2017.
- On February 14, 2017, the VSRC notified SI to request inspection on the new potential instance.
- On February 21, 2017, the VSRC contacted the Canadian Vehicle Safety Office (“VSO”) to further understand the number and failure mode of parts obtained by the Canadian VSO for DAB IAD.
- On February 22, 2017, the Canadian VSO provided a photographic analysis of all parts obtained to understand root cause and failure mode in which two instances of wire rub through were confirmed.
- On February 27, 2017, the VSRC confirmed DAB only deployment through vehicle inspection report and photos, which prompted a part return request for failure mode analysis on the new potential instance of DAB IAD created February 9, 2017.
- On March 29, 2017, the failure mode was confirmed as wire rub through on the new potential instance created February 9, 2017 using the returned parts.
- The VSRC continued monitoring of this investigation with frequent incident search updates February 27, 2017, March 10, 2017, March 15, 2017, March 17, 2017, March 31, 2017, April 10, 2017, April 20, 2017, April 24, 2017, May 1, 2017 and May 2, 2017 which yielded no new occurrences.
- On May 5, 2017, the investigation was re-opened to provide an investigation update to management.
- On May 8, 2017, an incident search update found one new potential instance of DAB IAD created on May 6, 2017.
- On May 17, 2017, the VSRC confirmed a DAB only deployment through vehicle inspection report and photos, which prompted a part return request for failure mode analysis for the new potential instance created May 6, 2017.
- On May 26, 2017, FCA US media relations made the VSRC aware that a new potential instance of DAB IAD which was reported and for which an inspection had been requested.
- On June 5, 2017, the VSRC confirmed a DAB-only deployment through a vehicle inspection report and photos, which prompted a part return request for failure mode analysis for the new potential instance reported May 26, 2017.
- On June 6, 2017, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall on affected Dodge Grand Caravan vehicles related to this investigation but additional information regarding Dodge Journey vehicles was requested.
- On June 15, 2017, the failure mode for the instance created on May 6, 2017 was confirmed by analysis of returned parts as a shorted clockspring which was likely a result of wire rub through.

- On June 20, 2017, the failure mode for the instance created on May 26, 2017 was confirmed by analysis of returned parts as a shorted clockspring which was likely a result of wire rub through.
- As of June 28, 2017, FCA US LLC ("FCA US") identified approximately 9 CAIRs, 0 VOQs and 0 field reports related to this issue.
- As of June 28, 2017, total warranty is zero at 0c/1000.
- As of June 28, 2017, FCA US is aware of zero accidents and six minor injuries potentially related to this issue.
- On June 30, 2017, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.