

Chronology of Defect/Noncompliance Determination

In October 2017, DAG during routine product observation at the plant, DAG noticed that certain weld spots where the front passenger side door is hinged to the body had been omitted from some vehicles. DAG advised the manufacturer of the welding robots of its observation and the manufacturer inspected the robots and updated a software setting to ensure that all of the weld spots would be set so that future production would not be affected. DAG commenced an investigation into the root cause and potential consequences of the issue.

In November 2017, DAG's investigation found that the issue originated when the robot manufacturer had adjusted the software settings in anticipation of the upcoming model changeover. DAG was able to isolate the potentially affected population to vehicles produced between the supplier's change to the software settings and when the issue was corrected on the production line.

In December 2017, DAG commenced an investigation into the potential consequences of the missing welds. DAG initiated simulations and an analysis of the durability and performance of a vehicle with the missing weld spots over the lifetime of the vehicle and in the event of a crash. The initial results of the analysis indicated that, as a general matter, the missing weld spots would not affect the overall stability of the vehicle. However, DAG continued its investigation to understand whether a combination of the missing weld spots and other production factors (for example, the quality of the nearby weld seams) could influence the performance of the vehicles.

In January 2018, DAG undertook a review of a sample of vehicles from then-current production to understand whether any variances generally existed in the positioning and welding of the passenger door hinges and also conducted a weld quality analysis. This analysis continued from February to April 2018.

In April 2018, based on the results of the review of the sample vehicles and additional data related to weld quality, DAG applied additional input factors into its crash and durability simulations. On April 27, 2018, based on the results of those simulations, DAG decided to conduct a recall as the adverse performance of the vehicle in a crash could not be ruled out.