Mercedes-Benz Part 573 Submission
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Chronology-Only section
Supplement to Original Submission

Chronology of Defect/Noncompliance Determination

In January 2020, MBAG launched initial investigations based on a finding on an internal vehicle that experienced a loss of the electric power steering assist. It was found that this vehicle had a damaged wiring harness which allowed moisture ingress into the wiring harness. The moisture subsequently entered into the steering control unit which resulted in the loss of the electric power steering assist. An analysis was initiated with the supplier. The initial results of the analysis indicated a deviation in the cutting process of the wiring harness at the supplier.

Further investigations were started to understand whether there was a more widespread possibility for damage to other wiring harnesses and if so, the extent of potential damage on the wiring harness and possibility of moisture ingress. During this process, the production plant reported additional vehicles that were found to have experienced a loss of electric power assist. MBAG reviewed its warranty claims and other field data and did not find any reports that were potentially related to this issue.

These findings indicated that if a vehicle were to have a damaged wiring harness, the part would have already been installed having prior damage rather than incurred during the production process.

MBAG reviewed its supplier's production process in detail to understand the point in the process at which the wiring harnesses may have been damaged. The damaged wiring harnesses of vehicles identified at the production plant were reviewed in comparison to the supplier's processes.

As a result, the root cause could be limited to a production deviation caused by incorrect parameters set in the process of cutting the wiring harnesses at the supplier. A correction of the process was immediately implemented at the supplier in February 2020.

Starting in February 2020, MBAG also analyzed the potential for vehicles in the field to have departed the production plant with a potentially affected wiring harness. In parallel, the range of potentially affected vehicles in the field was determined up to July 2020 based on logistics documents and supplier information.

Furthermore, a detailed analysis of the potential consequences of the damaged wiring harness was started. Other than the short-term consequences, an estimation of the risk over time for the affected vehicles was performed and compared to experiences and existing test results.

In October 2020, MBAG determined that a potential safety risk cannot be ruled out.