

Chronology of Defect/Noncompliance Determination Supplement for ODI 22-00855-28172-10

In August 2019, MBAG was made aware of several cases in the U.S. in which customers received warnings via the vehicle instrument cluster regarding the 12V battery (electrical charge indicator) and/or the 4Matic system (“4Matic malfunction”). MBAG investigated these cases and determined that corrosion of a transmission wiring harness electrical connector on triggered the messages in the instrument cluster. MBAG returned affected parts to Germany for inspection and testing regarding potential effects of corrosion in the electrical connector. At that time, MBAG’s investigation identified no risk of fire or other safety risks.

In August 2021, MBAG was made aware of field cases involving thermal events that occurred outside of the U.S. MBAG launched extensive investigations into potential causes of these field cases. As part of its investigation over the course of several months, MBAG evaluated the effects of different types of short circuits on the transmission wiring harness electrical connector. MBAG also compared the electrical resistance of corroded and non-corroded electrical connectors using computed tomography.

In the beginning of 2022, MBAG determined that production deviations in the routing and the length of the cable in the transmission wiring harness caused mechanical strain on the single-wire seal. Separation of the seal could allow water to penetrate the electrical connector. In April 2022, MBAG implemented a production change by using a longer harness and optimizing the harness position. MBAG also developed an additional bracket to optimize the routing of the transmission wiring harness on potentially affected vehicles in the field.

MBAG continued further investigation to assess whether corrosion in the electrical connection could pose a fire or other safety risk. Based on its investigation, MBAG identified forty-nine warranty claims in connection with this issue in the U.S. from February 13, 2019 to March 31, 2022. MBAG determined that two such claims alleged thermal events involving the affected vehicle. On July 15, 2022, MBAG determined that a potential safety risk cannot be ruled out and decided to conduct a recall.