

Amended Chronology of Defect/Noncompliance Determination Supplement'
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.

August 26, 2022 Amendment:

In August 2022, MBAG received feedback from individual markets that specific affected vehicles did not have the potentially affected wiring harness connector installed. Thus, the scope of potentially affected vehicles was reassessed. As a result, the scope of potentially affected vehicles was reduced. Additionally, Model Year ("MY") 2023 vehicles have been removed from the affected vehicle population as they have not been wholesaled. These vehicles will be re-worked internally before entering the stream of commerce.

October 5, 2022 Amendment:

In September 2022, a service workshop outside the US reported to MBAG that a vehicle not included in the recall population had experienced similar warning light activation accompanied by a thermal event. Mercedes-Benz has investigated and determined that one vehicle option code had been inadvertently excluded from the potentially affected population of vehicles. Following this determination, MBAG conducted a thorough review to confirm and verify that all affected vehicles are included in the recall population. Based on that review, MBAG is confident that, with the addition of the 512 vehicles originally not included in the recall, it has identified the full population of vehicles that may have the defect. This report amends the scope of the recall to include the 512 vehicles previously not included in the recall population.