

## **Chronology of Defect/Noncompliance Determination Supplement for ODI 22-00855-31240-10**

In July 2022, MBAG issued a safety recall (22V-533) for certain E-Class (213 platform), E-Class Coupe/Cabriolet (238 platform), CLS (257 platform) and AMG GT 4-door (290 platform) AMG models in response to concerns that a misrouted wiring harness could potentially cause a short circuit. In August 2022, Mercedes-Benz launched the recall in the US and the rest of the world to address this issue.

In April 2023, MBAG learned of a single field report from outside the U.S. describing corrosion of the electrical connector of the transmission wiring harness in a vehicle on which the prior recall 22V-533 remedy had been completed. At that time, MBAG concluded that this was an isolated and anomalous event, as available data did not suggest that other vehicles might be affected.

Between April and September 2023, MBAG received two additional field reports of incidents from outside the U.S. alleging a thermal overload at the electrical connector of the transmission wiring harness in vehicles where the recall remedy had been completed.

Between September 2023 and early 2024, MBAG conducted detailed reviews of the available warranty data and recall repair documentation for vehicles that had been inspected (and if necessary, repaired) as part of the recall campaign. This investigation was conducted to determine whether there may have been errors or deviations in the execution of the recall remedy.

As part of this review, MBAG identified additional warranty cases alleging similar wiring harness connector corrosion in vehicles subject to the prior recall 22V-533, including some vehicles on which the recall remedy had been completed. MBAG's analyses of these claims and available repair data did not suggest a common cause leading to such corrosion in remedied vehicles. During that investigation, MBAG identified occasional deviations from the prescribed recall procedures and actions.

To eliminate these deviations, MBAG reviewed the work instructions for the remedy program and conducted interviews with dealerships outside the US to determine what factors might have contributed to the identified deviations (such as technicians' workflow and how they understood the remedy work instructions). During these interviews, as part of this detailed review, MBAG determined that in some instances technicians may not have fully checked for potential water ingress in the wiring harness or the electrical connector as directed by the recall remedy work instructions.

Starting in February 2024, MBAG analyzed whether changes to the remedy instructions or methodology provided to service partners might mitigate the risk of incomplete or erroneous recall repairs by those service partners.

In parallel, during the spring of 2024, MBAG developed a single continuous wiring harness that eliminates the need for an electrical connector used to connect a two-part harness.

In May 2024, MBAG concluded its review of dealers' and repair workshops implementation of the remedy and analyzed the results. That analysis concluded that the effectiveness of the remedy could be enhanced, and any risk of occasional incomplete remedy implementation substantially mitigated, by revising the remedy to require replacement of the two-part wiring harness with a connector with the newly developed continuous wiring harness.

On June 7, 2024, MBAG determined that a potential safety risk due to erroneous remedy implementation (using the two-part wiring harness with connector) could not be ruled out. Out of an

abundance of caution, and to reduce potential customer confusion, MBAG decided to close the existing recall measure and issue this new defect report for the same vehicle population, and conduct a new recall that will implement the updated remedy.

MBAG is currently aware of 13 warranty claims received between November 11, 2022 to December 12, 2023 that may have been reworked incorrectly during implementation of the 22V-533 remedy. MBAG is aware of no reports of fatalities, injuries, or fires related to this defect in the US.

**Amendment 1:**

On July 30, 2024, a final assessment of vehicles transferred from the prior recall (22V-533) to the new recall (24-V445) was conducted. It was determined that a discrepancy occurred, resulting in some vehicles not being included in the internal campaign of the new recall. Upon further review, these vehicles have now been included.

**Amendment 2:**

In end of July 2024, MBAG became aware of isolated complaints where a short circuit occurred in the electrical connector on vehicles produced after the production change in 2022 that was intended to correct the harness routing. An analysis was conducted to determine if any prior repairs had been performed on these vehicles, and production records for the affected vehicles were reviewed. In August 2024, MBAG was informed of a thermal incident involving a vehicle outside the US also produced after the aforementioned production change. Further in-depth analyses were once again initiated to thoroughly investigate the influencing factors at the installation location of the electrical connector. A worst-case scenario was assessed, considering potential peak temperatures combined with high dynamic water volume loads. Based on this scenario, a test setup for a temperature cycling test combined with dynamic water exposure was developed. In September 2024, these tests indicated that if the connector is subjected to high temperatures due to its proximity to the exhaust system and then rapidly cooled down by dynamic water exposure, water ingress into the electrical connector might occur due to the pressure differential. Based on the root cause determination, all vehicles produced with the electrical connector in this installation location were considered as potentially affected. On October 11, 2024, MBAG determined that a potential safety risk cannot be ruled out and decided to conduct a recall.

MBAG is currently aware of 5 field reports from the amended vehicle population in the US, received on July 11, 2024, August 19, 2024, September 17, 2024, September 30, 2024, and October 7, 2024. 3 of the 5 field reports are under investigation and have not yet been confirmed as related to the defect. MBAG is aware of no reports of fatalities or injuries related to this defect in the US.