

Part 573 Safety Recall Report

24V-100

Manufacturer Name : Mercedes-Benz USA, LLC**Submission Date :** FEB 09, 2024**NHTSA Recall No. :** 24V-100**Manufacturer Recall No. :** 2024MMNNNN**Manufacturer Information :**

Manufacturer Name : Mercedes-Benz USA, LLC

Address : 13470 International Parkway

Jacksonville FL 32218

Company phone : 1-877-496-3691

Population :

Number of potentially involved : 12,191

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2021-2023 Mercedes-Benz CLS 450

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Mercedes-Benz 2021-2023 CLS 450 2,130 Vehicles. The recall population was determined through production records.

Vehicles outside of the recall population have 48V ground connections are tightened to the specified torque.

Production Dates : OCT 21, 2021 - APR 04, 2023

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Vehicle 2 : 2021-2023 Mercedes-Benz E 450

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Mercedes-Benz 2021-2023 E 450, 2,706 vehicles. The recall population was determined through production records.

Vehicles outside of the recall population have 48V ground connections are tightened to the specified torque.

Production Dates : OCT 21, 2021 - APR 04, 2023

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Vehicle 3 : 2021-2023 Mercedes-Benz E 450 All-Terrain

Vehicle Type : LIGHT VEHICLES

Body Style : STATIONWAGON

Power Train : GAS

Descriptive Information : Mercedes-Benz 2021-2023 E 450 All-Terrain, 1,650 vehicles. The recall population was determined through production records.

Vehicles outside of the recall population have 48V ground connections are tightened to the specified torque.

Production Dates : OCT 21, 2021 - APR 04, 2023

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 4 : 2021-2021 Mercedes-Benz AMG CLS 53

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Mercedes-Benz 2021 AMG CLS 53, 2 vehicles. The recall population was determined through production records.

Vehicles outside of the recall population have 48V ground connections are tightened to the specified torque.

Production Dates : OCT 21, 2021 - APR 04, 2023

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 5 : 2021-2023 Mercedes-Benz AMG E 53

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Mercedes-Benz 2021-2023 AMG E 53, 1,665 vehicles. The recall population was determined through production records.

Vehicles outside of the recall population have 48V ground connections are tightened to the specified torque.

Production Dates : OCT 21, 2021 - APR 04, 2023

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 6 : 2021-2023 Mercedes-Benz AMG GT 43

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Mercedes-Benz 2021-2023 AMG GT 43, 1,688 vehicles. The recall population was determined through production records.

Vehicles outside of the recall population have 48V ground connections are tightened to the specified torque.

Production Dates : OCT 21, 2021 - APR 04, 2023

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 7 : 2021-2023 Mercedes-Benz AMG GT 53

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Mercedes-Benz 2021-2023 AMG GT 53, 2,350 vehicles. The recall population was determined through production records.

Vehicles outside of the recall population have 48V ground connections are tightened to the specified torque.

Production Dates : OCT 21, 2021 - APR 04, 2023

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Description of Defect :

Description of the Defect : Mercedes-Benz AG (“MBAG”), the manufacturer of Mercedes-Benz vehicles, has determined that on certain Model Year (“MY”) 2021-2024 E-Class (213 platform), CLS (257 platform) and AMG GT 4-door (290 platform) vehicles, the 48V ground connection located in the engine compartment might not be tightened to the specified torque.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : In this case, the ground cable might not be correctly secured. Subsequently, the electric resistance at the connection might increase. In combination with the high electrical currents potentially flowing through this connection, the temperature in this area might increase. As a consequence, a risk of fire cannot be ruled out completely.

Description of the Cause : Due to a deviation in the vehicle production process, the 48V ground connection in the engine compartment might not be tightened to the specified torque. The issue described is not caused by a supplier.

Identification of Any Warning : In the case of intermittent increased resistance at the connection, the driver will not receive a warning due to the nature of the failure mechanism.

that can Occur : In the event of an impairment of the 48V system, warning messages are displayed in the instrument cluster relating to the 48V onboard power supply such as “48 V Battery See Operator's Manual.”

Involved Components :

Component Name 1 : electrical wiring harness

Component Description : electrical wiring harness

Component Part Number : A2135402870

Supplier Identification :

Component Manufacturer

Name : MBAG

Address : NR

NR

Country : NR

Chronology :

In late 2022, MBAG became aware of isolated field reports in the US in which customers allegedly experienced various warning messages.

From late 2022 and into March 2023, MBAG investigated those reports, and based on these analyses, hypothesized that an insufficiently tightened ground connection for the 48V-battery-system could have contributed to the reported warning messages. However, the torque data from quality control testing during production indicated that the bolt torque of the ground connection in these vehicles were tightened in accordance with specifications.

In April 2023, out of an abundance of caution, MBAG added an additional step to its production process to check and re-tighten the ground connection for the 48V- battery system on all potentially affected production lines.

From April until July 2023, MBAG continued to investigate the disparity between the field reports of insufficient bolt torque and MBAG's production testing data, including laboratory testing and production line audits. Based on its findings, MBAG determined that subsequent assembly steps could in some instances lead to a loosening of the ground connection. At that time, it was not possible for MBAG to identify the population of potentially affected models or model years.

Therefore, during the second half of 2023 and the beginning of 2024, MBAG analyzed worldwide field reports for conditions that could have resulted from a loose ground connection of the 48V-battery-system, and associated production data. These analyses allowed MBAG to identify potentially affected vehicle models and production dates.

On February 2, 2024, MBAG determined that a potential safety risk in the identified vehicle population cannot be ruled out and decided to conduct a recall.

MBAG is currently aware of 3 field reports received on September 1, 2022, December 7, 2022, and December 12, 2022. MBAG is aware of no reports of property damage, fatalities, or injury related to this defect.

Description of Remedy :

Description of Remedy Program : An authorized Mercedes-Benz dealer will check the bolt torque of the 48V ground connection on the affected vehicles and correct it, if necessary.

Pursuant to 49 C.F.R. § 577.11(e), MBUSA does not plan to provide notice about pre-notice reimbursement to owners since none of the involved vehicles would have been previously subject to the condition described and all remain covered under the new vehicle warranty.

How Remedy Component Differs from Recalled Component : The 48V ground connection in the engine compartment is tightened to the specified torque.

Identify How/When Recall Condition was Corrected in Production : A change in the production procedure ensures that this issue can no longer occur from April 7, 2023 onwards.

Recall Schedule :

Description of Recall Schedule : Dealers will be notified of the pending voluntary recall campaign on February 16, 2024. Owners will be notified of the voluntary recall campaign before April 9, 2024. A copy of all communications will be provided when available.

Planned Dealer Notification Date : FEB 16, 2024 - NR

Planned Owner Notification Date : APR 09, 2024 - NR

* NR - Not Reported