

Part 573 Safety Recall Report

24V-704

Manufacturer Name : Mercedes-Benz USA, LLC**Submission Date :** FEB 21, 2025**NHTSA Recall No. :** 24V-704**Manufacturer Recall No. :** 2024100007**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 : 27,190

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2021-2023 Mercedes-Benz S580

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : 26260 Mercedes Benz MY2021-2023 S580 vehicles affected. The recall population was determined through production records. The vehicles with a M176 8-cylinder gasoline engine with a cylinder deactivation feature, the lambda control in the Engine Control Unit software might not meet current production specifications

Production Dates : JUL 13, 2020 - SEP 11, 2023

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Vehicle 2 : 2021-2023 Mercedes-Benz Maybach S580

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : 930 Mercedes Benz Maybach MY2021-2023 S580 vehicles affected. The recall population was determined through production records. The vehicles with a M176 8-cylinder gasoline engine with a cylinder deactivation feature, the lambda control in the Engine Control Unit software might not meet current production specifications

Production Dates : JUL 13, 2020 - SEP 11, 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 S-Class (223 platform) vehicles with a M176 8-cylinder gasoline engine with a cylinder deactivation feature, the lambda control in the Engine Control Unit software might not meet current production specifications.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : In the event of an independent hardware failure in the Camtronic system, the amount of injected fuel might be erroneously increased by the lambda control system during cylinder deactivation. As a result, exhaust temperatures may increase and might damage surrounding components (e.g. engine wiring harness, catalytic converter). A loss of propulsion without warning and an increased risk of fire cannot be ruled out.

Description of the Cause : Due to a deviation in the development process, in the event of an independent hardware failure in the Camtronic system, the lambda control might not be deactivated as intended if cylinder deactivation is engaged.

Identification of Any Warning that can Occur : Before the issue occurs, the driver will not receive a warning due to the nature of the failure mechanism.
When the issue occurs, the driver might notice an activated Check Engine Light.

Involved Components :

Component Name 1 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769035100

Component Name 2 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769035200

Component Name 3 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769035300

Component Name 4 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769035500

Component Name 5 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769031201

Component Name 6 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769035400

Component Name 7 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769035600

Component Name 8 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769031301

Component Name 9 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769031101

Component Name 10 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769032001

Component Name 11 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769032101

Component Name 12 : SOFTWARE ENGINE CONTROL UNIT

Component Description : SOFTWARE ENGINE CONTROL UNIT

Component Part Number : A1769032201

Supplier Identification :

Component Manufacturer

Name : MBAG

Address : NR

NR

Country : NR

Chronology :

Through the summer of 2023, MBAG observed an increase in the number of field reports describing instances in which customers allegedly reported a loss of propulsion, non-start condition, or an activated Check Engine Light, although the overall number of reports remained very low. Prior to this increase, only isolated reports were reported from the field.

Immediately after detecting this increase, analyses were initiated to investigate the issue and attempt to identify the root cause. These analyses showed a deviation in the lambda control in the Engine Control Unit software.

Starting in January 2024, further analyses of the possible consequences of the deviation for the vehicles in the field were started. In the course of these analyses, detailed analyses of the worldwide field situation including warranty data and diagnostic fault codes were performed. Parts from the field were retrieved and thoroughly analyzed.

Starting in April 2024, all possibly affected software versions were evaluated to determine which technical variants might be affected by this issue. These analyses and the evaluation of the data were completed in August 2024. The potentially affected vehicles were determined based on the software versions installed on the vehicles.

On September 13, 2024, MBAG determined that a potential safety risk cannot be ruled out and decided to conduct a recall.

[MBAG is currently aware of 48 warranty field reports received from August 11, 2021 to August 29, 2024, and

1 potential related fire claim, in the US. MBAG is not aware of any cases of injury, death or crashes.]

Description of Remedy :

Description of Remedy Program : An authorized Mercedes-Benz dealer will update the Engine Control Unit software.

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 : New updated Software

Remedy Part No:
SOFTWARE ENGINE CONTROL UNIT A1769034501
SOFTWARE ENGINE CONTROL UNIT A1769034701
SOFTWARE ENGINE CONTROL UNIT A1769034601

Identify How/When Recall Condition was Corrected in Production : The introduction of new software for the Engine Control Unit ensures that this issue can no longer occur from September 20, 2023, onwards.

Recall Schedule :

Description of Recall Schedule : Dealers will be notified of the pending voluntary recall campaign on September 27, 2024. Owners will be interimly notified of the voluntary recall campaign on November 08, 2024. Wave 1 customers were notified of the voluntary recall campaign starting November 15, 2024. Wave 2 customers were notified of the voluntary recall campaign starting January 10, 2025. Wave 3 customers were notified of the voluntary recall campaign starting February 21, 2025. A copy of all communications will be provided when available.

Planned Dealer Notification Date : SEP 27, 2024 - NR

Planned Owner Notification Date : NOV 08, 2024 - NR

* NR - Not Reported