

# Part 573 Safety Recall Report

# 17V-654

**Manufacturer Name :** Mercedes-Benz USA, LLC.**Submission Date :** OCT 16, 2017**NHTSA Recall No. :** 17V-654**Manufacturer Recall No. :** NR**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 : 2,098

Estimated percentage with defect : 100 %

**Vehicle Information :**

Vehicle 1 : 2015-2016 Mercedes-Benz C63 AMG

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : 205.086 WF8G 190 Vehicles The recall population was determined through production records. The recalled vehicles do not have updated ESP software.

Production Dates : NOV 07, 2014 - MAY 30, 2016

VIN Range 1 : Begin : NR End : NR

 Not sequential

Vehicle 2 : 2015-2017 Mercedes-Benz C63S

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : 205.087 WF8H 1888 Vehicles The recall population was determined through production records. The recalled vehicles do not have updated ESP software.

Production Dates : NOV 04, 2014 - MAY 30, 2016

VIN Range 1 : Begin : NR End : NR

 Not sequential

Vehicle 3 : 2017-2017 Mercedes-Benz C63S AMG Coupe

Vehicle Type : LIGHT VEHICLES

Body Style : 2-DOOR

Power Train : GAS

Descriptive Information : 205.387 WJ8H 19 Vehicles The recall population was determined through production records. The recalled vehicles do not have updated ESP software.

Production Dates : NOV 04, 2014 - MAY 30, 2016

VIN Range 1 : Begin : NR End : NR

 Not sequential

Vehicle 4 : 2017-2017 Mercedes-Benz C63 AMG Cabrio  
Vehicle Type : LIGHT VEHICLES  
Body Style : OTHER  
Power Train : GAS

Descriptive Information : 205.486 WK8G 1 Vehicles The recall population was determined through production records. The recalled vehicles do not have updated ESP software.

Production Dates : NOV 04, 2014 - MAY 30, 2016

VIN Range 1 : Begin :

NR

End : NR

Not sequential

## Description of Defect :

Description of the Defect : Daimler AG ("DAG"), the manufacturer of Mercedes-Benz vehicles, has determined that on certain C-Class AMG vehicles (205 platform) high torque peaks in the powertrain might occur under extreme starting maneuvers (full throttle from a stop, Race Start) on slick road surfaces in combination with repeated short-duration rear wheel spin. As a consequence, a rear axle differential mounting flange might become over-stressed and fracture.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If a rear axle mounting flange fractures, the rear axle differential might become mis-aligned and the driveshaft may fail at the rear differential. This would lead to a loss of propulsion and a vehicle stall. Depending on the traffic situation, a vehicle stall might increase the risk of a crash.

Description of the Cause : Due to the powertrain configuration in potentially affected vehicles, the torque peaks that might occur under the extreme starting maneuvers outlined above cannot be sensed and prevented by the ESP when combined with a missing function in the ESP software.

Identification of Any Warning that can Occur : NR

## Supplier Identification :

### Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

## Chronology :

In February 2016, DAG became aware of an individual field report describing an instance of the subject condition outlined above.

In May 2016, DAG became aware of additional field reports describing similar conditions and subsequently initiated initial investigations. Parts from the affected vehicles were requested for analysis.

In July 2016, tests were conducted to attempt to reproduce the topic. It was assumed that high torque peaks on the rear axle might occur during extreme driving maneuvers on slick road surfaces with repeated short-duration wheel spin.

In September 2016, results of the analyzed returned parts were received. Those results indicated that the parts exhibited a rear axle differential mounting flange fracture, while no material imperfections or other factors that could be attributed to certain production batches were evident.

In October 2016, based on the assumption that the fracture might occur due to the high torque peaks as described above, a possible ESP software update was considered in order to introduce an additional function to sense and prevent such torque peaks.

The ESP software with the additional functionality was available for testing in April 2017.

In parallel, further analysis of field data determined that instances in the field only occurred on vehicles up to a production date of May 2016, where a modified rear axle differential was introduced into series production.

Between May and August 2017, the effectiveness of the new ESP software to sense and prevent the mounting flange fractures was analyzed and tested.

In September 2017, the potentially affected vehicles were identified.

In October 2017, DAG determined that a vehicle stall cannot be ruled out.

## Description of Remedy :

**Description of Remedy Program :** An authorized Mercedes-Benz dealer will update the ESP and chassis control units with new software. Pursuant to 49 C.F.R. § 577.11(e), MBUSA does not plan to provide notice about pre-notice reimbursement to owners since all involved vehicles remain covered under the new vehicle warranty.

**How Remedy Component Differs from Recalled Component :** The ESP and chassis control units will be programmed with new software.

**Identify How/When Recall Condition was Corrected in Production :** A change within the rear axle differential system ensures that this complaint can no longer occur as of June 1, 2016 onwards.

**Recall Schedule :**

Description of Recall Schedule : Dealers will be notified of the voluntary recall campaign in November, 2017. A copy of all communications will be provided when available. Owners will be notified in December, 2017, approximately one week after recall launch to the dealers.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : NR - NR

\* NR - Not Reported