Mercedes-Benz Part 573 Submission
Original Submitted to Portal May 9, 2022
Chronology-Only section
Supplement to Original Submission

Chronology of Defect/Noncompliance Determination

In July 2021, MBAG launched initial investigations based on an individual field report from outside the US describing an instance in which a customer allegedly experienced a reduced brake force support. No damages or personal injuries were reported. Parts of the affected vehicle were requested for further analysis. MBAG determined that, in the analyzed case, the function of the brake booster was impaired and corrosion of the brake booster housing was observed.

Starting in August 2021, further analyses was conducted regarding a potential failure mechanism, root cause and potential consequences. These analyses included investigations of parts procured from used parts suppliers, corrosion tests and functional tests of the brake booster in order to study the influence of continuous corrosion to the mechanical integrity and function of the brake booster.

Additionally, in September 2021, a field study was initiated in order to analyze the level of corrosion on brake booster housings in vehicles in different countries and regions worldwide.

In November 2021, investigations were conducted to study mechanisms that might lead to water application on the brake booster, thus allowing the observed corrosion to initiate.

From December 2021 onwards, additional corrosion tests on used parts from the field were conducted together with the supplier in order to determine the further progression of corrosion on parts in the field and the impact to the functionality of the brake booster.

From January 2022, potentially affected vehicles in the field were determined based on production records and information on the development of the fleet in operation.

From March 2022 onwards, results of the field study were evaluated in order to determine the distribution of corrosion levels in the field and to prepare a risk evaluation.

In March 2022, only one case was identified in the US where poor brake performance was caused by a corroded brake booster.

On May 2, 2022, MBAG determined that a potential safety risk could not be ruled out and decided to conduct a recall.

MBUSA contacted the agency on May 5, 2022 to inform NHTSA of this safety recall, stop drive instructions and that communications with owners would start as soon as possible.

MBAG can confirm there are no crashes, injuries or deaths related to this defect.