## Chronology of Defect/Noncompliance Determination Supplement for ODI 24-00855-30502-10

In March 2022, MBAG initiated an investigation of field reports alleging that certain GLE/GLS (167 platform) vehicles stalled while driving.

MBAG began its analysis by conducting a detailed review of field data and vehicle diagnostic information. These analyses identified some abnormalities that occurred during automatic transmission shifting from 7th to 6th gear. Based on data and information available at that time, MBAG could not connect the reported engine stalling incidents to the shifting abnormalities and did not identify any systemic failure.

From mid-2022 through 2023, MBAG retrieved vehicles from the field whose owners had reported similar stalling incidents and installed data logger hardware for further analysis and testing and attempted to reproduce the reported stalling phenomenon.

In parallel, MBAG developed an advanced diagnostic software feature for workshop technicians to gather and analyze additional data from vehicles with reported stalling incidents and distributed this new diagnosis feature to its service partners.

In May 2023, MBAG succeeded in duplicating the described issue on a single vehicle and record relevant data with an installed data logger. MBAG used that result and related findings as the basis for further indepth testing, investigations, and analysis of potential failure mechanisms. MBAG's investigation of the complex and multi-factored phenomenon continued through the end of 2023 and early 2024. Extensive analysis was required to determine the combination of multiple conditions and other factors necessary to allow stalling to occur. MBAG also compared its testing analyses and hypotheses with the additional diagnostic data collected from the field by its service partners using the diagnostic feature developed for this investigation.

These analyses further determined that the reported stalling could only occur in certain GLE/GLS vehicles equipped with a certain 6-cylinder gasoline engine and a certain 9-speed automatic transmission. Using this information, MBAG was able to determine the potentially affected vehicle population.

On February 9, 2024, MBAG determined that a potential safety risk in the identified vehicle population could not be ruled out and decided to conduct a recall.

MBAG is currently aware of 261 field reports received between December 3, 2019 and February 6, 2024 and 730 warranty claims received between May 6, 2019 and December 5, 2023 regarding this topic. MBAG is aware of no other information (such as the numbers of deaths and/or injuries) related to this defect in the USA.