In December 2021, MBAG identified a factor that may contribute to the rare occurrence of a park lock function error or enhance the related rollaway risk (i.e.: the "Park Lock Support" ("PLS") function). Although no clear and specific technical root cause for the rare phenomenon was identified at that time, a recall was launched in early 2022 to remove the PLS function from the subject vehicles.

Based on those findings, MBAG further investigated into the root cause. To assist in the investigation, MBAG purchased vehicles reported to have experienced rolling when the shift indicator was in "P", and shipped those vehicles to Germany for further testing and analysis.

The first vehicle was tested in February 2022. During test drives, no malfunction of the park lock system was detected on this vehicle.

In order to further investigate possible influence of wear within the park lock system, MBAG carried out continuing and intensive tests through April 2022.

In parallel, MBAG repeatedly tested a transmission removed from a complaint vehicle, and conducted further test drives in May 2022. Again, no malfunction of the park lock system was observed.

In May and June 2022, sporadic malfunctions of the park lock were detected by MBAG engineers during intensive testing and analysis of a returned vehicle. This sporadic malfunction was reproducible during controlled testing.

Through September 2022, MBAG carried out further testing of disassembled transmissions.

After further intensive testing and analysis, MBAG determined in October 2022 that the above described rare and temporary park lock function error might be caused by specific wear patterns on the guide bushing in the transmission. The analyses concluded that such wear patterns are influenced by a combination of driver parking practices and low-speed ratcheting of the parking pawl when "P" is activated while the vehicle is moving at a low speed.

On October 14, 2022, MBAG determined that a potential safety risk cannot be ruled out. In an abundance of caution MBAG has decided to take additional measures to eliminate the remaining identified rolling risk and conduct a recall.