

Mercedes-Benz Part 573 Submission
Original Submitted to Portal March 19, 2021
Chronology-Only section
Supplement to Original Submission

Chronology of Defect/Noncompliance Determination

In June 2020, NHTSA raised two VOQs to Mercedes-Benz describing instances in which the front roof panel forward of the panoramic sunroof had allegedly detached from the vehicle while it was traveling at highway speeds. MBAG launched an investigation and was able to verify from its internal documentation that in both cases the incorrect adhesive was used to bond the panels during a previous repair. MBAG also began to analyze its internal data related to detachment of the front roof panel to understand whether the incidents were indicative of a broader trend or isolated events and found a number of sporadic reports submitted between 2018 – 2020 involving claims of cracked or partially detached panels. MBAG also observed that all involved vehicles that had also undergone a prior service repair to the front roof panel. MBAG began to analyze whether there was a more systemic issue and whether it was related to a prior repair of the front roof panel. MBAG provided an update to NHTSA in December 2020 and NHTSA opened its Preliminary Investigation in January 2021. MBAG's technical analysis was carried out from late 2020 and into the first quarter of 2021 and included an analysis of possible deviations from the published repair instructions as not all vehicles that had undergone a prior service repair necessarily reported a subsequent issue with the bonding of the panel. Test setups were prepared by recreating various repair scenarios where an incorrect pre-treatment and bonding adhesives other than the specific adhesive that had been approved for this repair. Sample roof panels were also returned from the field and analyzed which indicated how the pre-treatment, cleaning and primer application were actually being applied by Mercedes-Benz workshops and any third-party sublets and confirmed that there were deviations from the repair procedures. Accordingly, it was concluded that the improper prior repair was the root cause for the panel detachment. Further analysis was conducted to identify potentially affected vehicles. On March 12, 2021, MBAG determined that a potential safety risk cannot be ruled out and decided to conduct a safety recall.