



March 16, 2023

Chronology of Defect / Noncompliance Determination

573.6 (c) (6) (7)

Describe the chronology of events leading up to the defect decision or test data for the noncompliance decision:

In June 2020, GM learned that Opel was investigating rear toe-link fractures on certain Opel Insignia vehicles, which use the same toe link design as the subject vehicles. GM had previously investigated rear toe-link fractures on the subject vehicles in 2018 but closed the investigation due to a very low number of potential field complaints found (2), no accidents or injuries, and no identifiable defect trend. Once Opel notified GM of their investigation, which was based in part on a recent toe-link failure in Europe, GM submitted the issue as a potential safety issue through GM's Speak Up For Safety (SUF5) program on June 17, 2020. On August 4, 2020, GM opened a new investigation into rear toe link fractures in the subject vehicles.

On August 20, 2020, GM learned of an additional toe link fracture on a 2013 Chevrolet Malibu with 261,762 miles that occurred on August 18, 2020. On September 14, 2020, GM obtained the rear toe link from that August 18 incident and began a part analysis. On September 15, 2020, GM's investigator found documentation from cosmetic corrosion testing conducted in 2013 that identified a supplier process in which e-coat material was applied in excess of specifications. The supplier subsequently fixed its e-coat process in March 2013. On October 12, 2020, GM completed an initial review of field data and the overall rate of toe-link failures was still low. On October 15, 2020, a third-party testing company, Element Materials Technology, completed its analysis of the returned toe link from the August 18 incident and confirmed that it fractured as the result of material thinning due to heavy corrosion. GM's investigator reviewed the investigation with the Open Investigation Review board on November 9, 2020, and the board requested further information on the toe-link failure rates in high corrosion states to determine if the rates were higher in those areas. The toe-link failure-rate analysis in Corrosion States was completed and reviewed on November 30, 2020, and it showed a notably higher toe-link failure rate than in non-corrosion states.

On December 3, 2020, GM's Safety and Field Action Decision Authority decided to conduct a safety recall for vehicles that were ever registered in Corrosion States and that may have received toe links with excessive e-coat material. GM subsequently discovered the population data search inadvertently omitted some merchandising model codes. On March 18, 2021, it was determined that some VINs with these merchandising codes are in the regions affected by this recall.

In March 2023, GM added 1480 vehicles that had moved into the affected region in the past two years.