

Chronology of Defect / Noncompliance Determination (amended)**573.6 (c) (6) (7)**

Describe the chronology of events leading up to the defect decision or test data for the noncompliance decision:
(2000)

In 2019, Isuzu conducted a safety recall to address field reports of loose steering stopper bolts in FTR model trucks. This recall, 19V-467, was launched in June 2019. The remedy in that recall was to clean the bolt, change the jam nut from a Grade 5 to Grade 8, apply Red Loctite 263 to the bolt, and reinstall with a higher torque specification. The same changes were adopted on the FTR production line in June 2019.

In April 2021, Isuzu received the first Field Product Report (FPR) of this condition in this model vehicle since launching the 2019 recall. The vehicle involved was one produced after the production line change that was made in June 2019. Isuzu launched an investigation, including researching and identifying warranty claims that may relate to this condition. Isuzu's warranty review indicated that the first relevant warranty claim was dated January 20, 2020 and the last was dated September 28, 2021; the majority of the relevant warranty claims were between January 2021 and the end of September 2021.

Some of these reports involved vehicles that had been remedied in the safety recall that launched in 2019, and some involved vehicles that were built after that safety recall.

Isuzu started to collect parts from the field of failed and non-failed parts; all of the non-failed parts and most of the failed parts were from vehicles built after the recall countermeasure was introduced in the factory for newly produced vehicles. Isuzu studied these returned parts. Isuzu also conducted a study of varying amounts of Loctite applications on bolts with varying amounts of oil contamination. Isuzu concluded that, when the Loctite is installed in an adequate amount on a clean bolt, the Loctite application results in breakaway torques that exceed the material properties of the bolt, meaning that the bolt will not loosen. However, the breakaway torque varies with the amount of Loctite applied and the degree of cleanliness of the bolt at the time of the Loctite application.

As a result of its detailed and thorough study of the returned parts, Isuzu concluded that the recall countermeasure (which was also introduced into production) was not sufficient to prevent the left-side steering stopper bolts from loosening. Isuzu believes that a combination of human errors in cleaning the bolt and in installing the Loctite caused these failures.

Isuzu has received a total of 16 reports of a loose stopper bolt involving 14 unique VINs. Isuzu is not aware of any crashes or injuries associated with these reports.

On 10/29/2021, Isuzu made a determination to conduct a safety recall to address the issue. Because the production change was identical to the recall remedy for recall 19V-467, and is now believed to be prone to the same risk of human error, Isuzu will recall all the vehicles included in recall 19V-467, as well as newer vehicles built after the recall countermeasure was introduced into production, for installation of the new Spirallock Nut. This means the vehicle population in this new recall will include all MY 2018 through 2021 FTR vehicles.