



22S13 – CERTAIN 2020-22 FORD F-59 VEHICLES – STEERING COLUMN INTERMEDIATE
SHAFT TO STEERING GEAR BOX U-JOINT BOLT MISSING

Chronology of Defect / Noncompliance Determination

Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.

On January 26, 2022, Detroit Chassis Plant (DCP) received a report from a secondary stage manufacturer of a 2021 MY stripped chassis that lost steering control due to separation of the intermediate steering shaft from the steering gear box. The unit had 19 miles on the odometer. The unit had been built at DCP on November 18, 2021. Investigation and Ford's Central Labs' analysis found evidence that a bolt securing the intermediate steering shaft to the steering box had not been properly installed.

Preliminary investigation found that an operator may have over-ridden an error-proofing "not-OK" (NOK) signal during bolt installation on the complaint vehicle. DCP brought this issue into Ford's Critical Concern Review Group (CCRG) for review on February 03, 2022. DCP had conducted an inspection of 118 units within DCP control on January 28th and did not identify any improperly secured bolts securing the intermediate shaft to the steering box. Likewise, an inspection of 845 units at the final stage manufacturer's facility was conducted from February 14-16, 2022, and no instances of improperly installed bolts were found. This information and related statistical analyses were under review by Ford's CCRG.

On February 17th, DCP received a report that a second upfit vehicle built on a stripped chassis experienced a separation of the intermediate steering shaft from the steering gear box. This vehicle was from the same final stage manufacturer and was unable to be inspected previously. The vehicle had 6 miles on the odometer. An initial inspection of the vehicle found evidence similar to the first complaint vehicle. This unit had been produced on December 20, 2021. A review of DCP records found that a error-proofing NOK signal had also been overridden during bolt installation on this unit. Corrective actions were implemented at DCP to ensure the bolt was properly installed and torqued during planned production downtime the week of February 14, 2022.

A review of DCP records was undertaken for F-59 units produced from February 27, 2020 to February 14, 2022 to identify units where the error proofing NOK signal was overridden. During this review, 72 units were found with where the station's error-proofing NOK signal was overridden.

On March 04, 2022, Ford's Field Review Committee reviewed the concern and approved a field action.

Ford is not aware of any reports of accident or injury related to this condition.

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March 11, 2022