

23C24 – CERTAIN 2023 FORD F53 RECREATIONAL STRIPPED CHASSIS AND F59 COMMERCIAL STRIPPED CHASSIS – SMART DATA LINK CONNECTOR WATER EXPOSURE

Chronology of Defect / Noncompliance Determination

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

May 2023

On May 4, 2023, an issue pertaining to water damaged Smart Data Link Connectors (SDLCs) was brought to Ford's Critical Concern Review Group for review. Ford received reports of inoperative instrument panel clusters and various other electrical issues from a body builder ("upfitter") of 2023 model year F5x stripped chassis vehicles. The affected incomplete vehicles are produced by Ford and then modified or upfit by vehicle body builders.

The CCRG investigation found that certain F5x vehicles built between July 14, 2022 and March 29, 2023 were subject to a rework procedure at the manufacturing plant. This rework procedure required removal of a protective plastic bag from the SDLC module in order to connect to the On Board Diagnostic (OBD) port. After the contractor completed the rework procedure, they did not consistently reinstall and secure the protective bags over the SDLC modules. As a result, the SDLC modules in these stripped chassis units were exposed to the elements, including precipitation, while in outdoor holding lots awaiting transport to upfitters.

June – July 2023

On June 5, 2023, an engineering study was conducted on a sampling of eight stripped chassis units at an upfitter which had reported SDLC communication issues. All eight of the samples exhibited signs of corrosion in the SDLC module and the wire harness connector. On June 26, 2023, an additional review by Ford Engineering of seven wire harnesses showed corrosion in the wiring of the wire harness. On July 6, 2023, a further review by Ford Engineering of two of these wire harnesses found that one had corrosion past the length (30 cm) of the service pigtail.

F5x Stripped Chassis vehicles with corrosion in the SDLC and connected wiring are susceptible to developing a variety of electrical issues related to loss of communication on the CAN bus. The most commonly reported issue that Ford has received is an inoperative or blank cluster screen. A blank cluster screen will not conform to the requirements of FMVSS No. 101, Controls and Displays, and FMVSS No. 105, Hydraulic and Electric Brake Systems.

As of July 11, 2023, Ford is aware of portional reports received from March 22, 2023 to June 14, 2023 potentially related to this concern.

On July 14, 2023, 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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