

On July 29, 2021, Ford's Critical Concern Review Group (CCRG) was informed of a supplier rear seat child restraint system benchmarking evaluation on a 2021 model year Ranger Super Cab with results that differed from Ford's internal FMVSS 225 certification results. Investigation was undertaken to understand the supplier's evaluation methods, and how they compared with Ford's certification methods.

#### August – September 2021

It was discovered that the supplier used a different test fixture to measure pitch and lower child restraint anchorage set-back dimensions for this seat configuration than the fixture used by Ford for certification. FMVSS 225 specifies that one of two unique test fixtures (560mm tall vs. 720mm tall) be used for compliance certification, depending on specific vehicle and seat parameters. A subsequent review of Ranger rear seat design changes identified that a fixed, non-removable rear seat head restraint was introduced on Ranger at the beginning of the 2020 model year. Based on this fixed head restraint design, the Ranger rear seat lower child restraint anchorages should have been re-certified to FMVSS 225 for 2020 and 2021 model years using the 720mm tall test fixture, rather than the 560mm fixture that was correctly used to certify the prior design. Analysis, including CAD evaluations with the 720mm test fixture, identified potential concerns with the pitch and wire set-back requirements of FMVSS 225 S9.2.1 (pitch) and S9.2.2(a) (setback) for 2020-2021 model year Ranger vehicles equipped with the fixed, non-removable head restraint.

During this investigation, vehicles from multiple model years were inspected to evaluate design variation. During these inspections, it was separately observed that the rear lower child restraint anchorages on certain 2021 model year vehicles were not "...straight, horizontal and transverse" as required by FMVSS 225 S9.1.1(b).

On **September 27, 2021**, 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.