

CHRONOLOGY for RECALL 21C31 – CERTAIN 2021-2022 MODEL YEAR BRONCO SPORT AND ESCAPE VEHICLES

NHTSA's Office of Vehicle Safety Compliance contacted Ford on October 1, 2021, regarding the results of their FMVSS 135 compliance audit on the 2021 model year Bronco Sport vehicle equipped with a brake vacuum booster. The stopping distance test results for "Brake Power Assist Unit Inoperative" were 191.9 m which exceeds the federal regulation of 168 m.

Ford's certification test from December 2018 indicates a stopping distance of 149.9 m for vehicles equipped with a brake vacuum booster which meets the regulation of 168 m.

Ford's investigation included analyzing raw data from the NHTSA test vehicle and comparing it to the raw data from the Ford certification test vehicle. Ford's analysis of all the NHTSA test data had not identified an explanation for the total difference in performance between the NHTSA test vehicle and the Ford certification test vehicle.

In November 2021, Ford conducted an FMVSS 135 certification test, including the "Brake Power Assist Unit Inoperative" portion, on a 2021MY Bronco Sport which was equipped with a brake vacuum booster without a vacuum sensor to replicate NHTSA's test vehicle. The test vehicle was fitted with a new current batch of brake linings from the assembly plant. The stopping distance test results for "Brake Power Assist Unit Inoperative" were 177.8 m, which exceeded the federal requirement of 168 m. Analysis of the brake system identified that the friction coefficient of the rear brake caliper linings was below the specification.

The vacuum sensor was removed from the brake vacuum booster on Bronco Sport and Escape vehicles during the affected build date ranges; when the vacuum sensor is present, the brake system can detect a booster malfunction and the ABS module assists during the "Brake Power Assist Unit Inoperative" portion and compensates for friction material variation.

The 2021-2022MY Ford Escape shares the same brake system with the Bronco Sport and the same Ford certification test applies to both vehicles. Some Bronco Sport and Escape vehicles are equipped with a brake vacuum booster and some are equipped with an Electronic Brake Booster (EBB). Vehicles with an EBB are not affected by this issue because they have higher system pressures if the booster malfunctions.

A Stop Ship was issued at Ford's Hermosillo Assembly Plant (HSAP) and Louisville Assembly Plant (LAP) on November 9, 2021.

Throughout this investigation, Ford and NHTSA met weekly to discuss the status of Ford's testing, test results, and conclusions.

On November 17, 2021, Ford's Field Review Committee reviewed the concern and approved a field action.

Ford is not aware of any accidents or injuries relating to this condition.