

23C36 Chronology

Ford's Field Review Committee (FRC) approved compliance recall 22C22 on **September 7, 2022**, to address a parking lamp flickering condition that does not meet the steady burning requirement of FMVSS 108 on certain 2022-2023 Bronco Sport and F-150 vehicles with LED Parking lamps due to a microchip in the LED Driver Module (LDM) that did not have sufficient capacitance.

Ford notified dealers on **February 21, 2023** that the remedy was available to begin making repairs for 22C22.

On **April 26, 2023**, Ford's Customer Service Division (FCSD) revised the dealer bulletin to clarify the steps required to complete the software uploads required for the recall after dealers began contacting Ford with questions about the technical instructions for completing the recall.

F-150 vehicles included in 22C22 are configured with three different headlamp types (High, Mid, and Low series), and the service remedy instructs dealers to reflash the LDM with revised software. The LDM is not capable of direct communication with the Ford Diagnosis and Repair System (FDRS) tool. Due to the multiple types of headlamps on F-150, there are two different service procedures. Vehicles with high series headlamps have the remedy software flashed through the Headlamp Control Module (HCM), and vehicles with low and mid series headlamps have the remedy software flashed through the Body Control Module (BCM).

On **June 12, 2023**, Ford's Critical Concern Review Group (CCRG) opened an investigation pertaining to implementation of safety recall 22C22. Ford was conducting a review for the LDM software level on vehicles. The investigation discovered that approximately 7% of F-150 vehicles that required an HCM flash, and had the recall completed, potentially did not receive the remedy software. Further review identified that dealers may have completed only (1) of the (2) prescribed HCM flashes and closed the FSA before the LDM reflash was fully completed, and some dealers inadvertently performed a BCM flash instead of the required HCM flash. The review did not identify any issues with the LDM software on vehicles that require a BCM flash, likely because the BCM is capable of detecting an incomplete software load and will alert the technician by flashing the dome lamps.

Between June and October 2023, Ford's FSA Implementation Team conducted a review of the software level on vehicles to confirm dealer repairs. The LDM software level cannot be determined from connected vehicle data and can only be determined by opening the service records from the service history on Ford's Professional Technician System (PTS) server. This requires help of a Ford Information Technology team. After a lengthy validation process, the collected information was used to determine the population of vehicles that potentially received an incomplete recall. FCSD then contacted dealers that potentially performed incomplete repairs to determine how these issues occurred. Multiple reasons for incomplete repairs were identified, as stated above.

Ford introduced robustness actions to improve the recall implementation quality, including providing guidance to the Special Service Support Center (SSSC) on how to help dealers verify the software level after installation of the software. Periodic reviews by Ford identified a

reduction in incomplete repairs and confirmed that its review process was accurately producing a list of vehicles that received an incomplete remedy; however, vehicles continued to receive an incomplete remedy. After further discussions about the program implementation with dealers, CCRG believed it would be better to separate the programs by remedy: one program to re-flash the HCM and one program to reflash the BCM, with separate repair instructions.

On **November 17, 2023**, Ford's Field Review Committee reviewed the concern and approved a field action.

Ford is not aware of any accidents, or injuries as a result of this condition.