CERTAIN 2014 FORD F-150 VEHICLES EQUIPPED WITH 6-SPEED AUTOMATIC TRANSMISSIONS – UNEXPECTED TRANSMISSION DOWNSHIFT

Date of Submission: June 14, 2024

Chronology of Defect / Noncompliance Determination

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

On February 08, 2024, Ford's Critical Concern Review Group (CCRG) opened an investigation into an increasing number of reports related to unexpected transmission downshifting on 2014 model year (MY) F-150 vehicles equipped with 6R80 six-speed automatic transmissions. On February 21, 2024, Ford discussed this topic with NHTSA Office of Defects Investigation (ODI) personnel. On February 22, 2024, NHTSA requested information regarding reports of unintended downshifting on 2014 MY F-150 vehicles and provided 86 Vehicle Owner Questionnaires (VOQs) potentially related to this condition.

On March 27, 2024, NHTSA opened Recall Query RQ24-005 to investigate the scope of Ford safety recalls 19S07 (NHTSA Recall Campaign 19V-075) and 19S19 (NHTSA Recall Campaign 19V-433) based on the VOQs reporting unexpected transmission downshifting in 2014 MY F-150 vehicles that were not included in prior recall 19S07 or 19S19.

Ford has previously conducted field service actions (FSAs) addressing unexpected downshifts on F-150 vehicles equipped with 6R80 transmissions. 16S19 (NHTSA Recall Campaign 16V-248) included certain 2011-2012 MY F-150 vehicles, as well as other vehicle lines, that may experience downshifts related to intermittent failures of the transmission Output Shaft Speed (OSS) sensor that is on the vehicles' lead frame. 16S19 addressed a specific build window for which there was an identified root cause. In January 2018, NHTSA opened RQ17-010 based on VOQs concerning reports of unexpected transmission downshifting in vehicles that were not included in recall 16S19. In June 2018, Transport Canada opened Engineering Analysis 3280-09-26 based on similar complaints for vehicles not included in the recall. The CCRG investigation leading to 19S07 and 19S19 found no attributable pattern to the cause of intermittent OSS signal loss in the population outside of 16S19. On February 04, 2019, Ford's Field Review Committee (FRC) approved FSA 19S07 for 2011-2013 MY Ford F-150 vehicles. On June 13, 2019, the FRC approved FSA 19S19 to update an error in the remedy recall software for certain MY 2013 vehicle configurations.

Through May 2024, the CCRG evaluated field reports and warranty data for 2014 MY F-150 vehicles alleging unexpected transmission downshifting. The rate of unexpected downshift reports remains lower for 2014 MY F-150 vehicles than the 2011-2013 MY F-150 vehicles previously recalled. Ford discussed these reports and other related concerns related to RQ24-005 with NHTSA on several occasions between February and June 2024. Ford submitted its response to NHTSA's Information Request on May 03, 2024, for Part 1 of the request and May 24, 2024, for Part 2 of the request.

As of April 08, 2024, Ford is aware of 300 warranty reports, 96 field reports and 124 customer complaints, corresponding to 482 vehicles in the US and US territories received from March 24, 2014, to March 29, 2024, related to unexpected transmission downshifting on 2014 MY F-150 vehicles. Of these reports, 40 vehicles had alleged rear wheel lock-up and/or loss of vehicle control. Ford is aware of 130 VOQs reports related to unexpected transmission downshifting, of which 52 alleged rear wheel lock-up and/or loss of vehicle control. Two VOQs allege injury and one VOQ alleges an accident that may be attributable to this condition.

On June 07, 2024, Ford's Field Review Committee reviewed the concern and approved a field action.