49 CFR Part 573 – DEFECT INFORMATION REPORT

22S26 – Certain 2020 & 2021 model year Ford F-150, 2020-2022 Ford Super Duty and 2020 & 2021 Ford Expedition and Lincoln Navigator vehicles – Wiper Arms Loose

Chronology of Defect / Noncompliance Determination

August - November 2021

On August 26, 2021, an issue pertaining to stripped wiper arm splines on certain Expedition vehicles was brought to Ford's Critical Concern Review Group for review. Routine Ford monitoring of field data had identified reports related to driver or passenger wiper arms coming loose, not working, or detaching. Passenger and driver side wiper arms are independently attached to the wiper system linkage assembly. Several warranty reports contained technician comments indicating stripped splines in the wiper arms, as well as assembly alignment keys that fell out or were missing.

Supplier analysis of field return wiper arms found that some exhibited spline casting tooth height that was not to specification. Investigation found that the splined design of the wiper arms and associated supplier tooling are similar among the Expedition, Navigator, F-150, Super Duty and Medium Truck vehicles. Further investigation of the supplier processes found that tooth head casting was not being measured correctly for wiper arms used on these products.

CCRG expanded its search for reports from the field to also include all vehicle models with this design. A low number of reports was identified. CCRG continued to monitor the field reports and conduct statistical analyses of the data.

December 2021 – March 2022

CCRG continued to monitor field data and observed an increase in rate of reports for certain vehicle lines in December and January, coinciding with cold weather usage. Additional investigation found that differences in wiper motor torque by vehicle line could contribute to differences in wiper arm performance. Product review found that Expedition, Navigator and 2020 model year F-150 vehicles incorporate a higher torque wiper motor, with a maximum torque of 72 Nm. Other vehicles (e.g., most 2021 model year F-150) utilize a different smart wiper motor that electronically limits the torque to 46 Nm.

As of February 25, 2022, there have been 257 reports of inoperative or detached windshield wiper arms on the 2020-2021 MY Expedition/Navigator vehicles, 380 on 2020-2022 MY Super Duty, 76 on 2020 MY F-150, and 41 reports on certain 2021 MY F-150 units that were built with an alternative higher torque wiper motor due to chip shortage issues. The first of these reports was received February 5, 2020.

A field action was approved by Ford's Field Review Committee on April 7, 2022.

There are no reports of accidents or injuries associated with this concern.