## 49 CFR Part 573 – DEFECT INFORMATION REPORT 23S10 – Certain 2021 Model Year Ford F-150 Vehicles – Wiper Arms Loose

## **Chronology of Defect / Noncompliance Determination**

## April – September 2022

On April 7, 2022, Ford approved safety recall 22S26 (NHTSA Campaign No. 22V-250) to address a pattern of inoperative or detached windshield wiper arms that could result in a reduction or loss of visibility in certain conditions. Safety recall 22S26 involved multiple vehicle lines that shared the same wiper arms and utilized a high torque wiper motor.

Model year ("MY") 2021 F-150 vehicles equipped with a smart wiper motor were not included in the population of 22S26. Unlike the wiper motor in the 22S26 population, this MY 2021 F-150 smart wiper motor electronically limits torque and has an overall lower maximum torque. The F-150 smart wiper motor also has an obstruction detection feature that learns and adapts the wipe pattern to reduce the torque applied to the wiper arms. The previous investigation found that, although the vehicles are equipped with wiper arms from the same supplier and produced within the timeframe of 22S26, the lower maximum torque of the wiper motor and the obstruction detection feature could contribute to the reduced rate of wiper arm warranty claims.

Ford's Critical Concern Review Group (CCRG) continued to monitor the field performance of the non-recalled F-150 vehicles with wiper arms produced by the same supplier within the 22S26 timeframe. Through September 2022, the rate of reports remained at a low level.

## October 2022 - February 2023

Ford conducted evaluations to understand why the lower torque smart wiper motors did not initially fail at the same rate as the vehicles included in 22S26 with the higher torque wiper motors. The team analyzed differences in F-150 smart motor operating voltage to understand the torque output. Returned parts were also analyzed to determine if the same failure mode condition existed on wiper arms on F-150 vehicles with a smart wiper motor. Due to the lower wiper motor torque, it is now believed that more time may elapse before the stripped wiper arm splines affect wiper performance.

Ford continued to monitor wiper arm performance for the MY 2021 F-150 smart wiper motor population through February 2023 and identified an increasing trend of inoperative or detached windshield wiper arm reports. By February 2023, the rate of F-150 reports in the monitor population was consistent with the rate of reports for the vehicle lines recalled under safety recall 22S26 at the time of that recall decision.

As of January 25, 2023, Ford is aware of 576 global reports of inoperative or detached windshield wiper arms related to this condition received from February 25, 2021 through January 25, 2023. Additionally, Ford's investigation identified nine (9) NHTSA VOQs potentially related to this concern.

On March 3, 2023, Ford's Field Review Committee reviewed the concern and approved a field action.

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

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