## Chronology

Subject: Ford Motor Company (Ford) Recall No. **22S74** – Certain 2017-2018 model year F-250 F-350 and F-450 vehicles with a 176" wheelbase 4x4 and a 4.1 or 4.3 rear axle ratio driveshaft may fracture.

## June 2022

On June 1st, 2022, NHTSA's Office of Defect Investigations (ODI) contacted Ford's Automotive Safety Office (ASO) regarding a Vehicle Owner Questionnaire (VOQ) that alleged a driveshaft fracture on a 2017MY 6.7L 176" wheelbase F-450. The owner stated to NHTSA that they believed their vehicle should have been included in a separate safety recall (17S08) that addressed a driveshaft natural frequency condition that was unique to a 6.8L gas, 4x4, 208" WB vehicle configuration. This report was reviewed within Ford's Engineering groups, whose initial finding was that this VOQ was unrelated to 17S08 but could instead be related to an earlier internal radial damper (IRD) warranty concern. Ford ASO conducted a preliminary search of field data and identified 16 similar driveshaft fracture reports on similarly equipped vehicles.

## July – November 2022

Based on that initial investigation, ASO introduced this concern to Ford's Critical Concern Review Group (CCRG) on July 14, 2022, to further investigate the scope, rate, and potential effect on vehicle for the IRD concern. CCRG's investigation found that most driveshaft replacements from the IRD concern were a result of NVH complaints and did not allege a fractured drive shaft. A smaller amount of claims resulted in a driveshaft replacement due to a driveshaft fracture. CCRG's investigation continued to better understand the reports of driveshaft fracture. Data analysis found an elevated number and rate of reports pertaining to specific rear axle ratios with higher driveshaft rotational speeds. Ford Engineering groups reviewed the data analysis and explained that vehicles with a 4.1 or 4.3 rear axle ratio operate with a higher driveshaft rotational speed and would be more likely to experience IRD movement and potential driveshaft fracture.

As of October 17th, 2022, there have been 63 global reports of IRD induced driveshaft fractures on the subject vehicle configurations with a 4.1 or 4.3 rear axle ratio.

On **November 18, 2022**, Ford's Field Review Committee reviewed the concern and approved a field action.

Ford is not aware of any reports of accident or injury related to this condition.