**Submission Date: 12/16/2021** 

Chronology of Defect / Noncompliance Determination for Ford Motor Company Recall #21C25

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

June – July 2021 On June 9, 2021, Driveline Engineering notified Ford's Critical Concern Review Group (CCRG) of an increase in warranty reports alleging loose or missing bolts where the driveshaft connects to the transfer case constant velocity joint (CVJ) interface on certain 2020 MY Transit AWD vehicles. The AWD variant was introduced in North America for the 2020 MY. From September to October 2020, CCRG previously investigated a report from a fleet customer of five fleet vehicles that experienced loose or missing bolts at the AWD driveshaft to transfer case CVJ interface. CCRG was not aware of any similar reports from other fleet or retail customers at that time. Investigation of the fleet's reports had found no evidence of improper driveshaft flange bolt installation at Kansas City Assembly Plant (KCAP), and analysis found evidence of potential improper driveshaft removal and reinstallation by the fleet. Driveline Engineering continued to monitor this subject.

Based on the updated field data, Engineering conducted part inspections, supplier reviews and material analysis and found nothing out of specification. The KCAP team reviewed all quality and tooling records and did not identify any anomalies or special cause relating to this concern.

<u>August – October 2021</u> A targeted fleet engineering study was undertaken to aid the engineering evaluation of this concern. Ford identified multiple candidate vehicles for inspection, though only one vehicle was made available based on high vehicle usage. On that vehicle, one bolt was missing, one bolt was fractured, and the remaining four bolts were loose.

<u>November 2021</u> Driveline Engineering conducted multiple assembly trials at KCAP and was unable to replicate the issue or identify a potential cause for a loss of bolt clamp load between the driveshaft and transfer case CVJ.

As of November 25, 2021, there have been 50 reports alleging loose or missing bolts at the Transit AWD driveshaft to transfer case CVJ interface with 22 alleging driveshaft separation. These reports span multiple fleets and retail customers. All reports relate to vehicles produced prior to February 1, 2020.

On **December 9, 2021**, 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.

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