CERTAIN 2022-2024 FORD F-150 BEV – BATTERY FIRES Date of Submission: February 28, 2025

Chronology of Defect / Noncompliance Determination

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

On October 17, 2024, an issue pertaining to a 2022 model year Ford F-150 Battery Electric Vehicle (BEV) fire was brought to Ford's Critical Concern Review Group (CCRG) for review after Ford learned of the incident on October 9, 2024.

On November 21, 2024, two additional fires, involving a 2022 MY F-150 BEV and 2023 MY F-150 BEV, were reported to Ford and CCRG opened a new investigation to more broadly investigate claims of 2022-2023 model year Ford F-150 BEV fires with potential origination within the high voltage battery pack. No physical samples from the vehicles were available for engineering evaluation at that time.

From December 2024 to January 2025, the CCRG investigation analyzed connected vehicle data and supplier cell manufacturing history to explore a potential connection between the vehicles involved in the fires.

On January 3, 2025, Ford received a fourth report of a fire involving a 2022 model year Ford F-150 BEV. On January 10, 2025, Ford Engineering received a battery array that had been replaced in one of the affected vehicles prior to the fire event. From January 2025 to February 2025, Ford conducted teardown analysis on this battery array and continued this detailed review of the supplier's manufacturing process. On January 24, 2025, while this teardown analysis and review was ongoing, Ford's Field Review Committee authorized Harvest Program 25H02 to obtain additional physical samples from the field for in-depth evaluation and root cause analysis to facilitate further testing and understanding of root cause.

On February 2, 2025, based on the teardown analysis on the returned array, Ford identified evidence of misaligned electrodes in the high voltage battery cells. The supplier also identified evidence of cathode shift on eight stacker machines between two production lines based on a review of historical data for cells manufactured between January 3, 2022 and April 1, 2023. This manufacturing concern resulted in overlap that did not meet the supplier's design requirement. Some of the cells in the vehicles that experienced fires were built in this timeframe.

On February 18, 2025, Ford learned of a fifth report of a vehicle fire that is under investigation.

On February 21, 2025, Ford's Field Review Committee reviewed the concern and approved a field action.

Ford is not aware of any claims of crash related to this concern. Ford is aware of one claim of injury and five reports of vehicle fire that may be related to this concern and are under further investigation.