22S55 – CERTAIN 2022 FORD MUSTANG MACH-E VEHICLES – REAR RIGHT HALFSHAFT

Date of submission: 8/26/2022 Manufacturer's identification code for this recall: FSA 22S55

Chronology of Defect / Noncompliance Determination

On July 29th, 2022, an issue pertaining to broken Mach-E rear right halfshafts was brought to Ford's Critical Concern Review Group by product engineering for review. It was reported that on July 27th, 2022, Cuautitlan Assembly Plant identified 2 VINs with broken rear right halfshafts. One broken halfshaft was identified during squeak and rattle validation, and a second just before loading transport. Production records show Neapco Rear right half shafts where first introduced to production on July 18th, 2022.

On August 3rd, 2022, Tier 1 Supplier Neapco informed Ford Motor Company that inspection records show that between 2/14/2022 and 2/25/2022, Yecheng (tier 2 supplier for the green turning operation) suspended its 100% inspection of the bottom wall thickness of the rear right halfshaft outer race production line due to labor shortages caused by the Chinese New Year. This allowed non-compliant parts to pass through into finished rear right halfshaft assemblies. Metallurgical analysis of the two broken parts showed that failure was due to a thin wall on the outer race allowing the halfshaft stem to break under load. Improper placement (not fully seated) during the green turning in the lathe caused too much material to be removed, exceeding the specified minimum wall thickness of 9.1mm.

On August 8th, 2022, Tier 1 Supplier Neapco confirmed 4,608 parts were produced as part of the two suspect lots. Shipping records show a total of 504 halfshafts from the suspect lots were delivered to Ford CSAP and the rest were contained at Neapco's Facilities.

On August 15th, 2022, Tier 1 Supplier Neapco informed Ford Motor Company all rear right halfshafts at its Saltillo facility had been sorted, finding a total of 7 non-compliant parts, all confirmed to be from the affected lots.

No warranty or field reports have been found related to this concern. Ford is not aware of any VOQs related to this concern.

On August 19, 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.