

## 22C12 – CERTAIN 2022 FORD BRONCO AND RANGER VEHICLES – INADEQUATE WINDSHIELD ADHESION

## Chronology of Defect / Noncompliance Determination

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

<u>April 2022-</u> On April 07, 2022, an issue was introduced to Ford's Critical Concern Review Group (CCRG) to review windshield installation control plan data from the Michigan Assembly Plant (MAP). On the previous day, a reported urethane concern from a customer's Bronco was reviewed. In expanding the search, data indicated that eight of 65 units did not meet Ford's internal adhesion control plan requirements. These eight units had build dates from January 15 to January 25, 2022.

From April 07 to April 13, 2022, additional Bronco windshield cutout tests were conducted and 16 additional units that did not meet Ford's enhanced internal threshold adhesion were identified. These units were built between January 15 to March 30, 2022. Ford further identified that the Ranger windshield installation process is similar to Bronco. Subsequent windshield cutout tests conducted on Ranger units found three units out of 14 that did not meet Ford's internal windshield adhesion threshold. These three units were built between January 10 to March 29, 2022.

At the direction of the CCRG, Ford Engineering and MAP initiated an investigation on April 21, 2022, into potential contributors to reduced windshield adhesion and variables affecting bonding results, including ambient temperature and humidity, oven settings and variation, presence of contaminants (e.g. silicone and fluorine), phthalate levels, clearcoat thickness and others. While some evidence was found that could relate to each variable, no conclusions were reached.

<u>May 2022-</u> From May 06, 2022 to June 02, 2022, an expanded review of MAP control plan data and additional cutout data for vehicles at MAP identified bonding performance that did not meet Ford's internal requirements on vehicles produced during the build date ranges identified above. The level of windshield adhesion performance observed from the panel testing and vehicle glass cut-outs called into question whether the affected units would meet the 50% adhesion requirements of FMVSS 212. The cause for this issue remains unknown at this time.

Ford is not aware of any accidents or injuries pertaining to this issue.

On June 17, 2022, Ford's Field Review Committee reviewed the concern, and approved a field action for a potential noncompliance in the listed population.