

Chronology of Defect / Noncompliance Determination**573.6 (c) (6) (7)**

Describe the chronology of events leading up to the defect decision or test data for the noncompliance decision:

On April 20, 2022, an end of assembly line final inspection team at the factory noticed that the engine brake telltale on an F-Series truck did not illuminate when the engine brake switch was activated. That same day, Cummins (the supplier of the F-Series engine) was contacted. Cummins reviewed Isuzu Technical Center of America, Inc.'s (ITCA) flash station calibration Action Authorization Sheet (AAS) for the engine brake switch in effect at that time and found it to be in error.

On April 21, 2022, the production line updated the software calibration per Cummins' instructions and the engine brake flashing station once again began to function properly.

Isuzu North America Corporation (INAC) QA, together with Isuzu Motors Limited (IML) and Isuzu Technical Center of America, Inc. (collectively, Isuzu), promptly launched an investigation and determined that: (1) the engine brake flashing station had a problem that required its calibration to be reloaded on January 24, 2022; (2) the calibration reloading on that day followed the erroneous AAS mentioned above; (3) between the Start of Production in December 2021 and January 24, 2022, the F-Series vehicles produced had properly functioning engine brakes and engine brake switches and telltales; and (4) there were 745 F-Series vehicles still within Isuzu's control that were produced between January 24 and April 21, 2022 and, thus, that had non-functioning engine brakes and engine brake switches and telltales. Those 745 vehicles within Isuzu's control were re-flashed (such that their engine brake and engine brake switch and telltale would function properly) between April 25 and 28, 2022. There also were, however, and are eleven vehicles with improper calibration that already had been released from Isuzu's control.

Between the end of April 2022 and the middle of June 2022, Isuzu studied the nature and effect of the improper engine brake calibration on the functioning of the vehicles. In a properly functioning vehicle, turning the engine brake switch on would cause the engine brake to function at speeds over 9.9 mph and cause the engine brake telltale to illuminate to show that the engine brake was on. Isuzu's analysis determined that in the vehicles with the improper calibration, the telltale would not illuminate when the engine brake switch was turned on. In that respect, drivers would be given an indication that the engine brake would not function. And, of course, since generally one can feel the effect of a functioning engine brake slowing down the vehicle even without use of the service/foundation air brakes, the absence of engine braking would likely be noticed by the driver, who, presumably would not rely on the engine brake to assist in the stopping of the vehicle.

Although Isuzu is not aware of any crashes, property damage claims, warranty claims, injuries or deaths associated with this issue, in an abundance of caution, on July 8, 2022, Isuzu made a decision to conduct a safety-related defect recall to address this concern.