

Chronology of Defect Determination

June - August, 2022

On June 29, Hino started an investigation upon receiving a field report of a vehicle where the fuel gauge showed “Empty” at all times. Hino collected the fuel sender gauge from the subject vehicle and found the fuel sender connecting rod detached from the fuel gauge.

September – December, 2022

Hino inspected its inventory fuel sender gauge and its assembly processes for fuel sender at its West Virginia production facility. There were no abnormalities observed in either its inventory of fuel sender parts or its assembly processes.

January – July, 2023

Due to unknown frequency and effect of the potential fuel sender issue, Hino continued field monitoring. As a result of field monitoring, Hino determined that the issues were concentrated in models equipped with either 70 or 90 gallon fuel tanks. Hino collected suspect fuel sender gauges from field vehicles equipped with 70 or 90 gallon fuel tanks for further investigation.

The investigation revealed the fuel sender connecting rods were deformed. Hino continued a detailed investigation to understand the root cause of fuel sender connecting rod deformation.

Through testing, Hino determined that when an excessive load is applied to the fuel sender connecting rod float installed in 90 gallon fuel tanks, for example due to fuel sloshing during hard braking event, the fuel sender connecting rod deforms and may become disconnected from the fuel sender gauge. In addition, from estimation of fuel sloshing in a 70 gallon fuel tank, Hino determined that vehicles equipped with a 70 gallon tank have the possibility of experiencing the same excessive load on the fuel sender float phenomena, which may result in the fuel sender connecting rod becoming detached. Through field monitoring, Hino has determined that models equipped with a 50 gallon fuel tank have not been experiencing similar issues. Hino also confirmed the load applied to a fuel sender connecting rod float in a 50 gallon tank did not result in sufficient energy to deform the fuel sender connecting rod. Hino then verified that a reduced size and density of the fuel sender connecting rod would reduce the load applied to the fuel sender float and prevent the fuel sender connecting rod from deforming.

On August 1, 2023, based on the above investigation result, Hino determined it would conduct a voluntary safety recall campaign for the subject vehicles equipped with either 70 or 90 gallon fuel tanks.

As of July 31, 2023, Hino is aware of 233 warranty claims for this issue (9 cases of stall or no engine start, 7 cases of reads full but is empty, 73 cases of reads empty but has fuel, and 144 cases that the customer complaint is unclear) related to fuel sender connecting rod deforming and detaching from the fuel sender gauge, and which were repaired from May 9, 2022 to July 17 2023. To date, Hino is not aware of any reports of accidents or injuries related this issue.