573.6 (c) (6) - Chronology of Events (Recall N623)

NHTSA raised a Recall Query (RQ) investigation RQ19-004 concerning Jaguar XF 4.2L vehicles and reports of fuel leaks from the fuel tank outlet flange. Reflecting on the response to NHTSA, Product Safety and Compliance Committee (PSCC) investigation was opened on February 16, 2021.

In April 2021, NHTSA requested Jaguar Land Rover investigate and respond to their Preliminary Evaluation PE20-018 concerning LR4 and Range Rover Sport fuel tank outlet flanges.

Jaguar Land Rover investigated and provided a response to NHTSA during June 2021 but, prompted by NHTSA's enquiry and following reviews of field data also opened an internal investigation

The internal investigation conducted by the PSCC requested a review by engineering into the possible causes of the issue and subject parts to be returned from the market so engineering could identify the origin of the leak and scope of vehicles affected.

A detailed technical review of the fuel system, engine management system interaction with the fuel system, fuel pump operating strategy and fuel tank outlet design changes and validation of designs was conducted as part of the internal investigation. This was routinely reviewed by the PSCC through March, April, May, June and July 2021.

Field return parts were also inspected as part of this internal investigation to understand the failure mechanism and contributory factors. This revealed the presence of cracks around sub-surface voids in the fuel tank outlet flange. The cracks would propagate over time and with the flexing of the outlet flange due to the integrated fuel filter which pulsates as fuel pressure rises and falls, become sufficiently large to allow liquid fuel to leak out.

The PSCC reviewed all the information available on August 3, 2021, and concluded that the issue should be progressed to the Jaguar Land Rover Recall Determination Committee (RDC).

The RDC review commenced on August 5, 2021, and characterized this concern as a safety defect as it is possible that fuel vapor or liquid fuel may ignite if it comes into contact with an ignition source. The decision was made by the RDC to voluntarily recall all affected vehicles.

There have been no reported accidents, injuries or fires as a result of this concern.