

## Chronology of Defect Determination

The initial failure was reported by a McLaren retailer on September 16, 2023 on a vehicle that was completing a pre-delivery inspection. An engine warning light came on, with observation of fuel on the floor, and smell of fuel. After inspection it was found that a pipe within the engine low pressure fuel pipe assembly had become disconnected from an end-fitting.

McLaren immediately commenced an investigation. During the investigation eight subsequent occurrences of the low pressure fuel pipe detaching have been reported between the end of September through to mid-November 2023.

Each pipe is stamped with a production date and production time. Using this information, McLaren has found that all occurrences reported to McLaren involved a single extrusion batch of pipes made by a sub-supplier within a one-hour period on a single day of production (the "**Relevant Production Time**" on the "**Relevant Production Date**").

McLaren has observed that: (i) pipes produced during the Relevant Production Time have a level of variability in their performance in burst resistance tests; and (ii) overall, the pipes produced during the Relevant Production Time performed poorly in burst resistance tests compared to pipes manufactured in other batches.

On November 16, 2023 McLaren quarantined all parts extruded on the Relevant Production Date.

Further analysis is taking place in order to determine the root cause of the defects found in the suspect batch. One point being investigated is the inconsistency of the thickness of the pipe cross-section on parts from this batch. Localised lack of thickness of the pipe can lead to lower strength against hoop and radial stresses, leading to possible loss of clamping load under pressure under engine operating conditions.

Although none of the nine instances of the low pressure fuel pipe detaching have led to a thermal event, McLaren has decided to conduct a safety recall to address it. Whilst all failures can be traced back to pipes produced during the Relevant Production Time, out of an abundance of caution the recall population includes all vehicles that may potentially be fitted with a pipe produced on the Relevant Production Date.