

Chronology of Principle Events

December 25, 2019

Suzuki Motor Corporation (SMC) received a Field Technical Information Report (FTIR) from its Japanese distributor concerning a UH200 motorcycle that was reported to have a gasoline smell the day after the vehicle was operated.

February 13, 2020 – April 1, 2020

SMC received two similar FTIRs (three in total) from its Korean distributor.

April 8, 2020

SMC inspected the fuel supply hose obtained from the market and found that the inside diameter of the fuel hose was larger than the inspection control value of the supplier. As a result, the fuel hose fitment which is a friction-fit to joining metal pipe attachments were not sufficiently tight, which resulted in the fuel smell.

The fuel hose supplier conducted an investigation of their manufacturing process for the affected production lot and determined that the resin mandrel used for fuel hose extrusion was inadvertently stored adjacent to a toluene-soaked cloth (used for general equipment cleaning). As a result of the limited exposure to toluene, the resin mandrel expanded above its maximum diameter specification. Rubber fuel hose subsequently produced with this mandrel in the next production lot is believed to have an internal diameter that could be above specification. Because usage of the toluene-contaminated resin core mandrel was limited to a portion of a single production lot, the supplier determined that other fuel hose production lots were not affected with this issue.

April 10, 2020 – April 30, 2020

SMC received two similar FTIRs (five in total) from the Japanese distributor, all of which were manufactured in lots using resin mandrels contaminated with toluene.

May 18, 2020

The supplier determined that the cause of the increase in the inner diameter of the fuel hose was a temporary manufacturing failure and that there were no multiple occurrences. However, as a measure to prevent reoccurrence, the supplier revised the inspection process from a sample-based process to inspection of all hose production.

May 21, 2020 – June 10, 2021

SMC received two similar FTIRs (seven in total) from the Japanese distributor, all of which were manufactured in lots using resin mandrels contaminated with toluene.

June 24, 2020 – July 1, 2020

SMC received one similar FTIR (eight in total) from the Thai distributor, and two similar FTIRs (ten in total) from the Korean distributor.

July 10, 2020

SMC checked the production lot numbers of two fuel hoses (9th and 10th in total) collected from Korea. All were found to have been manufactured using resin mandrels contaminated with toluene.

July 16, 2020

SMC checked the production lot numbers of one fuel hose (8th in total) collected from Thailand. It was determined that the production lot for this hose was not from one using a resin mandrel contaminated with toluene. For this reason, SMC initiated a reinvestigation to determine the cause of the continuing defect, including investigation of the entire manufacturing process including the supplier's internal control processes for usage of containing toluene for cleaning.

January 21, 2021

Fuel hose manufacturing processes in general commonly use a resin core for each production lot, however, SMC found that the supplier used for the UH200 fuel hose was reusing the resin mandrel core for multiple production lots. SMC began an investigation into the effect of this practice as it could relate to the defect.

July 7, 2021

SMC speculated that repeated use of a resin mandrel core could cause the core to increase in diameter through swelling, potentially causing the internal hose diameter to become larger than the inspection control value of the supplier.

July 15, 2021

SMC determined fuel hoses manufactured using resin mandrel cores that had been repeatedly reused could have internal hose diameter values that were larger than specification, and these fuel hoses could have insufficient press-fit tightness. SMC decided to conduct a recall to replace the fuel hose assembly of affected motorcycles with a countermeasure part.