

Chronology of Principal Events

On October 5, 2017, Suzuki Motor Corporation (SMC) received a Field Technical Information Report (FTIR) from its Japanese distributor concerning a GSX250R motorcycle stop lamp that was not working.

From late October 2017 through April 2018, SMC received three additional FTIRs for similar incidents. SMC examined the collected parts from these incidents and found some brown foreign material in the rear brake stop lamp switches. SMC considered the possibility that the incident motorcycles had fallen over and muddy water had entered the switch, causing corrosion inside the switch and leading to poor circuit conductivity.

In June 2018, SMC received a fifth FTIR for a similar incident. SMC examined the collected part from this incident and did not find foreign material inside the switch as they had for parts that they previously examined.

In July to September 2018: (1) SMC began an investigation to compare the stop lamp switch produced by the Chinese supplier for the GSX250R model with the stop lamp switch produced by the Japanese supplier for other Suzuki models, and (2) SMC visited the stop lamp switch supplier in China to investigate whether there was any process change for mass production. SMC was unable to find any process change or problem of mass production during their visit. As of the end of September 2018, SMC had received a total of thirteen FTIRs.

In October and November 2018, SMC conducted a more in-depth investigation of how the structure of the stop lamp switch might contribute to the reported problems. SMC found that, for the stop lamp switch produced by the Chinese supplier, the part of the switch that moves against the switch body when the stop lamp is activated and deactivated can become more worn than the corresponding part in the switch produced by the Japanese supplier (the contact part of the switch produced by the Japanese supplier is coated with grease and the contact part of the switch produced by the Chinese supplier is not). SMC, however, was unable to reproduce the problems described in the FTIRs during SMC's reproduction testing. As of the end of November 2018, SMC had received a total of twenty-one FTIRs.

In December 2018 to April 2019, SMC continued to conduct reproduction testing. With repeated switch operation in a corrosive environment, SMC was able to reproduce failure of the stop lamp switch. For comparison purposes, additional reproduction testing was performed using stop lamp switches made by the Japanese supplier. In addition, SMC collected stop lamp switch parts from the Japanese market that had experienced long-term use and examined them for wear and corrosion. As of the end of April, 2019, SMC had received a total of thirty-seven FTIRs, all of which were from distributors in Japan and China.

In May, 2019, SMC reviewed their testing and was able to identify the following as factors leading to failure of the stop lamp switch: (1) entry of water into the switch can cause

corrosion of the zinc-plated iron spring, (2) rust powder from the spring can adhere to the movable part of the switch that is in contact with the body of the switch, causing wear to the contact part of the switch, and (3) water can corrode the contact part of the switch. The stop lamp switch can fail in a manner that results in failure of the stop lamp to illuminate when only the rear brake is used or in a manner that results in the stop lamp remaining on when the brakes are not being used.

On May 30, 2019, SMC decided to make a defect determination.