

Chronology of Principle Events

February 28, 2019

Suzuki Motor Corporation (SMC) received an initial report from the distributor in Korea that the speedometer of a UH125 scooter had stopped working.

July, 2019

Because of an increase in the number of reported speedometer failures, SMC sent its person in charge to the supplier in Taiwan to investigate the reason for the failures. As a result of the investigation, SMC determined that the reason for the speedometer failures was due to corrosion of the resistors in the wheel speed sensor power supply circuit that is integral to the speedometer assembly. SMC believed that the corrosion might be caused by exposure to sulfur gas that is released as a natural byproduct from the rubber boot surrounding the electrical harness coupler that is then attached to the speedometer assembly.

October, 2019

SMC determined that a change to the speedometer assembly manufacturing specification by the supplier had occurred in April 2018 that added a second supplier of resistors used in the speed sensor power supply, and that the resistor corrosion condition was limited to resistors sourced from this second supplier. The speedometer supplier discontinued use of resistors from the second component supplier.

November 19, 2019

SMC received a report from the U.S. distributor that the speedometer of a UH200 scooter did not display speed. (Note that the UH125 and UH200 scooters share a common wheel speed signal power supply design).

February 2020

SMC confirmed that the root cause of the speedometer operation failure was due to resistor corrosion caused by sulfur gas emanating from the rubber harness connector boot. At this time, SMC did not believe that the condition resulted in a safety defect.

March, 2020

SMC performed additional analysis of resistors sourced from both resistor part suppliers and confirmed that the resistors from the second supplier that was added in April 2018 had lower resistance to corrosion from sulfur gas than the resistors sourced from the original resistor part supplier.

April, 2020

SMC conducted research into available technical literature on sulfur off-gassing which reported that sulfur gas emissions from the type of rubber material used for the harness boot generally stop after about one year following manufacture. This supposition was supported by the decreasing number of cases of speedometer non-operation and the approximate two-year age of the vehicles that had been manufactured during the period when the affected resistors were being used. SMC made an initial determination that a market action was not required.

June 3, 2020

SMC received a second report of speedometer non-operation from the U.S. distributor for a UH200 scooter.

August, 2020

Because the amount of time elapsed between manufacture of the and speedometer failure did not agree with the initial research information on sulfur off-gassing, SMC resumed its investigation.

December, 2020

SMC collected samples of rubber boots in good condition of approximately two-years of age and investigated the amount of sulfur remaining in the rubber material. SMC determined that some sample rubber boots continued to release sulfur gas more than two years after manufacture.

April 22, 2021

SMC determined that the resistors in the speed sensor power supply circuit could have inadequate resistance to corrosion and could develop poor circuit continuity resulting in the loss of speedometer function. SMC decided to conduct a safety recall to replace the speedometer assemblies of the affected vehicles.