

Chronology of Principal Events

February 15, 2023

Suzuki Motor Corporation (SMC) initiated a safety recall regarding the front brake master cylinder for 2022 model-year Suzuki GSX1300R motorcycles (NHTSA recall ID 23V-088).

February 16, 2023 – March 1, 2023

SMC received a report of increased front brake lever travel exhibited on a motorcycle that was not part of the original recall population from its foreign distributor. Market quality information on this vehicle was collected and sent to SMC.

March 17, 2023

The front brake master cylinder from the February 16, 2023, affected vehicle was inspected. The inspection indicated that amount of swelling of the primary cup seal, which adjusts the hydraulic pressure of the brake master cylinder, was similar to the degree of swelling that had been identified in the previous safety recall action.

March 30, 2023 – April 14, 2023

SMC received a second report of excessive front brake lever travel involving a motorcycle that was not part of the original recall population from its foreign distributor. Market quality information on this vehicle was collected and sent to SMC.

The front brake master cylinder from the second affected vehicle was inspected. The inspection revealed that under certain conditions, swelling of the primary cup seal could block the primary port. In this condition, brake fluid temperature change combined with a blocked primary port could result in negative brake fluid pressure that could slightly retract the front brake pads and increase initial brake lever travel. The inspection also indicated that despite the longer lever travel, front braking force was not reduced.

October 18, 2023

SMC evaluated braking performance under a condition of lowest operating fluid pressure with commensurate brake pad retraction and determined that there was no reduction in maximum braking force.

April 17, 2024

SMC reevaluated the interaction of primary cup seal swelling and primary port blockage and determined that under certain conditions the primary port could become blocked despite the original recall countermeasure. However, based on the findings of the April 14, 2023, and October 18, 2023, investigations it was determined that braking force did not decrease under this condition.

July 8, 2024 – September 24, 2024

SMC received a report from its foreign distributor that a motorcycle that was not part of the recall population had experienced increased front brake lever travel such that the brake lever contacted the handlebar grip. SMC repurchased the motorcycle.

Analysis of the front brake master cylinder from the repurchased motorcycle indicated that the primary cup seal had swelled and in a resting state the primary cup seal covered the primary port. Under conditions of brake fluid cooling the front brake lever travel could increase and in the worst case the lever could come into contact with the handlebar grip. In this condition, braking distance could be increased.

October 10, 2024

Because braking distance could increase as a result of primary cup seal swelling, SMC decided to conduct a safety recall.