

Chronology of Defect

Front brake caliper bolts may loosen and fall off on MY 2020 Mazda3 and MY2020 CX-30

February 27, 2020: Mazda received first field report of “Grinding noise occurred due to missing caliper installation bolts from brake caliper.” from the U.S.

On that day, Mazda detected two vehicles having this failure in the vehicle assembly plant in Mexico. Abnormal noises were detected during dynamic inspection on the testing track. In each of these cases, two bolts for mounting the brake caliper completely loosened and detached. The parts supplier immediately began to investigate this failure.

February 28, 2020 through March 14, 2020: Mazda inspected the tightening torque of brake calipers on vehicles stored in inventory and found that the caliper mounting bolts on five specific vehicles were loose.

March 6, 2020: Parts supplier began a tightening torque check of all manufactured calipers at assembly line-off to prevent loosened caliper bolts from leaving their facility as an interim corrective action.

March 31, 2020: Parts supplier determined the root cause of this defect. In the assembly process of the brake caliper, a manufacturing process error involving tightening torque occurred, starting from the production launch time of new parts for another OEM. While addressing the process failure for the other OEM, some brake calipers for Mazda were not properly tightened due to an improper assembly process countermeasure. During this time, Mazda also studied the risk to vehicle safety if the caliper was able to become detached. As a result, Mazda found that this defect may cause a decrease in braking force or wheel lock-up due to interference between the caliper and the wheel.

April 10, 2020: As a permanent countermeasure for mass-production, the parts supplier revised the assembly process and equipment to verify proper tightening torque is achieved during automated fastener installation operation.

June 5, 2020: Mazda held a Quality Audit Committee meeting to review all available information to date and determined to conduct a proactive field action on certain MY2020 Mazda3 and MY2020 CX-30 vehicles. No accidents, injuries, or deaths have been reported as a result of this defect.