



October 24, 2019

Chronology of Defect / Noncompliance Determination

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Describe the chronology of events leading up to the defect decision or test data for the noncompliance decision:

On May 21, 2019, a GM dealer submitted a warranty report to GM relating to a 2018 model year GMC Yukon, in which the customer stating that, while driving between 40 and 45 MPH, the vehicle's brakes applied and the vehicle unexpectedly pulled to the left. The customer also stated that the vehicle's ABS malfunction indicator lamp was illuminated at the time. On May 23, 2019, a GM brand quality manager submitted the dealer's report to GM's Speak Up For Safety (SUFFS) program.

On June 25, 2019, a GM field-service engineer tested the customer's vehicle and was able to duplicate the condition described in the warranty report by disconnecting one of the vehicle's wheel-speed sensors and driving the vehicle between 40 and 45 MPH with the vehicle's electronic transfer case set to four-wheel drive or automatic mode. On July 30, 2019, GM and ZF, the EBCM supplier, conducted supplemental in-vehicle testing on several test vehicles at GM's Milford Proving Grounds. During these tests, GM and ZF isolated the condition to certain K2 platform vehicles equipped with 5.3-liter engines, four-wheel drive, and 3.08-ratio rear axles, and to specific operating conditions: driving above 40 MPH with a failed wheel-speed sensor, and with the vehicle's electronic transfer case set to four-wheel drive or automatic mode.

Following this testing, GM conducted an initial field data search focusing on certain K2 vehicles equipped with 5.3-liter engines, four-wheel drive, and 3.08-ratio rear axles. GM's investigation ultimately identified approximately 150 relevant field claims alleging that this condition caused unintended braking or lateral-vehicle motion. GM is not currently aware of a crash that is attributable to this condition. On October 11, 2019, a team of GM safety engineers conducted in-vehicle testing at Milford to assess the condition's effect on vehicle braking and steering dynamics. On October 17, 2019, GM's Safety and Field Action Decision Authority decided to conduct a safety recall.