OMB Control No.: 2127-0004

Part 573 Safety Recall Report

22V-465

Manufacturer Name: General Motors, LLC

Submission Date: AUG 02, 2022 NHTSA Recall No.: 22V-465 Manufacturer Recall No.: N222370090



Manufacturer Information:

Manufacturer Name: General Motors, LLC

Address: 29427 Louis Chevrolet Road

MAIL CODE 480-210-2V WARREN MI

48093

Company phone: 586-596-1733

Population:

Number of potentially involved: 23,734 Estimated percentage with defect: 100 %

Vehicle Information:

Vehicle 1: 2018-2020 Buick Regal

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information : Manufacturing records were used to determine recall population.

Other model years of the Buick Regal use a different design and are not affected by

this recall.

Production Dates: JUN 09, 2017 - JUL 01, 2020

Description of Noncompliance:

Description of the General Motors has decided that certain 2018-2020 model year Buick Regal Noncompliance: vehicles may fail to conform to S7.11 of Federal Motor Vehicle Safety Standard

(FMVSS) No. 135, "Light vehicle brake systems." Following a partial or full loss

of vacuum-brake assist pressure, these vehicles may exceed the stopping-

distance requirements in S7.11 of FMVSS 135.

FMVSS 1: 135 - Light vehicle brake systems

FMVSS 2: NR

Description of the Safety Risk: If the vehicle's vacuum-power brake assist partially or fully fails, braking

events may require additional stopping distance, depending on the brakepedal force applied by the driver. Increased stopping distances could

increase the risk of a crash.

Description of the Cause: In the event of a partial or full loss of vacuum-brake assist, the vehicle's

hydraulic-brake boost is designed to supply supplemental pressure to the vehicle's brake system. A software error in the electronic brake control

module (EBCM) may fail to activate the hydraulic-brake boost under these

Identification of Any Warning In the event of a partial or full loss of vacuum-brake assist, the vehicle may that can Occur: display a message in the Driver Information Center, a malfunction warning light may illuminate, and the driver may notice increased pedal resistance.

Involved Components:

Component Name 1: DATA FILE-ELEK BRK CONT MDL XML

Component Description: Electronic Brake Control Module Software

Component Part Number: 39135331, 39187211, 39187212, 39187213, 39215667, 39215668, 39215669

Supplier Identification:

Component Manufacturer

Name: NR

Address: NR

NR

Country: NR

Chronology:

On April 28, 2022, an issue was submitted to GM's Speak Up For Safety (SUFS) program based on an Opel investigation of a potential brake-performance issue on the 2019 model year Opel Insignia, a sister vehicle to the Buick Regal. GM opened a formal investigation on May 6, 2022.

GM's supplier reviewed EBCM software files and determined that a software error in a file supplied by GM could cause the hydraulic-brake boost to fail to respond to a loss of brake-vacuum pressure. Tests conducted on a Buick Regal by GM on June 22 and June 23, 2022, showed that stopping distance following loss of vacuum brake pressure could exceed FMVSS 135 requirements by 1 to 5%.

A review of field data identified four field claims received by GM between January 17, 2019 and March 22, 2022 in which the vehicle's invalid vacuum pressure DTC (diagnostic trouble code) was set and the hydraulic brake boost was disabled. None of these claims involved an allegation that the condition contributed to a crash, and GM is not aware of any crashes or injuries relating to this condition. On June 23, 2022, GM's Safety Field Action Decision Authority (SFADA) decided to conduct a noncompliance recall.

Description of Remedy:

Description of Remedy Program : Dealers will reflash the software in the electronic brake control module

(EBCM).

Pursuant to 49 C.F.R. § 573.13(d)(2), General Motors does not plan to provide notice about reimbursement because a remedy for this condition

was not previously available.

How Remedy Component Differs The revised software activates the hydraulic brake boost if the vehicle

from Recalled Component: suffers a loss of vacuum brake pressure.

Identify How/When Recall Condition A different design was used starting with the 2021 model year.

was Corrected in Production:

Recall Schedule:

Description of Recall Schedule: Dealers will be notified on June 30, 2022. Owner notification is estimated

to begin on August 15, 2022.

Planned Dealer Notification Date : JUN 30, 2022 - JUN 30, 2022 Planned Owner Notification Date : AUG 15, 2022 - AUG 15, 2022

^{*} NR - Not Reported