

Part 573 Safety Recall Report

19V-645

Manufacturer Name : General Motors LLC**Submission Date :** SEP 12, 2019**NHTSA Recall No. :** 19V-645**Manufacturer Recall No. :** N192268490**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 : 3,456,111

Estimated percentage with defect : 2 %

Vehicle Information :

Vehicle 1 : 2015-2017 Cadillac Escalade

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Some vehicles manufactured within this period are equipped with a specific vacuum brake assist pump design that has demonstrated an elevated rate of the condition.

2015 was the first model year of this generation vehicle. Prior model years used a different brake assist system design. Vehicles manufactured after the designated period are not equipped with the affected pump design.

130,939 Cadillac Escalades vehicles are affected by this recall.

Production Dates : DEC 03, 2013 - AUG 19, 2017

VIN Range 1 : Begin : NR End : NR

 Not sequential

Vehicle 2 : 2014-2018 Chevrolet Silverado 1500

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Some vehicles manufactured within this period are equipped with a specific vacuum brake assist pump design that has demonstrated an elevated rate of the condition.

2014 was the first model year of this generation vehicle. Prior model years used a different brake assist system design. Vehicles manufactured after the designated period are not equipped with the affected pump design.

Vehicles previously serviced under customer satisfaction program N182206730 are not included in this recall.

1,773,650 Chevrolet Silverado 1500 vehicles are affected by this recall.

Production Dates : JAN 30, 2013 - AUG 31, 2017

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 3 : 2015-2018 Chevrolet Suburban

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Some vehicles manufactured within this period are equipped with a specific vacuum brake assist pump design that has demonstrated an elevated rate of the condition.

2015 was the first model year of this generation vehicle. Prior model years used a different brake assist system design. Vehicles manufactured after the designated period are not equipped with the affected pump design.

202,634 Chevrolet Suburban vehicles are affected by this recall.

Production Dates : APR 16, 2013 - SEP 01, 2017

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 4 : 2015-2018 Chevrolet Tahoe

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Some vehicles manufactured within this period are equipped with a specific vacuum brake assist pump design that has demonstrated an elevated rate of the condition.

2015 was the first model year of this generation vehicle. Prior model years used a different brake assist system design. Vehicles manufactured after the designated period are not equipped with the affected pump design.

Vehicles previously serviced under customer satisfaction program N182206730 are not included in this recall.

356,043 Chevrolet Tahoe vehicles are affected by this recall.

Production Dates : SEP 19, 2013 - SEP 01, 2017

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 5 : 2014-2018 GMC Sierra 1500

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Some vehicles manufactured within this period are equipped with a specific vacuum brake assist pump design that has demonstrated an elevated rate of the condition.

2014 was the first model year of this generation vehicle. Prior model years used a

different brake assist system design. Vehicles manufactured after the designated period are not equipped with the affected pump design.

696,097 GMC Sierra 1500 vehicles are affected by this recall.

Production Dates : JAN 29, 2013 - AUG 31, 2017

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 6 : 2015-2018 GMC Yukon

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Some vehicles manufactured within this period are equipped with a specific vacuum brake assist pump design that has shown an elevated rate of the increased brake pedal effort condition.

2015 was the first model year of this generation vehicle. Prior model years used a different brake assist system design. Vehicles manufactured after the designated period are not equipped with the same pump design.

296,748 GMC Yukon vehicles are affected by this recall.

Production Dates : SEP 19, 2013 - AUG 30, 2017

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Description of Defect :

Description of the Defect : General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2014-2018 model year Cadillac Escalade, Chevrolet Silverado, Chevrolet Suburban, Chevrolet Tahoe, GMC Sierra, and GMC Yukon vehicles. In some circumstances, these vehicles may have a condition in which the engine-mounted mechanical vacuum pump output may decrease over time, decreasing the amount of vacuum/power brake assist.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the vacuum level drops, customers may experience increased brake pedal effort, hard brake pedal, and/or potentially increased stopping distance. The Driver's Information Centre (DIC) "Service brake assist" alert will activate 2-5 minutes after the vacuum level drops, and a Diagnostic Trouble Code (DTC) will also be set. The condition is more prevalent at low speed when softly applying the brakes. At all times, the brakes remain functional and exceed the requirements of S7.11 of Federal Motor Vehicle Safety Standard (FMVSS) No. 135, "Light Vehicle Brake Systems."

Description of the Cause : The vehicles' vacuum assist pump is lubricated with engine oil, which flows into the pump through a filter screen. Under certain conditions and over a period of time, debris such as oil sludge can accumulate on the filter screen, potentially restricting the flow of oil into the pump over time and gradually

**Identification of Any Warning
that can Occur :**

reducing the amount of vacuum pressure generated. Failure to follow recommended oil change intervals could contribute to this condition. These vehicles are equipped with a secondary, hydraulic power brake assist system that activates to provide power brake assist if the vacuum drops, however, as calibrated the hydraulic brake boost assist is limited at lower speeds.

The driver may feel vibration in the brake pedal or a change in the amount of pressure required to depress the brake pedal. The operator and persons inside the vehicle may hear a ticking noise coming from the engine compartment or activation of the secondary hydraulic brake assist system. In addition, a "Service Brake Assist" message will appear in the Driver Information Center within two to five minutes of vacuum level less than 10 kPA.

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

Chronology :

On November 20, 2018, the National Highway Traffic Safety Administration (NHTSA) opened a preliminary evaluation (PE18-012) to investigate the subject condition. In cooperation with NHTSA, GM also conducted its own internal investigation.

On December 13, 2018, after concluding its investigation and having reviewed the results with NHTSA, GM's Safety & Field Action Decision Authority (SFADA) decided to extend warranty coverage for vacuum pump replacements for the subject vehicles.

On February 7, 2019, NHTSA issued an Information Request relating to the condition. GM responded and provided the requested information on March 27, 2019.

On July 18, 2019, NHTSA provided GM with additional field data reports. GM opened a new investigation into the issue on July 22, 2019. GM's investigator reviewed the new data provided by NHTSA and refreshed the field data from other sources.

On August 29, 2019, GM's Safety & Field Action Decision Authority decided to conduct a safety recall to update affected vehicles with the new software calibration.

Description of Remedy :

Description of Remedy Program : Dealers will reprogram the Electronic Brake Control Module in these vehicles with a new calibration that will improve how the system utilizes the hydraulic brake boost assist function when vacuum assist is depleted. Pursuant to 573.13, General Motors does not plan to provide notice about reimbursement to owners because a remedy of this type was not available prior to this recall.

How Remedy Component Differs from Recalled Component : The new calibration improves how the system utilizes the hydraulic brake boost assist function when vacuum assist is depleted.

Recalled Component Name: DATA FILE-ELEK BRK CONT MDL CALN
Recalled Component Description: Braking Control Module (BCM) calibration

Recalled Component Part Number: 84110293 thru 84110320, 84110322 thru 84110332, 84110336

Recalled Component Country of Origin: U.S.

Identify How/When Recall Condition was Corrected in Production : NR

Recall Schedule :

Description of Recall Schedule : Dealers will be notified on September 6, 2019. GM will provide owner notification dates when available.

Planned Dealer Notification Date : SEP 06, 2019 - SEP 06, 2019

Planned Owner Notification Date : NR - NR

* NR - Not Reported