

Part 573 Safety Recall Report

16V-651

Manufacturer Name : General Motors LLC**Submission Date :** SEP 08, 2016**NHTSA Recall No. :** 16V-651**Manufacturer Recall No. :** 16007**Manufacturer Information :**

Manufacturer Name : General Motors LLC

Address : 30001 VAN DYKE
MAIL CODE 480-210-2V WARREN MI
48090

Company phone : 5961733

Population :

Number of potentially involved : 3,640,162

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2015-2017 Chevrolet Silverado HD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2015 – 2017 Chevrolet Silverado HD vehicles.

Production Dates : OCT 01, 2013 - AUG 15, 2016

VIN Range 1 : Begin : NR End : NR Not sequential

Vehicle 2 : 2015-2017 GMC Sierra HD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2015 – 2017 GMC Sierra HD vehicles.

Production Dates : SEP 30, 2013 - AUG 15, 2016

VIN Range 1 : Begin : NR End : NR Not sequential

Vehicle 3 : 2014-2017 Chevrolet Corvette

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 – 2017 Chevrolet Corvette vehicles

Production Dates : FEB 13, 2013 - AUG 15, 2016

VIN Range 1 : Begin : NR End : NR Not sequential

Vehicle 4 : 2014-2016 Buick Lacrosse

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 – 2016 Buick Lacrosse vehicles.

Production Dates : APR 30, 2013 - APR 22, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 5 : 2015-2017 GMC Yukon

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2015 – 2017 GMC Yukon vehicles.

Production Dates : SEP 19, 2013 - JUL 21, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 6 : 2015-2017 Cadillac Escalade

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2015 – 2017 Cadillac Escalade vehicles.

Production Dates : DEC 03, 2013 - JUL 21, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 7 : 2015-2017 Chevrolet Tahoe

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2015 – 2017 Chevrolet Tahoe vehicles.

Production Dates : SEP 19, 2013 - JUL 21, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 8 : 2014-2017 Buick Encore

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 – 2017 Buick Encore vehicles.

Production Dates : APR 11, 2013 - AUG 24, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 9 : 2014-2017 Chevrolet Trax

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 – 2017 Chevrolet Trax vehicles.

Production Dates : APR 11, 2013 - AUG 29, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 10 : 2014-2016 Chevrolet Spark EV

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 – 2016 Chevrolet Spark EV vehicles.

Production Dates : JAN 15, 2013 - JUL 25, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 11 : 2014-2017 Chevrolet Silverado LD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 – 2017 Chevrolet Silverado LD vehicles.

Production Dates : JAN 30, 2013 - AUG 15, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 12 : 2014-2017 GMC Sierra LD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 – 2017 GMC Sierra LD vehicles.

Production Dates : JAN 29, 2013 - AUG 15, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 13 : 2015-2017 Cadillac Escalade ESV

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2015 – 2017 Cadillac Escalade ESV vehicles.

Production Dates : DEC 03, 2013 - AUG 15, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 14 : 2015-2017 Chevrolet Suburban

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2015 – 2017 Chevrolet Suburban vehicles.

Production Dates : OCT 16, 2013 - AUG 15, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 15 : 2015-2017 GMC Yukon XL

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2015 – 2017 GMC Yukon XL vehicles.

Production Dates : OCT 16, 2013 - AUG 15, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 16 : 2014-2017 Chevrolet Caprice Police Vehicle

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 – 2017 Chevrolet Caprice Police vehicles.

Production Dates : MAY 15, 2013 - AUG 01, 2016

VIN Range 1 : Begin : NR End : NR

Not sequential

Vehicle 17 : 2014-2016 Chevrolet SS

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 – 2016 Chevrolet SS vehicles.

Production Dates : MAY 14, 2013 - APR 27, 2016

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 – 2017 model year Chevrolet Silverado LD, GMC Sierra LD, Buick Encore, Chevrolet Trax, Chevrolet Caprice Police, and Chevrolet Corvette vehicles, 2014 – 2016 model year Buick Lacrosse, Chevrolet Spark EV, and Chevrolet SS vehicles and 2015 – 2017 model year Chevrolet Silverado HD, GMC Sierra HD, GMC Yukon, GMC Yukon XL, Cadillac Escalade Cadillac Escalade ESV, Chevrolet Suburban, and Chevrolet Tahoe vehicles. The sensing and

diagnostic module (SDM) in these vehicles, which controls airbag and pretensioner deployment, contains a software defect which may prevent the deployment of frontal airbags and pretensioners in certain rare circumstances.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the frontal airbags and seatbelt pretensioners do not deploy when required, there is an increased risk of injury to occupants in a crash.

Description of the Cause : The supplier of these SDMs included a diagnostic "oscillation test" routine in its SDM software which can be improperly activated by pre-crash vehicle dynamics and which can, in rare circumstances, interfere with the SDM's proper deployment of frontal airbags or pretensioners as required.

Identification of Any Warning that can Occur : NR

Supplier Identification :

Component Manufacturer

Name : Delphi

Address : 2151 E. Lincoln Road
Kokomo INDIANA 46902

Country : United States

Chronology :

On May 17, 2016, a report was filed in GM's Speak Up for Safety system relating to a crash involving a 2014 model year Chevrolet Silverado truck in which the driver's frontal airbag and seatbelt pretensioners were alleged not to have deployed. GM opened an investigation into the issue on June 7, 2016 and assigned a product investigator on June 8, 2016.

GM's product investigator obtained records from the subject vehicle's electronic data recorder (EDR) and, on June 28, 2016, provided the records to Delphi, the supplier of the sensing and diagnostic module (SDM), which controls airbag and pretensioner deployment. From July 12, 2016 through July 22, 2016, GM identified, retrieved and provided to Delphi additional EDR records from other incidents involving similar vehicles with similar allegations. GM's product investigator then reviewed the results of the EDR analysis with Delphi and subsequently requested and reviewed additional airbag and pretensioner non-deployment legal claim data for all vehicles equipped with the same SDM as the subject vehicles.

On August 3, 2016, the investigator briefed GM's Safety and Field Action Decision Authority (SFADA) on the status of the investigation. Also, at this time, GM provided additional EDR records to Delphi for analysis.

On August 10, 2016, SFADA requested additional data relating to the potentially affected vehicle population and a comparison to other vehicles. SFADA also requested additional road testing along with a review of existing test data to understand how this SDM performs in certain scenarios.

GM conducted road testing at its Milford Proving Grounds from August 17 through 19, 2016. On August 23 and 24, 2016, GM and Delphi reviewed additional EDR records. On August 31, 2016, after reviewing the results of the additional analyses and road testing, SFADA decided to perform a safety recall.

Description of Remedy :

Description of Remedy Program : Dealers will reflash the SDM with new software that eliminates this defect. In vehicles with any previous deployment events recorded in the SDM, the dealers will replace the existing SDM with a new SDM containing the latest software. Pursuant to 577.11, GM will provide reimbursement to owners for repairs according to the plan submitted on May 20, 2015.

How Remedy Component Differs from Recalled Component : The new software changes the oscillation test so that it does not affect the multipoint system's airbag and seatbelt pretensioner deployment decisions.

Recalled Component Name: SDM

Recalled Component Description: Sensing and diagnostic module

Recalled Component Part Number: Software: 13518038, 13518017,
Hardware (Ancillary/Collateral Parts): 13594402, 13594413, 13594404,
13594406, 13592885

Recalled Component Country of Origin: U.S.

Identify How/When Recall Condition The reflashed software was added to all Chevrolet Silverado LD, Chevrolet

was Corrected in Production : Silverado HD, Chevrolet Corvette, Chevrolet Tahoe, Chevrolet Trax, Chevrolet Spark EV, Chevrolet Suburban, Chevrolet Caprice Police, Chevrolet SS GMC Sierra LD, GMC Sierra HD, GMC Yukon, GMC Yukon XL, Buick Lacrosse, Buick Encore, Cadillac Escalade, and Cadillac Escalade ESV vehicles built after 8/24/2016.

Recall Schedule :

Description of Recall Schedule : General Motors will provide dealer bulletin and owner letter notification dates when available.

Planned Dealer Notification Date : SEP 08, 2016 - SEP 08, 2016

Planned Owner Notification Date : NR - NR

* NR - Not Reported