

Part 573 Safety Recall Report

18V-340

Manufacturer Name : General Motors LLC

Submission Date : MAY 24, 2018

NHTSA Recall No. : 18V-340

Manufacturer Recall No. : 18179



Manufacturer Information :

Manufacturer Name : General Motors LLC

Address : 29427 Louis Chevrolet Road
MAIL CODE 480-210-2V WARREN MI
48093

Company phone : 5961733

Population :

Number of potentially involved : 88,129

Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2018-2018 GMC Terrain

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Recalled population was determined using manufacturing records and will include all 2018 model year Terrain vehicles build before a verified breakpoint for corrected SDM software. Vehicles outside of the 2018 Terrain program have not demonstrated susceptibility to this type of lock-up condition.

Production Dates : MAR 14, 2017 - MAY 22, 2018

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 2018 model-year GMC Terrain vehicles. In these vehicles, the sensing diagnostic module (SDM), which provides crash sensing and deploys airbags in the event of a crash, may not power down correctly when the vehicle is powered off. If this condition occurs, the SDM may be inoperative when the vehicle is restarted. If the SDM is inoperative when the vehicle is started, the airbag warning lamp will be illuminated, the driver information center will display a "service restraint system" message, and warning chimes will sound.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the SDM is inoperative, the SDM will not detect a crash or command deployment of airbags, increasing the risk of injury in a crash.

Description of the Cause : In some cases, the SDM software in these vehicles may allow certain signals received by the SDM during vehicle power-down to interrupt the module

Identification of Any Warning that can Occur : shutdown sequence, resulting in an incomplete shutdown of the SDM. This condition will cause a lock-up that prevents proper SDM function on restart. If the SDM is not fully functional when the vehicle is started, the airbag warning will illuminate, the driver information center (DIC) will display a service restraints system message, and a chime will be present.

Supplier Identification :

Component Manufacturer

Name : Autoliv / Vioneer
Address : AEC 7455 Birchmount Rd.
Markham FOREIGN STATES L3R 5C2
Country : Canada

Chronology :

In January 2018, GM's release engineer for the SDM identified a higher-than-expected rate of 2018 GMC Terrain vehicles recording a "loss of communication" diagnostic trouble code (DTC) when compared to other programs. Testing to duplicate the condition began on February 1, 2018, and an Engineering Information bulletin was issued February 8 to collect additional information. On February 27, the issue was elevated as a potential safety issue through GM's Speak Up For Safety program. An SDM software vulnerability was identified during testing at supplier facilities on March 9. GM opened a formal investigation on March 28. Data analysis completed on April 20 revealed no accidents, injuries, or fatalities, but confirmed elevated IPTV/RPTV (incidence/repairs per thousand vehicle) rates for loss of communication DTC codes/SDM replacement for the 2018 Terrain as compared to other programs. The investigation was reviewed in GM's Open Investigation Review on April 30 and again on May 14. On May 17, 2018, GM's Safety Field Action Decision Authority (SFADA) decided to conduct a safety recall.

Description of Remedy :

Description of Remedy Program : Dealers will reprogram the SDM with updated software. Pursuant to 49 C.F.R. § 573.13(d)(1), all covered vehicles are under warranty so reimbursement is not offered.

How Remedy Component Differs from Recalled Component : The updated SDM software prevents signals received by the SDM during vehicle power-down from interrupting the SDM shutdown sequence.
Recalled Component Name: Sensing & Diagnostic Module (SDM)
Recalled Component Description: Airbag SDM
Recalled Component Part Number: 13522059, 13523927
Recalled Component Country of Origin: Canada

Identify How/When Recall Condition was Corrected in Production : Vehicles produced after May 22, 2018 have the updated SDM software.

Recall Schedule :

Description of Recall Schedule : Dealers will be notified on May 24, 2018. GM will provide owner notification dates when available.

Planned Dealer Notification Date : MAY 24, 2018 - MAY 24, 2018

Planned Owner Notification Date : NR - NR

* NR - Not Reported