

**Part 573 Safety Recall Report****14V-827****Manufacturer Name :** General Motors LLC**Submission Date :** DEC 23,2014**NHTSA Recall No. :** 14V-827**Manufacturer Recall No. :** 14696 and 14912**Manufacturer Information :**

Manufacturer Name : General Motors LLC

Address : 30001 VAN DYKE

MAIL CODE 480-210-2V WARREN MI 48090

Company phone : 999

**Population :**

Number of potentially involved : 83,572

Estimated percentage with defect : 1

**Vehicle Information :**

Vehicle : 2011-2012 Cadillac Escalade

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 Cadillac Escalade vehicles

Production Dates : MAY 09, 2011 - MAY 21, 2012

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

 Not sequential VINs

Vehicle : 2011-2012 Cadillac Escalade ESV

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 Cadillac Escalade ESV vehicles

Production Dates : MAY 09, 2011 - NOV 11, 2011

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

 Not sequential VINs

Vehicle : 2011-2012 Cadillac Escalade EXT

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 Cadillac Escalade EXT vehicles

Production Dates : MAY 23, 2011 - SEP 03, 2011

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

 Not sequential VINs

Vehicle : 2011-2012 Chevrolet Avalanche

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 Chevrolet Avalanche vehicles

Production Dates : MAY 17, 2011 - AUG 04, 2011

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

 Not sequential VINs

Vehicle : 2011-2012 Chevrolet Silverado HD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 Chevrolet Silverado HD vehicles

Production Dates : MAY 06, 2011 - MAY 15, 2012

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

 Not sequential VINs

Vehicle : 2011-2012 Chevrolet Silverado LD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 Chevrolet Silverado LD vehicles

Production Dates : MAY 08, 2011 - JUN 14, 2012

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

 Not sequential VINs

Vehicle : 2011-2012 Chevrolet Suburban

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 Chevrolet Suburban vehicles

Production Dates : MAY 09, 2011 - MAR 08, 2012

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

 Not sequential VINs

Vehicle : 2011-2012 Chevrolet Tahoe

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 Chevrolet Tahoe vehicles

Production Dates : MAY 09, 2011 - MAY 03, 2012

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

Not sequential VINs

Vehicle : 2011-2012 GMC Sierra LD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 GMC Sierra LD vehicles

Production Dates : MAY 08, 2011 - JUN 14, 2012

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

Not sequential VINs

Vehicle : 2011-2012 GMC Sierra HD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 GMC Sierra HD vehicles

Production Dates : MAY 06, 2011 - DEC 12, 2011

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

Not sequential VINs

Vehicle : 2011-2012 GMC Yukon

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 GMC Yukon vehicles

Production Dates : MAY 09, 2011 - MAY 31, 2012

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

Not sequential VINs

Vehicle : 2011-2012 GMC Yukon XL

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2011-2012 GMC Yukon XL vehicles

Production Dates : MAY 09, 2011 - MAY 21, 2012

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

Not sequential VINs

**Description of Defect :**

Description of the Defect : General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2011 – 2012 model year Cadillac Escalade, Chevrolet Avalanche, Silverado, Suburban, and Tahoe, GMC Sierra and Yukon vehicles, and vehicles serviced with defective parts. Certain of these vehicles may have an ignition lock actuator with an outer diameter that exceeds specifications. These ignition lock actuators may make turning the ignition key difficult and the ignition key could get stuck in the “start” position if the vehicle’s interior ambient temperature is sufficiently high. If the vehicle is driven with the key stuck in the “start” position, and the vehicle’s interior temperature cools or the vehicle experiences a significant jarring event, the ignition lock cylinder could move out of the “start” position, rotate past the “run” position, and move into the “accessory” position.

Description of the Safety Risk : If the key moves into the “accessory” position, engine power, power steering, and power braking will be affected, increasing the risk of a crash. In the event of a crash, the timing of the key movement into the “accessory” position relative to the activation of the sensing algorithm of the crash event may result in the airbags not deploying, increasing the potential for occupant injury in certain types of crashes.

Description of the Cause : The outside diameter of the barrel portion of the ignition lock actuator (located within the steering column) may exceed the maximum specification, causing binding at high interior ambient temperatures. If the actuator sticks in the “start” position, it may loosen as it cools. Spring tension from the ignition switch may cause the cylinder to rotate past the “run” position and into the “accessory” position.

Identification of Any Warning that can Occur : The key may stick in the “start” position.

**Supplier Identification :**

**Component Manufacturer**

Name : Nexteer Automotive

Address : 3900 Holland Rd.

Saginaw MICHIGAN 48601-9494

Country : United States

**Chronology :**

On June 11, 2014, bulletin writers in GM's service group submitted a revised internal technical bulletin for technical review. The bulletin was for 2010 – 2013 full-size trucks and SUVs and related to a stall condition in which the ignition cylinder could get stuck in the "start" position. The original bulletin, published on August 29, 2012, was based on two field cases from July 7, 2010, and June 22, 2012. On July 30, 2014, the bulletin revision was put on hold as part of the technical review and the issue was elevated to GM's Emerging Issues Group. On October 6, 2014, GM assigned a product investigator.

On October 29, 2014, as part of GM's investigation, GM Engineering obtained a steering column from a related field case. GM suspected that high temperatures were a causal factor – e.g., at high temperatures, the ignition lock actuator would expand and stick in its housing in the "start" position. GM confirmed the condition occurs at high temperatures when it replicated the condition by subjecting the steering column to high temperature testing.

On November 12, 2014, GM and the ignition lock actuator supplier, Nexteer, conducted additional testing, including dimensional analysis of the ignition lock actuator, and determined that the outside diameter (OD) of the actuator barrel exceeded the maximum specification limit. Reviewing the manufacturing history of the ignition lock actuator, GM and Nexteer discovered that the tool used to make the ignition lock actuator was twice pulled for repair between May 4, 2011, and July 8, 2011 because the OD was too large. A review of the column manufacturing process established that the suspect lock actuators were assembled into steering columns between May 4, 2011, and July 15, 2011.

The investigation was reviewed at Open Investigations Review (OIR) meetings on December 8, 2014, and December 15, 2014. On December 17, 2014, GM's Safety Field Action Decision Authority (SFADA) decided to conduct a safety recall.

**Description of Remedy :**

Description of Remedy Program : Dealers will inspect steering columns for identifying information (date code and/or production cavity number) and if necessary, replace the ignition lock housing. Pursuant to 577.11, GM will provide reimbursement to owners for repairs according to the plan submitted on May 23, 2013.

How Remedy Component Differs from Recalled Component : The outside diameter of the barrel portion of the ignition lock actuator (located within the steering column) is within specification.

Identify How/When Recall Condition was Corrected in Production : The ignition lock actuator tool was removed from production July 8, 2011, and repaired before reinstatement.

**Recall Schedule :**

Description of Recall Schedule : General Motors will provide the dealer bulletin and owner letter mail dates for both recalls when available.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : NR - NR

\* NR - Not Reported