

Part 573 Safety Recall Report

16V-507

Manufacturer Name : General Motors LLC**Submission Date :** JUN 29, 2016**NHTSA Recall No. :** 16V-507**Manufacturer Recall No. :** 36110**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 : 289,254

Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2009-2010 Chevrolet Impala

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2009 – 2010 Chevrolet Impala vehicles.

Production Dates : APR 25, 2008 - FEB 16, 2010

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 2009 – 2010 Chevrolet Impala vehicles. The front passenger seat frame in these vehicles may rub against and damage the wires of the passenger presence sensor (PPS) module, which could cause the PPS system to fail to recognize that the passenger seat is occupied and improperly suppress the front passenger airbag. In addition, the cluster gauges and driver information center (DIC) alerts may intermittently turn off or not function properly. In rare circumstances, the damage to the PPS module could cause the airbag fuse to short, resulting in the loss of all airbags and seat belt pretensioners.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Damage and chafing to the wires of the PPS module could prevent the front passenger airbag from deploying in the event of a crash, which could increase the risk of injury to front passengers. If the wire damage to the PPS module is severe enough to short the airbag fuse, it could cause the loss of power to the sensing diagnostic module, which would result in the loss of all airbags and seat belt pretensioners and could increase the risk of injury to vehicle

occupants in the event of a crash.

Description of the Cause : In certain vehicles, the bottom of the front passenger seat frame can rub against and chafe the electrical wires within the PPS module exposing and damaging the bare wires.

Identification of Any Warning that can Occur : There are at least three warnings to alert the customer that the wires of the PPS module may be damaged. Specifically, the passenger airbag status indicator will indicate that the passenger airbag is off even when a passenger is sitting in the front passenger seat; the service airbag message will be displayed in the DIC; and the airbag telltale light may be illuminated.

Supplier Identification :

Component Manufacturer

Name : Lear Corporation

Address : 21557 Telegraph Rd
Southfield MICHIGAN 48033

Country : United States

Chronology :

On March 8, 2016, a GM employee submitted an issue relating to the intermittent loss of cluster gauges and a possible malfunction of the passenger presence sensor to GM's Speak Up for Safety (SUFS) program. On March 9, 2016, GM opened a product investigation. During a search of past issues relating to the PPS module, the investigator learned that during the production of the subject vehicles in early 2010, GM addressed a similar wire chafing issue by adding abrasion resistant tape to the wires of the PPS module located underneath the front passenger seat. That change was put in place on all of the subject vehicles starting on February 10, 2010.

On April 4, 2016, GM obtained the vehicle that was the subject of the SUFS and analyzed the PPS module's wire chafing. Based on that analysis, the investigator and a GM electrical team determined that the wire chafing could cause the airbag fuse to short and power to the SDM to be lost. If power to the SDM is lost, none of the airbags or seat belt pretensioners would deploy in a crash.

Between April and May, 2016, the investigator reviewed warranty claims related to PPS wire repair.. The warranty data revealed a significant decrease in warranty claims for the vehicles with abrasion resistant tape, which was added to all vehicles built on or after February 10, 2010.

The investigation was reviewed in GM's Open Investigation Review on June 20, 2016, and on June 22, 2016, GM's Safety and Field Action Decision Authority decided to conduct a safety recall.

Description of Remedy :

Description of Remedy Program : All vehicles will have double wrap class F anti-abrasion tape with 50% overlap added to the wires in the PPS wire harness. For vehicles with wires that are chaffed, dealers will replace the wire if necessary and add anti-abrasion tape to protect it from further wear. 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 remedy component will have anti-abrasion tape added to the PPS module that will protect the wires from chafing and becoming exposed.
Recalled Component Name: Bose Sense Passenger Presence Sensor / Seat Asm
Recalled Component Description: Automatic Occupant Sensing System
Recalled Component Part Number: 20967972 – 20967983 and 20986751 – 20986752
Recalled Component Country of Origin: U.S.

Identify How/When Recall Condition was Corrected in Production : Anti-abrasion tape was added to the wires on all vehicles built after February 10, 2010. This change protected the wires from rubbing against the seat frame.

Recall Schedule :

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

Planned Dealer Notification Date : JUN 29, 2016 - JUN 29, 2016

Planned Owner Notification Date : NR - NR

* NR - Not Reported