



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 19-001  
**Date Opened:** 02/01/2019  
**Investigator:** Greg Fisher  
**Approver:** Stephen Ridella  
**Subject:** Roof Skin Separation While Driving  
**Date Closed:** 12/12/2019  
**Reviewer:** Gregory Magno

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** General Motors LLC  
**Products:** 2004 - 2005 Cadillac XLR  
**Population:** 7,700

**Problem Description:** The outer roof panel may delaminate from the frame, detached and possibly fly off while driving.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	6	6	8**
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	5	16	21

\*Description of Other: Not Separated (wind noise, noticed gaps, unable to close roof)

\*\* Total eliminates duplicates received by ODI and manufacturer.

## ACTION / SUMMARY INFORMATION

**Action:** This Preliminary Evaluation is closed without further action.

### Summary:

On August 23rd, 2018 - the Office of Defects Investigation (ODI) received a media inquiry pertaining to a motorist experiencing separation of the roof skin from their Cadillac XLR while driving.

Based on the data in-hand at that time and a subsequent (December) consumer complaint, ODI opened PE19-001 on February 1, 2019 to evaluate the scope of this condition in the 2004 - 2005 XLR population.

The subject vehicle model is a two-seat roadster equipped with an electrically powered retractable roof system. The outer roof skin is a Sheet Molded Composite (SMC) which is adhered to the magnesium alloy roof frame.

ODI's February 7, 2019 Information Request (IR) letter to General Motors (GM) covered the entirety of XLR production: MY 2004 - 2009. GM's March 21, 2019 IR response attributed the separations to an unexpected oxide layer on the magnesium framework. A total of eight separations were identified, six of which coincided with consumer complaints to NHTSA. Separations occurred at two per calendar year with the most recent taking place in late 2018. An additional twenty-one noise, fit/finish/ functionality claims were identified that did not lead to separations.

ODI compared the separation rate in the subject vehicles to those in two roof skin separation safety recalls involving the Corvette (06V181: 2005 - 2006 Corvette; 09V491: 2005 - 2007 Corvette) to find that the subject vehicles took over ten years of exposure to reach the failure rate that triggered the 06V181.

Since PE19-001 opened, ODI has received only one additional consumer complaint which reported wind noise

symptoms. The complainant has not responded to outreach efforts by ODI or GM.

Based on a low failure rate, sporadic occurrence, and high detectability of the alleged defect in the subject vehicles, this investigation is closed.

Further use of agency resources on this matter is not warranted.

The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist in the subject vehicles. The agency reserves the right to take further action if warranted by the circumstances.

The ODI complaints cited above can be viewed at [www.nhtsa.gov](http://www.nhtsa.gov) under the following ODI identification numbers:

Separations: 11155574, 11101657, 11012176, 11012166, 10970736, 10970383, 10653304

Note: ODI 11012176 & 11012166 pertain to the same incident

Not Separated: 11243947, 11194359, 11176647, 11173362, 11074433, 10985013

Note: 11176647 & 10985013 pertain to the same incident