



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: EA 13-007
Prompted by: PE13-013, VOQs, Owner Reports
Date Opened: 08/23/2013 **Date Closed:** 06/24/2014
Investigator: Lawrence Hershman **Reviewer:** Scott Yon
Approver: Frank Borris
Subject: Simultaneous Loss of Low-Beam Headlights

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: General Motors LLC
Products: 2005-2007 Chevrolet Corvette
Population: 103,158
Problem Description: An electrical conductor in the UBEC fractures causing the low-beam headlights to fail unexpectedly.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	138	90	200**
Crashes/Fires:	5	0	5
Injury Incidents:	2	0	2
Number of Injuries:	2	0	2
Fatality Incidents:	0	0	0
Other*:	0	154	154

*Description of Other: GM warranty/extended warranty reports which may relate to the subject defect.

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: Close this investigation. See NHTSA Safety Recall 14V-251.

Summary:

On May 14, 2014, General Motors (GM) submitted a Part 573 defect information report initiating NHTSA Safety Recall 14V-251 to remedy the subject vehicles. GM will remedy a defect condition in the underhood bussed electrical center (UBEC) by modifying the vehicle's electrical harnessing. GM also announced a customer satisfaction bulletin to address this issue on model year (MY) 2008-2013 Chevrolet Corvettes. Both programs will be conducted free of charge.

According to GM, when the engine heats up and cools down (from normal use), the plastic material in the UBEC housing expands at a different rate than an electrical conductor routed within it. The difference in expansion rates results in bending of the conductor, a control circuit for the low beam headlights. After multiple thermal cycles, often taking several years of use, the conductor fractures resulting in an open circuit. When this occurs the low-beam headlights will not illuminate. After the engine is turned off and the UBEC cools, the conductor may temporarily reconnect and restore low-beam function, although subsequent failures will occur. This condition does not affect high-beam headlights, marker lamps, turn signals or fog lamps. Simultaneous loss of low-beam headlights could reduce the driver's visibility, increasing the risk of a crash.

The ODI report counts noted above, involving the loss of low beam headlights, represents those received at the time of GM's recall filing; however NHTSA has since received additional complaints. GM submitted similar complaints in response to the agency's information request. Among the complaints reported to NHTSA, five alleged minor crashes in which the vehicle ran off the road or into roadside objects due to the sudden loss of headlights. Two of these

complaints alleged minor injuries and three alleged property damage. Several other reports to NHTSA alleged close calls due to the loss of lighting. GM states that it has received no reports of crashes, injuries or fatalities as a result of this condition.

GM's recall action appears to adequately address the safety risks in the subject vehicles of concern to ODI. Accordingly, the investigation is closed. In addition to recalling the subject vehicles, GM is covering MY 2008-2013 Corvettes, which contain essentially the same UBEC, under a customer satisfaction campaign. ODI notes that these vehicles exhibit a lower likelihood of failure due to their comparatively shorter service life.

The VOQs cited above can be viewed at www-odi.nhtsa.dog.gov/owners/SearchNHTSAID under the following identification numbers:

10400308, 10415603, 10415867, 10416531, 10421639, 10424391, 10424543, 10445971, 10451733, 10454919, 10460674, 10460750, 10463546, 10466342, 10466857, 10468128, 10469057, 10470616, 10471595, 10474350, 10474368, 10475257, 10486597, 10491670, 10496592, 10496788, 10498100, 10502059, 10505606, 10508507, 10510052, 10511467, 10511517, 10511576, 10511696, 10511699, 10511789, 10511837, 10511994, 10512072, 10512093, 10512154, 10512292, 10512341, 10512856, 10513422, 10514576, 10514802, 10514978, 10515162, 10515311, 10515821, 10519426, 10519879, 10520155, 10521036, 10521585, 10522260, 10523059, 10523064, 10523190, 10525646, 10531602, 10531631, 10532221, 10532439, 10533227, 10533251, 10533339, 10536835, 10537561, 10537612, 10538184, 10541749, 10542468, 10542540, 10542576, 10542708, 10542726, 10543187, 10543970, 10544083, 10544810, 10545441, 10545516, 10547343, 10547561, 10547600, 10548492, 10548588, 10548687, 10548982, 10549272, 10549487, 10550079, 10550260, 10551233, 10551867, 10551926, 10551978, 10552019, 10553258, 10554456, 10554573, 10556002, 10556433, 10556844, 10556984, 10557341, 10558236, 10558287, 10559806, 10560498, 10560568, 10560591, 10560732, 10560746, 10561062, 10563593, 10564504, 10564866, 10565725, 10565963, 10566478, 10568666, 10569020, 10572533, 10572598, 10573632, 10575175, 10575338, 10576658, 10577571, 10577811, 10579259, 10579741, 10583367, 10588249.