



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 12-010
Date Opened: 03/28/2012
Investigator: Kareem Habib
Approver: Frank Borris
Subject: Engine compartment fire

Date Closed: 07/19/2012
Reviewer: Jeff Quandt

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: GENERAL MOTORS LLC
Products: 2011-2012 Chevrolet Cruze
Population: 413,148

Problem Description: Engine compartment fire resulting from oil or hydraulic fluid contacting hot engine or exhaust system surfaces then spreading to the engine shield.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	2	25	25**
Crashes/Fires:	2	25	25**
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	2	4	4**

*Description of Other: Engine compartment fires of other or unknown cause.

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: This Preliminary Evaluation is closed. Recall 12V-288.

Summary:

In a June 21, 2012 letter to NHTSA, General Motors LLC. (GM) submitted a Defect Information Report (DIR) identifying a defect in approximately 413,148 model year (MY) 2011 through 2012 Chevrolet Cruze vehicles manufactured from October 2, 2009 through May 31, 2012 (Recall 12V-288). According to GM, engine oil change procedures can result in spilling or dripping of oil on the engine shield. Also, manual transmission vehicles with a completely worn clutch may cause hydraulic fluid to be expelled from the clutch housing vent hole. If oil, debris or the burning hydraulic fluid contacts hot engine or exhaust system surfaces, and the engine shield, the shield may ignite and burn, leading to a possible engine compartment or vehicle fire. GM and its engine shield supplier, Hanwha, modified the engine shield to address factors that may contribute to engine compartment fire. The redesigned shields were completely implemented in production vehicles by June 2012.

The Office of Defects Investigation (ODI) analyzed complaint data provided by GM as well as complaints submitted to ODI from consumers. In total, there were 25 unique Chevrolet Cruze reports indicating hot surface ignition due to engine oil or hydraulic fluid contacting hot manifold, exhaust surfaces and the engine shield. Four additional fires were identified that resulted from other or unknown causes, including 1 attributed to a missing oil filler cap. Three fires of unknown cause all involved vehicles equipped with 1.4L L4 turbocharged engines. ODI will continue to monitor field experience in Cruze vehicles equipped with that engine.

Owners of the recalled vehicles are notified to take their vehicle to a GM dealer, who will modify the engine shield to prevent oil fluids from contacting the shield. Also, on vehicles with a manual transmission, dealers are to apply a protective tape to the electronic power steering wire harness to prevent any incidents related to this issue. This

preliminary evaluation is closed.

The ODI reports cited above can be viewed at www-odi.nhtsa.dot.gov/complaints under the following identification numbers (ODI Nos.): 10456338, 10453754, 10450556, 10446718.