



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 13-016  
**Date Opened:** 05/09/2013  
**Investigator:** Kareem Habib  
**Approver:** Frank Borris  
**Subject:** Engine Stall  
**Date Closed:** 02/10/2014  
**Reviewer:** Jeff Quandt

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Chrysler Group LLC  
**Products:** MY 2006 Chrysler 300, Dodge Charger and Magnum  
**Population:** 153,817  
**Problem Description:** Fuel vapor recovery system failure following refueling may result in engine stall with immediate restart capability in vehicles equipped with 5.7L and 6.1L 8-cylinder HEMI engines.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	70	231	299**
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0

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

## ACTION / SUMMARY INFORMATION

**Action:** This Preliminary Evaluation is closed.

### Summary:

During PE13-016, Chrysler identified a condition in model year (MY) 2005 through 2006 Chrysler 300, Dodge Charger and Magnum vehicles equipped with 5.7L and 6.1L 8-cylinder HEMI engines that may result in engine stall after refueling when the vehicle is stopped or travelling at low speeds. According to Chrysler, the multifunction control valve (MFCV) fuel shutoff float integrated into 19-gallon fuel tanks can swell in a stuck open position allowing an overfill condition. This condition causes fuel to enter into the purge line which may result in engine stall after refueling. Chrysler's investigation determined that the problem was related to dimensional changes/swelling of the float when exposed to fuels with high ethanol content. Chrysler and its supplier, Stant, developed new fuel soak test requirements to address the condition and extended the warranty period on 19-gallon fuel tanks to lifetime coverage. The owner letter mailing began in January 2014. See the investigative file for copies of Chrysler's owner letter.

The Office of Defects Investigation (ODI) analyzed 1262 complaints related to engine stall that were provided by Chrysler or submitted to ODI from consumers. In total, there were 299 unique reports indicating that the fuel system allowed an overfill condition after refueling, and the predominant failure mode identified involved stalling when stopped or travelling at low speeds. The complaint counts shown in this resume include incidents in which enough detail was available to verify the symptoms were related to the defect condition identified by Chrysler. The condition that is causing the majority of stalling incidents in the subject vehicles occurs at a stop or low speed and allows the vehicle to be restarted immediately. The condition represents a low risk to motor vehicle safety and is adequately addressed by Chrysler's extended warranty. This preliminary evaluation is closed.

The ODI reports cited above can be viewed at "<http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID?targetCategory=C>" under the following identification numbers (ODI Nos.):

10507307, 10507200, 10505652, 10505171, 10504826, 10504737, 10504085, 10503965, 10502091, 10501842,  
10499752, 10496037, 10495284, 10494434, 10494394, 10493452, 10493120, 10490388, 10489004, 10487504,  
10483660, 10480828, 10480763, 10477973, 10477450, 10474702, 10474358, 10473974, 10466062, 10458709,  
10457762, 10455763, 10453489, 10453283, 10451227, 10450065, 10449138, 10446316, 10442787, 10442594,  
10440885, 10439373, 10415682, 10399601, 10384811, 10365159, 10340153, 10336288, 10275134, 10510152,  
10509942, 10509026, 10506031, 10505862, 10534319, 10534148, 10531912, 10520561, 10525368, 10524698,  
10520820, 10520097, 10520012, 10515715, 10519379, 10516140, 10515325, 10515134, 10520305, 10514678.