



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: DP 14-004
Prompted by: Defect petition
Date Opened: 09/25/2014
Investigator: Kareem Habib
Approver: Otto Matheke
Subject: Totally Integrated Power Module Failure
Date Closed: 07/24/2015
Reviewer: Jeff Quandt

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Chrysler (FCA US LLC)
Products: 2007-2014 Chrysler light vehicles equipped with TIPM-7
Population: 4,737,158

Problem Description: The petitioner alleges that Totally Integrated Power Module defects may result in engine stall, airbag non-deployment, failure of fuel pump shutoff resulting in unintended acceleration, and fire.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	76	0	76
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	223	0	223

***Description of Other:** Complaints related to either a fuel pump relay condition that did not result in a stall or other non-TIPM stall while driving reports. ** ODI requested manufacturer subject complaint vehicles info.

ACTION / SUMMARY INFORMATION

Action: This defect petition has been denied.

Summary:

In a letter dated August 21, 2014, the Center for Auto Safety (CAS) petitioned the National Highway Traffic Safety Administration (NHTSA) to initiate a defect investigation of alleged failures associated with the Totally Integrated Power Module (TIPM) installed in Chrysler SUV's, trucks, and vans beginning in the 2007 model year. The petitioner alleges that TIPM defects may result in engine stall, airbag non-deployment, failure of fuel pump shutoff resulting in unintended acceleration, fire, and other symptoms. On September 25, 2014, the Office of Defects Investigation (ODI) opened DP14-004 to evaluate the petition for a grant or deny decision.

ODI analyzed complaint data provided by CAS as well as complaints submitted to ODI from consumers. In total, there were 296 complaints submitted by the petitioner in the original petition and five supplements, including 271 complaints related to the subject vehicles equipped with TIPM-7. Approximately 3 percent of CAS complaints are related to vehicles equipped with TIPM-6 and ODI's review of these complaints did not identify any safety defect trends. ODI conducted a detailed review of complaints narratives submitted by CAS and consumers including careful analysis of vehicle repair histories, warranty claims obtained from the manufacturer and any available Customer Assistance Inquiry reports (CAIR). Analysis of the field data indicated that MY2011-2013 Jeep Grand Cherokee and Dodge Durango vehicles exhibited significantly higher complaint rates related to fuel pump relay (FPR) failures than other subject vehicles.

In a September 3, 2014 letter to NHTSA, Chrysler submitted a Defect Information Report (DIR) identifying a defect in the FPR within the TIPM-7 which can result in a no start or stall condition in approximately 188,723 model year (MY)

2011 Jeep Grand Cherokee (WK) and Dodge Durango (WD) vehicles manufactured from January 5, 2010 through July 20, 2011 (14V-530). In a February 24, 2015 letter, Chrysler submitted a second DIR expanding the scope of the FPR defect condition to include an additional 338,216 MY 2012 through 2013 Jeep Grand Cherokee vehicles manufactured from September 17, 2010 through August 19, 2013 and MY 2012 through 2013 Dodge Durango vehicles manufactured from January 18, 2011 through August 19, 2013 (15V-115).

ODI analysis of the CAS allegations of TIPM defects resulting in stall while driving, airbag non-deployment, unintended acceleration, fire and other faults identified a single defect condition related to 1 of over 60 different circuits in the TIPM assembly. The most common effect of this defect condition, related to the fuel pump relay, was a no-start concern, but it could also result in stall while driving (76 complaints). No valid evidence was presented in support of claims related to airbag non-deployment, unintended acceleration or fire resulting from TIPM faults and these claims were found to be wholly without merit based on review of the field data and design of the relevant systems and components.

Except insofar as the petitioner's contentions relate to the defect condition addressed by the Chrysler recalls, the factual bases of the petitioner's contentions that any further investigation is necessary are unsupported. In our view, additional investigation is unlikely to result in a finding that a defect related to motor vehicle safety exists or a NHTSA order for the notification and remedy of a safety-related defect as alleged by the petitioner at the conclusion of the requested investigation. Therefore, in view of the need to allocate and prioritize NHTSA's limited resources to best accomplish the agency's safety mission, the petition is denied. This action does not constitute a finding by NHTSA that a safety-related defect does not exist. The agency will take further action if warranted by future circumstances. Please see the Federal Register notice in DP14-004 file (www-odi.nhtsa.dot.gov/defects).