



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 14-012
Date Opened: 05/08/2014
Investigator: Kareem Habib
Approver: Frank Borris
Subject: Fuel level gauge system failure

Date Closed: 01/13/2015
Reviewer: Jeff Quandt

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Nissan North America, Inc.
Products: MY 2007 Nissan Quest
Population: 37,668

Problem Description: The fuel gauge system may fail, possibly resulting in engine stall while driving with no restart.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	45	111	136**
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	89	89

*Description of Other: Warranty claims that relate to repair or replacement of the subject component

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: This Preliminary Evaluation is closed.

Summary:

On May 8, 2014, the Office of Defects Investigations (ODI) opened Preliminary Evaluation PE14-012 to investigate allegations of inaccurate fuel tank fill level while driving resulting in the vehicle running out of fuel in model year (MY) 2007 Nissan Quest vehicles. During this investigation, Nissan identified a condition in the subject vehicles that may result in the fuel gauge falsely indicating more than the actual amount of fuel remaining in the gas tank. According to Nissan, the combination meter voltage divider circuit for the sender unit may have one of two resistors open or lifted resulting in a fuel gauge malfunction and inaccurate fuel level reading. When this condition occurs, the fuel gauge in the combination meter will continue to track the actual amount of fuel in the gas tank down to approximately one quarter of a tank. However, the fuel gauge will not go any lower which may cause drivers to run out of fuel unexpectedly.

Additionally, ODI analyzed complaint data provided by Nissan as well as complaints submitted to ODI from consumers. In total, ODI identified 136 unique complaints indicating an inaccurate fuel level reading while driving in the subject vehicles. Seventy (70) fuel gauge related stalls were identified, resulting in a complaint rate of 1.85 incidents per thousand vehicles after approximately 8 years in service. In addition, analysis of warranty and combination meter part sales data provided by Nissan indicate a claim rate of less than 1% for all part replacements involving fuel gauge malfunctions.

During PE14-012, Nissan developed a remedy procedure and issued Service Campaign PC 335 on approximately 68,003 MY 2007 through 2009 Nissan Quest vehicles. Owners of the affected vehicles will receive preliminary notification by mail recommending owners to keep fuel level above ½ tank at all times until repair parts become

available. Once the remedy kits become available, Nissan plans to send another letter to affected customers to take their vehicle to a Nissan dealer who will install an external amplifier box with jumper harness in the combination meter to bypass the electric circuit and ensure accurate fuel level indication. The bulletin was sent to dealers on December 19th, 2014 and the owner letter mailing began on December 31st, 2014. See the investigative file for copies of Nissan's dealer communication and owner letter.

Based on the relatively low rate of engine stall incidents for vehicles that have been in service for 8-9 years, this investigation is closed. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist. The agency will continue to monitor complaints and other information relating to the alleged defect and take further action in the future if warranted.

The following VOQ numbers are associated with the issues discussed in this closing resume:

10503555, 10505390, 10513356, 10525325, 10549839, 10551187, 10552937, 10559300, 10565794, 10567557, 10568302, 10574869, 10575303, 10588121, 10588843, 10594370, 10595029, 10597201, 10598275, 10608182, 10610671, 10615104, 10615697, 10617309, 10618457, 10621549, 10622551, 10627963, 10632742, 10633833, 10637512, 10638279, 10640959, 10641050, 10643726, 10643791, 10643933, 10644085, 10649107, 10649598, 10652109, 10660231, 10661351, 10662656, 10662666.