



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

ODI RESUME

Investigation: PE 05-029
Date Opened: 05/31/2005 Date Closed: 10/12/2005
Principal Investigator: Cheryl Rose
Subject: Engine Stalling

Manufacturer: Toyota Motor North America, Inc.
Products: 2004-2005 Toyota Prius
Population: 124,000 (estimated)

Problem Description: The gasoline engine allegedly stalls while driving, without warning.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	166	287	428
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	6,697	6,697

*Description of Other: Warranty claims related to vehicle conditions that could cause gas engine stalling

Action: This Preliminary Evaluation (PE) has been closed

Engineer: Cheryl Rose **CAR**
Div. Chief: Jeffrey L. Quandt
Office Dir.: Kathleen C. DeMeter

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Summary: ODI opened PE05-029 based on 33 reports of alleged gasoline engine stalling on the subject vehicles. The subject vehicles are gasoline/ electric hybrid vehicles that can be operated in gasoline or electric modes, or a combination of both depending on the power demand. All reports allege that the gasoline engine shut down suddenly without warning. Some of the complainants reported that the vehicle continued to operate using the electric mode for a period of time after the gas engine stalled and some reported that the vehicle shut down at the same time that they felt the gas engine stalled. Some consumers reported that they were able to restart the vehicle either immediately or after allowing the vehicle sit for a short time, whereas others reported that they had their vehicle towed. During PE05-029, additional failure data was identified as noted in the failure report summary above. The complaint data represents incidents where engine stalling was alleged or where the vehicle was alleged to have one of the various conditions that causes the gas engine to stall.

In its August 26, 2005 response to ODI's information request, Toyota identified various conditions that could cause the subject vehicles to experience a gas engine stall. If this happens, the driver is alerted by an audible sound and various warning lights. The vehicle will continue to operate in the electric mode and the electrically-powered brake and steering operation will continue to function normally.

Analysis of the warranty data indicated that over 97% of vehicles experiencing a gas engine stall resulted from an issue with the program logic in the electronic control module (ECM) system, which may cause the ECM system to not start the gas engine when required. As a result, the vehicle will enter the limited operation mode described above. The majority of the ODI complaints also indicated that the driver experienced this condition in conjunction with the engine stall.

During October 2005, Toyota informed ODI that it would initiate a special service campaign (SSC) to reprogram the ECM software on approximately 75,000 MY 2004 and early 2005 subject vehicles to address the gas engine stalling condition. During this SSC, dealers will also apply special dielectric grease to a transaxle connector to prevent water intrusion which may also cause similar limited operation conditions. Based on ODI's analysis, this remedy should address most of the incidents resulting in a limited operation mode.

Given these circumstances, further use of the agency resources in this matter does not appear to be warranted. Accordingly, 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 in the subject vehicles and take further action in the future if warranted.