



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION



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Investigation: DP 15-007
Prompted by: Petition
Date Opened: 10/19/2015
Investigator: Stephen Mchenry
Approver: Otto Matheke
Subject: Low-speed surging

Date Closed: 02/25/2016
Reviewer: Jeff Quandt

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Toyota Motor Corporation
Products: 2010 Lexus HS250H
Population: 18,117

Problem Description: The petitioner alleges a defect in the electronic throttle control software caused a crash.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	1	1	1**
Crashes/Fires:	1	1	1**
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: The petition is denied.

Summary:

In a letter dated September 15, 2015, a consumer submitted a petition to the National Highway Traffic Safety Administration (NHTSA) alleging that software defects caused an accident experienced by his wife in their model year 2010 Lexus HS250H vehicle as she was attempting to park the vehicle. The petition requests that NHTSA "have Toyota correct software defects in their electronic throttle control software" and then "issue a national recall of all effected [sic] vehicles and have Toyota replace the old faulty code with the new safer code."

NHTSA has reviewed the material cited by the petitioner. The results of this review and our evaluation of the petition are set forth in the DP15-007 Petition Analysis Report, published in its entirety in the Federal Register and included in the repository for this investigation, available at www.safercar.gov.

The Agency performed a thorough technical review of the concerns raised in the petition. The petitioner believes that the information from the Event Data Recorder (EDR), which records certain pieces of information for five seconds prior to a crash, shows that for the last 0.8 seconds prior to hitting the brick building the accelerator pedal was wide open at 100% at the same time the brake pedal was being depressed. Our analysis of data recovered from the EDR and from the engine management Hybrid Control Unit (HCU), together with vehicle inspection information contained in the petition, indicate that:

- 1) Sometime during the last 0.512 seconds of the event time frame the accelerator pedal was fully applied;
- 2) At the airbag trigger point (EDR t = 0s) immediately following the vehicle's impact with the building, the stop lamp switch status was ON, indicating that the brake had been applied at least enough to illuminate the brake lights;
- 3) At no time during the event were the brake and the accelerator pedals depressed simultaneously (based on information from the HCU); and
- 4) The braking system on the vehicle was fully functional and was capable of stopping a vehicle at full throttle if meaningfully applied in sufficient time.

After a thorough assessment of the material submitted by the petitioner, the information already in NHTSA's possession, and the potential risks to safety implicated by the petitioner's allegations, it is unlikely that an order concerning the notification and remedy of a safety-related defect would result from any proceeding initiated by granting the petition. After full consideration of the potential for finding a safety related defect in the vehicle, and in view of NHTSA's enforcement priorities and its previous investigations into this issue, the petition is denied.