

MIL "ON" - Code P2111 - Throttle Actuator Control System - Stuck Open

Service
Category Engine/Hybrid System

Section Engine Mechanical

Market USA

Lexus Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2010 - 2012	HS250H	

Introduction

Some 2010 – 2012 model year HS 250h vehicles equipped with 2AZ-FXE engines may exhibit a possible engine stall condition while the vehicle is stopped. These symptoms will be accompanied by a MIL "ON" condition with Diagnostic Trouble Code (DTC) P2111 (Throttle Actuator Control System – Stuck Open).

The Hybrid Vehicle ECU (SAE term: HV ECU) logic has been modified and affected parts have been changed to reduce the possibility of this condition occurring. Follow the Repair Procedure in this bulletin to address this condition.

Warranty Information

OP CODE	DESCRIPTION	TIME	MODEL YEAR	OFP	T1	T2
EL1517	R & R PCV Valve and Recalibrate HV ECU	0.8	2010 – 2011	89981-75030 89981-75031 89981-75032	8A	74 or 99
			2012	89981-75090 89981-75091		

APPLICABLE WARRANTY

- This repair is covered under the Lexus Federal Emission Warranty. This warranty is in effect for 96 months or 100,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

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Parts Information

MODEL YEAR	PART NUMBER		PART NAME	QTY
	PREVIOUS	NEW		
All	12204-28030	12204-28050	Valve Sub-Assy, Ventilation	1
All	12261-28190	12261-28191	Hose, Ventilation	1
–	00451-00001-LBL		Authorized Modification Labels	–
2010 – 2011	89981-75030 89981-75031 89981-75032	89981-75033	Computer, Hybrid Vehicle Control	–
2012	89981-75090	89981-75092	Computer, Hybrid Vehicle Control	–

NOTE

- The HV ECU should NOT be replaced as part of the repair procedure.
- Authorized Modification Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through Dealer Daily – Dealer Support Material Orders.

Additional Parts: Only As Needed

PART NUMBER	PART NAME	QTY
90467-19003	Clip or Clamp (For Ventilation Hose) No. 1	1
90467-21004	Clip or Clamp (For Ventilation Hose) No. 2	1

Calibration Information

MODEL	MODEL YEAR	ENGINE	CALIBRATION ID	
			PREVIOUS	NEW
HS 250h	2010 – 2011	2AZ-FXE	899837503000 / 37503000 899837503100 / 37503100 899837503200 / 37503200	899837503300 / 37503300
	2012		899837508000 / 37508000 899837508100 / 37508100	899837508200 / 37508200

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Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
Techstream Lite		TSLITEPDLR01	

* Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 11.00.017 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- The Diagnostic Tester is NOT recommended for flash reprogramming. Please use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.



SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	00002-MCGR8	1

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

* Essential SST.

Repair Procedure

1. Confirm the condition by performing a health check using Techstream.
Was DTC P2111 retrieved?
 - **YES** — Go to step 2.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

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Repair Procedure (Continued)

2. Replace the PCV Valve and Ventilation Hose.

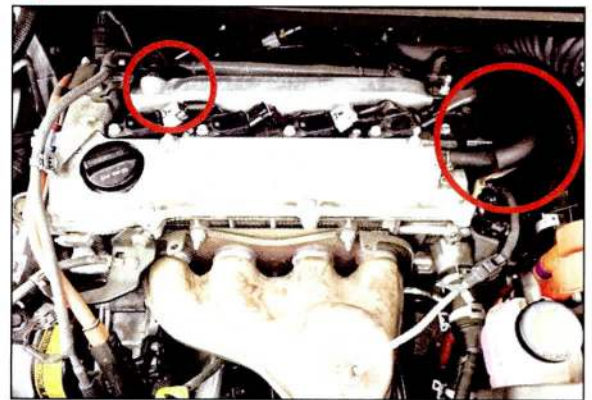
- A. Open hood and remove engine cover shown in Figure 1.

Figure 1.



- B. Unclamp ventilation hose and remove, as shown in Figure 2.

Figure 2.

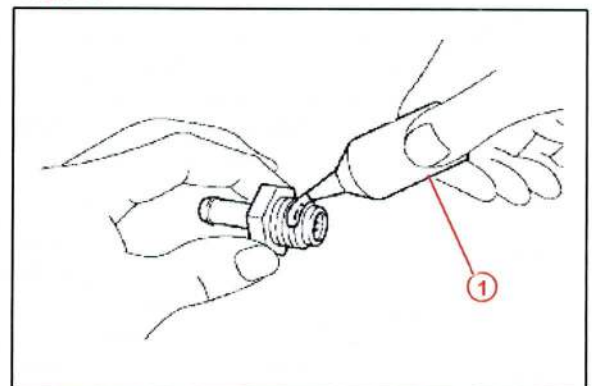


- C. Remove the PCV Valve on the back of the valve cover using a 22 mm deep socket.

- D. Install new ventilation hose and reinstall clamps.

- E. Apply Toyota Genuine Adhesive 1324, Three Bond 1324 or equivalent to PCV valve threads as shown in Figure 3.

Figure 3.



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Toyota Genuine Adhesive 1324, Three Bond 1324 or Equivalent

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Repair Procedure (Continued)

- F. Install new PCV valve using 22 mm deep socket.
Torque: 19 N*m (194 kgf*cm, 14 ft*lbf)
- G. Reattach hose to back of PCV valve.
3. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 4. Confirm if the HV ECU calibration has been updated. If the calibration ID listed is NOT the latest HV ECU calibration – go to step 4.

Figure 4. Location of Authorized Modification Label on 2010 – 2012 HS 250h



1	Replacement HV ECU Part Number (i.e., 89981-75033)
2	New Calibration ID(s) (i.e., 37503300)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (Continued)

4. Flash reprogram the HV ECU.

NOTE

- The GR8 Battery Diagnostic Station **MUST** be used in Power Supply Mode to maintain battery voltage at 13.5 volts while flash reprogramming the vehicle.
- For details on how to use the GR8 Battery Diagnostic Station, refer to the [GR8 Instruction Manual](#) located on the Technical Information System (TIS), Diagnostics – Tools & Equipment – Battery Diagnostics.

Follow the procedures outlined in Service Bulletin No. [L-SB-0021-14](#), "Techstream ECU Flash Reprogramming Procedure", and flash the HV ECU with the NEW calibration file update.

5. Place vehicle into Ready "ON" mode and test drive the vehicle to confirm proper vehicle operation of HV ECU.
6. Install the Authorized Modifications Label.
 - A. Using a permanent marker, enter the following information on the label:
 - HV ECU part number [Refer to **the Parts Information** section for the **CURRENT PART NUMBER**]
 - Calibration ID(s) [Refer to the **Calibration Identification Chart** for the **NEW CALIBRATION ID**]
 - Dealer Code
 - Repair Date
 - Change Authority [**This SB number**]
 - B. Affix the Authorized Modifications Label to the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.