

M.I.L. "ON" DTC P0172 & P0175

Service Category Engine/Hybrid System

Section Engine Control

Market USA

Lexus Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2008 – 2009	IS250	Drive Type(s): 2WD, 4WD Engine(s): 4GR Transmission(s): 6MT, 6AT VDS(s): BK262, CK262

Introduction

Under certain driving conditions, some 2008 – 2009 model year IS 250 vehicles with 4GR-FSE engines may exhibit a M.I.L. "ON" condition with one or both of the following Diagnostic Trouble Codes (DTCs):

- P0172 (System Too Rich [Bank 1])
- P0175 (System Too Rich [Bank 2])

The Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM) logic has been modified to reduce the possibility of this condition occurring. Refer to the following repair procedure to address customer concerns.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EG9005	Recalibrate ECM (PCM) Engine and Change Engine Oil & Oil Filter	1.0	89661-#####	8A	99

APPLICABLE WARRANTY

- This repair is covered under the Lexus Federal Emissions Warranty. This warranty is in effect for 96 months or 80,000 miles, whichever occurs first, from the vehicles in-service date.
- Warranty application is limited to correction of a problem based upon a customer's specific complaint.

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Parts Information

MODEL YEAR	DRIVETRAIN	TRANS	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
2008/ 2009	2WD	–	04152-YZZA3	Same	Element Kit, Oil Filter	1
	AWD	–	04152-YZZA2	04152-YZZA5		1
–	–	–	N/A	00451-00001-LBL	Authorized Modifications Label	1
2008	2WD	M/T	89661-53B00	89661-53B01	Computer, Engine Control (ECM/PCM)	–
		A/T	89661-53B10	89661-53B11		–
AWD	A/T	89661-53B20	89661-53B21	–		
2009	2WD	M/T	89661-53C40	89661-53C41		–
		A/T	89661-53C50	89661-53C51		–
	AWD	A/T	89661-53C60	89661-53C61		–

NOTE

- The ECM (PCM) 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 Materials Orders.

Calibration Identification Chart

MODEL YEAR	DRIVETRAIN	TRANS	ECM (CPU)	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID	VDS
2008	2WD	M/T	Main	35365000	35365100	BK262
		A/T		35366000	35366100	
	AWD	A/T	Main	35367000	35367100	CK262
			Sub	55351000	55351100	
2009	2WD	M/T	Main	35379000	35379100	BK262
		A/T		35380000	35380100	
	AWD	A/T		35381000	35381100	CK262

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Required Tools & Equipment

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

* Essential SST.

NOTE


- Additional SSTs may be ordered by calling 1-800-933-8335.
- The GR8 Battery Diagnostic Station (P/N 00002-MCGR8) supersedes the Automatic Trickle Charger (P/N 00002-YA122-01) and Fast Battery Chargers (Associated P/N ASE6003 and Christie P/N CAPPDQ). P/N 00002-YA122-01, ASE6003, and CAPPDQ are now obsolete.

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* NOTE: Software version 4.00.017 or later is required.	ADE	TSUNT	1

* Essential SST.

NOTE

- Additional TIS 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 with this calibration file. Please use TIS Techstream or an approved J2534 interface to perform this update. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.



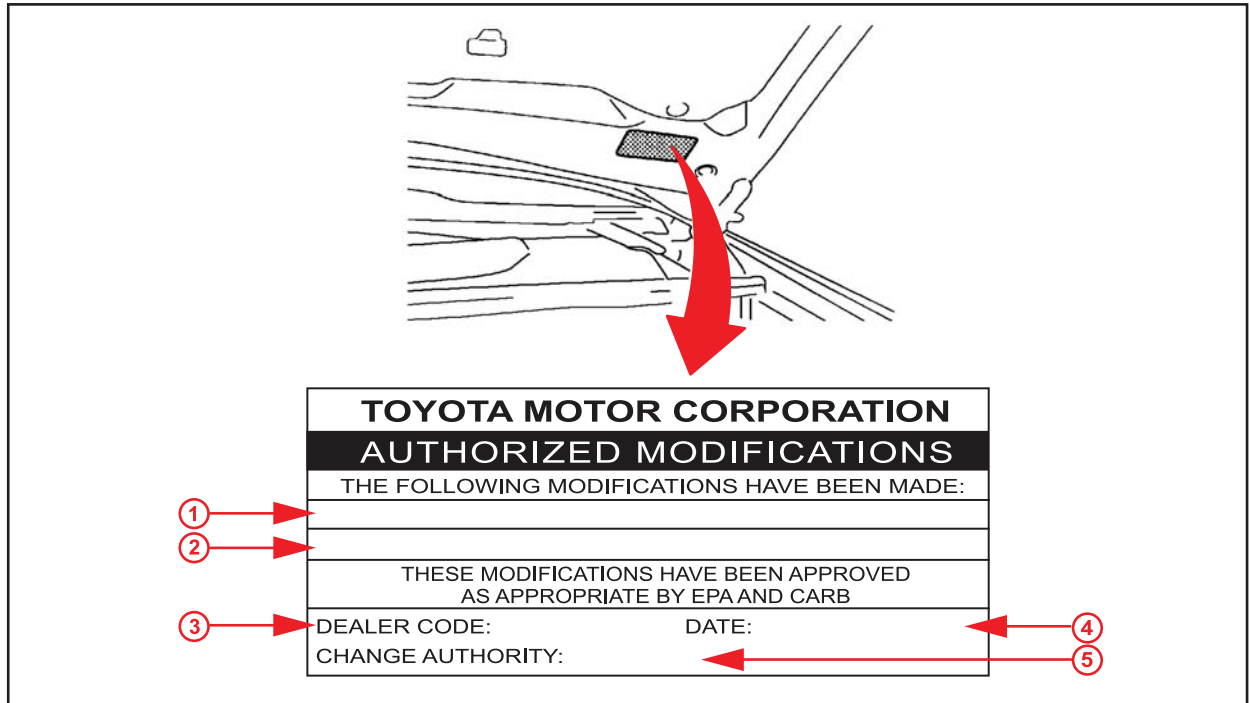
REQUIRED MATERIAL	CLASSIFICATION	DRIVETRAIN	QUANTITY
Engine Oil	ILSAC GF-4 Multi-grade SAE 5W-30	2WD	6.2 U.S. quarts (5.9 liters)
		AWD	6.3 U.S. quarts (6.0 liters)

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Repair Procedure

1. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 1. Confirm if the ECM (PCM) calibration has been updated. If the calibration ID listed is NOT the latest ECM (PCM) calibration — go to step 2.

Figure 1. Location of Authorized Modifications Label on 2008 IS 250



1	Replacement ECM (PCM) Part Number (i.e., 89661-53B01)
2	New Calibration ID(s) (i.e., 35365100)
3	Dealer Code

4	Date Completed
5	This TSIB Number

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Repair Procedure (Continued)

2. Flash Reprogram the ECM (PCM).

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 – Battery*.

Follow the procedures outlined in TSIB No. [SS002-07](#), "Techstream ECU Flash Reprogramming Procedure", and flash the ECM (PCM) with the NEW calibration file update.

3. Install the Authorized Modifications Label.

A. Using a permanent marker, enter the following information on the label:

- ECM 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 TSIB** 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.

4. Change the engine oil and filter.

Refer to TIS, applicable model year IS 250 Repair Manual:

- 2008 IS 250:
Engine/Hybrid System – Lubrication – "4GR–FSE Lubrication: Oil and Oil Filter (for 4WD) / (for 2WD): Replacement"
- 2009 IS 250:
Engine/Hybrid System – Lubrication – "4GR–FSE Lubrication: Oil and Oil Filter (for 4WD) / (for 2WD): Replacement"

5. Test drive the vehicle to confirm proper vehicle operation.