

M.I.L. "ON" DTC P0125

Service Category Engine/Hybrid System

Section Engine Control

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2004 – 2007	Prius	

Introduction

Some customers may report a M.I.L. "ON" condition that occurs after operating the vehicle for extended times in "Ready ON" mode with the transaxle in the Park position.

The following Diagnostic Trouble Code (DTC) may be found: P0125 "*Insufficient Coolant Temperature for Closed Loop Fuel Control*". The Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM) logic has been modified to improve this condition. Use the following repair procedure for applicable vehicles.

Warranty Information

OP CODE	DESCRIPTION	TIME	OPF	T1	T2
EG8014	Recalibrate ECM (PCM) Engine	0.9	89661-47###	8A	99

APPLICABLE WARRANTY

- This repair is covered under the Toyota Federal Emission Warranty. This warranty is in effect for 96 months or 80,000 miles, whichever occurs first, from the vehicle's 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	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
2004 – 2005	89661-47070	89661-47104	Computer, Engine Control (ECM/PCM)	–
	89661-47071			
	89661-47072			
	89661-47100			
	89661-47101			
	89661-47102			
2006 – 2007	89661-47140	89661-47162		–
	89661-47160			
	89661-47161			
–	N/A	00451-00001-LBL	Authorized Modifications Label	1

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 System, or by calling the MDC at 1-800-622-2033.

Calibration Identification Chart

MODEL	MODEL YEAR	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID	VDS
Prius	2004 – 2005	34705000	34705400	KB20U
		34705100		
		34705200		
		34705300		
	2006 – 2007	34702000		KB22U
		34702100		
2006 – 2007	34709000	34710200	KB20U	
	34710000			
	34710100		KB22U	

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Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS techstream* NOTE: Software version 3.00.021 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.



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 SPX/OTC at 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.

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Diagnostic Procedure

Since other factors can cause the DTC P0125 *"Insufficient Coolant Temperature for Closed Loop Fuel Control"* condition, eliminate other possible causes prior to performing the detailed repair procedure that follows.

General trouble areas:

- Engine thermostat
- Coolant leaks
- Improper engine coolant type or contamination

Refer to the Technical Information System (TIS):

[2004](#) or [2005](#) model year Prius Repair Manual, *Engine/Hybrid System – Engine Control – "SFI System: P0125 Insufficient Coolant Temperature For Closed Loop Fuel Control"*

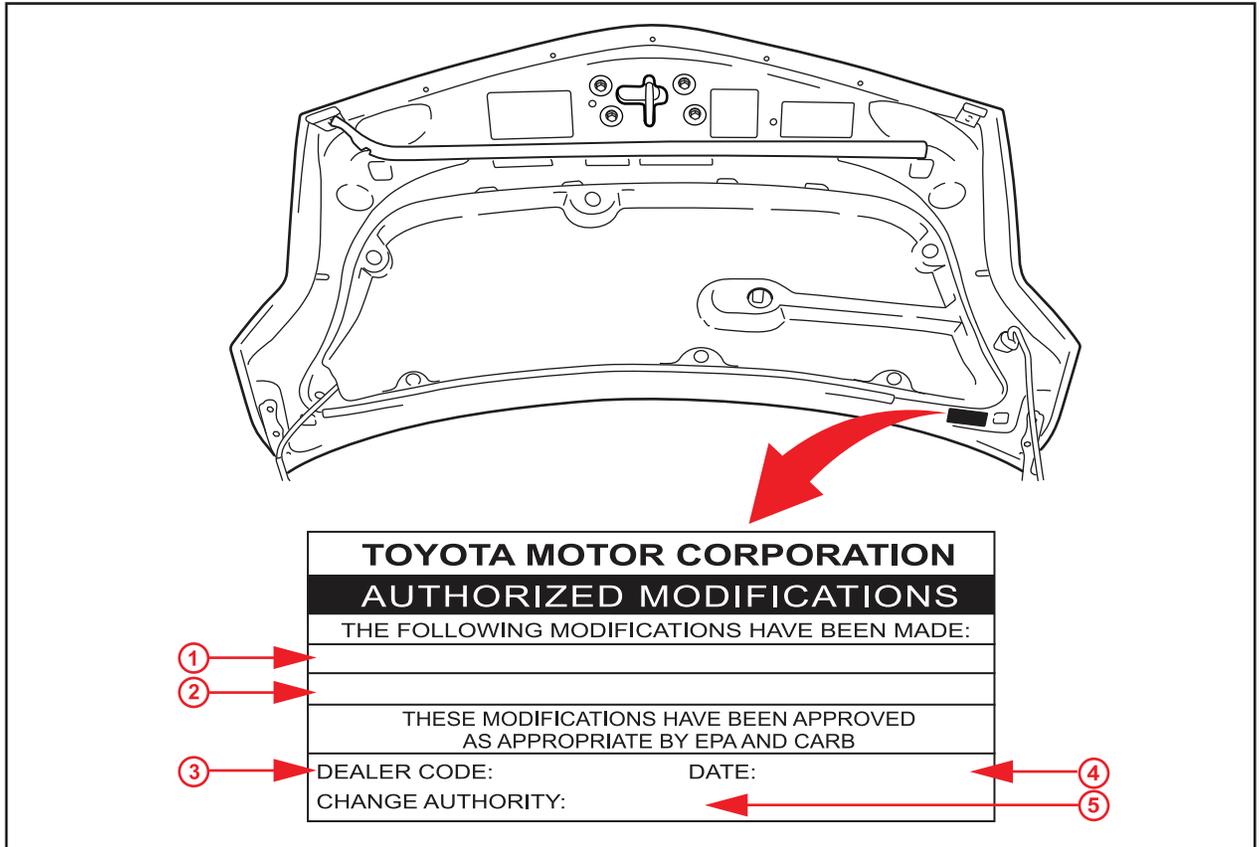
[2006](#) or [2007](#) model year Prius Repair Manual, *Engine/Hybrid System – Engine Control – "1NZ-FXE Engine Control System: SFI System: P0125 Insufficient Coolant Temperature For Closed Loop Fuel Control"*

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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 2007 Prius



1	Replacement ECM (PCM) Part Number (i.e., 89661-47162)
2	New Calibration ID(s) (i.e., 34710200)
3	Dealer Code

4	Date Completed
5	This TSB Number

2. Connect TIS techstream to DLC3.
3. Place the car in the "IG-ON" mode (push the Power button **twice** when the car is OFF — Do NOT depress the brake pedal).

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Repair Procedure (Continued)

- 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 TIS, *Diagnostics – Battery*.

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

- Install the Authorized Modifications Label.
 - 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 TSB number**]
 - 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.
- Start the engine and warm it up to normal operating temperature before test driving.
- Test drive the vehicle to confirm proper vehicle operation.
- Calibration update is complete.