

M.I.L. "ON" DTC P0133 (ONLY)

Service Category Engine/Hybrid System

Section Engine Control

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2005 – 2006	Matrix	Drive Type(s): 4WD Engine(s): 1ZZ Transmission(s): 4AT VDS(s): LR32E

Introduction

Under certain driving conditions, some 2005 – 2006 model year Matrix vehicles equipped with 4WD may exhibit a M.I.L. "ON" condition with DTC P0133 (Oxygen Sensor Circuit Slow Response [Bank 1 Sensor 1]). The Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM) logic has been modified to improve this condition.

Parts Information

MODEL YEAR	DRIVETRAIN	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
2005	4WD	89661-01140	89661-01141	Computer, Engine Control (ECM/PCM)	–
2006		89661-02F70	89661-02F71		–
–	–	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.

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EG8012	Recalibrate ECM (PCM) Engine	0.8	89661-##### 89666-#####	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.

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS techstream* NOTE: Software version 2.20.015 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 (SSTS)	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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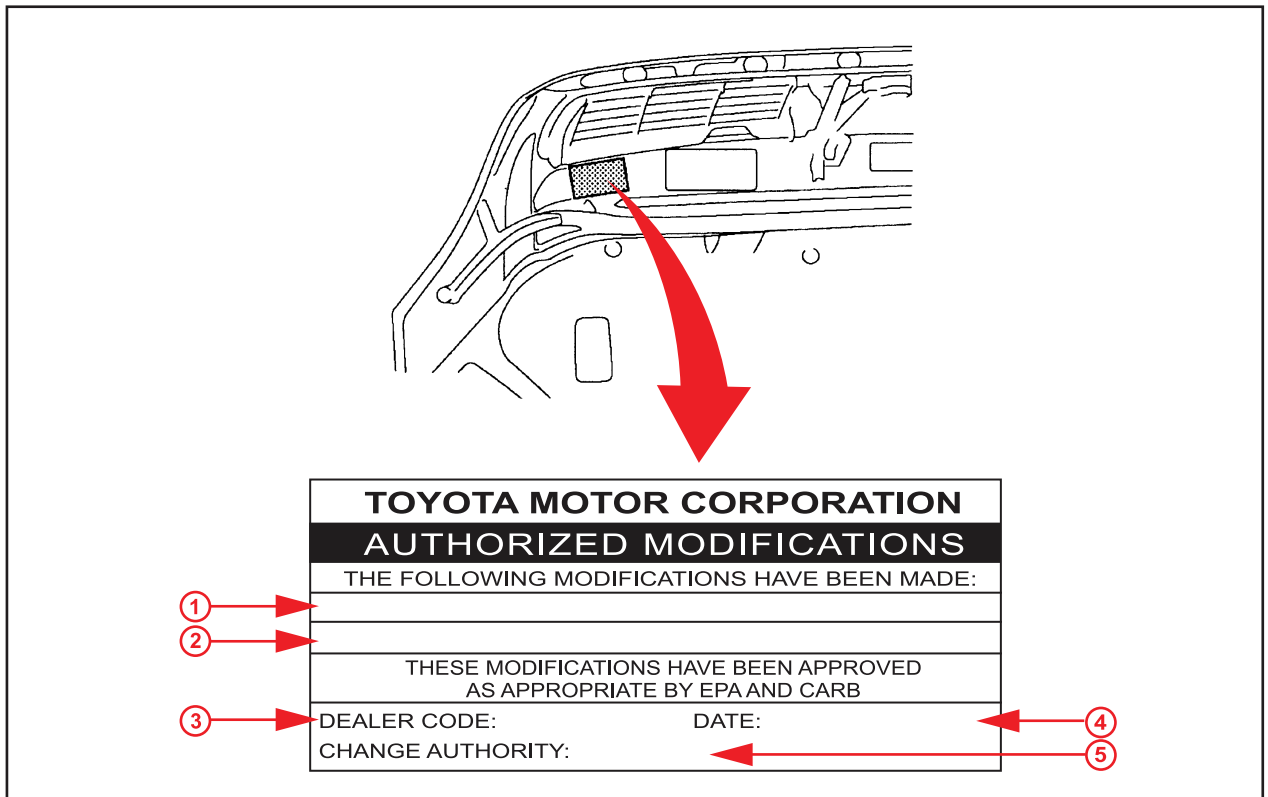
Calibration Identification Chart

MODEL	MODEL YEAR	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID	VDS
Matrix (4WD)	2005	30112000	30112100	LR32E LR30E
	2006	30258000	30258100	

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. Authorized Modifications Label on 2005 Matrix



1	Replacement ECM (PCM) Part Number (i.e., 89661-01141)
2	New Calibration ID(s) (i.e., 30112100)
3	Dealer Code

4	Date Completed
5	This TSB 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 TSB 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 TSB 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. Start the engine and warm it up to normal operating temperature before test driving.
5. Test drive the vehicle to confirm proper vehicle operation.
6. Calibration update is complete.