



**Technical Service
BULLETIN**

November 28, 2007

Title:

**M.I.L. "ON" DTC P2714 WITH
TRANSMISSION PERFORMANCE DTCs**

Models:

'07 Tundra

TRANSMISSION & CLUTCH
TC017-07

Introduction Some customers may complain about a M.I.L. "ON" condition with DTC P2714 (Pressure Control Solenoid "D" Performance – Shift Solenoid SLT) combined with other transmission performance DTCs such as P0751, P0756, P0761, P0766, P0729, P0781, P0894, P2757, or P0776 with abnormal transmission shifting. Replacement of the transmission and installation of revised Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) software logic may be required to repair the vehicle. Follow the repair procedure below to address customer concerns.

NOTE:

Fluid level must be confirmed to be OK following the procedures outlined in TSB No. TC009-07, "Transmission Fluid Level", BEFORE ordering parts or reprogramming the ECM (PCM) since incorrect fluid level can also cause these DTCs.

**Applicable
Vehicles**

- 2007 model year **Tundra** vehicles equipped with **5.7 L V8 engine**.

**Warranty
Information**

OP CODE	DESCRIPTION	TIME		OFF	T1	T2
TC7008	R & R Transmission Assembly	2WD	7.2	35000-0C###	8A	99
		4WD	7.8			
Combo A	Reprogram ECM (PCM)	0.5				

Applicable Warranty*:

This repair is covered under the Toyota Powertrain Warranty. This warranty is in effect for 60 months or 60,000 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.



Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	DRIVETRAIN	TOW PACKAGE	PART NAME	QTY
N/A	00451-00001-LBL	-	-	Authorized Modifications Label	1
00289-ATFWS	Same	-	-	ATF WS	As Needed
35000-0C170 35000-0C180	35010-0C170-84	2WD	-	Transmission Assembly	1
35000-0C190 35000-0C200	35010-0C190-84	4WD	-		1
89661-0C830 89661-0C831	89661-0C832	2WD	No	ECM (PCM)*	-
89661-0C840 89661-0C841	89661-0C842		Yes		-
89661-0C850 89661-0C851	89661-0C852	4WD	No		-
89661-0C860 89661-0C861	89661-0C862		Yes		-




* The ECM (PCM) should NOT be replaced as part of the Repair Procedure.

NOTE:
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 YEAR	MODEL	ENGINE	DRIVETRAIN	TOW PACKAGE	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID
2007	Tundra	3UR-FE 5.7 L V8	2WD	Yes	30C58000 30C58100	30C58200
				No	30C57000 30C57100	30C57200
			4WD	Yes	30C60000 30C60100	30C60200
				No	30C59000 30C59100	30C59200

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SSTs)	SUPPLIER	PART NUMBER	QTY
TIS Techstream* NOTE: Software version 2.20.015 or later is required. 	ADE	TSUNT	1
GR8 Battery Diagnostic Station* 	SPX/OTC	00002-MCGR8	1
Transmission Fill System* 	SPX/OTC	00002-11100-02	1

* Essential SSTs.

NOTE:

- 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.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- Other 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.



Repair Procedure

1. Check the transmission for evidence of fluid leakage.
2. Check the transmission fluid level.
Refer to TSB No. TC009–07, "Transmission Fluid Level".

NOTE:

Incorrectly adjusted fluid level can cause transmission shifting issues and M.I.L. "ON" conditions.

Is the transmission fluid level correct?

- If **YES** — **Go to step 3.**
- If **NO** — Adjust fluid level to correct level then repeat step 2 to confirm correct fluid level.

3. Does the transmission fluid smell burnt or have a gritty feel from contaminates?
 - If **YES** — **Go to step 5.**
 - If **NO** — **Go to step 4.**
4. Clear DTCs and test drive the vehicle.
 - A. Does the M.I.L. "ON" reoccur with DTC P2714 or other transmission performance DTCs resetting?

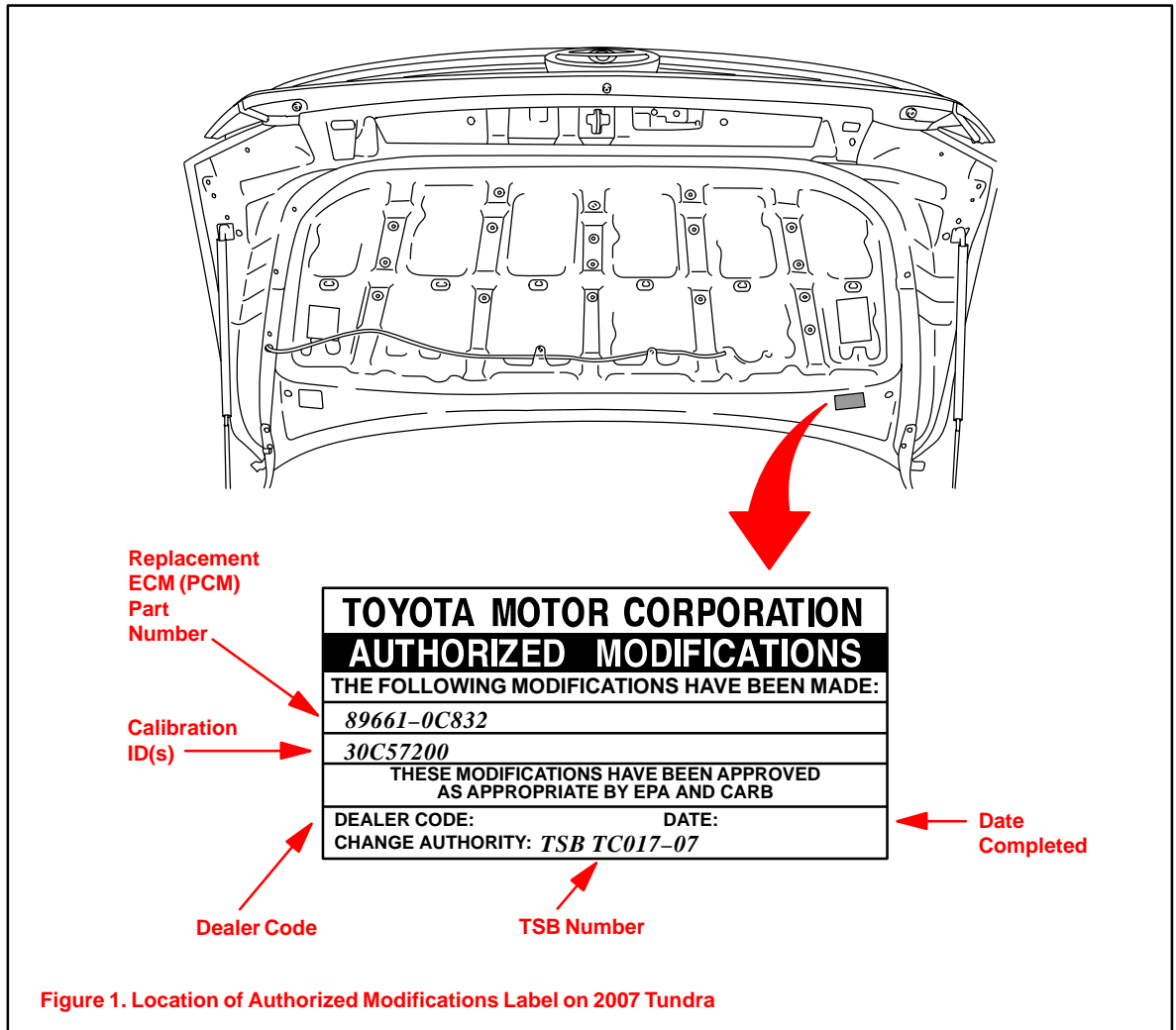
NOTE:

DTC P2714 and most transmission performance DTCs are two trip logic DTCs.

- B. Does the transmission display any transmission shifting issues?
 - If **YES to A or B** — **Go to step 5.**
 - If **NO to A and B** — Continue test driving the vehicle and try to duplicate the M.I.L. "ON" or abnormal transmission shifting. **If unable to duplicate complaint, return the vehicle to the customer with NO repairs attempted.**
5. Replace the transmission.
 - A. Refer to the Technical Information System (TIS), 2007 model year Tundra Repair Manual:
 - *Drivetrain – Automatic Transmission/Transaxle – "AB60E Automatic Transmission: Automatic Transmission Assembly: Removal"*
 - *Drivetrain – Automatic Transmission/Transaxle – "AB60F Automatic Transmission: Automatic Transmission Assembly: Removal"*
 - *Drivetrain – Automatic Transmission/Transaxle – "AB60E Automatic Transmission: Automatic Transmission Assembly: Installation"*
 - *Drivetrain – Automatic Transmission/Transaxle – "AB60F Automatic Transmission: Automatic Transmission Assembly: Installation"*
 - B. Refer to TSB No. TC009–07, "Transmission Fluid Level".

Repair Procedure
(Continued)

- 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 7.



- 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.

- Start the engine and warm it up to normal operating temperature before test driving.
- Test drive the vehicle to confirm proper vehicle operation.

**Repair
Procedure**
(Continued)

10. 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): *TC017-07*
 - 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.