# MIL "ON" DTC P0461 (Fuel Level Sensor "A" Circuit Range/Performance) 

Service
Category
Engine/Hybrid System
Toyota Supports
Section
Engine Control
Market USA
ASE Certification

Applicability

| YEAR(S) | MODEL(S) | ADDITIONAL INFORMATION |
| :--- | :--- | :--- |
| $2012-2013$ | Sequoia | VDS(s): BW5G1, DW5G1, JW5G1 |
| $2012-2013$ | Tundra | VDS(s): BW5F1, CW5F1, DW5F1, HW5F1, |
|  |  | KW5F1, MW5F1, UW5F1 |

Introduction
Some 2012 and 2013 model year Sequoia and Tundra vehicles with the 3UR-FBE ( 5.7 L ) engine may exhibit a MIL "ON" condition with Diagnostic Trouble Code (DTC) P0461 (Fuel Level Sensor "A" Circuit Range/Performance) after a recent fuel refill. The Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) logic has been revised to address this condition. Use the following repair procedure to recalibrate the ECM (PCM).

Warranty Information

| op Code | DESCRIPTION | TIME | model | TOWING OPTION | OFP | T1 | T2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EG1202 | Recalibrate ECM (PCM) Engine | 0.4 | Sequoia | Std | $\begin{aligned} & \hline 89661-0 \mathrm{CN} 20 \\ & 89661-0 \mathrm{CN} 21 \end{aligned}$ | 8A | 02 |
|  |  |  |  | Tow | $\begin{aligned} & \text { 89661-0CN30 } \\ & \text { 89661-0CN31 } \end{aligned}$ |  |  |
|  |  |  | Tundra | Std | $\begin{aligned} & \hline 89661-0 \mathrm{CM} 60 \\ & 89661-0 \mathrm{CM} 61 \end{aligned}$ |  |  |
|  |  |  |  | Tow | $\begin{aligned} & \hline 89661-0 \mathrm{CM} 70 \\ & \text { 89661-0CM71 } \end{aligned}$ |  |  |

## APPLICABLE WARRANTY

- This repair is covered under the Toyota Federal Emission Warranty. This warranty is in effect for 96 months or $\mathbf{8 0 , 0 0 0}$ 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.

MIL "ON" DTC P0461 (Fuel Level Sensor "A" Circuit Range/Performance)

Parts Information

| MODEL | ENGINE | TOWING OPTION | PREVIOUS PART NUMBER | CURRENT <br> PART NUMBER | PART NAME | QTY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sequoia | 3UR-FBE | Std | $\begin{aligned} & \text { 89661-0CN20 } \\ & 89661-0 \mathrm{CN} 21 \end{aligned}$ | 89661-0CN22 | $\begin{aligned} & \text { Computer, } \\ & \text { Engine Control } \\ & \text { (ECM/PCM) } \end{aligned}$ | - |
|  |  | Tow | $\begin{aligned} & 89661-0 \mathrm{CN} 30 \\ & 89661-0 \mathrm{CN} 31 \end{aligned}$ | 89661-0CN32 |  | - |
| Tundra |  | Std | $\begin{aligned} & \text { 89661-0CM60 } \\ & \text { 89661-0CM61 } \end{aligned}$ | 89661-0CM62 |  | - |
|  |  | Tow | $\begin{aligned} & 89661-0 \mathrm{CM} 70 \\ & \text { 89661-0CM71 } \end{aligned}$ | 89661-0CM72 |  | - |


| PREVIOUS PART NUMBER | CURRENT PART NUMBER | PART NAME | QTY |
| :---: | :---: | :---: | :---: |
| $00451-00001-$ LBL | Same | Authorized Modification Labels | 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 Orders.

Calibration Information

| MODEL | ENGINE | DRIVETRAIN | TOWING OPTION | PREVIOUS CALIBRATION ID | NEW CALIBRATION ID |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sequoia | 3UR-FBE | 4WD | Std | 30CK5000 | 30 CK 5200 |
|  |  |  |  | 30CK5100 |  |
|  |  |  | Tow | 30CK6000 | 30 CK 6200 |
|  |  |  |  | 30CK6100 |  |
| Tundra |  |  | Std | 30CJ9000 | 30 CJ 9200 |
|  |  |  |  | 30CJ9100 |  |
|  |  |  | Tow | 30 CK 0000 | 30 CK 0200 |
|  |  |  |  | 30CK0100 |  |

## MIL "ON" DTC P0461 (Fuel Level Sensor "A" Circuit Range/Performance)

## Required Tools \& Equipment

| REQUIRED EQUIPMENT | SUPPLIER | PART NUMBER | QTY |
| :---: | :---: | :---: | :---: |
| TIS Techstream* <br> or <br> Techstream Lite <br> NOTE: Software version 7.20 .041 or later is required. | ADE | $\begin{gathered} \text { TSPKG1 } \\ \text { or } \\ \text { TSLITEDLR0 } \end{gathered}$ | 1 |

NOTE

- 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 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) | PART NUMBER | QTY |
| :---: | :---: | :---: |
| GR8 Battery Diagnostic Station |  |  |

## NOTE

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

[^0]
## MIL "ON" DTC P0461 (Fuel Level Sensor "A" Circuit Range/Performance)

## Repair Procedure

1. Confirm the condition matches the Introduction.
2. 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 3.
Figure 1. Location of Authorized Modifications Label on 2012-2013 Sequoia and Tundra


| 1 | Replacement ECM (PCM) Part Number (i.e., <br> $89661-0 \mathrm{CN} 22)$ |
| :---: | :--- |
| 2 | New Calibration ID(s) (i.e., 30CK5200) |
| 3 | Dealer Code |


| 4 | Date Completed |
| :---: | :--- |
| 5 | This SB Number |

## MIL "ON" DTC P0461 (Fuel Level Sensor "A" Circuit Range/Performance)

Repair Procedure (Continued)
3. 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 - Tools \& Equipment - Battery Diagnostics.

Follow the procedures outlined in Service Bulletin No. T-SB-0064-10, "Techstream ECU Flash Reprogramming Procedure", and flash the ECM (PCM) with the NEW calibration file update.
4. 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 bulletin 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.

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

[^0]:    *Essential SST.

