T-SB-0022-23 May 12, 2023

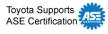


# Abnormal Fuel Gauge Operation and/or Low Oil Pressure Gauge Reading

Service

Category Vehicle Interior

Section Meter/Gauge/Display Market USA



# **Applicability**

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2022	Tundra, Tundra HV	

#### Introduction

Some 2022 model year Tundra and Tundra Hybrid vehicles may exhibit one or both of the following conditions:

- The fuel gauge reading increases when the vehicle is parked on an incline, as the front of the vehicle rises higher than the rear of the vehicle.
- The oil pressure gauge reads slightly below a quarter when the engine is idling, or the vehicle is cruising at a constant speed.

The combination meter ECU logic has been modified to reduce the possibility of these conditions. Follow the Repair Procedure in this bulletin to address these conditions.

#### **Warranty Information**

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
800279	Reprogram the Combination Meter ECU	1.2	83800-####*	87	74

<sup>\*</sup>Warranty claim MUST be submitted with the correct 10-digit OFP. Choose the correct OFP for the vehicle being repaired by searching for the parts in the Electronic Parts Catalog using the VIN filter.

#### **APPLICABLE WARRANTY**

- This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 36,000 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.

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#### **Parts Information**

PART NUMBER		PART NAME	OTY
PREVIOUS	NEW	PARTNAME	QTY
83800-0CW20	83800-0CW21		
83800-0CW30 83800-0CW31	83800-0CW32	Meter Assy, Combination	-
83800-0CW40 83800-0CW41	83800-0CW42		

## **NOTE**

The Combination Meter Assembly should NOT be replaced as part of the Repair Procedure.

## **Required Tools & Equipment**

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY	
Techstream ADVI*	m ADVI*			
Techstream 2.0	ADE	TS2UNIT	1	
Techstream Lite	ADE	TSLITEPDLR01		
Techstream Lite (Green Cable)		TSLP2DLR01		

<sup>\*</sup>Essential SST.

#### **NOTE**

- Only ONE of the Techstream units listed above is required.
- GTS+ software version 2023.02.001.02 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- Use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit <u>techinfo.toyota.com</u> for more information regarding J2534 reprogramming.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Battery Diagnostic Tool*	DCA-8000P T	1

<sup>\*</sup>Essential SST.

#### **NOTE**

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

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# Abnormal Fuel Gauge Operation and/or Low Oil Pressure Gauge Reading

# **Calibration Information**

MODEL	FUEL TANK CIZE	METER   CAL ID 1 SERI	CAL ID 1 SERIES CAL ID	CALIBRATION ID		
MODEL	FUEL TANK SIZE	WEIER	CALID 1 SERIES	NUMBER	PREVIOUS	NEW
		Analog	868000CW2###	CID-1	838000CW2100 838000CW2101	838000CW2102*
	32 Gallon (122 Liter) Digital	(122 Liter)		CID-1	838000CW3107 838000CW3108 838000CW310A 838000CW310B	
			838000CW3###	CID-2	838000CS7207	838000CW310D / 838000CS730E
Tundra and Tundra HV			CID-3	838000CS7307 838000CS7308 838000CS730A 838000CS730B		
				CID-1	838000CW4107 838000CW4108 838000CW410A 838000CW410B	
			838000CW4###	CID-2	838000CS7207	838000CW410D / 838000CS730E
				CID-3	838000CS7307 838000CS7308 838000CS730A 838000CS730B	

<sup>\*</sup>Maintenance Required reminder reset may be required. The scheduled maintenance notification will NOT appear as expected for the next service interval after the update.

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# Abnormal Fuel Gauge Operation and/or Low Oil Pressure Gauge Reading

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## **Repair Procedure**

- 1. Confirm the condition(s) exist(s).
  - A. Does the vehicle exhibit one or both of the following conditions?
    - The fuel gauge reading increases when the vehicle is parked on an incline, as the front of the vehicle rises higher than the rear of the vehicle.
    - The oil pressure gauge reads slightly below a quarter when the engine is idling, or the vehicle is cruising at a constant speed.
    - YES Continue to substep B.
    - NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
  - B. Confirm the combination meter assembly calibration.
    - (1) Use Techstream to confirm if the combination meter assembly has been updated.
    - (2) Is the calibration ID of the combination meter listed in Techstream as shown in the previous column of the calibration table above?
      - YES Continue to step 2.
      - NO This bulletin does NOT apply.
        Continue diagnosis using the applicable Repair Manual.
- 2. Reflash the combination meter assembly.

#### **NOTE**

- The battery diagnostic tool MUST be used in Power Supply Mode to maintain battery voltage at 13.5V while flash reprogramming the vehicle.
- For details on how to use the battery diagnostic tool, refer to the <u>DCA-8000 Instruction Manual</u> located at TIS Diagnostics Tools & Equipment Battery Diagnostics.

Follow the procedures outlined in <u>T-SB-0134-16</u>, *Techstream ECU Flash Reprogramming Procedure*, and <u>T-SB-0107-20</u>, *ECU Flash Reprogramming With Security Signature*, to flash the combination meter assembly with the NEW calibration file update.

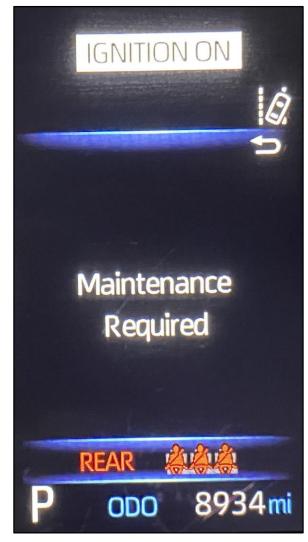
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# Abnormal Fuel Gauge Operation and/or Low Oil Pressure Gauge Reading

# **Repair Procedure (continued)**

- 3. Does a Maintenance Required message appear on the combination meter MID (Multi-Information Display)?
  - YES Continue to step 4.
  - **NO** Go to step 5.

**Figure 1. Maintenance Required Message** 



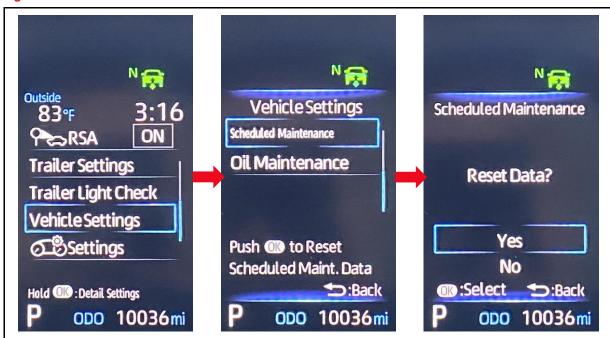
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# Abnormal Fuel Gauge Operation and/or Low Oil Pressure Gauge Reading

## **Repair Procedure (continued)**

- 4. Reset the Maintenance Required reminder.
  - A. Access the Vehicle Settings menu in the MID.
  - B. Select Vehicle Settings Scheduled Maintenance Reset Data Yes.

#### Figure 2.



## NOTE

It is NOT necessary to reset the Oil Maintenance reminder.

- 5. Using Techstream, perform a Health Check to confirm if the combination meter assembly calibration has been updated and clear ANY stored DTCs.
- 6. Confirm the condition(s) no longer exist(s).