

Abnormal Fuel Gauge Operation

Service Category Vehicle Interior

Market USA and Mexico

Section Meter/Gauge/Display

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2021 - 2022	Sienna HV	

Introduction

Some 2021 – 2022 model year Sienna Hybrid vehicles may exhibit a condition in which the fuel gauge reading changes when the vehicle is driven up or down an incline and left at an angle of up to 15° for five minutes or longer. The combination meter assembly ECU logic has been modified to reduce the possibility of this condition. Follow the Repair Procedure in this bulletin to reprogram the combination meter assembly ECU.

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Warranty Information

For USA Market

OP CODE	MODEL YEAR	DISPLAY SIZE	DESCRIPTION	TIME	OFF	T1	T2
EL2306	2021	4"	Reprogram the Combination Meter Assembly ECU	1.2	83800-08###*	87	74
	2022	4" and 7"					
Combo A	2021	7"	Additional Time Required to Reprogram the Combination Meter Assembly ECU	2.8			

*Warranty claim MUST be submitted with the correct 10-digit OFF. Choose the correct OFF 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.

For Mexico Market

OP CODE	MODEL YEAR	DISPLAY SIZE	DESCRIPTION	TIME	OFF	T1	T2
EL2306	2021	7"	Reprogram the Combination Meter Assembly ECU	1.2	83800-08###*	87	74
	2022						
Combo A	2021		Additional Time Required to Reprogram the Combination Meter Assembly ECU	2.8			

*Warranty claim MUST be submitted with the correct 10-digit OFF. Choose the correct OFF 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 60,000 kilometers, 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

For USA Market

PART NUMBER		PART NAME	QTY.
PREVIOUS	NEW		
83800-08B11	83800-08B12	Meter Assy, Combination	-
83800-08B51	83800-08B52		
83800-08C21	83800-08C22		
83800-08C70			
83800-08D10			
83800-08D40			

NOTE

The combination meter assembly should NOT be replaced as part of the Repair Procedure.

For Mexico Market

PART NUMBER		PART NAME	QTY.
PREVIOUS	NEW		
83800-08C01	83800-08C02	Meter Assy, Combination	-
83800-08D30			

NOTE

The combination meter assembly should NOT be replaced as part of the Repair Procedure.

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Required Tools & Equipment

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

*Essential SST.

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335 (USA) or 01-800-504-5330 (Mexico).

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

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- GTS+ software version 2023.03.002.02 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787 (USA) or 01-55-50103041 (Mexico).
- Use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.

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Calibration Information

MODEL YEAR	DESTINATION	DISPLAY SIZE	CID NO.	CALIBRATION ID	
				PREVIOUS	NEW
2021	USA	4"	CID 1	8380008B510D 8380008B510E	8380008B510F / 8380008B5206 / 8380008B5306
			CID 2	8380008B5205	
			CID 3	8380008B5305	
	USA, Mexico	7"	CID 1	8380008B110E 8380008B110F	8380008B1110 / 8380008B1208 / 8380008B1308
			CID 2	8380008B1207	
			CID 3	8380008B1307	
2022	USA	4"	CID 1	8380008D1103	8380008D1104
	USA, Mexico	7"		8380008C7103	8380008C7104

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Repair Procedure

1. Confirm the condition exists.

Does the fuel gauge reading change when the vehicle is driven up or down an incline and left at an angle of up to 15° for five minutes or longer?

- **YES** — Continue to step 2.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

2. Use GTS+ to confirm if the combination meter assembly calibration has been updated.

Is the calibration ID listed in GTS+ the latest combination meter assembly calibration?

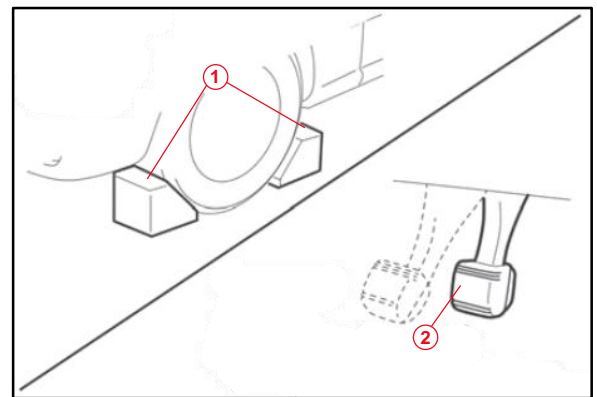
- **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- **NO** — Continue to step 3.

NOTICE

Flash reprogramming can take **MORE THAN 60 minutes to complete**, and the vehicle will turn the **IG-OFF** automatically when it has passed about 60 minutes with **IG-ON** while the shift lever is in the **P** position. Therefore, it is necessary to perform steps 3 – 5 **BEFORE** flash reprogramming the combination meter assembly.

3. Apply wheel blocks and the parking brake.

Figure 1.



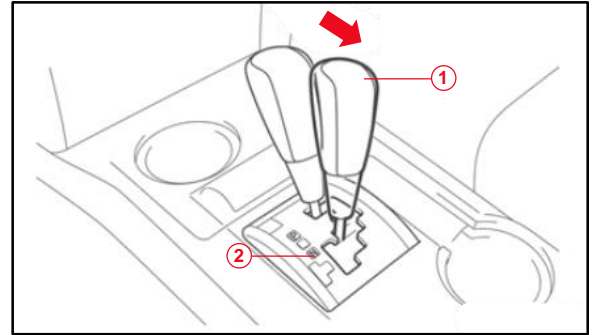
1	Wheel Blocks
2	Parking Brake

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Repair Procedure (continued)

4. Move the shift lever to the Neutral (N) position.

Figure 2.



1	Shift Lever
2	N Position

5. Prepare the GTS+ for reprogramming.

NOTICE

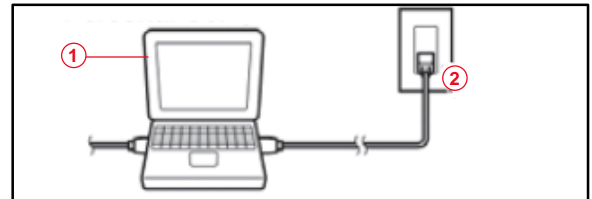
An ECU could be damaged if an error occurs in the communication while reprogramming the ECU. Confirm ALL work is performed as described in step 5.

- A. Connect the GTS+ to an external AC power supply.

NOTICE

The ECU could be damaged if the battery voltage of the GTS+ drops while reprogramming.

Figure 3.



1	GTS+ or Computer
2	AC Power Supply

- B. Turn OFF the screen saver and power saving mode of the GTS+.

NOTICE

If the screen saver or power saving mode launches while reprogramming, the communication may be disconnected.

Figure 4.



1	Turn Off the Screensaver and Power Saving Mode
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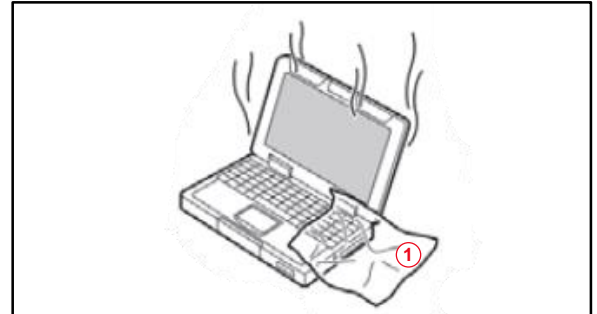
Repair Procedure (continued)

- C. Do NOT block the ventilation opening for the cooling fan of the GTS+.

NOTICE

If the ventilation opening for the cooling fan is blocked with a sheet cover or similar, the GTS+ may overheat, causing reprogramming to stop and potentially damaging the ECU.

Figure 5.



1

Do Not Block the Ventilation Opening for the Cooling Fan

6. Flash reprogram 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 station, refer to the [DCA-8000 Instruction Manual](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in [T-SB-0107-20 GTS+ Techstream ECU Flash Reprogramming Procedure With Security Signature](#), and flash the combination meter assembly with the NEW calibration file update.

7. Using GTS+, perform a Health Check to confirm if the combination meter has been updated and clear ANY stored DTCs.
8. Confirm the condition no longer exists.