

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM100000028U12
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: CELLULAR COMMUNICATION: SAFETY CONNECT SYSTEM: B157011,B157013; Indicator (Red) Circuit Short to Ground; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	B157011	Indicator (Red) Circuit Short to Ground
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DTC	B157013	Indicator (Red) Circuit Open
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DESCRIPTION

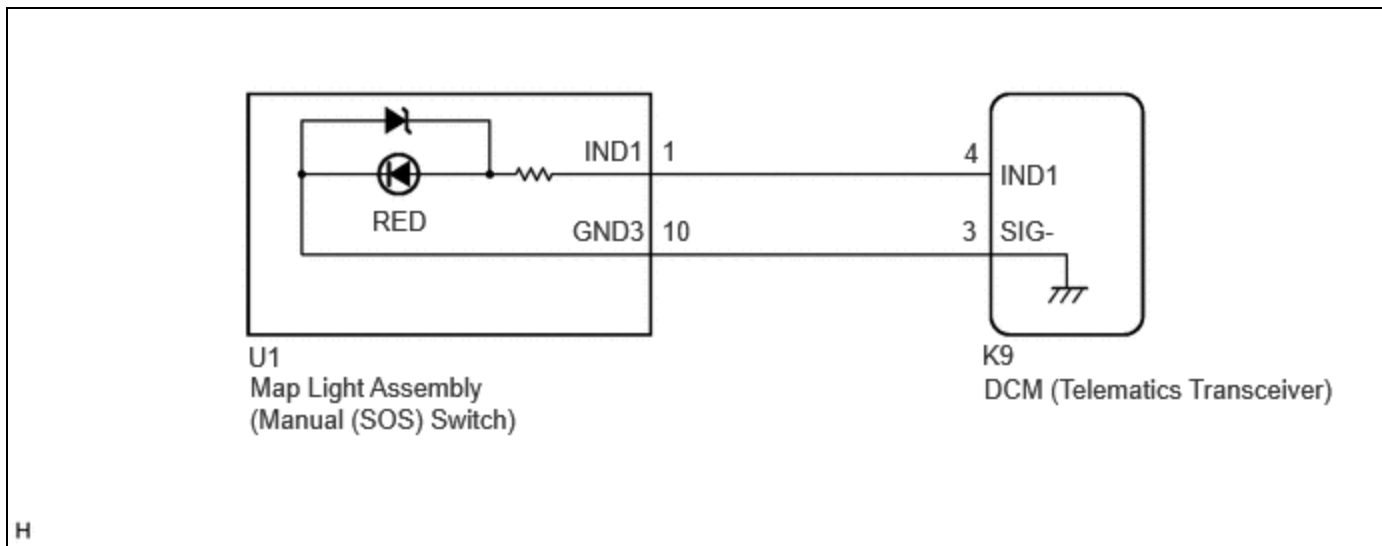
This DTC is stored when the DCM (telematics transceiver) detects an open or short in the manual (SOS) switch red indicator circuit of the manual (SOS) switch.

The manual (SOS) switch red indicator illuminates for 2 seconds and goes off when the ignition switch is turned to ON. If a malfunction in the safety connect system is detected, the manual (SOS) switch red indicator will illuminate.

However, the manual (SOS) switch red indicator may not illuminate when this DTC is stored.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
B157011	Indicator (Red) Circuit Short to Ground	Manual (SOS) switch red indicator impedance (Ω) is lower than the malfunction threshold for 10 seconds or more when the ignition switch is ON	<ul style="list-style-type: none"> DCM (telematics transceiver) Map light assembly (manual (SOS) switch) Harness or connector 	Telematics	A
B157013	Indicator (Red) Circuit Open	Manual (SOS) switch red indicator impedance (Ω) is higher than the malfunction threshold for 10 seconds or more when the ignition switch is ON	<ul style="list-style-type: none"> DCM (telematics transceiver) Map light assembly (manual (SOS) switch) Harness or connector 	Telematics	A

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

Depending on the parts that are replaced during vehicle inspection or maintenance, performing initialization, registration or calibration may be needed. Refer to Precaution for Safety Connect System.

Click here [INFO](#)

HINT:

If DTC B157011 or B157013 is stored, the manual (SOS) switch red indicator may not illuminate when another DTC is stored.

PROCEDURE

1. CLEAR DTC

- (a) Turn the ignition switch to ON and wait for 10 seconds or more.
- (b) Clear the DTCs.

Body Electrical > Telematics > Clear DTCs

NEXT



2. CHECK DTC

Pre-procedure1

- (a) Turn the ignition switch to ON and wait for 10 seconds or more.

Procedure1

- (b) Check for DTCs and check that no DTCs are output.

Body Electrical > Telematics > Trouble Codes

OK:

No DTCs are output.

RESULT	PROCEED TO
B157011 or B157013 is not output	A
B157011 or B157013 is output	B

Post-procedure1

(c) None

A  **USE SIMULATION METHOD TO CHECK**

B



3.	INSPECT MAP LIGHT ASSEMBLY (MANUAL (SOS) SWITCH) (RED INDICATOR)
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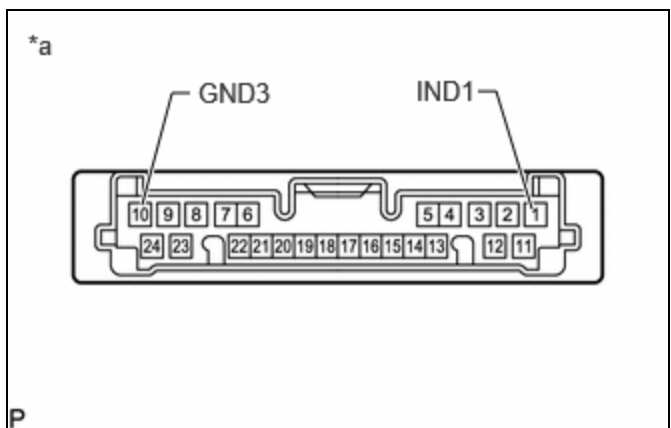
Pre-procedure1

(a) Remove the map light assembly (manual (SOS) switch).

HINT:

[Click here](#) 

(b) Connect 2 dry-cell batteries (1.5 V each) in series.



*a	Component without harness connected (Map Light Assembly (Manual (SOS) Switch))
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(c) Connect a positive (+) lead from the batteries to terminal 1 (IND1) and a negative (-) lead to terminal 10 (GND3) of the map light assembly (manual (SOS) switch) connector.

Procedure1

(d) Check if the manual (SOS) switch red indicator illuminates.

OK:

Manual (SOS) switch red indicator illuminates.

Post-procedure1

(e) None

NG  **REPLACE MAP LIGHT ASSEMBLY (MANUAL (SOS) SWITCH)**

OK



4.	CHECK HARNESS AND CONNECTOR (DCM (TELEMATICS TRANSCEIVER) - MAP LIGHT ASSEMBLY (MANUAL (SOS) SWITCH))
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Pre-procedure1

(a) Disconnect the K9 DCM (telematics transceiver) connector.

(b) Disconnect the U1 map light assembly (manual (SOS) switch) connector.

Procedure1

(c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(K9,U1\).](#)

[Click Connector\(K9\).](#)

[Click Connector\(U1\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K9-4 (IND1) - U1-1 (IND1)	Always	Below 1 Ω	Ω
K9-4 (IND1) or U1-1 (IND1) - Body ground	Always	10 kΩ or higher	kΩ
K9-3 (SIG-) - U1-10 (GND3)	Always	Below 1 Ω	Ω
K9-3 (SIG-) or U1-10 (GND3) - Body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(d) None

NG  **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK**5. REPLACE DCM (TELEMATICS TRANSCEIVER)**

(a) Replace the DCM (telematics transceiver) with a new one.

HINT:

Click here 

NOTICE:

- The ignition switch must be off.
- Do not exchange the DCM (telematics transceiver) with one from another vehicle.

NEXT  **PERFORM DCM ACTIVATION**

