

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM100000028U15
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: CELLULAR COMMUNICATION: SAFETY CONNECT SYSTEM: B15C464; Airbag Signal Signal Plausibility Failure; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

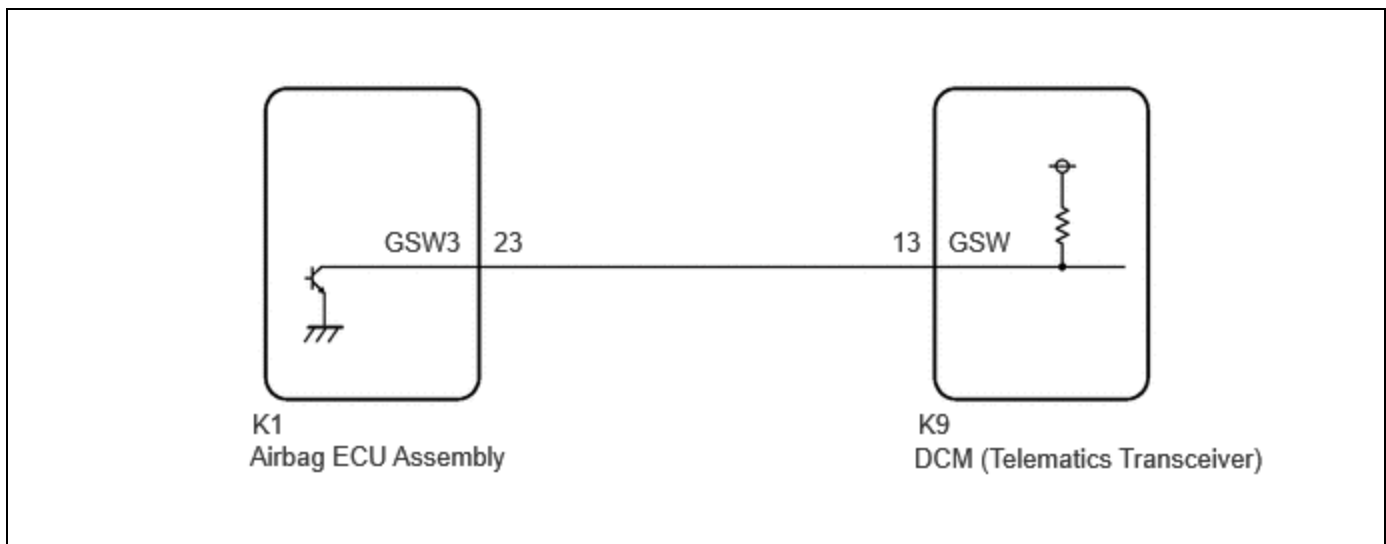
DTC	B15C464	Airbag Signal Signal Plausibility Failure
------------	----------------	--

DESCRIPTION

If the DCM (telematics transceiver) detects an error in communication between the DCM (telematics transceiver) and the airbag sensor assembly as a result of the DCM (telematics transceiver) self check, this DTC will be stored.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
B15C464	Airbag Signal Signal Plausibility Failure	DCM (telematics transceiver) detects an error in signals from airbag sensor assembly when ignition switch is ON.	<ul style="list-style-type: none"> Airbag system Harness or connector Airbag ECU assembly DCM (telematics transceiver) 	Telematics	B

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- The vehicle is equipped with an SRS (Supplemental Restraint System) which includes components such as airbags. Before servicing (including removal or installation of parts), be sure to read the Precaution in the SRS.

[Click here](#) INFO

- After the ignition switch is turned off, there may be a waiting time before disconnecting the negative (-) auxiliary battery terminal.

[Click here](#) INFO

HINT:

When disconnecting and reconnecting the auxiliary battery, there is an automatic learning function that completes learning when the respective system is used.

[Click here](#) INFO

PROCEDURE

1. CHECK DTC (AIRBAG SYSTEM)

Pre-procedure1

- (a) Turn the ignition switch to ON, and wait for at least 60 seconds.
- (b) Clear the DTCs.

Body Electrical > SRS Airbag > Clear DTCs

Procedure1

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

Body Electrical > SRS Airbag > Trouble Codes

OK:

No DTCs are output.

RESULT	PROCEED TO
DTCs are not output	A
DTCs are output	B

Post-procedure1

- (d) None

B ▶ **GO TO AIRBAG SYSTEM** INFO

A
▼

2. 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****3. 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
B15C464 is not output	A
B15C464 is output	B

Post-procedure1

(c) None

A **USE SIMULATION METHOD TO CHECK****B****4. CHECK DCM (TELEMATICS TRANSCEIVER) (GSW SIGNAL)**

Pre-procedure1

(a) Remove the DCM (telematics transceiver) but do not disconnect the connectors.

HINT:[Click here](#)

Procedure1

(b) Check the input waveform.

(1) Check the signal waveform according to the condition(s) in the table below. (Check the waveform from the back of the wire harness connector of the DCM (telematics transceiver) while the airbag sensor assembly connectors are connected.)

Reference Waveform:

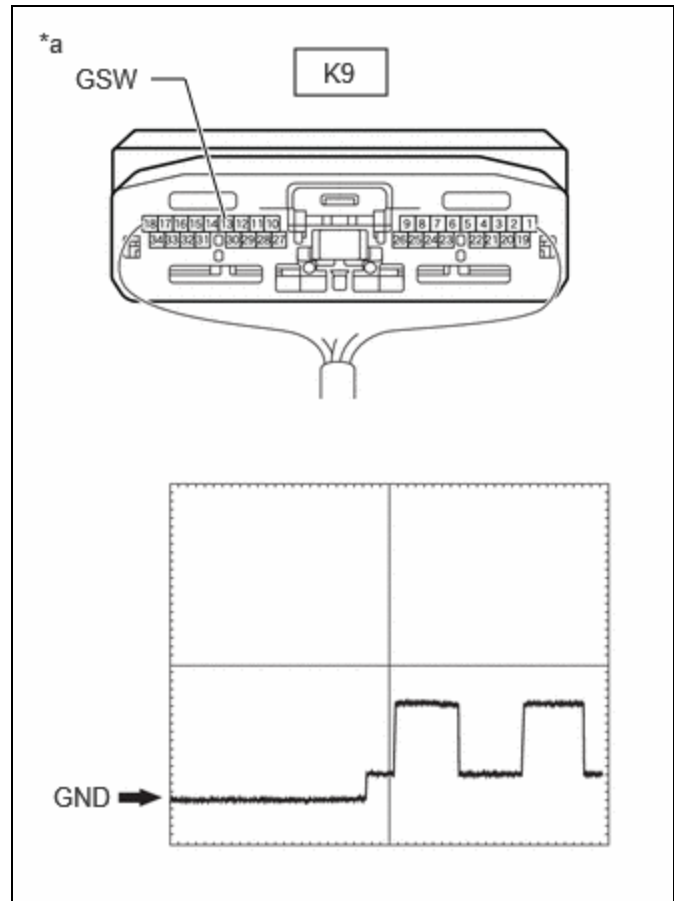
ITEM	CONDITION
Tester connection	K9-13 (GSW) - Body ground
Tool setting	5.0 V/DIV., 20 ms/DIV.
Vehicle condition	Ignition switch ON

OK:

The waveform is similar to that shown in the illustration.

Result:

PROCEED TO
OK
NG



*a Component with harness connected (DCM (Telematics Transceiver))

Post-procedure1

(c) None

NG ► **GO TO STEP 6**

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****6.****CHECK HARNESS AND CONNECTOR (DCM (TELEMATICS TRANSCEIVER) - AIRBAG ECU ASSEMBLY)**

Pre-procedure1

- (a) Disconnect the K9 DCM (telematics transceiver) connector.
- (b) Disconnect the K1 airbag ECU assembly connector.

Procedure1

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

Standard Resistance:


[Click Location & Routing\(K9,K1\).](#)
[Click Connector\(K9\).](#)
[Click Connector\(K1\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K9-13 (GSW) - K1-23 (GSW3)	Always	Below 1 Ω	Ω
K9-13 (GSW) or K1-23 (GSW3) - Body ground	Always	10 k Ω or higher	k Ω

Post-procedure1

- (d) None

OK ► **REPLACE AIRBAG ECU ASSEMBLY** INFO**NG** ► **REPAIR OR REPLACE HARNESS OR CONNECTOR**