12/15/24, 11:58 PM

SUPPLEMENTAL RESTRAINT SYSTEMS: AIRBAG SYSTEM: B001112; Passenger Frontal Stage 2 Deployment Control Circuit ...

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM100000028UX2	
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: SUPPLEMENTAL RESTRAINT SYSTEMS: AIRBAG SYSTEM: B001112; Passenger Frontal Stage 2 Deployment			
Control Circuit Short to Battery; 2023 - 2024 MY Prius Prius Prime [12/2022 -]			

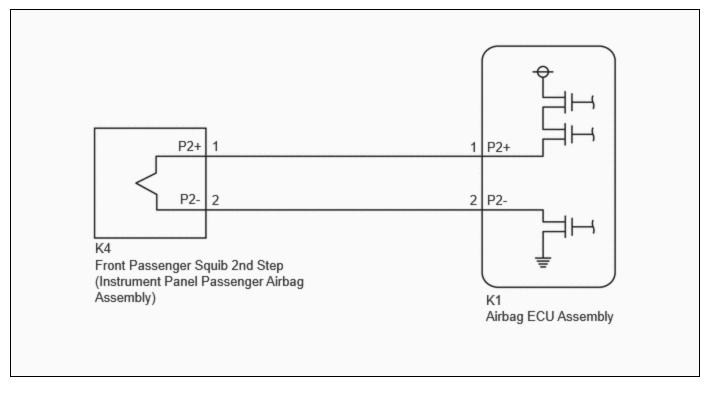
DTC

B001112 Passenger Frontal Stage 2 Deployment Control Circuit Short to Battery

DESCRIPTION

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	TEST MODE / CHECK MODE
B001112	Passenger Frontal Stage 2 Deployment Control Circuit Short to Battery	 The airbag ECU assembly detects a short to +B in the front passenger squib 2nd step circuit for 0.5 seconds. Instrument panel passenger airbag assembly malfunction Airbag ECU assembly malfunction 	 Harness or connector Instrument panel passenger airbag assembly Airbag ECU assembly 	Comes on	SRS Airbag	A	Applies to check mode

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

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

Click here

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

• After replacing the airbag ECU assembly, refer to work procedure.

Click here

HINT:

• To perform the simulation method, enter check mode (signal check) with the GTS.

Click here

• Perform the simulation method while checking the Data List.



PROCEDURE

1.

CLEAR DTC

Pre-procedure1

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

Procedure1

(b) Clear the DTCs stored in memory.

Body Electrical > SRS Airbag > Clear DTCs

Post-procedure1

(c) Turn the ignition switch off.

2.	СНЕСК ДТС
----	-----------

Pre-procedure1

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

Procedure1

(b) Check for DTCs.

Body Electrical > SRS Airbag > Trouble Codes

RESULT	PROCEED TO
B001112 is output	A
B001112 is not output	В

Post-procedure1

(c) None

B USE SIMULATION METHOD TO CHECK



3.	CHECK CONNECTION OF CONNECTORS
----	--------------------------------

Pre-procedure1

٦Г

(a) Turn the ignition switch off.

(b) Disconnect the cable from the negative (-) auxiliary battery terminal, and wait for at least 60 seconds.

Procedure1

(c) Check that the connectors are properly connected to the instrument panel passenger airbag assembly and airbag ECU assembly.

OK:

The connectors are properly connected.

Post-procedure1

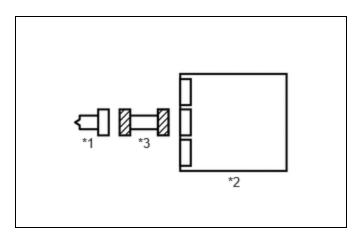
(d) None







Pre-procedure1



(a) Disconnect the airbag ECU assembly connector.

*1	Instrument Panel Passenger Airbag Assembly
*2	Airbag ECU Assembly
*3	Wire Harness

(b) Disconnect the instrument panel passenger airbag assembly connector.

Procedure1

(c) Check that the terminals of the connectors are not deformed or damaged.

OK:

The terminals are not deformed or damaged.

(d) Check that the connectors are not loose, deformed or damaged.

OK:

The connector locking button is not disengaged, and the claw of the lock is not deformed or damaged.

Post-procedure1

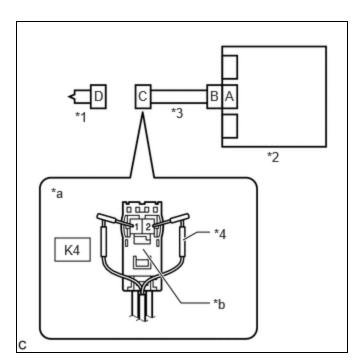
(e) None

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

ок

5.	CLEAR DTC
----	-----------

Pre-procedure1



(a) Connect the airbag ECU assembly connector.

*1	Instrument Panel Passenger Airbag Assembly
*2	Airbag ECU Assembly
*3	Wire Harness
*4	SST
*a	Front view of wire harness connector (to Instrument Panel Passenger Airbag Assembly)
*b	Color: Black

(b) Connect SST (resistance: 2.1 $\Omega)$ to connector C (black connector).

CAUTION:

12/15/24, 11:58 PM SUPPLEMENTAL RESTRAINT SYSTEMS: AIRBAG SYSTEM: B001112; Passenger Frontal Stage 2 Deployment Control Circuit ... Never connect the tester to the instrument panel passenger airbag assembly for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- Do not forcibly insert SST into the terminals of the connector when connecting SST.
- Insert SST straight into the terminals of the connector.

SST: 09843-18061

(c) Connect the cable to the negative (-) auxiliary battery terminal, and wait for at least 2 seconds.

(d) Turn the ignition switch to ON, and wait for at least 60 seconds.

Procedure1

(e) Clear the DTCs stored in memory.

Body Electrical > SRS Airbag > Clear DTCs

Post-procedure1

(f) Turn the ignition switch off.

NEXT

6. CHECK INSTRUMENT PANEL PASSENGER AIRBAG ASSEMBLY

Pre-procedure1

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

Procedure1

(b) Check for DTCs.

Body Electrical > SRS Airbag > Trouble Codes

RESULT	PROCEED TO
B001112 is not output	A
B001112 is output	В

HINT:

Codes other than DTC B001112 may be output at this time, but they are not related to this check.

Post-procedure1

- (c) Turn the ignition switch off.
- (d) Disconnect the cable from the negative (-) auxiliary battery terminal, and wait for at least 60 seconds.
- (e) Disconnect SST from connector C.

A REPLACE INSTRUMENT PANEL PASSENGER AIRBAG



7. CHECK HARNESS AND CONNECTOR

Pre-procedure1

- (a) Disconnect the airbag ECU assembly connector.
- (b) Connect the cable to the negative (-) auxiliary battery terminal, and wait for at least 2 seconds.
- (c) Turn the ignition switch to ON.

Procedure1

(d) Measure the voltage according to the value(s) in the table below.

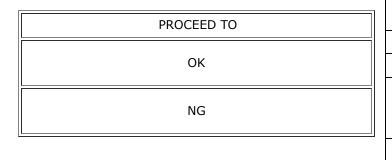
Standard Voltage:

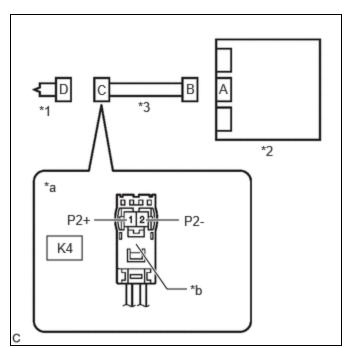


<u>Click Location & Routing(K4)</u> <u>Click Connector(K4)</u>

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K4-1 (P2+) - Body ground	Ignition switch ON	Below 1 V	V
K4-2 (P2-) - Body ground	Ignition switch ON	Below 1 V	V

Result:





*1	Instrument Panel Passenger Airbag Assembly
*2	Airbag ECU Assembly
*3	Wire Harness
*а	Front view of wire harness connector (to Instrument Panel Passenger Airbag Assembly)
*b	Color: Black

Post-procedure1

(e) Turn the ignition switch off.

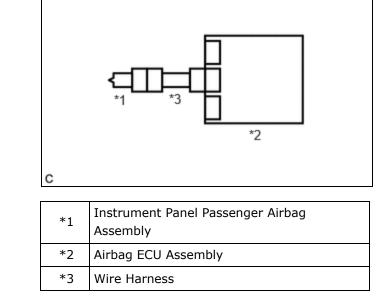
(f) Disconnect the cable from the negative (-) auxiliary battery terminal, and wait for at least 60 seconds.

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

ок

8.	CLEAR DTC
----	-----------

Pre-procedure1



(a) Connect the airbag ECU assembly connector.

(b) Connect the instrument panel passenger airbag assembly connector.

(c) Connect the cable to the negative (-) auxiliary battery terminal, and wait for at least 2 seconds.

(d) Turn the ignition switch to ON, and wait for at least 60 seconds.

Procedure1

(e) Clear the DTCs stored in memory.

Body Electrical > SRS Airbag > Clear DTCs

Post-procedure1

(f) Turn the ignition switch off.



9. CHECK DTC

Pre-procedure1

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

Procedure1

(b) Check for DTCs.

Body Electrical > SRS Airbag > Trouble Codes

RESULT	PROCEED TO
B001112 is not output	A
B001112 is output	В

HINT:

Codes other than DTC B001112 may be output at this time, but they are not related to this check.

Post-procedure1

(c) None

A USE SIMULATION METHOD TO CHECK

B REPLACE AIRBAG ECU ASSEMBLY

.

ΤΟΥΟΤΑ