

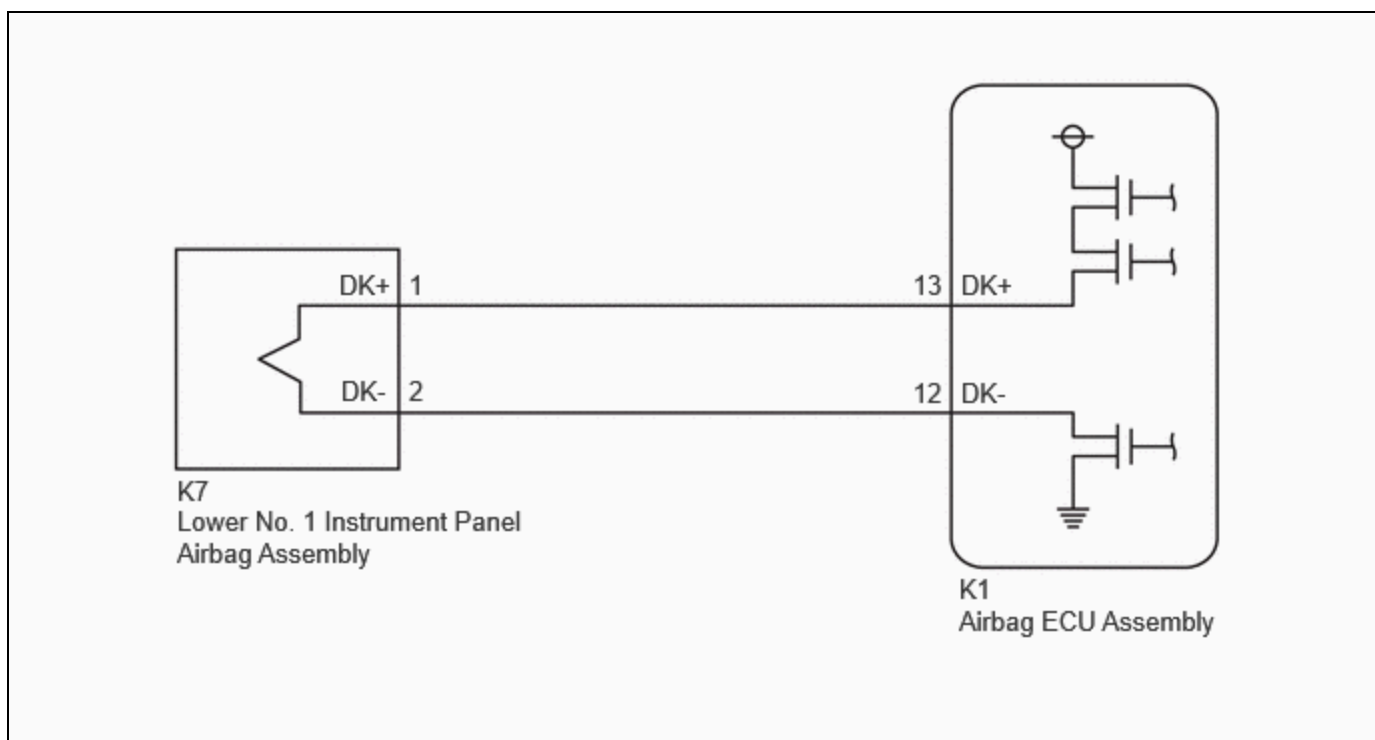
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<b>Model Year Start:</b> 2023	<b>Model:</b> Prius Prime	<b>Prod Date Range:</b> [12/2022 - ]
<b>Title:</b> SUPPLEMENTAL RESTRAINT SYSTEMS: AIRBAG SYSTEM: B000412; Driver Knee Bolster Deployment Control Circuit Short to Battery; 2023 - 2024 MY Prius Prius Prime [12/2022 - ]		

<b>DTC</b>	<b>B000412</b>	<b>Driver Knee Bolster Deployment Control Circuit Short to Battery</b>
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## DESCRIPTION

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	TEST MODE / CHECK MODE
B000412	Driver Knee Bolster Deployment Control Circuit Short to Battery	<ul style="list-style-type: none"> <li>The airbag ECU assembly detects a short to +B in the driver side knee airbag squib circuit for 0.5 seconds.</li> <li>Lower No. 1 instrument panel airbag assembly malfunction</li> <li>Airbag ECU assembly malfunction</li> </ul>	<ul style="list-style-type: none"> <li>Harness or connector</li> <li>Lower No. 1 instrument panel airbag assembly</li> <li>Airbag ECU assembly</li> </ul>	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](#) **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**

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

[Click here](#) **INFO**

### HINT:

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

[Click here](#) **INFO**

- Perform the simulation method while checking the Data List.

[Click here](#) **INFO**

## PROCEDURE

<b>1.</b>	<b>CLEAR DTC</b>
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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.

**NEXT**



<b>2.</b>	<b>CHECK DTC</b>
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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
B000412 is output	A
B000412 is not output	B

Post-procedure1

(c) None

**B** **USE SIMULATION METHOD TO CHECK**

**A**



<b>3.</b>	<b>CHECK CONNECTION OF CONNECTORS</b>
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Pre-procedure1

(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 lower No. 1 instrument panel airbag assembly and airbag ECU assembly.

OK:

The connectors are properly connected.

Post-procedure1

(d) None

**NG**  **CONNECT CONNECTORS PROPERLY**

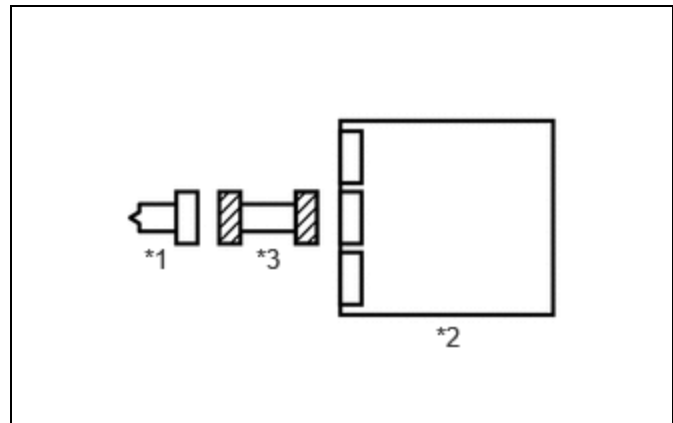
**OK**



<b>4.</b>	<b>CHECK CONNECTORS</b>
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Pre-procedure1

(a) Disconnect the airbag ECU assembly connector.



*1	Lower No. 1 Instrument Panel Airbag Assembly
*2	Airbag ECU Assembly
*3	Wire Harness

(b) Disconnect the lower No. 1 instrument panel 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

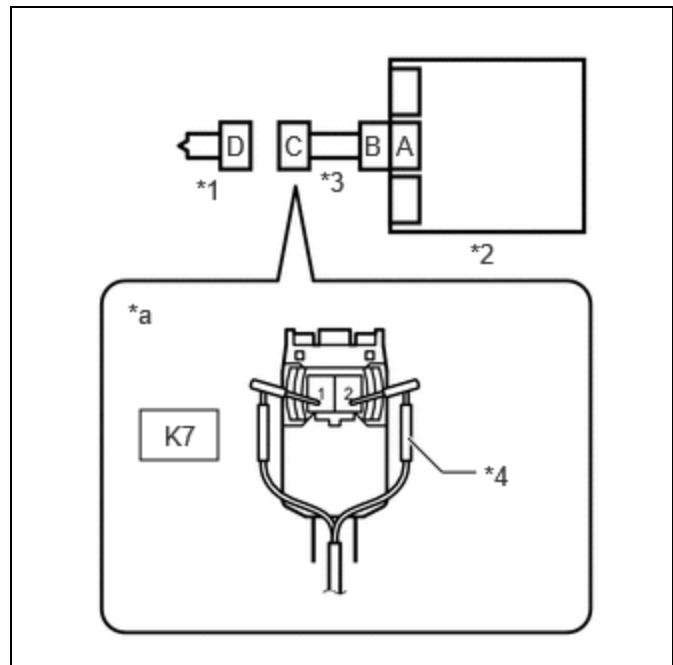
**NG**  **REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**



<b>5.</b>	<b>CLEAR DTC</b>
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Pre-procedure1



(a) Connect the airbag ECU assembly connector.

*1	Lower No. 1 Instrument Panel Airbag Assembly
*2	Airbag ECU Assembly
*3	Wire Harness
*4	SST
*a	Front view of wire harness connector (to Lower No. 1 Instrument Panel Airbag Assembly)

(b) Connect SST (resistance: 2.1 Ω) to connector C.

**CAUTION:**

Never connect the tester to the lower No. 1 instrument panel 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 LOWER NO. 1 INSTRUMENT PANEL 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
B000412 is not output	A
B000412 is output	B

**HINT:**

Codes other than DTC B000412 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 LOWER NO. 1 INSTRUMENT PANEL AIRBAG ASSEMBLY** INFO

**B**  
▼

**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:



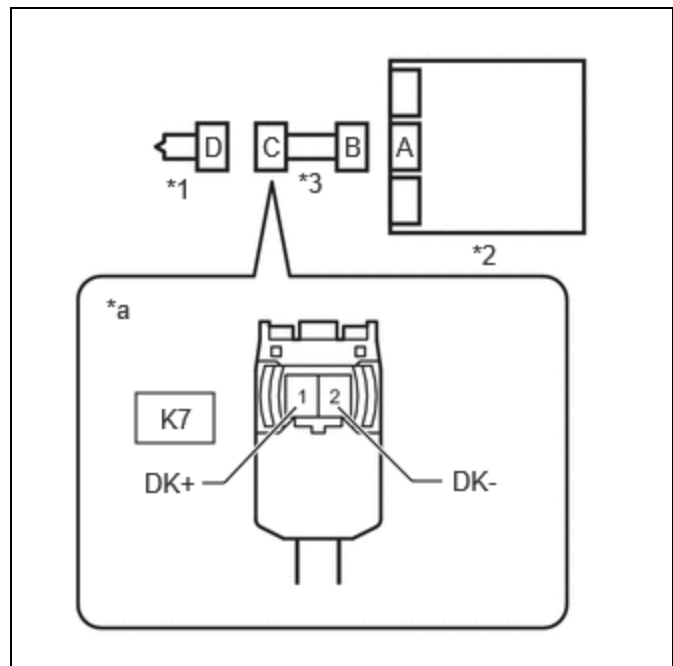
[Click Location & Routing\(K7\).](#)

[Click Connector\(K7\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K7-1 (DK+) - Body ground	Ignition switch ON	Below 1 V	V
K7-2 (DK-) - Body ground	Ignition switch ON	Below 1 V	V

Result:

PROCEED TO
OK
NG



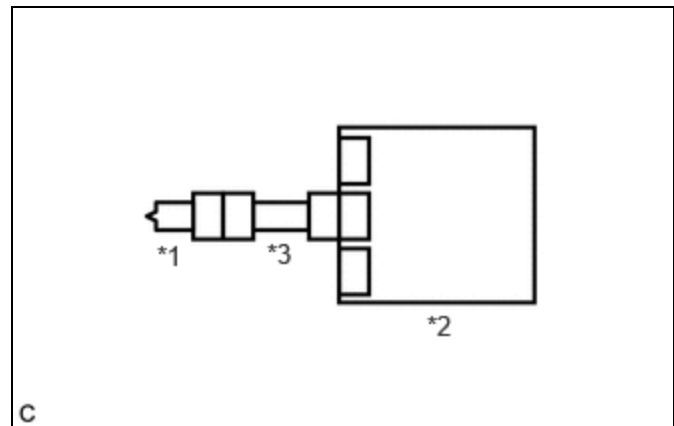
*1	Lower No. 1 Instrument Panel Airbag Assembly
*2	Airbag ECU Assembly
*3	Wire Harness
*a	Front view of wire harness connector (to Lower No. 1 Instrument Panel Airbag Assembly)

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****OK****8. CLEAR DTC**

Pre-procedure1



C

*1	Lower No. 1 Instrument Panel Airbag Assembly
*2	Airbag ECU Assembly
*3	Wire Harness

(a) Connect the airbag ECU assembly connector.

(b) Connect the lower No. 1 instrument panel 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.

**NEXT**



**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
B000412 is not output	A
B000412 is output	B

**HINT:**

Codes other than DTC B000412 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** **INFO**