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SUPPLEMENTAL RESTRAINT SYSTEMS: AIRBAG SYSTEM: B000413; Driver Knee Bolster Deployment Control Circuit Open; ...

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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 - ]
Title: SUPPLEMENTAL RESTRAINT S	YSTEMS: AIRBAG SYSTEM:	B000413; Driver Knee Bolster Deployment Control
Circuit Open; 2023 - 2024 MY Prius Prius Prime [12/2022 - ]		

DTC

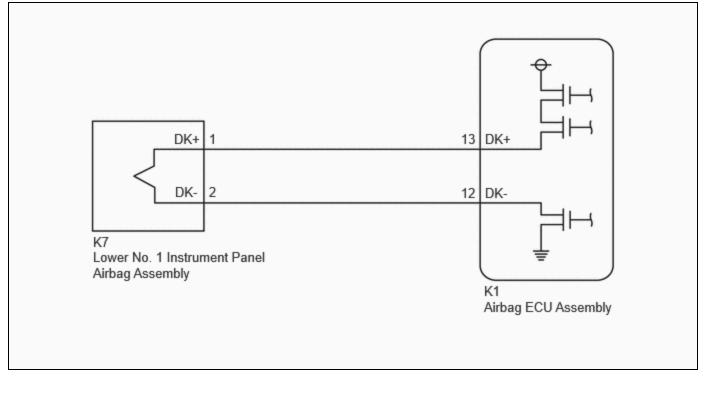
B000413

Driver Knee Bolster Deployment Control Circuit Open

## **DESCRIPTION**

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	TEST MODE / CHECK MODE
B000413	Driver Knee Bolster Deployment Control Circuit Open	<ul> <li>The airbag ECU assembly detects an open in the driver side knee airbag squib circuit for 2 seconds.</li> <li>Lower No. 1 instrument panel airbag assembly malfunction</li> <li>Airbag ECU assembly malfunction</li> </ul>	<ul> <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

#### 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
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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
B000413 is output	А
B000413 is not output	В

Post-procedure1

(c) None

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



3. CHECK CONNECTION OF CONNECTORS	
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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

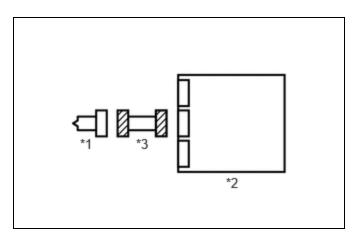
(d) None







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

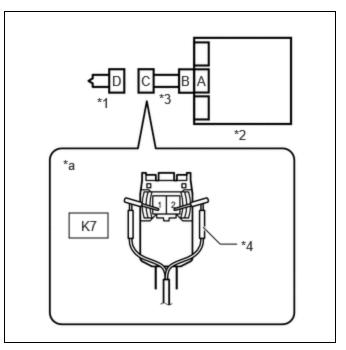
(e) None

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

ок

5.	CLEAR DTC
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#### Pre-procedure1



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

(a) Connect the airbag ECU assembly connector.

(b) Connect SST (resistance: 2.1  $\Omega)$  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.



### 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
B000413 is not output	A
B000413 is output	В

#### HINT:

Codes other than DTC B000413 may be output at this time, but they are not related to this check.

Post-procedure1

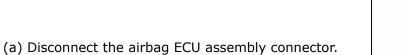
- (c) Turn the ignition switch off.
- (d) Disconnect the cable from the negative (-) auxiliary battery terminal, and wait for at least 60 seconds.
- (e) Disconnect SST from connector C.

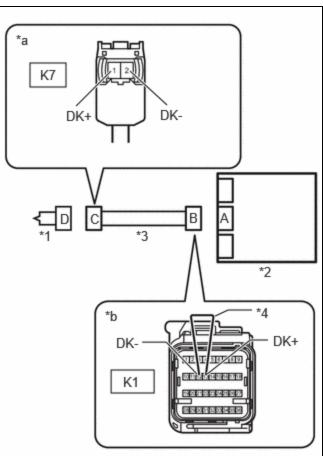
## A REPLACE LOWER NO. 1 INSTRUMENT PANEL AIRBAG



#### 7. CHECK HARNESS AND CONNECTOR

Pre-procedure1





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

(b) Using a service wire, connect terminals 13 (DK+) and 12 (DK-) of connector B.

**NOTICE:** 

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

Procedure1

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

Standard Resistance:



#### Click Location & Routing(K7) Click Connector(K7)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K7-1 (DK+) - K7-2 (DK-)	Always	Below 1 Ω	Ω

Post-procedure1

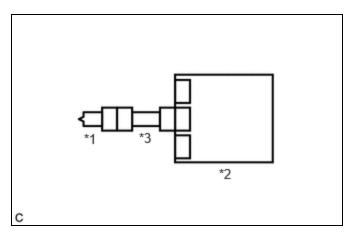
(d) Disconnect the service wire from connector B.

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

## ОК

8. CLEAR DTC

Pre-procedure1



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

(a) Connect the airbag ECU assembly connector.

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M SUPPLEMENTAL RESTRAINT SYSTEMS: AIRBAG SYSTEM: B000413; Driver Knee Bolster Deployment Control Circuit Open; ...

(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. 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
B000413 is not output	А
B000413 is output	В

#### HINT:

Codes other than DTC B000413 may be output at this time, but they are not related to this check.

Post-procedure1

(c) None

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#### **B** REPLACE AIRBAG ECU ASSEMBLY

TOYOTA