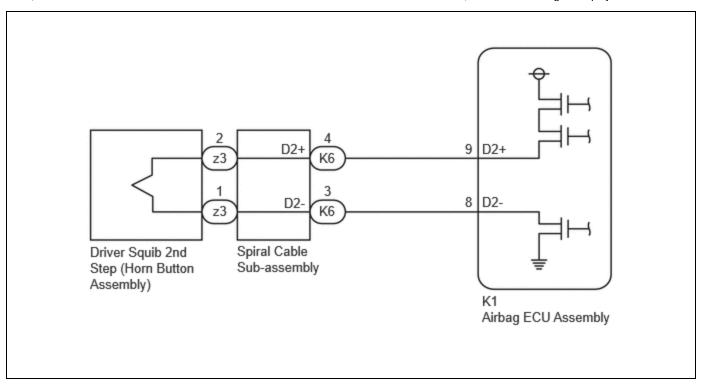
| Last Modified: 12-04-2024  | 6.11:8.1.0         | <b>Doc ID:</b> RM100000028UWY |  |
|--|--------------------|-------------------------------|--|
| Model Year Start: 2023   | Model: Prius Prime | Prod Date Range: [12/2022 - ] |  |
| Title: SUPPLEMENTAL RESTRAINT SYSTEMS: AIRBAG SYSTEM: B000212; Driver Frontal Stage 2 Deployment |                    |                               |  |
| Control Circuit Short to Battery; 2023 - 2024 MY Prius Prius Prime [12/2022 - ]                  |                    |                               |  |

| DTC | B000212 | Driver Frontal Stage 2 Deployment Control Circuit Short to Battery |  |
|-----|---------|--|--|
|-----|---------|--|--|

# **DESCRIPTION**

| DTC NO. | DETECTION<br>ITEM   | DTC DETECTION<br>CONDITION  | TROUBLE AREA  | WARNING<br>INDICATE | DTC<br>OUTPUT<br>FROM | PRIORITY | TEST<br>MODE /<br>CHECK<br>MODE |
|---------|---|---|---|---------------------|-----------------------|----------|---------------------------------|
| B000212 | Driver Frontal<br>Stage 2<br>Deployment<br>Control Circuit<br>Short to<br>Battery | <ul> <li>The airbag ECU assembly detects a short to +B in the driver squib 2nd step circuit for 0.5 seconds.</li> <li>Horn button assembly malfunction</li> <li>Spiral cable sub-assembly malfunction</li> <li>Airbag ECU assembly malfunction</li> </ul> | <ul> <li>Harness or connector</li> <li>Spiral cable subassembly</li> <li>Horn button assembly</li> <li>Airbag ECU assembly</li> </ul> | Comes on 1          | SRS<br>Airbag         | Α        | Applies<br>to<br>check<br>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 NFO

#### **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 NFO

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

Click here

• When installing the spiral cable sub-assembly and steering wheel, be sure to adjust the spiral cable sub-assembly as it may break if the steering wheel is turned before adjusting the spiral cable sub-assembly.

Click here NFO

#### 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.

Click here NFO

## **PROCEDURE**

1. CLEAR DTC

(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. 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 |
|-----------------------|------------|
| B000212 is output     | А          |
| B000212 is not output | В          |

Post-procedure1

(c) None





# 3. CHECK CONNECTION OF CONNECTORS

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 horn button assembly, spiral cable sub-assembly and airbag ECU assembly.

OK:

The connectors are properly connected.

Post-procedure1

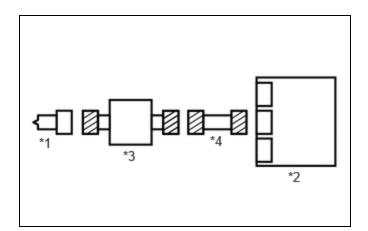
(d) None





# 4. CHECK CONNECTORS

Pre-procedure1



(a) Disconnect the airbag ECU assembly connector.

| *1 | Horn Button Assembly      |
|----|---------------------------|
| *2 | Airbag ECU Assembly       |
| *3 | Spiral Cable Sub-assembly |
| *4 | Wire Harness              |

- (b) Disconnect the spiral cable sub-assembly connector.
- (c) Disconnect the horn button assembly connector.

Procedure1

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

OK:

The terminals are not deformed or damaged.

(e) 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.

(f) Check that the short springs of the activation prevention mechanisms of the spiral cable sub-assembly connector are not deformed or damaged.

OK:

The short springs are not deformed or damaged.

Post-procedure1

(g) None

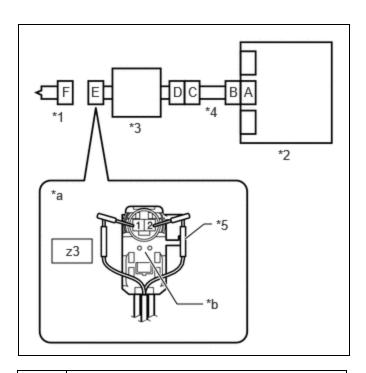
NG REPAIR OR REPLACE WIRE HARNESS OR SPIRAL CABLE SUB-ASSEMBLY



#### 5. CLEAR DTC

Pre-procedure1

(a) Connect the airbag ECU assembly connector.



| *1 | Horn Button Assembly      |
|----|---------------------------|
| *2 | Airbag ECU Assembly       |
| *3 | Spiral Cable Sub-assembly |
| *4 | Wire Harness              |
| *5 | SST                       |

| Front view of wire harness connector (to Horn Button Assembly) |
|--|
| Color: Black   |

- (b) Connect the spiral cable sub-assembly connector.
- (c) Connect SST (resistance: 2.1  $\Omega$ ) to connector E (black connector).

#### **CAUTION:**

Never connect the tester to the horn button 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

- (d) Connect the cable to the negative (-) auxiliary battery terminal, and wait for at least 2 seconds.
- (e) Turn the ignition switch to ON, and wait for at least 60 seconds.

#### Procedure1

(f) Clear the DTCs stored in memory.

#### **Body Electrical > SRS Airbag > Clear DTCs**

Post-procedure1

(g) Turn the ignition switch off.



## 6. CHECK HORN BUTTON 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 |
|-----------------------|------------|
| B000212 is not output | А          |
| B000212 is output     | В          |

#### **HINT:**

Codes other than DTC B000212 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 E.





#### 7. CHECK DRIVER SIDE 2ND SQUIB CIRCUIT

#### 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:

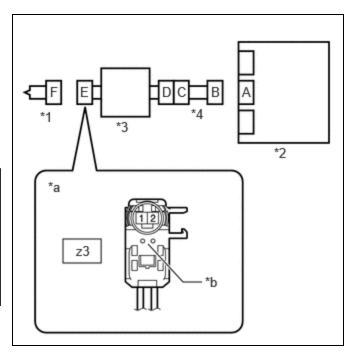


# Click Location & Routing(z3) Click Connector(z3)

| TESTER<br>CONNECTION  | CONDITION             | SPECIFIED CONDITION | RESULT |
|-----------------------|-----------------------|---------------------|--------|
| z3-1 - Body<br>ground | Ignition<br>switch ON | Below 1 V           | V      |
| z3-2 - Body<br>ground | Ignition<br>switch ON | Below 1 V           | V      |

#### Result:

| PROCEED TO |  |
|------------|--|
| ОК         |  |



| *1 | Horn Button Assembly      |
|----|---------------------------|
| *2 | Airbag ECU Assembly       |
| *3 | Spiral Cable Sub-assembly |

| PROCEED TO |
|------------|
| NG         |

| *4 | Wire Harness   |
|----|--|
| *a | Front view of wire harness connector (to Horn Button Assembly) |
|    |  |
| *b | Color: Black   |

Post-procedure1

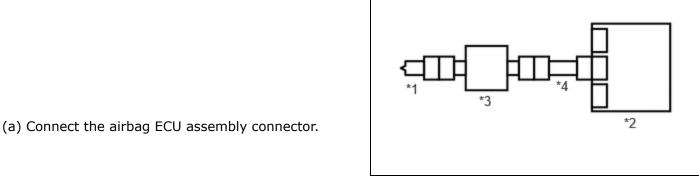
- (e) Turn the ignition switch off.
- (f) Disconnect the cable from the negative (-) auxiliary battery terminal, and wait for at least 60 seconds.

NG GO TO STEP 10



# **CLEAR DTC** 8.

Pre-procedure1



- \*1 Horn Button Assembly \*2 Airbag ECU Assembly \*3 Spiral Cable Sub-assembly \*4 Wire Harness
- (b) Connect the horn button 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 |
|-----------------------|------------|
| B000212 is not output | А          |
| B000212 is output     | В          |

#### HINT:

Codes other than DTC B000212 may be output at this time, but they are not related to this check.

Post-procedure1

(c) None



B REPLACE AIRBAG ECU ASSEMBLY

10. CHECK HARNESS AND CONNECTOR

Pre-procedure1

- (a) Disconnect the spiral cable sub-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(K6) Click Connector(K6)

| TESTER<br>CONNECTION        | CONDITION             | SPECIFIED CONDITION | RESULT |
|-----------------------------|-----------------------|---------------------|--------|
| K6-3 (D2-) -<br>Body ground | Ignition<br>switch ON | Below 1 V           | V      |
| K6-4 (D2+) -<br>Body ground | Ignition<br>switch ON | Below 1 V           | V      |

# \*a \*2 \*2 \*2 D2+

#### Result:

| PROCEED TO |  |
|------------|--|
| OK         |  |
| NG         |  |

| *1 | Horn Button Assembly  |
|----|---|
| *2 | Airbag ECU Assembly   |
| *3 | Spiral Cable Sub-assembly   |
| *4 | Wire Harness  |
| *a | Front view of wire harness connector (to Spiral Cable Sub-assembly) |

Post-procedure1

(e) None

OK REPLACE SPIRAL CABLE SUB-ASSEMBLY





