

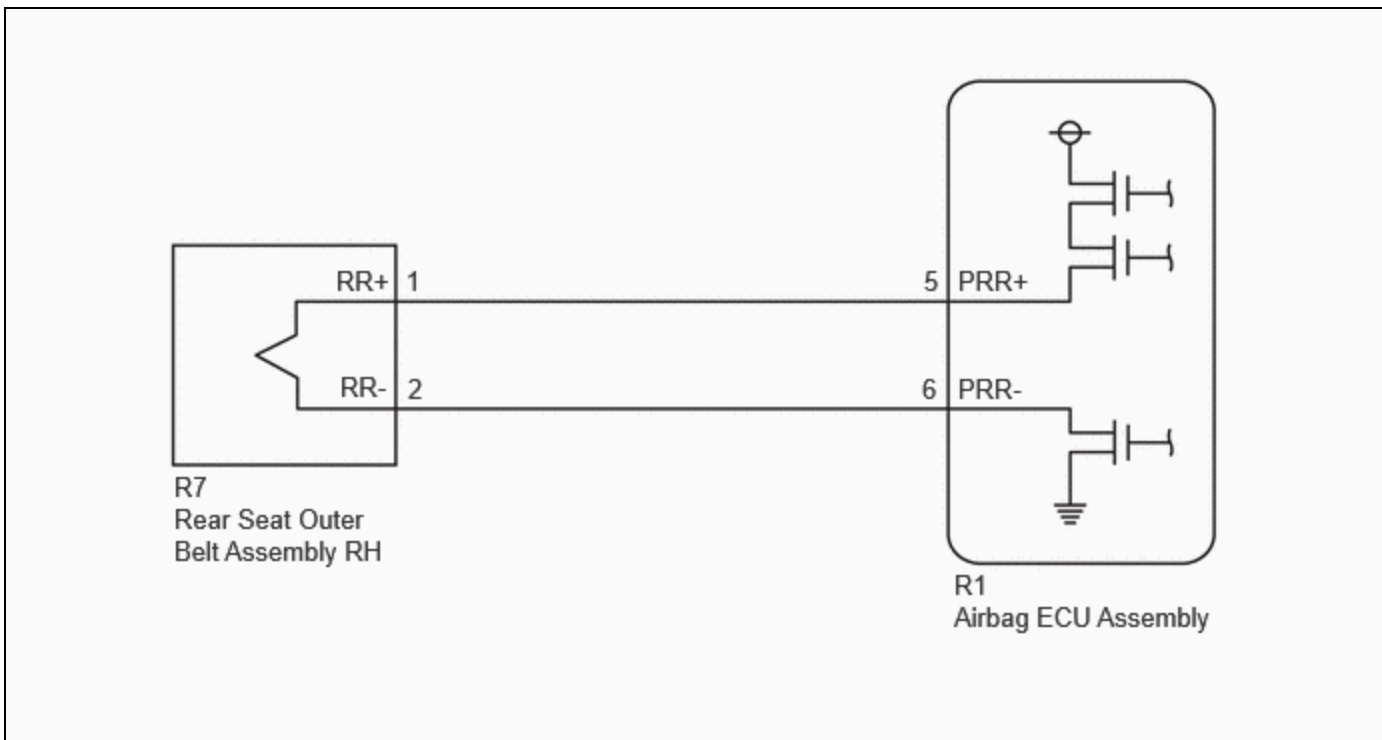
| | | |
|--|---------------------------|--------------------------------------|
| Last Modified: 12-04-2024 | 6.11:8.1.0 | Doc ID: RM100000028UW6 |
| Model Year Start: 2023 | Model: Prius Prime | Prod Date Range: [12/2022 -] |
| Title: SUPPLEMENTAL RESTRAINT SYSTEMS: AIRBAG SYSTEM: B007512; Second Row Right Seat Belt Pretensioner Deployment Control Circuit Short to Battery; 2023 - 2024 MY Prius Prius Prime [12/2022 -] | | |

| | | |
|------------|----------------|--|
| DTC | B007512 | Second Row Right Seat Belt Pretensioner 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 |
|---------|---|---|---|------------------|-----------------|----------|------------------------|
| B007512 | Second Row Right Seat Belt Pretensioner Deployment Control Circuit Short to Battery | <ul style="list-style-type: none"> The airbag ECU assembly detects a short to +B in the rear pretensioner squib RH circuit for 0.5 seconds. Rear seat outer belt assembly RH malfunction Airbag ECU assembly malfunction | <ul style="list-style-type: none"> Harness or connector Rear seat outer belt assembly RH 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](#) **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

| | |
|-----------|------------------|
| 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.

NEXT



| | |
|-----------|------------------|
| 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 |
|-----------------------|------------|
| B007512 is output | A |
| B007512 is not output | B |

Post-procedure1

(c) None

B **USE SIMULATION METHOD TO CHECK**

A



| | |
|-----------|---------------------------------------|
| 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 rear seat outer belt assembly RH and airbag ECU assembly.

OK:

The connectors are properly connected.

Post-procedure1

(d) None

NG  **CONNECT CONNECTORS PROPERLY**

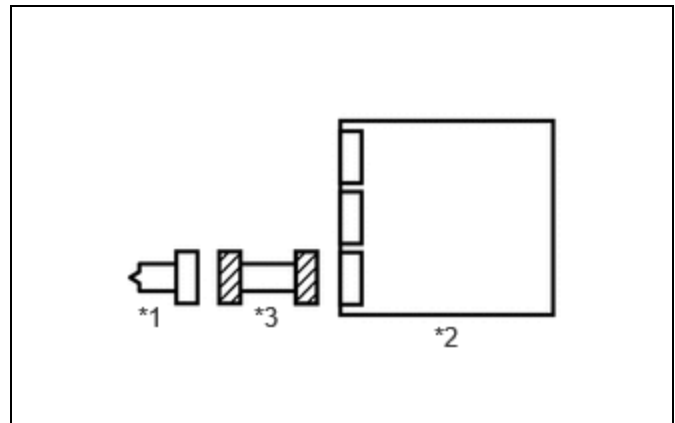
OK



| | |
|-----------|-------------------------|
| 4. | CHECK CONNECTORS |
|-----------|-------------------------|

Pre-procedure1

(a) Disconnect the airbag ECU assembly connector.



| | |
|----|----------------------------------|
| *1 | Rear Seat Outer Belt Assembly RH |
| *2 | Airbag ECU Assembly |
| *3 | Wire Harness |

(b) Disconnect the rear seat outer belt assembly RH 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**

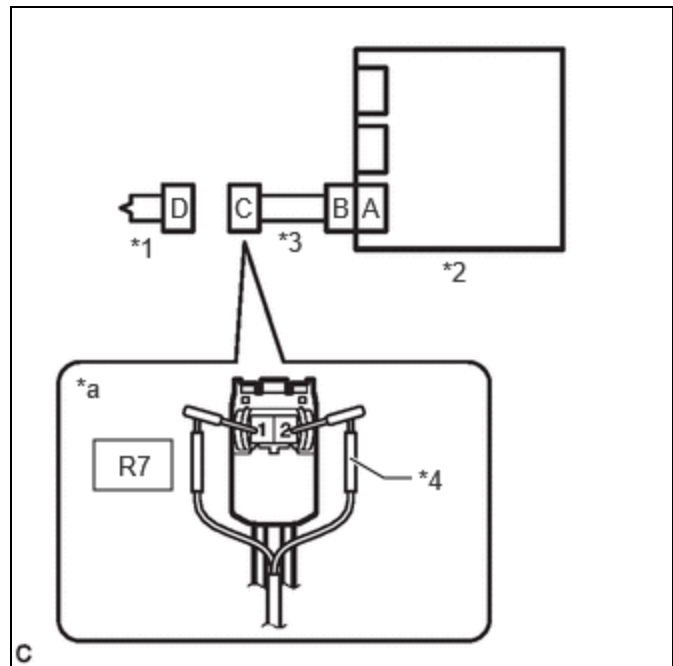
OK



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

Pre-procedure1

(a) Connect the airbag ECU assembly connector.



| | |
|----|--|
| *1 | Rear Seat Outer Belt Assembly RH |
| *2 | Airbag ECU Assembly |
| *3 | Wire Harness |
| *4 | SST |
| *a | Front view of wire harness connector (to Rear Seat Outer Belt Assembly RH) |

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

CAUTION:

Never connect the tester to the rear seat outer belt assembly RH for measurement, as this may lead to a serious injury due to pretensioner 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 REAR SEAT OUTER BELT ASSEMBLY RH |
|-----------|---|

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 |
|-----------------------|------------|
| B007512 is not output | A |
| B007512 is output | B |

HINT:

Codes other than DTC B007512 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 REAR SEAT OUTER BELT ASSEMBLY RH**

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:

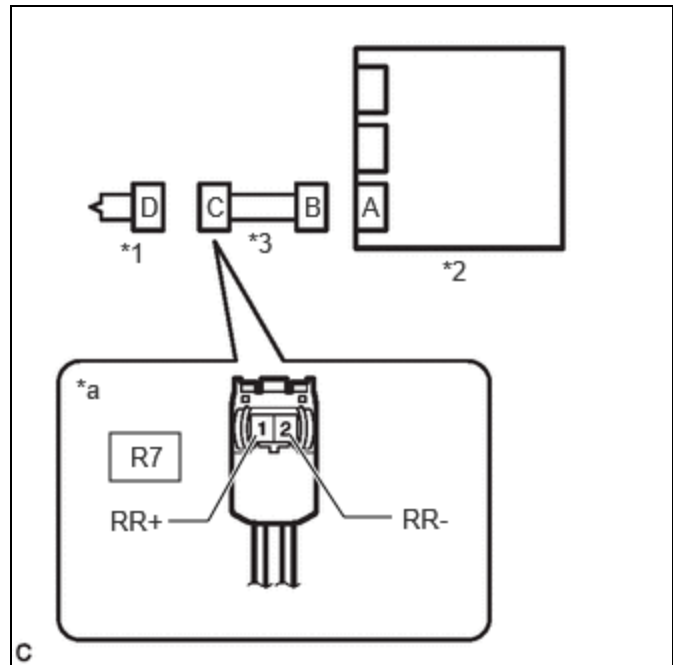


[Click Location & Routing\(R7\).](#)
[Click Connector\(R7\).](#)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION | RESULT |
|--------------------------|--------------------|---------------------|--------|
| R7-1 (RR+) - Body ground | Ignition switch ON | Below 1 V | V |
| R7-2 (RR-) - Body ground | Ignition switch ON | Below 1 V | V |

Result:

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



| | |
|----|--|
| *1 | Rear Seat Outer Belt Assembly RH |
| *2 | Airbag ECU Assembly |
| *3 | Wire Harness |
| *a | Front view of wire harness connector (to Rear Seat Outer Belt Assembly RH) |

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.

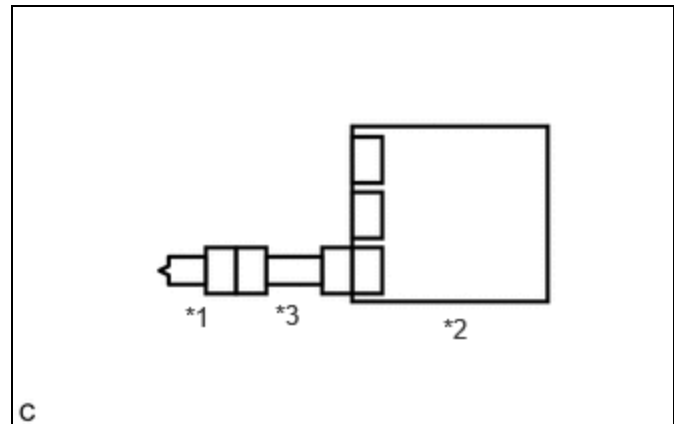
NG ► REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

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

Pre-procedure1

(a) Connect the airbag ECU assembly connector.



C

| | |
|----|----------------------------------|
| *1 | Rear Seat Outer Belt Assembly RH |
| *2 | Airbag ECU Assembly |
| *3 | Wire Harness |

(b) Connect the rear seat outer belt assembly RH 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 |
|-----------------------|------------|
| B007512 is not output | A |
| B007512 is output | B |

HINT:

Codes other than DTC B007512 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**

