| DTC | B1000/31 | Center Airbag Sensor Assembly Malfunction |
|---|---|---|

## DESCRIPTION

The center airbag sensor assembly consists of the deceleration sensor, the safing sensor, the drive circuit, the diagnosis circuit, the ignition control, etc.



If the center airbag sensor assembly receives signals from the airbag sensor, it determines whether or not the SRS should be activated.

DTC B1000/31 is recorded when a malfunction is detected in the center airbag sensor assembly.

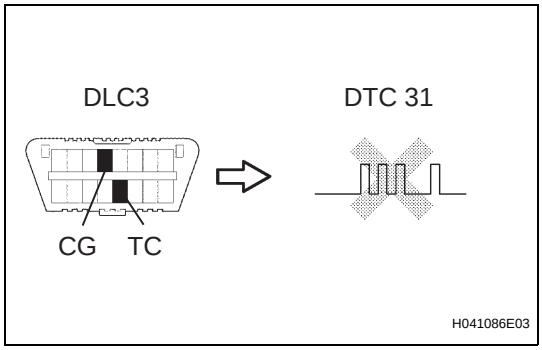
| DTC No. | DTC Detecting Condition | Trouble Area |
|---|---|---|
| B1000/31 | Center airbag sensor assembly malfunction | Center airbag sensor assembly |

HINT:

When a trouble code is displayed simultaneously with B1000/31, repair the malfunction indicated by this code (except B1000/31) first.

## INSPECTION PROCEDURE

| 1 | CHECK CENTER AIRBAG SENSOR ASSEMBLY |
|---|---|




(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear the DTCs stored in memory (See page RS-34).
(f) Turn the ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check the DTCs (See page RS-34).
**OK:**
**DTC B1000/31 is not output.**

**NG** → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

**OK**

**USE SIMULATION METHOD TO CHECK**

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| DTC | B1610/13 | Front Airbag Sensor RH Circuit Malfunction |
|---|---|---|

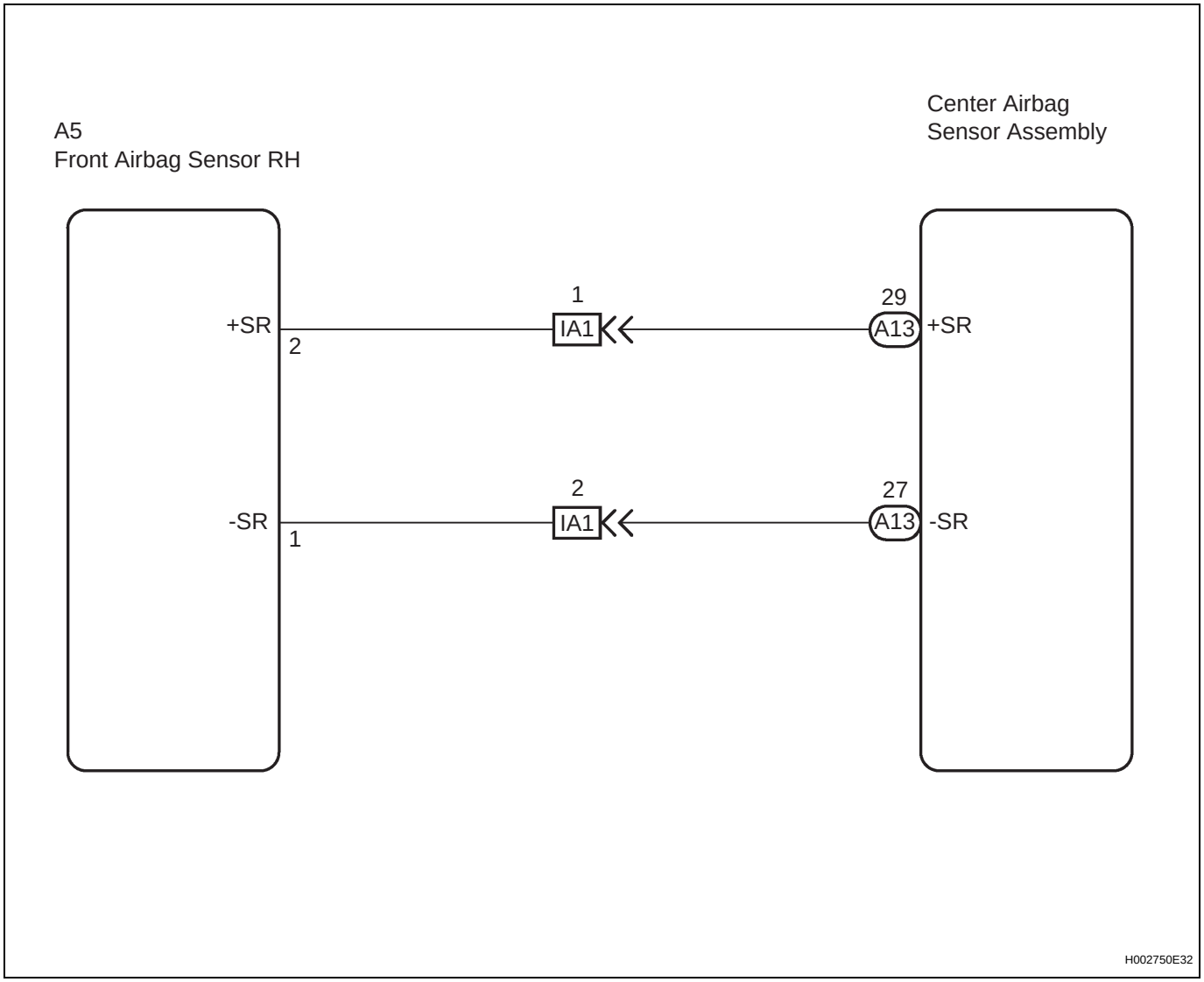
## DESCRIPTION

The front airbag sensor RH consists of the diagnostic circuit, the frontal deceleration sensor, etc.
If the center airbag sensor assembly receives signals from the frontal deceleration sensor, it determines whether or not the SRS should be activated.
DTC B1610/13 is recorded when a malfunction is detected in the front airbag sensor RH circuit.



| DTC No. | DTC Detecting Condition | Trouble Area |
|---|---|---|
| B1610/13 | • The center airbag sensor assembly receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor RH circuit for 2 seconds.<br>• Front airbag sensor RH malfunction<br>• Center airbag sensor assembly malfunction | • Instrument panel wire<br>• Engine room main wire<br>• Front airbag sensor RH<br>• Center airbag sensor assembly |

## WIRING DIAGRAM

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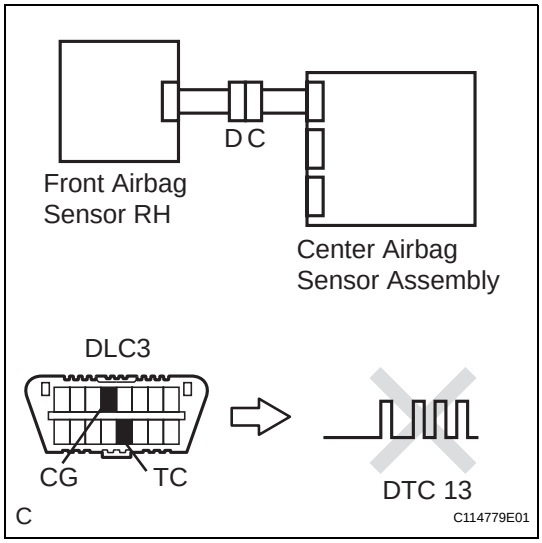
## INSPECTION PROCEDURE

RS

| 1 | CHECK DTC |
|---|---|




(a) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(b) Clear the DTCs stored in the memory (See page RS-34).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(e) Check the DTCs (See page RS-34).
**OK:**
**DTC B1610/13 is not output.**
HINT:
Codes other than DTC B1610/13 may be output at this time, but they are not related to this check.

NG → **Go to step 2**

OK

**USE SIMULATION METHOD TO CHECK**

| 2 | CHECK CONNECTION OF CONNECTORS |
|---|---|

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the center airbag sensor assembly and the front airbag sensor RH.
**OK:**
**The connectors are properly connected.**

NG → **CONNECT CONNECTORS, THEN GO TO STEP 1**

OK

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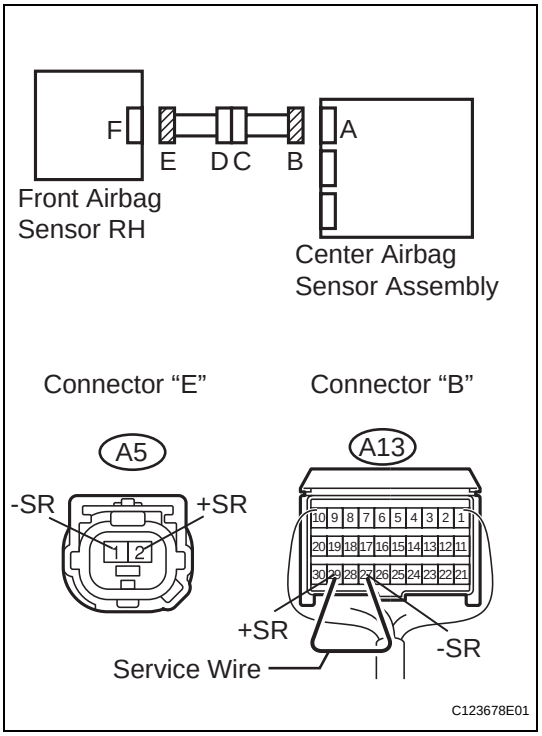
RS

## 3 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (OPEN)




(a) Disconnect the connectors from the center airbag sensor assembly and the front airbag sensor RH.

(b) Using a service wire, connect A13-29 (+SR) and A13-27 (-SR) of connector "B".

**NOTICE:**

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

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

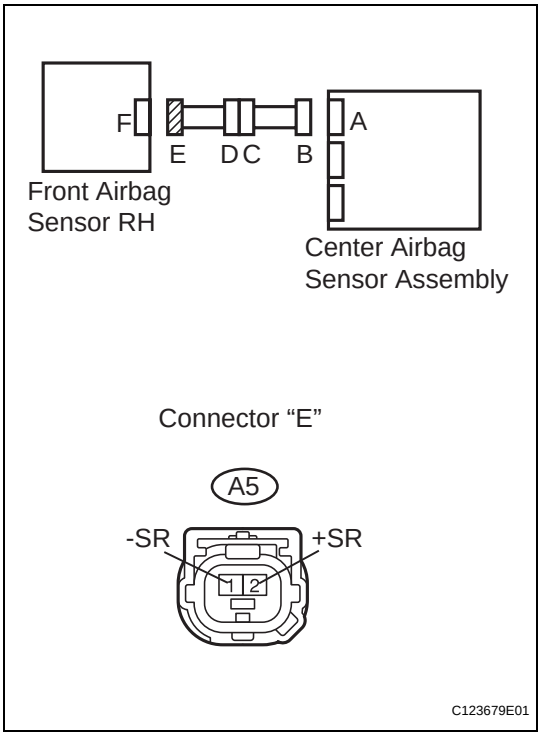
**Standard resistance**

| Tester connection | Condition | Specified condition |
|---|---|---|
| A5-2 (+SR) - A5-1 (-SR) | Always | Below 1 Ω |

**NG** → **Go to step 8**

**OK**

## 4 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (SHORT)




(a) Disconnect the service wire from connector "B".

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

**Standard resistance**

| Tester connection | Condition | Specified condition |
|---|---|---|
| A5-2 (+SR) - A5-1 (-SR) | Always | 1 MΩ or higher |

**NG** → **Go to step 9**

**OK**

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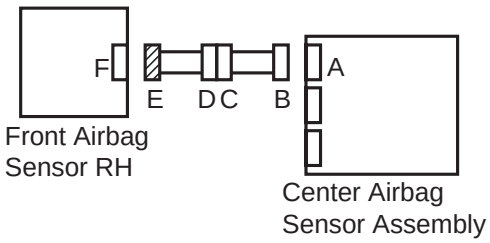
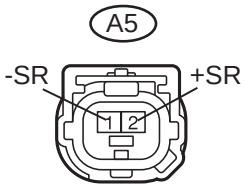
## 5 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (SHORT TO B+)




Connector “E”




C123679E01

(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage according to the value(s) in the table below.

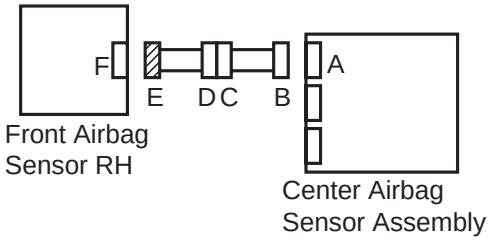
**Standard voltage**

| Tester connection | Condition | Specified condition |
|---|---|---|
| A5-2 (+SR) - Body ground | Ignition switch ON | Below 1 V |
| A5-1 (-SR) - Body ground | Ignition switch ON | Below 1 V |

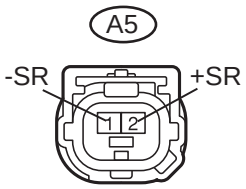
**NG** → **Go to step 10**

**OK**

## 6 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (SHORT TO GROUND)




Connector “E”




C123679E01

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

**Standard resistance**

| Tester connection | Condition | Specified condition |
|---|---|---|
| A5-2 (+SR) - Body ground | Always | 1 MΩ or higher |
| A5-1 (-SR) - Body ground | Always | 1 MΩ or higher |

**NG** → **Go to step 11**

**OK**

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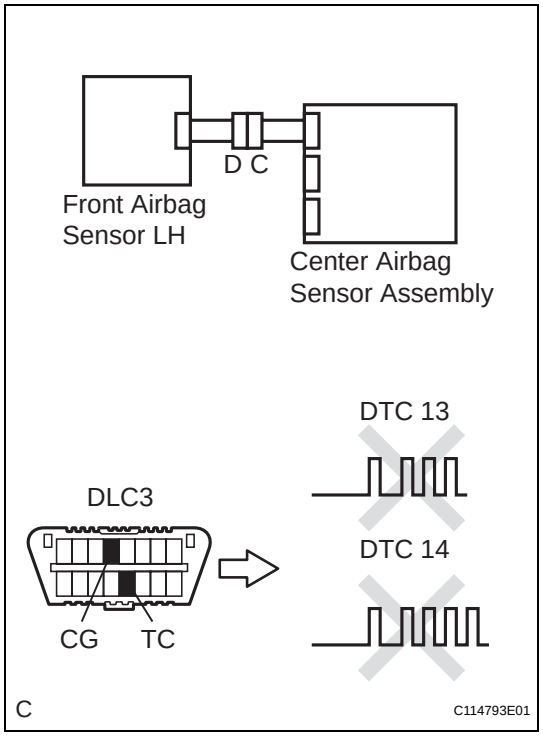
| 7 | CHECK FRONT AIRBAG SENSOR RH |
|---|---|




(a) Connect the connectors to the center airbag sensor assembly.
(b) Interchange the front airbag sensor RH with LH and connect the connectors to them.
(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear the DTCs stored in the memory (See page RS-34).
(f) Turn the ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check the DTCs (See page RS-34).

**Result**

| Result | Proceed to |
|---|---|
| **DTC B1610/13 is output.** | **A** |
| **DTC B1615/14 is output.** | **B** |
| **DTC B1610/13 and B1615/14 are not output.** | **C** |

HINT:
Codes other than DTC B1610/13 and B1615/14 may be output at this time, but they are not related to this check.

**A** → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

**B** → **REPLACE FRONT AIRBAG SENSOR RH**

**C**

**USE SIMULATION METHOD TO CHECK**

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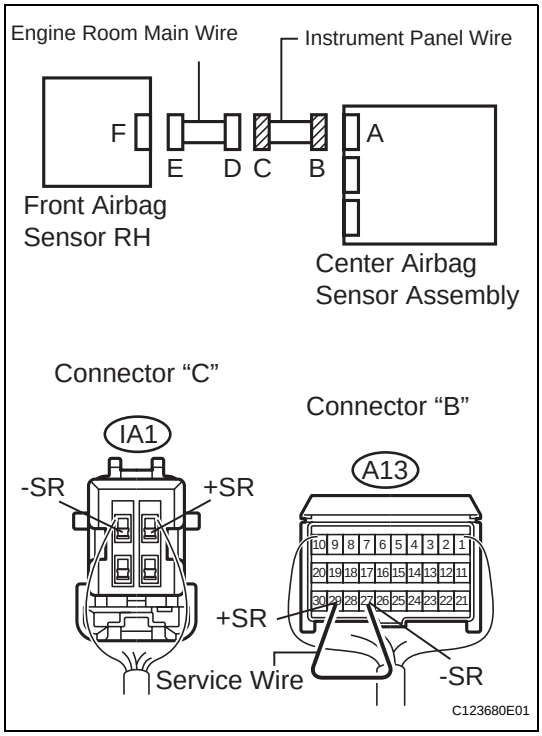
| 8 | CHECK INSTRUMENT PANEL WIRE (OPEN) |
|---|---|




(a) Disconnect the instrument panel wire connector from the engine room main wire.
HINT:
The service wire has already been inserted into connector "B".

(b) Measure the resistance according to the value(s) in the table below.
**Standard resistance**

| Tester connection | Condition | Specified condition |
|---|---|---|
| IA1-1 (+SR) - IA1-2 (-SR) | Always | Below 1 Ω |

**NG** → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

**OK**

**REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

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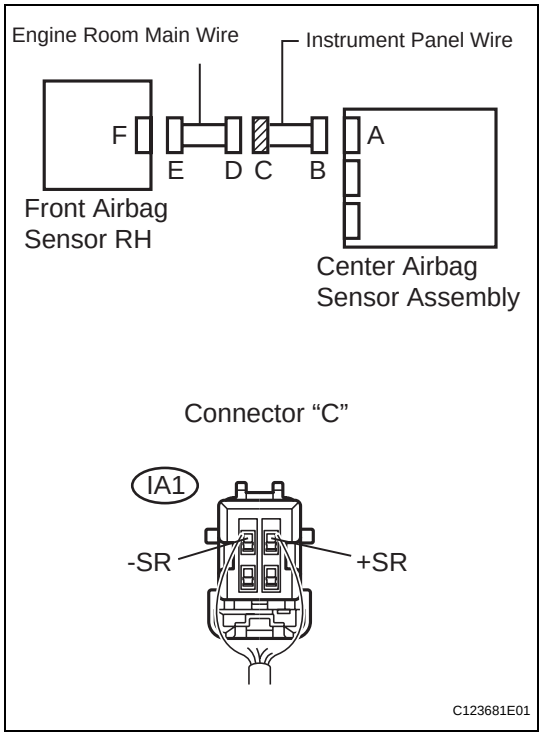
| 9 | CHECK INSTRUMENT PANEL WIRE (SHORT) |
|---|---|




(a) Disconnect the instrument panel wire connector from the engine room main wire.

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

**Standard resistance**

| Tester connection | Condition | Specified condition |
|---|---|---|
| IA1-1 (+SR) - IA1-2 (-SR) | Always | 1 MΩor higher |

**NG** → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

**OK**

**REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

RS

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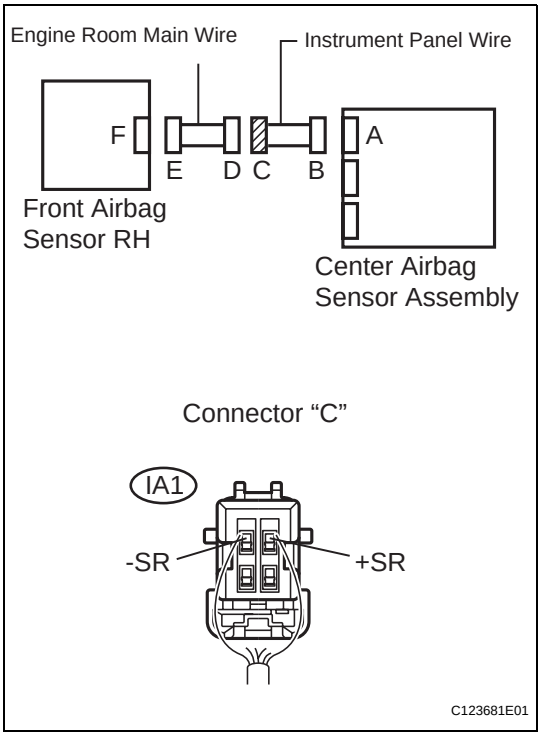
| 10 | CHECK INSTRUMENT PANEL WIRE (SHORT TO B+) |
|---|---|




(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the instrument panel wire connector from the engine room main wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage according to the value(s) in the table below.

**Standard voltage**

| Tester connection | Condition | Specified condition |
|---|---|---|
| IA1-1 (+SR) - Body ground | Ignition switch ON | Below 1 V |
| IA1-2 (-SR) - Body ground | Ignition switch ON | Below 1 V |

**NG** → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

**OK**

**REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

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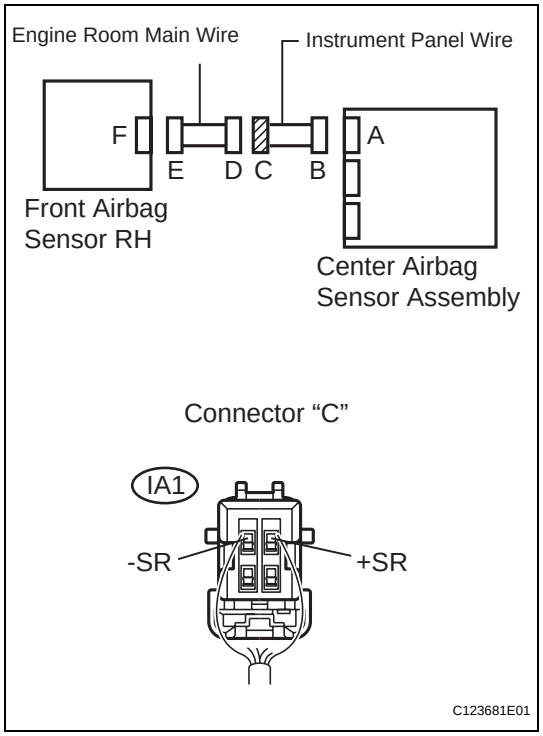
| 11 | CHECK INSTRUMENT PANEL WIRE (SHORT TO GROUND) |
|---|---|




(a) Disconnect the instrument panel wire connector from the engine room main wire.

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

**Standard resistance**

| Tester connection | Condition | Specified condition |
|---|---|---|
| IA1-1 (+SR) - Body ground | Always | 1 MΩ or higher |
| IA1-2 (-SR) - Body ground | Always | 1 MΩ or higher |

**NG** → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

**OK**

**REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

RS

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