

DTC	B1615/14	Front Airbag Sensor LH Circuit Malfunction
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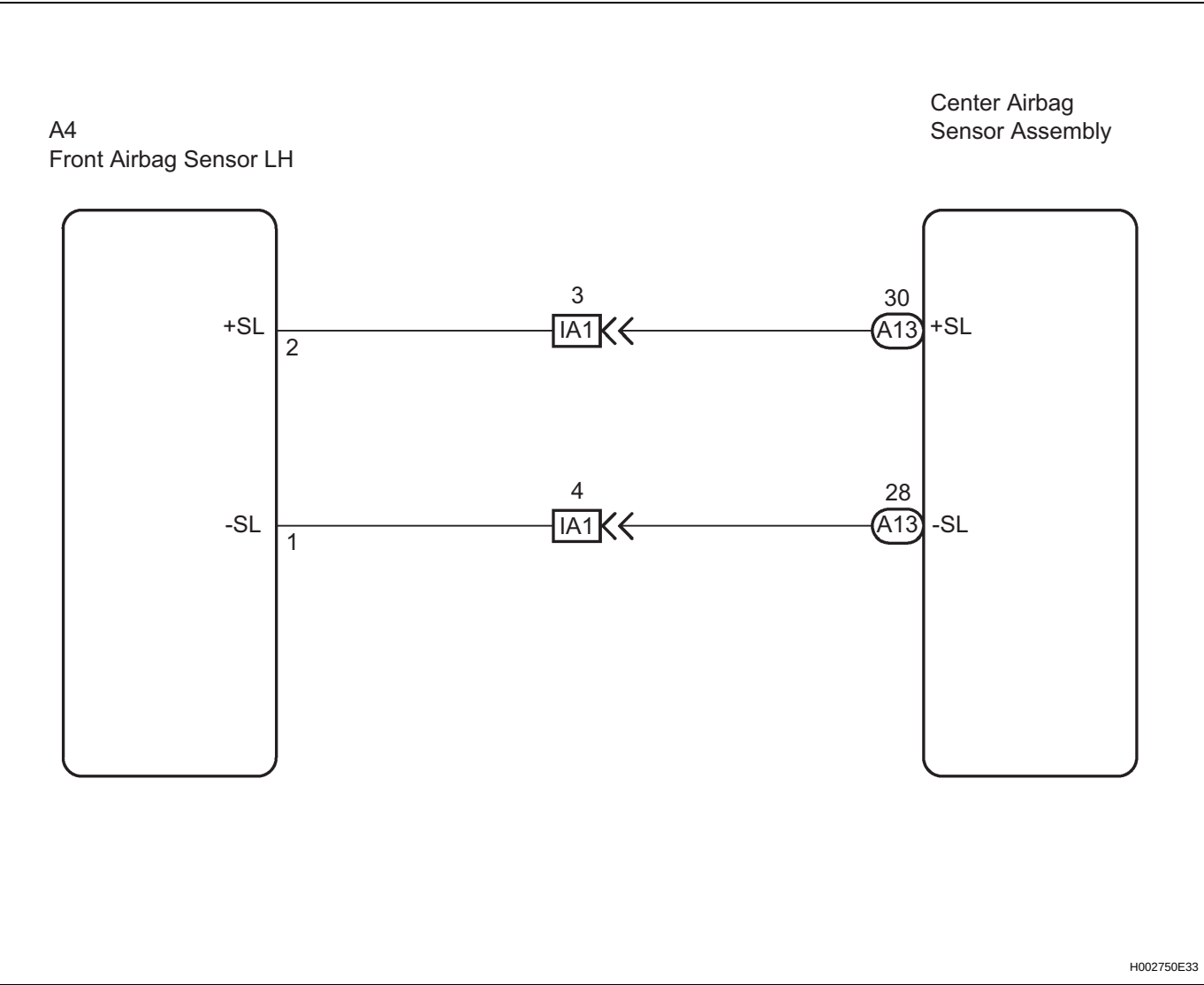
DESCRIPTION

The front airbag sensor LH consists of the diagnostic circuit and 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.

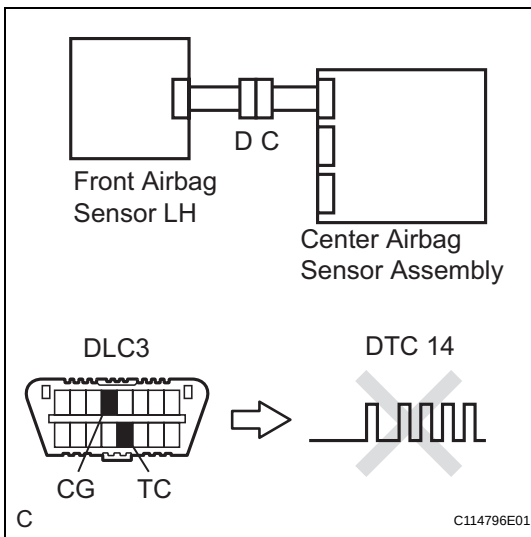
DTC B1615/14 is recorded when a malfunction is detected in the front airbag sensor LH circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1615/14	- 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 LH circuit for 2 seconds. - Front airbag sensor LH malfunction - Center airbag sensor assembly malfunction	- Instrument panel wire - Engine room main wire - Front airbag sensor LH - Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK DTC

OK

- (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 B1615/14 is not output.****HINT:**

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

NG

Go to step 2

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 LH.

OK:**The connectors are properly connected.**

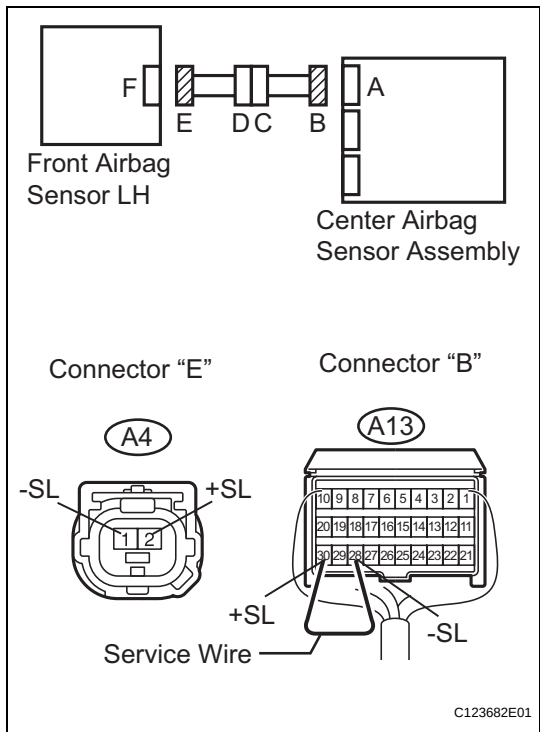
NG

CONNECT CONNECTORS, THEN GO TO STEP 1

OK

3

CHECK FRONT AIRBAG SENSOR LH CIRCUIT (OPEN)



- (a) Disconnect the connectors from the center airbag sensor assembly and the airbag sensor front LH.
- (b) Using a service wire, connect A13-30 (+SL) and A13-28 (-SL) 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
A4-2 (+SL) - A4-1 (-SL)	Always	Below 1 Ω

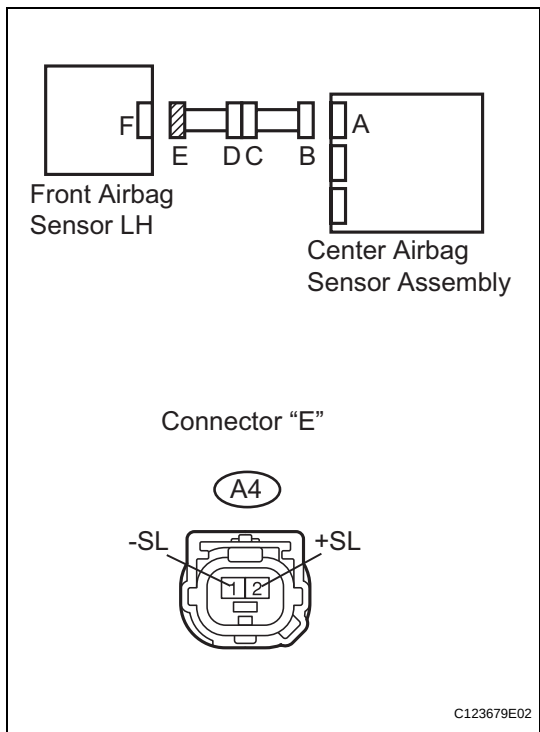
NG

Go to step 8

OK

4

CHECK FRONT AIRBAG SENSOR LH CIRCUIT (SHORT)



- (a) Disconnect the service wire from connector "B".
- (b) Measure the resistance according to the value(s) in the table below.

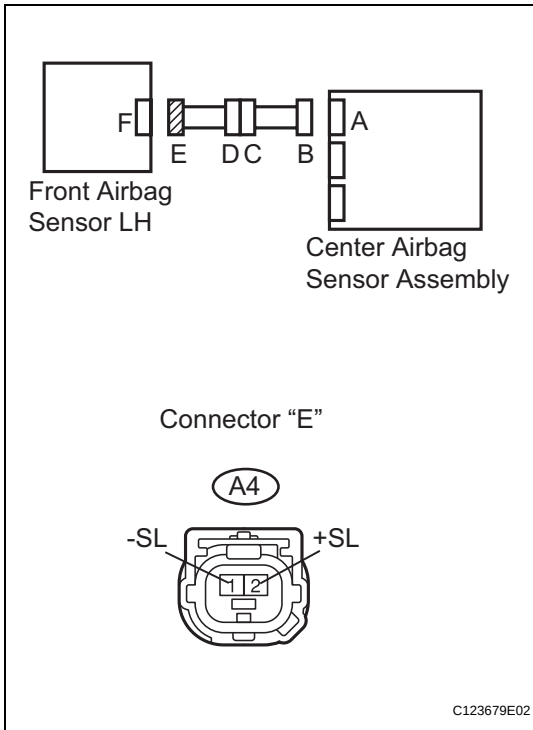
Standard resistance

Tester connection	Condition	Specified condition
A4-2 (+SL) - A4-1 (-SL)	Always	1 MΩ or higher

NG

Go to step 9

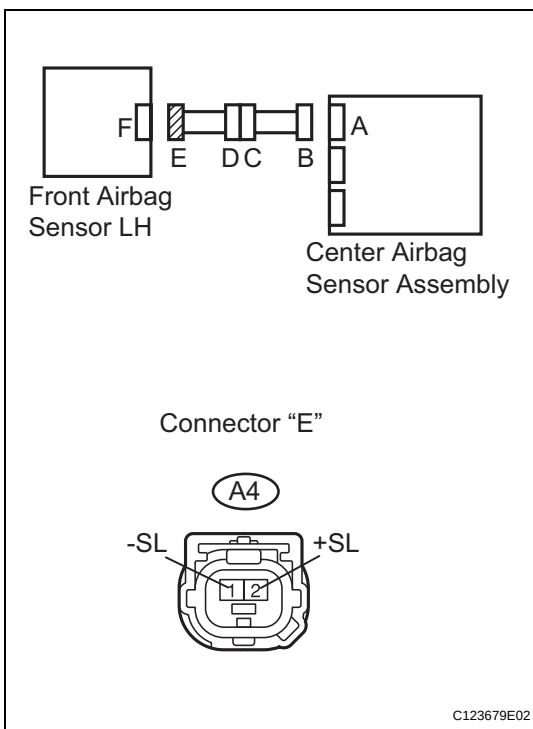
OK

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

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

Standard voltage

Tester connection	Condition	Specified condition
A4-2 (+SL) - Body ground	Ignition switch ON	Below 1 V
A4-1 (-SL) - Body ground	Ignition switch ON	Below 1 V

NG**Go to step 10****OK****6 CHECK FRONT AIRBAG SENSOR LH CIRCUIT (SHORT TO GROUND)**

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

Standard resistance

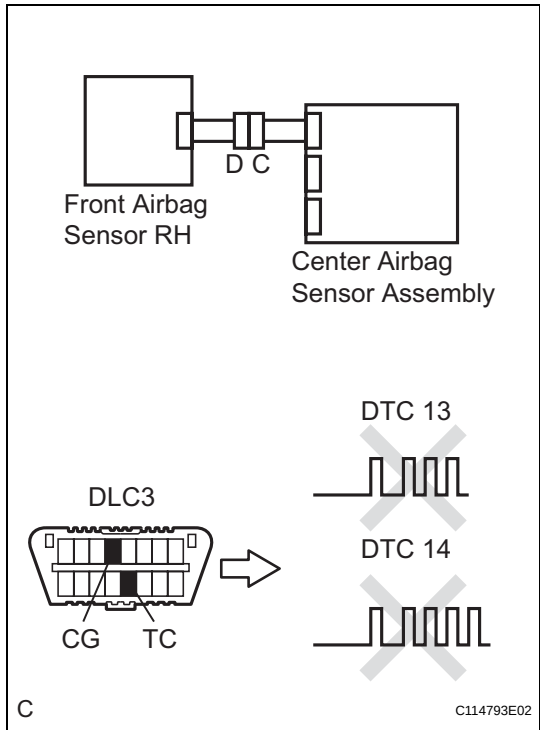
Tester connection	Condition	Specified condition
A4-2 (+SL) - Body ground	Always	1 M Ω or higher
A4-1 (-SL) - Body ground	Always	1 M Ω or higher

NG**Go to step 11****OK**

7

CHECK FRONT AIRBAG SENSOR LH

RS



- (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 B1615/14 is output.	A
DTC B1610/13 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.

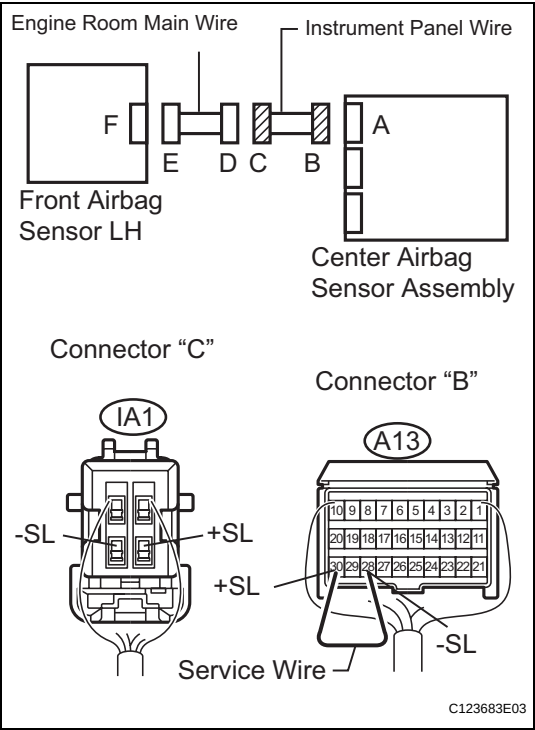
- A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY
- B → REPLACE FRONT AIRBAG SENSOR LH

C

USE SIMULATION METHOD TO CHECK

RS

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
IA1-3 (+SL) - IA1-4 (-SL)	Always	Below 1 Ω

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REPAIR OR REPLACE INSTRUMENT PANEL WIRE

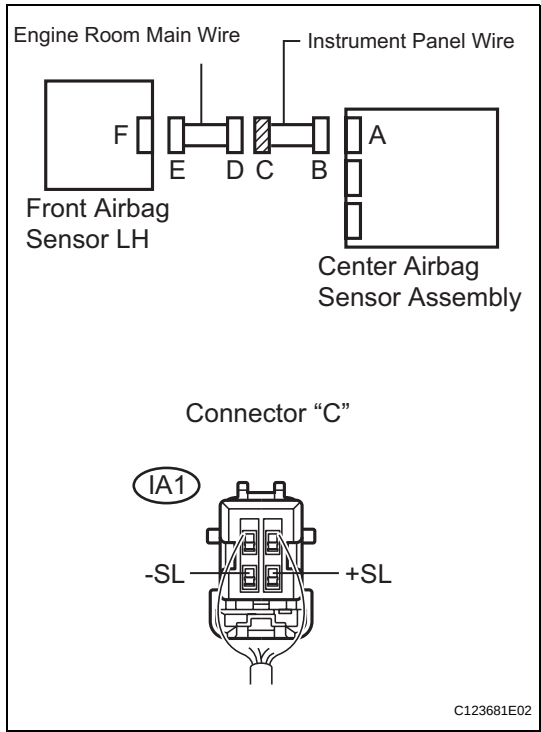
OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

9

CHECK INSTRUMENT PANEL WIRE (SHORT)

RS



- (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

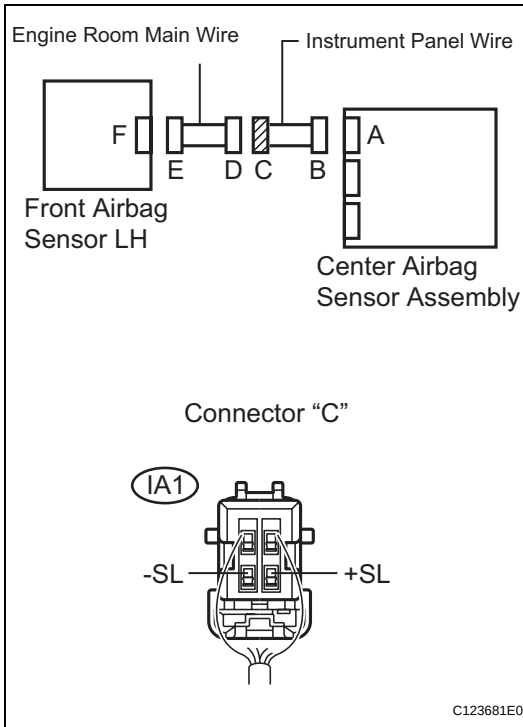
Tester connection	Condition	Specified condition
IA1-3 (+SL) - IA1-4 (-SL)	Always	1 MΩ or higher

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REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

10 CHECK INSTRUMENT PANEL WIRE (SHORT TO B+)

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

Standard voltage

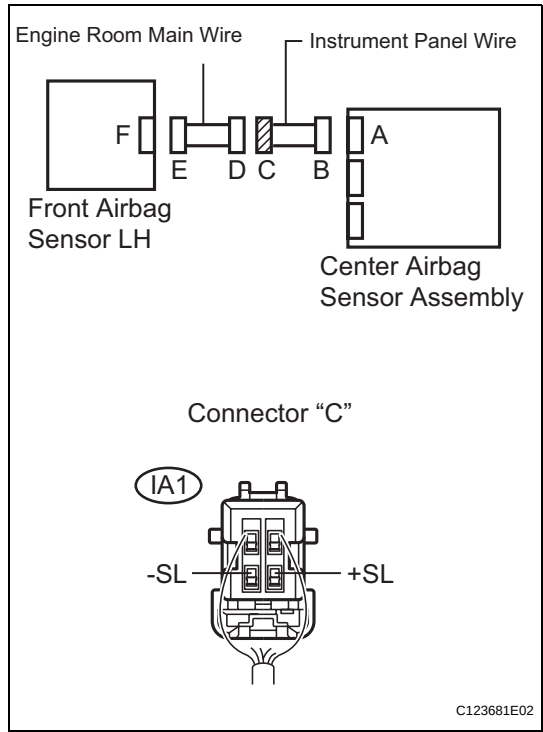
Tester connection	Condition	Specified condition
IA1-3 (+SL) - Body ground	Ignition switch ON	Below 1 V
IA1-4 (-SL) - Body ground	Ignition switch ON	Below 1 V

NG**REPAIR OR REPLACE INSTRUMENT PANEL WIRE****OK****REPAIR OR REPLACE ENGINE ROOM MAIN WIRE****RS**

11

CHECK INSTRUMENT PANEL WIRE (SHORT TO GROUND)

RS



- (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
IA1-3 (+SL) - Body ground	Always	1 MΩ or higher
IA1-4 (-SL) - Body ground	Always	1 MΩ or higher

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE