DTC	B1152/28	Passenger Airbag ON/OFF Indicator Circuit Malfunction

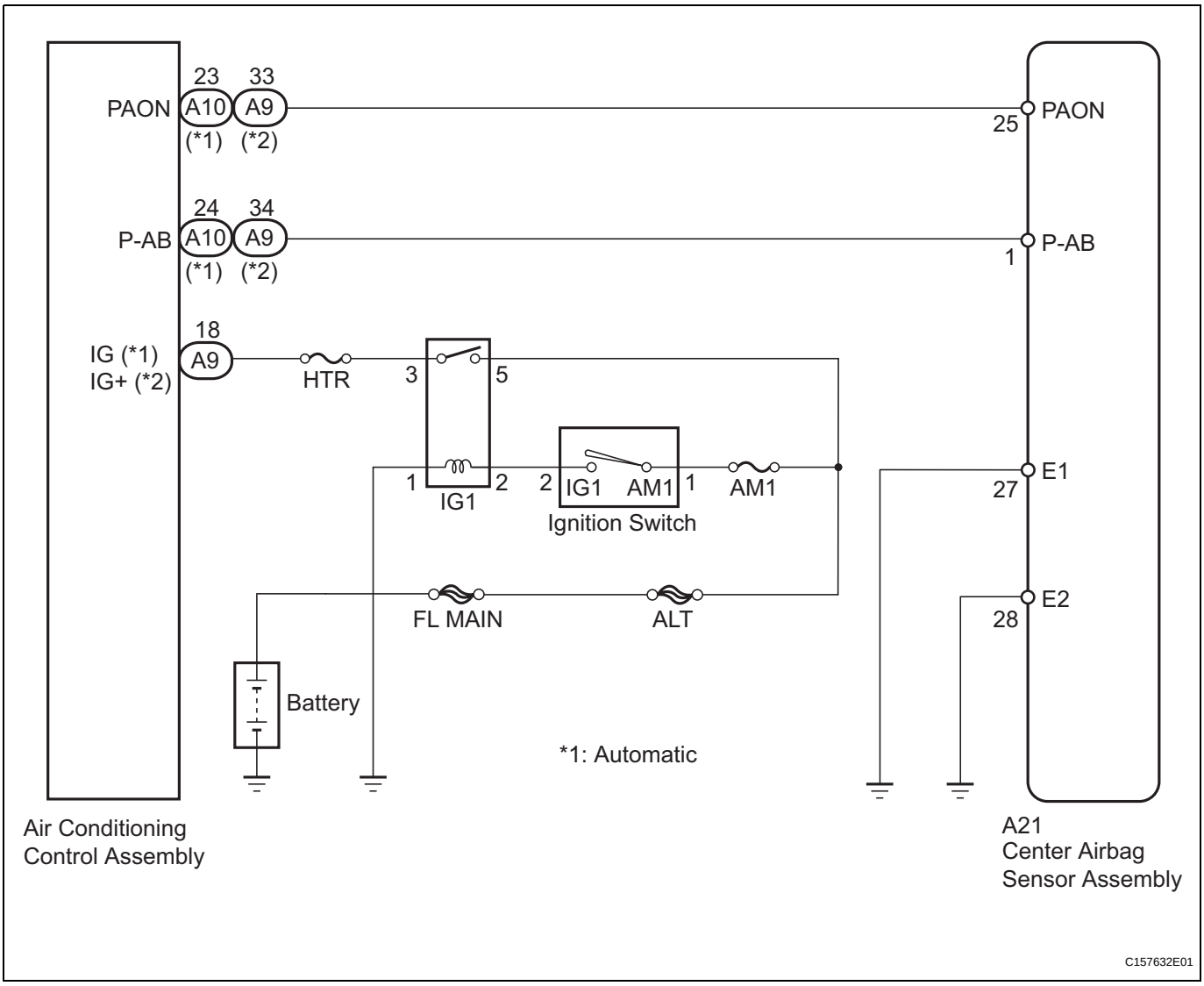
DESCRIPTION

The passenger airbag ON/OFF indicator circuit consists of the center airbag sensor assembly and passenger airbag ON/OFF indicator.
This circuit indicates the operation condition of the front passenger airbag, the front seat side airbag RH and front seat belt pretensioner RH.
DTC B1152/28 is recorded when a malfunction is detected in the passenger airbag ON/OFF indicator circuit.

RS

DTC No.	DTC Detecting Condition	Trouble Area
B1152/28	• The center airbag sensor assembly receives a line short signal, open signal, short to ground signal or B+ short signal in the passenger airbag ON/OFF indicator circuit for 2 seconds. • Passenger airbag ON/OFF indicator malfunction • Center airbag sensor assembly malfunction	• Air conditioning control assembly (Passenger airbag ON/OFF indicator) • Center airbag sensor assembly • Instrument panel wire

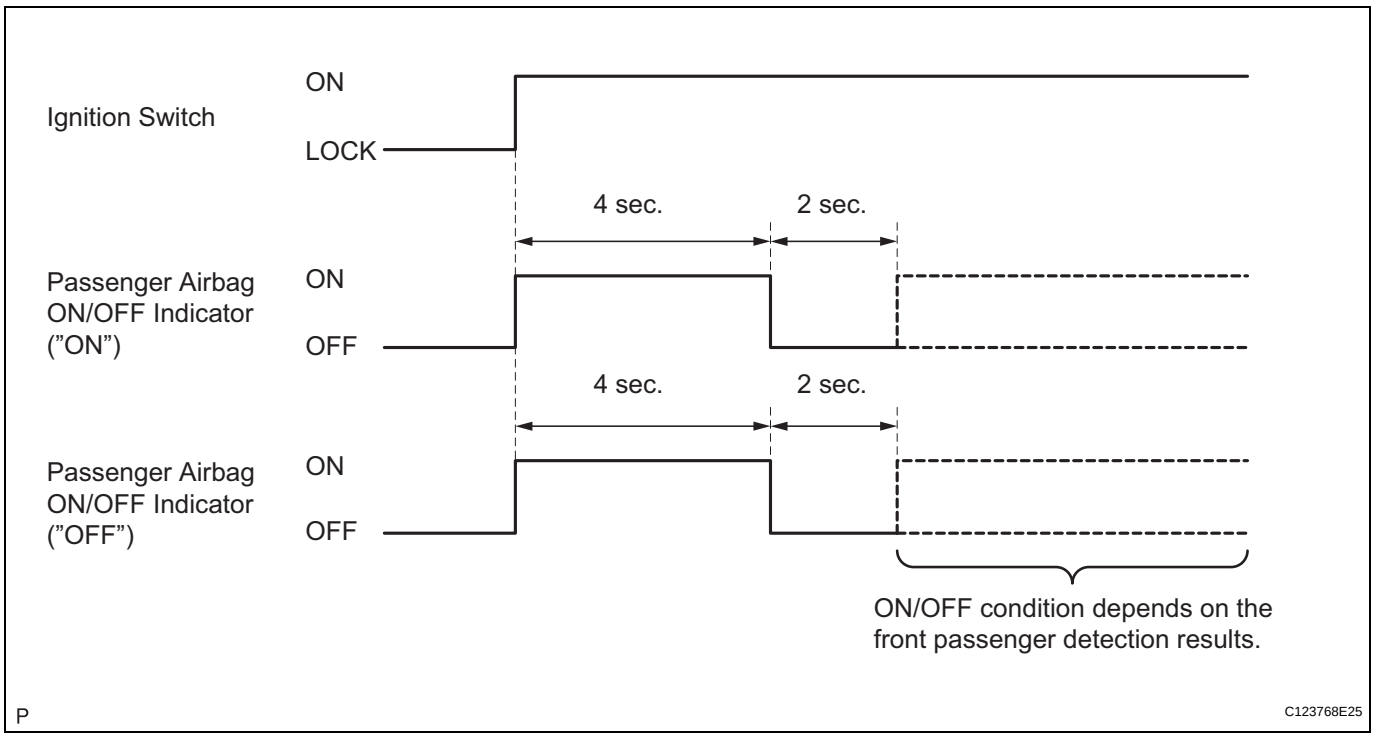
WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK PASSENGER AIRBAG ON/OFF INDICATOR OPERATION

(a) Turn the ignition switch to the ON position.
(b) Check the passenger airbag ON/OFF indicator operation.
HINT:
Refer to the normal condition of the passenger airbag ON/OFF indicator (See page RS-27).



Result

ON/OFF Indicator Illumination	Proceed to
Always ON	A
OFF	B

B → Go to step 10

A

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 air conditioning control assembly.
OK:
The connectors are connected.

NG → CONNECT CONNECTORS

OK

3	CHECK CONNECTORS

(a) Disconnect the connectors from the center airbag sensor assembly and the air conditioning control assembly.
(b) Check that the connectors (on the center airbag sensor assembly side and the air conditioning control assembly side) are not damaged.

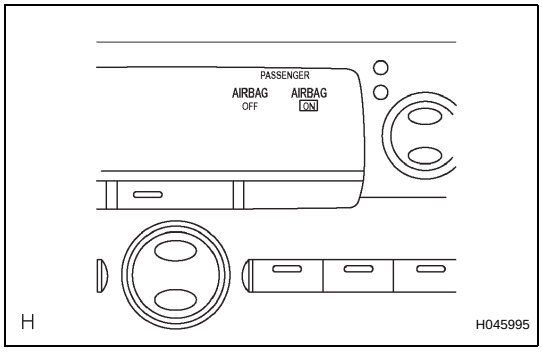
OK:

The connectors are not deformed or damaged.

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

OK

4	CHECK PASSENGER AIRBAG ON/OFF INDICATOR



(a) Connect the connector to the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position.
(d) Check the passenger airbag ON/OFF indicator operation.

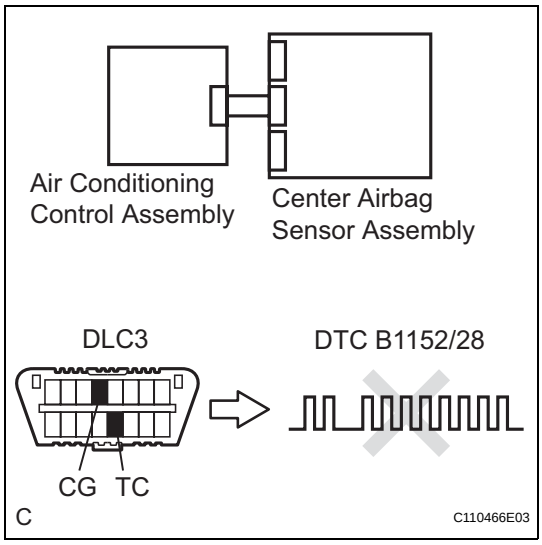
OK:

The passenger airbag ON/OFF indicator ("ON" and "OFF") does not come on.

NG → **Go to step 6**

OK

5	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 connector to the air conditioning control assembly.
(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, and wait for at least 60 seconds.
(f) Clear the DTCs stored in memory (See page RS-35).
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(i) Check the DTCs (See page RS-35).

OK:

DTC B1152/28 is not output.

HINT:
Codes other than code B1152/28 may be output at this time, but they are not related to this check.

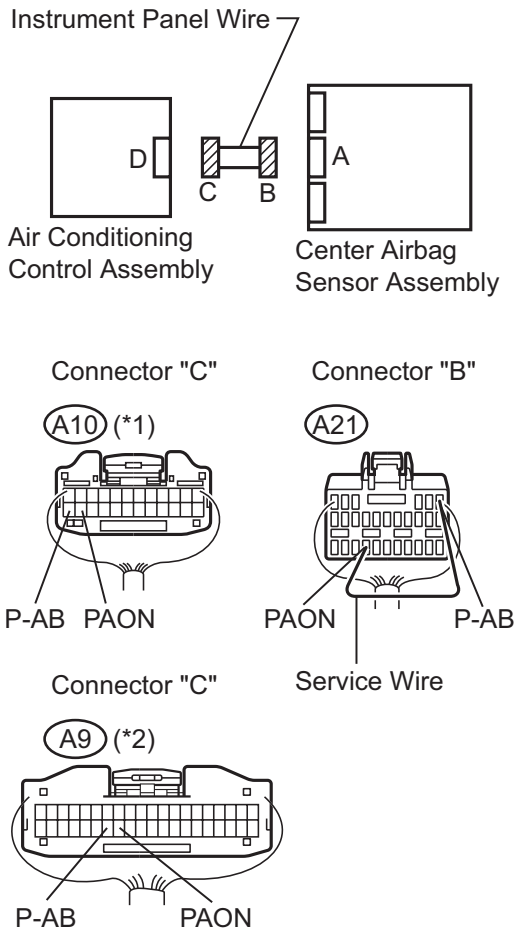
NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

USE SIMULATION METHOD TO CHECK

RS

6 CHECK INSTRUMENT PANEL WIRE (OPEN)



(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 connector from the center airbag sensor assembly.
(d) Using a service wire, connect A21-1 (P-AB) and A21-25 (PAON) of connector "B".
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(e) Measure the resistance according to the value(s) in the table below.

Automatic air conditioning:
Standard resistance

Tester connection	Condition	Specified condition
A10-23 (PAON) - A10-24 (P-AB)	Always	Below 1 Ω

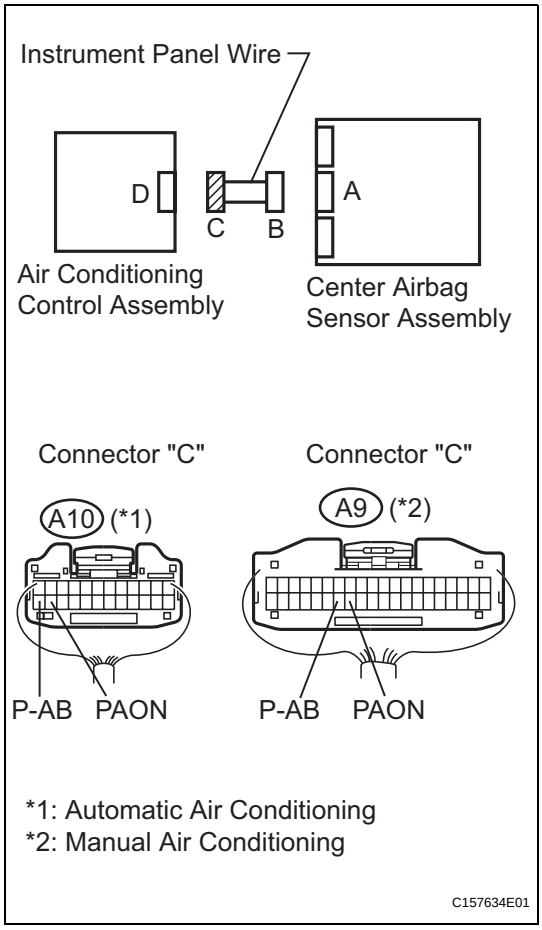
Manual air conditioning:
Standard resistance

Tester connection	Condition	Specified condition
A9-33 (PAON) - A9-34 (P-AB)	Always	Below 1 Ω

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

OK

7	CHECK INSTRUMENT PANEL WIRE (SHORT)



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

Automatic air conditioning:
Standard resistance

Tester connection	Condition	Specified condition
A10-23 (PAON) - A10-34 (P-AB)	Always	1 MΩ or higher

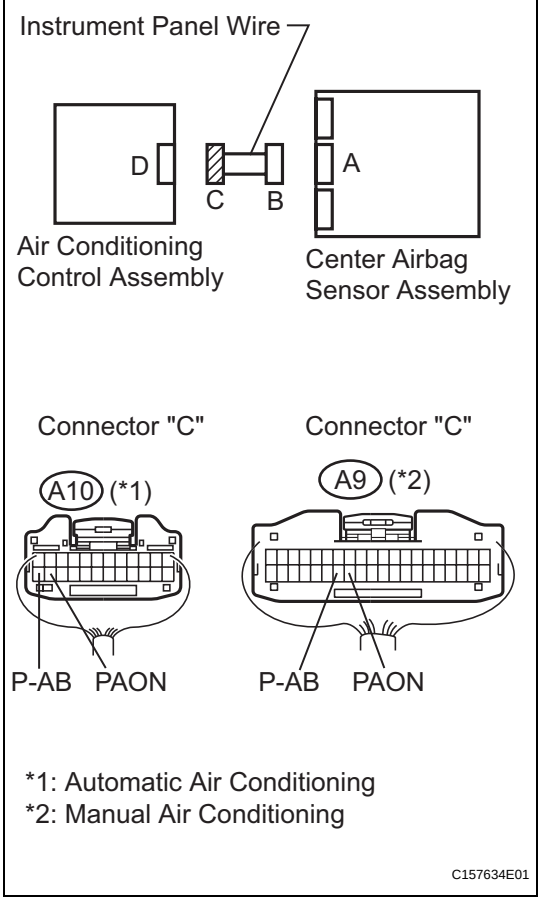
Manual air conditioning:
Standard resistance

Tester connection	Condition	Specified condition
A9-33 (PAON) - A9-34 (P-AB)	Always	1 MΩ or higher

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

OK

8	CHECK INSTRUMENT PANEL WIRE (SHORT TO GROUND)



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

Automatic air conditioning:
Standard resistance

Tester connection	Condition	Specified condition
A10-23 (PAON) - Body ground	Always	1 MΩ or higher
A10-24 (P-AB) - Body ground	Always	1 MΩ or higher

Manual air conditioning:
Standard resistance

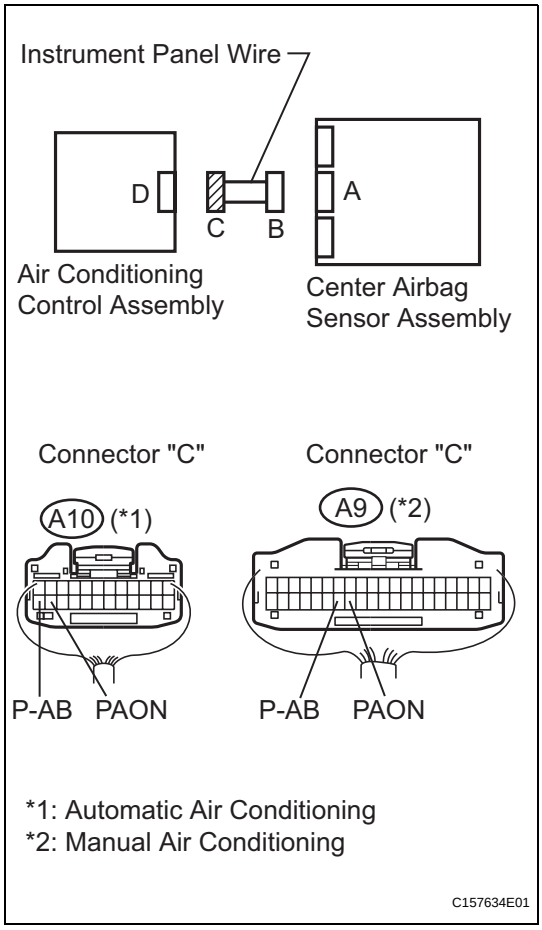
Tester connection	Condition	Specified condition
A9-33 (PAON) - Body ground	Always	1 MΩ or higher
A9-34 (P-AB) - Body ground	Always	1 MΩ or higher

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

OK

RS

9	CHECK INSTRUMENT PANEL WIRE (SHORT TO B+)



(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.

Automatic air conditioning:
Standard voltage

Tester connection	Condition	Specified condition
A10-23 (PAON) - Body ground	Ignition switch ON	Below 1 V
A10-24 (P-AB) - Body ground	Ignition switch ON	Below 1 V

Manual air conditioning:
Standard voltage

Tester connection	Condition	Specified condition
A9-33 (PAON) - Body ground	Ignition switch ON	Below 1 V
A9-34 (P-AB) - Body ground	Ignition switch ON	Below 1 V

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

OK

REPLACE AIR CONDITIONING CONTROL ASSEMBLY

10	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 air conditioning control assembly.

OK:
The connectors are connected.

NG → **CONNECT CONNECTORS**

OK

11 CHECK CONNECTORS

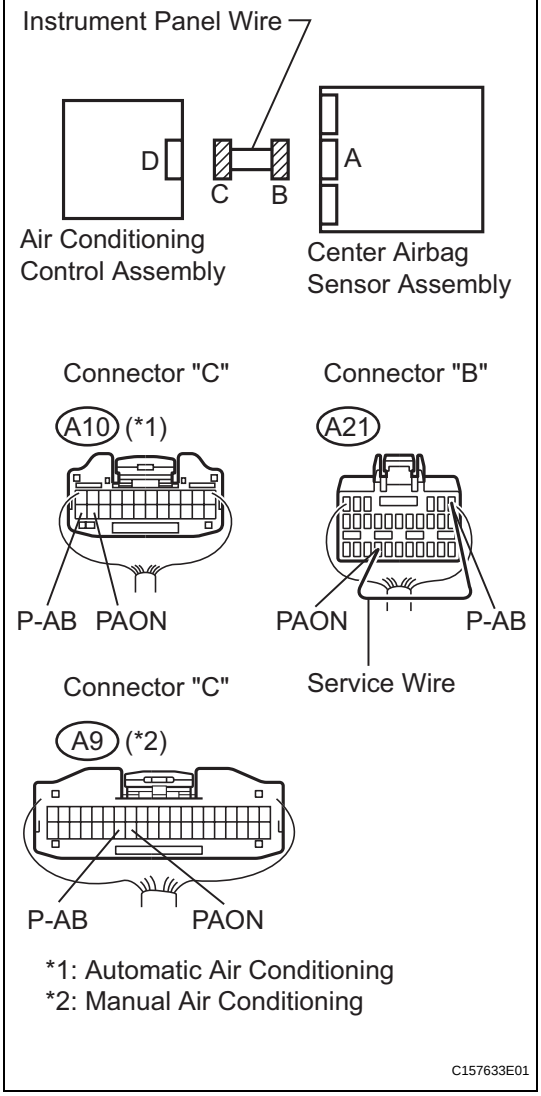
(a) Disconnect the connectors from the center airbag sensor assembly and the air conditioning control assembly.
(b) Check that the connectors (on the center airbag sensor assembly side and the air conditioning control assembly side) are not damaged.
OK:
The connectors are not deformed or damaged.

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

RS

OK

12 CHECK INSTRUMENT PANEL WIRE (OPEN)



(a) Using a service wire, connect A21-1 (ABON) and A21-25 (ABOF) of connector "B".
(b) Measure the resistance according to the value(s) in the table below.

Automatic air conditioning:
Standard resistance

Tester connection	Condition	Specified condition
A10-23 (PAON) - A10-24 (P-AB)	Always	Below 1 Ω

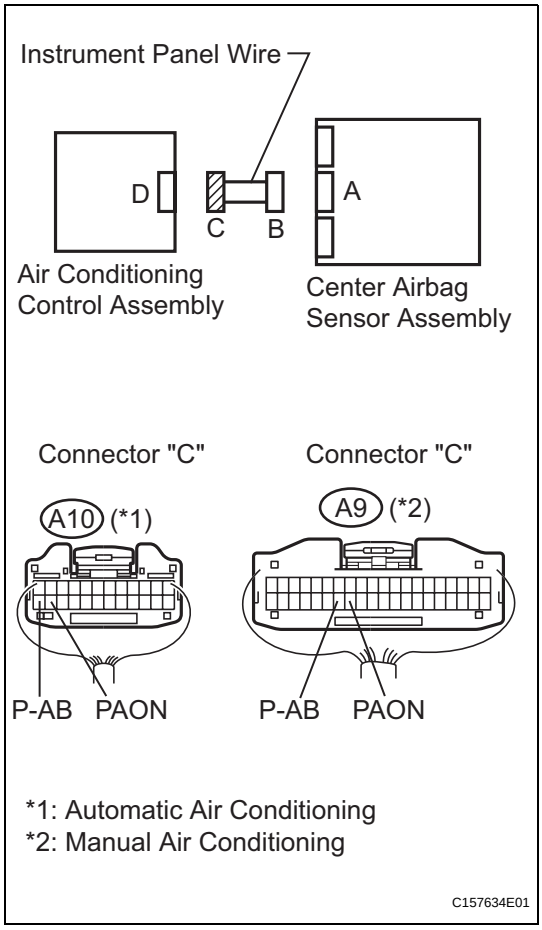
Manual air conditioning:
Standard resistance

Tester connection	Condition	Specified condition
A9-33 (PAON) - A9-34 (P-AB)	Always	Below 1 Ω

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

OK

13	CHECK INSTRUMENT PANEL WIRE (SHORT)



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

Automatic air conditioning:
Standard resistance

Tester connection	Condition	Specified condition
A10-23 (PAON) - A10-24 (P-AB)	Always	1 MΩ or higher

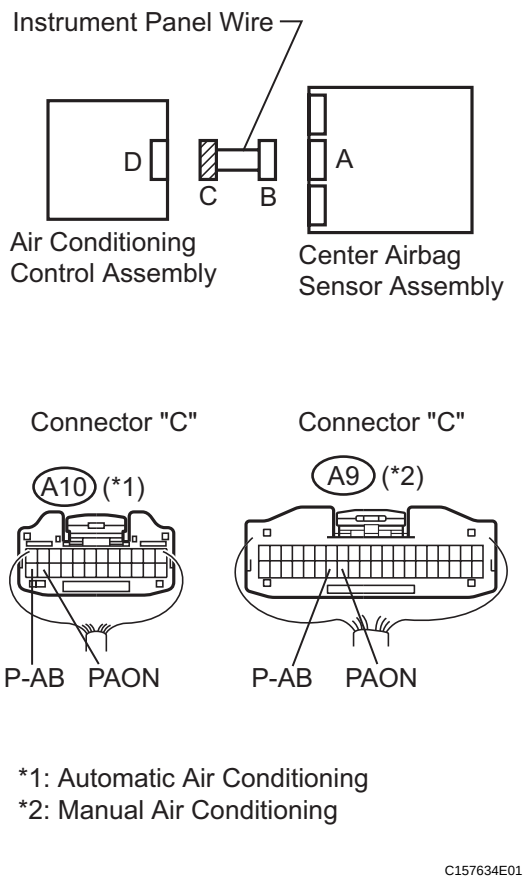
Manual air conditioning:
Standard resistance

Tester connection	Condition	Specified condition
A9-33 (PAON) - A9-34 (P-AB)	Always	1 MΩ or higher

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

OK

14	CHECK INSTRUMENT PANEL WIRE (SHORT TO GROUND)



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

Automatic air conditioning:
Standard resistance

Tester connection	Condition	Specified condition
A10-23 (PAON) - Body ground	Always	1 MΩ or higher
A10-24 (P-AB) - Body ground	Always	1 MΩ or higher

Manual air conditioning:
Standard resistance

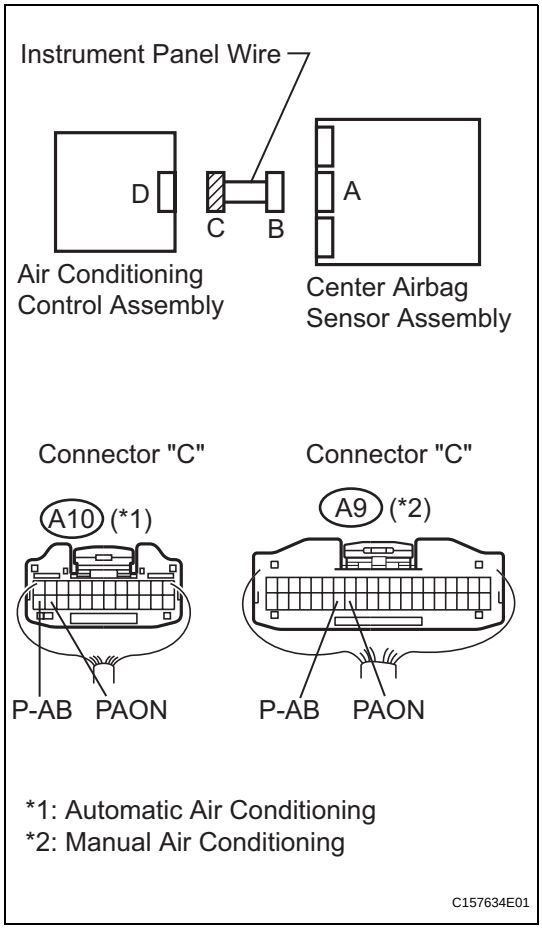
Tester connection	Condition	Specified condition
A9-33 (PAON) - Body ground	Always	1 MΩ or higher
A9-34 (P-AB) - Body ground	Always	1 MΩ or higher

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

OK

RS

15 CHECK INSTRUMENT PANEL WIRE (SHORT TO B+)



(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.

Automatic air conditioning:
Standard voltage

Tester connection	Condition	Specified condition
A10-23 (PAON) - Body ground	Ignition switch ON	Below 1 V
A10-24 (P-AB) - Body ground	Ignition switch ON	Below 1 V

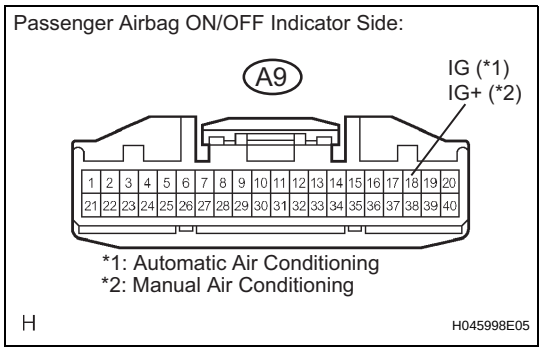
Manual air conditioning:
Standard voltage

Tester connection	Condition	Specified condition
A9-33 (PAON) - Body ground	Ignition switch ON	Below 1 V
A9-34 (P-AB) - Body ground	Ignition switch ON	Below 1 V

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

OK

16 CHECK WIRE HARNESS (POWER SOURCE)



(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 connector to the center airbag sensor assembly.
(d) Turn the ignition switch to the ON position.
(e) Measure the voltage and resistance according to the value(s) in the table below.

Automatic air conditioning:
Standard voltage

Tester connection	Condition	Specified condition
A9-18 (IG) - Body ground	Ignition switch ON	8 to 16 V

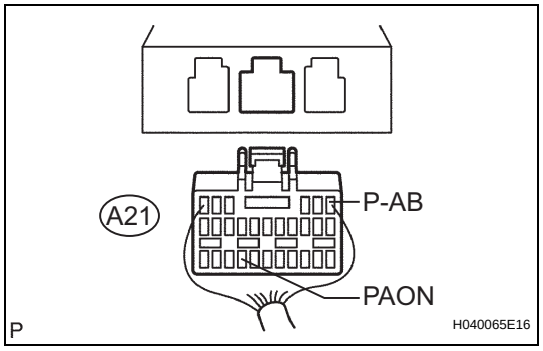
Manual air conditioning:
Standard voltage

Tester connection	Condition	Specified condition
A9-18 (IG+) - Body ground	Ignition switch ON	8 to 16 V

NG → REPAIR OR REPLACE POWER SOURCE CIRCUIT

OK

17 CHECK PASSENGER AIRBAG ON/OFF INDICATOR



(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 connector to the air conditioning control assembly.
(d) Disconnect the connector from center airbag sensor assembly.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position.
(g) Check the passenger airbag ON/OFF indicator condition.

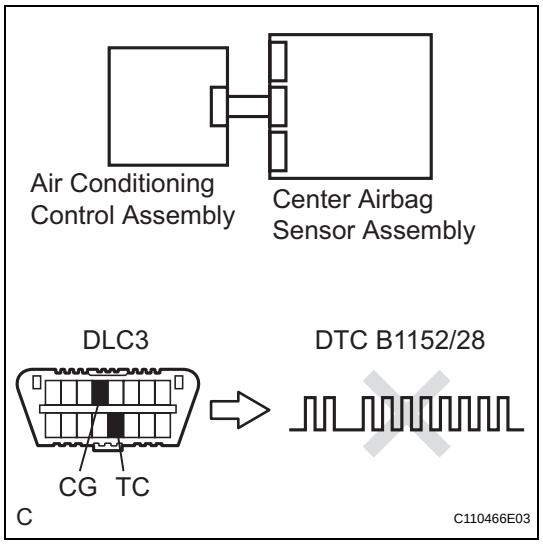
Result

Tester connection	Condition	Passenger airbag ON/OFF indicator condition
A21-25 (PAON) - Body ground	Ignition switch ON	"ON" comes on
A21-1 (P-AB) - Body ground	Ignition switch ON	"OFF" comes on

NG → REPLACE AIR CONDITIONING CONTROL ASSEMBLY

OK

18 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 connector to the center airbag sensor assembly.
(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, and wait for at least 60 seconds.
(f) Clear the DTCs stored in memory (See page RS-35).
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(i) Check the DTCs (See page RS-35).

OK:

DTC B1152/28 is not output.

HINT:
Codes other than code B1152/28 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

USE SIMULATION METHOD TO CHECK