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Model Year Start: 2009	Model: GX470	Prod Date Range: [08/2008 -]
Title: SUPPLEMENTAL RESTRAINT SYSTEM: AIRBAG SYSTEM: B1152/28; Passenger Airbag ON/OFF Indicator Circuit Malfunction; 2009 MY GX470 [08/2008 -]		

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

The passenger airbag ON/OFF indicator light 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 assembly, the front seat airbag assembly RH and front seat belt pretensioner RH.

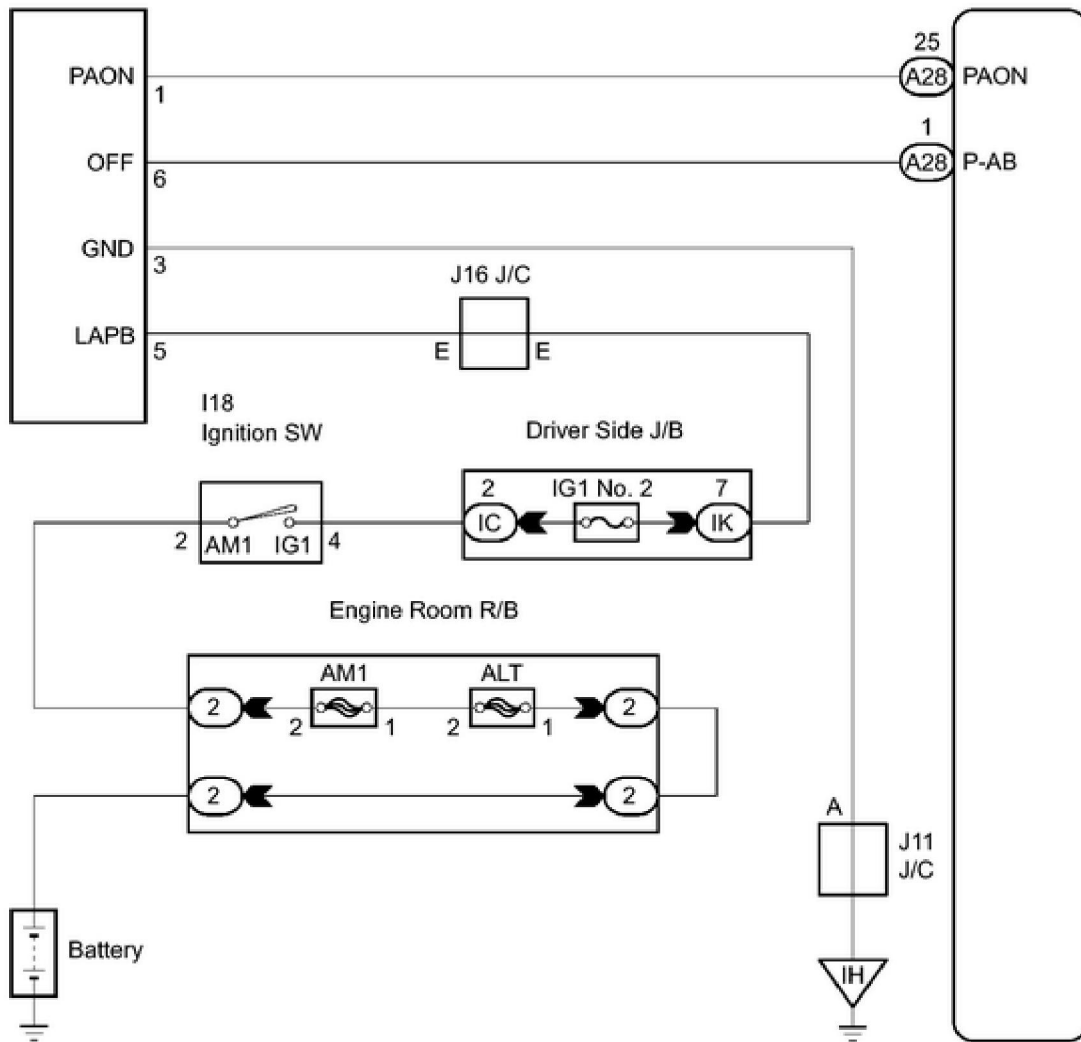
DTC B1152/28 is recorded when a malfunction is detected in the passenger airbag ON/OFF indicator circuit.

DTC NO.	DTC DETECTING CONDITION	TROUBLE AREA
B1152/28	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Telltale light assembly (Passenger airbag ON/OFF indicator) Center airbag sensor assembly Instrument panel wire

WIRING DIAGRAM

P28
Telltale Light Assembly (Passenger
Airbag ON/OFF Indicator)

Center Airbag
Sensor Assembly



C

INSPECTION PROCEDURE

PROCEDURE

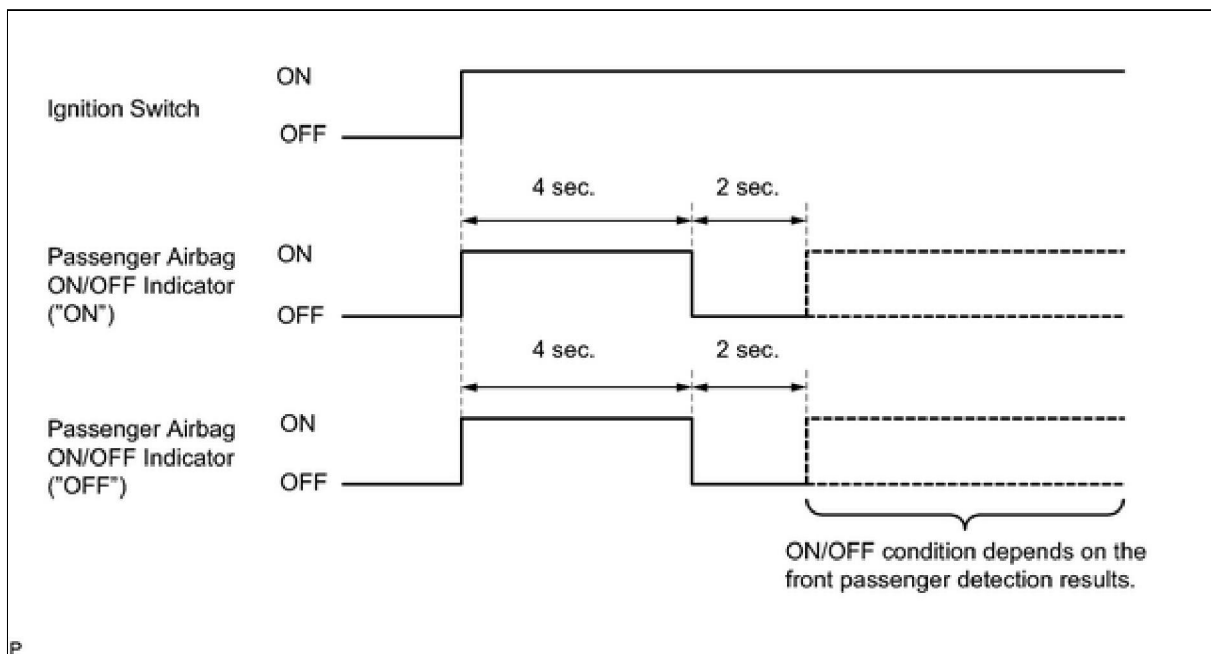
1. CHECK PASSENGER AIRBAG ON/OFF INDICATOR CONDITION

- (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

INFO



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 telltale light 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 telltale light assembly.

(b) Check that the connectors (on the center airbag sensor assembly side and the telltale light assembly side) are not damaged.

OK:

The connectors are not deformed or damaged.

NG ▶ REPLACE INSTRUMENT PANEL WIRE

OK



4. CHECK PASSENGER AIRBAG ON/OFF INDICATOR

(a) Connect the connector to the telltale light 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.

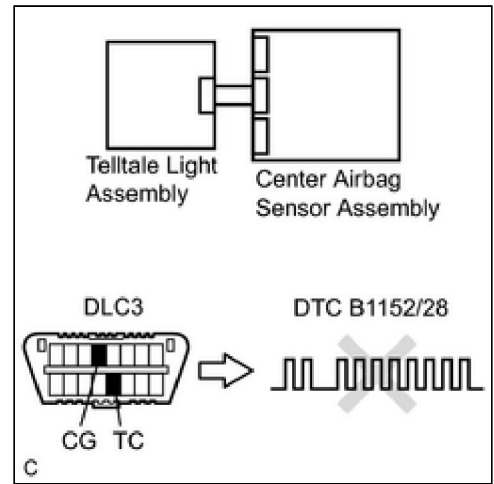
NG ▶ GO TO STEP 6

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 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 INFO.
- (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 INFO.

OK:

DTC B1152/28 is not output.

HINT:

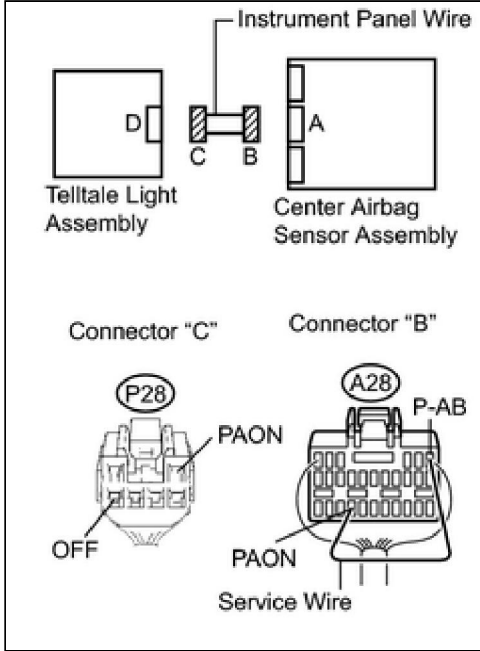
Codes other than code B1152/28 may be output at this time, but they are not related to this check.

NG ▶ REPLACE CENTER AIRBAG SENSOR ASSEMBLY

OK ▶ USE SIMULATION METHOD TO CHECK

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 telltale light assembly.
- (d) Using a service wire, connect A28-1 (P-AB) and A28-25 (PAON) of connector "B".
- (e) Measure the resistance according to the value(s) in the table below.

Standard resistance:

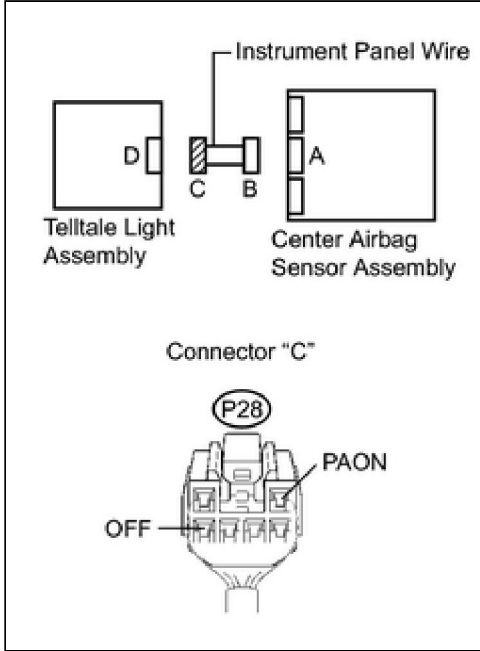
TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P28-6 (OFF) - P28-1 (PAON)	Always	Below 1 Ω

NG ▶ REPLACE INSTRUMENT PANEL WIRE

OK
▼

7. CHECK INSTRUMENT PANEL WIRE (SHORT)

- (a) Disconnect the SST from connector "B".



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

Standard resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P28-6 (OFF) - P28-1 (PAON)	Always	1 MΩ or higher

NG ▶ REPLACE INSTRUMENT PANEL WIRE

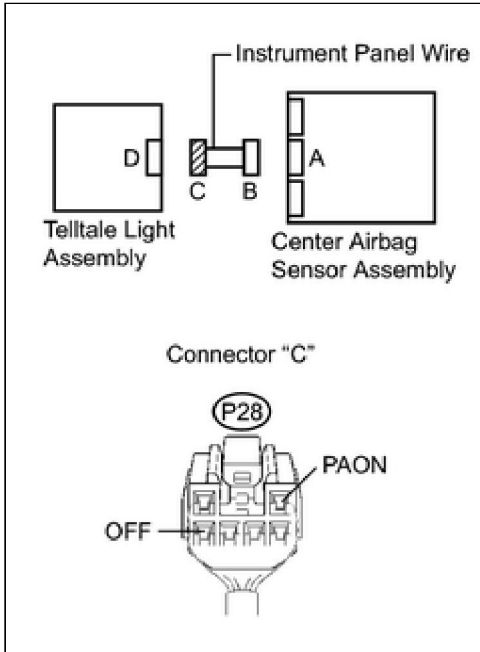
OK
▼

8. CHECK INSTRUMENT PANEL WIRE (SHORT TO GROUND)

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

Standard resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P28-6 (OFF) - Body ground	Always	1 MΩ or higher
P28-1 (PAON) - Body ground	Always	1 MΩ or higher

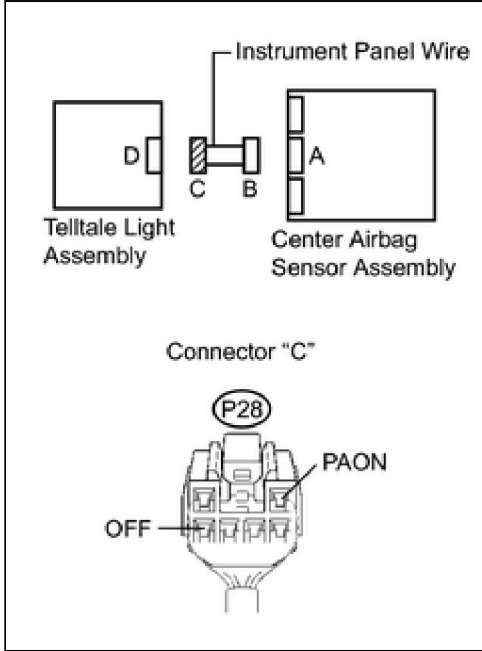


NG ▶ REPLACE INSTRUMENT PANEL WIRE

OK
▼

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.
 Standard voltage:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P28-6 (OFF) - Body ground	Ignition switch ON	Below 1 V
P28-1 (PAON) - Body ground	Ignition switch ON	Below 1 V

NG ▶ REPLACE INSTRUMENT PANEL WIRE

OK ▶ REPLACE TELLTALE LIGHT 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 telltale light assembly.

OK:

The connectors are connected.

NG  **CONNECT CONNECTORS**

OK



11.	CHECK CONNECTORS
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- (a) Disconnect the connectors from the center airbag sensor assembly and the telltale light assembly.
- (b) Check that the connectors (on the center airbag sensor assembly side and the telltale light assembly side) are not damaged.

OK:

The connectors are not deformed or damaged.

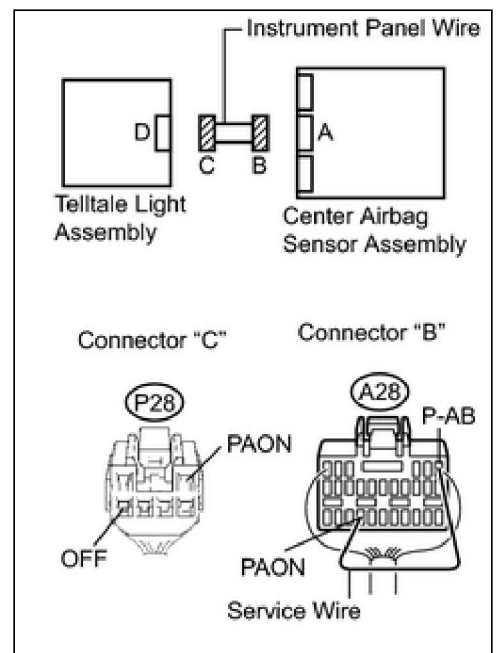
NG  **REPLACE INSTRUMENT PANEL WIRE**

OK



12.	CHECK INSTRUMENT PANEL WIRE (OPEN)
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- (a) Using a service wire, connect A28-1 (P-AB) and A28-25 (PAON) of connector "B".



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

Standard resistance:

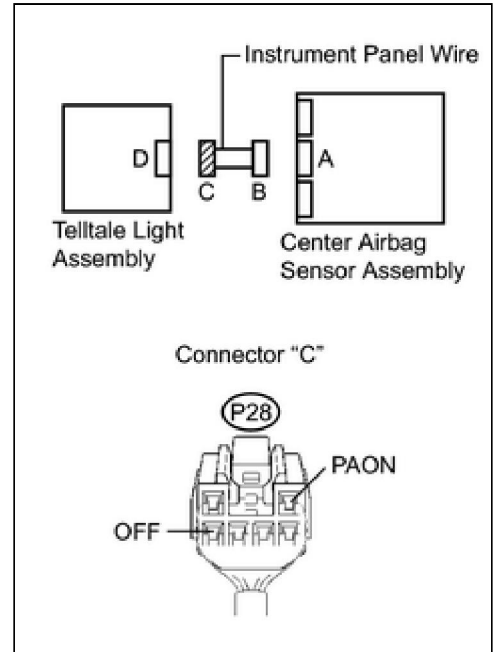
TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P28-6 (OFF) - P28-1 (PAON)	Always	Below 1 Ω

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.

Standard resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P28-6 (OFF) - P28-1 (PAON)	Always	1 MΩ or higher

OK



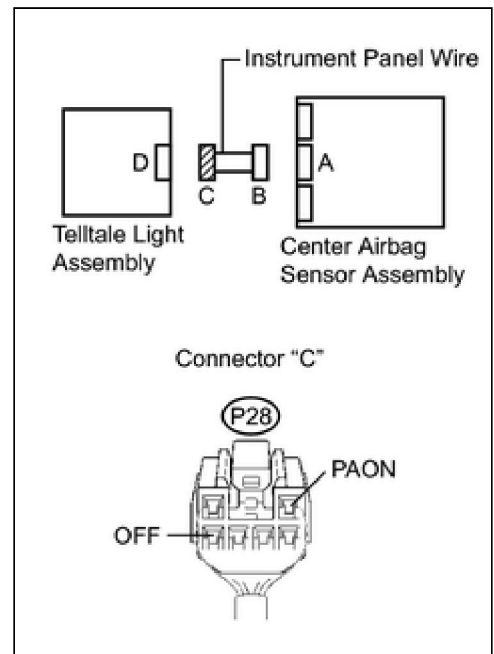
14. CHECK INSTRUMENT PANEL WIRE (SHORT TO GROUND)

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

Standard resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P28-6 (OFF) - Body ground	Always	1 MΩ or higher
P28-1 (PAON) - Body ground	Always	1 MΩ or higher

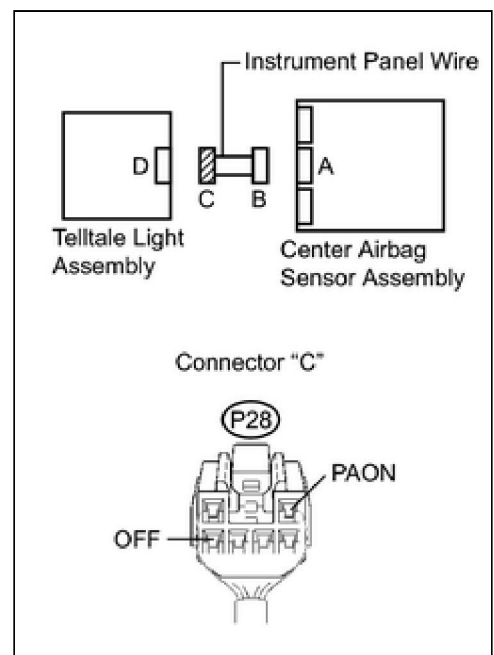


NG ▶ REPLACE INSTRUMENT PANEL WIRE

OK
▼

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.

Standard voltage:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
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TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P28-6 (OFF) - Body ground	Ignition switch ON	Below 1 V
P28-1 (PAON) - Body ground	Ignition switch ON	Below 1 V

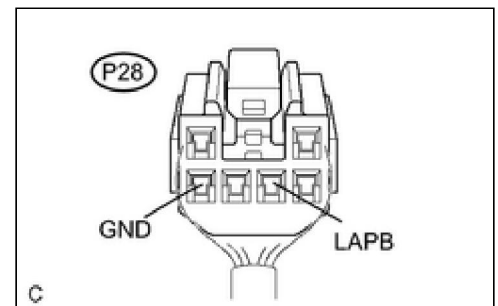
NG ▶ REPLACE INSTRUMENT PANEL WIRE

OK



16. CHECK TELLTALE LIGHT ASSEMBLY (POWER SOURCE)

(a) Turn the ignition switch to the ON position.



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

Standard:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P28-2 (IG+) - Body ground	Ignition switch ON	10 to 14 V
P28-7 (GND) - Body ground	Always	1 MΩ or higher

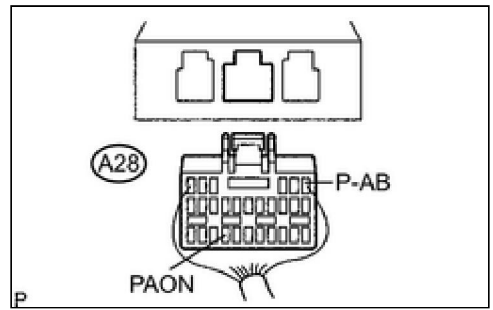
NG ▶ REPAIR OR REPLACE WIRE HARNESS (TELLTALE LIGHT ASSEMBLY - BATTERY) OR BATTERY

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 telltale light 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.
- (f) Check the passenger airbag ON/OFF indicator condition.

TESTER CONNECTION	CONDITION	PASSENGER AIRBAG ON/OFF INDICATOR CONDITION
A28-25 (PAON) - Body ground	Ignition switch ON	"ON" comes on
A28-1 (P-AB) - Body ground	Ignition switch ON	"OFF" comes on

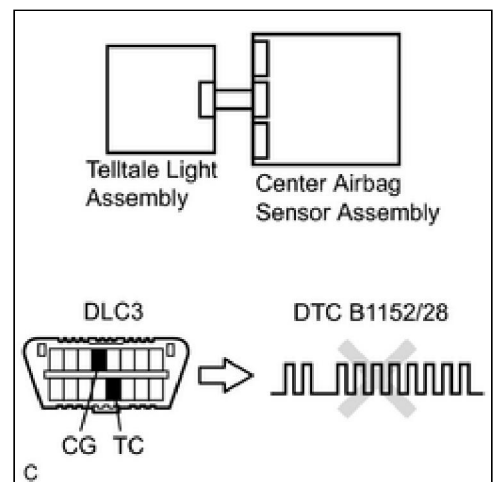
NG ▶ REPLACE TELLTALE LIGHT ASSEMBLY

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  .

(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  .

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**

