Front Passenger Side Seat Belt Warning Light Malfunction

DESCRIPTION

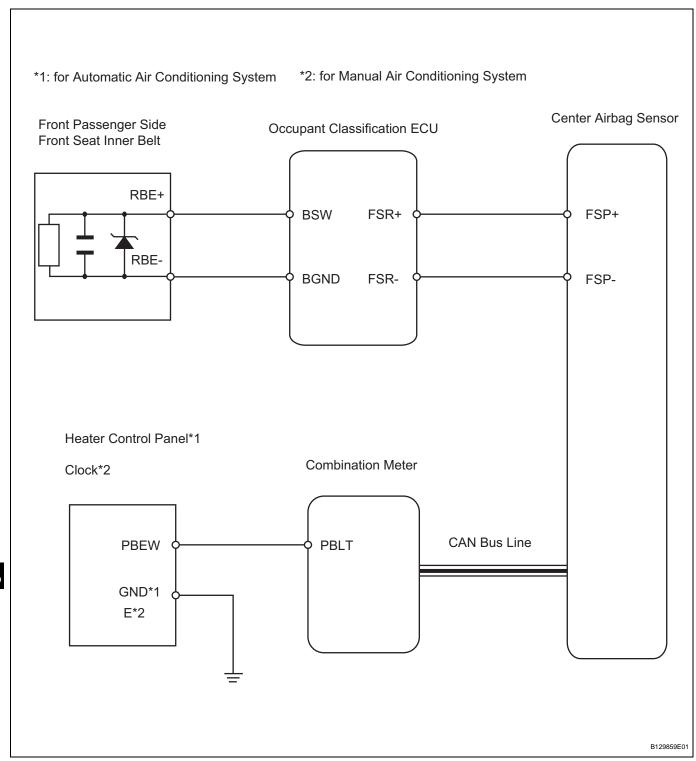
When the ignition switch is ON, the center airbag sensor transmits front seat inner belt status signals to the combination meter through the CAN bus line. If the front passenger seat belt is not fastened, the heater control panel (automatic A/C) or clock (manual A/C) blinks the front passenger seat belt warning light. If the seat belt is fastened, the warning light goes off.

NOTICE:

The seat belt warning system uses the CAN bus line. Before troubleshooting the seat belt warning system, perform "COMMUNICATION FUNCTION CHECK" by following "HOW TO PROCEED WITH TROUBLESHOOTING" to confirm that the communication systems are normal.

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WIRING DIAGRAM



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INSPECTION PROCEDURE

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER

(a) Select the Active Test, use the intelligent tester to generate a control command, and then check that the seat belt warning light operates.

Center airbag sensor:

| Item | Test Details | Diagnostic Note |
|---------------|------------------------------------|--|
| P-BELT REMIND | P-SEAT BELT warning light (OFF/ON) | Confirm that the vehicle is stopped, engine idling |

OK:

Passenger side seat belt warning light operates normally.



REPLACE CENTER AIRBAG SENSOR ASSEMBLY

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2 CHECK A/C TYPE

(a) Check system.

| A/C type | Proceed to |
|---------------------------------------|------------|
| for Automatic air conditioning system | A |
| for Manual air conditioning system | В |

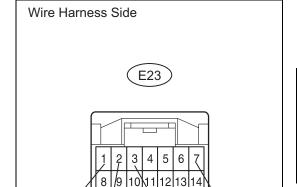
B Go to step 6



+B

IG+

3 CHECK HEATER CONTROL PANEL (POWER SOURCE CIRCUIT)



ACC

GND

B130079E01

- (a) Disconnect the E23 panel connector.
- (b) Measure the voltage and resistance of the wire harness side connector.

Standard voltage

| Tester Connection | Condition | Specified Condition |
|------------------------------|--------------------------|---------------------|
| E23-1 (+B) - Body ground | Always | 10 to 14 V |
| E23-2 (IG+) - Body ground | Ignition switch ON | 10 to 14 V |
| E23-3 (ACC) - Body ground | Ignition switch ON (ACC) | 10 to 14 V |

Standard resistance

| Tester Connection | Specified Condition |
|---------------------------|---------------------|
| E23-7 (GND) - Body ground | Below 1 Ω |

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REPAIR OR REPLACE HARNESS AND CONNECTOR

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- 4 CHECK WIRE HARNESS (HEATER CONTROL PANEL COMBINATION METER ASSEMBLY)
- Wire Harness Side

 Heater Control Panel

 E23

 1 2 3 4 5 6 7

 8 9 10 11 12 13 14

 PBEW

 Combination Meter

 E19

 PBLT

 PBLT

 B130080E01
- (a) Disconnect the E23 panel connector.
- (b) Disconnect the E19 meter connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

| Tester Connection | Specified Condition |
|-----------------------------|---------------------|
| E19-1 (PBLT) - E23-4 (PBEW) | Below 1 Ω |

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REPAIR OR REPLACE HARNESS AND CONNECTOR

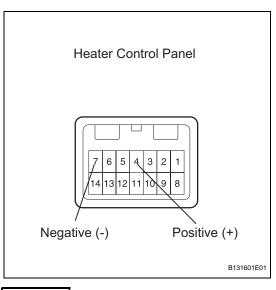
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5 INSPECT HEATER CONTROL PANEL

(a) Remove the heater control panel.





(b) Apply battery voltage and check that the front passenger side seat belt warning light illuminates.

OK

| Measurement Condition | Specified Condition |
|---|--|
| Battery positive (+) - Terminal 4 Battery negative (-) - Terminal 7 | Front passenger side seat belt warning light illuminates |

HINT:

When the battery's negative (-) lead is applied to terminal 4 and the positive (+) lead is applied to terminal 7, the seat belt warning light does not illuminate.

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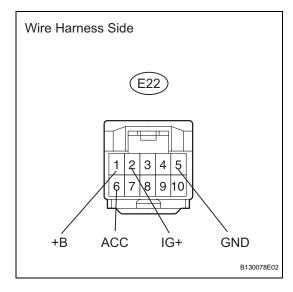
REPLACE HEATER CONTROL PANEL

OK

6

REPLACE COMBINATION METER ASSEMBLY

CHECK CLOCK SUB-ASSEMBLY (POWER SOURCE CIRCUIT)



- (a) Disconnect the E22 clock connector.
- (b) Measure the voltage and resistance of the wire harness side connector.

Standard voltage

| Tester Connection | Condition | Specified Condition |
|------------------------------|---------------------|---------------------|
| E22-1 (+B) - Body ground | Always | 10 to 14 V |
| B22-6 (ACC) - Body ground | Ignition switch ACC | 10 to 14 V |
| E22-2 (IG+) - Body ground | Ignition switch ON | 10 to 14 V |

Standard resistance

| Tester Connection | Specified Condition |
|---------------------|---------------------|
| E22-5 - Body ground | Below 1 Ω |

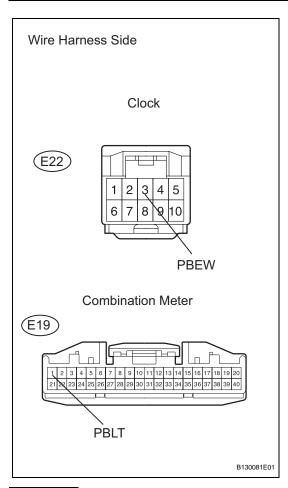
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REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

7 CHECK WIRE HARNESS (CLOCK - COMBINATION METER)

(a) Disconnect the E22 clock connector.



- (b) Disconnect the E19 meter connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

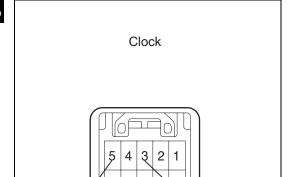
| Tester Connection | Specified Condition |
|-----------------------------|---------------------|
| E22-3 (PBEW) - E19-1 (PBLT) | Below 1 Ω |

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REPAIR OR REPLACE HARNESS AND CONNECTOR



8 INSPECT CLOCK SUB-ASSEMBLY



10 9 8

- (a) Remove the clock.
- (b) Apply battery voltage and check that the front passenger side seat belt warning light illuminates.

OK

| Measurement Condition | Specified Condition |
|---|--|
| Battery positive (+) - Terminal 3 Battery negative (-) - Terminal 5 | Front passenger side seat belt warning light illuminates |

HINT:

When the battery's negative (-) lead is applied to terminal 3 and the positive (+) lead is applied to terminal 5, the seat belt warning light does not illuminate.

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REPLACE CLOCK SUB-ASSEMBLY

OK

Negative (-)

Positive (+)

B131600E01