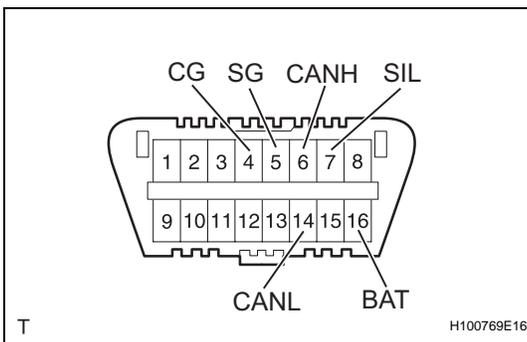


Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
SIG1 (Q5-7) - SGD1 (Q5-1)	BR - G	Occupant classification sensor front LH signal line	Ignition switch on, a load is applied to occupant classification sensor front LH	0.2 to 4.7 V
SIG2 (Q5-8) - SGD2 (Q5-2)	L - O	Occupant classification sensor front RH signal line	Ignition switch on, a load is applied to occupant classification sensor front RH	0.2 to 4.7 V
SIG3 (Q5-9) - SGD3 (Q5-3)	Y - W	Occupant classification sensor rear LH signal line	Ignition switch on, a load is applied to occupant classification sensor rear LH	0.2 to 4.7 V
SIG4 (Q5-10) - SGD4 (Q5-4)	B - BR	Occupant classification sensor rear RH signal line	Ignition switch on, a load is applied to occupant classification sensor rear RH	0.2 to 4.7 V



## DIAGNOSIS SYSTEM

### 1. CHECK DLC3

- (a) The ECU uses ISO 15765-4 for communication. The terminal arrangement of the DLC3 complies with ISO 15031-3 and matches the ISO 15765-4 format.

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Symbols (Terminal No.)	Terminal Description	Condition	Specified Condition
SIL (7) - SG (5)	Bus " + " line	During transmission	Pulse generation
CG (4) - Body ground	Chassis ground	Always	Below 1 Ω
SG (5) - Body ground	Signal ground	Always	Below 1 Ω
BAT (16) - Body ground	Battery positive	Always	11 to 14 V
CANH (6) - CANL (14)	HIGH- level CAN bus line	Ignition switch OFF*	54 to 69 Ω
CANH (6) - CG (4)	HIGH- level CAN bus line	Ignition switch OFF*	200 Ω or higher
CANL (14) - CG (4)	LOW- level CAN bus line	Ignition switch OFF*	200 Ω or higher
CANH (6) - BAT (16)	HIGH- level CAN bus line	Ignition switch OFF*	6 kΩ or higher
CANL (14) - BAT (16)	LOW- level CAN bus line	Ignition switch OFF*	6 kΩ or higher

### NOTICE:

**\*: Before measuring the resistance, leave the vehicle as is for at least 1 minute and do not operate the ignition switch, any other switches or the doors.**

If the result is not as specified, the DLC3 may have a malfunction. Repair or replace the harness and connector.

### HINT:

Connect the cable of the intelligent tester to CAN VIM, connect the CAN VIM to the DLC3, turn the ignition switch ON and attempt to use the tester. If the display indicates that a communication error has occurred, there is a problem either with the vehicle or with the tester.

- If communication is normal when the tester is connected to another vehicle, inspect the DLC3 of the original vehicle.
- If communication is still not possible when the tester is connected to another vehicle, the problem is probably in the tester itself. Consult the Service Department listed in the tester's instruction manual.

## 2. SYMPTOM SIMULATION

### HINT:

The most difficult case in troubleshooting is when no symptoms occur. In such cases, a thorough customer problem analysis must be carried out. Then the same or similar conditions and environment in which the problem occurred in the customer's vehicle should be simulated. Regardless of the technician's experience or skill, if troubleshooting proceeds without confirmation of the problem symptoms, something important is likely to be overlooked and incorrect guesses may be made at some points in the repair operation.

This leads to a standstill in troubleshooting.

- (a) Vibration method: When vibration seems to be the major cause.

### HINT:

Perform the simulation method only during the primary check period (for approximately 6 seconds after the ignition switch is turned to the on position).

- (1) Slightly vibrate the part of the sensor considered to be the cause of the problem with your fingers and check whether the malfunction occurs.

### HINT:

Shaking the relays too strongly may result in open relays.

- (2) Slightly shake the connector vertically and horizontally.  
 (3) Slightly shake the wire harness vertically and horizontally.

The connector joint and fulcrum of the vibration are the major areas to be checked thoroughly.

- (b) Simulation method for DTC B1795: Turn the ignition switch from the lock to the on position, hold for 10 seconds, and then back to the lock position again 50 times in a row.

### HINT:

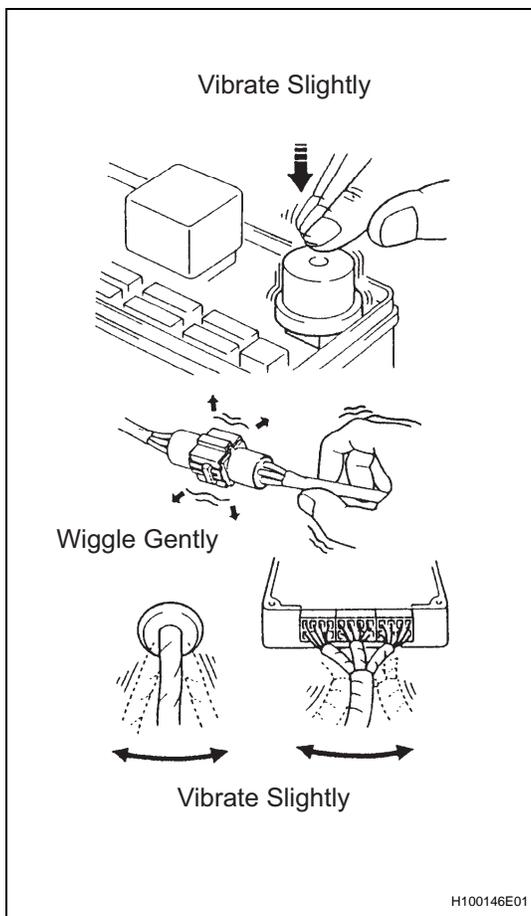
DTC B1795 is output if the occupant classification ECU receives the ignition switch lock-on-lock signal 50 times in a row when a malfunction occurs in the power circuit for the occupant classification system.

## 3. FUNCTION OF PASSENGER AIRBAG ON/OFF INDICATOR

- (a) Initial check

- (1) Turn the ignition switch to the on position.

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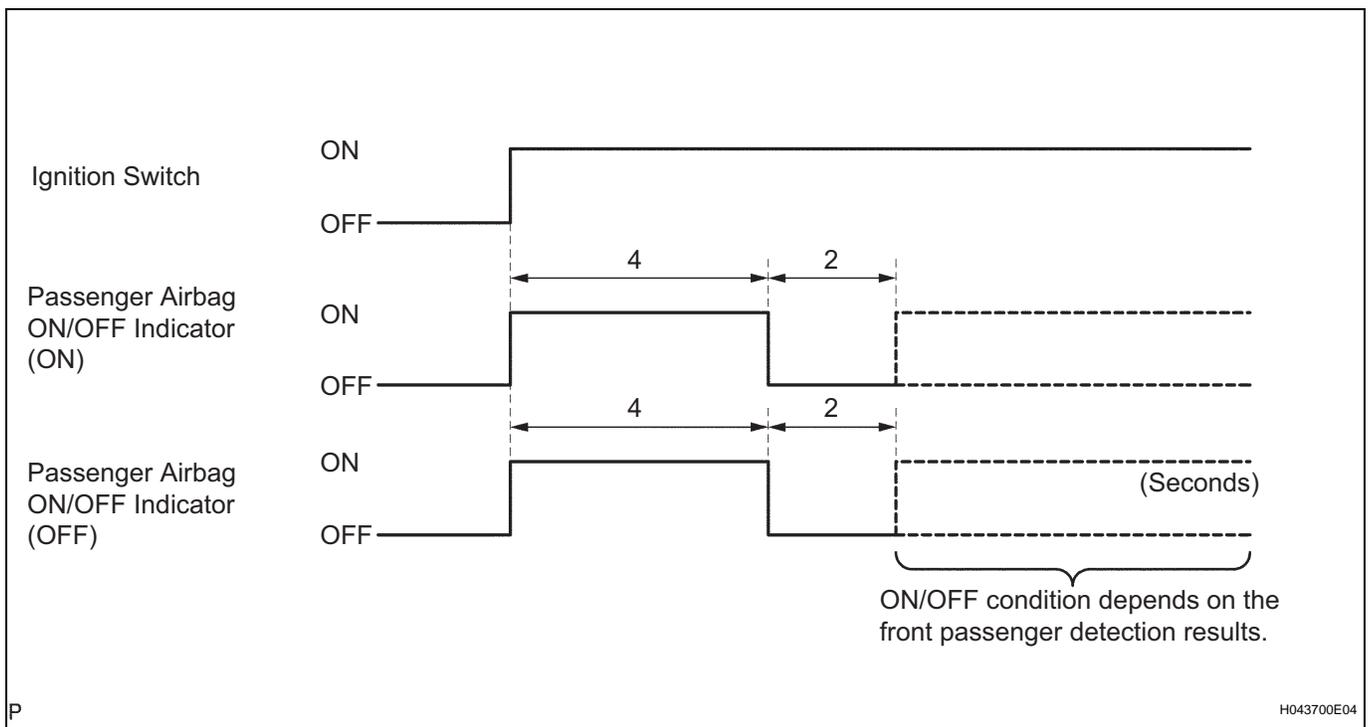
- (2) The passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then goes off for approximately 2 seconds.
- (3) Approximately 6 seconds after the ignition switch is turned to the on position, the passenger airbag ON/OFF indicator will be ON/OFF depending on the conditions listed below.

Condition	ON Indicator	OFF Indicator
Vacant	OFF	OFF
Adult is seated	ON	OFF
Child is seated	OFF	ON
Child restraint system is set	OFF	ON
Front passenger occupant classification system failure	OFF	ON

HINT:

- The passenger airbag ON/OFF indicator operates based on the timing chart below in order to check the indicator light circuit.

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- When the occupant classification system has trouble, both the SRS warning light and the passenger airbag ON/OFF indicator (OFF) come on. In this case, check the DTCs in the airbag system first.

**4. PASSENGER AIRBAG ON/OFF INDICATOR CHECK**

- (a) Turn the ignition switch to the on position.
- (b) Check that the passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then goes off for approximately 2 seconds.

**HINT:**

Refer to the table in the previous step regarding the passenger airbag ON/OFF indicator when approximately 6 seconds have elapsed after the ignition switch is turned to the on position.