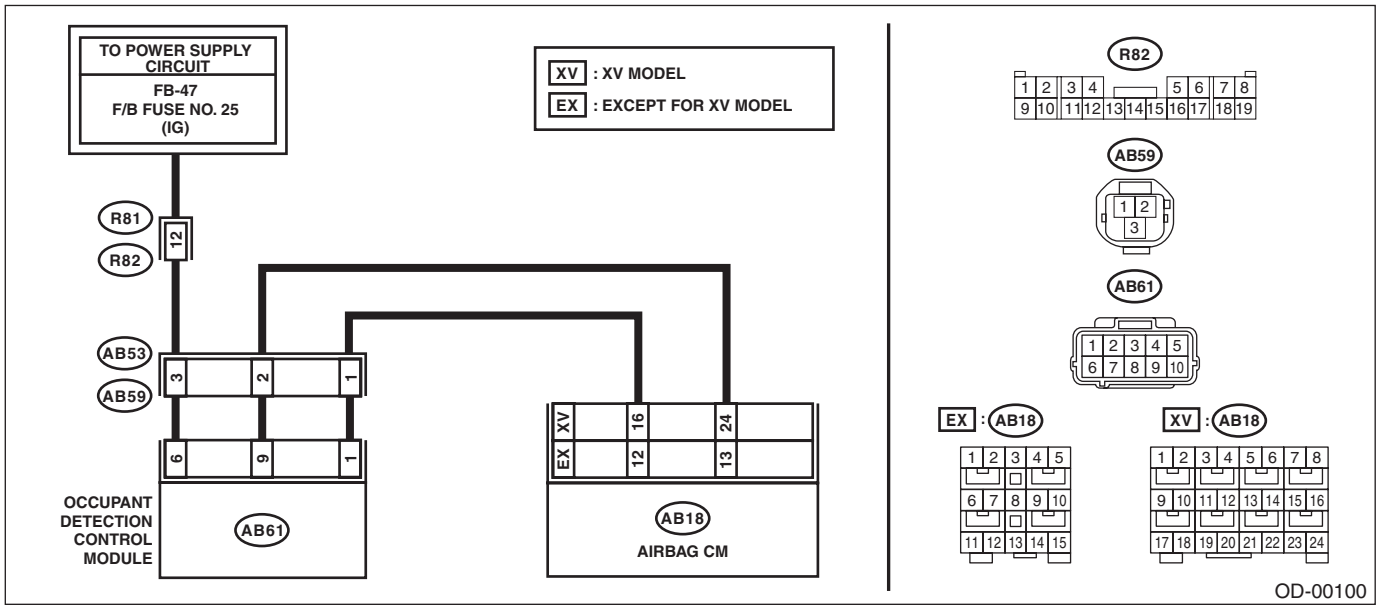
15.Diagnostic Procedure with Diagnostic Trouble Code (DTC)

A: DTC B1650 OCCUPANT CLASSIFICATION SYSTEM MALFUNCTION

DIAGNOSIS START CONDITION:
Ignition voltage is 8 V to 16 V.
DTC DETECTING CONDITION:

- Occupant detection sensor is faulty.
- Occupant detection control module is faulty.
- Occupant detection harness is faulty.
- Fuse No. 25 is blown out.
- Rear airbag harness is faulty.

CAUTION:
Before performing diagnosis, refer to "CAUTION" in "General Description". <Ref. to AB(diag)-4, CAUTION, General Description.>
WIRING DIAGRAM:
Occupant detection system <Ref. to WI(w/o HEV)-172, WIRING DIAGRAM, Occupant Detection System.> <Ref. to WI(HEV)-174, WIRING DIAGRAM, Occupant Detection System.>



Step		Check	Yes	No
1	**CHECK DTC.** Read the DTC of the occupant detection system.	Is any of DTC B1760, B1761, B1771 and B1795 detected?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK POOR CONTACT OF CONNECTORS.** Check for poor contact of the connectors between the occupant detection control module and airbag control module.	Is there poor contact?	When the connector is not fully connected, reconnect the connector correctly. Replace the faulty harness if the connector is faulty. (Replace the airbag rear harness along with body harness. Or replace the occupant detection harness (seat harness).)	Go to step **3**.

	Step	Check	Yes	No
3	**CHECK AIRBAG REAR HARNESS.** 1) Turn the ignition switch to OFF, disconnect the battery ground cable, and wait for 60 seconds or more. NOTE: For HEV model, disconnect the negative terminal from 12 volt auxiliary battery, and disconnect the ground terminal from 12V engine restart battery sensor for 12 volt engine restart battery. <Ref. to NT-5, BATTERY, NOTE, Note.> 2) Disconnect the connectors (AB59) and (AB53) under the passenger's seat. 3) Disconnect the connectors (AB6, AB17, AB18) from the airbag control module, and connect the connector (1AG) in the test harness AG to connectors (AB6, AB17, AB18). NOTE: Except for XV models, connect test harness AH between the connectors (AB6, AB17, AB18) and (1AG). 4) Connect the connector (1AP) in the test harness AP to the connector (AB53). 5) Measure the resistance between connector (5AG) in the test harness AG and connector (2AP) in the test harness AP. ***Connector & terminal*** ***XV model*** ***(6AG) No. 9 — (2AP) No. 2:*** ***(6AG) No. 11 — (2AP) No. 1:*** ***Except for XV model*** ***(5AG) No. 5 — (2AP) No. 1:*** ***(5AG) No. 16 — (2AP) No. 2:***	Is the resistance less than 10 Ω?	Go to step **4**.	Replace the airbag rear harness along with body harness.
4	**CHECK AIRBAG REAR HARNESS.** Measure the resistance between connector (5AG) in the test harness AG and chassis ground. ***Connector & terminal*** ***XV model*** ***(6AG) No. 9 — Chassis ground:*** ***(6AG) No. 11 — Chassis ground:*** ***(6AG) No. 9 — (6AG) No. 11:*** ***Except for XV model*** ***(5AG) No. 5 — Chassis ground:*** ***(5AG) No. 16 — Chassis ground:*** ***(5AG) No. 5 — (5AG) No. 16:***	Is the resistance 1 MΩ or more?	Go to step **5**.	Replace the airbag rear harness along with body harness.

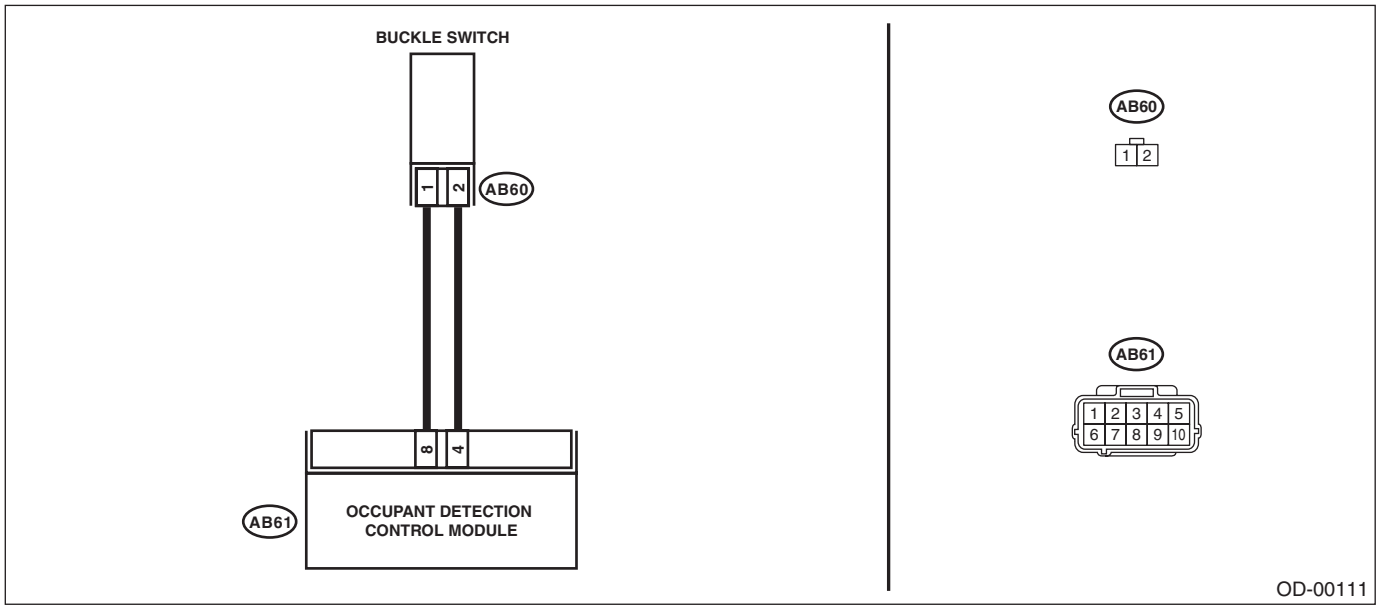
Step		Check	Yes	No
5	**CHECK OCCUPANT DETECTION HARNESS.** 1) Turn the ignition switch to ON. 2) Measure the voltage between connector (2AP) in the test harness AP and chassis ground. ***Connector & terminal*** ***(2AP) No. 3 (+) — Chassis ground (–):***	Is the voltage 10 V or more?	Replace the occupant detection harness (seat harness). If defective is not improved, replace the occupant detection system (seat cushion & frame assembly), and then the airbag control module in this order. <Ref. to SE-16, PASSENGER'S SEAT, DISASSEMBLY, Front Seat.>	Check the battery voltage and fuse. If there is no fault, replace the airbag rear harness together with body harness.

B: DTC B1655 FRONT BUCKLE SWITCH RH FAILURE

DIAGNOSIS START CONDITION:
Ignition voltage is 8 V to 16 V.
DTC DETECTING CONDITION:

- Passenger's buckle switch circuit is open, shorted or shorted to ground.
- Occupant detection system is faulty.
- Occupant detection harness is faulty.

WIRING DIAGRAM:
Occupant detection system <Ref. to WI(w/o HEV)-172, WIRING DIAGRAM, Occupant Detection System.> <Ref. to WI(HEV)-174, WIRING DIAGRAM, Occupant Detection System.>



	Step	Check	Yes	No
1	**CHECK DTC.** Read the DTC of the occupant detection system.	Is any of DTC B1760, B1761, B1771 and B1795 detected?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK POOR CONTACT OF CONNECTORS.** Check for poor contact of the connectors between the occupant detection control module and buckle switch.	Is there poor contact?	When the connector is not fully connected, reconnect the connector correctly. Replace the airbag harness if the connector is faulty.	Go to step **3**.

	Step	Check	Yes	No
3	**CHECK BUCKLE SWITCH.** 1) Turn the ignition switch to OFF, disconnect the battery ground terminal, and wait for 60 seconds. NOTE: For HEV model, disconnect the negative terminal from 12 volt auxiliary battery, and disconnect the ground terminal from 12V engine restart battery sensor for 12 volt engine restart battery. <Ref. to NT-5, BATTERY, NOTE, Note.> 2) Disconnect the buckle switch connector (AB60). 3) Connect the test harness AE and test harness connector Y to buckle switch connector (AB60). 4) Connect the battery ground terminal and turn the ignition switch to ON. NOTE: For HEV model, connect the negative terminal for 12 volt auxiliary battery, and connect the ground terminal to 12V engine restart battery sensor for 12 volt engine restart battery. <Ref. to NT-5, BATTERY, NOTE, Note.>	Does the airbag warning light illuminate for 6 seconds and go off?	Replace the buckle switch. <Ref. to SB-16, SEAT BELT OUTER - FRONT, REMOVAL, Front Seat Belt.>	Check the seat harness, and if any fault is found, replace the seat harness. If the fault is not fixed, replace the occupant detection system. <Ref. to SE-16, PASSENGER'S SEAT, DISASSEMBLY, Front Seat.>

C: DTC B1760 SENSOR MAT ABNORMAL

DIAGNOSIS START CONDITION:
Ignition voltage is 8 V to 16 V.
DTC DETECTING CONDITION:
- Occupant detection sensor is faulty.
- Occupant detection sensor circuit is open, shorted between terminals, shorted to power supply or shorted to ground.
- Seat heater circuit is open.
- Occupant detection control module is faulty.

	Step	Check	Yes	No
1	**CHECK POOR CONTACT OF CONNECTORS.** Check for poor contact of connectors between the occupant detection control module and the occupant detection sensor.	Is there poor contact of connector?	When the connector is not fully connected, reconnect the connector correctly. Replace the faulty harness if the connector is faulty. (Replace the occupant detection harness or replace the occupant detection system (passenger's & frame assembly)). <Ref. to SE-16, PASSENGER'S SEAT, DISASSEMBLY, Front Seat.>	Replace the occupant detection system (passenger's & frame assembly). <Ref. to SE-16, PASSENGER'S SEAT, DISASSEMBLY, Front Seat.>

D: DTC B1761 SENSOR MAT LIQUID COATING ABNORMAL

DIAGNOSIS START CONDITION:
Ignition voltage is 8 V to 16 V.
DTC DETECTING CONDITION:
- Occupant detection sensor is spattered with fluid.
- Occupant detection sensor is faulty.
- Occupant detection control module is faulty.

	Step	Check	Yes	No
1	**DRY THE SEAT.** 1) Open the vehicle windows in a well-ventilated place indoors and dry the seat for 24 hours. 2) Check that the seat is not wet. If the seat is wet, extend the drying time to dry the seat well. 3) Read the DTC of the occupant detection system.	Is DTC detected?	When DTC B1761 is detected again, replace the occupant detection system (passenger's & frame assembly). <Ref. to SE-16, PASSENGER'S SEAT, DISASSEMBLY, Front Seat.> When any other DTC is detected, perform the diagnosis according to the DTC.	Clear the memory.

E: DTC B1771 BUCKLE SWITCH ABNORMAL

DIAGNOSIS START CONDITION:
Ignition voltage is 8 V to 16 V.
DTC DETECTING CONDITION:
- Passenger's seat buckle switch is faulty.
- Passenger's buckle switch circuit is open, shorted or shorted to ground.
- Occupant detection system is faulty.
- Occupant detection harness is faulty.

Perform the diagnosis from step 2 in "DTC B1655 FRONT BUCKLE SWITCH RH FAILURE". <Ref. to OD(diag)-22, DTC B1655 FRONT BUCKLE SWITCH RH FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

F: DTC B1795 ECU INTERNAL CIRCUIT FAULT

DIAGNOSIS START CONDITION:
Ignition voltage is 8 V to 16 V.
DTC DETECTING CONDITION:
Occupant detection control module is faulty.

When "DTC B1795 ECU INTERNAL CIRCUIT FAULT" is displayed, the occupant detection control module is faulty. Replace the occupant detection system (passenger's & frame assembly). <Ref. to SE-16, PASSENGER'S SEAT, DISASSEMBLY, Front Seat.>

SEAT BELT SYSTEM

SB