

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

13. Diagnostic Chart with Trouble Code

A: DTC 11 DRIVER'S AIRBAG FAILURE

DTC DETECTING CONDITION:

- Airbag harness is open, shorted or shorted to ground.
- Airbag module harness (driver's side) is open, shorted or shorted to ground.
- Roll connector circuit is open, shorted or shorted to ground.
- Driver's airbag module is faulty.
- Airbag control module is faulty.

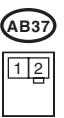
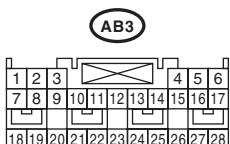
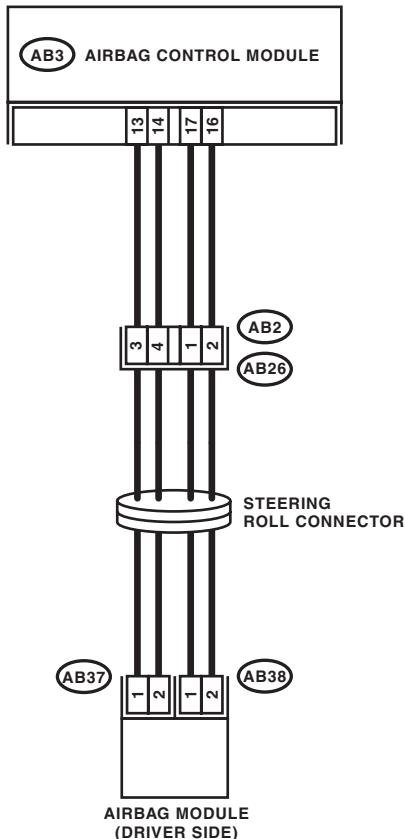
CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.

NOTE:

Before diagnosing, prepare the two airbag resistors (98299PA040).

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the driver's airbag module.	Is there poor contact?	Replace the airbag harness.	Go to step 2.
2 CHECK DRIVER'S AIRBAG MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Remove the driver's airbag module. 3) Connect connector (1N) in the test harness N to the connector (AB38). 4) Connect airbag resistor to connector (2N) in the test harness N. 5) Connect the connector (1Q) in the test harness Q to connector (AB37). 6) Connect the airbag resistor to the connector (2Q) in the test harness Q. 7) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the driver's airbag module. <Ref. to AB-14, Driver's Airbag Module.>	Go to step 3.
3 CHECK ROLL CONNECTOR. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the test harness N from connector (AB38). 3) Disconnect the test harness Q from connector (AB37). 4) Remove the instrument panel lower cover, disconnect the connector (AB26) from (AB2). 5) Connect connector (1P) in the test harness P to connector (AB2). 6) Connect the airbag resistor to the connectors (2P) and (3P) in the test harness P. 7) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the roll connector. <Ref. to AB-20, Roll Connector.>	Go to step 4.
4 CHECK AIRBAG MAIN HARNESS (DRIVER'S AIRBAG HARNESS). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the airbag resistor from the connectors (2P) and (3P) in the test harness P. 3) Disconnect the connectors (AB4) and (AB27) from the passenger's airbag module. 4) Disconnect the connector (AB3) from airbag control module, and connect the connector (1R) in the test harness R. 5) Measure resistance between connector (2R) in the test harness R and connector (2P) and (3P) in the test harness P. Connector & terminal (2R) No. 2 — (2P) No. 1: (2R) No. 4 — (2P) No. 2: (2R) No. 8 — (3P) No. 3: (2R) No. 12 — (3P) No. 4:	Is the resistance less than $10\ \Omega$?	Go to step 5.	Replace the airbag main harness along with the body harness.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
5 CHECK AIRBAG MAIN HARNESS (DRIVER'S AIRBAG HARNESS). Measure resistance between connector (2R) terminals in the test harness R. <i>Connector & terminal</i> (2R) No. 2 — (2R) No. 4: (2R) No. 4 — Chassis ground: (2R) No. 2 — Chassis ground: (2R) No. 8 — (2R) No. 12: (2R) No. 8 — Chassis ground: (2R) No. 12 — Chassis ground:	Is the resistance 1 MΩ or more?	Go to step 6 .	Replace the airbag main harness along with the body harness.
6 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 7 .
7 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)" <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

B: DTC 12 PASSENGER'S AIRBAG FAILURE

DTC DETECTING CONDITION:

- Airbag harness is open, shorted or shorted to ground.
- Airbag module harness (passenger's side) is open, shorted or shorted to ground.
- Passenger's airbag module is faulty.
- Airbag control module is faulty.

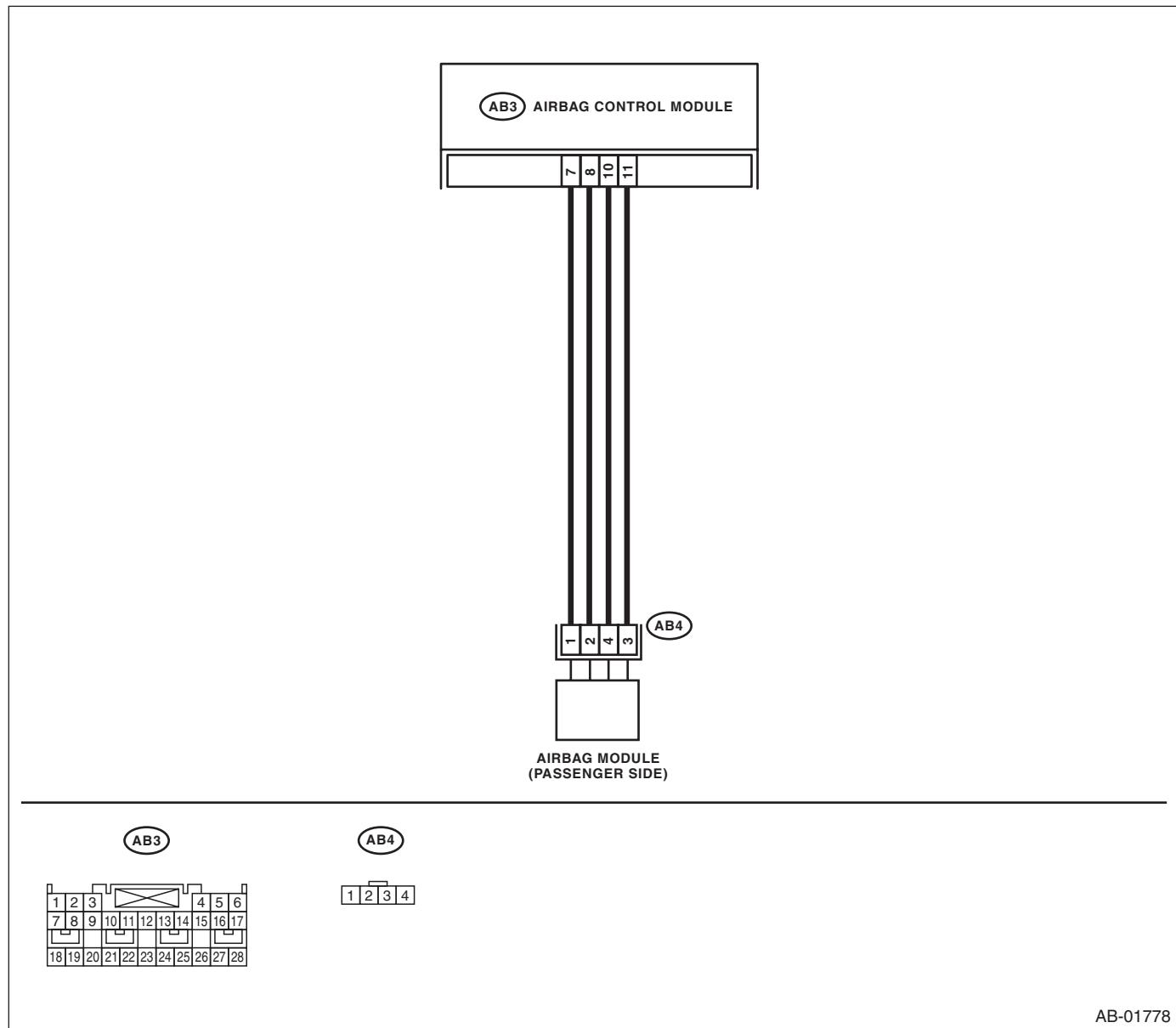
CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the airbag module connectors of the driver's and passenger's seats for safety.

NOTE:

Before diagnosing, prepare the two airbag resistors (98299PA040).

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the passenger's airbag module.	Is there poor contact?	Replace the airbag harness.	Go to step 2 .
2 CHECK PASSENGER'S AIRBAG MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connectors (AB27) from (AB4) of the passenger's airbag module. 3) Connect connector (1P) in the test harness P to connector (AB4). 4) Connect the airbag resistor to the connectors (2P) and (3P) in the test harness P. 5) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the passenger's airbag module. <Ref. to AB-15, Passenger's Airbag Module.>	Go to step 3 .
3 CHECK AIRBAG MAIN HARNESS (PASSENGER'S AIRBAG HARNESS). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the airbag resistor from the connectors (2P) and (3P) in the test harness P. 3) Remove the instrument panel lower cover, disconnect the connector (AB26) from (AB2). 4) Disconnect the connector (AB3) from airbag control module, and connect the connector (1R) in the test harness R. 5) Measure resistance between connector (2R) in the test harness R and connector (2P) and (3P) in the test harness P. Connector & terminal (2R) No. 3 — (2P) No. 1: (2R) No. 5 — (2P) No. 2: (2R) No. 9 — (3P) No. 3: (2R) No. 13 — (3P) No. 4:	Is the resistance less than $10\ \Omega$?	Go to step 4 .	Replace the airbag main harness along with the body harness.
4 CHECK AIRBAG MAIN HARNESS (PASSENGER'S AIRBAG HARNESS). Measure resistance between terminals of connector (2R) in the test harness R, and between connector (2R) and chassis ground. Connector & terminal (2R) No. 3 — (2R) No. 5: (2R) No. 3 — Chassis ground: (2R) No. 5 — Chassis ground: (2R) No. 9 — (2R) No. 13: (2R) No. 9 — Chassis ground: (2R) No. 13 — Chassis ground:	Is the resistance $1\ M\Omega$ or more?	Go to step 5 .	Replace the airbag main harness along with the body harness.
5 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 6 .
6 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

C: DTC 15 DRIVER'S AIRBAG FAILURE

DTC DETECTING CONDITION:

- Airbag harness (driver's side) is shorted to power supply.
- Airbag module harness (driver's side) is shorted to power supply.
- Roll connector is shorted to power supply.
- Driver's airbag module is faulty.
- Airbag control module is faulty.

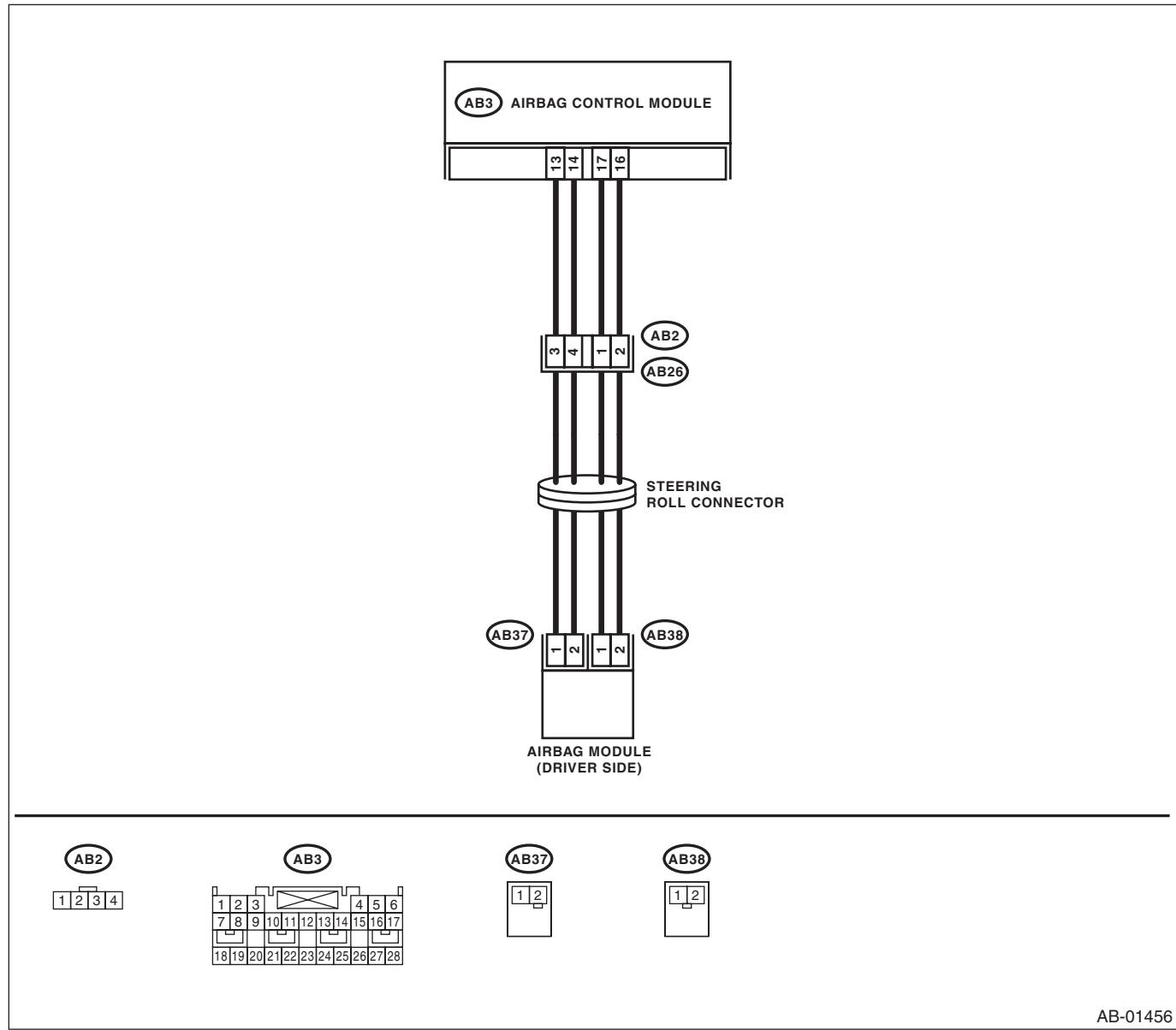
CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.

NOTE:

Before diagnosing, prepare the two airbag resistors (98299PA040).

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the driver's airbag module.	Is there poor contact?	Replace the airbag harness.	Go to step 2 .
2 CHECK DRIVER'S AIRBAG MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Remove the driver's airbag module. 3) Connect the connector (AB38) to the connector (1N) in the test harness N. 4) Connect airbag resistor to connector (2N) in the test harness N. 5) Connect the connector (1Q) in the test harness Q to connector (AB37). 6) Connect the airbag resistor to the connector (2Q) in the test harness Q. 7) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the driver's airbag module. <Ref. to AB-14, Driver's Airbag Module.>	Go to step 3 .
3 CHECK ROLL CONNECTOR. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the test harness N from connector (AB38). 3) Disconnect the test harness Q from connector (AB37). 4) Remove the instrument panel lower cover, disconnect the connector (AB26) from (AB2). 5) Connect connector (1P) in the test harness P to connector (AB2). 6) Connect the airbag resistor to the connectors (2P) and (3P) in the test harness P. 7) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the roll connector. <Ref. to AB-20, Roll Connector.>	Go to step 4 .
4 CHECK AIRBAG MAIN HARNESS (DRIVER'S AIRBAG HARNESS). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the airbag resistor from the connectors (2P) and (3P) in the test harness P. 3) Disconnect the connectors (AB27) and (AB4) of the passenger's airbag module. 4) Disconnect the connector (AB3) from airbag control module, and connect the connector (1R) in the test harness R. 5) Connect the battery ground terminal and turn the ignition switch to ON. (engine OFF) 6) Measure the voltage between connector (2R) in the test harness R and chassis ground. Connector & terminal (2R) No. 4 (+) — Chassis ground (-): (2R) No. 2 (+) — Chassis ground (-): (2R) No. 8 (+) — Chassis ground (-): (2R) No. 12 (+) — Chassis ground (-):	Is the voltage less than 1 V?	Go to step 5 .	Replace the airbag main harness along with the body harness.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
5 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 6 .
6 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

D: DTC 16 PASSENGER'S AIRBAG FAILURE

DTC DETECTING CONDITION:

- Airbag harness (Passenger's side) is shorted to power supply.
- Airbag module harness (passenger's side) is shorted to power supply.
- Passenger's airbag module is faulty.
- Airbag control module is faulty.

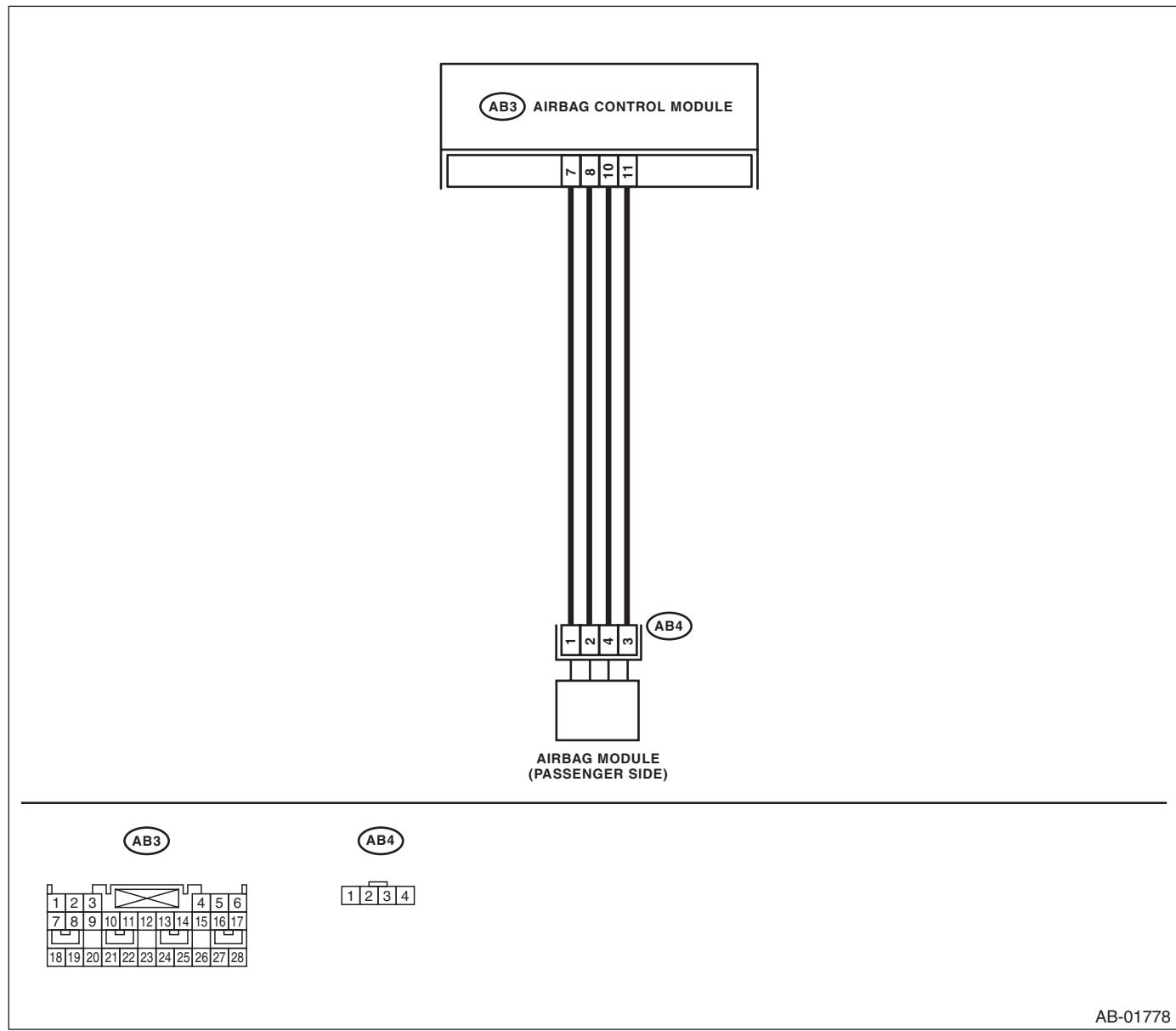
CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the airbag module connectors of the driver's and passenger's seats for safety.

NOTE:

Before diagnosing, prepare the two airbag resistors (98299PA040).

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the passenger's airbag module.	Is there poor contact?	Replace the airbag harness along with the body harness.	Go to step 2.
2 CHECK PASSENGER'S AIRBAG MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connectors (AB27) from (AB4) of the passenger's airbag module. 3) Connect connector (1P) in the test harness P to connector (AB4). 4) Connect the airbag resistor to the connectors (2P) and (3P) in the test harness P. 5) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the passenger's airbag module. <Ref. to AB-15, Passenger's Airbag Module.>	Go to step 3.
3 CHECK AIRBAG MAIN HARNESS (PASSENGER'S AIRBAG HARNESS). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the airbag resistor from the connectors (2P) and (3P) in the test harness P. 3) Remove the instrument panel lower cover, disconnect the connector (AB26) from (AB2). 4) Disconnect the connector (AB3) from airbag control module, and connect the connector (1R) in the test harness R. 5) Measure the voltage between connector (2R) in the test harness R and chassis ground. Connector & terminal (2R) No. 3 (+) — Chassis ground (-): (2R) No. 5 (+) — Chassis ground (-): (2R) No. 9 (+) — Chassis ground (-): (2R) No. 13 (+) — Chassis ground (-):	Is the voltage less than 1 V?	Go to step 4.	Replace the airbag main harness along with the body harness.
4 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 5.
5 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

E: DTC 21 AIRBAG ECM FAILURE

DTC DETECTING CONDITION:

Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When replacing the airbag module, seat belt pretensioner, roll connector, control module and sensor, reconnect each part and check that the warning light operates properly.

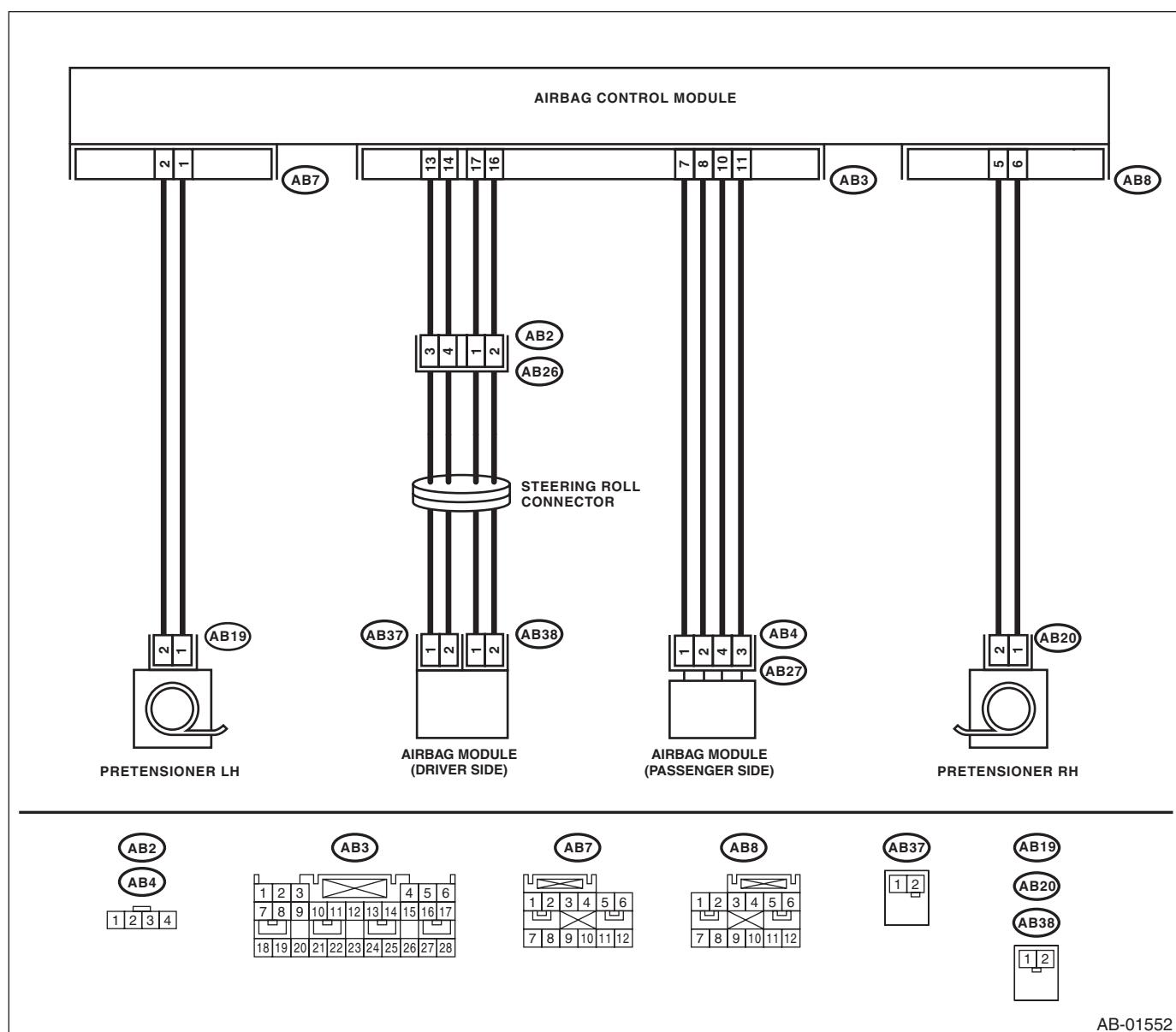
Step	Check	Yes	No
1 CHECK WHETHER DTC 21 IS INDICATED. 1) Read the DTC. <Ref. to AB(diag)-28, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> 2) Perform the Clear Memory Mode. <Ref. to AB(diag)-34, Clear Memory Mode.> 3) Read the DTC again.	Is DTC 21 displayed on Subaru Select Monitor?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Temporary poor contact occurs.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

F: DTC 22 FRONT AIRBAG FIRING OUTPUT

WIRING DIAGRAM:



This code is indicated when the front airbag and pretensioner activates.

Once this code is displayed, the memory cannot be cleared. Therefore replace the following parts.

- Airbag Control Module <Ref. to AB-18, Airbag Control Module.>
- Driver's airbag module <Ref. to AB-14, Driver's Airbag Module.>
- Passenger's airbag module <Ref. to AB-15, Passenger's Airbag Module.>
- Front sub sensor of both sides <Ref. to AB-21, Front Sub Sensor.>
- Front seat belt outer with pretensioner of both sides. <Ref. to SB-10, Front Seat Belt.>
- Steering roll connector <Ref. to AB-20, Roll Connector.>
- Occupant detection system (passenger's seat cushion & frame assembly) <Ref. to SE-14, PASSENGER'S SEAT, DISASSEMBLY, Front Seat.>

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

G: DTC 23 CONNECTOR TO AIRBAG ECM

DTC DETECTING CONDITION:

Improper connection of (AB3), (AB7) and (AB8) to airbag control module

CAUTION:

Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS (AB3), (AB7) AND (AB8). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connectors (AB3), (AB7) and (AB8) from the airbag control module.	Is there rust or damage on the harness connector and the control module connector?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.> Replace the airbag main harness along with the body harness. Replace the side airbag main harness along with the body harness.	Go to step 2.
2 CHECK POOR CONTACT OF CONNECTORS (AB3), (AB7) AND (AB8). 1) Reconnect the connector securely. 2) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Go to step 3.	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>
3 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 4.
4 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

H: DTC 24 IG1 OPEN

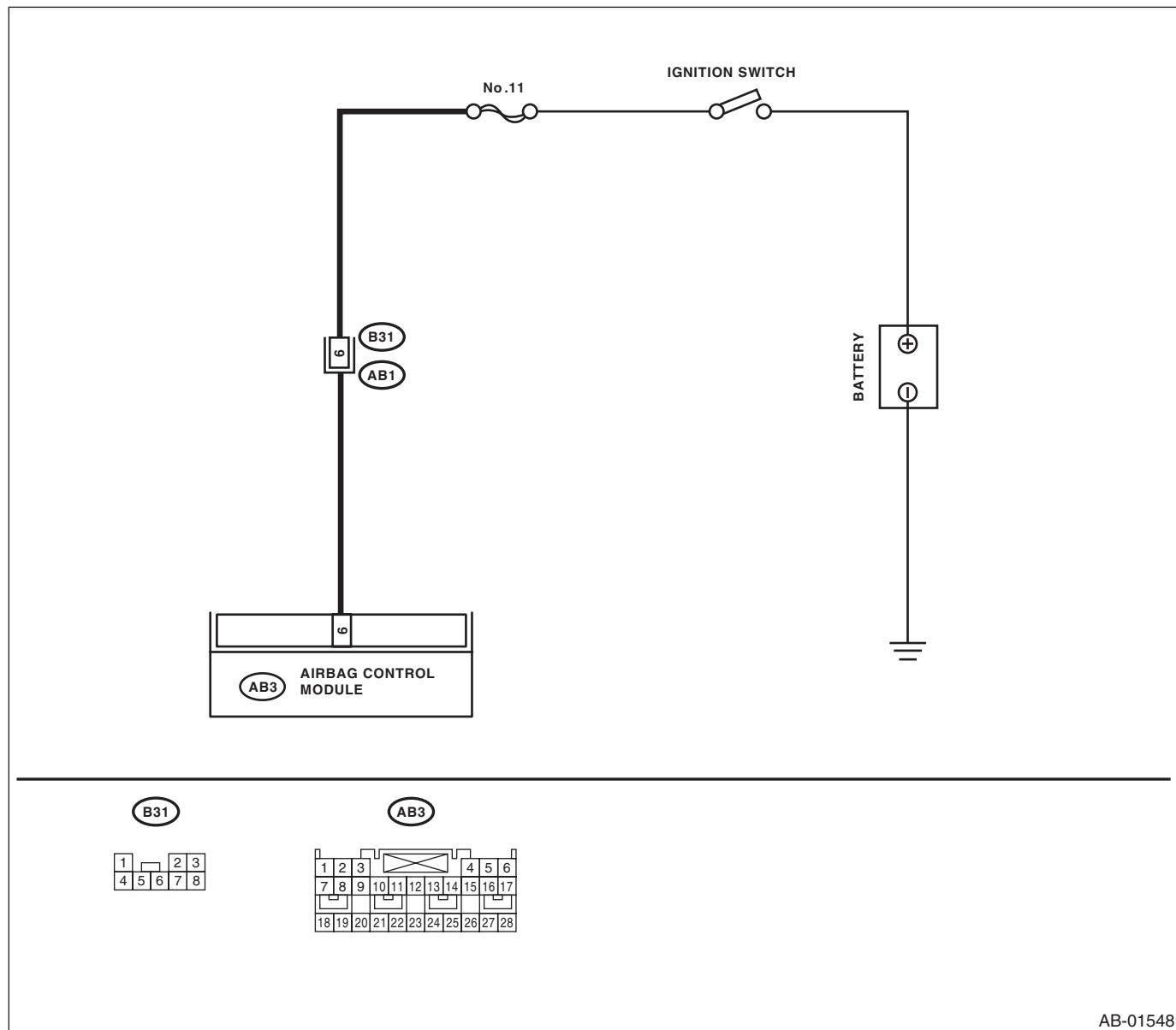
DTC DETECTING CONDITION:

- Airbag control module is faulty.
- Airbag main harness is open.
- Fuse No. 11 (in joint box) is blown.
- Body harness is open.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.

WIRING DIAGRAM:



AB-01548

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK AIRBAG CONTROL MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect connector (AB3) from airbag control module. 3) Connect connector (1R) in the test harness R to the connector (AB3). 4) Connect the battery ground terminal and turn the ignition switch to ON. 5) Measure the voltage between connector (2R) in the test harness R and chassis ground. <i>Connector & terminal (2R) No. 1 (+) — Chassis ground (-):</i>	Is the voltage 10 V or more?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 2 .
2 CHECK FUSE NO. 11 (IN JOINT BOX). 1) Confirm that the ignition switch is turned to OFF. 2) Remove and visually check the fuse No. 11 (in the joint box).	Is the fuse (No. 11) blown out?	Replace the fuse No. 11. If fuse No. 11 is blown out again, repair the body harness. Replace the airbag main harness along with the body harness.	Go to step 3 .
3 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 4 .
4 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

I: DTC 25 |G2 OPEN

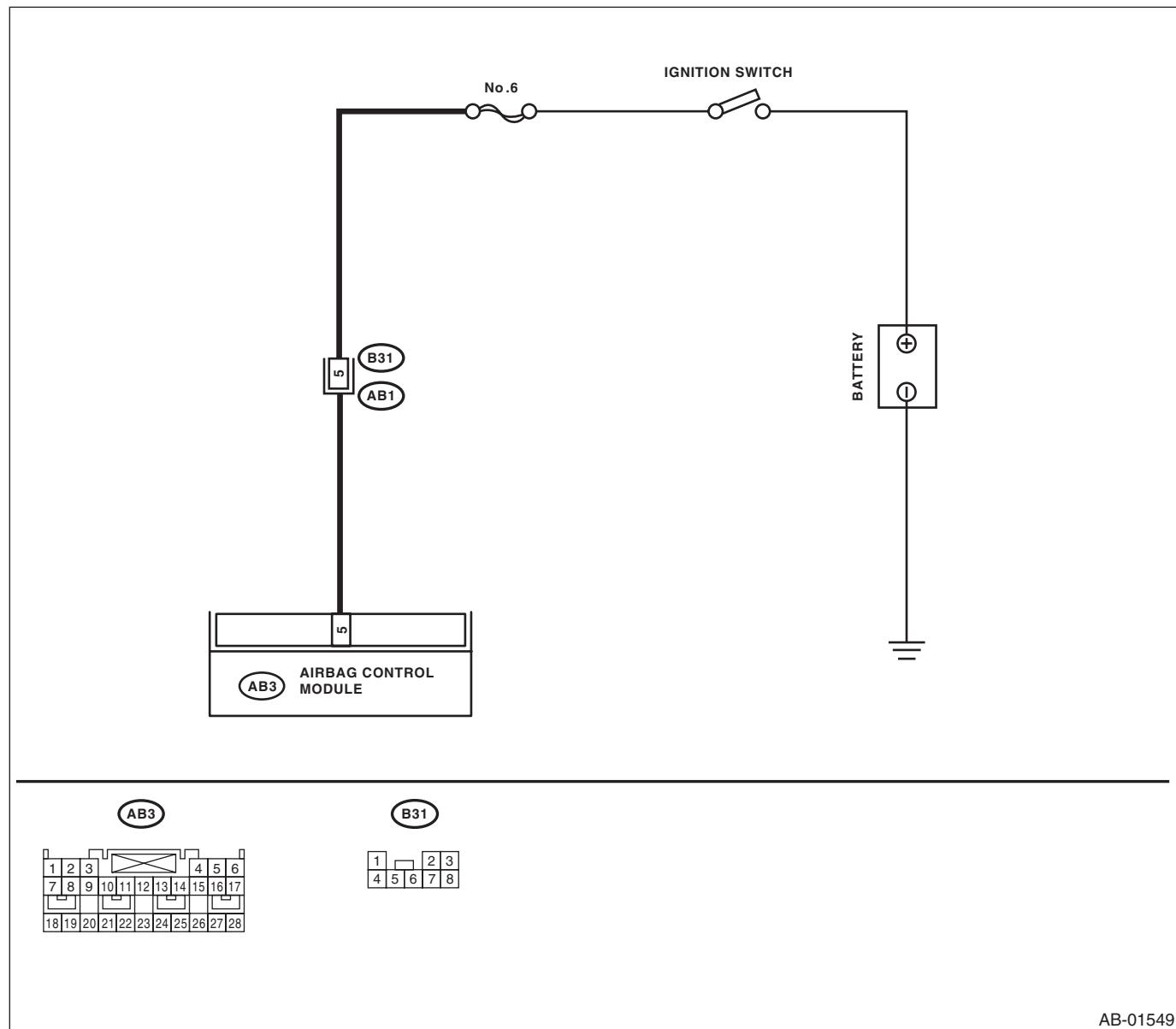
DTCT DETECTING CONDITION:

- Airbag control module is faulty.
- Airbag harness is open.
- Fuse No. 6 (in joint box) is blown.
- Body harness is open.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK AIRBAG CONTROL MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect connector (AB3) from airbag control module. 3) Connect connector (1R) in the test harness R to the connector (AB3). 4) Connect the battery ground terminal and turn the ignition switch to ON. 5) Measure the voltage between connector (2R) in the test harness R and chassis ground. <i>Connector & terminal (2R) No. 6 (+) — Chassis ground (-):</i>	Is the voltage 10 V or more?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 2 .
2 CHECK FUSE NO. 6 (IN JOINT BOX). 1) Confirm that the ignition switch is turned to OFF. 2) Remove and visually check the fuse No. 6 (in the joint box).	Is the fuse (No. 6) blown out?	Replace the fuse No. 6. If fuse No. 6 is blown out again, repair the body harness. Or replace the airbag main harness along with the body harness.	Go to step 3 .
3 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 4 .
4 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

J: DTC 26 PASSENGER'S AIRBAG INDICATOR FAILURE

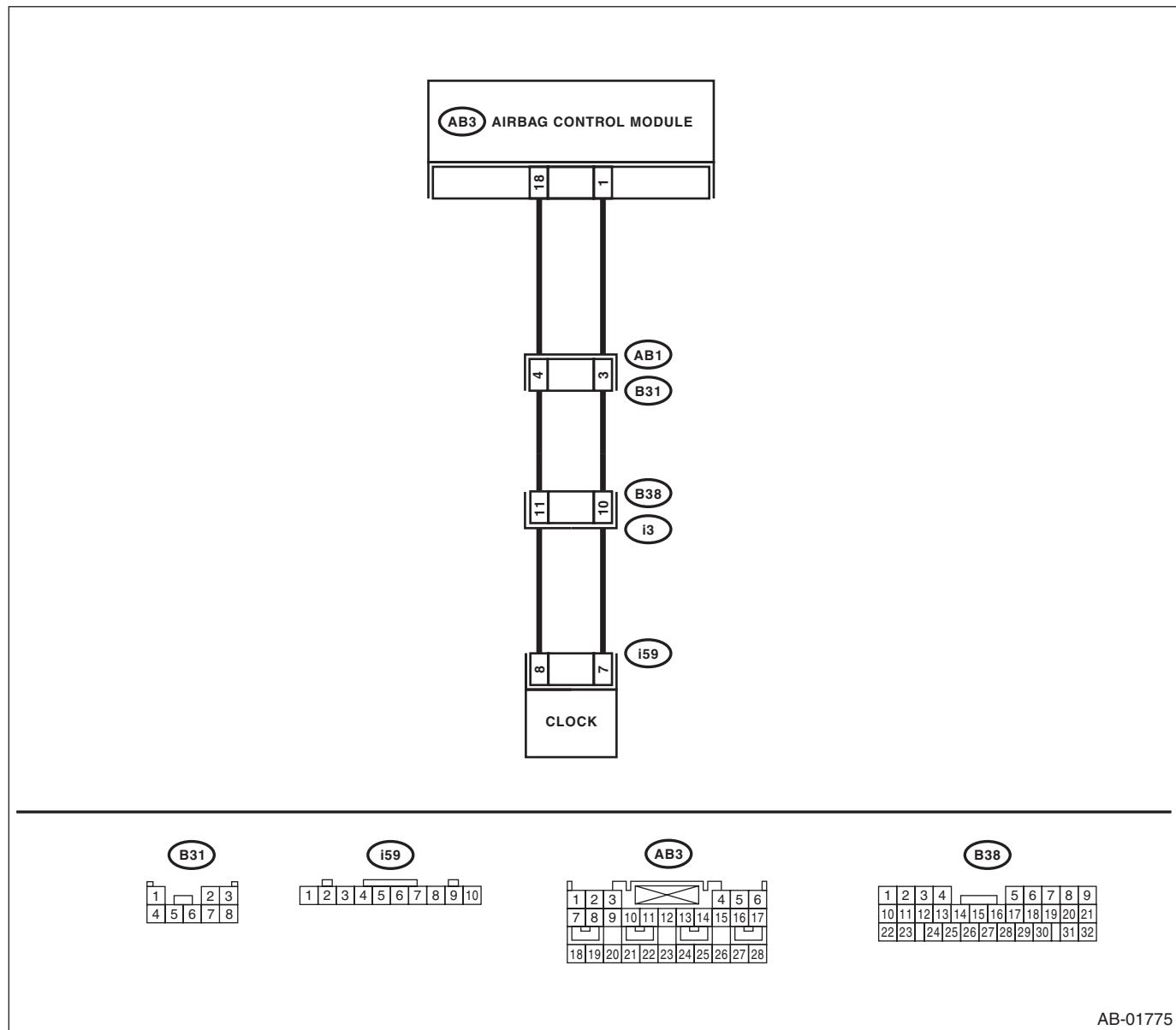
DTC DETECTING CONDITION:

- Passenger's airbag indicator is faulty.
- Airbag control module is faulty.
- Airbag main harness circuit is open.
- Body harness is open.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When replacing the airbag module, seat belt pretensioner, roll connector, control module and sensor, reconnect each part and check that the warning light operates properly.
- When inspecting the airbag harness, disconnect the airbag module connector and seat belt pretensioner for safety.

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Confirm that firm contact is secured for the connector between the airbag control module and clock.	Is there poor contact in any connector?	Replace the airbag harness connector.	Go to step 2 .
2 CHECK AIRBAG MAIN HARNESS. 1) Disconnect connector (AB3) from airbag control module. 2) Connect the battery ground terminal and turn the ignition switch to ON. NOTE: If normal, the indicator is not illuminated for both ON and OFF.	Is the passenger's airbag indicator turned on?	Go to step 3 .	Go to step 4 .
3 CHECK AIRBAG MAIN HARNESS. 1) Turn the ignition switch to OFF. 2) Remove the clock and then disconnect the connector (i59). 3) Connect connector (1R) in the test harness R to the connector (AB3). 4) Measure resistance between connectors (2R) and (4R) in the test harness R and chassis ground. Connector & terminal (2R) No. 14 — (4R) No. 17: (2R) No. 14 — Chassis ground: (4R) No. 17 — Chassis ground:	Is the resistance $1 \text{ M}\Omega$ or more?	Replace the clock. <Ref. to IDI-17, Clock.>	Repair the bulk-head harness. Or replace the airbag main harness along with the body harness.
4 CHECK AIRBAG HARNESS. 1) Turn the ignition switch to OFF. 2) Connect connector (1R) in the test harness R to the connector (AB3). 3) Measure resistance between connectors (2R) and (4R) in the test harness R and connector (i59). Connector & terminal (2R) No. 14 — (i59) No. 7: (4R) No. 17 — (i59) No. 8:	Is the resistance less than 10Ω ?	Go to step 5 .	Repair the bulk-head harness. Or replace the airbag main harness along with the body harness.
5 CHECK BODY HARNESS. 1) Turn the ignition switch to ON. 2) Measure the voltage between connector (i59) and chassis ground. Connector & terminal (i59) No. 3 — Chassis ground:	Is the voltage 10 V or more?	Replace the clock. <Ref. to IDI-17, Clock.>	Repair the clock power supply line.

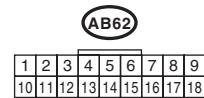
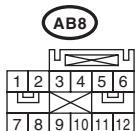
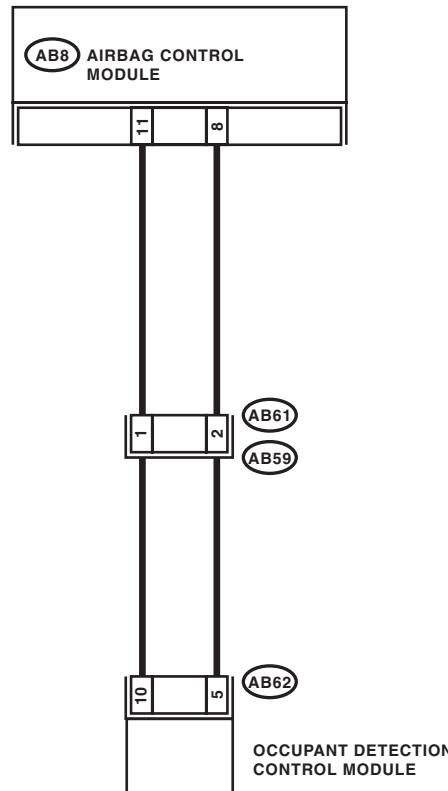
Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

K: DTC 27 ODS COMMUNICATION ERROR

DTC DETECTING CONDITION:

- Communication to the occupant detection control module is faulty.
- Occupant detection harness (seat harness) is faulty.
- Occupant detection system is faulty.
- Airbag control module is faulty.
- Airbag rear harness circuit is open, shorted or shorted to ground, or shorted to power supply.



AB-01550

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK AIRBAG HARNESS. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect connector (AB8) from airbag control module. 3) Disconnect connector (AB59) from the connector (AB61) on the lower side of passenger's seat. 4) Connect connector (1R) in the test harness R to the connector (AB8). 5) Connect the connector (1AB) in the test harness AB to connector (AB61). 6) Measure resistance between connector (4R) in the test harness R and connector (2AB) in the test harness AB. <i>Connector & terminal</i> <i>(4R) No. 12 — (2AB) No. 1:</i> <i>(4R) No. 10 — (2AB) No. 2:</i>	Is the resistance less than 10Ω ?	Go to step 2 .	Replace the airbag rear harness (RH) along with the body harness.
2 CHECK AIRBAG HARNESS. Measure resistance between the connector (4R) in the test harness R and chassis ground. <i>Connector & terminal</i> <i>(4R) No. 12 — Chassis ground:</i>	Is the resistance $1M\Omega$ or more?	Go to step 3 .	Replace the airbag rear harness (RH) along with the body harness.
3 CHECK OCCUPANT DETECTION SYSTEM. 1) Connect connector (AB8) to airbag control module. 2) Connect connector (AB61) and connector (AB59). 3) Connect the battery ground cable. 4) Check the occupant detection system. <Ref. to OD(diag)-2, Basic Diagnostic Procedure.>	Is there a malfunction in the occupant detection system?	Repair the occupant detection system. <Ref. to OD(diag)-2, Basic Diagnostic Procedure.>	Finish the diagnosis.

L: DTC 29 ODS FAILURE

NOTE:

Refer to "Occupant Detection System" for DTC 29. <Ref. to OD(diag)-28, DTC 29 ODS FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

M: DTC 2A ODS CALIBRATION ERROR

NOTE:

Refer to "Occupant Detection System" for DTC 2A. <Ref. to OD(diag)-25, DTC 2A ODS CALIBRATION ERROR, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

N: DTC 2B ODS SYSTEM WRONG PARTS

NOTE:

Refer to "Occupant Detection System" for DTC 2B. <Ref. to OD(diag)-25, DTC 2B ODS SYSTEM WRONG PARTS, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

O: DTC 2C BELT TENSION SENSOR FAILURE

NOTE:

Refer to "Occupant Detection System" for DTC 2C. <Ref. to OD(diag)-26, DTC 2C BELT TENSION SENSOR FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

P: DTC 31 FRONT SUB SENSOR RH FAILURE

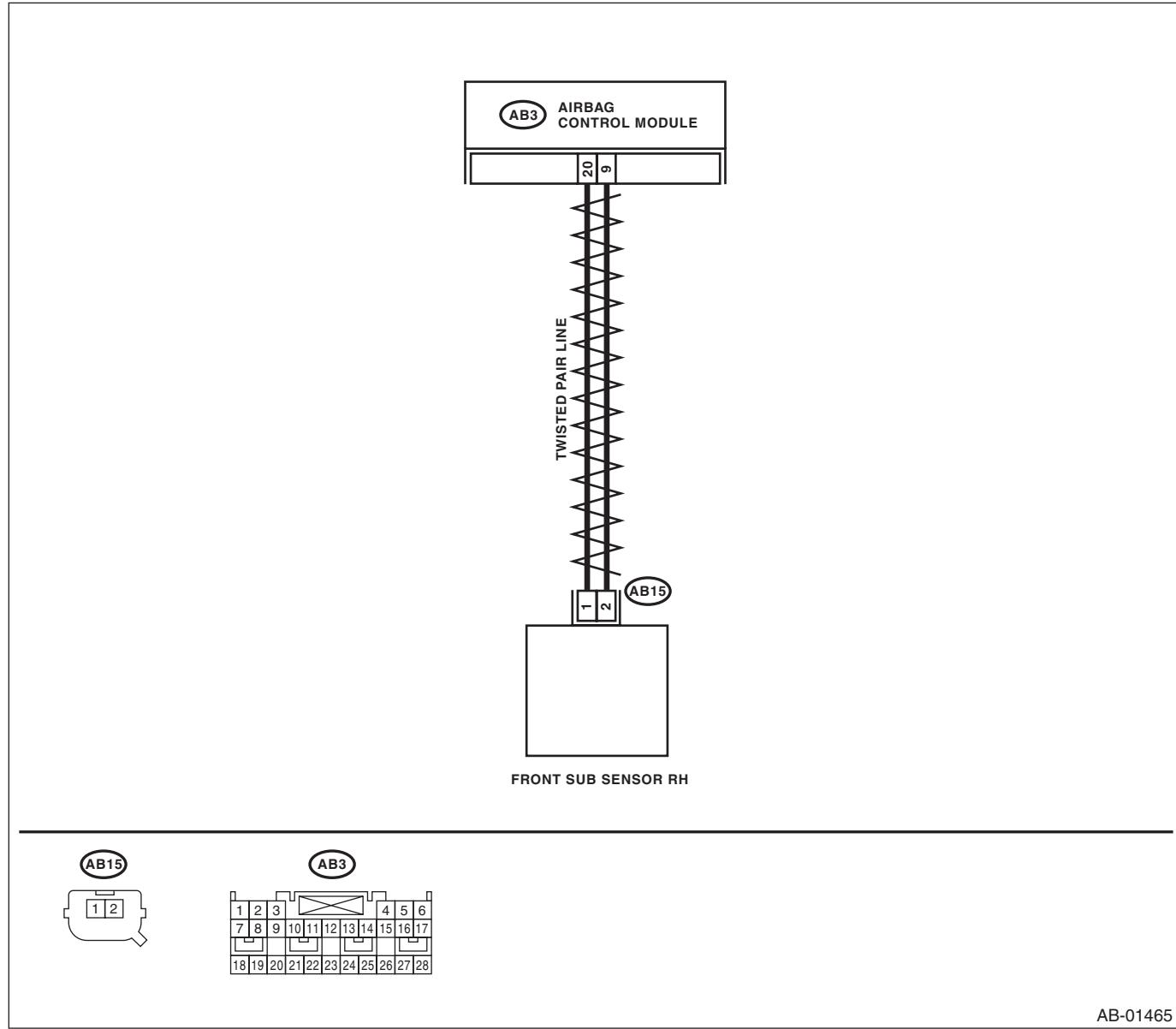
DTC DETECTING CONDITION:

- Front sub sensor harness (RH) is shorted, open or shorted to power supply.
- Airbag harness is shorted, open or shorted to power supply.
- Front sub sensor (RH) is faulty.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the front sub sensor (RH).	Is there poor contact?	Repair the connector.	Go to step 2 .
2 CHECK AIRBAG MAIN HARNESS AND FRONT SUB SENSOR HARNESS. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Remove the instrument panel lower cover, disconnect the connector (AB26) and (AB2). 3) Disconnect the connectors (AB27) and (AB4) of the passenger's airbag module. 4) Disconnect connector (AB3) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB3). 6) Disconnect the front sub sensor (RH), and connect the connector (1H) in test harness H to connector (AB15). 7) Measure resistance between connector (3R) in the test harness R and connector (3H) in the test harness H. <i>Connector & terminal</i> (3R) No. 7 — (3H) No. 5: (3R) No. 9 — (3H) No. 6:	Is the resistance less than $10\ \Omega$?	Go to step 3 .	Replace the airbag main harness along with the body harness.
3 CHECK AIRBAG MAIN HARNESS (FRONT SUB SENSOR HARNESS RH). Measure resistance between the connector (3R) in the test harness R and chassis ground. <i>Connector & terminal</i> (3R) No. 7 — Chassis ground: (3R) No. 9 — Chassis ground:	Is the resistance $1\ M\Omega$ or more?	Replace the front sub sensor (RH). <Ref. to AB-21, Front Sub Sensor.> Replace the airbag control module if not operating normally even after replacing the sensor. <Ref. to AB-18, Airbag Control Module.>	Go to step 4 .
4 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 5 .
5 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Q: DTC 32 FRONT SUB SENSOR LH FAILURE

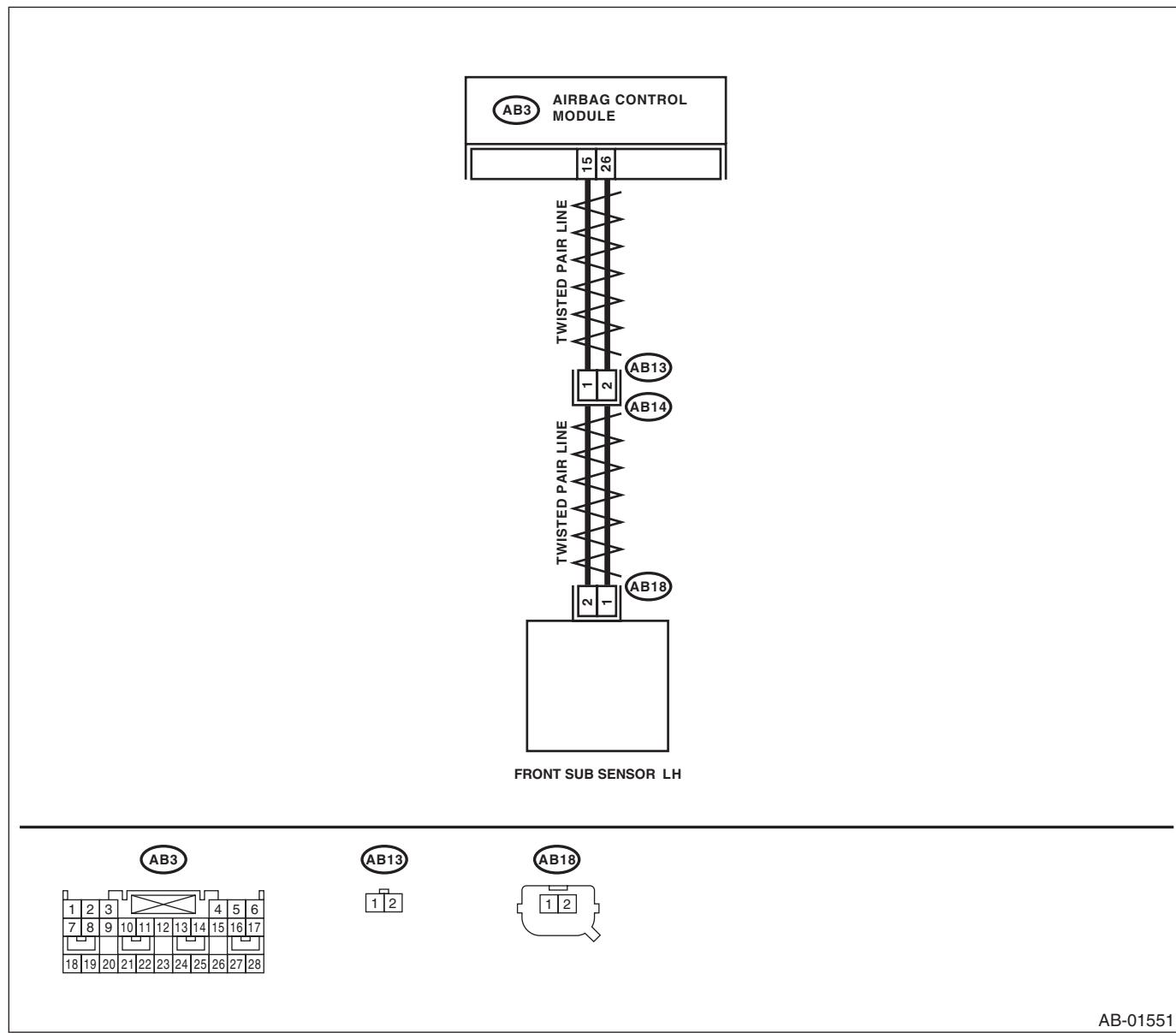
DTC DETECTING CONDITION:

- Front sub sensor harness (LH) is shorted, open or shorted to power supply.
- Airbag harness is shorted, open or shorted to power supply.
- Front sub sensor (LH) is faulty.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.

WIRING DIAGRAM:



AB-01551

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the front sub sensor (LH).	Is there poor contact?	Replace the airbag main harness along with the body harness.	Go to step 2 .
2 CHECK AIRBAG MAIN HARNESS (FRONT SUB SENSOR HARNESS LH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Remove the instrument panel lower cover, disconnect the connector (AB26) and (AB2). 3) Disconnect the connectors (AB27) and (AB4) of the passenger's airbag module. 4) Disconnect connector (AB3) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB3). 6) Disconnect the front sub sensor (LH), and connect the connector (1H) in test harness H to connector (AB18). 7) Measure resistance between connector (3R) in the test harness R and connector (3H) in the test harness H. <i>Connector & terminal</i> (3R) No. 6 — (3H) No. 5: (3R) No. 8 — (3H) No. 6:	Is the resistance less than $10\ \Omega$?	Go to step 3 . Replace the airbag main harness along with the body harness.	
3 CHECK AIRBAG MAIN HARNESS (FRONT SUB SENSOR HARNESS LH). Measure resistance between the connector (3R) in the test harness R and chassis ground. <i>Connector & terminal</i> (3R) No. 6 — Chassis ground: (3R) No. 8 — Chassis ground:	Is the resistance $1\ M\Omega$ or more?	Replace the front sub sensor (LH). <Ref. to AB-21, Front Sub Sensor.> Replace the airbag control module if not operating normally even after replacing the sensor. <Ref. to AB-18, Airbag Control Module.>	Go to step 4 .
4 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 5 .
5 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

R: DTC 33 FRONT SUB SENSOR RH FAILURE

DTC DETECTING CONDITION:

Front sub sensor (RH) is faulty.

If the DTC 33 is displayed, the circuit within the front sub sensor (RH) is faulty. Replace the front sub sensor (RH). <Ref. to AB-21, Front Sub Sensor.>

S: DTC 34 FRONT SUB SENSOR LH FAILURE

DTC DETECTING CONDITION:

Front sub sensor (LH) is faulty.

If the DTC 34 is displayed, the circuit within the front sub sensor (LH) is faulty. Replace the front sub sensor (LH). <Ref. to AB-21, Front Sub Sensor.>

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

T: DTC 36 SEAT POSITION SENSOR LH FAILURE

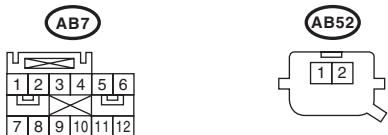
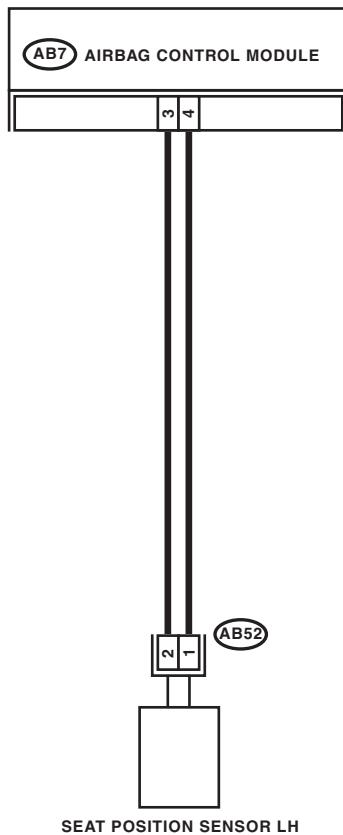
DTC DETECTING CONDITION:

- Driver's seat position sensor is faulty.
- Airbag control module is faulty.
- Airbag rear harness (LH) circuit is open, shorted or shorted to ground.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When replacing the airbag module, seat belt pretensioner, roll connector, control module and sensor, reconnect each part and check that the warning light operates properly.
- When inspecting the airbag harness, disconnect the airbag module connector and seat belt pretensioner for safety.

WIRING DIAGRAM:



AB-01467

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the driver's airbag module.	Is there poor contact?	Replace the airbag main harness.	Go to step 2.
2 CHECK SEAT POSITION SENSOR (LH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect connector (AB52) from seat position sensor (LH). 3) Connect connector (2Y) in the test harness Y to connector (AB52). 4) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the seat position sensor (LH) along with the driver's slide rail assembly. <Ref. to SE-7, Front Seat.>	Go to step 3.
3 CHECK AIRBAG REAR HARNESS (SEAT POSITION SENSOR HARNESS (LH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect connector (AB7) from airbag control module. 3) Connect connector (1R) in the test harness R to the connector (AB7). 4) Disconnect the seat position sensor (LH), and connect the connector (1H) in test harness H to connector (AB52). 5) Measure resistance between connector (3R) in the test harness R and connector (3H) in the test harness H. <i>Connector & terminal</i> <i>(3R) No. 1 — (3H) No. 5:</i> <i>(3R) No. 3 — (3H) No. 6:</i>	Is the resistance less than 10Ω ?	Go to step 4.	Replace the airbag rear harness (LH) along with the body harness.
4 CHECK AIRBAG REAR HARNESS. Measure resistance between the connector (3R) in the test harness R and chassis ground. <i>Connector & terminal</i> <i>(3R) No. 1 — Chassis ground:</i>	Is the resistance less than 10Ω ?	Replace the airbag rear harness (LH) along with the body harness.	Go to step 5.
5 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 6.
6 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

U: DTC 37 BUCKLE SWITCH RH FAILURE

NOTE:

Refer to "Occupant Detection System" for DTC 37. <Ref. to OD(diag)-29, DTC 37 BUCKLE SWITCH RH FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

V: DTC 38 BUCKLE SWITCH LH FAILURE

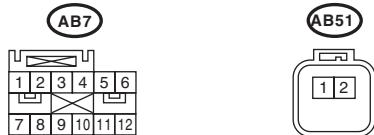
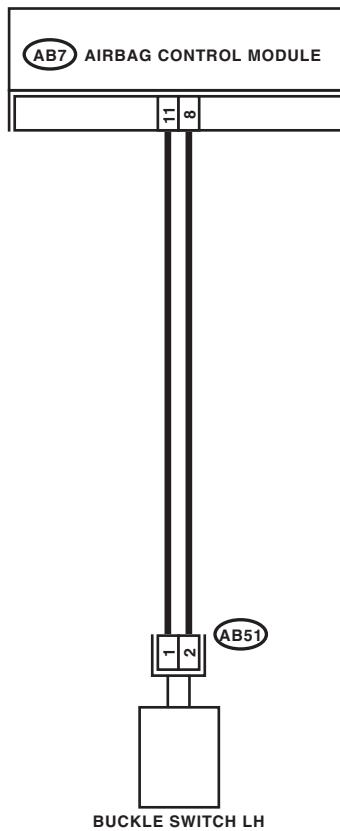
DTC DETECTING CONDITION:

- Driver's buckle switch circuit is open, shorted or shorted to ground.
- Airbag rear harness (LH) circuit is open, shorted or shorted to ground.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When replacing the airbag module, seat belt pretensioner, roll connector, control module and sensor, reconnect each part and check that the warning light operates properly.
- When inspecting the airbag harness, disconnect the airbag module connector and seat belt pretensioner for safety.

WIRING DIAGRAM:



AB-01469

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the driver's airbag module.	Is there poor contact?	Replace the airbag main harness.	Go to step 2.
2 CHECK SEAT BELT BUCKLE SWITCH (LH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB51) from buckle switch (LH). 3) Connect connector (1Y) in the test harness Y to connector (AB51). 4) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the seat belt buckle switch (LH). <Ref. to SB-10, Front Seat Belt.>	Go to step 3.
3 CHECK AIRBAG REAR HARNESS (BUCKLE SWITCH HARNESS (LH)). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect connector (AB7) from airbag control module. 3) Connect connector (1R) in the test harness R to the connector (AB7). 4) Disconnect the seat belt buckle switch (LH), and connect the connector (1D) in test harness D to connector (AB51). 5) Measure resistance between connector (4R) in the test harness R and connector (3D) in the test harness D. <i>Connector & terminal</i> <i>(4R) No. 11 — (3D) No. 3:</i> <i>(4R) No. 9 — (3D) No. 4:</i>	Is the resistance less than 10Ω ?	Go to step 4.	Replace the airbag rear harness (LH) along with the body harness.
4 CHECK AIRBAG REAR HARNESS. Measure resistance between the connector (4R) in the test harness R and chassis ground. <i>Connector & terminal</i> <i>(4R) No. 9 — Chassis ground:</i>	Is the resistance less than 10Ω ?	Replace the airbag rear harness (LH) along with the body harness.	Go to step 5.
5 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 6.
6 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

W: DTC 41 SIDE AIRBAG RH FAILURE

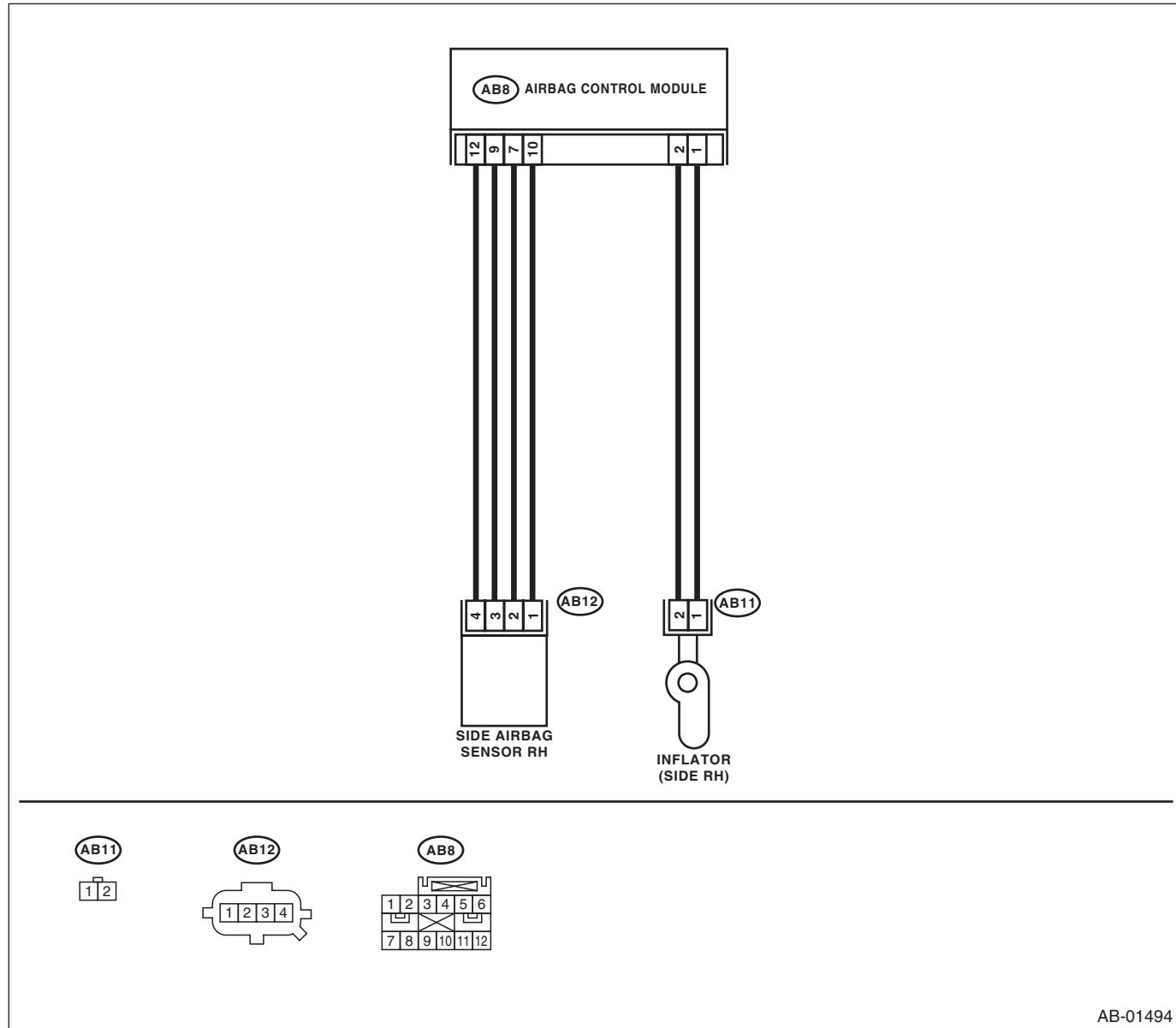
DTC DETECTING CONDITION:

- Side airbag harness (RH) is faulty.
- Side airbag module (RH) is faulty.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.
- When inspecting the side airbag harness, disconnect the side airbag module connector, and seat belt pretensioner connector for safety.

WIRING DIAGRAM:



AB-01494

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module, side airbag module (RH) and the side airbag sensor (RH).	Is there poor contact?	Replace the airbag rear harness (RH) along with the body harness.	Go to step 2.
2 CHECK SIDE AIRBAG MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB11) from the side airbag module (RH), and connect the connector (1F) in test harness F to connector (AB11). 3) Connect airbag resistor to connector (3F) in the test harness F. 4) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the side airbag module (RH). <Ref. to AB-16, REMOVAL, Side Airbag Module.>	Go to step 3.
3 CHECK SIDE AIRBAG HARNESS (RH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB20) from the seat belt pretensioner (RH). 3) Disconnect the airbag resistor from test harness F. 4) Disconnect connector (AB8) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB8). 6) Measure resistance between connector (3R) in the test harness R and connector (3F) in the test harness F. <i>Connector & terminal</i> <i>(3R) No. 18 — (3F) No. 4:</i> <i>(3R) No. 20 — (3F) No. 3:</i>	Is the resistance less than 10Ω ?	Go to step 4.	Replace the side airbag harness along with the body harness.
4 CHECK SIDE AIRBAG HARNESS (RH). Measure resistance between connector (3R) terminals in the test harness R. <i>Connector & terminal</i> <i>(3R) No. 18 — (3R) No. 20:</i>	Is the resistance $1M\Omega$ or more?	Go to step 5.	Replace the side airbag harness along with the body harness.
5 CHECK SIDE AIRBAG HARNESS (RH). Measure resistance between the connector (3R) in the test harness R and chassis ground. <i>Connector & terminal</i> <i>(3R) No. 18 — Chassis ground:</i> <i>(3R) No. 20 — Chassis ground:</i>	Is the resistance $1M\Omega$ or more?	Go to step 6.	Replace the side airbag harness along with the body harness.
6 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 7.
7 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

X: DTC 42 SIDE AIRBAG LH FAILURE

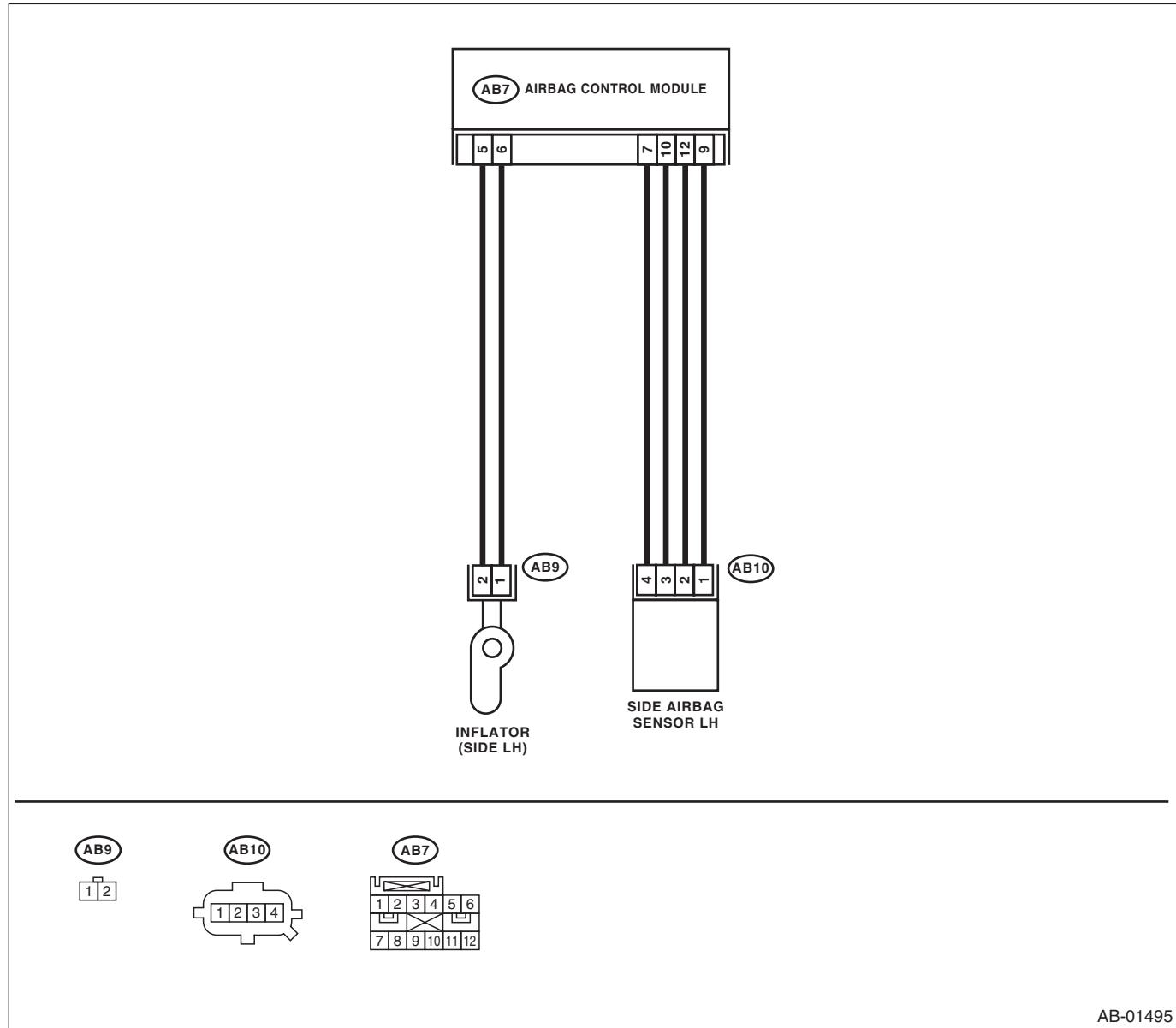
DTC DETECTING CONDITION:

- Side airbag harness (LH) is faulty.
- Side airbag module (LH) is faulty.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.
- When inspecting the side airbag harness, disconnect the side airbag module connector, and seat belt pretensioner connector for safety.

WIRING DIAGRAM:



AB-01495

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT IN CONNECTORS. Check for poor contact of the connectors between the airbag control module, side airbag module (LH) and the side airbag sensor (LH).	Is there poor contact?	Replace the airbag rear harness (LH) along with the body harness.	Go to step 2.
2 CHECK SIDE AIRBAG MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB9) from the side airbag module (LH), and connect the connector (1F) in test harness F to connector (AB9). 3) Connect airbag resistor to connector (3F) in the test harness F. 4) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the side airbag module (LH). <Ref. to AB-16, REMOVAL, Side Airbag Module.>	Go to step 3.
3 CHECK SIDE AIRBAG HARNESS (LH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB19) from the seat belt pretensioner (LH). 3) Disconnect the airbag resistor from test harness. 4) Disconnect connector (AB7) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB7). 6) Measure resistance between connector (3R) in the test harness R and connector (3F) in the test harness F. <i>Connector & terminal</i> <i>(3R) No. 12 — (3F) No. 3:</i> <i>(3R) No. 10 — (3F) No. 4:</i>	Is the resistance less than 10Ω ?	Go to step 4.	Replace the side airbag harness along with the body harness.
4 CHECK SIDE AIRBAG HARNESS (LH). Measure resistance between connector (3R) terminals in the test harness R. <i>Connector & terminal</i> <i>(3R) No. 12 — (3R) No. 10:</i>	Is the resistance $1M\Omega$ or more?	Go to step 5.	Replace the side airbag harness along with the body harness.
5 CHECK SIDE AIRBAG HARNESS (LH). Measure resistance between the connector (3R) in the test harness R and chassis ground. <i>Connector & terminal</i> <i>(3R) No. 10 — Chassis ground:</i> <i>(3R) No. 12 — Chassis ground:</i>	Is the resistance $1M\Omega$ or more?	Go to step 6.	Replace the side airbag harness along with the body harness.
6 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 7.
7 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Y: DTC 45 SIDE AIRBAG RH FAILURE

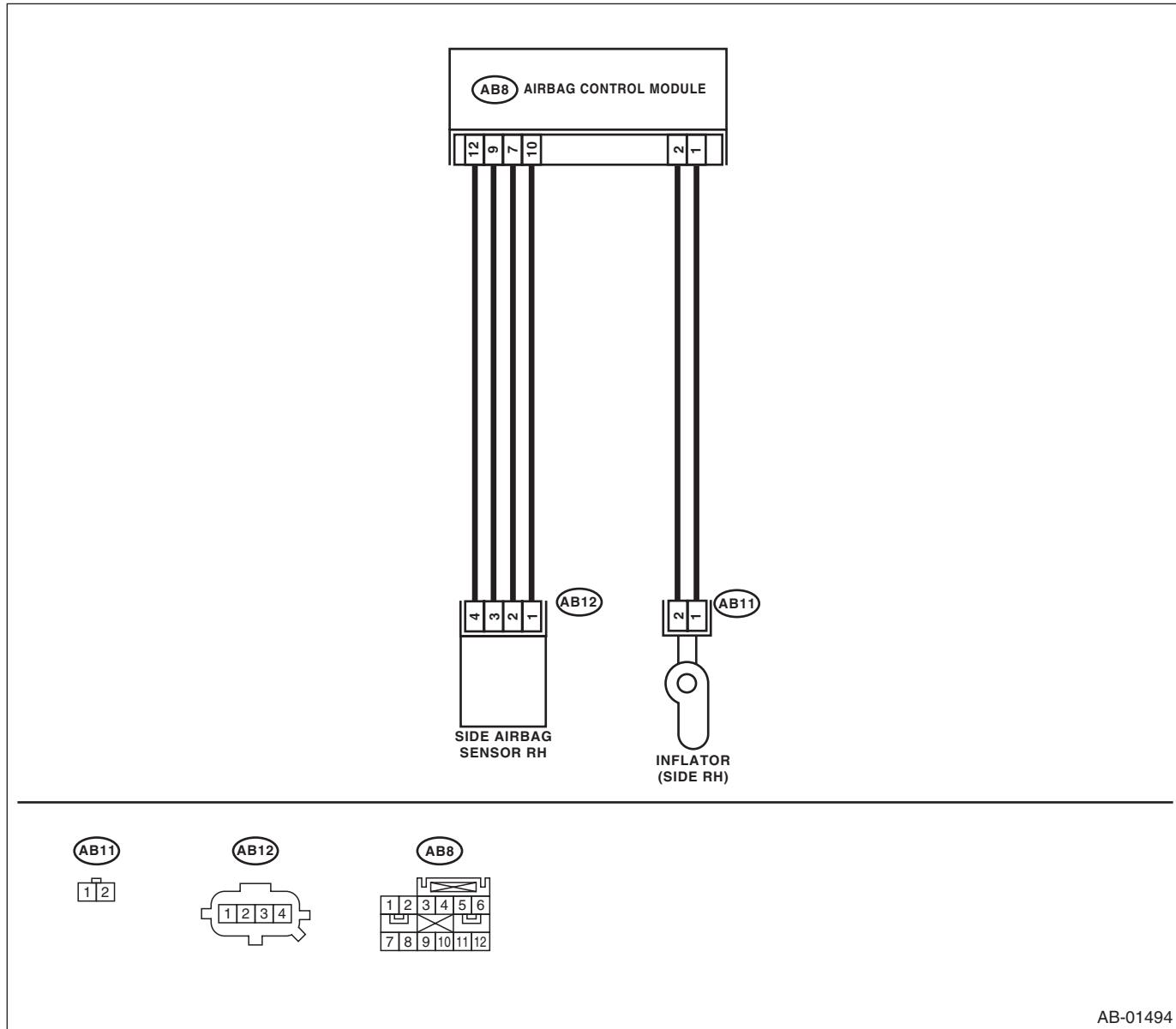
DTC DETECTING CONDITION:

- Side airbag harness is shorted to power supply.
- Side airbag module (RH) is faulty.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.
- When inspecting the side airbag harness, disconnect the side airbag module connector, and seat belt pretensioner connector for safety.

WIRING DIAGRAM:



AB-01494

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module, side airbag module (RH) and the side airbag sensor (RH).	Is there poor contact?	Replace the airbag rear harness (RH) along with the body harness.	Go to step 2.
2 CHECK SIDE AIRBAG MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB11) from the side airbag module (RH), and connect the connector (1F) in test harness F to connector (AB11). 3) Connect airbag resistor to connector (3F) in the test harness F. 4) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the side airbag module (RH). <Ref. to AB-16, REMOVAL, Side Airbag Module.>	Go to step 3.
3 CHECK SIDE AIRBAG HARNESS (RH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB20) from the seat belt pretensioner (RH). 3) Disconnect the airbag resistor from test harness. 4) Disconnect connector (AB8) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB8). 6) Connect the battery ground terminal and turn the ignition switch to ON. 7) Measure the voltage between connector (3R) in the test harness R and chassis ground. Connector & terminal (3R) No. 18 (+) — Chassis ground (-): (3R) No. 20 (+) — Chassis ground (-):	Is the voltage less than 1 V?	Go to step 4.	Replace the side airbag harness along with the body harness.
4 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 5.
5 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Z: DTC 46 SIDE AIRBAG LH FAILURE

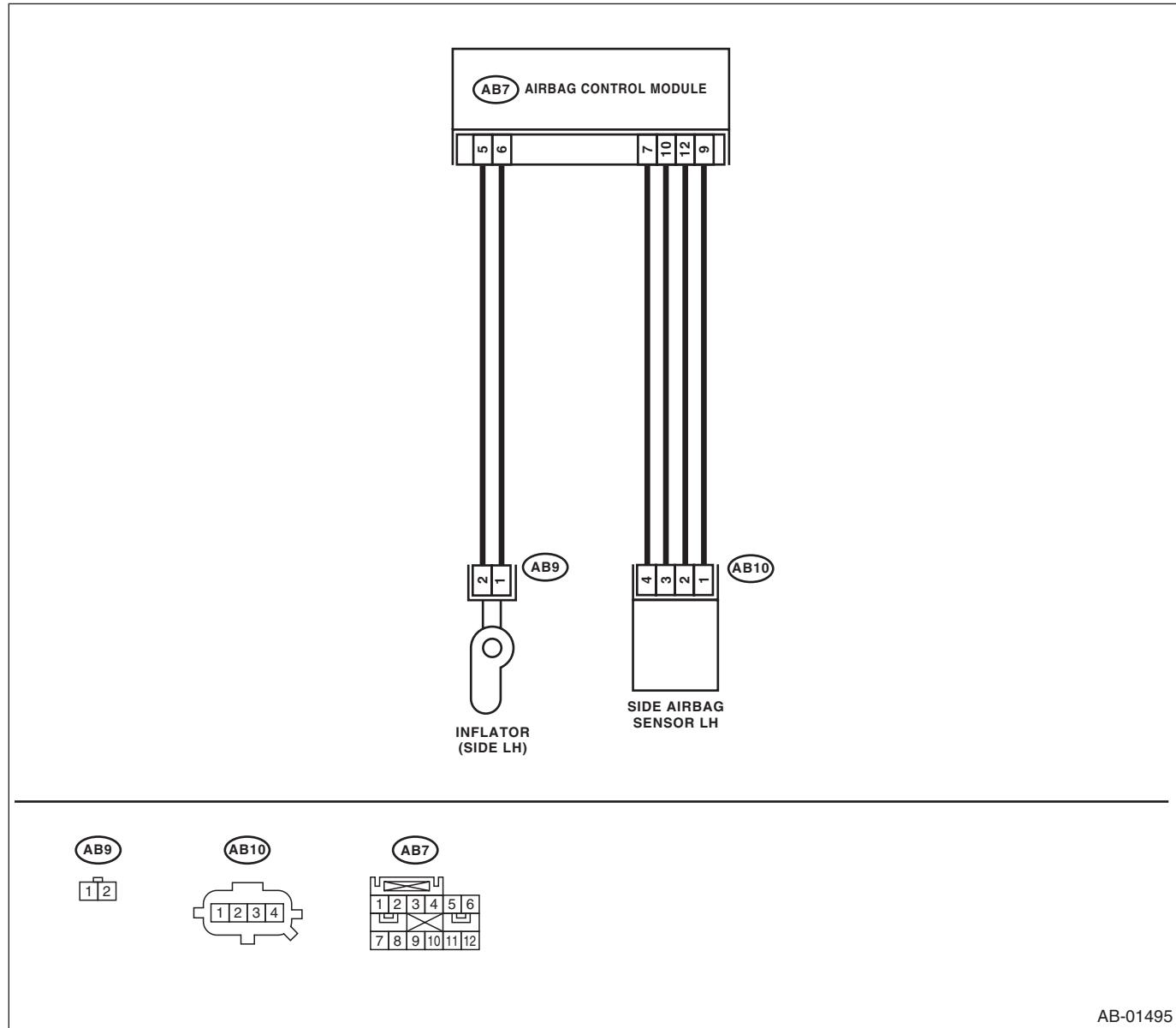
DTC DETECTING CONDITION:

- Side airbag harness is shorted to power supply.
- Side airbag module (LH) is faulty.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.
- When inspecting the side airbag harness, disconnect the side airbag module connector, and seat belt pretensioner connector for safety.

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module, side airbag module (LH) and the side airbag sensor (LH).	Is there poor contact?	Replace the airbag rear harness (LH) along with the body harness.	Go to step 2.
2 CHECK SIDE AIRBAG MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB9) from the side airbag module (LH), and connect the connector (1F) in test harness F to connector (AB9). 3) Connect airbag resistor to connector (3F) in the test harness F. 4) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the side airbag module (LH). <Ref. to AB-16, REMOVAL, Side Airbag Module.>	Go to step 3.
3 CHECK SIDE AIRBAG HARNESS (LH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB19) from the seat belt pretensioner (LH). 3) Disconnect the airbag resistor from test harness. 4) Disconnect connector (AB7) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB7). 6) Connect the battery ground terminal and turn the ignition switch to ON. 7) Measure the voltage between connector (3R) in the test harness R and chassis ground. <i>Connector & terminal</i> (3R) No. 10 (+) — Chassis ground (-): (3R) No. 12 (+) — Chassis ground (-):	Is the voltage less than 1 V?	Go to step 4.	Replace the side airbag harness along with the body harness.
4 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 5.
5 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

AA:DTC 51 SIDE AIRBAG SENSOR RH FAILURE

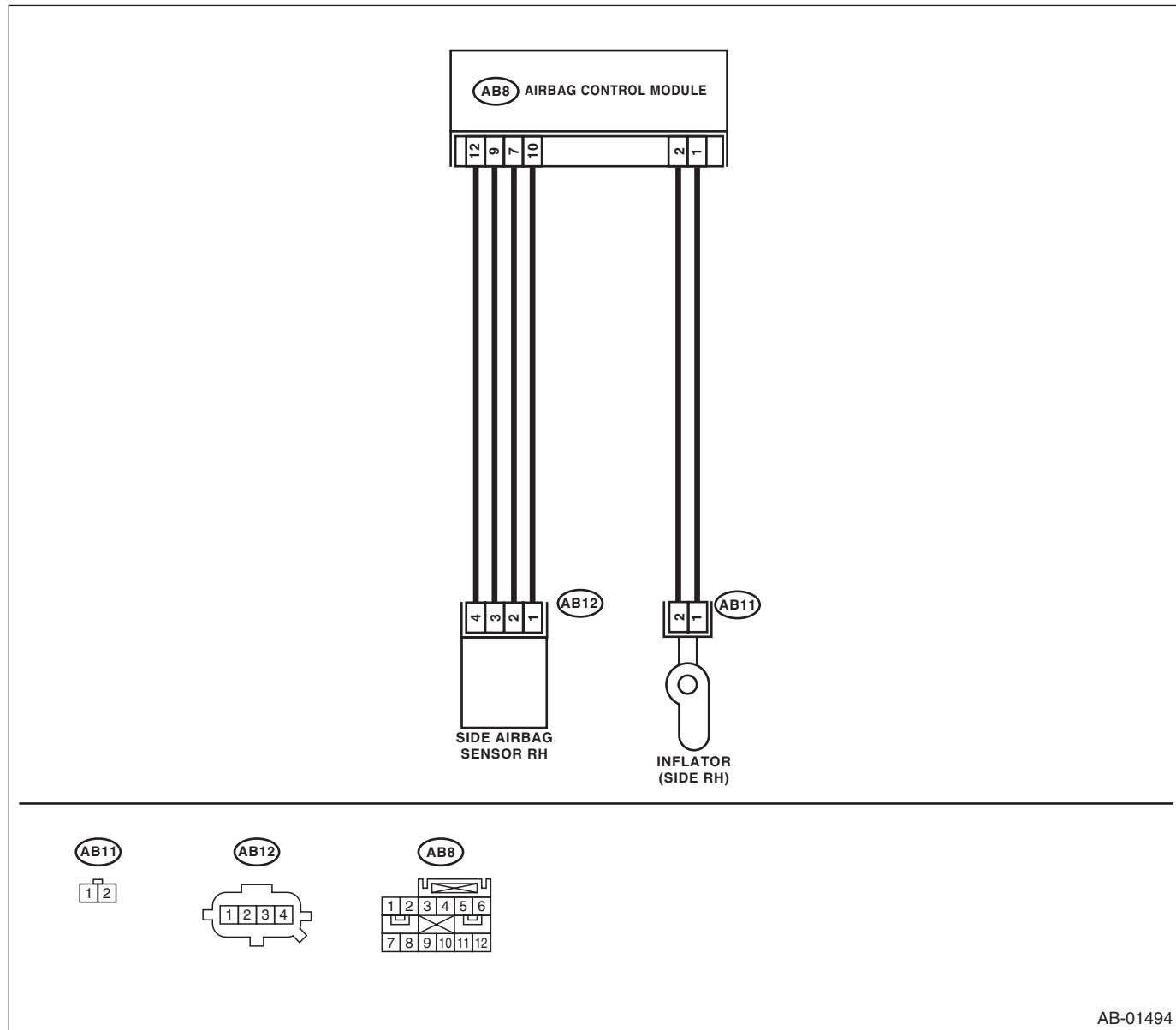
DTC DETECTING CONDITION:

- Side airbag sensor (RH) is faulty.
- Side airbag harness (RH) is faulty.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.
- When inspecting the side airbag harness, disconnect the side airbag module connector, and seat belt pretensioner connector for safety.

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module, side airbag module (RH) and the side airbag sensor (RH).	Is there poor contact?	Replace the airbag rear harness (RH) along with the body harness.	Go to step 2.
2 CHECK SIDE AIRBAG HARNESS (RH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB20) from the seat belt pretensioner (RH). 3) Disconnect connector (AB11) from side airbag module (RH). 4) Disconnect connector (AB8) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB8). 6) Disconnect connector (AB12) from the side airbag sensor (RH), and connect connector (2V) in test harness V to connector (AB12). 7) Measure resistance between connector (4R) in the test harness R and connector (3V) in the test harness V. <i>Connector & terminal</i> (4R) No. 5 — (3V) No. 2: (4R) No. 6 — (3V) No. 4: (4R) No. 7 — (3V) No. 1: (4R) No. 8 — (3V) No. 5:	Is the resistance less than $10\ \Omega$?	Go to step 3.	Replace the side airbag harness along with the body harness.
3 CHECK SIDE AIRBAG HARNESS. Measure resistance between connector (4R) in the test harness R, and the resistance between connector (4R) in the test harness R and chassis ground. <i>Connector & terminal</i> (4R) No. 5 — (4R) No. 7: (4R) No. 5 — (4R) No. 6: (4R) No. 5 — (4R) No. 8: (4R) No. 6 — (4R) No. 7: (4R) No. 6 — (4R) No. 8: (4R) No. 7 — (4R) No. 8: (4R) No. 5 — Chassis ground: (4R) No. 6 — Chassis ground: (4R) No. 7 — Chassis ground: (4R) No. 8 — Chassis ground:	Is the resistance $1\ M\Omega$ or more?	Go to step 4.	Replace the side airbag harness along with the body harness.
4 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the side airbag sensor (RH). <Ref. to AB-19, Side Airbag Sensor.> Replace the airbag control module if not operating normally even after replacing the sensor. <Ref. to AB-18, Airbag Control Module.>	Go to step 5.
5 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

AB:DTC 52 SIDE AIRBAG SENSOR LH FAILURE

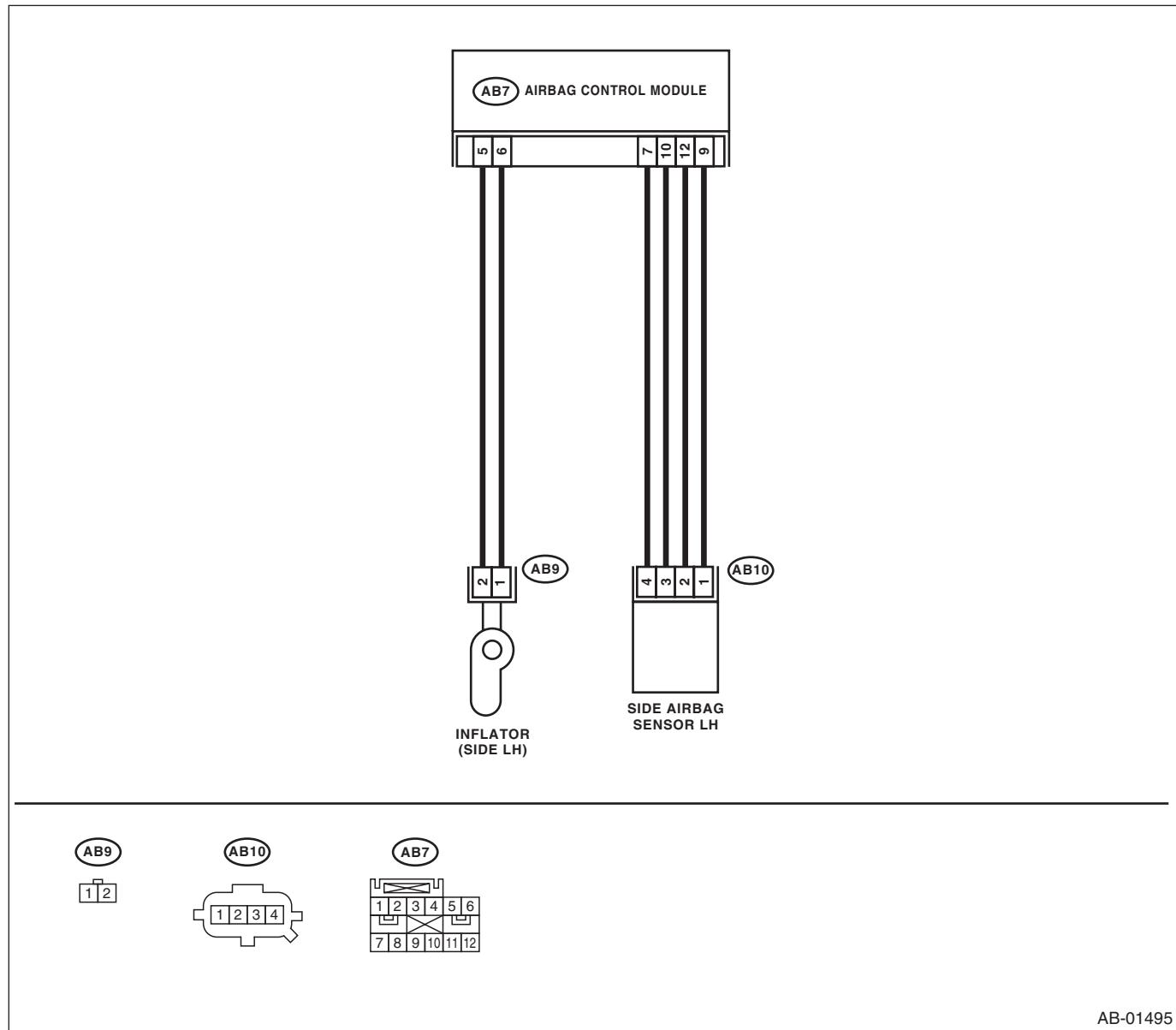
DTC DETECTING CONDITION:

- Side airbag sensor (LH) is faulty.
- Side airbag harness (LH) is faulty.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the driver's airbag module and passenger's airbag module connectors for safety.
- When inspecting the side airbag harness, disconnect the side airbag module connector, and seat belt pretensioner connector for safety.

WIRING DIAGRAM:



AB-01495

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module, side airbag module (LH) and the side airbag sensor (LH).	Is there poor contact?	Replace the airbag rear harness (LH) along with the body harness.	Go to step 2.
2 CHECK SIDE AIRBAG HARNESS (LH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB19) from the seat belt pretensioner (LH). 3) Disconnect connector (AB9) from the side airbag module (LH). 4) Disconnect connector (AB7) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB7). 6) Disconnect connector (AB10) from the side airbag sensor (LH), and connect connector (2V) in test harness V to connector (AB10). 7) Measure resistance between connector (4R) in the test harness R and connector (3V) in the test harness V. <i>Connector & terminal</i> (4R) No. 4 — (3V) No. 2: (4R) No. 3 — (3V) No. 4: (4R) No. 2 — (3V) No. 1: (4R) No. 1 — (3V) No. 5:	Is the resistance less than $10\ \Omega$?	Go to step 3.	Replace the side airbag harness along with the body harness.
3 CHECK SIDE AIRBAG HARNESS (LH). Measure resistance between connector (4R) in the test harness R, and the resistance between connector (4R) in the test harness R and chassis ground. <i>Connector & terminal</i> (4R) No. 4 — (4R) No. 3: (4R) No. 4 — (4R) No. 2: (4R) No. 4 — (4R) No. 1: (4R) No. 3 — (4R) No. 2: (4R) No. 3 — (4R) No. 1: (4R) No. 2 — (4R) No. 1: (4R) No. 4 — Chassis ground: (4R) No. 3 — Chassis ground: (4R) No. 2 — Chassis ground: (4R) No. 1 — Chassis ground:	Is the resistance $1\ M\Omega$ or more?	Go to step 4.	Replace the side airbag harness along with the body harness.
4 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the side airbag sensor (LH). <Ref. to AB-19, Side Airbag Sensor.> Replace the airbag control module if not operating normally even after replacing the sensor. <Ref. to AB-18, Airbag Control Module.>	Go to step 5.
5 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

AC:DTC 53 SIDE AIRBAG SENSOR RH FAILURE

DTC DETECTING CONDITION:

Side airbag sensor (RH) is faulty.

If the code 53 is displayed, the circuit within the side airbag sensor (RH) is faulty. Replace the side airbag sensor (RH).

<Ref. to AB-19, Side Airbag Sensor.>

AD:DTC 54 SIDE AIRBAG SENSOR LH FAILURE

DTC DETECTING CONDITION:

Side airbag sensor (LH) is faulty.

If the code 54 is displayed, the circuit within the side airbag sensor (LH) is faulty. Replace the side airbag sensor (LH).

<Ref. to AB-19, Side Airbag Sensor.>

AE:DTC 55 SIDE CURTAIN AIRBAG FIRING OUTPUT

This code is indicated when the side airbag and pretensioner activates.

When this code is displayed, the memory cannot be cleared. Replace the following parts.

- Airbag Control Module <Ref. to AB-18, Airbag Control Module.>
- Front seat with side airbag module (Operating side)<Ref. to SE-7, Front Seat.>
- Side airbag sensor (Operating side) <Ref. to AB-19, Side Airbag Sensor.>
- Front outer seat belt with pretensioner (Operating side)<Ref. to SB-10, Front Seat Belt.>

AF:DTC 61 BELT PRETENSIONER RH FAILURE

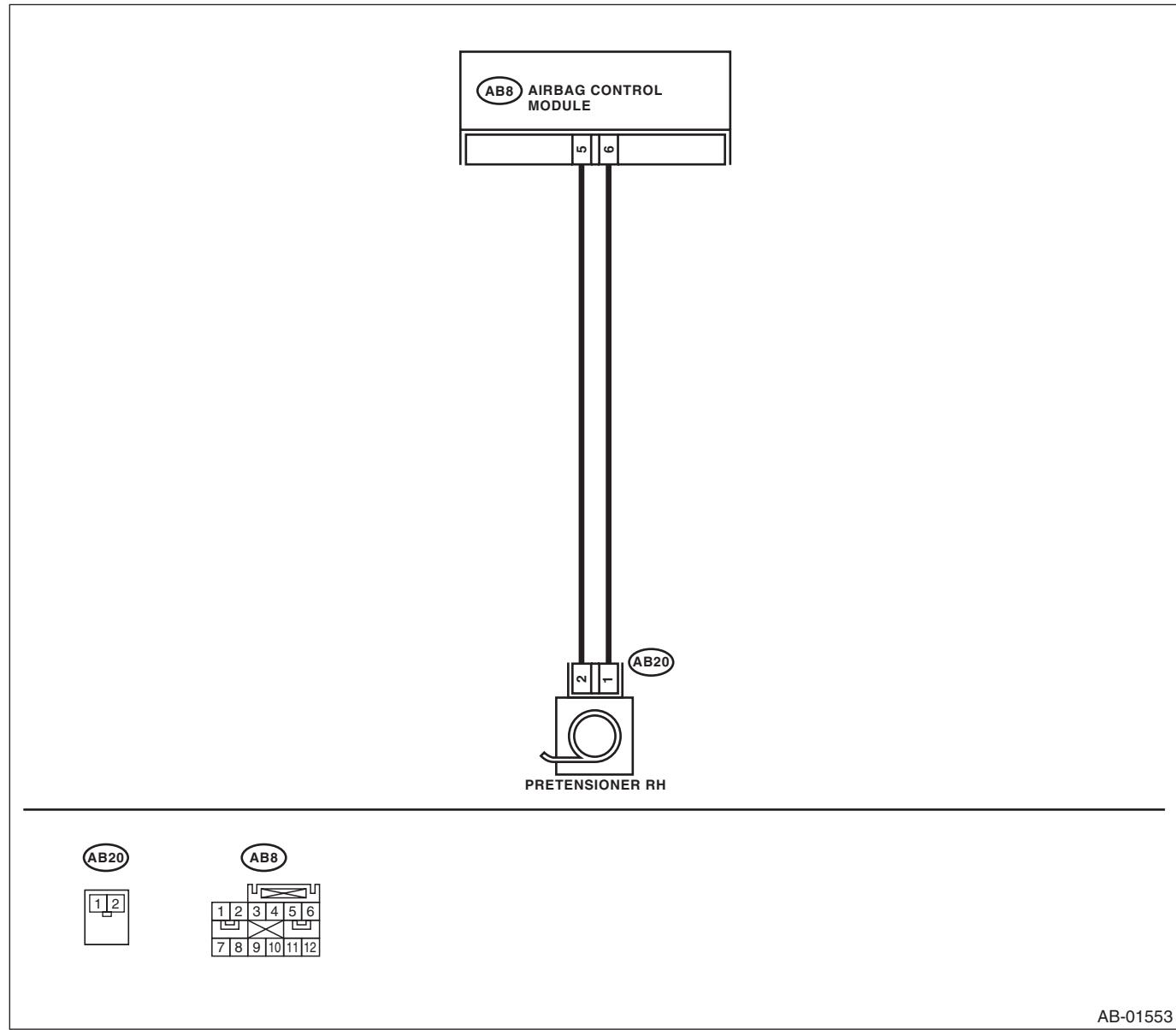
DTC DETECTING CONDITION:

- Seat belt pretensioner (RH) circuit is open, shorted or shorted to ground.
- Airbag control module is faulty.
- Pretensioner is faulty.
- Airbag harness is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the side airbag harness, disconnect the side airbag module connector, and seat belt pretensioner connector for safety.

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT IN CONNECTORS. Check for poor contact of the connectors between the airbag control module and the seat belt pretensioner (RH).	Is there poor contact?	Replace the airbag rear harness (RH) along with the body harness.	Go to step 2.
2 CHECK SEAT BELT PRETENSIONER. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB20) from the seat belt pretensioner (RH). 3) Connect connector (1N) in the test harness N to the connector (AB20). 4) Connect airbag resistor to connector (2N) in the test harness N. 5) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the seat belt pretensioner (RH). <Ref. to SB-10, Front Seat Belt.>	Go to step 3.
3 CHECK SIDE AIRBAG HARNESS (RH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the airbag resistor from test harness. 3) Disconnect connector (AB11) from side airbag module (RH). 4) Disconnect connectors (AB7) and (AB8) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB8). 6) Measure resistance between connector (3R) in the test harness R and connector (2N) in the test harness N. <i>Connector & terminal</i> <i>(3R) No. 17 — (2N) No. 1:</i> <i>(3R) No. 19 — (2N) No. 2:</i>	Is the resistance less than $10\ \Omega$?	Go to step 4.	Replace the side airbag harness along with the body harness.
4 CHECK SIDE AIRBAG HARNESS (RH). Measure resistance between connector (3R) terminals in the test harness R. <i>Connector & terminal</i> <i>(3R) No. 17 — (3R) No. 19:</i>	Is the resistance $1\ M\Omega$ or more?	Go to step 5.	Replace the side airbag harness along with the body harness.
5 CHECK SIDE AIRBAG HARNESS (RH). Measure resistance between the connector (3R) in the test harness R and chassis ground. <i>Connector & terminal</i> <i>(3R) No. 17 — Chassis ground:</i> <i>(3R) No. 19 — Chassis ground:</i>	Is the resistance $1\ M\Omega$ or more?	Go to step 6.	Replace the side airbag harness along with the body harness.
6 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 7.
7 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

AG:DTC 62 BELT PRETENSIONER LH FAILURE

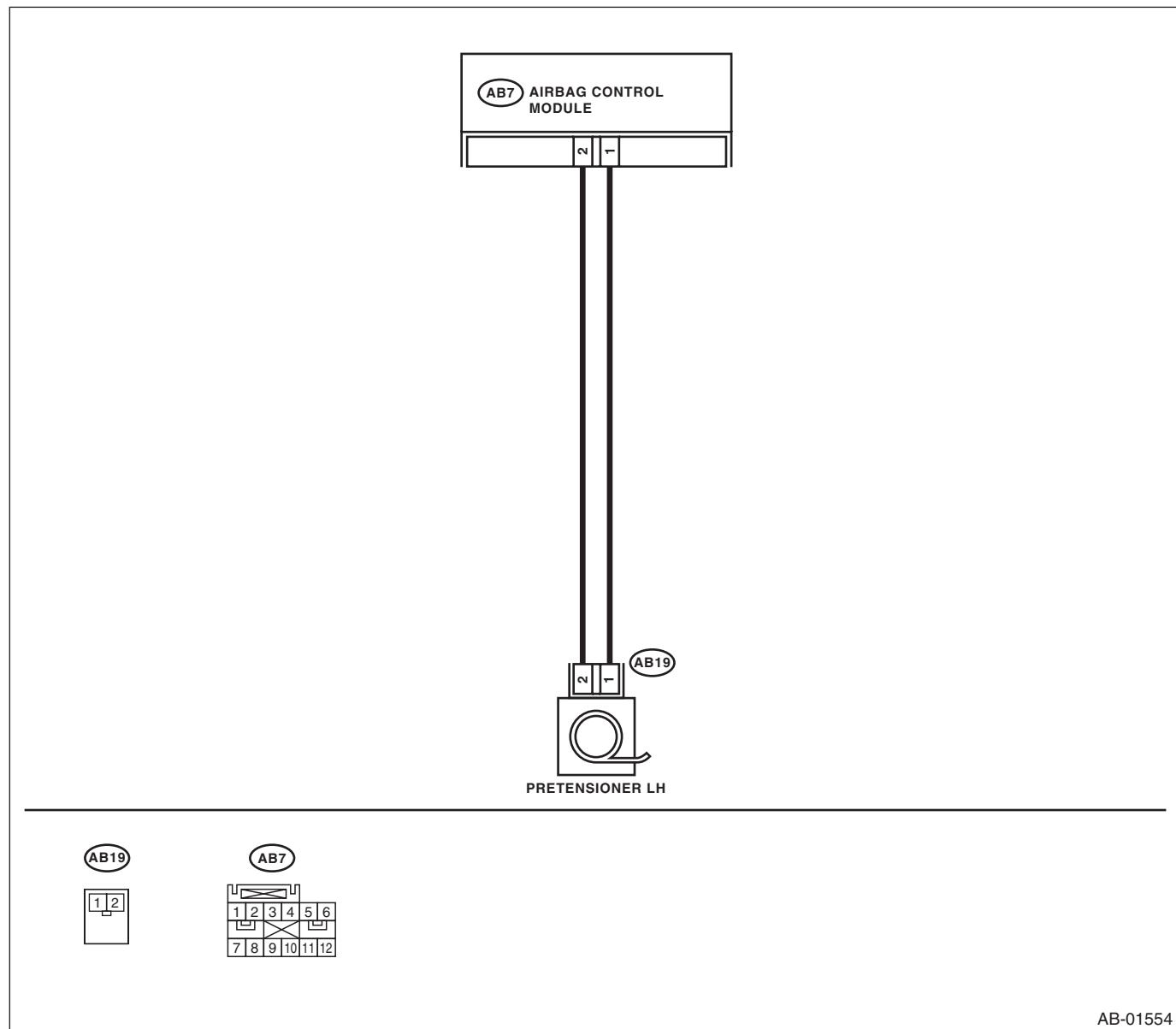
DTC DETECTING CONDITION:

- Seat belt pretensioner (LH) circuit is open, shorted or shorted to ground.
- Airbag control module is faulty.
- Pretensioner is faulty.
- Airbag harness is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the side airbag harness, disconnect the side airbag module connector, and seat belt pretensioner connector for safety.

WIRING DIAGRAM:



AB-01554

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the seat belt pretensioner (LH).	Is there poor contact?	Replace the airbag rear harness (LH) along with the body harness.	Go to step 2.
2 CHECK SEAT BELT PRETENSIONER. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB19) from the seat belt pretensioner (LH). 3) Connect connector (1N) in the test harness N to the connector (AB19). 4) Connect airbag resistor to connector (2N) in the test harness N. 5) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the seat belt pretensioner (LH). <Ref. to SB-10, Front Seat Belt.>	Go to step 3.
3 CHECK SIDE AIRBAG HARNESS (LH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the airbag resistor from test harness. 3) Disconnect connector (AB9) from the side airbag module (LH). 4) Disconnect connectors (AB7) and (AB8) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB7). 6) Measure resistance between connector (3R) in the test harness R and connector (2N) in the test harness N. <i>Connector & terminal</i> <i>(3R) No. 11 — (2N) No. 2:</i> <i>(3R) No. 13 — (2N) No. 1:</i>	Is the resistance less than 10Ω ?	Go to step 4.	Replace the side airbag harness along with the body harness.
4 CHECK SIDE AIRBAG HARNESS (LH). Measure resistance between connector (3R) terminals in the test harness R. <i>Connector & terminal</i> <i>(3R) No. 11 — (3R) No. 13:</i>	Is the resistance $1M\Omega$ or more?	Go to step 5.	Replace the side airbag harness along with the body harness.
5 CHECK SIDE AIRBAG HARNESS (LH). Measure resistance between the connector (3R) in the test harness R and chassis ground. <i>Connector & terminal</i> <i>(3R) No. 11 — Chassis ground:</i> <i>(3R) No. 13 — Chassis ground:</i>	Is the resistance $1M\Omega$ or more?	Go to step 6.	Replace the side airbag harness along with the body harness.
6 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 7.
7 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

AH:DTC 65 BELT PRETENSIONER RH FAILURE

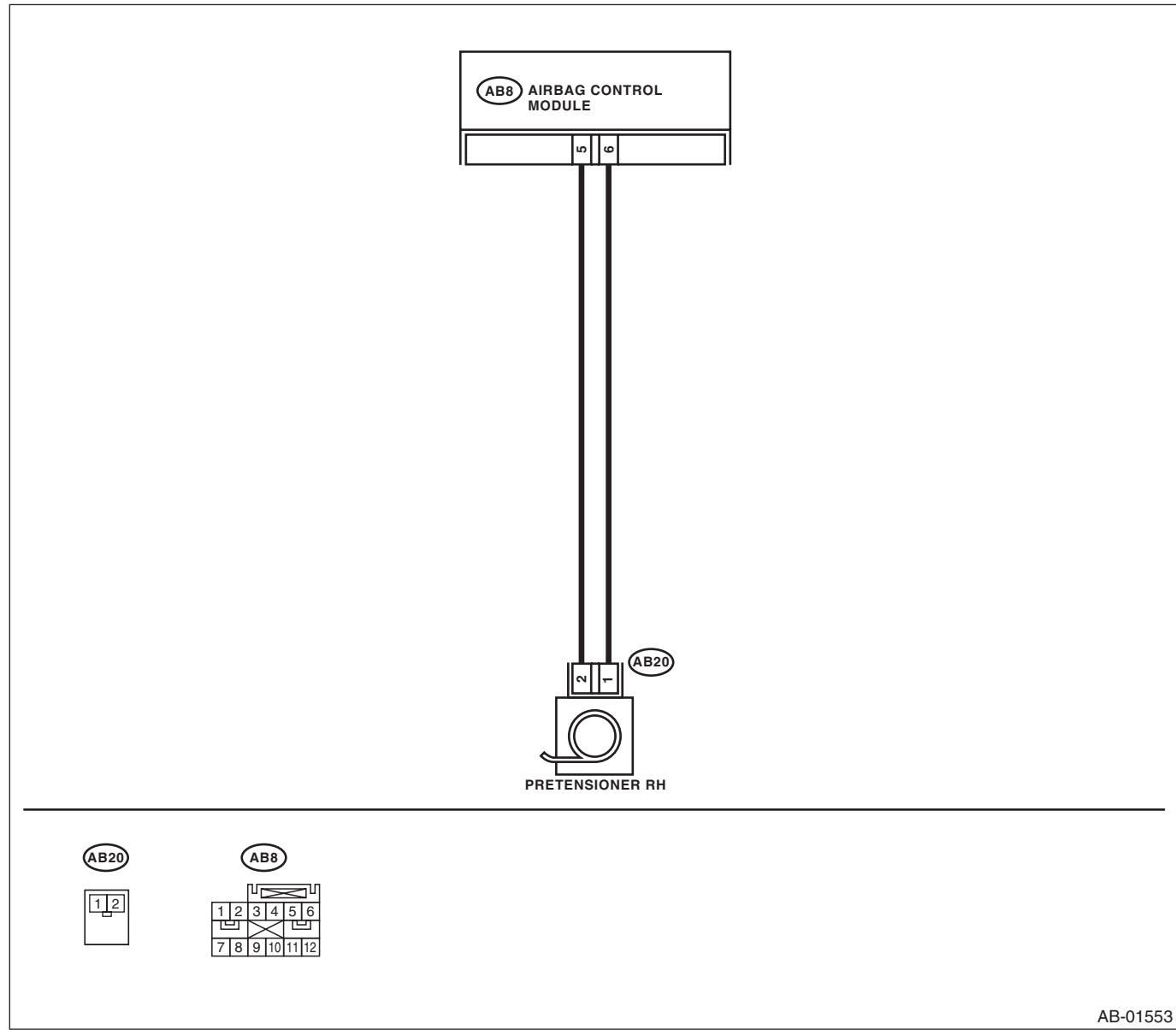
DTC DETECTING CONDITION:

- Seat belt pretensioner (RH) circuit is shorted to power supply.
- Pretensioner is faulty.
- Airbag harness is faulty.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the side airbag harness, disconnect the side airbag module connector, and seat belt pretensioner connector for safety.

WIRING DIAGRAM:



AB-01553

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the seat belt pretensioner (RH).	Is there poor contact?	Replace the airbag rear harness (RH) along with the body harness.	Go to step 2 .
2 CHECK SEAT BELT PRETENSIONER. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB20) from the seat belt pretensioner (RH). 3) Connect connector (1N) in the test harness N to the connector (AB20). 4) Connect airbag resistor to connector (2N) in the test harness N. 5) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the seat belt pretensioner (RH). <Ref. to SB-10, Front Seat Belt.>	Go to step 3 .
3 CHECK SIDE AIRBAG HARNESS (RH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the airbag resistor from test harness. 3) Disconnect connector (AB11) from side airbag module (RH). 4) Disconnect connectors (AB7) and (AB8) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB8). 6) Connect the battery ground terminal and turn the ignition switch to ON. 7) Measure the voltage between connector (3R) in the test harness R and chassis ground. <i>Connector & terminal</i> <i>(3R) No. 17 (+) — Chassis ground (-):</i> <i>(3R) No. 19 (+) — Chassis ground (-):</i>	Is the voltage less than 1 V?	Go to step 4 .	Replace the side airbag harness along with the body harness.
4 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 5 .
5 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

AI: DTC 66 BELT PRETENSIONER LH FAILURE

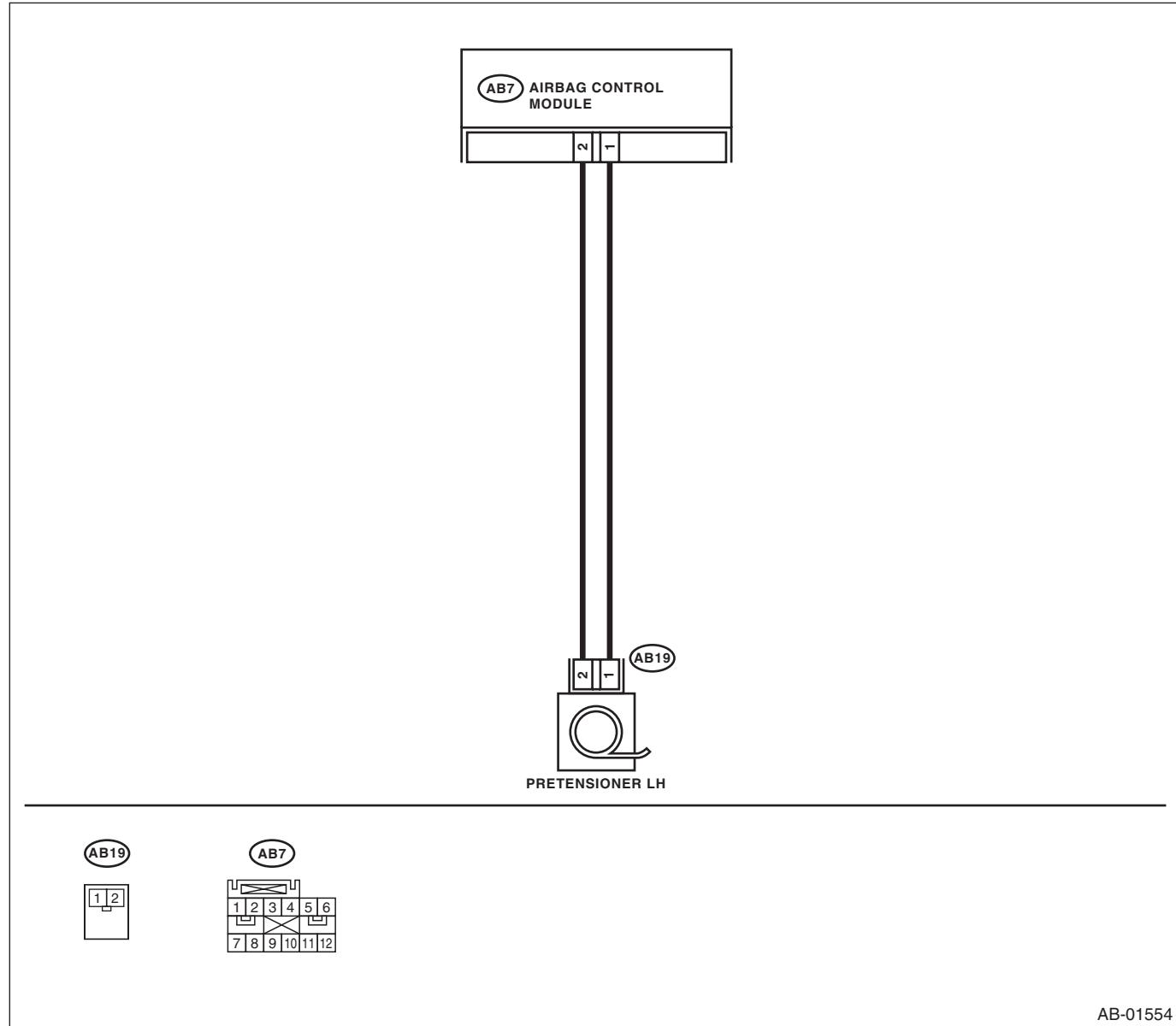
DTC DETECTING CONDITION:

- Seat belt pretensioner (LH) circuit is shorted to power supply.
- Pretensioner is faulty.
- Airbag harness is faulty.
- Airbag control module is faulty.

CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the side airbag harness, disconnect the side airbag module connector, and seat belt pretensioner connector for safety.

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the seat belt pretensioner (LH).	Is there poor contact?	Replace the airbag rear harness (LH) along with the body harness.	Go to step 2 .
2 CHECK SEAT BELT PRETENSIONER. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the connector (AB19) from the seat belt pretensioner (LH). 3) Connect connector (1N) in the test harness N to the connector (AB19). 4) Connect airbag resistor to connector (2N) in the test harness N. 5) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the seat belt pretensioner (LH). <Ref. to SB-10, Front Seat Belt.>	Go to step 3 .
3 CHECK SIDE AIRBAG HARNESS (LH). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the airbag resistor from test harness. 3) Disconnect connector (AB9) from the side airbag module (LH). 4) Disconnect connectors (AB7) and (AB8) from airbag control module. 5) Connect connector (1R) in the test harness R to the connector (AB7). 6) Connect the battery ground terminal and turn the ignition switch to ON. 7) Measure the voltage between connector (3R) in the test harness R and chassis ground. <i>Connector & terminal</i> (3R) No. 11 (+) — <i>Chassis ground (-):</i> (3R) No. 13 (+) — <i>Chassis ground (-):</i>	Is the voltage less than 1 V?	Go to step 4 .	Replace the side airbag harness along with the body harness.
4 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 5 .
5 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

AJ:DTC 71 DRIVER'S AIRBAG FAILURE

DTC DETECTING CONDITION:

- Airbag main harness circuit is open, shorted or shorted to ground.
- Airbag module harness (driver's side) circuit is open, shorted or shorted to ground.
- Roll connector circuit is open, shorted or shorted to ground.
- Driver's airbag module is faulty.
- Airbag control module is faulty.

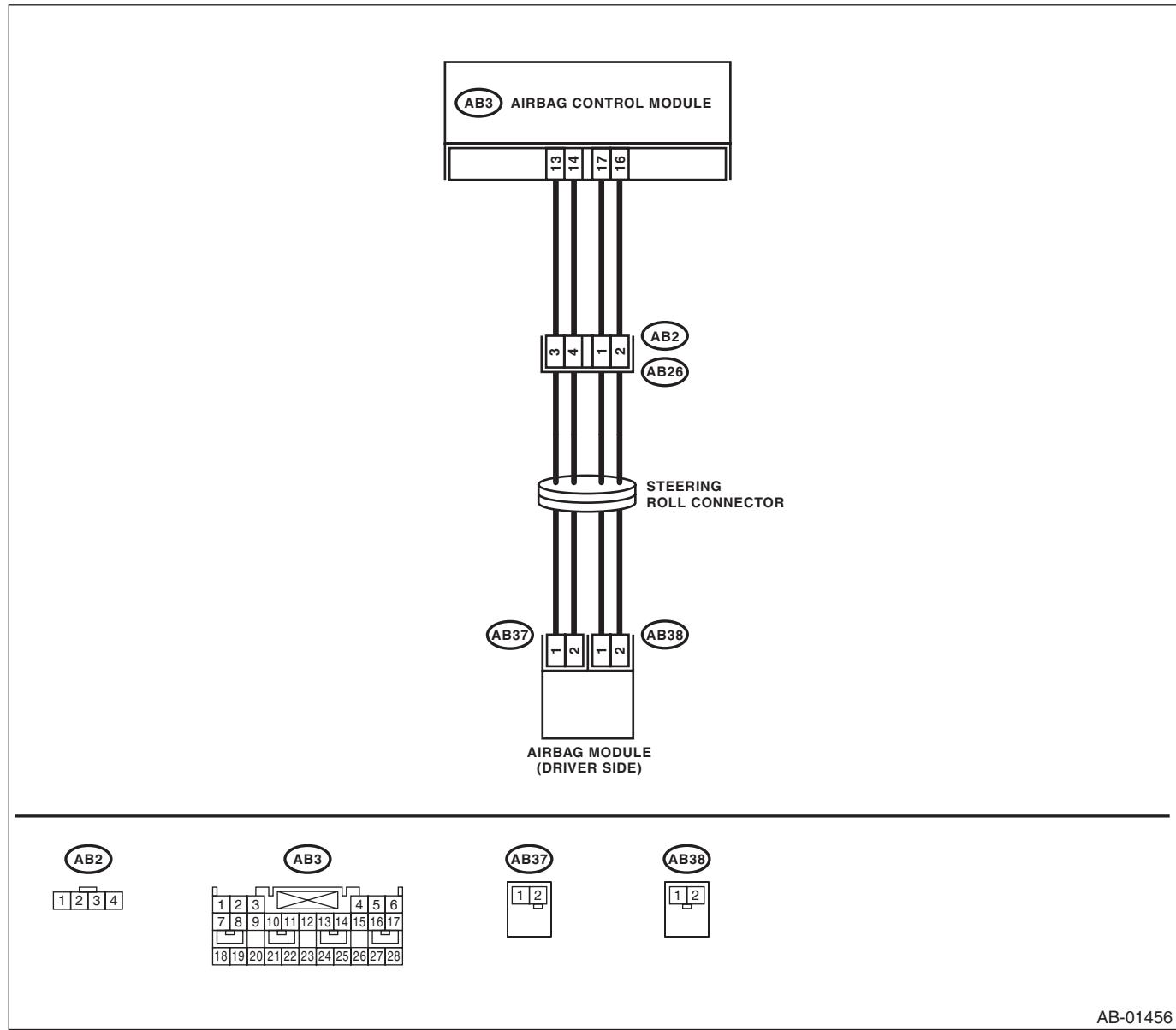
CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When replacing the airbag module, seat belt pretensioner, roll connector, control module and sensor, reconnect each part and check that the warning light operates properly.
- When inspecting the airbag main harness, disconnect the airbag module connectors and seat belt pretensioner of the driver's and passenger's seats for safety.

NOTE:

Prior to starting diagnosis, prepare two airbag resistors (98299PA040).

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the driver's airbag module.	Is there poor contact?	Replace the airbag main harness along with the body harness.	Go to step 2 .
2 CHECK DRIVER'S AIRBAG MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Remove the driver's airbag module. 3) Connect connector (1N) in the test harness N to the connector (AB38). 4) Connect airbag resistor to connector (2N) in the test harness N. 5) Connect the connector (1Q) in the test harness Q to connector (AB37). 6) Connect the airbag resistor to the connector (2Q) in the test harness Q. 7) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the driver's airbag module. <Ref. to AB-14, Driver's Airbag Module.>	Go to step 3 .
3 CHECK ROLL CONNECTOR. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the test harness N from connector (AB38). 3) Disconnect the test harness Q from connector (AB37). 4) Remove the instrument panel lower cover, disconnect the connector (AB26) from (AB2). 5) Connect connector (1P) in the test harness P to connector (AB2). 6) Connect the airbag resistor to the connectors (2P) and (3P) in the test harness P. 7) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the roll connector. <Ref. to AB-20, Roll Connector.>	Go to step 4 .
4 CHECK AIRBAG MAIN HARNESS (DRIVER'S AIRBAG HARNESS). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the airbag resistor from the connectors (2P) and (3P) in the test harness P. 3) Disconnect the connectors (AB27) and (AB4) of the passenger's airbag module. 4) Disconnect the connector (AB3) from airbag control module, and connect the connector (1R) in the test harness R. 5) Measure resistance between connector (2R) in the test harness R and connector (2P) and (3P) in the test harness P. Connector & terminal (2R) No. 2 — (2P) No. 1: (2R) No. 4 — (2P) No. 2: (2R) No. 8 — (3P) No. 3: (2R) No. 12 — (3P) No. 4:	Is the resistance less than $10\ \Omega$?	Go to step 5 .	Replace the airbag main harness along with the body harness.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
5 CHECK AIRBAG MAIN HARNESS (DRIVER'S AIRBAG HARNESS). Measure resistance between terminals of connector (2R) in the test harness R, and between connector (2R) and chassis ground. <i>Connector & terminal</i> (2R) No. 2 — (2P) No. 4: (2R) No. 4 — <i>Chassis ground</i> : (2R) No. 2 — <i>Chassis ground</i> : (2R) No. 8 — (2P) No. 12: (2R) No. 8 — <i>Chassis ground</i> : (2R) No. 12 — <i>Chassis ground</i> :	Is the resistance 1 MΩ or more?	Go to step 6 .	Replace the airbag main harness along with the body harness.
6 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 7 .
7 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

AK:DTC 72 PASSENGER'S AIRBAG FAILURE

DTC DETECTING CONDITION:

- Airbag harness circuit is open, shorted or shorted to ground.
- Airbag module (passenger's side) circuit is open, shorted or shorted to ground.
- Passenger's airbag module is faulty.
- Airbag control module is faulty.

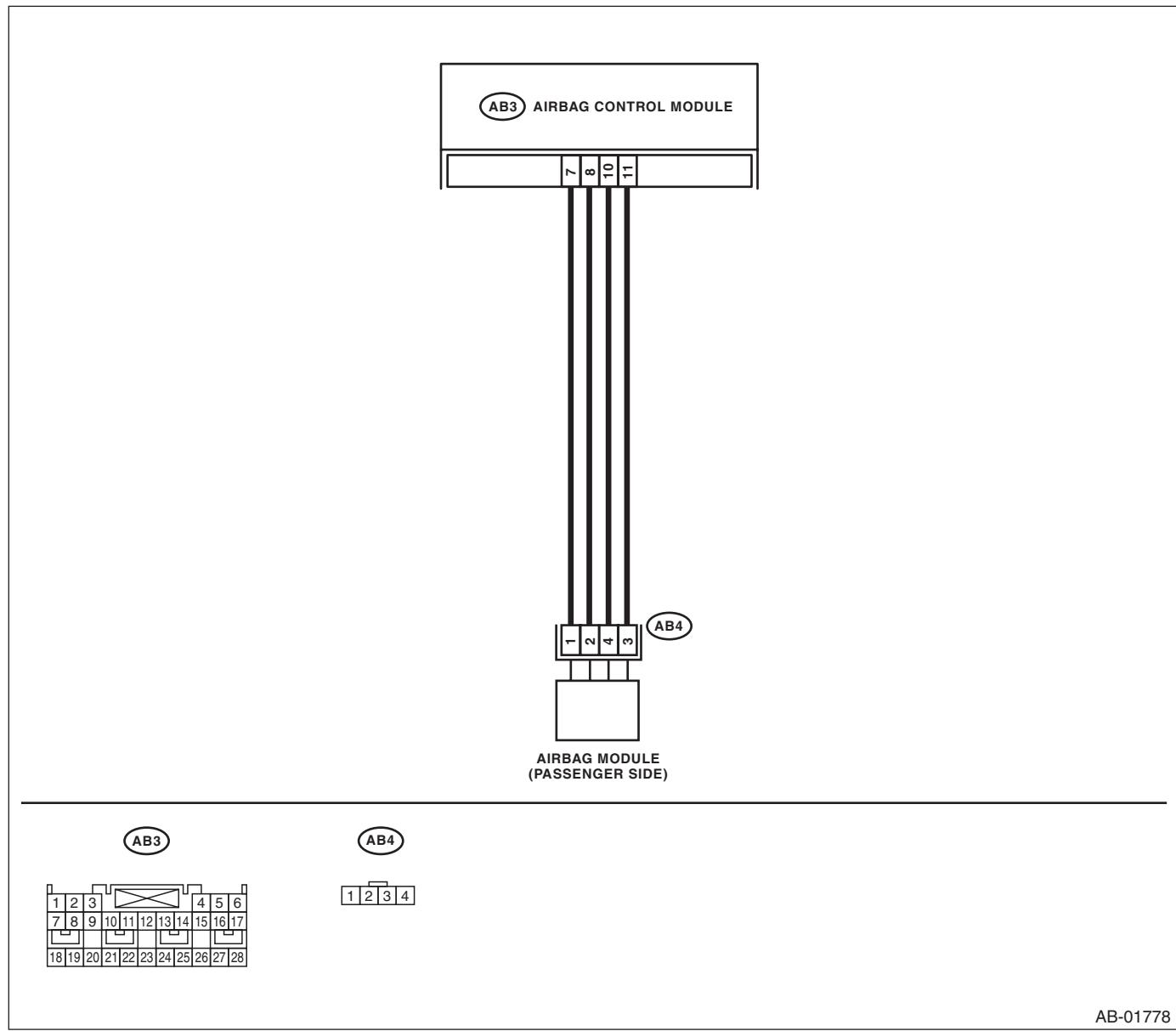
CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the airbag modules of the driver's and the passenger's seats for safety.

NOTE:

Before diagnosing, prepare the two airbag resistors (98299PA040).

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the passenger's airbag module.	Is there poor contact?	Replace the airbag main harness along with the body harness.	Go to step 2.
2 CHECK PASSENGER'S AIRBAG MODULE. 1) Turn the ignition switch to OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Remove the glove box. 3) Disconnect the connectors (AB4) of the passenger's airbag module. 4) Connect connector (1P) in the test harness P to connector (AB4). 5) Connect the two airbag resistors to the connectors (2P) and (3P) in the test harness P. 6) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the passenger's airbag module. <Ref. to AB-15, Passenger's Airbag Module.>	Go to step 3.
3 CHECK AIRBAG MAIN HARNESS. 1) Turn the ignition switch to OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the two airbag resistors to the connectors (2P) and (3P) in the test harness P. 3) Remove the lower cover, and disconnect the connector (AB2) from (AB26). 4) Disconnect the connector (AB3) from the airbag control module, and connect the connector (1R) in the test harness R. 5) Measure resistance between connector (2R) in the test harness R and connector (3P) in the test harness P. Connector & terminal (2R) No. 3 — (2P) No. 1: (2R) No. 5 — (2P) No. 2: (2R) No. 9 — (2P) No. 3: (2R) No. 13 — (2P) No. 4:	Is the resistance less than 10Ω ?	Go to step 4.	Replace the airbag main harness along with the body harness.
4 CHECK AIRBAG MAIN HARNESS. Measure resistance between the connectors (2R) of the test harness R. Connector & terminal (2R) No. 3 — (2R) No. 5: (2R) No. 3 — Chassis ground: (2R) No. 5 — Chassis ground: (2R) No. 9 — (2R) No. 13: (2R) No. 9 — Chassis ground: (2R) No. 13 — Chassis ground:	Is the resistance $1M\Omega$ or more?	Go to step 5.	Replace the airbag main harness along with the body harness.
5 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 6.
6 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

AL:DTC 75 DRIVER'S AIRBAG FAILURE

DTC DETECTING CONDITION:

- Airbag main harness circuit (driver's side) is shorted to power supply.
- Airbag module harness circuit (driver's side) is shorted to power supply.
- Roll connector is shorted to power supply.
- Driver's airbag module is faulty.
- Airbag control module is faulty.

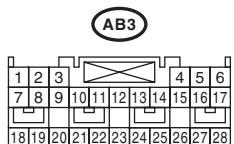
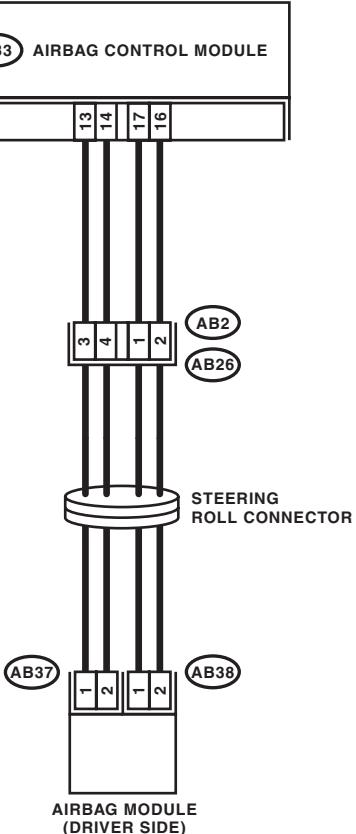
CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When replacing the airbag module, seat belt pretensioner, roll connector, control module and sensor, reconnect each part and check that the warning light operates properly.
- When inspecting the airbag main harness, disconnect the airbag module connectors and seat belt pretensioner of the driver's and passenger's seats for safety.

NOTE:

Prior to starting diagnosis, prepare two airbag resistors (98299PA040).

WIRING DIAGRAM:



Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the driver's airbag module.	Is there poor contact?	Replace the airbag main harness along with the body harness.	Go to step 2.
2 CHECK DRIVER'S AIRBAG MODULE. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Remove the driver's airbag module. 3) Connect the connector (AB38) to the connector (1N) in the test harness N. 4) Connect airbag resistor to connector (2N) in the test harness N. 5) Connect the connector (1Q) in the test harness Q to connector (AB37). 6) Connect the airbag resistor to the connector (2Q) in the test harness Q. 7) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the driver's airbag module. <Ref. to AB-14, Driver's Airbag Module.>	Go to step 3.
3 CHECK ROLL CONNECTOR. 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the test harness N from connector (AB38). 3) Disconnect the test harness Q from connector (AB37). 4) Remove the instrument panel lower cover, disconnect the connector (AB26) from (AB2). 5) Connect connector (1P) in the test harness P to connector (AB2). 6) Connect the airbag resistor to the connectors (2P) and (3P) in the test harness P. 7) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the roll connector. <Ref. to AB-20, Roll Connector.>	Go to step 4.
4 CHECK AIRBAG MAIN HARNESS (DRIVER'S AIRBAG HARNESS). 1) Turn ignition switch OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the airbag resistor from the connectors (2P) and (3P) in the test harness P. 3) Disconnect the connectors (AB27) and (AB4) of the passenger's airbag module. 4) Disconnect the connector (AB3) from airbag control module, and connect the connector (1R) in the test harness R. 5) Connect the battery ground terminal and turn the ignition switch to ON. (engine OFF) 6) Measure the voltage between connector (2R) in the test harness R and chassis ground. Connector & terminal (2R) No. 4 (+) — Chassis ground (-): (2R) No. 2 (+) — Chassis ground (-): (2R) No. 8 (+) — Chassis ground (-): (2R) No. 12 (+) — Chassis ground (-):	Is the voltage less than 1 V?	Go to step 5.	Replace the airbag main harness along with the body harness.

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
5 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 6 .
6 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.

AM:DTC 76 PASSENGER'S AIRBAG FAILURE

DTC DETECTING CONDITION:

- Airbag main harness (Passenger's side) is shorted to power supply.
- Airbag module harness (passenger's side) is shorted to power supply.
- Passenger's airbag module is faulty.
- Airbag control module is faulty.

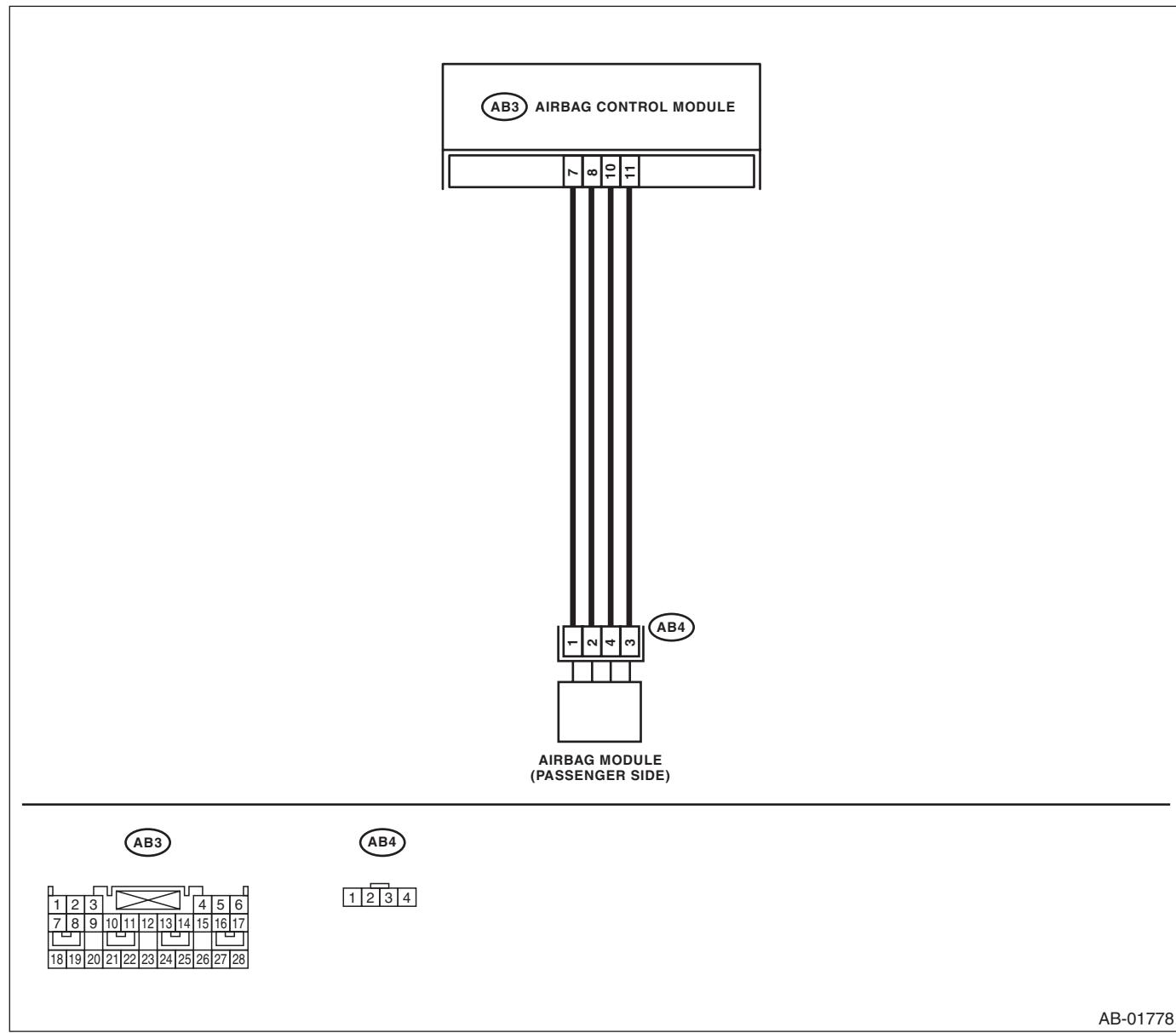
CAUTION:

- Before diagnosing the airbag system, be sure to turn the ignition switch to OFF, disconnect the ground terminal from battery, and wait more than 20 seconds before starting to work.
- When inspecting the airbag main harness, disconnect the airbag modules of the driver's and the passenger's seats for safety.

NOTE:

Before diagnosing, prepare the two airbag resistors (98299PA040).

WIRING DIAGRAM:



AB-01778

Diagnostic Chart with Trouble Code

AIRBAG SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the airbag control module and the passenger's airbag module.	Is there poor contact?	Replace the airbag main harness along with the body harness.	Go to step 2 .
2 CHECK PASSENGER'S AIRBAG MODULE. 1) Turn the ignition switch to OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Remove the glove box. 3) Disconnect connector (AB4) from the passenger's airbag module (LH). 4) Connect connector (1P) in the test harness P to connector (AB4). 5) Connect the two airbag resistors to the connectors (2P) and (3P) in the test harness P. 6) Connect the battery ground terminal and turn the ignition switch to ON.	Does the airbag warning light illuminate for 6 seconds then turn off?	Replace the passenger's airbag module. <Ref. to AB-15, Passenger's Airbag Module.>	Go to step 3 .
3 CHECK AIRBAG MAIN HARNESS. 1) Turn the ignition switch to OFF, disconnect the battery ground cable, and wait more than 20 seconds. 2) Disconnect the two airbag resistors to the connectors (2P) and (3P) in the test harness P. 3) Remove the lower cover, and disconnect the connector (AB2) from (AB26). 4) Disconnect the connector (AB3) from the airbag control module, and connect the connector (1R) in the test harness R. 5) Connect the battery ground terminal and turn the ignition switch to ON. 6) Measure the voltage between connector (2R) in the test harness R and chassis ground. <i>Connector & terminal</i> (2R) No. 3 (+) — Chassis ground (-); (2R) No. 5 (+) — Chassis ground (-); (2R) No. 9 (+) — Chassis ground (-); (2R) No. 13 (+) — Chassis ground (-);	Is the voltage less than 1 V?	Go to step 4 .	Replace the airbag main harness along with the body harness.
4 CHECK AIRBAG CONTROL MODULE. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the airbag control module. <Ref. to AB-18, Airbag Control Module.>	Go to step 5 .
5 CHECK ANY OTHER DTC ON DISPLAY.	Is any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to AB(diag)-40, List of Diagnostic Trouble Code (DTC).>	Finish the diagnosis.