

General Description

OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

3. General Description

A: CAUTION

1) If the seat cushion cover is removed or replaced, make sure to perform passenger detection system adjustment after installing the seat to the vehicle. <Ref. to OD(diag)-17, SYSTEM CALIBRATION (REZEROING), OPERATION, Subaru Select Monitor.>

Failure to do so may cause improper operation of the passenger detection system.

2) The passenger detection system (passenger seat only) control unit and the passenger detection sensor are fixed to the seat cushion frame. Never remove the passenger detection control unit or the pressure sensor from the seat cushion frame.

3) Do not replace the seat cushion pad by itself. Always replace the seat cushion pad and frame assembly as a set. The seat cushion pad and cushion frame are adjusted as a set at the time of manufacture. If cushion pads and cushion frames are combined from those of other vehicles or other sets, the passenger detection system may not operate properly.

4) If the seat cushion cover is removed, make sure to replace the hang wire on the seat cushion side with a new wire.

5) Never connect the battery in reverse polarity.

Occupant detection system may be destroyed instantly.

6) Do not disconnect the battery terminals while the engine is running.

A large counter electromotive force will be generated in the generator, and this voltage may damage electronic parts such as occupant detection control module.

7) Before disconnecting the connectors of each sensor and control module, be sure to turn the ignition switch to OFF and wait for 20 seconds or more.

Occupant detection control module may be damaged.

8) All passenger detection system parts are precision components. Do not drop them.

CAUTION:

- The airbag system wiring harnesses and connectors are all yellow in color. Do not use the electrical test equipment on these circuits.
- Be careful not to damage the airbag system wiring harness when servicing the occupant detection system.
- Refer to “Airbag System” when repairing the occupant detection system. <Ref. to AB(diag)-4, CAUTION, General Description.>

B: INSPECTION

Measure the battery voltage and check electrolyte.

Standard voltage: 12 V

Specific gravity: Above 1.260

Fluid level: Between the upper level and lower level

C: PREPARATION TOOL

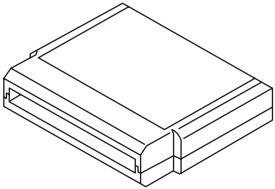

CAUTION:

To measure the voltage and resistance of airbag system and occupant detection system components, be sure to use the specified test harness.

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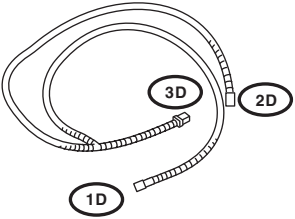
1. SPECIAL TOOL

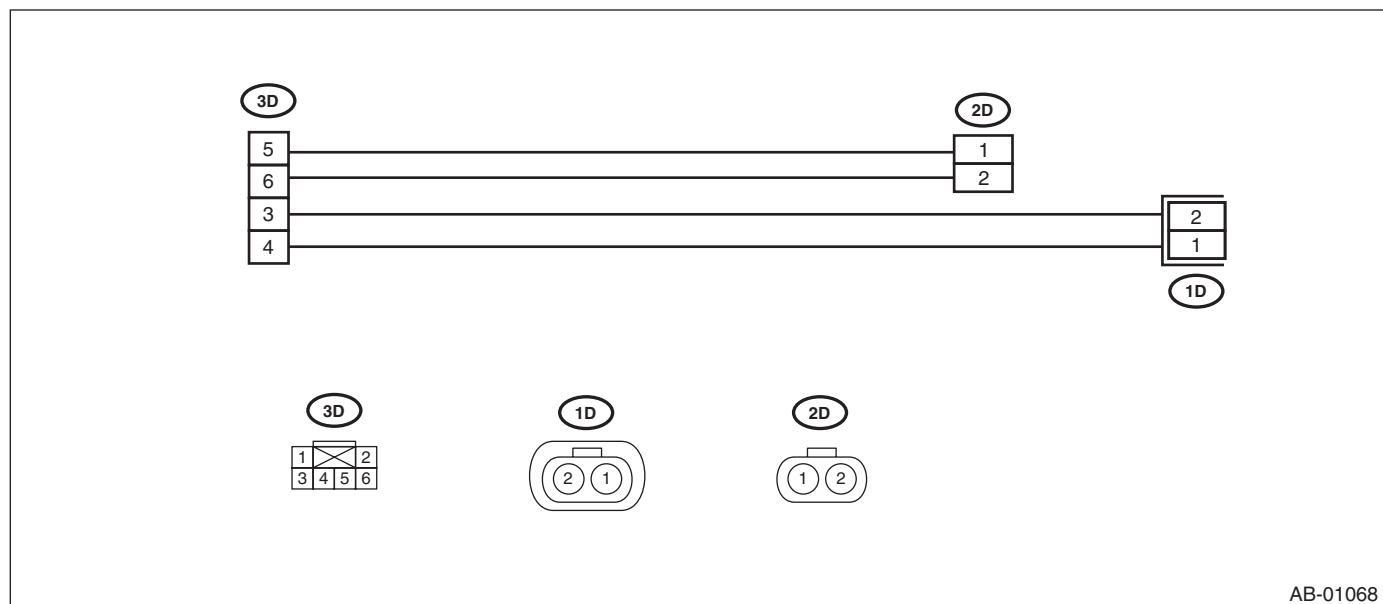
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST18482AA010	18482AA010	CARTRIDGE	Troubleshooting for the electrical system.
 ST22771AA030	22771AA030	SUBARU SELECT MONITOR KIT	Troubleshooting for the electrical system.

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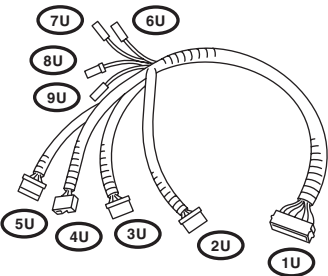
OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

• TEST HARNESS D

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p style="text-align: center;">ST98299AG060</p>	98299AG060	TEST HARNESS D	Used when measuring the voltage and resistance of the front seat belt buckle switch.

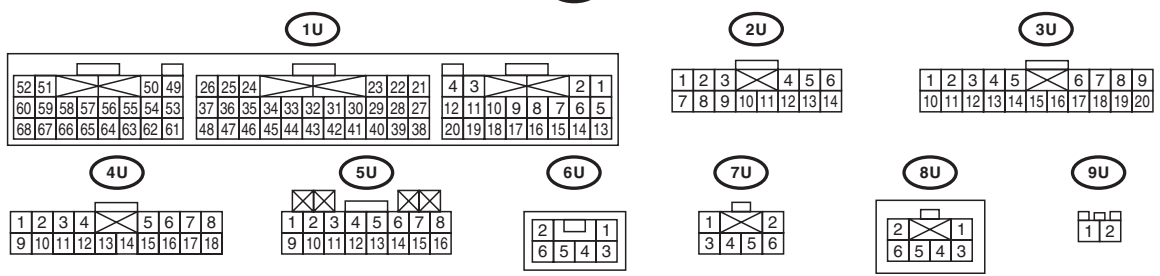
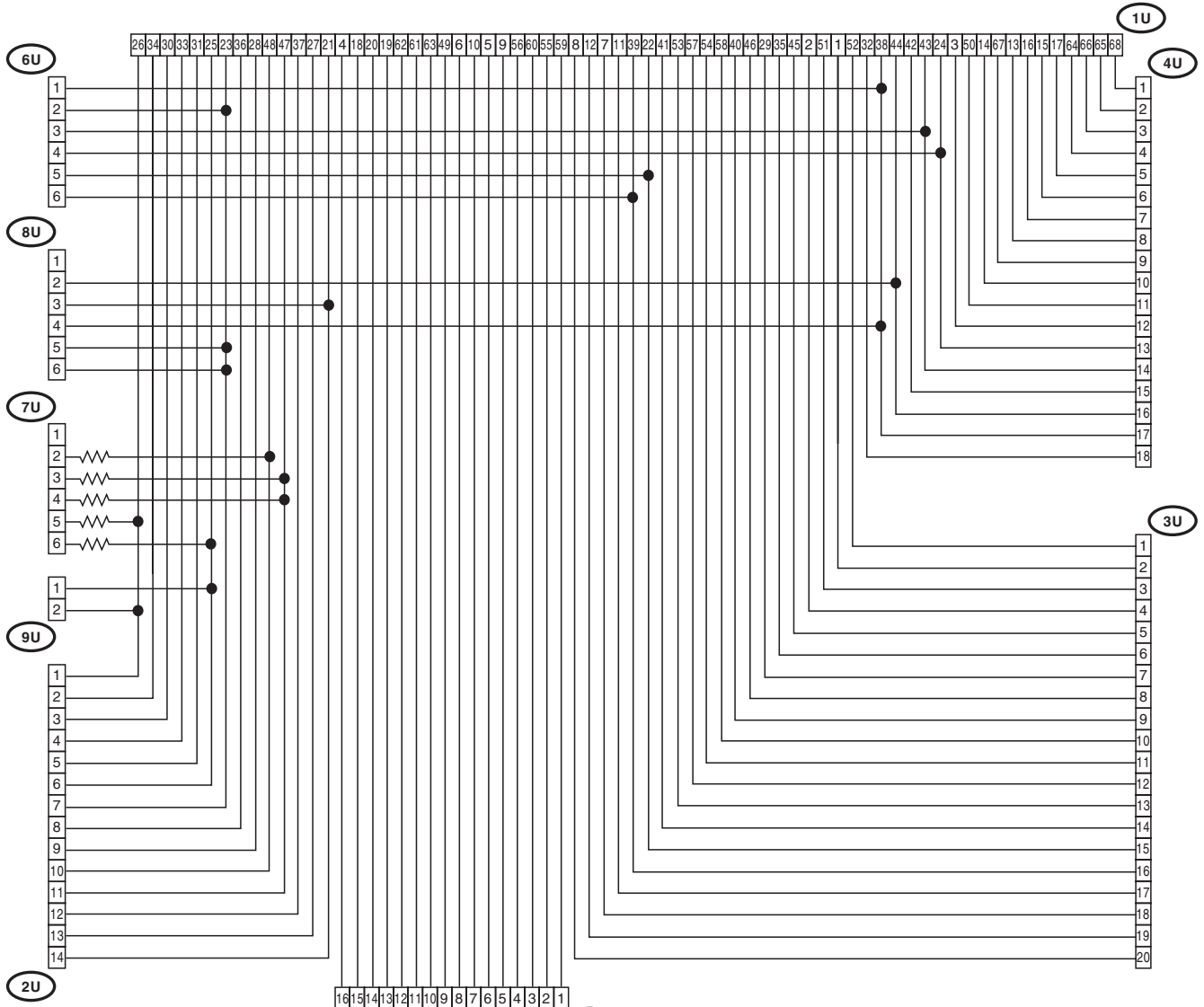


• TEST HARNESS U

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p style="text-align: center;">ST98299AG000</p>	98299AG000	TEST HARNESS U	Used when measuring voltage and resistance of airbag control module.

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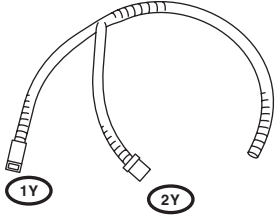


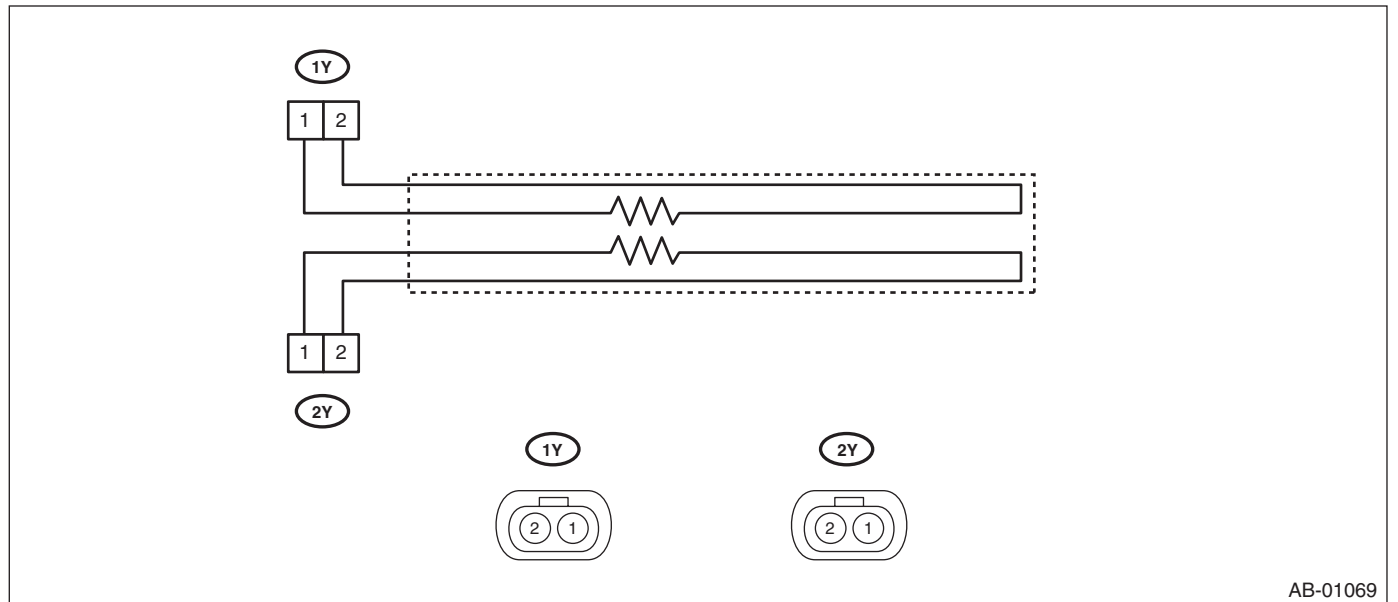
AB-00930

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OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

- TEST HARNESS Y

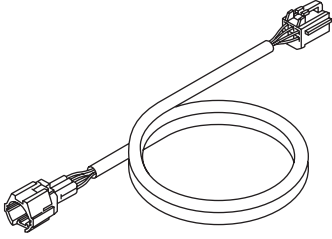
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="321 556 467 579">ST98299AG040</p>	28299AG040	TEST HARNESS Y	Used for diagnosing the seat belt buckle switch.

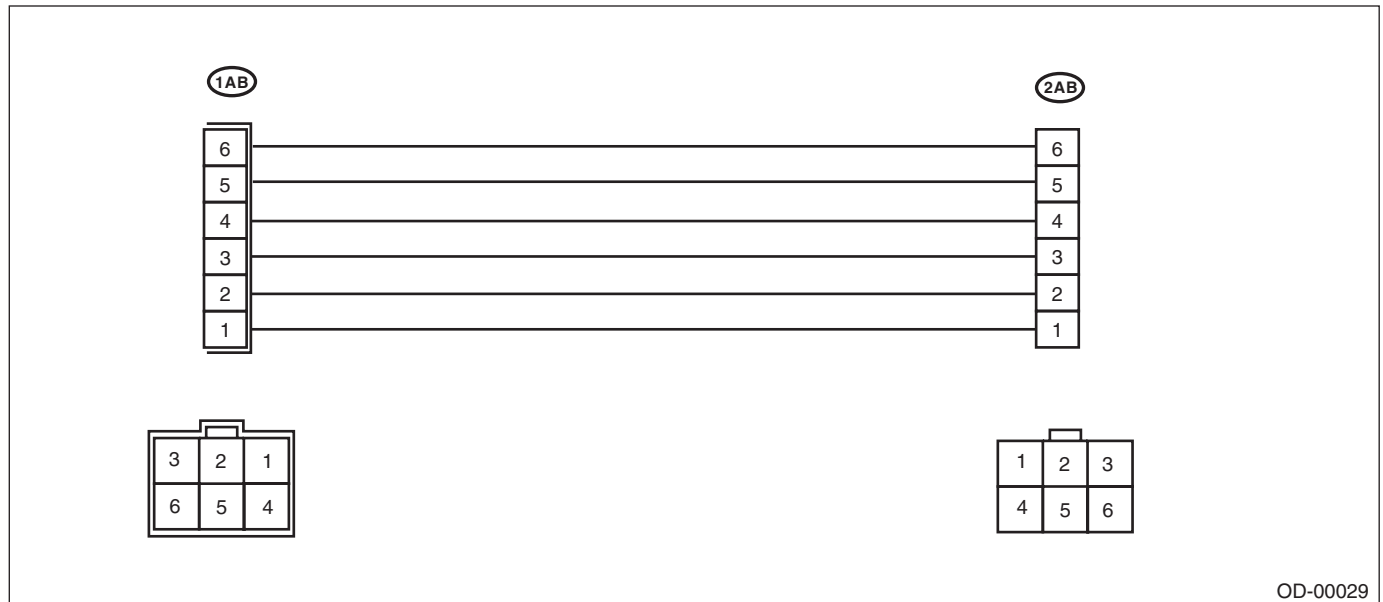


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OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

- TEST HARNESS AB

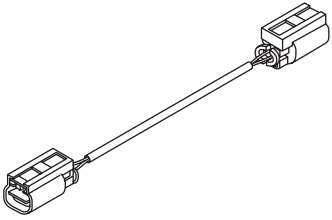
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299XA000</p>	98299XA000	TEST HARNESS AB	Used when measuring voltage and resistance of occupant detection system.

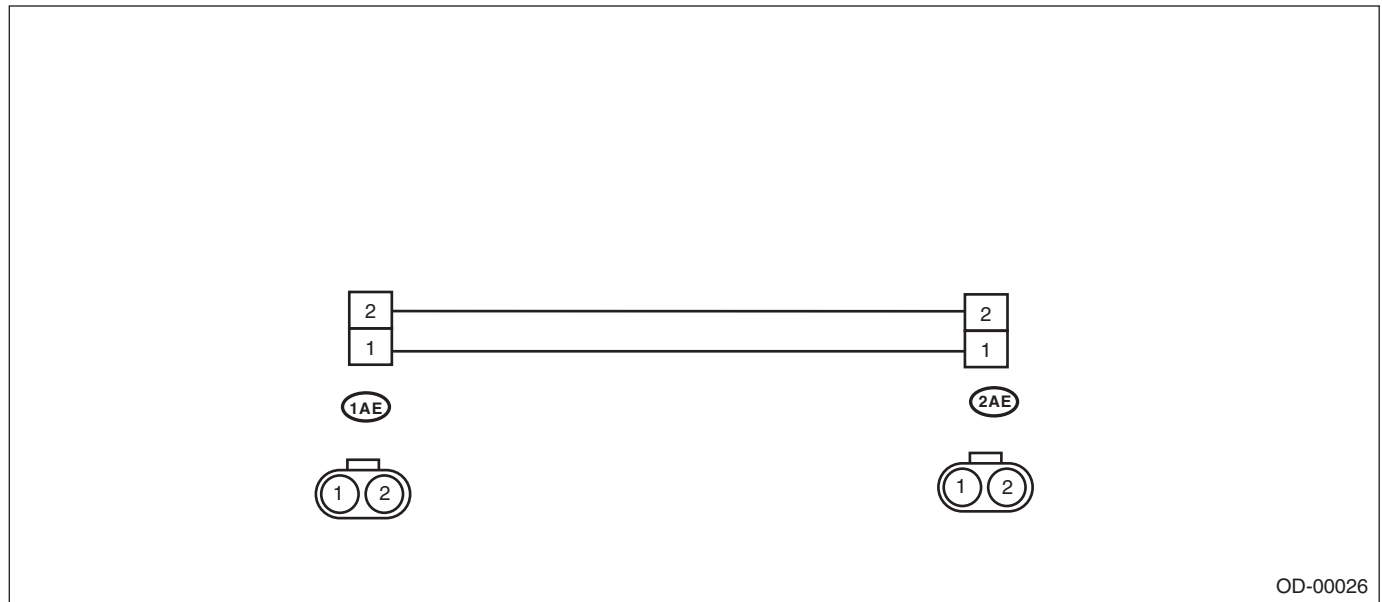


General Description

OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

- TEST HARNESS AE

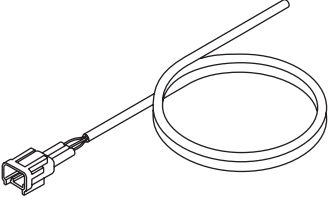
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="326 556 467 579">ST98299XA030</p>	98299XA030	TEST HARNESS AE	TEST HARNESS Y ADAPTER HARNESS Used for diagnosing the seat belt buckle switch.

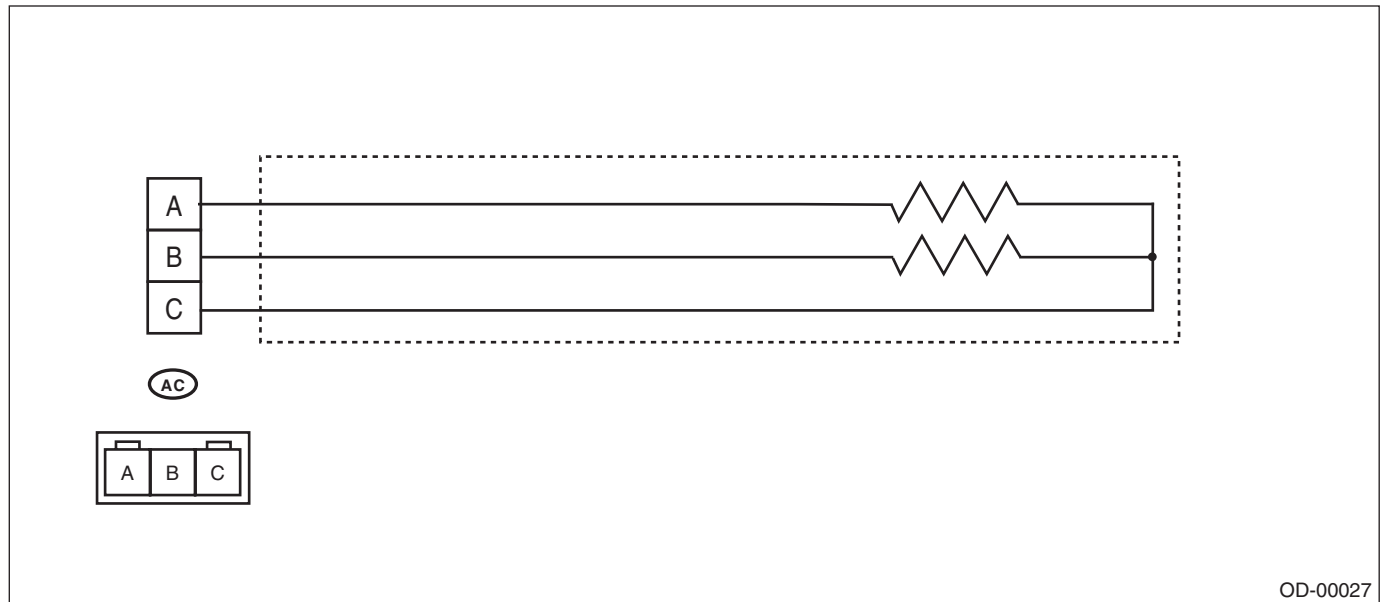


General Description

OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

- TEST HARNESS AC

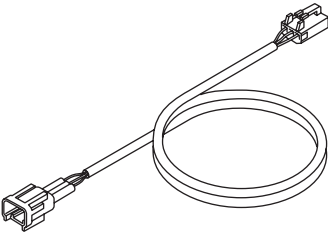
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST98299XA010	98299XA010	TEST HARNESS AC	Used for diagnosing the seat belt tension sensor.

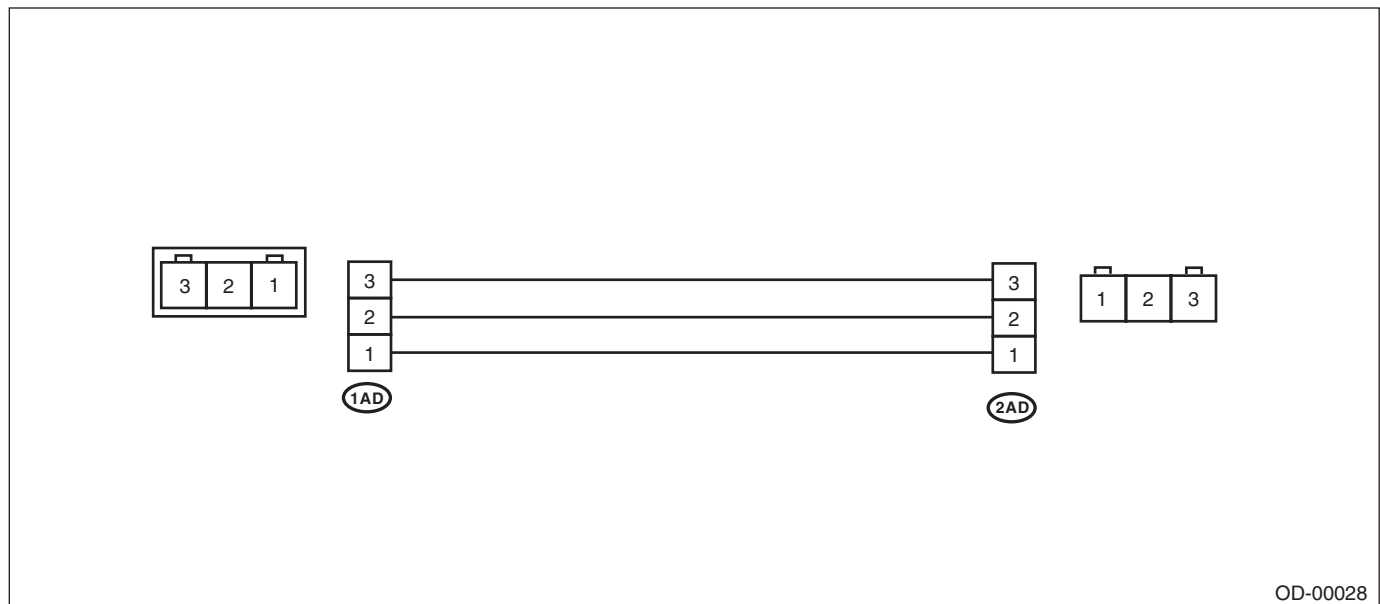


General Description

OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

• TEST HARNESS AD

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p style="text-align: center;">ST98299XA020</p>	98299XA020	TEST HARNESS AD	Used when measuring voltage and resistance of the seat belt tension sensor.



2. GENERAL TOOL

TOOL NAME	REMARKS
Circuit tester	Used for measuring resistance, voltage and current.