

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:

- Do not use electrical test equipment on the airbag system wiring harness and connector circuit.
- 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:

1.260 or more

Fluid level:

Between the upper level and lower level

General Description

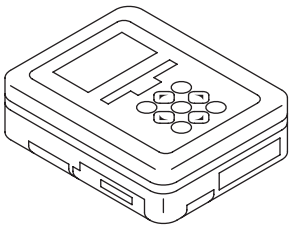
OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

C: PREPARATION TOOL

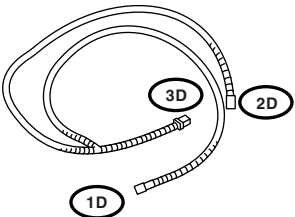
CAUTION:

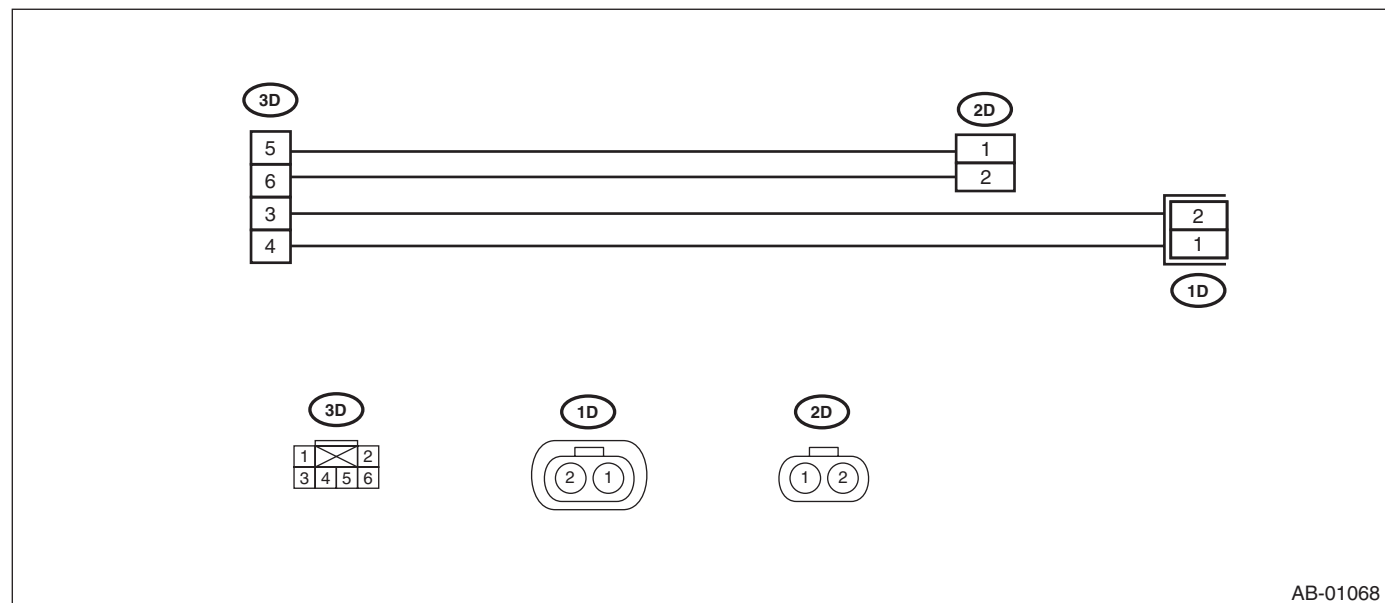
To measure the voltage and resistance of airbag system and occupant detection system components, be sure to use the specified test harness.

1. SPECIAL TOOL

| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|-------------|---------------------------|---|
|  ST1B020XU0 | 1B020XU0 | SUBARU SELECT MONITOR KIT | Used for troubleshooting the electrical system. |

• TEST HARNESS D

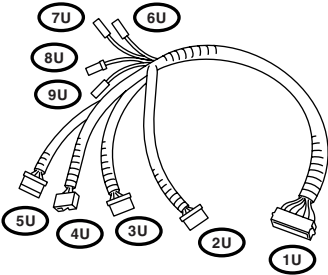
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|--|-------------|----------------|--|
|  ST98299AG060 | 98299AG060 | TEST HARNESS D | Used when measuring voltage and resistance of the front seat belt buckle switch. |



General Description

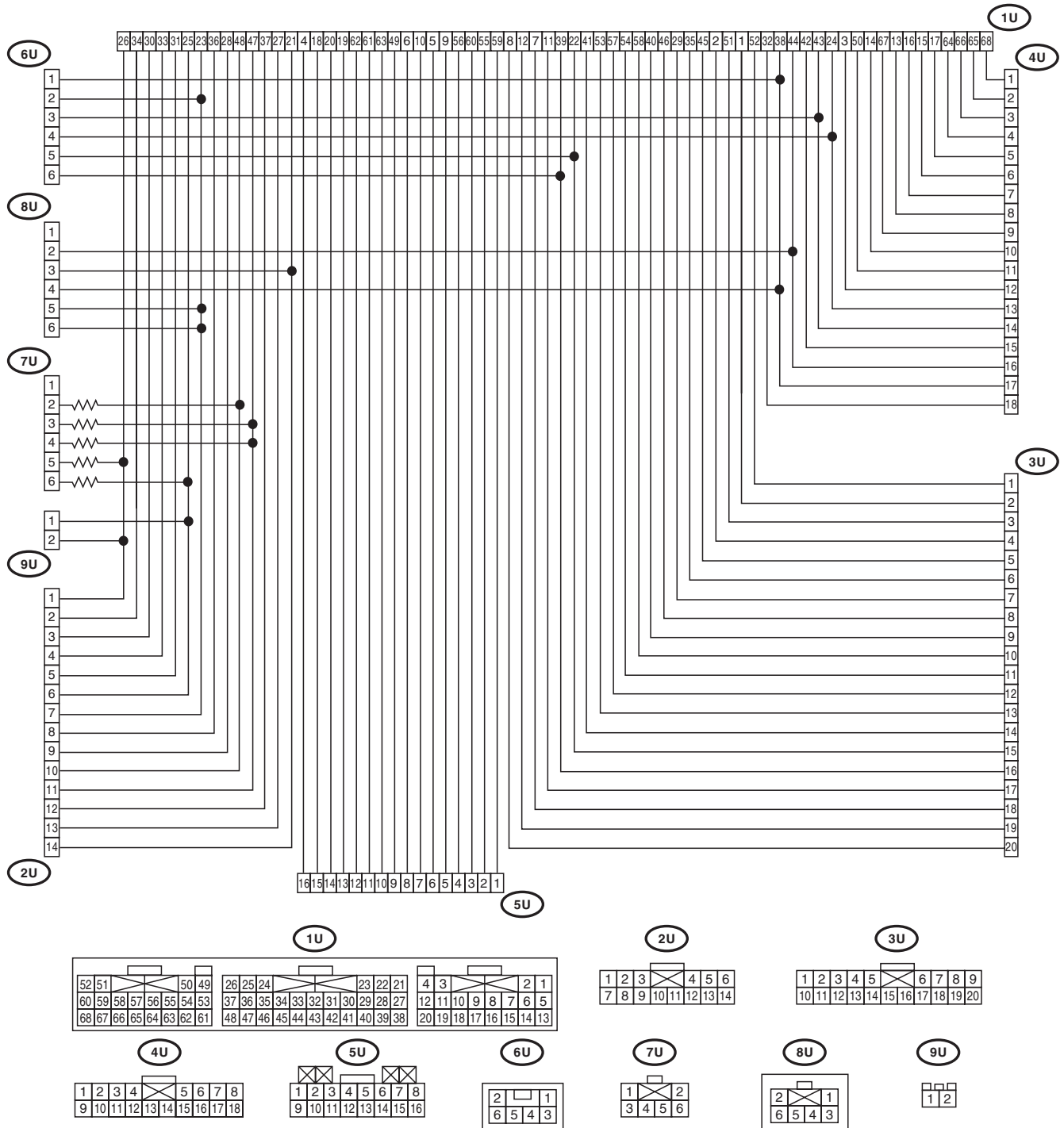
OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

- TEST HARNESS U

| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|-------------|----------------|--|
|  <p>ST98299AG000</p> | 98299AG000 | TEST HARNESS U | Used when measuring voltage and resistance of airbag control module. |

General Description

OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

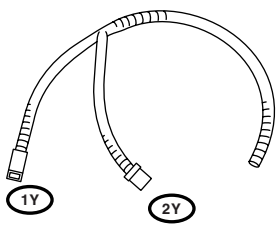


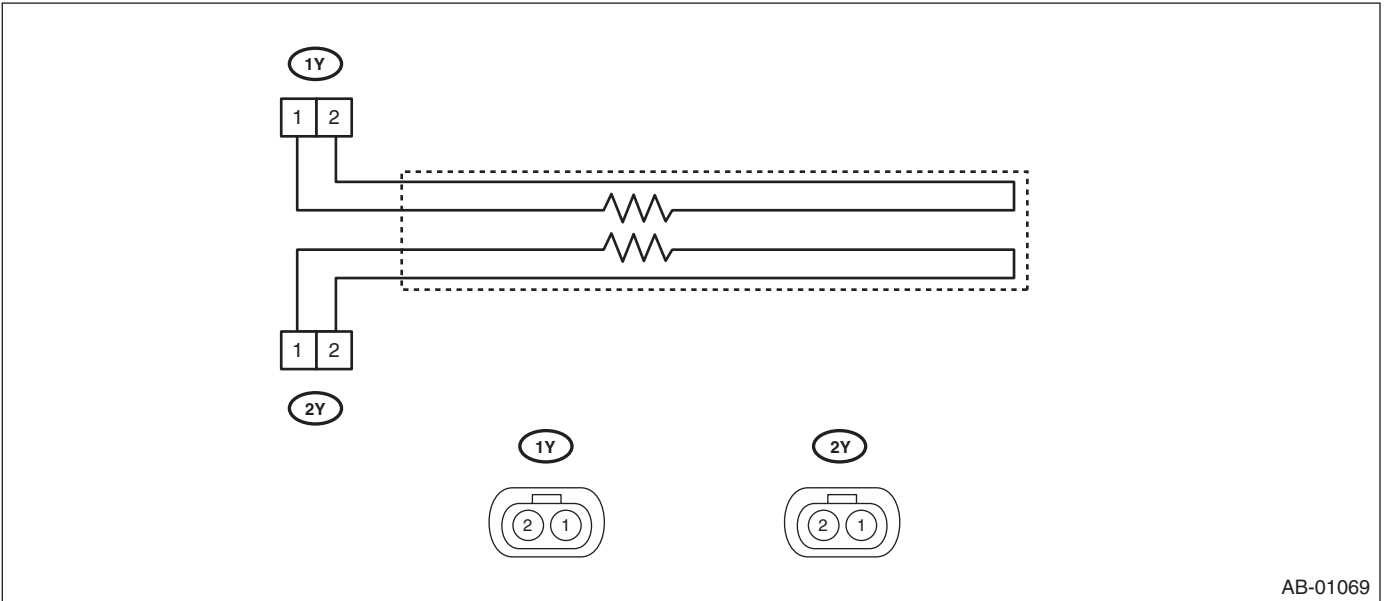
AB-00930

General Description

OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

- TEST HARNESS Y

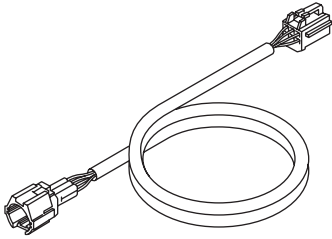
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|-------------|----------------|--|
|  <p>ST98299AG040</p> | 28299AG040 | TEST HARNESS Y | Used for diagnosing seat belt buckle switch. |

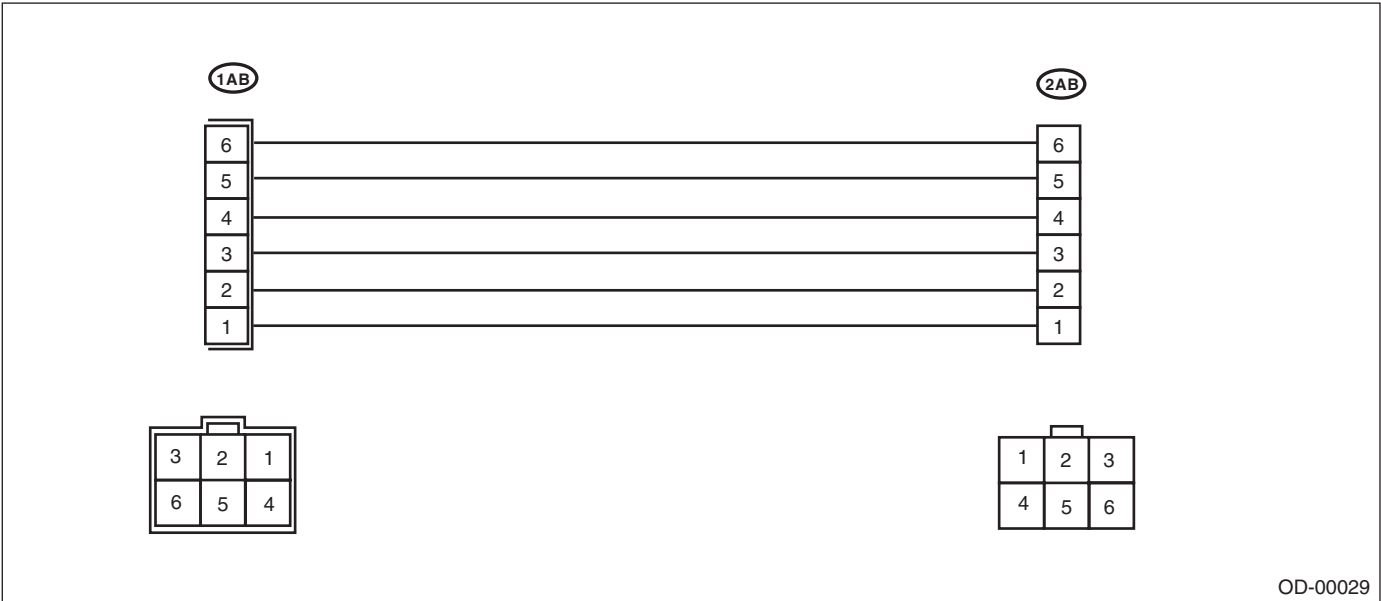


General Description

OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

• TEST HARNESS AB

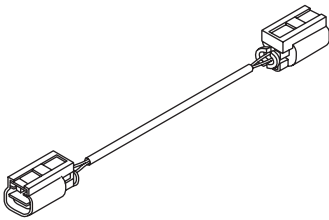
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|-------------|--------------------|---|
|  ST98299XA000 | 98299XA000 | TEST HARNESS AB | Used when measuring voltage and resistance of occupant detection system. |

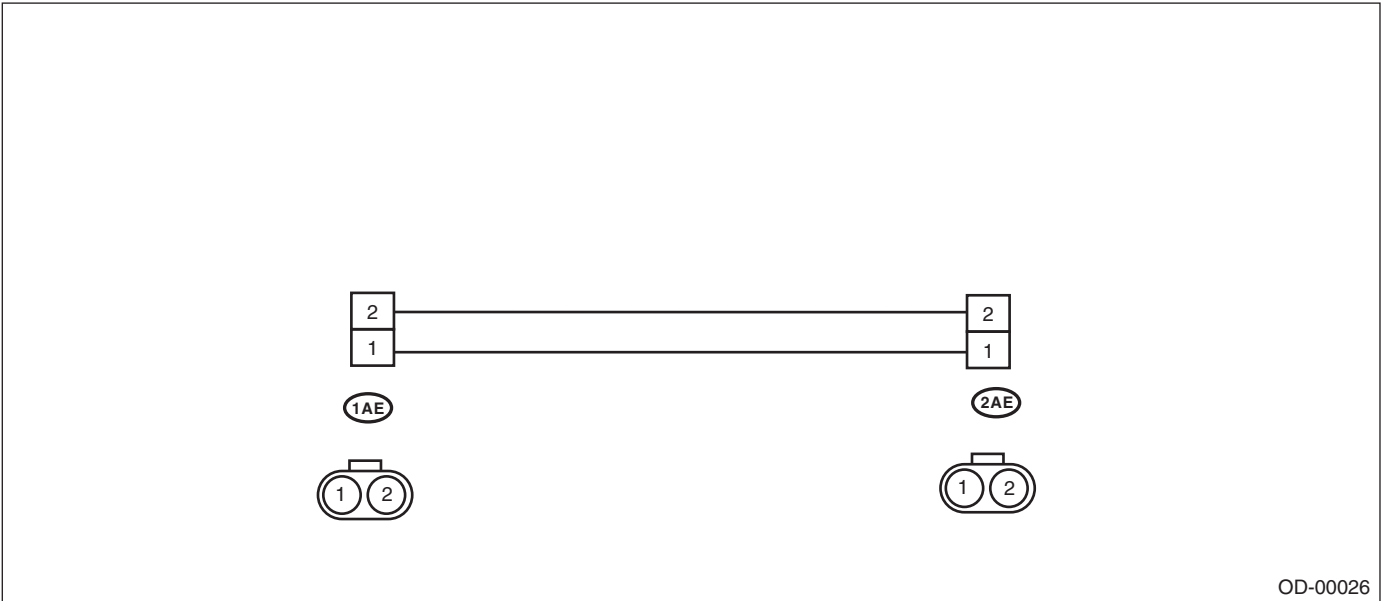


General Description

OCCUPANT DETECTION SYSTEM (DIAGNOSTICS)

- TEST HARNESS AE

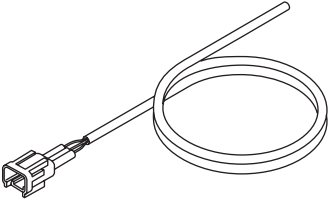
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|-------------|--------------------|--|
|  ST98299XA030 | 98299XA030 | TEST HARNESS AE | TEST HARNESS Y ADAPTER HARNESS Used for diagnosing seat belt buckle switch. |

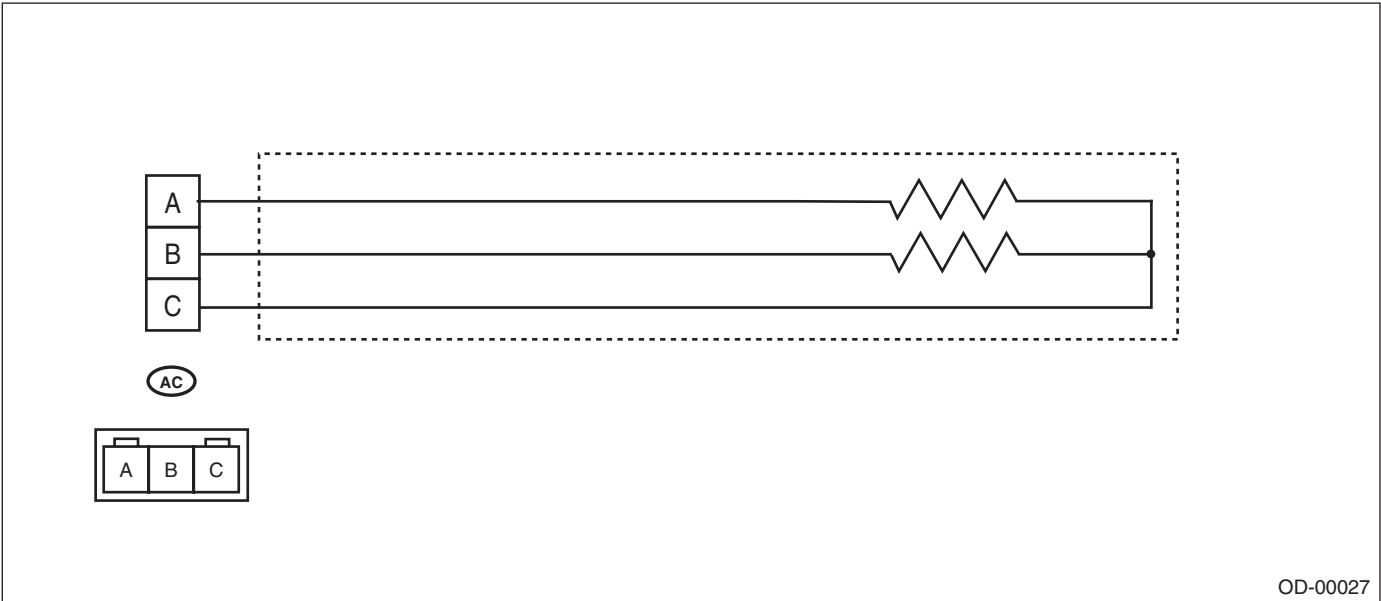


General Description

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. |

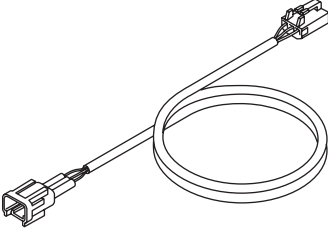


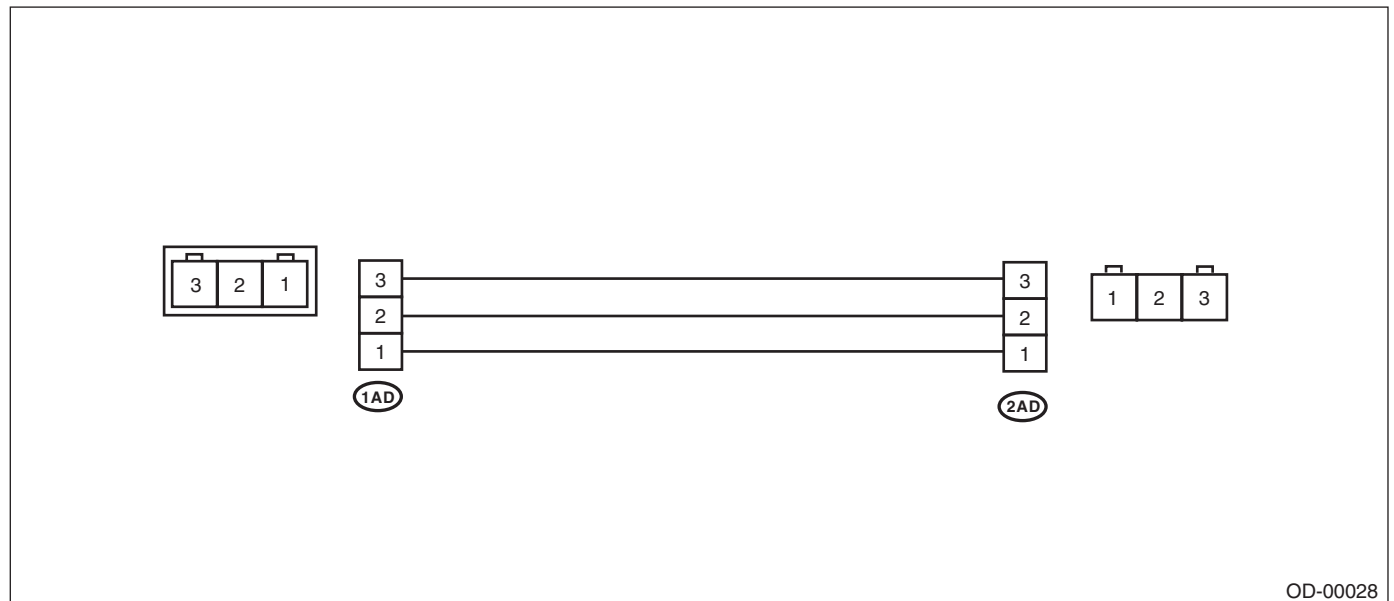
OD-00027

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. |