OCS series diagnostic device 0.1 - 0.2 manual

The OCS series diagnostic device - passenger seat occupancy sensor tester - is an advanced diagnostic device operating in an environment with a DC power supply of less than 15V, designed to diagnose SRS system faults. The device is intended for use in controlled conditions by qualified personnel, e.g. in car workshops. It can be used to confirm or rule out seat occupancy sensor failure in the vehicle.

The OCS series diagnostic device is not a factory device or replacement for the original seat occupancy sensor. After performing diagnostics, disconnect the device and reconnect the original seat occupancy sensor.

After connecting to the vehicle's SRS (Supplemental Restraint System), the device communicates with the airbag control unit and simulates the signal generated by a properly functioning seat occupancy sensor when an adult is seated.

If, after connecting a diagnostic tester to the SRS system, the fault code related to the passenger seat occupancy sensor can be successfully cleared, this indicates that the original sensor in the vehicle is faulty.

However, if the error cannot be cleared, it suggests the presence of a malfunction in a different component — either another sensor or an issue unrelated to the seat occupancy sensor, such as a fault in the vehicle's electrical system or a defect in the airbag control unit itself.

The OCS diagnostic device – a seat occupancy sensor tester – is not intended for permanent installation in the vehicle.

The extended version of the tester also includes a seat belt buckle tester, which enables verification or exclusion of a fault in the vehicle's seat belt buckle.

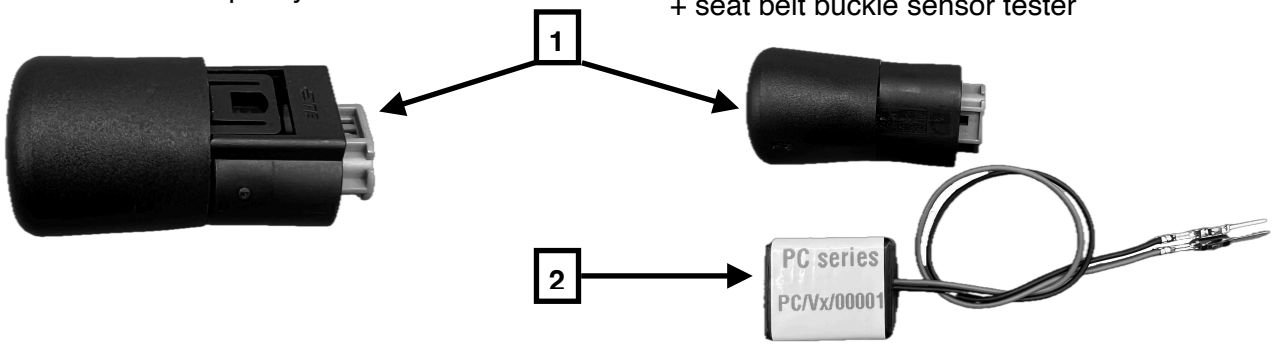
Once connected to the vehicle's SRS (Supplemental Restraint System), the device communicates with the airbag control unit and transmits the same signal as the original buckle when the seat belt is fastened.

If, after connecting the tester to the SRS system, the seat belt buckle fault code can be cleared from the airbag control unit, this indicates that the buckle in the vehicle is defective.

If the error cannot be cleared, it suggests another type of malfunction — for example, a fault in the vehicle's electrical system or a defect in the airbag control unit itself.

Variant 0.1 - seat occupancy sensor tester

Variant 0.2 - seat occupancy sensor tester + seat belt buckle sensor tester



1. The two-wire seat occupancy sensor tester is integrated with the connector and does not include any external cables.
2. The seat belt buckle sensor tester is equipped with two wires: one red and one black.

Safety

After unpacking, visually inspect the condition of the device. If the device appears damaged, do not use it.

1. Guidelines

Please read this manual carefully. It is a necessary prerequisite for the safe and correct use of the device.
Keep this manual as a reference. Always follow safety instructions and warnings.

2. Intended Use

Compliance with the intended use instructions is essential for the proper and safe operation of the device.
The device must be installed and used only as described in this manual.

3. User Restriction

This device may only be operated by adults who have the appropriate knowledge and authorizations to perform work on the vehicle's SRS (Supplemental Restraint System).
Children and minors are not permitted to handle or play with the device.

Installation

General Safety Principles

Installation should be carried out by a person knowledgeable in SRS systems and with access to the appropriate wiring diagrams for the vehicle in which the tester is being connected.

Before starting the installation, perform the following steps:

- Turn off the ignition
- Properly disconnect the ground cable from the main battery
- If applicable, properly disconnect the ground cable from the additional battery (if present)
- Wait at least 5 seconds.

After completing the installation:

- Ensure that all SRS system components have been correctly reinstalled (if disconnected during tester installation).
- Reconnect all connectors that were unplugged during the installation process.

Safety Procedures and Best Practices

Perform system testing only when all components and connectors are properly connected. Use only approved diagnostic tools. Carry out the test without passengers inside the vehicle. The use of unauthorized diagnostic equipment may result in the unintended deployment of airbags or seatbelt pretensioners. Warning: Risk of injury due to ejected components in the event of accidental airbag or pretensioner deployment. A damaged device or damaged wires present a safety hazard, do not use a damaged device.In case of any damage to the device or cables, contact the distributor or manufacturer.

Connecting the Seat Occupancy Sensor Tester

Before starting any work, familiarize yourself with the general safety principles!!!

1. Locate the connection point for the seat occupancy sensor under the seat where it connects to the vehicle’s wiring harness.

2. Disconnect the seat occupancy sensor connector from the vehicle’s wiring harness.
3. Connect the tester’s connector to the vehicle’s wiring harness.

Connecting the Seat Belt Buckle Sensor Tester

Before starting any work, familiarize yourself with the general safety principles!!!

Locate the connection point for the seat belt buckle sensor under the seat where it connects to the vehicle’s wiring harness.

Depending on the tester version (wires with pins or pre-fitted connector), follow the appropriate instructions below:

Wires with pins:
Check whether the wire colors in the original sensor match those in the tester, and ensure the pin configuration in the connector is identical. If not, stop working with the tester and contact the seller or manufacturer for more guidance. If the colors match, follow the instructions below:

- Disconnect the seat belt buckle sensor connector from the vehicle’s wiring harness.
- Note the position of each wire in the connector.
- Remove the wires from the original sensor connector.

- Insert the tester wires into the connector according to the previously noted configuration.
- Reconnect the connector to the vehicle’s wiring harness.

Connectors:
Check whether the wire colors in the original sensor match those in the tester. If not, discontinue use immediately and contact the distributor or manufacturer. If the colors match, proceed as follows:

- Disconnect the seat belt buckle sensor connector from the vehicle’s wiring harness.
- Connect the tester’s connector to the vehicle’s wiring harness.

WEEE Information and Environmental Protection

This device must be disposed of at an authorized WEEE collection facility, in accordance with local regulations, when no longer in use. This is required under Directive 2012/19/EU of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE), as well as corresponding national laws.

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