O2S TEST RESULT

1. O2S Test Result Description

The O2S Test Result is part of the monitoring for Heated Oxygen (HO2) sensor malfunctions. The various states (Test Items) of the HO2 sensor are monitored by the ECM. The Test Item values (Test Values) can be read using an intelligent tester or OBD II scan tool.

A Test Value is the latest data snapshot after the vehicle is driven to run the monitor. Therefore, the Test Value is not dynamic data.

If a Test Value is outside the standard range, this indicates that the HO2 sensor is malfunctioning. If a Test Value is on the borderline of the standard level, any malfunctions may be concealed in the HO2 sensor.

Test Values are cleared when the ignition switch is turned to OFF.

Example:

Test ID	Test Item	Description	Unit Conversion	Unit	Standard Value
$81	Time $81	Percentage of monitoring time when HO2S voltage was below 0.05 V	Multiply by 0.3906	%	Within 60 %

- Test ID: Code applied to each Test Item
- Test Item: State to be monitored in the test
- Description: Monitoring method
- Unit Conversion: Conversion factor used to calculate the Test Value displayed on an intelligent tester
- Unit: Unit applied to a Test Value
- Standard Value: The standard range or level used to judge whether or not the HO2 sensor is normal

HINT:

- Specifics of each Test Item, Description, Unit Conversion and Standard Value are descried in the paragraph titled "O2S TEST RESULT" in each DTC section relating to the HO2 sensor, such as P0130, P0133 and P0136.
- The O2S Test Result is not applicable to the A/F (Air-Fuel Ratio) sensor and the HO2 sensor heater. The Monitor Result is used for these components tests. For more information about the tests, refer to Checking Monitor Status (See page ES-15).

2. Test Procedure

CAUTION:

Strictly observe posted speed limits, traffic laws, and road conditions when conducting the drive pattern.

(a) Connect an intelligent tester or OBD II scan tool to the DLC3.

(b) Turn the ignition switch to ON.

(c) Turn the tester or scan tool ON.

(d) Clear DTCs (where set) (See page ES-30).

(e) Drive the vehicle to run the HO2 sensor monitor, in accordance with the applicable Drive Pattern described in the Readiness Monitor Drive Pattern section (See page ES-16).

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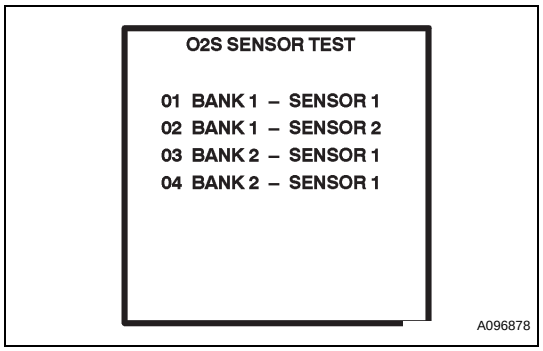
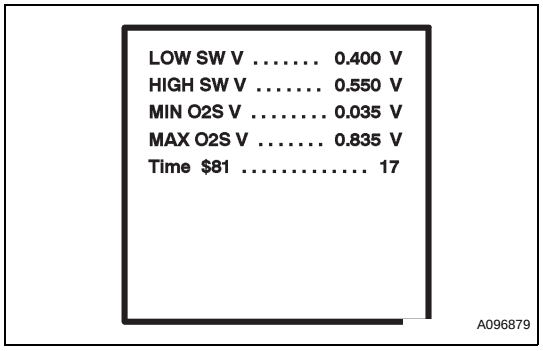


(f) After conducting the drive pattern, select the following menu items on the tester: DIAGNOSIS / CARB OBD II / O2S TEST RESULT.
HINT:
This test is not applicable to the A/F sensor. Therefore, even when BANK 1 - SENSOR 1 or BANK 2 - SENSOR1 is selected on the tester, "NO PARAMETER TO DISPLAY" is displayed by the tester.

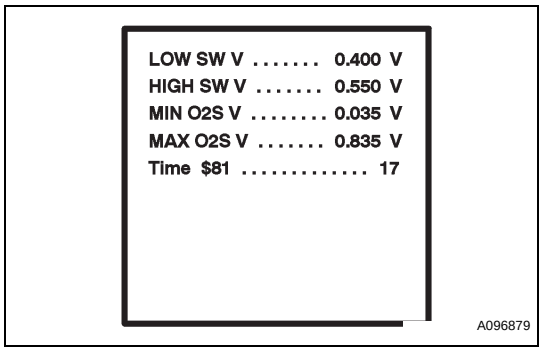
(g) All HO2 sensors are listed on the tester screen.



(h) Select the desired HO2 sensor from the list and press the ENTER button (a screen such as that shown on the illustration appears).

(i) Check the Test Value (the Test Item value).

(j) For the scan tool, refer to the instruction manual.
NOTICE:
Until the HO2 sensor monitor runs to completion, when it fails to complete or when the ignition switch is turned to OFF, the tester screen displays the upper and lower viewable limit values for the monitor (for example, voltages: 0 V and 1.275 V, seconds: 0 and 10.2, and Test Value: 0 and 255).



3. Reading Procedure

HINT:
The values shown below are examples only.

(a) Check the Test Value in the Test Item line.

(b) Use the Unit Conversion (conversion factor value) in the O2S Test Result table to calculate the Test Value.
(1) Test Value: 17 x Unit Conversion: 0.3906 = Calculated Value and Unit: 6.6 %

(c) Check the calculated Test Value by referring to the Standard Values in the table.
HINT:
If a Test Value is within the Standard Value, this indicates that the Test Item is normal. If a Test Value is on the borderline of the Standard Value, the Test Item may have a problem or malfunction.

O2S TEST RESULT Table:

Test ID	Test Item	Description	Unit Conversion	Unit	Standard Value
$81	Time $81	Percentage of monitoring time when HO2S voltage was below 0.05 V	Multiply by 0.3906	%	Within 60 %

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