

## O2S TEST RESULT

### 1. INTRODUCTION

The O2S TEST RESULT refers to the results of the Engine Control Module (ECM) when it monitors the oxygen sensor (O2S), and it can be read using the hand-held tester or the generic OBD II scan tool. Based on this, you can find the O2S's conditions.

The ECM monitors the O2S for the various data. You can read the monitor result (TEST DATA) of each monitor item using the O2S TEST RESULT. However, the output value of the TEST DATA is the latest "snapshot" value that is it taken after monitoring and therefore it is not dynamic.

In this repair manual, the description of the O2S TEST RESULT (for O2S related DTCs) are written in a table.

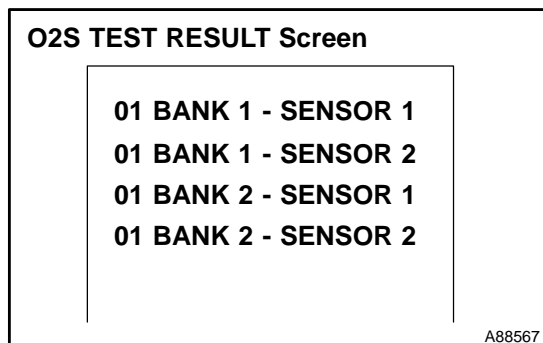
This table consists of 5 items:

- (1) TEST ID (a code applied to each TEST DATA)
- (2) Description of TEST DATA
- (3) Conversion Factor (When conversion factor has a value written in the table, multiply the TEST DATA value appearing on the scan tool by the conversion factor value. The result will be the required value.)
- (4) Unit
- (5) Standard Value

If the TEST DATA value appearing on the scan tool is out of the standard value, the O2S is malfunctioning. If it is within the standard value, the O2S is functioning normally. However, if the value is on the borderline of the standard value, the O2S may malfunction very soon.

### 2. HOW TO READ O2S TEST RESULT USING HAND-HELD TESTER

- (a) Connect the hand-held tester to the DLC3.



- (b) On the tester screen, select the following menus: DIAGNOSIS/CARB OBDII/O2S TEST RESULT. A list of the O2S equipped on the vehicle will be displayed.

**TEST DATA Screen**

**LOW SW V . . . 0.400 V**  
**HIGH SW V . . . 0.550 V**  
**MIN O2S V . . . 0.100 V**  
**MAX O2S V . . . 0.900 V**  
**TIME \$81 . . . . 17**

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- (c) Select the desired O2S and press ENTER. The following screen will appear.
- (d) Press HELP and ✱ simultaneously. More information will appear.
- (e) Example:
  - (1) The hand-held tester displays "17" as a value of the "TIME \$81" (see the illustration on the left).
  - (2) Find the conversion factor value of "TIME \$81" in the O2S TEST RESULT chart below. 0.3906 is specified for \$81 in this chart.
  - (3) Multiply "17" in step (1) by 0.3906 (conversion factor) in the step (2).  
 **$17 \times 0.3906 = 6.6 \%$**
  - (4) If the answer is within the standard value, the "TIME \$81" can be confirmed to be normal.

**O2S TEST RESULT Chart**

TEST ID	Description of TEST DATA	Conversion Factor	Unit	Standard Value
\$81	Percentage of monitoring time when the O2S voltage is less than 0.05V	Multiply 0.3906	%	Within 60%