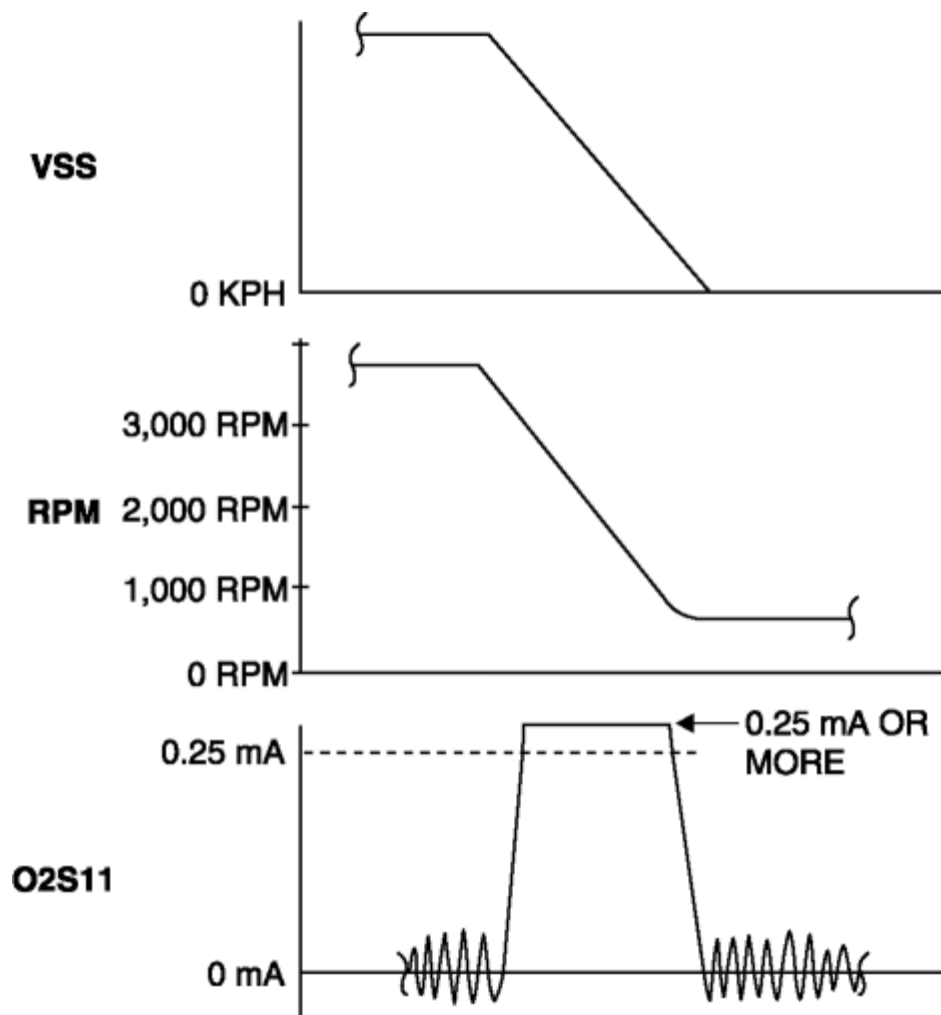


2012 - Mazda6 - Engine

AIR FUEL RATIO (A/ F) SENSOR INSPECTION [MZR 2.5]

A/ F Sensor Inspection

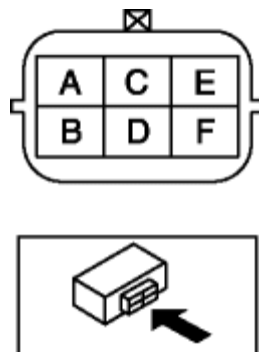
1. Warm up the engine to normal operating temperature.
2. Access the following PIDs using the M-MDS: (See [ON-BOARD DIAGNOSTIC TEST \[MZR 2.5\]](#).)
 - VSS (Vehicle speed)
 - RPM (Engine speed)
 - O2S11 (A/F sensor output current)
3. Drive the vehicle and decelerate the engine speed by releasing the accelerator pedal fully when the engine speed is **3,000 rpm or more**.
4. Verify that the A/F sensor current (PID: O2S11) is **0.25 mA or more** while decelerating as shown in the figure.



- If not within the specification, replace the A/F sensor. (See [AIR FUEL RATIO \(A/ F\) SENSOR REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)

A/ F Sensor Heater Inspection

1. Disconnect the negative battery cable. (See [BATTERY REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
2. Disconnect the A/F sensor connector.
3. Measure the resistance between A/F sensor terminals A and E.



- If not as specification, replace the A/F sensor. (See [AIR FUEL RATIO \(A/ F\) SENSOR REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)

A/ F sensor heater resistance

- 1—10 ohms

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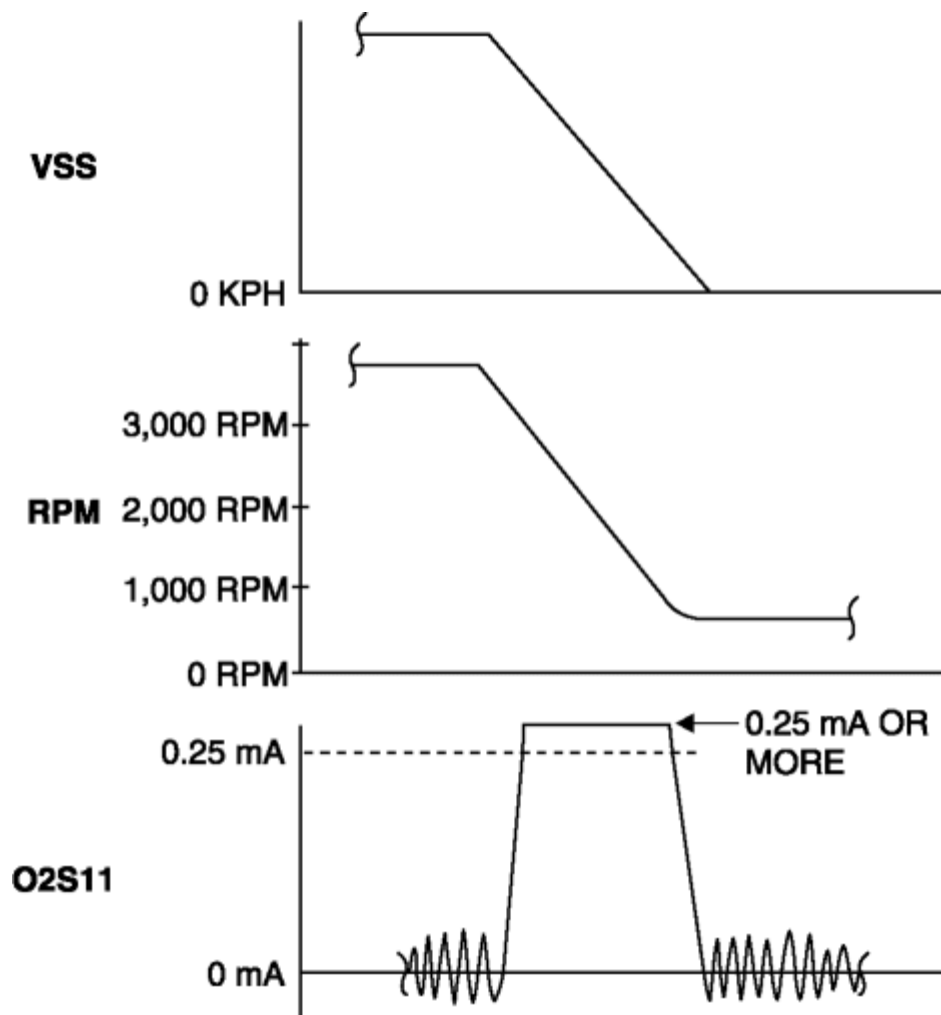
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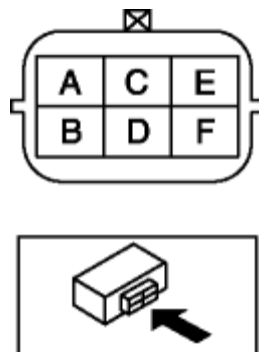
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