

<b>DTC</b>	<b>P0136</b>	<b>Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)</b>
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<b>DTC</b>	<b>P0156</b>	<b>Oxygen Sensor Circuit Malfunction (Bank 2 Sensor 2)</b>
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## CIRCUIT DESCRIPTION

Refer to DTC P0125 on [page DI-113](#).

DTC No.	DTC Detecting Condition	Trouble Area
P0136 P0156	Voltage output of heated oxygen sensor remains at 0.4 V or more or 0.5 V or less when vehicle is driven at 30 km/h (19 mph) or more after engine is warmed up (2 trip detection logic)	<ul style="list-style-type: none"> <li>• Open or short in heated oxygen sensor circuit</li> <li>• Oxygen sensor</li> </ul>

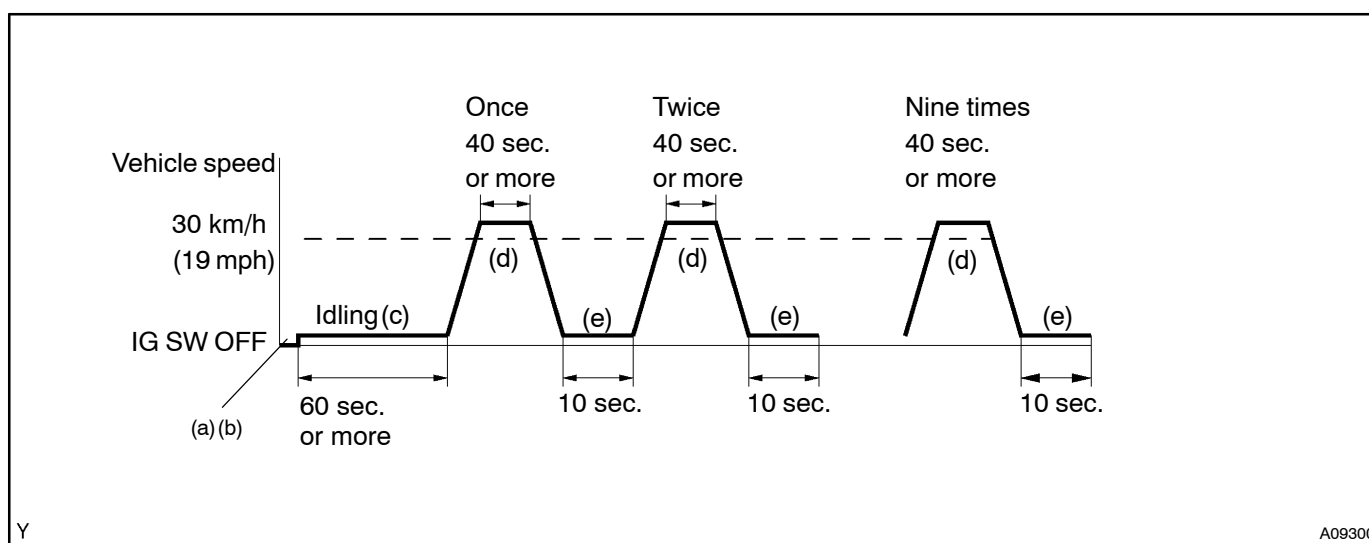
### HINT:

Sensor 2 refers to the sensor farther away from the engine body.

## WIRING DIAGRAM

Refer to DTC P0125 on [page DI-113](#).

## CONFIRMATION DRIVING PATTERN



- Connect the hand-held tester to the DLC3.
- Switch the hand-held tester from the Normal Mode to the Check (Test) Mode ([See page DI-73](#)).
- Start the engine and let the engine idle for 60 seconds or more.
- Drive the vehicle at 30 km/h (18 mph) or more for 40 seconds or more.
- Let the engine idle for 10 seconds or more.
- Perform steps (d) to (e) 9 times.

### HINT:

If a malfunction exists, the MIL will be indicated on the multi information display during step (f).

**NOTICE:**

If the conditions in this test are not strictly followed, detection of the malfunction will not be possible. If you do not have a hand-held tester, turn the ignition switch OFF after performing steps (3) to (6), then perform steps (3) to (6) again.

**INSPECTION PROCEDURE****HINT:**

Read freeze frame data using OBD scan tool or hand-held tester. Because freeze frame records the engine conditions when the malfunction is detected, when troubleshooting it is useful for determining whether the vehicle was running or stopped, the engine warmed up or not, the air-fuel ratio lean or rich, etc. at the time of the malfunction.

**1 Are there any other codes (besides DTC P0136 or P0156) being output?**

**YES**

Go to relevant DTC chart (See page DI-84).

**NO**

**2 Check for open and short in harness and connector between engine ECU and oxygen sensor (See page IN-30).**

**NG**

Repair or replace harness or connector.

**OK**

**3 Check output voltage of heated oxygen sensor.**

**PREPARATION:**

- (a) Connect the OBD scan tool or hand-held tester to the DLC3.
- (b) Warm up the engine to normal operating temperature.

**CHECK:**

Read voltage output of the heated sensor when the engine suddenly raced.

**HINT:**

Perform quick racing to 4,000 rpm for 3 min. using the accelerator pedal.

**OK:**

**Oxygen sensor output voltage: Alternates from 0.4 V or less to 0.5 V or more.**

**OK**

Check that each connector is properly connected.

**NG**

**Replace oxygen sensor.**