DI63X-01

DTC		Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)
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# CIRCUIT DESCRIPTION

Refer to DTC P0125/91 on page DI-48.

DTC No.	DTC Detecting Condition	Trouble Area
P0136/27	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)	Open or short in oxygen sensor circuit Oxygen sensor

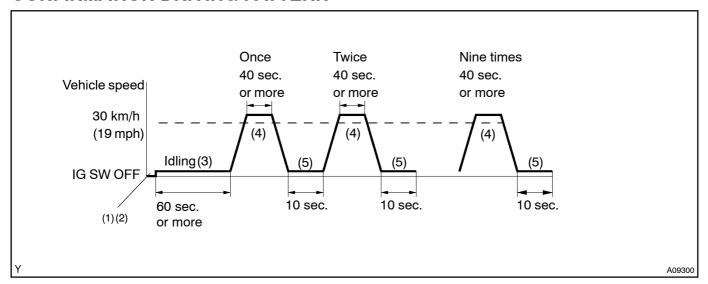
#### HINT:

- Bank 1 refers to bank that includes cylinder No.1.
- Sensor 2 refers to the sensor farther away from the engine body.

# WIRING DIAGRAM

Refer to DTC P0125/91 on page DI-48.

# CONFIRMATION DRIVING PATTERN



- (1) Connect the hand-held tester to the DLC3.
- (2) Switch the hand-held tester from the Normal Mode to the Check (Test) Mode (See page DI-4).
- (3) Start the engine and let the engine idle for 60 seconds or more.
- (4) Drive the vehicle at 30 km/h (18 mph) or more for 40 seconds or more.
- (5) Let the engine idle for 10 seconds or more.
- (6) Preform steps (4) to (5) 9 times.

### HINT:

If a malfunction exists, the CHK ENG (MIL) will be indicated on the multi information display during step (6). **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

# When using hand-held tester:

HINT:

Read freeze frame data using 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 was warmed up or not, the air-fuel ratio was lean or rich, etc. at the time of the malfunction.

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

YES

Go to relevant DTC chart (See page DI-17).

NO

2 Check for open and short in harness and connector between engine ECU and oxygen sensor (See page IN-32).

NG

Repair or replace harness or connector.

OK

3 Check output voltage of oxygen sensor.

#### PREPARATION:

- (a) Connect the hand-held tester to the DLC3.
- (b) After warming up the engine, race the engine at 2,500 rpm for 3 min.

#### **CHECK:**

Read the voltage output of the oxygen sensor when the engine is suddenly raced.

HINT:

Perform quick racing to 4,000 rpm 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.

LEXUS IS200 (RM684E)

# When not using hand-held tester:

1 Are there any other codes (besides code 27) being output?

YES

Go to relevant DTC chart (See page DI-17).

NO

Replace oxygen sensor.