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| DTC | P0136/27 | Oxygen Sensor Circuit Malfunction (Bank 1 (2) Sensor 2) |
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CIRCUIT DESCRIPTION

Refer to DTC Oxygen Sensor Circuit Malfunction on page DI-55.

| DTC No. | DTC Detecting Condition | Trouble Area |
|----------|---|---|
| P0136/27 | Voltage output of the heated oxygen sensor (bank 1 sensor 2, bank 2 sensor 2) remains at 0.4V or more or 0.5V or less when the vehicle is driven at 100 km/h (62 mph) or more after the engine is warmed up. (2-trip detection logic) | <ul style="list-style-type: none"> • Open or short in heated oxygen sensor circuit • Heated oxygen sensor |

WIRING DIAGRAM

Refer to Oxygen Sensor Circuit Malfunction on page DI-55 for the WIRING DIAGRAM.

INSPECTION PROCEDURE

HINT:

LH and RH bank engine ECU detect this DTC code respectively. The inspection procedures are same for both LH and RH bank engine ECU and described in this manual. Even though terminal name and part name on the side of RH bank are described in parenthesis, perform the inspection for only ECU that has detected DTC.

When using hand-held tester

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 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 P0136/27) being output? |
|---|---|

YES
Go to relevant DTC chart (See page DI-15).

NO

| | |
|---|---|
| 2 | Check for open and short in harness and connector between engine ECU and oxygen sensor (See page IN-20). |
|---|---|

NG
Repair or replace harness or connector.

OK

3 Check the output voltage of oxygen sensor (bank 1 (2) sensor 2).

PREPARATION:

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

CHECK:

Read voltage output of oxygen sensor (bank 1 (2) sensor 2) when engine suddenly raced.

HINT:

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

OK:

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

OK

Check that each connector is properly connected.

NG

Replace heated oxygen sensor.

When not using hand-held tester

1 Are there any other codes (besides code P0136/27) being output?

YES

Go to relevant DTC chart (See page DI-15).

NO

Replace heated oxygen sensor.