DTC	P0136	Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)

CIRCUIT DESCRIPTION

Refer to DTC P0125 on page DI-42 .

DTC No.	DTC Detecting Condition	Trouble Area
P0136	Voltage output of heated oxygen sensor remains at 0.45 ^{*1}V/0.4 V^{*2} or more or 0.60 V^{*1}/0.5 V^{*2} or less when vehicle is driven at 50 km/h (31 mph) or more after engine is warmed up (2 trip detection logic) ^{*1}: California Spec. ^{*2}: Except California Spec.	• Open or short in Heated oxygen sensor circuit • Heated oxygen sensor

HINT:

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

WIRING DIAGRAM

Refer to DTC P0125 on page DI-42 .

INSPECTION PROCEDURE

HINT:

Read freeze frame data using TOYOTA hand-held tester or OBD II scan tool. 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 IN-28).

NO

2	Check for open and short in harness and connector between ECM and heated oxygen sensor (See page IN-28).

NG 〉 Repair or replace harness or connector.

OK

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

PREPARATION:

(a) Connect the OBD II scan tool or TOYOTA hand-held tester to the DLC3.

(b) Warm up the engine to normal operating temperature.

CHECK:

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

HINT:

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

OK:

Heated oxygen sensor output voltage:

Alternates from 0.45 V^{*1}/0.4 V^{*2} or less to 0.60 V^{*1}/0.5 V^{*2} or more.

*1: California Spec.

*2: Except California Spec.

OK >	**Check that each connector is properly connected.**

NG

Replace heated oxygen sensor.