DI2OR-03

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

| DTC | Oxygen Sensor Circuit Malfunction (Bank 2 Sensor 2) |
|-----|---|
|     |   |

# CIRCUIT DESCRIPTION

Refer to DTC P0125 on page DI-207.

| DTC No.        | DTC Detecting Condition  | Trouble Area   |
|----------------|--|--|
| P0136<br>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) | Open or short in heated oxygen sensor circuit Heated oxygen sensor |

### HINT:

- Bank 1 refers to bank that includes cylinder No.1.
- Bank 2 refers to bank that does not include cylinder No.1.
- Sensor 2 refers to the sensor farther away from the engine body.

# WIRING DIAGRAM

Refer to DTC P0125 on page DI-207.

## INSPECTION PROCEDURE

#### HINT:

Read freeze frame data using LEXUS 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.

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

YES

Go to relevant DTC chart (See page DI-175).

NO

2

1

Check for open and short in harness and connector between ECM and heated oxygen sensor (See page IN-30).

NG

Repair or replace harness or connector.

OK

2000 LEXUS SC300/SC400 (RM715U)

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3 Check output voltage of heated oxygen sensor.

## **PREPARATION:**

- (a) Connect the OBD II scan tool or LEXUS 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 heated oxygen sensor when the engine is suddenly raced.

HINT:

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

### OK:

Heated 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 heated oxygen sensor.