DIB80–01

DTC	P0134	Oxygen Sensor Circuit No Activity Detected (Bank 1 Sensor 1)

DTC	P0154	Oxygen Sensor Circuit No Activity Detected (Bank 2 Sensor 1)

CIRCUIT DESCRIPTION

Refer to DTC P0031 on page DI–34.

DTC No.	DTC Detecting Condition	Trouble Area
P0134 P0154	After engine is warmed up, heated oxygen sensor (bank 1, 2 sensor 1) output does not indicate RICH (≧0.45 V) even once when conditions (a), (b), (c) and (d) continue for at least 65 seconds: (a) Engine speed: 1,400 rpm or more (b) Vehicle speed: 40 – 130 km/h (25 – 81 mph) (c) Throttle valve does not fully closed (d) 180 seconds or more after starting engine	• Open or short in heated oxygen sensor (bank 1, 2 sensor 1) circuit • Heated oxygen sensor (bank 1, 2 sensor 1) • Air induction system • Fuel pressure • Injector • Gas leakage on exhaust system • ECM • PCV piping

HINT:

After confirming DTCs P0134 and P0154, use the OBD II scan tool or hand–held tester to confirm voltage output of the heated oxygen sensor (bank 1, 2 sensor 1) from the CURRENT DATA. If voltage output of the heated oxygen sensor is less than 0.1 V, heated oxygen sensor circuit may be open or short.

WIRING DIAGRAM

Refer to DTC P0031 on page DI–34.

INSPECTION PROCEDURE

HINT:

- Read freeze frame data using hand–held tester or the OBD II scan tool, as freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, this 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.
- If the vehicle run out of fuel, the air–fuel ratio is LEAN and DTCs P0134 and P0154 will be recorded. The MIL then comes on.

1	Are there any other codes (besides DTCs P0134 and P0154) being output?

YES → Go to relevant DTC chart.

NO

2	**Check connection of PCV piping.**

NG → **Repair or replace PCV piping.**

OK

3	**Connect OBD II scan tool or hand–held tester, and read value for voltage output of heated oxygen sensor (bank 1, 2 sensor 1).**

PREPARATION:

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

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

CHECK:

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

HINT:

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

OK:

Heated oxygen sensor output a RICH signal (0.45 V or more) at least once.

OK → **Go to step 10.**

NG

4	**Check for open and short in harness and connector between ECM and heated oxygen sensor (bank 1, 2 sensor 1) (See page IN–36).**

NG → **Repair or replace harness or connector.**

OK

5	Check whether misfire is occurred or not by monitoring DTC and data list.

NG → Perform troubleshooting for misfire (See page DI–118).

OK ↓

6	Check air induction system (See page SF–1).

NG → Repair or replace.

OK ↓

7	Check fuel pressure (See page SF–7).

NG → Check and repair fuel pump, pressure regulator, fuel pipe line and filter (See page SF–1).

OK ↓

8	Check injector injection (See page SF–24)

NG → Replace injector.

OK ↓

9	Check gas leakage on exhaust system.

NG → Repair or replace.

OK →

Replace heated oxygen sensor (bank 1, 2 sensor 1).

10	Perform confirmation of driving pattern (See page DI–66).

Go →

11	Are there DTCs P0134 and P0154 being output again?

YES → Check and replace ECM (See page IN–36).

NO →

12	Did vehicle run out of fuel in past?

NO → Check for intermittent problems (See page DI–3).

YES →

DTCs P0134 and P0154 are caused by running out of fuel.