

DTC	P0135	Oxygen Sensor Heater Circuit Malfunction (Bank 1 Sensor 1)
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DTC	P0141	Oxygen Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)
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DTC	P0155	Oxygen Sensor Heater Circuit Malfunction (Bank 2 Sensor 1)
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CIRCUIT DESCRIPTION

Refer to DTC P0125 on page [DI-42](#).

DTC No.	DTC Detection Condition	Trouble Area
P0135	When heater operates, heater current exceeds 2 A (2 trip detection logic)	<ul style="list-style-type: none"> • Open or short in heater circuit of heated oxygen sensor • Heated oxygen sensor heater • ECM
P0141	Heater current of 0.2 A or less when heater operates (2 trip detection logic)	
P0155		

HINT:

- Bank 1 refers to the bank that includes cylinder No. 1.
- Bank 2 refers to the bank that excludes cylinder No. 1.
- Sensor 1 refers to the sensor closer to the engine body.

WIRING DIAGRAM

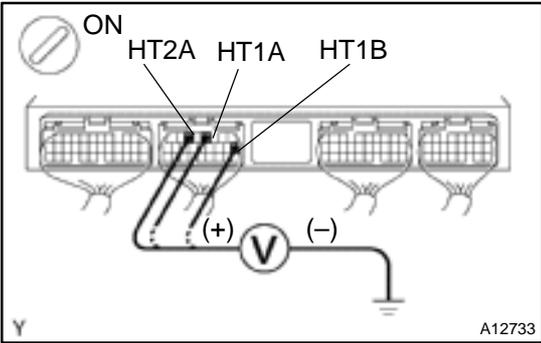
Refer to DTC P0125 on page [DI-42](#).

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	Check voltage between terminals HT1A, HT1B and HT2A of ECM connector and body ground.
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PREPARATION:

- (a) Disconnect the ECM with connector from body panel (See page [SF-62](#)).
- (b) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminals HT1A, HT1B of the ECM connector and body ground.

HINT:

- Terminal HT1A connects to bank 1 sensor 1.
- Terminal HT1B connects to bank 2 sensor 1.
- Terminal HT2A connects to bank 1 sensor 2.

OK:

Voltage: 9 – 14 V

OK	Check and replace ECM (See page IN-28).
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NG

2	Check resistance of heated oxygen sensor heater (See page SF-61).
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NG	Replace heated oxygen sensor.
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OK

Repair or replace harness or connector between EFI main relay (Marking: EFI MAIN) and heated oxygen sensor and heated oxygen sensor and ECM (See page IN-28).
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