

<b>DTC</b>	<b>P1135/21</b>	<b>A/F SENSOR HEATER CIRCUIT MALFUNCTION (BANK1 SENSOR1)</b>
<b>DTC</b>	<b>P1155/28</b>	<b>A/F SENSOR HEATER CIRCUIT MALFUNCTION (BANK2 SENSOR1)</b>

## CIRCUIT DESCRIPTION

Refer to DTC P0125/91 on [page 05-48](#).

DTC No.	DTC Detecting Condition	Trouble Area
P1135/21 P1155/28	When the heater operates, heater current exceeds 1.0 A (1 trip detection logic)	<ul style="list-style-type: none"> <li>• Open or short in heater circuit of A/F sensor</li> <li>• A/F sensor heater</li> <li>• ECM</li> </ul>
	Heater current of 0.8 A or less when the heater operates (1 trip detection logic)	

## WIRING DIAGRAM

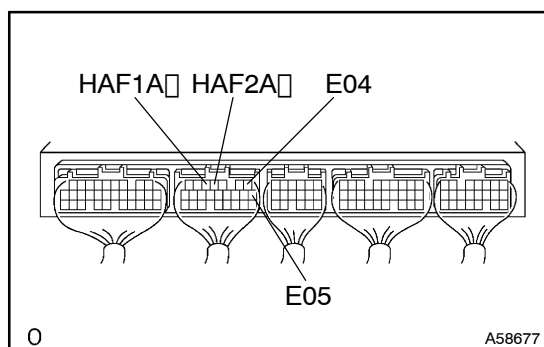
Refer to DTC P0125/91 on [page 05-48](#).

## INSPECTION PROCEDURE

### HINT:

Read freeze frame data using the hand-held tester, as freeze frame data 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 INSPECT ECM (CHECK VOLTAGE)



- Turn the ignition switch ON.
- Measure the voltage between terminals HAF1A of the ECM connector and E04 of the ECM connector.  
**Voltage: 9 - 14 V**
- Measure the voltage between terminals HAF2A of the ECM connector and E05 of the ECM connector.  
**Voltage: 9 - 14 V**

OK

CHECK AND REPLACE ECM

NG

### 2 CHECK AIR FUEL RATIO SENSOR (See page 10-1)

NG

REPLACE AIR FUEL RATIO SENSOR

OK

3	CHECK AIR FUEL RATIO SENSOR HEATER RELAY
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NG	REPLACE AIR FUEL RATIO SENSOR HEATER RELAY
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OK
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REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR
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