DTC	P1135/21	A/F SENSOR HEATER CIRCUIT MALFUNCTION(BANK1 SENSOR1)

DTC	P1155/28	A/F SENSOR HEATER CIRCUIT MALFUNCTION(BANK2 SENSOR1)

CIRCUIT DESCRIPTION

Refer to DTC P0125 on page 05–333.

DTC No.	DTC Detecting Condition	Trouble Area
P1135/21 P1155/28	When the heater operates, heater current exceeds 8 A (2 trip detection logic)	• Open or short in heater circuit of A/F sensor • A/F sensor heater • A/F HTR relay • ECM
	Heater current of 0.25 A or less when the heater operates (2 trip detection logic)	

WIRING DIAGRAM

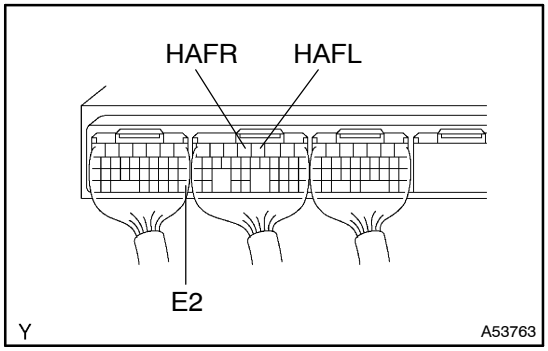
Refer to DTC P0125 on page 05–333.

INSPECTION PROCEDURE

HINT:

Read freeze frame data using hand–held tester. 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 INSPECT ECM



(a) Turn the ignition switch ON.
(b) Measure the voltage between terminals HAFL, HAFR and E2 of the ECM connector.
Voltage: 9 – 14 V

OK → **CHECK AND REPLACE ECM**

NG

2 CHECK AIR FUEL RATIO SENSOR(RESISTANCE) (See page 12–13)

NG → **REPLACE AIR FUEL RATIO SENSOR**

OK

3	CHECK AIR FUEL RATIO SENSOR HEATER RELAY (See page 10–14)

NG → REPLACE AIR FUEL RATIO SENSOR HEATER RELAY

OK

REPAIR OR REPLACE HARNESS AND CONNECTOR