DTC	P0125	INSUFFICIENT COOLANT TEMPERATURE FOR CLOSED LOOP FUEL CONTROL

CIRCUIT DESCRIPTION

Refer to DTC P0115 on page 05–62.

DTC No.	DTC Detection Condition	Trouble Area
P0125	If ECT (engine coolant temperature) or IAT (intake air temperature) is less than –6.6°C (20°F) at engine start and 20 minutes or more after starting engine, ECT sensor value is 20°C (68°F) or less (2 trip detection logic)	• Cooling system • ECT sensor • Thermostat
P0125	If ECT and IAT are between –6.6°C (20°F) and 10°C (50°F) at engine start, 5 minutes or more after starting engine and ECT sensor value is 20°C (68°F) or less (2 trip detection logic)	• Cooling system • ECT sensor • Thermostat
P0125	If ECT and IAT greater than 10°C (50°F) at engine start and 2 minutes or more after starting engine, ECT sensor value is 20°C (68°F) or less (2 trip detection logic)	• Cooling system • ECT sensor • Thermostat

INSPECTION PROCEDURE

HINT:

- If DTC P0115, P0116, P0117, P0118 and P0125 are output simultaneously, engine coolant temperature sensor circuit may be open or short. Perform the troubleshooting of DTC P0115, P0117 or P0118 first.
- Read freeze frame data using the hand–held tester. Freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, freeze frame data can help determine if the vehicle was running or stopped, if the engine was warmed up or not, if the air–fuel ratio was lean or rich, and other data from the time the malfunction occurred.

1 CHECK OTHER DTC OUTPUT (IN ADDITION TO DTC P0125)

(a) Read the DTC using the hand–held tester.

Result:

Display (DTC Output)	Proceed to
Only P0125 are output	A
P0125 and other DTCs are output	B

HINT:

If any other codes besides P0125 is output, perform the troubleshooting for those codes first.

B → **GO TO RELEVANT DTC CHART (See page 05–27)**

A

2 INSPECT THERMOSTAT (See page 16–2)

(a) Check the valve opening temperature of the thermostat.

OK: Valve opening temperature: 80 to 84°C (176 to 183°F).

HINT:

Also check the valve is completely closed under opening temperature as above.

NG → **REPLACE THERMOSTAT**

OK

3	CHECK COOLING SYSTEM

(a) Check the cooling system for excessive cooling, such as abnormal radiator fan operation, modified cooling system and other defects.

OK: There is no modification of cooling system.

NG → **REPAIR OR REPLACE COOLING SYSTEM**

OK

REPLACE ENGINE COOLANT TEMPERATURE SENSOR