DTC	P0116	ENGINE COOLANT TEMPERATURE CIRCUIT RANGE/PERFORMANCE PROBLEM

CIRCUIT DESCRIPTION

Refer to DTC P0115 on page 05–68.

DTC No.	DTC Detection Condition	Trouble Area
P0116	If engine coolant temperature was between 35°C (95°F) and 60°C (140°F) at engine start, and conditions (a) and (b) are met (2 trip detection logic): (a) Vehicle is driven at varying speeds (under acceleration and deceleration) (b) Engine coolant temperature remains within 3°C (5.4°F) of engine starting temperature	• Engine coolant temperature sensor
P0116	If engine coolant temperature was more than 60°C (140°F) at engine start, and conditions (a) and (b) are met (6 trip detection logic): (a) Vehicle is driven at varying speeds (under acceleration and deceleration) (b) Engine coolant temperature remains within 1°C (1.8°F) of engine starting temperature, and this is successively recorded 6 times	• Engine coolant temperature sensor

WIRING DIAGRAM

Refer to DTC P0115 on page 05–68.

INSPECTION PROCEDURE

HINT:

- If DTC P0115, P0117 and/or P0118 is output simultaneously with P0116, the engine coolant temperature sensor may have an open or short circuit. Troubleshoot DTC P0115, P0117 and/or P0118 first.
- Read freeze frame data using the intelligent tester II. Freeze frame data record the engine condition when malfunctions are detected. When troubleshooting, freeze frame data can help determine if the vehicle was moving or stationary, 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	REPLACE ENGINE COOLANT TEMPERATURE SENSOR