- IAT circuit intermittent short to voltage
- IAT circuit intermittent short to ground
- Damaged IAT sensor
- Damaged harness connector
- Damaged harness

Diagnostic Aids: Monitor the IAT sensor value on a scan tool. Look for sudden changes in the reading when the harness is wiggled or the sensor is tapped.

Application	Key On Engine Off	Key On Engine Running	Continuous Memory
All	GO to Pinpoint Test DA .		

DIAGNOSTIC TROUBLE CODE (DTC) CHARTS AND DESCRIPTIONS > P0116 - ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1 CIRCUIT RANGE/PERFORMANCE - DTC CHART

P0116 - ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1 CIRCUIT RANGE/PERFORMANCE - DTC CHART

Description: This DTC sets when the engine coolant temperature or cylinder head temperature value is higher than the calibrated value and could prevent one or more on board diagnostic (OBD) monitors from completing. The PCM runs this logic after an engine off and a calibrated soak period (typically 6 hours). This soak period allows the intake air temperature and the engine coolant temperature or cylinder head temperature to stabilize and not differ by greater than a calibrated value. This DTC sets when all of the following conditions are met:
The engine coolant temperature at engine start exceeds the intake air temperature at engine start by greater than a calibrated value, typically 17°C (30°F).
The engine coolant temperature exceeds a calibrated value, typically 107°C (225°F).
The fuel system, heated oxygen and misfire monitors have not completed.
The calibrated time to set this DTC has expired.

Possible Causes:

- ECT or cylinder head temperature (CHT) sensor
- Coolant system concern

Diagnostic Aids: Make sure the intake air temperature and the engine coolant temperature or cylinder head temperature are similar when the engine is cold. Also make sure the ECT or CHT sensor and the actual engine operating temperatures are the same.

Application	Key On Engine Off	Key On Engine Running	Continuous Memory
Edge 2.0L, Edge 2.7L, Escape/Kuga 2.0L, Explorer 2.0L,	GO to Pinpoint Test DX .		