

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) What diagnostic trouble codes (DTCs) are usually associated with a fault with the throttle position (TP) sensor?

2) How can a TP sensor be diagnosed using a scan tool?

3) What is the procedure to follow when checking the 5-volt reference and TP sensor ground?

4) What all does the PCM do with the TP sensor signal voltage?

5) What is the purpose of each of the three wires on a typical TP sensor?

Answer Key

Testname: SHORT 75

- 1) The diagnostic trouble codes associated with the throttle position sensor include: P0121, P0122, and P0123.
Page Ref: 887
- 2) A scan tool can be used to check a TP sensor by looking at the voltage, as well as the percentage of throttle valve opening and closing.
Page Ref: 887
- 3) To check for proper 5-volt reference and TP sensor ground, the ignition key should be on, engine off and a digital multimeter set to read DC volts. The 5-volt reference should be measured at the sensor and should be between 4.9 and 5.1 volts. The ground should be checked by attaching one meter lead to the ground terminal of the TP sensor and the other to the negative terminal of the battery. A reading of less than 0.2 volts indicates a good ground connection.
Page Ref: 886
- 4) The PCM uses the TP sensor signal to determine clear flood mode, torque converter clutch operation, target idle speed, automatic transmission shift points, air-conditioning compressor clutch operation, as well as, for rationality testing and backup for the other sensors.
Page Ref: 885
- 5) The purpose of the three wires on a typical TP sensor include: 5-volt reference from the PCM, signal wire from the TP sensor to the PCM, and ground.
Page Ref: 884