# **Advanced Diagnostics**

## DTC P0452: Fuel Tank Pressure (FTP) Sensor Circuit Low Voltage



P0452-9671

### **General Description**

The fuel tank pressure (FTP) sensor is installed between the evaporative emission (EVAP) two way valve and the EVAP bypass solenoid valve. The FTP sensor is used to detect leaks in the EVAP system.

The engine control module (ECM) monitors the FTP sensor output voltage. The FTP sensor output voltage rises as the fuel tank pressure increases. Conversely, the FTP sensor output voltage drops as the fuel tank pressure decreases. If the FTP sensor output voltage does not reach a target value within a set time after starting the engine in a cold condition, the ECM detects a malfunction and stores a DTC.

#### Monitor Execution, Sequence, Duration, DTC Type

Execution	Once per driving cycle
Sequence	None
Duration	7 seconds or more
DTC Туре	Two drive cycles, MIL ON

#### **Enable Conditions**

Condition	Minimum	Maximum
Elapsed time after starting the engine	2 seconds	_
Initial engine coolant temperature	-	95°F (35°C)
No active DTCs	ECM, ECT	

#### **Malfunction Threshold**

The output from the fuel tank pressure sensor is less than -8 kPa (-55 mmHg, -2.2 in.Hg) for at least 7 seconds.

#### **Driving Pattern**

Start the engine at an engine coolant temperature as specified under Enable Conditions, and let it idle.

#### **Diagnosis Details**

#### Conditions for illuminating the MIL

When a malfunction is detected during the first drive cycle with the ECT at engine start-up within the specified temperature range, a Temporary DTC is stored in the ECM memory. If the malfunction recurs during the next (second) drive cycle with the ECT at engine start-up within the specified temperature range, the MIL comes on and the DTC and the freeze frame data are stored.

#### Conditions for clearing the MIL

The MIL will be cleared if the malfunction does not recur during three consecutive trips in which the diagnostic runs. The MIL, the DTC, the Temporary DTC, and the freeze frame data can be cleared by using the scan tool Clear command or by disconnecting the battery.