

**Wheels:** How can a technician determine if a major sensor is skewed or out of range?

**Halderman:** A scan tool is needed and the technician has to compare the readings of one sensor and compare it to the readings of another sensor. For example, both the engine coolant temperature (ECT) and intake air temperature (IAT) sensors should read the same after the vehicle has sat for several hours. The manifold absolute pressure (MAP) sensor should read the same as the barometric pressure (BARO) sensor with the ignition key on and the engine off.

ENGINE SPD	0	RPM
VSS	0	MPH
ECT SENSOR (1)	73.0	°F
IAT SENSOR (2)	75.0	°F
MAP SENSOR	97	kPa
CLV	0	%
BARO SENSOR	97	kPa
TP SENSOR	9	%