

Locate the oxygen sensor signal wire

The easy way to do this is to look it up in your Haynes, Clymer or Chilton manual for your car. If you don't have one of these, I have also found a resource at www.autozone.com where you can find sensor information and diagrams for many vehicles.

If none of these options are available, you'll need to locate the oxygen sensor and then locate the signal wire by testing. The sensor can have 2, 3 or 4 wires, and you have to know which one is the signal wire. If you have 4 wires they will be:

- Heater 12 Volts +
- Heater ground
- Oxygen sensor signal +
- Oxygen sensor signal ground

If you have 2 or 3 wires, then you can have a common ground, or no heater wires etc. The simplest setup is a single wire, which is the signal wire and the sensor gets its ground from the exhaust pipe. You can use the following procedure to narrow down which wire is which:

1. Stick straight pins into the sensor's wires and measure them to ground with the engine running. One of these will show 12 volts, and this will be power for the heater.
2. Next find any wires that produce 0 volts. These will be ground wires. The remaining wire should be your signal wire.
3. Measure the signal wire to ground with the engine running. The voltage on this wire will vary from nearly 0 to about 1 volt. Since your meter will not be fast enough to see the lows and highs, it will average them out to about .2 to about .8 volts. The fluctuations will be so fast you have a hard time reading the numbers. Note, that you have to let the engine warm up a bit before you will get these voltages from the sensor.
4. Cut this wire at a convenient location for connecting the EFIE. We'll call the sensor side of this cut the sensor wire, and the other side of the cut, the computer wire.

Note: The engine must be at operating temperature to perform this check. Many O2 sensors do not produce a signal until the sensor is warmed to 600 F. If you can not find a signal wire with fluctuations between 0-1 volt, there is a possibility that you have Wideband O2 sensors. Contact us for more information

Note:2 Some Chrysler products will produce fluctuations between 2.5 to 3.5 volts. This requires our Special Chrysler AFR Control Center. This is only present in a few Chrysler/Dodge/Plymouth & Jeep models.

Note:3 Some Jeep models from the 90's and very early 2000 models had Titania sensors. We, nor anyone I know of makes a device for this type of sensor.