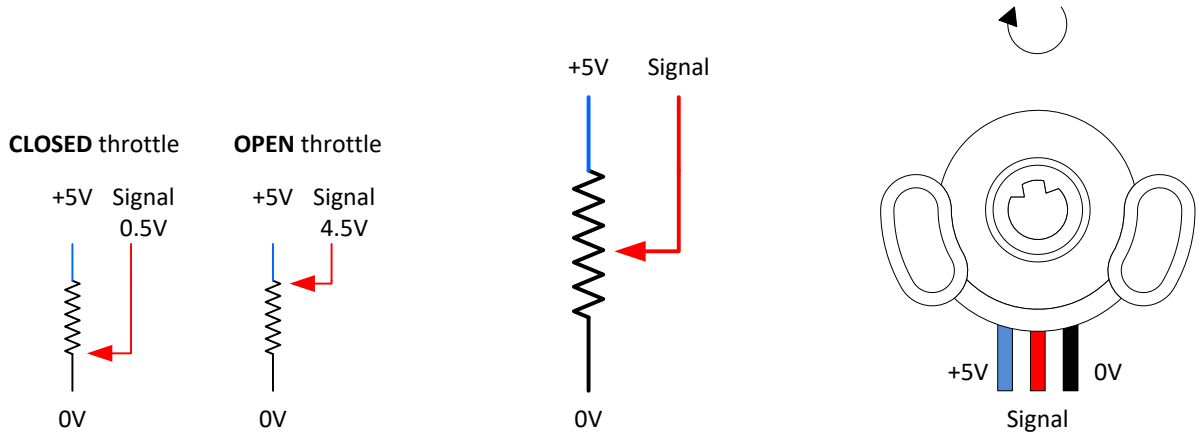
Identification of Throttle Position Sensor Cables

A potentiometer is a three terminal resistor with a sliding contact. One terminal at each end of the resistor with the third terminal called the 'wiper' which is free to move along the resistor.
The component is essentially a voltage divider. Moving the slider adjusts the voltage measured at this terminal.

There are three connections: **+5V**
0.5V to +4.5V output (**Signal**)
0V (signal ground)



Using Colvern TPS colour code

Identifying the three connections

Disconnect the Throttle Position Sensor (TPS)

Using an ohmmeter or multimeter (set on resistance, 'Ω'), find the two wires that do not vary resistance when the TPS spindle is rotated (approximately 5kΩ). These will be the 0V (signal ground) and +5V wires. The remaining third wire is the Signal.

To find the correct polarity

To find the polarity of the 0V and +5V wires. Measure the resistance across the Signal wire and either one of the 0V/ +5V wires. Observe the resistance as you rotate the TPS spindle from closed throttle position to full open throttle position.

If the resistance INCREASES then you are using the 0V (signal ground) wire.

If the resistance DECREASES then you are using the +5V wire.

You now have correctly identified all three wires for a positive gradient TPS.

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