

Automotive Electrical – Words to Know

Series Circuit – A Circuit that has only one Path.

Parallel Circuit – A Circuit that has more than one Path.

Series/Parallel Circuit – A Circuit that has a Combination of Series Circuits and Parallel Circuits.

Voltage – Electrical Pressure, Electromotive Force, EMF, or Difference of Potential. Voltage is measure in Volts and is Represented by the Symbol “E” (Note – Some books use the symbol “V”)

Current – Flow of Electricity, Flow of Electrons. Current is measured in Amps and is Represented by the Symbol “I” (Note – Some books use the Symbol “A”)

Resistance – The Opposition to Current Flow. Resistance is measure in Ohms and is Represented by the Symbol “R”

Power – The Rate that Electrical Energy is Transferred by an Electric Circuit. Power is measured in Watts and is Represented by the Symbol “P”

Voltage Drop – The Amount of Voltage Used by a Component or by a Part of the Circuit or Electrical Path.

Conductor – A Substance that makes it Easy for Current to Flow. Examples: Copper, Gold

Insulator – A Substance that does not allow Electricity to Flow Easily. Examples: Plastic, Glass

Solid Wire – Consists of a Single Metal Core. Solid Wire is cheaper and has a smaller diameter for the same current carrying capability as Stranded Wire.

Stranded Wire – Consists of a Bundle of Small Gauge Wires Compressed together. Most Automotive wire is Stranded because it is more flexible and can withstand movement and vibration better.

Alternating Current – Current that reverses its direction many times per second.

Direct Current – Current that travels in only one direction through the circuit.