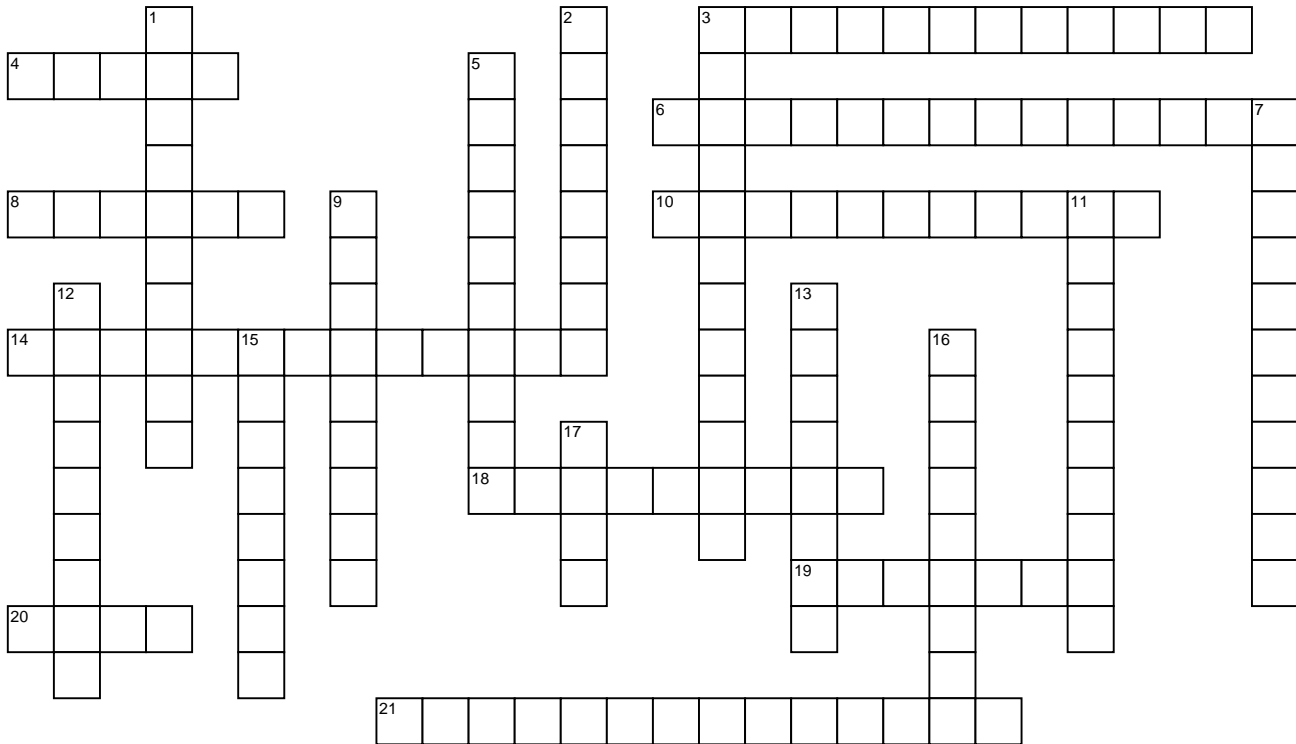


# Drivetrain Electricity and Electronics

## Chapter 9



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### ACROSS

- 3 It was once thought that electricity had only one charge and moved from positive to negative. This theory of the flow of electricity through a conductor is called the \_\_\_\_\_ theory of current flow.
- 4 A \_\_\_\_\_ is a magnetic switch that uses a movable armature to control a high-amperage circuit by using a low-amperage electrical switch.
- 6 \_\_\_\_\_ is resistance higher than normal circuit resistance.
- 8 The \_\_\_\_\_ is the unit used throughout the world to measure current flow.
- 10 An \_\_\_\_\_ is any circuit that is not complete, or that lacks continuity, such as a broken wire.
- 14 The TP sensor consists of a \_\_\_\_\_, a type of variable resistor.
- 18 A wiring \_\_\_\_\_, sometimes called a diagram, shows electrical components and wiring using symbols and lines to represent

components and wires.

- 19 An \_\_\_\_\_ measures the flow of current through a complete circuit in units of amperes or milliamperes (1/1,000 of an ampere).
- 20 Each module, also called a \_\_\_\_\_, must communicate with other modules.
- 21 The discovery of the electron and its negative charge led to the \_\_\_\_\_.

### DOWN

- 1 \_\_\_\_\_ has the ability to generate a voltage signal in semiconductor material (gallium arsenate crystal) by passing current through it in one direction and applying a magnetic field to it at a right angle to its surface.
- 2 An \_\_\_\_\_ measures the resistance of a component or circuit section in ohms, when no current is flowing through the circuit.
- 3 \_\_\_\_\_-\_\_\_\_\_-\_\_\_\_\_ connectors contain a sealant and shrink tubing in one piece and are not simply butt connectors.
- 5 \_\_\_\_\_ are materials with

fewer than four electrons in their atom's outer orbit.

- 7 \_\_\_\_\_ is the movement of electrons from one atom to another. The dense center of each atom is called the nucleus.
- 9 A short-\_\_\_\_-\_\_\_\_\_ occurs when the power side of one circuit is electrically connected to the power side of another circuit.
- 11 \_\_\_\_\_ are materials with more than four electrons in their atom's outer orbit.
- 12 The term \_\_\_\_\_ usually refers to the plastic portion that snaps or connects together, thereby making the mechanical connection.
- 13 A \_\_\_\_\_ is a metal fastener attached to the end of a wire, which makes the electrical connection.
- 15 A short-\_\_\_\_-\_\_\_\_\_ is a type of short circuit that occurs when the current bypasses part of the normal circuit and flows directly to ground.
- 16 A \_\_\_\_\_ measures the pressure or potential of electricity in units of volts.
- 17 Resistance to the flow of current through a conductor is measured in units called \_\_\_\_\_.