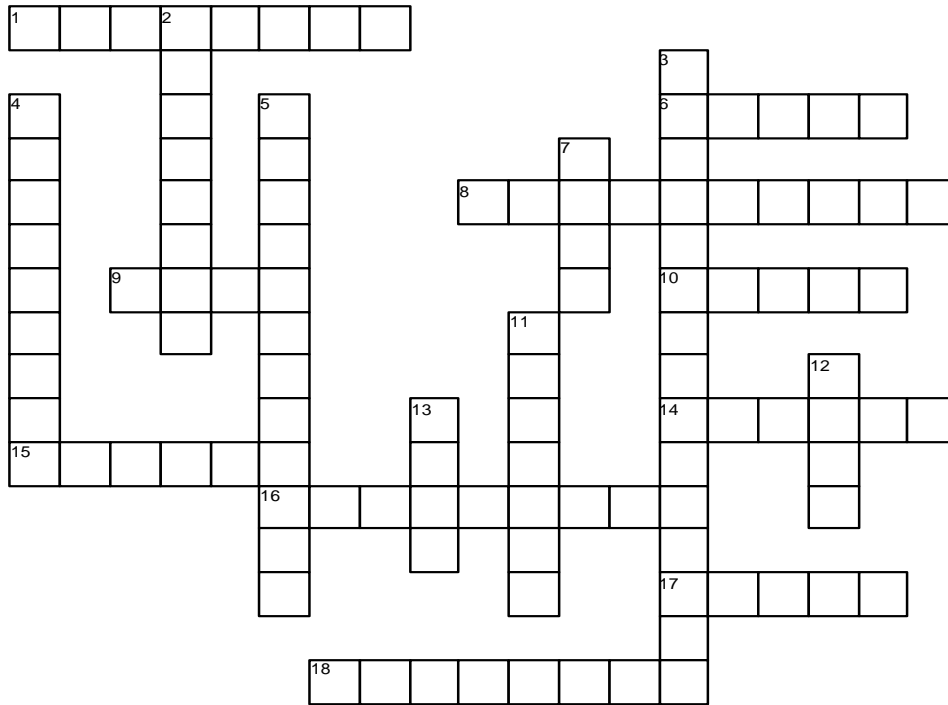


Automotive Electrical and Engine Performance 9th Edition Chapter 9 - Magnetism and Electromagnetism



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ACROSS

- 1 _____ magnetism: The remaining magnetism in a material after an external magnetic field has been removed.
- 6 _____ law: A principle stating that an induced current will flow in a direction that opposes the change that caused it.
- 8 The resistance of a material to magnetic flux, similar to electrical resistance but for magnetic circuits.
- 9 One of two regions, typically labeled north or south, where the magnetic field is strongest.
- 10 An electromagnetic switch that uses a low-current signal to control a higher-current circuit.
- 14 _____-turns: A unit of magnetomotive force, indicating the product of current in amperes and the number of turns in a coil.
- 15 _____ induction: The generation of an electromotive force in one coil due to the changing magnetic field of another nearby coil.
- 16 Magnetic _____: The process by which a conductor moving in a magnetic field generates an electromotive force (EMF).
- 17 _____ ratio: The ratio of turns in the primary coil to the turns in the secondary coil of a transformer, affecting the voltage transformation.
- 18 _____ flux: The total amount of magnetic field passing through a surface, measured in webers.

DOWN

- 2 _____ control module: A device in an ignition system that controls the timing of the spark by switching the ignition coil on and off.
- 3 _____ interference: Disruption of electrical signals caused by electromagnetic radiation from external sources.
- 4 A force caused by the motion of electrons, resulting in attraction or repulsion between objects.
- 5 The ability of a material to conduct magnetic flux, influencing how easily it can become magnetized.
- 7 _____ density: The amount of magnetic flux passing through a unit area, indicating the strength of a magnetic field.
- 11 _____ electromotive force: A voltage generated by a running motor or inductor that opposes the applied voltage, reducing current flow.
- 12 _____-hand rule: A method used to determine the direction of the magnetic field around a current-carrying conductor.
- 13 _____ lines: Invisible lines that represent the path and strength of a magnetic field surrounding a magnet or conductor.