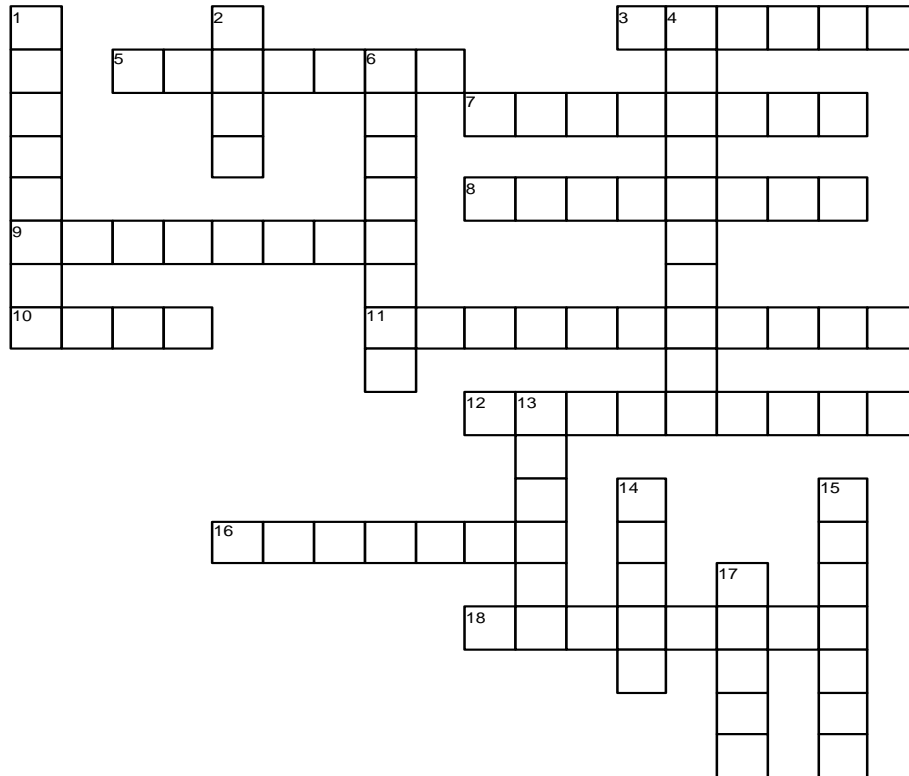


## Automotive Electrical and Engine Performance 9th Edition

### Chapter 12 - Batteries and Battery Testing and Service



www.CrosswordWeaver.com

#### ACROSS

- 3** \_\_\_\_\_ lead: A porous form of lead used in the negative plates of a lead-acid battery to enhance the chemical reaction and battery performance.
- 5** \_\_\_\_\_ lead acid (FLA): A traditional type of lead-acid battery where the electrolyte is in liquid form and can be replenished if necessary.
- 7** \_\_\_\_\_ glass mat: A type of lead-acid battery where the electrolyte is absorbed into a fiberglass mat, providing better performance and reducing the chance of spillage.
- 8** \_\_\_\_\_ gravity: A measure of the concentration of the electrolyte in a battery, used to determine the battery's state of charge.
- 9** \_\_\_\_\_ off draw (IOD): The electrical load that drains the battery when the vehicle is off, measured during parasitic load testing.
- 10** The lead framework inside a battery that holds the active material and facilitates the flow of electricity.
- 11** The sulfuric acid solution inside a

lead-acid battery that allows the chemical reaction necessary for generating electrical energy.

- 12** \_\_\_\_\_ load test: A test to identify whether any circuits or components are draining the battery while the vehicle is off.
- 16** \_\_\_\_\_ capacity: A battery rating that measures how long a fully charged battery can supply a specified current before the voltage drops below a usable level.
- 18** \_\_\_\_\_ chamber: A compartment at the bottom of a battery that collects disintegrated material from the plates to prevent short circuits.

#### DOWN

- 1** \_\_\_\_\_ amps (CA): A measure of the battery's ability to supply high current to start the engine under standard temperature conditions.
- 2** \_\_\_\_\_-cranking amps (CCA): A battery rating indicating the amperage it can provide for 30 seconds at 0°F while maintaining at least 7.2 volts for a 12-volt battery.

**4** Internal dividers inside a battery that separate the individual cells while allowing the flow of current.

- 6** \_\_\_\_\_ Flooded Battery (EFB): A type of lead-acid battery with improved durability and performance, often used in vehicles with start-stop technology.
- 13** \_\_\_\_\_ hour (AH): A battery rating that indicates the amount of current (in amperes) a battery can provide over one hour.
- 14** Battery electrical \_\_\_\_\_ test: A diagnostic test to determine if any circuit or component is draining the battery when the vehicle is off, also known as the ignition off draw (IOD) or parasitic load test.
- 15** \_\_\_\_\_ Council International (BCI): An organization that sets the standards for battery sizes, performance, and testing methods.
- 17** Individual compartments within a battery that generate voltage, typically connected in series to produce a total battery voltage.