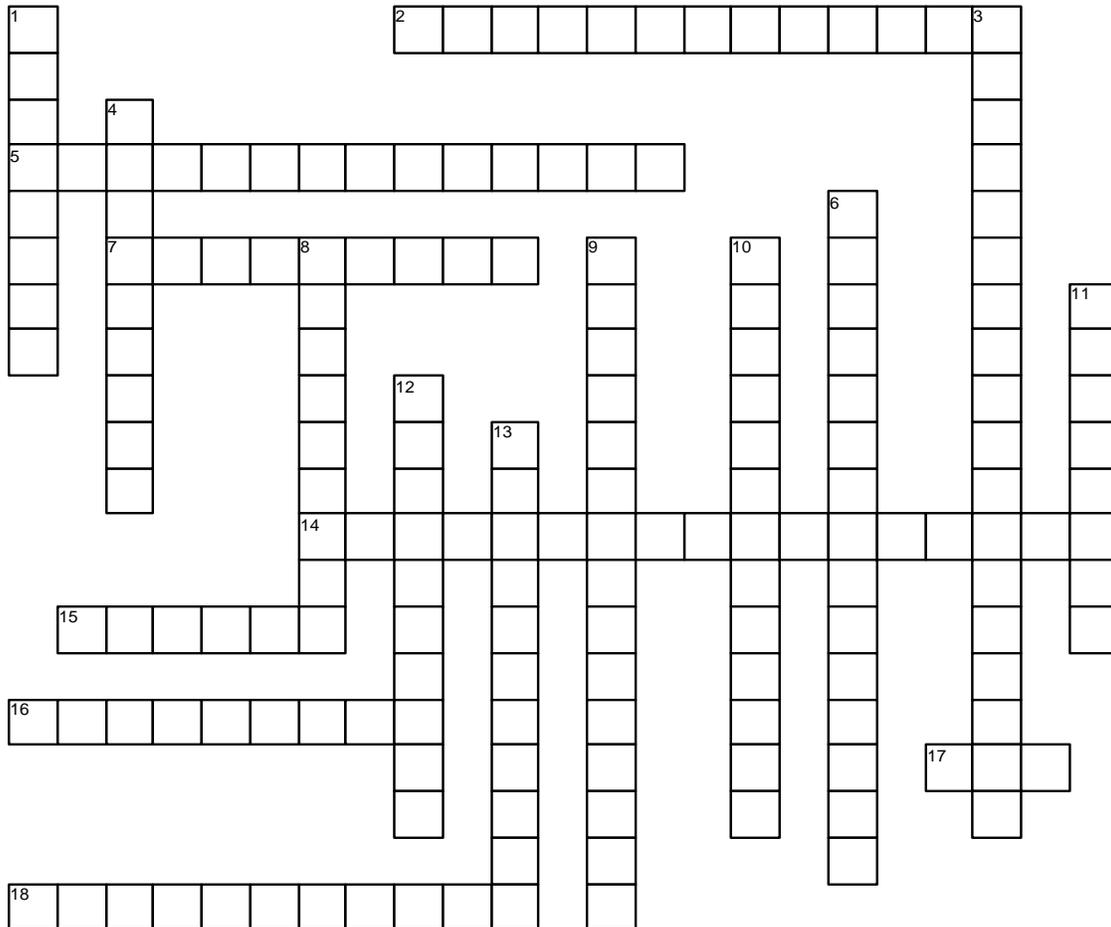


# Battery Testing And Service

## Chapter 19



<http://jameshalderman.com>

### ACROSS

- 2 Testing the battery voltage with a voltmeter is a simple method for determining the \_\_\_\_\_ of any battery.
- 5 \_\_\_\_\_ is the voltage of the power source with the circuit in operation.
- 7 Be sure the battery charger is \_\_\_\_\_ from the power outlet when making connections to a battery.
- 14 A \_\_\_\_\_ test is used to check if a battery is sulfated.
- 15 Batteries can be tested with a conductance \_\_\_\_\_ even if discharged.
- 16 To \_\_\_\_\_ another vehicle with a dead batter, connect good-quality copper jumper cables or a jump box to the good battery and the dead battery.
- 17 Another name for the battery electrical drain test is the \_\_\_\_\_ test.
- 18 Some vehicles, usually European brands, use an \_\_\_\_\_ battery system that monitors the battery operation including state of charge, voltage, and temperature.

### DOWN

- 1 Battery maintenance includes making certain that the battery case is clean and checking that the battery cables and \_\_\_\_\_ fasteners are clean and tight.
- 3 One symptom of a weak or defective battery is \_\_\_\_\_ on battery cables or connectors.
- 4 The fastest and easiest method to measure battery electrical drain is to connect an \_\_\_\_\_ DC ammeter that is capable of measuring low current (10 milliamperes).
- 6 The first step for \_\_\_\_\_ is to determine the charge rate.
- 8 One symptom of a weak or defective battery is that it \_\_\_\_\_ in one or more cells.
- 9 The battery \_\_\_\_\_ test determines if any component or circuit in a vehicle is causing a drain on the battery with everything off.
- 10 Another name for the battery electrical drain test is the \_\_\_\_\_ test.
- 11 One test to determine the condition of any battery is the \_\_\_\_\_.
- 12 A \_\_\_\_\_ is a tester that measures the specific gravity.
- 13 \_\_\_\_\_ voltage is the voltage that exists without a load being applied.