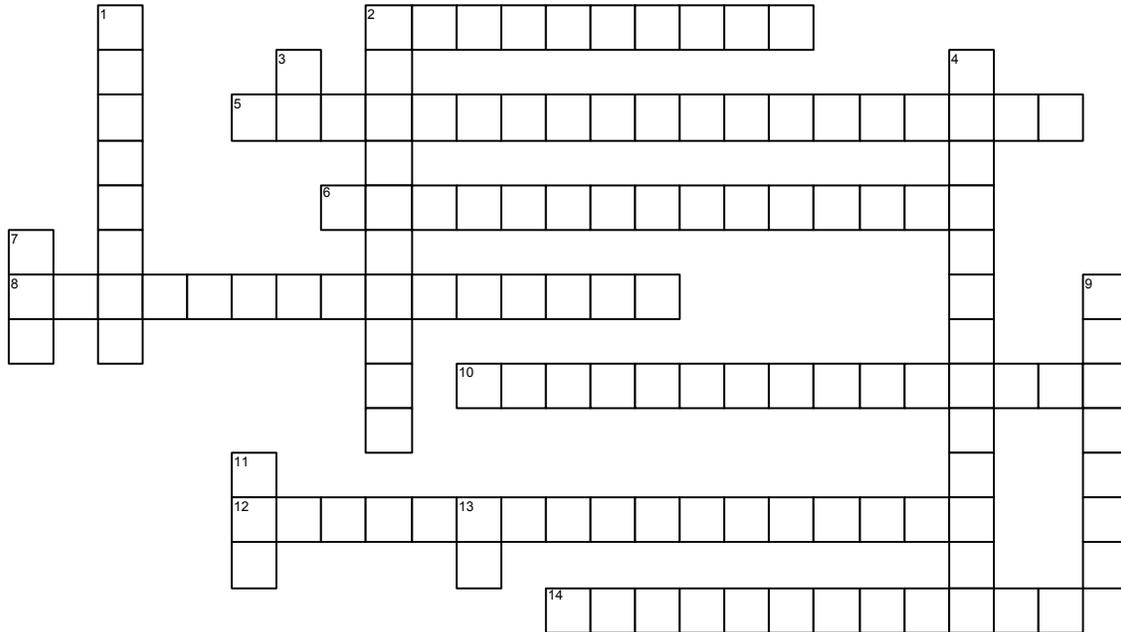


# Starting and Charging Systems

## Chapter 23



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### ACROSS

- 2 The \_\_\_\_\_ - \_\_\_\_\_ is how many amperes can be discharged from the battery, over a 20 hour period before the battery voltage drops to 10.5 volts.
- 5 Many automobile manufacturers use a \_\_\_\_\_ that opens the circuit between the ignition switch and the starter to prevent starter motor operation unless the gear selector is in neutral or park.
- 6 If a battery is discharged, the \_\_\_\_\_ could test as being defective because the battery voltage might drop below specifications.
- 8 The \_\_\_\_\_ rating for batteries is the number of minutes for which the battery can produce 25 amperes and still have a battery voltage of 1.75 volts per cell (10.5 volts for a 12 volt battery).
- 10 The \_\_\_\_\_ could also test as being defective because of a weak or discharged battery.
- 12 Many vehicle manufacturers specify that a \_\_\_\_\_ be used to test batteries in vehicles still under factory warranty.
- 14 Another name for the load test is the \_\_\_\_\_.

### DOWN

- 1 One method to determine the condition of any battery is the \_\_\_\_\_.
- 2 The battery is a voltage stabilizer because it acts as a reservoir where large amounts of current can be removed quickly during starting and replaced gradually by the \_\_\_\_\_ during charging.
- 3 A front ball bearing is pressed into the front housing, called the \_\_\_\_\_ housing, to provide the support and friction reduction necessary for the belt-driven rotor assembly.
- 4 If the \_\_\_\_\_ of a battery is low, it must be recharged.
- 7 The rear housing, called the \_\_\_\_\_, usually contains a bearing support for the rotor and mounting of the brushes, diodes, and internal voltage regulator.
- 9 The primary purpose of an automotive \_\_\_\_\_ is to provide a source of electrical power for starting and for electrical demands that exceed alternator output.
- 11 The cold-cranking performance rating is called \_\_\_\_\_.
- 13 The designation \_\_\_\_\_ refers to the number of amperes that can be supplied by the battery at 32°F (0°C).