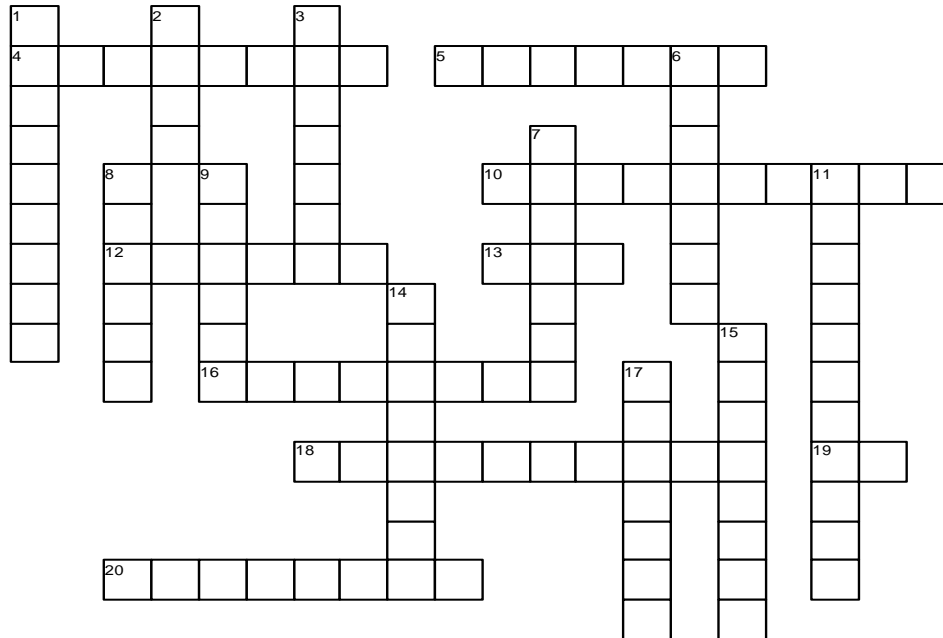


Advanced Engine Performance Diagnosis 8th Edition

Chapter 11

Battery, Starting, and Charging, Diagnosis, and Stop-Start



www.CrosswordWeaver.com

ACROSS

- 4** _____ glass mat is a type of battery where the acid is absorbed into a glass mat separator, making the battery spill-proof and ideal for use in vehicles with stop-start systems.
- 5** _____ Capacity: The amount of time a fully charged battery can supply 25 amps before the voltage drops below a specified level (10.5 volts for a 12-volt battery).
- 10** battery _____ drain test: A test performed to detect any excessive parasitic drain from the battery when the vehicle is off, which could result in battery discharge.
- 12** _____ current: The fluctuating current caused by the alternator's rectification process, which should be minimal in a properly functioning electrical system.
- 13** State-of-Charge abbreviation.
- 16** _____ flooded Battery: A type of flooded battery that is designed to be more durable and suitable for use in stop-start vehicle systems.
- 18** The component responsible for generating electricity to charge the battery.
- 19** _____ ripple voltage is the small AC voltage present on the battery terminals due to the rectifying action of the alternator. Excessive AC ripple voltage can indicate a faulty alternator.
- 20** _____ amperes: The amount of current a battery can provide for cranking the engine at higher temperatures (above 0°F).

DOWN

- 1** _____ load: The small electrical load present on the battery even when the vehicle is off.
- 2** _____ cranking amperes: A measurement of a battery's ability to start an engine in cold temperatures.
- 3** _____ safety switch: A safety feature that prevents the engine from starting unless the transmission is in neutral or park.
- 6** _____-drop: The reduction in voltage across a component or conductor in the vehicle's electrical system.
- 7** _____ lead-acid: A conventional type of battery that uses a liquid electrolyte.
- 8** Cranking _____ is the part of the vehicle's electrical system responsible for supplying power to the starter motor to crank the engine.
- 9** _____-hour: A measure of a battery's capacity. It indicates how many amps a battery can provide for one hour before its voltage drops below a specified level.
- 11** _____ tester: A diagnostic tool used to test a battery's ability to conduct current, which helps determine its overall health and capacity.
- 14** _____ off draw: Refers to the small current draw from the battery that occurs when the vehicle is off.
- 15** _____ circuit: The electrical system responsible for maintaining the battery's charge while the vehicle is running, typically composed of the alternator, voltage regulator, and wiring.
- 17** A device that provides electrical power for starting the engine and other electrical demands that exceed the alternator's output.