

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) Why should a battery not be fast charged?

2) Why do some vehicles need to have a new battery registered?

3) What are the results of a voltmeter test of a battery and its state of charge?

4) How is a battery drain test performed?

5) What the steps for performing a battery load test?

Answer Key

Testname: AEE6_SHORT19

- 1) Fast charging a battery creates heat, which can cause battery plates to warp. It is best to charge a battery at a rate equal to 1% of the CCA rating of the battery.
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- 2) Some vehicles require that a new battery be registered so that the Powertrain Control Module (PCM) “knows” that the battery has been replaced. Overtime, every battery loses capacity and as a result, the charging voltage usually needs to be increased to keep the battery performing correctly.
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- 3) After removing the surface charge, a battery voltage of 12.6 volts or higher indicates a fully charged battery. If 12.4 volts, it is 75% charged; 12.2 volts is 50% charged, and if 12.0 volts, the battery is only 25% charged.
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- 4) A battery drain test is performed using either a clamp-on ammeter or by connecting an ammeter in series between the negative terminal of the battery and the disconnected negative battery cable end.
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- 5) A battery load test involves removing the surface charge, loading the battery to $\frac{1}{2}$ of the CCA rating for 15 seconds, and observing the voltage at the end of the time with the load still applied.
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