

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) How is a battery drain test performed?

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

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

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

Answer Key

Testname: SHORT 51

- 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) 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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- 3) When a new battery is installed, the vehicle must have the new battery registered so that the system is at rest and does not overcharge the new battery. The replacement battery must be the same type (flooded or AGM) as the original to avoid potential issues.
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- 4) 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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- 5) 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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