

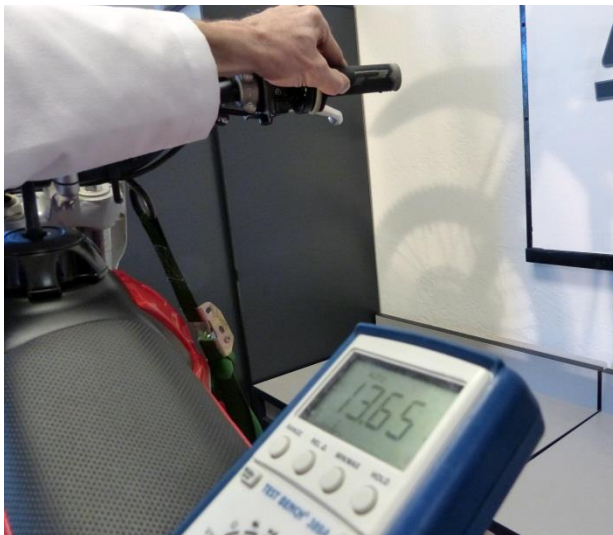
Charging System Output Tech Tip



(above) Battery Voltage at idle.

A charging system is designed to support the vehicles electrical power needs and replenish the battery energy that was used to start the engine. Using a digital voltmeter while the bike is running will confirm that the battery is being properly recharged. When connecting a volt meter to the battery, a measured output of 13.6-14.4V @ ~2000rpm is ideal. It is typical to see the voltage level increase and decrease with a change in engine rpm.

(below) Battery voltage at 2K RPM



Voltage readings less than 13.2V or more than 15.2V could indicate a charging system issue. Continuously charging the battery to 15.2V or higher is not recommended and will be damaging to the battery. If the voltage output is less than 13.2V the battery will be undercharged. Using high output lighting, heated gear or other electrical accessories can exceed the watt rating of the charging system and result in an undercharged battery. If the battery goes dead while riding or will not restart after a long ride it is likely to be a bike issue. It could be a failed voltage regulator or the power requirements for the electrical accessories greatly exceed the charging systems output rating.