

Battery Testing

Every spring there are numerous people asking questions about batteries and battery testing because their bike won't start. This is an especially important topic if you use a Boyer electronic ignition or have an electric starter.

To begin with, a battery voltage reading without a load doesn't mean squat. If you place your voltmeter across the battery terminals and then notice a voltage drop when the ignition is turned ON, that is exactly correct. When the ignition is turned ON, you've applied a load and the voltage is supposed to drop. The real question is... just how much did it drop? This is because the "dropped voltage reading" is closer to the *real* battery voltage.

If you take your battery to a motorcycle shop and pay for a "load test", they will also drain the battery to find its real voltage. However they will use a device that will allow this to happen in a matter of moments, and then charge you money for the privilege. And then, since you'll be at the local Honda or Kawa-yama-suki-Davidson shop, all laugh at you for having a Brit bike. Our plan is equivalent, cheaper and much less damaging to your Anglophile ego.

We've designed a "standardized home test" for battery testing. First, completely charge your battery and reinstall it in the motorcycle. With the engine *not* running, turn ON your low-beam headlamp for 2 minutes. Your battery voltage may start out fairly high. After 2 minutes, with the headlamp still ON, take a voltage reading across the battery terminals.

Most average batteries will be somewhere around 12.3V after the 2 minute time period, but results will vary depending on the condition of your battery. As a part of normal battery aging, a chemical change takes place inside the battery that raises the internal resistance and thereby lowers the available voltage. Your reading could be anywhere between 7.0 to 12.9 volts. A higher reading would indicate a battery in better condition.

If you had an electronic ignition (a Boyer) you *must* have a reading above 12.0V or replace the battery. This is because a Boyer's circuits absolutely will not function below 12.0 volts.

If you have the stock points-type ignition this is not a big deal. Your bike will still crank and run very well with battery voltages down to 7 or 8V. However, your headlamp will be a dull yellow at night (not very safe) and your battery will continue to go "down hill" until you can't see "diddley" at night. [Not that Bo Diddley is highly visible at night anyway.]

If your battery voltage is low it will not have a miraculous recovery; the degradation in battery voltage is a natural consequence of the unstoppable aging process of the lead-acid battery. More charging is useless. Replacing the internal fluids will not help. Don't waste your money on magic pills. You simply need a new battery.

Hope this helps!

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