

1977-78 Kawasaki KZ1000 Charging System Troubleshooter

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- 1.) Battery Test (ignition off): Meter Scale: 20V DC, Meter Connections: Red test lead to Positive battery terminal, Black test lead to Negative battery terminal, Specifications: 12V min. No more than 1V drop, If up to spec proceed; if below spec, replace battery and retest.
- 2.) Battery Test (ignition on) (lights on): Meter Scale: 20V DC, Meter Connections: Red test lead to Positive battery terminal, Black test lead to Negative battery terminal, Specifications: 12V min. No more than 1V drop; If up to spec proceed, if below spec charge or replace battery and retest.
- 3.) Charging System Test: Meter Scale: 20V DC, Meter Connections: Red test lead to Positive battery terminal, Black test lead to Negative battery terminal, Specifications: 13.6V @ 4000 RPM; If above or below spec proceed to next test, if up to spec-charging system is OK.
- 4.) Alternator Test: Meter Scale: 120V AC, Meter Connections: Disconnect alternator output leads. Check AC output between all three alternator leads @4000 RPM, Specifications: 62V @ 4000 RPM; If up to spec proceed, if low-replace dyno armature and retest.
- 5.) Rectifier Test: Meter Scale: R x 1 Ohms, Meter Connections: (Disconnect Rectifier) (1) Connect Black test lead to ground wire from rectifier. With Red meter lead, check each Yellow rectifier lead for resistance. (2) Connect Red test lead to ground wire from rectifier. With Black meter lead, check each Yellow rectifier lead for resistance. Specifications: Resistance in one direction, very little resistance when test leads are reversed (check service manual for ohm specs). If good proceed, if bad replace rectifier and retest.
- 6.) Regulator Test: Meter Scale: 12 Amp, Meter Connections: Connect meter in series with battery. Connect Black meter lead to ground, and Red meter lead to Negative terminal of battery. Kick start engine, and recheck meter reading @ 4000 RPM. **CAUTION! Do not use electric starter.** Specifications: 5.8A @ 4000 RPM; If up to spec proceed, if high or low-replace replace regulator and retest.
- 7.) Unregulated System Test: Meter Scale: 12 Amp, Meter Connections: (Disconnect regulator from system) Connect meter in series with battery. Connect Black meter lead to ground, and Red meter lead to Negative terminal of battery. Kick start engine, and recheck meter reading @ 4000 RPM. **CAUTION! Do not use electric starter.** Specifications: 9.5A @ 4000 RPM; If good, test complete. If bad, go back to #1 – Start over.