



Trouble Shooting for Field Excited Charging Systems

1979-1983 CB650/750/900/1000
1980-1983 XJ550/650/750 & 1975-83 XS650

When charging failure occurs, it is most often the rotor. Heat and vibration break down the insulation on the copper wire inside the rotor resulting in a “short” of the current from one coil to the next. This prevents the electro-magnet rotor from providing sufficient magnetic strength to produce a strong charge in the stator.

A secondary problem may now surface. When the internal rotor “short” occurs, the resistance in the rotor goes down and current flow increases. This puts a heavy load on the rectifier/regulator and may burn out the regulator unit. **When the rotor fails, always replace the rectifier/regulator.**

To test a rotor:

- Clean a spot on each of the 2 slip rings
- Set a digital OHMs meter to 0-20 OHMs
- Put one probe on one ring, and one on the other
- Record the OHM reading

(An “open” reading or low reading of 1 OHM or less is bad. A good rotor reads **4-6 OHMs**. A reading between this indicates a questionable rotor & the decision to replace it should be made by the technician.)

- Now test from any one ring to the steel base

(A good rotor should have **NO** continuity)

If your rotor tests good - test the stator:

- Identify the 3 stator wires (probably all yellow)
- Check all 3 wires for continuity (approx. .5 – 1 OHM)
- There should be no continuity to ground

There is no field test for the rectifier/regulator, however we can test your unit at our facility.

Rick's Motorsport Electrics, Inc.
30 Owens Ct. #2 Hampstead, NH 03841
1-800-521-0277
www.ricksmotorsportelectrics.com