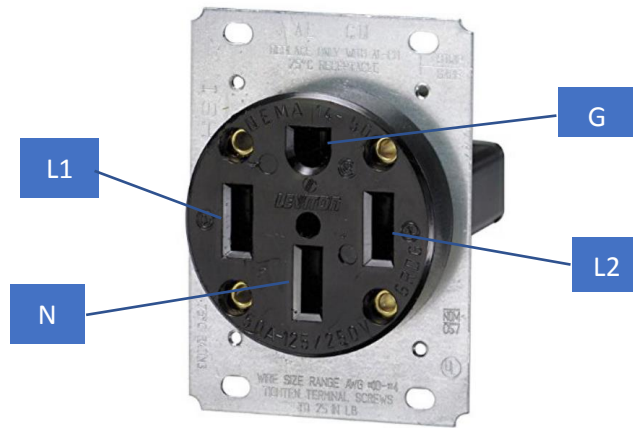


**Steve's Tip 2**  
**Check Your 50 Amp Power Source**

**Southwire recommends that if you are not qualified through training or experience, working on energized 120/240-volt electrical equipment can be dangerous. Please seek the assistance of a qualified technician.**



We frequently have owners of Surge Guard protection equipment devices, contact us with questions about their quality of electric power. Most times these questions arise from issues resulting when the Surge Guard device blocks power from entering their RV's or the diagnostic light pattern indicates a problem. The following discussion is a recommended procedure of what needs to be checked to ensure correct power supply.

**Tools Required:**

A multi meter capable of reading AC volts from 0 volts to 240 volts. You do not need the high-priced device for these tests.

**50 Amp Step by Step Procedure:**

1. Disconnect your RV power cord from the pedestal plug or your electric service box.
2. I prefer that voltages readings are taken inside the pedestal circuit box on the black, red, white and green wires. This discussion shows how to take reading through the pedestal plug which is an alternative method. The inside the box method is similar and more accurate. There are 4 slots (or wires) on the female plug located on pedestal where the male blades insert. See above for a typical plug configuration. Let's identify them as 12 o'clock (Green Ground = G), 3 o'clock (Red Power Leg 2 = L2), 6 o'clock (White Neutral = N) and 9 o'clock (Black Power Leg 1 = L1).
3. Using your multi meter probes, insert them into the slots and record the voltage as follows:

L1	to	N	120 Volts
L1	to	G	120 Volts
L2	to	N	120 Volts
L2	to	G	120 Volts
N	to	G	0 Volts
L1	to	L2	240 Volts

If your readings are close to the readings in the above chart, the source of your power looks good!

If your readings deviate from the readings in the above chart, your source of electricity is bad. You should contact the owner of the electric supply and discuss. It is not recommended that an electrical supply that deviates from the above values be used in your RV.