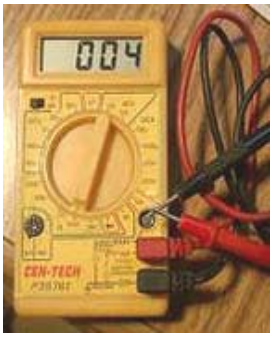
Testing

Do not trust any installation done by anyone including yourself or a professional.

Everyone should have the following testers as a minimum for checking the Service. They can be purchased from Lowe's, Home Depot, Camping World or elsewhere for a reasonable price. If you do not know how to use them ASK and learn. Forums and campground neighbors are a great source for getting information.

Voltmeter/Multi-Tester



or a cheap Multi-Tester

3-Wire Circuit Analyzer

Plug in voltmeter

The readings on RV friendly receptacles.

For the 50-amp 120/240-volt 3 pole 4 wire grounding service		For the 30-amp 120-volt 2 pole 3 wire RV service	
 **14-50R**	The voltage between Y and X should be 240-Volt, X and W 120-Volt, Y and W 120-Volt, X and G 120-volt, Y and G 120-volt, W and G 0-Volt	 **TT-30R**	The voltage between the Hot lead at 7 o'clock and W 120-volt, Hot lead and G 120-volt, W and G 0-volt

Protecting the RV from spikes, low voltage and bad wiring

The best way to protect the RV is to install a Surge Protector. They are available as a hardwired or a portable unit. Low voltage protection is available with an Autoformer. The merits or shortcomings of these products are discussed on RV Forums. They are available from Camping World or other Dealers.

Surge Protector **Surge Guard** **Autoformer**

Testing Campground and other RV Electric Service.

Lot has been said on various Forums about testing Campground outlets before plugging in. Even RV's equipped with Surge Guards could benefit from performing a simple test to determine the condition of the Electric Service. RV's without Surge Guard protection will get hit with a bad outlet sooner or later so testing should be a first chore performed when hooking up to a new Electric outlet.

Some Campgrounds advertise 50-amp Electric Service but in reality they misrepresent what they offer. ***A TRUE 50-amp Service is 120/240 Volt.*** In this Service the HOT leads (X & Y) come from L1 and L2 so when you check it the voltage between **X and Y should be 240-Volt, X and W 120-Volt, Y and W 120-Volt, X and G 120-volt, Y and G 120-volt, W and G 0-Volt.** This service provides 12,000 watts.

On a FAKE 50-amp they use L1 or L2 for BOTH side (X & Y) of the HOT leads therefore the voltage between **X and Y will be 0-Volt, X and W 120-Volt, Y and W 120-Volt, X and G 120-volt, Y and G 120-volt, W and G 0-Volt**. This service will give you 6,000 watts it is better than 30-amp with 3,600 watts but it is ***NOT a TRUE or CORRECTLY WIRED 50-amp service.***

Look at these YouTube Videos for more information on Multimeters.

Multimeter Basics 50-amp **Multimeters** **How to use a Multimeter**

Make sure you check for this misrepresentation BEFORE you start to run too many appliances in your RV or if you encounter problems.

Before I plug my RV into any electric service for the first time, I check both legs of the 50-amp outlet also the 30-amp outlet for voltage and correct wiring. This WILL NOT protect my RV from spikes or other mishaps after I plug in, that's the job of the Surge Guard.

30-amp outlet tester ***50-amp outlet tester***

To get a better reading on Campground outlets it is recommended that an additional test be performed

Under Load