



Minimum electricity is furnished to participants at this event. Electricity on the grounds will be shared through common hookups and branch circuits.

Basic precautions are essential for the benefit of all.

- If you have been experiencing electrical problems do **NOT** plug into electricity until our electricians check your rig. Contact them through Registration, Information, parking or any staff member. **Don't take a chance on injuring yourself, a neighbor or causing damage because of a careless mistake.**
- Electric circuits have been checked for proper wiring. If you are plugging into a set of receptacles with other rigs already plugged in, we encourage you to check the polarity for yourself since another rig may have caused a fault.
- Minimum electricity means just that--**minimum**. The electrical system will **NOT** support air conditioners, electric heaters and other heavy users. **BE CONSERVATIVE**. Run your refrigerator on propane. **Consider your neighbors**. If everyone turns on coffee makers, toasters and hair dryers each morning, the resulting low voltage can damage sensitive electronics in many RVs. Experienced RVers run battery chargers and use 12V-powered appliances as much as possible.
- **HIGH VOLTAGE:** An actual electric surge (lighting strike or power company catastrophe) is extremely unusual--but possible--and you should always use a surge protector. **The vast majority of high voltage**

incidents are due to RVer carelessness and accidents that damage the electric system (yours and those on the same line). Be careful.

- **LOW VOLTAGE:** A far more common problem than high voltage. Many electrical appliances can be damaged when operated at 104 Volts AC or less.

HIGH VOLTAGE SURGE

What is it? Lightning and failed power company equipment. Catastrophic in nature.

What can you do? Use a good surge protector. Unplug your RV from commercial power when storms threaten. If you see a "crackling/arcng" power transformer, unplug. If someone drives a vehicle into a power pole, unplug.

ARTIFICIAL SURGE

What is it? Similar in effect to the high voltage surge above, but caused by someone (you?) who interferes with the power system. Examples: • Tearing power connections apart with a vehicle or tripping over them. • Running a generator that isn't properly isolated from the commercial power system (**Do NOT ever run a generator without disconnecting from commercial power when you're "sharing" power with others. Do NOT trust an automatic transfer switch to protect your RV or your neighbors.**) • Running a faulty appliance in your RV that "melts down." • Plugging in faulty power adapters. All these may affect your neighbors on the same system.

What can you do? Pay attention to what you're doing. **Artificial surges are the most common cause of severe damage (the kind that can wipe out your whole RV--and your neighbor's). DON'T BURN UP YOUR NEIGHBOR'S RV!**

HIGHER THAN NORMAL VOLTAGE

What is it? Not a surge, but voltage in excess of 130VAC for an extended period.

What will it do? Burn out or cause premature failure of lights, refrigerator heating element, sensitive electronics in any number of appliances (including things like automatic coffee makers with timers).

What can you do? Every RVer should have a simple, cheap voltage monitor plugged into one of the easily-seen AC receptacles in their RV. If

you don't have one, connect your multimeter.

LOWER THAN NORMAL VOLTAGE

What is it? The most common cause of damage to electrical items in an RV. It is any sustained voltage of 104VAC or less. Common at RV gatherings as well as at campgrounds with insufficient power to sites.

<u>What will it do?</u>	
Electric Motors	Low Voltage means higher amperage. That means more heat, slower running and early failure. LV also means that motors with a starting switch (see Air Conditioners below) like washing machines may not reach starter winding cutout speed and this will result in motor damage. Some motors, however, will just run slow and not be damaged. Do you want to risk yours to find out?
Air Conditioners	LV = Motors die early as above. Also, compressors (constant horse power loads) will be severely stressed and burn out.
Fluorescent Lamps	LV = Constant cycling of circuit board and ballast. That means premature failure.
TV/VCR/etc.	LV = Heat = premature failure of components. (And see Power Supplies below.)
Refrigerator	LV = Relays fail to operate properly; unit goes into search mode from 120VAC to LP to 12VDC constantly and thoroughly confuses circuit board that, in consequence, fails.
Furnace & Water Heater	LV = Slow fan, which = too much heat in furnace enclosure, which destroys circuit board. Water heaters with auto ignition have circuit board that may fail or not operate properly.
Microwave Oven	LV = Fan runs slow. Fan cools a magnetron (the cooking element). Hot magnetrons die if run too long in this condition.
Power Supplies	LV = Some power supplies will run too hot (switching power supplies); some just won't regulate properly (linear type). Either, if not running properly, are components of and may damage, computer equipment, TVs, VCRs and the like.

WHAT CAN YOU DO?

Monitor your electrical system for Low Voltage as described above for High Voltage.

When at an RV gathering, like an Escapade, be considerate. Don't be an energy hog.

Some items won't necessarily be damaged by low voltage. They just won't work or won't work well. Examples: incandescent lamps, heaters, clocks, non-automatic coffee makers.

Some appliances are known to fail even, when turned off, and create disasters. Examples: toasters, automatic coffee makers and heating items which should not be plugged in when not in use, in your RV or at home.