

ELECTRICAL CORDS, REDUCERS, BATTERIES AND INVERTERS FOR LONG RANGE CRUISING BOATERS

Most long range cruising vessels are between 32 feet and 45 plus feet and require dual 30 amp electric or a single 50 amp electric power source. Many trawlers only require a single 30 amp service, but they usually have only one air conditioner.

The point of this article is to inform readers that at many places on the America's Great Loop Cruise you will not find dual 30's or a single 50. If you get a single 30 amp service, you should consider yourselves fortunate. Indeed, in a few locations you will only find a measly single 15 amp ground fault circuit interrupter duplex outlet - and the outlet may be as much as 150 feet away from your boat, on shore and even affixed to a tree! If the marina has dual 30 amp or single 50 amp electric, then you are truly in a first class marina - enjoy! When calling for reservations, check availability and request what your boat requires - you might just get lucky.

If you are already thinking about giving up your dream of doing the Great Loop, don't fret. You may not believe it, but you can live with only a 15 amp service, but you must be prepared to do so. When fellow boaters say NO WAY, we tell them yes, you can make do and be happy with a 15 amp electric service.

You can run the following essentials with a 15 amp service: Battery Charger, Refrigerator, a TV set or Radio, a Fan, and perhaps a Reading Light. Everything else can be run off the 12 volt system except an electric stove and hot water heater. If you wish to take a hot shower, shut off the other items and run the hot water heater for 15 to 20 minutes, then turn it off. If you need to run the Electric Stove, shut off the other items and cook, then switch back to the basics. Turn everything else off and you may even be able to run one air conditioner. The other alternative is to run the generator, which you sometimes can not do in all dockside situations, and anchoring out may not always be an option either.

Depending on your electrical requirements and shore power hookups, you will need the following. The objective is to allow you to turn items you wish to use on and off from the boat's electrical panel versus having to go ashore to switch the electrical plugs.

(1) One or two Electrical cord Reducer Plugs from 30 amp (female) down to 15 amp (male) - to go from a 30 amp power cord to a 15 amp GFCI Duplex Outlet.

(2) If you have twin 30 amp service on your boat, you will need a 50 amp male to twin 30 amp female SPLITTER (Y Adapter) - to go from 50 amp dockside to your boat's twin 30 amp plugs.

You may also find a 30 amp male to twin 30 amp female SPLITTER (Y Adapter) helpful in those situations where only a single 15 amp service is available - using one of the 30 amp to 15 amp reducers (see # 1 above).

An alternative is to use a 30 amp male to a 50 amp female PIGTAIL CORD hooked up to a conventional 50 amp male to twin 30 amp female SPLITTER (Y Adapter).

(3) If you have a single 50 amp service, you will need a 50 amp female to a twin 30 amp male SPLITTER (Reverse Y Adapter, sometimes called a Smart Cord) - to go from your boat's 50 amp male plug to the twin 30 amp dockside service. You may also need a 50 amp female to a 30 amp male PIGTAIL CORD to be able to use a single 30 amp dockside service (also see # 1 above for 15 amp outlets).

We recommend that 75 feet of power cord be available at all times. An additional one or two 50 foot cords are recommended. For those occasions where only a single 15 amp service is available a distance away, a 100 foot heavy duty 3-wire extension cord will be most valuable.

The vessel's electrical system should be checked out for any Ground Fault Circuit Interrupter problems. An improper ground will easily trip a ground fault interrupter outlet dockside and prevent you from using available electric service.

Get into the habit of tying your electric cords to the dockside power pedestals. Use a 4 foot piece of 3/8 nylon rope (or shock cord) to secure your dockside power cords, near the plug, to the marina's power pedestal. Many connectors on transient docks are worn and/or loose causing your plug to work loose and/or fall out. Your power cords may also be removed or switched by vandals or others causing an expensive disconnect problem!

Beware of power surges! Install several "state of the art" Surge Protectors to protect ALL of your valuable equipment such as TV's, Stereos, Computers, Cellphone Chargers, Bread Makers, etc.

We do not anchor out much, so we do not profess to be experts when it comes to the use of inverters (12 volt DC to 110 volt AC). Therefore, just a few comments about batteries and inverters. Long range cruisers who enjoy anchoring out or spending time on the lock wall docks (Canadian heritage canals and 1000 Islands) will want to have a bank of deep cycle house batteries. Many have even installed one or more golf cart batteries for this purpose. Good inverters can run many electrical items and they can also be purchased having ground fault circuit interrupter capability. The important thing to remember about inverters is to locate them as close to the battery source as possible and use heavy gauge wire. The 110 volt AC line can be run a good distance without losing power. One good place to have a 110 volt ground fault circuit run from an inverter is at the helm station to run a computer for electronic charting. When setting up a battery and inverter system, make sure that the engine alternators are large enough to recharge the batteries when cruising and that the battery chargers are capable of charging all the batteries when the generator is on or shore power is being used.

Being prepared to use whatever power is available will increase your options and help eliminate frustrations as you cruise in areas not accustomed to larger vessels.

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