

CHAPTER 12 : INVERTER : I used a Xantrex 1000 in the 323 mainly to keep the electric units from the same manufacturer. I found a Black and Decker coffee maker rated 850 AC watts, and it uses thermal carafes which I see as better than glass ones that get hot. I looked into a second carafe, but they were so expensive it was better to buy a second maker for another thirty dollars. I shopped around and found an 850 AC watts microwave that I use in my kitchen at present, but will install in the boat- probably in the upper part of the wet locker. In practice, you would have all batteries on AND the engine running to have the inverter running. This prevents any one battery from being discharged too much. (Please note my inverter, third battery, AC circuit breaker panel, windlass, and washdown pump projects were all done simultaneously.)

In my 323, I placed the inverter HORIZONTALLY on the bulkhead next to the battery charger. You will need to run pos & neg battery feed (a maximum of 5 feet per the instructions) and a chassis ground to the engine block, I ran these three down the bulkhead, through the board atop the water heater, then through the bulkhead between the lazerette and quarterberth. There is a large opening through this bulkhead where the water hoses run, but I drilled a hole for each new battery cable, but ran the ground down thru where the water hoses go thru.

FOR THE BATTERY CABLES: I read that it's not a good idea to terminate heavy-draw cables right onto the battery. This is in case the device causes the cables to heat up and melt the battery terminal right out of the battery casing. That's why I used the junction studs. I kept with the policy of 3/8inch lugs for pos, and 5/16 for neg lines every place I could. I ran #2 wire from the inverter to the junction studs. The other battery cables are 1/0.

THE POS CABLE: Goes about one foot from the inv to where I placed a simple on/off switch on the bulkhead that is easy to access in the lazerette. (I suppose if you used one of the Beneteau OEM battery switches (or some other type), you could put it through the bulkhead to mount behind the potty for easier access and the connections would be in the laz.) From the switch it goes to under the bunk board cubby to a fuse block mounted on the bulkhead that is shared with the head. The other side of the fuse block goes three inches to a junction stud. On this stud are also the cables to the pos battery buss and another cable to the THIRD battery (in my case the size 24 engine battery in that same cubby). I suppose you could terminate the two battery lugs onto the fuse block and save the stud expense. (If you have not added the third battery, you would go from the junction stud to the battery by the prop shaft.)

THE NEG CABLE: Runs from the inverter to a junction stud on the cubby bulkhead. Also on this stud is a cable to the 24 battery right there, and a cable back to the neg battery switch. (Again, if you have not added the third battery, you would go from the junction stud to the battery by the prop shaft.)

FOR THE GROUND WIRE: The green ground wire was spec'd to be a #8 (minimum) wire in the installation manual. I crimped and soldered a lug on it and attached it under a bolt on the rear of the engine block. Clean the block before bolting it on.

Inverter pos ->->to on/off switch->->fuse block under berth->->battery junction stud->->battery pos lost;
Battery junction stud->->battery switch

Inverter neg ->->to junction stud under berth->->battery junction stud->->battery neg;
Battery junction stud->->battery NEG switch

Inverter ground ->-> to engine block.

AC output: You can use the AC outlet right on the inverter. AND/OR you can cable the output to the AC circuit breaker panel with 14/2 or 12/ cable. (See the CHAPTER 13 AC PANEL DIY sheet for those details.)

You can also move (I recommend it) the monitor panel from the inverter to the nav panel with only a 12-foot phone cord. I placed a PVC pipe up by the toe rail from the lazerette to the nav panel to put this and the battery charger monitor cable in. 1-24-2009 REP