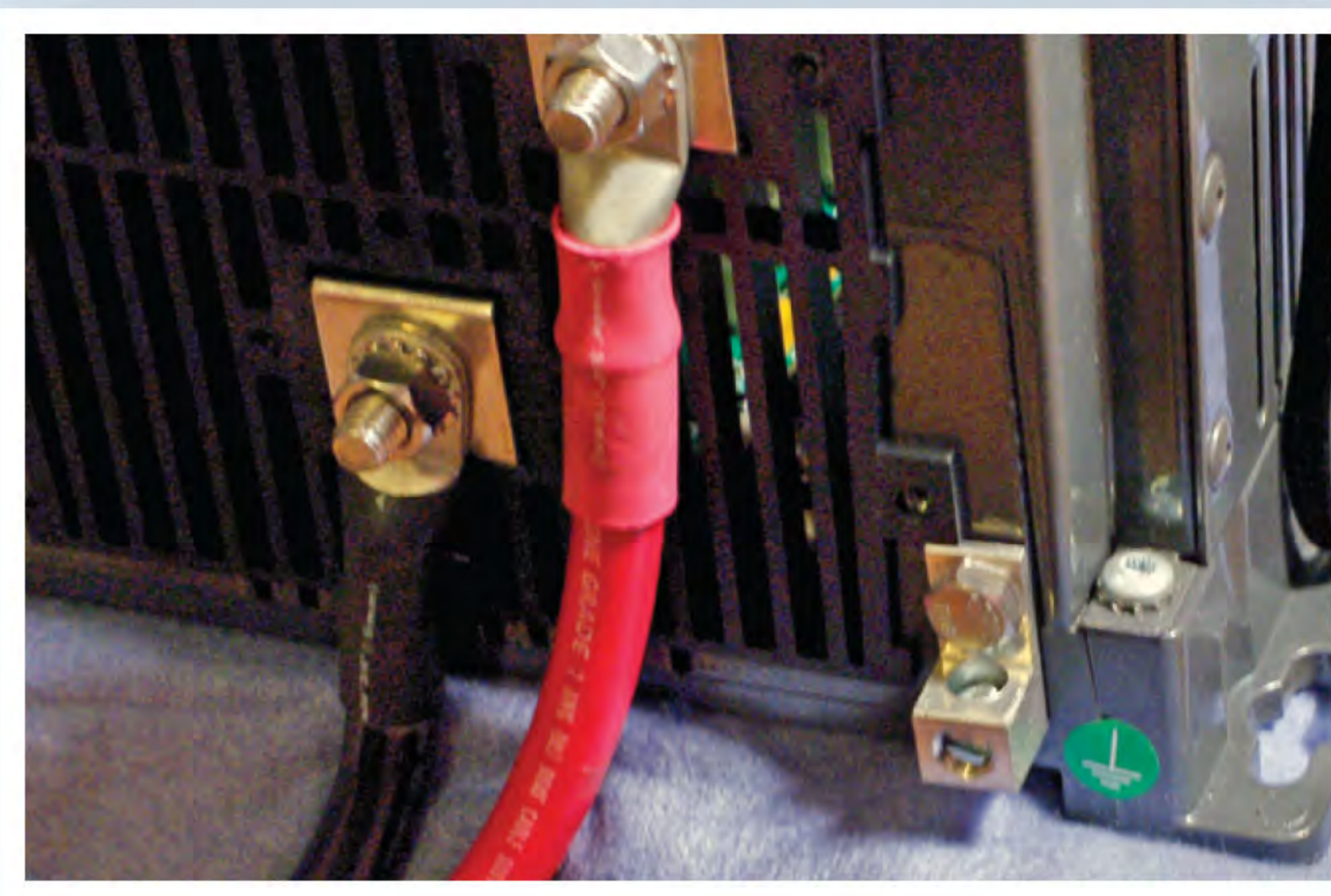




*ProMariner Combi 2500QS*



*Magnum ME2012*



*Mastervolt Combi 12/2000-100*

## Staying Grounded

The American Boat and Yacht Council, which develops safety and manufacturing standards for boat and marine products and practices, requires in Standard A-31 (inverterchargers) that a DC case ground should be sized no smaller than one AWG wire size below the cable needed for the DC positive conductor supplying the unit. This is to ensure that in the event of a ground fault to the metal case on the DC positive side, there is a sufficiently sized conductor to get the fault current back to the source of power and trip the DC supply fuse. Most often, the DC supply conductors on inverters are quite robust—from about 2 AWG to 4 AWG—so this grounding conductor needs to be sized to deal with that reality. The only products in the test group to successfully meet the ABYC standard were the ProMariner Combi units. (See photos above.) None of the other inverter manufacturers provide a sufficiently sized lug, so installers who are intent on complying with ABYC standards should either replace the supplied lug with a larger one, or use a unit mounting bolt as a stud to install the oversized cable ABYC recommends.