

Propane on Demand Tankless Hot Water Heaters taken from Practical Sailor February 2014 edition

Tankless propane water heaters carry serious risk of causing carbon-monoxide poisoning or oxygen depletion when mounted in a tight or sealed space. Because a boat is more tightly sealed than a shoreside home, the carbon monoxide is more likely to become trapped. Multiple boater deaths have been attributed to tankless water heaters, and several brands have been recalled over the years—among them Wolter Water Heater, Paloma, and Rheem-Rudd—because they posed a carbon-monoxide poisoning hazard.

That said, you will find tankless propane water heaters on some production boats, but it is buyer beware, in our opinion. Where you mount the heater, how it is installed, and how it is vented are of critical importance. We've heard of boat owners mounting them successfully in vented spaces such as cockpit lazarettes, galleys, and anchor lockers, and many install them with heat shields. For extra precaution, you could run the water heater on a propane system separate from your stove, and rig it with a water solenoid that opens when the propane solenoid opens so the propane won't flow unless there is water flowing.

If you decide to install the tankless water heater despite the risks, you should first be sure that your heater hasn't been recalled. We also recommend investing in a quality carbon monoxide detector like the Fireboy/Xintex (PS, December 2005), and always keeping a hatch open in the shower when using the heater. Also, check out our recent blog on inspecting marine systems for propane leaks (Dec. 30, 2013). It wouldn't hurt to look into your other water-heating options as well; you'll find a good sampling of what's available on the marine market in our December 2013 water-heater test.