

Water Tank Re-commissioning

A how-to guide from Boatgeek.biz.



Fresh water system problems--foul odor or taste--are typically caused by allowing water to stagnate in the system. Although most people think only in terms of the tank, the plumbing is actually the source of most foul water, because the molds, mildew, fungi and bacteria, which cause these problems, thrive in damp dark places rather than under water. Many people—and even some boat manufacturers—believe that keeping the tanks empty reduce the problem, but an empty water tank only provides another damp dark home for those “critters.”

There are all kinds of products sold that claim to keep onboard water fresh, but all that's really necessary is an annual or in especially warm climates, semi-annual re-commissioning of the entire system—tank and plumbing. The following recommendations conform to section 10.8 in the A-1 192 code covering electrical, plumbing, and heating of recreational vehicles. The solution is approved and recommended by competent health officials. It may be used in a new system a used one that has not been used for a period of time, or one that may have been contaminated.



Before beginning, turn off electric power to your water heater at the breaker; do not turn it on again until the entire re-commissioning is complete.

Icemakers should be left running to allow cleaning out of the water feed line; however the first two buckets of ice—the bucket generated during re-commissioning and the first bucketful afterward--should be discarded.



1. Using a bucket, Prepare a solution of 1 pint Purex or Clorox bleach to 25 gallons of water). With tank empty, pour chlorine solution into tank. Use a food grade funnel if necessary.

2. Complete filling of tank with fresh water. Open each faucet and drain cock until air has been released and the entire system is filled. **Do not turn off the pump; it must remain on to keep the system pressurized and the solution in the lines**

3. Allow to stand for at least three hours, but no longer than 24 hours.

4. Drain through every faucet on the boat (and if you haven't done this in a while, it's a good idea to remove any diffusion screens or aerators from the faucets, because what's likely to come out will clog them). Fill the tank again with fresh water only, drain again through every faucet on the boat.

5. To remove excess chlorine taste or odor which might remain, prepare a solution of one quart white vinegar to five gallons water and allow this solution to agitate in tank for several days.

6. Drain tank again through every faucet, and flush the lines again by filling the tank 1/4-1/2 full and again flushing with potable water.

An annual or semi-annual re-commissioning according to the above directions is all that should be necessary to keep your water tasting and smelling as good as anything that comes out of any faucet on land. If you need to improve on that, install a water filter. Just remember that a filter is not a substitute for cleaning out the system, and that filters require regular inspection and cleaning or replacement.