

④ THE HOLE DILEMMA

So, what exactly is a conscientious boat owner supposed to do with a seacock no longer in use or service? BY STEVE D'ANTONIO

MONTHLY MAINTENANCE

It's a question I'm asked with surprising regularity: "What should I do with a seacock I'm not using?" It actually borders on the manic. There are two primary approaches to dealing with this conundrum, and the first is simple: Retain the seacock while making certain it is sound, and remains that way indefinitely.

A seacock that is in poor

made up of copper and tin, with trace amounts (usually low, single-digit percentages) of silicon, aluminum, manganese or zinc.

With some exceptions, only true bronze alloys (i.e., with low zinc content) should be used in raw-water applications. The pink coloration indicates the loss, by galvanic corrosion, of zinc, leaving behind a porous, weak copper lattice. Bronze that contains more than a trace amount of zinc is

resistance.

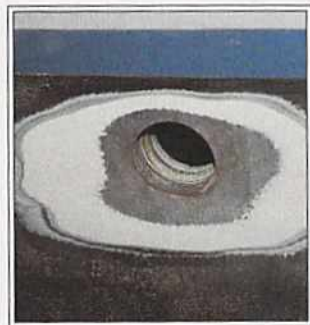
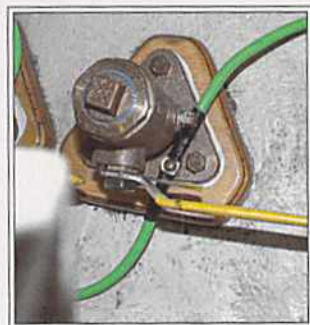
Some seacock manufacturers offer their own proprietary grease; for instance, Groco's includes a marine-growth inhibitor. Ball and taper-plug seacocks must be greased in the open position. If greased while closed, the grease is simply pumped into the hole in the ball or plug (where it does no good) rather than into the void between the ball/plug and the inside of the valve body. Of course, this procedure holds

set. It's also the route many instinctively choose, believing it to be the most secure approach. It involves removing the seacock altogether and filling the hole with fiberglass, using what's known as a "secondary bond" (see "The Bond That Ties," June/July 2020). I have on several occasions seen this accomplished by filling the void left by a seacock's through-hull fittings with an appropriately sized fiberglass plug (one of equal thickness to the hull) that is retained with epoxy, and then glassed over on one or both sides with a layer of fiberglass fabric.

It sounds simple, and it is, and it's also deadly wrong. This "quick and dirty" technique lacks the necessary interface with the hull to be strong and reliable. The correct approach involves grinding a minimum of a 12-to-1 scarf—a dish-shaped depression—in the inside or outside of the hull (a 1/2-inch-thick hull would require a scarf radius of 6 inches from the edge of the hole), and then laying in successive layers of fiberglass fabric and resin. The scarf provides the area needed for both adhesion and stiffness.

Given the choice, I nearly always choose the first option of ensuring functionality by greasing and capping. In addition to its general overall robustness, keeping the seacock means it could be used by you, or a future owner, should a raw-water source be needed, while avoiding the labor and potential liability of a secondary bond.

Steve D'Antonio offers services for boat owners and buyers through Steve D'Antonio Marine Consulting (stevedmarineconsulting.com).



From left to right: A properly decommissioned seacock is secure and reliable. Glassing over the through-hull hole left by an unused seacock is no small matter. The top nut on this seacock has been removed, exposing the ball and the gap that should be greased.

repair is among a vessel's greatest raw-water liabilities. If it's seized open or corroding, it could lead to catastrophe. All seacocks should be maintained in good working order regardless of whether they are in active use, be easy to open and close, and be free of all signs of decay or corrosion.

Bronze, a copper alloy, will turn green with what's commonly referred to as verdigris; it's completely normal and entirely harmless, and bronze seacocks are no exception. Corrosion that takes on a pinkish hue, on the other hand, is cause for concern. It signifies that the alloy in question is not a true bronze, because true bronze alloys are

in fact brass by definition, and the more zinc it contains, the more susceptible it is to failure as a result of dezincification. With few exceptions, brass should not be used in raw-water applications because it can be the source of both flooding and sinking.

If a seacock is unused, you can begin to ensure that it remains secure by making certain it functions. The handle should rotate through 90 degrees without excessive effort. If it can accept a grease fitting, it should be pumped with high-viscosity water-resistant grease; avoid using silicone, Teflon or white lithium greases because these are all too light and lack adequate water

true for active seacocks as well; if greaseable, they should by all means be greased. For dormant seacocks, while closed, the top of the valve (the portion accessible from inside the vessel) should be packed with grease, and then capped with a bronze pipe cap or plug, depending on thread design. Then, even if inadvertently opened, the valve cannot be the source of flooding, and the grease reduces the likelihood of seizure and corrosion.

The second approach to dealing with disused seacocks is more complex—not to mention more time consuming, invasive and messy—and it requires a specialized skill