

Replacing rudder bearings

Simple original construction means a simple repair

by Jim Craighead

I should have paid more attention to my loose rudder bearing when I put the boat in the water, but it didn't seem any worse than in previous years. Weeks later, during a day of sailing in strong winds, my friend yelled up at me from the cabin, "Hey, you've got water down here!"

After pulling into the slip and pumping the bilge, I followed a small trickle of water back to my lower rudder bearing. The four lag screws fastening it to a block glassed into the hull had rusted away to tiny brown spikes. This, combined with the wooden block absorbing water and rotting, had caused it to work its way up the rudder post until it no longer provided a seal against the cold Lake Superior water.

I needed to do a quick fix for the leak until the boat could be pulled, so I smeared beeswax from a toilet ring — it sticks to anything — between the bearing flange and the rotted block and pushed the bearing against the block with small jacks made from bolts and coupling nuts. The leak slowed to a drip. That was good enough until the boat could be pulled later in the week. When he pulled the boat, the owner and operator of our marina thoughtfully placed it at the edge of his pullout dock so I could drop the rudder without first digging a hole.

The lag screws that secured the bearing to its block had corroded, allowing the bearing to rise up the rudder stock, above. The weldment is for the rudder stops. After removing the block, Jim prepped the hull for the replacement, below.

Disassembly

Before unbolting the quadrant and stop collar from the rudder stock, I fastened a rope sling under the rudder. Together with the solid stainless-steel stock, the rudder assembly probably weighed 150 pounds. I could imagine it dropping into the mud below as I loosened the last bolt, but the sling held it in place. After all the hardware was removed, I lowered the rudder assembly with the sling and laid it on the dock.

Using an angle grinder and an old chisel, I cut through the fiberglass covering the rotted bearing block and removed it. I was careful to keep it intact as it would be my template for the new one. I cleaned up the remaining fiberglass and the hull around it to provide a clean surface for mounting the new block.

