

Garboard Drain Installation  
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Mutual Fun C36 #1057

The last two summers we were over 1100 miles from our boat and not able to check on it. Because of the amount of water that comes down the inside of our mast I needed to figure out how to remove it without having to provide power for pumps. With some research, I learned about the Garboard Drain but I could not really find the info I needed on how to install one on a C36.

Looking at the different types of Garboard Drains that are available, I decided to use the style of drain in the pictures below. Based on the layout of the bilge and the outside of the keel, I decided to use the forward bilge compartment closest to the aft side of the mast. The picture below is taken looking to port, the aft side of the mast is to the right.



With a 1/8" drill bit I put a hole on about a 45 degree angle 3/4 of a inch off the floor in the center of the bilge compartment on the port side. I felt it would be easier to patch a small hole than a big one if it was not in the right location.



On the outside of the boat, I placed the drain up to the hole to get an idea if it would work and it appeared it would. My next step was to grind out the glass that was on the inside of the hole where the plug would be screwed in. Once the glass was ground away so the plug would seal, it was time to install the Garboard Drain. I continued on making the hole bigger up to ½ inch in diameter. Once I got the hole big enough to insert a ½ hose barb snugly, I used 5200 and coated the outside of the hole, pressed the drain into the hole and sealed the edges on the inside.

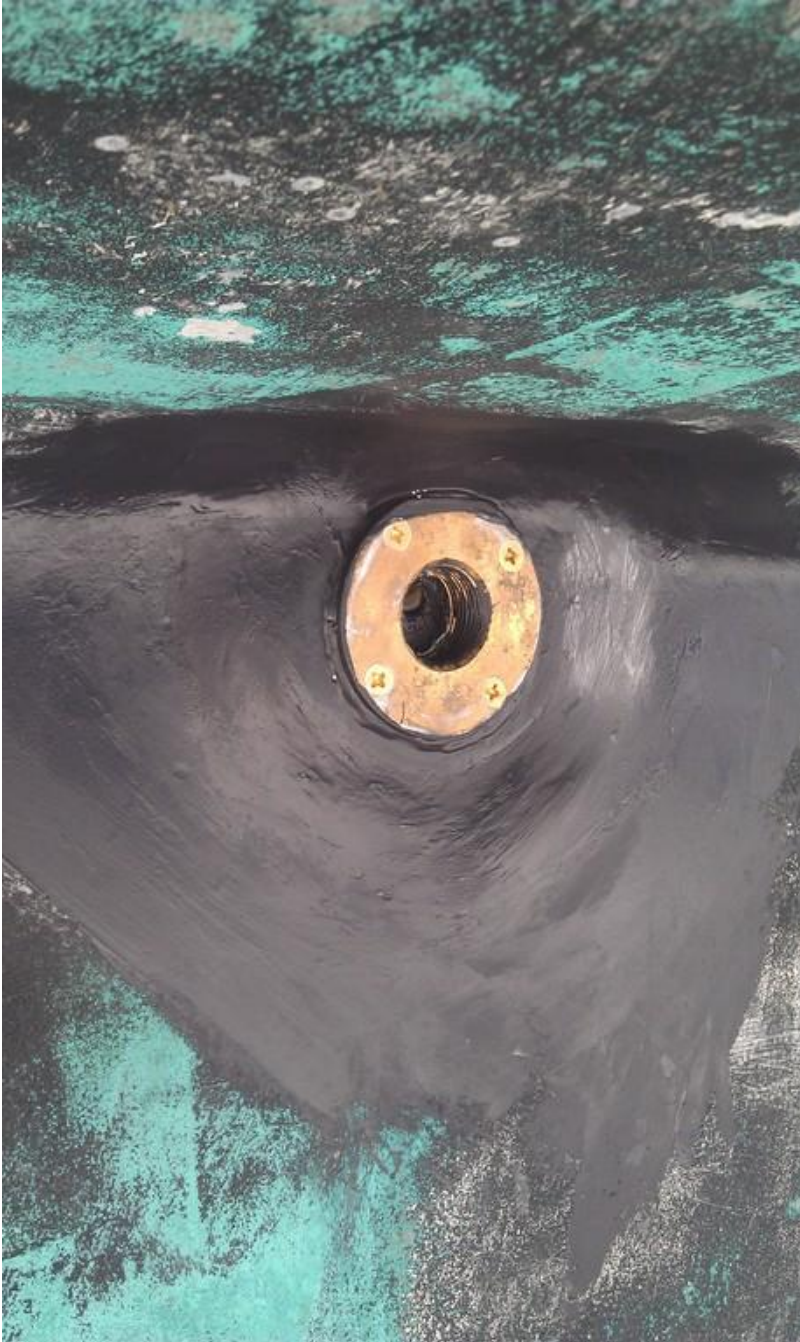


The drain hole exited at the radius of the keel to the hull joint on the outside. I had to lay up multiple layers of glass and taper them back to create a boss to inset the drain into the hull. The picture below shows the build up for the drain viewed from the bow.





With a dremel tool and markers I laid out the ID and OD of the drain I carefully ground out only what was needed to recess the drain back into the laid up glass. Keeping the hole centered in the drain, I had to grind the top side of the Garboard Drain flat so it would have clearance to install flat onto the laid up glass without hitting the underside of the hull.



I drilled the required holes to insert the 4 brass screws to hold the drain in making sure not to go through the hull. Once it was ready I recoated the new glass with 4 coats of Interlux 2000 barrier coat. After the required drying time, I coated the back of the drain and the 4 screws with 5200. I then tapped the Garboard Drain into the hull with a rubber mallet until the 5200 squeezed out and installed the 4 screws to secure the drain.



After curing for 2 days, I added a coat of bottom paint just so it would adhere to the Interlux 2000. Now that it is done the most water I will have in the bilge is  $\frac{3}{4}$  of an inch. Knowing what I do now, it is possible to have the hole exit right at the bottom of the bilge. However, the minimal amount of water that will collect is acceptable compared to what was happening previously.