Cabin Sole Repair

January 1, 2015 in Repair

Geoff Stothard owner of Bippy #1043 posted the following question Jan-1,2015.

Question #1

Just noticed bad dry rot in the center section of my cabin sole. Are there any instructions or lessons learned out there for replacing it successfully?

Question #2

A few follow-up questions: Would you consider making the new sole with something other than wood? Some of the plastic "lumber" available from West Marine looks like a possibility and would avoid future issues, I hope? Can I replace just the "flat" section of the sole and leave alone the parts under the settee and counter top, including the sloping parts that approach the flat sole?

Brian Shenstone multi-national champion and owner of Draco #1633 provided the following advice.

Answer #1

I suggest that you make a template off of the old cabin sole with brown paper. Then remove the old sole which may take a little work with a chisel and sandpaper. Get a piece of plywood of the same thickness and make the new sole from the template. Make sure that you make the openings big enough to allow the battery to be installed and use a belt sander to taper the back side of the plywood around the periphery so that it matches the hull where the two parts meet.

Install the new sole with epoxy with a filler as an adhesive and then some folks like to add glass tape around the edges to hold it in place. When you have the sole out you should defiantly check the keel stringers to see what shape they are in. If the sole was rotten then the stringers likely are a problem also and these parts are important to stiffening the keel and making the boat go to weather as it was designed. It's the same routine for replacing these parts. Template, build new stringers and reinstall..... The sole sits on top of the stringers in order to give it support but there is no physical joint (glue or screws) between these two parts. The stringers need to be free to move as the keel flexes. Good luck!

Answer #2

If you are racing the boat and therefore conforming to the one design rules, using the original plywood material is the only legal option. Also, the polyethylene materials that I am aware of would not have the same strength as plywood. I think that if you use marine plywood and seal it

up carefully before you install it will last a long time. Mine was replaced over 15 years ago and I see no signs of degradation. There is a special hardener for use with West System epoxy which is designed to allow it to be used like a varnish for sealing wood. It builds quickly and provides a good barrier to moisture. Also, I would use marine plywood.

Yes you can just replace the cabin sole without replacing the other parts. I would expect from your sail/hull number that you have a "C" hull which would mean that on the port side the cabin sole extends a few inches under the settee and on my boat it stops short of the starboard side cabinetry. There are minor differences in how these boats are built so I'm not sure I understand what you're calling the "sloping parts". As long as you replace the entire sole and can do that without having to remove other parts, you should be OK.

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