

Initial post by Chuck on March 22, 2009 at 1:53pm

I have a crack that appeared about four years ago about 24" up on the rudder support. At the time I ground in about 1/2" and feathered up and down. Wrapped fiberglass in layers about 8" on either side of the crack. That seemed to hold it for a while but over time the crack slowly reappeared. I nor the marina knows if there is a metal plate in the support or if there is another attachment method. I don't care about the crack I just don't need to have total failure of the support. Boat is stationed in the North Channel in the summer. In the winter she is Stored in Charlevoix, Michigan. Any ideas? She is a 1979 Mariner 36. Thanks

Reply by Bill on May 17, 2009 at 6:38am

Chuck,

There are two bars inside the skeg and they connect the hull to the lower part of the skeg about where you have the crack. One bar ends in a treaded section that the bronze shoe at the end of the skeg is attached to. The other is simply for support. They are close together.

On our boat they were originally stainless steel but the threaded one rusted out. I had both replaced with bronze. The boatyard expected that the rods would terminate inside the hull in an accessible area, but they were glassed over by the factory and probably all Mariners were build the same. The yard had to chop out glass to get access to the nuts holding the bars. They did this on the starboard side after using some device to determine where the rods ended. After the work was done, they filled the area around the nuts with a "knockout" material. The idea being the next time we need to work on the lower skeg or the bars, we just whack this material and it should pop out.

Bill

Reply by Chuck on May 19, 2009 at 8:13pm

I found the long rod with the shoe on the bottom and assumed that was the only one holding the skeg. Five years ago I ground the skeg in about 1/2" on either side of the crack and then beveled the repair area on either side of the crack using an automotive fiberglass repair kit. It started to crack after the first year and continued until it was almost the complete length of the skeg but only a couple of inches at a time. This time I ground in deep

enough to realize there was a seam there. I tried to pull the skeg down after removing the bronze pivot but there was no way it was going to budge. I almost gave up on the "Do it yourself" repair until I thought I would try something. I cleaned the lower pivot of gasket residue and reinstalled to the original position. I could still move the skeg enough to cause a crack if I refiberglassed (I think that is what happened the first time). I then tightened the nut until I had no flex in the skeg but could move the rudder freely. I then reglassed the seam by beveling out with layers of mono and bi layer fiberglass for strength, If I had known about the second rod my approach may have been different but I think I may have it licked. If not I love the smell of ground fiberglass in the morning. I appreciate the input. I will keep you informed as to my repair longevity.

Reply by Markus on May 21, 2009 at 5:34pm

The threaded rod in my rudder skeg that holds the [rudder shoe](#) to the skeg corroded and the original skeg shoe is somewhere on the Great River Loop. I have had a crack since I bought it Here is a picture taken in 2002.



Reply by George on February 15, 2013 at 12:29am

Chuck,

How did your repair work out. While cleaning the hull in the water we discovered the crack. It was not there two years ago when the bottom was painted. I did hit a log while motoring but I thought it hit the keel, who knows. I will keep an eye on it and see what happens. Any advice would be appreciated.

Thanks George Sparr

Reply by Chuck on February 15, 2013 at 10:55am

George

The repair is still good. I repaint every couple of years and keep a good eye on it. After tightening the nut on the bottom, follow the instructions above and it will work out fine. Holler if you have any questions

Reply by George on February 15, 2013 at 3:11pm

Chuck



Above is the underwater picture of the skeg crack. Looks bad but what I've read I should be OK until I pull the boat out next year for new bottom paint. Is the nut visible at the bottom of the skeg? I can have the bottom cleaner check the skeg attachment next time he cleans the bottom. I don't want it to drop off as what happened to Markus's boat. I guess the crack was caused when I hit a log while motoring home one night. Thanks again for your response. Contact me if you are in the Bay area we can go out for a sail.

Reply by Chuck on February 16, 2013 at 11:37am

George

I am assuming the crack is on both sides. If so that is the flex point. The bottom pivot needs to be removed as I remember but the nut is readily accessible and a turn or two would keep everything tight until the fiberglass is repaired have your man grab the skeg at the bottom and check for flex. A little is okay. A lot is not. You do want to fix the fiberglass so that the water does not seep inside the bolt race over time. Looks just like mine a couple of years ago. Good Luck and the offer is returned if you are ever in the North Channel around St. Joseph Island

Reply by George on February 17, 2013 at 9:48pm

Chuck,

The crack is only on one side. I think the log we hit first contacted the keel and then hit the port side of the skeg. Can you tell me if the nut is under the skeg shoe? I was thinking of having the diver who cleans the bottom of the boat tighten the nut while its still in the water. I can't tell from the forum's discussion from Bill Ferguson and Markus if I have to get at the threaded rod from inside the hull or if I can tighten it up from under the skeg shoe. I was going to wait until I pull the boat to repaint the bottom in Oct. 2014 and do the fiberglass repair but now I'm getting concerned about the water causing corrosion damage to the threaded rod. Any comments would be appreciated.

Reply by Markus April 23,2014

When Sankaty finished its Great River Loop trip in 2000, the area where the keel attached to the hull had a little crack, on both sides front to back. I tightened ten of the eleven keel bolts to 200 foot pounds and since then the crack has pretty much disappeared except maybe at the very front. The eleventh bolt and most forward, is under the mast, and got no attention.

This experience is probably the same as tightening the nut at the bottom of the skeg so that the joint has less slack (skeg is in compression and rod in tension). This however is not possible when the Stainless rod going from the hull through the entire skeg has corroded at the bottom end leaving no threads.