

## Replacing Doghouse Handrails

### Don Magnus: Take Five

The handrails on the cabin top of my Pearson 323, hull #77, were in pretty bad shape. The starboard one was cracked and was further damaged when a tarp I had covering the boat came loose in high wind and finished the job, breaking a chunk out of it. I decided to replace both handrails rather than try to just match one new one to the existing port side, which was still intact but looking pretty rough.



I decided to make my new rails slightly larger than the old ones, since the starboard one had broken when the previous owner had fallen and used the handrail to catch himself. I think the old one probably would have held when it was new, but 25+ years of weather had taken its toll.



I purchased a piece of rough-cut teak from a Minneapolis, MN lumber yard. The piece I got was 10'

long by 5" wide by 1" thick. Since the old handrails were nominally 1 3/4 wide by 7/8 thick and 111 inches long, I could get the two new ones out of this one board, which cost me \$55.



I first ripped a very thin strip off one edge of the board to square it up. Then I ripped two, 2" wide pieces.



I then used a 1/2" rounding over bit with bearing in my router to round over the edges of the new rails to make them fit the hand nicely. I started out trying to use the router table, but soon discovered that my expertise was lacking and reverted to the tried and true hand method.

It came out pretty good, with the exception of one area where I must have ridden up on the table that I had the piece clamped to and got a little deep somehow. Sanding and orienting that part on the bottom will make it invisible to all except me – I'll always know its there...



I then finished the pieces with West Pro Satin Varnish. I'm putting about 4 coats on and I might put a coat or two of urethane before installation.

Since the new pieces are about 9 ½ inches longer than the old, I'm going to wait until I install them on the boat to cut them to length. I may leave a slight overhang, but haven't decided yet.

Altogether, I took me about 5 hours from start to first coat of varnish. Of course, subsequent coats are 24 hours apart, so that will take awhile longer.

Now for the fiberglass part: Well, it's a couple of months later, the boat is in the water and I finally got some weather that was good enough (barely) to drill out the old holes and fill them with epoxy resin.

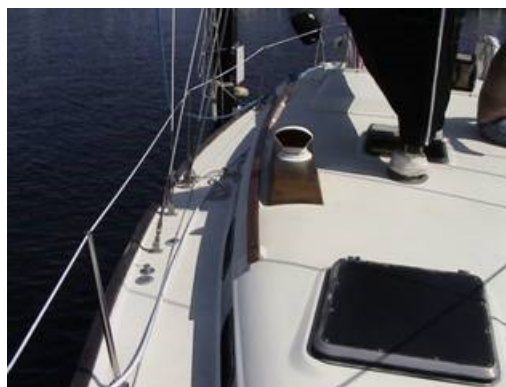
I used a ¾" (max) step drill to widen the old screw holes. I had to cut the old screws with my Dremel since there were nuts on the underside, which was impossible to get to. As I cut the screws off after pulling them as far out as possible, I could hear the screw/nut/washer fall down the headliner to eventually make its way to the bilge – I hope. I used West System epoxy and hardener along with some of their filler material mixed to a "peanut butter" consistency to minimize dripping down inside. I also stuffed some masking tape as deep into each hole as I could to help keep the epoxy from running.



This is a typical hole after it had been drilled. The scoring lines are from a previous attempt with the Dremel to cut square chunks out. I realized right away that this was not going to be the way to do it.



I filled each hole with epoxy, packing it in until it was over the top of the hole. I then put 3M long term masking tape over each one to smooth out the top surface and further pack the epoxy in. It was also looking like it was going to rain (it did – buckets), so the tape helped keep the water out while the epoxy cured. The temperature was in the low 50's so I left everything to cure for a week.



When I came back the next weekend, I checked the epoxy and it had hardened nicely. I'll have to grind

it down level with the top of each mounting and I'll be ready to drill new holes and mount the handrails.

I finally got to mount the handrails the weekend of June 4/5. The epoxy had hardened nicely and just needed a little sanding to get it smooth. I had a helper since you couldn't do this job alone. Unfortunately, I didn't have anyone to take pictures of the operation, just got some shots of the finished (almost) product.

We decided to start with the middle mounting pad and work out toward the ends. With the first screw in there was 8-10" from the ends of the handrail to the end mounting pads. As we worked closer it became harder to bend the rail to match the pad, but it was easily handled by my helper while I used two drills with three attachments to drill, countersink and screw in the #14 1 1/2" pan head Phillips screw. The largest bit I had was a 3/8 to use as a countersink, so I'm going to go back with a proper 1/2" countersink and remove each screw, countersink the hole, caulk and replace the screw. Then I'll put 1/2" teak plugs in to cover the screws. I left the handrails the length I had cut them (~ 10'), with the longer overhang at the aft end. I think the forward overhang is about the same as the old ones were – maybe a little longer. If I have a problem with catching lines, I'll trim them off.

Total cost for this project: Teak board 10' X 5" X 1" - \$55 and 14 #14 1 1/2" SS Pan Head Screws - \$5.60. A small amount of West System Epoxy and filler and maybe a 1/4 quart of West System varnish for the teak.



I'm quite pleased with the result and have had a lot of compliments already. I had thought that the much larger size might be too "aggressive", but the 323 is a big, brawny boat and the man-sized handrails match up nicely.

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P-323 #77 Take Five  
Menominee Marina D-5

Editors note: Notice the really pretty wooded dorade box. that took some work to make right.