

SCOUT Projects:



m/v SCOUT (Great Harbour N37)

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Description

There were several areas of our cabin sole that made a loud “pop” when walked over. There were expansion or uneven substrate voids underneath that gave way when stepped on.

We wanted to try to glue or fill them in.

Parts Ordered

1. Glue syringes



10ml Syringes 14Ga 1.5" Blunt Tip Needle Storage Caps - Glue Applicator, Oil Dispensing (Pack of 5)

★★★★★ 165 customer reviews | 9 answered questions

Amazon's Choice for "10cc syringe with needle"

2. Tape, epoxy, cleanup supplies

Design

We made a cutout in a piece of cardboard and taped it down to the teak and holly sole. The teak and holly plywood is about 1/4” thick laid over a 3/4” sub-floor. We chose to make a hole in the lighter-colored holly section instead of the teak area so that just about any big-box store light colored putty/filler would be easier to match when covering the hole.

I drilled a hole at a steep angle through the tape, “feeling” my way in to find the void. It was pretty evident when the drill bit broke through the 1/4” thickness.



Angled Hole Drilled, Needle Test

I started with a 21ga hole/needle to make the smallest hole possible. It turns out that the epoxy would not flow through the 21ga needle. I also had some 14ga needles and, while they needed a bigger hole, they passed the epoxy through without a problem. In fact, I probably could have used a bit of thickener and still got it though.



21ga and 14ga Needle Testing

The key to filling the syringe with epoxy is to remove the plunger entirely and then fill it by pouring from a tiny Dixie cup or similar. Then re-insert the plunger and use.

We filled three areas of the boat, using one full syringe each and then putting some heavy tool boxes on top while it cured.

Completion

Two of the three locations we did are completely fixed. The third one is much better, but still has one small section of void. I will inject another syringe into it soon.

Here is the small 14ga drill hole before patching with wood filler.



Drill Hole

Do-Overs and Comments

I think with epoxy and no filler, a 16ga or 18ga needle would work and have a small drill hole needed. I did not have either of these sizes on hand to test.

The epoxy injected is quite thin, and likely is not the best “void filler” and glue-down, but it is a good compromise for being so easy to get injected under the teak and holly sole.