

## Replacing the Transom in a classic Lido 14

I acquired Lido14 # 5120 and the transom needed to be replaced. It was soft and still pretty damp. I started by using a multitool to cut out a clean rectangular shape above the seats on the inside of the transom. If I only needed to replace the top section, then I would have an easy time splicing a rectangle of marine plywood into the space. I want to keep the original fiberglass back of the transom in place. This will also preserve the Hull ID on the back of the boat. I only cut deep enough to penetrate the fiberglass, which is about 1/8"-3/16" thick. The transom wood just peeled off by hand.....not a good sign.



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It was clear that the wood was wet all the way down to the bottom and it all needed to be removed. With a multi-tool, I cut a line following the shape of the seats, leaving about 1" of flange. This will give me something to epoxy the new transom wood to.

If your transom wood is dry behind the seats, you may not need to remove it all. As long as the new transom wood reaches beyond the flanges of the seats and you have an airtight seal when you epoxy it in, structurally the boat should be sound.

Unfortunately, the transom on this boat was completely rotted out. It all had to go.



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I found that the easiest way to remove the wood from behind the seats was to first separate the wood from the back fiberglass by using a Japanese pull saw flush against the fiberglass.

I repeated this step to separate the transom wood from the back of the seats.

As I removed the wood, the original fiberglass back started getting flimsy. Since I wanted to keep that from breaking, I began clamping scrap boards across it to stiffen it up. I particularly wanted to keep myself from accidentally cracking the thin piece of fiberglass above the tiller slot.



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Because my wood was in such bad shape, it only took me about 90 minutes to remove all the wood from behind both seats. The original transom wood was not epoxied to the bottom of the boat, so the last two inches of wood pretty much fell out by poking it with a long screwdriver. The remaining slot was beautifully clean.

I suspect cleaning all the wood out of the slot will be more difficult if you have a boat that was built on a good day. The wood on the port side of this boat didn't reach the bottom of the hull at all. If your wood is solid back there, consider leaving it in place and don't worry about getting every bit out.



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After removing all the remaining wood from the fiberglass transom by hand-scraping with a chisel, I sanded the back fiberglass panel using a 5" orbital sander with 60 grit sandpaper to get the last bits of wood off. In this photo, I had just finished the port side of the transom and was moving over to the starboard.

While sanding, I kept the fiberglass stiff by clamping scrap 2x6's across the back. I also held blocks of 2x6 on the back of the transom with one hand while pressing the sander from the inside with the fiberglass transom sandwiched in between.



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## Helpful tip

I glued some 60 grit sandpaper to a board that squeezed right between the seats and the back fiberglass. This made removing the small pieces of wood stuck to the transom and the back of the seat flanges pretty easy.

In the end, if the wood wouldn't come off then I decided it wasn't a problem. Save it for the person who might do this again in 40 years!



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## Time to make a pattern

To make a pattern, I taped a large piece of cardboard to the back of the boat (not pictured) and traced the shape of the transom onto the cardboard. Because doing so makes a pattern of the outside, but we need a pattern for the inside, I had to trim the edges of the pattern to fit the inside.

Once you have a good pattern, trace the outline of the seats onto the pattern. This will come in handy when you are cutting fiberglass later.

**Warning:** mark your pattern so you do not accidentally reverse it. If you've done any work on your Lido before, you will have noticed they are not symmetrical.



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I decided to keep the drain hole tube in place during the refit. I ended up cutting the new transom wood wide around this plug so I can pack it with thickened epoxy. This way, if water does find its way into the back of the boat, it will come into contact with epoxy, not my new wood transom.

Take a look at the trough the new transom wood will fit into. It is not square but rounded. You will need to round the edges of the new wood to fit this.



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I traced my pattern onto some good  $\frac{3}{4}$ " marine plywood. I marked the "fore" and "aft" facing surfaces because the two sides are not interchangeable (see previous comment on asymmetry)

The transom is not perpendicular to the hull of the boat. It is at a considerable angle. To have the bottom of the new wood sit as tightly as possible into the slot left by the old wood, I estimated the angle of the transom and duplicated that by putting my jigsaw at that angle.

**Very Important:** Do not cut the top of the new transom or the tiller hole now. Only cut the part of the wood that will go down into the back of the boat. You will trim the top off to match the boat transom, and cut the hole out, after you install the wood.

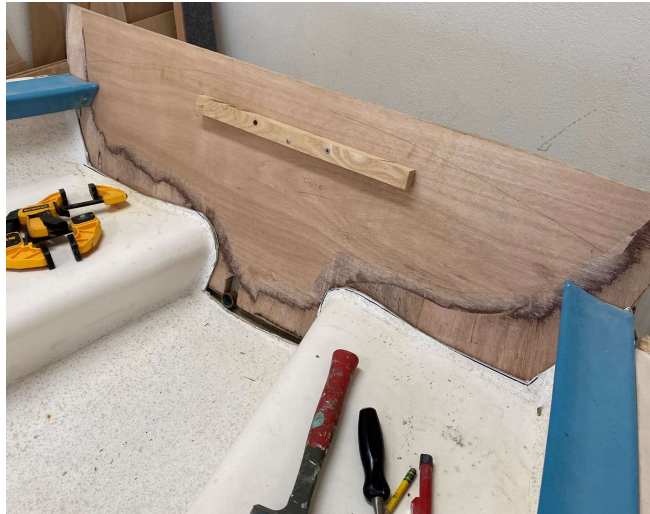


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After cutting to the pattern, I test-fitted the new transom. I estimated where the tiller hole will be and screwed on some scrap hardwood to use as a handle.

Also, you can see I left the top of the new wood uncut. **You do not want to cut this early.** You will not know exactly where the top will land until it is epoxied in place.

There were some tight-fitting spots along the seat flanges and at the upper port corner. I used a hand plane to taper the plywood along the edges. A rubber mallet was needed to tap the wood back out of the slot for several fittings and adjustments. Mostly I had to shave down the upper corners to fit (where the blue rail meets the transom was tight).



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Before installing the wood, I completely sealed it in West System epoxy. I was especially careful to put extra coats around the edges of the wood and on the part that will be behind the seats.

I then coated the inside of the fiberglass transom and behind the seats....every place where the wood will contact fiberglass....with epoxy thickened with West System 403 Microfiber Adhesive Filler.

You can see in the photo that I used the gudgeon holes to screw in scraps of hardwood to hold everything together while the epoxy cured. You can also see many holes added by a previous owner. I think this was an attempt to hold the transom together.

I cut the top of the transom flush and cut out the tiller hole after the epoxy cured. Cut the bottom of the tiller hole level with the floor, not perpendicular to the transom, so the tiller won't rub on it later.



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## Did you save the pattern?

This is when it becomes helpful to trim your pattern to match the shape you will cut the fiberglass.

I assume you have experience with woodworking and epoxy/ fiberglass, so I am not going into "how to" detail on that aspect. There are plenty of YouTube videos on the subject.

Polyester resin is usually a good choice for laying up multiple layers of 'glass but I hate the smell and West System epoxy is what I already have. There are also a lot of odd fillers and patches on this boat that may not be compatible with polyester resin.

I started with 6 oz cloth and will layer up with some CSM Mat. I order my boat building supplies from Duckworks and Jamestown Distributors.



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Before beginning the lay-up I beveled the edges of the 1" flange around the seats and sides to give the new 'glass something to transition into. **Note: This would have been easier to do before I put in the new wood.**

There are a few problems to deal with. The thickness of the existing fiberglass is not consistent, so it is hard to match. The port side flange is only 1/16" thick and grows to about 3/16" thick as it follows the edge along the back of the seat to the bottom of the boat. The Starboard side seat flange is nearly 3/8" thick. As it follows the edge up toward the starboard rail it thins out again to about 1/8". I want to get to a total of 15/16" thick at the top of the transom but it needs to be about 1 3/16" to match the lower starboard side of the seat. I'll have to put more glass mat on the bottom/starboard than the top and feather it all together.



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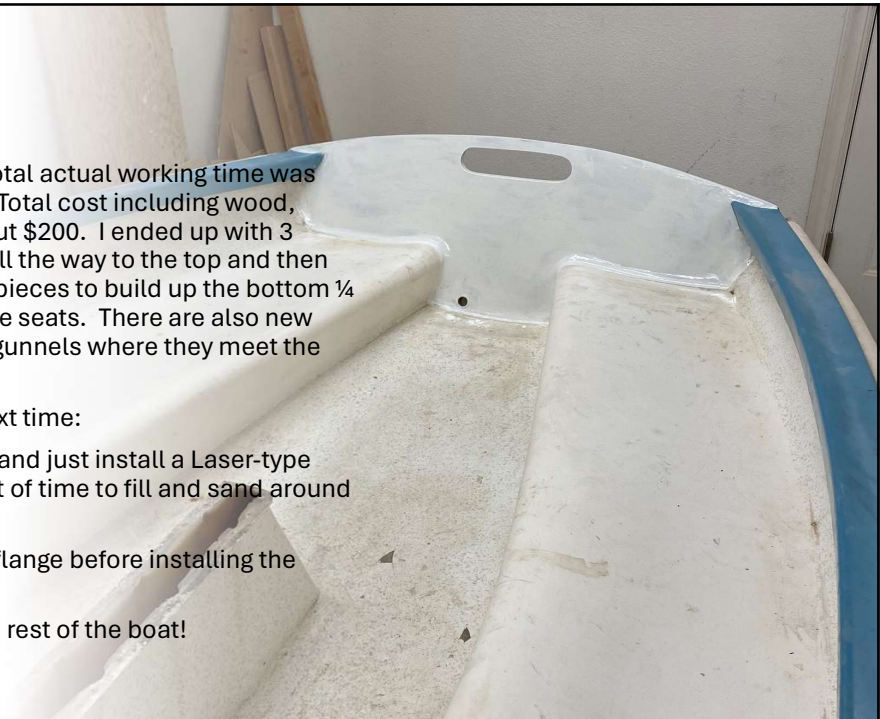
## Done!

I think it came out well. Total actual working time was 9½ hours over two weeks. Total cost including wood, glass, and epoxy, was about \$200. I ended up with 3 layers of fiberglass going all the way to the top and then layered two more smaller pieces to build up the bottom ¼ of the transom between the seats. There are also new wood supports under the gunnels where they meet the transom.

Things I'll do differently next time:

- Remove the drain tube and just install a Laser-type screw plug. It took a lot of time to fill and sand around that opening.
- Bevel the existing seat flange before installing the wood.

Time to sand and paint the rest of the boat!



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