

Alternative transom, deck, and stringer repair

by Paul Esterle
Contributing Writer

A column I recently wrote covered a process for replacing a rotted and water-saturated transom. That process required cutting away the interior fiberglass layer, bonding in a new plywood core, and relaminating the interior transom wall. At best, this is no small task and requires the internal equipment and structure around the transom to be removed for access.

Another alternative repair method recently came to my attention. It doesn't require the disassembly of the innards of the boat and offers an alternative method. It also seems to have use in replacing rotted decks and stringers. I want to make it very clear that I have not personally used this method and am only offering it as an alternative method worth investigating.

The Problem

Transoms are often made with thick plywood laminated between inner and outer skins of fiberglass. When water seeps into the plywood, usually through improperly sealed fastener holes, the plywood rots and delaminates. The resulting weak and flexible transom is not a dependable mounting for your expensive outboard.

The same process happens to both decks and the structural stringers bonded into the structure of your boat. Stringers, especially, are hard to repair, as major boat disassembly is required. Historically, these repairs have then been made with various types of replacement wood or foam product.

The Alternative

The alternative involves the use of a pourable material to cast a new transom core in place. The material is a polyester-based liquid to which you add a catalyst and reinforcing fiberglass strands. The resulting mixture is then poured in place and left to harden. The resulting repair is rock hard and won't rot. The material is called SEACAST Pourable Transom.

The Process

As in most things, it is easier said than done. The repair can be easy or difficult depending on the extent to the rot and the construction of the boat. There are three basic techniques: top, outside, and inside.

The top method is easiest if your boat qualifies. The wood core must be in such poor condition that it can easily be re-

moved. In this method, the top cap of the transom is first removed. The rotted wood inside is then chipped away, leaving a cavity between the inner and outer fiberglass skins.

In many cases, these skins are very flexible and must be supported with sheets of plywood to maintain the straightness of the transom. Be sure to seal any holes in the transom with tape. It also wouldn't hurt to cover the face of the plywood with waxed paper to prevent inadvertent bonding of the plywood to the fiberglass. The plywood and wood backers can be clamped in place or held temporarily with screws.

The sides of the motor may also need to be sealed up with blocks of waxed wood. Once the supports are all in place, the Seacast material is mixed and poured in place. The liquid fills all the voids and flows into all the nooks and crannies in the transom cavity.

Once the material has cured, the support forms can be removed. A new transom cap is then laminated in place on top of the new transom core. This cap can be built up out of layers of fiberglass mat, cloth, and resin. You then do any cosmetic repairs to the transom exterior, and you are good to go.

In many cases, the transom wood core may be saturated and delaminated but not sufficiently weakened to make removal through the narrow top opening practical. In this situation, you will need to remove the inner fiberglass skin or the outer skin. The inner skin removal will require less cosmetic repair but will require disassembly of the interior structure.

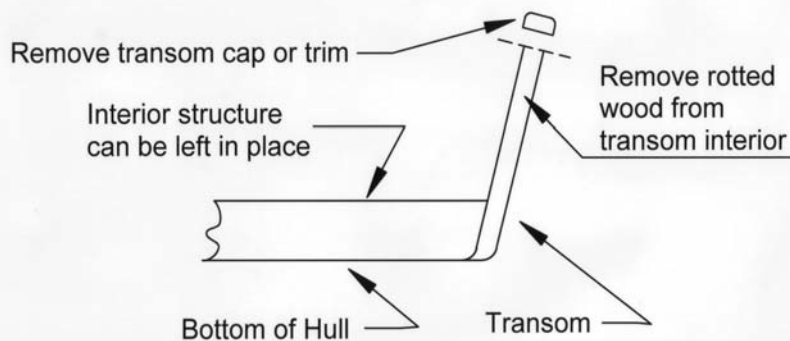
The outer skin removal will require gelcoat and cosmetic repairs but will allow much easier access to the transom core.

In either case, the fiberglass skin is cut several inches inside the edge of the transom. The skin is carefully peeled off so it can be reused later. The plywood core is chipped out, and the fiberglass surfaces are rough sanded to remove any traces of the rotted plywood and cleaned with acetone.

The outside surface of the removed skin is heavily waxed to prevent any Seacast from bonding to it. The skin is then temporarily screwed to a plywood backer, and that in turn is screwed to the flange around the edge of the transom opening. The motor may again need to be sealed

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Alternate Transom Repair - Step 1



off with waxed wood blocks.

As before, the Seacast material is mixed, poured in place, and allowed to cure. Once the plywood backers are removed, the repairs to the fiberglass skins can be completed. The edges of the cut should be sanded back, and the joint should be reinforced with layers of fiberglass mat and resin. Screw holes should be patched, as well as any unneeded opening.

The transom can then be sanded, primed and painted or gel coated to complete the repair.

Stringers

The problem with repairing stringers is being able to reach them. Much of the interior structure and equipment will need to be removed to access the problem areas. Make sure the boat will be worth repairing before starting!

Stringers pose another problem because they are heavily bonded to the hull with multiple layers of heavy fiberglass woven roving. If you cut and remove too much of this reinforcement, you will have weakened even the repaired structure. It is best to use a hole saw in the sides (make as few access holes as possible) and fish out the rotted wood through these.

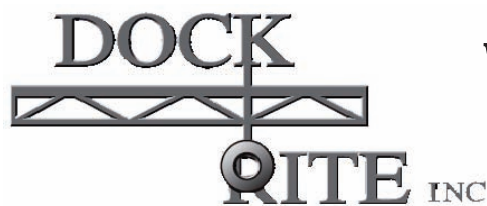
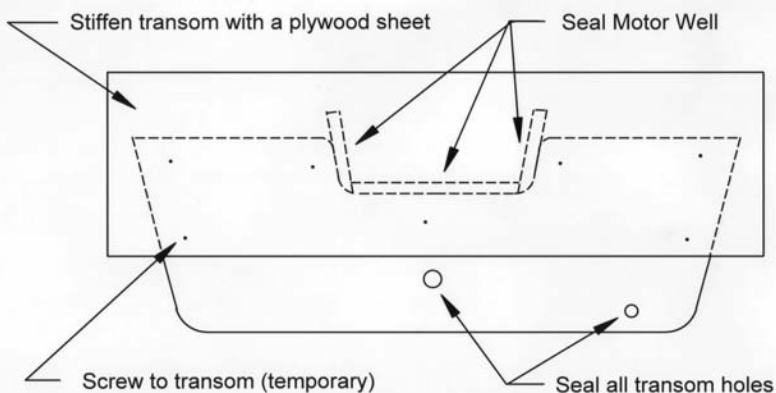
Once the bad wood or delaminated foam is removed, clean the cavity as well as possible, finishing up with acetone. Seal up the access holes you just made and pour the Seacast in place.

Decks

Decks are most often replaced with sheets of various types of plywood. However, if not well sealed, they are prone to

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Alternate Transom Repair - Step 2



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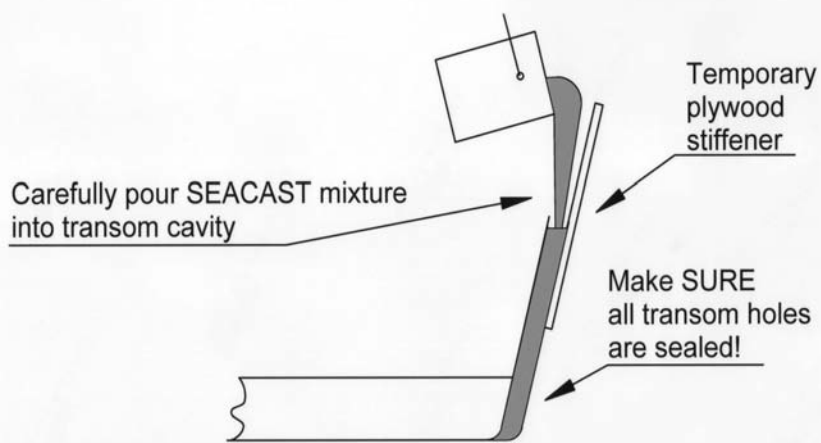


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Alternate Transom Repair - Step 3



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the same conditions that made the original deck fail. In certain circumstances, Seacast can also be used to replace wood deck.

A special self-leveling mix is used. It can be poured in place and troweled smooth. It should be between five eighths and three quarters of an inch thick. Once the material has cured, a top skin of fiberglass mat or cloth is then applied. It is a little more work than using plywood but has the advantage that it will not rot.

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There are online instructions and diagrams, as well as a user’s forum for answers to any questions you might have.

I’d like to reiterate that I have not personally used this system. It is offered here as another possible solution to a difficult problem. Make sure the boat is worth the effort before making any irreversible cuts. In some cases, simply reinforcing the transom externally may give a few more years of use for a marginal boat.

The Company

Seacast is available online at

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