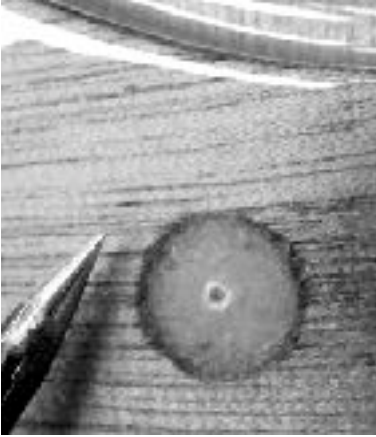


FOREDECK HATCH TURN DOGS

Use an awl to mark a center in the epoxy filled holes. These marks should be about 1/2" from the edge of the hatch cut-out.



Drill the holes for the screws as square as possible to the surface of the foredeck and use a countersink to lightly bevel the edges of the holes.

Install all the screws & turn dogs. Make sure the screws are square to the surface when starting them. Remove the screws and apply a tiny bit of epoxy to the insides of the holes with a nail or the butt end of a tiny drill bit.

Install the screws and turn dogs. Tighten the screws and then loosen until the dogs turn with friction. They will loosen up a bit with use and it's best if they turn with a bit of friction after some use.

Mark your 5/32" drill bit to the correct depth for the 5/8" #10 screws.



End of previous section in the manual and beginning of new section follows.

GASKETS

The PT 11 has 3 gaskets. All of them quite important to the safe operation of the boat. The hull gasket keeps the hull from leaking, the hatch gasket keeps the storage area watertight, and the trunk cap gasket keeps the trunk from gushing water when towing and getting your butt wet when rowing.

We have tried many different gasket materials and only one, latex surgical tubing, has provided the performance needed. Why? Because it has perfect memory: It can be squashed flat for years and it still pops back to its original shape.

What's wrong with surgical tubing? It's challenging to adhere to and we had tried every glue known to man before one of our customers tried cyanoacrylate (super glue). **This sticks just unbelievably well and it's far easier than the previous methods.**

Another issue we have had is that the gaskets can break down and adhere to the opposite surface when left pressed too long, especially true with the trunk cap, where the gasket pressure is highest. If the cap is left dogged down for a long period of time, removing the cap can be a challenge.

Gasket maintenance (and photos) at the end of this section.

What kind of cyanoacrylate glue to use? We aren't sure that it makes much difference, but it does need to be the thicker, gap filling variety (see top lettering on bottle).

Gluing in the gaskets is a tricky, yet very important job. It won't take long, but don't rush it

Cyanoacrylate glue cures very fast, so the gluing is done a short section at a time. It's not hard to do, but there's no second chance to get it right.



All 3 gasket notches should be prepped for gluing with multiple narrow strips of scrubbie.

Cut the strips with a sharp knife and straightedge. **Push the scrubbie around with the end of a stick as shown to remove most of the gloss from the bottom faces of the notches.**

Thoroughly wipe all the dust from the notches with clean cotton rags.



The foredeck hatch gasket is the most challenging, so let's start there.

Cut one end of the gasket square with a sharp razor blade. Use a fingertip either side of the blade to hold the gasket when cutting.

Wipe the foredeck and notch clean and **lay the gasket into the notch** as shown below with the square end down.

Mark as shown, remove gasket and cut square on the mark.

Note: it may be better to cut the gasket slightly too short than too long as that can help keep it from wandering in the notch.



Both the foredeck and trunk cap gaskets need to be butt-glued to make a loop before installing. This should be done by **applying a thin film of cyanoacrylate to one end** and pushing the ends together in an inside corner as shown.

What's not shown is that there was a piece of plastic packing tape applied to that inside corner first to keep it from sticking, and, that fingertips held the ends of the tube while sliding the butt joint together.

If the ends are not square, rotate until they fit together best.

Practice first and make sure things look right before pushing the ends together.

Hold for a minute and then let the joint cure for 5 or 10 before moving.



Now is when the fun begins. Re-install gasket and tape down as shown. **The lid will be used for pressure as the glue dries**, so try installing it and dogging it down. Add more tape if necessary to keep the gasket in the notch.



Lift one corner as shown.



A small bead of glue is all that's needed (less than shown below) and it can be applied **in the center of the notch** by leaning the bottle sideways to use the upper edge of the notch as a guide. See photos on following page.

Start with just 4" or so of the exposed corner (photo above right). **Apply a small bead in that area, lay the gasket into the notch, put the lid in place and dog it down.**

Working quickly is important with this glue. Once the gasket is laid into the wet glue, getting the lid on for pressure should happen quickly



The gasket diameter can vary, but is smaller than the width of the notch. It can be centered in the notch (if you want) with small tabs of tape if made ready ahead of time and applied quickly.

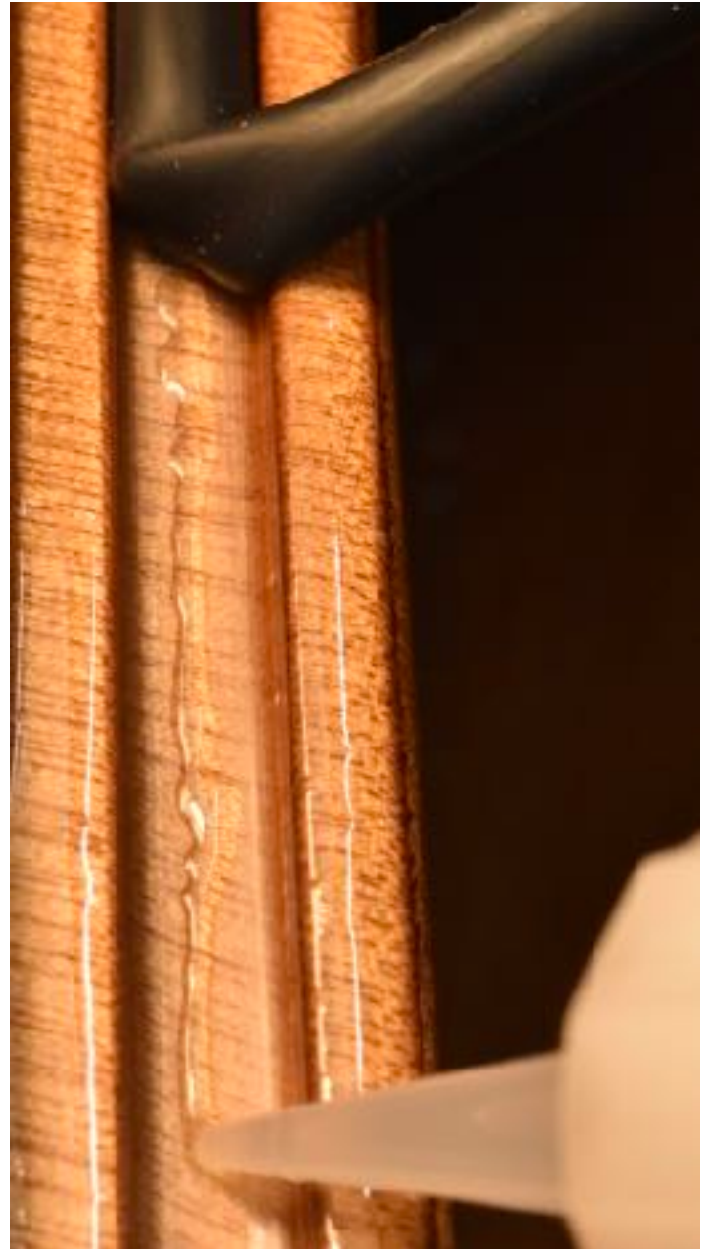
The glue we used took only a few minutes to cure enough to pull the lid off and continue.

Start on the trunk cap gasket while waiting if you want.

Pull up enough tape to allow folding the gasket back as shown to apply glue right up to the previous glue.

Photo on right shows about the right amount of glue to apply. Too much is not good.

Apply glue for the next 6" or so and make sure that the gasket is fully seated in the notch all the way around before dogging down the lid.



Continue around the coaming, gluing 4" to 8" at a time.

It's best if **the last part to be glued is at a corner** so that it's easier to get slack in the gasket for getting the glue nozzle under the gasket (photo on left).

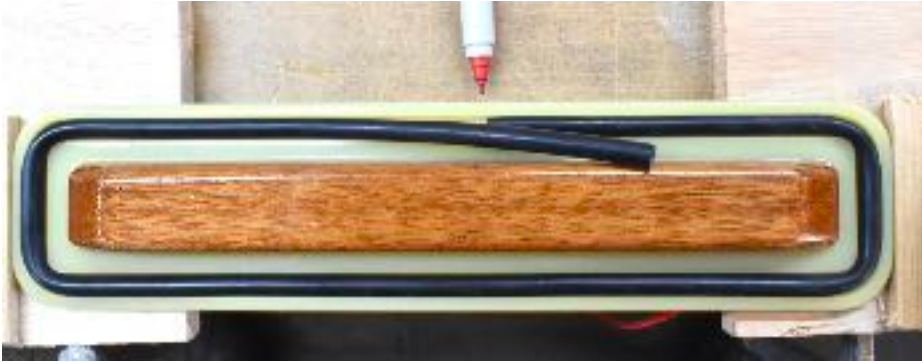


The trunk cap gasket is easier, but should still be glued in small steps.

Mark gasket as shown. **Butt glue** as with the hatch gasket.

Tape the gasket back in the notch with one end free.

Practice putting the cap in place & dogging it down before lifting one end of the gasket, applying glue, getting the gasket back in place and quickly placing the cap and dogging it down.



'Kinda obvious where the glue is, ain't it?'



Firmly tape the far end & pull up & glue one edge at a time, dogging the cap down each time. (photo on left).

Lift the remaining end & glue & dog down (photo below).



For the hull gasket, the bow section will need to be standing on its nose. We tied it to clamps on the edge of the bench with a rope running through the alignment holes to keep it from falling sideways.

We flubbed the photos for gluing this gasket, but it is **glued in sections using a scrap of plywood around 8" long that is weighted to achieve pressure.**

Lay one end of the gasket into the notch (about 1/4" short of the end of the notch) and place a piece of tape that shows the end of the section to be glued (length of plywood scrap).

Pull that section up, apply glue, lay the gasket back in the notch, and use the plywood and weights for pressure.



We had lead chunks for weight. Finding something heavy and easy to use will be helpful.

The small pieces of tape in the photo above are for helping to hold the gasket in the center of the notch before applying pressure. It's not necessary, but if you choose to do this, remember it has to happen fast, before the glue dries.

When approaching the far end of the job, **cut the end of the gasket about 1/4" short** (of the end of the notch).





GASKET MAINTENANCE

It appears that **waxing** the mating face (not the gasket) is effective in keeping the gasket from bonding to the opposite surface when left under pressure for a long time. It should also help with the hull gasket being “grabby”. Any paste wax should work to wax just the area needed.

If a gasket starts to lift, fix it! Flush with water, dry thoroughly, inject a little glue, and clamp the lid down.

Replacing gaskets: You’ll have to get all the residue out of the notches first. If you used contact cement as an adhesive, level the area and pour acetone into the notch. Pinch a paper cut to apply acetone into the notch only. Soak and scrub with tiny bits of rag pushed around with a stick. Do not get acetone on the turn-dogs. If you are replacing a gasket glued with cyanoacrylate, there’s a special remover for cyanoacrylate.

You can buy the surgical tubing from McMaster Carr, part number 5234K963, 5/32 ID, 1/4” OD. Unfortunately the OD of this material can vary quite a lot.

Please give us your feedback and ideas about gaskets, gluing the gaskets, and gasket maintenance.