

## Transom Transducer Mounting Pad

As our boats have aged and have seen many advancements in electronics and as old age has worn out things like depth finders and speedometers, our transoms have likely had many transducers mounted. Likely none of the replacements match the previous screw mounting patterns. As a result, there may be several obsolete and unsightly holes that have been plugged to seal the old screw holes. These may be sites or water intrusion and rot. Mine was no different.



After removing the old mountings, the old holes were drilled out to accept wood dowels that would fit snug. The drilling chips were

inspected for rot and the holes were probed to confirm the transom wood soundness.

A thin viscosity slow set epoxy was used to saturate the holes and the wood dowels. About 15 minutes was allowed for it to soak. The remaining resin was mixed with Cabosil (fumed silica) to make a thin paste. The paste was pushed in the holes and was used to coat the dowels. The dowels were driven in the excess resin was solvent wiped clean from area. Once the resin set, the excess dowel length was sanded flush with the transom.

Vertical and horizontal lines were drawn on the transom to mark an area to encompass all of the plugged holes plus a little. The area was sanded and degreased/dewaxed to accept marine adhesive.

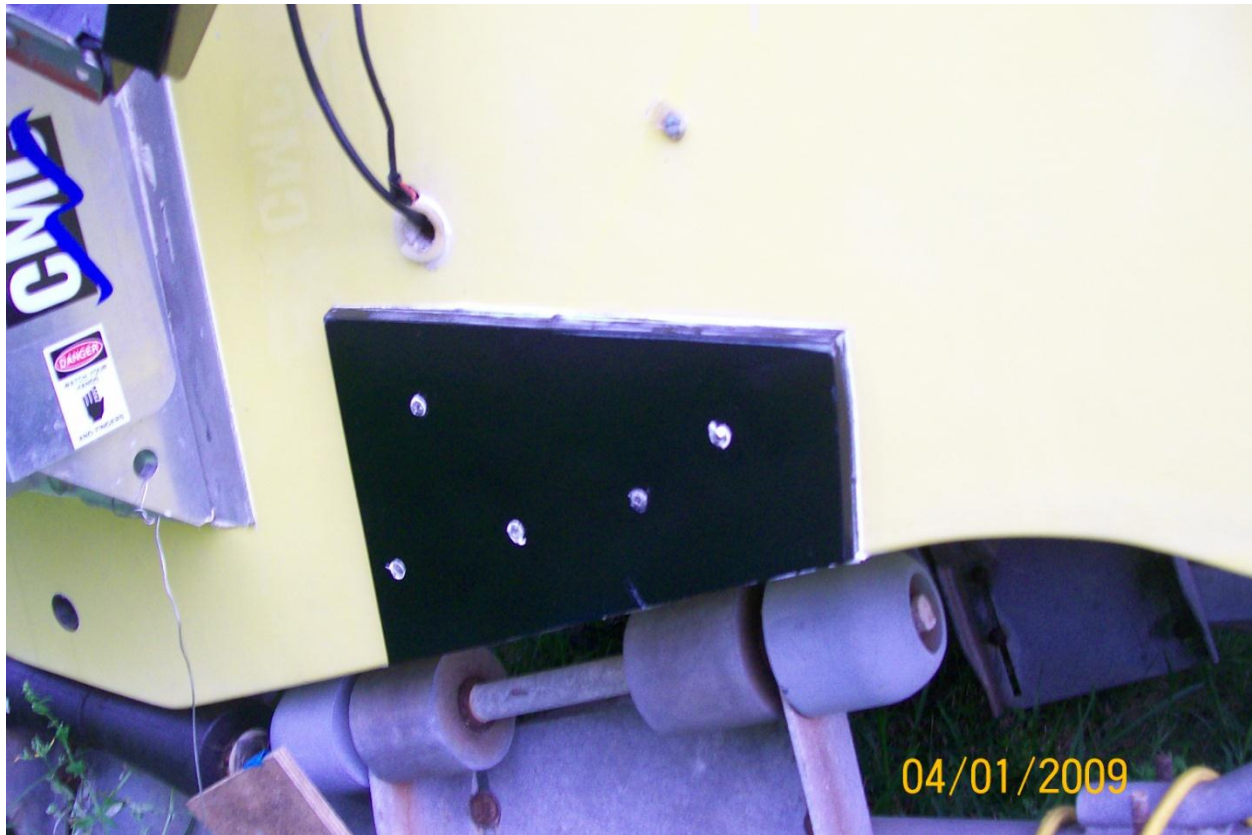
These lines were transferred to piece of ½ inch thick sheet of polypropylene. The angle between the hull bottom and transom was measured. This angle was set on the table saw and was used to miter the bottom of the pad to match the plane of the hull. This is to minimize turbulence. The rest of the cuts were made at the same angle to frame the edges of the pad.

The pad was drilled to accept stainless wood screws, number 10 oval head by 1 1/2 inches long in my case. The holes were countersunk to flush mount the screws. Five screws were used to make the mount.

Once sized and drilled, the pad was sanded, solvent cleaned and painted with one of the sprays designed for coating plastic. The color was used to match the trim of the boat. About 4 coats were used and I was pleased with the finish and texture.

The pad was taped to the transom for alignment. I placed the pad 1/8 above the plane of the bottom of the hull to insure that the pad would not impinge in the path of water coming past the transom. One hole at a time was drilled into the transom and the screw installed. Before the second hole was drilled the alignment was checked. The area outside of the mounting plate was masked. The pad was removed. More epoxy was mixed and pushed into the new screw holes. Marine adhesive was used to coat the back of the mounting plate making sure a little extra was applied around the screw holes.

The pad was put back in place and the screws started. Extra adhesive was placed below the screw heads before it was driven home. This was to give a little more assurance of a tight seal. The screws were driven home and excess adhesive oozed out around the edge of the pad. It took several retightenings of the screws to take up the slack as the adhesive oozed.



The screw placement is not as random as it looks. The two top screws are aligned horizontal and the three lower ones are parallel with the hull bottom. The idea was to minimize the number of screws used, distribute the forces, and miss possible mounting sites.





Hard to see since the wires, depth and speed transducers are black like the pad, but hope you get the idea. The stays for the wires and tube are also mounted in the plate.

Whatever new electronics come along, they can be mounted into the pad without fear of jeopardizing the transom.