Some notes on making the centerboard insert blocks

The centerboard insert blocks should be made of laminated cedar with s-glass cloth between laminations (your bulkhead material works great). The blocks below are made of 4 layers of ¼" thick cedar. Simply lay a strip of s-glass between each lamination (it helps to use a little silica in the epoxy—about like cream) and use weight or clamps to apply pressure. You can omit the extra s-glass If you're using bulkhead material with the s-glass already applied. Do yourself a favor by building an extra set of cassette blanks while you're at it.



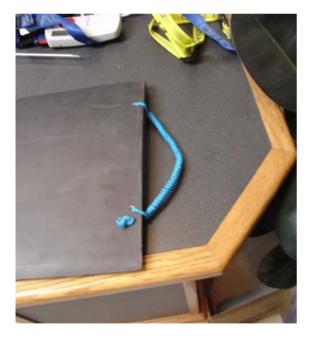
Cut the cassettes slightly oversized and bevel the edges with your disc sander by setting the table at 4 degrees. This will make a wedge shape that will make the insert tighter as it is inserted further. Leave a little space since you'll want to wrap the edges with 1" glass tape and epoxy. Use a little silica when you coat the glass cloth so you can re-sand it to make the block fit tight.

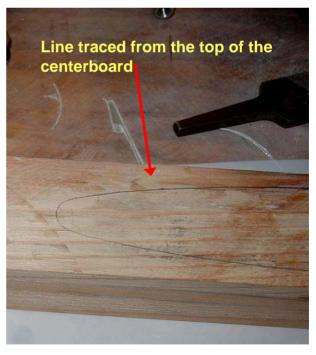
Making it easier

If you cut your centerboard top flush with the deck and use the rope handle as a stop (blurry picture bottom left) you can trace around the head onto your insert block before cutting with the saber saw.



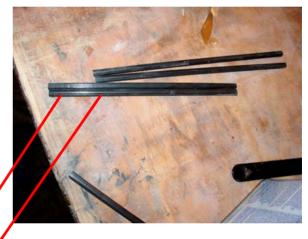


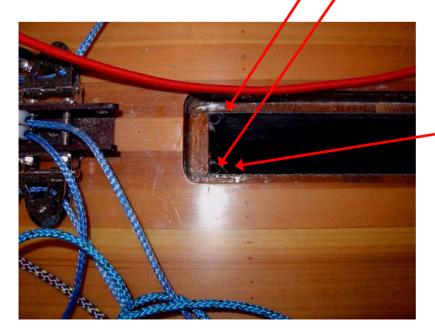




A new approach for fastening the blocks for installation

If you intend to experiment with centerboards, this is a way to change the board and insert blocks quickly without turning the boat over. It also eliminates the need for any adhesive to hold them in place. The idea is to use some long stainless steel threaded rods to bolt the top and bottom block together (right through the entire trunk) I found some hollow kite battens laying around and decided to insert one in each corner of the trunk as index tubes to ensure that the rods hit the target in the bottom block (thinwall ¼" aluminum tubes will work also). These tubes are cut just short of touching the blocks on the top and bottom. To install them, mix some epoxy and silica to about the thickness of peanut butter and put a bead down one side of the tube (batten) and stick them in.



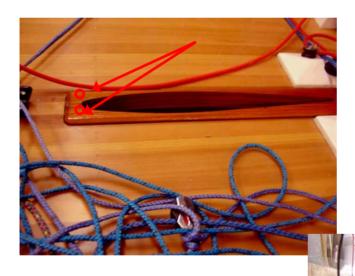


The only purpose of these tubes is to guide the rods into the threaded inserts in the lower cassette block

More on the new method of installing the cassette blocks

After wrapping with glass and fitting the blocks with a precision fit against the recess, insert the top block and use a 12" long 3/16" bit to drill up through the tubes and right through the top block --all four holes (set a weight on top of the block to hold it down). Do the same with the bottom one (drill from the top down) except, only go about ½ way through. On the bottom holes use threaded inserts epoxied in place. Use a proper length threaded rod with a cap nut on the top (one in each corner) and insert these long "bolts" through the holes in the top block and the index tubes and into the threaded inserts in the bottom block. With a precision fit, no adhesive will be necessary. You will be able to change cassette blocks and centerboards in about 10 minutes without turning the boat over.

Drilling up from the bottom



If you make these blocks and install the threaded inserts before you install the centerboard trunk assembly in the boat, you'll avoid a lot of this kind of work.

Parts you'll need

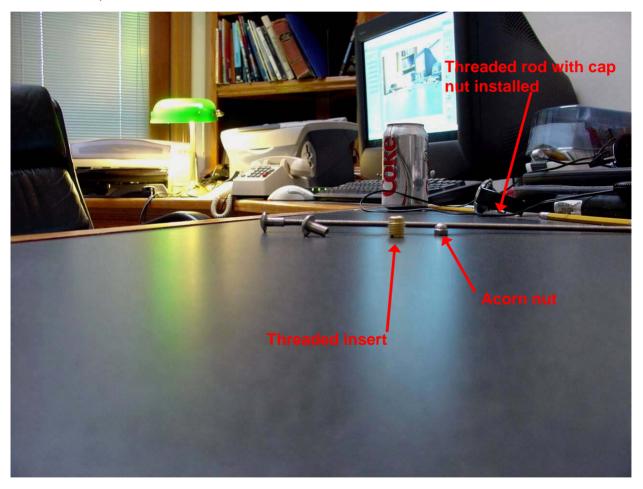
You'll need:

48 inches of 10-24 threaded stainless steel rod

4 ea. 10-24 acorn nuts unless you want to use the far more expensive caps nuts that I used.

48 inches of ½" id tubing (hollow kite battens or thin walled aluminum will work)

8 ea. 10-24 brass threaded wood inserts (often called slotted knife thread inserts). This will make two sets.



The front two rods will be cut to about 11 ¼" and the rear to about 10 ¼" and the top nuts are epoxied on (you need to figure your own lengths because of potential differences in the block thickness). The other end of the threaded rod should be ground to a bit of a point to help it index in the threaded inserts in the lower block

Drill the holes for the threaded inserts large enough that the threads barely hold in the wood. In order to make sure the angle is correct to accept the threads from the rods, follow this procedure:

- 1. Carefully put some epoxy with silica (heavy cream) in the holes around the edges with a q-tip (put only enough in the bottom of the hole to seal the wood).
- 2. Put Vaseline on the end of the thread rods
- Insert the brass inserts
- 4. Screw the lubed rod ends into the brass inserts and place the cassette in the bottom of the trunk—carefully sliding the rods into the tubes. If you meet resistance, stop and realign the angle of the brass inserts in their respective holes







The angle of these inserts is critical to allow the rod to hook up with the threads in the lower cassette