

# Flying Scot, Inc.

## Internal Spinnaker Trim Instructions

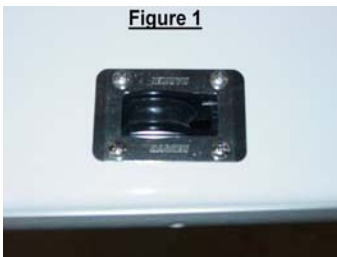
### Kit Includes

- 1 Paper Template (Starboard)
- 2 Fairleads with Screws
- 2 Harken Carbo-Ratchamatic Blocks with Rubber Padding, Plastic Cap, and Screws
- 2 Small Cam Cleats with Wedges and Screws
- 2 Harken Thru-Deck Blocks with Screws and Bolts
- 2 Aluminum Thru-Deck Blocks with Screws
- 2 Wood Blocks and Glass for Ratchets
- 2 Small Wood Blocks and Glass for Fairleads

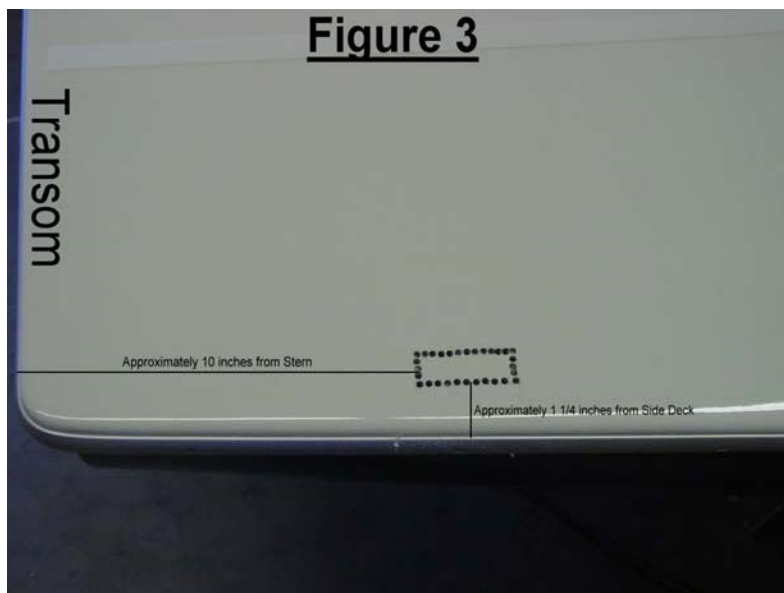
**Before Beginning Please Read Through All Instructions.**  
**Please call us at 1-800-864-7208 with any questions.**

***Suggestion:*** Slightly countersink (enlarge the top of the hole) all of the screw holes in the aft deck and the seat edge. This will prevent chips and stress cracks in the gelcoat.

### Thru-Deck Block Installation (See Figures 1 and 2)



1. The paper template will give an approximate location for the thru-deck blocks. (See Figure 3)



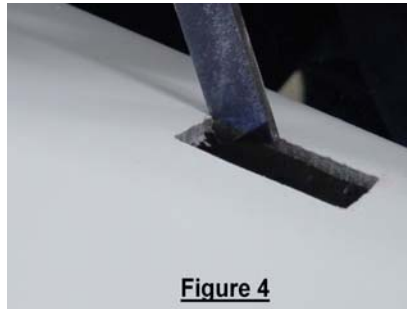
***Note:*** It is best to try to locate the cutouts so that you do not cut into the balsa core. If you do cut into the core, be sure to seal the balsa with resin or gel coat.

2. The thru-deck blocks should be angled so that the spinnaker trim will lead just outside the shroud.

**Note:** We recommend drawing the outline of the hole with pencil on the deck as a template.

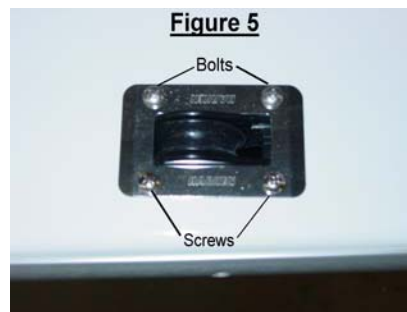
3. Cut the hole for the thru-deck block.

**Note 1:** We suggest cutting the hole slightly undersize and then using a file to enlarge it to the correct size. (See Figure 4)



**Note 2:** The hole can be cut using a drill by drilling multiple holes around the perimeter of the hole. Once the small holes are drilled, drag the drill around the perimeter to cut out the section and file down to desired size. (See Figure 3 above)

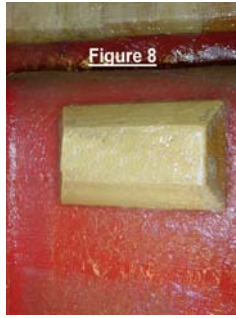
4. Place the block in the cut out hole and use it as a template to drill the 5/32” screw holes making sure to countersink the holes.
5. Install the screws in the fore and aft holes closest to the deck edge. (See Figure 5)
6. Install the bolts in the fore and aft holes inboard. (See Figure 5)



### **Fairlead Installation (See Figures 6 and 7)**



1. Glass the small wood blocks in place underneath the seats, at the aft edge inboard of the seat drain tube. (See Figure 8)



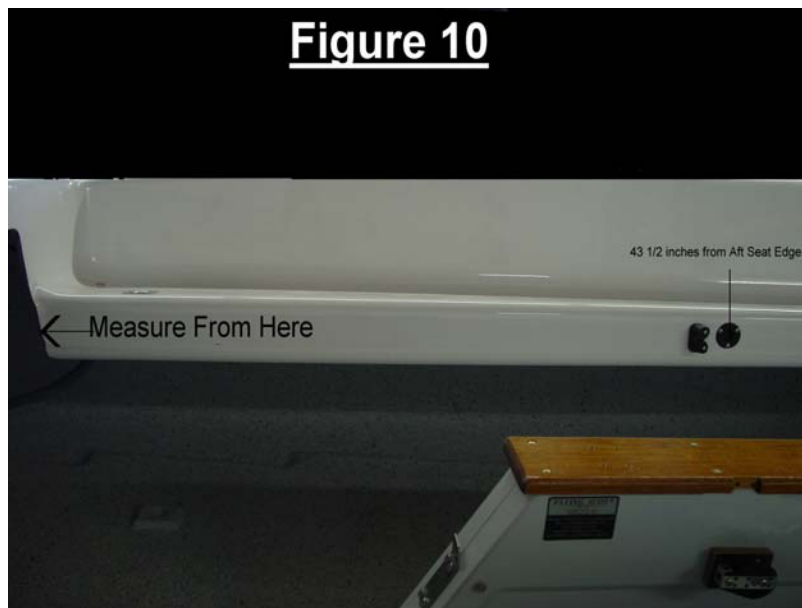
**Note:** The wood blocks can be glued in place using a good adhesive (3M 5200 works well) instead of glass if that is more convenient.

2. Pre-drill the holes in the wood blocks using a 1/8" bit. **BE SURE NOT TO GO ALL THE WAY THROUGH THE SEAT!**
3. Screw the fairleads onto the wood blocks.

#### Thru-Seat Fairlead and Cam Cleat Installation ( See Figure 9)



1. Position the holes for the aluminum thru-seat fairleads so that the center of the hole is 43 1/2" forward of the aft ends of the seats. (See Figure 10)



**Note:** Be certain that the hole is clear of the seat brace.

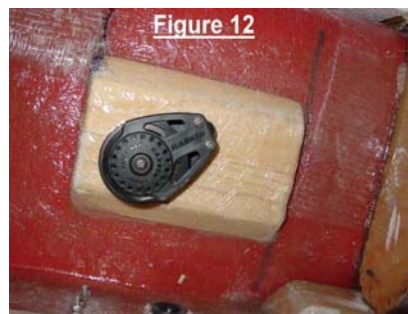
2. Drill a 1" hole.

3. Place the fairlead in the hole and use it as a template to drill the 7/64" screw holes making sure to countersink the screw holes.
4. Install the fairlead using the screws provided.
5. Position the small cam cleats about 1" aft of the aluminum thru-seats. **(See Figure 11)**



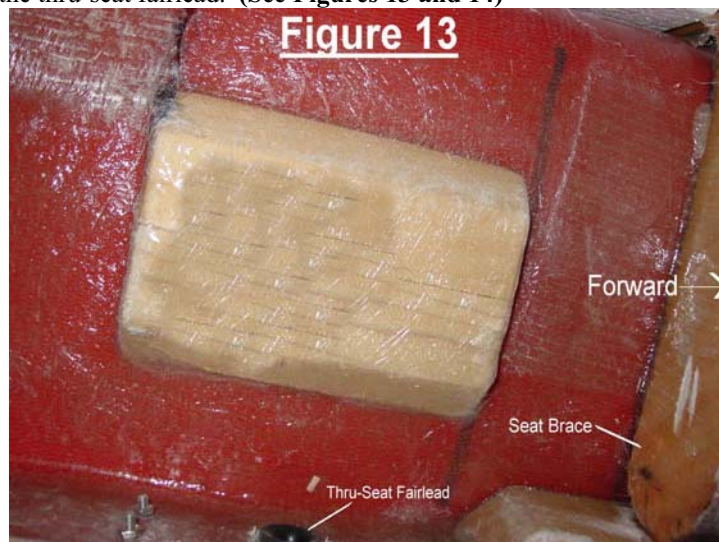
6. Using the cleat as a template, drill 1/8" holes making sure to countersink the holes.
7. Mount the cam cleats and wedges using the screws provided.

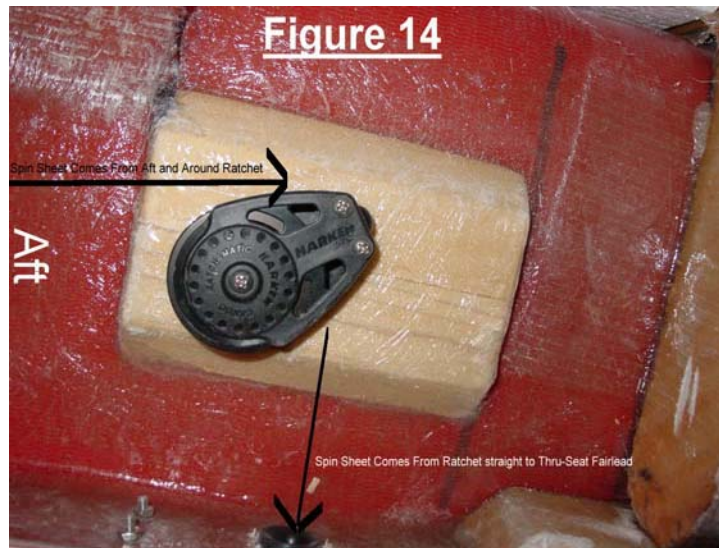
#### Harken Carbo Ratchamatic Block Installation (See Figure 12)



***Important Information:*** If your boat has balsa under the seat, it must be removed before installing the wood blocks. The balsa can be removed with a hammer and chisel. Remove the balsa carefully so as to not puncture the glass underneath. Seal remaining exposed balsa with resin and a small piece of fiberglass.

1. Glass the wood blocks in place to the underside of the seats, aft of the seat brace, so that the spinnaker trim will follow a straight line from the block through the thru-seat fairlead. **(See Figures 13 and 14)**

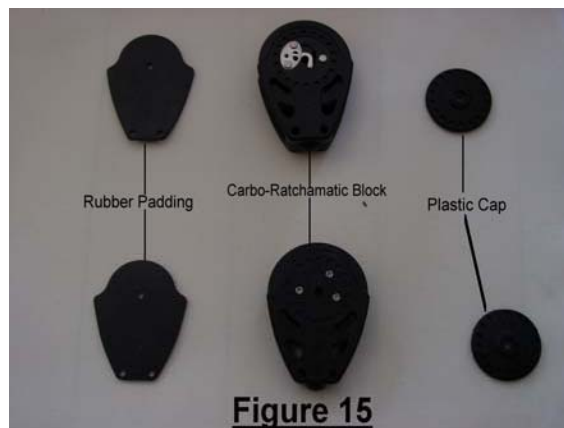




**Note 1:** The wood blocks can be glued in place using a good adhesive (3M 5200 works well) instead of glass if that is more convenient.

**Note 2:** Be certain that the block is clear of the seat brace.

2. Pre-drill the holes in the wood blocks using a 5/32" bit. The rubber padding can be used as a template in drilling the holes. **BE SURE NOT TO GO ALL THE WAY THROUGH THE SEAT!**
3. Assemble the Harken Carbo-Ratchamatic blocks in the following manner: Rubber padding, block, plastic cap. The rubber padding should be against the wood block. (See Figure 15)



**Note:** The Harken Carbo-Ratchamatic cheek blocks do have arrows on each side to assist in positioning the blocks. Be sure that the block is mounted so that the end of the line that comes out of the thru-seat fairlead follows the direction of the arrow on the block. If you need it to ratchet in the other direction, flip the block over. The block is free turning until the line is under enough load to engage the ratchet. This allows the block to turn free in light air, but engages the ratchet automatically if you encounter a heavy puff.

4. Screw the ratchets to the wood blocks making sure that the closed end of the block is forward and the block ratchets inward.