

## SmartTrack Trim Tab Kit #03825 For kayaks with SmartTrack Toe Pilot Foot Controls

### 1. Initial Set-up

a. Disconnect rudder control cables from rudder. Thread them completely through kayak shell and out of the Toe Pilot Foot Controls. The rudder control cables exit the Foot Controls from the Cable Adjustment Knob (Fig. 2) located on the aft of the Foot Control unit.

b. Leave the Foot Controls mounted in kayak for now. If the Foot Controls are not mounted in the kayak, mount them now.

### 2. Pre drill for the Trim Tab

a. Once the Foot Controls are mounted, accurately determine the location where you want the Trim Tab. It should go on a flat portion of the front deck within easy reach from the cockpit. The Trim Tab will be mounted under the deck, with only the Knob above deck. (Fig. 3)

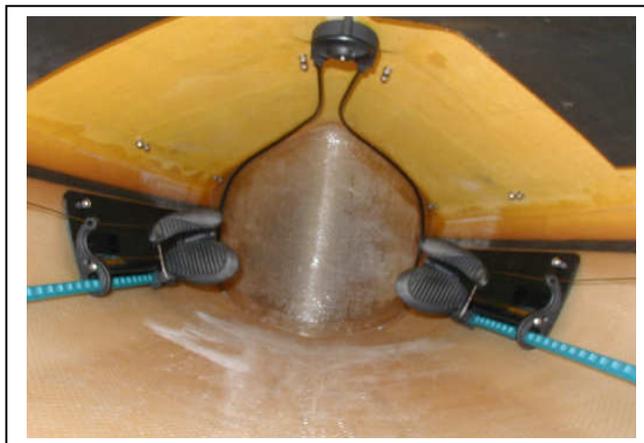


Fig. 1 – View inside kayak with Trim Tab installed.

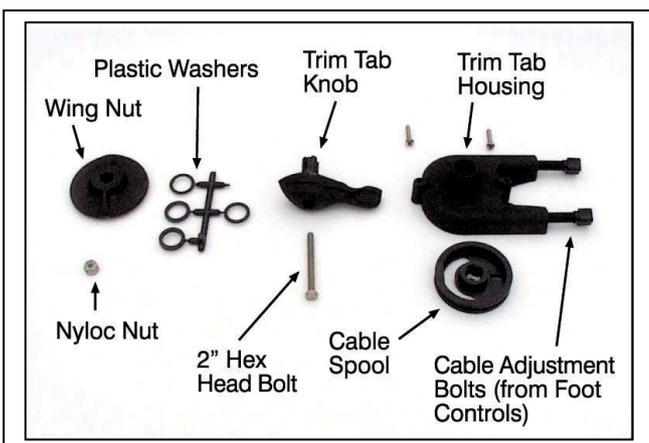


Fig. 2 – Trim Tab parts

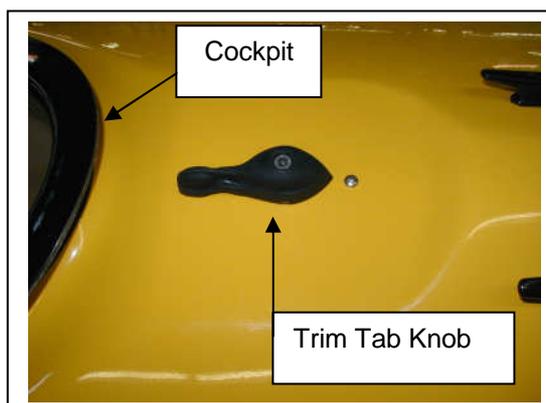


Fig. 3 – Completed Trim Tab Knob.

b. Mask off the area over which the Trim Tab will be mounted to reduce splintering of the gel coat.

c. Place the Trim Tab Housing onto the masking tape, making sure that it is in correct alignment, with the Cable Adjustment Bolts forward. Be sure you've taken into account anything that might interfere with the Trim Tab Housing and Cable Adjustment Bolts under the deck and with the Trim Tab Knob on the deck. (Fig. 4)

d. Using the two outer holes in the Trim Tab Housing for guides, drill two small holes in the deck of the kayak with a 7/64" or 3/32" bit.

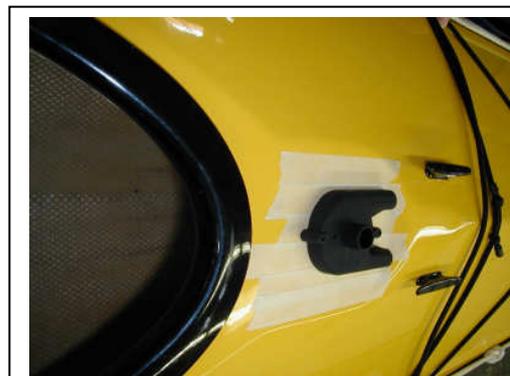


Fig. 4 – Trim Tap placed atop masked area.

e. Remove the Trim Tab from the deck, insert the Cable Spool under the Trim Tab Housing, and gently drop the Trim Tab lever in from above. Make sure the teeth engage into the Spool.

f. Set the assembled Trim Tab back on the kayak deck, and align the small outer mounting holes with the holes you just drilled in the deck of the kayak. Secure the Trim Tab assembly in place by dropping a couple of small drill bits or nails through the holes. (Fig. 5)

g. Using a 3/16" bit and the bolt hole in the Trim Tab knob as a guide, drill a pilot hole for the Trim Tab in the deck of the kayak.

h. Remove the Trim Tab assembly, and using a 3/4" bit, enlarge the pilot hole in the kayak for the Trim Tab knob. Be careful, go slow, and make sure your bit is sharp as you do not want to chip the gel coat. We have used both a sharp "Speedbore" spade bit and a hole saw with success. If possible, drill down from top and then up from bottom to reduce splintering.

i. Enlarge the outer two mounting holes using a 5/32" bit. Remove the tape, as you are now set to install the Trim Tab.

### 3. Pre-cut the Cable Tubing

a. Place the Trim Tab Housing under the deck in its desired location, with the Cable Adjustment Bolts towards the bow. Temporarily hold in place by threading in the two small #6 screws. (Fig. 9)

b. You now need to determine the length of Cable Tubing that will need to travel between the Trim Tab and the lower cable hole on the front end cap of the Foot Controls. The easiest method for this is to use the actual Cable Tubing for this measurement. Holding the end of the Tubing at the Cable Adjustment Bolts on the Trim Tab, push enough Cable Tubing forward to form a "J" shaped loop that reconnects at the front end cap of the Foot Controls. Ideally, this loop should lay against the deck of the kayak, drop down along the front bulkhead, and loop back to the front end cap of the Foot Controls. (Fig.1) If your Trim Tab is not centered on the deck of the kayak, make sure to take two separate right and left measurements between the Trim Tab Cable Adjustment Bolts and the front end cap of the Foot Control. Carefully cut the Cable Tubing to the two desired lengths. We recommend using a sharp razor knife, as scissors tend to crimp the Tube.

### 4. Assembling the cable into the Trim Tab

(Note: take great care not to kink the Cable)

a. Remove Trim Tab from boat and disassemble it into its component pieces.

b. Thread each end of the Cable into the holes on the inside of the Trim Tab Housing, and out the Cable Adjustment Bolts.

c. Keep threading both sides of the cable through the Trim Tab Housing until it starts getting taught. As the swage approaches the Trim Tab Housing, slip the Trim Tab Cable Spool into the loop and engage the swage into the slot on the Spool. Make sure that the flush surface of the Spool faces the flush surface on the inside of the Trim Tab Housing. The open recess of the Spool needs to be facing outward. (Fig. 6)

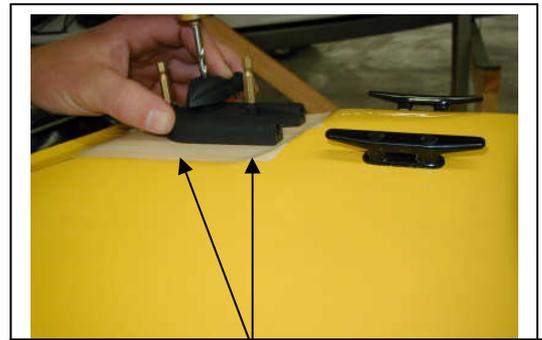


Fig. 5 – Using drill bits or nails placed in holes to keep Trim Tab assembly in position while drilling pilot hole.



Fig. 6 – Swage slotted into spool.

d. Continue threading the Cable until you can fit the Cable Spool into the Housing. Now slip the pre-cut pieces of Cable Tubing onto the ends of the cable, and slide it up the Cable to the Trim Tab Housing.

### 5. Threading cable onto Foot Controls

a. Set the assembled Trim Tab upright on a large table or the floor, with the Cable Adjustment Bolts pointed towards you. The Trim Tab knob post should be facing up, and the open side with the Cable Spool should be down. This is the position in which the Trim Tab assembly will be mounted in the kayak. (Fig. 7)

b. If Foot Controls are still mounted in the kayak, remove them. Place the appropriate (left and right) Foot Control adjacent to the appropriate side of the Trim Tab.

c. Take the right Cable, which is coming out of the right Cable Adjustment Bolt in the Trim Tab, and thread it from front to back through the lower guide hole in the forward end cap of the right Foot Control.

d. Pass the Cable back through the cable slot on the bottom side of the Foot Pedal.

e. Pass the Cable up and forward, around the cam radius on the Foot Pedal, and back through the slot and over the roller in the Toe Pedal.

f. Continue threading the Cable back through the cable guide in the aft end cap of the Foot Control, and keep going until all slack is removed.

g. Carefully press fit the ends of the Cable Tubing into the Cable Adjustment Bolt on the Trim Tab and into the recess on the front end cap of the Foot Control. This is a tight fit, so make sure you use enough pressure to get proper engagement. Repeat this process for the left side.

### 6. Installation of the assembly into the kayak

a. Carefully set the full Trim Tab/Foot Control assembly into the cockpit of the kayak. (Fig. 8)

b. To get them out of the way, thread Cable ends back through cable channel to the rudder. Do NOT attach them to the rudder at this point.

c. Insert Trim Tab assembly up through the deck hole, Cable Adjustment Bolts forward, and secure from above with the two  $\frac{3}{4}$ " #6 screws and the large Fender Washers and small O-rings between the deck and Trim Tab Housing. Use marine sealant to create a water-tight seal for the large Trim Tab Knob hole. (Fig. 9)

d. Mount the Foot Controls back into their original position. Remember to use the neoprene washers between hull and side rail for this final installation.

e. At this point, do a careful check to make sure the Cable Tubing did not dislodge from the end caps or Cable Adjustment Bolts. If so, re-press the Cable Tubing as needed. Use needle nose vise grips to clamp the Cable just behind the front end cap if tubing slips out.



Fig. 7 – Complete Trim Tab and Foot Control assembly laid out.



Fig. 8 Insert full assembly into cockpit.

f. If desired, install the Cable Clips at an appropriate location along the Cable Tubing to secure it in place. Note: The Cable Tubing is usually stiff enough to remain in looped against the deck and bulkhead without the aid of Cable Clips. (Fig. 1)

### 7. Installation of the Trim Tab knob.

a. Take the thickest Washer from the plastic Washer Tree and place it over the teeth and shaft, and into the groove, on the Trim Tab Knob. If your kayak has a thick deck (i.e. plastic) or is somewhat crowned at the location of Trim Tab placement, consider using one or two of the thin Washers on top of the thickest washer.

b. From the outside of the kayak, place the Trim Tab Knob through the post, and engage the teeth into the Trim Tab assembly. When doing so, make sure the handle of the Knob is lined up front to back when the copper swage on the Cable is centered on the back side of the Trim Tab Cable Spool. You may need to pry the back edge of the Spool slightly out of the Trim Tab Housing to double check this. (Fig. 10)

c. Drop the 2" hex head bolt through the Trim Tab Knob on the deck of the kayak.

d. Insert the nylock nut into the hex recess on the plastic Trim Tab Wing Nut. It should "snap" into place. Thread the plastic Trim Tab Wing Nut with nylock nut onto the bolt from inside the kayak, and tighten to moderate resistance.



Fig. 9 – Installation of Trim Tab assembly.

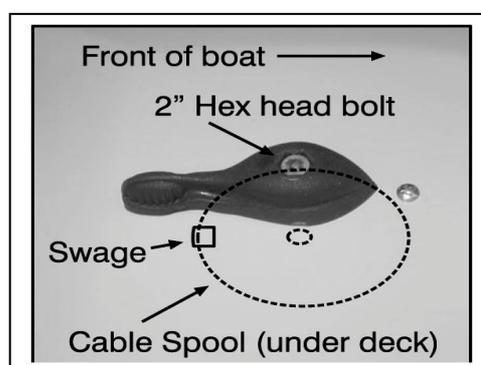


Fig. 10

### 8. Attach cables to the rudder tiller and set the proper Toe Pedal position

Follow the rudder set-up instructions.

### 9. Using the Trim Tab

To use the Trim Tab, keep slight pressure on the Toe Pedals, and move the Trim Tab Knob to the right or left (you should feel resistance in the system) to set right or left deflection in the rudder blade. Loosen or tighten the Trim Tab Wing Nut to adjust and set resistance to desired level.

#### Trim Tab Kit Contents:

20-459 Cable Adjust. Bolt x 2 Pc  
 20-462 Housing x 1pc  
 20-463 Spool x 1pc  
 20-464 Trim Knob x 1pc  
 20-473 Washer Tree x 1pc  
 20-474 Wing Nut x 1pc  
 43-800 Cable Clip x 2pcs  
 43-804 Cable Tube, 10 Ft  
 43-811 Shrink Tube x 2pcs  
 43-812 O-Ring x 4pcs

43-816 Cable End Cap, Alu x 2pcs  
 43-819 Control Cable, 36 Ft  
 44-510 Trim Hex Bolt 2" x 1pc  
 44-511 Trim Bolt Nylock Nut x 1pc  
 44-512 Housing Screw #6 x 2pcs  
 44-514 Fender Washer x 2pcs  
 44-515 Bolt 5/8" x 2pcs  
 44-516 Flat Washer x 2pcs  
 44-517 Bolt Nylock Nut x 2pcs