

TOURNAMENT TAB INSTALLATION INSTRUCTIONS for BT810 and BT1012

READ INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION

Materials / Tools:

- | | | | |
|------------------------|-----------------------------------------------|-----------------|----------------------------------|
| 7/16", 1/2" Wrench | Vise Grips | Wire Stripper | Wire Cutters |
| Electric Drill | 9/94", 3/32", 5/32", 3/16", & 3/4" Drill Bits | Teflon Tape | #2 & 3 Phillips Head Screwdriver |
| Four Foot Straightedge | Automatic Transmission Fluid | Tape Measure | Marine Epoxy |
| Marine Grade Sealant | Masking Tape | 1-1/8" Hole Saw | Small Funnel |

Step 1 - Position the trim tabs against the transom and check to see that the upper mounts of the hydraulic actuators do not center on an inside obstruction. If they do, reposition tabs slightly outboard. The further outboard the tabs are mounted the greater the lateral (side to side) control. Position tabs 3" to 4" from the chine, and a minimum of 8" from the centerline of outboard or sterndrive unit. (See Figure 1). Note: If the inside of the transom is inaccessible due to fuel tank, floatation, or other obstruction, call Bennett Marine for alternate installation options (954) 427-1400. (1" shorter actuators are also available).

Step 2 - Attach the mounting plates and trim plane with #14 x 1-1/2" stainless steel screws 1/4" above hull bottom (see Figure 2). Using the backing plate as a template, mark screw hole locations. Drill 3/16" pilot holes for mounting screws. Assemble mounting plates and tab, dip screws in marine epoxy before tightening screws. Slide trim tab between backing plate and hinge plate before running screws tight. Snug screws down to secure mounting plates and trim tab to transom. Aluminum boats should use machine screws and nuts(not included) instead of the enclosed #14 self-tapping screws.

Figure 1

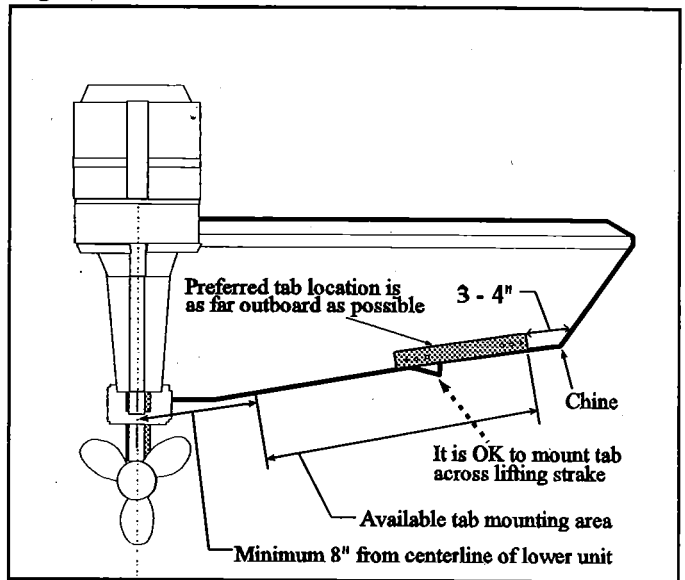
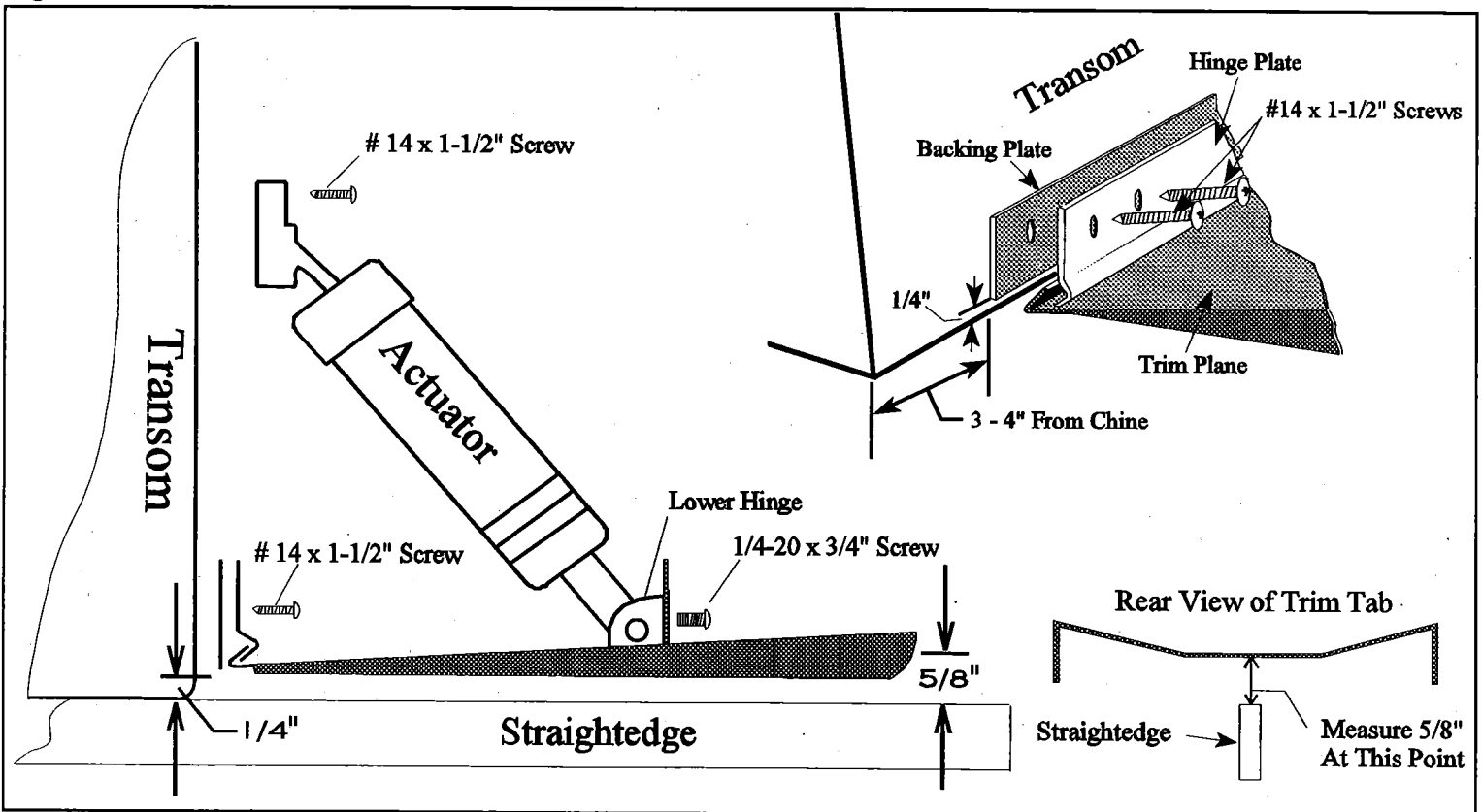


Figure 2



Step 3 - Secure the lower hinge of the actuator without pre-connected tubing to port trim tab using 1/4-20 x 3/4" machine screws. Using straightedge under the trim tab and the hull bottom, set the center of the tab trailing edge to 5/8" negative. (See Figure 2). With tabs set at this 5/8" negative angle, position the upper mount of the actuator against the transom. Slide the actuator template behind upper mount, align and tape to transom. It is not necessary that the upper mounts lie flat against the transom as the actuator neck has the ability to flex far more than necessary (Figure 3). The straightedge may now be removed. Drill holes accurately as indicated on templates. Drilling a small pilot hole first helps you locate accurate centers. Remove the actuator from the trim tab and repeat for the starboard side.

Step 4 - Screw brass fitting with attached tubing into upper mount of the actuator without tubing. Tighten fitting only snug with 7/16" wrench. Do not attempt to "bottom out" the fitting (See Figure 4).

Step 5 - Resecure lower hinges of actuators to trim tabs using 1/4 - 20 x 3/4" machine screws.

Step 6 - Feed the taped end of tubing through the 3/4" hole in transom. Apply sealant on the mounting surface of actuators and around brass fitting. Secure the actuator upper mounts to transom with #14 x 1-1/2" screws.

Step 7 - Install hydraulic power unit (HPU) in a convenient location with a dry environment **Important: The HPU must be mounted in a dry enough location to avoid submersion and drenching.** Allow space above the HPU so that it may be slid into its mounting bracket (about 3"). Lay out upper holes on HPU mounting bracket 4-5/8" apart and start #10 x 1" screws using 5/32" pilot holes. Then drill 5/32" pilot holes for lower screws and mount bracket. Slide HPU into bracket.

Step 8 - With plastic hangers, secure hydraulic tubing along hullside or bulkheads to HPU. When facing HPU, the brass fitting on the left of the pump face connects with the tubing from the port actuators, the fitting on the right connects with tubing from the starboard actuators. These fittings are marked "P" & "S" for port and starboard. *To connect tubing to the pump, insert tubing through the nut with ferrule fitting and push into the pump-face fitting until it bottoms. While continuing to bottom the tubing in the fitting, tighten nut "finger tight", then one full turn with a 1/2" wrench...NO MORE.* Use tube bending clips at desired 90 degree bends in tubing to prevent kinking.

Step 9 - Connect black HPU ground wire to any convenient ground.

Step 10 - Plug connector of Interrupter Relay to HPU plug. Attach black ground wire ring terminal to either stud on back of HPU motor or to any convenient ground. Mount Interrupter Relay. Plug other connector into the 4-color wire harness plug. Run other end of wire harness to desired location of trim tab control switch. Secure wire harness with plastic hangers and cut to length. Install control switch according to "Rocker Switch Installation Instructions."

Step 11 - Connect fused (20 amp) orange power lead from Rocker Switch to 12 volt power source.

Step 12 - Fill HPU reservoir to full line using any type automatic transmission fluid (ATF).

Step 13 - Using the Rocker Switch control, press the "Bow Down" position for 15 seconds, then "Bow Up" for 15 - 20 seconds. Repeat 3 times. This will purge any air from the system. No bleeding is necessary.

Step 14 - Place both trim tabs in the "full down" position and check hydraulic system for leaks. Bring the tabs to the full up position and check fluid level. Add ATF if necessary.

PLEASE KEEP THIS SHEET AND TRIM TAB OWNERS MANUAL WITH YOUR BOAT'S OPERATING MANUALS.



BENNETT MARINE

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For product support, please call **1-866-894-1626 (Option #3)**, or email **BMI_Info@Yamaha-motor.com**.
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Figure 3

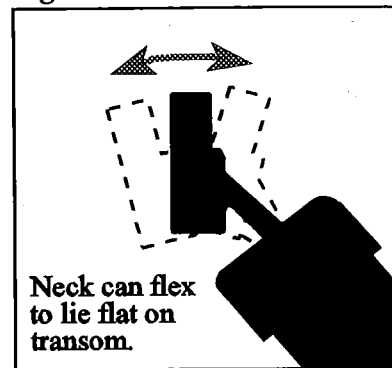


Figure 4

