

# SPORT TABS INSTALLATION INSTRUCTIONS for M80 and M120

**READ INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION**

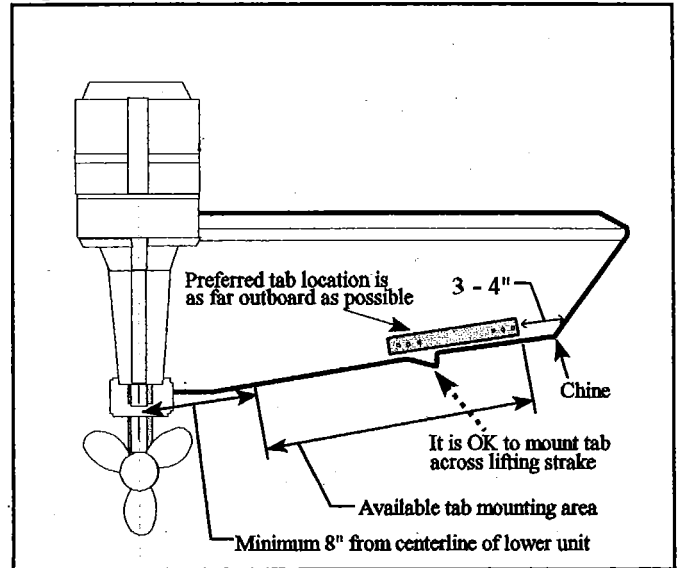
**Materials / Tools:**

7/16", 1/2" Wrench	Masking Tape	Wire Stripper	Wire Cutters
Electric Drill	9/64", 3/32", 5/32", 3/16", & 3/4" Drill Bits	1-1/8" Hole Saw	#2 & 3 Phillips Head Screwdriver
Two Foot Straightedge	Automatic Transmission Fluid	Tape Measure	Regular Flat Screw Driver
Marine Grade Sealant	Small Funnel		

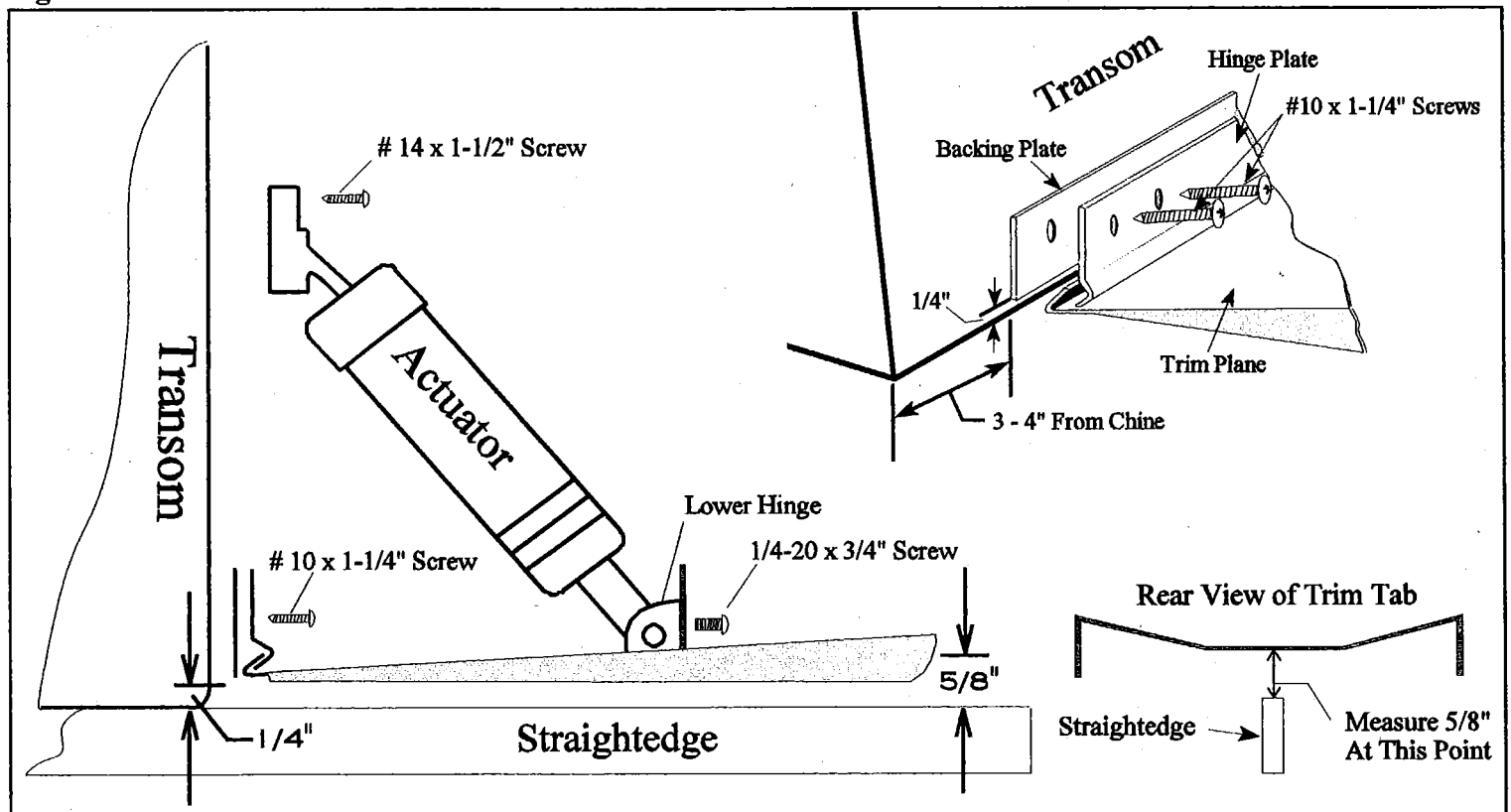
**Step 1** - Position the trim tabs against the transom and check to see that the upper mounts of the hydraulic actuators do not center on an inside obstruction. If they do, reposition tabs slightly outboard. The further outboard the tabs are mounted the greater the lateral (side to side) control. Position 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, flotation, 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 #10 x 1-1/4" stainless steel screws 1/4" above hull bottom (see Figure 2). Using the backing plate as a template, mark screw hole locations. Drill 9/64" pilot holes for mounting screws. Test to see how the screws fit, enlarge with 5/32" drill if needed. 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 #10 self-tapping screws.

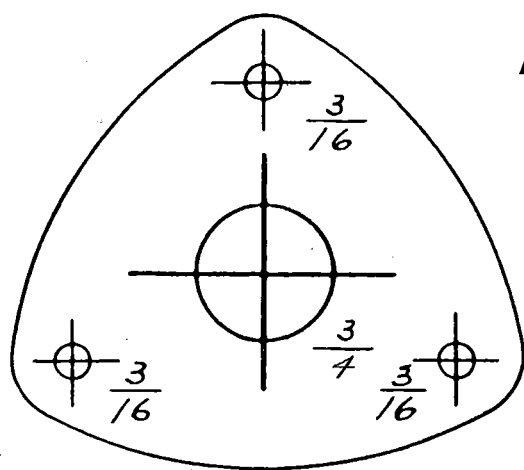
**Figure 1**



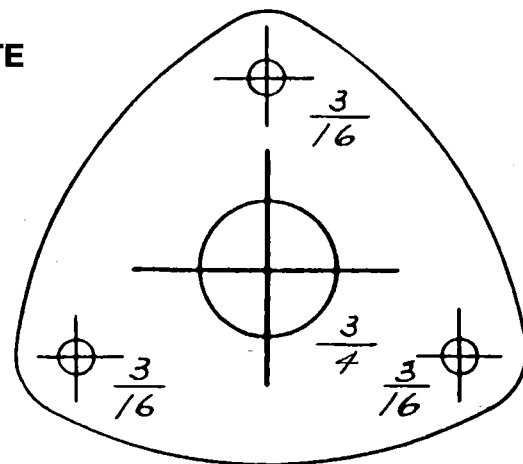
**Figure 2**



## PRE-CONNECTED ACTUATOR TEMPLATE



CUT



**Step 3** - Secure the lower hinge of the actuator 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. Repeat for the starboard side.

**Step 4** - Screw brass fitting with attached tubing into upper mount of the actuator. Tighten fitting only snug with 7/16" wrench. Do not attempt to "bottom out" the fitting (See Figure 4).

**Step 7** - 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 8** - 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 mounting bracket. Fill HPU reservoir to full line using any type automatic transmission fluid (ATF). Slide HPU into bracket.

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

**Step 10** - Run hydraulic tubing along hullside or bulkheads to HPU. Note: Make port and starboard lengths as equal as possible. 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.

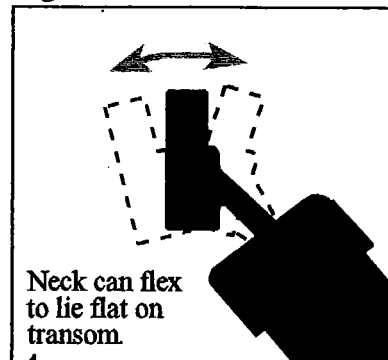
**Step 11** - Install control switch according to "Rocker Switch Control Instructions".

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

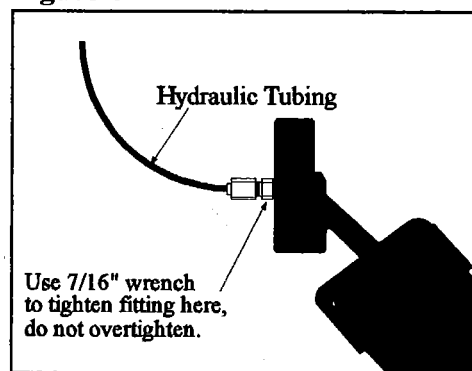
**Step 12** - Using the Rocker Switch control, press the "Bow Down" position for 15 seconds, then "Bow Up" for 15 - 20 seconds. Repeat 3 times. This will purge any air from the system. No bleeding is necessary.

**Step 13** - 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.

**Figure 3**



**Figure 4**



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

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