

Wake Tab

INSTALLATION INSTRUCTIONS

for X-22, X-18 and X-14

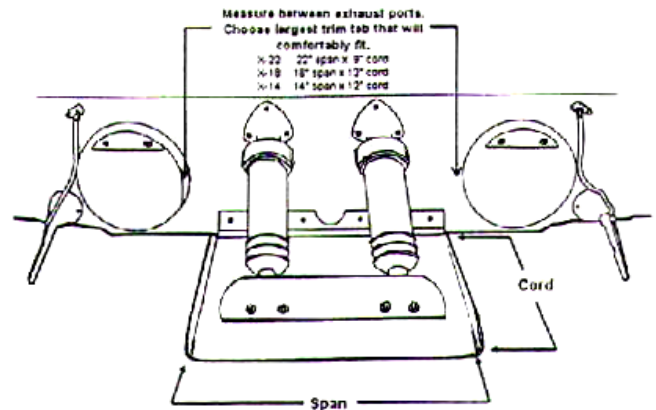
READ INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION

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 tab against the transom and check to see that the upper mounts of the hydraulic actuators do not center on an inside obstruction. (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 or Trimtabs@earthlink.net.

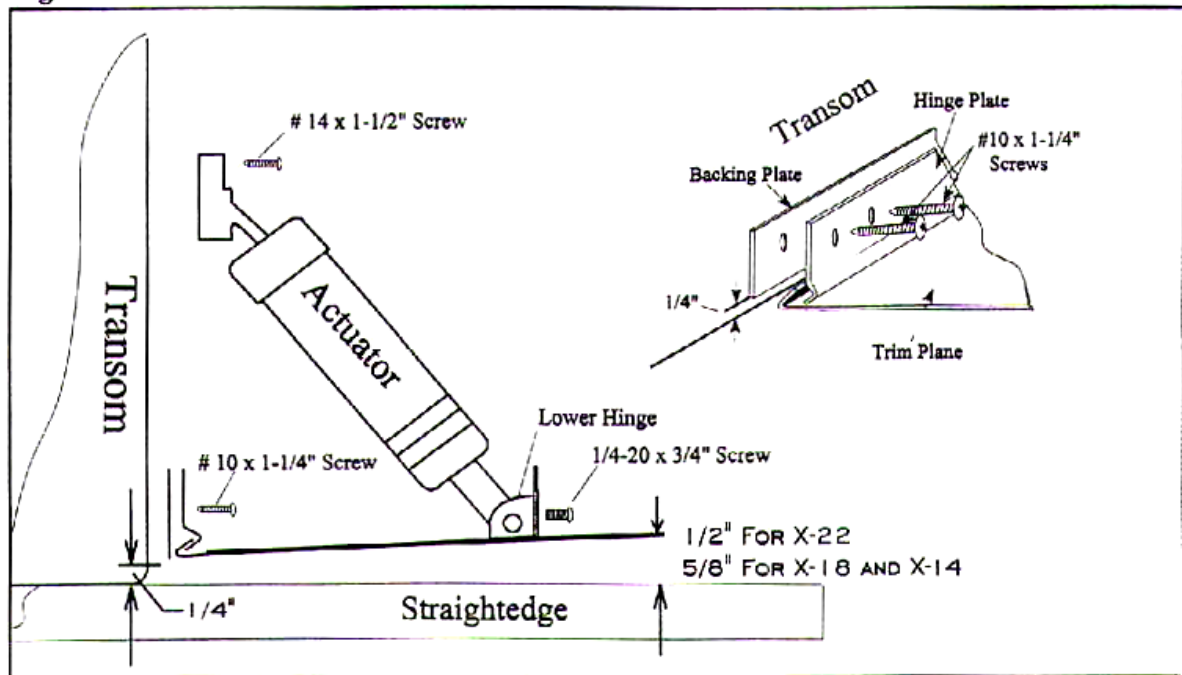
Figure 1



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.

Step 3 - Secure the lower hinge of the one actuator to 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 1/2" or 5/8" negative. (See Figure 2). With tab set at negative angle,

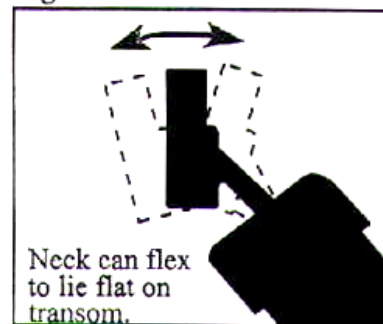
Figure 2



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).

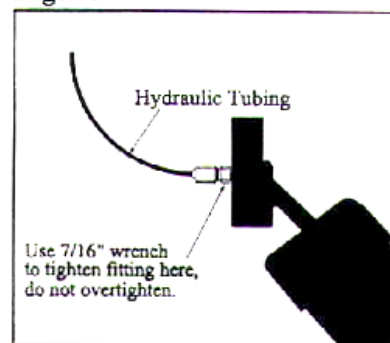
Step 7 - Feed the taped end of tubing through the 3/4" hole in transom. Apply sealant on the mounting surface of actuators and around brass fitting. Secure the actuator upper mounts to transom with #14 x 1-1/2" screws. Inside the transom attche the two lengths of tubing from the actuators to the brass tee with "nut with ferrule fitting". (To use "nut with ferrule", insert tubing through the nut and push until it bottoms in the fitting. While continuing to bottom the tubing in the fitting, tighten nut "finger tight", then one full turn with a 1/2" wrench...no more.) Connect one end of the long coil of tubing into the remaining fitting of the brass tee and run to HPU.

Figure 3



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.

Figure 4



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

Step 10 - Run the long hydraulic tubing to HPU. 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 - Find a location for the Rocker Switch control. To install drill two 1-1/8" holes spaced 1-1/16" on center as shown in Figure 5. File points evenly as indicted until switch comfortably fits. Pull the wire harness up through the hole and attach it to the back of the switch with the ring connectors enclosed. Use the wiring digam in Figure 6. Use 7/64" pilot holes for the #8 screws and mount switch to dashboard.

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 "Top" position for 15 seconds, then "Bottom" for 15 - 20 seconds. Repeat 3 times. This will purge any air from the system. No bleeding is necessary.

Step 13 - Place trim tab in the "full down" position and check hydraulic system for leaks. Bring the tab to the full up position and check fluid level. Add ATF if necessary.

Figure 5

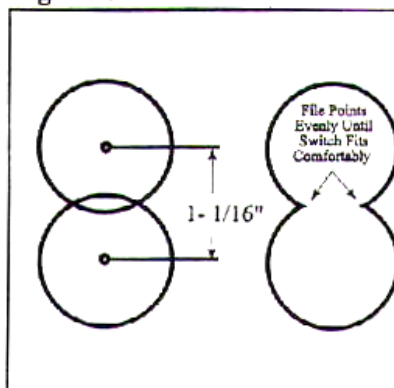
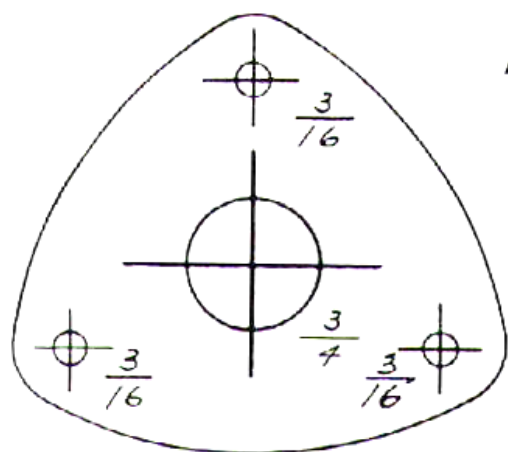
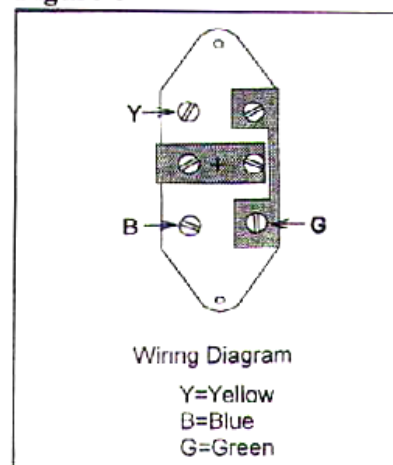
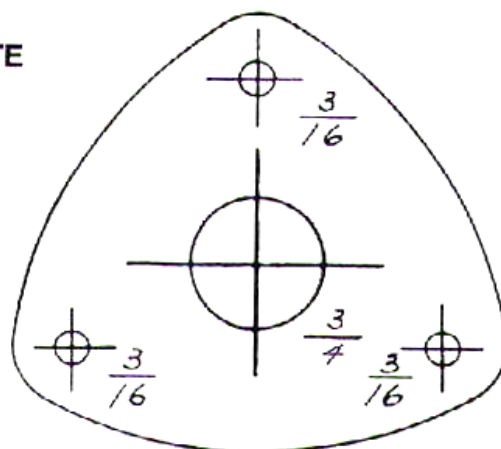


Figure 6



PRE-CONNECTED ACTUATOR TEMPLATE

CUT



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



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