

## Electric RetroFit Kit for Bennett Trim Tabs Installation Instructions

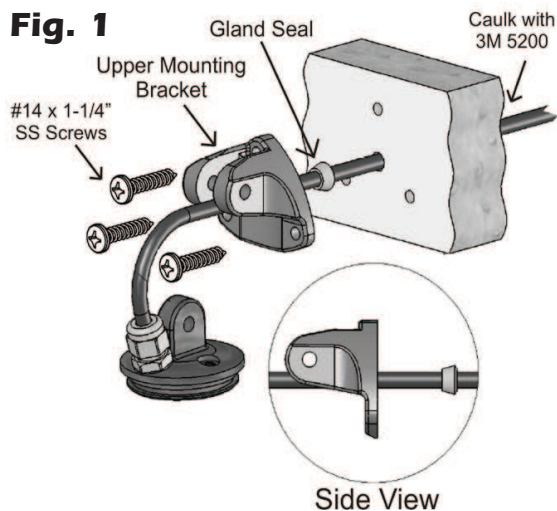
Lenco Marine's RetroFit Kit is designed as a direct replacement for the Bennett hydraulic power unit (HPU) on systems using Bennett's 4-ring standard trim tab actuators.

**Note: Bennett Joystick Control can not be retrofitted to the Lenco Actuators.**

These instructions should be followed completely. See page 5 for complete Tools and Materials List. If you experience any problems not covered, please call the Lenco Marine Customer Service line at 772-288-2662.

**Make sure the power is removed from the Bennett Trim Tab System before installation.**

- 1) Disconnect the Bennett hydraulic pump unit (HPU) from the Bennett wiring harness and drain as much of the hydraulic fluid as possible into a container for proper disposal later. Remember that automatic transmission fluid (ATF) is to be disposed of only at an approved collection site in your area; do not discard in the regular trash. Discard hydraulic pump unit (HPU). **Leave Bennett wiring harness in place.**
- 2) Remove and discard the Bennett trim tab cylinders from the boat transom and remove the hydraulic line at the connection. It helps to have several rags handy to soak up the oil. Remove and discard old hydraulic lines.
- 3) Disconnect the Bennett cylinder from the trim tab plane by tapping out the small black pin at the base of the cylinder where it attaches to the plane. You will first have to remove one screw from the lower mounting bracket as this holds the pin in place. **Do not remove the lower mounting bracket, as you will need it later.**



**Now you are ready to begin the Lenco Installation**

- 1) Insert the actuator cable through the appropriate hole in the upper mounting bracket (supplied with the kit) until it reaches the actuator. Insert the actuator cable through the gland seal until it reaches the upper mounting bracket.

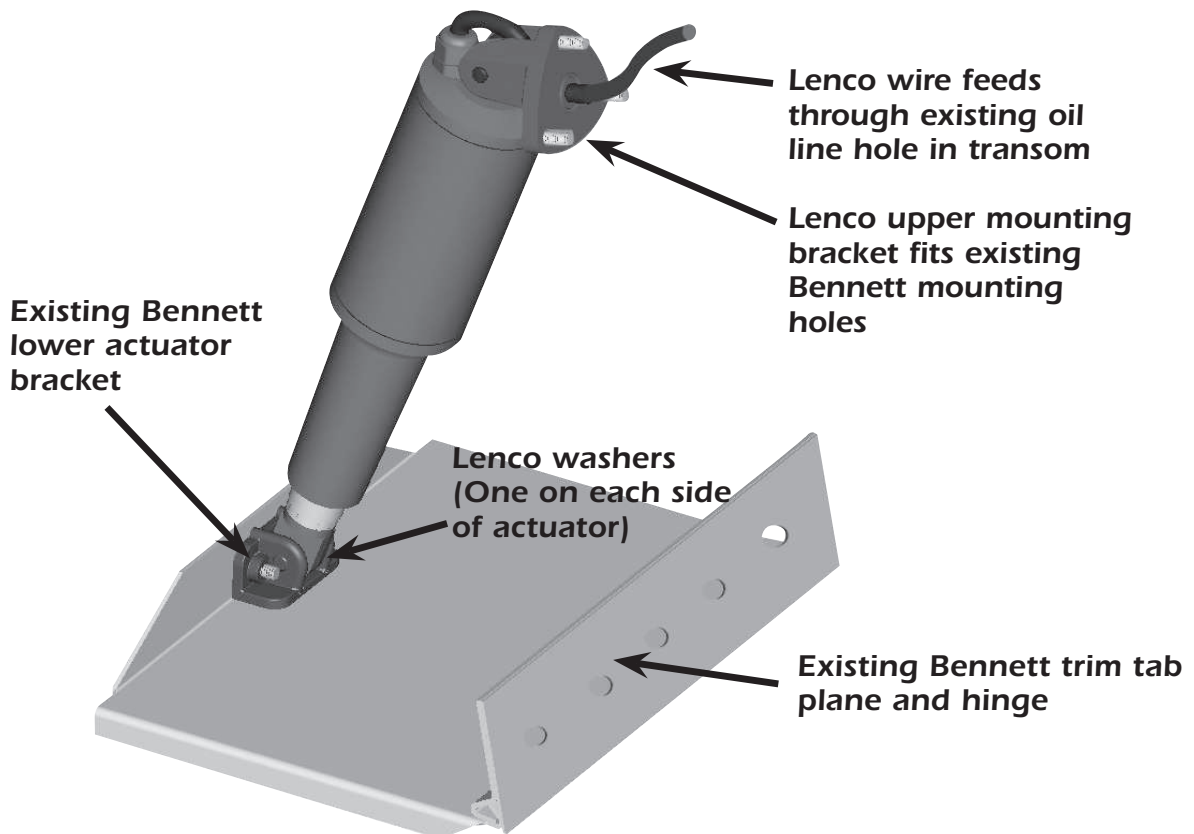
**Note: For appropriate orientation of upper mounting bracket and gland seal, (see Fig 1).**

You will need to clean the mounting surfaces on the transom with a cleaning solvent such as mineral spirits or alcohol to remove all oils and dirt before final mounting.

Insert the actuator cable through the transom. With the actuator loosely supported, bed the upper mounting bracket and screws with 3M 5200 adhesive caulking. Start the provided #14 x 1-1/4" (3.17 cm) stainless steel sheet metal screws through the upper mounting bracket and into the transom. **MAKE SURE TO LEAVE THE SCREWS ONLY PARTIALLY INSTALLED.**

Insert the actuator clevis (mounting ear) into the upper mounting bracket and hold in the approximate installed location. Pass the actuator cable through the transom removing slack on the cable until it **looks like the installation on Fig 2.1 on page 6.** Remove the actuator from the upper mounting bracket and finish installing the previously started #14 x 1-1/4" (3.17 cm) stainless steel sheet metal screws through the upper mounting bracket and into the transom.

(Continued on page 15)



We recommend using 3M 5200 adhesive caulking to bed the upper mounting bracket and screws.  
**DO NOT OVERTIGHTEN.**

Attach the actuator to the upper mounting bracket using the 1-1/2" Delrin Pin provided.

- 2) You are now ready to attach the Lenco Actuator to the blade. First insert the 1-1/4" Delrin Pin part way through the hole in the Bennett lower mounting bracket and insert through one of the four black washers provided in the kit. Place the actuator into the bracket and tap the pin through. Continue through the second washer and other side of the bracket. Replace the bracket screw removed in step 3 on page 14. This will lock the pin in place and prevent it from falling out.
- 3) Now you will need to hook up the Lenco Actuator wires inside the bilge/rigging area. First cut the wire connector from the Bennett wire

harness where the pump used to be. Strip the four harness wires and connect to the four Lenco wires using the heat shrink butt splices provided in the kit. Make sure to use the proper crimping tool and then heat all connections for a tight waterproof seal. Tie-wrap or secure in some fashion to a dry location to help prevent the connectors from getting too wet.

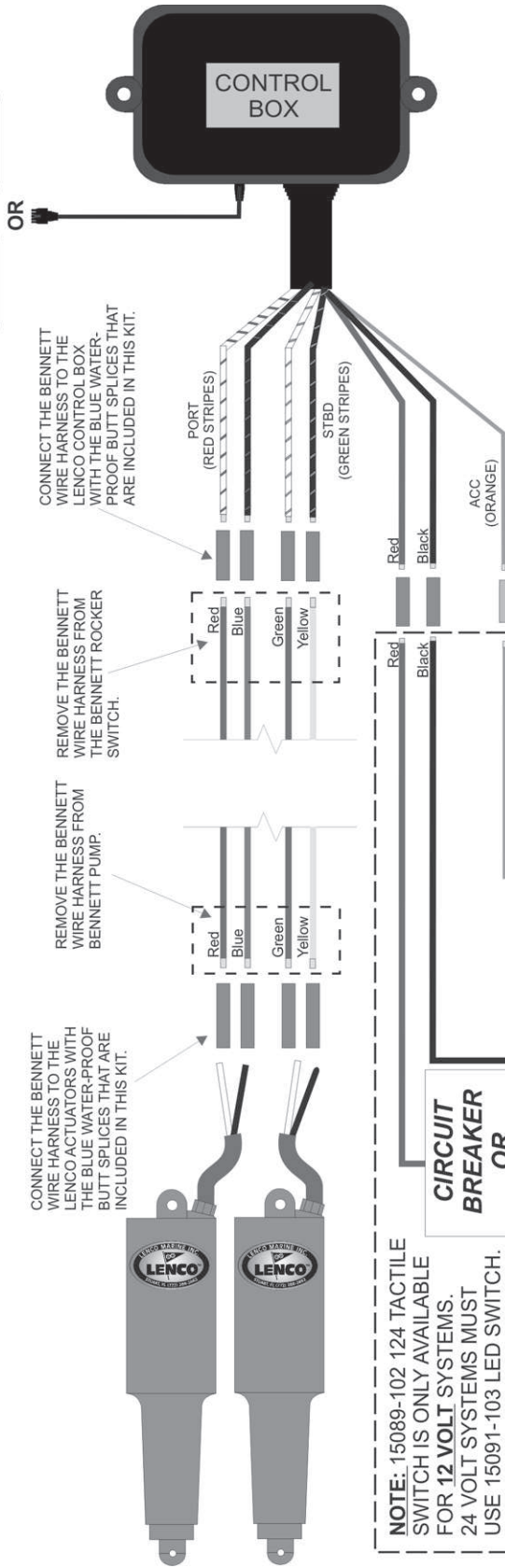
- 4) Switch Installation: Remove Bennett switch and install new Lenco Switch. Follow the switch wiring diagram on page 16. See page 7-8 for complete switch kit installation instructions.

**Please follow the instructions and drawings carefully.**

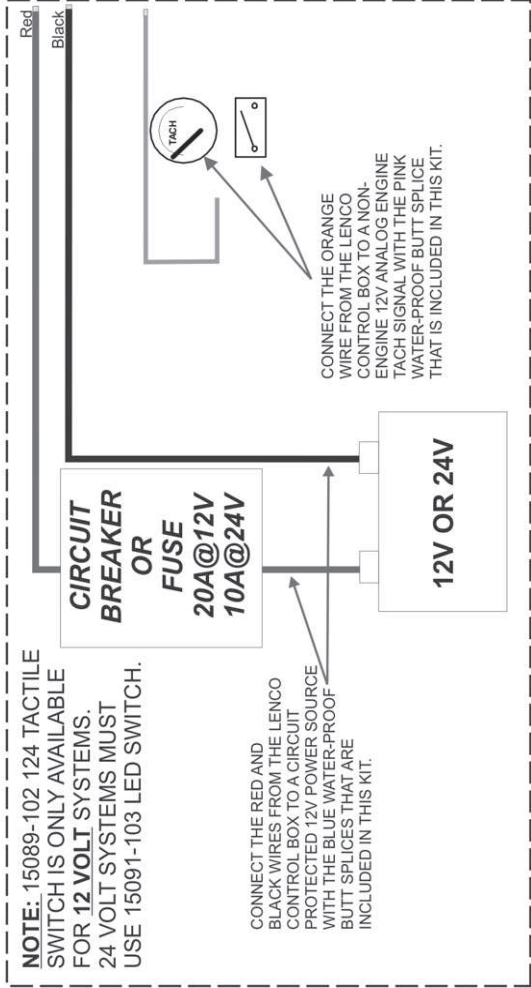
**For further assistance please visit our website at [www.lencomarine.com](http://www.lencomarine.com), email us at [info@lencomarine.com](mailto:info@lencomarine.com), or call us at 772-288-2662**

### Bennett RetroFit Kit Wiring Diagram- Part #:

- 15089-102 124 Tactile Switch (12V)
- 15090-103 123 LED Switch (12V)
- 15091-103 LED Switch (24V)



**NOTE:** 15089-102 124 TACTILE SWITCH IS ONLY AVAILABLE FOR 12 VOLT SYSTEMS. 24 VOLT SYSTEMS MUST USE 15091-103 LED SWITCH.



**Note:** In all cases, make sure the control box is mounted with the wires facing down toward the deck.