

# ELECTRIC

## Bennett RetroFit Kit



**We make the best boats better!™**

### Lenco Marine Electric RetroFit Kit for Bennett Trim Tabs

Upgrade your boat with the latest trim tab technology — trouble-free, high performance Lenco electric actuators. Available in 12- or 24-volt, for single or dual actuator applications.

**Easy installation:**

- Use existing Bennett trim blades, lower bracket and switch
- Use all existing mounting holes

**Lenco RetroFit Kit includes:**

- 2 electric actuators
- 2 upper mounting brackets
- Switch wiring kit with Deutsch connectors
- All mounting hardware



**Lenco electric actuators fit all Bennett trim planes with 4-ring actuators**

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



**Part Numbers**  
BRK for 12-volt motor  
BRK 24 V for 24-volt motor

**Just 4 simple steps:**

- 1** Remove Bennett actuators, and install Lenco upper mounting brackets on transom.
- 2** Feed Lenco wires through holes in brackets and through existing oil line holes in transom.
- 3** Mount Lenco actuators on to new upper brackets and existing Bennett lower brackets.
- 4** Connect Lenco actuator wires to existing harness.



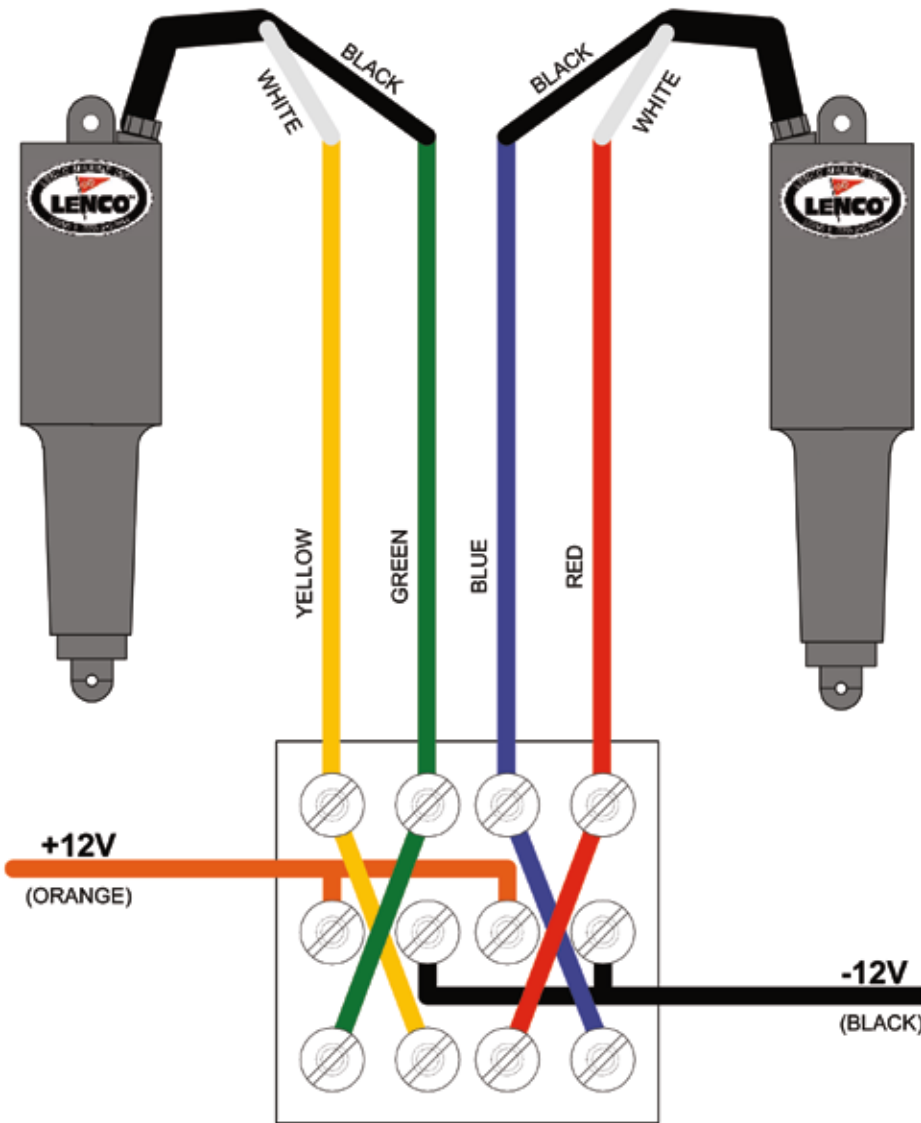
Wiring diagram and installation instructions on the following pages.

# ELECTRIC

## Bennett RetroFit Kit

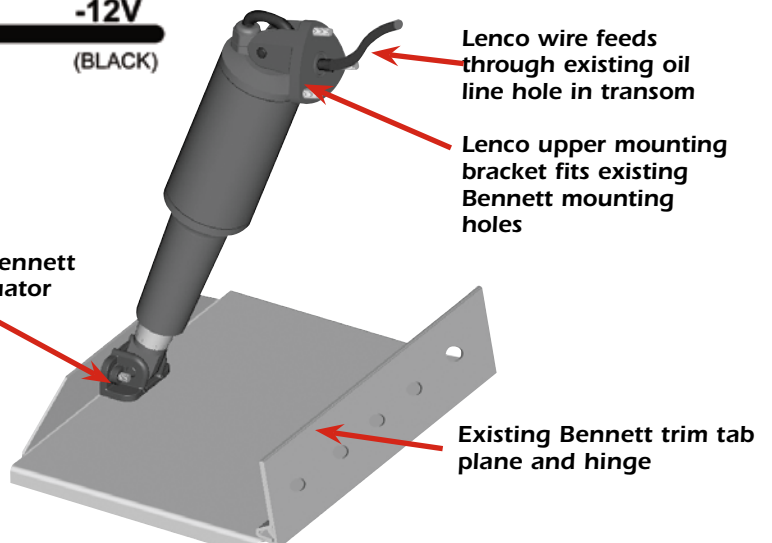


### Wiring Instructions for Electric RetroFit Kit for Bennett Trim Tabs



**Waterproof  
PLUG & PLAY  
Deutsch Connections**

Existing Bennett lower actuator bracket



- 1) Remove all wires and all jumpers (brass strips) on Bennett factory switch and discard.
- 2) Now find the 12-volt negative at the helm/console. Connect the black wire from the switch to this source. The Lenco system requires that a negative (-) wire be attached at the switch as per the wiring diagram. The 12-volt positive (+) should already be at the switch from the previous system. Simply reconnect it as per the wiring diagram.
- 3) Test the trim tabs for proper operation. Remember that the right switch controls the left trim tab and the left controls the right. BOW DOWN should extend the tabs while BOW UP should retract them. If for some reason this does not work as described in the above text, recheck all the wiring for a misplaced wire. If still not fully operational, refer to the trim tab troubleshooting guide on page 7 for further instructions.

**Use caution when using Lenco Trim Tabs for the first time. The response time is faster than the Bennett system. Try small taps of the switch until you become accustomed to the new trim tabs.**

**For technical assistance call: 772-288-2662**

## Bennett RetroFit Kit



## Installation Instructions

Lenco Marine's RetroFit Kit is designed as a direct replacement for the Bennett 4-ring standard trim tab actuator.

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

These instructions should be followed completely. If you experience any problems not covered, please call the Lenco Marine customer service line at 772-288-2662.

- 1) Disconnect the Bennett hydraulic pump unit (HPU) 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.
- 2) Remove the Bennett trim tab cylinder 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 bracket as this holds the pin in place. Do not remove the lower bracket, as you will need it later.
- 4) Insert the actuator cable through the appropriate hole in the upper bracket until it reaches the actuator. Insert the actuator cable through the gland seal until it reaches the upper bracket.

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

You will need to clean 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 bracket and screws with 3M 5200 adhesive caulking. Start the provided #14 x 1-1/4" (3.17 cm) stainless steel metal screws through the upper bracket and into the transom. **MAKE SURE TO LEAVE THE SCREWS ONLY PARTIALLY INSTALLED.**

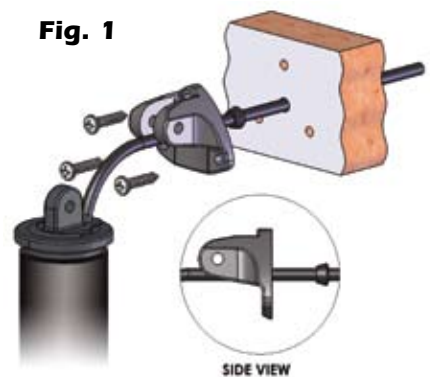
Insert the actuator clevis (mounting ear) into the top bracket and hold in the approximate installed location. Pass the actuator cable through the transom removing slack on the cable until it is snug. Remove the actuator from the upper bracket and finish installing the previously started #14 x 1-1/4" (3.17 cm) stainless steel metal screws through the upper bracket and into the transom. We recommend using 3M 5200 adhesive caulking to bed the upper bracket and screws. **DO NOT OVERTIGHTEN.**

Attach the actuator to the upper bracket using the 5/16-18 X 1-3/4" (4.45 cm) large hex head bolt and 5/16-18 (.79 cm) hex nut provided.

- 6) You are now ready to attach the Lenco Actuator to the blade. First insert the pin part way through the hole in the Bennett lower 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. This will lock the pin in place and prevent it from falling out.

- 7) 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. For further wiring information, see wiring instructions and diagram on next page.

**Please follow the instructions and drawings carefully. Call the Lenco Service Department at 772-288-2662 for technical assistance.**



© Lenco Marine 2007

**Lenco Marine, Inc.**

4700 Municipal Court ■ Stuart, Florida 34997 ■ [www.lencomarine.com](http://www.lencomarine.com)

**For more information call: 772-288-2662 Fax: 772-288-2566**