



# Replacement of BOLT Adjustable Upper Hinge Actuator (BEA3000)

Instructions for using the triangular adjustable upper hinge (Matches Lenco actuator hole pattern)

The actuator replacement must be done when the vessel is out of the water. Do not attempt to replace the actuator while the vessel is in the water as the actuators are mounted below the water line. Before performing any electrical work on a vessel, disconnect the battery by removing the positive (+) cable or if equipped, turn the battery disconnect switch to the OFF position.

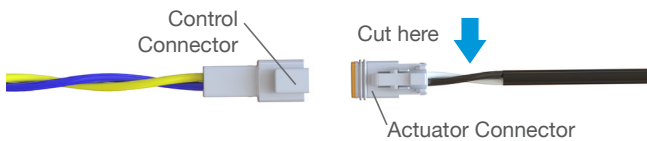
## To Remove an Existing BOLT Actuator

- Unplug the wiring harness connection from the actuator to the relay control module.



- Cut off the wiring harness connector from the old actuator so it can pass through the transom hole.

**⚠ Only cut the wires coming from the actuator.**



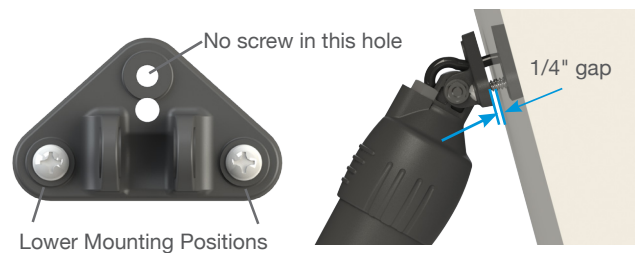
- Unscrew the lower hinge mount of the BOLT actuator from the trim tab by removing the (2) 1/4-20 x 3/4" long Phillips head screws using a #3 Phillips head screw driver.
- Allow the trim tab to swing down and out of the way.
- Unbolt the BOLT actuator from the adjustable upper hinge by removing the 5/16-18 lock nut and bolt using a 1/2" wrench and allow it to hang by the wire.
- Unscrew the upper hinge mount of the BOLT actuator from the transom by removing the (3) #14 x 1-1/2" long screws using a #3 Phillips head screw driver.
- The actuator can then be removed. Take care to gently pull the electrical wires through the transom hole.
- Clean the hull using a sharp blade to remove any old sealant from the actuator mounting locations. Wipe clean using a solvent.

## To Install the New BOLT Actuator

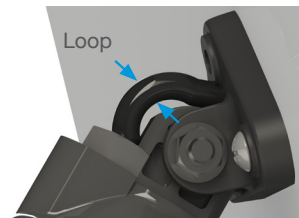
- Carefully insert the end of the electrical cable through the adjustable upper hinge mount and install the sealing grommet onto the cable.



- Pull the cable through the mount until the mount is about 8" from the actuator.
- Insert the end of the cable through the transom hole.
- Temporarily mount the actuator to the adjustable upper hinge using the supplied 5/16-18 bolt and lock nut (using a 1/2" wrench) to set the cable length.
- Temporarily mount the upper hinge of the new actuator to the transom using (2) of the supplied #14 x 1-1/2" screws in the lower mounting positions, leaving a gap of 1/4" between the upper hinge and the transom.



- Pull the excess cable through the transom leaving enough cable to prevent the actuator from binding during its normal movement.

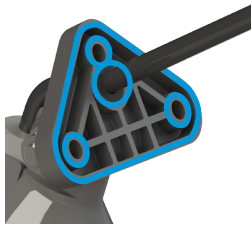


## To Install the New BOLT Actuator (Cont.)

- Ensure that the cable sealing grommet is moved down the cable to its seat on the upper hinge.
- Swing the actuator through its maximum range of motion to ensure there is the proper amount of cable to allow movement without binding.



- Unscrew the two #14 x 1-1/2" screws holding the adjustable upper hinge and pull back from the transom making sure the cable length does not change.
- Apply 3M 5200 waterproof sealant on the mounting surface and around the wiring of the new actuator.



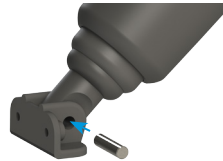
- Screw the adjustable upper hinge to the transom using (2) of the supplied #14 x 1-1/2" screws in the lower 2 mounting positions.



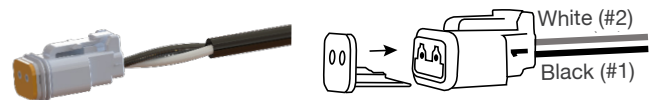
- Remove the BOLT actuator from the upper hinge and allow the actuator to hang by the cord.



- Install the remaining (1) #14 x 1-1/2" screw into the top position of the hinge.
- Install the BOLT actuator to the upper hinge using the supplied 5/16-18 bolt and nut. Make sure not to over-tighten as the actuator needs to rotate within the hinge. Over-tightening will cause the actuator to bind. Do not collapse upper hinge mount uprights.
- Tighten until the bolt and nut contact the flanges of the upper hinge. There should be a gap between the uprights of the upper hinge mount and the flanges on the actuator.
- Install the lower hinge mount to the BOLT actuator using the supplied stainless steel pin.



- Install the lower hinge mount to the trim tab using the (2) supplied 1/4-20 x 3/4" screws and nuts using a 1/2" wrench
- Install the wiring connector onto the wires:
  - » Insert the black wire into location pin #1, insert the white wire into location pin #2 one at a time into the back of the connector until the pin locks into place.
  - » Ensure the proper wire color is on the correct side of the connector by comparing the old connector that was cut off.
  - » Install the orange plastic wedge into the front of the connector.



- Connect the male wiring connector to female wiring connector coming from the relay module. For help with connectors visit [BennettTrimTabs.com/ConnectorHelp](http://BennettTrimTabs.com/ConnectorHelp).



- Reconnect the positive (+) battery cable or turn battery disconnect switch to the ON position and check the system for functionality.
- Troubleshooting: If the actuators are working backwards, the wires are reversed.