

## Before Installation

Before performing installation, read the entire instructions and make sure battery power is disconnected.

## Required Tools and materials

- 7/16", 1/2" & 9/16" Wrench
- 5/16" Drill Bit
- Masking Tape
- 2" Hole Saw
- Teflon Tape
- Wire Stripper
- Electric Drill
- Marine Grade Sealant
- Vise Grips
- Wire Cutter

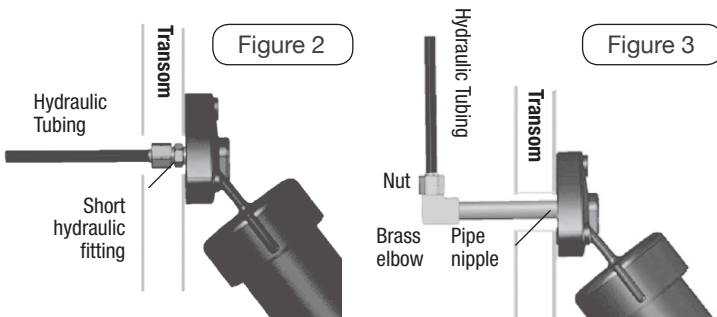
## Installation Instructions

### Installing New Upper Hinges with Sensors

**Step 1** - Inside the transom, with tabs in full up position, locate the trim tab hydraulic line. If there is no pipe nipple visible inside the transom, you have a short through-transom fitting connection, (Figure 2). Unscrew and remove the actuator away from the transom and use a 7/16" wrench to remove the tubing from the upper hinge. Skip to step 3.

For standard installations, detach tubing from the brass elbow (some fluid will drip out). While holding the pipe nipples with vise grips, unscrew the brass elbow using a 9/16" wrench. Do this procedure for the port and starboard cylinders (see Figure 3).

**Step 2** - Outside the transom, unscrew and remove the actuator away from the transom. Remove the pipe nipple.



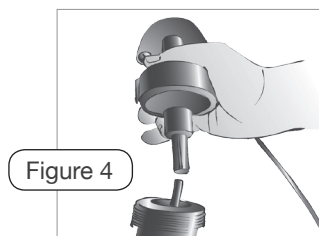
**Step 3** - Start with the port side cylinder. Snap the white plastic clip on the shaft protruding from the bottom of the cylinder.

**!** This clip must be used to keep the spring inside the cylinder compressed. Grasp the cylinder upper hinge with both hands and unscrew it counterclockwise from the cylinder body (a small amount of fluid may spill).

**Step 4** - Use care when handling sensor coils during assembly to

**!** avoid damaging wires. Insert the metal rod into the piston,

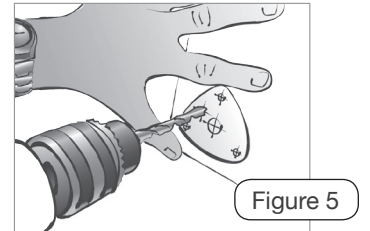
pointed end down. Make sure that the O-ring is in place in the new upper hinge with sensor coil. Screw the new upper hinge with the red sensor wire onto the port side cylinder while keeping the metal rod inserted into the center of the sensor coil (Figure 4).



Tighten the upper hinge hand tight. You will finish tightening the cylinder in Step 7.

**Step 5** - Remove the plastic clip from the piston and repeat steps 2 - 4 for the starboard cylinder. Use the upper hinge with the green sensor wire for the starboard side.

**Step 6** - Using the included template, drill a 5/16" hole in the transom for the sensor wire (Figure 5). Screw the pipe nipple into the actuator upper hinge. Tighten the nipple hand tight. Then, with vise grips, tighten two full turns ... **NO MORE.** Cover end of the pipe nipple with masking tape. If you have the short through-transom fitting, using a 7/16" wrench, screw it in until the fitting is snug; the shoulder of the fitting will just touch the plastic of the upper hinge.



**Step 7** - Carefully feed the sensor wire through the 5/16" hole. Apply sealant to the actuator upper hinge surface around the pipe nipple, screw holes, and cable. Secure the actuator upper hinge to the transom with mounting screws. Grasp the cylinder body with both hands and tighten (clockwise) securely.

**Step 8** - Inside the transom, remove masking tape from the pipe nipples. Carefully wrap Teflon tape around the male threads of the pipe nipples. Holding the pipe nipples with vise grips (to prevent them from turning) re-secure 90 degree elbows. Re-attach the hydraulic tubing, tightening nut finger tight. Snug nut with 1/2" wrench. Do not over-tighten. Note: If you have the short through-transom fittings, omit this step. Repeat for the other side. Run the red and green sensor wires to where you plan to mount the ATP Helm Display.

### Step 9 - Connecting the ATP Display

Refer to the "Installation of the ATP Helm Display" section on page 7 of the ATP Hydraulic Installation & User's Guide, and the "Connecting & Testing the System" section on page 8-9. Calibration instructions as well as troubleshooting information can also be found in the complete installation guide. **A digital version of this manual can be downloaded at [BennettTrimTabs.com/ATP](http://BennettTrimTabs.com/ATP).**

*For information on installing a complete Bennett Hydraulic Actuator, please visit [BennettTrimTabs.com/Installation](http://BennettTrimTabs.com/Installation)*

## Have Questions?

### We're here to help

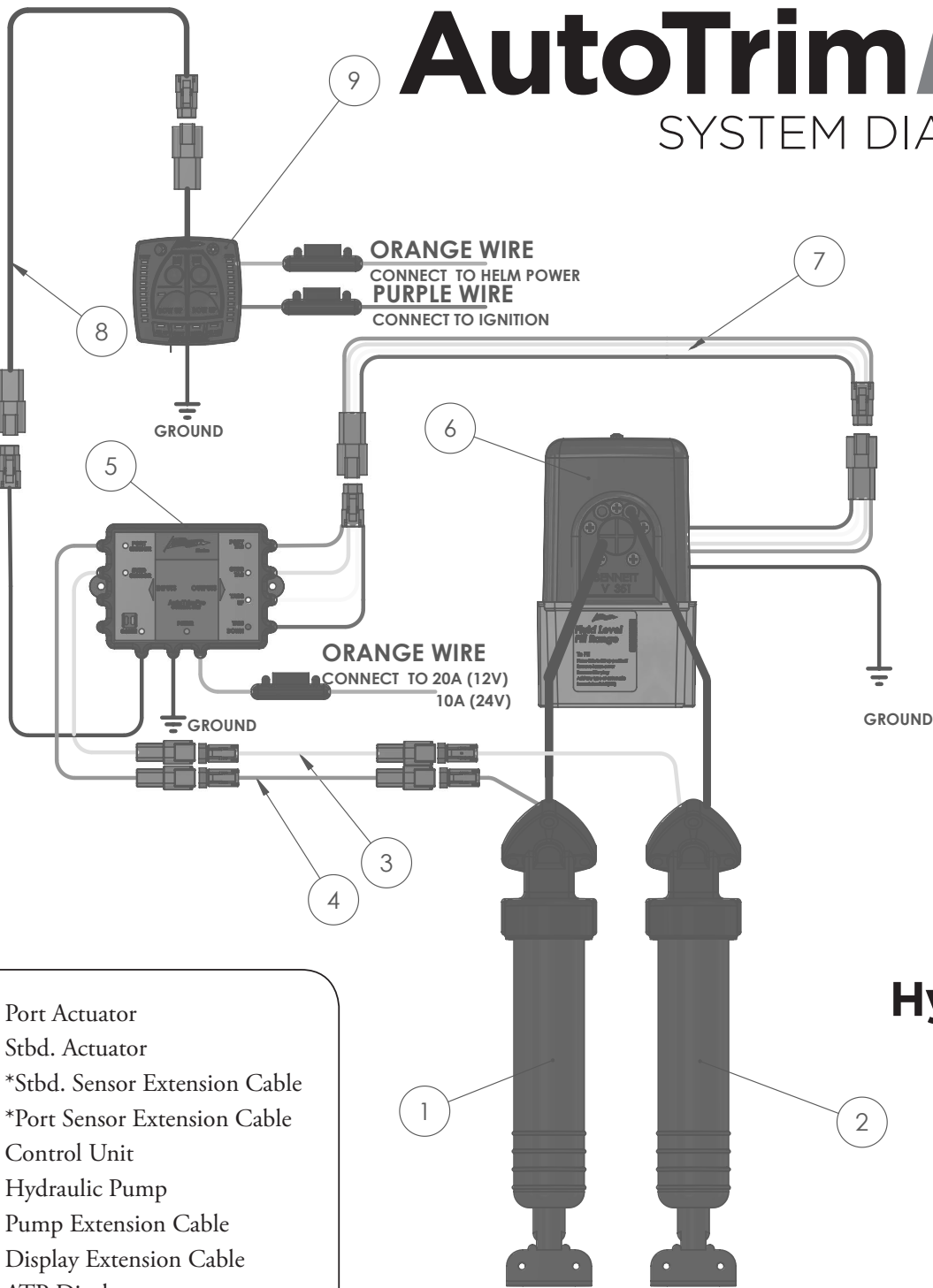
 Call us at (954)427-1400



See the reverse side for the system diagram and sensor wire hole drilling template

# AutoTrimPro

## SYSTEM DIAGRAM



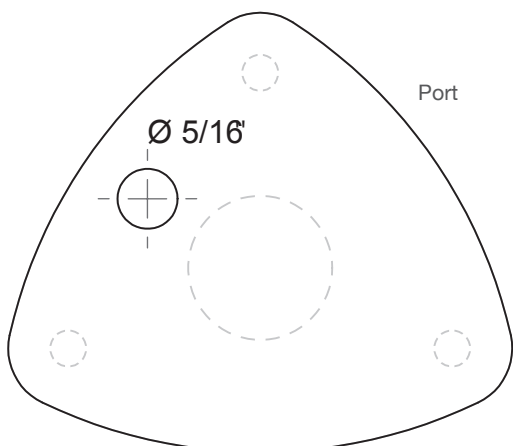
### Classic Single Pump Hydraulic System

1. Port Actuator
  2. Stbd. Actuator
  3. \*Stbd. Sensor Extension Cable
  4. \*Port Sensor Extension Cable
  5. Control Unit
  6. Hydraulic Pump
  7. Pump Extension Cable
  8. Display Extension Cable
  9. ATP Display
- \* **Optional**

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(954) 427-1400 [BennettTrimTabs.com](http://BennettTrimTabs.com) 550 Jim Moran Blvd., Deerfield Beach, FL 33442

BENNETT  MARINE



**!**

Templates must be printed or copied at 100% scale. Be sure to select "Actual Size" when printing from a PDF file.

